Forest Service
U.S. DEPARTMENT OF AGRICULTURE

Southwestern Region / Carson National Forest MB-R3-02-12 July 2022

Final- Replaces the previous September 2021 Version – Not an Exact Reprint

Final Environmental Impact Statement for the Land Management Plan

Carson National Forest

Volume 2: Appendix A – Response to Comments

Rio Arriba, Taos, Mora, and Colfax Counties, New Mexico



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Final Environmental Impact Statement for the Carson National Forest Land Management Plan

Volume 2: Appendix A – Response to Comments

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Abstract: This programmatic final environmental impact statement discloses the detailed analysis of five alternatives for revising the 1986 Forest Plan. The analysis documents anticipate progress toward desired conditions as well as potential environmental and social consequences of implementing each alternative. Alternative 1 is the no-action alternative, which is the 1986 Forest Plan, as amended. Alternative 2 is the proposed revised plan and is reflected in the accompanying Land Management Plan for the Carson National Forest. Alternative 3 maximizes access and commodity utilization. Alternative 4 maximizes natural processes. Alternative 5 maximizes wilderness recommendation.

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Appendix A – Response to Comments

Introduction

This appendix describes the process used for content analysis of the comments received during the 90-day public comment period of August 9 to November 7, 2019, and includes public comments by individuals and organizations and Forest Service responses to the substantive comments received. A variety of methods were used to inform the public about the draft environmental impact statement (DEIS) and the draft land management plan (draft plan). These included emails to the plan revision mailing list, news releases, media interviews, open houses, contacts with other Federal and local agencies, publication of the notice of availability in the Federal Register, and notice on the Carson National Forest (Carson NF) plan revision website, www.fs.usda.gov/goto/carsonforestplan.

During the comment period, a total of 5,740 letters were received. Of these letters, 325 were identified as unique letters. Comment letters were received from 86 organizations. Twenty-eight organizations prompted 5,193 form letters. One hundred and fifty-two form letters included additional information (form plus letters). In the response to comments section, similar comments are grouped into concern statements. Individual or representative comments may be paraphrased or quoted directly. Letters that contained no substantive comments required no response and are not included in this appendix.

Content Analysis Process

The analysis of comment content was conducted using a systematic process of reading, coding, and summarizing all submitted comments. Content analysis is a method commonly used by the Forest Service to compile information about comment letters. This process ensured that every comment was read, analyzed, considered, and responded to. The most helpful comments were those that were unique and specifically related to the draft plan and analysis in the DEIS. Each submission was assigned a letter number. Each unique comment in a letter was numbered sequentially and coded by topic in a database. Similar comments were grouped, and nearly identical comments were combined. The interdisciplinary team prepared responses for each comment based on its merits, regardless of the source or whether the comment was expressed by one person or by many.

This appendix documents the Forest Service responses to the substantive comments, which have been addressed, as prescribed in 40 CFR 1503.4, in the following ways:

- modifying the land management plan (final Plan) (alternative 2-modified) and alternatives;
- developing or analyzing alternatives not given detailed consideration in the DEIS;
- supplementing, improving, or modifying the analysis that the DEIS documents;
- making factual corrections; and/or
- explaining why the comments need no further agency response.

Once the unique and substantially different comments had been coded, the concerns raised by different commenters on the same subject and with the same intent were grouped by subject and category code, which captured the essence of similar concerns. The substantive comments and their coding were entered into a database, which enabled reports to be run listing all substantive comments by topic. Resource specialists on the Carson NF then combined similar comments into concern statements capturing the intent of the commenter(s). While every comment is not quoted in this appendix as written, each comment was considered individually. The comment statements are followed by the responses prepared by the Carson NF interdisciplinary team. Comments and responses are arranged according to resource or topic.

In considering the comments, it is important for readers and decisionmakers to understand that this process makes no attempt to treat comments as if they were votes. That is, no more weight has been attributed to similar comments made by many different people. Instead, the content analysis process focuses on the content of the comments and ensures that every substantive comment is considered in the decision process.

Resource specialists reviewed all attachments included with comments, and relevant information was considered in the final environmental impact statement (FEIS) analysis and plan component development. All references to literature were reviewed by resource specialists and, where appropriate, citations to the relevant literature are included in the FEIS and reference sections.

All letters are included in the project record.

Demographic Information

Tables 1 through 5 display the demographics of the comments received for the Carson NF draft land management plan and DEIS during the public comment period.

Letter Type

Comments were categorized based on the type of letter (table 1). All letters that were received are included in the planning record. Form plus refers to form letters with one or more additional unique and substantive comments. Master form letters are letters determined to be representative of a set of form letters.

Table 1. Letter type

Letter Type	Letter Count
Unique	325
Duplicate	42
Form	5,193
Form Plus	152
Master Form	26
Total	5,740

Responding Organizations

Many organizations submitted comments. Table 2 lists these organizations as well as the respective letter number(s) and contact name(s) listed in the letter. Some organizations sent multiple letters; some individuals from the same organization sent the same letter; some letters had multiple signatories. Concern statements in this appendix list the numbers of letters that raised that concern. In the electronic version of this document, you may search by the letter number to find responses.

Table 2. Responding organizations and corresponding letter number(s) in the Content Analysis and Response Application (CARA)

Organization	Letter Number(s)	Contact Name
Abeyta-Trujillo Acequia	5287	Tim Seaman
Access Fund	5236	Katie Goodwin
Acequia de La Joya	5069	Harold Trujillo
Acequia del Monte del Rio Chiquito	114, 4865	John MacArthur
Albuquerque Wildlife Federation	4856	Kristina Fisher

Organization	Letter Number(s)	Contact Name
American Rivers	5505	Mike Fiebig
American Rivers	5505	Steve Smith
Amigos Bravos	4911	Rachel Conn
Backcountry Hunters & Anglers	4880	Timothy Brass
Blue Ribbon Coalition	5665	Ric Foster
Carson Forest Watch	5673	Joanie Berde
Center for Biological Diversity	154, 4856, 5347	Joe Trudeau
Center for Large Landscape Conservation	4835	Laramie Maxwell
Certified Tree Farmer, Taos County, New Mexico	111	Carl Struck
Colorado Wildlife Federation	4901	Suzzane O'Neill
Conejos Clean Water	4901	Anna Lee Vargas
Connectedcorridors.com	5663	Anonymous
Continental Divide Trail Coalition	4898	Amanda Wheelock
Dean Swift Seed Company	109	Dean Swift
Defenders of Wildlife	4925	Lauren McCain
Dept. Of Agriculture State of New Mexico	5422	Jeff M. Witte
EarthKeepers 360	4889	Andrew Black
Enchanted Circle Trails Association	4960	Carl Colonius
Guardians of Taos Water	4862	Clifton Bain
HECHO	4890, 4901	Camilla Simon
HECHO	5580	Rock Ulibarri
International Mountain Biking Association	4970	Aaron Clark
JMHA	105	Barb Kiipper
MAS Comunidad	4853	Jean Nichols
Mora County	4840	Frances Muniz
National Wildlife Federation	4901	Andrew Black
National Wildlife Federation	4901	Mary Greene
National Wildlife Federation	4901	Jeremy Romero
Native Plant Society of New Mexico	4924	Thomas Stewart
New Mexico Acequia Association	5296	Enrique Romero
New Mexico Acequia Commission	4985	Ralph Vigil
New Mexico Council of Outfitters and Guides	4867	Kerrie Romero
New Mexico Council of Trout Unlimited	5017	Harris Klein
New Mexico Land Grant Consejo	5378	NMLG Consejo
New Mexico Land Grant/Merced Consejo	122	Andrea Padilla
New Mexico Sportsmen	4856	Oscar Simpson
New Mexico Wild	154	Logan Glasenapp
New Mexico Wilderness Alliance	4856, 4964	Logan Glasenapp
New Mexico Wildlife Federation	4901	Jesse Deubel
NM Dept of Game and Fish	5574	Chuck Hayes
NM Land Grant Consejo	4927	Andrea Padilla

Organization	Letter Number(s)	Contact Name
NM Land Grant Council	4926	Arturo Archuleta
NM Land Grant Council	5344	NM Land Grant Council
NM Wild Sheep Foundation	4838	Bryan Bartlett
NMDA	5422	Marshal Wilson
NMED	5515	Michaelene Kyrala
NMOHVA	3268	Mark Werkmeister
NNMSA and NLFRTA	137, 138	David Sanchez
Northern New Mexico Stockman's Association	144	David Sanchez
Northern New Mexico Stockman's Association	143	Carlos Salazar
Philmont Ranch	4977	Michael Crockett
Picuris Pueblo	4921	Les Rubin
Quality Deer Management Association	113	Jacob Pries
Ria Arriba County	152	Danny Garcia
Rio Arriba Concerned Citizens	5716	Barbara Turner
Rio Grande Broadband of the Great Old Broads for Wilderness	4856	Susan Ostlie
Rio Grande Valley Broadband of the Great Old Broads for Wilderness	154	Susan Ostlie
Rivers and Birds	168	John Miles
Rivers and Birds	4856	Roberta Salazar
Rob and Charlie's bike shop	4861	Stephen Newhall
Rocky Mountain Elk Foundation	4887	Blake Henning
San Antonio del Rio Colorado	4929	Esther Garcia
San Felipe Pueblo Department of Natural Resources	4876	Rueben Duran
San Joaquin del Rio Chama	4930	Leonard Martinez
Santa Barbara Land Grant	5785	Bonafacio Vasquez
SE Group	4886	Travis Beck
Sierra Club	154	Eric Huber
Sierra Club, Rio Grande Chapter	5664	Anonymous
Sierra Club, Rio Grande Chapter	4856	Teresa Seamster
Sierra Club, Rio Grande Chapter	4856	Camilla Feibelman
Sierra Club, Rio Grande Chapter	5073	Miya King-Flaherty
Sipapu Ski and Summer Resort	4906	James Coleman
Sky Mountain Wild Horse Sanctuary / MT. Taylor Mustangs	4850	Karen Herman
Taos Mountain Bike Association	4970	Loren Bell
Taos Pueblo	5786	Miguel Vigil
Taos Pueblo Division of Natural Resources	4899	Cameron Martinez
Taos Pueblo, Office of Natural Resource Protection	133	Leonard Archuleta
Taos Pueblo, Office of Natural Resource Protection	133	Bernard Lujan
Taos Pueblo, Office of Natural Resource Protection	133	George M. Track
Taos Ski Valley, Inc.	4879	John Kelly
Taos Valley Acequia Association	5364	Judy Torres
The Broken Spoke bicycle shop	4844	Mike Chapman

Organization	Letter Number(s)	Contact Name
The Center for Large Landscape Conservation	4835	Robert Ament
The Center for Large Landscape Conservation	4835	Tyler Creech
The Pew Charitable Trusts	4881	John Gilroy
The Rewilding Institute	5705	Susan Morgan
The Wilderness Society	4856	Josh Hicks
Trails Preservation Alliance	5584	Scott Jones
Tri-State Generation and Transmission Association, Inc.	4896	Barbara A. Walz
Tri-State Generation and Transmission Association, Inc.	4896	Chris Reichard
Trout Unlimited	5303	Toner Mitchell
Trout Unlimited	5303	Dan Roper
Trout Unlimited New Mexico Council	5017	Art Vollmer
Truchas Chapter of Trout Unlimited	5031	John Hanasack
Truchas Chapter of Trout Unlimited	5031	Art Vollmer
US EPA-Region 6	5577	Keith Hayden
Velo New Mexico, Inc.	4877	Tim Fowler
WATERSHED DYNAMICS	4845	Mark Schuetz
Western Environmental Law Center	4911	Kelly E. Nokes
Western Watersheds Project	4994	Cyndi Tuell
Wild Sheep Foundation	4848	Clay Brewer
Wild Sheep Foundation	4848	Kevin Hurley
Wild Sheep Foundation	4848	Gray N. Thornton
Wild Watershed	154	Sam Hitt
WildEarth Guardians	154, 4856, 4894	Adam Rissien

Form Letters

Form letters originating from organized letter writing campaigns have been identified based on identical content and comments.

Table 3 lists the form set name, master form letter number, number of form letters per form set, number of form plus letters per form set, and then the total number of letters per form set. Form letters contain identical content and comments. Form plus letters contain content and comments from the master form letter plus additional comments. The total number includes the form and form plus letters and the master form letter. Most form letters did not indicate the organization with which the sender was affiliated. Table 4 lists the form plus letters by form set, including the commenter's name and the letter number.

Table 3. Number of letters received from organized letter campaigns

Form Set Name	Master Form Letter Number	Number of Form Letters	Number of Form Plus* Letters	Total Number (Includes Master Letter)
Form Set 1	138	1	2	4
Form Set 2	177	3,262	45	3,307
Form Set 3	178	55	1	56
Form Set 4	187	299	4	303
Form Set 5	196	186	11	197
Form Set 6	223	492	16	508
Form Set 7	236	38	3	41
Form Set 8	1153	56	2	58
Form Set 9	1218	4	0	4
Form Set 10	1826	17	0	17
Form Set 11	1838	95	0	95
Form Set 12	1861	1	1	2
Form Set 13	2766	85	1	86
Form Set 14	4837	2	0	2
Form Set 15	4841	2	0	2
Form Set 16	4846	29	4	33
Form Set 17	4868	1	1	2
Form Set 18	4926	7	0	7
Form Set 19	4970	1	1	2
Form Set 20	4985	2	2	4
Form Set 21	5008	1	5	6
Form Set 22	5011	468	24	492
Form Set 23	5591	9	17	26
Form Set 24	5617	2	0	2
Form Set 25	5643	52	1	53
Form Set 26	5720	56	5	61

Table 4. Commenters who submitted form plus letters by the form set to which they belong

Form Set	Commenter Name (last name, first name)	Letter Number
1	Sanchez, David	144
1	Sanchez, David	3219
2	Artine, Nora	4637
2	Baer, Robin	2136
2	Ball, Connie	534
2	Bender, Kae	4019
2	Borinson-Rodriguez, Susan	4353
2	Breed, Judy	2870
2	Creech, Carol	3727
2	Davidson Chou, Kelly	458
2	Desjardins, Amelia	3476
2	Flynn, Anonymous	404
2	Gattis, Beverly	2330
2	Gilbert, Janet	3270
2	Graffagnino, Mary Ann	2958
2	Gregory, Susan	4729
2	Gutman, James	2304
2	Holdeman Dalke, Bonnie	2101
2	Horan, Michael	673
2	Jobling, Anonymous	1409
2	Johnson, Anonymous	1028
2	Johnson, Helen	2412
2	Kaiser, John	4464
2	Kalman, Sherri	3084
2	Kuhnert, Bob	2012
2	Lancaster, Janice	3413
2	Lindig Lovett, Dianne	4030
2	Linn, Anonymous	3018
2	Ludtke, Alvin	657
2	MacKinnon, Alethea	4481
2	May, Michele	3835
2	Meyers, Anonymous	572
2	Monell, Anonymous	1627
2	Morgan, Dela	2434
2	Pennington, Anonymous	1416
2	Perinchief, Anonymous	1551
2	Reynolds, Anonymous	3857
2	Shaffer, Tria	3416
2	Silver, Victoria	436
2	Smith, Cris	3155
2	Swartz, Martha	4644
2	Swersey, Mary	4281
2	Tuttle, Catherine	2977
2	Vaughan, Jan	2749
2	Victoria, Betty	3577
2	Weber, Michael	3183
2	Whitson, Helene	3095
3	Vigil, Anonymous	274
4	Genthe, Randy	2041
4	Gibson, Bill	2613
4	Padilla, Rudy	2983
4	Tadler, Brian	2177
5	Arterburn, Jeffery	969
5	Baldwin, Greg	576
5	Goris, Daniel	654
5	Hopkins, Brian	292
5	Jones, Tammy	854
5	Klein, Harris	380
5	Lundstrom, Russell	870
5	Sanders, G.D.	5522
5	Shallish, Peter	1038
5	Steslicki, Lou	370
5	Tacker, Lowell	818
6	Brannin, Nancy	5238
6	Buchser, Linda	5510
6	Clements, Charles	424
6	Conner, Sally	5513
6	Davis, Christine	5265
6	Gates, Christopher	186
6	Genaze, Mathhew	1012
6	Guida, Marilyn	5212
6	Holtz, Anita	4933
6	Knight, James	522
6	Reinhart, Carol	736
6	Russo, Susan	249
6	Sadow, Emily	3071
6	Sharma, Andrei	4982
6	Ulibarri, Kristen	3332
6	Walker, Beverly	5384
7	Brown, Kelly	619
7	Douglas, Karen	219
7	Rose, Stephen	4847

Form Set	Commenter Name (last name, first name)	Letter Number
8	Emmy, Koponen	1578
8	Wiegel, Michael	2067
11	Lish, Chrostopher	4849
11	Patton, Therese	1859
11	Pregenzer, Arian	2788
11	Ratcliff, Philip	2325
11	Tibbetts, Bernard	1736
12	Kush, Rebecca	1879
13	Neely, Pamella	3335
16	Beirne, Dreux	4863
16	Bond, Darren	5491
16	Bushnell, Spencer	5444
16	Pierce, Randolph	5199
17	Lamont, Gerald	4869
19	Andrada, Bryan	4836
20	Seaman, Tim	5287
20	Torres, Judy	5364
21	Bawol, Robert	5325
21	Bergeron, Jean	5129
21	Consuelo, Anonymous	5052
21	Oliver, Debra	5341
21	Valerie, Gremillion	5361
22	Adara, Rowan	5570
22	Boykin, Alerta	704
22	Calhoun, David	5242
22	Carmichael, David	5200
22	Crapsey, Malinee	3460
22	Cronshaw, Francine	5379
22	Gefvert, Cynthia	5365
22	Gentry, Rita	5024
22	Giltrow, Peggy	5284
22	Goppert, Donald	5553
22	Griego, Janet	5248
22	Kalman, Sherri	4961
22	LeBeau, Barry	5068
22	Lowry, Christine	4980
22	Lynn, Randall	5389
22	McCarthy, Susann	5476
22	Norton, Jim	5399
22	Paul, Hannah	3443
22	Phillips, Wendy	5320
22	Shorb, Dan	5407
22	Shoup, Helen	4945
22	Verchinski, Stephen	5388
22	Walsh, Joseph	2817
22	Webster, Allison	5535
23	Barendsen, Kristen	5601
23	Black, Bruce	5607
23	Crawford, Judy	171
23	Denker, Debra	5595
23	Egolf, Kelly	5600
23	Fair, Jeanne	5604
23	Fisher, Kristina	148
23	Hensley, Morika	5596
23	Hinlicky, Jean	5597
23	Korber, Bette	5603
23	Marsh, Laura	5605
23	Raifman, Lawrence	5598
23	Ribe, Tom	164
23	Rodgers, Sally	5594
23	Swinton, Naomi	5602
23	Viereck, Jennifer	5599
23	Washington, M.	159
25	Morris, Meg	4908
26	Arellano, Olivama	5782
26	Lujan, Alberta	5783
26	Martinez, Carmella	5745
26	Rodriguez, Anthony	5719
26	Trujillo, Isador	5784

Individual Commenters

Table 5 includes the names of individuals who submitted comment letters. The list is organized alphabetically by last name. Letters sent anonymously or sent with illegible contact information are not included in this list. The second column contains the letter number assigned to each individual's letter. Letters from commenters who indicated they were associated with a particular organization are included in the organization table (table 2).

Concern statements in this appendix list the numbers of letters specifying that concern. If you are using an electronic copy of this document, you may search by the letter number to find responses.

Table 5. Commenters who submitted unique letters

Commenter Name (last, first name)	Letter Number
Albillar, Alexes	5511
Albillar, Alexes	5635
Anderson, Anita	5712
Archuleta, Leonard	133
Avery, Jim	5723
Barnes, Jane	5680
Bartlett, Margaret	5707
Bates, Angela	3430
Bates, Angela	5505
Bella, Jared	104
Berbaum, Jessica	4997
Bersaglieri, Albert	119
Black, Andrew	3136
Blankenhorn, Tom	170
Blish, Evan	3252
Bogard, Jeffrey, Susan	135
Bolander, Bruce	4913
Bonneau, Bonnie	129
Boyd, Andrew	4484
Bridgers, Douglas	5666
Bridgers, Noah	5686
Bridgers, Zane	5675
Brienza, Danny and Dana	5721
Brush, Sina	5207
Buchser, John	5561
Carey, Mary Jo	121
Carpenter, Jack	5588
Carryer, Justine	174
Choyt, Marc	4995
Christel, Paul	5708
Clifford, Susan	375
Christel, Paul	5708
Conahan, Jared	4928
Conn, Elliot	5670
Conn, Silas	5671
Corcoran, JC	2692
Cordova, Arno	169
Corinne, Jane	150
Cribbin, Brian	4892
Crockett, Michael	4977
Cross, Jai	112
Cross, Jai	5620
Darr, Margaret	4897
Daubert, Douglas	5722
Davis, Terry	5696
Dax, Michael	4893
DeGeest, Linda and Leo	5718
Deirne, Debbie	173
Delany, Graig	115
Dennis, Sylvia Rains	5333
Diamond, John	298
Dobry, David	1657
Draney, Scott	4873
Dreher, George	120
Dryden, Sharon	4912
Ellis, Christopher	5528
Fabrey, Steve	130
Farmer, John	4855
Felser, Susanne	151
Fiebig, Mike	1933
Fiebig, Mike	2113
Fitev, Matth	165
Flory, Sean	5271
Flying Up, Sharon	140
Foster, Ric	5665
Friedman, Linda	175
Fruits, Timothy	167
Furr, Don	5683
Furr, Jesse	5001
Gable, Carl	5546
Gabriel, Janet	5724
Garcia, Danny	152
Garcia, Esther	5709
Garcia, Esther	5715
Garcia, Marybeth	139
Garcia, Raena	4871
Gaudet, Deborah	5702
Gault, Ramona	156
Gedgaudas, Thomas	3359
Glass, Jonathan	4923
Glaw, Hannah	5704
Goldberg, Sue	127
Grace, Patrick	125
Graziano, Kristin	5614
Greenwood, Phaedra	5523
Greenwood Levy, Phaedra	4860
Griffin, Allen	5669
Grissom, Perry	3347
Gross, Tony	997
Hahn, Fritz	110
Handmaker, Philip	4859
Hayden, Keith	5577
Hayes, Chuck	4951
Hayes, Chuck	5574
Healey, Gerilyn	128
Healey, Gerilyn	5701
Healey, Gerilyn	5703
Hedden, Cheryl	5647
Henderson, Mark	4922
Herrera, Rep. Susan	4893
Hippeli, Toni	5064
Hodgen, Rebecca	5649
Homer, Margaret	146
Hurteau, Matthew	3228

Commenter Name (last, first name)	Letter Number
Iverson, Jan	106
Jacober, Gordon W	4959
Jacober, Jock	4959
Johnson, Carmen	5642
Johnson, Carmen	5644
Johnson, Michele	5247
Jones, Scott	5584
Keefe, Joey	940
King-Flaherty, Miya	5555
Klein, Harris	5312
Klingel, Jon	4851
Koch, Jake	117
Koponen, Emmy	4857
Lakind, Leslie	5391
Lebak, John	5545
Lee, Mandy	149
Leustig, John	5717
Lockridge, Ross	5143
Lonbard, Elana	5612
Long, Brian	5343
Long, Brian	145
Long, Brian	5698
Long, Brian	5699
Long, Brian	5700
Lopez, Ayleen	136
Lopez, Percy	5695
Lujan, Bernard	133
MacArthur, John	114
Maestas, Gloria	4909
Magee, Nancy	5710
Malisow, Lawrence	4883
Malm, Linda	162
Malone, Susan	5054
Martin, Robin	4842
Martinez, Nicolas	4904
Martinez, Robert	5489
Mauldin, Michael	1514
McCabe, Byron	5674
Mcconnell, Lawrence	5711
McCracken, Richard	4872
McKenna, Lawrence	5093
McQueen, Rep. Matthew	4893
Mellott, Quintina	155
Merarri, Elizabeth	5714
Miera, Carlos	4885
Miles, John	168
Morgan, Susan	153
Morgan, Susan	5705
Mosimann, Edward	5116
Murphy, Megan	116
Myers, Charlee	131
n/a, Maya	5706
Nixon, Paula	5039
North, Todd	160
O'Connell, Rita	4962
O'Connell, Rita	4977
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General - GEN

Concern Statement 1 **General**

The Carson belongs to us and deserves care and protection.

Associated Comment Letters: 149, 5238, 5671

Response

We agree that national forests belong to the American public and should be managed for multiple uses "so that they are utilized in the combination that will best meet the needs of the American people," as required by the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 531). We believe that the final Plan provides the vision, strategy, guidance, and constraints that will direct management accordingly, based on extensive public input, the best available science, the Forest Service's authority and fiscal capability, and the inherent capability of the planning area.

Concern Statement 2 **General Opposition**

Opposition to the Carson NF plan because its design is not implementable.

Associated Comment Letter: 138

Response

The final Plan provides a programmatic framework that guides site-specific actions, but does not authorize, fund, or carry out a project or activity. While the final Plan does not guarantee specific results (FSH 1909.12 section 21), plan components have been developed based on the fiscal capability of the Carson NF, as determined through a trend analysis of the recent past budget obligations for the unit (FSH 1909.12 section 22.14(5)). Desired conditions are achievable as required by FSH 1909.12 section 22.11(2)(c), though for certain conditions, the time to achieve success may exceed the plan period. The implementation of some management approaches is outside the complete control of the agency and will rely on additional resources from other sources (FSH 1909.12 section 22.12(5)). Successful implementation of the final Plan will require the development of new and existing collaborative partnerships with Federal, State, and local governments, federally recognized tribes and pueblos, non-profit organizations, private landowners, and the public, as described in the Partnerships section.

Concern Statement 3 **General**

The Carson is poorly managed, and staff lack commitment.

Associated Comment Letter: 5238

Response

The revised Plan does not address issues related to staffing. Rather, the purpose of the final Plan is to update management direction to address those areas in the 1986 Plan that were identified as inadequate or outdated. As documented in the FEIS, implementing the final Plan would move the Carson NF further toward desired conditions and better meet the expectations that the public has expressed through extensive public engagement throughout the revision process.

Concern Statement 4 **General**

The plan does not address the findings from the USDA Forest Service Compliance Review Report Civil Rights Program Review of the Carson National Forest, Conducted by the Office of Compliance, Policy, Training and Cultural Transformation Report Date: June 2013.

Associated Comment Letter: 138

Response

The Carson NF acknowledges and values diverse cultures. The two 2013 Program Discrimination Complaint cases that prompted a review of the Forest Service Rocky Mountain and Southwest Regions, April 1-June14, 2013, have been investigated, adjudicated, and closed by the Office of the Assistant Secretary for Civil Rights with no finding of discrimination or retaliation. The report also contained uninvestigated concerns and perceptions. To ensure that United States Department of Agriculture policy and procedures are consistently followed, the Office of the Assistant Secretary for Civil Rights noted areas of improvement that focused on improved civil rights training and assistance to the staff, public outreach, and accommodations. The Southwestern Region complied and implemented the recommendations and the Office of the Assistant Secretary for Civil Rights closed the review. The Carson NF will continue to strengthen our service and relationships with surrounding communities as noted in the final Plan (FW-FRT-DC-1, -2, FW-RHC-DC-1, DC-2, and through multiple management approaches).

Concern Statement 5 **General, Best Available Science**

The Forest Service must use the best available science and information and share that science and information with the public as part of the required processes under the National Environmental Policy Act (NEPA).

Associated Comment Letters: 160, 4894

Response

The best available scientific information has been used to inform the planning process. The planning record documents how best available scientific information was determined to be accurate, reliable, and pertinent to the issues being considered; as such, it includes relevant ecological, social, and economic scientific data. Use of best available scientific information was documented for the assessment, the plan decision, and the monitoring program. The 2012 Planning Rule does not require that planning develop additional scientific information, but that planning should be based on scientific information that is already available. New studies or the development of new information is not required for planning unless required by other laws or regulation. In the context of the best available scientific information, 'available' means that the information currently exists in a form useful and accessible for the planning process, without further data collection, modification, or validation. Analysis or interpretation of the best available scientific information may be needed to put it in the appropriate context for planning. Development of this revised plan, under the 2012 Planning Rule and directives, was an iterative process utilizing best available scientific information, regional guidance, internal feedback, and collaboration with a wide variety of government agencies, federally recognized tribes, non-governmental organizations, and publics. Furthermore, other programs within the Forest Service and outside partners are continually collecting scientific information for various research projects. Thus, the best available scientific information will continue to improve over time, as directed in the 2012 Planning Rule (36 CFR 219.3 and FSH 1909.12 § 07).

Concern Statement 6 **General, Management**

The plan needs to ensure mitigation and restoration of impacts from resource management.

Associated Comment Letter: 5333

Response

The final Plan includes management direction in standards and guidelines that provide constraints on projects and activity decision making to help achieve or maintain desired conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements (36 CFR 219.7(e)(1)(iii); FSH 1909.12 Chapter 20 section 22.13; 36 CFR 219.7(e)(1)(iv); and FSH 1909.12 Chapter 20 section 22.14).

Projects implementing the final Plan direction need to comply with standards and guidelines for areas relevant to the project in question. The Carson National Forest is required to follow the requirements for the National Environmental Policy Act (NEPA) process as defined by 40 CFR 1500, which requires the agency to consider and disclose environmental impacts that may occur as a result of management activities. The opportunity to implement mitigation measures that would reduce and or eliminate environmental impacts would be taken at the site-specific level based on the management activities proposed within an area and existing conditions.

Concern Statement 7 **General, Management**

All prescribed burning, thinning, mastication, or road building should be stopped until the long-term impacts of these management activities to human health, safety, and economies are objectively assessed by legislators.

Associated Comment Letter: 5008

Response

The National Environmental Policy Act (NEPA) requires the Carson NF to carefully assess the environmental, social, and economic effects of proposed management actions. When prescribed burning, thinning, and road building are proposed as part of a new NEPA planning project, an interdisciplinary team of technical experts evaluates the short- and long-term effects of each of these activities.

The Forest Service also provides opportunities for public review of, and comment on, these evaluations. Notices for comment are distributed to the public and to cooperating local, State, and Federal Government agencies. All members of the public, including legislators at the State and Federal level, are afforded opportunities to assess the Carson NF's proposed actions.

Concern Statement 8 **Life of the Plan**

Please define "life of the plan." This omission makes commenting more difficult. Many items in Appendix B. Proposed and Possible Actions are in a 10 or 10- to 15-year schedule while others are self-renewing "during each 10-year period following plan approval."

Associated Comment Letter: 129

Response

The life of the plan is defined by the National Forest Management Act of 1976 (P.O. 94-588, 90 Stat. 2949, as amended). Every national forest is directed to revise its plan:

- every 10 to 15 years
- when conditions or demands in the area covered by the plan have changed significantly;
- when changes in agency policies, goals, or objectives would have a significant effect on forest-level programs; and
- when monitoring and evaluation indicate that a revision is necessary (FEIS, Chapter 1, Purpose and Needs for Change).

The final Plan has been updated to clarify that all objectives apply on an ongoing basis and do not expire. That is, objectives recur on a set timeframe over the life of the plan.

Concern Statement 9 **Santa Fe National Forest Comments**

Comments related to management of the Santa Fe National Forest.

Associated Comment Letters: 143, 144, 380, 4889, 4893, 4925

Response

The final Plan directs only the management of the Carson NF.

Concern Statement 10 **Multiple Use**

Do not allow more fuelwood collection, recreation, timber extraction or hunting.

Associated Comment Letter: 119

Response

The Forest Service has a multiple-use mission. The 2012 Planning Rule emphasizes that forest plans are intended to guide management of the national forests so that they are ecologically sustainable at the same time that they contribute to social and economic sustainability, providing people and communities with a range of benefits, consistent with the Multiple-Use Sustained-Yield Act (15 Public Law 86-517) and National Forest Management Act of 1976 (P.L. 94-588) (77 FR 21187; FEIS, chapter 1, Introduction, Regulatory Direction, Plan Revision Under the 2012 Planning Rule).

Concern Statement 11 **Multiple Use**

Protect wildlife and wilderness from human encroachment including recreation and logging activities.

Associated Comment Letter: 4839

Response

Under the final Plan, wildlife and wilderness receive protection from human disturbance associated with recreation and management activities by way of desired conditions and guidelines. Recreation opportunities (location, type, frequency, duration, etc.) are commensurate with resource capacity and natural resource values (FW-REC-DC-5); recreation is managed adaptively to minimize impacts to at-risk species and their habitat (i.e., ecological desired conditions) (FW-REC-G-1 and -3). Also, FW-WFP-DC-7 directs that species be free from harassment and human disturbance from management activities at a scale that would impact vital functions. Several guidelines restrict management activities to protect wildlife and their habitat (e.g., FW-WFP-G-1, -3, -4, and -7). Wilderness, by definition, has outstanding opportunities for solitude or a primitive and unconfined type of recreation (P.L. 88-577, Sec. 2, Sept. 3, 1964, 78 Stat. 890). The 1964 Wilderness Act and DA-WILD-DC-3 in the final Plan require wilderness to be managed so as to be essentially unmodified. Logging is not permitted in wilderness.

Concern Statement 12 **Multiple Use**

The Forest should be managed for providing future opportunities for economic growth but sustain ecosystems so they remain for future generations.

Associated Comment Letter: 5617

Response

Forest plans are intended to guide management of national forests so that they are ecologically sustainable while contributing to social and economic sustainability, providing people and communities with a range of benefits, consistent with Multiple-Use Sustained-Yield Act (15 Public Law 86-517) and National Forest Management Act of 1976 (P.L. 94-588) (77 FR 21187; FEIS, chapter 1, Introduction, Regulatory Direction, Plan Revision Under the 2012 Planning Rule).

As described in the record of decision, alternative 2-modified balances providing future opportunities for economic growth and sustaining ecosystems in the long term (Appendix B – Description of Alternatives). The distribution of Carson NF resources under alternative 2-modified provides for restoration and diverse ecosystem services and allows for adaptive management. Alternative 2-modified addresses the need to recognize and enhance the Carson NF's role in contributing to local economies, including timber and forest products, livestock grazing, the service-based sectors of recreation and tourism, and other multiple-use activities and products. Compared to the previous plan, there is increased focus on riparian management and stream restoration.

Concern Statement 13 **General, Access**

Consider the needs of marginalized and underrepresented communities as Access to our public lands and outdoor spaces is a right that all Americans should be able to enjoy, regardless of their background.

Associated Comment Letter: 5236

Response

As we revised the Carson NF Land Management Plan, we considered the rich and unique history of northern New Mexico and the communities the national forest serves. The plan includes the following sections that acknowledge this unique history: Northern New Mexico Traditional Communities and Uses, Rural Historic Communities, and Federally Recognized Tribes. In addition, the following sections also contain information about access and needs for local communities: Facilities, Infrastructure, Lands, Minerals and Mining, National Scenic Historic and Recreation Trails, Partnerships, Scenery, Sustainable Forestry and Forest Products, Sustainable Rangeland and Livestock Grazing, Transportation and Forest Access, and Wilderness. The following plan components are included to ensure access is available for the needs of local communities: All FW-RHC-DCs, All FW-RHC-Gs, All FW-RHC-MAs; FW-GRZ-DC-1 and 2; FW-GRZ-G-6,7,8; FW-DC-MA-1,2,5,6; FW-LAND-G-2; FW-FFP-DC-2,3,4, FW-FFP-MA-2,3,5,6, and Appendix B under the following sections: Rural Historic Communities and Lands.

Concern Statement 14 **General, Socioeconomics**

The plan does not secure the sustainability of the social and economic welfare of rural communities

Associated Comment Letters: 138, 5785

Response

While land management plans do not themselves guarantee specific results (FSH 1909.12 section 21), the final Plan does direct management to sustain and make available those forest resources that are important for cultural and traditional needs, subsistence practices, and economic support (FW-RHC-DC-3). The Northern New Mexico Traditional Communities and Uses sections in the final Plan contain multiple plan components and strategies that focus on the social and economic sustainability of communities around the Carson NF. The FEIS describes the effects of each alternative on socioeconomics (Chapter 3, Affected Environment and Environmental Consequences, Socioeconomics section).

Concern Statement 15 **Payments in Lieu of Taxes**

Payments in lieu of taxes is capped based on county population, therefore the statement. “The economic impact analysis maintains payments to states and counties at the same level across all alternatives under the assumption that Payments in Lieu of Taxes (PILT) would cover the variance of payments from the Secure Rural Schools and Community Self-Determination Act payments” is incorrect.

Associated Comment Letter: 5422

Response

The quoted language in the concern statement is not from the Carson National Forest Draft Environmental Impact Statement. Language in the FEIS addresses future payments in lieu of taxes using the following assumption: “Although similar year to year, an average of the payments in fiscal years 2015 through 2017 was used for this analysis.” (Socioeconomic Environmental Consequences, Data Sources and Assumptions). The Carson NF did not model or predict future fluctuations in payments that are influenced by factors the Forest Service has no ability to control. The analysis relies on a recent average that provides a valid approximation.

Concern Statement 16 **Existing Law**

The plan implies that the Carson National Forest will not be bound by regulatory requirements by listing only summaries of certain laws in Chapter 4, Appendix C., Relevant Laws, Regulations, and Policy. The Forest Service Staff has clearly cherry picked which "Laws" and overall requirements they intend to use and implement.

Associated Comment Letters: 138, 143

Response

The Carson NF is not exempt from any law enacted by Congress. In accordance with the 2012 Planning Rule, which states that "[p]lans should not repeat laws, regulations, or program management policies, practices, and procedures that are in the Forest Service Directive System (CFR 219.2 (b) 2)," the intent of the Plan is to provide Carson NF specific direction that is in addition to laws, regulations, and policies. No language in the final Plan exempts the Carson NF from any higher-level direction and the national forest will continue to follow all current laws, policies, and regulations. Appendix C in the final Plan is a partial, not complete, list of applicable laws, regulations, and policies. The summaries of regulatory requirements are provided so that they can be understood by the general public and forest specialists; they are not detailed descriptions of each law.

Concern Statement 17 **Existing Law, Treaty of Guadalupe Hidalgo**

The CNFP is entirely deficient and non-compliant with Federal Laws, 36 CFR Regulations, State Laws/Constitution, and Treaties, "Treaty of Guadalupe Hidalgo" with regard to identifying the historic uses of the national forest, the social and economic needs of the people/communities and their valid existing rights.

Associated Comment Letter: 138

Response

The final Plan and Carson NF management comply with all existing laws, policies, and regulations (Record of Decision, Findings Required by Other Laws and Relevant Directives). Historic uses of the lands managed by the Carson NF and the national forest's socioeconomic contributions to local communities are discussed several places in the final Plan (primarily, Chapter 1, Plan Area, Historical Context; Chapter 1, Plan Area, Distinctive Roles and Contributions; Chapter 2, Northern New Mexico Traditional Communities and Uses; Chapter 2, Federally Recognized Tribes; Chapter 2, Rural Historic Communities; Chapter 2, Cultural Resources; Chapter 2, Sustainable Rangelands and Livestock Grazing; Chapter 2, Sustainable Forestry and Forest Products; Chapter 2, Recreation; Chapter 2, Special Uses; Chapter 2, Partnerships). Specific plan components that address social and economic needs of communities include, FW-FRT-DC-3, FW-RHC-DC-3, FW-CR-DC-1, FW-CR-DC-4, FW-GRZ-DC-1, FW-GRZ-DC-2, FW-FFP-DC-1, FW-FFP-DC-2, FW-REC-DC-4, FW-TFA-DC-1, FW-SU-DC-1, FW-PART-DC-1.

Concern Statement 18 **Law, Policy, Regulation**

The list of authorities in appendix C is a good start, but is inadequate because it does not explain how particular provisions apply to specific plan components on the forest to help readers understand the existing legal and policy framework that governs Forest Service management.

Associated Comment Letters: 4911, 4970

Response

According to the 2012 Planning Rule, "[p]lans should not repeat laws, regulations, or program management policies, practices, and procedures that are in the Forest Service Directive System (CFR 219.2 (b) 2)." Plans should not repeat agency policies that are applicable to all National Forest System units (FSH 1909.12 section 22.1(2)(i)) such as laws and regulations. Appendix C provides brief summaries of some relevant, frequently referenced laws, policies, and regulations, but is not an

exhaustive list nor does it explain the relationship between components in the final Plan and specific provisions. Many plan components are not required by law but are the result of public involvement and based on best available science (e.g., scattered slash should allow big game movement). In addition, the Forest Service is constrained by laws that are not addressed by plan components.

Concern Statement 19 **Budget**

Advocate for as functional a recreational program budget as possible.

Associated Comment Letter: 4960

Response

The Carson NF is prohibited from lobbying for funding (Anti-Lobbying Act; 18 U.S.C. 1913). The national forest has developed the objectives set forth in the final Plan based on reasonably foreseeable budgets (36 CFR 219.7(e)(1)(ii)) (Forest Plan, Introduction Section).

Concern Statement 20 **Budget**

Responsible management means having enough personnel to do the required jobs. Increase the budget for hiring more Forest Service employees.

Associated Comment Letter: 5718

Response

The filling of these positions is directed by the Federal budget, which determines annual appropriations to the Forest Service, as approved by Congress. The Carson NF is prohibited from lobbying for funding (Anti-Lobbying Act; 18 U.S.C. 1913). The national forest developed the objectives set forth in the final Plan based on reasonably foreseeable budgets (36 CFR 219.7(e)(1)(ii)) (Forest Plan, Plan Framework Section). It is important to recognize that we developed objectives considering historic and expected budget allocations, as well as professional experience with implementing various resource programs and activities. It is possible that annual management accomplishments could either exceed or not meet a target, based upon a number of factors including budget and staffing increases or decreases, increased or decreased planning efficiencies, increased or decreased partner contribution, and unanticipated resource constraints (Forest Plan, Introduction Section).

Concern Statement 21 **Agency Resources**

Agency resource constraints that operate to perpetuate non-compliance with water quality standards fundamentally implicate an issue that should be addressed by the forest plan and through the environmental review process conducted pursuant to NEPA.

Associated Comment Letter: 4911

Response

The Plan does not address agency resource constraints as they can vary from year to year and by type, including budgetary constraints, staffing constraints, and resource availability. Resource constraints can also be influenced by external factors such as a natural disaster or busy fire season. The final Plan provides management direction for water quality in FW-WSW-DC-2, -7; FW-WSW-G-1; FW-WSW-RMZ-G-4; FW-WSW-RMZ-STM-DC-5 and -6; FW-WSW-RMZ-WB-DC-5; FW-WSW-RMZ-SNS-DC-7; FW-GRZ-S-1; and in the Forest Plan Monitoring Program, Monitoring Topic 1: Watershed Conditions.

Concern Statement 22 **Contracting Officers**

There need to be enough Contracting Officers so that persons conducting business on Forest land are not self-inspecting or otherwise lacking in reporting/adherence to work provisions/scope of work/deliverables specified through long-term lease, government contracts or grants. For example, is

sufficient expertise being included regarding: toe slope stability, old growth and shrub removal for ski slope modifications, seep/spring diversion and wetland alteration, avalanche hazards from compaction, snow load and vegetative alterations, erosion and impacts to biodiversity as well as forest users and landscape features?

Associated Comment Letter: 5333

Response

Land and resource management plans provide vision, strategy, guidance, and constraints. They do not set staffing levels or require the hiring of specific positions. Contract administration includes inspection to ensure that contract specifications are implemented. Forest Service contracting officer certification levels are commensurate with project size and complexity. Contractors are required to meet any relevant local, State, and Federal safety, engineering, and environmental requirements. Permit administrators administer the terms and conditions of a permit and operating plan and monitor project implementation of design and mitigations required by environmental analysis associated with the project. The National Environmental Policy Act process requires input from interdisciplinary specialists and mitigations where appropriate.

Concern Statement 23 **Contracting**

Require contractors to hire local labor and choose or design projects which will employ local workers and be completed by local contractors. Provide jobs to local communities.

Associated Comment Letters: 105, 4845, 4900, 4926

Response

The Plan guides the Carson in fulfilling its stewardship responsibilities to best meet the current and future needs of the American people. This plan provides forest-specific guidance and information for project and activity decision-making over the plan period, generally considered to be 10 to 15 years. It provides the vision, strategy, and constraints that guide integrated resource management, provide for ecological sustainability, and contribute to social and economic sustainability. For instance, FW-RHC-DC-3 in the final Plan is directed at providing economic support to local communities. However, the Plan does not set forth legal requirements for contractors, as that would be outside of the scope and authority of a land management plan.

Concern Statement 24 **Botanist**

Employ a Forest Botanist on the Carson NF. The dominant feature of a forest is the plant communities therefore there should be at least one qualified botany professional on the staff of Carson National Forest.

Associated Comment Letter: 4924

Response

The employment of a botanist (or any other forest personnel) is not controlled or managed by the Plan. The filling of these positions is directed by the Federal budget, which determines annual appropriations to the Forest Service, as approved by Congress.

Concern Statement 25 **Staff, Partnerships**

How will the Carson address staff turnover and continue collaborations, public-private partnerships, and responsiveness to public input and feedback.

Associated Comment Letter: 5333

Response

The Carson National Forest Plan does not address staffing or staff turnover. The filling of positions is directed by the Federal budget, which determines annual appropriations to the Forest Service, as

approved by Congress. However, the Partnership section in chapter 3 in the final Plan includes plan components that ensure collaborative partnerships are developed and maintained. In addition, plan components regarding collaboration and partnerships can be found throughout most resource areas contained in the Plan; specifically, the final Plan includes many management approaches describing potential ways in which the Carson NF can collaborate with partners, other agencies, and the public.

Response to public input is not specifically addressed in the Plan, as this is best done on a project-by-project basis. This flexibility allows the Carson NF to respond and provide feedback in ways that are appropriate for a diversity of interested stakeholders; specifically, it allows for adaptation to local conditions and the use of developing technology.

Concern Statement 26 **Airplane Flights**

Restrict airplane flight over mountain recharge regions and oil and gas regions of the forest.

Associated Comment Letter: 5430

Response

The Federal Aviation Administration has the sole authority to regulate all navigable airspace, exclusively determining the rules and requirements for its use (49 U.S.C. § 40103(b)(1). The Carson NF does not have the authority to designate areas as no-fly zones.

Concern Statement 27 **Plan Components, General**

Add more (non-specific) standards and guidelines to the plan.

Associated Comment Letters: 132, 4911, 5347

Response

The purpose of standards and guidelines is to constrain projects and activities. The intent of the final Plan is to integrate "resource management to provide for ecosystem services and multiple uses in the plan area" (36 CFR 219.10(a)). The final Plan has been written to allow the Carson NF to adapt to changing conditions and improve management based on monitoring and new information, rather than to maximize constraints on Forest Service activities. Standards and guidelines have been developed in coordination with partners, other agencies, and the public; they limit management as necessary, while allowing innovative and diverse approaches to achieve desired conditions.

Concern Statement 28 **Plan Components, General**

Add a standard or guideline that requires the Carson to meet desired conditions.

Associated Comment Letter: 5303

Response

Desired conditions are descriptions of "specific social, economic, and/or ecological characteristics of the plan area, toward which management of the land and resources should be directed" (FSH 1909.12 22.11). That is, projects are designed to maintain or move toward desired conditions (final Plan, chapter 1, Plan Framework, Plan Components). However, desired conditions may not be achievable and need not be met over the life of the plan (FSH 1909.12 22.11).

Guidelines "[p]lace design or operational constraints on projects and activities to help achieve or maintain desired conditions, to avoid undesirable effects, or to meet applicable legal requirements…" (FSH 1909.12 22.14 (1)). Standards serve the same purpose by prohibiting "the Forest Service from authorizing certain types of projects or activities…" (FSH 1909.12 22.13 (1)). Plan components are not commitments to act (FSH 1909.12 22.1(2)(d)) and neither standards nor guidelines restate or require achievement of desired conditions (FSH 1909.12 22.14(5) and 22.13(5)).

Concern Statement 29 **Plan Components, General**

Add desired conditions that require collaboration with specific groups.

Associated Comment Letter: 4926

Response

Desired conditions are plan components that describe what the plan area should look like in the future (FSH 1909.12 section 22.11): they do not direct the agency to act in specific ways (FSH 1909.12 section 22.11(2)(d)). Additionally, plan components guide and constrain only Forest Service actions, not those of the public (FSH 1909.12 22.1(2)(g)). Collaboration requires willing collaborators; the plan cannot compel the public to work with the Forest Service. Management approaches are the appropriate planning tool for describing strategies for working with the public. The final Plan includes many management approaches that describe potential ways the Carson NF can collaborate with partners, other agencies, and the public.

Concern Statement 30 **Plan Components, General**

Create objectives to collaborate or meet with partners or agencies.

Associated Comment Letter: 4926

Response

Objectives are plan components that describe a rate of progress toward desired conditions (FSH 1909.12 22.12). Plan components guide and constrain only Forest Service actions, not those of the public (FSH 1909.12 22.1(2)(g)). Collaboration requires willing collaborators; the plan cannot compel the public to work with the Forest Service. Management approaches are the appropriate planning tool for describing strategies for working with the public. The final Plan includes many management approaches that describe potential ways the Carson NF can collaborate with partners, other agencies, and the public.

Concern Statement 31 **Plan Components, General**

Create plan components to make management approaches into firm commitments.

Associated Comment Letters: 4856, 4922, 4925, 5347, 5422

Response

Plan components guide and constrain Forest Service personnel, but the final Plan does not compel agency action or guarantee specific results or firm commitments (FSH 1909.12 sections 21 and 22.1(2)(g)). Objectives must be attainable within the fiscal capability of the Carson NF (FSH 1909.12 section 22.12(5)). Strategies that do not meet requirements for objectives are appropriate as management approaches. Most management approaches in the final Plan either require cooperation from the public or are outside of the Carson NF's capability to attain without additional resources or efficiencies. Management approaches describe principal strategies and program priorities that the responsible official intends to use to carry out projects and activities developed under the plan. They are subject to adaptation based on information learned through monitoring or evolving scientific information.

Concern Statement 32 **Plan Components, General**

Change certain guidelines to standards in order to make them more enforceable or required.

Associated Comment Letters: 4838, 4856, 4893, 4898, 4925, 4926, 4994, 5303, 5347, 5574

Response

Both standards and guidelines place design or operational constraints on projects and activities and are required to be followed (FSH 1909.12 sections 22.13(1) and 22.14(1)). Standards may include complete prohibitions (FSH 1909.12 section 22.13(1)), whereas the terms of a guideline may be departed from so long as its purpose is met, and the result would be equally effective (FSH 1909.12 sections 22.14(1)).

Meeting the purpose of a guideline is required. For example, FW-NIS-G-7 requires that the spread of nonnative invasive species by fill and rock material be controlled; the guideline states that fill and rock material should be inspected. The purpose of the guideline may be met by means other than inspection, such as using a known weed free borrow pit or stone that has been washed.

Concern Statement 33 **Plan Components, General**

Add a standard that would allow certain uses.

Associated Comment Letter: 4926

Response

"Plans provide vision, strategy, guidance, and constraints. Plans themselves do not compel Agency action or guarantee specific results" (FSH 1909.12 section 21). The final Plan guides the development of future projects and activities by the Carson NF (FSH 1909.12 section 22.1(d)) but does not guide the public's use of the national forest (FSH 1909.12 section 22.1(g)). Legal uses of the Carson NF that are compatible with desired conditions and not otherwise prohibited are allowed under the final Plan.

Concern Statement 34 **Plan Components, General**

The plan needs to address how treatments will affect unique forest communities, critical species interactions, biota, structural stages, wildlife habitat, wildlife corridors, species survival and fitness, the return of specific overstory trees, the continuation of rare understory complexes, soil resilience, midstory trees, and seedling/saplings within an envelope of unprecedented environmental change and use patterns.

Associated Comment Letter: 5333

Response

Land management plans provide vision, strategy, guidance, and constraints; they do not compel treatments or guarantee specific results (FSH 1909.12 21) or address effects. The FEIS addresses how each alternative—under predicted future environmental conditions—would impact vegetation communities, including structural stages, overstory trees, understory vegetation, midstory trees, seedlings, and saplings (Chapter 3, Environmental Consequences for Vegetation Communities and Fuels); species, including wildlife habitat, habitat connectivity, and species survival (Chapter 3, Environmental Consequences for Wildlife, Fish, and Plants); and soils (Chapter 3, Environmental Consequences for Soil Resources). Biota, the combination of plants and animals in a region, is discussed in the sections listed above. Components in the final Plan will guide the development of specific treatments and their effects would be evaluated by a project-specific analysis.

Adaptation to changing climate is addressed throughout the final Plan, both indirectly through desired conditions in the form of functional ecosystems and resilient landscapes, and directly through management approaches and the monitoring plan, where appropriate. The final plan is designed around strategies that are responsive to an uncertain and changing climate, including maintaining and restoring resilient native ecosystems, adaptive management, anticipating increased disturbance, increasing water conservation and planning for reduced supply, utilizing markets and demand for small-diameter wood and biomass, and anticipating increased recreational use (more summer visitors and extended summer season of use).

Concern Statement 35 **Value by the Public**

Several sections contain desired conditions with language such as "Recommended wilderness management areas are valued by the public and contribute to clean air and water..." Including public sentiment as a desired condition for select uses on the Carson NF is subjective and assumes a bias on the part of the public toward some uses/restrictions rather than others. Similar language is not found about livestock grazing, timber harvest, or motorized recreation. Removing all language that contains subjective metrics that are similar to "valued by the public."

Associated Comment Letter: 5422

Response

It is accurate that plan components guide and constrain Forest Service personnel, not the public (FSH 1909.12 section 22.1(2)(g)). The reference to public value has been removed from Wilderness and Recommended Wilderness Management Area desired conditions in the final Plan.

Concern Statement 36 **User Conflict**

The agency has no authority to manage the use on the Forest to reduce "user conflict" or "resolve" values or philosophical differences between lawful public lands visitors. The consideration of offering trail experiences based on the trail type, not the trail user attitudes, which lead to user conflicts is a clear misinterpretation of the agency's statutory authority. The Travel Management Rule (TMR) is often cited as the authority to manage "user conflict." The TMR does clearly direct the Forest to consider "conflicts among uses." The Forest Service is compelled by its management regulations to provide unique trail experiences based on the type of trail, not changing those uses due to users' attitudes, values, or belief systems.

Associated Comment Letter: 3268

Response

While we agree that we cannot, and it is not the agency's mission, to require users to change their personal values or belief systems, we believe that reducing conflicts among uses on the Carson NF can reduce the potential for conflicts among users. In addition, we contend that the Carson does have a role in helping to diffuse conflict among users that arises because of divergent attitudes toward public lands by working to find common ground and mutually shared goals (final Plan, Chapter 2, Partnerships).

We clarified DA-NTRL-DC-2 in the final Plan to refer to uses instead of users. The final Plan still refers to user conflict in FW-CRF-G-3. In this case, the intent is to include both conflicts among uses and conflicts among users in the class of concerns that may need to be communicated. FW-REC-DC-7 refers to conflicts among uses not among users. The DEIS discussed user conflict in the Environmental Consequences sections for Recreation and for Lands; this has been corrected to refer to uses where appropriate (Chapter 3, Environmental Consequences for Recreation – Alternative 1), but the FEIS analysis still correctly refers to user conflict in both sections. Though it is not within the full authority of the Carson to control, user conflict can be influenced by management decisions. As an example, the FEIS asserts, "Meeting the needs of local communities would reduce user conflicts and enhance satisfaction in public ownership of NFS lands." (Chapter 3, Environmental Consequences for Lands - Alternatives 2, 3, 4, and 5).

Concern Statement 37 **Plan Components, Law, Regulation**

Plan components cannot be written in a way that limits rights under existing laws and regulations (for example, access to traditionally used products, acequia easements).

Associated Comment Letters: 4926, 5069

Response

The Carson NF must adhere to relevant laws, regulations, policies, and directives at the national, State, and local government level; a partial list of these laws can be found in appendix C in the final Plan. Additionally, the Plan includes components specifically related to Federally Recognized Tribes (FRT) and Rural Historic Communities (RHC) supporting uses such as access to traditionally used products and acequia easements.

Concern Statement 38 **Monitoring Data**

We believe it is important that monitoring data is readily available to the public, and opportunities for citizen science to contribute to monitoring is recognized as a viable option to improving overall monitoring efforts and data availability.

Associated Comment Letter: 5303

Response

The Partnership Management Approach 2 was updated in the final Plan to address the use of citizen science in monitoring—specifically to consider collaborating with academia, State and private agencies, Forest Service Rocky Mountain Research Station, and other groups to expand project-level monitoring capabilities, including the use of citizen science.

We will use monitoring data in developing the Bi-Annual Forest Monitoring Report. The report summarizes monitoring, presents data in an accessible format, and will be shared with the public. To the extent possible, the Forest Service makes monitoring data available to the public. Data gathered from other agencies used in the monitoring report, such as the New Mexico State 303d list for streams, is publicly available.

Concern Statement 39 **Monitoring**

Effective monitoring is key to measuring the Carson NF's success in achieving desired conditions over the life of this forest plan and improving management strategies and on-the-ground treatments over time. We urge you to make this a forestwide priority over the life of the plan.

Associated Comment Letter: 5303

Response

The final Plan includes a comprehensive monitoring plan that the forest must adhere to following the 2012 Planning Rule (36 CFR 219.12 and FSH 1909.12 chapter 30). The monitoring plan includes eight topics and associated monitoring questions, indicators, and specified timeframes (final Plan, Chapter 4).

Concern Statement 40 **Monitoring, Botanical Area**

Include monitoring of *Haplopappus microcephalus* within the designated Botanical Area.

Associated Comment Letter: 161

Response

DA-BOT-G-2 requires monitoring of the *Haplopappus microcephalus* Botanical Area.

Concern Statement 41 **NEPA Process, General**

Land use planning associated NEPA must (1) rigorously explore and objectively evaluate all reasonable alternatives, and (2) take a hard look at the effects of the alternatives.

Associated Comment Letter: 163

Response

The FEIS describes the affected environment and discloses environmental effects of each alternative considered (chapter 3). The forest planning process is a high-level process designed to make decisions to serve as side boards to management; it does not conduct the site-specific analysis needed to make decisions about specific projects, areas, or management actions.

Concern Statement 42 **Oversight**

Include provisions ensuring oversight and evaluating decision-making regarding the recommended actions and long-standing multiple use programs.

Associated Comment Letter: 5333

Response

The final Plan does not recommend specific actions. The proposed and possible actions listed in appendix B in the final Plan are likely to be consistent with plan components but do not represent commitments by the agency to perform or permit those actions. Oversight and evaluation of plan development occurred as part of the plan revision public participation process, consistent with the 2012 Planning Rule requirements (FSH 1909.12 chapter 40). Oversight and evaluation of actions implemented under the final Plan will be subject to Council on Environmental Quality regulations that implement the National Environmental Policy Act (40 CFR parts 1500–1508).

Concern Statement 43 **Implementation Cost**

The EIS should compare the cost to implement each alternative.

Associated Comment Letter: 4856

Response

Chapter 3 of the FEIS includes a Socioeconomics section, which provides social and economic analyses, including of past and current conditions and the potential consequences of the four alternatives on the social and economic environment. Section 219.8 of the 2012 Planning Rule requires that the plan provide for social, economic, and ecological sustainability and further clarifies, under section B, which criteria plan components must take into consideration.

Concern Statement 44 **Public Input**

Changes between PDPP v2 (Preliminary Draft Proposed Plan version 2) and Draft were significant and done without public input.

Associated Comment Letter: 5673

Response

The Preliminary Draft Proposed Plan was released to solicit public input. The changes made to the draft Plan were in response to public comments and public input received on the Preliminary Draft Proposed Plan. This public involvement is part of the National Environmental Policy Act (NEPA) process as defined by 40 CFR 1500. During the 90-day comment period, the public had opportunities to provide input on the draft Plan including any differences between the draft and preliminary versions of the Plan.

Concern Statement 45 **Public Comment**

There has been insufficient time allowed for public comment. Extend the comment period and have a few more public meetings that better describe the alternatives and make the summary more understandable and available to more people. At such a meeting, computers and IT staff could be made available so residents without tech skills could be helped to comment online. The comment periods should not have been concurrent, as they violate the 2012 Planning Rule's emphasis on the importance of meaningfully involving the public throughout the plan revision process. We are disappointed, however, that the Santa Fe, Carson, and Cibola National Forests chose to initiate the public comment period for their draft plans and DEISs concurrently, with all three sets of comments having the same deadline. This decision will likely impede public comment and is inconsistent with the 2012 Planning Rule's emphasis on the importance of meaningfully involving the public throughout the plan revision process.

Associated Comment Letters: 4853, 4860, 4912, 4964, 5325, 5584

Response

The national forest followed the direction provided regarding Requirements for Public Participation in 36 CFR.219.4. The In addition the Carson, Cibola, and Santa Fe National Forests released all relevant documents for public review two months prior to the official comment period start date published in the

Federal Register to allow additional time for the public to review the documents. The responsible officials for the three forests unanimously decided to release the three plans within the same time frame to allow public review for consistency in all three plans at the same time. The Carson planning team coordinated meeting times and locations to minimize conflicts with the public in attending multiple meetings. During public meetings in the comment period, computers were available for attendees to submit comments and comment cards were handed out. A full description of public engagement can be found in the FEIS, appendix E.

The Carson NF initiated public involvement in June 2014. Since then, the national forest has participated in over 80 public meetings in neighboring communities, plus monthly open houses at the Carson National Forest Supervisor's Office in Taos, New Mexico. We have also held meetings to discuss comments with groups or individuals who requested a meeting (see Public Involvement section, FEIS). In addition, we continually encouraged the public to provide comments at any time throughout the process and provided these opportunities at every public engagement and meeting held.

Concern Statement 46 **Public Meetings**

Hold meetings in all neighboring communities so the public is aware of what is going on.

Associated Comment Letter: 5719

Response

The Carson NF made a concerted effort to host meetings in as many communities across the forest as possible (FEIS, Volume 1, Public Involvement section). Multiple meetings were held in at least 24 local communities. In addition, planning materials were made available for the public to review online, at district offices, and at regional libraries. Not all communities around the national forest have public spaces available to host these meetings. Other factors limiting the number of meetings were venue availability, employee availability, and public interest. The Carson followed all Requirements for Public Participation in 36 CFR.219.4.

Concern Statement 47 **Comment Period**

The public was unaware of the comment period deadline because it was not well advertised. Public meetings were not held in neighborhoods that are directly affected.

Associated Comment Letters: 5008, 5391

Response

The Carson NF used a variety of methods to share information. The first is following our legal requirement to post a legal notice in the newspaper of record which announces the beginning of the comment period (36 CFR 215). The newspaper of record is *The Taos News*. The national forest also followed direction provided to us regarding public notification (36 CFR 219.16). In addition, we posted information regarding the public comment period on our website, in all district offices, at area libraries, and at area post offices. We held 12 public meetings in August and September 2019 across northern New Mexico to advertise the comment period, explain the plan and alternatives, and assist the public with submitting comments. An email announcement was sent to the full forest plan revision mailing list of over 1,300 recipients. Letters were sent to all Carson NF permit holders and Tribes with which we consult.

The Carson NF made a concerted effort to host meetings in as many communities across the forest as possible throughout the plan revision process. To date, the national forest has hosted over 80 public meetings in communities across the forest, plus monthly open houses at the Supervisor's office in Taos (FEIS, Volume 1., Public Involvement Section). Not all communities around the Carson have public space available to host these meetings. Other factors that limited the number of meetings were venue availability, employee availability, and public interest. The forest followed the direction provided regarding Requirements for Public Participation in 36 CFR.219.4.

Appendix E of the FEIS contains a summary of its public involvement process through the forest plan revision effort.

Concern Statement 48 **Revision Process**

The process has been cumbersome and the information too dense and complex for many local residents to navigate.

Associated Comment Letter: 4853

Response

The Carson NF has presented a large amount of information throughout the plan revision process. The information presented and the processes through which we have done so have been in accordance with the 2012 Planning Rule (36 CFR 219) as well as with Forest Service Directives found in Forest Service Handbook (FSH 1909.12). We made a concerted effort to present complex, scientific information in plain language as much as possible and explain the planning process. We held 12 public meetings in August and September 2019 across northern New Mexico to advertise the comment period, explain the plan and alternatives, and assist the public with submitting comments. The environmental analysis was presented on posters summarizing effects by resource and alternative and Forest Service personnel were available to help describe what they showed. The summary posters were also available to the public online.

Concern Statement 49 **Public Comments**

The plan does not mention specific comments submitted during the wilderness process.

Associated Comment Letter: 143

Response

The final Plan has been adjusted based on public comment received throughout the plan revision process, though it does not include specific comments. Wilderness process comments were specifically considered during the wilderness process and are documented in the Wilderness Recommendation Process – Inventory, Evaluation, and Analysis document. Responses to comments related to wilderness submitted during the public comment period for the draft Plan appear later in this appendix.

Concern Statement 50 **Comment Confirmation**

Please confirm receipt of my comment.

Associated Comment Letter: 5333

Response

All written, substantive comments received via postal mail, electronic mail, or direct submission through the Carson NF website during the formal comment period are included in this appendix. Lists of unique commenters appear in tables 2, 4, and 5 above.

Concern Statement 51 **Commenting, Facebook**

Do not allow comments that originate via Facebook forms.

Associated Comment Letter: 298

Response

The Carson NF has considered all comments received throughout the plan revision process through a variety of means and from many sources. We have not solicited plan revision comments through Facebook, but the Carson NF has no way of tracking where comments originated. All written, substantive comments received via postal mail, electronic mail, or direct submission through the Carson NF website during the formal comment period are summarized and responded to in this appendix.

Concern Statement 52 **Public Notice of Changes**

Inform the NMDA of any changes to the Draft plan prior to final decision.

Associated Comment Letter: 5422

Response

We released a draft version of the final Plan to the public so that commenters may object to changes made to the draft Plan based on public comment, consistent with Council on Environmental Quality regulations for implementing the National Environmental Policy Act (40 CFR parts 1500–1508). The objection process allows the responsible official, the reviewing official, interested persons, and objectors to have the opportunity to seek reasonable solutions to conflicting views of plan components before the responsible official approves the plan revision. The objection resolution period (usually 90 days) typically includes discussions between the planning team, responsible official, and reviewing officer to ensure full understanding of objection issues and possible resolutions. Either the reviewing officer or objectors may request to meet to discuss the issues raised and potential resolutions. Once the reviewing officer issues a response to the objections and the responsible official follows any instructions contained in the written response, the responsible official may sign the final Record of Decision and implement the proposal.

Concern Statement 53 **Public Notice of Revision**

Keep the public informed regarding future plan revision and other NEPA project information.

Associated Comment Letter: 4886

Response

Public participation and notification during the plan revision process is required as described in the 2012 Planning Rule (FSH 1909.12 chapter 40) and Council on Environmental Quality National Environmental Policy Act regulations (40 CFR 1500 et seq., FSM 1950). The Carson NF does not plan to revise the land management plan again for at least 10 years. All project-level analyses and planning are publicly available in the Carson NF's Schedule of Proposed Actions Report[1] and on the Carson NF website, current and recent projects page[2]. The public may request to be added to our project mailing list by subscribing to the project update page on the national forest's website located here: https://www.fs.usda.gov/projects/carson/landmanagement/projects.

Concern Statement 54 **Writer-Editor**

Someone not involved in producing the document should be given the task to read the entire document and point out wording problems before it is released to the public.

Associated Comment Letter: 5588

Response

The final Plan and FEIS have undergone multiple reviews for content, format, clarity, and grammar. They have been reviewed by independent writer-editors and by the general public. Any errors pointed out during reviews have been corrected.

Concern Statement 55 **Comparison of Alternatives**

Add the expected quantity (density) of snags and coarse woody debris and components for landscape connectivity to the comparison of alternative table.

Associated Comment Letters: 4951, 5574

[1] https://www.fs.fed.us/sopa/forest-level.php?110302
[2] https://www.fs.usda.gov/projects/carson/landmanagement/projects

Response

Variation in snags and coarse woody debris among alternatives differs by vegetation community and is difficult to summarize briefly in this overview table, but detailed comparison tables are provided in appendix C of the FEIS (tables 18, 19, 23, and 24) and discussed in the environmental consequences sections for individual vegetation communities as appropriate (FEIS, chapter 3, Vegetation and Fuels). Landscape connectivity plan components do not differ by alternative other than FW-WSW-RMZ-STM-DC-2, which under alternative 4 directs management to never fragment streams through infrastructure of development. This plan component would not allow fragmentation to protect native aquatic species from non-native aquatic species. For a list of all habitat connectivity-related plan components please see section 4 of appendix H in the FEIS volume 3.

Concern Statement 56 **Compatibility with Other Plans**

Table 28: “Management plan summaries for other lands in the cumulative effects landscape” summarizes the land management plans of local governments and lists the effects the Carson NF's Draft Plan would have on them. The Carson NF should not only include a summary of local government land use plans but incorporate those plans into its own to ensure compatibility between them.

Associated Comment Letter: 5422

Response

Table 28 in the FEIS does list land management plans for other area land managers. The table does not list the effects that the final Plan would have on those other lands or on land management plans of other land managers. The final Plan guides management of Carson NF lands only. The plan revision process has involved land managers from each of the entities listed, among other local governments. Throughout the process, the national forest has worked closely with cooperating agencies, including state entities, counties, and adjacent tribes to ensure compatibility with local government planning.

Concern Statement 57 **Glossary Definitions**

The glossary of the Forest Plans and EIS should be consistent and expanded to include description or definitions of the National Trails System Act, National Scenic Trail, National Scenic and Historic Trail nature and purposes, and Scenic Integrity. Recreation Opportunity Spectrum class definitions need to be expanded to add descriptions of Access, Remoteness, Non-Recreation Uses, Visitor Management, Social Encounters, and Visitor Impacts setting indicators. The Forest Plan glossary should include other descriptors for clarity and those definitions and terms that are found in the attached CDNST Planning Handbook should be added.

Associated Comment Letters: 1301

Response

The glossaries in the final Plan and the FEIS reflect the terminology used in the respective documents. Acts of Congress, including the National Trails System Act of October 2, 1968, are generally not included in the glossary, but are listed in appendix C in the final Plan. The nature and purposes of specific national trails vary and are developed based on legislative history and enabling legislation and are typically stated in each trail’s comprehensive plan. We added an entry for national trails to the glossaries for the final Plan and FEIS, which references the act and the nature and purposes common to all national trails.

Scenic integrity objective is defined in the final Plan and FEIS glossaries. The scenery management system, including scenic integrity is more completely described in the handbook, Landscape Aesthetics: A Handbook for Scenery Management (USDA FS 1995), which is referenced in appendix C in the final Plan.

Reference to the Recreation Opportunity Spectrum User's Guide has been added to the Recreation section introduction and is referenced in appendix C in the final Plan. The description of recreation opportunity spectrum class setting characterizations in the FEIS is taken directly from the Recreation Opportunity Spectrum User's Guide, which has been added as a reference (FEIS, Chapter 3, Recreation, Description of Affected Environment, Recreation Setting and Opportunities). Physical setting (remoteness, size, evidence of humans), social setting (visitor density), and managerial setting (visitor management) are all factors in delineating recreation opportunity spectrum class. These are described in detail in the Recreation Opportunity Spectrum User's Guide and were considered during the inventory of existing recreation opportunities (USDA FS Carson NF 2018b).

Concern Statement 58 **Geographic Areas**

The Carson NF should, at a minimum, explain why it has chosen not to establish geographic areas in the draft plan, consider whether or not establishing geographic areas is warranted, and provide a full, reasoned explanation of its decision in the final draft plan.

Associated Comment Letter: 4911

Response

The Carson NF did consider including geographic areas but determined that the additional terminology adds unnecessary complexity to the plan and was neither necessary nor warranted. Geographic areas are based on place, while management areas are based on purpose (FSH 1909.12 22.21). The final Plan identifies several management areas that are based on both their geographic location and their management purpose (Valle Vidal Management Area, San Antonio Management Area, Jicarilla Natural Gas Management Area). We chose to use the term management areas, not geographic areas to simplify organization of the final Plan; this terminology decision in no way alters the plan direction that applies to those areas. The final Plan is the result of decisions made during the revision process; it does not document the decision process; rather decisions are documented in the record of decision, the project record, and the FEIS, including this appendix.

Concern Statement 59 **Appendix B Consistency**

Update appendix B to be consistent with changes made to the plan.

Associated Comment Letter: 4970

Response

Appendix B of the FEIS has been updated to be consistent with the final Plan.

Editorial Changes to Plan - EDT

Concern Statement 60 **Geographic Context**

"Their high elevations fill two major rivers, the Rio Grande and Rio Chama, and are vital water sources to both small local communities and larger urban areas downstream." Both rivers start in Colorado so need to give some support to this statement.

Associated Comment Letter: 5588

Response

We accept that both rivers originate in Colorado but stand by this statement. The term "fill" is used figuratively and is not intended to imply that the Rio Grande or Rio Chama are "filled exclusively" from runoff from the Carson. Streams from the Carson NF contribute 40.3 percent of the total runoff in the Rio Chama and Upper Rio Grande sub-basins based on streamflow modeling (USDA FS Carson NF 2015, p. 141); about 50 percent of the water in these sub-basins originates in Colorado (USGS 2015).

Concern Statement 61 **Geographic Context**

"The NFS lands make up about 37 and 23 percent of Taos and Rio Arriba Counties, respectively, and the majority of these two counties are under management of Federal agencies or federally recognized tribes." What are the overall percentages? It would be nice to have that information here to show how much is under the National Forest System in these counties. How about adding San Juan County also?

Associated Comment Letter: 5588

Response

This sentence was slightly misleading and has been corrected in the final Plan. The Carson NF overlaps four counties and alone makes up 23 percent of Rio Arriba County, 37 percent of Taos County, 3 percent of Colfax County, and 1.4 percent of Mora County (USDA FS Carson NF 2015, p. 2). The Santa Fe NF overlaps an additional 15 percent of Rio Arriba County and 8 percent in Mora County. There are no National Forest System lands in San Juan County.

Concern Statement 62 **Historical Context**

"Today, by far the Carson's greatest local economic impact is through recreational tourism." Citation or at least reference the statement.

Associated Comment Letter: 5588

Response

Support for statements in the final Plan is contained in supporting documents such as the assessment report and environmental impact statement. The Carson NF's total economic impact by industry was assessed by the University of New Mexico in 2014 (UNM 2014) and reported in the Assessment Report (USDA FS Carson NF 2015, p 345). This contribution includes direct, indirect, and induced impacts. Labor income contributed by the Carson NF is reported for each alternative in the FEIS (Chapter 3, Environmental Consequences for Socioeconomics, Data Sources and Assumptions, Payments to States and Counties). That direct labor income contributed is greatest from minerals. Forest Service expenditures, such as salaries are also a larger labor income contributor than recreation. However, the recreation program has significant indirect impacts, such as a tourist spending money in a local restaurant, and induced impacts such as increased demand for goods and services in the local economy (USDA FS Carson NF 2015).

Concern Statement 63 **Historical Context**

The plan needs to tell the general public the history of traditional users of the Carson beginning with colonization by Don Juan de Oñate in 1597.

Associated Comment Letter: 143

Response

The final Plan is not intended to provide an authoritative or complete history of New Mexico or the Carson NF; rather, the Historical Context section provides a brief introduction to the background against which the national forest is managed, beginning prior to European colonization.

Concern Statement 64 **Historical Context**

The Plan says "In 1856, 200,000 head were driven to California. Breeding with American wool-producing varieties made New Mexican sheep profitable for wool as well as mutton, and sheep numbers in New Mexico rose from 1.6 million in 1870 to 5.2 million by 1883." Citation needed otherwise this is just conjecture.

Associated Comment Letter: 5588

Response

Support for statements in the final Plan is contained in supporting documents such as the Assessment Report and environmental impact statement. This sentence has been reworded to be more general and not reference exact numbers or dates but reflect a general trend that is well documented. The 200,000 sheep driven to California in 1856 is noted by Roth (1965) and Denevan (1967). Connor gives a similar figure of half a million sheep driven from New Mexico to California during the 1850s and discusses breeding for wool-producing varieties (1921, pp.118, 138). Wallace provides a consistent and detailed history of the sheep industry in New Mexico (2014). He also discusses a shift to breeding for higher quality wool production (p. 62). The sheep numbers in 1870 and 1883 are from Raish and McSweeney (2001). Conner references U.S. Census data of 619,000 sheep in New Mexico in 1870 and 3.9 million in 1880 (1921, p. 191). Wallace summarizes the New Mexico sheep population in 1883 as more than triple what it was in 1867 (2014, p. 111).

Concern Statement 65 **Historical Context**

Add to historical context within the plan, sixth paragraph: “The cattle and sheep boom and the environmental damage they caused led Congress to establish and regulate Federal reserves across the American West, often through the purchase of former land grant common land lost to land speculators who drove the changing economy to ecological exploitation.”

Associated Comment Letter: 4926

Response

It is already noted in the Plan that, “The cattle and sheep boom and the environmental damage they caused is one of many reasons that led Congress to establish and regulate Federal reserves across the American West.” (Historical Context section pg. 3). A brief summary of New Mexican territorial history and the origins of National Forest lands has been added to the final Plan (Chapter 1, Plan Area, Historical Context).

Concern Statement 66 **Historical Context**

“There are scattered patented mining claim inholdings of private land across the Questa, Camino Real, and Tres Piedras Ranger Districts that have been worked periodically since the late 1800s.” Need to add Valle Vidal, i.e., the La Belle area.

Associated Comment Letter: 5588

Response

The Valle Vidal and La Belle area are part of the Questa Ranger District.

Concern Statement 67 **Historical Context**

The first Spanish visitors came to the Taos area as early as 1540, and settled along the Rio Grande and its tributaries. Would be nice to state that these people came up from the area of Mexico instead of people assuming from the east or the west.

Associated Comment Letter: 5588

Response

The historical context provided in the final Plan is a brief overview and not intended to be a historical account of detailed settlement patterns.

Concern Statement 68 **Historical Context**

The increased cold [what increase cold. Information to support this statement], periodic droughts, and subsequent diminished food supply, combined with the catastrophic impact of European epidemic diseases, culminated in 1680 with the violent expulsion of the Spanish from New Mexico.

Associated Comment Letter: 5588

Response

The sentence above was clarified in the final Plan. It was changed to, “In the 1600s, New Mexico experienced a series of severe, devastating droughts and bitterly cold winters that caused widespread hardship and famine for both Native Americans and Spanish settlers. The cold, drought, and subsequent diminished food supply, combined with the catastrophic impact of European epidemic diseases, culminated in 1680 with the violent expulsion of the Spanish from New Mexico” (Chapter 1, Historical Context).

Concern Statement 69 **Historical Context**

“Timber harvested from the Carson was utilized throughout the American West to support rapidly expanding railroads, as well as mining operations." [What is the citation?]. Need to add built Colorado Springs from timber harvested via railroad logging on the Tres Piedras and El Rito Ranger Districts via the narrow gauge railroad. One large mill is where the fire department sits in Tres Piedras, New Mexico.

Associated Comment Letter: 5588

Response

The final Plan is not intended to provide an authoritative or complete history of New Mexico or the Carson NF. Support for statements in the final Plan is contained in supporting documents such as the assessment report and environmental impact statement. The statement about the historical use of timber harvested from the Carson NF is also supported by Correia (2008).

Concern Statement 70 **Historical Context**

“Extensive logging cleared all of the largest pine, fir, and spruce trees from many areas” Not true. Logging removed the largest that were accessible for railroad logging on the west side of the Carson and horse logging on the east side. Jammer logging was done on lands privately held, which later became part of the Carson.

Associated Comment Letter: 5588

Response

The word “accessible” has been added after the word “many” in the final Plan. Otherwise, the historical context is a brief overview and not intended to be a detailed historical account of settlement patterns.

Concern Statement 71 **Historical Context**

“The cattle and sheep boom and the environmental damage they caused is one of many reasons that led Congress to establish and regulate Federal reserves across the American West” citation or speculation. Need to reference Gifford Pinchot and President T. Roosevelt statements. Mostly was timber harvest and some resulting wildfires.

Associated Comment Letter: 5588

Response

Support for statements in the final Plan is contained in supporting documents such as the assessment report and environmental impact statement. Establishment of the Federal reserves is described by Gerry and Brock (2000). Otherwise, the historical context is a brief overview and not intended to be a detailed historical account of settlement patterns.

Concern Statement 72 **Historical Context**

“Since its establishment, Congress has designated additional lands as a part of the Carson National Forest with a current total land area of 1,486,372 acres.” Ought to note land was returned to Taos Pueblo by President Nixon.

Associated Comment Letter: 5588

Response

There are numerous reasons that the Carson NF manages the current land area that it does. However, the historical context is a brief overview in the final Plan and not intended to be a detailed historical account of settlement patterns and/or history.

Concern Statement 73 **Distinctive Roles and Contributions**

"As people move to the area they settle along the flanks of the mountains, in the valleys, in proximity to travel routes, and near its rivers and streams." Change this language to say 'moved' instead of 'move.'

Associated Comment Letter: 5588

Response

In the Distinctive Roles and Contributions section in the final Plan, the language was changed from 'move' to 'moved.'

Concern Statement 74 **Distinctive Roles and Contributions**

Within the Distinctive Roles and Contributions section of the plan it states "The high elevations on the Carson support environments that are rare in New Mexico and in the region. Alpine and tundra, bristlecone pine, montane and subalpine grasslands, and the piñon juniper-sage mix are all uncommon in the surrounding landscape. High alpine is particularly unique and though it is well protected it is also vulnerable." Please clarify this statement, as it seems like piñon juniper occurs in the high elevations.

Associated Comment Letter: 5588

Response

Piñon juniper-sage was removed from this list. The statement now says, "Alpine and tundra, bristlecone pine, and montane and subalpine grasslands are all uncommon in the surrounding landscape."

Concern Statement 75 **Distinctive Roles and Contributions**

"Historically, the communities around the Carson have relied upon the many resources and uses the forest provides for food, shelter, and economic support for their families." Add water.

Associated Comment Letter: 5588

Response

We added water to the list of resources that communities rely on in the Distinctive Roles and Contributions section in the final Plan.

Concern Statement 76 **Distinctive Roles and Contributions**

"But, it is the mountains, with their majestic beauty and dominance over the landscape, their trees for timber and fuelwood, water for irrigating agricultural lands via acequias, watering livestock and domestic drinking water, and wildlife and plants for food, which have drawn individuals and families to settle the land and establish communities. The mountains and their natural assets provide the basis for the traditional customs and practices, which contribute to cultural life and to social institutions important to the people who live here. These include fuelwood for heating and cooking, latillas and vigas, opportunity for hunting and fishing, forage for livestock grazing, medicinal plants and herbs, piñon nuts, family recreation opportunities, and water for acequias." There is a lot of redundancy in this section. Could be made more straightforward and simpler.

Associated Comment Letter: 5588

Response

We agree and have rewritten this paragraph in the final Plan to make it less repetitive.

Concern Statement 77 **Distinctive Roles and Contributions**

"The Carson's high plateaus and rugged mountains are major sources of snowpack and stream runoff, contributing to over 40 percent of the waters that flow into the Rio Grande from northern New Mexico and southern Colorado." Finally, some numbers. could be done on page 1 of introduction also.

Associated Comment Letter: 5588

Response

The final Plan introduction is intended as a brief overview of the Carson NF's location, organization, and history, not a comprehensive or detailed accounting of the resources it manages. The assessment report and affected environment sections of the FEIS provide much more of this type of information.

Concern Statement 78 **Distinctive Roles and Contributions**

Concurrent with the statement which describes the distinctive roles and contributions of the high elevation forests, add some brief text recognizing the distinctive role that high elevation forest and watershed areas have in contributing to science and education.

Associated Comment Letter: 5347

Response

We added contribution to science and education to the Distinctive Roles and Contributions section in the final Plan (chapter 1).

Concern Statement 79 **Distinctive Roles and Contributions**

Page 4 of the Draft Management Plan, last paragraph, second sentence - why is acequias listed separately?

Associated Comment Letter: 4921

Response

This sentence lists examples of communities with historic, cultural, and social connections to the Carson NF. Acequia parciantes (users) are a good example of this type of community. This has been clarified in the final Plan. The term "communities" was added to this sentence to clarify that the Carson NF is important to acequia users not to the physical ditch.

Concern Statement 80 **Distinctive Roles and Contributions**

While implied, hunting, trapping, and fishing should be included as serving specific, distinct roles and contributions to the Carson National Forest.

Associated Comment Letter: 4887

Response

Hunting, trapping, and fishing have been specifically listed in the Distinctive Roles and Contributions section of the final Plan.

Concern Statement 81 **Distinctive Roles and Contributions**

Within the Distinctive Roles and Contributions section of the plan, add a citation to the following statement: "Most visitors to the Carson come for some form of recreation, making tourism the single largest contributor to the local economy for surrounding communities."

Associated Comment Letter: 5588

Response

The final Plan is not intended to provide an authoritative or complete history of New Mexico or the Carson NF. Support for statements in the final Plan is contained in supporting documents such as the

assessment report and environmental impact statement (USDA FS Carson NF 2015). This statement is supported by the Contributions to Local Economic Conditions section of the Assessment and the information in table 69 specifically (UNM 2014, 2015; USDA FS Carson NF 2015, p. 344).

Concern Statement 82 **Purpose of the Plan**

Within the Purpose of the Plan section of the plan it is stated that "The NFMA directs that plans be revised on a 10- to 15-year cycle." If this statement is included, then include the false starts and changes in the regulations, lawsuits and the like that have prevented the completion on this schedule. This makes the prior management seem incompetent as the plan was not revised on schedule.

Associated Comment Letter: 5588

Response

There were many reasons why the Carson NF plan was not revised following the 10- to 15-year schedule required by the National Forest Management Act. One purpose of the final Plan is to fulfill that revision requirement. The history of previous management decisions regarding plan revision and the regulatory environment that contributed to delaying a new plan is not relevant to the purpose of the plan.

Concern Statement 83 **Administrative Changes**

The public should be given time to comment on any administrative changes to the plan.

Associated Comment Letter: 5347

Response

Language has been added to the Consistency of Projects with the Plan section of the final Plan describing two types of administrative changes and their associated public notification and involvement.

The Forest Service directives (FSH 1909.12) describe two types of administrative change, substantive changes to the monitoring program and all other administrative changes. Substantive changes to the monitoring program made outside of the process for plan revision or amendment may be made only after notice to the public of the intended change, at least 30 days for public comment, and consideration of comments (219.16(c)(6), 1909.12 sec 21.5, 21.51).

Other administrative changes such as corrections of clerical errors or updates to conform with new statutory or regulatory requirements require notification of the public (219.16(c)(6), 36 CFR 219.13(c), 1909.12 sec 21.5). The responsible official should be transparent with the public and governmental entities when making administrative changes to "other plan content" by reaching out to the public early. When considering public and governmental participation, the responsible official should consider the importance of the need to change the plan and conduct outreach that is commensurate with the change to be made and the level of public and governmental interest. Public involvement may be minimal for correction of clerical errors.

Concern Statement 84 **Needs for Change**

"Ecological conditions have changed since the plan was issued in 1986, including the recognition that vegetation conditions (i.e., structure, composition, and function) are divergent from reference conditions; forest conditions indicate a substantial departure from the natural fire regime." Many on the Carson recognized these departures in the 1970s, '80s, and '90s. Often the public was not supportive of the needs of the land base. Hence, many of the activities needed were not undertaken due to public comment.

Associated Comment Letter: 5588

Response

We agree that vegetation departure was recognized in 1986 and have reworded this sentence to acknowledge this in the final Plan. It remains valid that this recognition was not a central tenant of the 1986 plan and constitutes a reason for changing that plan.

Concern Statement 85 **Partnerships, General Support**

Support for plan language to work with partners.

Associated Comment Letter: 4876

Response

The Carson NF has made a concerted effort to support building and maintaining collaborative partnerships. This focus can be found throughout the plan, for instance, in the following plan components: FW-VEG-MA 7 and 8; FW-CAM-MA-2; FW-CRF-MA-2; FW-WFP-MA-2; FW-FRT-MA-7; FW-RHC-MA-2; FW-FFP-MA-6; FW-REC-O-3; FW-REC-MA-3, 4,5,6 and 8; and FW-TFA-MA-1 in addition to the section on Partnerships within the final Plan.

Concern Statement 86 **Partnerships, General Support**

The Forest Service should prioritize working with local governments and communities, recreation user groups, and other nonprofit or non-governmental entities to fund, develop and maintain sustainable multi-use areas within the Forest.

Associated Comment Letter: 5236

Response

The Partnerships section in the final Plan describes working with partners and volunteers to increase capacity for managing forest resources, assist in communicating with and educating the public, and achieve short- and long-term mutually shared goals (FW-PART-DC-1). There are also many management approaches throughout the final Plan that describe an emphasis on working with local governments, communities, recreation user groups and other nonprofit or non-governmental entities (examples include Management Approaches for Recreation-3 and -9, and Management Approaches for Transportation and Forest Access-2 and -3).

Concern Statement 87 **Partnerships, General Support**

Work in conjunction with other resource concerns (grazing permitees, water right holders, forestry project leads, etc.) to prioritize and develop mutually beneficial projects, such as pairing upland restoration projects with improvements to streams and habitat.

Associated Comment Letter: 5303

Response

In the final Plan, FW-PART-DC-1 directs management to collaborate with partners toward short- and long-term mutually shared goals.

Concern Statement 88 **Partnerships, Infrastructure Maintenance**

Add the following Recreation Objective: “Establish and utilize community-based partnership programs to address up to 25 percent of the deferred maintenance for core infrastructure needs such as water, sewer, roads, and trails within 10 years of plan approval.”

Associated Comment Letters: 4837, 4846, 4960, 4970, 5199, 5444

Response

Objectives are plan components that describe a rate of progress toward desired conditions (FSH 1909.12 22.12). Plan components guide and constrain Forest Service actions, not those of the public (FSH

1909.12 22.1(2)(g)). Collaboration by the Carson NF requires willing participants and the plan cannot compel the public to work with the Forest Service. Management approaches are the appropriate planning tool for describing strategies for working with the public.

The final plan emphasizes using partnerships and collaboration to leverage resources and provide sustainable recreation to meet user needs and contribute to the economic, cultural, and social vitality and well-being of surrounding communities (FW-PART, FW-REC-DC-4, FW-REC-DC-5, FW-REC-DC-10, Management Approaches for Recreation-3, -4, and -6). In particular, FW-PART-DC-1 states the desire to build a collaborative network of partners and volunteers to increase capacity.

Concern Statement 89 **Partnerships, Project Prioritization**

Prioritize partner projects for restoration and rehabilitation including replacement of non-native vegetation such as tamarisk with appropriate native plantings or seedings.

Associated Comment Letter: 4925

Response

The Carson NF recognizes the importance of collaborative partnerships; the final Plan has a Partnership Section that focuses entirely on partnership opportunities and includes numerous plan components to facilitate such partnerships. The Plan also includes components throughout the various resource areas that focus on partnership opportunities; for instance: FW-VEG-MA-8; FW-FRT-MA-7, FW-FHC-MA-2.

Concern Statement 90 **Partnerships, Stakeholder Recommendations**

The management direction for these iconic New Mexico landscapes should align closely with the community recommendations developed by local stakeholder groups.

Associated Comment Letters: 1255

Response

The Carson NF final Plan was developed with numerous periods of public and stakeholder input throughout the revision effort. Public involvement is part of the NEPA process as defined by 40 CFR 1500, along with the 2012 Planning Rule (36 CFR Part 219). In addition, as part of the plan revision process, a Government Working Group was established that enabled local, State and Federal agencies to provide direct input regarding the development of the revised plan, based on their own recommendations and those of their constituents.

Concern Statement 91 **Advisory Councils**

Please include the provision of objective Advisory Councils to provide expertise, respond to plans and BMP development, and to review concerns on a case-by-case, resource- and site-specific basis.

Associated Comment Letters: 1342

Response

Federal advisory committees that provide an agency with consensus advice or recommendations are governed by the Federal Advisory Committee Act of 1972 and require very specific organization, certification, annual reports, notice in the Federal Register, and establishment by the Secretary of Agriculture (Pub. L. 92–463, Oct. 6, 1972, 86 Stat. 770, as amended by Pub. L. 94–409, § 5(c), Sept. 13, 1976, 90 Stat. 1247; Pub. L. 96–523, § 2, Dec. 12, 1980, 94 Stat. 3040; Pub. L. 97–375, title II, § 201(c), Dec. 21, 1982, 96 Stat. 1822; Pub. L. 105–153, § 2(a), (b), Dec. 17, 1997, 111 Stat. 2689; Pub. L. 111–259, title IV, § 410(a), Oct. 7, 2010, 124 Stat. 2724).

The plan does not compel any agency action or guarantee specific outcomes (FSH 1909.12 § 22.1(2)(d)). It does not prioritize projects or activities. The Carson NF's priorities fit within the framework set forth in the land management plan, but evolve and are reassessed continually by Forest Service leadership, in

collaboration with the public. It is not the intent of the plan to establish an advisory council. Any such effort would be outside the scope of a forest plan and would need to be completed in accordance with relevant law, regulation, and policy. The final Plan has been developed with numerous periods of public and stakeholder input throughout the revision effort, as part of the NEPA process, per 40 CFR 1500 and the 2012 Planning Rule (36 CFR Part 219). In addition, as part of the plan revision process, a Government Working Group was established that enabled local, State, and Federal agencies to provide direct input regarding the development of the revised plan based on their own recommendations and those of their constituents.

Site-specific and case-by-case public input is solicited through the NEPA process on individual projects. The Partnership section in the final Plan focuses on working with partners and volunteers to exchange information and promote collaborative development of national forest priorities, a connection to place and its history, and a sense of stewardship (FW-PART-DC-2).

Concern Statement 92 **Local Government Definition**

In New Mexico the term “local government” includes soil and water conservation districts, acequias, rural fire districts, and others that are important to partnership efforts. In order to clarify this term for users of the plan, please add the term "local government" to the glossary, and include those local subdivisions of state government mentioned.

Associated Comment Letter: 5422

Response

We believe that users of the final Plan understand the meaning of local government without a glossary definition. “Soil and water conservation district” has been added to the glossary in the final Plan with a definition that clarifies that it is a form of local government. Acequias and community ditch associations are described as political subdivisions of the State of New Mexico in the Rural Historic Communities section introduction. Rural fire districts are generally a subdivision of county government but overseen by New Mexico State Forestry.

Concern Statement 93 **Volunteers**

The plan should require that the Carson post notices asking for volunteers.

Associated Comment Letter: 5711

Response

The FW-PART section in the final Plan outlines strategies for building and maintaining partnerships including volunteer opportunities. The plan does not require specific ways of fostering collaborative partnerships, reserving such specifics to local interests, and project-specific needs, among other factors.

Concern Statement 94 **Volunteers, Valle Vidal**

The Carson should do volunteer stream restoration projects in the Valle Vidal.

Associated Comment Letter: 5005

Response

Identifying specific volunteer opportunities in is not within the scope of the land management plan. However, there are numerous volunteer opportunities to work in the Valle Vidal with partner organizations such as Trout Unlimited, Quivira Coalition, Sierra Club, Albuquerque Wildlife Federation, local livestock grazing organizations, and others. We invite you to contact one of these organizations directly or contact the Questa Ranger District Office for more information on volunteer opportunities within the Valle Vidal. The final Plan includes plan components in the Partnership section to promote partnership across the national forest.

Concern Statement 95 **Volunteers, Motorized Trails**

The Forest Plan should identify how the Carson NF can partner with specific communities and recruit and utilize public/volunteer labor and resources to maintain motorized trails, enhance motorized recreation opportunities, and subsequent positive economic impact.

Associated Comment Letter: 24

Response

The FW-PART section in the final Plan outlines strategies for building and maintaining partnerships including volunteer opportunities. The plan does not require specific ways of fostering collaborative partnerships, reserving such specifics to the local interests and project-specific needs, among other factors. The Carson NF has hired a Partnership Coordinator, who recruits volunteers for projects occurring on the national forest.

The final Plan includes the following plan components specifically related to working with partners to enhance motorized recreation opportunities.

- FW-PART-DC 1 Partners and volunteers are a collaborative network that increases capacity for managing forest resources, assists in communicating with and educating the public, and is a crucial component to achieving short and long-term mutually shared goals (e.g., restoration and sustainable recreation).
- FW-REC-MA-7 Consider developing motorized and non-motorized nested loop trail systems, improved connectivity of existing routes and communities, and opportunities for long distance travel.

Concern Statement 96 **Youth Engagement**

Find a way to get our kids to the forests - make it part of your plan. Engage our future conservators of the environment and promote their physical and emotional health now.

Associated Comment Letter: 5597

Response

The final Plan includes direction in multiple sections to provide for engaging youth in forest management activities (FS-WFP-O-6; FW-FRT-DC-7; Management Approach for Federally Recognized Tribes-5; FW-RHC-DC-6; Management Approaches for Rural Historic Communities -1 and -4; Management Approach for Recreation-5; and MA-VVMA-DC-5). Engagement with youth is also included in the Forest Plan Monitoring Program, Monitoring Topic VII: Progress toward Meeting Desired Conditions and Objectives (table 15).

Specific youth engagement activities are not listed within the final Plan, because the plan is strategic rather than a commitment to specific activities. The ‘Every Kid in the Park’ program is an example of an active national initiative that meets the intent to reach out to youth described in the final Plan (i.e., in the sections/ components referenced above). There are also local conservation education programs, fire educations programs, and local events, such as Fish Fiestas, hosted by the Carson NF. We invite you to contact your local district office to learn more about local opportunities available to you.

Concern Statement 97 **Partnerships**

Previous versions of PART-DC-4 better prevented conflicts of interest and commercialization of public lands and required transparent partnerships.

Associated Comment Letter: 5673

Response

This concern reflects a misunderstanding of FW-PART-DC-4 in the preliminary draft proposed plan. The intent of that component was that the Carson NF would work with partners and volunteers to increase capacity for managing forest resources toward desired conditions, assist in communicating with and educating the public, and provide monitoring expertise and capacity. However, as previously written, it required a commitment from partners and volunteers, which lies outside of the control of the Carson NF, because plan components guide Forest Service personnel, not the public. The rewording of this desired condition as FW-PART-DC-1 in the final Plan resolves this error but does not change the intent and is no more or less permissive of conflicts of interests, commercialization, or transparency with partners or the public.

Concern Statement 98 **Partnership, Monitoring**

Trout Unlimited would like to partner with the Carson NF to help implement effective monitoring protocols where our interests align.

Associated Comment Letter: 5303

Response

Thank you for your interest; partnerships are encouraged under the final Plan, for instance in the Partnerships section and Wildlife Management Approaches.

Concern Statement 99 **Partnerships, Climbing**

The climbing community and the Access Fund are ready, willing, and able to help planners identify and improve the climbing related trail system, roads, and other management needs the Carson NF may require to provide for the world class opportunities found in the Carson NF.

Associated Comment Letter: 5236

Response

Thank you for your interest; partnerships are encouraged under the final Plan, for instance in the Partnerships section and Cliffs and Rocky Features Management Approaches.

Concern Statement 100 **Spatial Data Request**

Geospatial data was requested following FOIA procedures on September 8, 2019, which is yet to be received. “Under the Freedom of Information Act, I am requesting geospatial data for the Carson, Santa Fe, and Cibola NFs Draft Plans and DEISs that support the analyses of the revision proposed action and alternatives for each national forest. I would appreciate receiving the following datasets: Administrative Boundaries (FSH 1909.12 part 22.2) Land Ownership (FSH 1909.12 part 22.2) Designated Areas, including Recommended Wilderness, Wilderness Study Areas, Suitable and Eligible Wild and Scenic Rivers, Inventoried Roadless Areas, and the extent of the CDNST management corridor/rights-of-way to be established (acres) (FSH 1909.12 parts 22.2 and 24) Recreation Opportunity Spectrum Classes to be established - Summer and Winter (FSH 1909.12 parts 22.2 and 23.23a) Scenic Integrity Objectives to be established (FSH 1909.12 parts 22.2 and 23.23f) Lands that May be Suitable for Timber Production (FSH 1909.12 Chapter 60) CDNST travel route as an independent data layer (FSH 1909.12 part 23.23l) NFS roads and trails with attribute data (FSH 1909.12 part 23.23l). If the above GIS data is posted on the Forest Service websites, please provide to me the web-link locations. If this data is not to be posted to the Forest Service website, please send to me an email with the data attached in a zip file with embedded shapefiles, or a personal geodatabase which is preferred.” Please readily provide these geospatial datasets in future releases of the planning documents.

Associated Comment Letter: 163

Response

The Carson NF received an email request on September 2, 2019, for the data listed. The online locations of publicly available data were provided via email on September 3, 2019:

- Administrative Boundaries (FSH 1909.12 part 22.2)
  https://www.fs.usda.gov/detailfull/r3/landmanagement/gis/?cid=stelprdb5201889&width=full
  Click one of the links under Administrative Forest (this is a link to boundaries for all forests in the region –includes the Santa Fe and Cibola NFs)
- Land Ownership (FSH 1909.12 part 22.2)
  https://www.fs.usda.gov/detailfull/r3/landmanagement/gis/?cid=stelprdb5201889&width=full
  Click one of the links under Surface Ownership (this is a link to boundaries for all forests in the region –includes the Santa Fe and Cibola NFs)
- Designated Areas, including Recommended Wilderness
  https://www.fs.usda.gov/detail/carson/landmanagement/planning/?cid=fseprd620577
  There is a link for all management areas including recommended wilderness for each alternative.
- Wilderness Study Areas, the Carson does not have wilderness study areas.
- Suitable and Eligible Wild & Scenic Rivers, the Carson does not have any suitable rivers, eligible rivers are available on the Carson NF land management planning website as a kml.
  https://www.fs.usda.gov/detail/carson/landmanagement/planning/?cid=fseprd539892
- Inventoried Roadless Areas,
  https://data.fs.usda.gov/geodata/edw/datasets.php?xmlKeyword=inventoried+roadless
  Click one of the links under National Forest Lands with Nationally Designated Management or Use Limitations: Legal Status (this is a link to boundaries for all forests in the country –includes the SFE and CIB) and the extent of the CDNST management corridor/rights-of-way to be established (acres) (FSH 1909.12 parts 22.2 and 24) We have not mapped a CDNST management corridor; see the NTRL section of our plan beginning on page 148, in particular DA-NTRL-DC-2, DA-NTRL-S-1, 3, 4, DA-NTRL-G-3, 5, 9 (The SFE and CIB have similar plan direction, the codes and numbering may differ).
- Recreation Opportunity Spectrum (ROS) Classes to be established – Summer and Winter (FSH 1909.12 parts 22.2 and 23.23a)
  https://www.fs.usda.gov/detail/carson/landmanagement/planning/?cid=fseprd646363
  This is summer ROS, winter ROS is shown on our visitor map and is not changing as part of plan revision.
- CDNST travel route as an independent data layer (FSH 1909.12 part 23.23l)
  https://www.fs.usda.gov/detailfull/r3/landmanagement/gis/?cid=stelprdb5201889&width=full
  Click one of the links under Trail (this is a link to trails for all forests in the region –includes the Santa Fe and Cibola NFs, you can select to show only the CDNST).
- NFS roads and trails with attribute data (FSH 1909.12 part 23.23l)
  https://www.fs.usda.gov/detailfull/r3/landmanagement/gis/?cid=stelprdb5201889&width=full
  Click one of the links under Road (this is a link to roads for all forests in the region –includes the Santa Fe and Cibola NFs)

Two requested datasets were not publicly available at the time. The Carson NF received a narrowed Freedom of Information Act request on September 4, 2019, for Scenic Integrity/VRM Objectives to be established (FSH 1909.12 parts 22.2 and 23.23f) and Lands that May be Suitable for Timber Production (FSH 1909.12 Chapter 60). These datasets were delivered on November 14, 2019. Scenic integrity objectives have since been adjusted in response to public comment and consistent with the final Plan

(USDA FS Carson NF 2020b). A 1-mile corridor around the Continental Divide National Scenic Trail is shown on Figure A-5 (Final Plan, Appendix A).

Alternatives - ALT

Concern Statement 101 **General Support, Alternative 2**

General support for alternative 2.

Associated Comment Letters: 110, 111, 114, 178, 3268, 4845, 5303, 5364, 5489, 5515, 5666

Response

The forest supervisor selected alternative 2-modified, which is alternative 2 with some modifications based on the other action alternatives. The rationale for this decision is provided in the record of decision (USDA FS Carson NF 2021, Rationale for Decision and Components of the Decision sections).

Concern Statement 102 **General Support, Alternative 3**

General support for alternative 3.

Associated Comment Letters: 105, 4906, 4913, 5720

Response

The forest supervisor selected alternative 2-modified which is alternative 2 with some modifications based on the other action alternatives. The rationale for this decision is provided in the record of decision (USDA FS Carson NF 2021, Rationale for Decision and Components of the Decision sections).

Concern Statement 103 **General Support, Alternatives 3 and 2**

Support for alternatives 3 and 2, in that order. We feel that the direction provided by both alternatives is most capable of balancing the benefits and demands for developed recreation on the Carson NF while also promoting the continuation of diverse ecosystem services. Under alternative 3, we feel that year-round recreation on the national forest will provide the greatest support to local, rural economies.

Associated Comment Letters: 4879, 4887, 4970, 5422

Response

The forest supervisor selected alternative 2-modified, which is alternative 2 with some modification based on the other action alternatives. The rationale for this decision is provided in the record of decision (see Rationale for Decision and Components of the Decision sections). The FEIS analyzed the effects of alternative 2-modified and alternative 3 on recreation, local economies, and ecological resources (Chapter 3, Recreation and Socioeconomics sections).

Concern Statement 104 **General Support, Alternative 4**

General support for alternative 4.

Associated Comment Letters: 121, 125, 131, 168, 4835, 4856, 4909, 4916, 5098, 5515, 5673

Response

The forest supervisor selected alternative 2-modified, which is alternative 2 with some modification based on the other action alternatives. The rationale for this decision is provided in the record of decision (see Rationale for Decision and Components of the Decision sections). The FEIS analyzed the effects of alternative 4 (chapter 3).

Concern Statement 105 **Support, Alternative 4 with Additional Wilderness**

General support for alternative 4 with additional wilderness acres from alternative 5.

Associated Comment Letters: 168, 4856, 5405, 5675

Response

The decisionmaker carefully considered a range of recommended wilderness areas, as well as other allocations, to determine the mix of land and resource uses that would best meet public need. The areas recommended for wilderness in the preferred alternative considered a broad range of social, environmental, and economic impacts, and public comment related to the management of recommended wilderness areas. As explained in the record of decision, the responsible official selected the preferred alternative (alternative 2-modified), which struck a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified recommends 9,295 acres, which includes all recommended wilderness from alternative 2 except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are those areas with a high degree of wilderness characteristics due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. It was the conclusion of the responsible official that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing as recommended wilderness management areas outweigh any additional limitations on management options (USDA FS Carson NF 2021).

Concern Statement 106 **General Support, Alternative 5**

General support for alternative 5/ maximizing recommended wilderness.

Associated Comment Letters: 127, 153, 158, 168, 175, 223, 4841, 4847, 4855, 4856, 4860, 4865, 4868, 4876, 4878, 4880, 4881, 4883, 4901, 4924, 4925, 4964, 4982, 5001, , 5011, 5032, 5039, 5054, 5073, 5093, 5143, 5212, 5238, 5247, 5303, 5307, 5388, 5511, 5561, 5609, 5611, 5617, 5646, 5666, 5675, 5683, 5705, 5710, 5712, 5714, 5718, 5722, 5725

Response

The decisionmaker carefully considered a range of recommended wilderness areas, as well as other allocations, to determine the mix of land and resource uses that would best meet public need. The areas recommended for wilderness in the preferred alternative considered a broad range of social, environmental, and economic impacts, and public comment related to the management of recommended wilderness areas. As explained in the record of decision, the responsible official selected the preferred alternative (alternative 2-modified), which struck a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified recommends 9,295 acres, which includes all recommended wilderness from alternative 2 except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are those areas with a high degree of wilderness characteristics due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. It was the conclusion of the responsible official that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing as recommended wilderness management areas outweigh any additional limitations on management options (USDA FS Carson NF 2021).

Concern Statement 107 **Support for Alternatives 3 and 4**

Create a new alternative that includes mechanical treatments in alternative 3 while emphasizing natural processes from alternative 4.

Associated Comment Letters: 4848, 4859, 4860, 4887

Response

Alternative 2 is a combination of mechanical and natural processes. All alternatives are based on recent and expected capacity of the Carson NF. The focus of each alternative requires tradeoffs in terms of the types of projects that are achievable considering those capacity limitations. Under alternative 2, the

following management direction is proposed for mechanical treatment, and prescribed and naturally ignited fires:

- Mechanical treatment in ponderosa pine: 2,200 to 5,000 acres per year
- Mechanical treatment in dry mixed conifer: 550 to 1,000 acres per year
- Prescribed fire and naturally ignited wildfire in ponderosa pine: 8,000 to 12,500 acres per year.
- Prescribed fire and naturally ignited wildfire in dry mixed fire: 2,000 to 4,000 acres per year.

This is not the maximum amount of treatment that could be completed. Partnership opportunities could increase capacity and acres treated. The rationale for this decision is provided in the record of decision (USDA FS Carson NF 2021, Rationale for the Decision section).

Concern Statement 108 **General Opposition, Alternative 5**

General opposition to alternative 5.

Associated Comment Letter: 4848

Response

The decisionmaker carefully considered a range of recommended wilderness areas, as well as other allocations, to determine the mix of land and resource uses that would best meet public need. The areas recommended for wilderness in the preferred alternative considered a broad range of social, environmental, and economic impacts, and public comment related to the management of recommended wilderness areas. As explained in the record of decision, the responsible official selected the preferred alternative (alternative 2-modified), which strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified recommends 9,295 acres, which includes all recommended wilderness from alternative 2 except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are those areas with a high degree of wilderness characteristics due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. It was the conclusion of the responsible official that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing as recommended wilderness management areas outweigh any additional limitations on management options (USDA FS Carson NF 2021, Rationale for the Decision section).

Concern Statement 109 **General Opposition, Alternatives 1, 2, and 3**

General opposition to alternatives 1, 2, and 3.

Associated Comment Letter: 168

Response

The forest supervisor selected alternative 2-modified. The rationale for this decision is provided in the record of decision (USDA FS Carson NF 2021, Rationale for Decision and Components of the Decision sections).

Concern Statement 110 **General Opposition, Alternatives 4 and 5**

General opposition to alternatives 4 and 5.

Associated Comment Letter: 4879

Response

The forest supervisor selected alternative 2-modified. The rationale for this decision is provided in the record of decision (USDA FS Carson NF 2021, Rationale for Decision and Components of the Decision sections).

Access, Roads, and Trails - ART

Concern Statement 111 **Support, Off-Road Travel and Camping**

The Forest Plan needs to ensure access for hunting, including allowing the elderly to travel off-road on ATVs for the retrieval of downed game. Dispersed camping along access roads must also continue to be permitted.

Associated Comment Letters: 274, 997

Response

The Travel Management Rule generally prohibits off-road, motorized travel, but permits the "limited" use of motor vehicles within a specified distance of "certain" forest roads for the purposes of camping or retrieval of downed big game animals. Forest travel management decisions allowed for off-road, big game retrieval (USDA FS Carson NF 2010a, 2010b, 2011, 2013).

Dispersed camping and hunting were both recognized as important uses in the introduction to the Northern New Mexico Traditional Communities and Uses section in the final Plan (e.g., FW-RHC-DC-2 and FW-REC-DC-2).

Concern Statement 112 **Support, Access**

Support for the proposed standards to eliminate gaps in public access and to provide access for landscape restoration projects and fire suppression activities.

Associated Comment Letter: 4887

Response

The final Forest Plan includes desired conditions for National Forest System lands as a mostly contiguous land base providing for and contributing to the long-term socioeconomic diversity of local communities; management of vegetation and watershed health; wildlife habitat and diversity; and recreation and scenic opportunity (FW-LAND-DC-1). Where applicable, the final Plan also addresses right-of-way access to National Forest System lands through other land ownerships (FW-LAND-DC-4).

Concern Statement 113 **Access, Inholdings**

Secure access to the national forest across inholdings and maintain current access within the Forest for traditional uses, such as hunting, fuelwood gathering, etc.

Associated Comment Letter: 4887

Response

Acquiring road access through private lands has been added as a Management Approach for Transportation and Forest Access-2 in the final Plan. Where required, right-of-way access through other lands is desired under FW-LAND-DC-4. Access to places on the Carson NF for traditional uses are addressed by FW-FRT-DC-3 and -4, and FW-RHC-DC-3 and -4.

Concern Statement 114 **Illegal Off-Road Use**

Illegal off-road use is having increasingly negative effects on important water quality.

Associated Comment Letter: 162

Response

The final Plan does not address off-road travel. The Travel Management Rule determines motorized travel routes and directs Federal agencies to ensure that the use of off-road vehicles on public lands will be controlled and directed to protect the resources of those lands. However, the Carson NF will continue to monitor impacts from recreation and manage according to FW-REC, FW-WSW, and other relevant resource sections in the final Plan.

Concern Statement 115 **Opposition, New Roads**

There are enough roads, maintain what we have for hunters, fishermen and hikers' access.

Associated Comment: 5683

Response

Travel management decisions are project-level decisions (USDA FS Carson NF 2010a, 2010b, 2011, 2013). The final Plan maintains road conditions and access (FW-TFA-DC-1).

Concern Statement 116 **Opposition, New Roads**

Do not create more roads as suggested in Pueblo Ridge project.

Associated Comment Letter: 151

Response

The Pueblo Ridge project is a specific project decision and not related to plan revision. The Transportation and Forest Access section in the final Plan includes desired conditions that system roads and trails have minimal impacts on ecological and cultural resources (FW-TFA-DC-4). In addition, guidelines FW-TFA-G-2, -3, -4, -6, -8, and -9 address new system road construction, unauthorized roads, unneeded roads, and road maintenance impacts on terrestrial and aquatic wildlife species including at-risk species.

Concern Statement 117 **Road Density**

The Carson should use the plan revision process as an opportunity to examine current road densities in the forest, identify their cumulative impacts, and determine how proposed management direction will influence these densities. The final EIS should identify current road densities and their impacts on the Carson and explain how the alternatives would impact road density over the life of the revised plan. Determine what density thresholds are necessary to protect ecological values in the forest, with a particular focus on sensitive areas including watersheds, wildlife habitat and migration routes, and areas that are vulnerable to flooding (which may wash out roads and cause harm). Identify the number of roads to be reduced on the landscape throughout the duration of the forest plan and ensure that decommissioned roads do not become unauthorized routes.

Associated Comment Letters: 4856, 4857, 4925, 5303

Response

An alternative to include motorized route density standards was considered but not in detail because recent site-specific travel management analyses and decisions have been made on the forest that defined the open road system (FEIS, Chapter 2, Alternatives Considered but Eliminated from Detailed Study, Alternative that would limit road density forestwide). The final Plan does not revisit these travel management decisions, though alternatives did analyze varying levels of road decommissioning, based on Carson NF capacity (FW-TFA-O-1). Road densities on the forest were calculated in the assessment (USDA FS Carson NF 2015, p. 90). Impacts from roads under each alternative are discussed in the FEIS (Chapter 3, Environmental Consequences for Transportation and Forest Access). FW-TFA-S-1 prohibits motor vehicle use off the designated system of roads, trails, and areas identified on the Carson's most updated motor vehicle use map. This prohibition includes unauthorized use on decommissioned roads.

Concern Statement 118 **Roads, Climate Change**

Road management needs to reflect long-term funding expectations, use and monitor best management practices, and address climate change. Climate change impacts such as flooding and more severe weather are likely to stress the forest's transportation system and may cause significant ecological harm, threaten human safety, and damage property, especially where erosion hazards exist or where roads are poorly maintained. The final plan and EIS must disclose the impacts of climate change on roads and discuss how the Carson plans to address these challenges in coming years. The Carson should use the planning process as "an opportunity to analyze baseline conditions and climate change vulnerabilities and to develop climate resilient strategies for the future," as described in the recently released Forest Service transportation resilience guidebook.

Associated Comment Letter: 4856

Response

The Carson NF manages roads based on necessary and economically justified needs of multiple use management (36 CFR 212.4). In the final Plan, FW-TFA-DC-3 directs management to maintain the road system to provide safety and compliance according to a road's maintenance level. FW-WSW-G requires that best management practices should be identified and implemented to prevent accelerated erosion, among other things. The monitoring of best management practice implementation and effectiveness is included in Monitoring Topic 1 (final Plan, chapter 4). Several management approaches are included in the Transportation and Forest Access section that describe strategies for road management and maintenance (Management Approaches for Transportation and Forest Access-3, -4, -5). It is not appropriate to prescribe mitigations for road impacts at the plan level. Travel management decisions have been completed for each ranger district in compliance with the 2005 Travel Management Rule. "In designating National Forest System roads, National Forest System trails, and areas on National Forest System lands for motor vehicle use, the responsible official shall consider effects on National Forest System natural and cultural resources, public safety, provision of recreational opportunities, access needs, conflicts among uses of National Forest System lands, the need for maintenance and administration of roads, trails, and areas that would arise if the uses under consideration are designated; and the availability of resources for that maintenance and administration." (36 CFR § 212.55)

The U.S. Forest Service Transportation Resiliency Guidebook has been added to the Other Sources of Information section in the final Plan (appendix C).

The impacts of climate change on roads and road maintenance are discussed in the Environmental Consequences for Transportation and Forest Access, Common to All Alternatives section of the FEIS (chapter 3).

Concern Statement 119 **Road and Trail Infrastructure**

Add the language in brackets to FW-TFA-DC-4 to make it clear that appropriate sizing of road and trail infrastructure is critical to minimize its impacts and ensuring that it is fiscally manageable. System road and trail infrastructure [is right-sized to achieve administrative and social needs and] has minimal impacts on ecological and cultural resources.

Associated Comment Letter: 4856

Response

Minimization of road and trail impacts is addressed by FW-TFA-DC-4 in the final Plan. The fiscal capacity for infrastructure maintenance is not entirely within the control of the Carson NF. The minimum road system required to balance maintenance resources with social needs was addressed as part of the Carson NF's existing travel management decisions. The Carson NF has completed Travel Management Rule Subpart A and B for all districts (USDA FS Carson NF 2010a, 2010b, 2011, 2013). Travel Management Rule Subpart A directs the Forest Service to identify the most ecologically, economically, and socially sustainable road system in terms of access for recreation, research, and other land

management activities, while Subpart B designates roads, trails, and areas for motorized use. Desired conditions must reflect the financial capability of the agency (FSH 1909.12 22.11). It is not within the financial capability of the Carson NF to meet all social demand for roads and trails and "reasonable access" that contributes to the social and economic sustainability of local communities is desired under the final Plan (FW-TFA-DC-1). Reasonable access has been assessed as part of existing travel management decisions by considering anticipated budgets, existing infrastructure, and social need (36 CFR 212.55(a)). Consistent with Forest Service travel management direction, those travel management decisions are not being revisited as part of this plan revision process (FSH 7709.55 11.2(1)).

The final Plan describes several strategies for improving fiscal manageability of roads and trails including, sustainable recreation (Recreation section introduction and Management Approach for Recreation-1), co-management (Management Approach for Recreation-3), and road maintenance agreements (Management Approach for Transportation and Forest Access-3).

Concern Statement 120 **Roads, Sustainability**

The revised plan must include meaningful plan components that will drive progress toward a fiscally and ecologically sustainable road system and identify a minimum road system and prioritize unneeded roads for decommissioning to achieve compliance with subpart A of the Roads Rule.

Associated Comment Letters: 4856, 5673

Response

The Carson NF completed a Travel Analysis Plan in compliance with Subpart A of the Travel Management Rule in 2015. This document identified the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands (36 CFR 212.5(b)(1)). To fulfill Subpart B of the Travel Management Rule, each district on the Carson NF made project-level decisions regarding a designated road system (USDA FS Carson NF 2010a, 2010b, 2011, 2013). The final Plan includes components that allow for management of designated roads (those included on the motor vehicle use map) and unauthorized roads. FW-TFA-DC-5 provides direction for unauthorized roads and determining their purpose in the transportation system or to determine if they are unneeded. Unneeded roads are decommissioned to reduce impacts to ecological resources and improve habitat connectivity. Transportation objectives also address the need to address unneeded roads on the forest by obliterating or naturalizing them (FW-TFA-O-1). This objective will help meet the minimum road system identified in the Travel Analysis Plan for the forest.

Concern Statement 121 **Road Maintenance**

The draft plan fails to provide management direction that would effectively address financial challenges identified in the DEIS regarding deferred maintenance and road maintenance. Relying on partners and volunteers to accomplish this work is unrealistic and does not address the financial challenges. The Carson must identify how to move toward a minimum road system using the funds available, with concrete actions that will reduce the amount of maintenance required over the life of the plan. A sustainable road system must be sized and designed so it can be adequately maintained under current fiscal limitations.

Associated Comment Letters: 4856, 5303

Response

The final Plan was developed following the 2012 Planning Rule and regulations for developing plan components (36 CFR 219 and FSH 1909.12 Chapter 20 section 22.1). Objectives must be attainable within the fiscal capability of the unit, determined through a trend analysis of the recent past budget obligations for the unit (36 CFR 219.1(g)). The objectives identified for Transportation and Forest Access (FW-TFA-O 1-4) were based on the capability of the forest to complete those within the given timeframe and recognized budget trends for roads maintenance. Additional plan components within the

final Plan support completion of these objectives and movement toward desired conditions for roads and facilities by identifying the need to work with partners and others to secure funding or additional capacity (Management Approach for Transportation and Forest Access 3 and Management Approaches for Recreation 1 and 3).

The minimum road system for the Carson NF was identified in the Carson National Forest Travel Analysis Process Report (2008) and was designated through project-level travel management decisions (USDA FS Carson NF 2010a, 2010b, 2011, 2013). The final Plan provides management direction for roads not designated within these project-level decisions and for any future road construction (FW-TFA-DC-5; FW-TFA-O-1; FW-TFA-G 1, 2, 3, 4, and 6).

Concern Statement 122 **Travel Management**

The agency should develop travel management strategies.

Associated Comment Letter: 5665

Response

From 2010 to 2013, four separate environmental analyses were conducted to identify and designate 2,613 miles of road and 85 miles of trail open to motor vehicle use under the 2005 Travel Management Rule (36 CFR §§ 212, 251, 261, and 295). These roads and trails are identified on motor vehicle use maps by area: (1) Jicarilla Ranger District; (2) Tres Piedras, El Rito, and Canjilon Ranger Districts; (3) Questa Ranger District; and (4) Camino Real Ranger District (USDA FS Carson NF 2010a, 2010b, 2011, 2013).

For additional motorized and non-motorized trail opportunities Management Approach for Recreation-7 prioritizes developing motorized and non-motorized nested loop trail systems and opportunities for long-distance travel and improving the connectivity of existing routes and communities.

Concern Statement 123 **Travel Management**

The Forest Service needs to have a collaborative plan to re-address travel management, including ticketing and fining people and putting more signs up. Any Travel Management Rule-based wet weather closure strategy should allow for native surfaced trails and roads to be open when soil conditions/lack-of-rainfall permits. If a wet weather closure is needed, the implementing Forest Order should be for the shortest period of time rather than a longer time period

Associated Comment Letters: 5359, 5665

Response

No travel management decisions are being made as part of the plan revision process (FEIS, Chapter 2, Alternatives Considered but Eliminated from Detailed Study). The final Plan does not compel any agency action, such as re-addressing travel management (FSH 1909.12 section 21). Ticketing and signage are both approaches for implementing the Travel Management Rule that are appropriate under the final Plan, but the plan does not require the Carson NF to take specific actions. Through site-specific travel management decisions, the Carson NF closed the forest to cross-country travel and designated an open road system based on multiple factors, including public input. Any future transportation system changes would be covered under a separate NEPA environmental analysis. For instance, wet weather closures are project-level determinations made based on current site-specific conditions and requirements.

Concern Statement 124 **New Road Construction**

The Carson needs to keep the TFA-G-1,2,4 from the preliminary draft proposed plan, rather than delete it to allow more road building. Simply putting in “mitigating actions” to offset impacts from construction is not the same and rarely has been followed or effective.

Associated Comment Letter: 5673

Response

FW-TFA-G-1 in the preliminary draft proposed plan required an emphasis on reconstruction and rehabilitation of existing roads over new road construction. This guideline was removed from the final Plan not to allow more road building, but because impacts on ecological and cultural resources are best minimized through a site-specific analysis. In some cases, rerouting a road that is negatively impacting other resources may be preferable to reconstructing the road in the same location. No new road construction is approved by the final Plan and new road construction would not be prevented by adopting FW-TFA-G-1 from the preliminary draft proposed plan.

FW-TFA-G-2 in the final Plan is unchanged from the preliminary draft proposed plan, except that "other roads, unauthorized routes" has been replaced with "unneeded roads" to be consistent with Forest Service terminology. Decommissioning should not occur on roads that are determined to be needed. The need for an unauthorized road by definition has not been determined. This is clarified by adopting the updated guideline. The intent is not changed; resource damage resulting from road construction must be offset.

FW-TFA-G-4 from the preliminary draft plan has been replaced by FW-TFA-S-3 in the final Plan, using appropriate Forest Service terminology.

Concern Statement 125 **Opposition, New Roads and Trails**

Prohibit the development of new permanent roads and trails and analyze where road decommissioning may be necessary to provide security habitat for species like elk

Associated Comment Letters: 4880, 5303

Response

Prohibiting the construction of new roads and trails is not consistent with the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 531) or the 2012 Planning Rule (36 CFR 219.10). "[T]he plan must provide for ecosystem services and multiple uses, including outdoor recreation, range, timber, watershed, wildlife, and fish…." (36 CFR 219.10) "The plan must include plan components, including standards and guidelines, to provide for…Sustainable recreation; including recreation settings, opportunities, and access…." (36 CFR 219.10(b)(1)) Road decommissioning would be analyzed at a site-specific level, based on transportation system need, long-term effects to adjacent resources, and capacity to maintain additional system roads (FW-TFA-G-4). Elk and other wildlife habitat are covered by FW-WFP-DC-1, -2, -4, -5, -6, and -7.

Concern Statement 126 **Routes, Primitive and Semi-Primitive Areas**

Support for components in the draft plan barring construction of any new or permanent routes in primitive and semi-primitive areas.

Associated Comment Letter: 5569

Response

Consistent with recreation opportunity spectrum setting characterizations, motorized use is not permitted in primitive and semi-primitive non-motorized areas (USDA FS 1982). The final Plan does not prohibit non-motorized trail construction in primitive and semi-primitive non-motorized areas. FW-REC-S-1 and -2 prevent permanent roads where primitive and semi-primitive non-motorized settings are desired. Roads are appropriate and allowed under the final Plan where semi-primitive motorized settings are desired (USDA FS 1982).

Concern Statement 127 **Road Construction, Mitigating Actions**

Require the mitigating action in FW-TFL-GDL-2 to be initiated "as soon as practicable."

Associated Comment Letter: 4856

Response

In the final Plan, FW-TFA-G-2 uses the term "accompanied by" which suggests adjacency in time. Adding the equally ambiguous term "as soon as practicable" would not help managers determine whether projects are consistent with the guideline.

Concern Statement 128 **Road Decommissioning**

Decommission or eliminate redundant or unnecessary roads in key watersheds or where impacts to water quality and aquatic habitat are occurring, especially where such roads overlap with Rio Grande cutthroat trout.

Associated Comment Letter: 5303

Response

In the final Plan, FW-TFA-DC-5 directs management to decommission unneeded roads and trails to reduce impacts to ecological resources and improve wildlife habitat connectivity.

Concern Statement 129 **Road Decommissioning**

Add objectives to the transportation section to increase the target number of miles to be decommissioned, prioritize road decommissioning where it will have the most benefit in achieving an ecologically and fiscally sustainable transportation network, identify all roads that are likely not needed for the future within 3 years, and develop an integrated strategy to reduce the costs of the forest road system within 5 years.

Associated Comment Letters: 4856, 4893, 5303, 5569

Response

Additional road decommissioning (40 miles over a 10-year period) was considered under alternative 4 (FW-TFA-O-1). As discussed in the record of decision, the responsible official selected FW-TFA-O-1 from alternative 2 (obliterate or naturalize at least 20 miles) based on expected financial and personnel capacity.

The final Plan includes strategies to work with partners that have the potential to increase the amount of road decommissioning that may occur over the life of the plan. Decisions regarding the prioritization of road decommissioning will occur at the project-specific level, based on accessibility, cost, interest, contributions from partners, enforcement benefits, and other factors. The benefit to ecological and fiscal sustainability of the transportation network is difficult to assess, and while it would be considered, would not necessarily be the deciding factor.

In the final Plan, FW-TFA-DC-5 directs management to determine the purpose of unauthorized roads and trails or identify them as unneeded. FW-TFA-G-3 and -4 require that roads be evaluated for need during ecosystem restoration projects. The Carson NF believes that resources are best directed toward on-the-ground work, such as restoration and road decommissioning, that are part of a public process. An inventory of unauthorized roads was completed to support travel management decisions (USDA FS Carson NF 2010a, 2010b, 2011, 2013), and the final Plan relies on those previous decisions to identify the transportation network.

Objectives describe rates of progress toward desired conditions (36 CFR 219.9(e)(1)(ii)). They do not constitute commitments to act, such as developing an additional strategy (FSH 1909.12 22.1(2)(d)). The final Plan does describe several strategies for improving fiscal manageability of roads and trails including, sustainable recreation (Recreation section introduction and Management Approach for Recreation-1), co-management (Management Approach for Recreation-3), and road maintenance agreements (Management Approach for Transportation and Forest Access-3).

Concern Statement 130 **Road Decommissioning**

Add the following standard: “Over the life of the plan, all unaddressed temporary roads will be decommissioned and naturalized.” This standard would complement Standard 3. It is needed to ensure that any temporary roads that currently exist on the Carson (even though the associated projects(s) have been completed) are decommissioned during the life of the plan."

Associated Comment Letter: 4856

Response

In the final Plan, FW-TFA-S-3 does require that temporary roads be decommissioned when projects are completed. Some projects and their associated temporary roads may extend beyond the life of the plan. For example, in the case of a 3-year project that begins the year before the plan is next revised, it would not be appropriate to decommission temporary roads prior to project completion. Additionally, FW-TFA-O-1 requires obliteration or naturalization of unneeded roads, which could include temporary roads. The 20 miles in FW-TFA-O-1 reflects anticipated Carson NF capacity.

Concern Statement 131 **Road Decommissioning**

Include a version of alternative 4's FW-TFA-S-3 in the preferred alternative: Temporary roads that support ecosystem restoration activities, fuels management, or other short-term projects shall be obliterated or naturalized upon project completion if determined to be necessary to protect watershed condition, minimize wildlife disturbance, or prevent illegal motorized use.

Associated Comment Letter: 5303

Response

The alternative 2 version of FW-TFA-S-3 included in the final Plan requires road decommissioning under the circumstances raised in this concern. Obliteration and naturalization, two methods of decommissioning, would be used where necessary to meet the intent of FW-TFA-S-3, i.e., of protecting watershed condition, minimizing wildlife distribution, and preventing illegal motorized use.

Concern Statement 132 **Road Decommissioning**

Modify FW-TFA-S-3 to read: “Temporary roads that support ecosystem restoration activities, fuels management, or other short-term projects shall be decommissioned, or converted to non-motorized recreational trails upon project completion, to protect watershed condition, minimize wildlife disturbance, and prevent illegal motorized use."

Associated Comment Letters: 4960, 4970

Response

In the final Plan, FW-TFA-S-3 requires that temporary roads be decommissioned upon project completion. This does not prevent the conversion of temporary roads to non-motorized trails. However, decommissioning of roads that are to be converted to non-motorized trails would still be important to prevent illegal motorized use.

Concern Statement 133 **Unneeded Roads, Decommissioning**

Change FW-TFA-DC-5 to a guideline.

Associated Comment Letter: 4893

Response

Guidelines “[p]lace design or operational constraints on projects and activities to help achieve or maintain desired conditions, to avoid undesirable effects, or to meet applicable legal requirements” (FSH 1909.12 22.14 (1)). By contrast, as a desired condition, FW-TFA-DC-5 in the final Plan describes a vision for the desired landscape of the future, not a constraint on activities. That is, projects are required

to be designed to maintain or move toward desired conditions (final Plan, chapter 1, Plan Framework, Plan Components). To move toward FW-TFA-DC-5, the final Plan directs projects to evaluate all system roads not open to the public and unauthorized roads for need or determine that they are not needed (FW-TFA-G-3) and requires obliteration or naturalization of unneeded roads based on anticipated Carson NF capacity (FW-TFA-O-1).

Concern Statement 134 **Road Maintenance Level**

In order to help the agency achieve its budget objectives while still providing a substantive and high quality recreational route network, change the classification of maintenance level 3 roads to maintenance level 2 roads and reclassify maintenance level 2 roads to motorized trails, or manage appropriate maintenance level 2 roads as "roads managed as trails," or convert roads to single track trails, or motorized trails less than 50 inches in width, or roads managed as motorized trails greater than 50 inches in width. Manage appropriate maintenance level 1 roads as "motorized trails."

Associated Comment Letters: 3268, 5665

Response

No travel management decisions are being made as part of the plan revision process (FEIS, Chapter 2, Alternatives Considered but Eliminated from Detailed Study). The Carson NF made site-specific travel management decisions that closed the forest to cross-country travel and designated an open road system based on multiple factors including public input (USDA FS Carson NF 2010a, 2010b, 2011, 2013). Any future transportation system changes would be covered under a separate NEPA environmental analysis. In the final Plan, new trail development would include site-specific input from, and collaboration with, the public (Management Approach for Recreation-6) and would meet FW-TFA-DC-4 by minimizing impacts on ecological and cultural resources. Recreation opportunities will continue to be made available for a diverse group of forest uses, including vehicles (FW-REC-DC-3).

Concern Statement 135 **Temporary Road Conversion**

Add the following management approach: "Consider converting temporary roads and roads to be decommissioned into motorized or non-motorized recreational trails/routes where appropriate and feasible for expanding recreation access."

Associated Comment Letters: 4960, 4970

Response

The suggested management approach has been added to the final plan as Management Approach for Recreation-10.

Concern Statement 136 **Road Decommissioning**

Consider developing watershed-specific plans that prioritize specific roads for decommissioning to result in improved water quality and a smaller road system (administrative or public).

Associated Comment Letter: 5303

Response

No travel management decisions are being made as part of the plan revision process (FEIS, Chapter 2, Alternatives Considered but Eliminated from Detailed Study); such decisions are made at the project level. However, there are many guidelines and objectives in the final Plan that address decommissioning unneeded roads and trails. For instance, FW-TFA-DC-5 states that unneeded roads and trails will be decommissioned to reduce impacts to ecological resources and improve habitat connectivity. Additionally, FW-TFA-O-1 directs obliteration or naturalization of at least 20 miles of unneeded roads every 10 years. Finally, under FW-TFA-G-4 in the final Plan, the Carson NF's capacity to maintain is among the criteria used to evaluate a road's eligibility for decommissioning. Other guidelines establish opportunities for decommissioning roads during project implementation (FW-TFA-G-1 and 3); also,

Management Approaches for Watershed and Water include analysis of pollutant sources and pollutant load reductions in watershed restoration action plans.

Concern Statement 137 **Road Decommissioning, Mitigation**

Transportation and Forest Access Objectives (FW-TFA-O): We request adoption of FW-TFA-O-1 as proposed in alternative 4 of the DEIS instead of as proposed in the Draft Plan. We also request the following modifications to FWS-TFA-O-1 (as proposed in alternative 4 of the DEIS): “Obliterate or naturalize up to 40 miles of non-system roads (e.g., unauthorized, decommissioned) within the 10-year period following plan approval. Road obliteration is prioritized in priority watersheds and/or in the Wetland Jewel Management Area.” Adopt FW-TFA-S-3 as it is proposed in alternative 4 of the DEIS: “Temporary roads that support ecosystem restoration activities, fuels management, or other short-term projects shall be obliterated or naturalized upon project completion, to protect watershed condition, minimize wildlife disturbance, and prevent illegal motorized use. Adopt FW-TFA-S-4 as it is proposed in alternative 4 of the DEIS, with the following modifications, in the final Plan as well: “Construction of new system roads shall be accompanied by a mitigating action (e.g., decommissioning) of other unneeded roads and trails to offset any resource damage resulting from construction.”

Associated Comment Letter: 4911

Response

As discussed in the record of decision (USDA FS Carson NF 2021), FW-TFA-O-2 from alternative 2 was selected for the final Plan based on current and expected capacity. Objectives in the final Plan are phrased as minimums (“at least”) not maximums (“up to”). FW-TFA-O-2 does not prevent additional road miles from being obliterated or naturalized if opportunities to do so exist. Prioritization of road obliteration is best handled at the local project scale, taking into consideration specific road factors such as illegal motorized use, impacts to ecological resources and habitat connectivity, and opportunity such as a concurrent project or partner interest.

FW-TFA-S-3 from alternative 2 was selected for the final Plan based on current and expected capacity. The type of decommissioning necessary (obliteration, naturalization, reseeding, signage, berming, reestablishing drainage, scattering slash) is best determined at a site-specific scale. Obliteration or naturalization may not be necessary in all cases but could add significantly to the complexity of a project (USDA FS Carson NF 2021).

FW-TFA-G-2 from alternative 2 is included in the final Plan, requiring that any resource damage that results from new system road construction be offset. We believe there are additional methods for reducing resource damage (such as design features) that may be more effective than mitigating the impact elsewhere. The intent to offset resource damage is more important than the method used to achieve that offset, therefore this plan component is a more appropriate guideline than a standard (USDA FS Carson NF 2021).

Concern Statement 138 **Road Decommissioning**

Keep FW-TFA-S-1 and FW-TFA-S-2 as proposed in the final plan. Support standards and guidelines that mitigate new and temporary road actions through decommissioning, obliteration, and naturalization of unneeded or temporary roads. Support forestwide transportation components in alternative 2, including desired conditions that move the Carson NF toward a system of road and trail infrastructure that has minimal impacts on ecological and cultural resources (DC 3), and where unneeded roads and trails are decommissioned to reduce impacts to ecological resources and improve habitat connectivity (DC 5).

Associated Comment Letters: 4911, 5303

Response

The final Plan includes FW-TFA-DC-5 and FW-TFA-S-1 and -2; it also includes FW-TFA-DC 4, wherein it is desired that road and trail infrastructure have minimal impacts on ecological and cultural resources.

Concern Statement 139 **Temporary Road Conversion**

Adopt Transportation and Forest Access Guideline 11 from alternative 3 and modify to read: "Temporary roads that support ecosystem restoration activities, fuels management, or other short-term projects should be considered for conversion to system roads, motorized trails, or non-motorized trails."

Associated Comment Letters: 4960, 4970

Response

FW-TFA-G-11 in alternative 3 is problematic because it complicates the definition of temporary roads; the proposed addition of non-motorized trails does not clarify this inconsistency. If a road is identified as temporary, then by definition, it is not necessary for long-term management and should not remain a road (i.e., become a system road) following project completion. Decommissioning of a temporary road does not preclude the roadbed from being used as a motorized or non-motorized trail.

The final Plan includes the following standard: "Temporary roads that support ecosystem restoration activities, fuels management, or other short-term projects shall be decommissioned upon project completion, to protect watershed condition, minimize wildlife disturbance, and prevent illegal motorized use" (FW-TFA-S-3). This standard is consistent with the desired conditions for Transportation and Forest Access (FW-TFA-DC-4). To support the decision to have forest management provide for restoration and diverse ecosystem services, it was determined that the guideline recommended in alternative 3 is more appropriate as a standard and that all temporary roads should be decommissioned. The final Plan clarifies that project planning should determine the post-project need for all roads in the project area (FW-TFA-DC-5, FW-TFA-G-1, -G-3, -G-4). The final Plan does not preclude the reclassification of temporary roads to motorized trails. The final Plan also provides management approaches to allow for continually working with local communities, the public, partners, and others in developing a sustainable recreation program, including development of additional trail systems (Management Approaches for Recreation-3, -6, and -7).

Concern Statement 140 **Unneeded Roads, Habitat Connectivity**

Require unneeded roads and non-system routes to be removed if they impair habitat connectivity.

Associated Comment Letter: 4856

Response

Decommissioning of unneeded roads is desired under FW-TFA-DC-5 in the final Plan. Obliteration and naturalization of unneeded roads will be conducted as funding is available, but at least at the rate of 20 miles every 10 years (FW-TFA-O-1). Prioritization of road decommissioning will be a project-specific decision, based on accessibility, cost, interest and contributions from partners, enforcement benefit, impacts to ecological resources and habitat connectivity, and other factors. The benefit to habitat connectivity is difficult to assess for an individual road, and while it would be considered, it would not necessarily be the deciding factor. Habitat connectivity is desired forestwide (FW-WFP-DC-5-7 and FW-WFP-DC-8) and supported by FW-WFP-O-4 and FW-WFP-G-6.

Concern Statement 141 **Editorial**

Clarification is needed in TFA management approach 4. What is "the proposed action"? It seems like it should instead read, "a proposed action."

Associated Comment Letter: 4856

Response

The language in Management Approach for Transportation and Forest Access-4 has been changed.

Concern Statement 142 **Road Database**

Add language to TFA Management Approach 6: “Consider maintaining a spatial database of existing roads [that demarcates] roads needed for public access, future project use, administrative use, access to private land [temporary roads, and roads not needed for future use. New roads will be added to the database on an ongoing basis].” Such a database would be helpful and should be created. Additional roads should be included in the database as noted above and any new roads should be added to the database to ensure that it is comprehensive and up-to-date.

Associated Comment Letter: 4856

Response

Unneeded roads and temporary roads have been added as examples of the types of roads to be maintained in a spatial database under Management Approach for Transportation and Forest Access-6 in the final Plan. Under the current Forest Service data management system, spatial database contains location information while road attributes (such as road need or use) are stored in a non-spatial database.

Concern Statement 143 **Roads, Climate Change**

The DEIS does not adequately address the impacts of climate change on the forest's road system or assess how the Carson can increase resilience to these impacts. These omissions are critical and must be addressed in the final EIS.

Associated Comment Letter: 4856

Response

The discussion of climate change impacts on the Carson NF’s road system has been expanded in the FEIS (Chapter 3, Environmental Consequences for Transportation and Forest Access Common to All Alternatives), although the environmental impact statement does not assess how the national forest can address impacts. The final Plan includes management approaches that describe possible strategies for increasing resiliency of the road system (e.g., Management Approach for Transportation and Forest Access-5). A much more detailed “guide for adaptation planning at the Forest level to reduce the vulnerability of FS transportation systems” is contained in the Forest Service Transportation Resiliency Guidebook (USDA FS 2018b, p 19). The guidebook is a framework for assessing vulnerability of Forest Service transportation systems to climate change and includes a selection of “toolboxes” for implementing preventative and mitigation strategies. The guidebook has been added to appendix C in the final Plan.

Concern Statement 144 **Roads, Climate Change**

Broaden Transportation and Forest Access management approach 5 so it includes all relevant climate change impacts and change it from a management approach to a standard or guideline. Consideration of climate change in the context of reconstructing or building roads should be an enforceable plan component.

Associated Comment Letter: 4856

Response

In the final Plan, “other climate related impacts” has been added as a consideration under Management Approach for Transportation and Forest Access-5. We fully agree that sustainable design is an important consideration for efficient future management. While the sustainability of roads and trails is addressed from a recreation perspective in the Recreation section in the final Plan, we agree that it is important to consider transportation design in the context of multiple uses. Sustainable design has been added to FW-TFA-DC-1.

Concern Statement 145 **Road Maintenance**

Add the language in brackets to FW-TFA-DC-1 to make it clear that roads, trails, and bridges should be appropriately maintained. Roads, bridges, and trails are well-marked [and maintained].

Associated Comment Letter: 4856

Response

The suggested language has been added to FW-TFA-DC-1 in the final Plan.

Concern Statement 146 **Roads, Best Management Practices**

Add the following standard: "All roads, including temporary roads, will comply with applicable and identified Forest Service best management practices (BMPs) for water management. The Carson will implement BMP monitoring to evaluate effectiveness and identify necessary modifications to address deficiencies."

Associated Comment Letter: 4856

Response

In the final Plan, implementation of best management practices is required for all management activities by FW-WSW-G-1. Monitoring the efficacy of best management practices is required in chapter 4 (Monitoring Topic I).

Concern Statement 147 **Road and Trail Maintenance**

Include trails in FW-TFA-GDL-6 and include roads in FW-TFA-GDL-9. Trail construction and maintenance activities also have the potential to disturb at-risk species or their habitat.

Associated Comment Letter: 4856

Response

In the final Plan, FW-TFA-G-6 has been modified to address disturbance of at-risk species by both roads and trails. FW-TFA-G-9 in the draft plan has been converted to Management Approach for Transportation and Forest Access-7 in the final Plan. Additionally, road closures are a possible strategy for protecting at-risk species from harassment and human disturbance, as required by FW-WFP-DC-7and FW-WFP-G-3 and -4.

Concern Statement 148 **Road and Trail Maintenance**

Add a new guideline that maintenance of needed routes will be prioritized based on: (a) Storm-proofing needs and opportunities (e.g., relocating roads away from water bodies, resizing or removing culverts, etc.); (b) Restoring aquatic and terrestrial habitats and habitat connections; and (c) Increasing resilience to climate change and other stressors.

Associated Comment Letter: 4856

Response

Guidelines place design and operational constraints on projects and activities (FSH 1909.12 22.14(1)); they do not direct or compel processes such as analysis or assessment (FSH 1909.12 22.14(4)). Maintenance prioritization is a project-specific decision based on road maintenance objectives, level of use, available funding, interest and contributions from partners, and other factors. Opportunities to improve storm resilience, improve habitat connectivity, or increase resilience to climate change are factors that would be considered, but would not necessarily be deciding factors (Management Approach for Transportation and Forest Access-5).

Concern Statement 149 **Trail Demand**

The revised Forest Plan should include clear objective and goal statements (Desired Conditions) of how the designated motorized trail system meets the need of enhancing public enjoyment and motorized user satisfaction of the Forest.

Associated Comment Letter: 24

Response

Desired conditions must be achievable and reflect the financial capability of the agency (FSH 1909.12 22.11). It is not within the financial capability of the Carson NF to meet all social demand for roads and trails. Under the final Plan, "reasonable access" that contributes to the social and economic sustainability of local communities is desired (FW-TFA-DC-1), as are motorized trail opportunities commensurate with public interest, resource capacity, and other natural and cultural resource values (FW-REC-DC-5). Plan components such as desired conditions, objectives, and goals do not specify how they must be achieved (FSH 1909.12 22.11(2)(d)). Management approaches describe strategies that the responsible official intends to use to fulfill the intent of the Plan; multiple management approaches in the final Plan address management of the motorized trail system (e.g., Management Approaches for Recreation-3, -6 and -7; Management Approach for Transportation and Forest Access-3).

Concern Statement 150 **Road and Trail Demand**

Add the following condition to FW-TFA-DC-4: "system road and trail infrastructure meets the increasing demand for forest access by local and visiting users." Add the following Objective: "Create new trails as needed to meet the increasing demand for non-motorized transportation opportunities." It is important to recognize that there is an increasing demand for recreation on the Carson, and while there may be some challenges to meeting that demand, we can all agree that we desire it be met.

Associated Comment Letters: 4960, 4970

Response

Desired conditions and objectives must be achievable and reflect the financial capability of the agency (FSH 1909.12 22.11 and FSH 1909.12 22.12(5)). It is not within the financial capability of the Carson NF to meet all social demand for roads and trails. Under the final Plan, "reasonable access" that contributes to the social and economic sustainability of local communities is desired (FW-TFA-DC-1). We acknowledge the increasing recreational demand for roads and trails; discussion has been added to the Recreation section introduction in the final Plan to reflect this. Trails have also been explicitly included in FW-REC-DC-5 and Management Approach for Recreation-3.

Concern Statement 151 **Road and Trail Demand**

Add the following Guideline: "Changes to existing transportation infrastructure, including decommissioning of unauthorized roads or trails, are done in consultation with user groups and stakeholders who may be affected by the change." Multiple "unauthorized" trails exist on the Forest as a result of users developing access to meet a need. Rather than blanket decommissioning of these trails, engage with user groups to seek solutions that will accommodate these needs, either through the creation of more sustainable trails, or through alternative solutions for maintaining these routes. This applies specifically to motorized recreationists, and four-wheel and two-wheel motorized recreationists' needs should be treated separately.

Associated Comment Letters: 4960, 4970

Response

Collaboration by the Carson NF requires willing collaborators; plan components cannot compel the public to work with the Forest Service (FSH 1909.12 22.1(2)(g)). Management approaches are the appropriate planning tool for describing strategies for working with the public. In the final Plan,

Management Approaches for Recreation-3 and -6 emphasize working with partners to make recreation decisions; trails have been explicitly added to this management approach.

Decisions regarding the transportation system are made through project-specific analyses, during which input and comments from user groups and other stakeholders are considered. The final Plan states that during ecosystem restoration projects, unauthorized and closed system roads should be evaluated for need (FW-TFA-G-3), based on transportation system need (FW-TFA-G-4) which aims to be responsive to public interest (FW-REC-DC-5). That planning occurs with public involvement, consistent with the National Environmental Policy Act implementing procedures (7 CFR 372.7).

Concern Statement 152 **Trail Maintenance**

Modify FW-TFA-O-3 to read: "Maintain all existing and future trails (including motorized) on a rotating basis, with at least 200 to 400 miles of trails of non-motorized, and 30 to 45 miles of motorized trails maintained annually." All 600 miles of non-motorized, and 85 miles of motorized trails should be attended to at least every 3rd year, if not every other year. Also, it is important to distinguish between motorized and non-motorized, so that neither gets ignored or disproportionately attended to.

Associated Comment Letters: 4837, 4846, 4960, 4970, 5528

Response

An increase in the number of miles for this objective was analyzed under alternative 3. As discussed in the record of decision, the preferred alternative includes FW-TFA-O-3 from alternative 2 (100 to 300 miles annually), based on recent and expected capacity. Trail maintenance prioritization is a project-level decision based on trail maintenance objectives, level of use, available funding, interest and contributions from partners, and other factors. Certain trails get much more use than others and require more frequent maintenance; other trails that are well designed and see less use require less frequent maintenance. Trails are also designed to provide differing levels of user experience from developed to primitive and require different levels of maintenance as a result.

We acknowledge that there is a backlog of motorized trail maintenance and that many trails are not currently maintained to standard (USDA FS Carson NF 2015, p. 472). Funding dictates how much total trail maintenance can be accomplished; motorized trail maintenance may require mechanized equipment and is more labor intensive than non-motorized trail maintenance and is therefore typically more expensive per mile. Increasing the motorized proportion of trail miles maintained will decrease the total miles that can be maintained. As outlined in the final Plan, the Carson NF intends to increase the total miles of motorized trails maintained, and the miles of motorized trails maintained as a percentage of total trail maintenance, by increasing forest capacity through a sustainable recreation approach that requires less maintenance (Management Approach for Recreation-1), co-management of trails (Management Approach for Recreation-3), a recreation fee system (Management Approach for Recreation-9), and partners and volunteers (FW-PART-DC-1, -4).

Concern Statement 153 **Over-Snow Vehicles**

Some management direction for motorized use can be found in the plan components for transportation and forest access, but they are not cross-referenced in the recreation section of the plan. A comprehensive suite of plan components is needed to address motorized use. Because this is a crossover topic, cross references should be provided to other plan components that address the issue. The plan components for recreation do not address over-snow vehicles at all. This omission is problematic and must be addressed in the final plan and EIS. Among other things, the plan components for over-snow vehicles should properly apply the minimization criteria, impose a minimum snow depth of 18 inches, identify season of use restrictions based on relevant criteria, and require best management practices and mitigation requirements for over-snow vehicles. Add a new desired condition that addresses motorized recreation (and over-snow vehicles specifically) that states that such recreation is managed so it does not impair ecological, cultural, or other resources.

Associated Comment Letter: 4856

Response

The final Plan is integrated, meaning that plan components address a variety of habitat and human needs (Chapter 1, Plan Framework, Plan Concepts). In the draft Plan, the Plan Concepts section described the identification of interrelationships between plan components as a "crosswalk." The term "cross-reference" is more appropriate and has been substituted (Chapter 1, Plan Framework, Plan Concepts).

The Transportation and Forest Access section is cross-referenced in the Recreation section in the final Plan (Chapter 2, Recreation, Related Plan Content for Recreation). Motorized use is addressed in both of these sections, as well as the Riparian Management Zones, Wetland Riparian, Rural Historic Communities, Special Uses, Wilderness, National Scenic, Historic, and Recreation Trails, Recommended Wilderness Management Area, Eligible Wild and Scenic Rivers, Jicarilla Natural Gas Management Area, Valle Vidal Management Area, and San Antonio Management Area sections in the final Plan. Motorized use is managed under the travel management regulations at 36 CFR 212, which are not repeated in the final Plan, but are included by reference (Appendix C, Forest Service Regulations).

Over-snow vehicles are addressed by FW-TFA-S-2, which requires over-snow vehicle use to conform to the most current over-snow vehicle use direction. The current over-snow vehicle use direction was developed consistent with Executive Orders 11644 and 11989, which outline criteria for off-road vehicle use on public lands meant to minimize conflicts among the various uses of those lands. The Travel Management Rule also requires that trails and areas are designated with the objective of minimizing effects to forest resources, wildlife, recreational uses, and other classes of vehicles (FR vol 70, no 216, § 212.55(b)). Consistent with Forest Service travel management direction, no trail or area designations are being made as part of this plan revision process. "Approval of a plan, plan amendment, or plan revision should not include a final decision designating roads, trails, or areas for motor vehicle use or OSV use or otherwise restricting those uses. Rather, the land management plan provides information and guidance for travel management decisions." (FSH 7709.55 11.2(1))

The final Plan is consistent with Executive Orders 11644 and 11989 and the Travel Management Rule and the Carson NF will manage in compliance with all existing laws, policies, and regulations. Additionally, some of the resource protection intent in those executive orders and the Travel Management Rule is reiterated by FW-TFA-DC-4, FW-REC-DC-5, and FW-REC-DC-7 in the final Plan.

Concern Statement 154 **Over-Snow Cross-Country Travel**

Include a plan component that eliminates cross-country travel for over-snow vehicles in the San Antonio Management Area. Adopt a standard that over-snow vehicles be limited to designated system roads: Over-snow use off designated system roads and trails is prohibited, except as authorized by law, permits, or orders, to protect public safety and ecological resources. This will help mitigate impacts to wildlife and better align on-the-ground activities with the primitive and semi-primitive non-motorized ROS classification that is proposed in the draft plan. According to the Carson's visitor use map revised in 2010, this area of the forest is already off-limits to over-snow vehicles use. Including this management direction in the forest plan would ensure consistency with the 2010 visitor use map.

Associated Comment Letters: 4925

Response

The 2010 Carson NF visitor map depicts travel restrictions adopted as part of the 1986 Carson National Forest Land and Resource Management Plan and the Valle Vidal Multiple Use Area Guide. Those restrictions, as depicted on the 2010 visitor map, did not prohibit over-snow vehicle use in the entire area identified in the final Plan as the San Antonio Management Area. Over-snow vehicle use was prohibited only in the Cruces Basin Wilderness and the portion of the management area north of National Forest System Road 87 and south of National Forest System Road 87A (restriction class 2, see FEIS, Chapter 3, Recreation, Description of Affected Environment, Recreation Settings and Opportunities). Generally,

restrictions shown on the 2010 visitor map continue to be the most current direction for over-snow vehicle use forestwide and the final Plan does require that over-snow vehicle use comply with the forest visitor map or subsequent (most current) direction (FW-TFA-S-2). In the final Plan, the Recommended Wilderness Management Area modifies this previous direction by limiting over-snow vehicle use in additional areas where it is not suitable; this has been clarified in the FEIS (Chapter 3, Environmental Consequences for Recreation Common to All Alternatives).

Consistent with Forest Service travel management direction, no trail or area closures are being made as part of this plan revision process. "Approval of a plan, plan amendment, or plan revision should not include a final decision designating roads, trails, or areas for motor vehicle use or OSV use or otherwise restricting those uses. Rather, the land management plan provides information and guidance for travel management decisions" (FSH 7709.55 11.2(1)). Cross-country use of over-snow vehicles was allowed under the 1986 plan and the Multiple Use Area Guide and is not being restricted under the final Plan. We do not believe that over-snow vehicle use must be managed the same way as other motor vehicle use; rather the Travel Management Rule recognizes that "cross-country use of snowmobiles presents a different set of management issues and environmental impacts than cross-country use of other types of motor vehicles" (FR Vol 70 no 216, 2005). Generally, travel analysis specific to over-snow vehicles should form the basis for any proposed changes to the designation of over-snow trails or areas (FSH 7709.55 section 13(3)).

The desired recreation opportunity spectrum map included in the final Plan (USDA FS Carson NF 2020c) represents summer (not snow or ice-based) opportunities. This has been clarified in the final Plan and FEIS. The existing recreation opportunities during summer differ from existing recreation opportunities in winter based on where snowmobiles are not suitable according to existing restricted areas and wilderness recommendations under the final Plan (FEIS, Chapter 3, Environmental Consequences for Recreation). The 2012 Planning Rule states that this suitability should be consistent with desired winter recreation opportunity classes (FSH 1909.12 23.23a(2)(d)). On the Carson NF, the over-snow travel management process may change the designation of over-snow trails or areas based on travel analysis and the desired winter recreation opportunity spectrum would reflect those changes. Because the Carson NF has not conducted an over-snow vehicle travel analysis, it is not appropriate to propose desired winter recreation opportunity classes as part of this plan revision process.

Concern Statement 155 **Monitoring, Decommissioned Roads**

Support for miles of decommissioned roads as a monitoring indicator.

Associated Comment Letter: 5303

Response

Miles of road decommissioned is included as a monitoring indicator in the final Plan (Chapter 4, Monitoring Topic I).

Concern Statement 156 **Monitoring, Motorized Recreation**

The revised Forest Plan should include clear methodology and metrics (number of users, growth rate, dollars spent per user day, etc.) of how the Carson NF will enhance its role in contributing to the local economies via development and enhancement of motorized recreation opportunities.

Associated Comment Letter: 24

Response

The Carson NF participates in national visitor use monitoring in accordance with the U.S. Forest Service National Visitor Use Monitoring framework. The information collected from forest visitors includes "who our visitors are, why they come to the national forest, how satisfied they are with the facilities and services provided, and how much they spend on their visit" (USDA FS 2007). The methodology and metrics are detailed in the National Visitor Use Monitoring Handbook (USDA FS 2007). The final Plan

relies on National Visitor Use Monitoring to measure how recreational opportunities contribute to local economies (Chapter 4, Monitoring Topic VII).

Air -AIR

Concern Statement 157 **Air Quality, Fire**

The Draft Land Management Plan Air and Fire and Fuels sections are not complete because they do not comply with Federal laws, regulations, and standards. Specifically, there is no analysis of the impacts to the "quality of the human environment" particularly from restoration or maintenance prescribed burns or wildfires. The Land Management Plan needs to (1) demonstrate that management actions for implementation of planned ignitions and wildfire are consistent with maintaining air quality that meet or exceed laws and regulations and (2) consider and disclose the negative cumulative impacts from $PM_{2.5}$ and CO_2 from management prescriptions directed under combined land management plans across the New Mexico National Forests.

Associated Comment Letter: 160

Response

FW-AIR-DC-2 directs that projects should move the forest in a direction such that air quality meets or exceeds state and federal air quality standards. Additionally, forest projects and activities must be consistent with plan direction and compliant with current law, regulation, and policy. There is no requirement to reiterate this higher-level direction and generally plan components do not. In some cases, the final Plan repeats existing law, regulation, or policy to add emphasis. Appendix C contains a partial list of applicable laws, regulations, executive orders, and policy for reference.

Cumulative effects across all of New Mexico, including but not limited to, National Forest System lands, are mitigated by adherence to the Smoke Management Program in the State Implementation Plan, as discussed in Air Resource section in the FEIS Volume 1. Quality of life, as related to health and safety, is discussed in the Socio-Economics section of the FEIS Volume 1. Additionally, while there are emissions associated with prescribed fire as well as wildfire, the total emissions per unit area are directly related to the amount of biomass consumed by the fire. Prescribed fire is typically lower intensity and consumes less biomass than uncharacteristic wildfire, leading to lower per unit area emissions (Wiedinmyer and Hurteau 2010). Empirical measurements of wildfire versus prescribed fire emissions show that particulate matter (PM) emissions are larger from wildfire (Liu et al. 2017). Thus, plan direction to reduce uncharacteristic wildfire through treatments that include controlled burning will, over the long-term, improve air quality and the "human environment."

Concern Statement 158 **Air Quality Regulations**

To further ensure air quality standards are met, applicable local or county regulations requiring smoke, noise and/or dust control must be followed.

Associated Comment Letter: 5515

Response

The Carson NF is required to comply with the Clean Air Act of 1970. This rule requires the Forest Service or any federal agency to demonstrate that its actions or any activities it permits, comply with these national standards and any State and local requirements for air pollution control. States develop State Implementation Plans, describing how they will implement the requirements of the Clean Air Act. State legislation determines how the air quality regulatory process is conducted state by state. The Carson NF final Plan (Air Resources section) references these national requirements. In addition, the following relevant components are included in the final plan: FW-AIR-DC-1, FW-AIR-DC-2, FW-AIR-DC-4, FW-AIR-DC-5, FW-AIR-G-1, FW-AIRG-G-2, FW-AIR-MA-1, FW-AIR-MA-2, and MA-JIC-G-3. Appendix C includes a partial list of laws with which the Carson NF is required to comply.

Concern Statement 159 **Air Quality**

The Forest Plan should only include desired conditions for air that pertain to system attributes that the Forest Service has direct control over. FW-AIR-DC-1 is not a desired condition because it is required as part of NFMA, CAA, and NAAQS. FW-AIR-DC 1, 2, and 4 cannot be met because they are outside the control of the Forest Service and should be rewritten to say "All prescribed fires and wildfires managed for resource benefit are conducted within the requirements of New Mexico regulation 20.2.65" as this covers only ignitions, which is the only aspect the Forest Service has control over with respect to air quality impacts.

Associated Comment Letters: 160, 3228

Response

Although the Forest Service cannot control air quality issues that stem from activities beyond NFS lands, the 1970 Clean Air Act (42 U.S.C. §7401 et seq.) and the 1999 Regional Haze Rule (40 U.S.C. §51 et seq.) charge the U.S. Forest Service as a Federal Land Manager of Class I areas (which include the Columbine-Hondo, Wheeler Peak, Latir, Cruces Basin, and the Pecos Wilderness) to protect air quality related values in these areas. In addition, the Clean Air Act sets standards for air quality to protect public health and welfare. The Forest Service must ensure that its activities, or activities it permits (including but not limited to smoke emissions), comply with these national standards and any State and local requirements for air pollution control.

The Regional Haze Rule of 1999 requires states and interested tribes to address sources of pollution contributing to regional haze in the 156 mandatory Class I areas. To do this, states develop visibility State Implementation Plans to demonstrate to the public, the Federal Land Managers (FLMs), and EPA how they plan to address regional haze to reach the goal of natural background conditions by the year 2064. The Forest Service, as the FLM of 88 mandatory Class I areas, works closely with the states, interested tribes, EPA, and the Regional Planning Organizations in the development of the technical products and policy documents that are used by each state as they develop and revise their plans. By law, the FLMs of mandatory Class I areas have a formal consultation with each state 60 days before the draft plans go to public hearing. As stewards of the resource targeted for protection, the Forest Service has a special duty to ensure the Class I wildernesses under our responsibility are managed for the use and enjoyment of current and future generations.

Our desired conditions reflect these regulations, which give the Forest Service the authority to work together with states to manage air quality.

Concern Statement 160 **Air Quality, Class 1 Areas**

There needs to be a smoke model analysis to determine if mandatory Class 1 Federal areas are affected by project implementation; specifically, restoration projects, prescribed fires and wildland fires; and a mitigation plan for visibility if these areas are being impacted.

Associated Comment Letters: 160, 5515

Response

By being compliant with the state Smoke Management Program, we avoid impacts to Class 1 areas (under the Regional Haze Rule). Updates to the Regional Haze Rule exclude impacts from smoke from wildland fires. The Carson NF complies with the New Mexico Smoke Management Program via plan components (FW-AIR-DC-2-5 and FW-AIR-G-1); smoke monitoring is coordinated at the project level and is outside of the scope of the planning process. Furthermore, to be most useful, air quality modeling of smoke depends on meteorological inputs from current forecasts (2 to 3 days in the future). As a result, prospective modeling, without current forecasts to predict smoke months or years in advance, is not a useful predictor of impacts from an individual burn.

Concern Statement 161 **Air Quality Standards**

The protection of the Public's respiratory health must be a primary value of the Carson NF. The Carson NF is required by law (e.g., the Clean Air Act, which includes the National Ambient Air Quality Standards (NAAQS) and the Regional Haze Rule) to comply with Federal, State, and local air quality standards, yet in the DEIS, estimated emissions of $PM_{2.5}$ and $C0_2$ from planned and wildfire ignitions could have a significant negative impact on air quality and respiratory health. Therefore, the Plan should provide guidance to:

1. control pollution from federal facilities and activities that may result in the discharge of air pollutants as per the EPA Clean Air Act,
2. provide necessary mitigation and coordination to protect individuals with sensitivity to smoke, including Environmental Justice populations in counties adjacent to the Carson NF, and
3. use the EPA approved “Federal Reference or Equivalent Method air quality monitoring equipment and methodology” to demonstrate that planned and wildfire burns are consistent with maintaining air quality at levels as required by law, regulation, and policy.

Associated Comment Letter: 160

Response

Health and safety are key values of the Forest Service, the final Plan identifies air quality as a key need for change from the 1987 Plan (see Need for Change section of the Plan). Air quality is regulated by the New Mexico Environment Department, Air Quality Bureau (NMED-AQB) and the Environmental Protection Agency. $PM_{2.5}$ levels are evaluated via federally regulated and approved fixed monitors that are sited in accordance with New Mexico network design objectives using Federal reference methods; the Forest Service does not have any control over the Federal Reference monitoring. In addition, exceedances are not based on short time periods; rather, a number of metrics are employed using a 3-year average (https://www.epa.gov/criteria-air-pollutants/naaqs-table). The Forest Service complies with the New Mexico State Smoke Management Program, which is described in New Mexico Section 309(g) Regional Haze State Implementation Plan.

The final Plan includes components that tier to, and require the national forest to meet, all State and Federal air quality regulations and legal requirements (FW-AIR-DC-1-5, FW-AIR-G-1). The Air section in the Plan also includes management approaches on working collaboratively with other agencies, organizations, and tribes to reduce air pollution impacts.

Management approaches in the Wildland Fire section (e.g., Management Approaches for Fire-3 and -4) also ask project managers to consider working collaboratively with stakeholders when dealing with prescribed fires and wildfires. This includes “promoting public safety and reducing the risk of wildfire on lands of other ownership by supporting the development and implementation of community wildfire protection plans (CWPPs) or similar assessments and management plans to mitigate negative impacts of wildfire.” Public announcements are also posted online (nmfireinfo.com).

Environmental justice, while not directly addressed in the Plan, is analyzed as part of the FEIS, Volume 1. Under all analyzed alternatives, the Forest Service complies with the New Mexico State Smoke Management Program. New Mexico’s administrative code (20.2.65 New Mexico Administrative Code, Smoke Management) stipulates that all burners must comply with requirements of the Clean Air Act and Federal Regional Haze Rule, as well as all city and county ordinances relating to smoke management and vegetative burning practices. Vegetation treatments to reduce fire risk would also occur under all alternatives, as would fire control operations by Forest Service personnel that protect quality of life for all communities.

Smoke management is administered by the New Mexico Air Quality Bureau. The Forest Service complies with the New Mexico State Smoke Management Program, which is described in New Mexico

Section 309(g) Regional Haze State Implementation Plan. New Mexico's administrative code (20.2.65 New Mexico Administrative Code, Smoke Management) stipulates that all burners must comply with requirements of the Clean Air Act and Federal Regional Haze Rule, as well as all city and county ordinances relating to smoke management and vegetative burning practices. There are specific requirements for prescribed fires and wildfires managed for multiple objectives that exceed 10 acres, which include registering the burn, notifying State and nearby population centers of burn date(s), visual tracking, and post-fire activity reports (emissions tracking also applies to wildfires greater than 100 acres that are fully suppressed) (20.2.65 New Mexico Administrative Code, Smoke Management).

The decision to use mobile units to monitor air quality is made at the project level; the national forest has limited monitoring resources and deploys them with care, focusing on communities that are being impacted that are without their own permanent monitors. Decisions on monitoring are made in conjunction with the New Mexico Department of Health.

Concern Statement 162 **Fugitive Dust Control**

The Forest Plan needs to include dust control measures to minimize the release of particulates due to vehicular traffic, construction, and harvesting activities. Areas disturbed by these activities should be reclaimed to avoid long-term problems with erosion and fugitive dust. Project activities that increase dust and emissions should not result in non-attainment of air quality standards and should follow applicable local or county regulations for smoke, noise, and dust including attaining proper air quality permits as per 20.2.72 NMAC for asphalts, concrete, quarrying, crushing, and screening facilities used for projects.

Associated Comment Letter: 5515

Response

The final Plan requires that dust abatement strategies should be implemented during construction and road projects where dust is a potential effect (FW-AIR-DC-1 and FW-AIR-G-2). This is generally done on a site-specific basis, as fugitive dust was analyzed as part of the EIS and found to be an insignificant source of emissions compared to those produced by fire (FEIS, Chapter 3, Environmental Consequences for Air Resources Common to all Alternatives). Management Approach for Air Resources-2 describes an emphasis on "design features, best management practices, or mitigation measures to reduce fugitive dust where needed." The Forest Service is also required to follow all local, county, and state regulations concerning dust management.

Concern Statement 163 **Nitrogen Critical Load**

Please monitor for critical loads of nitrogen.

Associated Comment Letter: 5430

Response

The United States Geological Survey is the lead Federal agency for the monitoring of wet atmospheric deposition through the National Atmospheric Deposition Program (USGS 2020). For wilderness areas on the Carson NF, critical loads for nitrogen and acid deposition have been established based on a national assessment, although they lack some site-specific data for a more robust assessment (Pardo 2011). This general approach has been applied to determine critical loads for nitrogen and sulfur deposition for some sensitive receptors on the forest. Generally, the amount of atmospheric deposition occurring on the Carson is relatively low when compared to some forests in the east. The Carson NF also supports the United States Geological Society (USGS) Snowpack Chemistry Monitoring Study, which includes two locations on the forest (USGS 2014). One site is located near Taos Ski Valley and the second is near Hopewell Lake. Generally, nitrate deposition at the two sites has decreased over the last 14 years, consistent with overall emissions and the expected trend in emissions (USDA FS Carson NF 2015, pgs. 263-265). Sites that collect ambient NO2 data surrounding the Carson NF have recorded levels that are

substantially below applicable 1-hour and annual National Ambient Air Quality Standards (USDA FS Carson NF 2015, p. 259). Critical load exceedance for nitrogen deposition on the Carson NF was summarized in the Assessment (Table 48, p. 268). Annual gradient maps of deposition for multiple chemical species, including nitrogen, are available from: http://nadp.slh.wisc.edu/NTN/annualmapsByYear.aspx#2018.

Concern Statement 164 **Monitoring, Air Quality**

"Is air quality meeting defined standards in the plan area?" This is not the appropriate question because it does not include a temporal component. New Mexico regulation 20.2.65 states the requirements for prescribed burning. The State of New Mexico has issued a Ventilation Statewide Waiver for SMP I and II that specifies the conditions under which ignition can occur when ventilation is fair or poor. These regulations do not make any statements with respect to meeting specific emission targets. The monitoring question should be: Are all prescribed and managed wildfires conducted in accordance with state air quality regulations governing prescribed and managed wildfire?

Associated Comment Letter: 3228

Response

The air quality monitoring question requires monitoring of air quality for multiple resources that could affect air quality, not just prescribed or managed fire.

The Forest Plan includes components that tier to and require the Forest to meet all State and Federal air quality regulations and legal requirements (FW-AIR-DC-1-5, FW-AIR-G-1). Smoke management is administered by the New Mexico Air Quality Bureau. The Forest Service complies with the New Mexico State Smoke Management Program, which is described in New Mexico Section 309(g) Regional Haze State Implementation Plan. New Mexico's administrative code (20.2.65 New Mexico Administrative Code, Smoke Management) stipulates that all burners must comply with requirements of the Clean Air Act and Federal Regional Haze Rule, as well as all city and county ordinances relating to smoke management and vegetative burning practices. There are specific requirements for prescribed fires and wildfires managed for multiple objectives that exceed 10 acres, which include registering the burn, notifying State and nearby population centers of burn date(s), visual tracking, and post-fire activity reports (emissions tracking also applies to wildfires greater than 100 acres that are fully suppressed) (20.2.65 New Mexico Administrative Code, Smoke Management).

Concern Statement 165 **Greenhouse Gas Emissions**

The Assessment did not provide emissions data and analysis for the Carson NF. Instead, the Assessment relied on a study for the Apache-Sitgreaves NF in Eastern Arizona and Western New Mexico as a "surrogate solution for emissions assessment" on the Carson NF. While this study is instructive, its conclusions may not be fully applicable to the Carson, and we urge the Carson NF to undertake Carson-specific greenhouse gas emissions research to better inform management decisions on the Carson NF. The Apache-Sitgreaves study examined "the long-term (100 years difference in carbon stocks and carbon emissions between treated [for fire prevention] and untreated forest ecosystems." The study found that carbon storage is higher in untreated areas, but treated areas have lower emissions related to wildfires.

Associated Comment Letters: 4911

Response

An analysis of carbon loss and sequestration by alternative based on Carson-specific data has been added to the FEIS (Chapter 3, Carbon). The full description of the carbon modeling process can be found in appendix C of the FEIS.

Climate Change and Carbon - CCC

Concern Statement 166 **Carbon Sequestration**

The plan should describe the value of carbon sequestration in designated and management areas and in each type of forest ecosystem (vegetation, soils, wetlands).

Associated Comment Letter: 4911

Response

Carbon sequestration is identified as an ecosystem service in the introduction to chapter 2 in the final Plan. Carbon sequestration is also discussed in the introduction to the Soil Resources and Air Resources sections in the final Plan. FW-VEG-DC-3 directs management to maintain ecosystem functions including carbon sequestration. The Plan does not assign value to any ecosystem service. It does not discuss carbon sequestration under management areas or designated areas because it is not the designation itself that sequesters carbon, but rather the resources (vegetation, soils) within the area that sequester carbon.

Concern Statement 167 **Carbon Sequestration Alternative**

The Forest Service has a carbon sequestration alternative that was not made public and which the Forest Service is not receiving comment on because it was rejected. Keeping this alternative out of the EIS and not revealing it violates the spirit and letter of NEPA's public information requirements, the requirement that the action be noticed for public comment and comment by other agencies, and the requirement that the EIS provide sufficient information to the decision-maker to choose among alternatives.

Associated Comment Letter: 154

Response

Forest Service directives for environmental impact statements state that the EIS rigorously explore and objectively evaluate all reasonable alternatives and briefly discuss the reasons for having eliminated other alternatives from detailed study (FSH 1909.15 Chapter 20 Section 23.3 5(a)).

An alternative that manages forest lands for carbon sequestration to offset greenhouse gas emissions was included as an Alternative Considered but Eliminated from Detailed Study in the draft and final environmental impact statements. This alternative was not included in detailed study within the FEIS analysis because management to maximize carbon sequestration over other ecosystem services is not a goal of the plan nor is it included in the purpose and need for revising the forest plan (FEIS, Purpose and Need section). The revision topics identified in the purpose and need for change include Terrestrial Ecosystem and Habitat, Watersheds and Water, and Multiple Use and Human Influences. The final Forest Plan addresses the needs of changing climate patterns with a focus on restoration by managing for functional ecosystems over time to provide ecosystem services including carbon storage (Chapter 2 Forestwide Plan Components, Ecological Sustainability and Diversity of Plant and Animal Communities Introduction). The following plan components address carbon storage: FW-VEG-DC 3; Management Approach for All Vegetation Communities-11. FW-FAC-DC 2 addresses Forest facilities, setting a desired condition that these are energy-efficient and that renewable energy sources are used for power.

The Carson NF had extensive public engagement throughout the planning process, from assessment through the 90-day public comment period (FEIS, Public Involvement Section). We held monthly open houses beginning in 2016 to allow the public to speak with and ask questions of Carson personnel on the many documents being developed as part of the draft plan and draft EIS. The Carson NF has accepted all comments received from the public.

Concern Statement 168 **Carbon Sequestration by Alternative**

The Forest needs to evaluate the differences between alternatives regarding the current carbon sequestration and the carbon emissions and determine which one provides for more carbon sequestration and reducing carbon emissions. The Draft Environmental Impact Statement, Environmental Consequences for Air Resources - Alternative 2 Restoration to Provide Diverse Ecosystem Services, page 264. The following statement: "Alternative 2 would restore approximately 11 times more acres annually than the current plan, which would result in greater potential for carbon sequestration over the life of the plan." is not complete and requires revision. Please provide the study citation (author, title, date, publisher) that demonstrates that the Carson National Forest Restoration (i.e., reduction in Forest densities), through a reduction in the number of trees, results in an increase in carbon sequestration over the life of the Land Management Plan

Associated Comment Letter: 160

Response

While the Carson NF recognizes the vital role that forested lands play in carbon sequestration, the final Plan manages for overall ecosystem function, which implies inherent levels of carbon sequestration and greenhouse gas emissions. The analysis of carbon sequestration has been expanded in the FEIS (Chapter 3, Environmental Consequences for Carbon) and documentation of the modeling process has been added to appendix C.

A citation has been included in the FEIS to support the statement that forest restoration can lower risk for greater carbon stock losses and emissions in the future (Wiedinmyer and Hurteau 2010).

Concern Statement 169 **Carbon Sequestration**

Manage forests to serve as vast carbon sinks. The Forest Plan should acknowledge and optimize the climate value of national forests and maximize long-term carbon storage on public lands. Given that the adverse impacts of climate change on the forest are caused by excessive carbon emissions into the atmosphere, and that carbon sequestration can offset these emissions and hence reduce this cause, it follows that maximizing carbon sequestration promotes the overall ecosystem function over the long-term.

Associated Comment Letters: 154, 4911, 5347

Response

The value of the Carson NF for carbon sequestration is noted in several places in the final Plan including FW-VEG-DC-3 and the Soil Resources section introduction. An alternative to manage forest lands for carbon sequestration to offset greenhouse gas emissions was considered but eliminated for detailed study (FEIS, chapter 2). While the Carson NF recognizes the vital role that forested lands play in carbon sequestration the final plan manages for overall ecosystem function which implies inherent levels of carbon sequestration and greenhouse gas emissions.

> The basic approach involves managing C through managing the health and productivity of the Nation’s forests. The approach focuses on managing risks to the health, productivity, and ability of the resource to provide the goods and services called for in management plans. Management actions have C outcomes and those are considered among the benefits being managed. Forest systems are dynamic and emit and capture C regardless of human intervention. The Forest Service C strategy is embedded in a larger adaptation strategy for managing the resource that considers multiple impacts of natural and anthropogenic stressors (Birdsey et al. 2019, p. 15).

We disagree that managing to maximize carbon sequestration promotes ecosystem function and management to maximize carbon sequestration over other ecosystem services is not a primary management focus in the plan. Janowiak et al. (2017) briefly summarize how land management planning

incorporates carbon sequestration, "The long-term capacity of forest ecosystems to capture and store carbon depends in large part on their health, productivity, resilience, and adaptive capacity."

> Land management in a dynamic system considers cumulative effects across time, factoring in risk, severity, scale, and likely outcome of disturbances. For example, storing carbon in overly dense forests increases the risk of losing the carbon through fire and decomposition of fire-killed trees following large wildfires (M. D. Hurteau and Brooks 2011). Dense stands are less vigorous and more susceptible to insect attack (Oliver and Larson 1996). Land management programs that restore forests to healthy and productive conditions will help ensure the long-term maintenance and transformation of forest carbon stocks (Janowiak et al. 2014).

Concern Statement 170 **Carbon Sequestration, Wilderness**

The EIS should analyze the impacts of each alternative to the carbon cycle. If the Carson considered and quantified the carbon sequestration and carbon storage capabilities of wilderness it may have developed and chosen an alternative with greater recommended wilderness. Instead, it rejected the two alternatives with the greatest wilderness, without apparent consideration of these factors. The Forest Service should be conducting an explicit cost-benefit analysis to ensure that there are in fact net economic benefits when the impacts of not avoiding carbon emissions are taken into account.

Associated Comment Letter: 154

Response

The Carson NF has quantified carbon flux under each alternative (FEIS, appendix C). Carbon stocks on the Carson NF have increased from 56.4±8.2 teragrams of carbon (Tg C) in 1990 to 56.9±7.3 Tg C in 2013, a 0.9 percent increase. All of the alternatives would initially directly reduce carbon stocks on the forest, though minimally. However, this initial effect would be mitigated or even reversed with time, reducing the potential for negative indirect and cumulative effects. As shown in figure 1, all action alternatives have a greater potential for carbon loss per year from disturbance (tree removal, insects, disease, and fire). Carbon loss from disturbance would be offset to varying degrees by increased net primary productivity and carbon sequestration from young tree establishment following disturbance (figure 2). The success of tree establishment is related to overall ecosystem integrity that would vary by alternative. But replacing old trees (generally greater than 50 years in age on the Carson NF) with younger more productive trees increases the rate of carbon sequestration, and most stands on the Carson are more than 50 years old (figure 3).

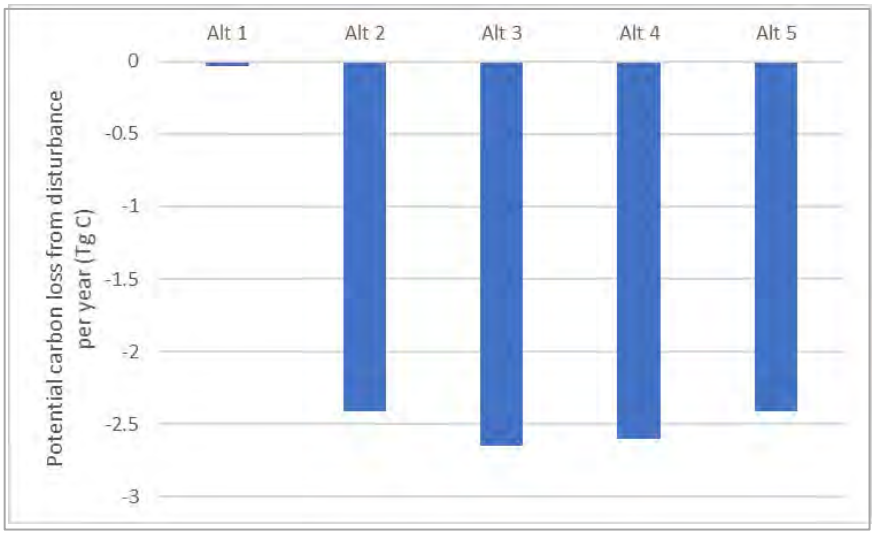


Figure 1. Potential carbon loss from disturbance per year by alternative

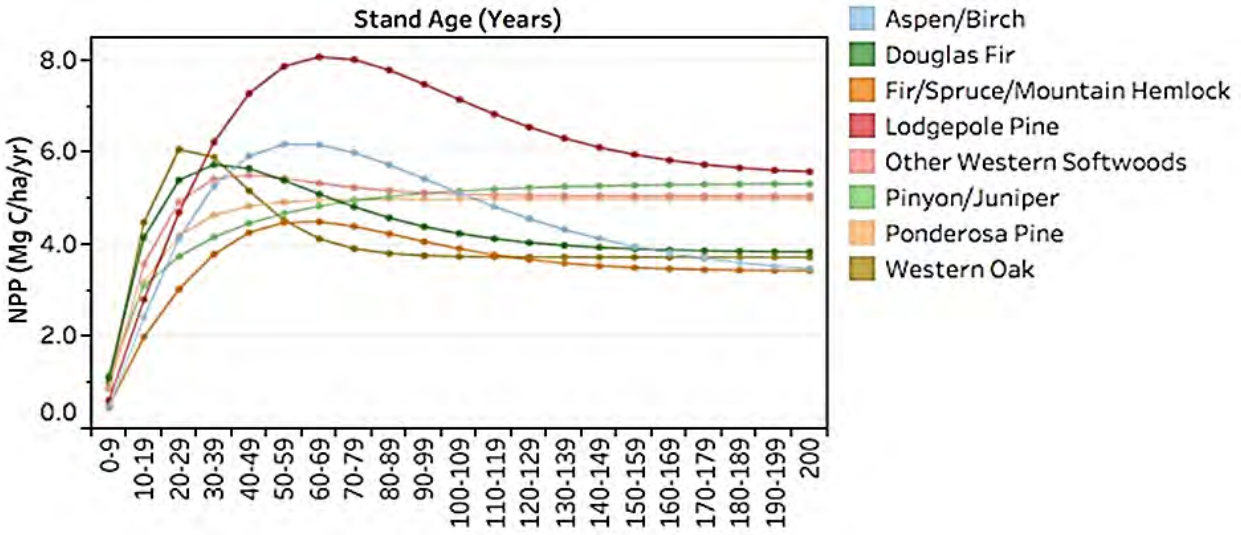


Figure 2. Net Primary Productivity-stand age curves by forest type group in Carson National Forest. Derived from forest inventory data and He et al. 2012.

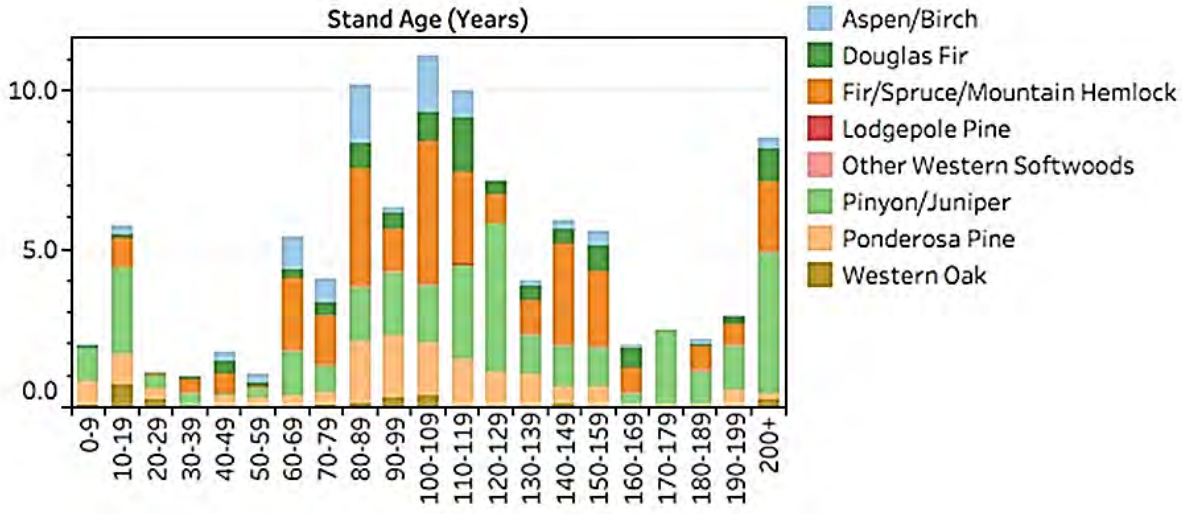


Figure 3. Stand age distribution in 2011 by forest type group in Carson National Forest. Derived from forest inventory data.

In a global atmospheric CO_2 context, even the maximum potential management levels described by the plan alternatives would have a negligible impact on national and global emissions and on forest carbon stocks. When impacts on carbon emissions (and carbon stocks) are small, a quantitative analysis of carbon effects is not warranted and thus is not meaningful for a reasoned choice among plan alternatives (USDA FS 2009b). Although advances in research have helped to account for and document the relationship between greenhouse gas emissions and global climate change, it remains difficult to reliably simulate observed temperature changes and distinguish between natural or human causes at smaller than continental scales (IPCC 2007).

Even more challenging is the ability to quantify future carbon consequences of management alternatives due to potential variability in future conditions and the unpredictable nature of disturbances (Ryan et al. 2010). The dominant disturbance influence on carbon flux on the Carson NF between 1990 and 2011

was wildfire with some contribution from insect-induced mortality (Birdsey et al. 2019). Across southwestern national forests, other factors such as climate variability, atmospheric CO_2, and nitrogen deposition were significant drivers of carbon stock fluctuations (Birdsey et al. 2019). The result of these sorts of variable influences is a very low signal-to-noise ratio: small differences in carbon impacts among management alternatives, coupled with high uncertainty in carbon stock estimates, make the detection of statistically meaningful differences among alternatives highly unlikely.

Carbon storage capabilities of wilderness, recommended wilderness, and non-wilderness were not considerations in the wilderness recommendation process. The wilderness recommendation process followed 2012 Planning Rule direction (FSH 1909.12 chapter 70). The record of decision details the considerations used to make final wilderness recommendations.

Concern Statement 171 **Carbon Sequestration, Thinning and Logging**

Facilitate carbon-rich ecosystems by increasing the number of trees. The assumption that mechanical thinning and treatment will avoid the carbon emissions associated with more frequent high severity fires, see DEIS at 261, is flawed. Eliminate mechanical thinning because it causes a net loss of forest carbon storage and a net increase in carbon emissions. Thinning and logging can increase fire intensity rather than reduce it (Bradley et al. 2016). Because timber production releases carbon in the harvest process, reduces the carbon storage capacity of the forest and reduces its potential for carbon sequestration, it adds carbon to the atmosphere and is not compatible with the objective of sustaining a healthy forest ecosystem.

Associated Comment Letters: 154, 5008, 5361, 5673

Response

We stand by the supposition that thinning and prescribed fire increase carbon sequestration over longer time frames and have added supporting documentation to the assumptions section of Environmental Consequences for Air Resources (FEIS, Chapter 3). While mechanical thinning does result in a short-term loss of forest carbon emissions, over the long term (several decades to one century), forest restoration results in more total ecosystem carbon and lower wildfire emissions than a no-harvest scenario (Hurteau 2017; McCauley et al. 2019). Carbon “losses caused by thinning and burning treatments are out-weighed by the [carbon] gains from decreased tree mortality rates and increased sequestration” (Hurteau et al. 2016).

Bradley, Hanson and DellaSala (2016, p. 7) did show a negative correlation between protection status (PAD-US, USGS 2012) and fire severity; however, the observed correlation does not indicate, as the paper concludes, that burn severity is higher in areas with “more intense management” (p. 7). The comment incorrectly links national forest lands where more intensive management is allowed (non-wilderness and non-inventoried roadless areas, Gap Analysis Program protection class 1 and 2) to areas where thinning and logging are occurring. In fact, Bradley, Hanson, and DellaSala (2016, p. 9) conclude, “due to the coarseness of the management intensity variables that we used (i.e., GAP status), we cannot rule out whether low intensities of management decreased the occurrence of high-severity fire in some circumstances. However, the relationship between forest density/fuel, mechanical fuel treatment, and fire severity is complex.”

More protective management, such a wilderness or inventoried roadless areas, often reflect a historical pattern of lower human use. That is, the same lack of access that makes areas good candidates for more protective designations has also discouraged past human use and management that have contributed to the current departed forest conditions and fire regimes in other places. A large body of evidence indicates that thinning of frequent-fire forests from which fire has historically been excluded is effective at reducing uncharacteristic fire effects (Evans 2018).

Concern Statement 172 **Climate Resiliency Potential**

Protect places that have high climate resiliency potential, like headwater streams, wetlands, and the Valle Vidal. This is crucial for preparing our landscape for the stresses of climate change.

Associated Comment Letter: 236

Response

The final Plan has incorporated climate change into the management of resources and has pinpointed desired conditions and objectives that increase the ecological resiliency of the Carson to predicted changes in climate. Stream function and resiliency is described in the FW-WSW-RMZ-STM section and wetland function and resiliency is described in the FW-WSW-RMZ and FW-WSW-RMZ-WR sections. The Valle Vidal is managed according to forest wide plan components with additional direction provided in the MA-VVMA section.

The final Plan addresses climate-related stressors through strategies that are responsive to an uncertain and changing climate (Chapter 1, Plan Concepts). Complex interactions will occur among species as they migrate and adapt in response to changing environmental conditions. Future management will benefit by being adaptive, innovative, and flexible as species associations and environmental stressors without historical equivalent emerge (Millar et al. 2007). Management that reduces stressors that are well understood will produce ecosystems with better baseline resiliency and more adaptive capacity to continue to function in the face of other, more uncertain stressors (Hanberry et al. 2015). Strategies for management that take climate uncertainty into consideration are integrated throughout the plan (FEIS, Chapter 3, Assumptions Common to All Resources, Management Implications of Projected Future Climate).

Concern Statement 173 **Climate Change Impacts**

Reference conditions should be adjusted to account for climate change impacts.

Associated Comment Letter: 4911

Response

Reference conditions represent the characteristic natural range of variability prior to European settlement and under the current climatic period (final Plan, glossary). The glossary definitions in the final Plan and FEIS have been edited to clarify that reference conditions can be used to inform desired conditions but may have to be refined considering factors such as climate change.

The final Plan has incorporated climate change into the management of resources and has pinpointed desired conditions and objectives that increase the ecological resiliency of the Carson to predicted changes in climate. For example, vegetation management practices in the final Plan can reduce drought stress and the risk of uncharacteristic fire, both of which are consequences of changing temperature and precipitation regimes combined with uncharacteristically dense and fuel-laden forests. Management practices are also designed to allow for the flexibility to address changing conditions over time.

The implications of climate change for both society and natural resources are profound and complex, as are the challenges of integrating adaptation and mitigation responses. A successful approach will be based on thorough assessments and well-tailored policies, engaging a full range of stakeholders across the landscape in activities for adaptation, mitigation, and education (USDA FS 2010a). The uncertainty that accompanies a changing climate creates challenges for natural resource management and dependent communities (Gowda et al. 2018; Hand et al. 2018; Jantarasami et al. 2018). Broad scientific ecological knowledge is based on observations of natural process and interaction under past and current climatic conditions. Complex interactions will occur among species as they migrate and adapt in response to changing environmental conditions. Future management will benefit by being adaptive, innovative, and flexible as species associations and environmental stressors without historical equivalent emerge (Millar et al. 2007).

Management that reduces stressors that are well understood will produce ecosystems with better baseline resiliency and more adaptive capacity to continue to function in the face of other, more uncertain stressors (Hanberry et al. 2015). Strategies for management that take climate uncertainty into consideration are integrated throughout the plan (FEIS, Chapter 3, Assumptions Common to All Resources, Management Implications of Projected Future Climate).

Concern Statement 174 **Climate Change Impacts**

There is insufficient analysis of the impacts of management decisions on the environment in light of the compounding impacts of climate change.

Associated Comment Letter: 4994

Response

Management implications of projected future climate are summarized at the beginning of chapter 3 of the FEIS (Assumptions Common to All Resources). The FEIS also includes discussion of the impacts of climate change in the Environmental Consequences for Vegetation; Fuels and Wildland Fire; High Elevation Forests; Frequent Fire Forests; Woodlands; Soil Resources; Watersheds and Water; Wildlife, Fish, and Plants; Sustainable Rangelands and Livestock Grazing; Recreation; Scenery; Transportation and Forest Access; Wilderness; the Jicarilla Natural Gas Management Area; Socio-Economics; and Environmental Justice (chapter 3).

The implications of climate change for both society and natural resources are profound and complex, as are the challenges of integrating adaptation and mitigation responses. There is significant uncertainty that accompanies a changing climate and complex interactions will occur among species as they migrate and adapt in response to changing environmental conditions. Accordingly, the final Plan is designed to be adaptive, innovative, and flexible to respond to unforeseen challenges as species associations and environmental stressors without historical equivalent emerge (FEIS, Chapter 3, Assumptions Common to All Alternatives, Management Implications of Projected Future Climate Change).

Concern Statement 175 **Climate Change Impacts**

The plan needs to take into account the ongoing and future impacts of a changing climate.

Associated Comment Letters: 1218, 1826, 4847, 4857, 4911, 5673

Response

The final Plan has incorporated climate change into the management of resources and has pinpointed desired conditions and objectives that increase the ecological resiliency of the Carson to predicted changes in climate. For example, vegetation management practices in the final Plan can reduce drought stress and the risk of uncharacteristic fire, both of which are consequences of changing temperature and precipitation regimes combined with uncharacteristically dense and fuel-laden forests. Management practices are also designed to allow for the flexibility to address changing conditions over time.

The implications of climate change for both society and natural resources are profound and complex, as are the challenges of integrating adaptation and mitigation responses. A successful approach will be based on thorough assessments and well-tailored policies, engaging a full range of stakeholders across the landscape in activities for adaptation, mitigation, and education (USDA FS 2010a). The uncertainty that accompanies a changing climate creates challenges for natural resource management and communities dependent on forest resources (Gowda et al. 2018; Hand et al. 2018; Jantarasami et al. 2018). Broad scientific ecological knowledge is based on observations of natural process and interaction under past and current climatic conditions. Complex interactions will occur among species as they migrate and adapt in response to changing environmental conditions. Future management will benefit by being adaptive, innovative, and flexible as species associations and environmental stressors without historical equivalent emerge (Millar et al. 2007).

Management that reduces stressors that are well understood will produce ecosystems with better baseline resiliency and more adaptive capacity to continue to function in the face of other, more uncertain stressors (Hanberry et al. 2015). Strategies for management that take climate uncertainty into consideration are integrated throughout the plan (FEIS, Chapter 3, Assumptions Common to All Resources, Management Implications of Projected Future Climate).

Concern Statement 176 **Climate Change Section**

There is no comprehensive section concerning climate change in either the draft plan or DEIS. The piecemeal approach to the issue of climate change makes it difficult to get a good sense of how the Carson is planning to address climate change and how climate change is likely to impact the forest. It also makes it hard to determine what gaps exist in the Carson's climate-related management direction and environmental analysis. Include a section on climate change in the draft plan that describes climate change impacts on the forest, explain how the Carson plans to address climate change (including climate mitigation, adaptation, and resilience), and cross-references all plan components that concern climate change. The Carson should also include a comprehensive section on climate change in the final EIS. The analysis should describe current and expected climate impacts in the Carson and explain how the various alternatives would address climate change.

Associated Comment Letters: 154, 4856, 4911, 4951, 4994, 5574

Response

Projected climate change impacts on the Carson NF are described in the Assessment (pp. 275–279); the final Plan itself does not describe impacts. The FEIS is organized by resource; projected climate change is discussed throughout the analysis in terms of its impact on individual resources. The FEIS also summarizes management implications of projected future climate at the beginning of chapter 3 (Assumptions Common to All Resources).

The implications of climate change for both society and natural resources are profound and complex, as are the challenges of integrating adaptation and mitigation responses. There is no single approach that will successfully address climate change across the Carson NF and its multiple resources. Future management will benefit by being adaptive, innovative, and flexible as species associations and environmental stressors without historical equivalent emerge (Millar et al. 2007). Changing climate is identified as a foundational plan concept that “sets the tone for the plan throughout” and is “important to consider during implementation” (final Plan, Chapter 1, Plan Concepts). Strategies for management that take climate uncertainty into consideration are integrated throughout the plan (FEIS, Chapter 3, Assumptions Common to All Resources, Management Implications of Projected Future Climate). Management that reduces stressors that are well understood will produce ecosystems with better baseline resiliency and more adaptive capacity to continue to function in the face of other, more uncertain stressors (Hanberry et al. 2015). Desired conditions throughout the plan reduce stressors to improve resiliency increase adaptive capacity. The final Plan does include management approaches that describe possible strategies that may be useful under future climatic conditions such as, Management Approaches for All Vegetation Communities-2, -8, and -11, and Management Approach for Transportation and Forest Access-5.

Concern Statement 177 **Climate Change, Other Stressors**

It does not appear the Forest Service considered factors related to climate change and other stressors in developing this Plan as required by the 2012 Planning Rule. Responsible officials must identify and evaluate a baseline assessment of carbon stocks, as a part of the assessment phase. Climate change must be taken into account when the responsible official is developing plan components for ecological sustainability. When providing for ecosystem services and multiple uses, the responsible official is required to consider climate change. Measurable changes to the plan area related to climate change and other stressors affecting the plan area must be monitored.

Associated Comment Letters: 154, 4994

Response

A baseline assessment of carbon stocks was conducted during the assessment phase and is documented on pages 284–297 of the Assessment. Climate change was considered during the development of plan components for ecological sustainability, ecosystem services, and multiple uses. Changing climate is identified as a foundational plan concept that "sets the tone for the plan throughout" and is "important to consider during implementation" (final Plan, Chapter 1, Plan Concepts). Monitoring topic VI measures changes to the plan area related to climate change and other stressors. An additional question has been added to annually monitor seasonal temperature and precipitation trends (Final Plan, Chapter 4).

Concern Statement 178 **Monitoring, Drought**

Drought should be an added indicator to Monitoring Topic VI: Measurable Changes Related to Climate and Other Stressors.

Associated Comment Letter: 3228

Response

Drought has been added to the list of stressors in Table 14, Monitoring Topic VI: Measurable Changes Related to Climate and Other Stressors.

Concern Statement 179 **Climate Change, Human Manipulation**

Wild forests should be unmanaged and free from human manipulation in order to address climate change.

Associated Comment Letter: 154

Response

The Carson NF is required by law to manage lands included within its boundaries and is not authorized to prevent all human manipulation. The Multiple-Use Sustained-Yield Act of 1960 directs the Secretary of Agriculture "to develop and administer the renewable surface resources of the national forests for multiple use and sustained yield of the several products and services obtained therefrom" (16 U.S.C. 529). Further, "it is the policy of the Congress that the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes" (16 U.S.C. 528).

In addition, evidence does not support the assumption that leaving forests unmanaged is an effective mitigation for climate change. While mechanical thinning and prescribed burning do result in a short-term loss of forest carbon emissions, over the long term (several decades to one century), forest restoration results in more total ecosystem carbon and lower wildfire emissions than a 'no-harvest' scenario (Hurteau 2017; McCauley et al. 2019). Carbon "losses caused by thinning and burning treatments are out-weighed by the [carbon] gains from decreased tree mortality rates and increased sequestration" (Hurteau et al. 2016).

Concern Statement 180 **Climate Impacts**

The contribution of any particular alternative to climate change was not considered. Climate impacts should be described in detail, including impacts on temperature, precipitation patterns, drought, wildfire, water resources, vegetation, species and habitat, insect infestations, disease, and invasive species.

Associated Comment Letters: 154, 4994

Response

In a global atmospheric CO_2 context, even the maximum potential management levels described by the plan alternatives would have a negligible impact on national and global emissions and on forest carbon stocks. When impacts on carbon emissions (and carbon stocks) are small, a quantitative analysis of

carbon effects is not meaningful and thus is not warranted for a reasoned choice among plan alternatives (USDA FS 2009b). Although advances in research have helped to account for and document the relationship between greenhouse gas and global climate change, it remains difficult to reliably simulate observed temperature changes and distinguish between natural or human causes at smaller than continental scales (IPCC 2007).

Global geopolitical decisions impacting climate change will overwhelm any differences in contributions from the range of Carson NF management proposed in these alternatives. Climate change is a global phenomenon, because major greenhouse gases mix well throughout the planet's lower atmosphere. Estimated emissions of greenhouse gases in 2010 were 13,336 ± 1,227 teragrams carbon globally (IPCC 2014) and 1,881 teragrams carbon nationally (US EPA 2015). All the plan alternatives are projected to contribute negligibly to overall greenhouse gas emissions (Birdsey et al. 2019). Furthermore, predictions involve considerable uncertainty and it is difficult to ascertain the indirect effects of emission from multiple, generally small projects that make up these alternatives on global climate. Management actions are directed at a very small percentage of the total forest land on the Carson NF; even in the near-term, these alternatives would have minimal direct effects on carbon emissions and carbon stocks relative to total carbon stocks in the Carson NF. Because the potential direct and indirect effects of alternatives would be negligible, the contribution of the plan's proposed actions to cumulative effects on global atmospheric greenhouse gas concentrations and climate change would also be negligible.

The dominant disturbance influence on carbon flux on the Carson NF between 1990 and 2011 was wildfire with some contribution from insect-induced mortality (Birdsey et al. 2019). Fire treatment acres differ by a maximum of about 21,000 acres per year. Fire treatment objectives do not include uncharacteristic wildfire; and carbon-related impacts from wildfire acres would likely narrow the difference among alternatives because wildfires are easier to suppress in areas that have been treated with prescribed fire and alternatives with less prescribed fire are likely to have more and higher intensity wildfire. Regardless, the difference among alternatives could be easily overwhelmed in any given year by a large wildfire such as the 2002 Ponil Complex (92,000 acres), the 2018 Spring Creek Fire just north of the New Mexico border in Colorado (108,000 acres), or the 2011 Ute Park Fire on the Santa Fe NF (156,000 acres).

Concern Statement 181 **Monitoring, Climate Change Vulnerability**

Quantifying treatment effectiveness as it relates to the Climate Change Vulnerability Assessment will not provide an accurate assessment of the effectiveness of treatments in building ecosystem resilience to ongoing climate change. In addition to climate-driven increases in disturbance (fire, insects), acute climatic extremes, such as a spike in vapor pressure deficit, can cause tree mortality (Williams et al. 2012). Climate projections, such as those used in the Climate Change Vulnerability Assessment, do not capture extreme events well (Wuebbles et al. 2014). Thus, determining if treatments are effective in mitigating climate-induced canopy loss will require that rates of canopy loss in treated areas be compared with rates of canopy loss in untreated areas.

Associated Comment Letter: 3228

Response

We do not dispute that extreme events will cause tree mortality in the future and that the Climate Change Vulnerability Assessment uses average projected future conditions. We also agree that treatment effectiveness should be measured against untreated areas; however, that level of treatment effectiveness is difficult to measure at a programmatic scale and is therefore not appropriate as a plan monitoring question. A more effective approach is to design monitoring of specific treatments to match the intent, location, and prescription of a particular project. The climate change vulnerability monitoring question under Topic VI of the final plan evaluates the Climate Change Vulnerability Assessment's utility in predicting treatment effectiveness, not the actual effectiveness of those treatments.

Concern Statement 182 **Monitoring, Climate Impacts**

Developing and implementing a robust monitoring program is essential to track climate impacts in the Carson NF and determine what management strategies are most effective at addressing these impacts. Climate change monitoring indicators should be revised to include - acres where vegetation treatments have reduced climate-induced vegetation mortality.

Associated Comment Letters: 3228, 4911

Response

The final Plan includes monitoring of climate change impacts and forest mortality (Chapter 4, Monitoring Topics II: Ecological Processes and Conditions for Terrestrial and Aquatic Ecosystems and VI: Measurable Changes Related to Climate and Other Stressors). Annual forest health inventories do not attribute vegetation mortality directly to climate change; however, it is acknowledged that climate may exacerbate other stressors such as drought, insects, or disease. The inventories measure mortality that has occurred, not mortality that has been avoided. Furthermore, the desired conditions in the final Plan direct management toward overall ecosystem integrity and ecosystems that are resilient, resistant, and adaptive to a range of stressors, including changes in climate; accordingly, vegetation treatments are necessary to be consistent with that direction.

Concern Statement 183 **Climate Change Vulnerability Assessment**

The Climate Change Vulnerability Assessment does not analyze the qualitative or quantitative potential for sequestration or storage to contribute to offsetting these impacts. The Carson NF should consider incorporating carbon carrying capacity into the forest plan as an actionable concept integrated into plan components. Estimate the carbon reduction capabilities of the Carson, and the cumulative carbon impacts of all of the national forests in the system.

Associated Comment Letters: 154, 4911

Response

It is correct that the climate change vulnerability assessment does not quantify the potential for carbon sequestration. The purpose of the assessment is to indicate the vulnerability of individual plant communities, based on the degree by which their climate envelopes are exceeded under future climate projections. Additionally, reference carbon stocks in above-ground biomass and soils for each ecological response unit on the Carson NF were estimated in the assessment (USDA FS Carson NF 2015, p 284-297). The final Plan manages to these reference levels based on the historical range of variation for ecosystem conditions, not to a theoretical potential.

An alternative to manage forest lands for carbon sequestration to offset greenhouse gas emissions was considered but eliminated for detailed study (FEIS, chapter 2). While the Carson NF recognizes the vital role that forested lands play in carbon sequestration, the final Plan manages for overall ecosystem function, which implies inherent levels of carbon sequestration and greenhouse gas emissions.

> The basic approach involves managing C through managing the health and productivity of the Nation’s forests. The approach focuses on managing risks to the health, productivity, and ability of the resource to provide the goods and services called for in management plans. Management actions have C outcomes and those are considered among the benefits being managed. Forest systems are dynamic and emit and capture C regardless of human intervention. The Forest Service C strategy is embedded in a larger adaptation strategy for managing the resource that considers multiple impacts of natural and anthropogenic stressors. (Birdsey et al. 2019, p 15)

Concern Statement 184 **Sustainable Operations**

Omission of plan components addressing operations and facilities management is inconsistent with Forest Service policy to reduce emissions and promote sustainability in Forest Service operations.

Associated Comment Letter: 4911

Response

Forest Service directives for developing plan components clarify that components may be used to carry out laws, regulations, or policies, but should not merely repeat existing direction from laws, regulations, or directives (FSH 1909.12 Chapter 20 22.1(2)(f)). The final Plan does include a desired condition within the Facilities Infrastructure section that addresses energy-efficient and renewable energy for Carson NF facilities (FW-FAC-DC-2). Sustainable operations is a foundational assumption and framework used throughout the final Plan, as described in the Plan Concepts portion of the Plan Framework section; it represents a commitment by the Forest Service to use energy efficiently and reduce consumption of resources in daily operations in six focus areas: energy, water, green purchasing, fleet and transportation, waste prevention and recycling, and sustainability leadership (Final Plan, Plan Framework, Plan Concepts, Sustainable Operations section). The sustainable operations plan concepts adhere to Executive Orders that outline this policy, including Executive Order 13423 “Strengthening Federal Environmental, Energy, and Transportation Management,” and Executive Order 13514 “Federal Leadership in Environmental, Energy, and Economic Performance.”

Concern Statement 185 **National Climate Roadmap**

The plan should include sustainability metrics like those in the Forest Service National Climate Roadmap.

Associated Comment Letter: 4911

Response

The National Roadmap for Responding to Climate Change was added to Appendix C, Relevant Laws, Forest Service Regulations, Policies, Directives, and Other Sources of Information section in the final Plan. The Roadmap contains three monitoring strategies: systemic, targeted, and effectiveness. The Carson NF participates in systemic monitoring including national programs such as Forest Inventory and Analysis, National Stream Gauging Network, and Ambient Air Quality Monitoring. Examples of targeted monitoring on the Carson NF include the Climate Change Vulnerability Assessment, annual insect and disease outbreak mapping, and invasive species monitoring. Effectiveness monitoring involves evaluating resilience and adaptation outcomes resulting from on-the-ground activities. Monitoring Topic VI in the final Plan measures vegetation seral state departure and stressors such as fire, insects, and disease. Management effectiveness relative to species is measured under Monitoring Topics III and IV. The final Plan does not compel specific on-the-ground activities. Generally, therefore, most effectiveness metrics are better designed to match a specific project than prescribed at a programmatic level.

Cultural Resources - CTL

Concern Statement 186 **Picuris, Historical Context**

Within the Plan, on Page 2- Historical Context- Second paragraph- Picuris should be removed from this sentence, no mission was established until 1621.

Associated Comment Letter: 4926

Response

We have corrected this statement by removing the word “Picuris.”

Concern Statement 187 **Traditional Cultural Property**

The entire Carson NF should be considered a Traditional Cultural Property.

Associated Comment Letter: 4876

Response

The Carson NF is committed to, and pertinent law and the final Plan require, consultation with Tribes and Pueblos to recognize areas of religious and cultural significance and sacred sites (FW-FRT-DC-1, -2, -4, and -6, FW-FRT-G-2, and EO 13007). Traditional cultural properties are specific designations that must qualify for inclusion in the National Register of Historic Places. The NRHP requires four specific criteria for significance and seven specific considerations for integrity. While the entirety of the lands currently managed by the Carson NF are recognized as ancestral space and/or ancestral lands, the contemporary administrative boundary is not in keeping with the intent or direction of the NRHP definition of historic property; thus it is not, as a whole, considered a Traditional Cultural Property.

Concern Statement 188 **Cultural Site and Resource Protection**

Eligibility for listing in the National Register of Historic Places cannot be the sole determination regarding if a site or resource should be protected. Tribal priorities for sites, values, resources that need to be considered and protected need to have more robust inclusion.

Associated Comment Letter: 4876

Response

Current Federal law requires consideration of the full range of resources and uses of importance to federally recognized tribes, including historic properties (such as traditional cultural properties) (36 CFR 800), sacred sites (Executive Order 13007), and traditional resources and uses (National Environmental Policy Act of 1969 (Major Amendments since 1969 consist of Public Law 94-52, July 3, 1975, Public Law 94-83, Aug 9, 1975 and Public Law 97-258, section 4(b), Sep 13, 1982)).

The final Plan describes places of importance to federally recognized tribes to be inclusive of, but not limited to, historic properties (properties listed on or eligible to the National Register of Historic Places). FW-FRT-G-3 stipulates that planning and implementation activities should prevent or limit impacts to "places that the federally recognized tribes regard as sacred sites, traditional cultural properties, or part of an important cultural landscape." The introduction to the Cultural Resources section in the final Plan has been expanded to describe the resources as "the entire spectrum of resources...from artifacts to cultural landscapes. They can include, but are not limited to, [properties] eligible or listed on the National Register of Historic Places, or National Historic Landmarks."

However, we realize that Tribes have felt that in the past Federal agencies have not adequately accounted for impacts to resources, places, and uses important to federally recognized tribes (Dongoske et al. 2015; Ross et al. 2011). The final Plan therefore includes components that require consideration of impacts to the full spectrum of tribal resources and uses (FW-FRT-G-3) and incorporation of Native American perspectives, needs, and concerns, including traditional knowledge, into the planning process (FW-FRT-G-2).

Concern Statement 189 **Editorial**

Within the Draft Plan on page 4, last paragraph - The paragraph should be reworded starting with "As people move to the area…" as it is written to accommodate the arrival of the Spanish and other groups in the 1500s and, does not mention the indigenous people who were utilizing the area long before the 1500s. The last sentence in the paragraph is an attempt to mention the tribal groups but needs more work and should be intertwined rather than an afterthought.

Associated Comment Letter: 4921

Response

Within the final Plan, Tribes and Pueblos are mentioned before any other group after the opening sentence of the paragraph. In addition, the word “centuries” was replaced by the word “millennia” in the opening sentence of the paragraph to better reflect the time depth of human presence on the landscape.

Concern Statement 190 **Editorial**

Use of the terms “tribes and pueblos” should be consistent or just do a general listing of “tribes.”

Associated Comment Letter: 4921

Response

Not all Native American and/or American Indian groups prefer to be referred to by the same general term. The names that are currently reflected in the Plan are the names that each respective group has self-identified. The terms “tribe” and “pueblo” could have significance for any one group and thus, the final Plan uses the more inclusive term.

Concern Statement 191 **Tribal Connection**

Overall, the tribal communities are connected to all ecological zones and their resources, as each has its place in our ceremonies, prayers, traditions, lifeways, etc. You cannot separate the land and all its resources from the native peoples as we are intertwined, and we cannot exist without our Earth Mother.

Associated Comment Letter: 4921

Response

The Federally Recognized Tribes (FRT) section of the Plan addresses and respectfully acknowledges that, “For much of the span of human history, American Indians were the only people to occupy and use the lands that encompass the Carson” (FW-FRT, pg. 98). Also, the Federally Recognized Tribes Desired Conditions, Standards, and Guidelines sections of the Plan illustrate and emphasize the importance, connection, and ties that the pueblos and tribes within, adjacent to, and near the Carson NF have with these landscapes (FW-FRT-DC-1-7; FW-FRT-S-1; FW-FRT-G-1-4; Management Approaches 1-10).

Concern Statement 192 **Tribal Consultation**

In the Federally Recognized Tribes section, page 97 - Consultation is highly important to maintain the government-to-government relationship. It should be done at the beginning. As stated above, all aspects of Nature are important to native communities and we are interested in having an open dialogue. How does the FS know “when proposed management activities have a potential to affect tribal interests”?

Associated Comment Letter: 4921

Response

Tribal consultation is a regular and reoccurring activity that the Carson NF conducts for all proposed projects well before any implementation decisions are made. “The Carson consults with federally recognized tribes and pueblos that have aboriginal territories within and traditional ties to the land now administered by the Forest Service……and employs a variety of avenues to achieve meaningful consultation, with the preferred method being real-time, in-person dialogue between tribal leaders and Forest Service line officers” (FW-FRT, pg. 98) in order to determine which proposed management activities have a potential to affect tribal interests. In addition, the FW-FRT Management Approaches (1-10) outline possible communication methods designed to illuminate tribal interests. A comprehensive list of Federal authorities related to tribal consultation can be found in appendix C in the final Plan.

Concern Statement 193 **Rio Grande del Rancho Heritage Landscape**

Rio Grande del Rancho Heritage Landscape- The Forest Management Plan should have special management provisions for the Rio Grande del Rancho as a National Register of Historic Places cultural

landscape associated with the traditional homeland of both modern Picuris and Taos homelands and as an extraordinarily important area of intact prehistoric archeological resources. The Forest Plan should include consideration of special designation and management for the Rio Grande del Rancho watershed and specifically.

Associated Comment Letter: 4922

Response

Making the Rio Grande del Rancho Heritage Landscape a National Register of Historic Places cultural landscape is a National Historic Properties Act Section 106 issue, and is therefore, outside of the scope of the final Plan. However, the Plan also includes desired conditions related to protecting and enhancing significant cultural resources and/or groups of cultural resources (FW-CR-DC-1 and -3).

Concern Statement 194 **Heritage Sightseeing**

Heritage Sightseeing associated with Taos Pueblo World Heritage site and Spanish colonial and Mexican territorial and U.S. Territorial history are not adequately considered in the Forest Plan with overwhelming emphasis placed on Natural Resource visitation and recreation.

Associated Comment Letter: 4922

Response

The following desired condition was added to the final Plan: “Heritage tourism opportunities are available for the public” (FW-CR-DC-5).

Concern Statement 195 **Ancient Site Protection**

Ancient sites are part of the cultural patrimony of all Americans of every culture and must be protected.

Associated Comment Letter: 5212

Response

Significant ancient sites are protected through Section 106 of the National Historic Preservation Act and other applicable Federal laws, as well as being emphasized in the final Plan (FW-CR-DC-1-3; FW-CR-S-1 and -2; FW-CR-G-1 and -2).

Concern Statement 196 **Traditional Cultural Properties**

The Abeyta-Trujillo Acequia considers itself a Traditional Cultural Property and requests that all future consultations under Section 106 of the National Historic Preservation Act honor our declaration.

Associated Comment Letter: 5287

Response

Designating areas as a traditional cultural property does not occur during the revision of a forest plan (National Historic Properties Act Section 106 and Bulletin 38 of the National Historic Preservation Act of 1966). Traditional cultural properties are very specific designations that must qualify for inclusion to the National Register of Historic Places (see National Register Bulletin 38 Guidelines for Evaluating and Documenting Traditional Cultural Properties).

Concern Statement 197 **Traditional Cultural Properties**

Update plan direction to recognize American Indian [Native American] traditional cultural properties and sacred sites and places, and other traditional cultural properties

Associated Comment Letter: 5588

Response

The Federally Recognized Tribes (FRT) section of the Plan addresses and respectfully acknowledges that, “For much of the span of human history, American Indians were the only people to occupy and use

the lands that encompass the Carson" (FW-FRT, p. 98). Also, the Federally Recognized Tribes Desired Conditions, Standards, and Guidelines sections of the Plan illustrate and emphasize the importance, connection, and ties that the pueblos and tribes within, adjacent to, and/or near the Carson NF have with these landscapes, including traditional cultural properties and sacred sites (FW-FRT-DC-1-7; FW-FRT-S-1; FW-FRT-G-1-4; Management Approaches 1-10).

Designating an area as a traditional cultural property does not occur during the revision of a forest plan (National Historic Properties Act Section 106 and Bulletin 38 of the National Historic Preservation Act of 1966). Traditional cultural properties are specific designations that must qualify for inclusion to the National Register of Historic Places (see National Register Bulletin 38 Guidelines for Evaluating and Documenting Traditional Cultural Properties).

Concern Statement 198 **Consultation**

Consult Taos Pueblo regarding any restoration activities which may occur near riparian areas because they may have negative impacts on Pueblo lands and waters.

Associated Comment Letter: 5786

Response

Tribal consultation is a regular and reoccurring activity that the Carson NF conducts for all proposed projects well before any implementation decisions are made. The tribal consultation approach and process is outlined in the Plan in the Federally Recognized Tribes (FRT) section (FW-FRT-DC-1-7; FW-FRT-S-1; FW-FRT-G-1-4; Management Approaches 1-10). Riparian areas are also addressed in the Plan and can be found in the following sections: WSW, WSW-RMZ, WSW-RMZ-STM, WSW-RMZ-WB, WSW-RMZ-SNS, WSW-RMZ-WR, WSW-RMZ-FSR.

Concern Statement 199 **Site Watch Program**

The plan does not mention using volunteer efforts with the State of New Mexico State Historic Preservation Officer Site Watch Program.

Associated Comment Letter: 4922

Response

Language was added in the final Plan to Management Approach for Cultural Resources-7 "Consider using volunteer efforts to monitor and protect historic properties."

Designated Areas - DES

Concern Statement 200 **Designated Area Management**

The draft plan should be revised to provide for the integrated management of congressionally designated areas and to clarify and strengthen the direction presented.

Associated Comment Letter: 163

Response

The final Plan includes direction for the management of congressionally designated areas in the Designated Areas section of chapter 3. Congressionally designated areas are managed consistent with the requirements of their establishing legislation. In many cases, plan direction reiterates the Carson NF's existing management requirements under the law. Additional plan components are generally only included to clarify unique circumstances such as management of the Rio Grande Wild and Scenic River under the Taos BLM river management plan (DA-WSR-S-3).

Concern Statement 201 **Botanical and Zoological Areas**

The Haplopappus Microcephalus Botanical Area and the Pea Clam Zoological Area are necessary and should be retained in the final plan. We are pleased that the draft plan includes the Haplopappus Microcephalus Botanical Area and the Pea Clam Zoological Area. These administratively established management areas, both of which currently exist on the Carson, are needed to adequately protect the small-headed goldenweed (*Haplopappus Microcephalus*) and the Pea Clam. It is important for the Carson to include specific management direction to protect these rare organisms and ensure that they are not harmed. We support the continued existence of the botanical and zoological management areas and urge the Carson to retain them in the final plan.

Associated Comment Letter: 4856

Response

The Haplopappus Microcephalus Botanical Area and the Sangre de Cristo Pea Clam Zoological Area were carried forward into the final Plan. However, Haplopappus Microcephalus Botanical Area was renamed to Small-headed Goldenweed Botanical Area as the scientific name is no longer correct.

Concern Statement 202 **Wild and Scenic Rivers**

General support for designated wild and scenic rivers.

Associated Comment Letter: 4860

Response

Only Congress may designate wild and scenic rivers on National Forest System lands; therefore, no changes to designation are made through this plan revision. Management of designated wild and scenic rivers under the final Plan is consistent with the 1968 National Wild and Scenic Rivers Act (Public Law 90-542) and the river management plan required by the act.

Concern Statement 203 **Wilderness, Commercial Services**

Commercial enterprises should not be allowed in designated wilderness as it is a violation of the Wilderness Act of 1964.

Associated Comment Letter: 1657

Response

Section 4(d)(5) of the Wilderness Act of 1964 provides that “Commercial services may be performed...to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas.”

Concern Statement 204 **Wilderness Designation**

The aim in all alternatives, but especially in the proposed alternative and alternative three seems to be to foreclose the possibility of wilderness designation for most of the Carson not already so designated.

Associated Comment Letter: 168

Response

The final Plan does not foreclose the possibility of wilderness designation anywhere on the Carson NF, including in areas not included in a Recommended Wilderness Management Area. Only congress has the authority to designate wilderness, and as such has the authority to designate wilderness anywhere on national forest lands including outside of recommended wilderness.

Concern Statement 205 **Wilderness Protection**

Please protect the untouched wilderness.

Associated Comment Letter: 4997

Response

Under all alternatives, areas currently designated as wilderness will remain designated wilderness and will be managed according to the 1964 Wilderness Act as required by law. Only Congress has the authority to designate wilderness or revoke wilderness status.

Concern Statement 206 **Wilderness Management Plans**

Change Wilderness Management Approach 5 to a guideline to ensure that the Forest Service does in fact use the most recent version of a wilderness management plan unless there is some legitimate reason not to. Leaving this direction as an unenforceable management approach could result in inconsistent application of wilderness management plans, which would undermine the plans and could compromise the effectiveness or appropriateness of management actions in wilderness areas.

Associated Comment Letter: 4856

Response

The Forest Service must follow all laws, regulations, and polices that provide direction for Wilderness, including the Wilderness Act and FSM 2300. Individual wilderness management plans are not required (FSM 2322.03) but are a tool that describes specific management of a specific wilderness. Wilderness management direction is developed as a part of the forest planning process as required by 36 CFR Part 219 and FSM 1922 (FSM 2322). Individual wilderness management plans completed prior to the writing of the land management plan may be incorporated if they:

a. Have been prepared in accordance with the NEPA process (FSM 1950).
b. Are considered current and valid.
c. Are appropriately referenced to and discussed in the land management plan.
d. Provide at least the same level of direction and guidance as would be found in the completed land management plan. (FSM 2322.03)

Not all wilderness areas on the Carson NF have a wilderness management plan, because in some cases a specific plan is not necessary. In some cases, existing wilderness management plans or portions of those plans are neither current nor valid.

Concern Statement 207 **Wilderness, Ecosystem Services**

The desired conditions for wilderness (DA-WILD-DC) should include the following language (underlined) to ensure that wilderness areas in the Carson NF contribute to carbon storage and other ecosystem services: “Wilderness is valued by the public and contributes to clean air and water, carbon sequestration, wildlife habitat enhancement, primitive recreation opportunities, other ecosystem services, and other of [sic] wilderness characteristics.”

Associated Comment Letter: 4911

Response

DA-WILD-DC-1 was clarified based on various public comments to read as follows in the final Plan: “Wilderness contributes to ecosystem services such as clean air and water, wildlife habitat enhancement, and outstanding opportunities for solitude or primitive and unconfined recreation.” Further, wilderness contributes to regulating ecosystem services, including, but not limited to carbon sequestration (final Plan, Chapter 1, Plan Framework, Plan Concepts, Ecosystem Services). The examples in the desired condition are examples of ecosystem services, not a complete list of all ecosystem services that wildernesses provide.

Concern Statement 208 **Wilderness, Mechanical Equipment**

Clear plan language to allow New Mexico Department of Game and Fish to utilize mechanical equipment in wilderness to reasonably manage wildlife needs to be included in the Carson NF Plan. This language would give the NMDGF the right to meet their mandated responsibility of conducting wildlife management and research within wilderness.

Associated Comment Letters: 4838, 4880

Response

The Carson NF must follow the Wilderness Act of 1964, which established the terms and conditions for the designation and management of wilderness on the national forests and prohibits the use of mechanical equipment within wilderness. All subsequent legislation designating wilderness adopts the direction from the Wilderness Act of 1964 but may also include additional provisions or exceptions for management of a particular area. Typically, these special provisions allow for consideration of activities or Section 4(c) Prohibited Uses but do not mandate their approval and any nonconforming use in a wilderness area must first undergo a minimum requirements analysis.

Concern Statement 209 **Inventoried Roadless Area, Road Construction**

Roadless areas must remain roadless and no new road construction should be approved at this time.

Associated Comment Letters: 3430, 5617

Response

Under the final Plan, inventoried roadless areas are managed to be “relatively undisturbed” and to “appear natural” (DA-IRA-DC-1 and -2). The final Plan constrains road construction in inventoried roadless areas under DA-IRA-S-1, consistent with the roadless rule. Any new road construction or reconstruction within inventoried roadless areas would be analyzed at the project level and must be approved by the Chief of the Forest Service, except when construction or reconstruction are necessary in emergency situations involving imminent threats to public health and safety. In such emergency circumstances, road construction or reconstruction must be approved by the regional forester (USDA FS 2012b) final Plan, Inventoried Roadless Areas section, introduction).

Concern Statement 210 **Inventoried Roadless Areas**

The 105,000 acres of the 12 areas identified as Inventoried Roadless Areas should be included in the final plan along with no construction of new or permanent routes in primitive and semi-primitive areas.

Associated Comment Letter: 161

Response

The roadless rule established prohibitions on road construction, road reconstruction, and timber harvesting in inventoried roadless areas on National Forest System lands (36 CFR part 294 Special Areas; Roadless Area Conservation; Final Rule). The 12 inventoried roadless areas on the Carson NF will be managed in accordance with this rule.

Permanent road construction is prohibited everywhere that primitive (FW-REC-S-1) or semi-primitive non-motorized (FW-REC-S-2) recreation settings are desired, both within and outside of inventoried roadless areas. A prohibition on roads would be inconsistent with semi-primitive motorized recreation settings and is not included in the final Plan. The term routes includes both roads and trails. Trails are appropriate in any recreation opportunity setting (including primitive and semi-primitive).

Concern Statement 211 **Inventoried Roadless Area Designation**

Add at least 5 more IRAs, Rio Medio for example.

Associated Comment Letter: 4884

Response

Inventoried roadless areas were designated by the Roadless Area Conservation Rule, the Carson NF does not have the authority to create inventoried roadless areas (FSH 1909.12 24.44).

Concern Statement 212 **Inventoried Roadless Area Characteristics**

Why was IRA-G-1 in inventoried Road-less areas removed? It is important to maintain or improve the IRA characteristics. Explain why this was "not consistent with policy?" (Roadless Route direction).

Associated Comment Letter: 5673

Response

The roadless rule identifies values or features that "often characterize inventoried roadless areas" (66 FR 3245). Not all values and features are present or required in all inventoried roadless areas. The roadless rule limits road construction (DA-IRA-S-1) and certain forms of timber harvest (DA-IRA-S-2) because those could incrementally reduce the ecological characteristics and social values of inventoried roadless areas (66 FR 3246). "[T]he scope of prohibited actions considered in detail was limited to road construction, road reconstruction, and timber harvesting, because these activities pose disproportionately greater risks of altering and fragmenting natural landscapes at regional and national scales" (66 FR 3257). "Currently, a wide range of multiple uses is permitted in inventoried roadless areas subject to the management direction in forest plans. A wide range of multiple uses will still be allowable under the provisions of this rule" (66 FR 3249).

There is no requirement that those multiple uses are consistent with or protect the values and features in a specific inventoried roadless area that, in general, characterize inventoried roadless areas. "Other uses, although potentially as harmful to roadless area values and characteristics, … are more appropriately reviewed through land and resource management planning" (66 FR 3257). The final Plan addresses characteristics listed in the roadless rule, such as high quality soil, water, and air; plant and animal communities; wildlife habitat; recreation opportunities; undisturbed landscapes; scenic quality; traditional cultural properties; and others through the plan components specific to those resources.

Concern Statement 213 **Inventoried Roadless Area Plan Components**

It is important to include direction in forest plans for roadless areas that is at least as protective as the direction found in the Roadless Rule to offer a backstop to ensure that roadless areas and their values, as listed in the Roadless Area Conservation Rule and generally echoed in the Carson's proposed desired condition for roadless areas, remain protected should the national roadless rule be weakened or eliminated. The proposed management direction and narrative description of inventoried roadless areas (IRAs) is generally good. The two standards will provide strong protection for IRAs and help the Carson achieve the desired conditions for roadless areas. We strongly support these plan components. We also support the desired conditions and guideline 2, which requires IRAs to be managed with a scenic integrity objective of high.

Associated Comment Letter: 4856

Response

The Carson NF is required to provide lasting protection for inventoried roadless areas (66 FR 3257). Plan components are included in the final Plan to ensure that project-level decisions avoid adverse impacts to inventoried roadless areas (Final Plan, Chapter 3, Inventoried Roadless Areas).

Concern Statement 214 **Inventoried Roadless Areas, Recreation Opportunity**

Inventoried Roadless Areas guideline 1 includes semi-primitive motorized use as a potential recreation setting for IRAs. This would make it difficult for the Carson to achieve desired conditions for IRAs and would undermine the roadless characteristics of these lands. We urge the Carson to modify this guideline.

Associated Comment Letter: 4856

Response

Motorized uses are not incompatible with inventoried roadless areas; off-highway vehicles and snowmobiles are not prohibited. In fact, the semi-primitive motorized class of dispersed recreation is one of the features that is "often present in and characterize[s] inventoried roadless areas" (66 FR 3244). The Carson NF has several motorized trails that run through inventoried roadless areas and most are open to snowmobiles. The roadless rule only restricts road construction, reconstruction, and timber harvest in inventoried roadless areas (66 FR 3244). The recreation opportunity classification of semi-primitive motorized describes certain recreational experiences that a visitor is likely to have; it neither prohibits nor allows road construction.

Inventoried roadless areas provide "opportunities for dispersed outdoor recreation" (66 FR 3244). While the recreation opportunity spectrum does not limit the types of recreation that may or should occur, the semi-primitive motorized managerial setting is the same as the semi-primitive non-motorized managerial setting, with "on-site regimentation and controls present but subtle" (USDA FS 1982). The semi-primitive motorized experience involves a "moderate probability of experiencing isolation from the sights and sounds of humans" (USDA FS 1982). Nothing in the semi-primitive motorized classification is inconsistent with opportunities for dispersed outdoor recreation.

Concern Statement 215 **Inventoried Roadless Areas, Mapping**

It would be good to mention what percentage of the forest consists of IRAs. The Carson should also include a map of the IRAs in the plan and/or the DEIS because a visual representation is needed to show the location, shape, and size of the IRAs. That information cannot be inferred from Table 6 or the narrative text, and the failure to include a map makes it difficult to understand the context of IRAs in the larger forest setting.

Associated Comment Letter: 4856

Response

The location, shape, and size of inventoried roadless areas on the Carson NF appear in Figure A-6 in the final Plan (appendix A). Table 6 in the final Plan lists the acreage of each inventoried roadless area and the exact sum of those acreages is included in the Inventoried Roadless Area section introduction. The percentage of the Carson NF that consists of inventoried roadless areas is 7.1 percent, which is calculated by dividing this total (105,331 acres) by the total acreage of the Carson NF (1,486,372 acres, final Plan, Chapter 1, Plan Area).

Concern Statement 216 **Inventoried Roadless Areas, Management Area**

Establish a Management Area for lands comprised of IRAs. The name for the MA should be Roadless, Backcountry, Conservation, or something similar. Include a map in the final plan that delineates the lands included in this MA. Include the plan components in the draft plan and others in this MA. This will help ensure that these areas and their associated protection from logging and road construction will remain intact should some action at the national level (e.g., rulemaking, legislation) change the national roadless rule's application to New Mexico's national forests.

Associated Comment Letter: 4856

Response

The final Plan includes components that require inventoried roadless areas to be managed consistent with the roadless rule, including restrictions on road construction and timber removal. The Inventoried Roadless Area Designated Area identifies those areas where roadless rule requirements apply. It is unnecessary to duplicate this direction in a management area and plan direction does not supersede rulemaking or legislation.

The final Plan is used to carry out laws, policies, and regulation (FSH 1909.12 22.1(2)(f)) and must be in accordance with agency authorities (FSH 1909.12 22.1(2)(a)). It is not within the agency's or the Carson NF's authority to permanently designate areas that Congress has identified. Management of the Carson NF is subject to rulemaking and legislation, and the final Plan in no way exempts the responsible official from rules or laws, either existing or that may be passed in the future.

Concern Statement 217 **Inventoried Roadless Areas, Threatened and Endangered Species**

Change IRA desired condition 1 as follows: Inventoried roadless areas encompass large, relatively undisturbed landscapes that are important to biological diversity and the long-term survival of federally listed [at-risk] species. They provide public drinking water, serve as safeguards against the spread of invasive plant species, and provide reference landscapes for study and research. The previous version of the draft plan mentioned "at-risk species" rather than "federally listed species." IRAs are important to the long-term survival of other species besides those that have been formally listed as threatened or endangered and using the broader term is appropriate to ensure that IRAs are managed to help the survival of all at-risk species regardless of whether they have been listed.

Associated Comment Letter: 4856

Response

The reference to species in DA-IRA-DC-1 has been clarified in the final plan and adopts language directly from the roadless rule, specifically, that roadless areas "function as biological strongholds for populations of threatened and endangered species" (66 FR 3244). The roadless rule also notes that undisturbed landscapes including those in roadless areas, are important to "biological diversity and the long-term survival of many at risk species" (66 FR 3244). That language, directly from the roadless rule, has been added to the Inventoried Roadless Area section introduction in the final Plan (Chapter 3). The final Plan acknowledges the importance of undisturbed landscapes to species survival (FW-WFP) and includes numerous plan components to improve and maintain habitat connectivity across the Carson NF. For a complete list of those plan components that address habitat connectivity, see Section 4 of Appendix H in the FEIS Volume 3. The intent of DA-IRA-DC-1 is that inventoried roadless areas are maintained as relatively undisturbed, not that they are important to species survival. That is, the Carson NF manages the level of disturbance in inventoried roadless areas, not the importance of undisturbed landscapes to species.

Concern Statement 218 **Inventoried Roadless Areas, Timber Suitability**

Table 27 Appendix D in Volume II of the DEIS lists all designated and management areas and whether they are suitable for timber under each alternative. We request that the Carson include inventoried roadless areas in this list and make them unsuitable for timber in the final plan.

Associated Comment Letter: 4856

Response

The timber suitability analysis follows the requirements in the National Forest Management Act, as described in the 2012 Planning Rule (FSH 1909.12 61). Inventoried roadless areas are removed from the suitable timber base in phase 1 of the process (FEIS, appendix D, Timber Suitability Analysis, Phase 1: Lands that may be Suitable for Timber Production, Lands Withdrawn from Timber Production (Criteria D)). Table 27 lists lands that are suitable and not suitable based on plan direction (phase 2) and applies only to those lands that may be eligible according to phase 1.

Concern Statement 219 **Inventoried Roadless Areas, Timber**

The Draft Forest Plan states that "timber cutting, sale, or removal in inventoried roadless areas incidental to the implementation of an existing special use authorization. Road construction or road reconstruction is not authorized through this re-delegation without further project specific review." (Draft Forest Plan,

page 146) The 2001 Roadless Rule states, “The cutting, sale, or removal of timber is incidental to the implementation of a management activity not otherwise prohibited by this subpart” (CFR § 294.13 (b)(2)). The language “existing special use authorization” is not used specifically in the roadless rule and does not accurately reflect the 2001 Roadless Rule.

Associated Comment Letter: 4906

Response

The roadless rule lists circumstances under which timber may be cut, sold, or removed from an inventoried roadless area, including when that “cutting, sale, or removal of timber is incidental to the implementation of a management activity not otherwise prohibited by this subpart” (66 FR 3244). The responsible official determines whether this circumstance applies. In the case where the cutting, sale, or removal is incidental to the implementation of an existing special use authorization, the responsible official is the regional forester; in other cases, the responsible official is the Chief of the Forest Service (USDA FS 2012b). This review process is accurately described in the Inventoried Roadless Area section introduction in the final Plan and is consistent with the roadless rule and agency direction. The final Plan requires appropriate review in inventoried roadless areas (DA-IRA-S-1 and -2).

Concern Statement 220 **Inventoried Roadless Areas, Authorization Process**

According to the Plan, road construction or reconstruction and timber harvesting are prohibited in inventoried roadless areas except where authorized by either the Regional Forester or the Chief of the Forest Service. The Plan does not provide the specific process involved in making these determinations.

Associated Comment Letters: 4985, 5069

Response

The review process is described in the Inventoried Roadless Area section introduction in the final Plan. DA-IRA-S-1 and -2 in the final Plan require the responsible official to compare the proposed action to the circumstances in the 2001 Roadless Rule, under which road construction or reconstruction, and/or timber cutting, sale, or removal are allowed (66 FR 3244). Also, the process is described in the 2001 Roadless Rule and the Chief's May 2012 Memorandum to Regional Foresters. These and more documents are on the national Roadless Area Conservation website. Ultimately, the determination is the responsibility of the responsible official.

Concern Statement 221 **Inventoried Roadless Areas, Ecosystem Function**

Add a desired condition relating to the ecological function of IRAs such as: In IRAs, ecosystems are intact and function to provide a full range of ecosystem services. These areas should be managed as intact ecosystems that provide a full range of ecosystem services.

Associated Comment Letter: 5303

Response

Ecosystem integrity is desired in all areas of the national forest, including inventoried roadless areas, according to FW-VEG-DC-2. As described in the roadless rule and reiterated in the final Plan, inventoried roadless areas “provide public drinking water, serve as safeguards against the spread of invasive plant species, function as biological strongholds for populations of threatened and endangered species, and provide reference landscapes for study and research” (DA-IRA-DC-1). We do not believe inventoried roadless areas should or are legally capable of providing a full range of ecosystem services. In particular, they explicitly do not provide timber or road-based services.

Concern Statement 222 **Vallecitos Federal Sustained Yield Unit**

The plan components for the Vallecitos Federal Sustained Yield Unit (DA-VFSYU-DC) do not provide any assurance that the harvest of timber and other forest products will not harm ecological functions and processes in the VFSYU. To remedy this, desired conditions should include a new condition as follows:

"The harvest of timber and forest products in the VFSYU is consistent with maintaining the Unit's ecological functions and processes." The guideline for the VFSYU (DA-VFSYU-G) is currently missing information. This guideline requires the VSFYU to be managed "according to the most recent Policy Statement" but does not identify the Policy Statement or explain where to find it. This guideline (or an accompanying footnote) should include identifying information about the Policy Statement so people can locate it and directly reference the Policy Statement's provisions to ensure readability and clarity.

Associated Comment Letter: 4911

Response

In the final Plan, DA-VFSYU-DC-5 states: "Vegetation within the Vallecitos Federal Sustained Yield Unit is consistent with desired conditions for Mixed Conifer with Aspen, Mixed Conifer with Frequent-Fire, and Ponderosa Pine Forest." Plan components within these sections have specific requirements that protect ecological functions and processes not only within the VFSYU, but in these three vegetation types across the national forest.

The final Plan includes the following standard FW-FFP-S-2: Timber harvest shall only occur where soil, slope, and watersheds will not be irreversibly damaged and protection must be provided for streams, streambanks, shorelines, lakes, wetlands, other waterbodies, fish, wildlife, recreation (including trails), and aesthetic resources.

The Vallecitos Federal Sustained Yield Unit Policy Statement has not changed from the 1986 Carson NF Plan. It has been posted online and referenced in appendix D in the final Plan.

Concern Statement 223 **Wild Horses**

I would be the first to contribute funds for private land purchase to put the wild feral horses, there are plenty of large ranches for sale in the West.

Associated Comment Letter: 167

Response

The Carson NF cannot accept private monetary donations or purchase private land. As per policy outlined in the Forest Service Manual 2200- Range Management, Chap. 2260 - Wild Free-Roaming Horses and Burros, the Forest Service must "manage, protect, and control wild free-roaming horses and burros on National Forest land rather than issue leases or permits to private parties." (FSM 2260.3(7))

The Forest Service aims to maintain wild free-roaming horse and burro populations in ecological balance with the areas they inhabit on National Forest System lands (FSM 2200 - Range Management, Chap. 2260 - wild free-roaming horses and burros, 2260.2). The Wild Horses and Burros Protection Act of 1971 (P.L. 92-195, 85 Stat. 649, as amended; 16 U.S.C. 1331-1340), as amended by the Federal Land Policy and Management Act of 1976 and the Public Rangelands Improvement Act of 1978, establishes wild free-roaming horses and burros as a part of the natural system where they occur on National Forest System lands. The acts require management, protection, and control of these horses and burros. Four additional acts important in the protection and control of wild free-roaming horses, and burros are the Multiple-Use Sustained-Yield Act of 1960, the National Environmental Policy Act of 1969, and the Resource Planning Act as amended by the National Forest Management Act.

Concern Statement 224 **Wild Horses, Opposition**

A new report within last 2 weeks documents how much bovine and equine contribute to climate change just measuring the amount of flatulence they produce. So, at this time it appears that bovine, equine grazing on public land is a lose, lose, lose proposition, but with a stretch could be a lose, lose, win when used with best fuels practice and without the equine.

Associated Comment Letter: 167

Response

The Forest Service aims to maintain wild free-roaming horse and burro populations in a thriving ecological balance in the areas they inhabit on National Forest System lands (FSM 2200 - Range Management, Chap. 2260 - wild free-roaming horses and burros, 2260.2). The Wild Horses and Burros Protection Act of 1971(P.L. 92-195, 85 Stat. 649, as amended; 16 U.S.C. 1331-1340), as amended by the Federal Land Policy and Management Act of 1976 and the Public Rangelands Improvement Act of 1978, establishes wild, free-roaming horses and burros as a part of the natural system where they occur on National Forest System lands. The acts require management, protection, and control of these horses and burros. Four additional acts important in the protection and control of wild free-roaming horses, and burros are the Multiple-Use Sustained-Yield Act of 1960, the National Environmental Policy Act of 1969, and the Resource Planning Act as amended by the National Forest Management Act.

Concern Statement 225 **Wild Horse Territories, Appropriate Management Level**

Support of population control measures to reduce wild horse populations to the approved AML. Active management to enhance habitat (primarily range) conditions for wildlife and livestock are at risk of degradation due to high AMLs.

Associated Comment Letter: 4887

Response

DA-WHT-G-1 and -2, and Wild Horse Territories Management Approach-2 are included in the final Plan.

Several components in the final Plan (e.g., DA-WHT-G-1 and 2) require that horse populations within a territory be aligned with the appropriate management level, as described in wild horse territory management plans, and that population control measures for wild horses be implemented to maintain genetic diversity and desired resource conditions in the area. Also, Management Approach for Wild Horse Territories-2 in the final Plan encourages partnering and coordinating with wild horse advocates, federally recognized tribes, adjacent landowners, academia, Federal and State agencies, and grazing permit holders to maintain the appropriate management level of wild horses through various actions, such as capture and removal and fertility control treatments.

Concern Statement 226 **Wild Horse Territories, Management Plans**

The Forest Plan should include the following plan language: Develop herd-specific management plans that outline short, mid, and long-term goals and explore using the 4 designated territories for wild horses. This provides for comprehensive management that is sustainable and can be monitored over time, provides plans for funding by external partners, and improves opportunities for achieving healthy horses and ecosystems by disbursing wild horses across more range.

Associated Comment Letter: 4850

Response

The Forest Service aims to “maintain wild, free-roaming horse and burro populations in a thriving ecological balance in the areas they inhabit on National Forests” (FSM 2200 - Range Management, Chap. 2260 - wild free-roaming horses and burros, 2260.2). The Wild Horses and Burros Protection Act of 1971 (P.L. 92-195, 85 Stat. 649, as amended; 16 U.S.C. 1331-1340), as amended by the Federal Land Policy and Management Act of 1976 and the Public Rangelands Improvement Act of 1978, establishes wild, free-roaming horses and burros as a part of the natural system where they occur on National Forest System lands. The acts require management, protection, and control of these horses and burros. Four additional acts important in the protection and control of wild, free-roaming horses, and burros are the Multiple-Use Sustained-Yield Act of 1960, the National Environmental Policy Act of 1969, and the Resource Planning Act as amended by the National Forest Management Act.

The final Plan recognizes that horse numbers within a territory should be aligned with the appropriate management level as described in wild horse territory management plans (DA-WHT-G-1). These plans address short-, mid-, and long-term goals for the territories that are not specific to herd management and are required by FSM 2200 Sec. 2263.1. Specific herd management plans for a territory would provide comprehensive management that can address genetic diversity and desired resource conditions in the area.

Wild Horse Territories Management Approach -2 encourages coordination with wild horse advocates, federally recognized tribes, adjacent landowners, academia, federal and state agencies, and grazing permit holders to maintain the appropriate management level of wild horses through various actions, such as capture and removal and fertility control treatments. Creating wild horse territory management plans and developing funding opportunities to manage wild horses are other examples of these types of actions that would help to achieve healthy horses and ecosystems, as described by desired conditions in the DA-WHT section.

Concern Statement 227 **Partnerships, Wild Horses**

The Final Plan should include language to partner and coordinate with scientists with demonstrated experience in wild horse management. This would provide for the use of evolving herd management science for effective, science-based, humane, and fiscally sound management.

Associated Comment Letters: 105, 4850

Response

The Final Plan includes Wild Horse Territories Management Approach-2, which encourages the Forest Service to partner and coordinate with wild horse advocates, federally recognized tribes, adjacent landowners, academia, Federal and State agencies, and grazing permit holders to maintain the appropriate management level of wild horses through various actions, such as capture and removal and fertility control treatments.

Designated Areas - National Trails - NTL

Concern Statement 228 **National Trail Designation**

Add an objective to National Scenic, Historic, and Recreation Trail Section to include at least 3 more National Scenic, Historic, and Recreation Trails, e.g., Santa Barbara - Pecos Divide Trail and complete survey and signage for Continental Divide National Scenic Trail.

Associated Comment Letter: 4884

Response

In accordance to the National Trails System Act, national scenic, recreation, and historic trails can only be authorized and established by Congress. The designation of the Santa Barbara - Pecos Divide Trail would require congressional action.

In the final Plan, DA-NTRL-DC-10 directs management to maintain and sign the Continental Divide National Scenic trail. Re-routes, surveys, and signage of the CDNST will continue in conjunction with partners, commensurate with user need, and capacity.

Concern Statement 229 **Old Spanish National Historic Trail, Management Plan**

The Forest Plan should address the need to create a specific management plan for the management of the Old Spanish National Historic Trail in accordance with the purpose of designation as listed in the DEIS (Vol 1, page 392): National historic trails shall have as their purpose the identification and protection of the historic route and its historic remnants and artifacts for public use and enjoyment.

Associated Comment Letter: 4922

Response

The Old Spanish National Historic Trail Final Comprehensive Administrative Strategy establishes "the administrative objectives, protocols, processes, and guidelines necessary to fulfill preservation and public use goals for the entire trail" (USDI BLM and USDI NPS 2017). A segment management plan would be guided by this strategy and the vision it outlines; it is included by reference in appendix C in the final Plan. However, land management plans do not compel specific future actions such as developing a segment-specific management plan (FSH 1909.12 section 21).

Concern Statement 230 **National Trails, Plan Direction**

The draft plan should be revised to provide for the integrated management of congressionally designated areas and to clarify and strengthen the direction for National Trails System Act of 1968.

Associated Comment Letter: 163

Response

The Findings Required by Other Laws and Relevant Directives section of the record of decision outlines how the final Plan addresses the relevant laws and executive orders, including the National Trails System Act of 1968, as amended. The introduction for the National Scenic, Historic, and Recreation Trails section in the final Plan was expanded to clarify that the National Trails System Act is the primary guidance for all nationally designated trails. Plan components are also included in the final Plan that provide for the continuation of management of any designated national scenic and historic trails on the Carson NF (DA-NTRL-DC-1-12; DA-NTRL-S-1-5; DA-NTRL-G-1-12; Management Approaches for National Trails-1 and -2).

Concern Statement 231 **Camino Real de Tierra Adentro**

Include mention of the Camino Real de Tierra Adentro under historical context "Traders that journeyed down the Santa Fe Trail from the Midwest did so hoping to access not only the small market for good in Santa Fe, but access to the Camino Real and to markets in northern and central Mexico."

Associated Comment Letter: 4926

Response

The Plan is not intended to provide a detailed, all-inclusive historical settlement history of the Carson NF and surrounding communities. Additionally, there is debate among researchers as to whether the actual Camino Real came as far north as present-day Taos, New Mexico, and the lands that the Carson NF currently manages. Although there is a Park Service designation of the Camino Real on the Carson NF, Park Service National Historic Trail designations are not always historically and/or archaeological verified or correct. Most researchers agree that the Camino Real did not continue farther north than present-day San Juan Pueblo or Ohkay Owingeh (Hassig 1991; Hockman 2004; Marshall 1990; Moorhead 1958).

Concern Statement 232 **Camino Real del Tierra Adentro**

The DEIS needs to be corrected to reflect the true boundary of the Camino Real del Tierra Adentro National Historic Trail. Chapter 3, Page 393 of the Draft EIS indicates that there are 8.4 miles of the Camino Real del Tierra Adentro National Historic Trail in the Carson NF. The Forest Plan makes no mention of the Camino Real del Tierra Adentro National Historic Trail except in Map A-7 which is in error depicting the Camino Real del Tierra Adentro National Historic Trail in Carson NF. The designated Camino Real National Historic Trail does not extend north of Ohkay Oingue. There are no congressionally designated components of the Camino Real del Tierra Adento within the Carson NF. See the official NPS map at the NPS website.

Associated Comment Letter: 4922

Response

Map A-7 has been corrected and the Camino Real del Tierra Adentro National Historic Trail is not depicted on the Carson NF.

Concern Statement 233 **National Trails, Plan Components**

Based on the duplication of DA-NTRL-DC-5 as DA-NTRL-DC-9, that the plan components for "other national scenic, historic, and recreation trails" do not apply to the CDNST. We encourage the inclusion of a statement in this section that makes it clear whether this assumption is, in fact, correct (or not!) so that those implementing the plan will have no doubt as to which plan components apply to which trails.

Also, DA-NTRL-DC-3 is included in the draft plan for other national scenic, historic, and recreation trails, but is not currently included for the CDNST.

Associated Comment Letter: 4898

Response

The National Scenic, Historic, and Recreation Trails section has been reorganized to clarify which plan components apply to all national trails and which are specific to the Continental Divide National Scenic Trail (CDNST). Plan components DA-NRTL-DC-2 and DA-NTRL-DC-3 now apply to all national scenic, historic, and recreational trails including the CDNST.

Also, to prevent confusion, the term "other" was removed from the title of National Scenic, Historic, and Recreational Trails.

Concern Statement 234 **Continental Divide National Scenic Trail, Description**

Change the introduction to read, "The CDNST travels through portions of 20 national forests, 4 national park units, and 13 BLM field offices. Additionally, since the initial drafting of this language, the CDNST has been completed in the Carson" (thanks to the hard work of many Carson NF staff and volunteers!).

Associated Comment Letters: 4898, 4960, 4970

Response

These updates were made to the introduction section of National Scenic, Historic, and Recreation Trails section within the final Plan (chapter 3).

Concern Statement 235 **Continental Divide National Scenic Trail, Special Uses**

The first management approach as currently worded seems to be in direct conflict with DA-NTRL-G-7, and we suggest its removal.

Associated Comment Letter: 4898

Response

DA-NTRL-G-7 was rewritten to state "Special-use authorizations for new visible communication sites, utility corridors, and renewable energy sites should not be allowed within the foreground (up to 0.5 mile) and should be visually subordinate within the middle ground viewshed (up to 4 miles), to protect the Continental Divide National Scenic Trail's scenic values." National Scenic, Historic, and Recreation Trails Management Approach 1 was also clarified, and no longer conflicts with DA-NTRL-G-7.

Concern Statement 236 **Continental Divide National Scenic Trail, Mountain Biking**

Append the introduction with the following: "The CDT on the Carson represents one of the few extended sections of single-track trail on this system that does not cross Wilderness, making it a unique and sought-after recreational opportunity for bike-packers and long-distance mountain bikers which is

unavailable on most other sections of the trail." Discussion: It is important to recognize the profoundly unique opportunity the CDT on the Carson provides. Even before its completion, sections were being ridden by riders seeking solitude, exploration, and challenge that the nearly continuous single-track affords.

Associated Comment Letters: 4960, 4970

Response

The use of the Continental Divide National Scenic Trail by mountain bikers is noted in the introduction to the National Scenic, Historic, and Recreation Trails section in the final Plan. DA-NTRL-DC-6 describes the desire to allow mountain biking opportunities on the trail.

Concern Statement 237 **Continental Divide National Scenic Trail, Nature and Purposes**

A management area of at least one-half mile on both sides of the trail should be created for existing National Scenic and Historic Trails and any high-potential future route segments. The management area should describe desired conditions, standards, guidelines, and suitability that provide for the nature and purposes of the CDNST. Protection of scenic landscapes and unique wildlife habitat may warrant establishing a corridor of a greater breadth than that normally provided by a Semi-Primitive Non-Motorized ROS setting [1/2 mile from any motorized route, adjusted for steep topography].

Associated Comment Letters: 163, 4898

Response

National scenic and historic trails are designated by Congress and are appropriate therefore to include in the final Plan as a designated area (DA-NTRL). There is no reason to add an overlapping management area. Locations where various trail-related resources and activities are desired or allowed are defined in this section (DA-NTRL-DC-4, DC-7, DA-NTRL-S-3, DA-NTRL-G-5, G-7, G-11). A 0.5-mile corridor was added to either side of the Continental Divide National Scenic Trail in Figure A-7 and defines the general location where these plan components may apply (appendix A of the final plan). The Carson NF has not identified any high-potential route segments at this time. If any are identified in the future, they will be evaluated appropriately under the Plan.

Concern Statement 238 **Continental Divide National Scenic Trail Corridor**

Revise Figure A-7 in the Draft Plan (map of designated national trails and scenic byways) to clearly show the CDNST corridor instead of just the trail itself. The affected environment must describe the environment of the CDNST rights-of-way/corridor to be affected.

Associated Comment Letters: 163, 4898, 5584

Response

The final Plan includes the most current location of the CDNST, which includes changes that have occurred during the planning process (e.g., re-routes, new construction), as well as a map of the CDNST corridor (Figure A-7, Appendix A, final Plan).

Concern Statement 239 **Continental Divide National Scenic Trail, Potential Routes**

A CDNST management area extending at least one mile from the CDNST trail should be established along existing and high-potential route segments. The management area should include comprehensive plan components.

Associated Comment Letters: 163, 5584

Response

We developed plan components using the 2012 Planning Rule, the 2015 Planning Directives, and direction from the regional foresters. All plan components are designed to protect the nature and purposes of the CDNST. We have plan components that are specific to how the corridor will be managed as part of a designated areas (DA-NTRL-G-4-5, 7, and 11). DA-NTRL-S-1 also directs us to adhere to the most up to date CDNST Comprehensive Plan, which provides additional guidance. Plan direction is in addition to law, regulations, and policies. The Forest Service must follow all laws, regulations, and polices that provide direction for the CDNST. The responsible official determined that appropriate protection and direction to provide for the nature and purposes of the CDNST can be provided through designated area plan components and the mapped corridor shown (see appendix A in the final Plan). The corridor is defined and mapped as part of existing plan components. Within the section on the trail, there are plan components that are specific to the trail, the corridor, or both. Therefore, the intent of having the corridor as a management area is met with the existing set of plan components but in a way that is more streamlined in our plans. The Carson has not identified any high-potential route segments at this time. If any are identified in the future, they will be evaluated appropriately under the final Plan.

Concern Statement 240 **Continental Divide National Scenic Trail, Vegetation Management**

The Forest Plan should include a guideline in the Continental Divide National Scenic Trail section that addresses vegetation management. The guideline should state: Vegetation may be managed to enhance CDNST nature and purposes values or to maintain or improve threatened and endangered species, proposed candidate species, and species of conservation concern habitat.

Associated Comment Letter: 163

Response

Allowing certain activities is not the intent of forest plan guidelines. Guidelines "[p]lace design or operational constraints on projects and activities to help achieve or maintain desired conditions, to avoid undesirable effects, or to meet applicable legal requirements…." (FSH 1909.12 22.14 (1)). No forms of vegetation management (such as for habitat improvement) are outright prohibited along the Continental Divide National Scenic Trail. Any activities would need to be consistent with DA-NTRL-DC-1 and compatible with the nature and purpose of the Continental Divide National Scenic Trail.

Concern Statement 241 **Continental Divide National Scenic Trail, Fire Suppression**

The Forest Plan should include a guideline in the Continental Divide National Scenic Trail section that addresses fire suppression tactics. The guideline should state: Fire suppression activities should apply the Minimum Impact Suppression Tactics Implementation Guidelines. The purpose of this guidance is to protect the CDNST nature and purposes from suppression activities.

Associated Comment Letter: 163

Response

All activities need to be consistent with DA-NTRL-DC-1 and compatible with the nature and purpose of the Continental Divide National Scenic Trail. Minimum impact suppression tactics are required along the Continental Divide National Scenic Trail under FW-FIRE-G-5.

Concern Statement 242 **Continental Divide National Scenic Trail, Scenery**

The Continental Divide Trail should have a scenic integrity objective of high and very high due to the area predominately having a natural-appearing or naturally evolving landscape.

Associated Comment Letter: 163

Response

In the final Plan, DA-NTRL-G-4 requires that management activities protect and enhance the scenic qualities of the Continental Divide National Scenic Trail by being consistent with scenic integrity objectives of high or very high. Mapped scenic integrity objectives in the visible foreground (up to 0.5 mile) must be at least moderate to high along the trail (USDA FS Carson NF 2020b).

Concern Statement 243 **Continental Divide National Scenic Trail, Scenery, Recreation Opportunity**

The plan does not establish a desired condition for scenic integrity of high or very high as viewed from the CDNST travel route. This is inconsistent with the CDNST Comprehensive Plan and FSM 2353.44. In areas where the CDNST corridor is managed for roaded natural and semi-primitive motorized settings, management actions will substantially interfere with the CDNST nature and purposes. Managing the CDNST travel route for foot races and bicycling must be determined through site-specific analyses as directed by FSM 2353.44b. Allowing such use to become established without appropriate controls and monitoring, may substantially degrade the experience of visitors seeking a primitive or semi-primitive non-motorized experience and will displace equestrians. Visitor-use management practices need to be sensitive to situations where there is an asymmetric nature of a conflict, especially where there is a one-way relationship where the primary use is sensitive to a secondary use. In those situations, monitoring and adaptive management actions should ensure that the secondary use does not substantially interfere with maintaining the primary purposes and values.

Associated Comment Letter: 163

Response

In the final plan DA-NTRL-G-4 requires that management activities protect and enhance the scenic qualities of the Continental Divide National Trail by being consistent with scenic integrity objectives of high or very high. The final Plan does not authorize any management actions, but any future management actions would need to be consistent with DA-NTRL-DC-1 and thus would not conflict with the nature and purposes of the trail.

Concern Statement 244 **Continental Divide National Scenic Trail, Scenery**

DA-NTRL-G-5 in the National Scenic, Historic, and Recreation Trails section should be modified to read: If management activities {that do not substantial interfere with the nature and purposes of the CDNST, but} result in short-term impacts to the scenic character along the Continental Divide National Scenic Trail, mitigation measures should be included (e.g., screening, feathering, and other scenery management techniques), to minimize visual impacts at key points (e.g., vistas), within 0.5 mile either side of the trail.

Associated Comment Letter: 163

Response

In the final Plan, DA-NTRL-DC-1 directs management to allow only those activities that protect the nature and purposes of the Continental Divide National Scenic Trail. It is unnecessary to repeat this requirement in DA-NTRL-G-5.

Concern Statement 245 **Continental Divide National Scenic Trail, Scenery, Recreation Opportunity, Carrying Capacity**

The DEIS does not address the expected effects of resource management under each alternative on CDNST nature and purposes values as measured through the ROS planning framework, and must disclose effects on scenic integrity, ROS class conditions, and carrying capacities. A Supplemental DEIS effects analysis must include cross-tabular tables that explore and disclose the relationship between (1) the proposed CDNST travel route location and management corridor/rights-of-way extent and (2) the

intersection and overlap with the proposed ROS Classes and Scenic Integrity Objectives allocations. Using the ROS and Scenery Management System will help ensure that NEPA assessments are systematic and accurately describe the affected environment and expected outcomes from each alternative.

Associated Comment Letter: 163

Response

The plan revision process does not designate new segments of the Continental Divide National Scenic Trail but directs management of existing trail segments. The FEIS analyzes the effects of our proposed management on the trail under each alternative in chapter 3, Nationally Designated Trails. The type of analysis being asked for in the comment is more appropriate for a site-specific trail delineation or re-route, rather than for a programmatic management analysis.

Plan components in the final Plan are designed to protect the nature and purposes of the CDNST during future proposed site-specific management activities. Regardless of the recreation opportunity setting that designated trails pass through, they are managed according to the National Scenic, Historic, and Recreation Trails section in the final Plan, including DA-NTRL-DC-1, which directs management to protect the nature and purposes of trail designations.

In the final Plan, DA-NTRL-DC-8 reflects the desire that the Continental Divide National Scenic Trail passes mainly through primitive or semi-primitive non-motorized settings. This is the case on the Carson NF to the extent possible. The other settings along the southern portion of the trail on the Carson NF in the Canjilon and El Rito Ranger Districts are unavoidable because the trail must traverse existing development. The trail parallels or crosses 2 U.S. Highways, a State Highway, at least 4 county roads, and nearly 150 open National Forest System roads. It passes by two developed campgrounds and through the Vallecitos Federal Sustained Yield Unit, all of which impact the recreation opportunity setting of the surroundings.

A range of recreation opportunity settings, including more developed settings are compatible with the Continental Divide National Scenic Trail. “Where possible, locate the CDNST in primitive or semi-primitive non-motorized ROS classes; provided that the CDNST may have to traverse intermittently through more developed ROS classes to provide for continuous travel between the Canada and Mexico borders” (USDA FS 2009a, p. 8).

Concern Statement 246 **Continental Divide National Scenic Trail, Recreation Opportunity**

The CDNST must be protected to provide for the nature and purposes of this national scenic trail. Primitive and semi-primitive non-motorized ROS settings normally provide for the nature and purposes of the CDNST. Semi-primitive motorized and roaded natural ROS allocations do not protect CDNST values; however, the CDNST Comprehensive Plan recognizes that crossing State highways and other similar permanent developments is unavoidable. National Scenic Trails may contain campsites, shelters, and related-public-use facilities. Other uses that could conflict with the nature and purposes of the CDNST may be allowed only where there is a determination that the other use would not substantially interfere with the nature and purposes of the CDNST.

Associated Comment Letter: 163

Response

The nature and purpose of the Continental Divide National Scenic Trail is provided for by plan components found in the National Scenic, Historic, and Recreation Trails (NTRL) section in the final Plan. DA-NTRL-DC-8 describes the desire for a primitive or semi-primitive non-motorized setting while acknowledging that the trail may pass through more developed areas. The nature and purpose of the trail is provided for, regardless of the established recreation opportunity spectrum classes. The desired conditions also address access points to the trail (DA-NTRL-DC-10). The plan also includes a standard requiring that management of the Continental Divide National Scenic Trail “…comply with the most

recent version of the Continental Divide National Scenic Trail Comprehensive Plan. Best available science can be used in lieu of the comprehensive plan if the plan is more than 15 years old" (DA-NTRL-S-1).

Concern Statement 247 **Continental Divide National Scenic Trail, Recreation Opportunity**

The extent of the established CDNST Management Area must be based on compatible recreation opportunity spectrum allocations along the CDNST travel route. If the proposed plan components are not modified to reflect a desirable primitive or semi-primitive non-motorized ROS setting along the CDNST than a new alternative should be developed to protect the CDNST setting.

Associated Comment Letter: 163

Response

Regardless of the recreation opportunity setting that designated trails pass through, they are managed according to the National Scenic, Historic, and Recreation Trails section in the final Plan, including DA-NTRL-DC-1, which directs management to protect the nature and purposes of trail designations.

In the final Plan, DA-NTRL-DC-8 reflects the desire that the Continental Divide National Scenic Trail passes mainly through primitive or semi-primitive non-motorized settings. This is the case on the Carson NF to the extent possible. The other settings along the southern portion of the trail on the Carson NF in the Canjilon and El Rito Ranger Districts are unavoidable because the trail must traverse existing development. The trail parallels or crosses 2 U.S. Highways, a State Highway, at least 4 county roads, and nearly 150 open forest roads. It passes by two developed campgrounds and through the Vallecitos Federal Sustained Yield Unit, all of which impact the recreation opportunity setting of the surroundings.

A range of recreation opportunity settings, including more developed settings are compatible with the Continental Divide National Scenic Trail. "Where possible, locate the CDNST in primitive or semi-primitive non-motorized ROS classes; provided that the CDNST may have to traverse intermittently through more developed ROS classes to provide for continuous travel between the Canada and Mexico borders" (USDA FS 2009a, p. 8).

Concern Statement 248 **Continental Divide National Scenic Trail, Recreation Opportunity**

Delete "may intermittently pass through more developed settings" from DA-NTRL-DC-8. The Continental Divide National Scenic Trail provides for a continuous route through predominately undeveloped settings. "Developed settings" are not a CDNT desired condition. Also, delete "New or relocated trail segments should be located primarily within settings consistent with or complementing primitive non-motorized recreation opportunity spectrum classes, to retain or promote the character for which the Continental Divide National Scenic Trail was designated" from DA-NTRL-G-3. This direction may be appropriate guidance for developing the Forest Plan, but it is irrelevant to plan implementation.

Associated Comment Letter: 163

Response

A range of recreation opportunity settings, including more developed settings are compatible with the Continental Divide National Scenic Trail. "Where possible, locate the CDNST in primitive or semi-primitive non-motorized ROS classes; provided that the CDNST may have to traverse intermittently through more developed ROS classes to provide for continuous travel between the Canada and Mexico borders" (USDA FS 2009a, p. 8).

In the final Plan, DA-NTRL-DC-8 reflects the desire that the Continental Divide National Scenic Trail passes mainly through primitive or semi-primitive non-motorized settings. This is the case on the Carson NF to the extent possible. The other settings along the southern portion of the trail on the Carson NF in

the Canjilon and El Rito Ranger Districts are unavoidable because the trail must traverse existing development. The trail parallels or crosses 2 U.S. Highways, a State Highway, at least 4 county roads, and nearly 150 open forest roads. It passes by two developed campgrounds and through the Vallecitos Federal Sustained Yield Unit, all of which impact the recreation opportunity setting of the surroundings.

Concern Statement 249 **Continental Divide National Scenic Trail, Recreation Opportunity**

The Final Plan should include a standard for the Continental Divide National Scenic Trail addressing inconsistent uses within the primitive or semi-primitive non-motorized recreation opportunity spectrum (ROS) classes. Motorized class inconsistencies include existing: (1) NFS roads, (2) state and county road rights-of-way, and (3) utility rights-of-way. Add a standard that states: Resource management actions and allowed uses must be compatible with maintaining or restoring primitive or semi-primitive non-motorized ROS class settings. Manage ROS class inconsistencies with the objective of minimizing effects on the CDNST nature and purposes.

Associated Comment Letter: 163

Response

Desired ROS is based both on desired management and the existing level of development in an area. Areas where roads and trails will require management in the future are classified appropriately to reflect how they will be managed. In the final Plan, DA-NTRL-DC-8 reflects the desire that the Continental Divide National Scenic Trail pass mainly through primitive or semi-primitive non-motorized settings. This is the case on the Carson NF to the extent possible. It is assumed, for National Scenic, Historic, and Recreational Trails, that ROS settings will vary as it is not always possible to route trails away from all motorized activity. Thus, while it may be desired that trails only pass through primitive or semi-primitive non-motorized settings, this is not realistic on the landscape and management is improved by acknowledging the actual setting the trails pass through. More developed settings along the southern portion of the trail on the Carson NF in the Canjilon and El Rito Ranger Districts are unavoidable because the trail must traverse existing development. The trail parallels or crosses 2 U.S. Highways, a State Highway, at least 4 county roads, and nearly 150 open forest roads. It passes by two developed campgrounds and through the Vallecitos Federal Sustained Yield Unit, all of which impact the recreation opportunity setting of the surroundings.

A range of recreation opportunity settings, including more developed settings are compatible with the Continental Divide National Scenic Trail. “Where possible, locate the CDNST in primitive or semi-primitive non-motorized ROS classes; provided that the CDNST may have to traverse intermittently through more developed ROS classes to provide for continuous travel between the Canada and Mexico borders.” (USDA FS 2009a, p. 8).

Concern Statement 250 **Continental Divide National Scenic Trail, Recreation Opportunity**

The Forest Plan fails to establish ROS plan components to protect the nature and purpose of the CDNST, and comprehensive planning for the trail is inconsistent with National Trails System Act, Section 5(f) and 7(c) direction as implemented through the CDNST Comprehensive Plan, E.O. 13195, and directives.

Associated Comment Letter: 163

Response

Plan components were developed for all designated areas, including those that protect the nature and purposes of the National Scenic and Historic Trails. All action alternatives include plan components for the CDNST and provide direction that applies regardless of the ROS Setting; please see the FW-NTRL section of the Forest Plan. Analysis for the CDNST trail is included in the FEIS. DA-NTRL-DC-8 and DA-NTRL-G-3 and the Recreation section in the final Plan also address ROS settings.

The Forest Service must follow—and the final Plan is consistent with—all laws, regulations, and polices that provide direction for the CDNST. All future, site-specific project analysis will consider the CDNST trail as required by the final Plan and will need to follow associated plan components, and all laws, regulations, and policies for the CDNST. Executive Order 13195 requires Federal agencies, to the extent permitted by law and where practicable and in cooperation with Tribes, States, local governments, and interested citizen groups, to "protect, connect, promote, and assist trails of all types throughout the United States." As stated in the executive order, "This will be accomplished by… protecting the trail corridors associated with National Scenic Trails… to the degree necessary to ensure that the values for which [the] trail was established remain intact."

Additionally, DA-NTRL-S-1 states that management of the CDNST must comply with the current CDNST Comprehensive Plan.

Concern Statement 251 **Continental Divide National Scenic Trail, Recreation Opportunity**

DA-NTRL-G-10 in the National Scenic, Historic, and Recreation Trails section would be better addressed through establishing ROS settings.

Associated Comment Letter: 163

Response

DA-NTRL-G-10 in the draft Plan, which equates to DA-NTRL-G-12 in the final Plan, requires that a natural-appearing setting be preserved along the Continental Divide National Scenic Trail by providing minimal trail facilities. We do not consider that this requirement is fully covered by recreation opportunity spectrum mapping, which focuses more generally on the recreational experience, not appearance, specifically. Recreation opportunity spectrum settings along the trail are generally primitive or semi-primitive non-motorized (DA-NTRL-DC-8). However, in some areas the recreation opportunity is more developed, and even in less developed settings, DA-NTRL-G-12 directs management to minimize facilities. In the DA-NTRL section in the final Plan, DA-NTRL-G-12, DA-NTRL-DC-6, DA-NTRL-DC-7, and DA-NTRL-DC-8, among other plan components all complement each other to create a setting along the trail that appears natural.

Concern Statement 252 **Continental Divide National Scenic Trail, Recreation Opportunity**

DA-NTRL-G-7 in the National Scenic, Historic, and Recreation Trails section should be modified to read: To protect the CDNST's scenic values {and ROS setting}, new communication sites, utility corridors, and renewable energy sites developed under special-use authorizations should not be visually apparent within visible foreground (up to 0.5 mile) and should be visually subordinate in the middleground viewshed (up to 4 miles).

Associated Comment Letter: 163

Response

No modifications were made to the guideline; DA-NTRL-G-7 focuses on scenic values. ROS settings are addressed in DA-NTRL-G-3.

Concern Statement 253 **Continental Divide National Scenic Trail, Nature and Purposes**

The Forest Plan should include a standard in the Continental Divide National Scenic Trail section that address the values for which the CDNST was designated. The standard should state: Resource uses and activities that could conflict with the nature and purposes of the CDNST may be allowed only where there is a determination that the other use would not substantially interfere with the nature and purposes of the CDNST.

Associated Comment Letter: 163

Response

DA-NTL-DC-1 directs land managers to protect the nature and purposes of the trail's designation. Activities that would substantially interfere with the purposes for which the trail was designated are inconsistent with the National Trails Act and DA-NTRL-DC-1 (16 U.S.C. 1241).

Concern Statement 254 **Continental Divide National Scenic Trail, Nature and Purposes**

To reduce potential confusion, we suggest making it more clear in the narrative that the nature and purposes statement is actually policy for the management of the CDNST, and rewording the desired condition as follows (with changes in italics): DA-NTRL-DC-6: The Continental Divide National Scenic Trail is a well-defined trail that provides high-quality scenic, primitive hiking and pack and saddle stock opportunities while conserving natural, historic, and cultural resources along the trail. Other non-motorized activities and opportunities, including mountain biking, are allowed when compatible with the nature and purposes of the trail.

Associated Comment Letter: 4898

Response

DA-NTRL-DC-6 has been reworded in the final Plan to reflect the nature and purposes of the Continental Divide National Scenic Trail (USDA FS 2009a).

Concern Statement 255 **Continental Divide National Scenic Trail, Comprehensive Plan**

Within appendix C of the Forest Plan, remove 1985 and replace with 2009 CDNST Comprehensive Plan.

As noted in the Draft Land Management Plan, the Continental Divide National Scenic Trail Comprehensive Management Plan was approved by the U.S. Forest Service and set forth as policy in 2009. This overarching policy direction serves to implement Congress's direction in the National Trails System Act and should be incorporated into Forest Plan direction and project proposal evaluation. The Comprehensive Plan also incorporates FSM 2353.42 and 2353.44b.

Associated Comment Letters: 163, 4898

Response

The 1985 Continental Divide National Scenic Trail Comprehensive Plan was changed to 2009 Continental Divide National Scenic Trail Comprehensive Plan in appendix C in the final Plan.

Also, forest plan direction is in addition to law, regulations, and policies. The Forest Service must follow all laws, regulations, and polices that provide direction for the CDNST. DA-NTRL-S-1 states that the Carson NF will comply with the most recent version of the CDNST Comprehensive Plan, including its stated nature and purpose.

Concern Statement 256 **National Trails, Cost Benefit**

In addition to specific congressional mandates requiring maximization of balance economic interests in management of National Trails System Act areas and segments and generalized requirements of economic analysis of NEPA, both President Trump (EO 13771 in 2017) and President Obama (EO 13563 in 2011) have issued Executive Orders requiring all Federal agencies to undertake a cost benefit analysis of management decisions. The U.S. Supreme Court recently specifically addressed the need for cost benefit analysis as an issue and stated as follows: "And it is particularly so in an age of limited resources available to deal with grave environmental problems, where too much wasteful expenditure devoted to one problem may well mean considerably fewer resources available to deal effectively with other (perhaps more serious) problems." Given this clear statement of concern over the wasteful expenditure

of resources for certain activities or management decisions. It is very concerned regarding what could easily be the wasteful expenditure of resources for the benefit of what is a very small portion of the recreational community. Similar concerns have been previously noted by Congress around the amendments to the National Trails System Act over its lifespan.

Associated Comment Letter: 5584

Response

As the Carson is not changing management of the Continental Divide National Scenic Trail by adopting the final Plan, there will be no new cost associated with this decision. Executive Order 13771 and Executive Order 13563 guide the adoption of regulations such as the 2012 Planning Rule that guides plan revision. Complying with these executive orders is outside of the scope of plan revision as these orders are about adoption of regulations.

Concern Statement 257 **Continental Divide National Scenic Trail, Nature and Purposes**

Desired Condition 1 in the CDNST section does not align with the 2009 CDNST Comprehensive Plan. The language should be altered to reflect the nature and purpose language in the CDNST Plan.

Associated Comment Letter: 163

Response

DA-NTRL-DC-1 from the draft plan is DA-NTRL-DC-6 in the final Plan and has been clarified to be consistent with law, regulations, and policies and the 2009 CDNST Comprehensive Plan. Non-motorized activities are allowed so long as they do not interfere with the nature and purposes of the trail. Mountain biking is allowed on the trail so long as the nature and purposes of the trail can be maintained. DA-NTRL-DC-6 has been reworded to better reflect these requirements.

Concern Statement 258 **Continental Divide National Scenic Trail, National Forest Management Act of 1976, National Environmental Policy Act of 1969**

DA-NTRL-S-1 in the National Scenic, Historic, and Recreation Trails section is inconsistent with the National Forest Management Act and the NEPA and must be deleted.

Associated Comment Letter: 163

Response

Forest plan direction is consistent with and in addition to law, regulations, and policies. The Forest Service must follow all laws, regulations, and polices that provide direction for the CDNST.

Concern Statement 259 **Continental Divide National Scenic Trail, Comprehensive Plan**

The discussion of no action should note that the direction in the 2009 CDNST Comprehensive Plan and FSM 2353.44 is to be implemented without plan revision, as necessary. The final amendments to the CDNST Comprehensive Plan and corresponding directives will provide guidance to agency officials implementing the National Trails System Act. The final amendments are consistent with the nature and purposes of the CDNST identified in the 1976 CDNST Study Report and 1977 CDNST Final Environmental Impact Statement adopted by the Forest Service in 1981 (40 FR 150). The final amendments and directives will be applied through land management planning and project decisions following requisite environmental analysis. (74 FR 51123)

Associated Comment Letter: 163

Response

The CDNST was analyzed as part of the Carson land management plan FEIS (Chapter 3, Environmental Consequences for National, Scenic, and Historic Trails). This analysis includes alternative 1, which represents current management direction. Effects of the alternatives to nationally designated trails were evaluated by comparing the plan direction of each alternative with respect to meeting the nature and purpose of these routes and protecting their historic, recreation and scenic qualities. The following statement was also added to the National Scenic, Historic, and Recreation Trails section of the FEIS: "The comprehensive plans for the Continental Divide National Scenic Trail and national historic trails along with corresponding directives guide management in implementing the National Trails System Act for these trails under all alternatives."

Concern Statement 260 **Continental Divide National Scenic Trail, Comprehensive Plan**

DA-NTRL-S-2 in the National Scenic, Historic, and Recreation Trails section is not consistent with the National Trails System Act implemented through the Comprehensive Plan and policy.

Associated Comment Letters: 163, 5584

Response

The Carson NF developed plan components using the 2012 Planning Rule, the 2015 Planning Directives, and direction in response to the multi-regional guidance from the regional foresters (USDA FS 2017). All plan components are designed to protect the nature and purposes of the CDNST trail.

Forest plan direction is in addition to law, regulations, and policies. The Forest Service must follow all laws, regulations, and policies that provide direction for the CDNST. DA-NTRL-S-2 is consistent with policy set forth in the Comprehensive Plan. New motorized vehicle use by the general public is prohibited on the CDNST. In general, established motorized uses, both summer and winter, are allowed to continue, but new motorized uses will not be designated on the trail (USDA FS 2017).

Concern Statement 261 **Continental Divide National Scenic Trail, Land Acquisition and Disposal**

The Forest Plan should include the following standard: Provide for land acquisitions to protect the nature and purposes of the National Trail. Prohibit land disposals.

Associated Comment Letter: 163

Response

The final Plan allows land acquisitions that would benefit the nature and purposes of national trails; it does not commit the Carson NF to acquire any specific tract of land. It is outside the scope of the plan revision process to prohibit land disposals. A management approach has been added to the final Plan to consider the impacts of potential land conveyances on the viewsheds, nature, and purposes of National Trails (Management Approach for National Scenic, Historic, and Recreation Trails-6).

Concern Statement 262 **Continental Divide National Scenic Trail, Unit Plan**

The following should be added to DA-NTRL-O: Complete a CDNST unit plan in compliance with FSM 2353.44(b)(2)) within 3 or 5 years. There is nothing in the Draft Plan that calls for the creation of a Unit Plan for the CDNST. As required by FSM 2353.44b(2), "a CDNST unit plan must be developed for each administrative unit through which the CDNST passes."

Associated Comment Letters: 163, 4898

Response

Forest plan direction is in addition to law, regulations, and policies. The Forest Service must follow all laws, regulations, and polices that provide direction for the CDNST. FSM 2353.44b directs the Forest

Service to complete a CDNST Unit Plan for those segments of the trail that cross the Carson NF. Since the unit plan is mentioned in the Forest Service Manual, this direction does not need to be repeated in the final Plan.

Concern Statement 263 **Continental Divide National Scenic Trail, Access**

Delete "while easily accessible trail segments complement local community interests and needs" from NTRL-DC-7.

Associated Comment Letter: 163

Response

The Carson NF developed plan components using the 2012 Planning Rule, the 2015 Planning Directives, and direction in response to the multi-regional guidance from the regional foresters (USDA FS 2017). All plan components are designed to protect the nature and purposes of the CDNST trail. Forest Plan direction is in addition to law, regulations, and policies. The Forest Service must follow all laws, regulations, and polices that provide direction for the CDNST.

Concern Statement 264 **Continental Divide National Scenic Trail, Motorized Effects**

For primitive and semi-primitive non-motorized ROS allocations, any existing designated motorized roads, trails, and areas must be managed to minimize their effects on the primitive and semi-primitive non-motorized settings. This should be reflected in the description of the guidelines. DA-NTRL-G-9 should also describe that a temporary road may only be constructed for resource actions that benefit the semi-primitive non-motorized setting.

Associated Comment Letter: 163

Response

Motorized roads and trails are generally not compatible with primitive and semi-primitive non-motorized settings. Recreation opportunity spectrum mapping reflects the existing designated road and trail system and avoids creating conflicts between motorized uses and non-motorized settings. In the final Plan, FW-REC-S-1 and S-2 prevent any new permanent roads or motorized trails in primitive or semi-primitive non-motorized settings forestwide, including along the Continental Divide National Scenic Trail. DA-NTRL-G-9 identifies additional stipulations for roads near the trail and applies across all recreation opportunity spectrum settings.

Concern Statement 265 **Continental Divide National Scenic Trail, Motorized Use**

We suggest and support this wording as a Standard: "Existing motorized use may continue on the CDT. Motorized events and motorized special use permits shall not be permitted on the CDT except where motorized use already exists. Motorized use shall not be allowed on newly constructed segments of the CDT."

Associated Comment Letters: 163, 3268

Response

The Carson NF developed plan components using the 2012 Planning Rule, the 2015 Planning Directives, and direction in response to the multi-regional guidance from the regional foresters (USDA FS 2017). All plan components are designed to protect the nature and purposes of the CDNST trail. Forest plan direction is in addition to law, regulations, and policies. The Forest Service must follow all laws, regulations, and policies that provide direction for the CDNST. DA-NTRL-S-2 and DA-NTRL-S-5 are consistent with policy set forth in the Comprehensive Plan. New motorized vehicle use by the general public is prohibited on the CDNST. In general, established motorized uses, both summer and winter, are

allowed to continue, but new motorized uses, motorized events, and motorized special use will not be designated on the trail (USDA FS 2017).

Concern Statement 266 **Continental Divide National Scenic Trail, Motorized Use**

DA-NTRL-S-5 in the CDNST section should be modified so as to not contradict DA-NTRL-S-2. It should be modified to reflect the language recommended by the Washington Office's Continental Divide National Scenic Trail (CDT) Recommended Forest Plan Components document: “Existing motorized use may continue on the CDT. New motorized events shall not be permitted on the CDT. Motorized use shall not be allowed on newly constructed segments of the CDT.”

Associated Comment Letter: 3268

Response

We disagree that a contradiction exists between DA-NTRL-S-2 and DA-NTRL-S-5 in the final Plan. On the Carson NF, no motorized events or motorized special use permits are currently permitted or authorized on the Continental Divide National Scenic Trail. DA-NTRL-S-5 prohibits any permitting or authorization of these activities in the future. DA-NTRL-S-2 prohibits motorized use on newly constructed segments of the Continental Divide National Scenic Trail while allowing existing motorized uses to continue. These standards are entirely consistent with the national suggested language.

Concern Statement 267 **Continental Divide National Scenic Trail, Multiple Use**

The CDNST plan further adopts multiple use principals by clearly adopting management standards for motorized categories of the recreational opportunity spectrum and as a result the concept of an exclusively non-motorized corridor would directly conflict with the CDNST plan. While the National Trails System Act fails to specifically address multiple use trails along the CDNST, the Management Plan does specifically provide that multiple use routes adopted under relevant travel management decisions shall be allowed and consistent with applicable planning. At no point in the CDNST plan is the concept of an exclusionary corridor even mentioned.

The conflict of the Carson RMP provisions restricting all CDNST usage to "hiking and horseback" usage directly conflicts with these provisions of the National Trails System Act requiring segment be segment management. At no point in the Carson RMP is there any analysis provided of areas that might or might not have been open to multiple use access at any time in the past or impacts that might occur as a result of this decision for access to other areas of the Carson NF. Additionally, no analysis is provided to support how the management direction of the CDNST has been moved from maximum outdoor recreational potential to being managed only for horseback and hiking usage.

Associated Comment Letter: 5584

Response

The Continental Divide National Scenic Trail (CDNST) was established by Congress in 1978 to provide high-quality scenic, primitive hiking, and horseback riding opportunities, and to conserve natural, historic, and cultural resources along the Continental Divide National Scenic Trail corridor. It does not preclude other uses as long as they are compatible with the nature and purposes of the CDNST (DA-NTRL-DC-1).

The final Plan does not limit use of the Continental Divide National Scenic Trail to only hiking and horseback riding, in fact, other activities are explicitly allowed (DA-NTRL-DC-6). Neither the final Plan nor any of the alternatives place this restriction on the trail.

Concern Statement 268 **Continental Divide National Scenic Trail, Oil and Gas**

The following changes (noted in italics) need to be added to DA-NTRL-S-3: No surface occupancy for *oil and gas or* geothermal energy leasing activities shall occur within 0.5 mile either side of the Continental Divide National Scenic Trail.

Associated Comment Letters: 163, 969, 4898

Response

The exploration for and production of oil and gas resources is generally allowed on National Forest System lands as required by the Mining and Minerals Policy Act of 1970 (30 U.S.C. 21a). Exceptions include lands formally withdrawn from mineral leasing by Congress or Executive order. The decision to lease lands is not dictated by the land management plan but by a leasing analysis (FSH 1909.12 23.23i(4)(d)). Leasing analyses are different in scope, proposed action, and level of detail than a programmatic plan revision. The required dual level of analysis complicates the plan revision process and decision to be made. The Carson NF is not completing a revised oil and gas leasing availability analysis at this time per the requirement of 36 CFR 228 Subpart E, 228.102. Instead, the final Plan includes components for multiple resources that would guide future leasing decisions for example, DA-NTRL-G-3, -4, and -9.

Concern Statement 269 **Continental Divide National Scenic Trail, Timber Production**

The CDNST corridor is unsuitable for timber production, as this use is incompatible with the nature and purpose of the trail and is not allowed by the National Trails System Act of 1968. To reflect ROS principles, the CDNST corridor with an extent of one-half mile on each side should be identified unsuitable for timber production and timber harvest should only occur within the CDNST Management Area to protect CDNST values.

Associated Comment Letter: 163

Response

We developed plan components in accordance with the 2012 Planning Rule, the 2015 Planning Directives, and direction in response to the multi-regional guidance from the regional foresters (USDA FS 2017), and all plan components in the Forest Plan have been designed to protect the nature and purposes of the CDNST during future proposed site-specific management activities. In areas where the CDNST corridor overlaps lands that are suitable for timber production and other areas where harvest is allowed, timber harvest activities would be constrained by the plan components for the CDNST and timber harvest (DA-NTRL-S-1, DA-NTRL-G-4, -5, -9, -10, and FW-FFP-S-1, 2, and 8). The trail is not removed from lands that may be suited for timber production because sustainable timber harvest is not inconsistent with the law, regulation, policy, or plan direction that directs management of these lands. Site-specific actions along the CDNST, such as timber harvesting, will be analyzed through NEPA environmental analysis outside of the land management planning process.

Concern Statement 270 **Continental Divide National Scenic Trail, Connectivity**

The entire CDNST corridor across the Carson NF provides for connectivity to aquatic and terrestrial habitats that are critical to flora and fauna of the region. Recognition of the role the CDNST may play in animal movements across many landscapes should be incorporated and at least acknowledged in the designated area standards, guidelines, and management approaches.

Associated Comment Letter: 4898

Response

The Continental Divide National Scenic Trail may provide habitat connectivity for wildlife species; however, this is not the purpose of the Continental Divide Trail designation. Direction in the DA-NTRL

section requires the trail to be managed for the purpose of its designation. The final Plan includes many plan components that are designed to improve wildlife habitat connectivity, which apply to the Continental Divide Trail. For a list of plan components that improve wildlife habitat connectivity, please see appendix H section 4 of the FEIS volume 3.

Concern Statement 271 **National Scenic Trails, Monitoring**

The Forest Plan needs to monitor progress toward the desired conditions for national scenic trails, with specific indicators.

Associated Comment Letters: 163, 4898

Response

Elements of the Continental Divide National Scenic Trail Comprehensive Management Plan are monitored. There is no need to repeat this monitoring as a part of the final Plan. Additionally, the Forest Service must follow all laws, regulations, and policies that provide direction for the CDNST.

Energy and Minerals - EMS

Concern Statement 272 **Transmission Utility Corridor**

The SU [Special Uses] section of the DLMP [draft land management plan] includes a reference to "public utility corridor locations" in the last sentence of the second paragraph on page 128. Figure A-3 refers to these areas as "transmission utility corridor." Using "utility corridor location" would better reflect the nature and purpose of these designated areas.

Associated Comment Letter: 4896

Response

The reference in the Special Uses section introduction has been changed to transmission utility corridor, consistent with Figure A-3. This terminology was chosen to distinguish transmission utility corridors from other public utility corridors on the Carson NF, for example, where electric distribution lines cross National Forest System land under permit. It is the intent that FW-SU-S-2 in the final Plan applies to only those large transmission corridors that currently exist on the Carson NF (as shown in Figure A-3), but does not entirely limit any future utilities that may be allowed under permit, following appropriate review.

Concern Statement 273 **Transmission Utility Corridor**

FW-SU-S-2 does not allow for any deviation from creating new transmission lines. There are many factors considered during transmission line siting and routing and there could be situations in the future where it may be preferable to deviate from existing corridors, possibly for reasons such as avoiding or reducing effects to a particular resource issue. Consider increasing the flexibility of this draft standard to allow for grid modernization activities, which may include the need for additional transmission line routes related to increasing deployment of renewable generation in New Mexico.

Associated Comment Letter: 4896

Response

Future routing of new transmission lines outside of existing transmission utility corridors identified in Figure A-3 in the final Plan would be inconsistent with the final Plan. If additional transmission line routes are needed or colocation would cause avoidable resource impacts, a plan amendment would be required.

Concern Statement 274 **Transmission Utility Corridor**

While it may be feasible to co-locate certain types of infrastructure, it is not feasible to co-locate electric transmission lines because National Electric Safety Code standards require sufficient clearance between transmission lines for reliability and safety reasons. The widths of electrical rights-of-way (ROW) are based on these clearance requirements. Add a reference that new utilities may be placed "parallel" to existing utilities or other existing disturbances such as roads to the extent practicable. Recommendations on paralleling existing rights-of-way should also require a review of Federal safety standards, industry standards, and technical feasibility (engineering, land use, physical constraints), and cost implications prior to siting infrastructure parallel or in proximity to existing rights-of-way.

Associated Comment Letter: 4896

Response

We clarified FW-SU-G-1 in the final Plan to stipulate that infrastructure be either co-located or adjacent within the same corridor. Review of applicable standards, feasibility, and costs would be part of a site-specific analysis prior to siting any new infrastructure.

Concern Statement 275 **Transmission Utility Corridor**

In the EIS on page 23, Utility Corridor: Common sense is that the statement needs to say that the corridor needs to be of sufficient width to prevent trees in place from falling onto utility lines.

Associated Comment Letter: 120

Response

The discussion regarding utility corridors on page 23 of the FEIS references an alternative to make all existing utility corridors 1,000 feet wide. This is an alternative that was considered but was not analyzed in detail and is not adopted in the final Plan. The final Plan does not define the width of utility corridors, which would be determined on a case-by-case, site-specific basis as part of the special use permitting process. We agree that tree height is a consideration in this determination, as are access needs, topography, type of utility, and other factors.

Concern Statement 276 **Power Lines**

Do not permit power lines on the forest.

Associated Comment Letter: 5683

Response

The Carson NF manages public land resources for multiple uses “so that they are utilized in the combination that will best meet the needs of the American people” as required by the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 531). Additionally, the 2012 Planning Rule requires that a plan include components to provide for multiple uses (36 CFR 219.10). Power transmission is a valid use of public lands, is in the public interest, and in many cases power lines must cross National Forest System lands to serve private land inholdings and communities that are surrounded by public lands.

Concern Statement 277 **Dark Skies**

Preserve the region's dark skies when doing new construction or retrofit outside lighting on older facilities. Parking lot lights can be dimmed after midnight. This is a good time to retrofit lighting fixtures, as LEDs are much cheaper to operate than older fixtures. Consider impacts to wildlife when installing or replacing new light fixtures.

Associated Comment Letter: 4842

Response

Energy efficiency of Carson NF facilities is desired, according to FW-FAC-DC-2 in the final Plan; additionally, facility impacts on wildlife must be minimized according to FW-FAC-G-2. The Carson NF generally works with local governments to comply with ordinances such as dark sky requirements, while also addressing workplace requirements and safety needs of employees and the public.

Concern Statement 278 **Resource Use**

A reasonable scenario of increased use of renewable resources and exhaustion of natural gas resources should be addressed in the plan, with the associated costs of restoration of pre-development ecological conditions.

Associated Comment Letter: 4922

Response

The public's use of renewable resources or natural gas are not within the Carson NF's authority to control. The final Plan guides future project and activity decision making for a wide range of possible situations, but does not predict future scenarios.

The Carson NF manages mineral resources in accordance with the Mining and Minerals Policy Act of 1970 (30 U.S.C. 21a). "[I]t is the continuing policy of the Federal Government in the national interest to foster and encourage private enterprise in (1) the development of economically sound and stable domestic mining, minerals, metal and mineral reclamation industries, (2) the orderly and economic development of domestic mineral resources, reserves, and reclamation of metals and minerals to help assure satisfaction of industrial, security and environmental needs" (30 U.S.C. 21a). Any impacts and mitigations for new renewable resources or natural gas development would be analyzed based on the specific proposal and site conditions. Reclamation of mining sites is required by a lease (FSM 2840.3 and FW-MM-DC-1). Under the final Plan, the reclamation of mining sites is guided by FW-MM-G-1, and -2, MA-JICMA-S-8, and -11, and MA-JICMA-G-9.

Concern Statement 279 **Mineral Leasing, Opposition**

Prohibit mineral extraction and new leasing and revoke non-producing leases.

Associated Comment Letters: 139, 154, 155, 158, 4858, 4911, 5359, 5721

Response

The exploration for and production of oil and gas resources is generally allowed on National Forest System lands, as required by the Mining and Minerals Policy Act of 1970 (30 U.S.C. 21a). Exceptions include lands formally withdrawn from mineral leasing by Congress or Executive order. The decision to lease lands is not dictated by the land management plan, but by a leasing analysis (FSH 1909.12 23.23i(4)(d). Leasing analyses are different in scope, proposed action, and level of detail than a programmatic plan revision. The Carson NF is not conducting an oil and gas leasing availability analysis at this time, per the requirement of 36 CFR 228 Subpart E, 228.102. Instead, the final Plan includes components for multiple resources that would guide future leasing decisions.

Pursuant to the Mineral Leasing Act of 1920, as amended (30 U.S.C. 181-287), the Department of the Interior has principal authority to manage leasable minerals; this management is carried out by the Bureau of Land Management. When leasable minerals occur under National Forest System lands, the Forest Service and the Bureau of Land Management cooperate on mineral leasing and related actions, based on applicable laws and regulations for the leasable mineral type.

A Federal mineral lessee may explore and drill for, extract, remove, and dispose of oil and gas deposits on the lease. Before conducting any surface-disturbing activities, a mineral lessee must obtain approval. Drilling proposals are subject to the lease terms and stipulations that are attached to the lease and any necessary mitigation measures that are consistent with the lease rights. The Bureau of Land Management

may cancel a lease if a lessee is non-compliant with lease terms. A lease will expire at the end of its primary term, which is usually 10 years. However, the Bureau of Land Management may extend a lease, or a lease may continue under its own terms, if:

- Qualifying drilling operations are in progress;
- The lease contains a well capable of producing in paying quantities; or
- The lease is entitled to receive an allocation of production from an off-lease well.

The General Mining Act of 1872, as amended (30 U.S.C. 22), governs the prospecting for and the appropriation of metallic and most nonmetallic minerals on the 140 million acres of National Forest System lands set up by proclamation from the public domain. Under the 1872 Act, and its principal amendment of July 23, 1955, qualified prospectors may search for mineral deposits on these "public domain" lands. A prospector, upon discovering a valuable mineral deposit, may locate a mining claim. Recording that claim in the local courthouse and with the appropriate Bureau of Land Management State Office affords protection from subsequent locators. A mining claimant is entitled to reasonable access to the claim for further prospecting, mining, or necessary related activities, subject to other laws and applicable regulations.

Concern Statement 280 **Energy and Minerals, National Environmental Policy Act of 1969**

Energy and mining extraction projects should get full NEPA evaluation and mitigation. Impacts of this scale are a major action and require Environmental Impact Studies and a Record of Decision. To process oil extraction under permits from the 1950s is very inappropriate.

Associated Comment Letter: 997

Response

Energy and mineral projects are subject to the appropriate requirements of the National Environmental Policy Act of 1969 (42 U.S.C. § 4321 et seq.), the National Historic Preservation Act (54 U.S.C. § 300101 et seq.), the Endangered Species Act (16 U.S.C. ch 35§ 1531 et seq.), Clean Water Act (33 U.S.C. ch 23 § 1151), and other applicable laws.

Concern Statement 281 **Mining, Industry, Roads, Opposition**

Prohibit mining, industrialized development, and new roads.

Associated Comment Letter: 2844

Response

In the Mining and Minerals Policy Act of 1970 (30 U.S.C. § 21a), Congress declared that it is the continuing policy of the Federal Government, in the national interest, to foster and encourage private enterprise in (among other goals) the development of domestic mineral resources and the reclamation of mined land. This Federal policy clearly applies to National Forest System lands and the Carson NF will continue to manage accordingly under the final Plan.

Industrial development would be analyzed on a case-by-case basis, would need to be consistent with plan components in the final Plan, and must "best meet the needs of the American people" as required by the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. § 531). Any new roads would be analyzed under a separate site-specific process for their purpose and need and their site-specific effects. No new roads are being authorized by this plan revision decision.

Concern Statement 282 **Mining, Industry, Roads, Opposition**

Prohibit new road construction, new energy leases and new mineral extraction in sensitive areas.

Associated Comment Letters: 3071, 5405, 5631

Response

In the Mining and Minerals Policy Act of 1970 (30 U.S.C. § 21a), Congress declared that it is the continuing policy of the Federal Government, in the national interest, to foster and encourage private enterprise in (among other goals) the development of domestic mineral resources and the reclamation of mined land. This Federal policy clearly applies to National Forest System lands and the Carson NF will continue to manage accordingly under the final Plan.

No new roads are being authorized by this plan revision decision. Components in the final Plan are more restrictive in sensitive areas such as riparian areas (FW-WSW-RMZ), raptor fledging areas (FW-WFP-G-3), class I airsheds (FW-AIR-DC-3), cultural resources on the National Register of Historic Places (FW-CR-S-1), state endangered plants (DA-BOT), Jicarilla Natural Gas Management Area areas of resource concern (MA-JICMA-DC-2), and others. Any new mining or road construction would be analyzed under a separate site-specific process for their purpose and need, their site-specific effects, and consistency with forestwide Plan direction and Plan direction specific to more sensitive areas or resources.

Concern Statement 283 **Energy, Perennial Water**

Include quarter-mile, no-energy development buffers around all perennial waters.

Associated Comment Letters: 127, 150

Response

The exploration for and production of oil and gas resources is generally allowed on National Forest System lands as required by the Mining and Minerals Policy Act of 1970 (30 U.S.C. 21a). Exceptions include lands formally withdrawn from mineral leasing by Congress or Executive order. The decision to lease lands is not dictated by the land management plan but by a leasing analysis (FSH 1909.12 23.23i(4)(d)). Leasing analyses are different in scope, proposed action, and level of detail than a programmatic plan revision. The required dual level of analysis complicates the plan revision process and decision to be made. The Carson NF is not conducting an oil and gas leasing availability analysis at this time per the requirement of 36 CFR 228 Subpart E, 228.102. Instead, the final Plan includes components for multiple resources that would guide future leasing decisions.

Concern Statement 284 **Mining and Minerals, Other Forest Resources**

Mining and Minerals section should provide a framework for balancing mining activities with other forest resources and values. The final plan should ensure mining activities adhere to appropriate methodologies and scale so that the Carson NF's ability to achieve desired conditions for water quality, native fish and wildlife, and ecological and cultural resources is not compromised.

Associated Comment Letter: 5303

Response

The final Plan directs management to minimize adverse impacts to surface and groundwater resources, watershed and forest ecosystem health, wildlife and wildlife habitat, scenic character, and other desired conditions applicable to the area and are reclaimed to natural conditions (FW-MM-DC-1, -2, -3, FW-MM-G-1, -2). Plan components specific to oil and natural gas development on the Jicarilla Ranger District require the same management that adheres to established best management practices to meet desired conditions of other resources (especially MA-JICMA-DC-1, MA-JICMA-G-2).

Concern Statement 285 **Energy and Minerals, Delay**

Delay energy and mineral extraction for 10 years.

Associated Comment Letter: 5617

Response

In the Mining and Minerals Policy Act of 1970 (30 U.S.C. § 21a), Congress declared that it is the continuing policy of the Federal Government, in the national interest, to foster and encourage private enterprise in (among other goals) the development of domestic mineral resources and the reclamation of mined land. This Federal policy clearly applies to National Forest System lands and the Carson NF will continue to manage accordingly under the final Plan.

Pursuant to the Mineral Leasing Act of 1920, as amended (30 U.S.C. §§181-287), the Department of the Interior has principal authority to manage leasable minerals. These activities are carried out by the Bureau of Land Management. When leasable minerals occur under National Forest System lands, the Forest Service and the Bureau of Land Management cooperate on mineral leasing and related actions based on applicable laws and regulations for the leasable mineral type.

The General Mining Act of 1872, as amended (30 U.S.C. § 22), governs the prospecting for and the appropriation of metallic and most nonmetallic minerals on the 140 million acres of National Forest System lands set up by proclamation from the public domain. Under the 1872 Act, and its principal amendment of July 23, 1955, qualified prospectors may search for mineral deposits on these "public domain" lands. A prospector, upon discovering a valuable mineral deposit, may locate a mining claim. Recording that claim in the local courthouse and with the appropriate Bureau of Land Management State Office affords protection from subsequent locators. A mining claimant is entitled to reasonable access to the claim for further prospecting, mining, or necessary related activities, subject to other laws and applicable regulations.

Concern Statement 286 **Resource Extraction, Opposition**

Limit resource extraction in the Carson Forest as much as possible.

Associated Comment Letter: 4928

Response

In the Mining and Minerals Policy Act of 1970 (30 U.S.C. § 21a), Congress declared that it is the continuing policy of the Federal Government, in the national interest, to foster and encourage private enterprise in (among other goals) the development of domestic mineral resources and the reclamation of mined land. This Federal policy clearly applies to National Forest System lands and the Carson NF will continue to manage accordingly under the final Plan.

Pursuant to the Mineral Leasing Act of 1920, as amended (30 U.S.C. §§181-287), the Department of the Interior has principal authority to manage leasable minerals; these activities are carried out by the Bureau of Land Management. When leasable minerals occur under National Forest System lands, the Forest Service and the Bureau of Land Management cooperate on mineral leasing and related actions based on applicable laws and regulations for the leasable mineral type.

The General Mining Act of 1872, as amended (30 U.S.C. § 22), governs the prospecting for and the appropriation of metallic and most nonmetallic minerals on the 140 million acres of National Forest System lands set up by proclamation from the public domain. Under the 1872 Act, and its principal amendment of July 23, 1955, qualified prospectors may search for mineral deposits on these "public domain" lands. A prospector, upon discovering a valuable mineral deposit, may locate a mining claim. Recording that claim in the local courthouse and with the appropriate Bureau of Land Management State Office affords protection from subsequent locators. A mining claimant is entitled to reasonable access to the claim for further prospecting, mining, or necessary related activities, subject to other laws and applicable regulations.

Concern Statement 287 **Jicarilla Natural Gas Management Area, Big Game**

Restrict energy and mineral development to the existing Jicarilla Natural Gas Management Area (JICMA). While the extractive energy industry makes significant contributions to New Mexico's economy and is a crucial component of a diverse portfolio of industries on our public lands, it also poses a tangible threat to several big game species, primarily elk and mule deer, and to the rural communities, businesses, and economies that rely on big game hunting

Associated Comment Letter: 4901

Response

The final Plan directs management to minimize adverse impacts to wildlife and wildlife habitat (FW-MM-DC-1, and -2, FW-MM-G-2).

In the Mining and Minerals Policy Act of 1970 (30 U.S.C. § 21a), Congress declared that it is the continuing policy of the Federal Government, in the national interest, to foster and encourage private enterprise in (among other goals) the development of domestic mineral resources and the reclamation of mined land. This Federal policy clearly applies to National Forest System lands and the Carson NF will continue to manage accordingly under the final Plan.

Pursuant to the Mineral Leasing Act of 1920, as amended (30 U.S.C. §§181-287), the Department of the Interior has principal authority to manage leasable minerals; these activities are carried out by the Bureau of Land Management. When leasable minerals occur under National Forest System lands, the Forest Service and the Bureau of Land Management cooperate on mineral leasing and related actions based on applicable laws and regulations for the leasable mineral type.

The General Mining Act of 1872, as amended (30 U.S.C. § 22), governs the prospecting for and the appropriation of metallic and most nonmetallic minerals on the 140 million acres of National Forest System lands set up by proclamation from the public domain. Under the 1872 Act, and its principal amendment of July 23, 1955, qualified prospectors may search for mineral deposits on these “public domain” lands. A prospector, upon discovering a valuable mineral deposit, may locate a mining claim. Recording that claim in the local courthouse and with the appropriate Bureau of Land Management State Office affords protection from subsequent locators. A mining claimant is entitled to reasonable access to the claim for further prospecting, mining, or necessary related activities, subject to other laws and applicable regulations.

Concern Statement 288 **Air Quality**

Change MM-DC 1 to include air quality, atmospheric levels of greenhouse gases.

Associated Comment Letter: 4911

Response

In the final Plan, FW-MM-DC-1 directs management to minimize adverse impacts to “other desired conditions applicable to the area,” which include those desired conditions in the forestwide air resource section. FW-AIR-DC-2 requires air quality to meet or surpass State and Federal ambient air quality standards. The Carson NF is also required to follow all local, county, and State regulations concerning dust management and other pollutant sources including State regulations for air quality mitigation requirements set forth by the New Mexico Air Quality Bureau. This requirement is reiterated by MA-JICMA-S-1 in the final Plan.

Fire and Fuels - FFS

Concern Statement 289 **Wildland Fire, Support**

The forest needs to increase the amount of fire (wildfire and prescribed fire) and management should include following recent prescribed fires, fires managed for resource benefit, and wildfires with additional burning with the understanding that past fires act as fuel breaks and those fire effects diminish in time. In ponderosa pine forests, prescribed fire should be used following high-severity burns.

Associated Comment Letters: 164, 4887, 4904, 5347

Response

Alternative 4 of the EIS considered a heavier reliance on fire to move vegetation toward desired conditions (EIS, Alternatives Considered in Detail, Alternative 4). Alternative 2-modified (preferred alternative) includes a substantial increase compared to recent levels of prescribed fire and wildfire managed for resource benefits to reach desired conditions while also balancing the need to provide diverse ecosystem services. The 2009 interagency standard, "Guidance for Implementation of Federal Wildland Fire Management Policy" (USDA FS et al. 2009) provides direction on policy related to management of unplanned ignitions and is included in appendix C of the final Plan. The document, "Interagency Prescribed Fire Planning and Implementation Procedures Guide" (NWCG 2017) provides direction on policy related to management of planned ignitions and is included in appendix C of the final Plan.

Concern Statement 290 **Thinning, desired conditions**

Instead of striving for desired size and age distributions, landscape scale thinning treatments should instead "focus on creating conditions in which fire can occur without devastating consequences."

Associated Comment Letter: 5347

Response

Desired conditions in the final Plan direct management to provide for ecological integrity, while also contributing to social and economic sustainability as required by the 2012 Planning Rule (36 CFR 219.1). Fire is managed to function in its natural ecological role under conditions where safety and values at risk can be protected (FW-FIRE-DC-2), meaning that wildland fires do not result in the loss of life, investments, infrastructure, property, or cultural resources, or create irreparable harm to ecological resources (FW-FIRE-DC-4). Fire regimes are managed toward the historic range of variability (FW-FIRE-DC-1, FW-VEG-DC-1 and -2). Project-level treatments would move vegetation toward these desired conditions, including the landscape scale seral state distributions described for vegetation communities. In some places, such as in the wildland-urban interface, this may mean managing for lower fire intensities (FW-FIRE-DC-5), while in others high-severity fire may be ecologically beneficial, may not threaten values at risk, and may be desired (for example, FW-VEG-MCW-DC-12).

Concern Statement 291 **Wildfire, Private Homes**

Your long-term plans must also include a carefully considered long-term effort to remove privately owned homes and camps from forest areas in order to reduce the destructiveness of wildfires and the costs incurred to protect such private property.

Associated Comment Letters: 5642

Response

The Forest Service does not have jurisdiction over private lands and privately owned homes; fuels reduction on private lands is therefore not within the management direction in the final Plan. However, the Carson NF strives to facilitate these treatments on private lands adjacent to National Forest System

lands. These types of treatments are more appropriately addressed at a site-specific scale, through project-level work, rather than at the forest planning scale.

Concern Statement 292 **Prescribed Fire, Thinning, Effectiveness**

Management tools, such as prescribed burning and thinning, do not prevent the spread of wildfires and do not protect habitat for wildlife species. The forest plan did not consider the best available scientific information regarding where prescribed fire and thinning treatments should occur (lower elevations with historically moderate to high fire frequency) as explained in, Why Thinning Forests is a Poor Wildfire Strategy (https://www.westernwatersheds.org/gw-poor-wildfire-strategy/). The Forest needs to evaluate a new alternative which excludes creation of smoke due to the use of prescribed fires. Smoke contributes to greenhouse gas emissions and the analysis needs to describe the negative impacts of having more fire on the landscape. The forest plan needs to focus on collaborating with homeowners to protect their homes and preparedness for evacuations.

Associated Comment Letters: 160, 1578, 4839, 4923, 5008, 5405, 5631

Response

Prescribed burning and thinning are not intended to "prevent the spread of wildfires," but rather to modify fire behavior to mimic historic severities of low to moderate intensity and to allow fire to play its historic role in lower-elevation frequent-fire forest types. Furthermore, fuels treatment effectiveness is well documented across the western United States (Evans 2018) and references therein). The article cited in this concern is not peer-reviewed and does not mention southwestern frequent-fire forests specific to northern New Mexico where there is a robust pool of peer reviewed literature that currently informs management (Evans 2018). Alternative 1, the current forest plan, has the least amount of prescribed fire and results in the highest seral state departure among the alternatives (EIS Chapter 3, Vegetation Communities and Fuels, Environmental Consequences for Frequent Fire Forests). There is widespread agreement that fire plays an important role in western landscapes, including northern New Mexico (Moritz et al. 2018).

Regarding smoke, the total emissions per unit area are directly related to the amount of biomass consumed by the fire. Prescribed fire is typically lower intensity and consumes less biomass than uncharacteristic wildfire, leading to lower per unit area emissions (Wiedinmyer and Hurteau 2010). The speciation of the emissions is a function of the type of combustion, with flaming combustion resulting in lower particulate matter emissions. Both prescribed fire and wildfire have flaming and smoldering combustion, but empirical measurements of wildfire versus prescribed fire emissions show that particulate matter emissions are greater from wildfire (Liu et al. 2017).

While the Forest Service cannot spend non-emergency funds on private land, it is important to note that treatments in the wildland-urban interface are one part of a holistic approach to landscape restoration. The final Plan directs management to protect the public and values at risk, including homes under these plan components: FW-FIRE-DC-2, -4, and-5, FW-FIRE-S-1. Management Approach for Wildland Fire-3 emphasizes the use of community wildfire protection plans, and in the final Plan, additional emphasis has been added for working with private landowners.

Concern Statement 293 **Fire Management**

The Plan does not explore any 21st century technologies, systems analysis, or other approaches to the fire conundrum, but cling to 20th century methods.

Associated Comment Letter: 5008

Response

The final Plan does not prescribe specific technologies or approaches for fire management use of new technology or approaches that move toward desired conditions would be completely compatible. The

final Plan does substantially update direction and desired conditions related to fire regimes, based on best available science, and adopts an adaptive management approach.

The U.S. Forest Service is a leader in fire research. Since the early 1900s, Forest Service fire research has played a vital role in the agency's fire and fuels management program. Managers use the results and products from this work in making tactical firefighting decisions, in prioritizing and implementing fuel hazard reduction projects, in smoke forecasting, in rehabilitating and restoring land after severe wildfire, and in providing information to homeowners in the wildland-urban interface. Recognizing the complexity and scope of wildland fires, Forest Service Research & Development's approach emphasizes cutting-edge and world-renowned research that is conducted by experts located around the country (USDA FS 2020).

Concern Statement 294 **Prescribed Fire, Support**

Prescribed fires contribute to the ecological health of forests, whereas thinning causes unnecessary ecological impacts. Prescribed fire should be used rather than thinning to prevent forest fires.

Associated Comment Letter: 4858

Response

In many cases, the use of thinning facilitates the safe reintroduction of fire and a more efficient and effective means of reaching desired conditions (GTR-310, Reynolds et al. 2013). The combination of thinning and burning has been demonstrated to be effective at moderating fire behavior and reducing fire severity (Collins et al. 2013; Evans et al. 2011; Huffman et al. 2009; Martinson and Omi 2013).

Alternative 4 of the FEIS considered reduced mechanical treatments with a heavier reliance on fire to move vegetation toward desired conditions (FEIS, Chapter 2, Alternatives Considered in Detail). Any mechanical treatment would be focused in wildland-urban interface areas resulting in uncharacteristic fire intensities in many untreated, Frequent-fire forest areas. In those forests, fire effects would be more likely to result in loss of canopy cover and negative soil impacts (erosion, sterility, hydrophobicity) than under alternative 2 (FEIS, Chapter 3. Affected Environment and Environmental Consequences, Vegetation Communities and Fuels, Fuels and Wildland Fire Environmental Consequences – Alternative 4). The final Plan uses a combination of prescribed and naturally ignited wildland fire and mechanical treatments to restore departed ecosystems and return natural disturbance regimes (Record of Decision, Decision and Rationale for the Decision).

Concern Statement 295 **Mechanical Treatment, Strategic Placement**

Considering that much of the landscape is currently densely stocked with dangerous surface fuel loads and ladder fuels, mechanical thinning of small-diameter trees is a viable tool for preparing those areas for successful re-establishment of a predominantly low-intensity, frequent fire regime with mixed severity components. However, if current workforce trends in the southwest continue, that work cannot be accomplished at a pace commensurate with the scale of the ecological problem, and as such a course correction is needed. Because many acres identified for thinning may be poor candidates for economically viable mechanical treatment but suitable for fire-based restoration, strategic placement of mechanical thinning is essential.

Associated Comment Letter: 5347

Response

All plan alternatives and objectives are based on the best available science and strive to increase the pace and scale of ecologically beneficial fire and fuel treatments including mechanical, treatment and prescribed and wildland fire managed for resource benefit. Alternative 2-modified has the potential to provide increased commercial timber volumes, because it would increase mechanical treatment for forest restoration. Alternative 2-modified has the potential to treat 2,750 to 6,000 acres per year with mechanical treatments and 10 to 16,500 acres per year with prescribed fire. The exact placement and

location of mechanical treatments and prescribed fire on the landscape are determined on a project-specific basis and not within the context of a land management plan.

Concern Statement 296 **Mechanical Treatment, Strategic Placement**

The Forest Plan should include the best available scientific information to prioritize thinning in a manner that supports expanding use of prescribed and wildfires to accomplish restoration and fuels reduction. The Draft Plan contains no plan components that promote strategic application of mechanical tree thinning to support the restoration of fire to frequent fire-adapted ERUs. The plan is not consistent with the National Cohesive Wildland Fire Management Strategy because there are no plan components that strategically prioritize thinning treatments.

Associated Comment Letter: 5347

Response

Management Approach-6 for Wildland Fire Management describes a strategy for prioritizing treatments and has been changed in the final Plan to reference best available science. Treatment prioritization is considered at the project level when planning thinning treatments. The National Cohesive Wildland Fire Management Strategy takes a holistic approach to fire on the landscape. Collaboration between Federal, State, Tribes, and other stakeholders is key when considering prioritization of vegetation and fuels management. This is captured as a management approach in the forest plan to allow flexibility to work with other stakeholders in determining treatment priorities (Management Approach for Wildland Fire Management-5).

Concern Statement 297 **Fire Risk Assessment**

No genuine risk assessment has been done or published by reputable scientists on fire in these forests, so risk assessment of the many, many 'prescribed burns' the Forest Service plans, cannot be compared, is unknown, and therefore unacceptable.

Associated Comment Letter: 160, 5008

Response

The effects of prescribed fire are well understood (Evans 2018) and narrowly confined through modeling, prescription, firing techniques, and monitoring. The dynamics of fire exclusion, land-use history, and resulting departure from the natural range of variation in frequent fire vegetation types are well documented in the southwest (Allen 2002). Desired conditions are the basis of comparison when considering objectives of prescribed fires and are described in detail in chapter 2 in the final Plan.

All naturally ignited and planned wildland fires require protection of social, economic, and ecological values at risk, as directed by FW-FIRE-DC-2 in the final plan. Risk assessment is an integral part of prescribed fire planning process and, “reflects an understanding of the interaction of objectives and implementation limitations for the project” (NWCG 2017, p. 16).

> Prescribed fires present an inherent level of risk. Risk is at all levels, from decision-makers to on-the-ground firefighters and the public. The overall prescribed fire planning process includes a risk assessment, and reflects an understanding of the interaction of objectives and implementation limitations for the project.
>
> Risk management consists of mitigation strategies and implementation activities to improve outcomes and minimize negative consequences. For prescribed fire, the risk assessment is accomplished by completing the complexity analysis process. The complexity analysis process identifies values, risks, mitigation measures, and the technical difficulty of implementation actions to be addressed in the prescribed fire plan and will acknowledge any remaining unmitigated risk in the final rating.

> During the implementation phase of prescribed fires, personnel may encounter uncertain and dynamic conditions, where they must continuously evaluate risks with an eye towards maintaining a safe working environment, meeting the prescribed fire objectives (on time, within budget and with available resources) and addressing social and political concerns.
>
> The risk management process identified in the Incident Response Pocket Guide, PMS 461, helps identify, evaluate and mitigate time-sensitive risks and hazards associated with prescribed fire implementation. (NWCG 2017, p 16)

The Interagency Prescribed Fire Planning and Implementation Procedures Guide describes 21 elements of prescribed fire risk management (NWCG 2017). This document is included in appendix C in the final Plan.

Concern Statement 298 **Vegetation Type, Classification**

Without a data-based classification of the different vegetation types occurring on the forest, it is not possible to quantify if desired fuel levels and vegetation characteristics are being maintained with wildland fire.

Associated Comment Letter: 3228

Response

Desirable fuel levels and vegetation characteristics are described by desired conditions for each vegetation community. Desired conditions were developed using best available scientific information (USDA FS Carson NF 2015). The monitoring plan summarizes wildland fire metrics by ecological response unit (Final Plan, Chapter 4, Plan Monitoring Program, Monitoring Topic II). The ecological response unit map is a data-based classification of different vegetation types occurring on the forest (Wahlberg et al. 2014, in draft). It incorporates historic disturbance regimes in its taxonomy and provides an appropriate stratification for applying desired conditions at the programmatic scale. Where site-specific conditions differ from the ecological response unit mapping or where project areas cover small inclusions of dissimilar ecological response units, desired fuel levels or vegetation characteristics may differ from the desired conditions of the mapped ecological response unit (Final Plan, Chapter 2, Vegetation section introduction).

Concern Statement 299 **Human-Caused Fire, Objectives**

Human-caused fires should be managed to meet multiple resource objectives (Fire-S-5).

Associated Comment Letters: 163, 5347

Response

In the final Plan, FW-FIRE-S-5 requires a suppression strategy, consistent with direction on policy related to management of unplanned ignitions contained in Guidance for Implementation of Federal Wildland Fire Management Policy, February 13, 2009: "Initial action on human-caused wildfire will be to suppress the fire at the lowest cost with the fewest negative consequences with respect to firefighter and public safety" (Guidance for Implementation section, item number 8, Fire Executive Council 2009).

Concern Statement 300 **Thinning and Fire, Support**

Forest management should include the use of thinning and fire to fragment riparian canopy connectivity and create fuel breaks to improve growth of grasses, forbs, young shrubs, and trees that provide critical wildlife habitat and support healthy ecosystem functions.

Associated Comment Letters: 4845, 4887, 4909, 5489

Response

Fire is not emphasized in riparian communities as much as other natural disturbances, such as flooding and scouring. Compared to surrounding uplands, riparian corridors have characteristics (e.g., surface

water and saturated soils) that reduce the frequency and severity of fire. Fire is limited or absent. Fire that occurs is typically smoldering and of low intensity, and high- to mixed-severity fire occurs very infrequently (FW-WSW-RMZ-DC-7).

Fuel breaks are treatments associated with facilitating firefighter response and protecting values at risk. These treatments generally take place in the uplands adjacent and are not usually associated with riparian communities.

Concern Statement 301 **Fire Severity, Desired Conditions**

Generalizing desired conditions to suggest that virtually all fires should be low-intensity surface fires ignores the bulk of scientific evidence to support that pinyon-juniper, mixed conifer, and spruce-fir ecosystems commonly burned at high severity, and occasionally ponderosa pine did as well. Additional plan components should be added that reflect the best available science which supports the use of mixed severity fires to accomplish restoration objectives and move towards desired conditions. additional plan components to encourage the use of mixed severity fire in all forested and woodland ERUs as integral components of a process-based restoration strategy. small patches of high-severity fire effects interspersed within a matrix of low- and moderate-severity can meet restoration objectives, create important ephemeral habitats, and reduce the risk of uncharacteristic reburn potential.

Associated Comment Letters: 160, 161, 5347

Response

We agree that a distribution of fire severities relative to different vegetation communities is desired. The final plan does not manage exclusively toward low-intensity surface fire, but toward a range of severity and frequency that is within the historic fire regime for a vegetation community (FW-FIRE-DC-1). The following plan components reflect this approach: FW-FIRE-DC-1; FW-VEG-PPF-DC-2,4,8,12; FW-VEG-MCD-DC-2,3,8; FW-VEG-MCW-DC-3; FW-VEG-SFF-DC-7; FW-VEG-PJO-DC-6; FW-VEG-PJS-DC-6; and Management Approach for Wildland Fire Management-2.

Concern Statement 302 **Fire-Created Openings**

The Forest Plan should have guidelines for Fire and Fuels that allow for fire-created openings at scales consistent with the reported range, generally up to 100 hectares. Prescribed and resource benefit fires could mimic historical fire behavior by accepting higher levels of mortality in patches of up to 100 hectares in ponderosa pine, and perhaps up to several hundred or more in mixed-conifer forests during the initial fire entry, and only in areas where such fires can be managed to protect communities, infrastructure, and other key values.

Associated Comment Letter: 5347

Response

The desired fire regimes in the final Plan are based on best available scientific information as described in the assessment (USDA FS Carson NF 2015).

In the final Plan, the ponderosa pine forest vegetation community is characterized by frequent (4- to 18-year return intervals), low-severity fire that primarily burns on the forest floor across the landscape and does not typically include crown fire (FW-VEG-PPF-DC-4). Desired conditions for ponderosa pine at the mid-scale (10 to 1,000 acres) provides up to 90 percent openness, which could include large open patches (FW-VEG-PPF-DC-12).

The case is similar for the frequent fire mixed conifer vegetation community (14- to 24-year return intervals), where fire also primarily burns on the forest floor and crown fire is not typical (FW-VEG-MCD-DC-3). Desired conditions for frequent fire mixed conifer at the mid-scale (10 to 1,000 acres) also provides up to 90 percent openness, which could include large open patches (FW-VEG-MCD-DC-8). In addition, according to FW-VEG-MCD-DC-1, recently burned or early seral conditions are desired on 9 percent of the landscape.

Fire in the mixed conifer with aspen vegetation community is mixed-severity at its lower elevation with a fire return interval every 50 to 100 years and high severity at its higher elevations with fire return intervals occurring less frequently (FW-VEG-MCW-DC-3). At the mid-scale (10 to 1,000 acres), patch sizes vary, but are frequently hundreds of acres in size with rare disturbances in the thousands of acres (FW-VEG-MCW-DC-8). According to FW-VEG-MCW-DC-1 recently burned, aspen, or early seral conditions are desired on up to 51 percent of the landscape.

Management Approach for Wildland Fire Management-2 describes a strategy of using higher fire intensities than described above at the fine scale (up to 10 acres) as a tool for preventing large, high-severity wildfire in departed forests.

Concern Statement 303 **Patch Size**

Additional plan components that expand the scale of desired fire severities and patch sizes will allow the Carson NF to use fire in a more dynamic role to achieve restoration of ecological integrity.

Associated Comment Letters: 161, 5347

Response

Fire severity and patch size are based on the natural range of variation within vegetation communities and desired distribution of seral states according to the best available scientific information available for the Carson NF (USDA FS Carson NF 2015). The historic range of variation reflects those ecosystem conditions that supported the assortment of wildlife and plant species that existed on the Carson prior to widespread human influence. As such, they reflect ecosystem conditions that will most likely sustain those wildlife and plant species into the future. Restoring and maintaining desired vegetation structure, composition, pattern, and process minimizes the vulnerability of ecosystems to disturbance, such as wildfire, flooding, or climate change. Management that makes the most progress toward desired conditions, including restoring historic fire regimes, produces the greatest resistance, resiliency, and adaptability to climate change and other stressors (Final Plan, Chapter 3, Environmental Consequences for Vegetation Communities and Fuels, Indicators, Ecological Integrity).

Management Approach for Wildland Fire Management-2 describes a strategy of using higher fire intensities than described by the desired conditions for each vegetation community at the fine scale (up to 10 acres) as a tool for preventing large, high-severity wildfire in departed forests and facilitating restoration.

Concern Statement 304 **Wildland Fire, Particulate Matter**

The Forest needs to consider respiratory health when determining the use of prescribed fires. The Draft Environmental Impact Statement, Description of Affected Environment Summary for Air (page 259) states the following: “Wildfires can also be a significant source of particulate matter.” The maximum annual $PM_{2.5}$ emissions in tons is expected to increase by 1244 percent under alternative 2. Therefore, this statement should be revised to “Prescribed fire and resource-managed fires can also be a significant source of particulate matter” since these are a major source of PM_{10} and $PM_{2.5}$.

Associated Comment Letter: 160

Response

The language has been changed to be inclusive of prescribed fires in the FEIS, Description of Affected Environment, Summary section. The term “wildfire” has been replaced with “wildland fire.” The term “wildland fire” includes wildfires (unplanned) and prescribed fire (planned). Fires managed for resource benefit are a type of wildfire (Final Plan, Wildland Fire Management, introduction).

Concern Statement 305 **Wildland Fire, Wilderness**

The forest should consider more recommended wildernesses to reduce the amount of wildfire risk from human ignitions. Wilderness does not hamper fire management in these areas. The forest needs to

consider the best available scientific information regarding wildfires being caused by humans (http://www.smithsonianmag.com/smart-news/study-shows-84-wildfirescaused-humans-180962315/ -xtvHllvrmVbF72Gh.99).

Associated Comment Letters: 168, 174

Response

The Smithsonian article does not make the case for the need of additional wilderness areas to address human ignitions. Most wilderness areas on the Carson NF are in infrequent fire regimes where fuels are not as frequently susceptible to ignition from humans or lightning. The article cited ends with a suggestion from the lead author of the study to conduct "more prescribed burns on forest land to decrease the amount of fuel in the forest after 100 years of fire suppression." Additional recommended wilderness would limit the ability to conduct management activities that would reduce fire risk from human ignitions (FEIS, Wilderness, Environmental Consequences for Wilderness).

Concern Statement 306 **Wildland Fire, Recommended Wilderness**

Management direction within the recommended wilderness areas would reduce the Forest's ability to limit the risk of wildfire.

Associated Comment Letters: 152, 2992, 4845

Response

Effects of recommended wilderness on fire management are analyzed in the FEIS (Chapter 3, Wilderness, Environmental Consequences for Wilderness-Alternative 2): "The RWMAs included in [alternative 2] are areas where wilderness protection (1) would not limit management activities for restoration of fire-dependent ecosystems (ponderosa pine forests and dry mixed conifer) and water sources; and (2) would not limit important ecosystems services that local communities rely on." Additionally, the areas recommended in alternative 2-modified are not adjacent to communities that require protection from wildfires. As discussed in the record of decision, these factors were fundamental to the final wilderness recommendation.

Concern Statement 307 **Wildland Fire, Infrastructure**

Wildland Fire Management Standards FW-FIRE-S-5 needs to be clarified to include transmission and telecommunications infrastructure as part of "investments" and "valuable resources."

Associated Comment Letter: 4896

Response

In the final Plan "infrastructure" has been added to FW-FIRE-S-5. In the final Plan "investments and infrastructure" has been added to FW-FIRE-DC-4.

Concern Statement 308 **Wildland-Urban Interface**

The Forest Plan does not quantify the geographic extent of wildland-urban interface (WUI) areas on the forest. The Forest needs to provide more operational guidance for WUI area delineation, including a map within the Plan and EIS and should quantify the proportion of the area within each ERU where ecological resource conditions could be superseded because another resource concern, such as public safety, is more important in a specific area. The amount of WUI treatments across the Forest would have cumulative effects on other resource desired conditions. This needs to be analyzed in the EIS for all alternatives. The Forest needs to quantify what proportion of the Forest would be managed for reduced structural components such as snag density and downed woody debris in WUI areas and the impact on wildlife habitat.

Associated Comment Letters: 4951, 5574

Response

The wildland-urban interface is not delineated in the final Plan (Chapter 2, Wildland Fire Management section introduction). It is defined as a buffer of at least 0.5 mile around communities, private lands, and other infrastructure that may vary based on topography, fuels, and values at risk. Its location is best mapped at the project level. The alternatives do not specify levels of treatment in the wildland-urban interface and varying levels could occur under any of the alternatives based on future opportunity and need. Desired conditions for forested and woodland vegetation communities include direction to manage the wildland-urban interface at the mid-scale for more open stand conditions with fewer snags and less coarse woody debris compared to the surrounding forest (FW-VEG-SFF-DC-14, FW-VEG-MCW-DC-14, FW-VEG-MCD-DC-15, FW-VEG-PPF-DC-14, FW-VEG-PJO-DC-12, and FW-VEG-DC-PJS-DC-12). These desired conditions do not supersede the desired seral state distribution at the landscape scale or snag and coarse woody debris averages.

An analysis of the distribution of wildland-urban interface relative to each vegetation community has been added to the FEIS (Chapter 3, Wildland Fire Management, Environmental Consequences for Wildland Fire Management Common to All Alternatives).

Forestry - FOR

Concern Statement 309 **Active Management, Support**

General support for active management-commercial logging, thinning, wood gathering, controlled burning. The lack of a timber program effectively reduces the likelihood of reducing catastrophic wildfire over the short term.

Associated Comment Letter: 431

Response

The final Plan supports prescribed fire and timber harvesting including commercial logging, fuel wood collection, and thinning for restoration and fuels reduction. The Carson NF currently operates a timber program and will continue to support timber production under the final Plan (FW-FFP-DC-1 and -4; FEIS, Chapter 3, Environmental Consequences for Sustainable Forestry and Forest Products).

Concern Statement 310 **Mechanical Treatment, Support**

General support for mechanical forest treatment.

Associated Comment Letters: 157, 169, 4885, 4887, 5364

Response

The final Plan supports mechanical forest treatment. Specific objectives for mechanical treatment are included in Ponderosa Pine Forest and Mixed Conifer with Frequent Fire sections (FW-PPF-O-1 and FW-MCD-O-1).

Concern Statement 311 **Mechanical Treatment, Opposition**

Mechanical treatments are naïve and ecologically harmful, ignoring impacts of logging on at-risk species, soils, and other resources. Plan direction also ignores the need to return fire to the landscape.

Associated Comment Letters: 5001, 5347

Response

Direction in the final Plan is based on the best available scientific information that has been determined to be accurate, reliable, and relevant to the issues being considered (Forest Service Handbook 1909.12 0.07). Mechanical treatments in the appropriate context are supported by the best available scientific information (e.g., Fitzgerald 2012; Graham et al. 1999; Noss et al. 2006; Reynolds et al. 2013) and in many cases are considered necessary prior to prescribed fire (Fitzgerald 2012). Mechanical treatment

prior to prescribed fire entry is necessary in part due to excessive fuel loading and altered forest structure resulting from past management, including grazing, timber harvest, and fire exclusion. Specifically, mechanical treatments can address subsequent fire behavior by reducing ladder fuels (those fuels that provide an avenue for surface fire to reach the forest canopy (Fitzgerald 2012; Graham et al. 1999)), reducing canopy bulk density (a measure of aerial fuel loading; the primary factor affecting crown fire behavior), increasing canopy base height (a measure of the distance from surface to lower tree branches; higher canopy base requires relatively higher flame lengths for crown fire initiation), and changing species composition toward more fire-tolerant species such as ponderosa pine and Douglas-fir (Graham et al. 1999). Fire alone may not be applicable in high-severity fire regimes, where high severity from prescribed fire is not likely to be socially desirable. In such cases, mechanical treatments may be preferred to alter potential wildfire behavior, particularly in the wildland-urban interface (Noss et al. 2006).

Alternative 4 in the FEIS represents essentially a fire-only scenario. Under this alternative, a small amount of mechanical treatment would occur, focused on treating fuels to protect communities and other wildland-urban interface areas, but fires would often burn with uncharacteristic intensities in many untreated, frequent-fire forest areas. In those forests, fire effects would be more likely to result in loss of canopy cover and negative soil impacts (erosion, sterility, hydrophobicity) than under other alternatives (FEIS, Chapter 3, Fuels and Wildland Fire Environmental Consequences section). The final Plan uses a combination of prescribed and naturally ignited wildland fire and mechanical treatments to restore departed ecosystems and return natural disturbance regimes (Record of Decision, Decision and Rationale for the Decision).

The final Plan monitoring program will help determine impacts of plan implementation on at-risk species, soils, and other resources. The status of focal species will be monitored (at different intervals depending on resource area) to assess how ecological conditions provide for the diversity of plant and animal communities, within the Forest Service authority (final plan, chapter 4) and consistent with the inherent capability of the planning area as required by the 2012 Planning Rule (36 CFR 219.12(a)(5)).

Concern Statement 312 **Restoration, Inventoried Roadless, Recommended Wilderness**

To the extent that restoration can occur within or adjacent to inventoried roadless areas and recommended wilderness management areas and is consistent with standards and guidelines, we encourage the Carson NF to emphasize such work where necessary to improve habitat conditions and reduce the risk of catastrophic wildfire.

Associated Comment Letter: 5303

Response

As stated in chapter 1 of the final Plan (Purpose of the Plan section), the plan does not prioritize projects or activities. Rather, the Carson NF's priorities fit within the framework set forth in the plan but evolve and are reassessed continually by Forest Service leadership, in collaboration with the public. Management activities within these designated management areas are very limited and generally uncommon; however, restoration activities are allowed and may be considered under the right circumstances as described by Recommended Wilderness Management Area and Inventoried Roadless Area sections in chapter 3 in the final Plan.

Concern Statement 313 **Thinning, Effects**

While thinning might increase grazing opportunities in the short run, the decrease in sustained moisture levels potentially reduces grass and reduces regrowth of forest in the long run.

Associated Comment Letter: 4883

Response

Based on the best available scientific information, we disagree that thinning clearly results in decreased moisture or reduced grass cover over the long term. Thinning in ponderosa pine forests has been shown to increase herbaceous production; specifically, reduction in tree competition from thinning and burning results in improved moisture availability and favorable response by grasses, forbs, and shrubs and clearly increases tree growth and vigor (Covington et al. 1997; Reynolds et al. 2013). Studies have shown that dense tree canopies intercept snow and rain, which sublimates directly back into the atmosphere, reducing the amount of precipitation that falls through to the soil (Simonin et al. 2007). However, overall water balance is also dependent on climatic conditions, understory evapotranspiration, and overstory evapotranspiration, among other factors; Simonin et al. conclude that "Clearly, effects of stand thinning on water balance components in southwestern ponderosa pine forests cannot be easily predicted solely from differences in tree leaf area" (2007, p. 275).

Concern Statement 314 **Thinning, Species**

When thinning, leave cedar, juniper, oak as well.

Associated Comment Letter: 4907

Response

In the final Plan, FW-VEG-DC-7 identifies the vision to have Gambel oak well represented in all age classes where ecologically appropriate. Similarly, FW-PG-PJO-DC-1 and -2 describe the desired future distribution in size and ages of piñon–juniper across the landscape. FW-VEG-PJO-DC-2 specifically states that, in this vegetation community, one or more juniper species is always present in treed seral states. These desired conditions will be used to design thinning in project-level National Environmental Policy Act (NEPA) analysis. Stand-specific prescriptions would specify retention of juniper (cedar) and oak when implementing thinning projects, depending on the site, vegetation community, and project objectives. Retention of juniper and oak is carefully considered for wildlife habitat and resilience within project areas and on the landscape.

Concern Statement 315 **Thinning, Best Available Science**

The Forest Service's current emphasis on aggressive structural manipulation to very low densities, as articulated in GTR-310 and exhibited in current thinning projects on the Carson NF, is an essentially unproven approach that is well outside the current zone of agreement among numerous Forest stakeholders and not applicable to the Carson NF as it was developed using mostly study sites around Flagstaff and the Grand Canyon.

Associated Comment Letter: 5347

Response

We disagree that the forest restoration techniques articulated in RMRS-GTR-310 (Reynolds et al. 2013) are unproven and controversial. The historical range of variability in southwestern frequent-fire forests is well understood (Moritz et al. 2018) and the Carson NF is not an outlier (Johnson and Margolis 2019). The effectiveness of frequent-fire forest restoration techniques has been well documented (Evans 2018; Stephens et al. 2012). The final Plan is consistent with the strong prevailing scientific consensus.

Concern Statement 316 **Timber Harvest, Effects**

The proposed plan and draft environmental impact statement have failed to demonstrate that timber harvest is compatible with ecological desired conditions. Namely, how timber harvest could be carried out in a manner consistent with the urgent need to reduce carbon emissions, and in a manner consistent with the protection of soil, watershed, fish, and wildlife resources.

Associated Comment Letters: 154

Response

All action alternatives have incorporated climate change into the management of resources and have pinpointed desired conditions and objectives that increase the ecological resiliency to predicted changes in climate (FEIS, Chapter 3, Assumptions Common to All Resources section). Restoring and maintaining desired vegetation structure, composition, pattern, and process minimizes the vulnerability of ecosystems to disturbance, such as wildfire, flooding, or climate change. Management that makes the most progress toward desired conditions, including restoring historic fire regimes, produces the greatest resistance, resiliency, and adaptability to climate change and other stressors (FEIS, Environmental Consequences for Vegetation Communities and Fuels, Indicators, Ecological Integrity section). For example, the vegetation management practices outlined under all action alternatives are capable of reducing drought stress and the risk of uncharacteristic fire, both of which are consequences of changing temperature and precipitation regimes combined with uncharacteristically dense and fuel-laden forests. Management practices are also designed to allow for the flexibility to address changing conditions over time (FEIS, Chapter 3, Assumptions Common to All Resources section). This is supported further by the final Plan (e.g., FW-FFP-DC-4 and FW-FFP-S-8), essentially stating that primary objectives of vegetation management activities are to move toward ecological desired conditions.

Concern Statement 317 **Timber Harvest, Sustainability**

The draft plan fails to address sustainability of timber harvest within the forest. The final plan should include language that prohibits clear cutting, other timber sales, and protects streams and watersheds from timber harvest impacts.

Associated Comment Letters: 4847, 4853, 4860, 4883, 5359, 5523, 5673

Response

Effects of timber harvest on riparian features and watershed function are mitigated by adhering to national standards known as best management practices, which are required in the final Plan by WSW-G-1. Additional mitigations for any negative ecological effects of timber harvest are required forestwide by FW-FFP-S-2. Consideration and planning for sustained yield are mandated by the National Forest Management Act of 1976 (16 U.S.C. 1601-1621, 1976, as amended, “Resource Planning” section).The amount of timber that can be removed from the Carson NF annually in perpetuity on a sustained-yield basis is calculated in appendix D of the environmental impact statement (Volume 3, Sustained Yield Limit Analysis). Sustainability of timber harvests is required in the final plan by FW-FFP-S-7.

Concern Statement 318 **Timber Harvest, Resource Protection**

Add traditional use resources and cultural and historic resources to the list of items for protection during timber harvests to FW-FFP-Standard 2.

Associated Comment Letter: 4926

Response

In the final Plan, FW-CR-DC-2 sets forth the vision that human impacts to cultural resources are minimal. Current and future management activities, such as timber harvests, must include practices to minimize or avoid negative impacts to cultural resources. Additionally, Federal statutes including the National Historic Preservation Act (36 CFR 800), Antiquities Act (16 U.S.C. 431-433), Archaeological Resources Protection Act (16 U.S.C. 470 aa et seq.), and Historic Sites Act (16 U.S.C. 461) require Federal agencies to protect and preserve significant historic properties. Eligible historic properties are also protected under 36 CFR 800.1-2, 800.4 and 800.8 and with aid from the FSM 236 Heritage Program Management.

Traditionally used products are also addressed in the Rural Historic Communities section of the Plan. FW-RHC-G-1 makes available traditionally used products on the Carson NF to rural historic communities and these resources need to be considered when planning timber management activities.

Concern Statement 319 **Timber Harvest, Even-Aged Harvest**

Remove the problematic exceptions from FFP-S-6. As written, it would allow the following scenario: In the case of a stand-replacing fire, a clear-cut salvage harvest would be permitted to harvest dead trees over more than 40 acres and would not be required to have 60 days public notice or review by the Regional Forester. It could also allow an unlimited size clear cut in an area determined to have a mistletoe infestation beyond an undefined threshold. This Standard simply cannot be included in the Plan as written as it could bypass all rules for proper public involvement and could usurp other desired conditions. The first part ("Except for harvests that are the result of a large scale disturbance event [e.g., stand replacing fire, wind storm, or insect or disease outbreak],") should be deleted, and the standard should instead clearly state that "Any even-aged regeneration timber harvest operation (e.g., clearcutting, seed tree cutting, shelterwood cutting) will not exceed 40 acres without 60 days public notice and review by the Regional Forester." Mistletoe is a native, naturally occurring organism that has coevolved with ponderosa pine, Douglas-fir, and fire, and returning fire processes to forests will manage mistletoe in a functional balance without necessitating cutting of old and large trees and destroying limited old growth and mature forest structure.

Associated Comment Letter: 5347

Response

FW-FFP-S-6 does not bypass any rules for public involvement or usurp other desired conditions in the final plan. FW-FFP-S-6 limits the size of even-aged regeneration timber harvests. Per the National Forest Management Act of 1976, this type of limit on "clearcutting, seed tree cutting, shelterwood cutting, and other cuts designed to regenerate an even-aged stand of timber…" "shall not apply to the size of areas harvested as a result of natural catastrophic conditions such as fire, insect and disease attack, or windstorm…." (16 U.S.C. 1600(g)(3)(F)(iv)) The standard does not allow the examples presented in this concern where those practices would not be consistent with other plan components, including for example FW-VEG-PPF-DC-7, which defines desired thresholds for mistletoe.

Concern Statement 320 **Timber Harvest, Waterbodies**

The All Vegetation Communities Standards (FW-VEG-S) should add the following as a standard: Timber will be harvested only where it can be done in a manner that includes necessary protections for streams, streambanks, shorelines, lakes, wetlands, and other bodies of water.

Associated Comment Letters: 4951, 5347, 5574

Response

The final Plan includes FW-FFP-S-2, which limits timber harvest activities to areas where watersheds will not be irreversibly damaged and requires that protection be provided for streams, streambanks, shorelines, lakes, wetlands, and other waterbodies. Additionally, FW-WSW-G-1; FW-WSW-RMZ-G-1, -2, -3, and -4; FW-WSW-RMZ-STM-S-1 and -2; FW-WSW-RMZ-WB-S-1 and -2; and FW-WSW-RMA-WR-1 and -3 outline measures to protect water resources that must be followed for all management actions, including those related to timber harvest activities.

Concern Statement 321 **Timber Harvest, Steep Slopes**

Logging on steep slopes should be prohibited. Logging equipment would erode soils and impact water quality.

Associated Comment Letters: 162

Response

In the final Plan, Standard FW-FFP-S-2 states that timber harvest shall only occur where soil, slope, and watersheds will not be irreversibly damaged and that protection must be provided for streams, streambanks, shorelines, lakes, wetlands, other waterbodies, fish, wildlife, recreation (including trails), and aesthetic resources. FW-SOIL-G-2 requires that management activities, including timber harvesting

on steep slopes, be designed to minimize short- and long-term impacts to soil resources and soil conservation practices be developed if disturbance cannot be avoided. Additionally, FW-WSW-G-1, FW-WSW-RMZ-G, FW-WSW-RMZ-STM-S-1 and -2, FW-WSW-RMZ-WB-S-1 and -2, and FW-WSW-RMA-WR-1 and -3 address measures that must be followed for all management actions to protect water resources.

The National Environmental Policy Act (NEPA) requires the Carson NF to carefully assess the environmental effects of proposed management actions. When a new logging project is proposed, a site-specific NEPA environmental analysis is completed. An interdisciplinary team of technical experts evaluate the short-term and long-term effects of the logging activity based on site conditions, proposed harvest method, and equipment to be used for the timber harvest. Best management practices, and if necessary, design criteria, are developed through the NEPA process for site-specific project areas to address environmental concerns resulting from logging on steep slopes.

Concern Statement 322 **Timber Harvest, Slope, Stream Buffers**

The final plan needs to address specific resource protection concerns regarding timber harvest such as maximum allowable slope and stream buffers.

Associated Comment Letter: 5347

Response

In the final Plan, FW-FFP-S-2 states that timber harvest shall only occur where soil, slope, and watersheds will not be irreversibly damaged and that protection must be provided for streams, streambanks, shorelines, lakes, wetlands, other waterbodies, fish, wildlife, recreation (including trails), and aesthetic resources. Although this does not establish slope limitations or identify specific restrictions for certain types of soils, watersheds, etc., FW-WSW-RMZ-G-2, -3, and -4 require management activities, including timber harvest, to move riparian management zones to desired conditions, protect riparian function, and protect water quality. Additionally, FW-WSW-RMZ-G-1 requires that riparian management zones be defined by site-appropriate delineation of the area or that a minimum buffer of 100 feet be established from the edge of all perennial streams and lakes.

Site-specific National Environmental Policy Act (NEPA) planning projects would identify soils too sensitive for harvest; weather conditions and seasons appropriate for harvest based on soil types; watersheds where timber harvest should be limited to mitigate damage; appropriate buffer widths along streams; and inconsistencies with desired conditions for fish, wildlife, plants, and/or at risk species; and identify areas where prescribed fire would be used as a tool in lieu of timber harvest to meeting desired conditions. NEPA planning efforts and silvicultural prescriptions written during the implementation phase would identify protection measures for recreational trails.

Effects of timber harvest on riparian features and watershed function are mitigated by adhering to national best management practices, which are required in the final Plan by FW-WSW-G-1. Best management practices are methods, measures, or practices selected by an agency to meet its nonpoint source control needs; they are applied before, during, and after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters (36 CFR 219.19).

Concern Statement 323 **Timber Harvest, Woody Debris**

On every thinning, logging or salvage harvest that takes place on sloped terrain (wherever there is slope in excess of 10 percent), woody debris should be laid cross slope within these gullies to capture sediment and stall water on the landscape, so it has a chance to infiltrate. Logs should be dispersed adequately on the slope to avoid cumulative fuel loading; they should be in complete contact with the ground to capture downslope detritus and water migration, and as close to horizontal across slope as is achievable.

Associated Comment Letter: 4845

Response

Depending on specific site and objectives, this technique may not always be feasible or necessary. Placing woody debris cross-slope and in gullies has been added to the final Plan as Management Approach for Sustainable Forestry and Forest Products-13.

Concern Statement 324 **Post-Fire Snags**

During post-fire recovery, the burnt snags should be brought to the ground as soon as is practically possible, to help anchor the soil that is likely to wash aggressively with the first rainstorm and create debris flows.

Associated Comment Letter: 4845

Response

Post-fire rehabilitation techniques are applied on a site-specific basis based on location, burn severity, and other factors. In many cases leaving burned snags standing may be desirable from a habitat perspective. A management approach has been added to the final Plan that describes a strategy of placing woody debris cross-slope to capture sediment and slow runoff (Management Approach for Sustainable Forestry and Forest Products-13).

Concern Statement 325 **Thinning, Burning, Drought**

If the forests are burnt and thinned, how do we know we will get them back, we could once again be at the edge of an extended dry spell, nobody knows. Look at dendrochronology and the numerous droughts recorded therein.

Associated Comment Letter: 5325

Response

Desired conditions in the final Plan were developed based on a broad range of scientific publications covering topics including forest ecology and restoration principles. The desired conditions are often similar to the reference conditions outlined in scientific publications, which have sustained forests through past stressors, including drought (FEIS, Chapter 3, Environmental Consequences for Vegetation Communities and Fuels section).

Prescription development considers resilience on the landscape and incorporates potential impacts of climate change and effects of extended dry spells. Mechanical treatments and prescribed fire are necessary to reduce excessive fuels and stand densities, reducing competition between trees already stressed due to limited resources. Forest Service Manual 2472.6 describes factors to consider when establishing forest vegetation following a natural disturbance (such as fire). When harvest treatments are applied, artificial or natural regeneration treatments should be prescribed. Natural regeneration is the establishment of a plant or plant age class from natural seeding, sprouting, or suckering.

Concern Statement 326 **Clearcutting, Opposition**

The final plan should ban clearcutting and only permit regenerative timber practices.

Associated Comment Letters: 4847, 5620

Response

Even-aged management by clearcutting is appropriate in specific situations and permitted by the final plan in FW-FFP-S-4 and -6. For instance, Management Approach for Aspen-2 describes a strategy of using small patch clearcuts to stimulate aspen sprouting and avoid widespread mortality by promoting a variety of age classes as suggested by FW-VEG-DC-12. Insect and disease management may also warrant clearcutting, examples include salvage harvest (final plan FW-FFP-S-6), prevention or maintenance of susceptible forest types such as patch clearcuts in spruce fir forest where young age classes are not hosts to spruce beetle, or spread mitigation by removing susceptible host species. The

National Forest Management Act of 1976 (16 U.S.C. 1601-1621, 1976, as amended, "Reforestation" section) mandates reforestation when harvest or a disturbance event reduces forest cover to an unstocked or understocked condition.

Concern Statement 327 **Monoculture, Opposition**

Do not do any treatments that will result in a monoculture.

Associated Comment Letter: 4907

Response

FW-VEG-DC-1 in the final Plan calls for a mosaic of vegetation conditions, densities, and structures at a landscape level (1,000 acres or greater). The mosaic occurs at a variety of scales across landscapes, reflecting the disturbance regimes that naturally affect the area. FW-VEG-DC-8 states that representation of all age classes of deciduous trees is desired on appropriate ecological settings, providing habitat for wildlife and rare plants. The Sustainable Forestry and Forestry Products (FFP) section in the final Plan emphasizes creating and maintaining uneven-aged forest conditions, as well as managing for desired species composition.

Desired conditions for all forest types describe multiple seral stages, moving away from monocultures. To meet desired conditions for uneven-aged management, small groups (openings) may be created at the fine-scale and may appear to be a monoculture, but at the mid-scale and landscape level, openings provide diversity through recruitment of new age classes.

Concern Statement 328 **Restoration Approach, Support**

We appreciate that the Draft Plan calls for "consider designing management activities to restore and maintain characteristic levels of: 1. Large, old ponderosa pine trees with reddish-yellow, wide platy bark, flattened tops, moderate to full crowns, and large drooping or gnarled limbs (e.g., Thomson's age class 4, Dunning's tree class 5, or Keen's Tree Class 4, A & B). 2. Mature trees with large dwarf mistletoe induced witches' brooms suitable for wildlife nesting, caching, and denning, except where retaining such trees would prevent the desired development of uneven-aged conditions over time. 3. Large snags, partial snags, and trees greater than 18 inches diameter (DBH) with broken tops, cavities, sloughing bark, lightning scars greater than 4 inches wide, and large stick nests. d. Gambel oak greater than 8 inches diameter at root collar."

Associated Comment Letter: 5347

Response

The final Plan includes the management approaches for all vegetation communities (Chapter 2, Vegetation Section).

Concern Statement 329 **Log Landing Location**

Prohibit log landings in wetlands, riparian areas, or critical habitat. FW-FFP-G-3 should be elevated to a standard and changed to require that log landing areas shall be located at least 300 feet outside of designated sensitive areas (e.g., riparian areas, wetlands and natural meadows, archeological sites, threatened and endangered critical habitat, and along Scenery Management System Concern Level I roads).

Associated Comment Letter: 5347

Response

In the final Plan, FW-FFP-G-3 requires that log landings be located so as to protect or mitigate impacts to sensitive resources, by generally avoiding areas especially sensitive to ground disturbance. On rare occasions, log landings may be located in areas of concern, for instance, if seasonal timing allows for treatment with minimal disturbance (e.g., frozen soils) or if the area is the only location that can be used

due to steep terrain. Best management practices and design criteria developed during National Environmental Policy Act environmental analysis for site-specific project areas address these concerns.

Concern Statement 330 **Timber Processing Facilities**

The Forest Service should work with partners, local and state government to build facilities to process harvested timber.

Associated Comment Letters: 5364, 5489

Response

The Final Plan includes FW-PART-DC-1, -2, and -3 which directs the Carson NF to partner and collaborate with various entities to increase capacity for managing forest resources, promoting stewardship, and find solutions to ecological and societal issues across ownership boundaries. The Carson NF believes that partnering with others across boundaries will lead to ecological, social, and cultural projects that benefit the greater forest community.

New language added to Sustainable Forestry and Forest Products Management Approach-3 clarifies that the Carson NF will consider working with partners to expand the timber industry to appropriately scaled and sustainable levels:

> When planning and implementing projects, consider working collaboratively with Federal, State, and local governments; federally recognized tribes; and private landowners to promote integrated ecological and social-economic goals of harvesting forest products through the use of mechanisms such as Collaborative Forest Restoration Projects, Tribal Forest Protection Act, youth programs, and stewardship contracting authorities to expand industry to appropriately-scaled and sustainable levels.

Concern Statement 331 **Wood Product Uses**

Wood fuels should be turned into electricity, digested into fuel, chemicals, pharmaceuticals and more.

Associated Comment Letter: 167

Response

The final Plan addresses forest products, including wood for timber, biomass, fuelwood, and special forest products; for instance, it addresses the desire for biomass technology in FW-FAC-DC-2. The potential use of wood products as biomass or other products would be planned and conducted at the project level.

Concern Statement 332 **Salvage Harvesting**

Support for salvage harvesting when its execution includes stabilizing the soils in the burnt over area.

Associated Comment Letter: 4845

Response

FW-FFP-DC-5 underscores that harvesting dead and dying trees for economic value is consistent with the desired conditions of soil productivity. Salvage logging impacts are similar to those of other vegetation management practices. In the final Plan, FW-SOIL-G-1 stipulates that ground-disturbing management activities should be designed to minimize short- and long-term impacts to soil resources; salvage logging projects would need to adhere to this guideline. Additionally, FW-FFP-S-2 states that timber harvest shall only occur where soil, slope, and watersheds will not be irreversibly damaged, and that protection must be provided for streams, streambanks, shorelines, lakes, wetlands, other waterbodies, fish, wildlife, recreation (including trails), and aesthetic resources.

Concern Statement 333 **Standing Dead**

Support for objectives, standards, and guidelines to remove (where appropriate) dead standing trees in piñon-juniper woodland that reduce habitat quality to improve groundcover conditions through evaluation of road use/densities.

Associated Comment Letter: 4887

Response

Road density was analyzed through a separate travel management analysis completed in 2010, and is not included in the final Plan. The final Plan sets the desired condition for snags in piñon juniper woodlands at two snags per acre at the landscape scale (FW-VEG-PJO-DC-8). The density of snags may be lower in the wildland-urban interface to reduce fire intensity and assist in the control of fire (FW-VEG-PJO-DC-12).

Concern Statement 334 **Suitable Timber, Restoration**

Increase the number of acres suitable for timber production in order to facilitate restoration.

Associated Comment Letter: 5422

Response

The determination of suitable timber follows the timber requirements defined by the National Forest Management Act of 1976 (16 U.S.C. 1600) and the process required by the 2012 Planning Rule (FSH 1909.12 section 61). Appendix D of the FEIS details the requirements and the Carson's timber suitability analysis. A finding that timber is not suitable for timber production does not imply that forest restoration is not appropriate or prohibited (FW-FFP-S-1). Management activities to meet resource objectives other than timber production are permitted on all lands, "suitable" and "not suitable."

Concern Statement 335 **Suitable Timber, Carbon**

Base suitable timber acres on carbon sequestration impacts.

Associated Comment Letter: 154

Response

The determination of suitable timber follows the timber requirements defined by the National Forest Management Act of 1976 (16 U.S.C. 1600) and the process required by the 2012 Planning Rule (FSH 1909.12 section 61). Appendix D of the FEIS details the requirements and the Carson's timber suitability analysis. A finding that timber is suitable does not constitute a decision to apply any particular treatment to that area and itself has no impact on carbon sequestration.

Concern Statement 336 **Suitable Timber, Spruce Fir Forest**

Spruce Fir Forest (VEG-SFF) should be removed from the suitable timber base as past harvesting has demonstrated inability to achieve adequate restocking.

Associated Comment Letter: 4851

Response

The National Forest Management Act of 1976 (16 U.S.C. 1601-1621, 1976, as amended, "Resource Planning" section) requires the agency to determine the suitability of National Forest System lands for timber production and has specific requirements for timber suitability analysis in land management plans. The agency makes a distinction between timber harvest as a resource use (timber production) and timber harvest as a management tool to achieve desired conditions (2012 planning rule (36 CFR 219.11(a)) and directives (Forest Service Handbook 1909.12 61-61.3). Timber suitability was determined for each alternative. The specific process and criteria used are detailed in the FEIS, Volume 3, Appendix D: Timber Suitability. It should be noted that harvest methods other than clearcutting, which do not

reduce forest cover to an unstocked or understocked condition, are viable options that do not initiate the restocking requirement.

Concern Statement 337 **Suitable Timber, Recreation Opportunity Spectrum**

The Carson should consider establishing a desired roaded modified ROS setting/class where timber production is intended. roaded natural/road modified ROS settings, within national scenic trail and wild and scenic river corridors, would lead to management actions that would substantially interfere with the nature and purposes of national scenic and historic trails.

Associated Comment Letter: 163

Response

Timber suitability is not related to location of or distance from roads, nor does it necessarily mean there will be a timber harvest on the land. Rather, suitability has to do with soils and how lands are designated (see FEIS Volume 2, Appendix D). FW-FFP-S-1, 2, and 8 define how resources will be protected during harvests. Wild and scenic rivers with scenic and recreation are considered suited, as there is nothing in scenic or recreational classifications that precludes timber suitability, but primitive and semi-primitive non-motorized ROS settings are not suited to timber production (see FEIS Volume 2, Appendix D, Table 27).

Concern Statement 338 **Suitable Timber, Quotas**

The suitable timber analysis would benefit from clarification of the relationship between suitable acres for timber production based on analysis within the Plan, and the national timber quotas that may be generated independent of this evaluation. The EIS should include language that strongly encourages application of site-specific data and analyses to determine prescriptions and quantities of timber available for harvest on the Forest, rather than having timber operations simply represent an externally determined apportionment of national-level directives.

Associated Comment Letters: 4951, 5574

Response

Clarification of the relationship between suitable acres for timber production and any future quotas or timber volume goals has been added to Volume 3, Appendix D: Timber Suitability, of the FEIS. Harvest of timber on National Forest System lands occurs for many different reasons, including ecological restoration; community protection in wildland-urban interfaces; habitat restoration; protection of municipal water supplies; and production of timber, pulp for paper, specialty woods for furniture, and fuel as a renewable energy source-all of which can support local businesses and employment. While timber harvest often occurs on lands classified as suitable for timber production, many of the forest products (timber, firewood, etc.) generated on the Carson NF have been, and will continue to be, produced as a result of restoration and fire protection activities that occur both on lands classified as suitable and unsuitable for timber production. The quantification of suitable timber lands neither commits lands to timber production nor commits the national forest to any future volume of timber sale.

The final Plan prescribes no specific treatments nor quantities; proposed and possible actions, including timber sale quantities were estimated based on each alternative to compare the alternatives' potential effects. Details such as the specific amount or type of treatment, frequency, location, magnitude, or numbers of actions would be determined at the project level, based on site-specific conditions (Forestwide Management section of the final plan under Appendix B: Proposed and Possible Actions, Timber Management). Site-specific data are analyzed during silvicultural prescription development, where data are obtained for all pertinent stand attributes during stand examination, resulting in a diagnosis of conditions, and ultimately a detailed management prescription (Forest Service Handbook 2409.17 8.1, Region 3 Supplement).

Concern Statement 339 **Suitable Timber, Alternatives**

Appendix D should clarify the source of differences between total suitable timber acreages calculated under the preferred action (alternative 2) and the no-action alternative or 1986 plan. It appears that the primary difference in suitable acres between alternatives 1 and 2 is the amount of proposed wilderness. However, the terminology for lands removed from consideration due to inconsistency with plan direction differs between the current and previous (1986) plans, so it is difficult to determine if these acreages can be compared directly.

Associated Comment Letter: 4951

Response

The timber suitability determination in the 1986 plan followed a different process for identifying lands that may be suitable; mapping was less accurate and less detailed, and the sequence by which lands were removed during the previous process differed from the sequence by which they were removed during the current process (1986 Plan, Section H, Table H-2). The 1986 process resulted in 487,898 acres that may be suitable versus 465,350 acres using the current process (FEIS, Volume 3, Appendix D, Lands that may be Suitable for Timber Production).

The updated mapping of lands that may be suitable (465,350 acres) was used to calculate suitable lands for all five alternatives (FEIS, Volume 3, Appendix D, Tables 28-32). Alternative 2 removes recommended wilderness and grassland maintenance management areas from suitable timber based on plan components, neither of which are included in alternative 1. Alternative 1 removes different management areas from suitable lands based on 1986 plan direction including potential recreation areas, existing recreation areas, botanical areas, zoological areas, and the Valle Vidal (which was not addressed by the 1986 plan).

Concern Statement 340 **Old Growth, Tree Retention**

Add the language “Forest restoration projects will retain old trees and old growth characteristics where they exist” or “Old and large trees should be retained when designing forest restoration projects” to forest plan components. We request that any subsequent NEPA document contain plan components that emphasize the protection and retention of old (over 150 years) and large (over 16 inches) trees in all forested ERUs.

Associated Comment Letters: 4883, 5347, 5673

Response

FW-VEG-DC-4 describes old growth as well distributed, dynamic in nature, and shifts on the landscape over time, as a result of succession and disturbance. In this vision, old-growth attributes (e.g., multistory structure, large old trees with sloughing, exfoliating bark, snags, large downed logs, and other indicators of decadence) are present in all forest and woodland vegetation communities and provide habitat for associated species. FW-PPF-G-1 indicates that vegetation treatments should be designed such that structural stages and age classes are proportionally represented to assure continuous recruitment of old-growth characteristics at the appropriate scale over time. Desired Condition-1 for other vegetation communities defines the desired distribution among structural stages and size class.

Management Approach-1 for All Vegetation Communities in the final Plan also outlines considerations for designing management activities to restore and maintain characteristic levels of large, old ponderosa pine trees, mature trees with large dwarf mistletoe induced witches’ brooms suitable for wildlife, large snags, partial snags and trees greater than 18 inches diameter, Gambel oak greater than 8 inches diameter at root collar, and bristlecone pine.

Diameter caps may enhance ecosystem components, such as increased density of larger-diameter trees, but may negatively affect many non-tree components of forested areas (Abella et al. 2006).

Concern Statement 341 **Old Growth, Tree Retention**

The Plan should include an old and large tree retention strategy, similar to the one developed for the Four Forest Restoration Initiative (4FRI) for ponderosa pine and mixed conifer forests, and consider extending the strategy to encompass higher elevation forests as well.

Associated Comment Letter: 5347

Response

FW-VEG-DC-4 describes old growth as well distributed, dynamic in nature, and shifting on the landscape over time, as a result of succession and disturbance. In this vision, old-growth attributes (e.g., multistory structure, large old trees, large trees with sloughing, exfoliating bark, snags, large downed logs, and other indicators of decadence) are present in all forest and woodland vegetation communities and provide habitat for associated species. FW-VEG-PPF-G-1 provides guidance on designing vegetation treatments to proportionally represent structural stages and age classes to assure continuous recruitment of old-growth characteristics across the landscape over time. FW-VEG-MCD-DC-4 describes old-growth structure as occurring throughout the landscape, generally in small areas as individual old-growth components or as clumps of old growth. Old growth may be intermixed with groups of younger trees or distinct groups of mostly old trees. Old-growth structure generally occurs over large areas as stands or patches for FW-VEG-SFF-DC-3.

The large tree retention strategy for the 4FRI suggested establishing 16-inch diameter caps. Diameter caps may enhance ecosystem components, such as increased density of larger-diameter trees, but negatively affect many non-tree components (Abella et al. 2006).

Concern Statement 342 **Old Growth, Distribution**

Almost every mention of old trees in the draft plan is in the desired conditions, which inaccurately describe old growth as “clumps” or “individual old-growth components.”

Associated Comment Letter: 5347

Response

Desired conditions describe a vision of the characteristics toward which the Carson NF would manage the land and resources (final plan, chapter 1, Plan Framework section). Any project that would not maintain or move toward desired conditions for old growth would need to be modified. In the final Plan, FW-VEG-DC-4 describes old growth in time and space with attributes other than clumps or individual components (e.g., multistory structure, large old trees, large trees with sloughing and exfoliating bark, snags, large downed logs, and other indicators of decadence). Management Approach for All Vegetation Communities-1 in the final Plan describes old-growth characteristics of individual trees that would meet FW-VEG-DC-4. The FEIS describes old growth holistically as an ecological function, defined not just by the presence of old trees, but also snags, dead and downed large woody debris, and structural variability (FEIS, Chapter 3, Vegetation Communities and Fuels section). Though the final Plan references clumps and individual components, there is also recognition of a wider spectrum of old-growth characteristics

Concern Statement 343 **Fuelwood**

The final plan should add a standard that requires that wood generated by management activities be provided to the local communities for fuelwood collection.

Associated Comment Letters: 4853, 4926, 5620

Response

Plan components that address fuelwood availability can be found in the Rural Historic Communities (RHC) and Sustainable Forestry and Forest Products (FFP) sections, all of which apply forestwide. In the final Plan, FW-RHC-DC-3 describes forest products as available to rural historic communities.

Additionally, Sustainable Forestry and Forest Products Management Approaches-4, -5, -6, and -13 suggest ways for making fuelwood available to the public.

Concern Statement 344 **Fuelwood Permit Sales**

The final plan should allow for fuelwood permits to be sold online.

Associated Comment Letter: 4926

Response

The Carson NF fuelwood program is required to follow national guidance and use agency-approved software and procedures for the sale of fuelwood. No procedures currently exist that allow the Carson NF to sell fuelwood permits online. The Forest Service Washington Office is working on developing an online sale platform that will improve availability of fuelwood products to the public.

Concern Statement 345 **Fuelwood, Cost**

There should be no charge for fuelwood.

Associated Comment Letter: 169

Response

The National Forest Management Act of 1976 (16. U.S.C. 472a, section 14(a), authorizes the Secretary of Agriculture to sell trees, portions of trees, and other forest products at not less than appraised value (FSM 2401.1, paragraph 8). Forest Service Manual (FSM) 2400, Chapter 2430, sec. 2431.31c., establishes minimum charges for small sales. The minimum charge for commercial and personal-use sales, including other forest products is $20 per transaction, except that the minimum charge for personal use of a Christmas tree is $5 per transaction. The minimum rate for personal-use firewood is $5 per hundred cubic feet with a minimum charge of $20 per transaction regardless of the permit or tag form used.

FSM 2400, chapter 2460, sec. 2462.01 states that individuals or organizations may receive free wood from national forests under the specific conditions set forth in 36 CFR 226.5b and 35 CFR 223.6. FSM 2462.2, Item 8 pertains to firewood and states that free use of firewood should be authorized only when objectives (FSM 2462.02) are unlikely to be met through use of charge permits. FSM 2462.02 states that the Forest Service provides free firewood and other forest products for personal use to aid in the protection and silvicultural improvement of individual national forests when these needs cannot be met using charge permits.

Concern Statement 346 **Fuelwood, Size**

Size of firewood available is important. At least 6- to 7-inch logs would be preferred.

Associated Comment Letter: 5668

Response

Fuelwood offered through the green fuelwood program and material that has been thinned through service contracts or grants and agreements range from 5 to 12 inches in diameter. Conifer trees offered through the green fuelwood program and dead and down fuelwood areas resulting from thinning projects average 7 to 8 inches in diameter. Trees as small as 5 inches in diameter at breast height are also marked in the process to meet project and resource objectives. The removal of smaller-diameter material assists with slash management, reducing activity fuels, and meeting project objectives.

Region 3 (Southwestern Region) utilization standards can be found in Forest Service Handbook (FSH) 2409.12, chapter 10, sec. 12., Exhibit 01. Guidance is to use standards as shown for sawtimber, non-sawtimber, biomass and fuelwood. Regional Forester approval is required for different utilization standards.

Concern Statement 347 **Forest Products, Unauthorized Removal**

In FW-FFP-DC-6, replace theft with the term "unauthorized collection" with a description of what is meant by unauthorized collection in parentheses.

Associated Comment Letter: 4926

Response

Unauthorized collection would include collection of forest products that do not require authorization, such as herbs for personal use. That broad definition would expand the prohibition under this desired condition beyond what the Carson NF intends. Generally, Forest Service rules and regulations use the term theft. Forest Service Handbook (FSH) 2409.12b, Chapter 20 – Measurements is specifically titled "Timber and Forest Products Trespass/Theft Procedures Handbook." Section 20 – Requirements for Theft or Trespass Measurements establishes procedures for measurements related to theft and trespass, including forest products other than timber under Item 8. Willful cutting or removal is also referred to as theft in parentheses in FSH 5309.11, chapter 20, sec. 23.33.

However, Forest Service Manual (FSM) 5332.1 refers to similar actions as "unauthorized cutting or removal" of timber or other forest products from National Forest System lands. To clarify what is meant by theft, FW-FFP-DC-6 in the final plan uses this manual language instead.

Concern Statement 348 **Forest Products, Permitting**

Add as a standard to FW-FFP-S: Collection of the culturally significant forest products of piñon nuts, trementia sap, chapulin berries, and medicinal plants, in small quantities for personal and traditional use shall not require a permit.

Associated Comment Letter: 4926

Response

Rural Historic Communities Desired Conditions-1 and -3 demonstrate that the Carson NF is committed to providing forest products for traditional, subsistence, and culturally based activities. Forest Service Handbook (FSH) 2409.18, chapter 80, sec. 87.1 requires that special forest products be sold in a manner that maintains these products on a sustainable basis (36 CFR 223.219). However, FSH 2409.18, chapter 80, sec. 87.51 allows free use to be granted to individuals (including customary and traditional uses by local residents for direct personal or family consumption) if supply is not limited and product value is low. Individuals are prohibited from selling or exchanging material harvested or gathered under free use. A free-use permit is required for gathering more than minor amounts of forest products intended for personal use (Permit form FS-2400-8). Indian Tribes with reserved rights retain their historical rights to harvest forest products without a permit.

Concern Statement 349 **Seed Collection**

The plan needs to assure access to conifer seed collection for reforestation and ornamental cultivation and assure that genetic resources will remain available from the Carson.

Associated Comment Letter: 109

Response

In the final Plan, FW-FFP-DC-7 directs management to make available a stock of native seed to supply reforestation needs. Forest Service policy also provides direction on maintaining adequate seed inventory by species, seed/breeding zones, and elevation bands; verification and labeling of all seed purchased and harvested; seed storage; seed testing; disposal of low-quality and surplus seed; and construction and closure of seed extractories (Forest Service Manual (FSM) 2474.03). FSM 2474.04b authorizes the regional forester to approve the sales of forest tree seed to domestic public agencies. FSM 2475 provides direction for the provision of genetically diverse, well-adapted plant materials for vegetation

management activities, and for the restoration of sites disturbed by natural processes, climate change, or human activities.

Lands - LND

Concern Statement 350 **Forest Service, Authority**

The Forest Service has no authority to manage lands within the original boundaries Santa Barbara Land Grant under the 1905 U.S. Patent. The authority to which the Forest obtained these lands is clouded and therefore can be contested and should remain with the Santa Barbara Land Grant.

Associated Comment Letters: 5782, 5785

Response

The Carson NF manages public lands in accordance with existing laws, policies, and regulations including the Federal Lands Policy and Management Act of 1976 (Public Law. 94-579). Under this act, it is the policy of the United States that, "the Congress exercise its constitutional authority to withdraw or otherwise designate or dedicate Federal lands for specified purposes" and that "goals and objectives be established by law as guidelines for public land use planning, and that management be on the basis of multiple use and sustained yield unless otherwise specified by law" (43 U.S.C. §1701). Forest Service land and resource management plan development is governed by the National Forest Management Act of 1976 (P.L. 94-588) and the 2012 Planning Rule (36 CFR 219). The final Plan is focused on working with the public, including land grants and other historic communities in particular, to find mutually beneficial approaches and to build respectful, collaborative relationships (Final Plan, Chapter 2, Northern New Mexico Traditional Communities section and subsections; Partnerships section).

Concern Statement 351 **Land Conveyance**

The Forest Plan should provide direction allowing for small, unmanageable tracts of land within the Carson NF to revert back to land grant heirs. The Forest Plan should provide direction that the FS will work with existing authorities to convey land or provide block easements for community land grants associated cemeteries, and other culturally significant sites (i.e., moradas, chapels, churches). The U.S. Forest Service should prove the they have the legal right to manage the common lands within the original boundaries for which a U.S. Patent issued in 1905.

Associated Comment Letters: 4885, 4926, 5720

Response

The Forest Service has limited land conveyance authorities; of those authorities, none are specific to convey land directly to land grant heirs (Exchange of National Forest System land Title 36, Code of Federal Regulations, part 254, subpart A (36 CFR part 254, subpart A). Sales of land provide for the conveyance of specific and limited categories of land to relieve or to resolve title conflicts and certain management problems (see FSH 5509.11, ch. 20). These authorities are part of laws, regulations, and policies, so they do not need to be repeated in the final plan. A guideline was added to the Lands section of the final Plan to address these concerns: Land adjustments should consolidate and improve management efficiency of resources through real estate transactions, including sales, purchases, exchanges, and conveyances (FW-LAND-G-4). Additionally, language was added to Management Approach for Lands-4 that specifies that prioritization of land acquisition or conveyance be based on improving management efficiency and/or serving the broader needs of the community within the scope of the authorities proved for these types of transactions.

Concern Statement 352 **Land Conveyance**

The National Forest land should be returned to the indigenous communities that it was taken from.

Associated Comment Letter: 5073

Response

The Forest Service has limited land conveyance authorities (Exchange of National Forest System Land Title 36, Code of Federal Regulations, part 254, subpart A (36 CFR part 254, subpart A). Sales of land provide for the conveyance of specific and limited categories of land to relieve or to resolve title conflicts and certain management problems (see FSH 5509.11, ch. 20). These authorities are part of laws, policies, and regulations, and thus do not need to be repeated in the final Plan. Management Approach for Lands-4 has been added to the final plan to prioritize land acquisition or conveyance based on improving management efficiency and/or serving the broader needs of the community within the scope of the authorities proved for these types of transactions.

Concern Statement 353 **Land Acquisition**

The Forest Plan should include language that allows for working with partners and national and local conservation groups to acquire privately owned wildlife habitat within or immediately adjacent to the national forest, when it becomes available for purchase. Opportunities should exist for land exchanges or to obtain conservation easements to secure more wildlife habitat for the future.

Associated Comment Letters: 4887, 4925

Response

A guideline was added to the Lands section in the final Plan to address these concerns: “Land adjustments should consolidate and improve management efficiency of resources through real estate transactions, including sales, purchases, exchanges, and conveyances” (FW-LAND-G-4). Language was added to Management Approach for Lands-4 that specifies that prioritization of land acquisition or conveyance be based on improving management efficiency and/or serving the broader needs of the community within the scope of the authorities proved for these types of transactions.

An additional, related management approach was added (Management Approach for Lands-5), stating: Work with interested stakeholders to identify suitable parcels for acquisition and explore funding opportunities, grant opportunities, and private financing.

Concern Statement 354 **Lands Special Uses**

Add a guideline to RHC: To issue and maintain special use permits (i.e., cemeteries, dumps, community water, wastewater, community centers) to community land grant associated forest dependent communities which are surrounded by Federal lands and which have little or no vacant land for community facilities and uses.

Associated Comment Letter: 4926

Response

The introduction to the Special Uses section in the final Plan discusses lands special use authorization and lists some examples of permitted uses on the Carson NF; community water systems have been added to this list. Any special use permit would be evaluated on a case-by-case basis, consistent with FW-SU-DC-1 and -2. Several cemeteries are currently permitted on the Carson NF. New cemeteries, liquid waste disposal areas, and solid waste disposal sites are not permitted on National Forest System lands (FSH 2709.11 section 19, exhibit 3).

Management Areas- Eligible Wild and Scenic Rivers - WSR

Concern Statement 355 **Public Comment**

It is imperative that any proposal to remove existing wild and scenic river eligibility be carefully documented, and that documentation must be subjected to public review and comment before final eligibility determinations are made. The draft eligibility evaluation falls short in this regard.

Associated Comment Letters: 4881, 5505

Response

Three versions documenting the draft eligibility evaluation have been made available for public review and comment, with each subsequent version incorporating public input. The draft process and evaluation criteria document was first released in April 2017. The draft evaluation was released in September 2017. An updated version of the draft evaluation was released in April 2019.

Concern Statement 356 **Documentation**

The Forest Service should both provide adequate documents for its eligibility findings as well as modify those findings in accordance with our comments.

Associated Comment Letter: 4881

Response

The evaluation of wild and scenic river eligibility is documented in the Wild and Scenic River Eligibility Evaluation, which incorporates public comment as appropriate.

Concern Statement 357 **Documentation**

The draft wild and scenic eligibility evaluation should be improved—and then presented for more effective public review and comment—with the inclusion of individual narrative sections describing particular details of the river-related values being evaluated (and related information sources used), along with a detailed geographic map for each stream segment.

Associated Comment Letters: 4881, 4901, 5505

Response

Narratives for each evaluated stream segment are included in tables 3 through 6 in the Wild and Scenic River Eligibility Evaluation. “The determination that a river area does or does not contain one or more outstandingly remarkable values is a professional judgement on the part of the Responsible Official as informed by the Interdisciplinary Team, best available scientific information, and public participation” (FSH 1909.12 82.73). Individual maps of each eligible segment are not included in either the plan or evaluation document; however, a detailed map of eligible rivers is available online here: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd569034.pdf.

Concern Statement 358 **Mapping**

Provide more visual and contextual details for the wild and scenic river eligibility evaluation. The single composite map showing relative and very generalized locations of the rivers proposed for eligibility does not put the individual stream segments into geographic context, nor does it present what would be helpful details of particular physical features, segment termini, ownership boundaries, or existing land-management designations.

Associated Comment Letters: 4881, 5505

Response

District-level maps are provided in the Wild and Scenic River Eligibility Evaluation (figures 3 through 6). Narrative descriptions of the location of each eligible segment are provided in table 3. A more

detailed map showing physical features, segment location, ownership, and existing designations such as wilderness is available online: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd569034.pdf.

River segments are also available as a Google Earth kml: https://www.fs.usda.gov/detail/carson/landmanagement/planning/?cid=fseprd539892.

Concern Statement 359 **Mapping**

No maps are provided representing either rivers previously studied and not proposed for eligibility or other streams included in the current draft evaluation and not proposed for eligibility.

Associated Comment Letter: 4881

Response

Rivers previously studied, but not proposed for eligibility, are shown in the final Plan (figure A-10), in the Wild and Scenic River Eligibility Evaluation (figures 2 through 6), and on the more detailed map of eligible rivers available online here: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd569034.pdf.

"Other rivers – not eligible" are shown as thin blue lines on all maps listed.

Concern Statement 360 **Additional Data**

There are additional data sources that should be considered in evaluating eligibility of rivers for potential outstandingly remarkable values such as wildlife, climate adaptation, and botany, such as rare, unique, and exemplary values identified by the University of New Mexico's Natural Heritage New Mexico.

Associated Comment Letters: 4881, 5505

Response

The eligibility evaluation considered all relevant information, including firsthand knowledge of Carson NF specialists, field verification, and any information submitted by the public. See responses in this appendix and Wild and Scenic River Eligibility Evaluation Appendices A, B, and C.

Concern Statement 361 **Opposition to Reevaluation**

Opposition to the downgrading of eligibility for Wild and Scenic designation of 62 river segments in the Carson. None of these rivers should be downgraded: Cabrestro Creek, Columbine Creek, Gallegos Canyon, Gavilan Canyon, Italianos Canyon, Long Canyon, Manzanita Canyon, McCrystal Creek, Middle Ponil Ck. (3 segments), North Ponil Ck., Osier Ck., Red River, Rio de Las Trampas (2 segments), Rio San Leonardo, Rio San Antonio (2 segments), Rio Santa Barbara (2 segments), San Cristobal Creek, S. Fork Rio Hondo, Yerba Canyon.

Associated Comment Letters: 124, 147, 153, 223, 236, 1826, 3071, 4926, 5011, 5093, 5247, 5307, 5388, 5561, 5705, 5706

Response

The reevaluation of river eligibility is being conducted within the context of the overall plan revision for the Carson NF. There is a suite of regulatory, policy, and legal considerations with which management must comply along all rivers on the forest. Changes to river eligibility fit within the revised approach to river management described by the totality of the new plan. By refining the evaluation and management direction for eligible rivers, the Carson NF believes it is managing more in line with the intent of the Wild and Scenic Rivers Act, providing clearer management guidance, and stronger protections of those values which make a river eligible. Refining the evaluation and providing consistent management direction for eligible rivers improves the Carson NF's ability to effectively protect and enhance those values that make them eligible.

The definition of outstandingly remarkable values has been aligned with the requirement under the Act and the 2012 Planning Rule that the value be river-related and a unique, rare, or exemplary feature that is significant when compared with similar values from other rivers at a regional or national scale. The revised definition resulted in adjustments to outstandingly remarkable values for some river segments.

The evaluation of free-flowing nature, outstandingly remarkable values, and classifications for specific river segments is detailed in the Wild and Scenic River Eligibility Evaluation.

Concern Statement 362 **Opposition to Reevaluation**

General opposition to reevaluation of wild and scenic river eligibility. Finding that rivers supposedly do not have special qualities leaves them vulnerable to abuse and degradation and threatens the recreational interests and livelihoods of thousands of New Mexicans. The evaluation needs to consider that water is rare in New Mexico, and recognize recreational, wildlife, scenic, and cultural values, and wildlife corridors as special values. The risks are grave because downgrading these segments increases the possibility that they will be exposed to forms of development including mining and dam building.

Associated Comment Letters: 121, 123, 126, 130, 131, 132, 135, 145, 146, 151, 158, 168, 170, 173, 174, 196, 236, 375, 380, 619, 940, 1218, 1312, 1514, 1826, 1861, 2317, 2766, 3332, 4841, 4855, 4856, 4857, 4859, 4860, 4865, 4868, 4871, 4876, 4878, 4880, 4881, 4911, 4962, 4964, 4997, 5005, 5054, 5073, 5093, 5102, 5143, 5238, 5271, 5303, 5359, 5405, 5471, 5505, 5576, 5610, 5617, 5620, 5625, 5631, 5642, 5646, 5666, 5673, 5675, 5683, 5696, 5697, 5699, 5702, 5714, 5717, 5718

Response

The reevaluation of river eligibility is being conducted within the context of the overall plan revision for the Carson NF. There is a suite of regulatory, policy, and legal considerations with which management must comply along all rivers on the forest. Changes to river eligibility fit within the revised approach to river management described by the totality of the new plan, which protects rivers from abuse and degradation and addresses the forest's contributions to recreation and local economies. By refining the evaluation and management direction for eligible rivers, the Carson NF believes it is managing more in line with the intent of the Wild and Scenic Rivers Act, providing clearer management guidance, and stronger protections of the values that make a river eligible. Refining the evaluation and providing consistent management direction for eligible rivers improves the national forest's ability to effectively protect and enhance the values that make them eligible.

The definition of outstandingly remarkable values has been aligned with the requirement under the Wild and Scenic Rivers Act and the 2012 Planning Rule that the value be river-related and a unique, rare, or exemplary feature that is significant when compared with similar values from other rivers at a regional or national scale. The revised definition resulted in adjustments to outstandingly remarkable values for some river segments.

Because a feature is rare or unique does not alone make it outstandingly remarkable. It must also be conspicuously dissimilar from the class of feature to which it belongs (Wild and Scenic River Eligibility Evaluation, Outstandingly Remarkable Value Determination). That is, just being an example of a type of feature that is remarkable is insufficient; the feature must be an outstandingly remarkable example of the type. For example, river-based recreation opportunities are rare in the arid southwest. To be outstandingly remarkable, the recreational opportunity must be unusually exemplary among arid rivers.

Recreational, wildlife, scenic, and cultural values were all considered as outstandingly remarkable value categories for each river segment evaluated. To the extent that a wildlife corridor in or along a river is related to uniquely diverse or high-quality habitat for wildlife of national or regional significance, it may be considered a wildlife outstandingly remarkable value. However, wildlife movement and habitat connectivity are more holistically and directly protected by other plan components throughout the final Plan (see appendix H). Mining is managed according to existing laws, policies, and regulations that are

not altered by the final Plan or river eligibility. While dam construction is not compatible with river eligibility, it is also not prevented because a river has been found eligible. The relative benefits and impacts of dam construction in an eligible river would be assessed via a suitability study.

Concern Statement 363 **Support for Eligibility**

More rivers should be eligible for wild and scenic designation to provide a diversity of wild places to visit. The most precious resource we have is our surface water and providing maximal protection for our wild streams protects our water and keeps people from over-visiting a small number of places.

Associated Comment Letters: 4995, 5561

Response

Eligible rivers may be classified as wild, scenic, or recreational - each with varying levels of development. Recreation is an outstandingly remarkable value for some rivers, where unique, rare, or exemplary recreation opportunities exist. While recreation may not be identified as an outstandingly remarkable value for other rivers, eligibility does not permit or restrict public access. Recreational opportunities are addressed more holistically and directly by other plan components, especially FW-REC-DC-3, FW-REC-DC-5, and FW-REC-G-2.

Concern Statement 364 **Support for Eligibility**

Opposition to downgrading wild and scenic river protections in the Carson because these rivers and tributaries form an important basis for the environmental and economic health of northern New Mexico. The underlying reason for people to visit and live in the area is that it is wild and scenic—it informs much of the artistic expression and recreational opportunities that people enjoy. Seeing bighorn sheep and elk and other wildlife becomes a special part of every person who visits or lives here.

Associated Comment Letter: 5569

Response

The final Plan manages to protect wild places and scenery and supports environmental health (ecosystem integrity) and local economies. The reevaluation of river eligibility is being conducted as part of the overall revision of the Carson NF forest plan. Changes to river eligibility fit within the revised approach to river management described by the totality of the new plan. By refining the evaluation and management direction for eligible rivers, we believe we are managing more in line with the intent of the Wild and Scenic Rivers Act, providing clearer management guidance, and stronger protections of the values that make a river eligible. Refining the evaluation and providing consistent management direction for eligible rivers improves the national forest's ability to effectively protect and enhance those values that make them eligible. Wild and scenic river eligibility is an evaluation of existing conditions of river free-flow, river-related values, and the level of development along rivers; it does not provide the primary direction in the final Plan for wild places, scenery, or economic support.

In the final Plan, the primary mechanisms for managing wild places are designated wilderness, recommended wilderness, and the recreation opportunity spectrum. Designated wilderness will continue to be managed according to the Wilderness Act and the DA-WILD section in the final Plan. The Carson NF has recommended additional areas for wilderness designation as part of this final Plan, which are managed according to the MA-RWMA section. The recreation opportunity spectrum describes the recreational experience that visitors can expect in an area, including primitive and semi-primitive opportunities. Not all wild and scenic rivers are wild places and classification ranges from wild to scenic to recreational—each with varying levels of development. Wildness or remoteness are not themselves resources that are included in the Forest Service directives baseline set of criteria to establish outstandingly remarkable values and were not directly evaluated as part of wild and scenic river eligibility. The Carson NF added "exceptional opportunities for solitude and to experience unaltered aquatic and riparian habitats" to the planning rule's list of recreational criteria to clarify what would constitute an example of unique or rare camping, hiking, or other recreational opportunities.

Scenic values contributed to river eligibility to the extent that they met the requirements for outstandingly remarkable value as defined in the Wild and Scenic Rivers Act (16 U.S.C. chapter 28) and the 2012 Planning Rule (FSH 1909.12 chapter 80), and the Carson NF's evaluation criteria. Rivers with scenic values that are unique, rare, or exemplary when compared with similar values from other rivers at a regional or national scale are considered eligible. This high and limited threshold does not adequately address the range of scenic attributes on the Carson NF. Therefore, the final Plan includes additional direction for managing scenic values that are either more common regionally or not river dependent. The introduction for management areas describes scenic character, designated and management areas define specific scenic management in those areas, and the FW-SCEN section addresses scenery forestwide.

Concern Statement 365 **Support for Eligibility**

General opposition to re-evaluation of eligible wild and scenic rivers especially because river eligibility protects headwaters and accommodates upward-moving adaptations of sensitive species under a changing climate.

Associated Comment Letters: 196, 236, 1218, 4881, 5505

Response

Neither protecting headwaters nor facilitating species migration under a changing climate is the intent of the Wild and Scenic Rivers Act, and neither is achieved via a finding of eligibility. The final Plan does address headwater protection (all FW-WSW sections, individual vegetation communities plan components), species movement (FW-WFP section), habitat connectivity (FEIS appendix H), and climate change generally (plan concepts, VEG-DC-2, WSW-DC-2).

Concern Statement 366 **Opposition to Eligibility**

Opposition to wild and scenic eligibility for any river segments that would impact acequia access or easements or are within one-quarter mile from any points of diversion. For any rivers that are currently eligible, the Forest Service should inventory all acequia easement rights, and should indicate that these rights are not subject to any restriction as a result of eligibility or designation as a wild and scenic river.

Associated Comment Letters: 4985, 5069

Response

The planning process only recommends eligible segments; final decisions regarding designation would require congressional action. The National Wild and Scenic Rivers Act (16 U.S.C. 1271 et seq.) and Forest Service regulations (36 CFR Part 297) contain provisions regarding effects on water diversions and preexisting rights.

The state of New Mexico manages water rights. Neither the Plan nor wild and scenic river eligibility affect water rights. New Mexico state law governs easements and access to acequias (NM Statutes Section 73-2-5); see the Forest Service Southwestern Region acequia guidance document for more detail (USDA FS 2019). No river segments that contain acequias or any diversions for other purposes have been determined to be eligible; no eligible segments are within one-quarter mile of acequia points of diversion. Diversion by acequias or for other purposes impacts a river's free flow, and is therefore, generally not compatible with wild and scenic river eligibility.

Concern Statement 367 **Timber Production**

Timber production is not compatible with protecting outstandingly remarkable values of eligible wild and scenic rivers with scenic and recreational classifications. Eligible scenic and recreational rivers are not suitable for timber production (36 CFR 219.11(a)(i) and (iii)).

Associated Comment Letter: 163

Response

36 CFR 219.11(a)(1) defines those lands that are not suited for timber production, including where one of the following factors applies: (i) Statute, Executive order, or regulation prohibits timber production on the land; or (iii) Timber production would not be compatible with the achievement of desired conditions and objectives established by the plan for those lands. No statute, Executive order or regulation prohibits timber production in scenic or recreation classification eligible rivers. Interim management of eligible rivers explicitly allows "a range of vegetation management and timber harvest practices" so long as "these practices are designed to protect users, or protect, restore, or enhance the river environment, including the long-term scenic character" (FSH 1909.12 84.3(9)(b)).

Timber production may be compatible with desired conditions and objectives along eligible wild and scenic rivers, as long as it can be done in a manner that protects the free-flowing nature of the river (MA-EWSR-S-1), protects the river's outstandingly remarkable values (MA-EWSR-S-2), and preserves the appropriate user experience according to the river's classification (MA-EWSR-S-3). Outstandingly remarkable values are specific to a particular river segment, not to the segment's classification. Timber production may be appropriate along rivers with some outstandingly remarkable values, but not others.

Concern Statement 368 **Recreational and Wild Values**

Opposition to removing 46 rivers on the Carson from the list of wild and scenic eligible rivers. Many of these rivers such as the Columbine, Italianos, Gavilan Canyon, Middle Ponil, and McCrystal have numerous wild, scenic, and recreational values. The analysis appears to be focusing on Rio Grande cutthroat trout and not on the many other amazing recreational and wild values of these rivers.

Associated Comment Letters: 1218, 5238

Response

Wild and scenic river eligibility is one potential tool among a suite of laws, policies, and regulations that guide the management of the Carson NF. The reevaluation of river eligibility is being conducted as part of the overall revision of the land management plan. Changes to river eligibility fit within the revised approach to river management described by the entire final Plan. By refining the evaluation and management direction for eligible rivers, the Carson NF believes it is managing more in line with the intent of the Wild and Scenic Rivers Act, providing clearer management guidance, and stronger protections of the values that make a river eligible. Refining the evaluation and providing consistent management direction for eligible rivers improves the national forest's ability to effectively protect and enhance the values that make them eligible.

We assessed each river segment in the evaluation for outstandingly remarkable values in each of seven resource categories, in addition to "other similar values" (Wild and Scenic River Eligibility Evaluation, outstanding remarkable value criteria section). The evaluation for individual river segments is contained in the Wild and Scenic River Eligibility Evaluation.

Concern Statement 369 **Water Quality and Supply**

MA-EWSR-DC-1 should include direction to preserve high water quality and adequate water supply to maintain outstandingly remarkable values in the face of climate change and other stressors.

Associated Comment Letter: 4856

Response

Plan components for eligible wild and scenic rivers are based on language and requirements in the Wild and Scenic Rivers Act (16 U.S. Code chapter 28) and the 2012 Planning rule (FSH 1909.12 chapter 80). Water quality is covered for all rivers by FW-WSW-DC-7. A requirement of eligibility is that flow must be sufficient to sustain or compliment the outstandingly remarkable values for which the river is recommended. Any activity that reduces water levels such that they no longer sustain or complement outstandingly remarkable values would be inconsistent with MA-EWSR-S-2.

Concern Statement 370 **Project Effects on Free-Flow**

The footnote for MA-EWSR-S-1 is needed to ensure that restoration projects that positively affect free-flow are allowed, while projects that would adversely affect free-flow are not.

Associated Comment Letter: 4856

Response

This language is included in footnote 41 in the final Plan.

Concern Statement 371 **Interim Management Measures**

General support and concurrence with the draft forest plan's summary of interim management measures—desired conditions, standards, guidelines—applicable to eligible wild and scenic rivers (Draft Plan, pp. 160-164).

Associated Comment Letter: 4881

Response

The MA-ESWR section is included in the final plan.

Concern Statement 372 **Support for Criteria**

General support for wild and scenic river eligibility reevaluation and consideration of previous citizen recommendations regarding regions of comparison, definitions and criteria for certain outstandingly remarkable values, and inclusion of additional outstandingly remarkable values categories.

Associated Comment Letters: 4881, 4964, 5031, 5303, 5505

Response

The re-evaluation of wild and scenic river eligibility is being adopted as part of the final Plan.

Concern Statement 373 **Changed Circumstances**

A reassessment of existing wild and scenic river eligibility is not required by the 2012 Planning Rule. Such and evaluation is not necessary except in response to documented changed circumstances to the river or river corridor. The wild and scenic river eligibility evaluation removes previously established eligibility from rivers without, in many instances, sufficiently documenting changed circumstances that warrant such a change. The Forest Service fails to provide a sufficient explanation as to what changed circumstances justify the changed eligibility of so many rivers and streams.

Associated Comment Letters: 4881, 4901, 4911, 4964, 5505

Response

While there is no requirement that previously studied rivers without changed circumstances be reevaluated, as the Forest Service Handbook states, “The Responsible Official may choose to evaluate or revaluate a river for eligibility at any time through a plan amendment” (FSH 1909.12 82.3). The adoption of plan direction regarding eligible rivers and the previous inventory was a decision made as part of the 1986 plan (Amendment 12). That plan and its associated amendments, including the evaluation of river eligibility, is being replaced through this 2012 Planning Rule revision process with a new plan. By refining the evaluation and management direction for eligible rivers in the final Plan, the Carson NF believes it is managing more in line with the intent of the Wild and Scenic Rivers Act, providing clearer management guidance, and stronger protections of the values that make a river eligible.

Each river in the evaluation was considered individually based on free flow and outstandingly remarkable values. Those found eligible were considered individually to determine their appropriate classification. Documentation of the evaluation is contained in the Wild and Scenic River Eligibility Evaluation.

Concern Statement 374 **Inholdings**

The Carson NF justifies reducing the number of eligible wild and scenic river segments based on other forests finding fewer rivers. The national forest should take into account the unique nature of the Carson NF in terms of the relative number, size, and level of development of inholdings along perennial waterways. There are perhaps reasons based on the relatively unsegmented nature of the Carson NF with fewer private inholdings, compared to other national forests .

Associated Comment Letter: 4922

Response

The evaluation of wild and scenic river eligibility is based on the free-flowing nature of a river and the presence of outstandingly remarkable values. Eligibility was only evaluated on national forest-managed river segments. Segmentation by private inholdings would only impact eligibility to the extent that activities on private land impacted the outstandingly remarkable values on the national forest segments. No evidence suggests that private inholdings are less common or smaller on the Carson NF than on other national forests. While difficult to quantify, there is no evidence that the national forest has uniquely fewer inholdings or fewer acres of inholdings along perennial rivers. In fact, the Carson is similar to other national forests in New Mexico:

National Forest	Total Acres	Miles of Perennial Rivers	Number of Inholdings on Rivers	Acres of Inholdings on Rivers	Inholdings per River Mile (Rank)	Percentage of Total Acres that are Inholdings on Rivers (Rank)	Number of Eligible Wild and Scenic Rivers (Rank)
Carson	1,587,079	1,044	316	49,632	0.30 (2)	3.13% (2)	51 (1)
Santa Fe	1,680,000	1,180	327	61,066	0.28 (1)	3.63% (3)	12 (3)
Cibola	1,630,000	25	347	381,135	13.88 (5)	23.38% (5)	7 (4)
Gila	3,271,497	957	459	73,956	0.48 (3)	2.26% (1)	25 (2)
Lincoln	1,260,821	174	387	56,644	2.22 (4)	4.49% (4)	eligibility evaluation has not been completed

The Carson NF ranks second with more inholdings per river mile (0.30) than the Santa Fe NF and second for acres of inholdings along rivers as a percentage the total forest (3.13 percent) with more than the Gila NF. Generally, the Carson is not a significant outlier among forests in New Mexico with respect to the amount of private land along perennial rivers. In addition, the eligibility evaluation was not limited to perennial rivers, but included any river with sufficient flow to sustain or complement the outstandingly remarkable values for which the river would be recommended. The Carson NF remains an outlier in terms of the number of eligible wild and scenic rivers, with at least twice as many eligible rivers (51) as any other national forest in New Mexico.

Concern Statement 375 **Utility Rights of Way**

The plan does not describe how new development or utility rights-of-way would be handled in designated “wild” wild and scenic river segments. Add standards that prohibit construction of structures or new utility rights-of-way.

Associated Comment Letter: 4911

Response

Management of designated wild and scenic rivers is defined by the 1968 National Wild and Scenic Rivers Act (Public Law 90-542) and the river management plan required by the act. The Red River and Rio Grande Wild and Scenic Rivers are managed under the BLM’s river management plan (USDI BLM

Taos Field Office and USDA FS Carson NF 1996). The act requires that designated rivers be managed according to their classification. Section 10(a) of the act requires that, "Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values." This is reiterated in DA-WSR-DC-1.

Generally, construction of structures or utility rights-of-way would not be compatible with the essentially primitive nature of wild classification rivers. "Rivers with a wild classification must be administered to be free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America" (Wild and Scenic Rivers Act, section 2(b)(1)).

Concern Statement 376 **Uses in Recreational or Scenic Classifications**

Within designated and eligible wild and scenic river segments classified as recreational or scenic: utility rights-of-way should be permitted only when there are no alternatives; any new recreation sites should blend with the natural landscape and be shielded from the river; interpretive and educational themes and materials should stress resource protection, stewardship, low impact recreational practices, visitor responsibility, and river values; and vegetation treatments should not occur within the visible foreground.

Associated Comment Letter: 4911

Response

The Carson NF does not currently manage any wild and scenic rivers classified as recreational or scenic. Any rivers designated in the future would be managed according to the requirements of the 1968 National Wild and Scenic Rivers Act (Public Law 90-542) and the river management plan required by the act. Eligible wild and scenic rivers are managed in accordance with the act, the 2012 Planning Rule, and the MA-EWSR section of the final Plan.

The specific activities or developments that are allowed on a designated or eligible river are dependent on that river's classification and outstandingly remarkable values. For example, while shielding recreation sites may be appropriate in rivers with a scenic classification, where development is "largely primitive and undeveloped" (Wild and Scenic River Eligibility Evaluation, table 2), it may not be necessary, or the management objective, for a river with a recreational classification where "substantial evidence of human activity" is permissible. On the other hand, recreation site shielding may be an appropriate approach if scenery is an outstandingly remarkable value for which the river is deemed eligible, even if the classification is recreational and evidence of human activity would otherwise be acceptable. A similar calculation applies to vegetation treatments. In rivers with a scenic classification, vegetation management is acceptable provided that the forest appears natural from the riverbank. In rivers with a recreational classification, evidence of vegetation management may be evident, with the caveat that any activities must protect the river's outstandingly remarkable values (Wild and Scenic River Eligibility Evaluation, Table 2, MA-EWSR-S-2, MA-EWSR-S-3).

Blending recreational sites with the natural landscape is covered under FW-REC-DC-9. Utility rights-of-way are not likely to be compatible with a scenic classification under any circumstance. By contrast, they are not likely to be incompatible with a recreational classification unless they conflict with the outstandingly remarkable values. Location of new or upgraded energy and utility lines is covered by FW-SU-G-4. Interpretive materials and education are covered under FW-REC-DC-6.

Concern Statement 377 **User Experience**

In MA-EWSR-DC-3, change the term "user experience" to "usage." This language is clearer and less open to subjective interpretation.

Associated Comment Letters: 4911

Response

The term “user experience” has been replaced by “uses” in MA-EWSR-DC-3 in the final Plan.

Concern Statement 378 **Vegetation Management**

Appendix G should provide additional clarification as to whether the restrictions on vegetation management (DEIS Volume 3, page 142) would apply to restoration activities that protect surface water hydrology, and whether these restrictions would apply to the one-quarter-mile corridor on either side of the river (Volume 1, page 388).

Associated Comment Letters: 4951

Response

The interim protection measures in appendix G apply to all projects and activities within one-quarter mile of an eligible river segment (MA-EWSR-S-3).

Concern Statement 379 **Land Withdrawals**

Opposition to wild and scenic river designation because Section 8 of the Wild and Scenic Rivers Act has a provision that withdraws any land for which a wild and scenic river has been designated from disposal by the Federal Government and would prevent return of national forest lands to community land grants.

Associated Comment Letters: 5785

Response

While section 8(a) of the Wild and Scenic Rivers Act does withdraw all public lands within the boundaries of any component of the national wild and scenic rivers system, it applies only to those rivers “designated in section 3 of this Act or which is hereafter designated for inclusion in that system” (Public Law 90-542; 16 U.S.C. 1271 et seq.). The Forest Service does not have authority to designate wild and scenic rivers. The final Plan does not designate any wild and scenic rivers; the Wild and Scenic River Eligibility Evaluation only determines river eligibility. Reasonably foreseeable potential uses of land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System of Wild and Scenic Rivers would be considered during the suitability determination for an eligible river (FSH 1909.12 83.21(3)).

Concern Statement 380 **River Designation**

Add an objective to the EWSR section to submit at least three to five eligible river segments for designation.

Associated Comment Letter: 4884

Response

The Carson NF will not recommend for designation any rivers that have not been found suitable. This objective would presume that three to five of the eligible rivers on the Carson NF would be found suitable for designation. Suitability is based on study requirements as provided in sections 4(a) and 5(c) of the Wild and Scenic Rivers Act and the 2012 Planning Rule directives (FSH 1909.12 83.21). The number of rivers on the national forest that could potentially be recommended for designation is unknown until suitability studies are conducted. A more appropriate objective would be to conduct three to five suitability studies, without any implied assumption regarding the outcome.

The Carson NF has chosen not to set a rate for conducting suitability studies. From a planning perspective, there is no difference in the direction for eligible or suitable rivers; both are managed to protect free-flow, outstandingly remarkable values, and classification. The decision to study suitability is best made when management circumstances dictate. Examples of circumstances that may trigger a suitability study include public interest in designation of a specific river, or a proposed activity that would be inconsistent with management of an eligible river.

Concern Statement 381 **Stream Corridors**

Size and extent of eligible stream corridors can be variable. The Forest Service should select eligible stream corridors of width and configuration sufficient to properly preserve and enhance the outstandingly remarkable values for which each stream is found eligible.

Associated Comment Letters: 4881, 5505

Response

Consistent with the 2012 Planning Rule (FSH 1909.12 84.3) and the Wild and Scenic Rivers Act subsection 4(d), a corridor of one-quarter mile on either side of an eligible river is defined by MA-EWSR-S-2, in which outstandingly remarkable values are protected. Under subsection 4(d) of the Act, a suitability study may expand the scope “to address areas which lie more than one-quarter mile from the ordinary high water mark on each side of the river” (WSR Act section 4(d)).

Concern Statement 382 **Interim Protections**

The detailed, specific prescriptions and guidance from the 1986 forest plan should be updated and preserved in the final revised forest plan to ensure thorough and methodical protective management for the designed rivers. Interim management provisions in the draft forest plan revision should be strengthened and further clarified.

Associated Comment Letters: 4881, 5505

Response

Designated rivers are managed under a river management plan as required by the Wild and Scenic Rivers Act (section 3(d)(1)). The interim protection measures for eligible rivers follow requirements of the 2012 Planning Rule (FSH 1909.12 84.3). The planning rule measures are summarized in table 8 in the final Plan and copied in their entirety in appendix G of the FEIS (p. 140) and the Wild and Scenic River Eligibility Evaluation (p. 14).

Concern Statement 383 **Environmental Impacts**

The Forest Service must analyze the potential environmental impacts of changing river eligibility. Rivers and river corridors that were previously eligible will no longer be managed with "interim protective measures". The river segments that have a downgraded status will be managed under less protective regimes. These actions could therefore undoubtedly have significant environmental impacts.

Associated Comment Letters: 4901, 4911, 4964

Response

Wild and scenic river eligibility is an inventory of existing conditions. Eligibility does not permit or prevent any management action; therefore, it does not result in specific environmental impacts. Similarly, management actions are not permitted or prevented simply because a river is not eligible and non-eligibility does not result in any specific environmental impacts. As described in the FEIS, the final Plan is expected to improve conservation of water resources due to its emphasis on restoration of frequent-fire forest types through a combination of mechanical treatments, prescribed fire, and management of natural ignitions; travel management focused on appropriate use of mechanical and motorized vehicles and equipment near water resources; reasonable reduction of the road network through decommissioning/obliteration/restoration of un-needed and un-authorized routes; adaptive grazing management; and recommendations for wilderness (Chapter 3, Environmental Consequences for Watersheds and Water).

Concern Statement 384 **Habitat Fragmentation**

More rivers should be found eligible because essential habitat and corridors risk further fragmentation from destructive actions like road development, mining activities, timber harvesting, and infrastructure in important river areas that are not found eligible.

Associated Comment Letters: 4911, 4964

Response

The final Plan manages to protect wildlife habitat and maintain habitat connectivity. Wild and scenic river eligibility is an evaluation of existing conditions of river free-flow, river related values, and the level of development along rivers; it does not provide the primary direction in the final Plan for road development, mining activities, timber harvesting, and infrastructure. Risk of fragmentation was not a criterion for eligibility evaluation, though wildlife habitat was included as an outstandingly remarkable value to the extent that it meets the requirements as defined in the Wild and Scenic Rivers Act (16 U.S. Code chapter 28) and the 2012 Planning Rule (FSH 1909.12 chapter 80), and the Carson NF's evaluation criteria. Rivers with wildlife values that are unique, rare, or exemplary when compared with similar values from other rivers at a regional or national scale are considered eligible. This high and limited threshold does not adequately address the range of habitat attributes on the Carson NF. Therefore, the final Plan includes additional direction for managing habitat values that are either more common regionally or not river dependent throughout the vegetation, watershed, and wildlife sections of the final plan. See FEIS appendix H for plan components related to wildlife habitat connectivity.

Concern Statement 385 **Wildlife Protections**

The wild and scenic river eligibility evaluation results in a drastic change in the wildlife protections provided by eligible rivers.

Associated Comment Letter: 4911

Response

The wild and scenic river eligibility evaluation guides management in the context of the overarching direction provided by the final plan, as well as existing laws and regulations. Wild and scenic river eligibility protects free-flowing rivers and values associated with the free-flowing nature of rivers. Free-flowing rivers are a minor factor in most wildlife management. Wildlife habitat is addressed throughout the vegetation, watershed, and wildlife sections in the final Plan. Wildlife management is guided by additional direction including state law, the state wildlife action plan, state recovery plans, the Endangered Species Act, and many others that are more directly applicable to wildlife and are not affected by wild and scenic river eligibility.

Concern Statement 386 **Outstandingly Remarkable Values, Acequias**

Acequias are distinctive features of our watershed features and are certainly are not common nationally, or even in the region of comparison proposed by the Forest for cultural values. Acequias certainly have "current on-going community importance" and acequia values are "widely held in the local area, are uniquely tied to particular rivers, and depend on the river's free-flowing, and unaltered condition." A cultural outstandingly remarkable value should be added to rivers with acequias from just upstream of the point of diversion to the headwaters to ensure that the forest would manage the stream (and one-quarter mile on either side of the stream) to protect acequias.

Associated Comment Letters: 4911, 5505

Response

The previous Carson NF evaluation found multiple rivers eligible for wild and scenic river designation, with acequias as outstandingly remarkable values. The current evaluation has removed eligibility from any rivers that are diverted by acequias, because cultural outstandingly remarkable values are those that depend on the river's unaltered condition, which is not applicable to acequia diversion that specifically

requires alteration of river flow. While the Carson NF acknowledges the cultural importance and history of acequias, acequia diversion is clearly not compatible with wild and scenic river protection of free flow. Moreover, it is unclear how eligibility for rivers that feed acequias would improve acequia protection or guide management. For example, when evaluating a forest restoration project, it is not obvious how the cultural value of a downstream acequia would affect the balance between the need for watershed restoration and the prohibition on tree thinning in a wild classification eligible river. We do not believe that maintaining an undeveloped, unmodified (undiverted) river corridor is beneficial or compatible with maintaining the cultural value of acequias that require river diversion and depend on functional watersheds that reliably deliver water downstream. On the other hand, installing riprap to protect a road or campground in an upper watershed may have no impact on a downstream acequia, but would not be allowed in an eligible river. It is not clear to the Carson NF how an eligible river would be managed any differently were a downstream acequia diversion to be considered an outstandingly remarkable value. The final plan addresses the value of acequias and the need to manage watersheds and rivers to support their continued use in the FW-WSW section and the FW-RHC section.

Concern Statement 387 **Evaluation Process**

The evaluation should be based on field assessment of each stream segment and a review of published literature and reports.

Associated Comment Letter: 5377

Response

The eligibility evaluation considered all relevant information, including firsthand knowledge of Carson NF specialists, field verification, published literature and reports, and any information submitted by the public. See responses in this appendix and Wild and Scenic River Eligibility Evaluation Appendices A, B, and C.

Concern Statement 388 **Evaluation Process**

In several instances, the draft eligibility evaluation considers streams that extend into adjacent Federal land-management units, provide headwaters for streams considered for eligibility in adjacent units, or are fed by headwaters located in adjacent units. The eligibility evaluation should be carefully integrated with related evaluations in those adjacent units, and potential impacts of eligibility decisions should be carefully considered.

Associated Comment Letter: 5505

Response

Where rivers are eligible on adjacent lands, the reasons for that eligibility were considered and noted in the Wild and Scenic River Eligibility Evaluation.

Concern Statement 389 **Interim Management**

The more detailed outline of interim management principles and practices included in the draft eligibility evaluation and the 1986 plan, reflecting requirements included in the Wild and Scenic Rivers Act should be formally affirmed and implemented under the final plan.

Associated Comment Letters: 4881, 5005

Response

The interim protection measures for eligible rivers are duplicated from the 2012 Planning Rule requirements (FSH 1909.12 84.3) in appendix G of the FEIS (p. 140) and in the Wild and Scenic River Eligibility Evaluation (p. 14) and are summarized in table 8 in the final Plan. They must be followed under the final Plan according to MA-EWSR-S-3.

Concern Statement 390 **Regions of Comparison**

Rather than relying on the same region of comparison for each outstandingly remarkable value category, the Forest Service, with little justification, relies on different regions of comparison for different values. For example, the scenery outstandingly remarkable value region of comparison is northern New Mexico and southern Colorado whereas the historic and cultural region of comparison is all of New Mexico and Colorado. The Forest Service provides no justification for these differing regions of comparison in either this evaluation or in the background document. While the Forest Service has the discretion to define the regions, it must articulate a rational connection between facts found and conclusions made. Absent such an articulation, the purpose of relying on such differing regions of comparison appears to be an attempt to downgrade a number of rivers and streams previously deemed eligible to not eligible. Therefore, we strongly advise Carson NF to modify the existing regions of comparison to accurately reflect and compare the streams, tributaries, and rivers of the Carson NF. We ask the Carson NF to change the following regions of comparison: Geology: New Mexico and Southern Colorado, Fish: Boundary of New Mexico, Wildlife: Boundary of New Mexico.

Associated Comment Letter: 4901

Response

The region of comparison is defined individually for each value on pages 4 and 5 of the Wild and Scenic River Eligibility Evaluation. We agree that the definition of this region is subjective; therefore, we have, to the extent possible, defined regions based on some existing mapping unit (drainage subregions, ecoregional provinces, physiographic provinces). The analysis of any river need not (and in this evaluation does not) consider every other river in the region of comparison. Enough similar type rivers are considered so that the river's values can by analyzed, up to all the rivers in the region of comparison. To be transparent and specific, a description of the regions of comparison, and the process for judging the outstanding remarkableness of river values is provided to clarify for the public the interdisciplinary team's reasoning.

The Carson NF has scaled the region of comparison to encompass similar types of rivers that provide a wide representation of river values so that rivers with outstandingly remarkable values can be identified as required by FSH 1909.12 82.73. The interdisciplinary team generally finds that geopolitical state boundaries are less likely to encompass similar types of rivers than are boundaries that relate directly to a particular value. Since the Carson NF is entirely in the far northern portion of New Mexico with rivers that extend into adjoining states, the team believes that rivers within adjacent watersheds are more similar for fish values than are rivers in the state of New Mexico overall. Similarly, habitat types on the Carson NF extend into adjacent states and the team considers that wildlife populations and habitat values are more similar in adjacent ecoregions than in the state of New Mexico. The interdisciplinary team finds that intersecting physiographic provinces define geology of similar origin and physiography and are an appropriate region of comparison for geologic values. Areas of northern New Mexico and southern Colorado (within 100 miles of the Carson NF) were judged to be appropriate for scenery and recreation.

Concern Statement 391 **Regions of Comparison**

The regions of comparison listed in the draft eligibility evaluation should be adjusted to more properly evaluate the rare, unique, and exemplary nature of river-related values of streams in the Carson NF. Decisions regarding regions of comparison should be made with the intention to err on the side of finding streams eligible, lest key values lose recognition and protection. The region of comparison should be the state of New Mexico instead of the Four Corners states. One or more of the regions of comparison should be changed to include only the forest itself. The region of comparison should be based on the importance of streams and their related values to the ecological and hydrological health of the Carson NF itself.

Associated Comment Letters: 4881, 4901, 4911, 4964, 5098, 5377, 5505

Response

Regions of comparison were developed by the interdisciplinary team with input from the public and ultimately approved by the responsible official. The region of comparison determines the other similar regional rivers against which river values are judged. Regions of comparison have been defined, to the extent possible, to some existing mapping unit related to a particular value (drainage subregions, ecoregional provinces, physiographic provinces). Any river may be considered outstandingly remarkable if the region of comparison is sufficiently confined, or the river type to which it belongs is narrowly defined. On the other hand, nearly every river may be unremarkable when compared to every other river in the nation. "A region of comparison should be large enough to encompass similar type rivers that provide a wide representation of river values so that rivers with outstandingly remarkable values can be identified" (FSH 1909.12 82.73). River values are meant to be significant when compared to "similar values from other rivers at a regional or national scale" (FSH 1909.12 82.73).

Reducing the size of the region of comparison (to include only the state of New Mexico or only the Carson NF) does not necessarily mean that more streams would be found eligible. A larger region of comparison may actually raise the remarkableness of a unique value because it becomes more unique as it is compared to other dissimilar values. For example, many rivers on the Carson have Rio Grande cutthroat trout; they are somewhat common on the national forest. But few rivers in the West have Rio Grande cutthroat trout. Those rivers on the Carson with the trout are, therefore, very unique within that region of comparison. Ecological or hydrological values of rivers could be considered under fisheries, wildlife, or other values (such as riparian). No particular rivers were identified that contribute more remarkably to the ecological or hydrological health of the Carson NF than any other. That is, rivers generally contribute to the ecological and hydrological health of the forest, perhaps some more than others, but all contribute to some extent. The importance of all streams, watersheds, riparian areas, waterbodies, springs, and wetlands and their ecological and hydrologic value is discussed in the watershed section in the final Plan (FW-WSW).

Concern Statement 392 **Outstandingly Remarkable Values – Wildlife**

The wild and scenic river criteria for wildlife as an outstandingly remarkable value are too restrictive and have resulted in loss of eligibility for many streams. Many rivers that are no longer eligible have high-quality habitat. Eligibility criteria should be revised to better protect unique and imperiled species such as those that are threatened or endangered and New Mexico species of greatest conservation concern.

Associated Comment Letters: 4881, 4911, 4964, 5238, 5343, 5377

Response

Eligibility evaluation criteria for wildlife follows the requirements in the 2012 Planning Rule directives (FSH 1909.12 82.73a(5)). Rivers are considered outstandingly remarkable if they provide uniquely diverse or high-quality habitat for wildlife of national or regional significance or populations that are nationally or regionally important. Specific examples provided in the Carson NF criteria definition include "federal or state listed or candidate threatened or endangered species" (Wild and Scenic River Eligibility Evaluation, p. 10), but would also include other wildlife of regional significance such as New Mexico species of greatest conservation concern. Habitat or populations that are unique, rare, or exemplary for any species could qualify as an outstandingly remarkable value so long as that species is directly associated with a river. Protection of unique and imperiled species is provided throughout the final Plan (see FEIS, Appendix H).

Concern Statement 393 **Outstandingly Remarkable Values – Instream Flow**

The eligibility evaluation should review the University of New Mexico's research data on instream flows, with particular focus on stream-related values for which instream flow protections have been established; those values may also qualify as outstandingly remarkable values in the wild and scenic

rivers context. Again, streams and stream corridors so identified should be considered for wild and scenic eligibility.

Associated Comment Letters: 4881, 5505

Response

We are not familiar with research data on instream flows. That a river value has had administrative regulations established to protect instream flow was not a factor considered during the determination of outstandingly remarkable values, as water quantity is not a requirement for eligibility nor an interim management requirement. “Flows are considered sufficient for eligibility if they sustain or complement the sustainably remarkable values for which the river would be designated” (FSH 1909.12 82.72).

Concern Statement 394 **Outstandingly Remarkable Values – Recreational**

Because protecting water resources and conserving key riparian habitats is critical to New Mexico, hunting, fishing, camping, hiking, wildlife viewing, and nature study should be included as “Recreational Outstandingly Remarkable Value” criteria within the Carson NF's Wild and Scenic River Draft Eligibility Evaluation.

Associated Comment Letters: 4881, 5031, 5643

Response

Except for nature study, all the criteria suggested by the commenter are included as examples of unique, rare, or exemplary recreation opportunities in the final evaluation criteria for recreation (Wild and Scenic River Eligibility Evaluation Report, Table 1). The list of opportunities included in the criteria is not exhaustive. Other recreational opportunities that are not included, such as nature study, may qualify as outstandingly remarkable values if they are unique, rare, or exemplary.

Concern Statement 395 **Outstandingly Remarkable Values – Criteria**

The Carson has broken away from national standards to assess various river segments by adding the term “exceptional” to modify both fishing, hunting, and multiple recreation activities. The Forest does not define the term, nor does it explain how determinations of such “exceptional” attributes will be made in a non-arbitrary way. Reasonable people may disagree whether an attribute qualifies as “exceptional” or not and thus adding this modifier without proper definition and guidance as to how the term will be applied is inappropriate, risking arbitrary and capricious decision-making.

Associated Comment Letters: 4901, 4911, 4964, 5643

Response

We agree that no matter how the criteria are defined, the identification of outstandingly remarkable values is inherently subjective. We have added the term “exceptional” to clarify that not all fishing and hunting opportunities qualify as outstandingly remarkable values. Only those recreational opportunities that are unique, rare, or exemplary are considered exceptional and qualify as wild and scenic river outstandingly remarkable values. Ultimately, the “determination that a river does or does not contain one or more outstandingly remarkable values is a professional judgement on the part of the responsible official as informed by the interdisciplinary team, best available scientific information, and public participation” (FSH 1909.12 82.73).

Concern Statement 396 **Outstandingly Remarkable Values – Bighorn Sheep**

The Forest Service incorrectly concludes that Rocky Mountain bighorn sheep are “not directly river related.” As stated in the Forest Service guidelines, to be river-related, river values should meet at least one of the following criteria: 1. Be located in the river or its corridor, 2. Contribute substantially to the functioning of the river ecosystem, or 3. Be river-dependent and owe their location and existence to the presence of the river (FSH 1909.12, sec. 82.73). Bighorn sheep clearly meet the first criteria, they are located in the river corridor. They also meet the third criteria as they are dependent on and owe their

location and existence to the presence of the river. The Forest Service's rationale to downgrade eligibility fails to acknowledge the important wildlife values tied to these streams and riparian areas described in the quote above.

Associated Comment Letter: 4901

Response

While Rocky Mountain bighorn sheep can be found along rivers and river corridors and while they require water sources, their habitat extends beyond rivers and their corridors and they also drink from other water sources (ponds, lakes, springs, etc.); therefore, they are not dependent on, and do not owe their location and existence to, the presence of the river.

Concern Statement 397 **Outstandingly Remarkable Values – Headwaters**

Additional consideration should be given to the potential eligibility of headwaters and of other higher-elevation portions of streams to anticipate and accommodate adaptive upstream movement by species that are sensitive to climate change.

Associated Comment Letter: 5505

Response

Wild and scenic river eligibility is an inventory of existing conditions, that is, the current distribution of habitat and wildlife populations. A river is considered to possess outstandingly remarkable values when it currently provides uniquely diverse or uniquely high quality habitat or the wildlife that it currently contains represent nationally or regionally important metapopulations.

Concern Statement 398 **Outstandingly Remarkable Values – Special Place**

All rivers in the Valle Vidal should be eligible for wild and scenic river designation because the Valle Vidal is an invaluable asset that we are fortunate to have access to. Management wise and landscape wise it is a very special place.

Associated Comment Letters: 4977, 5377

Response

Rivers in the Valle Vidal were evaluated for their free-flowing nature and outstandingly remarkable values. Certain rivers in the Valle Vidal were found to be eligible, with outstandingly remarkable values including fisheries, scenery, recreation, geology, and wetlands (see Wild and Scenic River Eligibility Evaluation). Other values not directly related to free-flowing rivers that make the Valle Vidal unique and special are discussed and managed in the Valle Vidal Management Area section of the plan (FW-VVMA).

Concern Statement 399 **Water Volume and Quality**

Water supply volume and quality are important functions of healthy rivers and should be considered in evaluating eligibility.

Associated Comment Letters: 4881, 5505

Response

The wild and scenic river eligibility evaluation is consistent with the intent of the Wild and Scenic Rivers Act that certain rivers should be “preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations” (P.L. 90-542 section 1(b)). The act specifically exempts water quantity as a requirement for eligibility and it is not an interim management requirement. “Flows are considered sufficient for eligibility if they sustain or complement the sustainably remarkable values for which the river would be designated.” (FSH 1909.12 82.72) Water quality is explicitly not a criterion for rivers with a recreational or scenic classification, “rivers will not be precluded from scenic or recreational classification because of poor water quality at

the time of their study" (FSH 1909.12 section 82.8). Rivers with a wild classification should meet or exceed state standards for propagation of fish and primary contact recreation (FSH 1909.12 section 82.8), but do not have more restrictive standards than other similar rivers.

The fundamental intent of the Wild and Scenic Rivers Act and the Carson NF's evaluation of river eligibility is not to identify rivers whose water quality and quantity need protection or remediation, and these goals are better addressed through other mechanisms. Water quality and quantity are managed according to a suite of laws, regulations, and policies including the Clean Water Act and New Mexico State water rights regulations. The final Plan complements this legal framework and supports clean and abundant water in streams (FW-WSW-RMZ-STM-DC-5 and -6).

Concern Statement 400 **Free-flowing Definition**

The Carson NF's definition of free-flowing could be interpreted as limiting a river area's eligibility under the Wild and Scenic Rivers Act based on necessary restoration activities. Clarification should therefore be added to ensure that restoration projects positively affecting the river area, while potentially inhibiting its free-flowing characteristics, do not and should not impair the river area's eligibility determination.

Associated Comment Letters: 4911

Response

The standards for free-flowing are defined by the Wild and Scenic Rivers Act and have been subsequently clarified as described in the Free-Flowing Determination section of the Wild and Scenic River Eligibility Evaluation report. A level of subjectivity remains when evaluating the effects of any water resources project on free-flow. In the final Plan, the Carson NF attempts to further clarify how those effects will be analyzed for future projects (MA-EWSR-S-1) and the same approach was applied during the evaluation.

Water resources projects include all modifications to the stream channel or banks below the ordinary high-water mark of a river. Proposed water resources projects must be analyzed to determine their effects on free flow, specifically whether they alter or restrict the natural function of the river (i.e., bank erosion, channel shifting, bedload, or debris movement). Any authorized water resources project in an eligible river segment must not adversely modify the river's free-flowing character. Water resources projects that modify free-flowing character may occur only when they mimic natural river processes, restore more natural river function, and are otherwise consistent with the river's eligibility.

Concern Statement 401 **Free-flowing Definition**

The intermittent flow of some streams appears to affect the findings in the draft eligibility evaluation. Small diversions or the intermittent nature of flows do not compromise the free-flowing condition of a stream.

Associated Comment Letters: 4881, 5505

Response

The seasonality of river flow was not a consideration in the eligibility evaluation. Flows need only be sufficient to "sustain or complement the sustainably remarkable values for which the river would be designated" (FSH 1909.12 82.72). Eligible rivers with a recreational classification may have some existing diversion and "[t]he existence…of low dams, diversion works, or other minor structures at the time any river is proposed for inclusion in the [National System] shall not automatically bar its consideration for such inclusion" (Wild and Scenic Rivers Act, section 16(b)).

Concern Statement 402 **Free-flow**

The draft wild and scenic river evaluation fails to include many other streams that should be studied and that should be found eligible. All free-flowing streams should be considered.

Associated Comment Letters: 4881, 5505

Response

The wild and scenic river eligibility evaluation included all rivers named on a 7.5 minute USGS quad, as required by the 2012 Planning Rule (FSH 1909.12 82.2). In addition, the Carson NF evaluated all rivers that were found eligible under a previous evaluation, but are not named. Some canyons without a named river in fact contain a "flowing body of water" and may, therefore, be considered a river for purposes of the evaluation, per the Forest Service Handbook (FSH 1909.12 80.5).

Concern Statement 403 **Free-flow**

The draft eligibility evaluation asserts that, for various reasons, some streams are not free-flowing (a basic requirement for eligibility). In some cases, the evaluation offers no explanation of that finding. In other cases, the explanation is not necessarily consistent with official definitions of free-flowing.

Associated Comment Letter: 5505

Response

We find no instances of missing explanations for streams found not to be free-flowing. The Wild and Scenic River Eligibility Evaluation uses the definition of free-flowing from the Wild and Scenic Rivers Act (section 16(b)).

Concern Statement 404 **Free-flow, Tanks**

The draft eligibility evaluation indicates the presence of off-channel pit tanks near streams that are proposed for eligibility. Such tanks do not necessarily compromise the free-flowing condition of candidate streams. Examples include Arroyo del Chamiso (table 3, p. 22) and Rio Tusas (table 3, p. 26).

Associated Comment Letter: 4881

Response

Both Arroyo del Chamiso and Rio Tusas have pit tanks in the channel, which do impact the free-flowing nature of the rivers. In the case of Arroyo del Chamiso, the impoundments occur within the eligible segment, necessitating a recreational classification. The eligible section for Rio Tusas ends above the impoundment created by the pit tank and its free-flowing nature is therefore unaffected. The pit tank does impact downstream free-flow and the eligibility of that downstream section.

Concern Statement 405 **Fish Barriers**

In the case of certain rivers such as, Jiron Canyon, Gavilan Canyon, San Cristobal Creek, Rio Tusas headwaters, Jicarita Creek, and Long Canyon, the Forest Service cites the absence of a fish barrier as reason to anticipate possible future loss of Rio Grande cutthroat trout genetic purity, concluding that the fish do not (or eventually will not) qualify as an outstandingly remarkable value. Since all components of wild and scenic river eligibility evaluation—free-flowing condition, segment classification, presence of outstandingly remarkable values, and eligibility itself—are required to be based on assessment and documentation of existing conditions only, this dismissal of eligibility based on possible future events is not valid.

Associated Comment Letter: 4881

Response

The river-related fish value of these streams does not qualify as an outstandingly remarkable value; this determination is based on the current condition of the habitat, not because of anticipated future loss of genetic purity. Habitat that is free of and protected from non-native species is of higher quality than habitat that is not; this is consistent with the eligibility evaluation for fisheries (Wild and Scenic River Eligibility Evaluation, p. 9).

Concern Statement 406 **Fish Barriers**

Neither the presence of fish barriers installed specifically to enhance the genetic purity and habitat for fish and therefore enhance the outstandingly remarkable value—Rio Grande cutthroat trout—nor the potential for future installation of such barriers justifies the removal or denial of wild and scenic eligibility. Fish barriers do not harm a stream's free-flowing condition.

Associated Comment Letters: 4881, 4911

Response

Many river segments above fish barriers have been found eligible. River segments that include a barrier must be classified as recreational because rivers classified as wild or scenic must be free from impoundment. The potential for future modification was not considered in the eligibility evaluation. Considerations for installation of a barrier in an eligible stream are clarified in MA-EWSR-S-1.

Concern Statement 407 **Fish Barriers**

Add specific language to appendix G to affirm that fish barriers designed to adequately maintain and/or enhance natural stream function (including free-flowing character) could be constructed under interim management protections for eligible rivers.

Associated Comment Letters: 4951, 5574

Response

The Interim Management of Eligible Rivers section in appendix G duplicates direction from the 2012 Planning Rule directives (FSH 1909.12 84.2). The final Plan clarifies the types of water resources projects (including fish barriers) that may be allowed in eligible rivers in the footnote for MA-EWSR-S-1 (Final Plan, footnote 41, p. 164).

Concern Statement 408 **Fish Barriers**

The distinction between complete and partial fish barriers in the river evaluation is not clear. In the draft evaluation several streams are labeled as having "partial" barriers (such as the McCrystal Creek) without any supporting documentation, yet these very same steams are shown as having "complete" fish barriers in the New Mexico Department of Game Fish 2016 Rio Grande cutthroat trout study.

Associated Comment Letters: 4911

Response

The definition of a complete fish barrier has been clarified in the Wild and Scenic River Eligibility Evaluation and the FEIS (Volume 3, Appendix G, Outstandingly Remarkable Value Criteria). A complete fish barrier prevents downstream nonnative species from moving upstream; partial barriers may hinder, but do not prevent, upstream movement or may only prevent upstream movement under some flow conditions. This distinction is based on best available information including professional judgement. The McCrystal Creek evaluation has been updated to reflect the presence of a complete barrier south of the forest boundary, as shown in the range-wide status of Rio Grande cutthroat trout report (NMDGF and CPW 2019). Other fish barrier classifications are consistent with those in this report.

Concern Statement 409 **Fish Barriers**

The installation of fish barriers is consistent with wild and scenic river eligibility. They are clearly allowed in designated streams. Existing fish barriers should not impede an eligibility designation under the WSRA based on a potentially positive alteration of free-flow ultimately resulting in overall benefit to river area and its values.

Associated Comment Letter: 4911

Response

Free-flowing is defined as the absence of impoundment or other modification of the waterway (Wild and Scenic Rivers Act section 16(b)). Fish barriers, by design, impound water and modify the waterway and therefore do modify free-flowing character. Any water resources projects that modify free-flowing character may occur only when they mimic natural river processes, restore more natural river function, and are otherwise consistent with the river's eligibility. With respect to fish barriers in particular, they must mimic natural processes, be consistent with the river's natural function, and not conflict with the user experience required by the river's classification. The Interagency Wild and Scenic Rivers Coordinating Council explicitly permits a "range of projects to restore natural channel processes and habitat" (IWSRCC 2017). However, those projects should, "[m]imic the effects of naturally occurring events such as trees falling in and across the river (including the formation of wood jams), boulders tumbling in or moving down the river course" and should be "made of native materials, e.g., wood, rock, vegetation, and so forth that are similar in type, composition or species to those in the vicinity of the project" (IWSRCC 2017). Projects "are most harmonious with river ecosystems" when "the resulting channel width, depth, slope, and substrate matches that of upstream and downstream reaches or that of a nearby comparable and undisturbed river system" (IWSRCC 2017).

Existing fish barriers that are not consistent with this description likely do impact the free-flowing nature of a river, and therefore, make it ineligible. The final plan clarifies the types of water resources projects (including fish barriers) that may be allowed in eligible rivers in the footnote for MA-EWSR-S-1 (Final Plan, footnote 41, p. 164).

Concern Statement 410 **Fencing**

Opposition to wild and scenic river designation because of effect of free flow of water and measurement and concern that it could possibly lead to additional fencing.

Associated Comment Letter: 120

Response

No rivers are being designated as part of this plan revision. A finding of eligibility protects the free-flowing nature of the river but does not require any specific measurement of stream flow and does not require or prevent additional fencing. Eligible rivers are managed to maintain the existing conditions in terms of free flow and classification, and to protect related outstandingly remarkable values.

Concern Statement 411 **Common Species**

Certain rivers should be considered eligible because they provide habitat for species that are common and whose habitat is widespread including: American dipper, black bear, beaver, brook trout, brown trout, boreal chorus frog, cougar, deer, Douglas-fir, elk, finches, golden eagle, grama grasses, grosbeak, grouse, hawk, humming bird, mountain lion, morels, old-growth spruce/fir, owls, paintbrush, penstemons, pronghorn antelope, purple geranium, portobello, rainbow trout, Rocky Mountain bighorn sheep, spotted penstemon, turkey, wild Mexican hat, wild mustang, yarrow, and yucca.

Rivers that commenters note may contain these species include Agua Piedra, Beaver Creek, Bonito Canyon, Cabresto Creek, Canjilon Creek, Carracas Canyon, Columbine Creek and tributaries, Comanche Creek, Cruses Creek, Diablo Creek, El Rito Creek, Gavilan Canyon, Italianos Canyon, Jiron Canyon, La Belle Creek, La Cueva Creek, La Jara Canyon, Little Costilla Creek, Long Canyon, Manzanita Canyon, McCrystal Creek, Middle Fork Creek, Middle Ponil Creek, Middle Rio Pueblo, North Ponil Creek, Policarpio Canyon, Powderhouse Creek, Red River and tributaries, Rio de las Trampas, Rio de los Pinos, Rio Grande del Rancho, Rio Hondo tributaries, Rio San Antonio, Rio San Leonardo, Rio Santa Barbara, Rio Tusas, Rio Vallecitos, Rito Claro, Rito de la Olla, Rito del Medio, Rito del Medio Headwaters, San Cristobal Creek, South Fork of the Rio Hondo, Tanques Canyon, Tierra Amarilla Canyon, Vaqueros Canyon, Vidal Creek, West Fork of the Red River, Yerba Canyon, and streams in the Valle Vidal.

Associated Comment Letters: 125, 132, 1218, 4881, 4901, 4911, 4964, 5343, 5377, 5393, 5505, 5569, 5716

Response

None of the rivers listed provide uniquely diverse or uniquely high-quality habitat for the species listed; none contains nationally or regionally important metapopulations of these species. Therefore, these rivers do not possess outstandingly remarkable values based on their habitat for these common species. We do not deny that these rivers provide habitat for the species listed, but these specific rivers are not unique in that regard among rivers in the region of comparison. The species are not dependent on these specific river habitats but occur throughout the region of comparison.

Concern Statement 412 **Uncommon or Vulnerable Species with Widespread Habitat**

Certain rivers should be considered eligible because they provide habitat for species whose habitat is relatively widespread, but which are either uncommon or vulnerable in New Mexico, including American marten, American pika, bald eagle, black-tailed prairie dog, boreal owl, brown-capped rosy finch, Canada lynx, Clark's nutcracker, goshawk, gray vireo, Gunnison's prairie dog, juniper titmouse, Lewis' woodpecker, loggerhead shrike, mountain plover, pacific marten, peregrine falcon, pinyon jay, pygmy nuthatch, red-headed woodpecker, snowshoe hare, spotted bat, southern red-backed voles, western bluebird, white-tailed ptarmigan, and Williamson's sapsucker.

Rivers that commenters note may contain these species include Bancos Canyon, Bonito Canyon, Cabresto Creek, Canjilon Creek, Carracas Canyon, Columbine Creek, East Fork Rio Brazos, Gavilan Canyon, Italianos Canyon, Jiron Canyon, La Jara Canyon, Leandro Creek, Long Canyon, Manzanita Canyon, McCrystal Creek, Middle Fork Creek, Middle Rio Pueblo, Osier Fork Rio Brazos, Policarpio Canyon, Red River and tributaries, Rio de las Trampas, Rio de los Pinos, Rio Grande del Rancho, Rio San Antonio, Rio San Leonardo, Rio Santa Barbara, Rio Tusas, Rito Claro, Rito de la Olla, Rito del Medio, San Cristobal Creek, South Fork of the Rio Hondo, Tanques Canyon, Tierra Amarilla Canyon, Vaqueros Canyon, West Fork of the Red River, and Yerba Canyon.

Associated Comment Letters: 125, 4881, 4901, 4911, 4964, 5343, 5377, 5505

Response

None of the rivers listed provide uniquely diverse or uniquely high-quality habitat for the species listed; none contains nationally or regionally important metapopulations of these species. Additionally, none of the species listed are directly river-related, i.e., they are not dependent on the specific rivers listed, but rather, occur throughout the region of comparison. Therefore, these rivers do not possess outstandingly remarkable values based on the habitat for these species. We do not deny that these rivers provide habitat for the species listed, but these rivers are not unique in this regard within the region of comparison.

Concern Statement 413 **Uncommon or Vulnerable Species with Widespread Habitat, Riparian Dependent**

Certain rivers should be considered eligible because they provide habitat for species that are either uncommon or vulnerable in New Mexico and whose habitat is widespread, but riparian-dependent, including: American bittern, Arizona willow, bank swallow, boreal (western) toad, eared grebe, hooded ladies’ tresses, northern leopard frog, olive-sided flycatcher, river otter.

Rivers that commenters note may contain these species include Canjilon Creek, Gavilan Canyon, Italianos Canyon, Jiron Canyon, Long Canyon, Manzanita Canyon, Middle Fork Creek, Middle Rio Pueblo, Canyon, Red River and tributaries, Rio Tusas, Rio de las Trampas, Rio de los Pinos, Rio Grande del Rancho, Rio Hondo tributaries, Rio San Antonio, Rio San Leonardo, Rio Santa Barbara, Rito de la Olla, Rito del Medio, San Cristobal Creek, South Fork of the Rio Hondo, Tierra Amarilla Canyon, Vaqueros Canyon, West Fork of the Red River, and Yerba Canyon.

Associated Comment Letters: 4881, 4901, 4911, 5343, 5377, 5505

Response

None of the rivers listed provides uniquely diverse or uniquely high-quality habitat for the species listed; none contains nationally or regionally important metapopulations of these species. Therefore, these rivers do not possess outstandingly remarkable values based on their habitat for these species. We do not deny that these rivers provide habitat for the species listed, but these specific rivers are not unique in this regard within the region of comparison.

Concern Statement 414 **Species Not Found on the Carson National Forest**

Commenters suggest that rivers with habitat for black swift and prairie falcon should be considered eligible, although these species are currently not known to occur on the Carson NF. These rivers include Italianos Canyon, Manzanita Canyon, Rio de las Trampas, Rio de los Pinos, Rio Grande del Rancho, Rio San Antonio, Rio Santa Barbara, Rio Tusas, Rito de la Olla, Rito del Medio, San Cristobal Creek, South Fork of the Rio Hondo, Vaqueros Canyon, and Yerba Canyon.

Associated Comment Letters: 4881, 4911, 5343, 5505

Response

The species listed do not occur on the rivers listed (BISON-M 2020).

Concern Statement 415 **Sangre de Cristo Pea Clam**

The Red River and its tributaries, especially the Middle Fork of the Red River should be eligible for the Sangre de Cristo pea clam.

Associated Comment Letters: 4881, 4911, 5377, 5505

Response

The Sangre de Cristo pea clam only occurs in Middle Fork Lake, not in any of the rivers listed.

Concern Statement 416 **Southwestern Willow Flycatcher**

Arroyo Hondo, Rio Grande del Rancho, Rio San Antonio, Rito de la Olla, and Tierra Amarilla Canyon should be eligible with a wildlife value for the southwestern willow flycatcher.

Associated Comment Letters: 4881, 4911, 5377, 5505

Response

Arroyo Hondo and Tierra Amarilla only have habitat for southwestern willow flycatcher at their confluence with the Rio Grande, which is already a designated wild and scenic river. Rito de la Olla only has habitat for southwestern willow flycatcher at its confluence with the Rio Grande del Rancho, which is eligible. The headwaters of the Rio Grande del Rancho and Rio San Antonio have habitat that is less outstanding than that in other parts of the region of comparison.

Concern Statement 417 **Uncommon and Vulnerable Species with Limited Habitat**

Certain rivers should be considered eligible because they provide habitat for species that are uncommon of vulnerable in New Mexico, with limited habitat, but which are not riparian or riparian-dependent; these include: alpine larkspur, arboles milkvetch, chama blazing star, cyanic milkvetch, New Mexico stickseed, Ripley's milkvetch, Sapello Canyon larkspur, small-headed goldenweed, Taos milkvetch, and Taos spring-parsley.

Rivers that commenters note may contain these species include, Canjilon Creek, Rio San Antonio, Rio Tusas, Rito de la Olla, Rito del Medio, San Cristobal Creek, and Vaqueros Canyon.

Associated Comment Letters: 4881, 5505

Response

The species listed are associated with upland, dry-site, and non-riparian habitats, such that, while they may occur near some of the rivers listed, they are not directly river-related. Accordingly, their presence along these corridors does not therefore constitute an outstandingly remarkable value for these rivers.

Concern Statement 418 **Outstandingly Remarkable Values – Rio Grande Sucker and Chub**

The fisheries eligibility evaluation criteria leave out other fish species of concern, including Rio Grande chub and sucker. These species should be considered outstandingly remarkable values in Canjilon Creek and Rio Tusas.

Associated Comment Letters: 4881, 5301, 5505

Response

Multiple fish species were considered during the evaluation of river eligibility, including Rio Grande sucker and Rio Grande chub. In addition to the rivers listed in the comment, Rio Grande suckers and chubs have been identified in Rio San Antonio and Rio Grande chubs have also been found in El Rito Creek (below the barrier), Tio Grande Creek, and Rio Vallecitos. In all cases, however, nonnative fish species are also present in these rivers. Negative interactions with nonnative fishes include hybridization, competition for space and food, and predation by nonnatives, therefore, none of these rivers was determined to provide outstandingly remarkable high-quality habitat. More extensive and successful populations of both native species exist elsewhere in the region of comparison, for example in the Jemez Mountains and Valles Caldera. Both suckers and chubs are potential species of conservation concern under the final Plan, which contains specific plan components designed to maintain the species' capability to persist within the planning area.

Concern Statement 419 **Outstandingly Remarkable Values – Rio Grande Cutthroat Trout**

The fisheries outstandingly remarkable value should not be applied only to rivers with genetically pure populations of Rio Grande cutthroat trout and a full fish barrier. The definition of a fisheries outstandingly remarkable value is: "Fish values may be judged on the relative merits of either fish populations or habitat." In addition, the proposed criteria also lists "an extraordinary diversity of resident fish species." Nonnatives such as brook and brown trout are resident species, and therefore, streams with excellent diversity of these species would be eligible for a fisheries outstandingly remarkable value.

Associated Comment Letters: 4911, 5031, 5242

Response

An outstandingly remarkable value for fisheries could apply to any river that is a nationally or regionally important producer of fish populations or provides uniquely diverse or high-quality habitat. The fisheries outstandingly remarkable value is not limited to Rio Grande cutthroat trout. Many rivers on the Carson NF and in the region of comparison contain brook and brown trout. Many rivers are stocked with these species. No rivers on the Carson NF were determined to provide uniquely high-quality habitat for these species, that is, many rivers within the region of comparison provide similarly high-quality habitat. Excellent diversity is interpreted to mean a diversity of species not of individuals (for example, different ages or sizes of a few species).

Concern Statement 420 **Outstandingly Remarkable Values – Species**

Wild and scenic river eligibility should be reconsidered for any streams proposed to lose outstandingly remarkable values if they contain populations of Rio Grande cutthroat trout or threatened or endangered species, or if new and substantial documentation of outstandingly remarkable values has been provided during the 90-day comment period.

Associated Comment Letter: 5303

Response

All rivers that were found eligible by previous evaluations (i.e., had an outstandingly remarkable value listed) have been reevaluated (Eligibility Evaluation Process section of the Wild and Scenic River Eligibility Evaluation). All comments received during the 90-day comment period have been considered and appropriate adjustments to eligibility have been made. Evaluation eligibility criteria for fisheries (including Rio Grande cutthroat trout) are based on 2012 Planning Rule recommendations (FSH 1909.12 82.73a(4)) and public comment. See footnote 12, page 137, of appendix G for specific considerations for Rio Grande cutthroat trout. Threatened and endangered species are managed under the Endangered Species Act (16 U.S.C. § 1531 et seq) and applicable state recovery plans. Populations that occur along or in a river may or may not justify an outstandingly remarkable value. Not all threatened or endangered species are dependent on particular rivers. The criteria for outstandingly remarkable fish values do include consideration of habitat or populations of threatened and endangered species (Eligibility Evaluation Process section of the Wild and Scenic River Eligibility Evaluation, p. 10).

Concern Statement 421 **Outstandingly Remarkable Values Fish**

Many river segments such as McCrystal Creek, Bitter Creek, Rio Santa Barbara, Policarpio Canyon, Canjilon Creek, and Rio Hondo tributaries should have fish as an outstandingly remarkable value because they support wild populations of genetically intact Rio Grande cutthroat trout, New Mexico's state fish, and thus merit wild and scenic river protections for their fisheries.

Associated Comment Letters: 5017, 5312

Response

The outstandingly remarkable value for fisheries was removed from Policarpio Canyon, Canjilon Creek, and two Rio Hondo Tributaries based on the revised region of comparison. In response to public comment, the region of comparison was reduced from the four corners states to only the four drainage subregions that intersect the Carson NF. With this change in scope, the standard for comparison of overall quality of habitat and integrity of populations is higher and the requirement for a finding of outstandingly remarkable value is stricter. Isolated, single tributaries with Rio Grande cutthroat trout are no longer eligible; only Rio Grande cutthroat trout streams that occur as part of a larger system that provides redundant habitat have been retained as eligible. McCrystal Creek, Policarpio Canyon, Canjilon Creek, Manzanita Canyon, and Italianos Canyon are not part of a larger connected system and therefore not eligible (Wild and Scenic River Eligibility Evaluation, p 89-90, 103-104).

Bitter Creek does not have a complete fish barrier, meaning that the Rio Grande cutthroat trout population is vulnerable to nonnative species and it is an isolated single tributary. For these reasons, it does not meet the criteria for a fisheries outstandingly remarkable value (Wild and Scenic River Eligibility Evaluation, p. 9). Nonnative species are present in the Rio Santa Barbara (NMDGF and CPW 2019), rendering it ineligible for a fisheries outstandingly remarkable value (USDA FS Carson NF 2018c, p. 9).

Concern Statement 422 **Concern Statement 691 Outstandingly Remarkable Values – Fisheries**

More rivers should be eligible for wild and scenic designation with an outstandingly remarkable value for fisheries because they contain or have the potential to support Rio Grande cutthroat trout in the future. At a minimum, the existence of wild Rio Grande cutthroat trout populations with “conservation” value as defined in the New Mexico Department of Game and Fish 2016 status assessment should be sufficient reason for applying a fisheries outstandingly remarkable value to the stream segments where they are found.

Associated Comment Letters: 4911, 5017, 5031, 5312

Response

Most rivers in north-central New Mexico (portions of the Rio Grande Headwaters, Lower Rio Grande, and Canadian watersheds) historically supported Rio Grande cutthroat trout. Many rivers in the region of comparison have the potential to support Rio Grande cutthroat trout; currently, there are 127 conservation populations in the region of comparison. To be considered outstandingly remarkable, "a river related value must be a unique, rare, or exemplary feature…." (FSH 1909.12 82.73) Neither the potential to support Rio Grande cutthroat trout or the presence of conservation populations are inherently unique, rare, or exemplary in the region of comparison; therefore, these rivers do not meet the requirements for an outstandingly remarkable value. Rio Grande cutthroat trout populations are only considered an outstandingly remarkable value where nonnative species are not present, a full barrier is in place (prevents all upstream movement by nonnative species), Rio Grande cutthroat trout genetics are unaltered (no more than 10 percent introgression), or are suspected to be unaltered according to New Mexico Department of Game and Fish data, and the stream is connected to a large network of streams that provide redundant, high-quality habitat.

Concern Statement 423 **Outstandingly Remarkable Values Migratory Corridor**

Rivers on the Jicarilla Ranger District should be eligible, including Bancos Canyon, Cabresto Canyon, Carracas Canyon, and Vaqueros Canyon. These rivers are migratory corridors and holding areas for deer as well as significant security areas for large bucks and wintering elk and bald eagles. State threatened wintering bald eagles are completely dependent on a healthy aquatic and riparian system.

Associated Comment Letter: 5377

Response

Outstandingly remarkable values must be "significant when compared with similar values from other rivers at a regional or national scale" (FSH 1909.12 82.73). Wildlife values were compared to similar rivers in the four ecoregional provinces that intersect the Carson NF. Other rivers in the region of comparison provide similar habitat for deer, elk, and bald eagles; therefore, these rivers were determined not to have wildlife outstandingly remarkable values.

Concern Statement 424 **Rio Chama Watershed**

Rivers in the Rio Chama watershed should be eligible for wild and scenic designation. They have unique cultural and recreational value and are important to our survival because they mitigate climate change and provide clean water to the state.

Associated Comment Letter: 5716

Response

Rivers that the Carson NF manages within the Rio Chama watershed were evaluated for eligibility and not all were determined to be eligible. The evaluation of free-flowing nature, outstandingly remarkable values, and classifications for specific river segments is detailed in the Wild and Scenic River Eligibility Evaluation.

Concern Statement 425 **Upper Los Pinos**

The Osier Fork Rio Brazos, East Fork of Rio Brazos, Osier Creek, Beaver Creek, and Diablo Creek represent the pinnacle of quality in the vicinity of the Brazos ridge and upper Los Pino drainage. Not only providing unparalleled views of the Sangre De Cristos, headwaters of the Rio Chama and the South San Juan Wildernesses, this area is a sanctuary for wildlife. Solitude abounds here. This is a very important corner of the San Juan/Tusas Ecosystem.

Associated Comment Letters: 125, 4911

Response

Osier Creek is not free-flowing. The scenic and wildlife values of these rivers are compared to similar rivers in the entire region of comparison, beyond the vicinity of the Brazos Ridge and Upper Los Pinos drainage. Other rivers in the region of comparison have similar scenic and wildlife values. Solitude may also be found in other places in the region of comparison. Therefore, solitude generally does not qualify rivers on the Carson NF as outstandingly remarkable for recreation, that is, opportunities for solitude are not unique or rare within the region of comparison.

Concern Statement 426 **Cruces Basin Area**

Please no downgrading of Cruces Wilderness area and rivers there. It is the jewel #2 of our wilderness of beauty, wildlife, fishing, H_2O value. This is such a beauty of nature. It makes for a happy joyous heart of love to see & experience this area. We are asking for no more roads, no opening for oil or any other financial gain except for recreational value. This area is a jewel of refuge mentally and physically! The fishing is extraordinary. The beauty overwhelming. We ask for quarter-mile buffers or streams and rivers adjacent to limit snowmobilers there.

Associated Comment Letter: 140

Response

The previous evaluation found outstandingly remarkable values for an “abundance of large fish” and a “good diversity” of wildlife in Beaver and Diablo Creeks. However, other rivers in the region of comparison are similar in terms of those values. With respect to scenic character, there are other similarly scenic rivers on the Tres Piedras Ranger District (e.g., the Rio de los Pinos and the Tusas Box canyons) and in the region of comparison. Finally, roads, oil extraction, and motorized uses, including snowmobiling, are already prohibited in the Cruces Basin Wilderness because of its wilderness designation.

Concern Statement 427 **Rio Hondo Tributaries**

Gavilan, Yerba, Italianos, Long Canyon, and Manzanita trails are all amazingly scenic. Coming up from the dry flatlands and entering Twining Canyon provides users with a reprieve. These canyon streams provide the user with a sense of serenity. The hiking along these streams is exceptional and hikers use them because of the stream. They have trails that draw locals and visitors alike. In the fall many people, both locals and visitors alike, hike along these streams for the views of golden aspen and peaks tinged with the first dusting of autumn snows.

These water segments provide opportunities for viewing wildlife and exceptional photography. Wildlife in the region use these river systems extensively and many hikers have seen or heard the eerie screech of the mountain lion or the quick steps of the Rocky Mountain bighorn sheep while hiking in these canyons. While these species may exist elsewhere in the Carson NF, these canyons provide the most consistent and reliable opportunity to view these animals. They should be eligible for scenic and recreational outstandingly remarkable value.

Having five free-flowing river systems that are pristine and without a sign of development save for trails so closely clustered together is a rare treasure in the arid Southwest. These river systems are connected by a ridge line trail and people often hike loops going up one canyon, climbing the nearby Lobo Peak and then descending another canyon. Where else in the region can one find five perennial streams all clustered close together and all with good Rio Grande cutthroat trout habitat, high-quality riparian habitat, and recreational opportunities that provide exceptional opportunities to experience unaltered aquatic and riparian habitats, exceptional wildlife viewing, and opportunities for solitude?

Associated Comment Letters: 132, 4911, 4964, 5377, 5669

Response

The scenery and hiking opportunities are similar in all of the Rio Hondo tributaries, including Italianos Canyon, Manzanita Canyon, Yerba Canyon, Gavilan Canyon, and Long Canyons; scenery is arguably more outstanding in Lake Fork Canyon. On the Carson NF alone, comparable scenic and recreational opportunities exist in the upper Red River Basin, Columbine Canyon Basin, Latir Wilderness, and Pecos Wilderness; other similar, or more outstandingly remarkable, alpine and high alpine, remote scenic and hiking opportunities can be found elsewhere in the region of comparison.

Trails on the north side of the Columbine-Hondo Wilderness are also popular for aspen viewing, especially during the annual Red River Aspencade Festival. People from Taos County and elsewhere also hike in the Pecos Wilderness to view aspen. Aspen throughout the region of comparison is often dusted with snow in autumn.

Mountain lions and Rocky Mountain bighorn sheep may be found in many river corridors on the Questa Ranger District, on the Carson NF, and in the region of comparison. Nothing about these particular rivers provides uniquely high-quality habitat or visibility for the species.

The Costilla Creek watershed in the Valle Vidal contains many streams with arguably better Rio Grande cutthroat trout habitat, high-quality riparian habitat overall, and recreational opportunities that provide exceptional opportunities to experience these unaltered aquatic and riparian habitats, arguably more exceptional wildlife viewing opportunities, and opportunities for solitude. The four streams in the Columbine Creek watershed just over the ridge offer all these same values in the same wilderness area.

Concern Statement 428 **Agua Caliente Canyon**

Agua Caliente Canyon should be found eligible for its historical and cultural values. Aqua Caliente Canyon possesses a history of both human conflict and social importance, all related to the stream and the springs that feed it.

Associated Comment Letters: 4881, 5505

Response

Agua Caliente Canyon is eligible with historic and cultural outstandingly remarkable values.

Concern Statement 429 **Agua Piedra**

The Agua Piedra is quite simply a repository of unequalled diversity and density for wildlife. This is a crucial drainage providing for elk, turkey, deer, owls, and grouse. The headwaters of this creek “los estenos” is a big wetland.

Associated Comment Letter: 125

Response

Many rivers in the region of comparison provide habitat for a highly diverse array of wildlife species. The elk, turkey, deer, owl, and grouse habitat are not outstandingly remarkable regionally and are not directly river-related. Many rivers in the region of comparison have large wetlands in their headwaters. The discussion of the importance of headwater wetlands has been expanded in the Riparian Management Zone introduction in the final Plan.

Concern Statement 430 **Alamitos Creek**

Alamitos Creek and the North Fork of Alamitos Creek should be found eligible for their fisheries value. These creeks provide excellent, intact habitat for a genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species.

Associated Comment Letters: 4881, 5505

Response

Both Alamitos Creek and the North Fork of Alamitos Creek are eligible with a fisheries outstandingly remarkable value.

Concern Statement 431 **Arroyo del Chamiso**

Arroyo del Chamiso should be found eligible for its scenic value. The steep, dramatic cliffs of Arroyo del Chamiso attest to the stream's relentless land-shaping power and are a scenic wonder. The presence of small diversions to off-channel livestock tanks does not compromise the stream's free-flowing condition.

Associated Comment Letters: 4881, 5505

Response

Arroyo del Chamiso is eligible with a scenic outstandingly remarkable value. The pit tanks are located in the river channel and do impact free-flowing condition by, impounding the river and resulting in a body of water formed by a human-made structure, thus contributing to its recreational classification. However, “the existence of…minor structures at the time any river is proposed for inclusion in the [National System] shall not automatically bar its consideration for such inclusion” (Public Law 90-542, section 15(b)). We conclude that the pit tanks in Arroyo del Chamiso are minor structures.

Concern Statement 432 **Arroyo del Yeso**

Arroyo del Yeso should be found eligible for its scenic, recreational, geologic values. The dramatic colors and stratification of Arroyo del Yeso's canyon walls affords impressive scenic backdrop to popular recreation there, particularly artistic appreciation and creativity.

Associated Comment Letters: 4881, 5505

Response

Arroyo del Yeso is eligible with scenic, recreational, and geologic outstandingly remarkable values.

Concern Statement 433 **Arroyo Hondo**

Arroyo Hondo should be found eligible for its geologic and wildlife values. The National Forest System portion of Arroyo Hondo complements distinctive geologic features also found along the BLM segment, including corresponding BLM Area of Critical Environmental Concern. The stream also includes Fish and Wildlife Service-designated southwestern willow flycatcher critical habitat, warranting an additional outstandingly remarkable value for wildlife. Arroyo Hondo is an important tributary to congressionally designated Wild and Scenic Rio Grande.

Associated Comment Letters: 4881, 5505

Response

Arroyo Hondo is eligible with a geologic outstandingly remarkable value. The southwestern willow flycatcher critical habitat is far below Carson NF, at the confluence with the Rio Grande. There are many tributaries along the wild and scenic portion of the Rio Grande; Arroyo Hondo is not unique, rare, or exemplary because it is a tributary.

Concern Statement 434 **Beaver Creek**

Beaver Creek should be found eligible for its fish, wildlife, climate adaptation, ecosystem service values. Both Beaver Creek and Diablo Creek are important wilderness tributaries to eligible Rio de los Pinos, contributing streamflow and water quality to that important stream. Beaver Creek possesses abundant fish populations in health, pristine stream habitat, along with diverse wildlife. The unique land protection afforded by Cruces Basin Wilderness, and the stream's critical headwaters location—important to climate adaption and downstream water supplies—warrant supplemental protection for the stream and riparian

corridor, with corresponding outstandingly remarkable values for climate adaptation and ecosystem services.

Associated Comment Letters: 4881, 5393, 5505

Response

The location of a river relative to designated wilderness is not a criterion in the eligibility evaluation. Many rivers in the region of comparison are headwaters for other rivers, contributing to streamflow and downstream water supplies. The previous evaluation found outstandingly remarkable values for an "abundance of large fish" and a "good diversity" of wildlife. Both of those values are similar to other rivers in the region of comparison. No current evidence indicates that this river is unique among similar rivers relative to climate adaptation, which would warrant an outstandingly remarkable value for that purpose.

Concern Statement 435 **Bitter Creek**

Bitter Creek should be found eligible for its recreational and historic values. The importance of headwaters water supply quality to human habitation and survival is vividly reflected in the history recorded along Bitter Creek.

Associated Comment Letters: 4881, 5505

Response

Bitter Creek is eligible with recreational and historic outstandingly remarkable values related to the Anchor and Midnight mine sites and mining history of the area.

Concern Statement 436 **Bull Creek**

Bull Creek should be found eligible for its fisheries value. The headwaters of Bull Creek provide excellent, intact habitat for a genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species.

Associated Comment Letters: 4881, 5505

Response

Bull Creek is eligible with a fisheries outstandingly remarkable value.

Concern Statement 437 **Cabresto Creek and Red River**

Cabresto Creek and Red River should be eligible. Each of them qualifies as important fisheries for recreation and native habitat. They each qualify as a good natural experience for a visitor, offering solitude, beauty, accessibility, and on any given day a unique wild experience. Both riparian environments are in essentially good shape. The impacts from human intrusion are minimal and, in many places, healed as well as they can be. The watershed for these creeks currently is working. It has been degraded, but now seems stable. To lower a management standard by removing wild and scenic designation can only jeopardize what healing has taken place.

Associated Comment Letters: 4959

Response

The middle segment of the Red River (Qu46) has been highly modified and is not free-flowing; the lower portion of Cabresto Creek is not free-flowing. Fishing is an important recreational opportunity and the river provides important habitat; however, nonnative species are present. The fisheries and recreational values are similar to those of other rivers in the region of comparison; they are not outstandingly remarkable. Similar wilderness experiences are provided by other rivers in the Cruces Basin and other wilderness areas in the region of comparison. The riparian environments are similar to those of other rivers in the region of comparison, and are therefore, not outstandingly remarkable.

Concern Statement 438 **Cañada de Chacon**

Canada de Chacon should be found eligible for its fisheries value. The uniquely intact headwaters stream through Canada de Chacon provides excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. It is an important tributary to El Rito Creek, which boasts similar conditions.

Associated Comment Letters: 4881, 5505

Response

Cañada de Chacon is eligible with a fisheries outstandingly remarkable value.

Concern Statement 439 **Canjilon Creek headwaters**

The Canjilon Creek headwaters should be found eligible for their recreational, wildlife, botany, climate adaptation, and water supply/ecosystem service values. Canjilon Creek headwaters provide excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. In addition to Rio Grande cutthroat trout, the stream and stream corridor also provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, warranting an additional outstandingly remarkable value for wildlife and botany, as noted in the outstandingly remarkable value list for this entry. The stream's critical headwaters location is important to climate adaption and downstream water supplies, warranting supplemental protection for the stream and riparian corridor, with corresponding addition of outstandingly remarkable values for climate adaptation and ecosystem services.

Associated Comment Letters: 4881, 5505

Response

The upper segment of Canjilon Creek is eligible with a recreation outstandingly remarkable value. However, Canjilon Creek is not part of a larger connected system (Wild and Scenic River Eligibility Evaluation, pp. 89–90, 103–104) and isolated Rio Grande cutthroat streams do not meet the Carson NF’s criteria for outstandingly remarkable values; only those Rio Grande cutthroat trout streams that occur as part of a larger system providing redundant habitat are considered eligible. Many rivers in the region of comparison provide habitat for a highly diverse array of wildlife species and are headwaters for other rivers, contributing to streamflow and downstream water supplies. No evidence indicates that this river is unique among similar rivers relative to climate adaptation and would therefore merit an outstandingly remarkable value for that purpose.

Concern Statement 440 **Canjilon Creek**

Canjilon Creek should be listed as eligible with a wild classification.

Associated Comment Letter: 4911

Response

Canjilon Creek is classified as recreational because of a two-track road that parallels its upper portion (Ca6), the developed recreation Canjilon Lakes area with significant evidence of recent timber harvest, and significant development along the lower portion (Ca8) including U.S. Highway 84.

Concern Statement 441 **Canjilon Creek below Canjilon**

Canjilon Creek below Canjilon should be found eligible for its scenic, recreational, geology, and wildlife values. Canjilon Creek's distinctive, colorful canyon is highly scenic, providing memorable recreation opportunities, including popular fishing for Rio Grande cutthroat trout. In addition to Rio Grande cutthroat trout, the stream and stream corridor also provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, warranting an additional outstandingly remarkable value for wildlife, as noted in the outstandingly remarkable value

list for this entry. The eligible stream corridor should be extended (beyond habitual one-quarter mile) to include and protect the full spectrum of stream-related geologic and wildlife features.

Associated Comment Letters: 4881, 5377, 5505

Response

Canjilon Creek below Canjilon is eligible with scenic, recreational, and geological outstandingly remarkable values. Many rivers in the region of comparison provide habitat for a highly diverse array of wildlife species. Consistent with the 2012 Planning Rule (FSH 1909.12 section 84.3) and the Wild and Scenic Rivers Act subsection 4(d), a corridor of one-quarter mile on either side of an eligible river is defined by MA-EWSR-S-2 in which outstandingly remarkable values are protected. Under subsection 4(d) of the act, a suitability study may expand the breadth of the corridor "to address areas which lie more than one-quarter mile from the ordinary high water mark on each side of the river" (Wild and Scenic River Act section 4(d)).

Concern Statement 442 **Canjilon Creek below Canjilon**

Canjilon Creek below Canjilon should be found eligible for its botany values. Natural Heritage New Mexico has identified special species Durango gumweed in this corridor, identified for "New Mexico Rare Conservation Strategy Species," warranting the addition of outstandingly remarkable value for botany.

Associated Comment Letters: 4881, 5505

Response

The Carson NF has no record of documentation of Durango gumweed (*Grindelia decumbens* var. *subincisa*) in Canjilon Creek. New Mexico Natural Heritage documents an occurrence of Durango gumweed on the Carson NF in section 5, north of the town of Canjilon, which is separated from Canjilon Creek by private land and does not contain a named river (NHNM 2020).

Concern Statement 443 **Carracas Canyon**

Carracas Canyon should be found eligible for its historic value. The historic values of Carracas Canyon are unique in the region, affirming the importance of the stream and stream crossing to early inhabitants and explorers.

Associated Comment Letters: 4881, 5505

Response

Carracas Canyon is eligible with a historic outstandingly remarkable value.

Concern Statement 444 **Chuckwagon Creek**

Chuckwagon Creek should be found eligible for its fisheries value. The headwaters of Chuckwagon Creek provide excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species.

Associated Comment Letters: 4881, 5505

Response

Chuckwagon Creek is eligible with a fisheries outstandingly remarkable value.

Concern Statement 445 **Columbine Creek**

Columbine Creek should be found eligible for its fisheries and recreational values with a wild classification. The headwaters of Columbine Creek provide excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. Recreation and biologic understanding in the area is enhanced by the nearby Columbine-Twining Trail. Columbine Creek

traverses the wonder and solitude of designated wilderness, providing uniquely southwestern recreational experiences and memories.

Associated Comment Letters: 4881, 5377, 5505

Response

Columbine Creek is eligible with a recreational outstandingly remarkable value. The segment above Deer Creek also has a fisheries outstandingly remarkable value. The upper segment has a wild classification. The lower segment flows through the Columbine Campground developed recreation site and is therefore classified as recreational.

Concern Statement 446 **Comanche Creek**

Comanche Creek should be found eligible for its scenic, recreational, geologic, fisheries, and wetlands values. The headwaters of Comanche Creek provide excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. The trout stream traverses an impressive array of geologic features and important, healthy riparian plant communities, and it is an important tributary to wild and scenic eligible Costilla Creek.

Associated Comment Letters: 5377, 5505

Response

Comanche Creek is eligible with scenic, recreational, geological, fisheries, and other (wetlands) outstandingly remarkable values.

Concern Statement 447 **Costilla Creek**

Costilla Creek should be found eligible for its fisheries, scenic, and recreational values. Costilla Creek provides excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. The trout stream traverses the sweeping splendor and recreational opportunities of Valle Vidal. The stream also traverses a distinctive canyon popular for recreational fishing.

Associated Comment Letters: 4881, 5505

Response

Costilla Creek is eligible with scenic and recreational outstandingly remarkable values and a fisheries outstandingly remarkable value above the fish barrier.

Concern Statement 448 **Deer Creek**

Deer Creek headwaters should be found eligible for its fisheries value. The headwaters of Deer Creek provide excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. Recreation and biologic understanding in the area is enhanced by the nearby Columbine-Twining Trail. The creek is also an important tributary to wild and scenic eligible Columbine Creek.

Associated Comment Letters: 4881, 5505

Response

Deer Creek is eligible with recreational and fisheries outstandingly remarkable values.

Concern Statement 449 **Diablo Creek**

Diablo Creek should be found eligible for its fish, wildlife, climate adaptation, and ecosystem services values. Both Diablo Creek and Beaver Creek are important wilderness tributaries to eligible Rio de los Pinos, contributing streamflow and water quality to that important stream. Beaver Creek possesses abundant fish populations in health, pristine stream habitat, along with diverse wildlife. The unique land protection afforded by Cruces Basin Wilderness, and the stream's critical headwaters location—

important to climate adaptation and downstream water supplies—warrant supplemental protection for the stream and riparian corridor, with corresponding outstandingly remarkable values for climate adaptation and ecosystem services.

Associated Comment Letters: 4881, 5505

Response

The location of a river relative to designated wilderness is not a criterion in the eligibility evaluation. Many rivers in the region of comparison are headwaters for other rivers, contributing to streamflow and downstream water supplies. The previous evaluation found outstandingly remarkable values for an "abundance of large fish" and a "good diversity" of wildlife; with respect to those values, Diablo and Beaver Creeks are similar to other rivers in the region of comparison. No evidence indicates that this river is unique among similar rivers relative to climate adaptation.

Concern Statement 450 **East Fork of the Red River**

East Fork should be found eligible for its scenic and historic values. The headwaters of East Fork provide striking scenic views, and it reflects historic human settlement and activity, even as the stream corridor regains its natural character.

Associated Comment Letters: 4881, 5505

Response

The East Fork of the Red River is eligible with scenic and historic outstandingly remarkable values.

Concern Statement 451 **El Rito Creek**

El Rito Creek should be found eligible for its fisheries, climate adaptation, and water supply/ecosystem services values. The wild, intact stretch of El Rito Creek provides excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. In addition, the pristine, unroaded condition of Rito Creek headwaters provides important climate adaptation opportunities as sensitive species move generally upstream and up-elevation. This warrants an additional outstandingly remarkable value for climate adaptation. Protected headwaters also help ensure streamflows and water quality for downstream water supplies, with corresponding additional outstandingly remarkable value for water supply/ecosystem services. While acequia use diverts the creek in portions interfacing with the town of El Rito, and while there are private land holdings near the creek, this creek should be elevated to wild and scenic within the Forest Service boundaries. Extraordinary visual features abound in the El Rito Creek environs. Every season of every year varies in flora and fauna and this makes the creek distinctive including large quantities of wild Mexican hat and yarrow along with rarely spotted penstemon varieties. Every year seems to bring different mushroom varieties. This riparian landscape is rich in water. There are large annual fall gatherings of bugling elk down from the Carson NF and mother bears with their cubs in proximity to the creek. El Rito Creek has a unique spicy smell that must be from the one-of-a-kind collection of plants growing in the area. Exceptional camping, hunting, bird viewing, and hiking are available along the creek. A rare red-rock tent geologic formation hangs above the El Rito Campground along the river. While camping is very popular, it is also possible to experience absolute solitude further up the creek. Cultural use of the creek watershed is alive and well. Medicinal plants and piñon nuts are collected on a regular basis.

Associated Comment Letters: 4881, 5505, 5716

Response

The upper portion of El Rito Creek is eligible with a fisheries outstandingly remarkable value. Many rivers in the region of comparison are headwaters for other rivers contributing to streamflow and downstream water supplies. No evidence indicates that this river is unique among similar rivers relative to climate adaptation.

The Carson NF is not aware of any penstemon species that are unique to El Rito Creek. Because a feature is rare or unique does not alone make it outstandingly remarkable; it must also be conspicuously dissimilar from the class of feature to which it belongs. That is, being an example of a type of feature that is remarkable is insufficient; the feature must be an outstandingly remarkable example of the type. For example, river-based recreation opportunities are rare in the arid Southwest. To be outstandingly remarkable, the recreational opportunity must be unusually exemplary among arid rivers. There are over 20 penstemon species that occur in Rio Arriba County; all but one are widespread, occurring in multiple states. *Penstemon crandallii* ssp. *taosensis* is the only penstemon with limited range. While this species may occur in El Rito Creek, its distribution is more likely limited to the eastern edge of Rio Arriba County, as it is most common in Taos County, in the Sangre de Cristo Mountains and Taos Plateau. New Mexico Natural Heritage Program has identified no rare penstemon varieties in Rio Arriba County.

The scenic, botanic, riparian, geological, recreational, wildlife, and cultural values are similar to those found in other rivers in the region of comparison and are not outstandingly remarkable. The lower portion of El Rito Creek is highly altered and diverted where it flows through private land and the community of El Rito.

Concern Statement 452 **Fernandez Creek**

The Carson has not included Fernandez Creek in their evaluation. Fernandez Creek is a tributary to Comanche Creek that drains into Comanche Creek downstream from Chuckwagon Creek. There are 2.75 miles of “good” Rio Grande cutthroat trout habitat and Rio Grande cutthroat trout populations that have been deemed as having “no risk of hybridization.” Fernandez Creek Rio Grande cutthroat trout populations are protected by the full fish barrier on the Rio Costilla. Fernandez Creek should be listed as eligible (wild) with the following outstandingly remarkable value: Fisheries.

Associated Comment Letters: 4911, 4964

Response

Fernandez Creek was not evaluated, consistent with the Carson NF’s Wild and Scenic River Eligibility Evaluation criteria. It is not a named river on the Comanche Point 7.5 minute USGS quadrangle map; only named rivers are required to be evaluated (FSH 1909.12, section 82.2). The Carson NF elected to evaluate an additional 25 unnamed rivers that were previously found eligible. Fernandez Creek was not among those previously eligible rivers.

Concern Statement 453 **Foreman Creek**

Foreman Creek should be found eligible for its fisheries value. Foreman Creek provides excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. It is also an important tributary to wild and scenic eligible Comanche Creek.

Associated Comment Letters: 4881, 5505

Response

Foreman Creek is eligible with a fisheries outstandingly remarkable value.

Concern Statement 454 **Frijoles Creek**

Frijoles Creek should be found eligible for its fisheries values. Frijoles Creek, a tributary to the Rito de la Olla in the headwaters of the Rio Grande del Rancho, has a genetically pure Rio Grande cutthroat trout population and while the New Mexico Department of Game and Fish categorizes the fish barrier as “partial” they also list the habitat as “excellent.” While the fish barrier is only a partial barrier, the excellent habitat warrants eligibility. As per the outstandingly remarkable value criteria, a fisheries outstandingly remarkable value can be applied “on the merits of fish populations or habitat.”

Associated Comment Letters: 4881, 4911, 4964, 5505

Response

The New Mexico Department of Game and Fish has identified 134 streams with excellent Rio Grande cutthroat trout habitat. The habitat in Frijoles Creek is similar to that of many rivers in the region of comparison and is not outstandingly remarkable. Frijoles Creek does not meet the criteria for a fisheries outstandingly remarkable value for Rio Grande cutthroat trout; nonnatives are present and there is not a full barrier separating this segment.

Concern Statement 455 **Gavilan Canyon**

Gavilan Canyon should be found eligible for its wildlife, scenic, fish, riparian/botany, climate adaptation, and water supply/ecosystem service values. Genetically pure Rio Grande cutthroat trout are present in this stream segment, warranting protective management under eligibility. According to the 2016 State study, Rio Grande cutthroat trout populations are genetically pure, Rio Grande cutthroat trout habitat is “excellent,” and there is “no risk of hybridization.” Although no barrier to nonnative fish is currently present, a properly constructed barrier can be installed in this eligible-qualifying segment. The stream and stream corridor also provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, justifying the outstandingly remarkable value s for wildlife, fish, and riparian/botany. The unique land protection afforded by Columbine-Hondo Wilderness, and the stream's critical headwaters location—important to climate adaptation and downstream water supplies—warrant supplemental protection for the stream and riparian corridor, with corresponding outstandingly remarkable value s for climate adaptation and ecosystem services. Gavilan Canyon is an important headwaters tributary contributing streamflow and water quality to Rio Hondo.

Associated Comment Letters: 4881, 4901, 4911, 4964, 5377

Response

Gavilan Canyon does not meet the criteria for a fisheries outstandingly remarkable value for Rio Grande cutthroat trout; nonnatives are present and there is no barrier separating this segment. The habitat and riparian values are similar to those of other areas of the district, forest, and region of comparison. The location of a river relative to designated wilderness is not a criterion in the eligibility evaluation. Many rivers in the region of comparison are headwaters for other rivers, contributing to streamflow and downstream water supplies. No evidence indicates that this river is unique among similar rivers relative to climate adaptation.

Concern Statement 456 **Gold Creek**

Gold Creek should be found eligible for its fisheries value. Gold Creek provides excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. It is also an important tributary to wild and scenic eligible Comanche Creek.

Associated Comment Letters: 4881, 5505

Response

Gold Creek is eligible with a fisheries outstandingly remarkable value.

Concern Statement 457 **Grassy Creek**

Grassy Creek should be found eligible for its fisheries values. Grassy Creek provides excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. It is also an important tributary to wild and scenic eligible Comanche Creek.

Associated Comment Letters: 4881, 5505

Response

Grassy Creek is eligible with a fisheries outstandingly remarkable value.

Concern Statement 458 **Hachita Canyon**

Hachita Canyon should be found eligible for its fisheries value. The uniquely intact headwaters stream through Hachita Canyon provides excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. It is an important tributary to El Rito Creek, which boasts similar conditions.

Associated Comment Letters: 4881, 5505

Response

Hachita Canyon is eligible with a fisheries outstandingly remarkable value.

Concern Statement 459 **Holman Creek**

Holman Creek should be found eligible for its fisheries value. Holman Creek provides excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. It is also an important tributary to wild and scenic eligible Comanche Creek.

Associated Comment Letters: 4881, 5505

Response

Holman Creek is eligible with a fisheries outstandingly remarkable value.

Concern Statement 460 **Italianos Canyon**

Italianos Canyon should be found eligible for its wildlife, scenic, fish, riparian/botany, climate adaptation, and water supply/ecosystem service values. Genetically pure Rio Grande cutthroat trout are present in this stream segment, warranting protective management under eligibility. The Draft Wild and Scenic Rivers Evaluation says that this segment is not eligible because this is an isolated section, yet there are three other rivers in close proximity that also have genetically pure populations of Rio Grande cutthroat trout—Yerba, South Fork, and Gavilan. The isolated nature of this stream segment does not render it ineligible.

Italianos is the most popular drainage in the Rio Hondo canyon and is considered one of the best hiking trails in the Taos area for its beautiful views and exceptional recreational values. Under a proper region of comparison, Rocky Mountain bighorn sheep would be deemed outstandingly remarkable. However, bighorn sheep are far from the only species that relies on this stream corridor: it provides habitat for a wide variety of diverse wildlife species that are either directly riparian-dependent or have stream-related life cycles, justifying the outstandingly remarkable values for wildlife, fish, and riparian/botany.

The unique land protection afforded by Wheeler Peak Wilderness, and the stream's critical headwaters location—important to climate adaptation and downstream water supplies—warrant supplemental protection for the stream and riparian corridor, with corresponding outstandingly remarkable values for climate adaptation and ecosystem services. Italianos Canyon is an important headwaters tributary contributing streamflow and water quality to Rio Hondo.

Associated Comment Letters: 128, 4881, 4901, 4911, 4964, 5377, 5505

Response

Isolated Rio Grande cutthroat streams do not meet the Carson NF’s criteria for outstandingly remarkable values; only those Rio Grande cutthroat trout streams that occur as part of a larger system providing redundant habitat, are considered eligible. Italianos Canyon is not part of a larger connected system (Wild and Scenic River Eligibility Evaluation, pp. 89–90, 103–104).

The scenery and hiking opportunities are similar in all the Rio Hondo tributaries, including Italianos Canyon, Manzanita Canyon, the South Fork of the Rio Hondo, and Long Canyon. Scenery is arguably more outstanding in Lake Fork. Similar scenery and recreational opportunities exist in the upper Red River basin, Columbine Canyon Basin, Latir Wilderness, and Pecos Wilderness on the Carson NF alone.

Other similar, or more outstandingly remarkable, alpine and high alpine, remote scenery and hiking opportunities can be found elsewhere in the region of comparison. Rocky Mountain bighorn sheep may be found in many river corridors on the Questa Ranger District and on the Carson NF, and their habitat is not directly river-related. Nothing specific to Italianos Canyon provides uniquely high-quality habitat for the species. Many rivers in the region of comparison provide habitat for a highly diverse array of wildlife and plant species.

Italianos Canyon is not in the Wheeler Peak Wilderness; regardless, the location of a river relative to designated wilderness is not a criterion in the eligibility evaluation. Many rivers in the region of comparison are headwaters for other rivers, contributing to streamflow and downstream water supplies. No evidence indicates that this river is unique among similar rivers relative to climate adaptation.

Concern Statement 461 **Jiron Canyon**

Jiron Canyon should be found eligible for its fisheries, wildlife, botany, climate adaptation, and water supply/ecosystem services values. Genetically pure Rio Grande cutthroat trout are present in this stream segment, warranting protective management under eligibility. Although no barrier to non-native fish is currently present, a properly constructed barrier can be installed in this eligible-qualifying segment. The stream and stream corridor also provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife, fish, and botany. The stream's critical headwaters location is important to climate adaption and downstream water supplies, warranting supplemental protection for the stream and riparian corridor, with outstandingly remarkable values for climate adaptation and ecosystem services.

Associated Comment Letters: 4881, 5505

Response

Jiron Canyon does not meet the criteria for a fisheries outstandingly remarkable value for Rio Grande cutthroat trout; nonnatives are present and there is no barrier separating this segment. Many rivers in the region of comparison provide habitat for a highly diverse array of wildlife and plant species. Many rivers in the region of comparison are headwaters for other rivers, contributing to streamflow and downstream water supplies. No evidence is provided as to why this river is unique among similar rivers relative to climate adaptation.

Concern Statement 462 **La Belle Creek**

La Belle Creek should be found eligible for its fisheries and elk calving values. La Belle Creek provides excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. It is also an important tributary to wild and scenic eligible Comanche Creek.

Associated Comment Letters: 4881, 5377, 5505

Response

La Belle Creek is eligible with a fisheries outstandingly remarkable value. The elk calving area is not outstandingly remarkable regionally, and not directly river-related.

Concern Statement 463 **La Cueva Canyon**

La Cueva Canyon should be found eligible for its fisheries, elk calving, and elk wintering values. La Cueva Canyon provides excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. It is also an important tributary to wild and scenic eligible Costilla Creek.

Associated Comment Letters: 4881, 5377, 5505

Response

La Cueva Creek is eligible with a fisheries outstandingly remarkable value. The elk calving area and winter range are not outstandingly remarkable regionally and are not directly river-related.

Concern Statement 464 **La Jara Canyon**

La Jara Canyon should be found eligible for its historic and wildlife values. La Jara Canyon boasts a colorful history of both human conflict and social importance, all related to the stream as a reprise and settlements in an arid region. This is a winter migratory corridor for deer, elk, and wintering bald eagles. State threatened wintering bald eagles are completely dependent on a healthy aquatic and riparian system.

Associated Comment Letters: 4881, 5377, 5505

Response

La Jara Canyon is eligible with a historic outstandingly remarkable value. The deer, elk, and bald eagle habitat are not outstandingly remarkable regionally, and are not directly river-related.

Concern Statement 465 **Lagunitas Fork**

Lagunitas Fork should be found eligible for its fisheries value. The headwaters of Lagunitas Fork provide excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. It is also an important tributary to wild and scenic eligible Lake Fork.

Associated Comment Letters: 4881, 5505

Response

Lagunitas Fork is eligible with a fisheries outstandingly remarkable value.

Concern Statement 466 **Lake Fork**

Lake Fork should be found eligible for its fisheries values. The headwaters of Lake Fork provide excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species.

Associated Comment Letters: 4881, 5505

Response

Lake Fork is eligible with a fisheries outstandingly remarkable value.

Concern Statement 467 **Leandro Creek**

Leandro Creek should be listed as eligible (wild) with the following outstandingly remarkable values: fisheries and wildlife. The upper portion (approximately 2 miles) of Leandro Creek, which is a tributary of the Vermejo River, has both genetically pure populations of Rio Grande cutthroat trout and a complete fish barrier.

Associated Comment Letters: 4911, 4964

Response

The eligibility evaluation has been updated to reflect a full barrier; however, nonnative species are present, and Leandro Creek, therefore, does not meet the criteria for a fisheries outstandingly remarkable value (USDA FS Carson NF 2018c). The habitat and wildlife values are similar to those in other areas of the district, forest, and region of comparison.

Concern Statement 468 **Little Costilla Creek**

Little Costilla Creek should be found eligible for its fisheries and elk calving values. Little Costilla Creek provides excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout,

protected from invasive fish species. It is also an important tributary to wild and scenic eligible Comanche Creek.

Associated Comment Letters: 4881, 5377, 5505

Response

Little Costilla Creek is eligible with a fisheries outstandingly remarkable value. The elk calving area is not outstandingly remarkable regionally and is not directly river-related.

Concern Statement 469 **Long Canyon**

Long Canyon should be found eligible for its wildlife, scenic, fish, riparian/botany, climate adaptation, and water supply/ecosystem services values. Rio Grande cutthroat trout are present in this stream segment, warranting protective management under eligibility. Although no barrier to nonnative fish is currently present, a properly constructed barrier can be installed in this eligible-qualifying segment. In addition, the stream and stream corridor provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife and fisheries. The unique land protection afforded by Columbine-Hondo Wilderness, and the stream's critical headwaters location—important to climate adaption and downstream water supplies—warrant supplemental protection for the stream and riparian corridor, with corresponding outstandingly remarkable values for climate adaptation and ecosystem services. Long Canyon is an important headwaters tributary contributing streamflow and water quality to Rio Hondo.

Associated Comment Letters: 4881, 4901, 5377, 5505

Response

Long Canyon does not meet the criteria for a fisheries outstandingly remarkable value for Rio Grande cutthroat trout as there is no barrier separating this segment. The habitat and riparian values are similar to those in other areas of the district, forest, and region of comparison. The location of a river relative to designated wilderness is not a criterion in the eligibility evaluation. Many rivers in the region of comparison are headwaters for other rivers, contributing to streamflow and downstream water supplies. No evidence indicates that this river is unique among similar rivers relative to climate adaptation.

Concern Statement 470 **Manzanita Canyon**

Manzanita Canyon should be found eligible for its wildlife, scenic, fish, riparian/botany, climate adaptation, and water supply/ecosystem services values. Genetically pure Rio Grande cutthroat trout are present in this stream segment, warranting protective management under eligibility. The isolated nature of this stream segment does not render it ineligible. In addition, the stream and stream corridor provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife and fisheries. The unique land protection afforded by Wheeler Peak Wilderness, and the stream's critical headwaters location—important to climate adaptation and downstream water supplies—warrant supplemental protection for the stream and riparian corridor, with corresponding outstandingly remarkable values for climate adaptation and ecosystem services. Manzanita Canyon is an important headwaters tributary contributing streamflow and water quality to Rio Hondo.

Associated Comment Letters: 4881, 4901, 4911, 4964, 5377, 5505

Response

Isolated Rio Grande cutthroat streams do not meet the Carson NF’s criteria for outstandingly remarkable values. Only those Rio Grande cutthroat trout streams that occur as part of a larger system providing redundant habitat are considered eligible. Manzanita Canyon is not part of a larger connected system (USDA FS Carson NF 2018c, pp. 89–90, 103–104). The habitat and riparian values are similar to those of other areas of the district, forest, and region of comparison. Manzanita Canyon is not in the Wheeler Peak Wilderness; regardless, the location of a river relative to designated wilderness is not a criterion in

the eligibility evaluation. Many rivers in the region of comparison are headwaters for other rivers, contributing to streamflow and downstream water supplies. No evidence indicates that this river is unique among similar rivers relative to climate adaptation.

Concern Statement 471 **McCrystal Creek**

McCrystal Creek should be found eligible for its historic, recreational, scenic, fisheries, and elk wintering values. From atop the rock wall running north from Windy Gap, the land falls away hundreds of feet onto a rolling savannah-wetland system of high-altitude wet meadows of the headwaters of McCrystal Creek. These meadows are packed with grama grasses and prairie flowers such as penstemons and paintbrush, Mexican hat, and purple geranium. The McCrystal homestead is located along McCrystal Creek and consists of an old cabin site and the remains of corrals and an old wagon. There are genetically pure populations of Rio Grande cutthroat trout in McCrystal Creek, as acknowledged in the Carson NF's own eligibility analysis. New Mexico Department of Game and Fish has categorized the barrier on North Ponil Creek, downstream from the McCrystal confluence as, "complete," the habitat quality as, "good," and presence of nonnatives as, "none." McCrystal Creek also offers exceptional recreational opportunities and easy access hiking from McCrystal Campground. The previous eligibility analysis found McCrystal Creek eligible for 5 out the potential 6 outstandingly remarkable values: scenery, fisheries, wildlife, scenic, historic, and ecological.

Associated Comment Letters: 4881, 4901, 4911, 4964, 5377, 5505

Response

The segment below McCrystal Place is not free-flowing; a headgate completely diverts the flow and there is a partially functional dam near McCrystal campground that impounds water. The short segment above McCrystal Place is free-flowing but there are no outstandingly remarkable values. The elk wintering area is not outstandingly remarkable regionally and regardless, is not directly river-related. Historic values in McCrystal Creek are not outstandingly remarkable; the old cabin site is fallen down and is not remarkable; the old corrals and old wagon are not remarkable. The evaluation has been updated to reflect the complete fish barrier; however, McCrystal/North Ponil Creek is an isolated segment, not part of a larger connected system. Isolated Rio Grande cutthroat streams do not meet the Carson NF's criteria for outstandingly remarkable values; only those Rio Grande cutthroat trout streams that occur as part of a larger system providing redundant habitat are considered eligible. Similar recreational opportunities, wildlife habitat, scenery, and ecology exist in other areas of the Valle Vidal, district, forest, and region of comparison and are not outstandingly remarkable in McCrystal Creek.

Concern Statement 472 **Middle Fork of the Red River**

Middle Fork should be found eligible for its scenic and historic values. The distinctive scenery and recreational opportunities along Middle Fork warrant protection for the recovering stream and its corridor. The stream and stream corridor also provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, warranting an additional ORV for wildlife and botany, as noted in the ORV list for this entry.

Associated Comment Letters: 4881, 4901, 4911, 4964, 5377, 5505

Response

The Middle Fork of the Red River is eligible with scenic and historic outstandingly remarkable values. Many rivers in the region of comparison provide habitat for a highly diverse array of plant and wildlife species. The Sangre de Cristo pea clam is only found in Middle Fork Lake, not in the river below. The Middle Fork is not outstandingly remarkable with regard to habitat or species.

Concern Statement 473 **Middle Ponil Creek**

Middle Ponil Creek should be found eligible for its wildlife, historic, ecological, scenic and recreational values. The headwaters of the Middle Ponil provide one of the more exceptional opportunities for

solitude and unaltered aquatic and riparian habitats in the Carson NF. In all the times I have hiked in this watershed, and there have been many, I have only encountered a couple of Boy Scouts. The long, wide valley that sits between Ash Mountain and Little Costilla Peak and that makes up the headwaters of the Middle Ponil is remote and not visited often by hikers or backpackers. Hiking to the headwaters involves bushwhacking along the ridge past the largest bristlecone pine tree in the state and dropping into the wild beautiful valley of the upper Middle Ponil. Ash Mountain, a stunning long ridge of shale that soars above to the east, provides exceptional geologic and scenic values. Little Costilla Peak towers above the northwest side of the valley, providing stunning views and recreational opportunities. The Middle Ponil starts in this valley this is situated between Little Costilla and Ash Mountain. When you're in the headwaters of the Middle Ponil, it's quite sheer - steep, rocky, uninviting. It's a diverse geologic landscape. Looking downstream out the notch made by Middle Ponil as it flows south, one can view the towering peaks of the Wheeler Peak and Columbine Hondo Wildernesses, home to the highest peaks in New Mexico. The Middle Ponil offers the best opportunities for solitude and for hiking and camping in a high mountain meadow that is not impacted by cattle grazing. While there are some signs of cattle grazing, it is very minimal - the cow patties are always old and dry and the grass is waist high in much of the riparian area. These conditions are extremely rare and unique across the Carson NF, and indeed across the West. The Middle Ponil offers unique opportunities for solitude and wildlife viewing. The Valle Vidal is home to the largest elk herd in New Mexico and the remote Upper Middle Ponil valley provides excellent opportunities for elk viewing (and listening, when the elks are bugling). The relatively undisturbed riparian wet meadows feed into a forested canyon segment, which offers excellent aquatic habitat.

Associated Comment Letters: 4881, 4901, 4911, 4964, 4977, 5505

Response

The geologic, scenic, and recreational values associated with Little Costilla Peak and Ash Mountain are outside the river corridor and not directly river-related. The solitude and recreational experience along the river itself are not unique compared to other rivers in the Valle Vidal or overall region of comparison. Rivers in the Cruces Basin, Weminuche Wilderness, or Valles Caldera are other similar examples. The aquatic and riparian values are similar to those in other areas of the district, forest, and region of comparison. There are views of Wheeler Peak and the Columbine-Hondo Wilderness from many locations in northern New Mexico. There are other areas in the region of comparison with little evidence of cattle grazing, including areas where no cattle grazing is permitted. The Valle Vidal elk herd may be viewed and heard throughout the Valle Vidal. Other large elk herds exist in the region of comparison.

Concern Statement 474 **North Ponil and McCrystal Creeks**

The restoration work that is occurring on North Ponil and McCrystal Creeks is one big reason why they should remain eligible as wild and scenic rivers.

Associated Comment Letter: 4977

Response

Wild and scenic river eligibility status does not impact restoration work so long as restoration work in eligible rivers is consistent with that eligibility. Outstandingly remarkable values are features of a river related to the river itself. For example, if restoration has created scenery in the river corridor that is extraordinary or exemplary, that scenery may be considered outstandingly remarkable; restoration work itself is not considered an outstandingly remarkable value. That a river has been manipulated to restore its function is not a consideration in the eligibility evaluation, since that is a reflection of past management decisions, not itself a feature of the river.

Concern Statement 475 **North Ponil Creek**

The North Ponil Watershed is home to the Ring Place historic site. Ring Place nestled in the North Ponil headwaters is a historic ranch, with an authentic two-story log cabin, barn and root cellar, and is a prime

example of early western homesteaders. Timothy Ring came to the United States from Ireland just in time for the Civil War, fought on the Union side and took a bullet in a lung. Ring purchased the 320-acre ranch in 1890 for $960. Born in County Cork, Ireland, Ring married Irish-born Catherine Byrnes in Chicago after the Civil War. They had seven daughters—Margaret, Mabel, Mary, Maud, Myrtle, Amy and Anna. The last of them, Anna, died in 1984 at age 92. Catherine Ring sold the ranch in 1906, but the property continued as a ranch until the 1980s. This site provides a glimpse into the past and the days of the old west where a few rugged families eked out a living in the harsh climate of high-elevation mountain valleys. The North Ponil and McCrystal Watersheds are unique in the region for the large numbers of Boy Scouts that recreate and engage in educational and restoration-based activities. North Ponil Creek should be listed as eligible (recreational) with the following outstandingly remarkable values: Historic, recreational, and scenery and other (educational opportunities for thousands of Boy Scouts).

Associated Comment Letters: 4911, 4964

Response

Ring Place is in the North Ponil Creek watershed, but not within the one-quarter-mile corridor of either North Ponil Creek or McCrystal Creek. While many Boy Scouts and other forest visitors do visit the Ring Place Ranch, the recreational and educational use in the rivers is similar to that of other rivers in the Valle Vidal and the adjacent Philmont Ranch. Other rivers in the Valle Vidal and the region of comparison have similar historic and scenic values.

Concern Statement 476 **Palociento Creek**

Palociento Creek should be found eligible for its fisheries value. As documented by New Mexico Department of Game and Fish, Palociento Creek, a tributary in the headwaters of eligible Rio Grande del Rancho has genetically pure populations of Rio Grande cutthroat trout, a full barrier, “excellent” Rio Grande cutthroat trout habitat, and “no risk of hybridization.”

Associated Comment Letters: 4881, 4911, 4964, 5505

Response

The Wild and Scenic River Eligibility Evaluation has been updated to reflect the most recent New Mexico Department of Game and Fish Rio Grande cutthroat trout assessment. Palociento Creek contains Rio Grande cutthroat trout that are genetically pure and there is a full barrier that separates this section, but nonnative brown trout are present. Rivers with nonnative species do not meet the Carson NF’s criteria for outstandingly remarkable values.

Concern Statement 477 **Placer Fork**

Placer Fork should be found eligible for its fisheries value. Placer Fork provides excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. It is also an important tributary to wild and scenic eligible Comanche Creek.

Associated Comment Letters: 4881, 5505

Response

Placer Fork is eligible with a fisheries outstandingly remarkable value.

Concern Statement 478 **Policarpio Canyon**

Policarpio Canyon should be found eligible for its recreational, fisheries, climate adaptation, and water supply/ecosystem services values. Genetically pure Rio Grande cutthroat trout are present in this stream segment, warranting protective management under eligibility. The isolated nature of this stream segment does not render it ineligible. In addition, the stream and stream corridor also provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife and fisheries. The stream's critical

headwaters location is important to climate adaption and downstream water supplies, warranting supplemental protection for the stream and riparian corridor, with outstandingly remarkable values for climate adaptation and ecosystem services. It's a small creek, but fairly easy to access and fish for relic Rio Grande cutthroat trout. Since a lot of our other creeks that support cutthroats are so small and brushy, this one stands out as being much easier to fish for people looking to catch a pure cutthroat–which there are many of.

Associated Comment Letters: 4881, 4911, 4964, 5393, 5505

Response

Isolated Rio Grande cutthroat streams do not meet the Carson NF's criteria for outstandingly remarkable values. Only those Rio Grande cutthroat trout streams that occur as part of a larger system that provides redundant habitat are considered eligible. Policarpio Canyon is not part of a larger connected system (USDA FS Carson NF 2018c, pp. 89–90, 103–104). Many rivers in the region of comparison are headwaters for other rivers, contributing to streamflow and downstream water supplies. Similar recreational and fishing opportunities are available in the region of comparison. No evidence indicates that this river is unique among similar rivers relative to climate adaptation.

Concern Statement 479 **Powderhouse Canyon**

Powderhouse Canyon should be found eligible for its fisheries and elk wintering and calving values. Powderhouse Canyon provides excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. The existing fish barrier within this segment does not compromise its eligibility.

Associated Comment Letters: 4881, 5377, 5505

Response

Powderhouse Canyon is eligible with a fisheries outstandingly remarkable value. The elk wintering and calving areas are not outstandingly remarkable regionally and are not directly river-related. The existing fish barrier in the middle of this segment impounds water, thereby impacting free-flow and therefore necessitates a recreational classification.

Concern Statement 480 **Red River**

Red River should be found eligible for its recreational value. Popular and accessible fishing along the Red River warrants it protection as a potential wild and scenic river. The presence of a small diversion does not unduly compromise the stream's free-flowing condition or its eligibility.

Associated Comment Letters: 4881, 4911, 5505

Response

The segment of the Red River above the fish hatchery is eligible with a fisheries outstandingly remarkable value. Diversion near the fish hatchery does impact free flow, contributing to its recreational classification.

Concern Statement 481 **Rito de la Olla**

Rito de la Olla headwaters should be found eligible for its scenic, historic, cultural, wildlife, fisheries, botany, climate adaptation, and water supply/ecosystem services values. It is beautiful, with unique history and pristine water. Extensive historical and cultural artifacts make the Rito de la Olla corridor uniquely valuable for heritage preservation, research, and exploration. Rio Grande cutthroat trout are present. The presence of a barrier to nonnative fish does not necessarily harm the free-flowing condition of this segment or otherwise disqualify it from eligibility. In addition, the stream and stream corridor also provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife, fisheries, and botany. U.S. Fish and Wildlife Service has designated critical habitat for southwestern willow flycatcher

in the corridor. The stream's critical headwaters location is important to climate adaption and downstream water supplies, warranting supplemental protection for the stream and riparian corridor, with outstandingly remarkable values for climate adaptation and ecosystem services. Rito de la Olla is an important tributary to eligible Rio Grande del Rancho and secondary tributary to Wild and Scenic Rio Grande. The stream's critical headwaters location is important to climate adaption and downstream water supplies—warrant supplemental protection for the stream and riparian corridor, with corresponding outstandingly remarkable values for climate adaptation and ecosystem services.

Associated Comment Letters: 115, 4881, 4911, 5505

Response

The full barrier in the middle of this segment does affect free flow. The lower portion of the river is confined by National Forest System Road 438, also affecting its free-flowing nature. Rio Grande cutthroat trout are present, but so are non-native trout, rendering the segment ineligible for fisheries outstandingly remarkable values. Other rivers in the region of comparison have similar scenery. There are no cultural values that are outstandingly remarkable regionally. The cultural site is mainly on private land, and where a portion of the cultural site is on National Forest System land, the river is on private land. Many rivers in the region of comparison provide habitat for a highly diverse array of wildlife and plant species. The only critical habitat for southwestern willow flycatcher is at the confluence with the Rio Grande del Rancho; this section is eligible with a wildlife outstandingly remarkable value due to the critical habitat. Many rivers in the region of comparison are headwaters for other rivers, contributing to streamflow and downstream water supplies. No evidence indicates that this river is unique compared to similar rivers in the region of comparison with respect to climate adaptation.

Concern Statement 482 **Rio de los Pinos**

Rio de los Pinos should be found eligible for its scenic, recreational, geologic, fisheries, wildlife, riparian, cliffs, and diversity values. The upper segment of Rio de los Pinos traverses a stunning combination of distinctive geologic layers and outcrops, recreation opportunities for fishing and wildlife viewing, all accented by and visible from the historic Cumbres and Toltec Railroad. This segment of Rio de los Pinos connects with the wild and scenic eligible segment in the adjacent Rio Grande NF. Rio de los Pinos has outstanding fishing, and certainly the Toltec gorge should be qualified as a world class kayak run.

The stream and stream corridor also provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife and fish, warranting outstandingly remarkable values for wildlife and fisheries. Distinctive stream-related scenery and abundant recreation opportunities along this segment of Rio de los Pinos warrant its protection. This stream segment is proximal to Rio de los Pinos Wildlife Management Area.

Associated Comment Letters: 4881, 4911, 5377, 5393, 5505

Response

The upper segment of the Rio de los Pinos is eligible with scenic, recreational, and geologic outstandingly remarkable values. The lower portion is eligible with scenic and recreational outstandingly remarkable values. Fishing opportunities and the Cumbres-Toltec Railroad are included as outstandingly remarkable recreational values. While there have been several kayak descents of the Toltec Gorge, it is not a regularly run or renowned segment (Mountainbuzz.com 2012). McCutchen and Stafford (2007) describe the gorge as “partially runnable and marginally portageable” with “rugged terrain, technical portages with ropes, and a tedious paddle out” (p. 424). “It’s a committing and technical run, with certain levels creating inhospitable paddling conditions with a solid NR [not recommended] rating” (McCutchen and Stafford 2007). There are more outstanding, narrow-canyon, class V+, steep creek kayaking opportunities in the region of comparison (McCutchen and Stafford 2007). Many rivers in the region of comparison provide habitat for a highly diverse array of wildlife and plant species.

Concern Statement 483 **Rio de las Trampas**

Rio de las Trampas headwaters should be found eligible for its scenic, recreational, historic, geologic, wildlife, scenic, fisheries, climate adaptation, water supply/ecosystem services values. Rio de las Trampas headwaters traverse and shape a distinctively scenic glacial terrain, creating and accenting memorable scenery. The lower portion supports an historic acequia system with historic significance. Stream diversions in lower reach of the stream segment do not compromise the stream's free-flowing condition. The draft eligibility evaluation notes only that, “The acequia diversions detract from the free-flowing characteristics of the river.” The distinction between “detract” and disqualifying the streams needs more clarification, or the stream should be found free-flowing.

The confluence with Rio Embudo has geologic significance. The downstream segment of Rio de las Trampas traverses a BLM Area of Critical Environmental Concern and has been found eligible with outstandingly remarkable values for geologic, wildlife, and scenery. The stream and stream corridor also provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable value for wildlife and fisheries, warranting outstandingly remarkable values for wildlife and fish. The unique land protection afforded by Pecos Wilderness, and the stream's critical headwaters location (combined with headwaters of Rio San Leonardo)—important to climate adaption and downstream water supplies—warrant supplemental protection for the stream and riparian corridor, with corresponding outstandingly remarkable values for climate adaptation and ecosystem services.

Associated Comment Letters: 4881, 4911, 5505

Response

The geology and scenery of Rio de las Trampas are not outstandingly remarkable in the context of the region of comparison. Other examples of headwater rivers that traverse scenic glacial terrain on the district include the three Rio Santa Barbara forks, Alamitos Creek, and Rito Angostura; more occur on the Questa Ranger District and many others are found just to the south on the Santa Fe NF. No river segments that contain acequia or any diversions for other purposes have been found eligible. No eligible segments are within one-quarter mile of acequia points of diversion. Diversion by acequias or for other purposes impacts a river’s free flow and is generally not compatible with wild and scenic river eligibility. Acequia diversions along with the other extensive development in the surrounding communities detract from the Rio de las Trampas’ free-flowing nature. The evaluation does not conclude that the river is not free-flowing, as some existing impoundment or diversion may occur in a recreational classification river. If the waterway remains generally natural and riverine in appearance it may still be considered free-flowing, but where diversions or impoundments create more extensive modification, the river is not considered free-flowing.

The Rio Embudo confluence is about 1 mile beyond the national forest boundary. The private inholding of Vallecitos is just upstream of the eligible BLM section, right near the national forest boundary. River values on the Carson are different than those on the BLM land downstream. The habitat and riparian values are similar to those in other areas of the district, forest, and region of comparison. The location of a river relative to designated wilderness was not a criterion in the eligibility evaluation. Many rivers in the region of comparison are headwaters for other rivers, contributing to streamflow and downstream water supplies. No evidence indicates that this river is unique among similar rivers relative to climate adaptation.

Concern Statement 484 **Rio Grande del Rancho**

Rio Grande del Rancho should be found eligible for its scenic, recreational, cultural, historic, riparian/botany, wildlife, riparian, climate adaptation, and water supply/ecosystem services values. The headwaters of Rio Grande del Rancho includes uniquely healthy mid-elevation riparian vegetation and scenery, appealing for diverse and accessible recreation. This river is very primitive, emerging from the pristine snow melt deep in the Carson NF. These waters have provided endless summers of recreation for

multiple generations of families and have contributed to a sense of wellbeing and identity for the local community. The river has provided peace and solace during times of adversity and grief. This area has a rich historical significance. Native pottery, tools, and arrowheads around the neighborhood spark discussions about the natives that graced the land we live on before us. Over 60 years ago, Texan lumber industry developers George Lavender and Richard Farrell acquired property rights along the river based on forest leasing exchanges. Luckily, their plans to reroute what is now HWY 518 to the east and dam the river to create “lakeside” properties for wealthy Texans failed.

The stream and stream corridor also provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife and fish, warranting outstandingly remarkable values for wildlife and fisheries. Sage, piñon, yucca and other plants and animals that were essential to life in the high desert can still be found in abundance in the forest. Native hummingbirds, beaker, elk, wild turkeys, and other animals roam freely without fear of food being eaten by domesticated livestock. Wetlands support multiple other species. The stream corridor includes critical habitat for endangered southwestern willow flycatcher, designated by U.S. Fish and Wildlife Service, as well as presence and habitat for Mexican spotted owl. Rio Grande del Rancho combines with Rito de la Olla, with similar biological characteristics, to become the eligible lower Rio Grande del Rancho. Together, these streams contribute the streamflows and water quality to the highly important Rio Grande. It's a rare thing, to have streams that aren't being sucked dry or overgrazed. The quality of the river water is superb. They have really good populations of brown trout, and very few people fishing them. In terms of recreational value, there's plenty of solitude – miles of creek that just rarely gets fished. The stream's critical headwaters location is important to climate adaption and downstream water supplies, warranting supplemental protection for the stream and riparian corridor, with outstandingly remarkable values for climate adaptation and ecosystem services.

Associated Comment Letters: 116, 118, 136, 4881, 4922, 5064, 5393, 5505

Response

The lower portion of the Rio Grande del Rancho is eligible with wildlife and riparian outstandingly remarkable values and includes the area designated as southwestern willow flycatcher critical habitat. There are other, more primitive rivers in the region of comparison, such as those in wilderness areas. The habitat and riparian values of the segment above Rito de la Olla are similar to those in other areas of the district, forest, and region of comparison. Mexican spotted owls have not been identified on the Carson NF, except in the Jicarilla Ranger District. The recreational and scenic opportunities are relatively common and are not outstandingly remarkable regionally. There are other rivers on the forest alone that are more popular for recreationists (e.g., Rio Pueblo, Red River, Cabresto Creek). There are other rivers in the region of comparison with similar water quality and similar fishing opportunities are available on other rivers within the region of comparison. Local communities’ ties to adjacent rivers are prevalent in northern New Mexico; the Carson does not question the importance of rivers to adjacent communities. The history of Native American occupation and a failed development are not outstandingly remarkable values. Many rivers in the region of comparison are headwaters for other rivers, contributing to streamflow and downstream water supplies. Most rivers on the Carson NF are tributaries to the Rio Grande. The volume of water and level of grazing in this river is not remarkable. No evidence indicates that this river is unique among similar rivers relative to climate adaptation.

Concern Statement 485 **Rio San Antonio**

Rio San Antonio should be eligible for its scenic, fisheries, wildlife, and riparian/botanic values. The vegetation in this area is pristine. The grasses are tall and create exemplary visual attraction. It has a feel of being a visitor 100 years ago. The river segment is also clear and beautiful. This area embodies an exceptional opportunity for solitude. The stunning combination of steep canyon and sweeping plains along Rio San Antonio represent the unique scenic wonder of northern New Mexico. The stream accordingly warrants strong protection.

The upper portion has potential southwestern willow flycatcher habitat. The Federal and State endangered southwestern willow flycatcher habitat is limited! If it was common as you suggest, they wouldn't be listed endangered! This habitat is critical for this species and needs protection. Juvenile pronghorn play fight at a distance. There is good hiding cover for deer. It is an extremely important Rio Grande cutthroat trout creek. In addition, the stream and stream corridor also provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife and botany. This stream segment is proximal to related BLM Area of Critical Environmental Concern.

Associated Comment Letters: 132, 4881, 4911, 5377, 5505

Response

Rio San Antonio below Stewart Meadows is eligible with a scenic outstandingly remarkable value. Similar vegetation can be found in other rivers in the region of comparison. The clarity of the river is not remarkable within the region of comparison. The solitude and recreational experience along the river are not unique among other rivers in the region of comparison.

Potential southwestern willow flycatcher habitat is present throughout the region; there is nothing outstandingly remarkable about the habitat here. The southwestern willow flycatcher is protected under the Endangered Species Act. The final Plan guides management of their riparian habitat in the Watershed sections, particularly FW-RMZ and FW-FSR.

The pronghorn population and habitat and deer hiding cover are similar to those of other regional rivers and not outstandingly remarkable. The Rio Grande cutthroat trout genetics have not been tested, but nonnative fish are present, and there is no complete barrier. The habitat and riparian values are similar to those in other areas of the district, forest, and region of comparison.

Concern Statement 486 **Rio San Leonardo**

Rio San Leonardo should be found eligible for its scenic, recreational, geologic, wildlife, fisheries, climate adaptation, and water supply/ecosystem services values. Rio San Leonardo traverses and shapes a distinctively scenic glacial terrain, creating and accenting memorable scenery. The stream and stream corridor also provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife and fisheries, warranting outstandingly remarkable values for wildlife and fisheries. The unique land protection afforded by Pecos Wilderness, and the stream's critical headwaters location (combined with the headwaters of Rio de las Trampas)—important to climate adaptation and downstream water supplies—warrant supplemental protection for the stream and riparian corridor, with corresponding outstandingly remarkable values for climate adaptation and ecosystem services.

Associated Comment Letters: 4881, 4911, 5505

Response

The geology and scenery of the Rio San Leonardo are not outstandingly remarkable. Other examples of headwater rivers that traverse scenic glacial terrain on the district include the three Rio Santa Barbara forks, Alamitos Creek, and Rito Angostura. More are present on the Questa Ranger District, and many others are found just to the south on the Santa Fe NF. The habitat and riparian values are similar to those in other areas of the district, forest, and region of comparison. The location of a river relative to designated wilderness is not a criterion in the eligibility evaluation. Many rivers in the region of comparison are headwaters for other rivers, contributing to streamflow and downstream water supplies. No evidence indicates that this river is unique among similar rivers relative to climate adaptation.

Concern Statement 487 **Rio Santa Barbara**

Rio Santa Barbara headwaters should be found eligible for its scenic, recreational, historic, fisheries, wildlife, climate adaptation, and water supply/ecosystem services values. The headwaters forks of Rio

Santa Barbara provide outstanding scenery and opportunities for primitive recreation. In addition, the stream and stream corridor also provide habitat for a highly diverse array of wildlife species that either are directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife. Rio Santa Barbara's high-quality fish habitat warrants the additional outstandingly remarkable value for fisheries. The stream's critical headwaters location is important to climate adaptation and downstream water supplies, warranting supplemental protection for the stream and riparian corridor, with corresponding addition of outstandingly remarkable values for climate adaptation and ecosystem services.

Associated Comment Letters: 4881, 5505

Response

Rio Santa Barbara is eligible with scenic, recreational, and historic outstandingly remarkable values. The habitat and riparian values are similar to those in other areas of the district, forest, and region of comparison. Many rivers in the region of comparison are headwaters for other rivers, contributing to streamflow and downstream water supplies. No evidence indicates that this river is unique among similar rivers relative to climate adaptation.

Concern Statement 488 **Rio Santa Barbara**

In the January 2018 response to comments on the draft Wild and Scenic Evaluation, the Carson stated that a fisheries outstandingly remarkable value was added to this segment for high quality habitat. A Fish fisheries outstandingly remarkable value has not yet been added. We request that a fisheries outstandingly remarkable value be added to the Rio Santa Barbara in the final Plan. In addition, a wildlife outstandingly remarkable value is also merited. State threatened Pacific marten occur in the headwaters of the Rio Santa Barbara and riparian zones there appear to be the primary and best habitat in the entire Pecos Wilderness. The only photograph of a marten obtained over an entire summer during a Pecos Wilderness-wide Share-With-Wildlife study for marten was taken in the dense riparian cover in the Rio Santa Barbara headwaters. In the summer, the cool riparian areas have the highest densities of marten food. The Rio Santa Barbara supports an historic acequia system that has important cultural significance to surrounding communities. The following outstandingly remarkable values should therefore be added to the Rio Santa Barbara: fisheries, cultural, and wildlife.

Associated Comment Letters: 4911, 4964, 5377, 5393, 5701

Response

An outstandingly remarkable value for high-quality fish habitat was added to the January 2018 version of the Wild and Scenic Eligibility Evaluation. The April 2019 version reevaluated all river segments, based on updated regions of comparison. The region of comparison for fish was reduced from the Four Corners states to only the four drainage subregions that intersect the Carson NF. Those four drainage subregions have unique qualities among all subregions in the Four Corners states. They contain more water and more cold-water habitat than many parts of the Four Corners and include two out of the three subregions that contain native Rio Grande cutthroat trout. By considering only those rivers in the revised region of comparison, the standard for overall quality of habitat and integrity of populations used for comparison is higher, and the requirement for a finding of outstandingly remarkable value becomes stricter. With the Four Corners states as the region of comparison, the only river with a fisheries outstandingly remarkable value for high-quality habitat for nonnative species was the Rio Santa Barbara; however, similar quality habitat may be found in many other streams in the revised region of comparison, and therefore, that outstandingly remarkable value was removed.

Wildlife population and habitat values are compared to similar rivers throughout the four ecoregional provinces that intersect the Carson NF. While Pacific marten are listed as threatened in New Mexico, they are widespread in North America, including the Colorado portion of the region of comparison. We agree that the Rio Santa Barbara is remarkable for historic values other than the Pole and Tie Company and those values have been added to the evaluation. Cultural outstandingly remarkable values are those

that depend on the river's unaltered condition, which is not applicable to acequia diversion, which entails alteration of river flow.

Concern Statement 489 **Río Santa Bárbara**

The Plan states the only other fish species present in Río Santa Bárbara are brown trout. Brown trout and Rio Grande cutthroat trout are not known to cross breed. Therefore, since there is no evidence of any rainbow trout in the Río Santa Bárbara, the claim that the "Rio Grande cutthroat trout populations are suspected to be hybridized" is likely a false claim.

Associated Comment Letters: 4926

Response

The Wild and Scenic River Eligibility Evaluation has been updated to reflect pure Rio Grande cutthroat trout genetics in Rio Santa Barbara, consistent with the 2016 New Mexico Status Assessment.

Concern Statement 490 **Rio Santa Bárbara**

Opposition to eligibility for the Rio Santa Bárbara, particularly the 1½ mile segment of the river that lies between the Santa Barbara Campground and the boundaries of the Pecos Wilderness, which does not contain outstandingly remarkable values. This area is part of the historic common lands of La Merced de Santa Barbara Land Grant and Section 8 of the Wild and Scenic Rivers Act has a provision that withdraws any land for which a wild and scenic river has been designated from disposal by the Federal Government.

Due to this segment's proximity to the Santa Bárbara Campground, there is actually very little opportunity for solitude on this stretch of the river. This is a result of the high levels of human traffic, especially during peak camping and fishing season, from campers, hikers, and fishers taking the trailhead from the campgrounds into the wilderness. There is a man-made bridge constructed of concrete and dimensional lumber. This bridge is by no stretch of the imagination primitive in design or appearance. Based on this, the claim that this segment of the river provides a truly primitive experience is refuted. The vast majority of the 1½-mile segment of the river is in a narrow canyon with that is densely populated with tall trees, which blocks out most of the view to greater surrounding area. Within this segment of the river there are no "views of the entire basin" or "its expansive aspen stands" as claimed in the draft eligibility evaluation. Therefore, based on the fact that this 1½-mile segment of the river, from the Santa Bárbara Campground to the Pecos Wilderness boundary, does not have true opportunities for solitude, does not offer a truly primitive experience, and does not have views of the entire basin or its expansive aspen stands, it does not have a qualifying scenic outstandingly remarkable value. Furthermore, like other rivers in the immediate area evaluated in the draft eligibility evaluation, i.e., the Río de las Trampas, the "scenic values are not outstandingly remarkable regionally."

Associated Comment Letters: 122, 4926, 5785

Response

The Rio Santa Barbara is eligible with scenic, recreational, and historic outstandingly remarkable values from its headwaters to its confluence with Jicarita Creek. This confluence is about one-third of a mile south of the campground and about three-quarters of a mile north of the wilderness boundary. The eligible segment is entirely south of the historic Merced de Santa Barbara Land Grant boundary. We agree that the portion directly adjacent to the campground does not provide the same primitive solitude as the rest of the river and it is not eligible. The bridge is not completely primitive but is consistent with the "essentially primitive" nature of the river's wild classification. The presence of a few inconspicuous structures is acceptable. The entire basin is not visible from the lower, confined segment and the scenic values are not outstandingly remarkable, but that segment does contribute to the recreational experience. This has been clarified in the evaluation narrative.

Concern Statement 491 **Rio Santa Barbara**

The eligibility recommendation for the Rio Santa Barbara is in violation of section 2(a) of the Wild and Scenic Rivers Act.

Associated Comment Letter: 5785

Response

Section 2(a) of the Wild and Scenic Rivers Act describes the process for designating wild and scenic rivers. Only Congress may designate wild and scenic rivers on National Forest System lands. The eligibility evaluation is being conducted in compliance with Section 5(d)(1) of the act that requires that, "consideration shall be given by all Federal agencies involved to potential national wild, scenic and recreational river areas" during land management planning.

Concern Statement 492 **Rio Santa Barbara**

Opposition to wild and scenic river eligibility for the Rio Santa Barbara because it will infringe on water and grazing rights. The determination of whether a project would detract from the wild character is subjective and could change or be interpreted differently from line officer to line officer.

Associated Comment Letters: 4926, 5720, 5782

Response

Water rights are managed by the state of New Mexico. Neither the final Plan nor wild and scenic river eligibility affect water rights. Grazing is consistent with wild classification for eligible rivers. The river's classification is based on the current condition of the river corridor; therefore, all existing infrastructure and management practices are consistent with eligibility. Any proposed change to management practices that would conflict with the river's eligibility and classification would trigger a suitability analysis. The interim management requirements in a wild classification eligible river are detailed in the Wild and Scenic River Eligibility Evaluation.

Concern Statement 493 **Rio Santa Barbara**

Opposition to eligibility for the Rio Santa Barbara because of the need to maintain access for mechanical removal to prevent or reduce the severity of wildfires or prevent fallen trees from damming up the river.

Associated Comment Letter: 5785

Response

Any potential activities that would conflict with the river's eligibility and classification would trigger a suitability analysis. Mechanical treatment would not be compatible with a wild classification. A suitability analysis would address questions including "Will the benefits of designation exceed the benefits of non-designation?" No suitability studies are being conducted as part of this plan revision.

Concern Statement 494 **Rio Santa Barbara**

Opposition to eligibility for the Rio Santa Barbara because it would prevent installation of a fish barrier to protect the core conservation population of Rio Grande cutthroat trout.

Associated Comment Letter: 4926

Response

The installation of fish barriers is not prevented in eligible rivers. The final Plan clarifies the types of water resources projects (including fish barriers) that may be allowed in eligible rivers in the footnote for MA-EWSR-S-1 (footnote 57). Fish barriers by design do impound water and modify the waterway, and therefore, result in modification of free-flowing character. Any water resources projects that modify free-flowing character may occur only when they mimic natural river processes, restore more natural river function, and are otherwise consistent with the river's eligibility. With respect to fish barriers in

particular, they must mimic natural processes, be consistent with the river's natural function, and not conflict with the user experience required by the river's classification. The Interagency Wild and Scenic Rivers Coordinating Council explicitly permits a "range of projects to restore natural channel processes and habitat" (IWSRCC 2017). However, those projects should, "[m]imic the effects of naturally occurring events such as trees falling in and across the river (including the formation of wood jams), boulders tumbling in or moving down the river course" and should be "made of native materials, e.g., wood, rock, vegetation, and so forth that are similar in type, composition or species to those in the vicinity of the project" (IWSRCC 2017). Projects "are most harmonious with river ecosystems" when "the resulting channel width, depth, slope, and substrate matches that of upstream and downstream reaches or that of a nearby comparable and undisturbed river system" (IWSRCC 2017).

Concern Statement 495 **Rio Santa Barbara**

Opposition to historical outstandingly remarkable value for the Rio Santa Barbara because the history of the Santa Barbara Pole and Tie Company and its adverse impact on the local community is not something to be celebrated or identified as remarkable. This historical outstandingly remarkable value relating to the Santa Barbara Pole and Tie Company is also present in the identification evaluation for Cr 51 Middle Río Pueblo. This outstandingly remarkable value needs to be removed from the Narrative Description of Outstanding Remarkable Values for Cr 51 as well.

Associated Comment Letters: 4926

Response

The Middle Rio Pueblo is not eligible. The Santa Barbara Pole and Tie Company was listed as an outstandingly remarkable value in the previous evaluation. The history of land use and management in this portion of the southern Camino Real Ranger District is remarkable; it tells the story of traditional use and dependence on this watershed and the battle for local resources by local communities. The Santa Barbara Pole and Tie Company is one element of that long history. The evaluation does not assign value to that history (i.e., does not "celebrate" it), but recognizes the significance of its impact on the land and local communities. We agree that the Rio Santa Barbara is remarkable for historic values other than the Pole and Tie Company and those values have been added to the evaluation.

Concern Statement 496 **Rio Santa Barbara**

The segments of the Rio Santa Barbara below Santa Barbara Campground support a historic acequia system that has important cultural significance to surrounding communities. These segments should be combined into a single segment and should be listed as eligible (recreational) with the following outstandingly remarkable value: cultural.

Associated Comment Letter: 4911

Response

Cultural outstandingly remarkable values are those that depend on the river's unaltered condition, which is not applicable to acequia diversion that specifically depends on alteration of river flow.

Concern Statement 497 **Rio Trampas and San Leonardo**

The Rio Trampas and San Leonardo are some of the most beautiful, pristine rivers in all the Southwest. They are filled with native trout and supply clean water to all the communities below. Please do your utmost to protect these streams.

Associated Comment Letter: 5708

Response

The Rio de las Trampas and Rio San Leonardo are managed according to plan components in the FW-WSW section and subsections in the final Plan. Most of the Rio San Leonardo and the upper portion of the Rio de las Trampas are within the Pecos Wilderness and are managed under plan components in

the FW-WILD section. The middle section of the Rio de las Trampas is highly altered as it flows through the communities of El Valle, Las Trampas, and Vallecito. The lower section is on BLM land and is eligible as a wild and scenic river. Native trout are managed according to FW-WSW-DC-6, FW-WFP-DC-1, and FW-WFP-DC-2. Water quality is managed according to state water quality standards (FW-WSW-DC-7) and the provisioning ecosystem services including local and urban potable water supplies and agricultural uses, are recognized in the FW-WSW introduction.

Concern Statement 498 **Rio Tusas**

Rio Tusas headwaters should be found eligible for recreation, wildlife, fisheries, and botany. The headwaters of Rio Tusas, along the Continental Divide Trail, include striking and memorable scenery that warrants strong protection. The Rio Tusas has outstanding recreational fishing opportunities and exceptional opportunities for solitude. In addition, the stream and stream corridor provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife, fisheries, botany. As noted in the draft eligibility evaluation, the presence of a small diversion to stock-watering tank does not unduly compromise the stream's free-flowing condition. No reason is provided for removing eligibility for the segment from section 16 to private land.

Associated Comment Letters: 132, 4881, 4911, 5505

Response

The Rio Tusas headwaters are eligible with a recreation outstandingly remarkable value. The stock tank in section 16 impounds water and affects free flow; the free-flowing, eligible section is above this impoundment. The 1-mile segment below the stock tank is less accessible, its free-flowing nature is affected and it offers a less remarkable recreational opportunity. This is a scenic area with small canyons, open meadows, and large aspen stands, but the scenery is not outstandingly remarkable within the context of the region of comparison. On the district, Rio Vallecitos just to the south, or areas in the Cruces Basin or Rio San Antonio just to the north are at least as scenic. Additionally, there are many more scenic areas in the region of comparison. The habitat and riparian values are similar to those in other areas of the district, forest, and region of comparison.

Concern Statement 499 **Rio Tusas**

Rio Tusas Box should be found eligible for its scenic and geologic values. The draft eligibility evaluation states, “Most of this section is private inholdings with irrigated agriculture diverted from the river.” There appears, to be some confusion about private ownership patterns; the previous eligibility evaluation specified that this segment stops at the private land boundary. In any case, small diversions can be consistent with free-flowing condition. Rio Tusas Box contains outstanding scenery, distinctive river-carved geologic features, and unique deep pools with corresponding habitat variety, as acknowledged in the draft eligibility evaluation. Small stream diversions do not compromise the stream's free-flowing condition or otherwise disqualify it from eligibility.

Associated Comment Letters: 4881, 5393, 5505

Response

The previous evaluation was inconsistent in this area and the updated Wild and Scenic River Eligibility Evaluation has clarified that inconsistency. The Rio Tusas serves as the boundary between the Tres Piedras and El Rito Ranger Districts from Spring Creek to the Petaca Grant. The previous evaluation had two conflicting descriptions and eligibilities for this river segment. The previous Tres Piedras Ranger District evaluation described the Rio Tusas Box as 8.9 miles from “Spring Creek to private boundary.” Based on the mileage of this segment, “private boundary” in this case clearly refers to the northern edge of the Petaca Grant, where the Rio Tusas leaves the Tres Piedras Ranger District. The previous El Rito Ranger District evaluation divides the segments of the Rio Tusas differently; the Tusas Box segment is described as 3 to 4 miles “from Spring Creek to Las Tablas.” The lower portion encompasses “Las

Tablas to Rio Vallecitos" and includes the segment between Las Tablas and the Petaca Grant. The current Wild and Scenic River Eligibility Evaluation adopts the latter delineation (from Spring Creek to Las Tablas).

The segment of the Rio Tusas from Spring Creek to Las Tablas includes the Rio Tusas Box and six private inholdings that span the river. The segment is 4.8 miles long, but only about 1.5 of those miles are on Carson NF lands, occurring in five separate short segments. Much of the private land is agricultural and irrigated with water diverted from the river. While some existing diversion can be consistent with a free-flowing river, the diversions in the Rio Tusas Box do impact the free-flowing nature of the river and its natural and riverine appearance, rendering it ineligible.

Concern Statement 500 **Rio Vallecitos**

Rio Vallecitos should be found eligible for its scenic, recreational, and other (ecological significance of old growth stands) values. The uniquely intact and secluded canyon along Rio Vallecitos provides outstanding opportunities for solitude and memorable recreation, including legendary sport fishing. The Rio Tusas is considered to be the largest and best stream in the Tusas Mountains by local fly fisherman and provides exceptional recreational values. In addition, it is surrounded by spectacular old growth ponderosa, and supports a herd of wild mustang.

Associated Comment Letters: 4881, 4898, 4911, 5505

Response

The segment of the Rio Vallecitos from Jarosa Creek to Forest Road 274 is eligible with scenic and recreational outstandingly remarkable values. The Jarita Mesa Wild Horse Territory is entirely to the east of Rio Vallecitos.

The old-growth ponderosa values associated with Rio Vallecitos are similar to those of other rivers in the region of comparison and are, in that context, not outstandingly remarkable. The final Plan defines old growth as "forests that have accumulated specific characteristics related to tree size, canopy structure, snags and woody debris and plant associations" (Glossary). Old growth is defined by multiple features: the "presence of large, old trees, multilayered canopies, forest gaps, snags, woody debris, and a particular set of species" (Glossary). Only 2.1 percent of the river corridor is dominated by large trees (bigger than 20 inches diameter at breast height). Lagunitas Creek also on the El Rito Ranger District has a greater concentration of large trees and there are other examples elsewhere on the forest. Likewise, other areas in the region of comparison are dominated by larger trees (larger than 30 inches diameter at breast height). Only 18.2 percent of the river corridor is dominated by multilayered canopies. There are other nearby areas with greater concentrations of multilayered canopy, for example Tanques Canyon and Rio Vallecitos.

Concern Statement 501 **Rito Claro and Bonito Canyon**

The Rito Claro and Bonito Canyon supports one of the oldest stands of Douglas-fir trees in the Southwest. Old-growth forests are rare in the Southwest and thus provide exceptional values both ecologically as well as recreationally. Rito Claro and Bonito Canyon should be listed as eligible (wild) with the following outstandingly remarkable values: Recreation and Other (ecological significance of old-growth stands).

Associated Comment Letters: 4911

Response

According to the Carson NF's Wild and Scenic River Eligibility Evaluation criteria, only named rivers are required to be evaluated (FSH 1909.12, Section 82.2); therefore, because Bonito Canyon is not a named river on the Comanche Point 7.5 minute USGS quadrangle map, it was not evaluated. While 25 unnamed rivers that had been previously found eligible were evaluated for this plan revision, Bonito Canyon was not among those previously eligible rivers.

As recommended in this comment and based on Swetnam and Brown's (1992) documentation of a "super old-growth" stand of Douglas-fir along the Rito Claro on the Questa Ranger District of the Carson NF, the 0.9-mile segment extending from the headwaters to Cabresto Creek are determined to be eligible with a wild classification with an outstandingly remarkable value of other for stand age. Specifically, as described in Appendix G (Wild and Scenic River Eligibility) of the final environmental impact statement, the stand age along this segment of the Rito Claro "is outstandingly remarkable, with some of the oldest Douglas-fir trees documented in the Southwest. Innermost pith dates from tree-ring records range between the early and late 1200s: ten trees date to the mid- to late-1200s, four trees to before 1230, and the innermost pith of the oldest tree at the Rito Claro site to 1210. Located on a gradual, south-facing slope of rocky soils, the stand comprises mainly small-diameter Douglas-fir trees (> 30 cm dbh). As Swetnam and Brown (1992) note, '[a]t first glance, it is not at all obvious that the Rito Claro stand is ancient.' The authors attribute the low growth rate to conditions like the shallow, rocky soils found in Rito Claro and, in the case of other old-growth sites in the Southwest, also steep slopes. Wild classification is appropriate."

Concern Statement 502 **Rito de la Olla and Manzanita Canyon**

The fish barriers in Rito de la Olla and Manzanita Canyon do not compromise the streams' free-flowing condition.

Associated Comment Letters: 4881

Response

The eligibility evaluation correctly states that the fish barrier in Rito de la Olla affects free-flow, not that the river is not free-flowing. The Manzanita Canyon segment (Qu32) is bounded by private land. There is a fish barrier below the private land, where the river crosses Highway 150. The segment above the barrier is free flowing. Despite having portions that are free flowing, neither river is eligible because no outstandingly remarkable values were identified.

Concern Statement 503 **Rito del Medio**

Rito del Medio headwaters should be found eligible for its wildlife, fisheries, and botany values. This is perhaps one of the most spectacular drainages in the Sangre de Cristos. This stream is an amazing series of waterfalls and plunge pools cascading over some of the most beautiful granite in the West providing habitat for native cutthroat. The rock formations in and around this water segment are exemplary. There is no granite like this in the wildlife region. The area is a great example of unique geologic features in the Southern Rocky Mountains. The rock climbing here is world class with the option to sit by this beautiful stream after an outing. The Questa Dome is an amazing cliff, shear and tall. It's a favorite of Taos County rock climbers and draws climbers from other parts as well. It is in Dennis Jackson's book, *Climbing New Mexico*. This area highlights amazing recreation opportunities. The hiking by this stream provides wildlife viewing, solitude, and photography opportunities. Hiking farther up brings you to the steep valley at the base of Virsylvia Peak and Venado Peak. Both are over 12,000 feet.

The Rito del Medio is currently listed as eligible with a wildlife outstandingly remarkable value for white-tailed ptarmigan. The Draft Wild and Scenic River Evaluation states that white-tailed ptarmigan, a State endangered animal, is "not stream dependent," yet the New Mexico Department of Game and Fish lists the white-tailed ptarmigan as living in montane riparian environments. In addition, white-tailed ptarmigan are dependent on riparian areas for their survival because they drop down to willows during the winter for cover. This habitat appears to be critical for their survival. The Carson states that there is nothing about the Rito del Medio that makes it more important for ptarmigan than other streams, yet the Rito del Medio is the sole stream identified in the 2000 Evaluation as being important for white-tailed ptarmigan. The Carson must provide more documentation than just a general statement saying that this is not now case. If it's not the sole stream, what is the total extent of streams important for white-tailed ptarmigan and why aren't those streams protected?

Rito del Medio's pristine higher-elevation ecology provides unique watershed health and wildlife habitat. The upper valley is an elk summertime grazing and calving area as well as a sanctuary for large bighorn and mule deer sanctuary. The stream and stream corridor provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife, fisheries, and botany.

Associated Comment Letters: 125, 132, 4881, 4911, 4964, 5377, 5505, 5711

Response

The genetic purity of Rio Grande cutthroat trout in Rito del Medio has not been tested; however, no barrier is present to protect the population from nonnatives. The recreational and scenic values of Rito del Medio canyon are not being challenged; however, they are judged as being similar to recreational opportunities and scenery available along other rivers in the Latir Peak wilderness, on the Questa Ranger District, and on the Carson NF, as well as in the wider region of comparison. The geological values are judged relative to geological values in other similar rivers in the region of comparison, which is defined by intersecting physiographic provinces and is larger than the wildlife region of comparison. Sheer, tall cliffs that attract rock climbers can be found throughout the region of comparison. And, while a popular climbing spot, locally, the Questa Dome is unremarkable for rock climbing in a regional context. There are similar granite climbing opportunities—from Porvenir Canyon to southwestern Colorado in the San Juan mountain range and the Ophir area. Steep valleys and 12,000-foot peaks are common on the Questa Ranger District; in fact, Cabresto Peak and Latir Peak in the same wilderness are also over 12,000 feet.

White-tailed ptarmigan is rare, and its habitat is rare regionally. However, most high alpine streams provide potential habitat (willow); the same habitat is found outside of stream corridors and white-tailed ptarmigan are not stream-dependent (i.e., they are not directly river-related). There is nothing about this segment of Rito del Medio making it more critical to ptarmigan survival than any other high alpine stream. It is not clear from the previous evaluation why Rito del Medio was the only river with ptarmigan as an outstandingly remarkable value. White-tailed ptarmigan habitat is primarily bare exposed rock, barren land, snow or ice, tundra, and transitional land. “The abundance of white-tailed ptarmigan varies depending on the amount of late-lying snow patches and rock and boulder fields, as well as the presence of willows (*Salix* spp.), which may be affected by moisture regimes” (NMDGF 2017b).

The habitat and watershed values are similar to those in other areas of the district, forest, and region of comparison. The elk grazing and calving areas are not outstandingly remarkable regionally, and these values are not directly river-related. Likewise, the deer and Rocky Mountain bighorn sheep habitat here are not outstandingly remarkable regionally and are not directly river-related.

Concern Statement 504 **Rito Osha**

Osha Creek (Cr 59) should be listed as eligible for its fisheries values. Osha Creek, a tributary to the Rio Pueblo, has genetically pure populations of Rio Grande cutthroat trout, “good” Rio Grande cutthroat trout habitat, a full fish barrier, there are no nonnatives present, and there is “no risk of hybridization.”

Associated Comment Letters: 4911, 4964

Response

Rito Osha (Cr 59), a tributary to Rito de la Olla in the northern portion of the Camino Real Ranger District, does not contain Rio Grande cutthroat trout and no other outstandingly remarkable values were identified. Osha Canyon, which meets the Rio Pueblo west of the Comales Campground, does not contain a named river, and was therefore, not evaluated consistent with requirements at FSH 1909.12 section 82.2. A second Osha Canyon on the Camino Real flows into Telephone Canyon near Vadito; this canyon also does not contain a named river, and was therefore, not evaluated.

Concern Statement 505 **San Cristobal Creek**

The draft eligibility evaluation notes diversions in San Cristobal Creek for community water supply below the eligible segment. Such diversions do not affect the free-flowing condition of the eligible segment. This drainage is a hidden gem that provides much needed water for valley residents downstream. San Cristobal Creek supports an historic acequia system that has important cultural values to the surrounding community. Acequias are unique and significant both nationally and in the region of comparison. San Cristobal Creek should be found eligible from immediately upstream from the acequia diversion and should be listed as eligible for its cultural, fisheries, wildlife, riparian/botany, climate adaptation, water supply/ecosystem services values. San Cristobal Creek is an important headwaters area with uniquely intact fish, wildlife, and riparian habitat. Rio Grande cutthroat trout are present. Although no barrier to nonnative fish is currently present, a properly constructed barrier can be installed in this eligible-qualifying segment. The stream and stream corridor provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife, fisheries, and botany. The stream's critical headwaters location is important to climate adaption and downstream water supplies, warranting supplemental protection for the stream and riparian corridor, with corresponding addition of outstandingly remarkable values for climate adaptation and ecosystem services. San Cristobal Creek is an important tributary to Wild and Scenic Rio Grande.

Associated Comment Letters: 125, 4881, 4911, 5377, 5505

Response

Diversion by acequias or for other purposes that impact a river’s free flow and is generally not compatible with wild and scenic river eligibility. No river segments that contain acequias, or any diversions for other purposes have been determined to be eligible and no eligible segments are within one-quarter mile of acequia points of diversion. In the case of San Cristobal Creek, the community water supply diversion is in the middle of the evaluated segment. At some points during the year, the entire river is diverted to community water and the acequia; the river therefore does not meet the definition of free-flowing below this point.

The upper portion of San Cristobal Creek contains Rio Grande cutthroat trout but there is no complete barrier that separates this section; it therefore does not meet the criteria for a fisheries outstandingly remarkable value for Rio Grande cutthroat trout. The habitat and riparian values are similar to those in other areas of the district, forest, and region of comparison. The location of a river relative to designated wilderness was not a criterion in the eligibility evaluation. Many rivers in the region of comparison are headwaters for other rivers contributing to streamflow and downstream water supplies. Finally, no evidence suggests that this river is unique among similar rivers with respect to climate adaptation.

Concern Statement 506 **Sawmill Creek**

Sawmill Creek should be found eligible for its scenic and historic values. The name Sawmill Creek reflects this stream's history of human habitation and activity, while demonstrating the corridor's ability to regenerate to a natural, scenic condition.

Associated Comment Letters: 4881, 5505

Response

Many streams in the region of comparison have a history of human habitation and activities, including sawmills. Sawmill Creek’s scenic values are similar to those of other rivers in the region of comparison and, in that context, are not outstandingly remarkable.

Concern Statement 507 **South Fork of the Rio Hondo**

The South Fork of the Rio Hondo should be found eligible for its wildlife, scenic, fisheries, riparian/botany, climate adaptation, and water supply/ecosystem services values. Genetically pure Rio

Grande cutthroat trout are present in this stream segment, warranting protective management under eligibility. There are three other rivers in close proximity that also have genetically pure populations of Rio Grande cutthroat trout—Yerba, Italianos, and Gavilan Creeks. In addition, the stream and stream corridor provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife and fisheries. The unique land protection afforded by Wheeler Peak Wilderness, and the stream's critical headwaters location—important to climate adaption and downstream water supplies—warrant supplemental protection for the stream and riparian corridor, with corresponding outstandingly remarkable values for climate adaptation and ecosystem services. South Fork is an important headwaters tributary contributing streamflow and water quality to Rio Hondo. Overall features and values are similar to those of eligible Middle Fork.

Associated Comment Letters: 4881, 4911, 4964, 5377, 5505

Response

The South Fork of the Rio Hondo contains genetically pure Rio Grande cutthroat trout; however, nonnative species are present and there is not a full barrier separating this section. Consequently, this segment does not meet the criteria for a fisheries outstandingly remarkable value for Rio Grande cutthroat trout. The location of a river relative to designated wilderness was not a criterion in the eligibility evaluation. The habitat and riparian values of the South Fork of the Rio Hondo are similar to those in other areas of the district, forest, and region of comparison and many rivers in the region of comparison are headwaters for other rivers, contributing to streamflow and downstream water supplies. No evidence suggests that this river is unique among similar rivers with respect to climate adaptation. The Middle Fork of the Red River is eligible for the historic value of the Elizabethtown ditch. The previous evaluation listed a scenic outstandingly remarkable value for Sawmill Park and waterfalls on the East Fork, neither of which are applicable on the Middle Fork.

Concern Statement 508 **Tanques Canyon**

Tanques Canyon should be eligible. This drainage is nothing less than spectacular. Home to large numbers of elk, deer, and lynx. The outstanding aspen forests are punctuated by meadows and a reliable water source in an area defined by settled and spread out water sources.

Associated Comment Letter: 125

Response

Tanques Canyon contains two pit tanks that impound water (suggested by its name, ‘tanks,’ in English). The river is not free-flowing, and therefore, does not meet the criteria for eligibility.

Concern Statement 509 **Toltec Creek**

Toltec Creek should be found eligible for its scenic and recreational values. The headwaters of Toltec Creek have carved the stunning steep walls of Toltec Canyon, resulting in unique, remote, scenic recreational opportunities.

Associated Comment Letters: 4881, 5505

Response

Toltec Creek is eligible with scenic and recreational outstandingly remarkable values.

Concern Statement 510 **Vaqueros Canyon**

Vaqueros Canyon should be found eligible for its scenic, wildlife, historic, and riparian/botany values. Vacqueros Canyon includes a locally unique, healthy, functioning riparian habitat. This long stretch of intact stream corridor, with corresponding variety of special wildlife and plant species, warrants careful protection. The stream and stream corridor also provide habitat for a highly diverse array of wildlife

species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife and botany.

Associated Comment Letters: 4881, 4911, 5505

Response

While Vaqueros Canyon may be unique on the Jicarilla Ranger District in its support of riparian plant and important elk habitat, it is not unique in this regard on the Carson NF or in the region of comparison. Various examples of similar riparian and habitat values may be found nearby, for instance at La Jara Wash, Dulce Creek, Frances Creek, Gobenador Canyon, and Munoz Creek.

Concern Statement 511 **Vidal Creek**

Vidal Creek should be found eligible for its scenic and fisheries values. Vidal Creek provides excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. It is also an important tributary to wild and scenic eligible Comanche Creek. The trout stream traverses the sweeping splendor and recreational opportunities of Valle Vidal.

Associated Comment Letters: 4881, 5377, 5505

Response

Vidal Creek is eligible with scenic and fisheries outstandingly remarkable values.

Concern Statement 512 **Warm Springs and Tierra Amarilla Canyon**

Warm Springs and Tierra Amarilla Canyon should be found eligible for their scenic, geologic, wildlife, and riparian/botany values. The short, but essential headwaters tributaries to the Red River include a unique combination of an intact, healthy, riparian ecosystem, and distinctive geologic features rendering outstanding scenery. The streams and corridor provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife and botany. Tierra Amarilla Canyon connects to BLM segment that is eligible with outstandingly remarkable values for water quality, geologic, recreation, cultural, riparian, and scenery.

Associated Comment Letters: 4881, 4911, 5505

Response

The springs at Warm Springs drain into Agua Caliente Canyon, but are not themselves a river that was evaluated for eligibility. Neither Tierra Amarilla Canyon nor Agua Caliente Canyon are tributaries of the Red River. Agua Caliente Canyon is eligible with historic and cultural outstandingly remarkable values. The scenery and geologic values here, however, are less remarkable than in Tierra Amarilla Canyon and while there is a small scenic rock outcrop in Tierra Amarilla Canyon, it is not outstandingly remarkable in the context of the region of comparison. Similar outcrops are found in the Latir area of the Questa Ranger District and in Rio Frijoles Canyon on the Santa Fe NF. More remarkable scenic rocky cliffs can be found in the Cruces Basin area and in the Costilla Creek Canyon on the Carson NF, as well as other places in the region of comparison. The scenic, geologic, habitat, and riparian values of these canyons are not outstandingly remarkable compared to those in other areas of the district, forest, and region of comparison.

Concern Statement 513 **West Fork**

West Fork should be found eligible for its scenic, botanic, and wildlife values. This pristine headwater tributary to Middle Fork Red River (which also warrants eligibility) boasts uniquely healthy riparian habitat and enhancement for the larger watershed. The stream and stream corridor also provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife and botany.

Associated Comment Letters: 4881, 4911, 5505

Response

The previous evaluation listed a scenic outstandingly remarkable value for Sawmill Park and waterfalls on the East Fork of the Red River, neither of which are applicable on the West Fork of the Red River. The habitat and riparian values associated with the West Fork of the Red River are similar to those in other areas of the district, forest, and region of comparison.

Concern Statement 514 **Willow Fork**

Willow Fork should be found eligible for its fisheries value. Willow Fork provides excellent, intact habitat for genetically pure population of Rio Grande cutthroat trout, protected from invasive fish species. It is also an important tributary to wild and scenic eligible Placer Fork.

Associated Comment Letters: 4881, 5505

Response

Willow Fork is eligible with a fisheries outstandingly remarkable value.

Concern Statement 515 **Yerba Canyon**

Yerba Canyon should be found eligible for its wildlife, scenic, fisheries, riparian/botany, climate adaptation, and water supply/ecosystem services values. Genetically pure Rio Grande cutthroat trout are present in this stream segment, warranting protective management under eligibility. In addition, the stream and stream corridor also provide habitat for a highly diverse array of wildlife species that are either directly riparian-dependent or have stream-related life cycles, affirming the outstandingly remarkable values for wildlife and fisheries. The unique land protection afforded by Wheeler Peak Wilderness, and the stream's critical headwaters location—important to climate adaptation and downstream water supplies—warrant supplemental protection for the stream and riparian corridor, with corresponding outstandingly remarkable values for climate adaptation and ecosystem services. Yerba Canyon is an important headwaters tributary contributing streamflow and water quality to Rio Hondo.

Associated Comment Letters: 4881, 4901, 4911, 4964, 5377, 5505

Response

The Rio Grande cutthroat trout populations in Yerba Canyon are genetically pure, but nonnative species are present, and there is no full barrier that separates this section, thus rendering it ineligible for an outstandingly remarkable value for fisheries based on cutthroat trout. Many rivers in the region of comparison provide habitat for a highly diverse array of wildlife and plant species.

Yerba Canyon is not in the Wheeler Peak Wilderness; however, the location of a river relative to designated wilderness was not a criterion in the eligibility evaluation. Many rivers in the region of comparison are headwaters for other rivers, contributing to streamflow and downstream water supplies. No evidence indicates that this river is unique among similar rivers in regard to climate adaptation.

Concern Statement 516 **River Suitability**

Support for not evaluating suitability of wild and scenic rivers for designation. The appropriate time to assess river suitability is in response to a congressional study mandate or in response to proposed projects that may harm and eligible stream or stream-related values (FSH 1909.12 83).

Associated Comment Letters: 4881, 5505

Response

In some cases, suitability studies are legislatively mandated within a set study period. When that study period is compatible with the timing of the planning process, a legislatively mandated study should be conducted as part of plan revision. If a proposed project has the potential to adversely affect the free-flow or outstandingly remarkable values of any river that has been previously determined to be eligible, the suitability of that river should be studied before approving the project (FSH 1909.12 83.1). While

both situations are appropriate times for conducting a suitability study, "[a]ny eligible river may be studied for its suitability for inclusion in the National System at any time" (FSH 1909.12 83). The Carson NF has chosen not to evaluate the suitability of any rivers during the plan revision process.

Management Areas - Recommended Wilderness - RDW

Concern Statement 517 **Recommended Wilderness Plan Components, Support**

The plan components for designated wilderness areas are strong and we support their inclusion in the final plan because they will help ensure that wilderness areas maintain their wilderness characteristics and achieve desired conditions during the life of the revised forest plan.

Associated Comment Letter: 4856

Response

All draft plan components for designated wilderness have been carried forward into the final Plan.

Concern Statement 518 **Recommendation Process, 2012 Planning Rule**

Chapter 70 of the Planning Rule Directives are illegal because they violate 16 U.S.C. 1131-1136 (the Wilderness Act): "…and no Federal lands shall be designated as 'wilderness areas' except as provided for in this Act or by a subsequent Act. (16 U.S.C. 1131(a))" Yet the Planning Directives direct the agency to circumvent the Wilderness Act by allowing a wide range of management options for recommended wilderness, up to, and including managing the area as if it were already designated wilderness. The Wilderness Act is crystal clear, the Forest Service isn't allowed to create wilderness or "manufacture" lands that are managed as de facto wilderness. Yet, the 2012 Planning Directives direct the agency to do precisely that!

Associated Comment Letter: 3268

Response

Recommended wilderness is not managed as designated wilderness. The Wilderness Act defines management requirements for designated wilderness only. Recommended wilderness is managed according to plan components to protect the characteristics that make the area suitable for designation.

The 2012 Planning Rule, written under the authority of the National Forest Management Act, requires the responsible official to "identify and evaluate lands that may be suitable for inclusion in the National Wilderness Preservation System and determine whether to recommend any such lands for wilderness." (36 CFR 219.7(c)(2)) Land management plans revised under the 2012 Planning Rule must include plan components for any areas recommended for wilderness designation. These plan components, including standards and guidelines, must "protect and maintain the ecological and social characteristics that provide the basis for their suitability for wilderness designation." (36 CFR § 219.10(b)(iv)). The Carson NF has chosen to identify each recommended wilderness as a management area, consistent with FSH 1909.12 section 24.41(4).

Concern Statement 519 **Recommendation Process, 2012 Planning Rule**

Lands identified as potentially suitable for wilderness under the inventory (and eventually evaluation) process would be managed under the nonimpairment policy (36 CFR 219.10 (b) (iv)) and would result in greatly reduced access for resource management and multiple uses. This nonimpairment policy extends the protection of congressionally designated wilderness areas to recommended wilderness areas identified in this process. It is beyond the authority of the United States Forest Service to manage an area as wilderness unless and until Congress actually designates such areas pursuant to the Wilderness Act of 1964.

Associated Comment Letters: 5422, 5785

Response

In the process of identifying the areas recommended for wilderness in the preferred alternative we considered a broad range of social, environmental, and economic impacts, as well as public comment related to the management of recommended wilderness areas. The responsible official concluded that ecological and social benefits obtained through alternative 2-modified (9,295 acres of recommended wilderness) outweigh any additional limitations on management options (Record of Decision). The recommended wilderness management area's plan components in the final Plan protect and maintain the ecological and social characteristics that provide the basis for their suitability for wilderness designation, consistent with the requirement to include these plan components in the 2012 Planning Rule (36 CFR 219.10 (b) (1) (iv)).

Plan direction in the final Plan applies to recommended wilderness management areas until such time as the area is designated as wilderness or released for other management by Congress. Recommended wilderness is not designated wilderness, as only Congress has the authority to designate wilderness.

Concern Statement 520 **New Mexico Wilderness Act**

The New Mexico Wilderness Act of 1980 (Public Law 96-550, Dec 19, 1980, 94-Stat. 3224) which was passed in December of 1980 calls into question the U.S. Forest Service authority, in New Mexico, to conduct the Recommended Wilderness Process as part of the current Carson National Forest Plan Revision. Under the 2012 Planning Rule this is a four-step process that includes: inventory, evaluation, analysis, and recommendation. However, Public Law 96-550 contains the following statutory provision: "(c) Unless expressly authorized by Congress, the Secretary shall not conduct any further statewide roadless area review and evaluation of National Forest System lands in the State of New Mexico for the purpose of determining their suitability for inclusion in the National Wilderness Preservation System."

Associated Comment Letters: 3268, 4926, 4985, 5069, 5258, 5785

Response

The New Mexico Wilderness Act of 1980 (Public Law 96-550) at Section 104 was developed in the context of the Roadless Area Review and Evaluation of 1979 (RARE II). RARE II was a nationwide effort that made recommendations, for potential wilderness by states. The process was the subject of judicial reviews that eventually led to the overturning of the environmental impact statement for RARE II in 1980. Subsequently, over 30 state-by-state wilderness statutes between 1980 and 1990 provided release language for RARE II areas (see Congressional Research Service, R41610, April 17, 2014). Section 104(c), that the commenter references, is specifically related to the release of this type of "roadless" area from pending judicial requirements for re-evaluation. Although these areas were released for purposes of multiple-use, this release does not prohibit re-evaluation of these areas for wilderness recommendation at a later date as indicated in other sections of the law.

The New Mexico Wilderness Act of 1980 (Public Law 96-550) at Section 104(b)(2) specifically states, "…the Department of Agriculture shall not be required to review the wilderness option prior to revision on the initial plans, and in no case prior to the date established by law for completion of the initial planning cycle…" The forest plans in New Mexico are well over the 10- to 15-year revision cycle described in the National Forest Management Act and any wilderness evaluation is covered by the requirements for plan revisions.

Forest Service regulations and directives implementing the National Forest Management Act require wilderness evaluation during plan revision and adoption. These regulations are described in the 2012 National Forest System Land Management Planning Rule and the manual and handbook issued in 2014. In the planning rule, Section 219.7 (c)(v) states that revisions shall "Identify and evaluate lands that may be suitable for inclusion the National Wilderness Preservation System and determine whether to recommend any such lands for wilderness designation." Forest Service Manual 1923 and Handbook 1909.12 Chapter 70 provide the direction regarding how this inventory and evaluation should be accomplished.

Based on the New Mexico Wilderness Act of 1980 (Public Law 96-550), Section 104(b)(2) requirements that wilderness be reviewed during plan revisions and the published requirements in Forest Service rule, manual, and handbook for how wilderness evaluation is to be accomplished, the revision process including the evaluation of wilderness potential is in full compliance with applicable law and policy.

Concern Statement 521 **Recommended Wilderness, Special Status**

Recommended wilderness values should be included across the entire forest in a gradient that varies from high use to minimal use. Activities would be facilitated and allowed appropriate to site, historic use, wildlife migration routes, and to scientific and cultural indicators that suggest how best to maintain vibrant ecosystem function to the benefit of nature and mankind in partnership. Those areas that have been suggested for wilderness designation by some comments could receive a special status that limits human engagement there to only facilitate ecosystem resilience and not allow commercial activities.

Associated Comment Letter: 4845

Response

Wilderness values conflict with other uses and management of the Carson NF, such as developed recreation, mountain biking, motorized recreation, timber harvest, fuelwood gathering, herb and food gathering, forest and watershed restoration, wildlife habitat improvement, sport fish stocking, community wildfire protection, among others. Managing for wilderness characteristics across the entire forest is not consistent with the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 531) or the 2012 Planning Rule (36 CFR 219.10). “[T]he plan must provide for ecosystem services and multiple uses, including outdoor recreation, range, timber, watershed, wildlife, and fish” (36 CFR 219.10). Plan components other than recommended wilderness do address certain wilderness characteristics outside of recommended wilderness management areas. For example, primitive recreation opportunities are also managed via the desired recreation opportunity spectrum and natural-appearing landscapes are addressed by scenery management.

In the final Plan, management areas and designated areas have been created where appropriate, based on the best use of that particular land as described by FSH 1909.12 section 22.21. Recommended wilderness management areas are included in the final Plan where management protects and maintains the ecological and social characteristics that provide the basis for each area’s suitability for wilderness recommendation (36 CFR 219.10 (b) (iv)).

Commercial activities are not incompatible with designated or recommended wilderness, and preventing commercial activity is not necessary to protect wilderness characteristics and may in some circumstances be useful to maintain or enhance them. Section 4(d)(5) of the Wilderness Act of 1964 provides that “Commercial services may be performed [in designated wilderness]...to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas.” Proposed commercial activities outside of recommended and designated wilderness are assessed on a case-by case basis through the special use permit process. In the final Plan, FW-SU-DC-1 and -2 describe the intent of special use permits, including those for commercial activities, as contributing to local economies while supporting the public’s needs and minimizing conflicts with other forest users. FW-SU-DC-7 directs special uses management to provide for public health and safety minimize impacts to ecological and cultural resources.

Concern Statement 522 **Congressional Designations**

One of the strongest combinations of conservation protection for undeveloped Federal public lands is overlapping wilderness, wild and scenic river, and national scenic trail designations. Each congressional designation offers protections that the other does not. Overlapping designations within roadless areas would help ensure National Forest System lands are protected for current and future generations by protecting wilderness characteristics, outstandingly remarkable values of eligible wild and scenic rivers, and the nature and purposes of national scenic trails. These overlapping designations provide a

complementary framework for a high level of protection from overuse and development of Federal lands.

Associated Comment Letter: 163

Response

Only Congress has the authority to designate wilderness, wild and scenic rivers, and national scenic trails. Under all alternatives, designated wilderness, wild and scenic rivers, and national scenic trails will remain designated and will be managed according to the 1964 Wilderness Act, 1968 National Wild and Scenic Rivers System Act, and 1968 National Trails System Act, respectively, as required by law. The recommended wilderness and the eligible wild and scenic river evaluation processes were conducted independent of each other, based on criteria specific to the enacting legislation, as required by the 2012 Planning Rule directives (FSH 1909.12 chapters 70 and 80).

Concern Statement 523 **Recommendation Process, Inventoried Areas**

Alternative 5, which has the most recommended wilderness, only recommends areas that the Carson determined possess wilderness characteristics during the evaluation process, not all inventoried areas. This is problematic because the Carson's evaluation process was flawed. The DEIS assumes that nearly half the inventoried areas should not be protected as recommended wilderness and considers only those alternatives with that end result. This is insufficient under NEPA.

Associated Comment Letter: 4856

Response

The Carson NF followed the 2012 Planning Rule directives for wilderness recommendation, as outlined in FSH 1909.12 Chapter 70. The responsible official identifies which specific areas, or portions thereof, to carry forward from the evaluation in one or more alternatives in the plan EIS (FSH 1909.12 73). The responsible official's decision was based on the evaluation of wilderness characteristics and input from the public. Neither the directives nor the NEPA require the automatic inclusion of all inventoried areas as recommended wilderness. "Not all lands included in the inventory and subsequent evaluations are required to be carried forward in an alternative" (FSH 1909.12 73).

Concern Statement 524 **Recommendation Process, Inventoried Roadless Areas**

The Forest should include in the final EIS information on where and why not all inventoried roadless areas were recommended as wilderness. I would like to add existing roadless areas as having wilderness characteristics.

Associated Comment Letters: 3359, 5271

Response

The evaluation of wilderness characteristics followed the requirements of the 2012 Planning Rule directives (FSH 1909.12 chapter 70). Inventoried roadless areas were assessed for wilderness characteristics using the same process that was applied to the rest of the Carson NF. Rationale for why some inventoried roadless areas were evaluated as not having wilderness characteristics can be found in the Evaluation section of the Wilderness Recommendation Process- Inventory, Evaluation, and Analysis (Alternative Development) document on the Carson NF plan revision website.

The FEIS contains detailed analysis of five alternatives with a variety of recommended wilderness acreages. These alternatives ranged from zero acres of recommended wilderness in alternatives 1 and 3, to 67,996 acres of recommended wilderness in alternative 5. Up to 52 percent of inventoried roadless areas were analyzed as recommended wilderness in alternatives 2, 4, and 5. For rationale as to why particular recommended wilderness areas were or were not included in the various alternatives, please see Areas Evaluated as Having Wilderness Characteristics (AEWC Alternative Development section of

the Wilderness Recommendation Process- Inventory, Evaluation, and Analysis (Alternative Development) document on the Carson NF plan revision website. A description of AEWC is included in each alternative and, for areas that included inventoried roadless areas, can also be found in the FEIS (Volume 1, Wilderness section).

The responsible official selected the preferred alternative (alternative 2-modified), which strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. The preferred alternative (alternative 2-modified) and record of decision recommends 9,295 acres, which includes all recommended wilderness from alternative 2 except for Llano and includes Rudy from alternatives 4 and 5. Alternative 2-modified recommends 9 percent of inventoried roadless areas as recommended wilderness. The recommendation of wilderness in the final Plan considered a broad range of social, environmental, and economic impacts, and public comment related to the management of recommended wilderness areas. The responsible official's decision accounts for likely impacts of wilderness designation and public input, recommending 9,295 acres as appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness and a lower probability of conflicting with other management goals and multiple uses.

Inventoried roadless areas outside of recommended wilderness will be managed according the Inventoried Roadless Rule and plan components (DA-IRA) in the final Plan.

Concern Statement 525 **Recommendation Process, Inventoried Areas**

The strength of the plan components for recommended wilderness is severely undermined by the fact that such a tiny fraction of inventoried lands is being recommended as wilderness. The proposed management direction looks excellent on paper, but it will have such limited application under the proposed draft plan that the benefits associated with these plan components will be severely limited. In other words, providing strong management direction for recommended wilderness is good, but does not make up for the serious deficiencies in the Carson's wilderness inventory and evaluation process.

Associated Comment Letter: 4856

Response

The plan components for recommended wilderness in the draft Plan were included in the final Plan.

The Carson followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook (1909.12, chapter 70) to consider areas for wilderness recommendation. A detailed description of the inventory process, the process for evaluation of the inventory, and the process for identifying areas to analyze as recommended wilderness can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019).

Thirteen areas were evaluated as having wilderness characteristics and were analyzed within the five alternatives. How each of the 13 areas with wilderness characteristics fit within each alternative was described in the Areas Evaluated as having Wilderness Characteristics (AEWC) Alternative Development section of the Wilderness Recommendation Process – Inventory, Evaluation, and Analysis (Alternative Development) (USDA FS Carson NF 2019). All 13 areas were analyzed in the maximum wilderness alternative 5.

The decisionmaker carefully considered a range of recommended wilderness areas, as well as other allocations, to determine the mix of land and resource uses that would best meet public need. The areas recommended for wilderness in the preferred alternative considered a broad range of social, environmental, and economic impacts, and public comment related to the management of recommended wilderness areas. The responsible official selected the preferred alternative (alternative 2-modified), which strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified recommends 9,295 acres, which includes all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and

5. Recommended wilderness management areas included in alternative 2-modified are those that are appropriate for wilderness designation due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. It was the conclusion of the responsible official that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing them as recommended wilderness management areas outweigh any additional limitations on management options (USDA FS Carson NF 2021).

Concern Statement 526 **Recommendation Process, Continental Divide National Scenic Trail**

The positive benefits of the Continental Divide National Scenic Trail (CDT) should be included in the wilderness evaluations and the NEPA effects analysis of CDT. Portions of the Continental Divide National Scenic Trail should be recommended as wilderness, not excluded.

Associated Comment Letter: 163

Response

The Carson followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 72 to consider areas for wilderness recommendation. Specifically, the Forest Service Handbook 1909.12, chapter 72.1 states, "Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value (characteristic 4). These values are not required to be present in an area for the area to be recommended for inclusion in the National Wilderness Preservation System, but their presence should be identified and evaluated where they exist."

The Carson NF identified the CDT as an outstanding value (characteristic 4) during the evaluation process. The FEIS notes the overlap between the Continental Divide National Scenic Trail and areas analyzed for recommendation as wilderness and in some places the CDT is consistent with recommended wilderness. The plan components related to management of the Continental Divide National Scenic Trail have been designed in cooperation with the public and other stakeholders, to ensure that the values for which the trail was designated are maintained or enhanced.

Concern Statement 527 **Recommended Wilderness, Grazing**

Recommended wilderness will be used to eliminate all livestock grazing and traditional uses. The 2012 NMSU Range Improvement Task Force Report No. 83, "Wilderness Designations and Livestock Grazing: The Gila Example," illustrates this point very well. The report concluded that 18 of the allotments within the Gila had the AUMs reduced by 87 percent, and 11 of the 18 were totally destocked. The report also concluded that the adverse impacts to counties, local communities, and allotment owners had been severe.

Associated Comment Letter: 143

Response

The Wilderness Act requires that pre-existing grazing uses be allowed to continue in designated wilderness, accordingly, multiple components in the final Plan support the maintenance of livestock grazing in recommended wilderness, including FW-RWMA-DC-5 and FW-RWMA-S-1.

The Carson NF looked at two alternatives that did not include any recommended wilderness (alternative 1 and 3). As part of plan revision, lands that may be suitable for inclusion in the National Wilderness Preservation System were identified and evaluated. This is a requirement of the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)). The Carson is not designating any wilderness areas through this recommendation process; only Congress can take that action.

The decisionmaker carefully considered a range of recommended wilderness areas, as well as other allocations, to determine the mix of land and resource uses that would best meet public need. The FEIS considered the impact of additional recommended wilderness on a wide variety of resources. The analysis notes potential benefits from recommended wilderness including long-term environmental monitoring, scenic vistas, protection of clean air and water, and maintenance of biological diversity (FEIS, Chapter 3, Wilderness, Description of Affected Environment, Areas Evaluated as Having Wilderness Characteristics). Increased wilderness also provides additional opportunities for primitive recreation and solitude. On the other hand, the environmental impact statement also acknowledges that additional acres of wilderness could lead to increased costs to grazing permittees, reduced opportunities for motorized and mechanized recreational use, and restrictions on the ability to restore departed habitats.

The rationale underlying decisions to recommend certain areas for wilderness in the preferred alternative considered a broad range of social, environmental, and economic impacts (including to livestock grazing), as well as public comments related to the management of recommended wilderness areas. The responsible official selected alternative (alternative 2-modified), which strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified recommends 9,295 acres, which includes all recommended wilderness from alternative 2, except for Llano, as well as Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are those areas with a high degree of wilderness characteristics due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. The responsible official concluded that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing them as recommended wilderness management areas outweigh any additional limitations on management options (USDA FS Carson NF 2021).

Concern Statement 528 **Recommended Wilderness, Grazing**

The desired condition for grazing in recommended wilderness should be revised. We take issue with desired condition 5, which says: “Sustainable rangelands provide forage for livestock grazing opportunities.” While livestock grazing may be an acceptable use in recommended wilderness areas, this use should not be elevated to a primary management emphasis within the recommended wilderness area in the form of a desired condition. Recommended wilderness areas do not exist for the purpose of providing grazing. It could be acceptable to downgrade this to a management approach if it is clarified. It is important that the Forest Service retains some flexibility for how it manages grazing in recommended wilderness areas. The Forest Service must be able to implement management changes as needed (e.g., by eliminating grazing opportunities in areas where resource damage is occurring), ensuring that rangelands in recommended wilderness provide grazing opportunities should not result in adverse impacts on forest resources. With the current wording, it is not clear whether the rangelands are meant to be managed sustainably (i.e., without causing resource damage) or whether they are merely meant to provide livestock with a sustainable supply of forage (even if this results in some resource damage). To ensure that rangelands are managed sustainably, we suggest the following modification: Recommendation: Downgrade desired condition 5 to a management approach and rephrase this statement to read as follows: “Manage wilderness range in a manner that utilizes the forage resource in accordance with established wilderness objectives (36 CFR 293.7).”

Associated Comment Letters; 4856, 4994

Response

The Wilderness Act of 1964, as enacted September 3, 1964, and amended October 21, 1978, explicitly allows for the grazing of livestock (16 U.S.C. 1133(d)(4)(2)). “The grazing of livestock, where such use was established before the date of legislation which includes an area in the National Wilderness Preservation System, shall be permitted to continue under the general regulations covering grazing of

livestock on the National Forests and in accordance with special provisions covering grazing use in units of National Forest Wilderness which the Chief of the Forest Service may prescribe for general application in such units or may arrange to have prescribed for individual units." (36 CFR 293.7)

Current permitted grazing in areas being recommended for wilderness has been authorized through previous allotment-level analysis, which include provisions to prevent resource damage. MA-RWMA-DC-5 has been included in the final Plan as it appropriately allows for continued grazing in Recommended Wilderness Management Areas where there is suitable rangeland.

MA-RWMA-DC-5 does not limit the ability of the Forest Service to implement management changes as needed. Grazing is managed sustainably in wilderness, recommended wilderness, and elsewhere on the Carson according to the plan components in the Sustainable Rangelands and Livestock Grazing section of the final plan, particularly FW-GRZ-DC-4.

Concern Statement 529 **Recommendation Process, Fire-Dependent Ecosystems**

Additional fire-dependent areas with wilderness characteristics should be included in the recommended wilderness management area. The DEIS explains that alternative 2 (the draft plan) includes areas with wilderness characteristics "where wilderness protection: 1) would not impact management activities for restoration of fire dependent ecosystems (Ponderosa Pine Forests and Dry Mixed Conifer) and water resources; 2) and would not limit important ecosystem services that local communities rely on." The subsequent analysis suggests that the primary reasons for excluding other areas is the desire to preserve flexibility for restoration treatments (to prevent fire, to treat insect infestations, etc.) and to maintain access for motorized and mechanized recreation (namely snowmobiles and mountain bikes). The Carson could include more fire-dependent recommended wilderness areas while still achieving its restoration objectives by providing more flexible management direction that would authorize some restoration treatments in these areas. This balanced approach would better achieve multiple management goals, as it would consider the need for restoration treatments and the ecological benefits that would result from a greater amount of recommended wilderness, instead of prioritizing restoration at the expense of wilderness values. The Carson should include additional recommended wilderness areas that consist of fire-dependent ecosystems in the preferred alternative. This could be accomplished consistent with the Carson's restoration objectives by authorizing some limited restoration treatments in recommended wilderness. The following management direction (or something similar) should be included in the final revised plan: "Recommended wilderness areas are suitable for low-impact restoration activities that move toward desired conditions (such as prescribed fires, active weed management, planting) and that protect and enhance the wilderness characteristics of these areas. In select circumstances within appropriate forest-types, recommended wilderness areas could be available for a one-time mechanical treatment that maintains an area's apparent naturalness and enables the return of natural fire."

Associated Comment Letters: 4856, 5666

Response

The final Plan does not authorize any specific treatments and while it also does not prohibit restoration in the recommended wilderness management area, we disagree that mechanical restoration treatments are generally compatible with wilderness management. Restoration of frequent-fire forests would be more costly and time-consuming where those forests are recommended as wilderness, because of restrictions on road construction (MA-RWMA-S-3), motorized travel (MA-RWMA-S-1), and motorized equipment (MA-RWMA-G-1). Modification of the landscape is limited by the requirement for very high scenic integrity (MA-RWMA-G-4). Planting is not prohibited but is unlikely since natural processes are desired (MA-RWMA-DC-2). However, some of the "low-impact restoration activities" that the commenter suggests should be allowed in recommended wilderness would be allowed under the final Plan. Prescribed fire is explicitly desired and invasive species are not desired (MA-RWMA-DC-2).

While alternative 2 was focused on restoration and thus did not recommend any area for wilderness where restoration may be needed, the final Plan balances the need for more active restoration with wilderness recommendation where that need not as great, including in some departed fire dependent ecosystems. The preferred alternative (Alternative 2-Modified) adds over 100 acres of frequent fire ecosystems to the recommended wilderness management area with the inclusion of the Rudy recommended wilderness. The Carson NF looked at all alternatives of recommended wilderness and the decisionmaker carefully considered a range of recommended wilderness areas, as well as other allocations, to determine the mix of land and resource uses that would best meet public needs. The areas recommended for wilderness in the preferred alternative reflect a broad range of social, environmental, economic impacts, and public comment related to the management of recommended wilderness areas.

Concern Statement 530 **Recommendation Process, Boundary Delineation**

Recommended wilderness management areas acreage on maps was dropped in alternative 2 through "Boundary adjustments." This is arbitrary and was done in a questionable manner. We disagree that making the acreage "more easily identifiable based on existing natural features, human-made features, on existing survey areas" was the proper way to use criteria for selection of recommended wilderness management areas. This caused a questionable reduction in recommended wilderness management areas in alternative 2 and we don't support doing this. It also violates the Wilderness Act.

Associated Comment Letter: 5673

Response

The Carson followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70 to consider areas for wilderness recommendation. Forest Service Handbook 1909.12, chapter 70.33 directs the responsible official to identify which specific areas, or portions thereof, from the evaluation to carry forward as recommended wilderness in one or more alternatives in the plan EIS. For each area included in one or more alternatives, the responsible official shall identify the:

1. Name of the area and number of acres in the area to be considered for recommendation.
2. Location and a summarized description of a recommended boundary for each area. To identify a clearly defined boundary for each area, evaluate how the location of the boundary will support management of the area for wilderness and other adjacent uses. Where possible, boundaries should be easy to identify and to locate on the ground. Potential boundaries may be identified as follows, listed in descending order of desirability:
    a. Use of natural features that are locatable both on the map and on the ground. Examples include, but are not limited to perennial streams, well-defined ridges, mountain peaks, and well-defined natural lake shorelines. If a stream is used, note whether the thread (centerline of a stream) or either bank (to mean high water line) has been used as the boundary.
    b. Use of human-made features that are locatable on the map and on the ground. Examples include, but are not limited to roads, trails, dams, powerlines, pipelines, and bridges. Where a human-made feature is used, note whether the feature itself forms the boundary or whether the boundary has been set back from the feature, and by what distance. Setbacks should be used only where necessary for future maintenance of the human-made feature.
    c. Use of previously surveyed lines or legally determined lines such as section and township lines, section subdivision lines, metes and bounds property lines, county or state boundaries, or national park or Indian reservation boundaries.
    d. Use of a straight line from one locatable point to another. These points should normally be high points in the landscape as they must be visible to be effective.

e. Use of a series of bearings and distances between locatable points as in a metes and bounds survey. Use this technique when other methods are not available or practicable.

3. A brief description of the general geography, topography, and vegetation of the recommended area.
4. A brief description of the current uses and management of the area.
5. A description of the area's wilderness characteristics and the ability to protect and manage the area so as to preserve its wilderness characteristics.
6. A brief summary of the factors considered, and the process used in evaluating the area and developing the alternative(s).
7. A brief summary of the ecological and social characteristics that would provide the basis for the area's suitability for inclusion in the National Wilderness Preservation System.

A detailed description of the process for identifying areas to analyze as recommended wilderness can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019). Analysis of areas recommended by alternative can be found in the FEIS in the wilderness section.

Concern Statement 531 **Boundary Delineation, Rio San Antonio**

The size and shape of the proposed Rio San Antonio Recommended Wilderness Area assures manageability. The majority of the area is isolated from areas of human activity, with limited access and very few encumbrances. The area does not have motorized activity occurring within its proposed boundaries, there are no private lands within the area, and there are no extrusions or bottlenecks. Proposed boundaries follow designated roads, Forest Service administrative boundaries, and topographic features. The area is directly adjacent to the BLM's San Antonio Wilderness Study Area, which is managed to maintain its wilderness character. This adjacency could offer consistency in land management. According to LR 2000 (as of April 22, 2016), there are no active or pending mining claims in the area.

Associated Comment Letter: 4964

Response

The Carson followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70 to consider areas for wilderness recommendation. Forest Service Handbook 1909.12, chapter 70.33 directs the responsible official to identify which specific areas from the evaluation, or portions thereof, to carry forward as recommended wilderness in one or more alternatives in the EIS. For each area included in one or more alternative, the responsible official identified a clearly defined boundary for each area and evaluated how that location of the boundary would support management of the area for wilderness and other adjacent uses. Where possible those boundaries use natural features that are locatable both on the map and on the ground. Human-made features that are locatable on the map and on the ground were also used. Along the western side of the Llano Area Evaluated as Having Wilderness Characteristics (Rio San Antonio) neither natural features nor human-made features exist to define a boundary. Instead, that boundary follows previously surveyed section lines, or uses a straight line between points.

In alternative 2- modified, Llano Area Evaluated as Having Wilderness Characteristics (Rio San Antonio) was removed as a recommended wilderness management area because, as described in the FEIS and Record of Decision, "the boundary is not identifiable on the ground and would have to be fenced and well-signed to prevent non-conforming uses. Still, enforcement would be problematic because there are no topographic features to separate developed motorized uses from primitive wilderness uses. It would be very difficult to prevent impacts from human development and activity occurring outside the recommended wilderness management area from affecting the solitude and

unconfined values inside the recommended wilderness management area." (FEIS, Chapter 3, Wilderness, Description of Affected Environment)).

Concern Statement 532 **Recommendation Process**

Flaws in the wilderness evaluation improperly constrained the amount of recommended wilderness and resulted in an inappropriately narrow range of inventoried lands being carried forward in the analysis, which led to fewer areas being proposed as recommended wilderness. While the Carson did attempt to provide additional detail to justify the conclusions reached in its wilderness evaluation, most of our concerns remain largely unaddressed. If the Carson had addressed these concerns, more areas with wilderness characteristics would have been analyzed as recommended wilderness in the DEIS. The Carson's failure to address these issues has created a gaping hole in the DEIS analysis for wilderness. Our primary concerns with the Carson's wilderness evaluation include the following:

> Failure to assess the "degree" of wilderness character, instead inappropriately relying on a yes/no determination to make an overall determination on wilderness character.
>
> Misapplication of the wilderness evaluation criteria, including apparent naturalness, solitude, and primitive recreation, and improper consideration of management trade-offs in the evaluation process.
>
> Lack of clarity about how the Carson combined the findings for each of the evaluation criteria to reach a final yes/no determination on wilderness character.
>
> Inadequate explanation of the methodology used to make the overall determination for wilderness character.

Problems with the evaluation are now bleeding into the analysis phase of the process, resulting in an unreasonably narrow range of alternatives. The Carson must remedy these deficiencies before proceeding to the final EIS. Recommendations: It is imperative that the Carson fix the problems with the Chapter 70 wilderness evaluation. The Carson should then utilize the findings from this improved evaluation to inform which lands to carry forward in the analysis. Conducting a proper wilderness evaluation will help the agency address the problems with its range of alternatives.

Associated Comment Letter: 4856

Response

The Carson followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 72 to consider areas for wilderness recommendation. A detailed description of the inventory process, the process for evaluation of the inventory, and the process for identifying areas to analyze as recommended wilderness can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019).

The evaluation process section of the FEIS Volume 3 Appendix F was clarified to better describe how each wilderness characteristic was evaluated and how all the characteristics were then evaluated together to determine the degree to which evaluation areas have wilderness characteristics.

Concern Statement 533 **Recommendation Process**

The Carson NF undertook an illegal evaluation of Forest Service lands for the purpose of determining their suitability for inclusion into the National Wilderness Preservation System. This illegal action requires that the agency withdraw the Draft Plans/EIS and complete a legally compliant process to produce draft Plan documents for the public to review.

Associated Comment Letter: 3268

Response

The 2012 Planning Rule, written under the authority of the National Forest Management Act, requires national forests, during the plan revision process, to identify and evaluate lands that may be suitable for inclusion in the National Wilderness Preservation System and determine whether to recommend any such lands for wilderness designation (36 CFR 219.7(c)(2)). The Carson NF followed the process defined in FSH 1909.12 Chapter 70 section 72 for identifying and evaluating lands that may be suitable for inclusion in the National Wilderness Preservation System and determining whether to recommend any such lands for wilderness designation.

Concern Statement 534 **Recommendation Process, Adjacent Lands**

Wilderness review should include all Federal lands adjacent to Carson Forest. Roadless areas do not stop at the forest boundary but should include adjacent public lands administered by the Bureau of Land Management. This issue was raised in early review of the plan several years ago and was discounted in the analysis. The "working in silo" administration of BLM and Forest Service in planning and implementation of actions continues to be a flaw in both agencies' planning and administration of the public lands and public forests. The wilderness inventory and analysis should be revised in the final forest plan to include Forest and adjacent BLM roadless tracts of 5,000 acres or more.

Associated Comment Letter: 4922

Response

The Carson followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70 to consider areas for wilderness recommendation. A detailed description of the inventory process, the process for evaluation of the inventory, and the process for identifying areas to analyze as recommended wilderness can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019).

The Carson NF worked with the Rio Grande NF, the Taos BLM Field Office, and the Santa Fe NF during the inventory and evaluation steps of the wilderness recommendation process. As such, 15,303 acres were added back into the inventory, specifically, because these areas were adjacent to BLM lands that may be managed to protect wilderness character or were adjacent to lands on the Rio Grande NF that may be inventoried as part of its wilderness recommendation process. The Cisnero (W29c) was evaluated as having wilderness characteristics if managed with existing BLM San Antonio Wilderness.

Concern Statement 535 **Recommendation Process, Closed Roads**

Closed administrative roads should not be used to remove an area from wilderness recommendation.

Associated Comment Letter: 4964

Response

Forest Service Handbook 1909.12, chapter 72, directs the forest; "to evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man's work substantially unnoticeable (apparent naturalness)." The term 'substantially noticeable' with respect to apparent naturalness is not defined in the 2012 Planning Rule or in the Forest Service Handbook 1909.12 Chapter 70 for recommended wilderness. Imprints of 'man's work,' as defined for the Carson, included old logging roads that are still visible and were GPSed on the ground (FEIS, Volume 3, Appendix F, Evaluation Process section). Although these roads may be administratively closed, they are still visibly apparent on the ground. The national forest evaluated the location and prevalence of these roads, as well as their co-occurrence with other activities or improvements that impact apparent naturalness within inventoried lands in the evaluation area.

The Carson followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70 to consider areas for wilderness

recommendation. A detailed description of the inventory process, the process for evaluation of the inventory, and the process for identifying areas to analyze as recommended wilderness can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019).

Concern Statement 536 **Recommendation Process**

The Carson should return to the evaluation stage of the wilderness recommendation process as its all or nothing approach has left many lands with wilderness characteristics open to development, destruction, and abuse. More areas should have been evaluated as having wilderness characteristics and recommended as wilderness. Advocating for the forest to reevaluate wilderness characteristics which were improperly disqualified during the wilderness recommendation process. With climate change - it is vital to protect and keep intact all forest that contribute to wilderness. These areas provide critical biodiversity and watershed sources and will buffer effects of climate change. They clean our air, absorb CO_2, give us O_2, and really are a vital part of combatting changing climate.

Associated Comment Letters: 4964, 4997, 5102, 5143, 5265, 5673

Response

The Carson followed the required process, as outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70, in considering areas for wilderness recommendation. A detailed description of the inventory process, the process for evaluation of the inventory, and the process for identifying areas to analyze as recommended wilderness can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019).

Recommended wilderness is one management tool that may be used to buffer the effects of climate change; however, the final Plan includes various forestwide components designed to maintain or restore the ecological integrity of terrestrial and aquatic ecosystems and watersheds in the plan area—including components to maintain or restore structure, function, composition, and connectivity and that take into account stressors such as climate change. For more details, please refer to the Management Implications of Projected Future Climate Change section of the FEIS (chapter 3).

Concern Statement 537 **Recommendation Process, Railroad**

Some polygons were excluded from the analysis stage of the Carson's wilderness recommendation process because of the proximity of the Cumbres and Toltec Scenic Railroad. We note that the present boundaries of the Cruces Basin Wilderness area abut the railroad. The presence of the railroad is an inappropriate reason to have excluded these lands, as they offer the same or substantially similar opportunities for solitude and primitive recreation as the Cruces Basin Wilderness does today.

Associated Comment Letter: 4964

Response

The wilderness recommendation process used different criteria than the congressional wilderness designation for the Cruces Basin Wilderness. The Carson followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70 to consider areas for wilderness recommendation. A detailed description of the inventory process, the process for evaluation of the inventory, and the process for identifying areas to analyze as recommended wilderness can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019).

When evaluating for wilderness characteristic 2, solitude and unconfined recreation were each evaluated separately. For solitude, we considered pervasive sights and sounds from just outside and within the evaluation area. A one-quarter-mile buffer around noise factors was used to address potential noise issues. Factors included chainsaw noise from fuelwood gathering along existing open roads, train

whistles, vehicle noise on existing roads, and areas currently open to snowmobile use during the winter (FEIS, Volume 3, Appendix F, Evaluation Process section).

When evaluating for unconfined recreation, we considered the opportunity to engage in primitive-type or unconfined recreation activities that lead to a visitor's ability to feel a part of nature. A majority of the inventory polygons are evaluated as having unconfined recreation, only snowmobile use areas from the 1986 Carson NF Plan were removed from the evaluation for lacking unconfined recreation (FEIS, Volume 3, Appendix F, Evaluation Process section).

Within the Tres Piedras North Evaluation Area, polygons were not evaluated as lacking wilderness characteristics for solitude solely because of sound impacts from the Cumbres and Toltec Scenic Train. Sound impacts from developed recreational activities (e.g., existing forest roads, day-use areas, adjacent campgrounds, Cumbres and Toltec train, snowmobile use) contribute to a lack of solitude on 187 acres (23 percent) of CbW9, 293 acres (4 percent) of W11, 301 acres (3 percent) of W17, 483 acres (2 percent) of W27, 425 acres (1 percent) of W29, and 676 acres (1 percent) of W30. Vehicle, snowmobile, and chainsaw sounds along the roads are evident within 358 acres (40 percent) of CbW1-CbW9, 764 acres (11 percent) of W11, 1,376 acres (15 percent) of W17, 14,042 acres (55 percent) of W27, 4,664 acres (15 percent) of W29, 28,070 acres (88 percent) of W30, and 2,803 acres (27 percent) of Wxs573ADD, Wxs701ADD, Wxs710ADD, and Wxs723ADD. All of these factors serve to diminish the sense of solitude.

Concern Statement 538 **Recommendation Process, Maps**

Without better maps, it is impossible for commenters to provide thoughtful input about the wilderness recommendations. It is unclear from the Carson's evaluation document where the overlapping unnatural features are present within the various polygons. The boundary lines of these polygons could likely be redrawn to incorporate more lands of wilderness quality. Because there are no maps, and the evaluation does not specifically state, it is unclear if any number of these areas within the Cruces Basin and Valle Vidal are adjacent to one another in such a fashion that the Carson could redraw boundary lines, which would result in areas over 5,000 acres in size which meet the all or nothing test applied by the Carson.

Associated Comment Letter: 4964

Response

The Carson followed the required process and mapping requirements outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70 to consider areas for wilderness recommendation. A detailed description of the inventory process, the process for evaluation of the inventory, and the process for identifying areas to analyze as recommended wilderness can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019). We used the following maps to show the results of the evaluation process, which were informed by: (1) on-the-ground knowledge of Forest Service personnel, (2) aerial photos, (3) GIS data, (4) field visits, (5) knowledge of our cooperating agencies, and (6) input from the public (these maps were created for all evaluation areas as a tool during evaluation and are included in the project record). The evaluation of inventoried lands for wilderness characteristics was a qualitative evaluation. Using the tools and information described above, we developed a narrative discussion for each wilderness characteristic in each evaluation area. To determine the degree to which an evaluation area has wilderness characteristics, wilderness characteristics 1 through 5 were assessed individually for each evaluation area, then a collective determination was made that considered all of the characteristics together. In other words, an evaluation area needs to have wilderness characteristics 1, 2, and 5 for an area to have wilderness characteristics. The evaluation area is then evaluated for wilderness characteristic 3, size. If the area is less than 5,000 acres, other factors (e.g., ability to be managed to retain wilderness characteristics, adjacency to other Federal lands with wilderness characteristics) must be considered to make a final determination. If wilderness characteristic 4 exists, the evaluation must also meet all of the other characteristics as described above.

Figure 4 and figure 5 are maps of the areas evaluated as having manageability (characteristic 5), apparent naturalness (characteristic 1), solitude or unconfined recreation (characteristic 2), and size (characteristic 3) within the Tres Piedras North and Valle Vidal evaluation areas.

There are 64,677 acres (55 percent of the evaluation area) scattered throughout the Tres Piedras North evaluation area that have manageability, apparent naturalness, and solitude or unconfined recreation. Two areas within the evaluation area are individually larger than 5,000 acres: W27a (7,117 acres) and W29e (10,048 acres); both comprise outstanding values (characteristic 4). Three areas are individually less than 5,000 acres in size, but could be managed in conjunction with the existing Cruces Basin Wilderness—W17f (1,675 acres) and W17k (2,670 acres) or the existing BLM San Antonio Wilderness—W29c (2,488 acres)—to create contiguous areas larger than 5,000 acres. The rest of the areas with manageability, apparent naturalness, and solitude or unconfined recreation (totaling 40,679 acres) are each less than 4,300 acres in size and are not adjacent to any wilderness or other protected areas (figure 4). Moreover, these remaining 40,679 acres lack the geographical definition necessary to maintain these acreages for preservation and use in an unimpaired condition and thus were not included in the next stage of the wilderness recommendation process (Analysis).

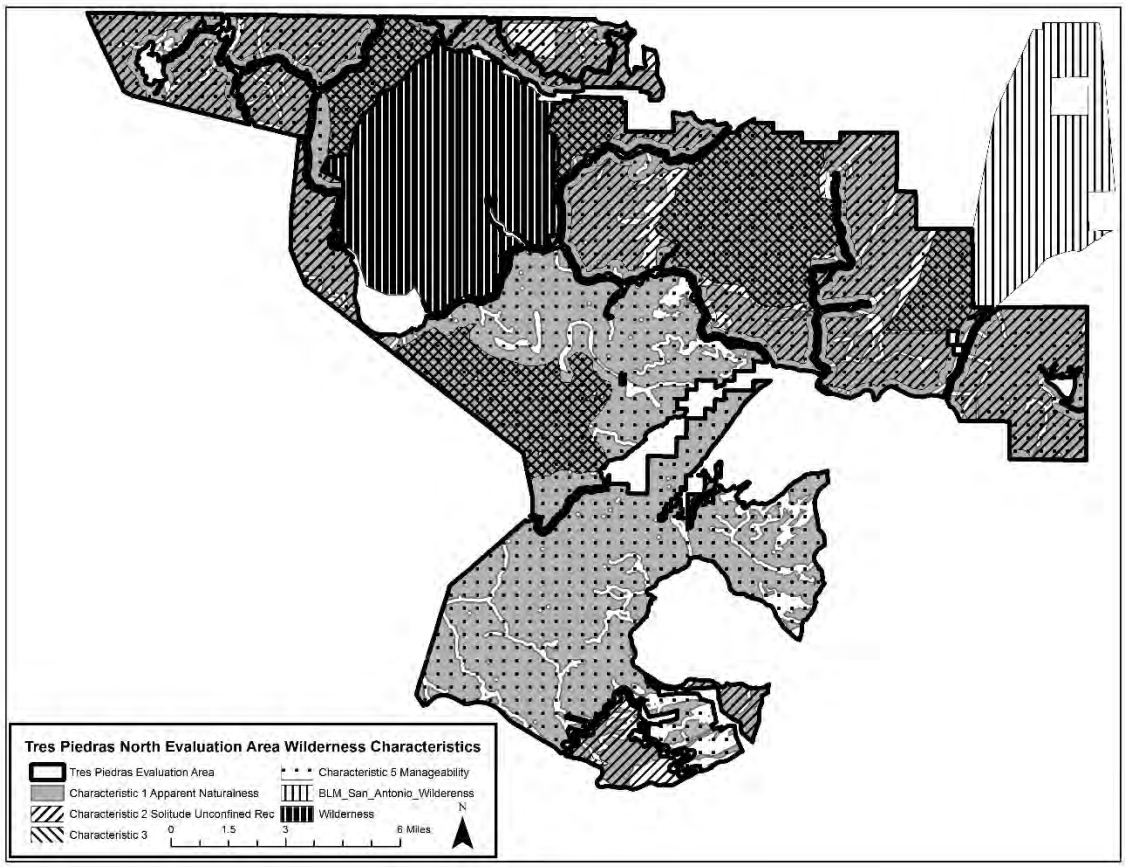


Figure 4. Wilderness characteristics for Tres Piedras North evaluation area

Within the Valle Vidal evaluation area, there are 28,110 acres (29 percent) scattered throughout with the following wilderness characteristics: manageability, apparent naturalness, and solitude or unconfined recreation. The largest of these areas, surrounding Little Costilla Peak, totals approximately 9,261 acres, and contains outstanding values (characteristic 4). The remaining 18,689 acres are less than 2,900 acres individually and are not adjacent to any existing wilderness or other protected areas (figure 5). Upon review, 18,689 acres lack geographical definition to maintain these acreages for preservation and/or use

in an unimpaired condition, and thus were not included in the next stage of the wilderness recommendation process, analysis.

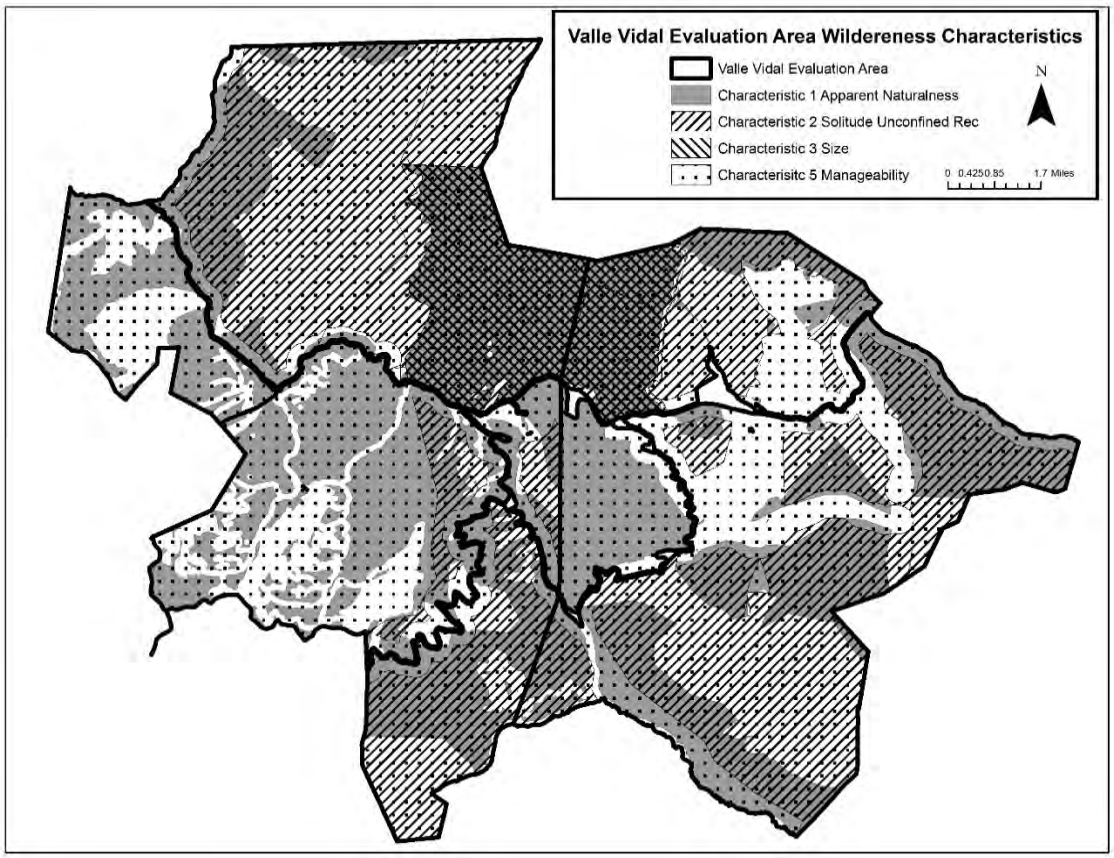


Figure 5. Wilderness characteristics of Valle Vidal evaluation area

Concern Statement 539 **Recommendation Process, Apparent Naturalness**

The Cruces Basin-San Antonio Watershed evaluation area - just one limited example for which we have on-the-ground data to support areas should be recommended wilderness, and of how this area is representative of more widespread misapplication of the apparent naturalness criteria throughout the wilderness evaluation narratives.

*Associated Comment Lett*er: 4964

Response

The Carson followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70 to consider areas for wilderness recommendation. A detailed description of the inventory process, the process for evaluation of the inventory (including apparent naturalness), and the process for identifying areas to analyze as recommended wilderness can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019). The term 'substantially noticeable' (i.e., with respect to apparent naturalness) is not defined in the 2012 Planning Rule or in the Forest Service Handbook 1909.12 chapter 70 for recommended wilderness; the Carson therefore defined this term based on forest-specific conditions; see Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019) to view the full definition and wilderness evaluation. Areas outside of the areas evaluated as having wilderness characteristics in the northern Tres Piedras evaluation area do not have wilderness

characteristics, according to the Carson's evaluation criteria. See also Concern Statement 558 for more information on how this area was evaluated.

The responsible official selected the preferred alternative (alternative 2-modified), which strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified recommends 9,295 acres and comprises all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are areas that are appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. The responsible official concluded that, for these 9,295 acres, the benefits to be obtained through recommending them to Congress for wilderness designation and managing them as recommended wilderness management areas outweigh any additional limitations on management options.

Concern Statement 540 **Recommended Wilderness, Effects**

The areas evaluated as having wilderness characteristics that were included in alternative 2 are those areas where the protection of wilderness characteristics: 1} would not limit management activities for restoration of fire dependent ecosystems (ponderosa pine forests and dry mixed conifer) and water resources; 2} would not limit important ecosystem services (e.g., mountain biking tourism, fuelwood gathering); 3) the boundary area is easily identifiable based on existing natural features, locatable human-made features, or existing survey lines. This suggests that the Carson recommendations are contradictory in that Carson NF claims alternative 4 would do more for ecological integrity, water resource protection, and wildlife movement. Why would you not include more rather than less recommended wilderness if your long-term goals are to protect "ecosystem services," the most important of which in this region is provision of a reliable water supply. We support providing opportunity for fuelwood gathering though it seems there is plenty of land outside of areas evaluated as having wilderness characteristics lands for that. Mountain biking is patently not an "ecosystem service" and there is also plenty of land outside of areas evaluated as having wilderness characteristics lands for that as well. The bottom line seems to be that recommendation for wilderness is based upon the narrowest of criteria.

Associated Comment Letters: 168

Response

How each of the 13 areas with wilderness characteristics fit within each alternative is described in the Areas Evaluated as having Wilderness Characteristics (AEWC) Alternative Development section of the Wilderness Recommendation Process – Inventory, Evaluation, and Analysis (Alternative Development) (USDA FS Carson NF 2019). The approach of varying acreages of recommended wilderness by alternative was based on the alternative theme and input from the planning team, the 19 cooperating agencies, and the Carson NF leadership team.

Recommended wilderness has environmental tradeoffs to ecological integrity, water resource protection, and wildlife movement. As stated in the FEIS, "Recommended wilderness would benefit some wildlife species because primitive management would minimize disturbance and provide habitat connectivity. Conversely, limited ability to mechanically treat in these areas may mean that ecological conditions become more departed which may negatively impact wildlife. For example, any wetland restoration would be accomplished by hand instead of using heavy machinery and would take longer meaning less would be accomplished (USDA FS Carson NF 2018a). Mechanical thinning of overstocked forests could be accomplished by hand with crosscut saws and then the slash could be treated to maintain scenic integrity. These restrictions would increase the cost and difficulty of treatments, would reduce the restoration return on investment, and would therefore make projects less attractive, and less likely to be accomplished by the Carson NF or partners (USDA FS Carson NF 2018a)" (Chapter 3, Environmental Consequences for Wilderness - Alternative 2). The FEIS explains the environmental consequences for

recommended wilderness by alternative; the record of decision describes which recommended wilderness was included in the Final Plan and the rationale underlying this decision.

Concern Statement 541 **Roadless Area Review and Evaluation**

See *California* v. *Block*, 690 F.2d 753, 765, 768-69 (9th Cir. 1982) (despite considering an alternative that allocated 100 percent of inventoried roadless areas to wilderness, "it was unreasonable for the Forest Service to overlook the obvious alternative of allocating more than a third of the RARE II acreage to a Wilderness designation"). Similar to the situation in *California* v. *Block* - where the Ninth Circuit invalidated an EIS that "uncritically assume[d] that a substantial portion of the [roadless] areas should be developed and consider[ed] only those alternatives with that end result," 690 F.2d at 767 - the DEIS assumes that nearly half the inventoried areas should not be protected as recommended wilderness and considers only those alternatives with that end result. This is insufficient under NEPA. See, e.g., Council on Environmental Quality, NEPA's Forty Most Asked Questions, 46 Fed. Reg. 18,026 (Mar. 23, 1981) ("When there are potentially a very large number of alternatives, only a reasonable number of examples, covering the full spectrum of alternatives, must be analyzed and compared in the EIS. An appropriate series of alternatives might include dedicating 0, 10, 30, 50, 70, 90, or 100 percent of the Forest to wilderness").

Associated Comment Letters: 4856

Response

Areas identified during the second Roadless Area Review and Evaluation (RARE II) were subsequently designated as inventoried roadless areas. Inventoried roadless areas are managed according to the roadless rule, as described in the Inventoried Roadless Area section of the plan. There is no requirement to consider all inventoried roadless areas as wilderness during the analysis phase of the wilderness recommendation process. All inventoried roadless areas were considered during the inventory phase, and any inventoried roadless areas that met inventory criteria were considered during the evaluation phase. Not recommending an area under the final Plan does not constitute a decision that it should be developed or would not be designated as wilderness in the future.

The Carson NF followed the planning directives for wilderness recommendation as outlined in FSH 1909.12 chapter 70. The responsible official identifies which specific areas, or portions thereof, to carry forward from the evaluation in one or more alternatives in the plan EIS (FSH 1909.12 73). The decision by the responsible official was based on the evaluation of wilderness characteristics and input from the public. Neither the directives nor the NEPA require the automatic inclusion of all inventoried areas as recommended wilderness. "Not all lands included in the inventory and subsequent evaluations are required to be carried forward in an alternative" (FSH 1909.12 73). Not all inventory acres were evaluated as having wilderness characteristics during the evaluation step of the Recommended Wilderness Process (see Wilderness Recommendation Process – Inventory, Evaluation, and Analysis (Alternative Development)) and the responsible official selected to not carry forward inventory lands that were evaluated as not having wilderness characteristics into an alternative.

There are multiple reasons why an inventoried roadless area may not have met the inventory or evaluation criteria for wilderness recommendation. The 43,738 acres in the Columbine-Hondo Wilderness inventoried roadless area have been designated as wilderness since the RARE II inventory, and therefore, were not evaluated for wilderness recommendation. Six of the inventoried roadless areas on the Carson NF are smaller than 5,000 acres and not adjacent to existing wilderness or otherwise manageable as a standalone wilderness, and therefore, do not meet the evaluation criteria for wilderness recommendation. About 32,399 acres of inventoried roadless areas (31 percent) were recommended as wilderness under at least one alternative.

36 CFR 220.5(e) states, "The environmental impact statement shall document the examination of reasonable alternatives to the proposed action. An alternative should meet the purpose and need, and address one or more significant issues related to the proposed action. Since an alternative may be

developed to address more than one significant issue, no specific number of alternatives is required or prescribed." In the Carson's FEIS, a no-action and four action alternatives with a spectrum of recommended wilderness acreages are analyzed in detail; 12 additional alternatives were considered but eliminated from detailed study, including alternatives to recommend all lands in the wilderness inventory as recommended wilderness. Rationale for not considering this alternative in detail can be found in the FEIS in the Alternatives Considered but Eliminated from Detailed Study section.

Concern Statement 542 **Range of Alternatives**

The final EIS must include a greater range of alternatives regarding recommended wilderness because the high end of the range is not considered. The proposed alternatives fail to comply with the requirements of NEPA because they do not consider a sufficiently varied range of recommended wilderness. This is not a meaningful range of alternatives because (1) the maximum upper range (i.e., all inventoried areas) of recommended wilderness is not considered, even though the opposite extreme (zero acres) is included; and (2) the upper middle range of recommended wilderness is inadequately represented.

Associated Comment Letters: 4856, 4964

Response

36 CFR 220.5(e) states that "The environmental impact statement shall document the examination of reasonable alternatives to the proposed action. An alternative should meet the purpose and need and address one or more significant issues related to the proposed action. Since an alternative may be developed to address more than one significant issue, no specific number of alternatives is required or prescribed." In the Carson's FEIS a no-action and four action alternatives with a spectrum of recommended wilderness acreages are analyzed in detail; 12 additional alternatives were considered but eliminated from detailed study, including alternatives to recommend all lands in the wilderness inventory as wilderness and to recommend 20 percent of ecosystems as wilderness. Rationale for not considering these alternatives in detail can be found in the FEIS in the Alternatives Considered but Eliminated from Detailed Study section.

The draft plan circulated for scoping was adjusted based on public feedback. 36 CFR 220.5(e) states that, "The responsible official may modify the proposed action and alternative(s) under consideration prior to issuing a draft environmental impact statement. In such cases, the responsible official may consider the incremental changes as alternatives considered. The documentation of these incremental changes to a proposed action or alternatives shall be included or incorporated by reference in accord with 40 CFR 1502.21." Insofar as the FEIS considered more than 15 alternatives that address public input and the issues identified (FEIS, Volume 1, Chapter 1, Public Participation, Issues), it complies with the National Environmental Policy Act requirement for a full range of alternatives.

The Carson NF followed the planning directives for wilderness recommendation as outlined in FSH 1909.12 chapter 70. The responsible official identifies which specific areas, or portions thereof, to carry forward from the evaluation in one or more alternatives in the plan EIS (FSH 1909.12 73). The decision by the responsible official was based on the evaluation of wilderness characteristics and input from the public. Neither the directives nor the NEPA require the automatic inclusion of all inventoried areas as recommended wilderness. "Not all lands included in the inventory and subsequent evaluations are required to be carried forward in an alternative." (FSH 1909.12 73). Not all inventory acres were determined to have wilderness characteristics in the evaluation step of the Recommended Wilderness Process (USDA FS Carson NF 2019); the responsible official opted not to carry forward, in any alternative, inventoried lands deemed not to have wilderness characteristics.

Concern Statement 543 **Wilderness, Opposition**

The Forest should not recommend any lands for wilderness as it limits the use/contributions of the lands to the economy of local communities. Support for no recommended wilderness in alternatives 1 and 3.

Associated Comment Letters: 143, 3123, 4844, 4845, 4848, 4985, 5782

Response

We analyzed two alternatives that include no recommended wilderness (alternatives 1 and 3). As required by the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)), the Carson NF identified and evaluated lands that may be suitable for inclusion in the National Wilderness Preservation System as part of plan revision.

The responsible official carefully considered a range of recommended wilderness areas, as well as other land allocations, to determine the mix of land and resource uses that would best meet public need. The recommendation of wilderness areas in the preferred alternative considered a broad range of social, environmental, and economic impacts, as well as public comment related to the management of recommended wilderness areas. The responsible official selected the preferred alternative (alternative 2-modified) for the final Plan, which strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified recommends 9,295 acres and comprises all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are those areas that are appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. It was the conclusion of the responsible official that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing them as recommended wilderness management areas outweigh any additional limitations on management options (USDA FS Carson NF 2021).

Concern Statement 544 **Alternative 2, Support**

Include all the recommended wilderness management areas in alternative 2 in the final Plan, especially Ash Mountain (5,365 acres) in the Valle Vidal and Rito Claro (1,165 acres) near Midnight Meadows.

Associated Comment Letters: 196, 380, 2752, 4964, 4970, 5303, 5098, 5569

Response

Ash Mountain and Rito Claro are included in the final Plan; as explained in the record of decision, Rito Claro has been renamed Ester Garcia. The responsible official selected the preferred alternative (alternative 2-modified) as the final Plan, as it strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified recommends 9,295 acres and comprises all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are those areas that are appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. It was the conclusion of the responsible official that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing them as recommended wilderness management areas outweigh any additional limitations on management options.

Concern Statement 545 **Alternative 4, Support**

Support for recommended wilderness in alternative 4 to be included in the final Plan.

Associated Comment Letter: 5673

Response

The Carson NF analyzed alternative 4, which included 45,473 acres of recommended wilderness. The decisionmaker carefully considered a range of recommended wilderness areas, as well as other allocations, to determine the mix of land and resource uses that would best meet public needs. The areas recommended for wilderness in the preferred alternative considered a broad range of social,

environmental, and economic impacts, and public comment related to the management of recommended wilderness areas. Not all recommended wilderness from alternative 4 was included in the preferred alternative or final Plan (USDA FS Carson NF 2021). The responsible official selected the preferred alternative (alternative 2-modified), which recommended 9,295 acres. This alternative strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified includes all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are those areas that are appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. It was the conclusion of the responsible official that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing them as recommended wilderness management areas outweigh any additional limitations on management options.

Concern Statement 546 **Alternative 4, Support**

Formally designate all recommended wilderness areas identified in alternative 4 as established wilderness areas.

Associated Comment Letters: 2766, 4835, 4853, 5303

Response

The Forest Service cannot designate the wilderness recommended in any of the alternatives; only Congress has the authority to designate wilderness. However, the responsible official decided to recommend wilderness areas in the preferred alternative (alternative 2-modified), which strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified recommends 9,295 acres and includes all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are areas that are appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. The responsible official (USDA FS Carson NF 2021) determined that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing them as recommended wilderness management areas outweigh any additional limitations on management options (see Record of Decision for rationale).

Concern Statement 547 **Alternative 5, support**

The final Plan should include Recommended Wilderness Management Areas: McCrystal, Jicarita Ridge, Rudy, Brazos Ridge, Lobo, Huckaby, Rito Claro, Rio Chiquito, Olguin, Llano, and Oso. It should especially include the recommended wilderness management areas from alternative 5 around Cruces Basin, Pecos, and Valle Vidal.

Associated Comment Letters: 148, 151, 153, 161, 168, 223, 1153, 1838, 3071, 4847, 4856, 4871, 4878, 4924, 4925, 4964, 5011, 5073, 5093, 5320, 5511, 5612, 5620, 5674, 5700, 5705, 5715, 5723

Response

The FEIS contains detailed analysis of each recommended wilderness management area in each of the five alternatives. These alternatives ranged from zero acres of recommended wilderness in alternatives 1 and 3 to 67,996 acres of recommended wilderness in alternative 5. The preferred alternative (alternative 2-modified) and final Plan recommend 9,295 acres and include all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5.

The wilderness evaluation looked at “manageability” in terms of legal impediments to managing an area as wilderness, adjacent land management, and shape and configuration. Boundary identification and

definition was considered during the assignment of areas evaluated as having wilderness characteristics to alternatives. The FEIS evaluated manageability in terms of enforceability and likely success of preventing non-wilderness-conforming uses as well as impacts of recommendation on existing uses.

In alternative 2-modified, the Llano Area Evaluated as having Wilderness Characteristics was removed as a recommended wilderness management area because, as described in the FEIS, "the boundary is not identifiable on the ground and would have to be fenced and well-signed to prevent non-conforming uses. Still, enforcement would be problematic because there are no topographic features to separate developed motorized uses from primitive wilderness uses. It would be very difficult to prevent impacts from human development and activity occurring outside the RWMA from affecting the solitude and unconfined values inside the RWMA" (FEIS, Chapter 3, Wilderness, Description of Affected Environment).

The Rudy Area Evaluated as having Wilderness Characteristics was included in the final Plan as a recommended wilderness management area, because, as described in the FEIS, "The area is open to snowmobiling and receives some to very little use along the ridge overlooking the existing wilderness. Some hunting occurs here. Otherwise, it is steep and undeveloped with little recreational or other use. The area is adjacent to an existing designated wilderness. For the most part, the remainder is steep and difficult to access. About one mile along Forest Road 87A is flat and leads to the rim of the Cruces Basin and is the only place where non-conforming uses would be a concern" (FEIS, Chapter 3, Wilderness, Description of Affected Environment).

This recommendation represents a compromise between the protections afforded by wilderness, the ability to successfully manage an area as recommended wilderness, and the management flexibility that is retained in non-wilderness management areas. The decision to recommend 9,295 acres was informed by the wilderness inventory and evaluation process, in which the Forest identified potentially suitable areas, evaluated their wilderness characteristics, and analyzed the impacts of potential wilderness designation in the environmental impact statement. The responsible official concluded that, on these 9,295 acres, the benefits to be obtained through wilderness designation outweigh any additional limitations on management options.

The FEIS considered the social, economic, and environmental impacts of additional recommended wilderness on a wide variety of resources. The analysis notes potential benefits from recommended wilderness, including long-term environmental monitoring, scenic vistas, protection of clean air and water, and maintenance of biological diversity (FEIS, Chapter 3, Wilderness, Description of Affected Environment, Areas Evaluated as Having Wilderness Characteristics). Increased wilderness also provides additional opportunities for primitive recreation and solitude. On the other hand, the FEIS also acknowledges that additional acres of wilderness could lead to increased costs to grazing permittees, reduced opportunities for motorized and mechanized recreational use, and limitations on the ability to restore departed habitats. The responsible official's decision accounts for all of these likely impacts of wilderness designation and recommends the 9,295 acres as appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness, a lower probability of conflicting with other management goals and multiple uses, and public comment.

Concern Statement 548 **Alternative 5, support**

The final Plan should recommend maximum recommended wilderness (alternative 5).

Associated Comment Letters: 161, 4964, 4995, 5005

Response

The Carson NF analyzed alternative 5, which included the maximum recommended wilderness. The responsible official carefully considered a range of recommended wilderness areas, as well as other designations, to determine the mix of land and resource uses that would best meet public need. The maximum possible recommended wilderness was not selected as the preferred alternative (USDA FS Carson NF 2021). The areas recommended for wilderness in the final Plan considered a broad range of

social, environmental, and economic impacts, as well as public comment related to the management of recommended wilderness areas. The analysis notes potential benefits from recommended wilderness, including long-term environmental monitoring, scenic vistas, protection of clean air and water, and maintenance of biological diversity (final environmental impact statement, Chapter 3, Wilderness, Description of Affected Environment, Areas Evaluated as Having Wilderness Characteristics). Increased wilderness also provides additional opportunities for primitive recreation and solitude. On the other hand, the environmental impact statement also acknowledges that additional acres of wilderness could lead to increased costs to grazing permittees, reduced opportunities for motorized and mechanized recreational use, and limitations on the ability to restore departed habitats. The responsible official selected the preferred alternative (alternative 2-modified) for the final Plan, which recommended 9,295 acres. This alternative strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified comprises all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are those areas that are appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. It was the conclusion of the responsible official that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing them as recommended wilderness management areas outweigh any additional limitations on management options.

Concern Statement 549 **Alternatives 4 and 5, Opposition**

Opposition to recommended wilderness management areas that would result in loss of cherished bike access or a significant reduction of current mountain biking opportunities on the Carson NF. Specifically, opposition to Comanche, Olguin, and Canjilon Meadows as recommended wilderness management areas listed in alternatives 4 and 5 because the newly completed Continental Divide National Scenic Trail (CDNST) runs through the middle of these areas, and recommending them as wilderness would lead to significant loss to current recreational mountain biking on the Carson NF.

Associated Comment Letters: 108, 176, 4836, 4960, 4970, 5405, 5444, 5491, 5546

Response

The FEIS considered the impacts on different recreational uses that would result from the varying levels of wilderness recommended in the five alternatives. The responsible official's selection of the preferred alternative (alternative 2-modified) represents a balance between mechanized and motorized uses and opportunities for solitude and a primitive experience (USDA FS Carson NF 2021). Alternative 2-modified recommends 9,295 acres, comprising all recommended wilderness from Alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are areas that are appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. It was the conclusion of the responsible official that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing them as recommended wilderness management areas outweigh any additional limitations on management options (USDA FS Carson NF 2021). Areas recommended as wilderness under the preferred alternative do not include any designated mountain bike trails. Moreover, Comanche, Olguin, and Canjilon Meadows are not included as recommended wilderness in the preferred alternative or the final Plan.

Concern Statement 550 **Alternatives 4 and 5, Opposition**

Opposed to the creation of the Olguin, Canjilon Meadows, Comanche, and Brazos Ridge Recommended Wilderness Management Areas as proposed in alternatives 4 and 5.

Associated Comment Letters: 4837, 4847, 5444

Response

Olguin, Canjilon Meadows, Comanche, and Brazos Ridge were not included in the preferred alternative or the final Plan.

Concern Statement 551 **Rio Arriba County, Opposition**

The final Plan should take seriously the public input regarding the five recommended wildernesses in Rio Arriba County and conclude that these areas are not suitable for further consideration as wilderness. The Forest Service does not have the needed support of the people who reside in the communities surrounding these areas.

Associated Comment Letters: 152, 2992

Response

The wilderness evaluation identified nine areas in Rio Arriba County that possess wilderness characteristics. In 2016, Rio Arriba County submitted comments expressing opposition to five of these areas. Those comments were considered and incorporated into the evaluation process and rationale, the assignment of areas evaluated as having wilderness characteristics to alternatives, and the final selection of recommended wilderness areas in the preferred alternative and final Plan. All other comments received during the wilderness recommendation process, including comments from people who reside in nearby communities, were considered. In three of the five areas, no portion is recommended as wilderness (W31d, W32a, W29c).

The northern portion of W17k (Toltec) is recommended under the preferred alternative, but excludes areas along Forest Road 74 and to the south, which commenters noted are open to motor vehicles and popular for hunting and recreation (FEIS, Chapter 3, Wilderness, Description of Affected Environment, Areas Evaluated as having Wilderness Characteristics, Affected Environment for Recommended Wilderness Management Areas, Toltec). The Toltec recommended wilderness is 1,038 acres, but it is manageable as wilderness because it is adjacent to the existing Cruces Basin Wilderness. The presence of the nearby Cumbres and Toltec scenic railroad raised by the public is noted in the wilderness evaluation (Wilderness Recommendation Process-Inventory, Evaluation, and Analysis [Alternative Development], p. 111), but has minor impacts to opportunities for solitude overall. The Toltec Recommended Wilderness Management Area is part of the Apache grazing allotment; however, under the final Plan, permitted grazing would continue and motorized travel and uses associated with grazing management may be authorized (MA-RWMA-S-1). To the north of the Toltec Mesa, the topography is steep and less accessible and there is less livestock or human use (FEIS, Chapter 3, Wilderness, Description of Affected Environment, Areas Evaluated as having Wilderness Characteristics, Affected Environment for Recommended Wilderness Management Areas, Toltec).

The W17f (Rudy) area was determined to have wilderness characteristics and is recommended under the preferred alternative. As commenters noted, the area is only 1,675 acres, but it is manageable as wilderness because it is adjacent to the existing Cruces Basin Wilderness. The presence of the nearby Cumbres and Toltec scenic railroad was referenced in the wilderness evaluation (Wilderness Recommendation Process-Inventory, Evaluation, and Analysis [Alternative Development], p. 111), but has minor impacts to opportunities for solitude overall. The Rudy Recommended Wilderness Management Area is part of the San Antone grazing allotment; however, under the final Plan, permitted grazing would continue and motorized travel and uses associated with grazing management may be authorized (MA-RWMA-S-1). The fact that views and vistas are limited due to topography and forest canopy was not a factor in the analysis of recommended wilderness areas or the selection of areas for the preferred alternative. Rudy tank and its access road have been excluded from the recommended wilderness. Hondo Tanks #1 and #2 are inside the recommended area, but may still be accessed and maintained under the final Plan (MA-RWMA-S-1). Forest Road 87A, which, as commenters note, is open to motor vehicles and part of the motorcycle Backcountry Discovery Route, is excluded from the recommended wilderness.

The recommendation of wilderness areas in the preferred alternative considered a broad range of social, environmental, and economic impacts, along with public comments related to the management of recommended wilderness areas. The responsible official's decision accounts for the likely impacts of wilderness designation and public input, recommending 9,295 acres as appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness and a lower probability of conflicting with other management goals and multiple uses.

Concern Statement 552 **Rio Arriba County**

The County of Rio Arriba conducted ground survey of all the areas evaluated with wilderness character and determined that they did not have wilderness character. These areas, especially around Canjilon mountain, Ghost Ranch, and North Tres Piedras has evidence of man all over them. There are range improvements, historic roads, and they have been logged in the past. Most of these areas have been used to feed our livestock, gather fuelwood, and for family gathering for several generations of native New Mexicans. Do not recommend any wilderness as this would limit our use of the land and these areas were surveyed to not have wilderness character.

Associated Comment Letter: 2992

Response

The Carson NF followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70 to consider areas for wilderness recommendation. A detailed description of the inventory process, the process for evaluation of the inventory, and the process for identifying areas to analyze as recommended wilderness can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019). Forest Service Handbook 1909.12, chapter 72 directs the forest "to evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man's work substantially unnoticeable (apparent naturalness)." With regard to apparent naturalness, the term 'substantially noticeable' is not defined in the 2012 Planning Rule or in the Forest Service Handbook 1909.12 chapter 70; the Carson NF therefore defined the term based on forest-specific conditions. See Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019) to view the full definition and wilderness evaluation. Canjilon Mountain, Ghost Ranch, and five areas (Rudy, Brazos Ridge, Olguin, Llano, and Oso) in the northern Tres Piedras evaluation areas were determined to be areas with wilderness characteristics. Of these, Rudy and Olguin Mesa are the only two recommended as wilderness in the final Plan. Limitations on use were not considered during the evaluation phase but are discussed in the FEIS and did factor into the final wilderness recommendation.

The responsible official selected the preferred alternative (alternative 2-modified), which strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified recommends 9,295 acres and comprises all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are areas that are appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. It was the conclusion of the responsible official that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing them as recommended wilderness management areas outweigh any additional limitations on management options.

Concern Statement 553 **Navajo Peak**

The final Plan should designate wilderness around Navajo Peak.

Associated Comment Letters: 196, 5388, 5705

Response

The USDA Forest Service does not have the authority to designate wilderness; only Congress can designate wilderness. The Carson NF does not manage Navajo Peak, and therefore, has no authority to create a recommended wilderness management area around Navajo Peak. However, the selected alternative, alternative 2-modified, and the final Plan do include Lobo Recommended Wilderness Management Area, located adjacent to Navajo Peak.

Concern Statement 554 **Cruces Basin, Pecos, Support**

The Forest should consider all or some of the areas within the wilderness inventory areas for recommended wilderness management areas in the final Plan, especially around the Cruces Basin, and Pecos Wilderness.

Associated Comment Letters: 111, 135, 155, 168, 170, 174, 2317, 3071, 4841, 4860, 4868, 4871, 5005, 5405, 5511, 5610, 5631, 5666, 5709, 5723

Response

The Carson NF followed the planning directives for wilderness recommendation as outlined in FSH 1909.12 chapter 70. The responsible official identified which specific areas, or portions thereof, to carry forward from the evaluation in one or more alternatives in the plan EIS (FSH 1909.12 73). The responsible official's decision was based on the evaluation of wilderness characteristics and input from the public. Neither the directives nor the National Environmental Policy Act require the automatic inclusion of all inventoried areas as recommended wilderness. "Not all lands included in the inventory and subsequent evaluations are required to be carried forward in an alternative" (FSH 1909.12 73). The additional acres described above were evaluated as not having wilderness characteristics during the evaluation step of the Recommended Wilderness Process (see Wilderness Recommendation Process – Inventory, Evaluation, and Analysis (Alternative Development)); the responsible official opted to not carry forward in any alternatives inventoried lands that were evaluated as not having wilderness characteristics.

Concern Statement 555 **Cruces Basin, Pecos, Support**

The draft management plan does not include adequate wilderness expansion. Places like the Pecos and Cruces Basin Wilderness Areas are home to centuries of culture and tradition and provide critical habitat for endangered and threatened species. They also provide unimpeded migratory routes for fish and wildlife species like elk, deer, and the Rio Grande cutthroat trout. It is essential to provide additional wilderness in the final Plan around Pecos and Cruces Basin to increase protection of migratory routes that allow these species to find food, mates, and escape ecosystems adversely impacted by climate change.

Associated Comment Letters: 133, 156, 168, 178, 4865, 5207, 5247, 5307, 5715

Response

The responsible official selected the preferred alternative (alternative 2-modified), which strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified recommends 9,295 acres and comprises all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. The responsible official concluded that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing them as recommended wilderness management areas outweigh any additional limitations on management options.

It is important to note that recommending these areas to Congress for wilderness designation is not the only mechanism for protecting wildlife corridors and it is not always the most appropriate. In some cases, active management that would not be possible in wilderness areas may be necessary or helpful to maintain or restore habitat. The final Plan includes many components designed to improve wildlife habitat connectivity, including wildlife migration routes, and not just in designated and recommended wilderness areas. For a list of plan components that improve wildlife habitat connectivity, please see appendix H, section 4 of the FEIS, Volume 3. Also included in the final Plan are the Valle Vidal Management Area and the San Antonio Management Area, each of which have plan components directing management to maintain connected habitat for wildlife.

Concern Statement 556 **Cruces Basin-San Antonio Watershed, Support**

The findings in the Cruces Basin-San Antonio Watershed evaluation, which claim that these areas do not have wilderness character due to their lacking apparent naturalness are incorrect, particularly as applied to inventory polygons W27 and W29. Field inventories found overwhelming evidence of apparent naturalness and wilderness character. The entire W27 and W29 units are overwhelmingly natural. It is part of a very large landscape of undeveloped, wild lands in northern New Mexico and southern Colorado. Open grasslands are the dominant ecosystem. Ponderosa pine, much of which is old growth, climb the hillsides. Riparian habitats, including wetlands, wet meadows, and streams are all represented. The area also enjoys an abundance of wildlife. The type of habitat found in the unit sustains healthy populations of game species such as elk, antelope, and mule deer as well as predator species such as mountain lion and black bear. The area appears predominantly natural and undeveloped, with the scattered imprints of man substantially unnoticeable. There are very few roads that are open to public motorized use in the northern reaches of the Tres Piedras Ranger District, including lands within this W27 and W29. Any open roads shown on the motor vehicle use map either serve as boundary roads to the area or are cherry-stemmed. Most of the old closed roads and unauthorized routes in the area that are unavailable for public motorized travel have faded back into the landscape from lack of use. Scars on the landscape from logging and mining are non-existent. The only improvements that are present on the landscape are those related to grazing and even these are hardly noticeable. These grazing improvements are undetectable due to their condition, the materials from which they are constructed, and their location on the landscape relative to surrounding topography. The unit has numerous built ponds in its backcountry. Based on aerial photographs and site visits, many appear functional. For most, it is hard to discern the location of the road that is used to access the pond. Relative to the area as a whole - which is vast and remote - existing grazing improvements are unnoticeable. In summary, the area's primitive and untrammeled character dominates the landscape. The area does not have any permanent structures, and the occasional signs of human activity, such as abandoned routes, stock ponds, and fencing, are substantially unnoticeable due to the vastness of the landscape, vegetative cover and topography, and natural reclamation.

Opportunities for solitude are omnipresent. The 16,897 acres of BLM Wilderness Study Area and lands with wilderness characteristics that are directly adjacent to the area make a continuous block of connected wilderness quality lands. The adjacency of these administratively recognized wildlands makes the proposal area that much more remote and isolated. Once visitors leave the boundary roads, they experience complete solitude and know that they are within a place untrammeled by humans and primeval in character. In our survey work, we encountered very few people and observed minimal signs of humans. The gentle topography instills a sense of peace and quietude. Relative to the rest of the forest, the Carson designated very few roads and trails as open to public motorized use in the travel planning process in this landscape. This lack of designated roads and motorized trails in combination with its remoteness from any population centers have left the area largely undiscovered, untrammeled and pristine providing opportunities for solitude.

Unconfined recreation is plentiful in the grassy, rolling landscape. The abundance of beaver dams, the presence of running water year-round, and the overall ecological quality of the landscape make this is a

prime area for wildlife viewing. Many of the streams in the region are popular among anglers. Vast, open, scenic vistas are common throughout the area.

The size and shape of the W27 and W29 assures manageability. The majority of the area is isolated from areas of human activity, with limited access and very few encumbrances. The area does not have motorized activity occurring within its proposed boundaries, there are no private lands within the area, and there are no extrusions or bottlenecks. Proposed boundaries follow designated roads, Forest Service administrative boundaries, and topographic features. The area is directly adjacent to the BLM's San Antonio Wilderness Study Area, which is managed to maintain its wilderness character. This adjacency could offer consistency in land management. According to LR 2000 (as of April 22, 2016), there are no active or pending mining claims in the area.

The Carson NF needs to reevaluate W27 and W29 with the Tres Piedras North evaluation area and include all of these areas as recommended wilderness as these areas have wilderness characteristics.

Associated Comment Letter: 4964

Response

The Carson followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70 to consider areas for wilderness recommendation. A detailed description of the inventory process, the process for evaluation of the inventory, and the process for identifying areas to analyze as recommended wilderness, can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019).

The following is a focused evaluation of W27 and W29; please see Wilderness Recommendation Process- Inventory, Evaluation, and Analysis (Alternative Development) (USDA FS Carson NF 2019) for a full evaluation of the North Tres Piedras evaluation area, which consists of W11, W17, W27, W29, and W30. Less than 1 percent of W27 and W29 could not be managed (characteristic 5) to preserve wilderness characteristics, as it has acequias, or shape and configuration issues that would make it difficult to manage as wilderness. Under the Chief's Policy relating to the Act of July 26, 1866 (Revised Statute 2339), continuing routine operation and maintenance of acequias is allowed without special use authorization being required. As such, 12 acres could not be managed to preserve wilderness characteristics in parts of W29. Additionally, 101 acres are connected only by one-quarter-mile-wide pinch points within W27 and W29; for this reason, these acres were removed from further evaluation.

Eight percent of W27 and W29 lacks apparent naturalness (characteristic 1), because of visible stumps, slash, and old logging roads from past or current thinning projects in eastern W27 and western W29. Overlapping with this evidence of thinning and old roads are various types of infrastructure for both livestock grazing and wildlife, scattered throughout W27 and western and eastern W29. This infrastructure includes exclosures, fish barriers, spring developments, trick tanks, stock tanks, and a corral. Taken together, these visibly apparent elements affect 2,549 acres (10 percent) of W27 and 2,370 acres (7 percent) of W29; these acres therefore lack apparent naturalness.

Fifteen percent of W27 and W29 lack solitude (characteristic 2). Vehicle, snowmobile, and chainsaw sounds along the roads, campgrounds, and lakes are evident throughout 3,630 acres (14 percent) of W27 and 5,089 acres (16 percent) of W29. During the winter, a high degree of snowmobile use takes place in W27, which was identified as a snowmobiling area in the 1986 Carson Forest Plan and would affect unconfined recreation. These developed recreational activities contribute to lack of unconfined recreation on 14,042 acres (55 percent) of W27. All of these factors serve to negatively affect the sense of solitude and unconfined recreation within W27 and W29.

Scattered throughout W27 and W29 are 34,166 acres (60 percent) with the characteristics of manageability, apparent naturalness, and solitude or unconfined recreation. Two areas are larger than 5,000 acres individually, W27a (7,117 acres) and W29c (10,000 acres), and both contain outstanding values. Another area, W29e, is made up of only 2,491 acres and while less than 5,000 acres on its own, it

could be managed in conjunction with newly designated BLM San Antonio Wilderness to total over 5,000 acres. The rest of the areas with manageability, apparent naturalness, and solitude or unconfined recreation (together comprising 14,558 acres) are each less than 2,500 acres in size and are not adjacent to any wilderness or other protected areas. Upon review, these remaining 14,558 acres lack the geographical definition (characteristic 3) necessary to maintain these acreages for preservation and use in an unimpaired condition; they were therefore removed from further evaluation.

Concern Statement 557 **Cruces Basin-San Antonio Watershed, Acequias, Recreation Sites**

The narrative for the Cruces Basin-San Antonio Watershed also lists the presence of irrigation ditches, impaired waters and developed recreation sites consisting of campgrounds and other facilities as detracting from wilderness character. We acknowledge that there are irrigation ditches in the area and that some of the ditches might be substantially noticeable; however, the Forest Service did not attempt to describe the appearance of this feature nor the extent to which the ditches are detracting from apparent naturalness. As for developed recreation sites, these are easy enough to exclude from the larger area by adjusting the boundary, which we request that the Carson do and then reevaluate this area. These developed recreation sites are indeed very localized sites. It is confounding how something so small could have such an outsized impact to the entire evaluation area, which is about 120,000 acres. Further, we contend that the Forest Service could easily adjust the boundary to exclude these features from the area.

Associated Comment Letters: 4964

Response

The Carson followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70 to consider areas for wilderness recommendation. A detailed description of the inventory process, the process for evaluation of the inventory, and the process for identifying areas to analyze as recommended wilderness can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019).

One percent of the Tres Piedras North evaluation area (W11, W17, W27, W29, and W30) could not be managed (characteristic 5) to preserve wilderness characteristics, as it has acequias and shape and configuration issues. Under the Chief's Policy relating to the Act of July 26, 1866 (Revised Statute 2339), continuing routine operation and maintenance of acequias is allowed without special use authorization being required. As such, 15 acres could not be managed to preserve wilderness characteristics in parts of W11 and W29. Two hundred eighty-two (282) additional acres located within W17, W27, W29, and W30 are connected only by one-quarter-mile-wide pinch points within this evaluation area and were therefore removed from further evaluation.

Thirteen percent is the degree to which the Tres Piedras North Evaluation Area lacks apparent naturalness (characteristic 1), because of visible stumps, slash, and old logging roads from past or current thinning projects (northern W17, eastern W27, western W29, Wxs723ADD, Wxs710ADD, all of W30, and Wxs701ADD). Overlapping these thinning projects and old roads are mine pits and tailing piles from historic mining operations (W30) and various types of infrastructure for both livestock grazing and wildlife are scattered throughout western and eastern W17 and W27, western W29, eastern W29, W11, and Wxs701Add. Grazing and wildlife infrastructure include exclosures, fish barriers, spring developments, trick tanks, stock tanks, and a corral. Within W11 (San Antonio Mountain), a designated electronic site supports multiple communications towers and antennas that serve northern New Mexico and southern Colorado; these structures are visually apparent from portions of W11. When all of these visibly apparent items are overlaid with each other, CbW1-CbW9 lacks apparent naturalness across 132 acres (15 percent), W11 across 854 acres (12 percent), W17 across 115 acres (1 percent), W27 across 2,549 acres (10 percent), W29 across 2,340 acres (7 percent), W30 across 8,259 acres

(26 percent), Wxs701ADD across 801 acres (36 percent), Wxs710ADD across 236 acres (7 percent), and Wxs723ADD across 384 acres (9 percent). Combined, 13 percent is the degree to which the Tres Piedras North evaluation area lacks apparent naturalness.

The Tres Piedras North evaluation area is a destination for people visiting the Carson NF from outside of the neighboring communities; this contributes to the high use numbers on the existing roads, especially along Forest Road 87. This is particularly true around lakes (northern W27), adjacent campgrounds (northern W27, W29, and W17), San Antonio Mountain (W11), and W30 north of Hopewell Lake. In addition, the sound impact from the Cumbres and Toltec Scenic Train can be heard in the summer in the adjacent northern W17, Wxs701Add, and Wxs573Add. During the winter, W27, W17, W29, and W30—which were identified as a snowmobiling area in the 1986 Carson Forest Plan—experience a high degree of snowmobile use. These developed recreational activities contribute to lack of solitude (characteristic 2) on 187 acres (23 percent) of CbW9, 293 acres (4 percent) of W11, 301 acres (3 percent) of W17, 483 acres (2 percent) of W27, 425 acres (1 percent) of W29, and 676 acres (1 percent) of W30. Vehicle, snowmobile, and chainsaw sounds along the roads are evident within 358 acres (40 percent) of CbW1-CbW9, 764 acres (11 percent) of W11, 1,376 acres (15 percent) of W17, 14,042 acres (55 percent) of W27, 4,664 acres (15 percent) of W29, 28,070 acres (88 percent) of W30, and 2,803 acres (27 percent) of Wxs573ADD, Wxs701ADD, Wxs710ADD, and WXS723ADD. All these factors serve to affect a sense of solitude and unconfined recreation (characteristic 2) on 36 percent of the Tres Piedras North evaluation area as a whole.

A total of 64,677 acres (55 percent) scattered throughout the evaluation area possess wilderness characteristics of manageability, apparent naturalness, and solitude or unconfined recreation. Two areas, specifically, are made up of more than 5,000 acres individually: W27a (7,117 acres) and W29c (10,000 acres); both have outstanding values (characteristic 4). Additionally, three areas are less than 5,000 acres in size individually but could be managed in conjunction with existing Cruces Basin Wilderness: W17f (1,675 acres) and W17k (2,670 acres) or with the newly designated BLM San Antonio Wilderness: W29e (2,491 acres) to together comprise over 5,000 acres. The rest of the areas with manageability, apparent naturalness, and solitude or unconfined recreation (40,724 acres) are each less than 4,300 acres in size, are not adjacent to any wilderness or other protected areas, and lack the geographical definition (characteristic 3) necessary to maintain these acreages for preservation and/or use in an unimpaired condition.

Concern Statement 558 **Land North of Highway 64**

All areas north of Highway 64 within the Tres Piedras Ranger District should not be recommended for wilderness designation. If these areas were to become designated wilderness areas that would disrupt several routes which are used by mountain bikers and snowmobilers, hikers, hunters, and other Public Land users including important sections of the recently established Continental Divide Trail. Maintaining this trail and the surrounding areas as access routes on which all current uses are allowed is important because all such methods of travel upon these lands have been utilized historically and should continue to be for sustainability, recreation, search and rescue operations which may arise in the future, and any other proper use relative to modern times whether anticipated or not. Also there are several old mines and prospecting sites within the areas which have been determined to hold wilderness characteristics, this fact indicates these areas do not actually hold the characteristics necessary to include them in wilderness recommendations per the requirements set forth by, and intent of the Wilderness Act of 1964, which is to preserve areas that have been undeveloped and hold genuine wilderness characteristics, NOT to designate as much land as possible as wilderness.

Associated Comment Letter: 104

Response

The FEIS contains detailed analysis of five alternatives with a variety of recommended wilderness acreages. These alternatives ranged from zero acres of recommended wilderness in alternatives 1 and 3,

to 67,996 acres of recommended wilderness in alternative 5. The preferred alternative (alternative 2-modified) and final Plan recommend 9,295 acres, which includes some areas north of Highway 64.

The wilderness evaluation looked at "manageability" in terms of legal impediments to managing an area as wilderness, adjacent land management, and the shape and configuration of the area. Boundary identification and definition was considered during the assignment of areas evaluated as having wilderness characteristics to alternatives. The FEIS evaluated manageability in terms of enforceability and likely success of preventing non-wilderness-conforming uses, such as mountain biking and snowmobiling, as well as impacts of recommendation on existing uses.

Areas that have existing mountain bike use were not included as recommended wilderness. This recommendation represents a compromise between the protections afforded by wilderness, the ability to successfully manage as recommended wilderness, and the management flexibility that is retained in non-wilderness management areas. The decision to recommend 9,295 acres was informed by the wilderness inventory and evaluation process, in which we identified potentially suitable areas, evaluated their wilderness characteristics, and analyzed the impacts of potential wilderness designation in the environmental impact statement. The responsible official concluded that, on these 9,295 acres, the benefits to be obtained through wilderness designation outweigh any additional limitations on management options.

The FEIS considered the impact of additional recommended wilderness on a wide variety of resources. The analysis notes potential benefits from recommended wilderness including long-term environmental monitoring, scenic vistas, protection of clean air and water, and maintenance of biological diversity (FEIS, Chapter 3, Wilderness, Description of Affected Environment, Areas Evaluated as Having Wilderness Characteristics). Increased wilderness also provides additional opportunities for primitive recreation and solitude. On the other hand, the FEIS acknowledges that additional acres of wilderness could lead to increased costs to grazing permittees, reduced opportunities for motorized and mechanized recreational use, and limitations on the ability to restore departed habitats. The areas recommended for wilderness in the preferred alternative considered a broad range of social, environmental, and economic impacts, and public comments related to the management of recommended wilderness areas. The responsible official's decision accounts for public comment and likely impacts of wilderness designation and recommends the 9,295 acres that are appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness, a lower probability of conflicting with other management goals and multiple uses.

Concern Statement 559 **San Antonio Management Area**

Additional lands with wilderness character in the San Antonio Management Area should be included in the recommended wilderness management area in the final plan. The Carson found that several areas in the San Antonio Management Area possess wilderness character in the wilderness evaluation process. In addition to these areas' wilderness values, the lack of human disturbance is also an important factor for why the area is important for wildlife movement. The alternatives propose varying amounts of recommended wilderness within the San Antonio Management Area, from 2,607 acres in alternative 2 to 23,905 acres in alternative 5. The final revised plan should go a step further by including nearly all lands with wilderness character in the San Antonio Management Area as recommended wilderness. The final revised plan should include the Llano and Cisnero additions (2,490 acres) to the Rio San Antonio Wilderness; the Toltec, Ruby, and Brazos Ridge additions (4,344 acres) to the Cruces Basin Wilderness, and the Oso area (10,000 acres). Additionally, there are important lands that possess wilderness character within the San Antonio Management Area that weren't included within the range of alternatives. We request that these lands be analyzed and included in the final plan. This recommendation would include the polygons W17j, W29c, W29e, W29h, W29i, and W29j. The acreage that has wilderness character has been underestimated east of the Cruces Basin, which contains around 25, 000 acres of land north of forest road 87.

Associated Comment Letters: 133, 4856, 4964

Response

The Carson NF followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70 to consider areas for wilderness recommendation. A detailed description of the inventory process, the process for evaluation of the inventory, and the process for identifying areas to analyze as recommended wilderness can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019).

The following is just a focused evaluation of portions of W17j, W29c, W29e, W29h, W29i, and W29j; please see Wilderness Recommendation Process- Inventory, Evaluation, and Analysis (Alternative Development) (USDA FS Carson NF 2019) for a full evaluation of Tres Piedras North, which included W17j, W29c, W29e, W29h, W29i, and W29j. Forty-nine percent of W17 and 39 percent of W29 is the degree to which these areas were evaluated as having wilderness characteristics; on the other hand, 51 percent of W17 and 61 percent of W29 are the degree to which these areas were evaluated as not having wilderness characteristics, and therefore, were not carried forward into the analysis step of the wilderness recommendation process.

Seven acres could not be managed to preserve wilderness characteristics (characteristic 5) in part of W29, due to the presence of an acequia and 140 acres include one-quarter-mile-wide pinch points within W17 and W29, thereby negatively impacting characteristic 5. W17 lacks apparent naturalness (characteristic 1) across 115 acres (1 percent) and W29 lacks apparent naturalness across 2,340 acres (7 percent), due to visibly apparent impacts such as visible stumps, slash, and old logging roads from past or current thinning projects and various types of infrastructure for both livestock grazing and wildlife. Developed recreational activities (chainsaws, trains, and road noise) contribute to lack of solitude (characteristic 2) on 301 acres (3 percent) of W17 and 425 acres (1 percent) of W29. Campgrounds, trains, and roads contribute to a lack of solitude in W17 and W29. W17 and W29 were identified as snowmobiling areas in the 1986 Carson Forest Plan and experience a high degree of snowmobile use during the winter. Ultimately, 39 percent (12,491 acres) is the degree to which W29 was evaluated as having wilderness characteristics and 49 percent (4,345 acres) is the degree to which W17 was evaluated as having wilderness characteristics. These acreages were analyzed as recommended wilderness in the FEIS. The remaining 20,529 acres scattered throughout W17 and W29 lack the geographical definition (characteristic 3) necessary to allow for their management for preservation and/or use in an unimpaired condition.

Concern Statement 560 **Land North of Forest Road 87**

Ground surveys of land north of Forest Road 87 determined that this entire area has wilderness character. Land north of Forest Road 87 is pristine and natural in appearance and it appears to have sparse human visitation. I understand the area north of Forest Road 87 is considered a special management area for its wintering elk habitat. The land north of Forest Road 87 is closed to motor vehicle traffic including snowmobiles. Since this area is closed to public motor vehicle access, why is the Carson NF reluctant to recommend this area for wilderness? Perhaps Carson Forest managers feel it would restrict their ability to actively manage the forest in this area. A spotted owl was observed perched in a tree in the Lagunitas area adjacent to Cruces Basin Wilderness, and has an adequate assessment for spotted owl presence been conducted in the Greater Cruces Basin Area to determine if management treatments would even be appropriate? Wilderness management guidelines would help ensure that this habitat is granted the highest degree of protection.

Associated Comment Letter: 5613

Response

The Carson NF followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70 to consider areas for wilderness recommendation. A detailed description of the inventory process, the process for evaluation of the

inventory (including apparent naturalness), and the process for identifying areas to analyze as recommended wilderness can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019). The term 'substantially noticeable' (i.e., with reference to apparent naturalness) is not defined in the 2012 Planning Rule or in the Forest Service Handbook 1909.12 chapter 70 for recommended wilderness; the Carson NF therefore defined this term based on forest-specific conditions. See Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019) to view the full definition and how the land north of Forest Road 87 was evaluated within North Tres Piedras evaluation area (p. 106).

It is incorrect that areas north of 87 are closed to vehicles or snowmobiles. North of 87 and south of 87A is closed to snowmobiles, but there are open and permitted roads (including 78, 78A, 87T). Two areas north of FR87 are recommended for wilderness in the final Plan. See also Concern Statement 558 for additional information on how this area was evaluated.

The responsible official selected the preferred alternative (alternative 2-modified), which strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified recommends 9,295 acres, which includes all recommended wilderness from alternative 2 except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are areas that are appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. It was the conclusion of the responsible official that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing them as recommended wilderness management areas outweigh any additional limitations on management options.

As required by the Endangered Species Act 1973, the Carson NF consults with U.S. Fish and Wildlife Service and conducts pre-implementation surveys for Mexican spotted owl presence on every management project that may impact Mexican spotted owl or its habitat.

Concern Statement 561 **Rio San Antonio, Water Quality**

Regarding the impaired stream in the Rio San Antonio area, water quality is not an appropriate consideration when evaluating apparent naturalness; instead, the proper inquiry is whether the water appears polluted and, if so, whether its polluted appearance would be substantially unnoticeable to the average visitor. The evaluation fails to discuss the appearance of the stream. If the stream appears natural to the average visitor, then this should not be considered in the evaluation.

Associated Comment Letter: 4964

Response

Water quality was removed as a criteria for apparent naturalness in the most recent (May 2019) Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019). No portions of the Tres Piedras North evaluation area were evaluated as not having wilderness characteristics based on water quality.

Concern Statement 562 **W29, Support**

Reevaluate W29 in the recommended wilderness evaluation to be evaluated as having wilderness character. On the ground surveys of the portions that lie directly to the east of the Cruces Basin Wilderness, bounded by Forest Road 87 on the south and by Forest Road 443 (87A) on east and north edges, and west of the Oso Areas Evaluated as Having Wilderness Characteristic. Additionally, the proposed "Tusas-San Antonio Landscape Project" shares boundaries with the southeast and northeast sections. In addition to Oso, which was evaluated as having wilderness character, on-the-ground surveys identified an additional 5,108.73 acres as having wilderness character and meets the roadless area size requirement. Little infrastructure still exists, and roads are disappearing. Five earthen stock tanks do not

detract from naturalness. We hiked wildlife and cattle trails but otherwise hiked where no trails exist. This area could be managed for wilderness character as is the Cruces Basin Wilderness, offering truly "unconfined recreation." Long-established traditional and cultural uses, except for fuelwood gathering, could continue. Additional fuel-gathering and snow machine use would be possible outside the wilderness.

Associated Comment Letter: 153

Response

The portion of W29 that is directly to the east of the Cruces Basin Wilderness, bounded by Forest Road 87 on the south and by Forest Road 443 (87A) on east and north edges, and west of the Oso Area Evaluated as Having Wilderness Characteristic was evaluated as not having wilderness characteristics (Wilderness Recommendation Process- Inventory, Evaluation, and Analysis (Alternative Development)(USDA FS Carson NF 2019)).

The following is a focused evaluation of the portion of W29 that is directly to the east of the Cruces Basin Wilderness, bounded by Forest Road 87 on the south and by Forest Road 443 (87A) on east and north edges, and west of the Oso Areas Evaluated as Having Wilderness Characteristic. Please see Wilderness Recommendation Process- Inventory, Evaluation, and Analysis (Alternative Development) (USDA FS Carson NF 2019) for a full evaluation of Tres Piedras North which included all of W29. Eighteen percent (1,006 acres) of this area lacks apparent naturalness due to visibly apparent old logging roads and various types of livestock and wildlife infrastructure, and 26 percent (1,453 acres) of this area lacks solitude and unconfined recreation due to sound impacts from vehicle, snowmobile, and chainsaw sounds along the roads. This area was identified as a snowmobiling area in the 1986 Carson Forest Plan. A total of 2,984 acres scattered throughout this area are legally manageable, appear natural, and provide opportunities for solitude or unconfined recreation. However, these remaining 2,984 acres lack geographical definition (characteristic 3) that would allow for their management for preservation and/or use in an unimpaired condition.

Twenty-three percent is the degree to which Tres Piedras North evaluation area (which includes W29)was evaluated as having wilderness characteristics.

Concern Statement 563 **W32a, Opposition**

The Forest should not recommend Sierrita de Canjilon W32a for wilderness for the following reasons:

1. During the summer months, sheep and cattle graze the Salvador, Nutrias and Jarosa allotments from FR 274 in the east to Trout Lakes in the west. Management of this grazing is facilitated by use of truck and ATV, in addition to horses. Mending fences also frequently requires the use of chainsaws to cut fallen trees.
2. During elk season, both the FR272 and FR125 corridors are lined with campsites as hunters know the rich elk habitat of the Canjilon meadows. Motorized access to this area is common and necessary during a successful hunt. Deer, black bear, mountain lions and grouse, which inhabit the area, also attract many hunters. Many in our northern New Mexico communities rely on access to these hunts as a staple source of food.
3. Firewood harvesting occurs spring, summer, and fall, and is a primary heating source for many community members.
4. Access to the bald summit of Canjilon Mountain is via several existing trails and is reached by people of all ages and by many means. Carving of initials into the sides of the old lookout shed is a local rite of passage and the inscriptions span many decades. A further restriction to access of the summit would limit who could experience the expansive views and local tradition.
5. Snowmobiling is a popular winter activity throughout much of the WSA.

6. Camping and fishing attract hundreds of people each year to the Trout Lakes and Canjilon Lakes campgrounds. With them come ATVs, motorcycles, and their desire to explore. Many visitors have been coming here all their lives and are now sharing the experience with their children and grandchildren.
7. The Continental Divide Trail attracts hikers and mountain bikers who travel through the spine of the WSA. The trail is blazed at frequent intervals with bright blue paint on trees and rock cairns.
8. The WSA encompasses the headwaters to Canjilon Creek, which is a primary water source for the village of Canjilon. Every few years, clearing of fallen trees and other obstructions is needed to maintain the stream flow in the meadows and from the tributary springs. Future access to maintain this area is critical to the watershed.

Associated Comment Letters: 152, 2992

Response

Sierrita de Canjilon W32a (Canjilon Meadows Recommended Wilderness Management Area) is included and analyzed as recommended wilderness in alternatives 4 and 5 in the FEIS. Canjilon Meadows Recommended Wilderness Management Area is not included in the preferred alternative or the final Plan. The decisionmaker carefully considered a range of recommended wilderness areas, as well as other allocations, to determine the mix of land and resource uses that would best meet public need. The areas recommended for wilderness in the preferred alternative considered a broad range of social, environmental, and economic impacts, and public comment related to the management of recommended wilderness areas. The responsible official selected the preferred alternative (alternative 2-modified), which strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified recommends 9,295 acres, which includes all recommended wilderness from alternative 2 except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. It was the conclusion of the responsible official that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing as recommended wilderness management areas outweigh any additional limitations on management options.

Concern Statement 564 **W31d, Opposition**

The Forest should not recommend Ghost Ranch W31d for wilderness as it limits the ability to manage grazing allotment effectively found in this area.

Associated Comment Letters: 152, 2992

Response

The Forest Service manages wilderness areas under the authority of the Wilderness Act of 1964 and the regulations and policies enacted in accordance with that law. The Wilderness Act, and the regulations adopted under the authority of the Wilderness Act, allow for grazing to occur in wilderness areas where it existed prior to the designation of the area as wilderness (36 CFR § 293.7). Permittees are required to adhere to the terms and conditions set forth in the permit and the forest plan, both of which are designed to minimize impacts to National Forest System lands. Livestock grazing is also allowed in recommended wilderness as it is an existing use and as per the National Forest Management Act and Multiple-Use Sustained-Yield Act. Ghost Ranch W31d (Comanche Recommended Wilderness Management Area) is included and analyzed as recommended wilderness in alternative 5 in the FEIS. Comanche Recommended Wilderness Management Area is not included in the preferred alternative or final Plan.

Concern Statement 565 **Valle Vidal**

Support for recommended wilderness for Valle Vidal from alternative 2.

Associated Comment Letter: 5715

Response

Ash Mountain Recommended Wilderness Management Area (alternative 2) within the Valle Vidal was carried forward into the final Plan.

Concern Statement 566 **Valle Vidal**

The Valle Vidal should be revaluated for wilderness characteristics. There are over 90,000 acres of wilderness quality lands in the Valle Vidal that should have been included in the analysis phase of the wilderness process. These lands need to be fairly evaluated and analyzed, and many of them should be included in the Carson's final recommendation. The wilderness evaluation required areas to be manageable, offer apparent naturalness, and solitude or unconfined recreation. This requirement is much more stringent than is required by Chapter 70 and has resulted in many areas being arbitrarily removed from the analysis phase of the wilderness process. The evaluation states that 77 percent, or 77,420 acres, of the Valle Vidal offers solitude or unconfined recreation, yet less than 10 percent was included in the analysis stage of the wilderness recommendation process. We urge the forest to reconduct its wilderness recommendation process using an evaluation method similar to the one employed by the Santa Fe NF, and the Cibola NF during its Phase 2 evaluation. The entire Valle Vidal offers opportunities for solitude and primitive recreation, appears natural, and has no, or not substantially noticeable, improvements. For these reasons the entire 100,000-acre area should be included in the Carson's final wilderness recommendations.

Associated Comment Letter: 4884, 4964

Response

The Carson NF followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70 to consider areas for wilderness recommendation. A detailed description of the inventory process, the process for evaluation of the inventory, and the process for identifying areas to analyze as recommended wilderness can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019).

The following is just a focused evaluation of the Valle Vidal; please see Wilderness Recommendation Process- Inventory, Evaluation, and Analysis (Alternative Development) (USDA FS Carson NF 2019) for a full evaluation of Valle Vidal. Four percent of the Valle Vidal Evaluation Area could not be managed to preserve wilderness characteristics (characteristic 5) as it has acequias, private property, and shape and configuration issues that make it difficult to manage as wilderness. Portions of the westside Valle Vidal evaluation area lack apparent naturalness (characteristic 1) because of visible impacts from past thinning and timber activities (e.g., cut stumps, logging roads) scattered throughout the entire area (Q1, Q4, and Q5). Numerous range and wildlife improvements and infrastructure overlap with these past thinning and logging activities, such as range rider camps (Q5), streambank improvement structures (Q5 and Q4), exclosures that require maintenance (Q4 and Q5), fish barriers (Q4), and corrals with parking areas (Q5). Most of these improvements have motorized access routes for maintenance. Additionally, the Ortiz electronic site and associated motor vehicle access route is visually apparent from within the southwestern portion of Q5. Within Valle Vidal, Q1 lacks apparent naturalness (characteristic 1) across 2,673 acres (46 percent), Q4 across 17,932 acres (53 percent), and Q5 across 27,223 acres (39 percent). Combined, 50 percent is the degree to which the Valle Vidal evaluation area lacks apparent naturalness.

Over 4,000 scouts visit camps on the east side of the Valle Vidal each year (totaling over 13,000 days and nights camping), which negatively affects solitude. The southern part of the westside Valle Vidal is frequently used during the winter by snowmobiles, which impacts opportunities for unconfined recreation. Specifically, Q5 was identified as an area for snowmobiling through the 1983 Valle Vidal Multiple Use Guide and 1986 Carson Forest Plan; noise from this activity is pervasive throughout Q5. Together, these activities contribute to a lack of solitude (characteristic 2) on 5,105 acres (88 percent) of

Q1, 5,061 acres (15 percent) of Q4, and 12,018 acres (17 percent) of Q5. About 73,167 acres of the Valle Vidal evaluation area have opportunities for both solitude and unconfined recreation (characteristic 2).

A total of 28,110 acres (29 percent) scattered throughout the evaluation area are legally manageable, appear natural, and provide opportunities for solitude or unconfined recreation. Q4 includes 9,361 acres (labeled Q4g) evaluated as having wilderness characteristics and was thus included in the analysis stage of the wilderness recommendation process. The remaining 18,749 scattered acres with characteristics 1, 2, and 5 lack the geographical definition (characteristic 3) that would allow for their management for preservation and use in an unimpaired condition. The largest of these acreages is 2,900 acres, which is not adjacent to any wilderness or other protected areas. Ten percent is the degree to which the Valle Vidal Evaluation Area was evaluated as having wilderness characteristics.

The responsible official selected the preferred alternative (alternative 2-modified), which strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified recommends 9,295 acres and comprises all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. It was the conclusion of the responsible official that, on these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing them as recommended wilderness management areas outweigh any additional limitations on management options.

Concern Statement 567 **Pecos Area**

Additional lands with wilderness character that would be added to the Pecos Wilderness should be included in the recommended wilderness management area in the final plan. The Pecos Wilderness is a large wilderness area surrounded by inventoried roadless areas. These roadless areas possess wilderness character and would offer an excellent addition to the existing Pecos Wilderness. On the Carson, this includes polygons C14v and C14x. Adding these lands to the Pecos Wilderness would expand opportunities for primitive recreation and solitude and naturalness of the Pecos Wilderness. Further, it would help maintain connectivity through the larger Sangre de Cristo range. The draft plan is not proposing any additions to the Pecos Wilderness. Include in the Final Plan wilderness recommendations from alternative 5.

Associated Comment Letters: 4856

Response

The FEIS contains detailed analysis of five alternatives with a variety of recommended wilderness acreages. These alternatives ranged from zero acres of recommended wilderness in alternatives 1 and 3, to 67,996 acres of recommended wilderness in alternative 5. The preferred alternative (alternative 2-modified) and record of decision recommends 9,295 acres, which includes all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5.

The FEIS considered the impact of additional recommended wilderness on a wide variety of resource areas. The analysis notes potential benefits from recommended wilderness, including long-term environmental monitoring, scenic vistas, protection of clean air and water, and maintenance of biological diversity (FEIS, Chapter 3, Wilderness, Description of Affected Environment, Areas Evaluated as Having Wilderness Characteristics). Effects of recommending Jicarita Ridge (C14v – 12,602 acres) and Rio Chiquito (C14x – 2,340 acres) Recommended Wilderness Management Areas would be similar to those under alternative 1. Inclusion of these areas would not expand opportunities for primitive recreation and solitude, as they are steep, with rugged terrain, and are—for the most part—already designated as inventoried roadless areas. There is little likelihood of development, motorized or mechanized management, or other uses in this area—regardless of whether they are explicitly prohibited (FEIS, Chapter 3, Wilderness, Environmental Consequences for Wilderness – Alternative 5). The FEIS

also acknowledges that additional acres of wilderness could lead to increased costs to grazing permittees, reduced opportunities for motorized and mechanized recreational use, and restrictions on the ability to restore departed habitats. The areas recommended for wilderness in the preferred alternative considered a broad range of social, environmental, and economic impacts, and public comment related to the management of recommended wilderness areas. The responsible official's decision accounts for these likely impacts of wilderness designation and recommends the 9,295 acres that are appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness, a lower probability of conflicting with other management goals and multiple uses, and public comment.

Concern Statement 568 **C14 and C5, Support**

Reevaluate C14 and C5 in the recommended wilderness evaluation to be evaluated as having wilderness character.

Associated Comment Letters: 168, 170, 2067, 4881, 5388

Response

As part of the evaluation process (Wilderness Recommendation Process- Inventory, Evaluation, and Analysis (Alternative Development) (USDA FS Carson NF 2019)), 14,927 acres of C14 were evaluated as having wilderness characteristics.

The following is a focused evaluation of C14 and C5; please see Wilderness Recommendation Process-Inventory, Evaluation, and Analysis (Alternative Development) (USDA FS Carson NF 2019) for a full evaluation of Camino Real South, which includes C14 and C5. Sixteen percent of C5 and C14 could not be managed to preserve wilderness characteristics (characteristic 5) because acequias are present and require maintenance, which include motorized and mechanized equipment (6,102 acres in C5 and C14). Additionally, wildland-urban interface comprises 2,862 acres in C14 and shape and configuration issues making management difficult (321 acres). Forty-nine percent (25,716 acres) of C14 lacks apparent naturalness (characteristic 1) due to visibly apparent old logging roads, various types of livestock and wildlife infrastructure, a permitted hay field, and fuelwood partnership blocks. Sipapu Ski and Summer Area in north-central C14, Hodges Campground (western C14), Trampas Campground and Trailhead (western C14), Santa Barbara Campground and Trailhead (western C14), Agua Piedra Campground and Day Use Site (northern C14), Angostura Trailhead (eastern C14), and Alamitos (Serpent Lake) Trailhead (eastern C14) contribute to a lack of solitude on 4,210 acres (8 percent) of C14. Vehicle and chainsaw sounds along the roads and within current fuelwood partnership blocks are evident within 10,638 acres (20 percent) of western C14, 4,244 acres (8 percent) of southeastern C14, and 13,478 acres (26 percent) of central C14. A total of 22,741 acres scattered within C14 are legally manageable, appear natural, and provide opportunities for solitude or unconfined recreation. However, 7,814 of those 22,741 acres lack the geographical definition (characteristic 3) that would allow for their management for preservation and/or use in an unimpaired condition. Seventeen percent (12,597 acres and 2,340 acres) of C14 is evaluated as having wilderness characteristics (characteristics 1 through 5).

Concern Statement 569 **C14v, Opposition**

Our specific concern is area C14v, which has now been identified as having wilderness characteristics despite the fact most of its northern boundary consists of a very popular (and critically important to the motorcycle community) motorized trail! The agency has seemingly purposefully set up a situation rife with potential issues.

Associated Comment Letters: 3268

Response

The Carson followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70 to consider areas for wilderness recommendation. A detailed description of the inventory process, the process for evaluation of the inventory, and identifying areas to analyze as recommended wilderness can be found in the Wilderness

Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019).

The motorized trail on the northern border was excluded from C14v because it does not appear natural. However, the ridgeline on which this motorized trail runs is easy to identify and locate on the ground, and therefore, has been made the boundary of this area, but is outside of the area evaluated with wilderness characteristics. The management of the motorized trail would therefore not change under any alternative.

Concern Statement 570 **C14v, Opposition**

C14v (also called Jicarita Ridge/Ripley Point) according to on-the-ground surveys is completely unsuitable for wilderness management as it doesn't offer the requisite apparent naturalness or solitude. The agency has chosen to disregard the obvious “imprint of man's work” in the form of remnant structures and logging evidence in the area…instead calling them “outstanding values.”

Associated Comment Letters: 3268

Response

The Carson followed the required process outlined in the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)) and in the Forest Service Handbook 1909.12, chapter 70 to consider areas for wilderness recommendation. A detailed description of the inventory process, the process for evaluation of the inventory, and identifying areas to analyze as recommended wilderness can be found in the Wilderness Recommendation Process –Inventory, Evaluation, and Analysis (Alternative Development) report (USDA FS Carson NF 2019).

The following is just a focused evaluation of C14v; please see Wilderness Recommendation Process-Inventory, Evaluation, and Analysis (Alternative Development) (USDA FS Carson NF 2019) for a full evaluation of the Camino Real South evaluation area, which includes C14v. C14v is within an inventoried roadless area, and therefore, does not include any visibly apparent roads. A motorized trail does exist on the northern border and was excluded from C14v because it is visibly apparent on the ground and detracts from opportunities for solitude. However, Forest Service Handbook 1909.12, chapter 70, section 73 directs the responsible official to identify which specific areas, or portions thereof, from the evaluation to carry forward as recommended wilderness in one or more alternatives in the plan FEIS and to identify the “Location and a summarized description of a recommended boundary for each area. To identify a clearly defined boundary for each area, evaluate how the location of the boundary will support management of the area for wilderness and other adjacent uses. Where possible, boundaries should be easy to identify and to locate on the ground.” The ridge line on which this motorized trail runs is easy to identify and locate on the ground; the motorized trail lies outside of C14v.

Additionally, no management activities have taken place in the last 15 years that detract from C14v’s natural appearance. Accordingly, C14v was evaluated as having manageability, apparent naturalness, and opportunities for solitude and unconfined recreation.

Remnant structures and logging evidence from the 1907–1928 Santa Barbara Pole and Tie Company and Trampas Lumber Company are found within C14v and were evaluated as outstanding values, as outlined by the Forest Service Handbook 1909.12, chapter 70. Areas included in the inventory were evaluated to determine, “the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value. These values are not required to be present in an area for the area to be recommended for inclusion in the National Wilderness Preservation System, but their presence should be identified and evaluated where they exist.” (FSH 1909.12 section 72.1) Structures and other evidence related to Santa Barbara Pole and Tie Company and Trampas Lumber Company were evaluated as historical values for C14v.

Concern Statement 571 **Rio Santa Barbara, Roads**

The Santa Barbara River with its glorious forks should remain roadless.

Associated Comment Letters: 4857

Response

The upper watershed of Rio Santa Barbara, including West Fork, East Fork, Middle Fork, and Jicarita Creek are within either designated wilderness or inventoried roadless areas. Only Congress has the authority to designate or revoke wilderness status. Under all alternatives, designated wilderness and inventoried roadless areas will remain thusly designated and will be managed according to the 1964 Wilderness Act and the 2001 Roadless Rule, as required. Downstream of the Santa Barbara Campground, roads run alongside the Rio Santa Barbara and its tributaries. Travel management decisions made for the districts of the Carson NF in 2010, 2011, and 2013 determined which roads were open to the public and are not being revisited as part of this plan revision process (USDA FS Carson NF 2010a, 2010b, 2011, 2013).

Concern Statement 572 **Recommended Wilderness, Management**

The final Plan should prohibit new road construction, new energy leases, and new mineral extraction in recommended wilderness management areas to ensure protection to existing wildlife habitat, migration corridors, and cultural traditions such as herb collection and game hunting for local communities.

Associated Comment Letters: 4868, 4871, 5511

Response

The final Plan includes the following components (MA-RWMA-S-3) for recommended wilderness management areas: “New permanent or temporary roads, motorized trails, or mechanized (e.g., mountain bike) trails for public access must not be constructed or designated in a recommended wilderness management area.” It also includes standards prohibiting any permitting of commercial infrastructure for renewable power generation or sales or extraction of common variety minerals (MA-RWMA-S-5 and 6).

The exploration for, and production of, oil and gas resources is generally allowed on National Forest System lands, as required by the Mining and Minerals Policy Act of 1970 (30 U.S.C. 21a). Exceptions include lands formally withdrawn from mineral leasing by Congress or Executive order. The decision to lease lands is not dictated by the land management plan, but by a leasing analysis (FSH 1909.12 23.23i(4)(d)). Leasing analyses are different in scope, proposed action, and level of detail than a programmatic plan revision. The Carson NF is not completing a revised oil and gas leasing availability analysis at this time, per the requirement of 36 CFR 228 Subpart E, 228.102. Instead, the final Plan includes components for multiple resources that would guide future leasing decisions.

The 2012 Planning Rule requires national forests to draft plan components for the management of recommended wilderness areas that will “protect and maintain the ecological and social characteristics that provide the basis for their suitability for wilderness designation” (36 CFR § 219.10(b)(iv)). As the FEIS notes, recommended wilderness areas are not withdrawn from mineral entry and are available for new leases or claims, as long as the social and ecological characteristics providing the basis for wilderness designation are maintained and protected. The forest plan captures this approach with desired condition MA-RWMA-DC-3, which directs forest management to maintain an essentially unmodified environment in recommended wilderness management areas, i.e., human-made features are rare and use natural or complementary materials. Such features may be present when needed, to provide for public safety or resource protection. This means that, prior to permitting oil and gas development at the project level, the Carson NF must account for any potential impacts to the wilderness characteristics of a recommended wilderness area that could arise due to the activity.

The plan revision does not make any decisions regarding leasing activities or mineral withdrawal. No leasing can occur until an EIS for an oil and gas leasing analysis is completed; any oil and gas leasing analysis would follow the NEPA requirements. Recommended wilderness should be managed to not

impair the wilderness values of these areas if and until they are established by Congress. This may include discretionary 'no lease' or 'no surface occupancy 'stipulations. While there are no active oil and gas leases on the national forest outside of the Jicarilla Ranger District, management of designated, proposed designated, and special interest areas will be consistent with management area direction. Subject to valid existing rights, wilderness areas are withdrawn from mineral leasing at the time of congressional designation.

Concern Statement 573 **Recommended Wilderness, Management**

The final revised plan for the Carson NF should ensure that all standards for designated wilderness and areas recommended for wilderness designation prioritize protection for wilderness values and avoid degradation of wilderness characteristics.

Associated Comment Letters: 4881

Response

The final Plan protects wilderness character in designated wilderness and wilderness characteristics in recommended wilderness. Designated wilderness and its wilderness values are managed according to the 1964 Wilderness Act (Public Law 88-577) and the DA-WILD section in the final Plan. Recommended wilderness and its wilderness characteristics are managed according to the MA-RWMA section of the plan, specifically MA-RWMA-DC-1, which states, "Recommended wilderness management areas retain their wilderness characteristics and contribute to clean air and water, wildlife habitat enhancement, primitive recreation opportunities, and other cultural ecosystem services."

Concern Statement 574 **Recommended Wilderness, Management, Support**

Desired conditions for recommended wilderness are strong and generally consistent with desired conditions for designated wilderness. This consistency is appropriate and should help ensure that recommended wilderness areas maintain their wilderness characteristics. Strongly support the proposed standards and wholeheartedly agree that prohibitions on motorized travel, mechanized recreation, new roads or trails, timber harvest for the purpose of timber production, new energy development or leases, and sale or extraction of common variety minerals are critical to protect the wilderness characteristics of recommended wilderness. The proposed guidelines are generally strong as well, Guideline 4 which establishes a scenic integrity objective of very high for recommended wilderness is wholly appropriate (and consistent with an equivalent guideline for designated wilderness).

Associated Comment Letters: 4856

Response

Most plan components in the draft plan for recommended wilderness management areas were carried forward into the final Plan, including all desired condition and guidelines. However, some the standards were rewritten, as recommended wilderness areas are not withdrawn from mineral entry and are available for new leases or claims, as long as the social and ecological characteristics that provide a basis for wilderness designation are maintained and protected. In addition, the final Plan constrains Forest Service actions, not those of the public (FSH 1909.12 sec 22.1(2)(g)). Standards have been clarified to guide only to Forest Service decisions and not to create a prohibition on public uses. Any constraint on the public's use of National Forest System lands, not otherwise imposed law or regulation, requires a closure order under 36 CFR 261, Subpart B. The forest plan itself does not prohibit use but does describe desired conditions that may require future closures in order to be realized.

Recommended wilderness areas are treated differently than designated wilderness because they have not been officially designated by Congress. The 2012 Planning Rule requires national forests to draft plan components for the management of recommended wilderness areas that will "protect and maintain the ecological and social characteristics that provide the basis for their suitability for wilderness designation" (36 CFR § 219.10(b)(iv)). The final Plan achieves this via desired condition MA-RWMA-DC-3, which directs forest management to manage recommended wilderness management areas as essentially

unmodified environments, where human-made features are rare and use natural or complementary materials; such features are only present when needed, to provide for public safety or resource protection. This means that, prior to permitting oil and gas development at the project level, the Carson NF must account for any potential impacts to the wilderness characteristics of a recommended wilderness area that could arise due to the activity.

The plan revision is not making any decisions on leasing activities or mineral withdrawal. No leasing can occur until an oil and gas leasing analysis is completed. Oil and gas leasing analyses will follow the NEPA requirements. Recommended wilderness should be managed to not impair wilderness values of these areas until Congress makes a decision regarding their status. This may include discretionary 'no lease' or 'no surface occupancy' stipulations. While there are no active oil and gas leases on the national forest outside of the Jicarilla Ranger District, management areas for areas designated or proposed for designation, as well as special interest areas, will be consistent with management area direction. Subject to valid existing rights, wilderness areas are withdrawn from mineral leasing at the time of congressional designation.

Concern Statement 575 **Recreation Opportunity Spectrum Classes**

Recommended wilderness should be explicitly classified as primitive or semi-primitive non-motorized in the recreation opportunity spectrum. The draft plan does not identify an ROS setting for recommended wilderness areas. Including a plan component that establishes the ROS setting for recommended wilderness is appropriate and would minimize confusion that may result if an ROS setting is not identified in the plan components. Including a map of desired ROS settings is also critical, but that should not substitute for management area-specific ROS settings. Establishing an ROS setting of primitive or semi-primitive non-motorized for the recommended wilderness management area would help protect these areas' wilderness characteristics, including their ecological and recreational value.

Associated Comment Letters: 4856

Response

Recommended wilderness in alternative 2-modified is classified as primitive or semi-primitive non-motorized in the recreation opportunity spectrum (see Desired Recreation Opportunity Spectrum report, USDA FS Carson NF 2020c).

Concern Statement 576 **Backcountry Areas, Mountain Biking**

As an alternative to recommended wilderness, the Forest should consider using a bike-friendly "Backcountry Area" designation in order to protect areas as they are now while maintaining bike access into future management. This "Backcountry Area" Forest Service designation has been developed elsewhere for the purpose of protecting an area's character while maintaining the diverse recreational opportunities currently enjoyed and would be appropriate to be applied here. The Forest Plan should recognize that there are some areas of the Carson NF that have low development and wild character and yet are also critically valued for human-powered recreation that includes mountain biking and therefore deserve customized management to retain and meet those needs. To manage these areas in a manner that can maintain the recreational access and character requires more flexible management than recommended wilderness management areas offer. The management goals of areas like this should seek to maintain the status quo of access, wild character, and low level of development of the area. This can be best served through a Backcountry Area Designation.

Associated Comment Letters: 4970

Response

The FEIS considered the impact of the varying levels of wilderness recommended in the five alternatives on different recreational uses; the responsible official's selection of preferred alternative (alternative 2-modified) represents a balance between the desire of national forest visitors for mechanized and motorized uses, on the one hand, and for solitude and a primitive experience, on the other. Alternative 2-

modified recommends 9,295 acres and includes all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5. Recommended wilderness management areas in alternative 2-modified are areas appropriate for wilderness due to their remote and inaccessible nature and adjacency to existing wilderness; these areas also have a lower probability of conflicting with other management goals and multiple uses. The responsible official concluded that, for these 9,295 acres, the benefits to be obtained through recommending these areas to Congress for wilderness designation and managing them as recommended wilderness management areas outweigh any additional limitations on management options and would not be appropriate to manage as Backcountry Management Areas. Areas recommended as wilderness under alternative 2-modified do not include any designated mountain bike trails, and therefore would not change existing mountain bike recreational access.

We agree that recommended wilderness does not allow for flexible management and is not appropriate in all locations; a variety of management intensities and levels of development are desired under the final Plan (FW-REC-DC-3). The desired recreation opportunity spectrum map (USDA FS Carson NF 2020c) depicts appropriate levels of recreational development for different locations. In addition, the Carson NF worked with the public throughout the development in the final Plan to create management areas, which are places identified as requiring different management than described by forestwide plan components; public input and consensus informed the resulting direction for management areas.

Concern Statement 577 **Mountain Biking**

Modify MA-RWMA-Standard-2 to read "Mountain biking shall be the only form of mechanized recreation allowed in a recommended wilderness management area," and modify MA-RWMA-Guideline-3 to read "Motorized equipment or mechanized transport for management activities (e.g., chainsaws or wheelbarrows), and mechanized transport for recreation activities (e.g., mountain biking) should be allowed in recommended wilderness areas if they do not permanently degrade wilderness characteristics of the area."

Associated Comment Letters: 4837, 4846, 4960, 4970, 5444, 5491, 5576, 5631

Response

We disagree that mechanized recreation is compatible with wilderness characteristics or the intent of the Wilderness Act, which prohibits motorized and mechanized uses. The responsible official selected the preferred alternative (alternative 2-modified), which strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. The preferred alternative (alternative 2-modified) and record of decision recommend 9,295 acres and include all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5. The decisionmaker considered how MA-RWMA-S-2 would help the Forest achieve the desired conditions for recommended wilderness. That is, because these areas have been identified and selected as recommended wilderness, the Carson should manage to protect their wilderness characteristics in the long term. The areas being recommended for wilderness do not currently have significant mechanized transport use in them, as they are generally steep. As such, to protect the wilderness characteristics of recommended wilderness, limitations on mountain biking were carried forward into the final Plan.

Concern Statement 578 **Bike Travel Corridors**

Create non- recommended wilderness management area bike travel corridor in recommended wilderness areas that contain existing mountain bike trails to allow for the continued use of mountain bikes between adjacent recommended wilderness parcels, but this option is less ideal than an alternative non-recommended wilderness designation. Designating existing mountain bike trails as wilderness would cause a significant loss to current recreational mountain biking on the Carson NF.

Associated Comment Letters: 4837, 4846, 4970

Response

None of the recommended wilderness management areas in the final Plan contain existing mountain bike trails.

Concern Statement 579 **Helicopter Use**

Wilderness Management Approach 4 needs to be deleted from the final Plan. Allowing helicopter use in wilderness areas would be disruptive both to wildlife and to forest visitors who seek solitude. This determination can be handled at the project level and, further, is an issue best discussed with the state on a project-by-project basis since it is the state that manages wildlife.

Associated Comment Letter: 4970

Response

Management approaches do not imply or constitute a decision but describe the principal strategies and program priorities the responsible official may use to carry out projects and activities developed under the plan. Any helicopter use in wilderness would be considered at the project level and only authorized when deemed appropriate by minimum requirements and project-level environmental analyses.

Concern Statement 580 **Mechanized Recreation**

Wilderness desired conditions (DA-WILD-DC) and recommended wilderness (MA-RWMA-DC 4). Wilderness provides recreation opportunities where social encounters are infrequent and occur only with individuals or small groups so that there are opportunities for solitude. Visitors experience self-reliance, challenge, and risk while enjoying opportunities to pursue non-motorized or mechanized activities.

As written, this desired condition could be interpreted to mean that visitors can enjoy opportunities to pursue mechanized activities (in addition to non-motorized activities). It should say non-mechanized to make it clear that mechanized activities (e.g., mountain biking) are not permitted in designated wilderness areas.

Associated Comment Letter: 4856

Response

In the final Plan, the prefix “non” was included in front of “mechanized” in DA-WILD-DC 4 and MA-RWMA-DC 4 to more clearly convey that only non-mechanized activities are suitable.

Concern Statement 581 **Cumulative Effects**

The cumulative effects analysis for wilderness is insufficient. The cumulative effects analysis for wilderness, which is less than one page, is insufficiently detailed and does not satisfy the requirements of NEPA. For example, it mentions the plan revisions for the Rio Grande and Santa Fe NFs, which are adjacent to the Carson, without providing any details. The DEIS merely notes that in some of the alternatives, recommended wilderness areas would be adjacent to the Santa Fe or BLM lands with wilderness character. It does not identify these areas, either in narrative or in maps, nor does it explain the cumulative effects of this adjacency other than to note, without a citation, that “Larger and more connected wilderness provides better opportunities for solitude and unconfined recreation.” We agree but wish to point out that larger and more connected wilderness also has a number of other benefits, including improved habitat connectivity, increased ecological resilience (especially for species threatened by climate change), and other resource benefits. The final EIS should expand on this discussion by considering in detail these cumulative effects. The cumulative effects analysis of climate impacts on wilderness also needs to be expanded. This paragraph is extremely vague. It notes that many plant and animal species are vulnerable to climate change and concludes: “climate trends are likely to affect the vegetation, water, air quality, and wildlife resources within designated and recommended wilderness areas, which in turn would affect their apparent naturalness.” Simply stating the obvious, that climate change is “likely to affect” these resources, is inadequate. The more difficult question, which the

DEIS does not answer, is how they are likely to be affected, and in what time frame? The final EIS should provide detailed analysis, supported by the best available science, to determine the cumulative effects on wilderness that are related to climate change. Recommendations: Expand the cumulative effects analysis for wilderness by providing additional detail, supported by the best available science, regarding (1) the cumulative impacts of wilderness areas on the Carson and adjacent Federal lands, including the ecological and wildlife connectivity benefits, and (2) the cumulative impacts of climate change on wilderness areas.

Associated Comment Letter: 4856

Response

The Cumulative Environmental Consequences for Wilderness section within the FEIS was rewritten to better address the above comments. Nevertheless, we disagree that all additional wilderness would necessarily improve habitat connectivity or ecological resilience in cases, for example, where that additional wilderness prevented restoration of degraded or disconnected wildlife habitat (FEIS, Chapter 3, Environmental Consequences for Wilderness). The resource benefits of wilderness are specific to the location of the wilderness recommendation and are discussed under the environmental consequences for each alternative. The implications of climate change for both society and natural resources are profound and complex. Impacts to vegetation, water, air quality, and wildlife are discussed in the Vegetation Communities and Fuels; Watersheds and Water; Air Resources; and Wildlife, Fish, and Plants sections of the FEIS (chapter 3) and are expected to be similar within and outside of wilderness or recommended wilderness areas.

Concern Statement 582 **Economic Impact**

The DEIS analysis for wilderness is inadequate and needs to be expanded. The discussion of wilderness in the DEIS lacks supporting detail and documentation in several areas. First, the DEIS fails to adequately account for the economic impacts of wilderness and does not use the best available science on these impacts. Based on a wealth of existing rigorous and scientifically validated research, the general rule is that there is a neutral-to-positive relationship between the presence and extent of wilderness and other protected areas on one hand and the economic performance of local economies and the economic benefits available to nearby residents on the other. For example:

- Protected public lands can and do play an important role in stimulating local economic growth, especially when combined with access to markets and an educated workforce, and are associated with some of the fastest growing communities in the West.
- Wilderness designation enhances nearby private property value.
- Wilderness and conservation lands are associated with rapid population, income, and employment growth relative to non-wilderness counties.
- There is no evidence of job losses associated with wilderness and no evidence that counties more dependent on logging, mining, oil, and gas suffered job losses as a result of wilderness designation in 250 non-urban counties in the Rocky Mountains.
- The total annual value of retaining the wilderness character associated with inventoried roadless areas in New Mexico ranges up to $42 million for maintenance of water quality, $24 million for carbon sequestration, $26 million for outdoor recreation, $14 million for passive uses, and $1.4 million in enhanced property values. Annual community effects range up to 938 jobs and $23 million in personal income.

Second, the DEIS does not include sufficient information about the factors influencing wilderness visits or the projected changes in wilderness visits over the life of the revised plan. More analysis and details are needed. Finally, the DEIS fails to include information comparing the amount of designated wilderness in New Mexico to other western states, which would provide helpful context. The final EIS

should expand the wilderness analysis in several areas, including: (1) economic impacts of wilderness; (2) factors influencing wilderness visits and projected changes in visits over the life of the revised plan; and (3) information comparing the amount of designated wilderness in New Mexico versus other states. It should also include an analysis of the costs of implementing each alternative, taking into account the cost savings of hands-off management approaches utilized in designated and recommended wilderness areas.

Associated Comment Letters: 4856

Response

The economic impacts of wilderness, factors influencing wilderness visits, and information regarding the amount of designated wilderness in New Mexico compared to other states is included in Volume 1 of the FEIS, Wilderness affected environment, environmental consequences, and cumulative effects sections. Specifically, New Mexico has a total of 1,972,507 acres of designated wilderness, comprising about 3 percent of the state. It ranks fifth among U.S. states in terms of total wilderness area (Wilderness.net 2020).

While studies show a correlation between counties with protected public lands (such as wilderness) and economic prosperity (Rasker et al. 2013), the commenter is correct to point out that although protected public lands contribute to that correlation, they do not necessarily drive it. As Rasker et al. (2013) conclude, amenities such as wilderness "may be an important but not sufficient condition for growth. Also needed are other factors, such as access to major markets via transportation infrastructure" (Rasker et al. 2013, p. 120). In fact, this generalization does not hold in the counties that overlap with the Carson. Taos County, which has the greatest percentage of lands designated as wilderness also has the highest percentage of the population living in poverty (figure 6). Colfax County has no designated wilderness but has the lowest poverty level (USDA FS Carson NF 2015). Accordingly, we do not accept that wilderness recommendation or designation alone stimulates local economic growth (and the Carson NF does not control access to other important factors such as market access or workforce education). Rasker et al. (2013, p. 120) also note that "there are potential negative economic and social consequences, including income inequality and tensions between long-time residents and newcomers. In other words, economic growth itself is not without its challenges."

Wilderness recommendation was considered in the context of multiple management objectives and multiple uses. The purpose of the final Plan is not to raise private property values or speed regional population growth, but to manage National Forest System lands for multiple uses and support local economies. Additionally, it is not the case that there is necessarily a cost savings by recommending an area as wilderness. In some, if not most, cases there may in fact be additional costs associated with enforcement and management through non-motorized, non-mechanized means (trail maintenance, for example).

Ultimately, the decision to recommend or not recommend an area as wilderness was not an economic one. As discussed in the Record of Decision, the final plan weighed the desires of the range of forest users for a variety of recreational opportunities, including motorized, mechanized, hunting, and fishing access. The final plan weighs the benefits of wilderness protection with other management priorities, such as protecting communities from wildfire, restoring ecosystems, managing wildlife habitat, and providing forest products.

The final Plan does not alter the location or size of inventoried roadless areas. The commenter cites values associated with retaining the wilderness character from a paper by Berrens, Talberth, Thacher, and Hand (2006, p. 19), which incorrectly conflates designated inventoried roadless areas with the inventory step in the wilderness recommendation process. The Carson NF has followed the 2012 Planning Rule directives (FSH 1909.12 chapter 70) to identify lands possessing wilderness characteristics. Not all inventoried roadless areas possess wilderness characteristics and, outside of designated wilderness, inventoried roadless areas are not managed to protect wilderness character.

The FEIS discusses factors that could drive demand for outdoor recreational opportunities, including wilderness recreation (Chapter 3, Cumulative Environmental Consequences for Wilderness). While we agree with the assumption that wilderness demand will increase in the future—Campaign for America's Wilderness (2003) offers examples of why this should be the case—others, such as Cordell et al. (2008, p. 9) are less sure, suggesting that "new generations may not want to visit wilderness, or what they perceive to be wilderness. No one can know for sure what the future will hold for wildland visitation, or for any other nature-based activity for that matter."

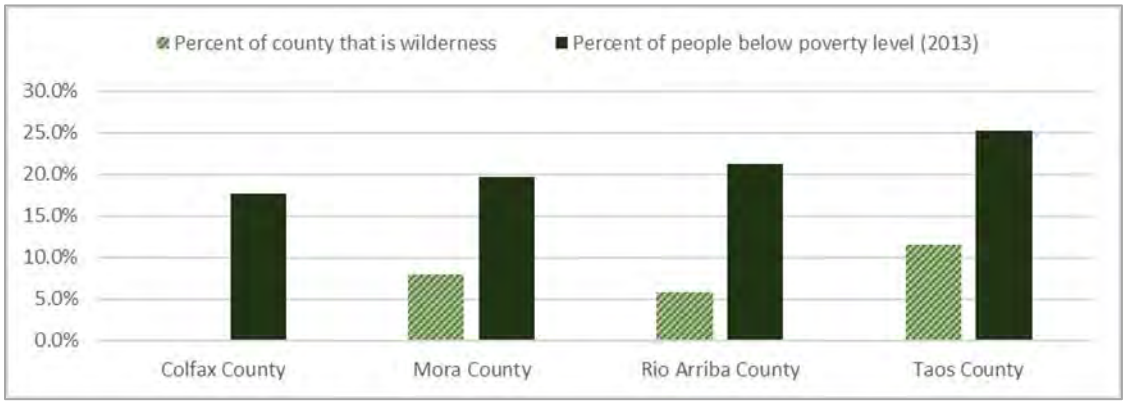


Figure 6. Percent wilderness and percent people living below the poverty level for the four counties that overlap the Carson NF

Concern Statement 583 **Fire Management**

In reading through the Carson NF Wilderness Recommendation Process - Inventory and Evaluation report (May 2019) it becomes clear that one of the principal factors narrowing your recommendation of areas evaluated with wilderness character for wilderness in the Plan is a concern for flexibility with fire management in wilderness areas. Remember that the ecological role of fire in natural systems is being documented by science. The assumption implicit in Carson NF Wilderness Recommendation Process - Inventory and Evaluation report use of this argument against wilderness is that all fire must be "managed," and this seems to fly in the face of current scientific thinking about wildfire. It certainly must be "managed" when it threatens property and human life, but such threats must occur where people live in order to justify fire suppression. Additional wilderness is needed in Cruces Basin, Pecos, and Valle Vidal and are not in area where wildfire would need suppression.

Associated Comment Letter: 168

Response

During the evaluation phase of the Wilderness Recommendation Process, areas that were within Fire Management Unit 1 were removed from further evaluation, as the latter designation conflicts with managing for wilderness characteristics. Specifically, Fire Management Unit 1 areas are generally wildland-urban interface on the Carson NF, i.e., near towns or villages, where fire is never desired and will be suppressed to protect life and property. Wildland-urban interface areas require intensive management of fuels (mechanical treatment) and intrusive suppression action if a fire occurs; this makes it difficult to manage to preserve wilderness characteristics. The following acres were removed because they are classified as Fire Management Unit 1: 0 acres within North Tres Piedras: 0 acres within Valle Vidal, and 3,815 acres within Camino Real South.

In other places on the Carson NF, unplanned ignitions are desired under at least some conditions (based on weather and resource availability); this does not mean, however, that fire in those areas is not managed. All fires on National Forest System lands are managed, even those that are not immediately suppressed to provide ecological benefits.

The total area removed because of Fire Management Unit 1 classification was 92,016 acres (9 percent of inventoried lands); this includes 450 acres (1 percent) from the Alamosa evaluation area; 3,815 acres (6 percent) from the Camino Real South evaluation area; 24,447 acres (21 percent) from the Rio Grande del Rancho Watershed evaluation area; 6,688 acres (28 percent) from Midnight Meadows and Mallette Canyon evaluation area; 1,183 acres (30 percent) from the Rio Grande del Norte Accompaniments evaluation area; 456 acres (3 percent) from the Rio Chama Wilderness Accompaniments and Echo Amphitheater evaluation area; 1,168 acres (4 percent) from the Tres Piedras-Lucero Lakes evaluation area; 8,533 acres (43 percent) from the Columbine-Hondo and Wheeler Peak Wilderness Accompaniments evaluation area; 2,289 acres (3 percent) from the El Rito Lobato evaluation area; 1,312 acres (2 percent) from the Mesa Montosa-Ghost Ranch evaluation area; 4,501 acres (6 percent) from the Sierrita de Canjilon-Upper Canjilon-Upper El Rito Watershed evaluation area; 12,869 (100 percent) from the Taos Canyon evaluation area; and 24,305 acres (47 percent) from the Jicarilla evaluation area.

Thirteen areas were evaluated as having wilderness characteristics and were analyzed within each of the five alternatives. How each of the 13 areas with wilderness characteristics was considered within each alternative was described in the Areas Evaluated as having Wilderness Characteristics (AEWC) Alternative Development section of the Wilderness Recommendation Process – Inventory, Evaluation, and Analysis (Alternative Development) (USDA FS Carson NF 2019). All 13 areas were analyzed in the maximum wilderness alternative 5. However, the responsible official selected the preferred alternative (alternative 2-modified), which strikes a balance between wilderness values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified recommends 9,295 acres and comprises all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5.

Concern Statement 584 **Motorized Trails, Apparent Naturalness**

There are obvious conflicts between the earlier Wilderness Recommendation Process - Inventory and Evaluation document (September 2016) and the current Wilderness Recommendation Process - Inventory, Evaluation, and Analysis document (May 2019). In the 2016 document, an entire section described the conflicts of wilderness characteristic and motorized trails. In the later document, all the statements about motorized trails detracting from the apparent naturalness and sense of solitude are “now” completely missing. In fact, the whole section entitled “Motorized Trails” was removed from the Evaluation section. The Carson NF must provide the public with the rationale that led to the elimination of the motorized trail impact from the evaluation step of the wilderness evaluation process and how the change in criteria affects subsequent evaluation of the lands considered. NEPA procedures must ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.

Associated Comment Letters: 3268

Response

The Carson NF considered the extent to which motorized trails detracted from apparent naturalness (characteristic 1) and solitude (characteristic 2) for each evaluation area (see Carson NF Wilderness Recommendation Process – Inventory, Evaluation, and Analysis (Alternative Development) report [USDA FS Carson NF 2019]). Motorized trails are identified on the most current motor vehicle use map according to NEPA decisions regarding travel management (2010 Jicarilla, Tres Piedras, El Rito, and Canjilon RDs; 2011 Questa RD; and 2013 Camino Real RD). During the evaluation phase, motorized trails were determined to detract from apparent naturalness and solitude on 12,971 acres (1 percent of inventoried lands) and included 1,274 acres (1 percent) from the Camino Real South evaluation area; 4,692 acres (4 percent) from the Rio Grande del Rancho Watershed evaluation area; and 7,005 acres (30 percent) from Midnight Meadows and Mallette Canyon evaluation area. According to the criteria just outlined, these acres could not be managed to preserve wilderness characteristic and were removed from further evaluation.

The difference between the current Wilderness Recommendation Process – Inventory, Evaluation, and Analysis (Alternative Development) report (dated May 2019) and the earlier version (2016) is the discussion of evaluation phases 1 and 2. In the current version, these phases were combined and discussed for each evaluation area under the appropriate wilderness characteristics. Motorized trails are now discussed in the Camino Real South evaluation area; Rio Grande del Rancho Watershed evaluation area; and Midnight Meadows and Mallette Canyon evaluation areas, under characteristics 1 and 2.

Management Areas – Valle Vidal and San Antonio - MVS

Concern Statement 585 **Support, Habitat Connectivity**

Support for Valle Vidal and San Antonio Management Areas as these areas ensure habitat connectivity for wildlife.

Associated Comment Letters: 121, 123, 126, 150, 168, 170, 187, 196, 1044, 1218, 1826, 1861, 4856, 4881, 4889, 4890, 4893, 4898, 4901, 4911, 4925, 4959, 4964, 5303, 5561, 5643, 5669, 5705

Response

The responsible official selected the preferred alternative (alternative 2-modified), which includes the Valle Vidal and San Antonio Management Areas.

Concern Statement 586 **Analysis of Effects**

The EIS must specifically analyze environmental impacts related to the Valle Vidal and San Antonio Management Areas. Why was the VVMA and SAMA was not analyzed in the DEIS, in contrast to other management areas such as the Jicarilla Natural Gas Management Area is concerning. This omission is concerning because the responsible official needs to have information about the environmental impacts of management direction specific to the Valle Vidal and San Antonio. This information is also needed to promote transparency and ensure that the public is informed. The final EIS must include detailed analysis explaining the environmental impacts related to the management direction proposed for the VVMA and SAMA.

Associated Comment Letters: 4856, 4925

Response

The FEIS analyzes the environment impacts from proposed management area direction. As such, the Jicarilla Natural Gas Management Area was analyzed instead under those resource sections that maybe impacted by the proposed management area's direction. Analysis of environmental impacts related to the Valle Vidal and San Antonio Management Areas is found in the following resource section environmental consequences analyses: Vegetation; Wildlife, Fish, and Plants; Sustainable Rangelands and Livestock Grazing; Sustainable Forestry and Forest Products; Recreation; Scenery; Transportation and Forest Access; Facilities Infrastructure; and Minerals and Mining (FEIS, Chapter 3).

Concern Statement 587 **Wildlife Protections**

Improve wildlife protections in the proposed special management areas. San Antonio and Valle Vidal should be included in final plans and managed for ecosystem restoration, connectivity for wildlife and semi-primitive forms of recreation. These areas should prohibit new energy development and mineral extraction and remove unneeded infrastructure like roads and fences to improve wildlife habitat connectivity.

Associated Comment Letter: 380

Response

The final Plan contains San Antonio and Valle Vidal as special management areas. There are plan components within each of the management areas related to ecosystem restoration, connectivity, semi-

primitive recreation, as well as energy development and mineral extraction: MA-VVMA-S 17, 18, 19, 20; MA-VVMA-G 1 and 2; MA-SAMA-S 5, 6, and 7; MA-SAMA-G-1. Additionally, there are forestwide components relevant to both management areas: FW-WFP-O 4 and 5; FW-MM-DC-1; and FW-MM-S-2.

Concern Statement 588 **Connectivity**

The San Antonio Management Area (SAMA) should specifically address landscape connectivity for wildlife, including security from motorized recreation and other human activities that can disrupt species at sensitive times throughout the year. New energy development should be prohibited here. Vegetation management in the SAMA and the Valle Vidal Management Area (VVMA) should be limited to projects that maintain or improve ecological function. The VVMA should bar the construction of any new motorized trails.

Associated Comment Letter: 5569

Response

Within the final Plan, the following plan components and management approaches provide habitat connectivity with San Antonio Management Area (including plan components to provide protect wildlife from harassment and minimize human disturbance from motorized recreation and other activities): MA-SAMA-DC-1-2, MA-SAMA-DC-4, MA-SAMA-S-1-7, MA-SAMA-G-1, and San Antonio Management Area management approaches 1 through 7. Also, any forestwide plan components for habitat connectivity would also apply to this management area unless direction in San Antonio Management Area is more restrictive. For a list of plan components that improve wildlife habitat connectivity, please see Appendix H, Section 4 of the FEIS, Volume 3.

The plan revision is not making any decisions regarding leasing activities or mineral withdrawal. No leasing can occur until an EIS for an oil and gas leasing analysis is completed; such an analysis will follow NEPA requirements. Infrastructure for permitted energy development is prohibited by MA-SAMA-S-5.

FW-FFP-G-2 in the final Plan states that, “On lands classified as not suitable for timber production, timber harvesting should only be used for making progress toward ecological desired conditions or for salvage, sanitation, public health, or safety.” This guideline would be required anywhere across the national forest, including in the Valle Vidal and San Antonio Management Areas. Vegetation management must move toward desired conditions, which describe desired ecological function and are outlined in the Vegetation section in the final Plan. In addition, timber harvest and forest product removal must be compatible with watershed and vegetation restoration (FW-FFP-DC-1 and -4).

MA-VVMA-S-5 has been modified in the final Plan to prohibit new motorized trails, except for winter over-snow trails, in the Valle Vidal.

Concern Statement 589 **Habitat**

The Forest needs to adopt a holistic management strategy partnering with NMDGF to ensure any single species is not degrading habitat conditions across the management area. This should be included as a management approach in the final plan. For example: Work collaboratively with NMDGF to manage ungulate populations in a manner that does not degrade habitat conditions for aquatic and riparian species or harm the success of restoration projects in the VVMA, and Coordinate annually with New Mexico Game and Fish (NMGF) and Colorado Parks and Wildlife (CPW) on defining big game heard dynamics, desired heard stats, landscape carrying capacity, and reproductive timing in SAMA.

Associated Comment Letter: 5303

Response

The final Plan includes Sustainable Rangelands and Livestock Grazing Management Approach 8 which states, "Consider facilitating a dialogue between the New Mexico Department of Game and Fish and permit holders about ungulates (e.g., elk, deer, bighorn sheep, and livestock) and their cumulative impacts on forest resources. Account for those impacts when planning projects or permitted activities." This management approach applies forestwide, including the Valle Vidal and San Antonio.

Concern Statement 590 **Wildlife Habitat**

Desired Condition 2 for Valle Vidal and San Antonio Management Areas should read: Wildlife and fish species are free from harassment and human disturbance at a scale that impacts vital functions (e.g., breeding, feeding, rearing young, seasonal and daily movements) that could affect persistence of the species.

Associated Comment Letter: 4901

Response

Seasonal and daily movements have been added as examples of vital functions to MA-VVMA-DC-2 and MA-SAMA-DC-2 of the Final Plan. 'Species' has been replaced with "wildlife and fish" to clarify the meaning of the term.

Concern Statement 591 **Habitat Connectivity**

Include in Valle Vidal and San Antonio a desired condition stating, "Habitat connectivity and distribution provide for genetic exchange, daily and seasonal movements of animals, and predator-prey interactions across multiple spatial scales, consistent with existing landforms and topography"; or "Habitat provides for landscape-scale movement, migration, and dispersal of wide-ranging wildlife species, and it offers security from intensive recreational and other human disturbances." This is an important step in providing for the maintenance of biodiversity across the forest.

Associated Comment Letters: 4893, 4901, 5303

Response

FW-WFP-DC-5 in the final Plan states that "Habitat connectivity and distribution provide for genetic exchange, daily and seasonal movements of animals, and predator-prey interactions across multiple spatial scales, consistent with existing landforms and topography." This desired condition applies to all wildlife habitat across the Carson NF, including the Valle Vidal and San Antonio. As such, this desired condition does not need to be restated in the Valle Vidal or San Antonio Management Areas.

MA-VVMA-DC-2 and MA-SAMA-DC-2 direct management to provide wildlife and fish with habitat that is free from harassment and human disturbance at a scale that impacts vital functions (e.g., seasonal and daily movements, breeding, feeding, and rearing young).

Concern Statement 592 **Wildlife Connectivity**

Include the following Objectives into the Valle Vidal and/or San Antonio Management Areas:

- Improve wildlife or aquatic habitat connectivity by removing unneeded structures (e.g., fences, roads, cattle guards, and culverts) or completing improvement projects (e.g., removing barriers and connecting fragmented habitat) in at least 10 to 20 locations, during each 10-year period following plan approval. This objective may be accomplished outside of the Valle Vidal Management Area if improvement opportunities no longer exist there.
- Complete at least 5 projects to improve habitat connectivity for aquatic and riparian species (e.g., remove barriers, restore dewatered stream segments, connect fragmented habitat, wildlife passage friendly fences, etc.), during the 10 years following plan approval.

Associated Comment Letters: 4856, 4893, 4901, 4925, 4964, 5303

Response

FW-WFP-O-4 and -5 in the final Plan are to "Improve wildlife or aquatic habitat connectivity by removing unneeded structures (e.g., fences, roads, cattleguards, culverts, and spring developments) or completing improvement projects (e.g., removing barriers and connecting fragmented habitat) in at least 10 to 20 locations during each 10-year period following plan approval" and "Complete at least 5 projects to improve habitat connectivity for aquatic and riparian species (e.g., remove barriers, restore dewatered stream segments, connect fragmented habitat, wildlife passage friendly fences, etc.) during each 10-year period following plan approval." These objectives would be accomplished in any part of the national forest most in need of improved habitat connectivity, including on the Valle Vidal or San Antonio Management Areas.

Including these objectives exclusively in Valle Vidal or San Antonio management direction would focus improving wildlife and aquatic habitat connectivity projects in the Valle Vidal or San Antonio Management Areas, rather than in areas where habitat connectivity may be needed more and/ or where such efforts may be more effective and feasible.

Concern Statement 593 **Surface Occupancy**

Prohibit surface occupancy within the San Antonio and Valle Vidal Management Areas.

Associated Comment Letters: 4856, 4880, 4881, 4893, 4925, 5303

Response

Subject to valid existing rights, the Valle Vidal was withdrawn from mineral entry and disposal, patent, and operation of the mineral leasing and geothermal leasing laws and common variety mineral materials laws under the Valle Vidal Protection Act of 2006 (Public Law 109–385). Decisions about mineral development elsewhere on the forest are made as part of a leasing analysis, based on site-specific conditions. No leasing analyses are being conducted as part of this plan revision. In the case of the San Antonio Management Area, any mineral development would be consistent with MA-SAMA-DC-3, MA-SAMA-S-5, and MA-SAMA-G-1.

Concern Statement 594 **Trail, and Mining Prohibitions**

Prohibit new motorized trails, new permanent roads, oil and gas leasing, and largescale mining activities within the San Antonio and Valle Vidal Management Areas.

Associated Comment Letters: 150, 159, 177, 196, 1767, 2766, 4856, 4880, 4881, 4893, 5303, 5591, 5643

Response

The exploration for, and production of, oil and gas resources is generally allowed on National Forest System lands, as required by the Mining and Minerals Policy Act of 1970 (30 U.S.C. 21a). Exceptions include lands formally withdrawn from mineral leasing by Congress or Executive order. The decision to lease lands is not dictated by the land management plan, but by a leasing analysis (FSH 1909.12 23.23i(4)(d)). Leasing analyses are different in scope, proposed action, and level of detail than a programmatic plan revision; the required dual level of analysis complicates the plan revision process and decision to be made. The Carson NF is not conducting an oil and gas leasing availability analysis at this time, per the requirement of 36 CFR 228 Subpart E, 228.102. Instead, the final Plan includes components for multiple resources that would guide future leasing decisions. Subject to valid existing rights, the Valle Vidal was withdrawn from mineral entry and disposal, patent, and operation of the mineral leasing and geothermal leasing laws and common variety mineral materials laws under the Valle Vidal Protection Act of 2006 (Public Law 109–385).

In the final Plan, new permanent roads are prohibited in the Valle Vidal by MA-VVMA-S-5, MA-VVMA-S-19, and MA-VVMA-G-1. New permanent roads are prohibited in the San Antonio Management Area by MA-SAMA-S-1 and MA-SAMA-S-2. A standard was added to the San Antonio

Management Area under alternative 4 (MA-SAMA-S-12) and analyzed in the environmental impact statement (Chapter 3, Environmental Consequences for Recreation – Alternative 4). As discussed in the Record of Decision, however, this standard was not selected for the preferred alternative.

Concern Statement 595 **Valle Vidal**

Valle Vidal should be managed exactly like it has always been. Please continue the closed road rule on the Valle Vidal. ATVs should not be allowed off the main road without special use paperwork on the Valle Vidal. Please continue to allow and support restoration work on the Valle Vidal. Please continue and expand the use of prescribed fire on the Valle Vidal.

Associated Comment Letter: 107

Response

Plan components for the Valle Vidal Management Area under the final Plan are similar to those that have governed management of the Valle Vidal unit since 1985. MA-VVMA-S-5 in the final Plan does not allow public access roads or motorized trails, with the exception of winter over-snow trails, to be added to the current designated system. Travel management decisions made for Carson NF districts in 2010, 2011, and 2013 determined which roads were open to the public and prohibited cross-country travel of vehicles (USDA FS Carson NF 2010a, 2010b, 2011, 2013). Any prescribed fire or restoration work proposed in the Valle Vidal Management Area would require project-level analysis and could continue, based on NEPA decisions. The final Plan does not prohibit or limit restoration work or the use of prescribed fire in the Valle Vidal Management Area.

Concern Statement 596 **Valle Vidal, Prohibitions**

The Carson should include in the Final Plan Standards 21-23 as proposed in alternative 4 (i.e., as standards) in the Valle Vidal Management Area. The citizens' proposal (February 14, 2017) requested that the Carson prohibit timber harvest for the purpose of timber production, prohibit the construction of motorized trails, and prohibit military ground operations in the Valle Vidal to ensure ecological integrity and non-motorized recreational opportunities are maintained in the area as stated in standards 21-23. It is appropriate for the Carson to prohibit military ground operations in the Valle Vidal; this use of the area would be inconsistent with the area's high ecological and recreational value and could damage forest resources. If the Carson wishes to retain more management flexibility than these standards would allow, we suggest including them as guidelines instead. This would provide clarity for both the Forest Service and the public and would establish more protective management direction while allowing some flexibility. At the very least, these proposed plan components could be included as management approaches. This would not be nearly as effective as including them as standards or guidelines because management approaches are not enforceable, but it would be better than leaving them out entirely.

Associated Comment Letters: 132, 168, 4856, 4925, 5073, 5303

Response

As described in the record of decision, a standard that prohibits timber harvest for the purpose of timber production was not included in the final Plan. This standard was analyzed as part of the Valle Vidal Management Area in alternative 4. However, as described in the FEIS, under alternative 4, fires would burn more frequently with uncharacteristic intensities in many untreated, frequent-fire forest areas (Chapter 3, Environmental Consequences for Fuels and Wildland Fire Environmental Consequences - Alternative 4) and treatment options for insect and disease outbreaks would be limited in high-elevation forests (Chapter 3, Environmental Consequences for High Elevation Forests–Alternative 4). As stated in the FEIS, “Compared to alternative 2, mechanical treatment would be less economically efficient because there would be much less timber revenue to offset costs” (Chapter 3, Environmental Consequences for Sustainable Forestry and Forest Products - Alternative 4).

MA-VVMA-S-5 has been modified in the final Plan to prohibit new motorized trails, except for winter over-snow trails, in the Valle Vidal.

Lastly, prohibiting all military ground operations was not included in the final Plan, as effects would vary depending on the specific activity proposed and would require a special use permit. Decisions regarding military ground operations are considered as part of project-level analysis (NEPA) and are beyond the scope of this programmatic analysis for the final Plan.

Concern Statement 597 **Valle Vidal, Mineral Withdrawal**

Change Valle Vidal standard 19 to clarify that such lands would be withdrawn as specified in standard 18(a)-(c), either by repeating the language or by including a cross reference.

Associated Comment Letter: 4856

Response

We added a footnote to the final Plan to clarify that when valid existing rights are relinquished or otherwise acquired by the United States, the lands that were subject to those rights will be immediately withdrawn as required by the Valle Vidal Protection Act of 2005 (P.L. 109-385).

Concern Statement 598 **Valle Vidal, Habitat**

MA-VVMA-DC-3 should read: Habitat conditions are capable of supporting self-sustaining native aquatic and terrestrial species populations.

Associated Comment Letter: 4901

Response

In the final Plan, MA-VVMA-DC-3 was reworded to include terrestrial as well as aquatic species.

Concern Statement 599 **Valle Vidal, Elk, Rio Grande Cutthroat Trout**

Support Valle Vidal desired condition 3 as proposed, which states that “habitat conditions are capable of supporting self-sustaining native aquatic species populations.” The Valle Vidal's management focus should be more holistic and less single species focused (elk), which it is currently. Although the elk population and habitat in the Valle Vidal is special, they have impacts on other resources, including riparian habitat and Rio Grande cutthroat trout. VV-DC-3 encourages the focus off of elk (terrestrial) and on Rio Grande cutthroat trout, which could be listed.

Associated Comment Letter: 5303

Response

Terrestrial habitat was added to MA-VV-DC-3 in the final Plan, as the Carson NF would like the Valle Vidal to provide habitat conditions for all wildlife, both terrestrial and aquatic, and not just elk or Rio Grande cutthroat trout.

Concern Statement 600 **Valle Vidal, Forage**

The Forest Plan should include specific vegetation objectives that aim to improve nutrition for summer forage and provide for reliable winter forage for elk and other big game within the Valle Vidal management area.

Associated Comment Letter: 4887

Response

FW-WFP-O-1 in the final Plan aims to restore or enhance terrestrial wildlife habitat; this objective could be used to improve nutrition for summer forage and provide reliable winter forage for elk and other big game. This objective is forestwide and could be completed anywhere the work is needed on the national forest, including in the Valle Vidal Management Area. Also, desired condition within the Montane and

Subalpine Grasslands (VEG-MSG) vegetation section would be applied to the Valle Vidal Management Area. FW-VEG-MSG-DC-3 directs management to ensure that "herbaceous vegetation cover (herbaceous cover, decaying debris, and leaf litter) is maintained at levels that contribute to suitable hydrologic function, soil stability, and nutrient cycling, while providing food and cover for at-risk species and other wildlife species" and that "a diversity of native grass and forb species and adequate plant litter reduce soil compaction and erosion." Also, FW-VEG-MSG-DC-13 provides management direction that cool season grasses and forbs provide nutritional forage, while shrubs and standing grass growth from the previous year provide adequate hiding cover (over 6 inches) to protect wildlife from predation. These desired conditions ensure that forage is provided for wildlife species across the national forest, including within the Valle Vidal. Additionally, FW-WFP-G-5 requires that vegetation treatments improve quality and diversity of forage across the Carson NF.

Concern Statement 601 **Valle Vidal, Water Quality**

We encourage the Carson to add a desired condition for the Valle Vidal that was included in the citizens' proposal: "Streams meet water quality standards and are returned back to functioning conditions through restoration." As noted in the draft plan, "All of the perennial streams within Valle Vidal are designated as Outstanding National Resource Waters." But many of these streams, despite their recognized importance, do not meet state water quality standards. The Carson should make it a priority to restore these streams to ensure they are fully functioning and meet all applicable water quality standards.

Associated Comment Letter: 4856

Response

The final Forest Plan comprises watershed and water plan components that are forestwide, meaning they pertain to all watershed and water areas on the forest (not just in a specific location, like the Valle Vidal). The forestwide plan components that would address restoration and water quality standards for streams within the Valle Vidal Management Area include: FW-WSW-DC 1, 5, 7; FW-WSW-O-1; FW-WSW-G 1, 3; Management Approach for Watershed and Water 1; FW-WSW-RMZ-DC 1; FW-WSW-RMZ-O-1; FW-WSW-RMZ-G 2, 3, 4; FW-WSW-RMZ-STM-DC 1, 5; FW-WSW-RMZ-STM-O 1-2; FW-WSW-RMZ-WB-DC 1, 5; FW-WSW-RMZ-SNS-DC 1, 7; FW-WSW-RMZ-SNS-O-1; and FW-WSW-RMZ-WR-DC 1).

The Carson NF manages Outstanding National Resource Waters in compliance with New Mexico State regulations (NMSA 1978, §§ 74-6-1 to 74-6-17). The New Mexico Water Quality Control Commission is the control agency for administration of the Federal Clean Water Act (33 U.S.C. §1251 et seq. (1972)) including authority over Outstanding National Resource Waters.

Concern Statement 602 **Valle Vidal, Recreation Opportunity Mapping**

We generally support the ROS map for the VVMA, displayed in Figure A1 - Appendix A, where much of the area is classified as primitive and semi-primitive non-motorized. However, the buffers that establish the "roaded natural" classification along NFS road 1950 within the VVMA are too wide. This buffer appears to be about one mile wide (0.5 mile on either side), which is excessive and erodes the overall primitive and semi-primitive character of the VVMA. We request that the Carson NF reduce the buffer along NFS Road 1950 in the VVMA to 600 feet (300 feet on either side of the road).

Associated Comment Letters: 4856, 4925

Response

The Carson NF used the National Recreation Opportunity Spectrum (ROS) Inventory Mapping Protocol (2019) to map ROS classifications on the national forest, including the Valle Vidal Management Area. This protocol calls for buffering all "high clearance vehicle/OHV" and "standard passenger vehicle" summer (non-snow) motorized routes and areas by one-half mile to 3 miles. The areas outside the buffer should be categorized as non-motorized and the areas within the buffer, motorized (Step 2. Buffer motorized routes and areas section). In step 3 of the mapping protocol, all areas less than 3 miles and

more than one-half mile from all motorized routes are classified as semi-primitive non-motorized. The Carson NF followed this protocol because it is consistent with the best available scientific information for mapping ROS and it follows the 1982 Recreation Opportunity Spectrum Guidebook.

Concern Statement 603 **Valle Vidal, Recreational Experiences**

MA-VVMA-DC-4 should read: A variety of outstanding outdoor recreation and educational experiences (e.g., hunting, fishing, wildlife viewing and camping) are available, with an emphasis on primitive and semi-primitive settings.

Associated Comment Letters: 4901, 4964

Response

MA-VVMA-DC-4 in the final Plan was rewritten to include the requested terminology: (e.g., hunting, fishing, wildlife viewing and camping). Educational experience is covered by MA-VVMA-DC-5: "Opportunities exist for outdoor, nature-based education (e.g., youth development and wilderness skills) and inspiring land stewardship."

Concern Statement 604 **Valle Vidal, Non-motorized Recreation**

Carson should clarify that non-motorized forms of recreation predominate on the Valle Vidal. Desired condition 4 could accomplish this by adding the word "non-motorized" as follows: "A variety of outstanding outdoor recreation experiences are available, with an emphasis on primitive and semi-primitive non-motorized settings." This modest change would acknowledge the importance of non-motorized recreation on the Valle Vidal without limiting other types of recreational opportunities in the area.

Associated Comment Letter: 4856

Response

MA-VVMA-DC-4 refers to the desired ROS setting of the Valle Vidal. Desired ROS is mapped in the Desired Recreation Opportunity Spectrum report (USDA FS Carson NF 2020c); the Valle Vidal predominantly corresponds to the primitive and semi-primitive non-motorized ROS setting. MA-VVMA-S-5 prohibits new roads or motorized trails from being added to the current transportation system. Desired ROS setting and MA-VV-MA-S-5 emphasize non-motorized recreation in the Valle Vidal. However, some motorized recreation still occurs in the Valle Vidal along existing public roads and, as such, MA-VVMA-DC-4 was not modified to specify non-motorized.

Concern Statement 605 **Valle Vidal, Timber Harvest**

Support for timber harvest as a by-product of ecological restoration in Valle Vidal Management Area.

Associated Comment Letters: 4856, 4925

Response

Management direction for the Valle Vidal Management Area (MA-VVMA-DC 1-5, MA-VVMA-S 1-20, MA-VVMA-G 1-2, and Management Approaches for Valle Vidal Management Area 1-3) does not preclude timber harvest for ecological restoration purposes from occurring in this management area (final Plan). Ecological restoration can occur within this management area under the preferred alternative, as described in the final Plan.

Concern Statement 606 **Valle Vidal, Timber Harvest**

Plan components should be included to define the circumstances under which timber harvest would be desirable, effective, and implemented. Timber harvest for the purpose of timber production should be prohibited in the VVMA.

Associated Comment Letters: 4893, 5303

Response

There is a wide range of circumstances under which timber harvest would be desirable and effective. There are also circumstances under which timber harvest would have undesirable and unmitigable impacts. Consideration of these circumstances is included in the final plan, for example, FW-VEG-MCD-O-1, FW-VEG-PPF-O-1, FW-FFP-DC-1, FW-FFP-S-2, FW-WSW-RMZ-G-2, DA-WILD-DC-3, MA-RWMA-S-4. Determining where timber harvest is desirable, effective, and should be implemented is dependent on harvesting system and site conditions and would be fully evaluated under a project-specific analysis.

Prohibiting timber harvest for the purpose of timber production in the VVMA was analyzed under alternative 4. Under alternative 2, however, mechanical treatment would be more economically efficient because there would be more forestwide timber revenue to offset costs (see Environmental Consequences for Sustainable Forestry and Forest Products section of the FEIS). Under the final Plan, timber harvest and timber production in the VVMA will be conducted according to restrictive plan components including, FW-FFP-S-8, MA-VVMA-DC-1, MA-VVMA-DC-2, and MA-VVMA-DC-4. The ROD explains the reasons for selecting the final VVMA plan components.

Concern Statement 607 **Valle Vidal, Temporary Roads**

MA-VVMA-G-1 and MA-VVMA-G-2 should be combined to read: Temporary roads should not be constructed unless necessary to support ecosystem restoration activities, fuels management, or other short-term projects that will be constructed with the smallest ground level disturbance and shall be closed and rehabilitated within two years upon project completion, to protect watershed condition, minimize wildlife disturbance, and prevent illegal motorized use. (This also has the qualities to be a desired condition).

Associated Comment Letter: 4901

Response

MA-VVMA-G-1 and MA-VVMA-G-2 provide separate guidance and are therefore appropriate as separate plan components. In the final Plan, MA-VVMA-G-1 from the draft Plan has been changed to a standard (MA-VVMA-S-20) to be consistent with San Antonio Management Area and forestwide plan direction.

Concern Statement 608 **Valle Vidal, Road and Trail Construction**

Change MA-VVMA-S-5 to the following – "No new net construction of permanent road or motorized trail miles." This standard, while similar to proposed MA-VVMA-S-5, is different in that the proposed MA-VVMA-S-5 only limits new roads "for public access." This could be interpreted as allowing new miles of administrative roads without limitation. This could be problematic, as administrative roads are often difficult to adequately gate, post as closed, and patrol, and therefore, are often illegally accessed by the public leading to detrimental impacts to resources. Additionally, many of the negative drainage impacts of roads occur regardless of whether the road is open to the public or for strictly administrative use. As proposed, MA-VVMA-S-5 does not prohibit motorized trails. Accordingly, we request modification to ensure no new roads are constructed in the Valle Vidal Management Area.

Associated Comment Letters: 126, 187, 1767, 4911, 5303

Response

MA-VVMA-S-5 in the final Plan has been revised to incorporate the restriction on new motorized trails from MA-VVMA-S-23 in alternative 4, "The designated road system open to the public at current maintenance levels includes Forest Service Roads 1900, 1910, 1913, 1914, 1915, 1916, and 1950. No roads or motorized trails[3] for public access shall be constructed." The limitation on new roads for public

[3] excluding winter over-snow trails

access under MA-SAMA-S-1 is not being expanded to prohibit any new road construction because administrative roads may be needed to be able to provide multiple use to this area. Administrative roads can have substantially different impacts in terms of wildlife disturbance, invasive species spread, illegal tree removal, illegal off-road vehicle use, maintenance requirements, among other factors. Project-level NEPA environmental analysis would be completed to add any new administrative roads to the system with opportunities for public input.

In addition, FW-TFA-G-2 would require new system roads to be accompanied by mitigation actions to offset any resource damage resulting from their construction. This action is required forestwide including in the Valle Vidal Management Area.

Concern Statement 609 **Valle Vidal, Road Construction**

Within the Valle Vidal Management Area, standard 5 states: The designated road system open to the public at current maintenance levels includes Forest Service Roads 1900, 1910, 1913, 1914, 1915, 1916, and 1950. No roads for public access shall be added to the current designated road system. We recommend deleting "for public access" to ensure that roads constructed for reasons other than public access are not added.

Associated Comment Letters: 4856, 4925, 5303

Response

We kept the phrase "for public access" in MA-VVMA-S-5 in the final Plan because construction of roads required for forest management activities may be needed within the Valle Vidal Management Area. This need would be determined at the project level under a National Environmental Policy Act (NEPA) analysis and any construction of new roads would follow final Plan direction, including direction for the Valle Vidal Management Area (MA-VVMA-G 1 and 2).

Concern Statement 610 **Valle Vidal, Road Decommissioning**

Include in the Final Plan language about decommissioning, closing, and rehabilitating old routes in the Valle Vidal Management Area.

Associated Comment Letters: 126

Response

FW-TFA-G-4 in the final Plan states that "Unauthorized roads and maintenance level 1 roads should be evaluated based on transportation system need, long-term effects to adjacent resources, and capacity to maintain additional system roads in order to identify roads eligible for decommissioning." This guideline applies across the Forest, including in the Valle Vidal Management Area. Also included in the Final Plan is FW-TFA-O-1: "Obliterate or naturalize at least 20 miles of unneeded roads within each 10-year period following plan approval." This objective can be accomplished in any part of the national forest, including in the Valle Vidal Management area.

Concern Statement 611 **Valle Vidal, Fencing**

Include management approach with Valle Vidal Management Area that states: Work with livestock permittees to identify fencing that is not critical for livestock operations. Remove fencing that is not critical for livestock operations and that is impeding wildlife movement. Where possible, modify existing fencing that is not wildlife friendly.

Associated Comment Letter: 4901

Response

FW-WFP-G-6 in the final Plan states, "To conserve wildlife and fish habitat connectivity, constructed features (e.g., exclosures, wildlife drinkers, range improvements, fences, and culverts) should be maintained to support the purpose(s) for which they were built. Constructed features should be removed

when no longer needed, to restore natural hydrologic function and maintain habitat connectivity." Additionally, FW-GRZ-S-2 "requires new or reconstructed fencing to allow for wildlife passage, except where specifically intended to exclude wildlife (e.g., elk exclosure fence)." This standard and guideline apply anywhere across the national forest, including in the Valle Vidal Management Area.

Concern Statement 612 **Valle Vidal, Restrictions**

Include the following standards in the Valle Vidal Management Area

- New or reconstructed fencing shall allow for wildlife passage and prevent wildlife entrapment, taking into consideration seasonal migration and access to water resources (except where specifically intended to exclude wildlife–e.g., elk exclosure fence–and/or to protect human health and safety).
- Prohibition on military ground operation
- No commercial timber harvesting, unless as a byproduct of ecological restoration.
- No new construction of motorized trails.

Associated Comment Letters: 4901, 5303

Response

FW-GRZ-S-2 in the Final Plan states that "New or reconstructed fencing shall allow for wildlife passage, except where specifically intended to exclude wildlife (e.g., elk exclosure fence), to protect human health and safety." This standard would apply to any fence throughout the national forest, including in the Valle Vidal, that wasn't specifically intended to exclude wildlife or to protect human health and safety. Because this standard applies to the entire forest, it need not be restated for the Valle Vidal Management Area. The Carson NF would like all fences to be wildlife-friendly, not just those important to seasonal migrations and providing access to water, as those locations important for these reasons can shift over time.

Prohibiting all military ground operations was not included in the final Plan, as effects would vary depending on the specific activity proposed and would require a special use permit. Decisions regarding military ground operation are considered as part of project-level analysis (NEPA) and are beyond the scope of the programmatic analysis for the final Plan.

As described in the record of decision, a standard that prohibits timber harvest for the purpose of timber production in the Valle Vidal was not included in the final Plan. This standard was analyzed as part of the Valle Vidal Management Area in alternative 4. As described in the FEIS, under alternative 4, fires would burn more frequently with uncharacteristic intensities in many untreated, frequent-fire forest areas (Chapter 3, Environmental Consequences for Fuels and Wildland Fire Environmental Consequences - Alternative 4) and treatment options for insect and disease outbreaks would be limited in high-elevation forests (Chapter 3, Environmental Consequences for High Elevation Forests–Alternative 4). "Compared to alternative 2, mechanical treatment would be less economically efficient because there would be much less timber revenue to offset costs" (FEIS, Chapter 3, Environmental Consequences for Sustainable Forestry and Forest Products - Alternative 4).

MA-VVMA-S-5 has been modified in the final Plan to prohibit new motorized trails, except for winter over-snow trails, in the Valle Vidal.

Concern Statement 613 **Valle Vidal, Restrictions**

The Valle Vidal is a spectacular place. The elk herd and the wildness of the Valle Vidal must be protected. Therefore, the final Plan needs to prohibit new motorized trails and block unauthorized routes. Please keep the cattle grazing down to reasonable levels. And military maneuvers are too destructive to be allowed.

Associated Comment Letters: 5625, 5703

Response

MA-VVMA-S-5 has been modified in the final Plan to prohibit new motorized trails, except for winter over-snow trails, in the Valle Vidal.

The final Plan includes FW-TFA-O-1, which states, "Obliterate or naturalize at least 20 miles of unneeded roads within each 10-year period following plan approval." This objective is forestwide and could include road decommissioning in the Valle Vidal Management Area.

Identifying the suitability and capability of rangeland is more appropriately accomplished at the allotment level. Under all alternatives, the rangelands management and livestock grazing program has multiple mechanisms to evaluate, review, and adapt management, as needed, to effectively protect resources and respond to changing conditions. The Valle Vidal allotment on the Carson NF is managed according to an existing environmental assessment decision that analyzed probable forage production, current range condition and trend, carrying capacity, livestock distribution issues, and range improvement possibilities. This decision would be reanalyzed as conditions change or with renewal of the permit. Stocking decisions regarding the degree of livestock grazing authorized for the Valle Vidal allotment are considered as part of project-level analysis (NEPA) and are beyond the scope of the programmatic analysis for the final Plan. Project-level analysis would encompass changes to authorized grazing through term grazing permits (subject to forestwide standards and guidelines); allotment management plans; and annual operating instructions.

Lastly, prohibiting all military ground operations was not included as part of the final Plan, as effects would vary depending on the specific activity proposed and would require a special use permit. Decisions regarding military ground operation are considered as part of project-level analysis (NEPA) and are beyond the scope of the programmatic analysis for the final Plan.

Concern Statement 614 **Valle Vidal, Elk, Water Quality**

Elk populations in the Valle Vidal are high and impacting water quality. MA-VVMA-DC-1 could exacerbate this problem because it states that ecosystems will support plant and animal species "especially within young rearing and winter range habitat of ungulates." We encourage the Carson to remove the phrase about ungulates to ensure that this desired condition does not prolong water quality impacts caused by the elk (which in turn can negatively impact aquatic plant and animal species).

Associated Comment Letters: 4856, 4925

Response

The Carson NF would like heathy ecosystems throughout the forest, including the Valle Vidal, as described by Vegetation and Watershed and Water desired conditions in the final Plan. To achieve MA-VVMA-DC-1, projects or activities must be consistent with all desired conditions in the Vegetation and Watershed and Water sections. Within the Watershed and Water Section, FW-WSW-DC-1 states, "Watersheds are functioning properly or trending toward proper functioning condition and resilient in that they exhibit high geomorphic, hydrologic, and biotic integrity relative to their potential condition" and FW-WSW-RMZ-STM-DC-5 states, "Water quality meets or surpasses State of New Mexico water quality standards for designated uses." Both desired conditions would apply to the Valle Vidal Management Area and any projects or activities must maintain or move toward them. As such, MA-VVMA-DC-1 would not prolong water quality impacts. Also, there were conditions specified as part of the Carson NF's acquisition of the Valle Vidal, including an emphasis on wildlife management, especially elk and deer (USDA FS Southwest Region 1985). Also, based on public input regarding the Valle Vidal's provision of elk and deer calving and winter habitat, MA-VVMA-DC-1 was not changed.

Whereas the Forest Service manages species habitat, the New Mexico Department of Game and Fish manage the elk themselves, including their population: this is not under the authority of Carson NF.

Concern Statement 615 **Valle Vidal, Ponil Creek Watershed Collaborative Landscape Restoration Project**

While we are pleased with the recommendation to establish a Valle Vidal Management Area in the plan, we are uncertain and concerned about how the proposed Ponil Creek Watershed Collaborative Landscape Restoration Project will impact a large portion of the Valle Vidal. We understand that the timeline for this project extends well beyond the current planning period, but the description of it in the request for comments of February 12, 2018 raised concerns for us.

Associated Comment Letter: 168

Response

The Valle Vidal Management Area is included in the final Plan. The Ponil Creek Watershed Collaborative Landscape Restoration Project is a site-specific (or project-level) analysis (NEPA) and beyond the scope of the programmatic analysis for the final Plan. Once the final Plan has been approved, all projects would have to comply with its direction.

Concern Statement 616 **San Antonio, Sportsmen's Conservation Areas**

In scoping, we asked for the creation of Sportsmen's Conservation Areas, including areas in the Cruces Basin that protect important fisheries and big game attributes, specifically "Osier Mesa IRA and Cruces Basin IRA, with protections for Rio de los Pinos" (TU Scoping Comments, 2015).

Associated Comment Letter: 5303

Response

The final Plan includes the San Antonio Management Area, which was created based on public comment and includes Osier Mesa and Cruces Basin Inventoried Roadless Areas and Rio de los Pinos. Numerous plan components relating to the San Antonio Management Area would benefit big game and fisheries species, such as MA-SAMA-DC-2 and MA-SAMA-G-1.

Concern Statement 617 **San Antonio, Alternative 4, Support**

Support for adding the 31,000-acre Cebolla Mesa tract to the SAMA, as proposed in alternative 4, without the closures to public access found in that alternative.

Associated Comment Letter: 5303

Response

The analysis of alternatives considered a broad range of social, environmental, and economic impacts, as well as public comment, related to the San Antonio Management Area, including the addition of the Cebolla Mesa area. The responsible official selected the preferred alternative (alternative 2-modified), which strikes a balance between primitive recreation values and the need to provide for multiple uses and retain management flexibility. Alternative 2-modified does not include Cebolla Mesa as a part of the San Antonio Management Area, because doing so would limit motorized recreation opportunities. Cebolla Mesa has numerous roads and has a current ROS class of semi-primitive motorized. This landscape is disconnected from the San Antonio Mountain portion by BLM lands and the Rio Grande Gorge, which would make them challenging to manage as a single management area.

Concern Statement 618 **San Antonio, Seasonal Closures**

Do not include the standard for big game closures from alternative 4 into the Final Plan for San Antonio Management Area because this closure would decrease sustainable recreation opportunities. Opportunities for the public to fish in May and June in the San Antonio Management Area can be some of the best of the year. Turkey hunting and spring bear seasons would also both be impacted by a closure. Finally, major closures such as those described in the SAMA could also affect livestock operators who have allotments in the area and local businesses who depend on tourism and other recreation activities.

Associated Comment Letter: 5303

Response

The standard for big game closures from alternative 4 is not included in the final Plan, but under MA-SAMA-G-1, big game closures can be used as a tool to avoid disturbance to big game species from management.

Concern Statement 619 **San Antonio, Timing Restrictions, Buffers**

The San Antonio Management Area includes guideline 1, which avoids disturbance to big game species during birthing season and on winter range, by concentrating potential disturbances in time and space away from these critical life history needs. The guideline is achieved through timing restrictions, spatial buffers, percent utilizations, etc. However, no specific dates or buffers for any of these management activities are included within the guideline. There are advantages of maintaining management flexibility to address site-specific or year-to-year variation. However, there is concern that lack of any identified sideboards can lead to a failure to implement this guideline. Add to the guideline additional language indicating that the national forest will work with the New Mexico Department of Game and Fish to identify site-specific protections against disturbance that will be implemented within the management area.

Associated Comment Letter: 5574

Response

This request to work with others is covered by management approaches for San Antonio Management Area 3 and 7, which describe a strategy to work with state agencies to mitigate impacts during project design. The Plan cannot require state agencies to work with the Forest Service.

Specific temporal or spatial buffers are tools to be considered in mitigating big game disturbance, depending on site-specific factors (e.g., topography and available habitat). Using timing restrictions or spatial buffers would be considered as part of project-level analysis (NEPA) and is beyond the scope of the programmatic analysis for the final Plan.

Concern Statement 620 **San Antonio, Wildlife Habitat**

Include better protection of the Cruces Basin in the Final Plan. This is one of the great attractions of the Carson and is a key wildlife area. The Final Plan should not allow any more roads, trails, developed sites, or any more human incursions in that area. Keep it wild for the wildlife!! In fact, expand the Cruces Basin Wilderness if you really care about protecting wildlife habitat.

Associated Comment Letter: 5005

Response

The Cruces Basin is currently designated wilderness; regardless of alternative, designated wilderness will be managed according to the 1964 Wilderness Act, as required by law.

Regarding the areas surrounding the Cruces Basin, these have been included as the San Antonio Management Area in the final Plan, which includes components that prevent roads construction for public access (MA-SAMA-S-1), development of commercial infrastructure for renewable power generation (MA-SAMA-S-6), extraction of common variety minerals for commercial or public use (MA-SAMA-S-7), and disturbance to big game species from management activities (MA-SAMA-G-1). MA-SAMA-DC 2 directs that wildlife and fish species be free from harassment and human disturbance at a scale that impacts vital functions (e.g., breeding, feeding, and rearing young).

The final Plan includes many plan components designed to improve wildlife habitat connectivity, including wildlife migration routes, which apply forestwide, i.e., not just in designated or recommended wilderness areas. For a list of these plan components, please see Appendix H, Section 4, of the FEIS, Volume 3.

Additionally, the final Plan includes two recommended wilderness management areas adjacent to the Cruces Basin (Toltec and Rudy). The FEIS includes detailed analysis of five alternatives with a variety of recommended wilderness acreages across the national forest including the areas surround the Cruces Basin. These alternatives ranged from zero acres of recommended wilderness in alternatives 1 and 3, to 67,996 acres of recommended wilderness in alternative 5. The preferred alternative (alternative 2-modified) and record of decision recommend 9,295 acres.

This recommendation represents a compromise between the protections afforded by wilderness and the management flexibility retained in non-wilderness management areas. The decision to recommend 9,295 acres was informed by the wilderness inventory and evaluation process, in which the Carson NF identified potentially suitable areas, evaluated their wilderness characteristics, and analyzed the impacts of potential wilderness designation in the environmental impact statement. The responsible official concluded that, on these 9,295 acres, the benefits to be obtained through wilderness designation outweigh any additional limitations on management options.

Road construction and other types of development are prohibited in the recommended wilderness management area. The final Plan has the following standard (MA-RWMA-S-3): “New permanent or temporary roads, motorized trails, or mechanized (e.g., mountain bike) trails for public access must not be constructed or designated in a recommended wilderness management area.” It also includes standards prohibiting infrastructure related to special use permits for energy developments and extraction of common variety minerals (MA-RWMA-S-5 and 6).

Concern Statement 621 **San Antonio, Connectivity**

The Carson does not offer any standards or guidelines related to connectivity in the SAMA. Management approaches are merely suggestions and not enforceable plan components, there is no guarantee that they will actually be implemented. The SAMA plays a significant role in providing connectivity to multiple wildlife species, and it is critical that the Carson protect this by providing enforceable plan direction for connectivity in the SAMA. Change the following management approaches to standards or guidelines as suggested below: 1. Consider improving wildlife or aquatic habitat connectivity within the San Antonio Management Area by removing unneeded structures (e.g., fences, roads, cattleguards, and culverts) or completing improvement projects (e.g. removing barriers and connecting fragmented habitat). * Comment: Change “Consider improving” to “Improve.” 2. Consider projects in the San Antonio Management Area that improve habitat connectivity for aquatic and riparian species (e.g., remove barriers, restore dewatered stream segments, connect fragmented habitat, wildlife passage friendly fences, etc.). Comment: Change “Consider projects” to “Complete 3-5 projects.”

Associated Comment Letters: 4856, 4925

Response

Under the final Plan, natural hydrologic function and habitat connectivity will be improved by removing constructed features when they are no longer needed (FW-WFP-G-6). This requirement applies forestwide, including in the San Antonio Management Area. Standards and guidelines constrain activities; they do not direct or compel processes, e.g., requiring a certain number of projects (FSH 1909.12 22.13). Objectives are a measurable statement of a desired rate of progress toward desired conditions, for instance, completing 3 to 5 projects to improve habitat connectivity over the life of the plan (FSH 1909.12 22.12). The final Plan includes objectives to improve wildlife or aquatic habitat connectivity by removing unneeded structures (FW-WFP-O-4) or completing habitat improvement projects (FW-WFP-O-5). These objectives apply forestwide and could be accomplished in the San Antonio Management Area. Management approaches for San Antonio Management Area-1 and -2 set a priority for locating this type of work in this area.

Concern Statement 622 **San Antonio, Connectivity**

Support for plans to strengthen the San Antonio Management Area by expanding the Cruces Basin Wilderness to protect elk, deer, black bears, coyotes, and other wildlife species that depend on undisturbed migratory routes across the New Mexico-Colorado border to find food and raise their young. Two recommendations regarding this area are to: (1) Include a desired condition statement about the need to maintain and restore habitat connectivity within the area for species migration and dispersal, and (2) Establish a standard that prohibits new energy development or leases.

Associated Comment Letters: 2766, 5643

Response

The FEIS contains detailed analysis of five alternatives with a variety of recommended wilderness acreages across the national forest including the San Antonio Management Area. These alternatives ranged from zero acres of recommended wilderness in alternatives 1 and 3, to 67,996 acres of recommended wilderness in alternative 5. The preferred alternative (alternative 2-modified) and record of decision recommend 9,295 acres, which includes all recommended wilderness from alternative 2, except for Llano, and includes Rudy from alternatives 4 and 5.

This recommendation represents a compromise between the protections afforded by wilderness and the management flexibility that is retained in non-wilderness management areas. The decision to recommend 9,295 acres was informed by the wilderness inventory and evaluation process, in which the Carson NF identified potentially suitable areas, evaluated their wilderness characteristics, and analyzed the impacts of potential wilderness designation in the FEIS. It was the conclusion of the responsible official that, on these 9,295 acres, the benefits to be obtained through wilderness designation outweigh any additional limitations on management options.

FW-WFP-DC-5 within the final Plan states, “Habitat connectivity and distribution provide for genetic exchange, daily and seasonal movements of animals, and predator-prey interactions across multiple spatial scales, consistent with existing landforms and topography.” This desired condition would be for all wildlife habitat across the national forest including the San Antonio Management Area. As such, a desired condition to maintain habitat connectivity does not need to be restated in the San Antonio Management Area.

FW-WFP-0-4 and 5 in the Final Plan state, “Improve wildlife or aquatic habitat connectivity by removing unneeded structures (e.g., fences, roads, cattleguards, culverts, and spring developments) or completing improvement projects (e.g., removing barriers and connecting fragmented habitat) in at least 10 to 20 locations during each 10-year period following plan approval,” and “Complete at least 5 projects to improve habitat connectivity for aquatic and riparian species (e.g., remove barriers, restore dewatered stream segments, connect fragmented habitat, wildlife passage friendly fences, etc.) during each 10-year period following plan approval.” These objectives would be accomplished anywhere across the forest that is in most need of improved habitat connectivity, including on the San Antonio Management Area. Habitat connectivity improvement is encouraged in management approaches for San Antonio Management Area 1 and 2.

Including these objectives in San Antonio Management Area would focus projects that improve wildlife and aquatic habitat connectivity there rather than in other areas where habitat connectivity may be needed more. The efficacy, feasibility, or need of treating the San Antonio is not clearly greater than they are for treating other locations on the national forest.

Infrastructure for permitted energy development is prohibited by MA-SAMA-S-5. The plan revision is not making any decisions on leasing activities or mineral withdrawal. No leasing can occur until an EIS for an oil and gas leasing analysis is completed. Any oil and gas leasing analysis would follow NEPA requirements.

Concern Statement 623 **San Antonio, Connectivity**

The Carson should include a desired condition for the SAMA that addresses landscape connectivity for wildlife. Desired condition 4 comes closest to addressing this issue, referring to the "mostly contiguous land base that best provides for and contributes to… wildlife habitat and diversity" but by itself it is not adequate to ensure that the SAMA retains its high connectivity value for wildlife species. The Carson should address this deficiency by adding another desired condition for the SAMA that specifically pertains to habitat connectivity, such as, "Long-term connectivity and integrity of habitat utilized for fish and wildlife movement through the area is maintained and, where necessary, restored to provide for ecological integrity."

Associated Comment Letters: 4856, 4925

Response

In the final Plan, the following plan components and management approaches provide habitat connectivity in the San Antonio Management Area: MA-SAMA-DC-1-2, MA-SAMA-DC-4, MA-SAMA-S-1-7, MA-SAMA-G-1, and San Antonio Management Area management approaches 1-7. Also, any forestwide plan components for habitat connectivity would apply to this management area unless direction in San Antonio Management Area is more restrictive. For a list of plan components that improve wildlife habitat connectivity, please see Appendix H section 4 of the FEIS Volume 3.

Concern Statement 624 **San Antonio, Connectivity**

The SAMA needs a desired condition statement that addresses the importance of the area for providing landscape scale connectivity for wildlife.

a. Habitat connectivity provides for genetic exchange and diversity, daily and seasonal movements of animals, and predator-prey interactions across multiple spatial scales, consistent with existing landforms and topography.
b. Long-term connectivity and integrity of habitat used for fish and wildlife movement through the area is maintained and, where necessary, restored to provide for ecological integrity and resilience.

Associated Comment Letters: 4901, 4964

Response

FW-WFP-DC-5 in the final Plan states, "Habitat connectivity and distribution provide for genetic exchange, daily and seasonal movements of animals, and predator-prey interactions across multiple spatial scales, consistent with existing landforms and topography." This desired condition applies to all wildlife habitat across the national forest including the San Antonio Management Area. As such, this desired condition does not need to be restated.

FW-WFP-DC-6 in the final Plan states, "Habitat configuration and availability and species genetic diversity allow long-distance range shifts of plant and wildlife populations, in response to changing environmental and climatic conditions. Barriers to movement may exist to protect native species and prevent movement of nonnative species (e.g., a fish structure to protect Rio Grande cutthroat trout from nonnative invasion)." This desired condition applies to all habitat across the national forest including the San Antonio Management Area. As such this desired condition does not need to be restated.

All forestwide plan components for habitat connectivity would also apply to this management area unless direction in the San Antonio Management Area is more restrictive. For a list of plan components that improve wildlife habitat connectivity, please see Appendix H section 4 (FEIS, Volume 3).

Concern Statement 625 **San Antonio, Connectivity**

Include in San Antonio Management Area a desired condition that states, "Habitat connectivity provides an essential ecological condition for supporting viable wildlife populations of at-risk species and offers

educational and research opportunities"; or SAMA provides for landscape-scale movement, migration, and dispersal of wide-ranging wildlife species, and it offers security from intensive recreational and other human disturbances." This is an important step in providing for the maintenance of biodiversity across the forest.

Associated Comment Letter: 4964

Response

This desired condition is covered in the San Antonio Management Area by MA-SAMA-DC 1 and 3. Also, FW-WFP-DC-5 in the final Plan states, "Habitat connectivity and distribution provide for genetic exchange, daily and seasonal movements of animals, and predator-prey interactions across multiple spatial scales, consistent with existing landforms and topography" and applies to all wildlife habitat across the national forest including the San Antonio Management Area. Lastly, any forestwide plan components for habitat connectivity would also apply to this management area unless direction in the San Antonio Management Area is more restrictive. For a list of plan components that improve wildlife habitat connectivity, please see Appendix H section 4 of the FEIS Volume 3.

Concern Statement 626 **San Antonio, Scenery, Educational Opportunities**

MA-SAMA-DC-4 should read: NFS lands exist as a mostly contiguous land base that best provides for and contributes to the management of vegetation and watershed health, wildlife habitat and diversity, and recreation and scenic opportunity. Natural conditions prevail in the area while providing an opportunity for interpretation, education, and research.

Associated Comment Letters: 4901, 4964

Response

The first sentence is exactly what MA-SAMA-DC-4 says in the final Plan. Natural-appearing scenery has been added to MA-SAMA-DC-3. MA-SAMA-DC-5 has been added to highlight the desire for educational opportunities. Interpretive and research opportunities may also exist and are not prohibited or prevented in any way by San Antonio Management Area plan components.

Concern Statement 627 **San Antonio, Fencing**

S-SAMA-S-3 should read: New or reconstructed fencing shall allow for wildlife passage and prevent wildlife entrapment, taking into consideration seasonal migration and access to water resources (except where specifically intended to exclude wildlife—e.g., elk exclosure fence— and/or to protect human health and safety).

Associated Comment Letters: 4901, 4964

Response

The intent of MA-SAMA-S-3 is that all fences be wildlife friendly, not just those important to seasonal migrations and access to water, as those locations can change over time. MA-SAMA-S-3 was not changed in the final Plan

Concern Statement 628 **San Antonio, Road Density, Decommissioning, Coordination, Land Purchase, Fencing**

Include in the Final Plan the following management approaches for San Antonio Management Area:

1. Where motorized route densities exceed one mile per square mile, develop and implement a strategy to reduce the densities to below this threshold level.
2. Identify unnecessary roads or trails that may need to be decommissioned to promote wildlife connectivity.

3. In coordination with the New Mexico Departments of Transportation and Game and Fish, develop and implement a strategy for mitigating highway related accidents related to wildlife movement in and around the SAMA.
4. As possible, augment wildlife values through purchase from willing sellers, exchange, transfer, or donation of additional acreage of crucial wildlife habitat for their migration, movement and dispersal.
5. Work with livestock permittees to identify fencing that is not critical for livestock operations. Remove fencing that is not critical for livestock operations and that is impeding wildlife movement. Where possible, modify existing fencing to ensure that it is wildlife friendly.

Associated Comment Letters: 4901, 4964

Response

A road density management approach for San Antonio Management Area was not included in the final Plan because recent site-specific analysis and decisions that have been made on the forest include the land within the San Antonio Management Area that identified the open road system during the travel management process. Under the travel management process, alternatives were developed and analyzed based on issues including the effects on wildlife, sedimentation, and erosion. Decisions were based on a collaborative process and scientifically based information and resulted in a current road density of about 1.1 miles per square mile. While it is desirable to minimize new roads and decommission unneeded roads, managing toward a specific road density would be arbitrary and would not meet the purpose and need.

FW-TFA-G-4 in the final Plan states, “Unauthorized roads and maintenance level 1 roads should be evaluated based on transportation system need, long-term effects to adjacent resources, and capacity to maintain additional system roads in order to identify roads eligible for decommissioning.” This guideline applies across the national forest including in the San Antonio Management Area. As such, the second proposed management approach does not need to be included because this action is already required.

In the final Plan, FW-TFA-G 7 and 8 address habitat connectivity along National Forest System roads. These guidelines are applicable anywhere across the forest including in the San Antonio Management Area. Also, the final Plan describes a strategy of working with the New Mexico Department of Transportation and counties when developing projects in Management Approach for Wildlife, Fish, and Plants number 4 and San Antonio Management Approach number 7.

In the final Plan, FW-LAND-DC-1 describes the desire to have a contiguous land base that contributes to wildlife habitat, including habitat connectivity. Management Approach for Lands-1 states, “Collaborative relationships with adjacent stakeholders and public land managers are actively encouraged to develop contiguous habitat connectivity across multiple ownerships.” This management approach is forestwide so could be applied to San Antonio Management Area, and is a way to develop additional contiguous habitat without conversion to National Forest System lands.

In the final Plan, FW-WFP-G-6 states, “To conserve wildlife and fish habitat connectivity, constructed features (e.g., exclosures, wildlife drinkers, range improvements, fences, and culverts) should be maintained to support the purpose(s) for which they were built. Constructed features should be removed when no longer needed, to restore natural hydrologic function and maintain habitat connectivity.” FW-GRZ-S-2 states, “New or reconstructed fencing shall allow for wildlife passage, except where specifically intended to exclude wildlife (e.g., elk exclosure fence), to protect human health and safety.” This standard and guideline are applicable across the national forest including in the San Antonio Management Area. The suggested management approach 5 does not need to be included as this action is already required.

Concern Statement 629 **San Antonio, Elk Calving**

Support for the proposed standards to minimize disturbance to elk during calving included in the Draft Plan for San Antonio. However, similar standards for closure from alternative 4 in Valle Vidal should be included in the San Antonio.

Associated Comment Letters: 161, 4887

Response

Big game closures from alternative 4 for San Antonio Management Area are not included in the final Plan as these would limit hunting and fishing opportunities within the San Antonio Management Area. If closures are needed to minimize disturbance to big game species, this best management practice can be taken under MA-SAMA-G-1 based on site-specific factors. This guideline states, "Management activities should avoid disturbance to big game species during birthing season and on winter range during the winter period. Management activities should concentrate activities in time and space to reduce impact to big game species. Timing restrictions, adaptive percent utilizations, distance buffers, or other means of avoiding disturbance should be based on the best available scientific information, as well as site-specific factors (e.g., topography, available habitat, etc.)."

Concern Statement 630 **San Antonio, Big Game**

The draft plan includes one guideline in San Antonio Management Area, and this guideline addresses the need to avoid disturbance to big game species during birthing season and on winter range during the winter period. This guideline should offer more specificity so that Forest Service staff know how to follow this direction when designing projects. To this end, the final plan should include guideline 2 from alternative 4, which reads: Vegetation management activities should not impact more than 3 percent of the management area in any one-year period. Including a guideline to restrict vegetation management activities in the SAMA would protect wildlife species from the short-term impacts and disruption of vegetation management projects, while still allowing such projects to occur in the area. While 3 percent may not sound like much, the SAMA is about 100,000 acres so this would allow for 3,000 acres of ground-disturbing activities at a given time. We believe that a project that is actively operating across 3,000 acres in the same vicinity at one time is significant, and that the Carson should be able to achieve its restoration efforts in the area with this limitation in place. This would strike a good balance between management flexibility and ecological integrity. Our proposed guideline, or a similar guideline, would help ensure that motorized routes in the SAMA do not adversely affect wildlife species.

Associated Comment Letters: 4856, 4925, 4964

Response

We agree that restoration objectives in frequent-fire forests could be achieved with this limitation in place (FEIS, Chapter 3, Environmental Consequences for Frequent-Fire Forests – Alternative 2). However, this guideline was not included in the final Plan, as it would limit treatment options if insect and disease outbreaks were to worsen in the future within high-elevation forest vegetation systems of the San Antonio Management Area (FEIS, Chapter 3, Environmental Consequences for High Elevation Forests – Alternative 4). Without proper treatment, worsening insect and disease outbreaks would move high-elevation forests toward a greater departure from reference condition. This could result in a decrease in wildlife distribution, health, and function, and an increase in the likelihood of stand-replacing wildfires.

Concern Statement 631 **San Antonio, Road Construction, Motorized Trails, Temporary Roads**

Include in the Final Plan MA-SAMA-1 and 2 with the following recommendations:

- Why are other types of new permanent roads not included? This seems like a potentially significant loophole that could lead to environmental degradation. To prevent this, we recommend removing the words "for public access."
- Add motorized trails to standard 1
- First, temporary roads should only be constructed if they are necessary. Second, the roads should be designed and built to minimize negative impacts as much as possible. And finally, there should be a time limit on when temporary roads will be closed and rehabilitated. We suggest that this should occur within two years of project completion.

Associated Comment Letters: 4856, 4901, 4925, 4964, 5303

Response

The limitation on new roads for public access under MA-SAMA-S-1 is not being expanded to prohibit any new road construction because administrative roads may be needed to provide for multiple uses in this area. Administrative roads can have substantially different impacts in terms of wildlife disturbance, invasive species spread, illegal tree removal, illegal off-road vehicle use, maintenance requirements, among other factors. Project-level NEPA environmental analysis would be completed to add any new administrative roads to the system with opportunities for public input. Also, FW-TFA-G-2 in the final Plan requires new system roads to be accompanied by mitigation actions to offset any resource damage resulting from their construction. This action is required forestwide including in the San Antonio Management Area.

A standard limiting new motorized trails in the San Antonio Management Area was added to alternative 4 (MA-SAMA-S-12) and analyzed in the FEIS (Chapter 3, Environmental Consequences for Recreation – Alternative 4). As described in the record of decision, the responsible official concluded that in most instances changes to travel management decisions are best made on a case by case basis, taking into consideration site specific factors, multiple use management, and desired conditions as described in the final Plan. Any proposal to construct a motorized trail in the future would have to go through a travel management decision under requirements of 36 CFR Part 212. Any decision to construct a new motorized trail or road would be made through the public participation processes for a change to the motor vehicle use map.

Temporary roads must be evaluated for use prior to any new road construction to minimize negative impacts to ecological and cultural resources according to FW-TFA-G-1. Lastly, a time limit was not added to MA-SAMA-S-2, as this standard requires the temporary roads be closed and rehabilitated as soon as the project is complete not sometime within two years.

Concern Statement 632 **San Antonio, Road Density, Vegetation Management**

Include the following guidelines in the San Antonio Management Area:

- Do not exceed a motorized route density of one mile per square mile generally, or a threshold determined by the best available science for specific at-risk species.
- Vegetation management activities should not impact more than 3 percent of the management area in any one-year period, unless the work is part of restoration activities

Associated Comment Letters: 4901, 4964

Response

A road density requirement for San Antonio Management area was not included in the final Plan because recent site-specific analysis and decisions have been made on the forest that include the land within the

San Antonio Management Area that identified the open road system during the travel management process. Under the travel management process, alternatives were developed and analyzed based on issues including the effects on wildlife, sedimentation, and erosion. Decisions were based on a collaborative process and scientifically based information and resulted in a current road density of about 1.1 miles per square mile. While it is desirable to minimize new roads and decommission unneeded roads, managing toward a specific road density would be arbitrary and would not meet the purpose and need.

The vegetation management guideline was not included in the final Plan. We agree that restoration objectives in frequent-fire forests could be achieved with this limitation in place (FEIS, Chapter 3, Environmental Consequences for Frequent-Fire Forests – Alternative 2). However, this guideline would limit treatment options if insect and disease outbreaks were to worsen in the future within high-elevation forest vegetation systems of the San Antonio Management Area (FEIS, Chapter 3, Environmental Consequences for High Elevation Forests – Alternative 4). Without proper treatment, worsening insect and disease outbreaks would move high-elevation forest toward a greater departure from reference condition. This could result in a decrease in wildlife distribution, health, and function, and an increase in the likelihood of stand-replacing wildfires.

Concern Statement 633 **San Antonio, Over-Snow Vehicles**

Over-snow vehicle (OSV) use can significantly impact wildlife and water resources. Given the importance of the SAMA for wildlife movement, it is important that the Carson properly manage OSV use in the area. We recognize and understand the Forest Service's reluctance to make route specific designations for motor vehicle use in a forest planning process. Area-wide classifications certainly occur (e.g., ROS classifications, recommended wilderness, special interest areas, etc.), however. Given this, we urge the Carson to include a plan component that eliminates cross-country travel for OSVs in the SAMA. We request that the Carson NF adopt a standard that OSVs be limited to designated system roads. This will help mitigate impacts to wildlife and better align on-the-ground activities with the primitive and semi-primitive non-motorized ROS classification that is proposed in the draft plan. Further, according to the Carson's visitor use map revised in 2010, this area of the forest is already off-limits to OSV use. Over-snow use off designated system roads and trails is prohibited, except as authorized by law, permits, or orders, to protect public safety and ecological resources.

Associated Comment Letters: 4856, 5303

Response

The scope of the Carson plan revision does not include Travel Management Rule Subpart C (over-snow motorized use). Site specific decisions regarding areas or trails open to snowmobiling will be made on all six districts outside plan revision and will include public input. The transportation and forest access section of the plan will incorporate these future decisions through the transportation standard that prohibits over-snow use outside of designated areas, “Over-snow use outside of designated areas identified on the Carson’s most updated over-snow vehicle use map is prohibited, except as authorized by law, permits, or orders, to protect public safety and ecological resources.” Any future transportation system changes would be covered under a separate NEPA analysis.

Concern Statement 634 **San Antonio, Timber Harvest, Military Ground Operations**

The management direction for the San Antonio Management Area (SAMA) is fairly good, but there are still significant gaps that need to be addressed. Among other things, the proposed management direction does not adequately address habitat connectivity for wildlife. This can be addressed by changing several of the proposed management approaches to enforceable standards or guidelines. Some other changes, including incorporating the more protective plan components from Alternative 4 into the preferred alternative, are needed to ensure that the exceptional resources in the SAMA are adequately protected.

Support the inclusion of the proposed standards in the final revised plan because they are generally strong and should help the Carson achieve desired conditions for the SAMA. However, please include the following recommendations:

Standards 10-11 from alternative 4 should be included in the preferred alternative:

- Standard 10: Timber harvest for the purpose of timber production is prohibited. Prohibiting timber harvest for the purpose of timber production in the SAMA is needed to protect resources in the area from harms associated with commercial timber production. This would prevent potentially significant adverse effects on the SAMA that could result from more extensive logging in the area. There are many other areas of the Carson that are far more suitable for timber production than the SAMA, and commercial logging should take place in those areas instead. Importantly, this standard would not limit the Carson's ability to implement restoration projects in the area. It is appropriately tailored to protect resources while maintaining some management flexibility and discretion.
- Standard 11 (was #12 in PDPP): Military ground operations are prohibited. Likewise, prohibiting military ground operations in the SAMA makes sense because this would protect the area from the harms of such activities without causing significant hardship. It is difficult to see why military ground operations should take place on the SAMA. We have seen increased conflicts associated with the military's use of federal public lands and encouraging the Carson to safely avoid the potential for such controversy in the SAMA by explicitly disallowing this use in the area.

Associated Comment Letters: 4856, 4893, 4925, 5303

Response

FW-WFP-DC-5 in the final Plan states, “Habitat connectivity and distribution provide for genetic exchange, daily and seasonal movements of animals, and predator-prey interactions across multiple spatial scales, consistent with existing landforms and topography.” This desired condition would be for all wildlife habitat across the national forest including the San Antonio Management Area. As such, a desired condition to maintain habitat connectivity does not need to be restated in the San Antonio Management Area.

FW-WFP-0-4 and 5 in the final Plan state, “Improve wildlife or aquatic habitat connectivity by removing unneeded structures (e.g., fences, roads, cattleguards, culverts, and spring developments) or completing improvement projects (e.g., removing barriers and connecting fragmented habitat) in at least 10 to 20 locations during each 10-year period following plan approval,” and “Complete at least 5 projects to improve habitat connectivity for aquatic and riparian species (e.g., remove barriers, restore dewatered stream segments, connect fragmented habitat, wildlife passage friendly fences, etc.) during each 10-year period following plan approval.” These objectives would be accomplished anywhere across the forest that is in most need of improved habitat connectivity including on the San Antonio Management Area. Habitat connectivity improvement is encouraged in Management Approaches-1 and -2 for San Antonio Management Area.

Including these objectives in San Antonio Management Area would focus projects that improve wildlife and aquatic habitat connectivity there rather than in other areas where habitat connectivity may be needed more. The efficacy, feasibility, or need of treating the San Antonio is not clearly greater than they are for treating other locations on the forest.

As described in the record of decision, a standard that prohibits timber harvest for the purpose of timber production was not included in the final Plan. This standard was analyzed as part of the San Antonio Management Area in alternative 4. As described in the FEIS under alternative 4, fires would more often burn with uncharacteristic intensities in many untreated, frequent-fire forest areas (Chapter 3, Environmental Consequences for Fuels and Wildland Fire Environmental Consequences - Alternative 4) and treatment options for insect and disease outbreaks would be limited in high-elevation forests

(Chapter 3, Environmental Consequences for High Elevation Forests–Alternative 4). “Compared to alternative 2, mechanical treatment would be less economically efficient because there would be much less timber revenue to offset costs” (FEIS, Chapter 3, Environmental Consequences for Sustainable Forestry and Forest Products - Alternative 4).

Lastly, prohibiting all military ground operations was not included as effects would vary depending on the specific activity proposed and would require a special use permit. Decisions regarding military ground operation are considered as part of project-level analysis (NEPA) and are beyond the scope of this programmatic analysis for the final Plan.

Concern Statement 635 **San Antonio, Collaboration, Mineral Withdrawal, Connectivity, Military Ground Operations**

Include in the Final Plan the following standards for San Antonio Management Area:

- Long-term collaboration with the Rio Grande NF, New Mexico Department of Game and Fish and Colorado Parks and Wildlife to establish appropriate wildlife connectivity models and management driven by the best available science to identify wildlife corridors, critical habitat, breeding and calving grounds, and winter and summer range.
- Subject to valid existing rights, San Antonio management area shall be withdrawn from:
  a. all forms of mineral entry, appropriation, and disposal under the public land laws;
  b. location, mineral entry, and patent under the mining laws; and
  c. operation of the mineral leasing and geothermal leasing laws and common variety mineral materials laws.
- Authorized activities shall be harmonious with the values of wildlife movement, habitat connectivity, and habitat condition for at-risk species.
- Military ground operations are prohibited.

Associated Comment Letters: 4901, 4964

Response

Collaboration between agencies cannot be required in the Forest Plan as the Carson NF cannot force other agencies to collaborate with us. Any strategy to collaborate with specific entities has been included as a management approach. Collaboration to identify wildlife corridors, critical habitat, breeding and calving grounds, and winter and summer range is covered by Management Approaches for San Antonio Management Area 3 through 7 and Management Approaches for Wildlife, Fish, and Plants 1, 3, 4, and 8.

The Carson NF is required to follow existing law, regulation, and policy including those related to mineral extraction, mineral leasing, and geothermal leasing and generally does not repeat these laws in the Plan. Lands may be withdrawn from mineral entry by Congress or Executive Order. Mineral withdrawal is outside the scope of plan revision. The final Plan includes MA-SAMA-S-5 and 6, which restrict commercial infrastructure for renewable power generation and prohibit the extraction of common variety minerals within the San Antonio Management Area.

Any forestwide plan components for habitat connectivity would also apply to this management area unless direction in the San Antonio Management Area is more restrictive. For a list of plan component that improve wildlife habitat connectivity, please see Appendix H section 4 of the FEIS Volume 3. Projects implemented under the Final Plan would have to move towards desired conditions, therefore any project undertaken would have to maintain or improve habitat connectivity that allows for genetic exchange in order to be incompliance with the final Plan.

Lastly, prohibiting all military ground operations was not included as effects would vary depending on the specific activity proposed and would require a special use permit. Decisions regarding military

ground operation are considered as part of project-level analysis (NEPA) and are beyond the scope of this programmatic analysis for the final Plan.

Concern Statement 636 **San Antonio, Collaboration**

Add to the big game disturbance guideline indicating that the Forest will work with New Mexico Department of Game and Fish to identify site-specific protections against disturbance that will be implemented within the San Antonio Management Area.

Associated Comment Letter: 4951

Response

The final Plan contains a component for the San Antonio Management Area related to avoiding disturbance to big game (FW-SAMA-DC-2, FW-SAMA-G-1). Additionally, there is a forestwide component relating to limiting disturbance to big game (FW-WFP-G-4) and a component related to general coordination with New Mexico Department of Game and Fish and other partners (FW-WFP-MA-1). Guideline language cannot be changed to add working with the New Mexico Department of Game and Fish because forest plan direction only applies to Forest Service management on National Forest System lands, it does not direct management of State agencies, such as the New Mexico Department of Game and Fish (36 CFR 219.1(g)). Management approaches may be used to inform future proposed and possible actions. These techniques and actions provide options for plan implementation, and represent possibilities, preferences, or opportunities, such as working with other agencies (Final Forest Plan, Chapter 1, Other Required Plan Content, Optional Content, Management Approach definition footnote).

Management Areas – Others - MAO

Concern Statement 637 **General**

Identify areas with unique and outstanding characteristics that merit special designation to enable visitation, interpretation, and protection.

Associated Comment Letter: 4856

Response

Throughout the plan revision process, the Carson NF has considered public input and available information regarding areas with unique or outstanding characteristics. Lands of unique character are addressed in the final Plan through designated or management area plan components.

Concern Statement 638 **Areas of Resource Concern**

The preliminary draft plan notes that Amendment 13 of the 1986 forest plan identifies five Areas of Resource Concern with important resource values that need to be protected on the Jicarilla Ranger District. We encourage the Carson NF to review the Jicarilla Natural Gas Management Area to determine whether additional areas of resource concern exist that merit special protection.

Associated Comment Letter: 4911

Response

The Carson NF created new management areas in the Plan revision process based on public comment and according to the 2012 Planning Rule directives (FSH 1909.12 § 22.21). Areas of resource concern were identified as part of the Record of Decision for the Surface Management of Gas Leasing and Development on the Jicarilla Ranger District, which covered the entire district and the entire Jicarilla Natural Gas Management Area. That decision and those areas remain valid under the revised plan. The Carson NF would review those areas of resource concern during any revised leasing analysis for the Jicarilla Ranger District.

Concern Statement 639 **Proposed Research Natural Areas**

There is no mention of the Carson's proposed Arellano Canyon Research Natural Area (RNA) in the draft plan or the DEIS, and no discussion of whether additional RNAs should be proposed. The Carson must analyze at least one alternative that considers additional proposed research natural areas, including the existing Arellano Canyon proposed RNA. The Carson must determine: (1) whether to propose additional RNAs, and (2) whether to retain the existing Arellano Canyon proposed RNA. The EIS must disclose and analyze the impacts of the recommended RNAs, if any, to the RNA system and its objectives under each alternative. The Carson should work with the Regional Office on the creation of new RNAs, as the Regional Office should have a region-wide understanding of which ERUs are lacking representation in the current RNA network and need to be included.

Associated Comment Letter: 4856

Response

The Carson NF has reevaluated all previously proposed research natural areas, including Arellano Canyon for their suitability for continued proposal. In addition, the Southwestern Regional assessment of need for additional research natural areas was used to identify additional areas for evaluation (FEIS, Volume 3, Appendix I). The Carson NF has identified four areas to propose. Those areas would be proposed under all alternatives, including the preferred alternative, alternative 2-modified. An evaluation of the environmental impacts of these proposed areas has been added to the FEIS (Chapter 3, Environmental Consequences for Sustainable Rangelands and Livestock Grazing, Environmental Consequences for Recreation, and Environmental Consequences for Transportation and Forest Access) and plan components that guide their management have been added to the final Plan (MA-PRNA).

Concern Statement 640 **Wetland Jewel and Rio Grande Cutthroat Trout Management Areas**

It is critically important to address the “Wetland Jewel Area” as well as the “Rio Grande Cutthroat Trout Management Area” by at least starting to designate and move in the direction of protecting their sustainable health.

Associated Comment Letters: 111, 4860

Response

Sustainability and health of wetlands are addressed in the Watersheds and Water section and subsections in the final Plan. Providing ecological conditions for Rio Grande cutthroat trout is addressed in the Watersheds and Water, Riparian Management Zones, Streams, and Wildlife, Fish, and Plants (FW-WFP-DC-1 and -2) sections in the final Plan. Plan components that would minimize effects of management activities on species of conservation concern such as Rio Grande cutthroat trout are included in the Wildlife, Fish, and Plants, Sustainable Rangelands and Livestock Grazing, Forestry and Forest Products, Recreation, and other sections in the final Plan. For a complete list of plan components that provide ecological conditions needed for Rio Grande cutthroat trout and that minimize effects to its habitat and the species itself, please see appendix H of the FEIS Volume 3.

Concern Statement 641 **Rio Grande Cutthroat Trout Management Area, Support**

Include the Rio Grande Trout Management Area from alternative 4 in alternative 2.

Associated Comment Letter: 4853

Response

As described in the draft Record of Decision, the final Plan includes plan components that address Rio Grande cutthroat population across the Carson NF, rather than within a single management area (Draft Record of Decision, Decision section). This allows for management direction to apply for any population of Rio Grande cutthroat trout on the national forest, not just within a specific area of the forest. Table 72,

of appendix H in the FEIS displays all the plan components related to issues and threats for Rio Grande cutthroat trout.

Concern Statement 642 **Rio Grande Cutthroat Trout Management Area, Opposition**

Volume 3, page 23, Rio Grande Cutthroat Trout Management Area. Alternative 4 identifies areas on the Forest where restoration of Rio Grande cutthroat trout should be emphasized. The proposed management area serves as an important impetus for furthering conservation and preventing future listing potential for this iconic species of native sport fish; however, an extensive area of restoration emphasis could approach the New Mexico Department of Game and Fish and the Carson NF's restoration capacity during the life of the Plan. It is recommended the following language be added that nonnative fish must be eradicated from restoration areas before native fish can be restored. Similarly, fish barriers often must be constructed, which is typically the most expensive and necessary part of any native fish restoration project. Also, recommend including language supporting fish barrier construction to restore native fish populations.

Associated Comment Letters: 4951, 5574

Response

The Rio Grande Cutthroat Trout Management Area in alternative 4 was not brought forward in the final Plan because it would focus native aquatic species restoration work in these areas, rather than forestwide or at the discretion of the New Mexico Department of Game and Fish. The New Mexico Department of Game and Fish manages Rio Grande cutthroat trout and would have more authority and better knowledge of where on the Carson NF Rio Grande cutthroat restorations should take place. As such, Rio Grande cutthroat trout management area was not carried forward into the final Plan. However, Rio Grande cutthroat trout restoration and management are emphasized forestwide in the final Plan.

Plan components in the final Plan that address ecological conditions and threats for Rio Grande cutthroat trout can be found in the FEIS Volume 3, appendix H on pages 199 and 200, Table 72: Species Crosswalk: Plan Components for At-Risk Wildlife Species and other Wildlife. These include desired conditions, objectives, standards, guidelines (coarse and fine filter), and management approaches. Forest wide Ecological Sustainability and Diversity of Plant and Animal Communities Plan Components and management approaches in the final Plan contribute to the restoration and management of the Rio Grande cutthroat trout.

Notably, management approaches in the final Plan contribute to coordination among partners such as the New Mexico Department of Game and Fish to participate in the restoration of the Rio Grande cutthroat trout. This includes Wildlife, Fish, and Plants Management Approach 1 and Watershed and Water Management Approach 4. Desired conditions to protect Rio Grande cutthroat trout from nonnative invasion by constructing barrier structures is included in FW-WFP-DC-6 in the final Plan. Similarly, FW-WSW-RMZ-STM-DC-3 provides for this same desired condition. Lastly, FW-WFP-O-3 offers an objective to reduce nonnative fish within native fish populations.

Concern Statement 643 **Developed Resorts, Alternative 3, Support**

Support for Expanding Developed Winter and Summer Resort Management Area for the Sipapu Ski Resort because of the important recreation and economic contributions that Sipapu and the other ski areas have on the Carson NF and their surrounding communities, we request that a Management Area specific to ski areas be created in the Final Forest Plan.

Associated Comment Letters: 111, 4853, 4906, 4909, 4913, 5782

Response

As described in the record of decision, the final Plan includes the Potential Developed Recreation Site Management Area from alternative 1, which maintains opportunities for future recreation development.

The Developed Winter and Summer Resort Management Area location in alternative 3 was not chosen because it was based on an expansion area proposed by the ski area, which is still under development and has not been fully analyzed. Neither the Potential Developed Recreation Site Management Area nor the Developed Recreation Site Management Area permit expansion of the Sipapu Ski Area or the permitted area; any ski area expansion would go through project-level analysis under the National Environmental Policy Act. The final Plan retains the existing management area boundary (alternative 1), while updating the management approaches that apply to that area.

Concern Statement 644 **Developed Resorts, Alternative 3**

The alternative 3 DEVRES management area boundary differs from the proposed Sipapu special use permit boundary. It will be critical to the long-term success of our upcoming NEPA process and boundary management consistency that the entirety of the proposed special use permit boundary at Sipapu contains the correct DEVRES management area. Please update the alternative 3 DEVRES management area to reflect the accepted master development plan boundary and adopt this management area boundary in the Final Forest Plan.

Associated Comment Letter: 4906

Response

The responsible official has included the Potential Developed Recreation Site Management Area boundary from alternative 1 in the selected alternative, alternative 2-modified (USDA FS Carson NF 2021). The Potential Developed Recreation Site Management Area boundary represents no change from the previous plan. We agree that any future special use permit should align with the Developed Winter and Summer Resort Management Area boundary; however, since no special use permit has been approved by the Carson NF, no proposed boundaries are being adopted in the final Plan. Permit expansion outside of the area identified as Developed Winter and Summer Resort Management Area or Potential Developed Recreation Site Management Area under the final Plan (the same area identified as Potential Recreation Site under the 1986 plan) would likely require an amendment of the management area boundary, but would be analyzed under a site-specific decision based on the actual development and use being proposed.

No change has been made to the DEVRES management area boundary in alternative 3 because the proposed adjustments were minor (about 6 fewer acres) and do not significantly impact the analysis or the decision made by the responsible official.

Concern Statement 645 **Developed Resorts, Alternative 3, Opposition**

General opposition to alternative 3 expanded Sipapu ski area (Developed Winter and Summer Resort Management Area).

Associated Comment Letters: 4903, 4904, 4926

Response

The location of the management area surrounding Sipapu Ski Area from alternative 1 has been adopted under alternative 2-modified (USDA FS Carson NF 2021). The management area location in alternative 3 was not chosen because it was based on an expansion area proposed by the ski area that is still under development and has not been fully analyzed. The Potential Developed Recreation Site Management Area maintains opportunities for future recreation development; however, it does not itself permit expansion of the Sipapu Ski Area or the permitted area. Any ski area expansion would go through project-level analysis under the National Environmental Policy Act.

Concern Statement 646 **Sipapu Ski Area Expansion**

The expansion or any additional development of the Sipapu Ski Resort must be required to undergo a complete National Environmental Policy Act (NEPA) analysis.

Associated Comment Letter: 5720

Response

The Potential Developed Recreation Site Management Area [in the selected alternative, alternative 2-modified] maintains opportunities for future recreation development; however, it does not itself permit expansion of the Sipapu Ski Area or the permitted area. Any ski area expansion would go through project-level analysis under the National Environmental Policy Act, which is required for all proposals before they are approved. At this point, the Carson NF has not received or authorized any application for expansion.

Concern Statement 647 **Sipapu Ski Area Expansion**

Management of the Sipapu ski resort has been allowed to move forward with its MDP [master development plan] by using a categorical exclusion rather than requiring the NEPA process as stated in the letter from Diana M. Trujillo (Acting Forest Supervisor) dated April 27, 2012. The public has been denied its legal rights to comment on construction actions that will have environmental and ecological impact for the entire community. We have also had meetings with the Forest Service and have been assured that any further development at Sipapu would undergo the scrutiny of NEPA and that the public would have the opportunity to comment about the proposed action. Nevertheless, we have been told the most recent construction at Sipapu, the laying of pipe, is being done under a Categorical Exclusion.

Associated Comment Letter: 5785

Response

Sipapu is currently implementing maintenance and previously approved projects, including those analyzed under a categorical exclusion. Categorical exclusions are a level of National Environmental Policy Act analysis. Any future expansion of the ski area would undergo appropriate National Environmental Policy Act analysis; this may include additional categorical exclusions, environmental analyses, or environmental impact statements, depending on the scope and scale of the proposed action. All levels of project planning require some level of public participation as described at 40 CFR 1500 et seq.

Concern Statement 648 **Sipapu Ski Area Expansion, Monitoring**

The Carson NF has failed to adequately monitor the Sipapu Ski area expansion.

Associated Comment Letter: 5785

Response

Permit administration does not occur at the plan revision scale; it is a type of project-level analysis and includes monitoring (inspections, evaluations). No decision has been made regarding ski area permit area expansion as part of the plan revision process. At this point, the Carson NF has not received or authorized any application for expansion.

Concern Statement 649 **Developed Resorts, Glading, Burning**

The Forest Plan needs to incorporate specific references to “glading” and “controlled burning” within plan components to improve forest health and safety in the DEVRES Management Area as a means of achieving desired conditions.

Associated Comment Letter: 4879

Response

Glading and controlled burning are both allowed in the Developed Winter and Summer Resort Management Area under the final Plan. The decision to use these techniques would require project-level analysis. Analyses for glading and/ or controlled burning would be addressed in the categorical

exclusion, environmental assessment, or environmental impact statement for each project as part of the National Environmental Policy Act process for each project.

Concern Statement 650 **Developed Resorts, Traditional and Cultural Uses**

Greater clarification of DEVRES-MA-DC-8 is needed, as the current condition of the ski area may prohibit certain traditional and cultural uses.

Associated Comment Letter: 4879

Response

DEVRES-MA-DC-8 has been clarified in the final Plan. Traditional and cultural uses in the developed winter and summer resort management area must be consistent with the current condition and uses as described by other desired conditions in the DEVRES section.

Concern Statement 651 **Developed Resorts, Land Exchange**

Within the DEVRES Management Area, plan components should allow for land exchanges or disposal of National Forest System Lands to private ownership if the lands in question are in heavily modified.

Associated Comment Letter: 4879

Response

In general, the DEVRES Management Area is more highly developed than other areas on the Carson NF and that alone would not be the criteria to dispose of Federal land.

The Forest Service has very limited authority to dispose, exchange, or sell land; additionally, there is no general authority to dispose of land. However, Congress has authorized a variety of laws to use in limited circumstances, including 36 CFR part 254, subpart A, FSM 5430.2, and FSM 5571.

We added one guideline and two management approaches to the final Plan to address the purpose and prioritization of land adjustments (FW-LAND-G-4; Management Approaches for Lands-4 and -5).

Concern Statement 652 **Developed Resorts, Capacity**

The Forest Plan should impose a 2,200 cap on lift tickets to moderate impacts at ski areas, specifically Taos Ski Valley. Although NEPA studies have been conducted for expansion of activities at the Taos Ski Valley, there are still developments occurring and cumulative effects have not been disclosed for all of these developments.

Associated Comment Letter: 4862

Response

Capacity for ski areas is established by the ski area master development plan (MDP). The MDP functions to ensure that the elements that interact to define capacity are, or will be, in balance (e.g., lifts, terrain, restaurants, restrooms, parking, transportation). The MDP is developed by the ski resort and accepted by the national forest. Cumulative effects are addressed in the analysis for each project.

Concern Statement 653 **Taos Ski Valley, watershed**

The proposed “boutique” resort in the Taos Ski Valley is an abomination that should be stopped in its tracks. The amount of water used, habitat destroyed, and garbage created will overwhelm Taos and its acequia systems downstream. Please stop letting this billionaire developer destroy our high-altitude watershed! Do your job and protect the forests for future generations!

Associated Comment Letter: 4980

Response

Ski area development at Taos Ski Valley or any other ski area on National Forest System lands must comply with all applicable environmental and other laws, including state water law. Environmental

impacts will be analyzed and disclosed through project-level National Environmental Policy Act analysis including any adverse impacts to acequia function or use. No specific development is either authorized or prevented by the land management plan. Ski areas on the Carson NF are managed under special use permits, which include development plans and the expected future condition of improvements and facilities and must adhere to plan direction and other measures (such as best management practices) that protect watershed condition and other resources. While Developed Winter and Summer Resort Management Areas provide "winter sports activities and other intensively managed outdoor recreation opportunities for large numbers of national and international visitors in highly developed settings" (Final Plan, Chapter 3, Developed Winter and Summer Resort Management Area section introduction), plan components related to water, wildlife habitat, and downstream acequias still apply. Additional development may be in response to either winter or summer recreation demand as authorized by law, regulation, and agency policy, including but not limited to the Ski Area Recreation Opportunity Enhancement Act of 2011.

Concern Statement 654 **Concern Statement 271 Taos Ski Valley, Cumulative Impacts**

The Carson National Forest should be exercising its duty to study the comprehensive and cumulative impacts of development in Village of Taos Ski Valley on and off the forest.

Associated Comment Letters: 4862, 5620

Response

The Cumulative Environmental Consequences for Recreation section in the FEIS (Chapter 3) discusses regional recreation trends and the Carson NF's ability to meet demand. No specific development is either authorized or prevented by the final Plan. Any impacts from proposed ski area development at Taos Ski Valley or any other ski area on National Forest System lands will be analyzed and disclosed through project-level National Environmental Policy Act analysis (40 CFR 1500).

Concern Statement 655 **Taos Ski Valley, Rio Hondo**

Rio Hondo and tributaries need better protection from activities in Taos Ski Valley.

Associated Comment Letter: 5698

Response

Plan components in the Watersheds and Water (WSW) section of the final Plan provide management direction for activities that occur on the Carson NF, including those permitted at the Taos Ski Valley (FW-WSW-DC 1-7; FW-WSW-O-1; FW-WSW-G 1-4; management approaches 1-2; FW-WSW-RMZ-DC 1-9; FW-WSW-RMZ-O-1; FW-WSW-RMZ-G 1-4; WSW-RMZ-STM-DC 1-11; FW-WSW-FMZ-STM-O 1-2; FW-WSW-RMZ-STM-S 1-2; FW-WSW-RMZ-STM-G 1-4; FW-WSW-RMZ-WB-DC 1-6; FW-WSW-RMZ-WB-S 1-2; FW-WSW-RMZ-SNS-DC 1-9; FW-WSW-RMZ-SNS-O-1; FW-WSW-RMZ-SNS-S-1; FW-WSW-RMZ-SNS-G-1; WSW-RMZ-WR-DC 1-5; FW-WSW-RMZ-WR-S 1-3; FW-WSW-RMZ-FSR-DC 1-13; and FW-WSW-RMZ-FSR-G 1-3).

Additionally, project-specific analysis of impacts from proposed activities on National Forest System lands under the Taos Ski Valley permit will use these watershed and water plan components to provide direction for any proposed activities along the Rio Hondo and tributaries. The national forest would conduct a National Environmental Policy Act environmental analysis at the project level to determine effects of the proposed activities.

Concern Statement 656 **Wetland Jewels, Support**

General support for the Wetland Jewels Management Area. They are all beautiful with a diversity of life. The management area would provide key protections to high priority wetlands and clean water and an important mitigation tool in combating the mounting impacts of climate change. They serve as anchors

of ecological and community resilience and protect our economy, natural heritage, opportunities for outdoor recreation, and livelihoods for future generations. They contribute clean water to downstream communities. They would protect native species including rare and important plant species and communities. The exclusion of the WJMA in the Draft Plan based on the false notion that incorporating the components of the WJMA would detract from the Forest's ability to conduct restoration activities and efforts elsewhere on the Forest necessarily fails. The Forest-wide approach does not adequately protect watershed and water resource values.

Associated Comment Letters: 123, 130, 134, 145, 147, 148, 150, 165, 174, 236, 1826, 1861, 4853, 4856, 4860, 4868, 4893, 4911, 4924, 4959, 4964, 5073, 5303, , 5407, 5515, 5561, 5620, 5673

Response

The Wetland Jewels Management Area is not included in the final Plan. The FEIS shows that focusing restoration on wetlands in the Wetland Jewels Management Area would be less effective than a forestwide approach (Chapter 3, Vegetation Communities and Fuels, Environmental Consequences for Riparian - Alternative 4). Additional language describing the importance of headwater wetlands and first order streams and the benefit of restoring watersheds from top to bottom has been incorporated into the Watershed and Water section introduction (Final Plan, Chapter 2).

Many of the values listed in the comment are addressed by resource-specific sections in the final Plan. For example, recreational opportunities are addressed in the FW-REC section; water quality is addressed by FW-WSW-DC-7; native species are addressed by the FW-WFP section and FW-VEG-DC-5; and watershed and water resources are addressed under the FW-WSW section and subsections. While the Wetland Jewels Management Area would focus restoration activities in those areas (through MA-WJMA-O-1, O-2, O-3, and O-4), treatment return on investment is likely to be low, since 49 percent of the Wetland Jewels Management Area is in either designated wilderness, recommended wilderness, or inventoried roadless areas, each of which restricts management options compared to other forest areas. Furthermore, it is not clear that the condition of wetlands in the Wetland Jewels Management Area is different than that of other wetlands on the forest; nor is it clear therefore that focusing restoration work in these areas is an effective approach for meeting desired conditions. Forestwide, maintenance of the priority wetland functions would be weighted toward functions more common in the Wetland Jewels Management Area. In the case of alternative 4, other priority wetland functions would be less well-maintained; by contrast, with the action alternatives, wetland restoration and management is guided by forestwide plan components.

Forestwide wetland conditions would be slightly worse under alternative 4 because restoration overall would be slightly less effective in the Wetland Jewels Management Area that overlaps with wilderness, recommended wilderness, or inventoried roadless areas because of more difficult access and limits on the types of equipment or techniques that could be used. Some wetland improvement might occur in the La Jara Wetland Jewels Management Area because there would be less opportunity for road, trail, and infrastructure development there. However, in La Jara, as in all other Wetland Jewels Management Areas, any development under alternative 2-modified would be constrained by watershed, wetland riparian, and riparian management zone plan components, such that any additional wetland impacts would be minimal. All other Wetland Jewels Management Areas would be subject to additional constraints under alternative 2-modified—either from components for the spruce-fir forest vegetation community, Valle Vidal Management Area, the San Antonio management area, or a combination thereof. Consequently, there would be essentially no difference in wetland conditions in these areas (see Environmental Consequences for Riparian - Alternative 4 in the FEIS).

Concern Statement 657 **Wetland Jewels, Support**

Differentiating water resources based on their functions would acknowledge their value and protecting existing wetland functions would shield wetlands from degradation and thus the need for restoration in the future.

Associated Comment Letter: 4911

Response

The final Plan differentiates water resources by type (Water, Riparian Management Zones, Streams, Waterbodies, Springs and Seeps, Wetland Riparian, and Forest and Shrub Riparian); recognizes their unique function and values; and provides desired conditions, objectives, guidelines, and management approaches to protect them from degradation. The importance of headwater wetlands and first order streams and the benefit of restoring watersheds from top to bottom were added to the Watershed and Water section introduction (Final Plan, Chapter 2).

Concern Statement 658 **Wetland Jewels, Protection, Restoration**

The Wetlands Jewels are regionally significant where clusters of high priority wetlands occur in different areas of the forest. Protecting and restoring wetlands in the Wetland Jewels Management Area would distribute benefits across the forest.

Associated Comment Letter: 4911

Response

The Wetland Jewels Management Area is not included in the final Plan. The FEIS shows that focusing restoration on wetlands in the Wetland Jewels Management Area would be less effective than a forestwide approach (Chapter 3, Vegetation Communities and Fuels, Environmental Consequences for Riparian - Alternative 4). Additional language describing the importance of headwater wetlands and first order streams and the benefit of restoring watersheds from top to bottom has been incorporated into the Watershed and Water section introduction (Final Plan, Chapter 2).

Concern Statement 659 **Wetland Jewels, Support**

General support for Wetland Jewels, Valle Vidal, and San Antonio Management Areas.

Associated Comment Letters: 123, 173, 236, 1218, 1312, 1514, 1826, 3332, 4856, 4925, 5347

Response

The Valle Vidal and San Antonio Management Areas are included in the final Plan. The FEIS shows that focusing restoration on wetlands in the Wetland Jewels Management Area would be less effective than a forestwide approach (Chapter 3, Vegetation Communities and Fuels, Environmental Consequences for Riparian - Alternative 4). The Wetland Jewels Management Area is therefore not included in the final Plan. Discussion of the importance of headwater wetlands has been added to the FW-WSW section.

Concern Statement 660 **Wetland Jewels, Opposition**

General opposition to the Wetland Jewels Management Area.

Associated Comment Letter: 4895

Response

The Wetland Jewels Management Area is not included in the final plan.

Concern Statement 661 **Wetland Jewels, Expansion**

The Wetland Jewels Management Area should be adopted but the extent of this management area should be expanded.

Associated Comment Letter: 4911

Response

The final Plan outlines desired conditions, objectives, guidelines, and management approaches for water, wetlands, and related resources. Those plan components have been designed to provide management guidance and direction suitable for all wetland resources, regardless of size, location, or function. The FEIS shows that focusing restoration on wetlands in the Wetland Jewels Management Area would be less effective than a forestwide approach (Chapter 3, Vegetation Communities and Fuels, Environmental Consequences for Riparian - Alternative 4). The WJMA is therefore not included in the final Plan.

Concern Statement 662 **Wetland Jewels, Education**

The Wetland Jewels Management Area should be used to educate and inform the public about the value of wetland resources on the Forest.

Associated Comment Letters: 4911, 5405, 5631

Response

The value of wetland resources can be conveyed to the public for educational purposes in many ways. While the Wetland Jewels Management Area is not included in the final Plan, this does not preclude opportunities for public involvement and education regarding the importance of wetlands.

Concern Statement 663 **Wetland Jewels, Wetland Functions**

The Forest, in the DEIS inaccurately states that the Wetland Jewels are more highly rated than other wetlands for only 4 functions instead of the 6 functions (streamflow maintenance, headwater, coldwater species, discharge flow, sediment retention and impaired) that the Forest's own analysis clearly shows. It is also important to note that Wetland Jewels score higher than other wetlands in the forest on several functions that are important climate resilience functions related to maintaining cold consistent flow in our rivers. For example, for streamflow maintenance, the Wetland Jewels protect 44.5 percent of all wetlands with high streamflow maintenance function and protects 31 percent, 25.4 percent, and 23.4 percent of all wetlands with highly rated headwater, discharge flow, and coldwater species, respectively.

Associated Comment Letter: 4911

Response

The comparison of wetland ratings has been clarified in the FEIS (Chapter 3, Vegetation Communities and Fuels, Environmental Consequences for Riparian - Alternative 4). Originally, wetland ratings in the Wetland Jewels Management Area were classified as higher than, lower than, or similar to the rest of the national forest. The occurrence of wetlands associated with an impaired stream and wetlands with a high rating for sediment retention were originally described as similar inside and outside of the Wetland Jewels Management Area. It is correct that both conditions are slightly more likely to occur in the Wetland Jewels Management Area (6 percent and 13 percent more likely, respectively) and the FEIS now characterizes these characteristics as more likely rather than similar.

Concern Statement 664 **Wetland Jewels, Value of Protection**

Wetland Jewels were identified by looking for large clusters of relatively high scoring wetlands to identify dense areas of wetlands where protection and restoration could have the most impact. While there may be isolated wetlands scattered across the Forest with highly rated wetlands for many of the functions, the value of protecting or exerting large mobilization of restoration efforts for small isolated wetland polygons is of less value.

Associated Comment Letters: 4911

Response

The purpose and intent of the final Plan is to provide desired conditions, objectives, guidelines, and management approaches for water, wetlands, and related resources in a concise and thorough format.

Many of the wetlands included in the Wetland Jewels Management Area are located in higher-elevation watersheds where precipitation is greater. The notion that smaller areas of wetlands are of less value is inconsistent with managing landscapes and habitat for resiliency, redundancy, distribution, and sustainability throughout. In some instances, smaller wetland areas in lower-elevation watersheds might be more critical to restore from a habitat perspective.

Concern Statement 665 **Wetland Jewels, Designated Areas**

We recognize there is overlap between a Wetland Jewel Management Area and existing roadless areas and wilderness, but it is important to consider that if roadless protections are administratively or congressionally removed, many of these wetland jewels would lose existing protections. Moreover, wilderness and roadless protections, while often rooted in watershed protection values, do not directly provide water quality or wetland specific protections—those protections are instead largely indirect at best. For that reason, we believe it is important to provide an additional layer of protection for these wetland jewels in the forest plan and to provide a more direct and overt connection between forest management and water quality protection.

The Forest Plan should include this plan language: provide additional layers of protection for wetland jewels in the forest plan and provide a more direct and overt connection between forest management and water quality protection.

Associated Comment Letters: 4911

Response

Plan components for inventoried roadless areas are included in the DA-IRA section of the plan. It is not the intent of the Carson NF to limit discretion of the Department of Agriculture or Congress to make future decisions regarding the management of public lands, including changes to the Roadless Rule. The final Plan directs management to meet State water quality standards in wetlands (FW-WSW-DC-7). Watershed values are addressed in the Watershed and Water section and subsections in the final Plan. Wetland values are addressed in the Riparian Management Zone and Wetland Riparian sections in the final Plan.

Concern Statement 666 **Wetland Jewels, Wilderness**

The Wetland Jewels Management Area should not overlap Wilderness areas in order to limit management complexity.

Associated Comment Letters: 4911, 5303

Response

The Wetland Jewels Management Area is not included in the final Plan. We agree that the restoration focus of the Wetland Jewels Management Area and the preservation focus in designated and recommended wilderness together would add unnecessary management complexity and complicate plan direction. Wetland management is effectively addressed via forestwide Watershed and Water plan components that apply both within and outside designated and recommended wilderness (FEIS, Chapter 3, Environmental Consequences for Riparian - Alternative 4). Prioritization of wetland restoration is best addressed on a site-specific basis—as opportunities arise, in conjunction with interested partners, and with consideration of possible approaches and limitations such as those required to protect the unmodified character of wilderness areas.

Concern Statement 667 **Wetland Jewels, Benefits**

The DEIS should discuss the substantial benefits that Wetland Jewels provide. Restoration practices would maximize water quality and wildlife habitat, and for carbon sequestration. These practices would include invasive species removal, bank stabilization, stream channel restoration, seeding or planting native species in denuded areas, or by minimizing recreation impacts. In addition, Wetland Jewel

Management Area plan components would minimize road impacts and maximize the beneficial effects of restoring hydrologic processes across the Forest. The Wetland Jewels Management Area would increase resiliency and provide increased ability to adapt to a changing climate or other stressors.

Associated Comment Letter: 4911

Response

The Wetland Jewels Management Area is not included in the final Plan. Restoration in the Wetland Jewels Management Area would have benefits where it occurred; however, the FEIS finds that, "Forestwide wetland conditions would be slightly worse under alternative 4 because restoration overall would be slightly less effective." (FEIS, Chapter 3, Vegetation Communities and Fuels, Environmental Consequences for Riparian - Alternative 4).

The FEIS does discuss benefits that would be provided by the Wetland Jewels Management Area. The specific impacts of focusing restoration in the Wetland Jewels Management Area have been clarified: "Forestwide, maintenance of the priority wetland functions would be weighted toward those functions that are more common in the Wetland Jewels Management Area, while other priority wetland functions would be less well-maintained under alternative 4 compared to other action alternatives, where wetland restoration and management is guided by forestwide plan components" (FEIS, Chapter 3, Vegetation Communities and Fuels, Environmental Consequences for Riparian - Alternative 4).

Concern Statement 668 **Wetland Jewels, Grazing**

Grazing should be prohibited in the Wetland Jewels Management Area.

Associated Comment Letters: 126, 132, 1218, 4845, 4860, 5569, 5625, 5669, 5716

Response

Grazing decisions are made at the project level. Under all alternatives, the rangelands management and livestock grazing program has multiple mechanisms to evaluate, review, and adapt management to effectively protect resources and respond to changing conditions. Stocking decisions regarding the amount of livestock grazing authorized for each grazing allotment are considered as part of National Environmental Policy Act project-level analysis and beyond the scope of this programmatic analysis for the final Plan. Project-level analysis would cover changes to authorized grazing through term grazing permits (subject to forestwide standards and guidelines), allotment management plans, and annual operating instructions. In addition, the alternatives include a range of options regarding how to deal with vacant and understocked allotments that could increase or decrease grazing numbers. Based on this, it was concluded that a restricted grazing alternative was not necessary (FEIS, Alternatives Considered but Eliminated from Detailed Study section).

Concern Statement 669 **Wetland Jewels, Support, Add Climate Resilience**

For the Wetland Jewel Management Area:

Adopt this desired condition: MA-WJMA-DC-1 - Wetlands provide aquatic invertebrate habitat, fish habitat, waterfowl and water bird habitat, groundwater recharge capacity, streamflow maintenance capacity, surface water detention capacity, and carbon sequestration capacity, consistent with the wetland's potential.

Modify MA-WJMA-DC-2 proposed in alternative 4 of the DEIS - "In cases where a Wetland Jewel Management Area is smaller than a watershed, the Wetland Jewels Management Area portion of the watershed is functioning properly in that it exhibits high geomorphic, hydrologic, and biotic integrity relative to its potential condition"

Add a proposed new desired condition: MA-WJMA-DC-3 – "Wetlands are fully restored, maintained, and enhanced to provide for healthy watershed condition, compliance with water quality standards, and operate as anchors of ecological and community resilience to a changing climate."

Associated Comment Letters: 4856, 4911, 4925, 4964, 5303

Response

The Wetland Jewels Management Area is not included in the final Plan; however, forestwide plan components with similar direction apply to these areas. Proposed language in WJMA-DC-1 is addressed by Watershed and Water plan components (FW-WSW-DC-3, -4, -5, and -7), FW-WSW-G-3, and FW-WSW-RMZ-DC-2 and -5). Language proposed in WJMA-DC-2 is addressed by FW-WSW-RMZ-DC-1 and -5. Proposed language in WJMA-DC-3 is addressed by Watershed and Water plan components ((FW-WSW-DC-1, -2, -3, -4, 5, 6, and 7; FW-WSW-G-3; and FW-WSW-RMZ-DC-1, -2 and -5).

Concern Statement 670 **Wetland Jewels, Climate Resilience**

Add a new desired condition for the Wetland Jewel Management Area (WJMA-DC-3): Wetlands are fully restored, maintained, and enhanced to provide for healthy watershed condition, compliance with water quality standards, and operate as anchors of ecological and community resilience to a changing climate.

Associated Comment Letter: 5303

Response

The Wetland Jewels Management Area is not included in the final Plan. Wetland restoration and management is addressed by forestwide Watershed desired conditions (FW-WSW-DC-2 and 3), forestwide Watershed guidelines (FW-WSW-G-3), and Wetland Riparian desired conditions (FW-WSW-RMZ-WR-DC-1–5)

Concern Statement 671 **Wetland Jewels, Objectives**

Objectives for restoration in the Wetland Jewels Management Area should be in addition to, not instead of forestwide objectives. Leaving the forestwide restoration components intact, while also adopting a Wetland Jewels Management Area accounts for any cumulative impacts and ensures due protection of both high-priority wetlands forestwide and as specified in the Wetland Jewels Management Area.

Associated Comment Letters: 4856, 4911, 4925, 4964

Response

We only considered alternatives that are achievable. Objectives are based on the Carson NF's reasonably foreseeable internal capacity. Objectives were developed based on "recent past budget obligations for the unit," as required under the 2012 planning directives (FSH 1909.12 22.12(5)). The restoration objective of 200 to 300 acres of riparian areas per year reflects the national forest's capacity to do this work. It is unreasonable to double this objective by retaining FW-WSW-RMZ-O-1 and adding MA-WJMA-O-1. MA-WJMA-O-2 from alternative 4 has been incorporated into FW-WSW-O-1 in the final Plan. MA-WJMA-O-3 from alternative 4 is not appropriate as a land management plan objective. Plan components do not commit the agency to act (FSH 1909.12 22.1(2)(d)) and objectives should be expressed in terms of outcomes, not actions (FSH 1909.12 22.12(4)).

In alternative 4, FW-TFA-O-1 is doubled, and MA-WJMA-O-4 focuses unneeded road removal in the Wetland Jewels Management Area. This increase reflects a management tradeoff to focus on road removal at the expense of active management such as thinning (final Plan FW-VEG-MCD-O-1 and FW-VEG-PPF-O-1). It is unreasonable to further increase this objective by removing 20 miles of unneeded roads forestwide (final plan FW-TFA-O-1) and an additional 40 miles of unneeded roads in the Wetland Jewels Management Area (alternative 4 MA-WJMA-O-4) even if other management occurs at the level described under alternative 4.

Concern Statement 672 **Wetland Jewels, Objectives**

Adopt WJMA-O-2 and O-3 and remove WJMA-O-1 and O-4 so that they apply forestwide.

Associated Comment Letters: 4856, 4893, 4911, 4925, 4964, 5303

Response

While the Wetland Jewels Management Area is not included in the final Plan, WJMA-O-1 is addressed by FW-RMZ-O-1 and applied forestwide. Removing unneeded roads forestwide is addressed by FW-TFA-O-1. The difference in miles of road obliterated or naturalized between alternatives 2 and 4 (20 miles versus 40 miles) is a tradeoff in alternative 2 based on the theme of more mechanical treatment. As described in the record of decision, lower levels of road obliteration and naturalization were selected to put more available resources toward forest, stream, and riparian restoration.

WJMA-O-2 is addressed by FW-WSW-RMZ-O-1 in the final Plan, which has incorporated the suggested language, "…to include installing 35 to 100 erosion control treatments to stabilize headcuts, road drainage impacts, and other erosional features."

WJMA-O-3 is addressed by the addition of Management Approach 4 for Watershed and Water, "Consider working with partners to develop wetland action plans for headwater wetland restoration projects to address wetland stressors by identifying and prioritizing mitigation and restoration actions."

Concern Statement 673 **Wetland Jewels, Roads, Infrastructure, Mining, Military Ground Operations, Watershed Condition**

Adopt WJMA-S-1: No new permanent roads or motorized trails shall be constructed.

Adopt WJMA-S-2: No new communication or electronic equipment, pipelines, powerlines, fiber-optic lines, or associated infrastructure shall be constructed.

Modify WJMA-S-3 as follows: Hard rock mining and fluid minerals leasing and development is prohibited, except as authorized by law.

Adopt WJMA-S-4: Military ground operations are prohibited.

Add the proposed new WJMA-S-5 as follows: Implementation and project-level action shall not cause permanent degradation of watershed condition.

Associated Comment Letters: 4856, 4911, 4925, 4964

Response

While the final Plan does not include the Wetland Jewels Management Area, WJMA-S-1 is addressed by FW-WSW-G-2 in the final Plan. In addition, new permanent roads or motorized trails are prohibited in wetlands by FW-WSW-RMZ-WR-S-4.

New infrastructure construction in wetlands is addressed by forestwide plan components, specifically, FW-WSW-RMZ-G-2, and FW-WSW-RMZ-WR-S-2. Site-specific analysis and project-level decision making is the most effective means of determining the appropriateness of allowing infrastructure development within or near wetlands or other water features. Mitigation, alternative routes, use of technology (such as boring underneath stream crossings or small wetlands), or other design criteria would all be part of any decision process for this type of proposal.

The suggested language for WJMA-S-3 cannot be incorporated as a standard in the final Plan without conducting a leasing analysis. The exploration for and production of oil and gas resources is generally allowed on National Forest System lands as required by the Mining and Minerals Policy Act of 1970 (30 U.S.C. 21a). Exceptions include lands formally withdrawn from mineral leasing by Congress or Executive order. The decision to lease lands is not dictated by the land management plan, but by a leasing analysis (FSH 1909.12 23.23i(4)(d). Leasing analyses are different in scope, proposed action, and level of detail than a programmatic plan revision; the Carson NF is not conducting an oil and gas leasing

availability analysis at this time, as would be required by 36 CFR 228 Subpart E, 228.102. Instead, the final Plan includes components for multiple resources that would guide future leasing decisions.

Addition of WJMA-S-4 is not needed; any special use authorization would be considered on a case-by-case basis and would need to be consistent with all applicable watershed, riparian, or wetland resource plan components. A project-level analysis and decision would determine what could be allowed in or near wetland riparian or other resources.

WJMA-S-5 regarding permanent degradation of watershed condition is addressed by FW-WSW-DC-1, which strives to attain proper function of watersheds (geomorphic, hydrologic, and biotic integrity) and FS-WSW-DC-6, which aims to provide multiple use of watersheds with no long-term decline in ecological condition. Short-term impacts may be allowed when they serve to improve conditions over the life of the final Plan.

Concern Statement 674 **Wetland Jewels, Objectives Infrastructure, Range, Wetland Functions, Watershed Health, Collaboration**

Adopt WJMA-G-1, as written.

Add proposed new guideline, MA-WJMA-G-2: Restoration and enhancement infrastructure (e.g., wetland/riparian fencing, culverts) should be constructed and maintained to minimize impacts on wildlife.

Proposed new guideline, MA-WJMA-G-3: Where consistent with protection, restoration, and enhancement of priority wetland functions, implementation and project level action should be designed to increase rangeland productivity in working landscapes.

Proposed new guideline, MA-WJMA-G-4: Infrastructure not necessary for protection, restoration, or enhancement of Wetland Jewels Management Area protected areas should be modified or removed to avoid or minimize impacts on priority wetland functions. Modification or removal of such infrastructure shall be assessed as a viable management alternative prior to any maintenance or reconstruction action.

Proposed new guideline, MA-WJMA-G-5: Action to protect, restore, and enhance Wetland Jewels Management Area protected areas should be designed to protect broader-scale forest and watershed health.

Proposed new guideline, MA-WJMA-G-6: Opportunities for collaboration and hands-on restoration activities for volunteers and interested stakeholders is encouraged to help achieved desired Wetland Jewels Management Area plan components while deepening the public's connection to the forest and providing opportunities for the public to learn about and value wetland resources.

Associated Comment Letters: 4856, 4911, 4925, 4964

Response

The Wetland Jewels Management Area is not included in the final plan. MA-WJMA-G-1 from alternative 4 is addressed by other components in the final Plan. Wetland function is addressed by FW-WSW-RMZ-DC-1. Aquatic invertebrate habitat is addressed by FW-WSW-DC-2, -4, and -5 and FW-WSW-RMZ-DC-9. Fish habitat is addressed by FW-WSW-DC-2 and -5 and FW-WFP-DC-1, -2, -3, -4, -5, -7, and -10. Waterfowl and water bird habitat are addressed by FW-WSW-DC-2 and -5 and FW-WFP-DC-1, -2, -3, -4, -5, -6, -7, and -10. Groundwater recharge is addressed under FW-WSW-DC-3 and FW-WSW-RMZ-WR-DC-1. Streamflow maintenance is addressed by FW-WSW-STM-DC-6 and FW-WSW-RMZ-WR-DC-1. Surface water retention capacity is addressed by FW-WSW-DC-1 and FW-WSW-RMZ-WR-DC-1. Carbon sequestration is addressed by FW-VEG-DC-3 and FW-SL-DC-1.

The proposed MA-WJMA-G-2 guideline is addressed by FW-WFP-G-6, FW-GRZ-S-2, and FW-GRZ-G-3.

Proposed guideline, MA-WJMA-G-3, is addressed by FW-GRZ-DC-4, FW-GRZ-DC-6, and FW-GRZ-S-1.

This proposed guideline, MA-WJMA-G-4, is addressed by FW-WSW-G-2, FW-WSW-G-, FW-WSW-MA-4, WSW-RMZ-G-2, FW-WSW-RMZ-WR-2, and FW-WSW-RMZ-WR-4.

The proposed guideline, MA-WJMA-G-5, is addressed by FW-WSW-DC-1 and FW-WSW-DC-6.

The proposed guideline, MA-WJMA-G-6, is addressed by FW-WSW-MA-4.

Concern Statement 675 **Wetland Jewels, Treatment Prioritization**

FW-WSW-RMZ-O-1 should be modified as follows: Treatments align with priority watersheds and/or the Wetland Jewels Management Area.

Associated Comment Letter: 4911

Response

The Wetland Jewels Management Area is not included in the final Plan. FW-WSW-RMZ-O-1 has been modified to include “other community priorities” to make the objective flexible enough that it could be fulfilled by restoring riparian areas anywhere on the Carson NF. Priority watersheds can be modified over the life of the Plan and could include those areas in the Wetland Jewels Management Area under alternative 4.

Concern Statement 676 **Wetland Jewels, Analysis**

The final EIS must specifically analyze environmental impacts related to the Wetland Jewels Management Area. The DEIS does not specifically analyze the Wetland Jewels Management Area (i.e., there is no section specifically about the Wetland Jewels Management Area, although it is mentioned elsewhere in the DEIS).

Associated Comment Letters: 4856, 4924, 4925

Response

In accordance with the National Environmental Policy Act, the FEIS discloses the impact of the proposed action on “environmental amenities and values” (42 U.S.C. 4332 (2)(B)). The FEIS is organized based on environmental amenities and values such as natural resources like streams or bristlecone pine, or benefits to people like recreation or facilities. Designated areas are congressionally mandated to be managed for specific benefits to people or specific environmental values. The addition of a management area is a proposed action that has impacts on the environment. The impact of the proposed action to create a Wetland Jewels Management Area is discussed in relation to the resources or benefits that would be affected, including high-elevation forests (FEIS, p. 60), riparian areas (FEIS, p. 74), watersheds and water (FEIS, p. 154), wildlife species (FEIS, Environmental Consequences for Wildlife, Fish, and Plants section), grazing (FEIS, p. 296), and transportation (FEIS, p. 342).

Concern Statement 677 **Wetland Jewels, Analysis**

The DEIS analysis of the Wetland Jewels Management Area ignores that many wetlands, by their nature, typically would not score high for several functions at the same time. For example, headwater wet meadows and fens are associated with streamflow maintenance and discharge flow but are generally too wet to support tall woody species that provide shading for fish.

Associated Comment Letter: 4911

Response

The FEIS does not dispute the fact that some types of wetlands generally provide different functions than others. The Environmental Consequences for Riparian - Alternative 4 section of the FEIS compares the percentage of wetlands that score high for each wetland function identified as a priority (MA-WJMA-

DC-1) in the Wetland Jewels Management Area to the percentage of wetlands that score high for each function outside of the management area. Table 26 and figure 11 in the FEIS show that the wetlands included in the Wetland Jewels Management Area are more likely to rate highly for just 6 of the 11 functions identified as priorities. Thus, focusing restoration of wetlands in the Wetland Jewels Management Area would have disproportionate benefits on some types of wetlands that provide certain wetland functions, but would not effectively address all the priority wetland functions.

The effects of the Wetland Jewels Management Area have been clarified in the Environmental Consequences for Riparian - Alternative 4 section of the FEIS, "Forestwide, maintenance of the priority wetland functions would be weighted toward those functions that are more common in the Wetland Jewels Management Area.…"

Concern Statement 678 **Wetland Jewels, Analysis**

The Forest, in its analysis, states that Wetland Jewels Management Area contains a small percentage of wetlands by area. This ignores the distinct but outsized benefits that protections can provide across the landscape. The Wetland Jewels Management Area could be shrunk as long as the wetlands themselves are included along with some level of buffer area. Including a broader "area of interest" in the Wetland Jewels Management Area that extends from the wetlands upgradient to watershed boundaries, terrain breaks, or other natural features is important because activities in the uplands above wetlands can have large impacts on downgradient wetlands.

Associated Comment Letter: 4911

Response

The Wetland Jewels Management Area is not included in the final Plan. The FEIS shows that focusing restoration on wetlands in the Wetland Jewels Management Area would be less effective than a forestwide approach (Chapter 3, Vegetation Communities and Fuels, Environmental Consequences for Riparian - Alternative 4). While reducing the size of the Wetland Jewels Management Area may reduce the potential for conflicting uses in the management area, it would not improve restoration effectiveness or change the effectiveness of wetland management. The effects described in Environmental Consequences for Riparian - Alternative 4 section of the FEIS are similar to those for alternative 2. A more narrowly defined management area would do little to improve wetland conditions in most of the management area compared to the final Plan; and restoration would be less effective overall.

Concern Statement 679 **Off-Highway Vehicle Management Area, Support**

Support for the establishment of an Off-Highway Vehicle Management Area as described in alternative 3. By effectively and aggressively tapping into the motorized recreation community as partners and collaborators, the Revised Forest Plan could be further enhanced by incorporating additional elements from alternative 3 without negatively impacting the trail budgets. OHV use on non-motorized trails is a continuing management problem on the Forest and designating an area for their recreation coupled with user education will reduce the encroachment on non-motorized areas.

Associated Comment Letters: 3268, 4960, 4970

Response

We considered alternative 3, which analyzed roughly 2,978 acres as an Off-Highway Vehicle Management Area (OHVMA). The preferred alternative does not include an OHVMA. As discussed in the record of decision and the FEIS, the OHVMA would increase sedimentation and wildlife impacts. In addition, the final Plan reflects a balanced distribution of Carson NF resources based on recent budget allocations. The OHVMA would require additional capacity to plan, construct, and maintain infrastructure that may come from contributions by partners and volunteers—as described in the final Plan (FW-PART-DC-1, Management Approaches for Recreation-3, and -9). It is not appropriate for the Plan to require partnerships to develop and maintain a management area. Trails have been added to FW-

REC-DC-5 as a specific example of recreation opportunities that should be available, commensurate with public interest and trends.

Concern Statement 680 **Off-Highway Vehicle Management Area, Opposition**

Strong opposition to developing an "Off Highway Vehicle Management Area."

Associated Comment Letters: 111, 4853

Response

The responsible official has opted not to include the Off-Highway Vehicle Management Area in the final Plan.

Nonnative Invasive Species - NIS

Concern Statement 681 **Nonnative Invasive Species, Inventory and Mapping**

Early detection and rapid response remains a critical component of effective weed management (Westbrooks 2004); complete mapping and inventory of invasive species populations. The addition of an inventory and mapping objective is requested. This would inform decisions related to treatment locations and priorities. It would also assist the Carson NF in identifying partners to assist with treatments on private and public lands adjacent to the forest.

Associated Comment Letters: 4887, 5422

Response

The Nonnative Invasive Species Standard, FW-NIS-S-1, states: "Forest management activities must apply best management practices and management guidance from the most current Forest Service Southwestern Region Guidance for Invasive Species Management, to minimize the introduction or spread of invasive species, including decontamination procedures on vehicles and equipment and using weed-free products." The best management practices are outlined in the Forest Service Southwestern Region Guidance for Invasive Species Management (Region 3) Handbook for Invasive Plant Detection and include surveillance, searches, and surveys. The Handbook states: "With this technique, a geographic area is systematically surveyed for invasive species to determine whether these species are present. By surveying the landscape, invasive plant cover and/or number of patches can be recorded through inventory and mapping to determine the intensity of infestation and acres covered."

Concern Statement 682 **Nonnative Invasive Species, Treatment**

Increase the proposed invasive species treatment objectives above 300 to 500 acres annually.

Associated Comment Letter: 4887

Response

The objectives for invasive species treatment are based on the capacity of our workforce; if additional capacity is available, such as through partnerships, additional acres could be treated under the final Plan.

Concern Statement 683 **Nonnative Invasive Species, Mining**

Nonnative Invasive Species plan components should include a standard directing incorporation of weed prevention efforts into mining operation plans approved by the Forest, and permit language from New Mexico Mining and Minerals Division.

Associated Comment Letters: 4951, 5574

Response

Mining operations require a special uses permit; special uses are handled administratively and have to follow plan components in FW-NIS-S-1: "Forest management activities must apply best management

practices and management guidance from the most current Forest Service Southwestern Region Guidance for Invasive Species Management, to minimize the introduction or spread of invasive species, including decontamination procedures on vehicles and equipment and using weed-free products;" and FW-NIS-S-2: "Projects, authorized activities, and special uses shall be designed (e.g., weed hay, off-highway vehicle washing, waders) to reduce the potential for introduction of new species or spread of existing invasive or undesirable aquatic or terrestrial nonnative populations."

Concern Statement 684 **Nonnative Invasive Species, State Noxious Weed List**

Management Approach for Nonnative Invasive Species-1. To avoid confusion please use the term "State Noxious Weed List" in place of the "introduced, invasive, and noxious plant list" within this management approach. This term is inaccurate. In the state of New Mexico, New Mexico Department of Agriculture maintains the State Noxious Weed List; and it is posted on the New Mexico Department of Agriculture website.

Associated Comment Letter: 5422

Response

As suggested, the final Plan language was changed to State Noxious Weed List in Management Approaches for Nonnative Invasive Species.

Concern Statement 685 **Nonnative Invasive Species, Native Seed**

The final Plan should require the use of native plant seed mixes.

Associated Comment Letters: 4887, 5347

Response

The final Plan addresses native plants and the management of invasive species in several places. FW-WFP-G-5 requires vegetation treatments to comprise a mix of native plant species for seeding to increase plant cover and improve the quality and diversity of forage for both wildlife and livestock. Similarly, FW-NIS-S-1 requires that forest management activities must apply best management practices and management guidance from the most current Forest Service Southwestern Region Guidance for Invasive Species Management to minimize the introduction or spread of invasive species, including decontamination procedures on vehicles and equipment and using weed-free products. FW-NIS-G-6 requires preventive measures, such as requiring pre- and post-work cleaning of equipment and using certified weed-free seed, to be implemented throughout contracting, permitting, and other administrative processes. Weed-free plant material should be selected for all seeding and mulching projects to restore natural species composition and ecosystem function to the disturbed area. Site-appropriate plant or seed materials that are capable of establishing and are not invasive, should be used.

Concern Statement 686 **Nonnative Invasive Species, Management**

The Forest Service should actively manage landscapes to control and reduce noxious weeds through an integrated weed management approach (biological, mechanical, chemical, and outreach).

Associated Comment Letter: 4887

Response

FW-NIS-S-1 and FW-NIS-G-3 in the final Plan require the Carson NF to use an integrated weed management approach or the best available science to control and reduce noxious weeds.

Concern Statement 687 **Aquatic Invasive Species Program**

The state-level efforts to prevent nonnative species introduction and infestations described in Nonnative Invasive Species Management Approaches should explicitly reference the New Mexico Department of

Game and Fish's Aquatic Invasive Species Program and “Clean, Drain, and Dry” guidelines. These efforts are critical to keeping New Mexico free of invasive quagga and zebra mussels.

Associated Comment Letters: 4951, 5574

Response

Nonnative Invasive Species Management Approach 5 in the final Plan states, “Consider New Mexico Department Game and Fish ‘Clean, Drain, and Dry’ guidelines as a resource to prevent nonnative species introduction and infestation into water resources.”

Range - RNG

Concern Statement 688 **Livestock Grazing Program**

The current CNFP discriminates against the children of northern New Mexico by diminishing the future of the Livestock Grazing Program. And, “The rights, privileges and immunities, civil, political and religious guaranteed to the people of New Mexico by the Treaty of Guadalupe Hidalgo shall be preserved inviolate.”

Associated Comment Letter: 138

Response

The purpose of forest plan revision is to update management direction to address areas of the 1986 Plan identified as inadequate or outdated. As documented in the FEIS, implementing the final Plan would move the Carson NF further toward desired conditions and better meet the expectations that the public has expressed through extensive public engagement throughout the revision process.

The final Plan does not alter or dictate the size of the Carson NF grazing program; it provides a programmatic framework that guides site-specific actions, but does not authorize, fund, or carry out a project or activity. The final Plan provides for livestock grazing as addressed in the Sustainable Rangelands and Livestock Grazing (GRZ) section. Grazing is also recognized in the Northern New Mexico Traditional Communities and Uses section. Livestock permitting decisions are made on a site-specific basis, based on the capability and suitability of an allotment. The final Plan is consistent with laws, policies, and regulations. In USDA programs, discrimination is prohibited on the basis of race, color, religion, sex, age, national origin, marital status, sexual orientation, familial status, disability, limited English proficiency, or because all or a part of an individual's income is derived from a public assistance program.

Concern Statement 689 **Grazing, Opposition**

General opposition to livestock grazing on the national forest.

Associated Comment Letters: 119, 4892, 9414, 4962, 5399

Response

The Carson NF is a Multiple-Use Forest and follows the Multiple-Use Sustained-Yield Act of 1960, which states, “Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (16 U.S.C. 528) it is the policy of the Congress that the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes.”

Section 4 of Multiple-Use Sustained-Yield Act states, “As used in this Act, the following terms shall have the following meanings: (a) ‘Multiple use’ means: The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less

than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output. 'Sustained yield of the several products and services' means the achievement and maintenance in perpetuity of a high level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land."

To discontinue grazing throughout the plan area is beyond the scope of this plan; current permitted grazing has been authorized through previous allotment-level National Environmental Policy Act analysis, including grazing of riparian areas. An alternative that would restrict grazing or eliminate grazing was considered in the FEIS (p. 22). However, a no grazing alternative would not meet legal direction that forests will be managed using multiple-use and sustained-yield principles, as per the National Forest Management Act and Multiple-Use Sustained-Yield Act just discussed. Also, it would not allow attainment of desired condition for livestock grazing to contribute to the long-term socioeconomic diversity, stability, and cultural identity of local communities. Therefore, a no grazing alternative is inconsistent with existing laws, Forest Service policy and direction, as well as the final Plan's desired conditions.

Concern Statement 690 **Grazing, Opposition**

All grazing decisions need to consider that livestock grazing is in conflict with maintenance and restoration of other crucial natural elements of the landscape. In particular, because concentrating livestock in and around at-risk plant and animal habitats will have negative impacts to that wildlife inconsistent with other desired conditions for at-risk species and vegetation

Associated Comment Letter: 5347

Response

The Carson NF is a Multiple-Use Forest and follows the Multiple-Use Sustained-Yield Act of 1960, which states, "Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (16 U.S.C. 528) it is the policy of the Congress that the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes."

Section 4 of Multiple-Use Sustained-Yield, "As used in this Act, the following terms shall have the following meanings: (a) 'Multiple use' means: The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output. 'Sustained yield of the several products and services' means the achievement and maintenance in perpetuity of a high level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land."

The final Plan supports ecological resources; under the proposed guidance, if monitoring shows that ecosystem condition is moving away from desired conditions, rest from grazing in a pasture or allotment is a possible remedy. In addition, FW-GRZ-S-1 requires livestock management to be compatible with capacity and to address ecological resources (e.g., forage, invasive plants, at-risk species, soils, riparian health, and water quality) that are departed from desired conditions, as determined by temporally and spatially appropriate data. FW-GRZ-DC-4 directs livestock grazing and associated management activities to be compatible with ecological function and process (e.g., water infiltration, wildlife habitat,

soil stability, and natural fire regimes). A plan amendment would be required to allow grazing management that deviated from the standard or did not progress toward the desired condition.

Concern Statement 691 **Grazing Permitting**

The Plan should codify a strategy to reduce grazing permits and related forest impacts, down into alignment with the recent drought-induced allowances, if not lower, over the planning period. This particularly applies to where pristine waters abound.

Associated Comment Letters: 118, 4892, 4904

Response

The Carson NF is a Multiple-Use Forest, which the Multiple-Use Sustained-Yield Act of 1960 states in Section 4 (16 U.S.C. 531), "As used in this Act, the following terms shall have the following meanings: (a) 'Multiple use' means: The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output." "Sustained yield of the several products and services' means the achievement and maintenance in perpetuity of a high level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land."

The Carson also utilizes adaptive management. Adaptive management is defined in the Region 3 supplement of FSH 2209.13 Chapter 90, section 92.23b as, "A system of management practices based on clearly identified intended outcomes and monitoring to determine if management actions are meeting desired outcomes, and if not, to facilitate management changes that will best ensure that outcomes are met or reevaluated. Adaptive management stems from the recognition that knowledge about natural resource systems is sometimes uncertain (36 CFR 220.3). Adaptive management is the general framework encompassing the three phases of planning: assessment, plan development, and monitoring (36 CFR 219.5). This framework supports decision-making that meets management objectives while simultaneously accruing information to improve future management by adjusting the plan or plan implementation. Adaptive management is a structured, cyclical process for planning and decision-making in the face of uncertainty and changing conditions, such as drought, with feedback from monitoring, which includes using the planning process to actively test assumptions, track relevant conditions over time, and measure management effectiveness (FSH 1901.12 (05))." Monitoring is required as a part of adaptive management in the Region 3 supplement of FSH 2209.13 Chapter 90.

Concern Statement 692 **Grazing, Needs for Change**

The Plan, in the "Needs" section (pp. 7-10), establishes upfront that the Forest Service wants livestock grazing. This qualifies as pre-decision under NEPA, wherein the agency has its mind made up before drafting the environmental impact statement. There is no real analysis of the impacts grazing has on the rest of the environment. Instead, the alternatives are analyzed with respect to effects on livestock owners. The right to run cattle appears as a foundational assumption in the Plan.

Associated Comment Letters: 118, 136, 4892, 5064, 5347

Response

The Forest Service operates under the Multiple-Use Mandate which states that, "The management of all the various renewable surface resources of the NFS should be managed so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient

latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output, consistent with the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 528–531) (36 CFR 219.19)."

Under all alternatives, the rangelands management and livestock grazing program has multiple mechanisms to evaluate, review, and adapt management as needed to effectively protect resources and respond to changing conditions. Stocking decisions regarding the amount of livestock grazing authorized for each grazing allotment are considered as part of National Environmental Protection Act project-level analysis and beyond the scope of this programmatic analysis for the final plan. Project-level analysis would cover changes to authorized grazing through term grazing permits (subject to forestwide standards and guidelines); allotment management plans; and annual operating instructions.

In compliance with 2012 Planning Rule, livestock grazing impacts have been analyzed with additional impacts discussed in the FEIS Volume 1 for the Carson NF Land Management Plan in all resource sections (chapter 3).

Concern Statement 693 **Grazing, Ecological Conditions**

The Sustainable Rangelands and Livestock Grazing introduction plays on the emotional appeal and false romantic narrative of the "traditional" or "western" way of life that livestock grazing producers embrace, in abject denial of the realities and long history of degradation of livestock grazing in southwestern forests. The quotes found at the beginning of the "Sustainable Rangelands and Livestock Grazing" section of the Draft Plan expose the Forest Service's true approach to managing livestock grazing on the Carson NF: ignore the best available science and rely upon the emotional pull of the "rural lifestyle" when making land management decisions. This approach turns a blind eye to the current degraded ecological conditions of the Carson NF that have resulted from generations of livestock grazing exploitation on this forest.

Associated Comment Letter: 4994

Response

The final Plan defines sustainability as the ability of the Carson and its resources to meet the needs of the present generation without compromising the ability to meet the needs of future generations. Sustainability includes ecological, economic, and social capabilities. It requires the symbiotic interaction among ecological integrity; the ability of society to produce and consume or otherwise benefit from goods and services; and the ability of society to support the network of relationships, traditions, culture, and activities that connect people to the land and to one another in vibrant communities (36 CFR 219.19). The quotes found at the beginning of the Sustainable Rangelands and Livestock Grazing Introduction were taken directly from a peer-reviewed report on the importance of livestock to the surrounding communities of the Carson and Santa Fe National Forests (McSweeney and Raish 2012).

FW-GRZ-S-1 in the final Plan requires livestock management to be compatible with and address ecological resources that are departed from desired conditions. This standard would require the Carson NF to improve degraded ecological conditions to benefit livestock grazing and other uses and ecosystem services.

Concern Statement 694 **Grazing, Ecosystem Services**

Statements within the introduction of Sustainable Rangelands and Livestock Grazing section about the "benefits" of livestock grazing are extreme hyperbole: "aeration through hoof action" is actually destruction of soil crusts and structure that leads to erosion; "invasive plant control" is more accurately described as invasive plant distribution; "fine fuels reduction" is removal of forage for wildlife as well as

removal of plant cover that prevents erosion. The Forest Service states that "livestock grazing today plays an essential role in providing ecosystem services." This is completely incorrect, and this statement must be corrected to state that "livestock grazing permittees utilize the ecosystem services of the Carson National Forest at a greatly reduced cost compared to those same services found on privately owned and managed lands."

Associated Comment Letters: 4994, 5515

Response

Ecosystem services are those products and processes in functional ecosystems that people enjoy or from which they benefit. The description of each resource in the plan includes a discussion of the ecosystem services that it provides. Benefits that people obtain from ecosystems may be grouped into four broad categories:

1. Supporting ecosystem services are those that are necessary for the production of other ecosystem services, such as pollination, seed dispersal, soil formation, and nutrient cycling.
2. Regulating ecosystem services are the benefits people obtain from the regulation of ecosystem processes, such as long-term storage of carbon; climate regulation; water filtration, purification, and storage; soil stabilization; flood and drought control; and disease regulation.
3. Provisioning ecosystem services are the products people obtain from ecosystems such as clean air and fresh water, energy, food, fuel, forage, wood products or fiber, and minerals.
4. Cultural ecosystem services are the non-material benefits people obtain from ecosystems such as educational, aesthetic, spiritual, and cultural heritage values, recreational experiences, and tourism opportunities (36 CFR 219.19).

Ecosystem services include cultural services and can be multi-leveled (e.g., cultural services may draw on supporting services). Additionally, grazing occurs in many ecosystems and contributes to balanced ecosystem function; when livestock grazing is in balance with other functions, it is both an ecosystem service and ecologically sustainable. Plan direction (FW-GRZ-DC-4) on balancing livestock grazing with ecological health supports sustainable grazing that contributes to both ecosystems and cultural ecosystem services.

The final Plan removed aeration of the soil through hoof action from the list of ecosystem services. Livestock grazing is often cited as a potential tool for invasive plant control (examples include Davison et al. 2006; Frost and Launchbaugh 2003; Tu et al. 2001). Researchers also cite livestock grazing as a tool for reduction of fine fuels (Bruegger et al. 2015; Decker 2018; Strand et al. 2014).

Concern Statement 695 **Grazing, Sustainability**

The Forest Service needs to acknowledge that there is no way to conduct a sustainable and commercially viable livestock grazing operation in the arid southwest. If sustainable means simply that it can be done year after year, decade after decade, perhaps. But if "sustainable" is defined, as it is more commonly, to mean maintained at a steady level without depleting or exhausting natural or economic resources, public lands livestock operations fail to meet the bar. Public lands grazing operates at a profound financial public deficit (economically unsustainable), has converted and degraded entire landscapes (ecologically unsustainable), converts thousands of gallons of potable water into sewage every year (hydrologically unsustainable), produces greenhouse gases at levels that exceed other forms of agriculture (climatically unsustainable), and results in a product that is demonstrably adverse to human health when ingested frequently or in high amounts (nutritionally unsustainable). Additionally, the reliance on removing top predators from the landscape as a way of making it safe for untended livestock is highly impactful on native wildlife species such as the coyote, cougar, and black bear.

Associated Comment Letters: 162, 4994

Response

The Carson National Forest is a multiple-use forest and follows the Multiple-Use Sustained-Yield Act of 1960, which states, "it is the policy of the Congress that the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes" (16 U.S.C. 528).

Section 4 of the Multiple-Use Sustained-Yield Act states, "Multiple use' means: The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output. 'Sustained yield of the several products and services' means the achievement and maintenance in perpetuity of a high level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land."

Livestock grazing contributes to the long-term socioeconomic diversity and stability and the cultural identity of local communities (FW-GRZ-DC-2). It requires the symbiotic interaction among ecological integrity, the ability of society to produce and consume or otherwise benefit from goods and services, and the ability of society to support the network of relationships, traditions, culture, and activities that connect people to the land and to one another in vibrant communities.

The final Plan requires that grazing management be compatible with ecological functions and processes (FW-GRZ-DC-4). In addition, based on FW-GRZ-S-1, "Livestock management shall be compatible with capacity and address ecological resources (e.g., forage, invasive plants, at-risk species, soils, riparian health, and water quality) that are departed from desired conditions, as determined by temporally and spatially appropriate data." According to FW-GRZ-G-1, "Forage use should be based on current and desired ecological conditions as determined by temporally and spatially scientific data during planning cycles (e.g., annual operating instructions, permit renewal), to sustain livestock grazing and maintain ecological function and processes."

Concern Statement 696 **Grazing, Wilderness**

Prohibit livestock grazing from wilderness.

Associated Comment Letters: 4857, 4914

Response

The Forest Service operates under the Multiple-Use Mandate, which states that, "The management of all the various renewable surface resources of the NFS should be managed so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output, consistent with the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 528–531) (36 CFR 219.19)."

The Wilderness Act of 1964, as enacted September 3, 1964, and amended October 21, 1978 (16 U.S.C. 1131-1136) (36 CFR 293.7) allows for the grazing of livestock: "Where such use was established before the date of legislation which includes an area in the National Wilderness Preservation System, shall be

permitted to continue under the general regulations covering grazing of livestock on the National Forests and in accordance with special provisions covering grazing use in units of National Forest Wilderness which the Chief of the Forest Service may prescribe for general application in such units or may arrange to have prescribed for individual units."

To discontinue grazing throughout the plan area is beyond the scope of plan revision. Current permitted grazing has been authorized through previous allotment-level NEPA analysis, including grazing of wilderness. An alternative that would restrict grazing or eliminate grazing was considered in the FEIS (p. 22). A no grazing alternative would not meet legal direction requiring that forests be managed using multiple-use and sustained-yield principles, as per the National Forest Management Act and Multiple-Use Sustained-Yield Act. Also, it would not allow the attainment of desired conditions for livestock grazing to contribute to the long-term socioeconomic diversity, stability, and cultural identity of local communities. Therefore, a no grazing alternative is inconsistent with existing laws, Forest Service policy and direction, as well as the Forest Plan's desired conditions.

Concern Statement 697 **Grazing, Exclusion**

The final Plan needs to fence livestock out of certain areas (sensitive wetlands, areas with endangered or At-risk species, critical habitat, seeps and springs), and fix exclosure fences.

Associated Comment Letters: 4994, 5347

Response

Grazing in the riparian areas has been analyzed and authorized through previous allotment-scale NEPA projects. Under all alternatives, the rangelands management and livestock grazing program has multiple mechanisms to evaluate, review, and adapt management as needed to effectively protect resources and respond to changing conditions. Stocking decisions regarding the amount of livestock grazing authorized for each grazing allotment and suitability of livestock grazing within a particular allotment are considered as part of project-level analysis (NEPA) and beyond the scope of this programmatic analysis for the draft plan. Project-level analysis would cover changes to authorized grazing through term grazing permits (subject to forestwide standards and guidelines); allotment management plans; and annual operating instructions. Consequently, it was concluded that a restricted grazing alternative was not necessary.

However, there are several plan component in the final Plan that would protect ecological resources on the forest, including riparian ecosystems and at-risk species' critical habitat (FW-GRZ-DC-6, FW-GRZ-G-2, FW-GRZ-G-3, FW-WSW-RMZ-STM-DC-11, FW-WSW-RMZ-WB-DC-6, FW-WSW-DC-6, FW-WSW-G-1, FW-WFP-DC-3, AND FW-WFP-G-1). Any deviance from standards, guidelines, or progression away from desired conditions would require a plan amendment.

Exclosure maintenance is considered as part of project-level analysis (NEPA) and beyond the scope of this programmatic analysis for the draft plan.

Concern Statement 698 **Grazing, Permitting**

The final Plan should reduce grazing permits in the Valle Vidal.

Associated Comment Letter: 126

Response

The Forest Service operates under the Multiple Use Mandate which states that, "The management of all the various renewable surface resources of the NFS should be managed so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration

being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output, consistent with the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 528–531) (36 CFR 219.19)."

Grazing in the Valle Vidal has been analyzed and authorized through previous allotment-scale NEPA projects. Under all alternatives, the rangelands management and livestock grazing program has multiple mechanisms to evaluate, review, and adapt management as needed to effectively protect resources and respond to changing conditions. Stocking decisions regarding the amount of livestock grazing authorized for each grazing allotment are considered as part of project-level analysis (NEPA) and beyond the scope of this programmatic analysis for the final Plan. Project-level analysis would cover changes to authorized grazing through term grazing permits (subject to forestwide-standards and guidelines); allotment management plans; and annual operating instructions. Accordingly, it was concluded that a restricted grazing alternative was not necessary.

Concern Statement 699 **Grazing Management**

Livestock grazing should be more adequately supervised. Some positive improvements could be realized by way of additional collaborative efforts to enhance the pasture resource on the Carson. https://holisticmanagement.org/case-studies-rancho-las-damas-chihuahua-mexico/ Alejandro Carillo has succeeded in re-establishing grass stands and significantly increased stocking capacity in the Chihuahan Desert where rainfall is less than 10 inches per year. Certainly, the Carson NF could do that here.

Associated Comment Letters: 4845, 4857, 4860, 4887, 4914

Response

Grazing management and systems are analyzed through project-level NEPA analysis. Strategies outlined in the reference could be applied at that level; the Plan doesn't dictate what strategies should be used.

Concern Statement 700 **Grazing Management**

Include a management approach for Sustainable Rangelands and Livestock Grazing to more frequently rest grazing allotments when the allotment permit comes up for renewal every ten years. A resting period of even one to two years after every 10 years of grazing would greatly increase the health and resiliency of the ecosystems affected by cattle.

Associated Comment Letter: 5515

Response

In the final Plan, FW-GRZ-S-1 states, "Livestock management shall be compatible with capacity and address ecological resources (e.g., forage, invasive plants, at-risk species, soils, riparian health, and water quality) that are departed from desired conditions, as determined by temporally and spatially appropriate data." Resting of an allotment is a tool that could be used to meet the requirements of FW-GRZ-S-1 to move towards desired conditions for ecosystems described in the final Plan if monitoring indicates a need.

Under all alternatives, the rangelands management and livestock grazing program has multiple mechanisms to evaluate, review, and adapt management as needed to effectively protect resources and respond to changing conditions. Season of use and pasture system management for each grazing allotment are considered as part of project-level analysis (NEPA) and beyond the scope of this programmatic analysis for the plan. Project-level analysis would cover changes to authorized grazing through term grazing permits (subject to forestwide standards and guidelines), allotment management plans, and annual operating instructions.

Concern Statement 701 **Grazing, Best Available Scientific Information**

There should be more plan components associated with FW-GRZ-S-1, where "temporally and spatially appropriate data" is guided by the most current Grazing Permit Administration Handbook and Regional

Supplements or best available science. We suggest that the best available science be the default, and that the Carson NF commit, with partners, to monitor and create the best possible "temporally and spatially appropriate data" for the benefit of grazers, rangeland health, and other resources.

Associated Comment Letter: 5303

Response

This comment has been addressed in the final Plan, under Sustainable Rangelands and Livestock Grazing Guidelines; GRZ-S-1 states that, “Livestock management shall be compatible with capacity and address ecological concerns (such as forage, invasive plants, at-risk species, soils, riparian health, and water quality) that are departed from desired conditions, as determined by temporally and spatially appropriate data.” The Grazing Permit Administration Handbook and Regional Supplements are based on best available science and are Forest Service policy that the Carson NF is required to follow.

Concern Statement 702 **Grazing, Forage, Land Grants**

The final Plan should include a desired Condition in the Rural Historic Community section that directs management to manage forage resources for fluctuations to ensure that there is no net loss in grazing capacity within the historic/traditional use boundaries of land grants or on grazing allotments affecting communities associated with land grants.

Associated Comment Letter: 4926

Response

The final Plan includes FW-RHC-DC-1 and FW-RHC-DC-3, which direct management to make available, in a sustainable manner, those traditional uses that are important for the subsistence practices and economic support (e.g., livestock grazing, acequias, and forest products) of rural historic communities. FW-GRZ-DC-1 describes sustainable rangelands that provide forage for livestock grazing opportunities that contribute to agricultural businesses, local employment, livelihoods, as well as generational ties to the land. In addition, FW-GRZ-DC-2 describes the contribution of livestock grazing to the long-term socioeconomic diversity and stability and the cultural identity of local communities.

Stocking decisions regarding the amount of livestock grazing authorized for each grazing allotment are considered as part of project-level analysis (NEPA) and are beyond the scope of this programmatic plan-level analysis. Project-level analysis would cover changes to authorized grazing through term grazing permits (subject to forestwide standards and guidelines); allotment management plans; and annual operating instructions. In the final Plan, Management Approach for Sustainable Rangelands and Livestock Grazing-1 emphasizes cooperation, collaboration, and coordination between forest managers and permit holders to respond to changing resource conditions to improve rangeland and forest conditions for multiple uses, move towards desired conditions, and contribute to the socioeconomic wellbeing of local communities.

Concern Statement 703 **Grazing, Montane Subalpine Grasslands**

The Forest Plan should include the following plan language: standards that will move Montane and Subalpine Grasslands ERU towards desired conditions which address heavily impacted by livestock grazing at all three scales and impose limits and/or constraints on livestock grazing if/when desired conditions are not achieved.

Associated Comment Letter: 5347

Response

This comment has been addressed in the final Plan under Sustainable Rangelands and Livestock Grazing Guidelines; FW-GRZ-S-1 states that, “Livestock management shall be compatible with capacity and address ecological concerns (such as forage, invasive plants, at-risk species, soils, riparian health, and water quality) that are departed from desired conditions, as determined by temporally and spatially appropriate data.” Limits or constraints designed to achieve this standard would be implemented at an

allotment level based on site-specific conditions and adaptive management. Adaptive management is defined in the Region 3 supplement of FSH 2209.13 Chapter 90, section 92.23b. “Adaptive management is a system of management practices based on clearly identified intended outcomes and monitoring to determine if management actions are meeting desired outcomes, and if not, to facilitate management changes that will best ensure that outcomes are met or reevaluated.…This framework supports decision-making that meets management objectives while simultaneously accruing information to improve future management by adjusting the plan or plan implementation.”

Concern Statement 704 **Grazing, Alpine and Tundra**

Analyze an Alternative that would eliminate grazing in riparian areas and Alpine Tundra. Suggest that grazing associations assess and submit a report on the possibility of their allotment's negative impact on protection of ecosystem integrity and diversity as required by the 2012 Planning Rule.

Associated Comment Letters: 120, 5347

Response

To discontinue grazing is a project-level decision and not an action completed through plan revision. Current permitted grazing has been authorized through previous allotment-level NEPA analysis, including grazing of riparian areas. An alternative that would restrict grazing or eliminate grazing was considered in the FEIS (p. 22). An alternative to severely restrict or eliminate grazing would not meet legal direction that forests will be managed using multiple-use and sustained-yield principles, as per the National Forest Management Act and Multiple-Use Sustained-Yield Act. Also, it would not allow the attainment of the desired conditions for livestock grazing to contribute to the long-term socioeconomic diversity, stability, and cultural identity of local communities. Therefore, such an alternative is inconsistent with existing laws and Forest Service policy and direction, as well as the final Plan’s desired conditions.

Grazing in riparian areas has been analyzed and authorized through previous allotment-scale NEPA projects. Under all alternatives, the rangelands management and livestock grazing program has multiple mechanisms to evaluate, review, and adapt management as needed to effectively protect resources and respond to changing conditions. Stocking decisions regarding the amount of livestock grazing authorized for each grazing allotment are considered as part of project-level analysis and beyond the scope of this programmatic plan-level analysis. Project-level analysis would cover changes to authorized grazing through term grazing permits (subject to forestwide standards and guidelines), allotment management plans, and annual operating instructions. Accordingly, it was concluded that a restricted grazing alternative was not necessary.

Lastly, the 2012 Planning Rule does not require “grazing associations to assess and submit a report on the possibility of their allotment's negative impact.” In compliance with 2012 Planning Rule, livestock grazing impacts have been analyzed, with additional impacts discussed in the FEIS in all other resource sections (Volume 1, Chapter 3). The analysis is based on changes from the current forest plan (alternative 1) that can be meaningfully analyzed.

Concern Statement 705 **Grazing, Allotment Management Plan**

Each grazing allotment has an Allotment Management Plan that requires the permittee to have an alternative place to keep the cattle should the need arise. Yet it is rare, even in severe droughts, for a permittee to be required to use this alternative place and remove the cattle from the forest. Conflicts such as these are likely to arise again as droughts are expected to become more frequent and severe in the next few decades. Forest Service should follow and enforce actions described in Allotment Management Plans to ensure water quality and water resources, riparian and wetland habitats, at-risk species, and recreational opportunities are protected and sustained, especially during drought conditions.

Associated Comment Letter: 5515

Response

The Allotment Management Plan does not require permittees to have an alternative place to the cattle; however, the Term Grazing Permit's Part 2, Section 8(c), states, "The permittee will remove livestock from Forest Service-administered lands before the expiration of the designated grazing season upon request of the Forest officer when it is apparent that further grazing will damage the resources." To respond to changing resource conditions, Management Approach for Sustainable Rangelands and Livestock Grazing-1 encourages Forest managers to cooperate, collaborate, and coordinate with permit holders to respond to changing resource conditions. Management Approach for Sustainable Rangelands and Livestock Grazing-4 also encourages an adaptive management approach to manage rangelands, specifically, in a manner that promotes the socioeconomic wellbeing and stability of local communities and ecosystem resilience, sustainability, and species diversity—based on scientifically quantified changes to rangelands. An adaptive management approach is designed to provide more flexibility to grazing management, while improving or maintaining the health of rangelands.

The plan supports ecological resources through the various plan components. FW- GRZ-DC-4 requires livestock grazing and associated management activities to be compatible with ecological function and process (e.g., water infiltration, wildlife habitat, soil stability, and natural fire regimes). FW-GRZ-S-1 requires livestock management to be compatible with capacity and address ecological resources (e.g., forage, invasive plants, at-risk species, soils, riparian health, and water quality) that are departed from desired conditions, as determined by temporally and spatially appropriate data.

Concern Statement 706 **Stewart Meadows**

Stewart Meadows is a lush section of the San Antonio that is protected from cows with a-near useless—3 strand fence that needs to be replaced. The cows just step through—and/or—over it when they need more green. In a wet year like this the cows probably stay out, but as soon as it gets dry, they easily find their way in there.

Associated Comment Letter: 4962

Response

Exclosure maintenance is considered as part of project-level analysis (NEPA) and is therefore beyond the scope of this programmatic plan-level analysis. However, multiple plan components in the Sustainable Rangelands and Livestock Grazing section protect ecological resources on the forest, including riparian ecosystems, such as FW-GRZ-DC-6: "Wetland and riparian areas consist of native obligate wetland species and a diversity of riparian plant communities consistent with site potential and relative to Wetland Riparian and Forest and Shrub Riparian desired conditions;" FW-GRZ-G-2: "Livestock grazing within riparian management zones (e.g., along streams, around seeps, springs, lakes, and wetlands) should be managed to sustain proper stream channel morphology, floodplain function, and riparian vegetation desired conditions:" and FW-GRZ-G-3: "New livestock troughs, tanks, and holding facilities should be located out of riparian management zones (e.g., along streams, around seeps, springs, lakes, and wetlands), to protect riparian ecological resources, unless necessary for resource enhancement or protection."

Concern Statement 707 **Communal Allotments**

Include in the final Plan in the Sustainable Rangelands and Livestock Grazing (GRZ) section a management approach: Consider converting vacant or understocked allotments near or adjacent to land grant communities into communal livestock grazing allotments.

Associated Comment Letter: 4926

Response

The Forest Service Range Management Manual (FSM 2231.3 Grazing and Livestock Use Permit System) states that, "Qualified applicants may be issued permits with term status through prior use, the

grant process, purchase of base property or livestock with waiver, or interchange of permits with other agencies."

The Grazing Permit Administration Handbook (FSH2209.13_92.13) states that, "The Forest Supervisor may issue grazing permits with term status by grant or increase existing term grazing permits to entities recognized as the logical applicants for new range, transitory range, or additional range, provided that the applicants meet requirements, and are otherwise qualified, and provided the range resource can support increased use." The Forest Service uses the grant process, which is the procedure designed to identify preferred applicants for a grazing permit to be issued, when unobligated grazing capacity becomes available. This is policy and required to followed.

Concern Statement 708 **Closed Allotments**

FW-GRZ-G-7 should not permit livestock use of closed allotments. Closed allotments may have been closed through a public process, or through informed administrative decision, and this guideline should not reverse those management decisions. In fact, the Plan should include components that establish a mechanism for closing and/or retiring additional allotments and/or pastures, and include plan components that provide the authority to remove a permittee who is out of compliance with lease terms.

Associated Comment Letters: 5347, 5364

Response

FW-GRZ-G-7 in the final Plan states, "Vacant or understocked allotments should be made available to permitted livestock, to provide pasture during times or events when other active allotments are unavailable and require ecosystem recovery as a result of natural disturbances (e.g., wildfire) or management activities (e.g., vegetation restoration treatments)." Vacant allotments are those allotments where, for a variety of reasons, no authorization of livestock use and occupancy under term grazing permit currently exists. In many cases, due to other higher priorities, there will have been no current and/or sufficient project-level NEPA-based decision regarding authorization of livestock or disposition of the allotment. Vacant allotments are not closed allotments.

Compliance issues are handled through term grazing permit administration (FS-2200-10) and the Handbook, not through the plan revision process. Part 1, Section 3 of the Term Permit says, "It is fully understood and agreed that this permit may be suspended or cancelled, in whole or in part, after written notice, for failure to comply with any of the terms and conditions specified in Parts 1, 2, and 3 hereof, or any of the regulations of the Secretary of Agriculture on which this permit is based, or the instructions of Forest officers issued thereunder; or for knowingly and willingly making a false statement or representation in the permittee's grazing application, and amendments thereto; or for conviction for failure to comply with Federal laws or regulations or State and local laws relating to livestock control and to protection of air, water, soils and vegetation, fish and wildlife, and other environmental values when exercising the grazing use authorized by the permit. This permit can also be cancelled, in whole or in part, or otherwise modified, at any time during the term to conform with needed changes brought about by law, regulation, Executive order, allotment management plans, land management planning, numbers permitted or seasons of use necessary because of resource conditions, or the lands described otherwise being unavailable for grazing. Any suspension or cancellation action may be appealed pursuant to 36 CFR 214."

Concern Statement 709 **Allotment Retirement**

The Forest Service should consider an alternative that would authorize the permanent retirement of grazing allotments that are voluntarily waived by the permittee. The Forest Plan must allow permits to be waived back to the agency for permanent resource protection. The option of permanent voluntary retirement of permits and associated grazing privileges represents an equitable solution to wildlife conflicts with agricultural operations on public lands. It provides security to livestock producers facing declining economic returns, increasing price instability, a shrinking available workforce, and other

challenges, and allows the Forest Service to re-designate lands to other uses, including wildlife habitat, recreation, and hunting. The permit waiver system represents the increasing public interest in maintaining natural systems and restoring native species and allows land managers to facilitate the win-win resolution of grazing conflicts which impact not only native species, but also water quality and the recreational experience of users. Allotments already vacated for resource protection, either through Forest Service actions or through the voluntary relinquishment of grazing preference, must be closed.

Associated Comment Letter: 4994

Response

An alternative to severely restrict or eliminate grazing was not considered in detail. Neither were permit waivers, as the permit issuance and waiver process is an administrative and project specific NEPA decision, and outside the scope of plan revision. Separate project-level analysis principles exist elsewhere in agency policy as codified in the Forest Service Directive System (FSH 2209.13).

Livestock management on NFS lands has shifted to an adaptive management philosophy that allows appropriate seasonal changes in livestock numbers (increases and decreases) or seasons of use in response to changing ecological conditions (e.g., forage production, water availability, and precipitation patterns). Over the last decade, the Carson has worked with partners and permit holders to relieve grazing pressure in sensitive areas (e.g., critical areas, riparian areas) through strategic distribution and by improving forage conditions away from sensitive areas (e.g., through sagebrush removal or prescribed fire), without reducing livestock numbers.

Concern Statement 710 **Permit Prioritization**

There is a need for the Carson NF to reassess grazing permits holders within the Carson NF to ensure that local ranchers have priority over out of state ranchers.

Associated Comment Letter: 4885

Response

The Forest Service Range Management Manual (FSM 2231.3 Grazing and Livestock Use Permit System) states that, “Qualified applicants may be issued permits with term status through prior use, the grant process, purchase of base property or livestock with waiver, or interchange of permits with other agencies.”

The Grazing Permit Administration Handbook (FSH2209.13_92.13) states that, “The Forest Supervisor may issue grazing permits with term status by grant or increase existing term grazing permits to entities recognized as the logical applicants for new range, transitory range, or additional range, provided that the applicants meet requirements, and are otherwise qualified, and provided the range resource can support increased use.” The Forest Service uses the grant process, the procedure designed to identify preferred applicants for permit issuance when unobligated grazing capacity becomes available; this is policy and must be followed.

Concern Statement 711 **Cultivation Permit**

The Final Plan should include a management area for Cultivation permit, File Code 2720 (see enclosure "d") into the Carson Forest Plan. This permit should be given the same considerations as the Sipapu permit. It should be renewed for forty years and allowed for expansion on land use. We believe the original intent on the use of these 20 acres was for the good of the local livestock owners of the community. The cultivation of hay complemented the grazing permits. In the summer months local livestock owners grazed their livestock in common and Forest land and in winter they used the hay gathered from the 20 acres. It is important that our people be given the opportunity to continue this tradition.

Associated Comment Letters: 5720, 5782, 5785

Response

The final Plan provides a programmatic framework that guides site-specific actions but does not authorize, permit, fund, or carry out a project or activity (including grazing permits, ski area permits, or cultivation permits). Permit issuance is a project-level NEPA analysis and decision. Project analysis principles already exist in agency policy as codified in the Forest Service Directive System (FSM 2240). The administration of lands special use permits seeks to minimize impacts to forest resources and ecosystem services, such as scenic vistas (cultural ecosystem service) and wildlife habitat and soil function (supporting ecosystem services), while still meeting the needs of the public (provisioning ecosystem services).

Concern Statement 712 **Permit Waivers**

In allowing permits to be waived for resource protection, the Forest Service can enable permittees to recoup expenses associated with allotment infrastructure and livestock operations while protecting critical resources affected by those operations. Permit waivers are a valuable tool and can be used to reallocate portions of the landscape to non-grazing resources, including water quality, soil health, and wildlife. In order to increase the security of bighorn sheep on the Carson NF, the Forest Service must incorporate into the Forest Plan guidance on permit waivers for resource protection. Include a standard stating, “Permits waived for resource protection shall not be reissued until a NEPA analysis is completed for the allotment(s) covered by the permit. On allotments with more than one permittee, partial waivers for resource protection will result in a reduction of livestock use proportional to those authorized in the waived permit. Increased use shall not be authorized until a NEPA assessment is completed.”

Associated Comment Letter: 4994

Response

Permit issuance and waivers are administrative decisions: the plan does not engage in project analysis or administration. Project analysis principles already exist in agency policy, as codified in the Forest Service Directive System (FSH 2209.13).

The Region 3 Grazing Permit Administration Handbook (FSH 2209.13 Chapter 10, Section 17) states that, “Nonuse directly related to the condition of and/or use of the forage resource is classified as nonuse for resource protection or development. A variety of issues contributing to changing status of the forage resource, resource management needs, and/or needs of the permittee, can contribute to the use of, and need for, nonuse for resource protection or development.”

Examples of resource issues that can drive the need for nonuse for resource protection or development are first, persistent drought reducing normal forage production and second catastrophic wildfire causing loss of forage and the permanent and/or temporary damage or loss of the structural improvements needed for proper livestock management.

The final Plan includes Management Approach for Sustainable Rangelands and Livestock Grazing-7, which addresses the nonuse for resource protection, “Actual levels of livestock use may vary due to annual fluctuations in individual livestock operations or ecological conditions, including authorized nonuse for resource protection or personal convenience. Consider not reducing permit numbers based on actual use, including nonuse.”

Concern Statement 713 **Water Tanks, Impacts**

The DEIS states, "Installation of water tanks for livestock and wildlife use may concentrate grazing pressure, leading to local water quality, soil and vegetation impacts." This statement is inaccurate or at least misleading. Proper range management encourages the installation of water tanks and other range infrastructure to disperse livestock with the intention of avoiding the impacts stated.

Associated Comment Letters: 5422

Response

This statement has been clarified in the FEIS. Discussion of the reasons that range infrastructure, including livestock dispersal might be installed have been added. The discussion of impacts immediately around water tanks is accurate and has been retained.

Concern Statement 714 **Unneeded Range Infrastructure**

The final Plan needs to include a plan component to remove existing range improvement structures for livestock grazing that are no longer necessary or in poor or non-functional conditions.

Associated Comment Letter: 4994

Response

The final Plan includes FW-WFP-O-4, which prioritizes removing unneeded structures (e.g., fences, roads, cattleguards, culverts, and spring developments) or completing improvement projects (e.g., removing barriers and connecting fragmented habitat) in at least 10 to 20 locations during each 10-year period following plan approval. Also, FW-WFP-G-6 requires maintenance of constructed features (e.g., exclosures, wildlife drinkers, range improvements, fences, and culverts) to support the purpose(s) for which they were built. Constructed features should be removed when no longer needed to restore natural hydrologic function and maintain habitat connectivity.

Concern Statement 715 **Infrastructure Maintenance, Shared Boundaries**

Create a plan component that requires the forest to annually assess and address infrastructure maintenance needs on shared boundaries with other landowners.

Associated Comment Letter: 4926

Response

Generally grazing permitees are responsible for maintaining assigned improvements on their allotments. Forest Service Term Grazing Permits (FS-2200-10 Part 2, Section 8(h)) state that, “The permittee will pay the costs of, perform, or otherwise provide for the proportionate share of cooperative improvements and management practices on the permitted area when determined by the Forest officer in charge that such improvements and practices are essential to proper protection and management of the resources administered by the Forest Service.” This usually includes fences and other infrastructure on National Forest System lands, but does not include boundary fences shared with other landowners.

In New Mexico, the Forest Service shares responsibility for infrastructure on its boundaries in limited instances where a memorandum of understanding or cooperative agreement to do so has been established with the adjacent landowner. However, in most cases it is the responsibility of private landowners in New Mexico to “fence out” their land (New Mexico Statutes - Article 16 — Fences, 77-16-1 through 77-16-18) meaning landowners have the responsibility to fence and maintain their own property.

Concern Statement 716 **Infrastructure, Seeps and Springs**

The final Plan should include the following plan language: Any form of human-made water structures or infrastructure for springs and seeps shall not be developed, current non-functioning developments are removed, and the spring or seep is restored to natural functioning hydrology and ecology. Livestock grazing impacts to springs and seeps objective should be added to include cattle enclosures are built around undeveloped springs and seeps which are large enough to adjacent uplands are fenced to allow regrowth of native xeric-mesic ecotones.

Associated Comment Letters: 161, 5347

Response

A prohibition on new spring development was considered under Alternative 4 (FEIS, Sustain Rangeland and Livestock Section and Wildlife, Fish, and Plant section). The development of a spring for livestock

grazing can divert some of the water that contributes to the function of the riparian area around the spring; however, precluding spring development may encourage livestock and other ungulates to trample the riparian area associated with the spring. Moreover, prohibiting new development of springs could contribute to increased competition by livestock and wildlife at existing springs and riparian areas.

FW-WFP-G-6 in the final Plan further addresses concerns related to conserving wildlife and fish habitat connectivity. Constructed features (e.g., enclosures, wildlife drinkers, range improvements, fences, and culverts) should be maintained to support the purpose(s) for which they were built and should be removed when no longer needed to restore natural hydrologic function and maintain habitat connectivity. Finally, FW-WFP-O-4 in the final Plan also states, "Improve wildlife or aquatic habitat connectivity by removing unneeded structures (e.g., fences, roads, cattleguards, culverts, and spring developments) or completing improvement projects (e.g., removing barriers and connecting fragmented habitat) in at least 10 to 20 locations, during each 10-year period following plan approval."

Building exclosures around springs to prevent livestock use is one tool that can be used to mitigate livestock impact in site-specific NEPA. All projects implemented on the national forest would require a site-specific analysis of their potential impacts to seeps, springs, other riparian areas, and other resources including rangelands and livestock grazing opportunities.

Concern Statement 717 **Infrastructure, Sensitive Areas**

The final Plan should include the following plan language: "New livestock troughs, tanks, and holding facilities (change should to shall) be located out of riparian management zones, archeological sites, and habitat associated with at-risk plant and animal species. Add to new standard, Existing range facilities in water resource features should/shall be modified, relocated, or removed, where their presence is determined to inhibit movement toward desired riparian or aquatic conditions and consistent with existing water rights and water quality and quantity."

Associated Comment Letter: 5347

Response

The final Plan includes a guideline (FW-GRZ-G-3) that requires new livestock troughs, tanks, and holding facilities to be located to protect riparian ecological resources. The intent of FW-GRZ-G-3 to protect riparian ecological resources must be met, it should be met by locating infrastructure outside of riparian management areas. FW-GRZ-G-4 also requires new range infrastructure to be designed to avoid long-term negative impact to soil resources within and outside of riparian management zones.

FW-WFP-O-4 prioritizes removing unneeded structures, including livestock troughs, tanks, and holding facilities, and states, " Improve wildlife or aquatic habitat connectivity by removing unneeded structures (e.g., fences, roads, cattleguards, culverts, and spring developments) or completing improvement projects (e.g., removing barriers and connecting fragmented habitat) in at least 10 to 20 locations during each 10-year period following plan approval., and complete at least 5 projects to improve habitat connectivity for aquatic and riparian species (e.g., remove barriers, restore dewatered stream segments, connect fragmented habitat, wildlife passage friendly fences, etc.) during the 10 years following plan approval."

FW-WFP-G-6 also requires constructed features (e.g., exclosures, wildlife drinkers, range improvements, fences, and culverts) to be maintained to support the purpose(s) for which they were built. Constructed features should be removed when no longer needed, to restore natural hydrologic function and maintain habitat connectivity.

FW-WSW-G-1 also addresses water quality and quantity concerns: for all management activities, applicable best management practices should be identified and implemented, to maintain water quality and quantity and timing of flows and to prevent or reduce accelerated erosion.

FW-CR-DC-1 addresses the preservation and protection of cultural and historic resources during the location, installation, and use of new and existing livestock troughs, tanks and holding facilities. Site

integrity and stability are protected and maintained on sites that are susceptible to imminent risks or threats or where the values are rare or unique.

Concern Statement 718 **Salting, Sensitive Areas**

The Forest Plan should include the following plan language: Salting or mineral supplementation should change to, shall not occur on or adjacent to known populations of at-risk plant and animal species, unsatisfactory soils, stream channels, riparian areas, wetlands, or known archeological sites.

Associated Comment Letter: 5347

Response

FW-GRZ-G-5 addresses the concern that salting or mineral supplementation should not occur on or adjacent to areas (e.g., known at-risk plant species habitat, riparian areas, wetlands, or archeological sites) that are especially sensitive to salt and to increased traffic from ungulates (e.g., known at-risk plant species habitat, riparian areas, wetlands, and archeological sites), to protect these sites; the parenthetical list is not exhaustive. This guideline would protect all areas sensitive to salt or to increased ungulate traffic.

FW-GRZ-DC-4 directs that livestock grazing and associated management activities are compatible with ecological function and process (e.g., water infiltration, wildlife habitat, soil stability, and natural fire regimes). FW-GRZ-S-1 requires livestock management to be compatible with capacity and address ecological resources (e.g., forage, invasive plants, at-risk species, soils, riparian health, and water quality) that are departed from desired conditions, as determined by temporally and spatially appropriate data. Additional guidance can be found in the most current Grazing Permit Administration Handbook and Regional Supplements or best available scientific information. Guidance for cooperating with permittees when establishing capacity can be found in the most current Grazing Permit Administration Handbook (2209.13_90)

Concern Statement 719 **Fencing, Removal**

In the final Plan suggest a requirement to get rid of the fences, use cowboys and girls to move associated cattle (grouping up permit cattle) instead.

Associated Comment Letter: 167

Response

Pasture system management for each grazing allotment is considered as part of project-level analysis (NEPA) and is outside the scope of programmatic plan-level analysis. Project-level analysis addresses changes to authorized grazing through term grazing permits (subject to forestwide standards and guidelines); allotment management plans; and annual operating instructions. Greater use of range riders could be tool for better pasture management, included at the project level.

Concern Statement 720 **Exclosures**

Provide access gates to exclosures and monitor them for opportunities to graze them for very short times in order to maintain control over invasive weed infestations and to provide short term and limited disturbance to maintain ecosystem function there. There will be a need for locks on those gates.

Associated Comment Letter: 4845

Response

Site-specific management of each grazing allotment is considered as part of project-level analysis (NEPA) and is outside the scope of forest plan revision. Project-level analysis would address changes to authorized grazing through term grazing permits (subject to forestwide standards and guidelines); allotment management plans; and annual operating instructions.

Concern Statement 721 **Rangeland Monitoring**

The final Plan should include a desired condition to move management direction toward routine monitoring and incorporation of appropriate data and best available science such as "Routine rangeland monitoring creates temporally and spatially appropriate data and livestock grazing decisions incorporate best available science."

Associated Comment Letter: 5303

Response

This concern is addressed in the final Plan. FW-GRZ-S-1 requires livestock management to be compatible with capacity and addresses ecological concerns (such as forage, invasive plants, at-risk species, soils, riparian health, and water quality) that are departed from desired conditions, as determined by temporally and spatially appropriate data; monitoring must be completed to meet the requirements of this standard. The Carson also uses adaptive strategies in rangeland management; adaptive management is defined in the Region 3 supplement of FSH 2209.13 Chapter 90, section 92.23b, as “A system of management practices based on clearly identified intended outcomes and monitoring to determine if management actions are meeting desired outcomes, and if not, to facilitate management changes that will best ensure that outcomes are met or reevaluated. Adaptive management stems from the recognition that knowledge about natural resource systems is sometimes uncertain (36 CFR 220.3). Adaptive management is the general framework encompassing the three phases of planning: assessment, plan development, and monitoring (36 CFR 219.5). This framework supports decision-making that meets management objectives while simultaneously accruing information to improve future management by adjusting the plan or plan implementation. Adaptive management is a structured, cyclical process for planning and decision-making in the face of uncertainty and changing conditions with feedback from monitoring, which includes using the planning process to actively test assumptions, track relevant conditions over time, and measure management effectiveness (FSH 1901.12 (05)).” Monitoring is required as a part of adaptive management in the Region 3 supplement of FSH 2209.13 Chapter 90.

Concern Statement 722 **Monitoring Data, Traditional Uses**

Carson NF should take steps to ensure that accurate data pertaining to livestock grazing, fuelwood cutting, and other traditional activities are available to permittees, Forest users and the general public. Providing accurate and timely information on traditional uses of the Forest may help alleviate disputes over trends in use and their impacts on rural communities and forest resources.

Associated Comment Letter: 5303

Response

Ten years of permitted and authorized grazing and forest product sales were summarized in the Assessment (USDA FS Carson 2015). Data about many other traditional activities such as herb or piñon collection, hunting, or acequia water use are not collected by the Carson NF. The amount of forest product sales including firewood, posts (vigas), and poles (latillas) are based on demand, that is, how many members of the public purchase permits. The final Plan includes monitoring questions to measure the number of authorized livestock and amount of timber harvested (Chapter 4, Monitoring Topics VII and IX). Biannual monitoring reports will be available to the public once the final Plan is implemented.

The Carson provides any information it can to the public that is not proprietary in nature, and that does not contain personally identifiable information, or PII. PII is any data that could potentially be used to identify a particular person. Examples include a full name, Social Security number, driver's license number, bank account number, passport number, and email address cannot be shared with the public. Also, in accordance with the Freedom of Information Act (FOIA) and USDA regulations at 7 CFR, any person can request access to USDA Forest Service (FS) records. The FOIA requires the FS to disclose records unless the information is exempt from mandatory disclosure under the FOIA (e.g., classified national security, business proprietary, personal privacy, investigative).

Concern Statement 723 **Grazing, Riparian Areas, Water Quality**

The Final Plan should include the following management approach in the Watershed and Water section: Consider working with grazing permittees to figure out ways to protect RMZs and meet NM water quality standards.

Associated Comment Letters: 4951, 5574

Response

The Sustainable Rangelands and Livestock Grazing section in the final Plan has multiple components that protect ecological resources on the forest, including riparian ecosystems, such as FW-GRZ-DC-6 and FW-GRZ-G-2. FW-WSW-DC-7 directs management to meet State water quality standards.

Additionally, Management Approach for Sustainable Rangelands and Livestock Grazing-1 addresses working with grazing permitees, "Forest managers cooperate, collaborate, and coordinate with permit holders to respond to changing resource conditions. Cooperation, collaboration and coordination among Carson and permit holders is key to improving rangeland and forest conditions for multiple uses, moving toward desired conditions, and contributing to the socioeconomic wellbeing of local communities. In addition, collaboration among stakeholders is important, including local communities; permit holders; Federal, State, county and local government entities."

Concern Statement 724 **Grazing, Riparian Areas**

The final Plan needs to include a standard that prohibits cattle from grazing in riparian areas.

Associated Comment Letters: 4872, 4878, 5347, 5561

Response

The Forest Service operates under the Multiple-Use Mandate, which states, " The management of all the various renewable surface resources of the NFS should be managed so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output, consistent with the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 528–531) (36 CFR 219.19)."

Grazing in riparian areas has been analyzed and authorized through previous allotment-scale NEPA projects. Under all alternatives, the rangelands management and livestock grazing program has multiple mechanisms to evaluate, review, and adapt management as needed to effectively protect resources and respond to changing conditions. Stocking decisions regarding the amount of livestock grazing authorized for each grazing allotment are considered as part of project-level analysis (NEPA) and outside of the scope of this programmatic plan-level analysis. Project-level analysis would address changes to authorized grazing through term grazing permits (subject to forestwide standards and guidelines), allotment management plans, and annual operating instructions. Livestock exclosures are tools that can be used to improve riparian condition and are a project-level NEPA analysis and management decision. Consequently, the national forest concluded that a restricted grazing alternative was not necessary.

The Sustainable Rangelands and Livestock Grazing section has multiple plan components that protect ecological resources on the forest, including riparian ecosystems. Please see Sustainable Rangelands and Livestock Grazing plan components, including FW-GRZ-S-1, FW-GRZ-G-1, FW-GRZ-G-2, FW-GRZ-G-3, FW-GRZ-G-4, and GRZ-G-5.

Concern Statement 725 **Grazing, Riparian Areas**

The Final Plan should include a Management Approach or a Guideline that states "In wetland or riparian areas that are functional-at-risk or non-functional, consider avoiding livestock grazing in the same area during the same vegetative growth and reproduction periods (e.g., leafing, flowering, or seeding) in consecutive years as necessary to ensure that riparian pastures have vegetative recovery."

Associated Comment Letters: 4951, 5574

Response

Watersheds and Water Management Approach-3 addresses the commenter's concern: "Consider rest-rotation management within allotments to improve wetland or riparian areas that are rated as functional-at-risk or non-functional. This system of management would avoid livestock grazing in the same area during the same vegetative growth and reproduction periods (e.g., leafing, flowering, or seeding) in consecutive years to ensure that riparian pastures have vegetative recovery." The final Plan also includes the following components that would improve functional-at-risk or non-functional riparian areas: FW-WSW-RMZ-WR-DC 2-3, FW-WSW-RMZ-FSR-DC-5, FW-GRZ-DC-6, and FW-WSW-RMZ-DC 1. Specifically, FW-GRZ-DC-6 desires wetland and riparian areas consisting of native obligate wetland species and a diversity of riparian plant communities consistent with site potential and Wetland Riparian and Forest and Shrub Riparian desired conditions. FW-WSW-RMZ-DC-1 describes riparian ecosystems as being unfragmented, unconstrained, and properly functioning with vegetation, landform, large coarse woody debris, litter, and root masses to capture sediment, filter contaminants, dissipate stream energy and overland flow from uplands to protect and enrich soils and stabilize banks and shorelines. Projects, including livestock grazing, must move vegetation and riparian areas toward desired conditions to be in compliance with the final Plan.

Concern Statement 726 **Grazing, Riparian Areas**

The Final Plan should move FW-GRZ-DC-6 [Wetland and riparian areas consist of native obligate wetland species and a diversity of riparian plant communities consistent with site potential and relative to Wetland Riparian and Forest and Shrub Riparian desired conditions.] to a more appropriate section. It is not clear why DC-6 has been inserted in the Sustainable Rangelands and Livestock Grazing section. This desired condition can be influenced by other variables such as wild ungulates, drought, or recreation.

Associated Comment Letters: 4926, 5422

Response

The final Plan is integrated across resources: "To effectively manage toward the desired conditions of a forest resource, project planners and decision makers must ensure they use the entire plan and not just the plan components listed for that resource. Effective integrated resource management recognizes the interdependency of ecological, social, cultural, and economic resources and how that management of one resource can influence the management or condition of other resources" (Final Plan, Chapter 1, Plan Framework, Interrelationships of Plan Content). We agree that other stressors (including wildlife, drought, and recreation) can also impact riparian conditions, but maintain that FW-GRZ-DC-6 is appropriate in the Sustainable Rangelands and Livestock Grazing section, as it reiterates that grazing affects riparian areas but can be managed consistent with wetland and riparian desired conditions. A similar desired condition is included in the recreation section (FW-REC-DC-8). The Carson NF does not have authority to manage wildlife populations or the ability to manage drought.

Concern Statement 727 **Livestock and Wildlife Competition**

The Forest Plan should include the following plan language: Objectives, standards, or guidelines to better address competition between wildlife and livestock as well as human disturbance to relatively fragile montane subalpine grasslands (alternatives 2, 3, and 5).

Associated Comment Letter: 4887

Response

The State of New Mexico manages wildlife and it is not within the Carson NF's authority to do so. The final Plan includes Sustainable Rangelands and Livestock Grazing Management Approach-8 that describes a strategy of working with the New Mexico Department of Game and Fish and grazing permit holders to manage ungulates (e.g., elk, deer, bighorn sheep, and livestock) and their cumulative impacts on forest resources. Grazing impacts are managed according to plan components in the Sustainable Rangelands and Livestock Grazing section (FW-GRZ-DC-4, FW-GRZ-G-1, and -2). The final Plan directs management to maintain ecological conditions that contribute to self-sustaining wildlife populations (FW-WFP-DC-2, -3, and -4). Montane Subalpine Grasslands are managed according to the FW-VEG and FW-MSG plan components, particularly FW-VEG-DC-2, which describes ecosystems as resilient or adaptive to disturbances, including human use.

Concern Statement 728 **Mexican Gray Wolf**

Within the final Plan the following management approaches need to be included: "Best Practices" for protecting livestock and grazing operations where predators (Mexican gray wolf) are present have been successful in reducing negative interactions between predators and livestock. These best practices must be followed and include: 1. Removing, destroying, burying, or placing electric fencing around dead livestock discovered on allotments if carcasses would attract predators into high use areas such as currently grazed meadows, salting grounds, water sources, or holding corrals. 2. Removing sick or injured livestock from grazing allotments to prevent them from being targeted by predators.
3. Increasing range riding to provide a more consistent human presence around your cattle. This has proven to be one of the most effective means for reducing predator-livestock interactions and depredation.

There is nothing in your Grazing Permit, Allotment Management Plans (AMPs), or in these Annual Operation Instructions (AOI) that authorizes predator control. For this allotment, the permittee is aware: * The allotment does include predator habitat and the possibility of predator-livestock conflicts exists and will be an ongoing part of managing livestock on the allotment; * The permittee has an obligation to comply with the Endangered Species Act, among all other federal laws; * The Forest Service will provide conflict-reduction resources as they are developed, * A grazing permit in non-use status shall not be allowed to increase allowable animal unit months when returning to use to help prevent livestock-predator conflicts; * The Forest Service has provided notification to the permittee regarding BMPs to minimize the potential for predator-livestock interactions * Permittees must implement specific best management practices to reduce livestock-predator conflicts, including, at a minimum, the removal of predator attractants during calving season, increased human presence during vulnerable periods, use of range-riders and diversionary and deterrent tools such as fladry fencing, airhorns, cracker shells, etc.; * Measures to reduce livestock-predator conflicts, including a clause notifying the permittee of the potential for modification, cancellation, suspension, or temporary cessation of livestock activities to resolve livestock-predator conflicts; * Permittees are prohibited from using leg-hold traps to manage livestock predation on any allotments. All AOIs should include a notice to grazing permittees that they may take conservation non-use for the sake of reducing livestock-predator conflicts on these allotments, pursuant to the Forest Service regulations at 36 CFR 222.3 Issuance of grazing and livestock use permits 36 CFR 222.3 Issuance of grazing and livestock use permits(C)(1)(iv)(D); Forest Service Handbook 2209.13(17.2) Nonuse for Resource Protection or Development. Drought management planning should take into consideration increased competition between predators, native prey and livestock for forage and resources and the Forest Service should maintain an adequate supply of food for wildlife it intends to avoid livestock-predator conflict.

Associated Comment Letter: 4994

Response

There are currently no Mexican gray wolves on the Carson NF; however, the Range section of the plan directs the national forest to manage livestock to be compatible with ecological resources, which would include the Mexican gray wolf if it appeared on the forest (see FW-GRZ-S-1). Additionally, FW-GRZ-DC-4 directs livestock grazing and associated management activities to be compatible with ecological function and process (e.g., water infiltration, wildlife habitat, soil stability, and natural fire regimes). Any management activity that would deviate from the standard or progress away from the desired condition would first require a plan amendment. In addition, annual operating instructions are developed with permittees on a project-level basis and monitoring of allotments ensures that we are able to respond to changing ecological conditions (e.g., new species, drought). Also, the plan and law require consultation for endangered species. For instance, FW-WFP-G-1 states that: "Management activities and special uses occurring within federally listed species habitat are required to integrate habitat management objectives and species protection measures from the most recent approved USFWS recovery plan, to maintain the persistence or contribute to the recovery of federally listed species."

Concern Statement 729 **Sustainable Grazing**

The Forest Plan should include the following plan language: remove the term sustainable from the range section (DC-1, and titles). Add "only permitted where" to FW-GRZ-DC-4. Add "wildlife and, where appropriate" to FW-GRZ-DC-5.

Associated Comment Letter: 4994

Response

The final Plan defines sustainability as the ability of the Carson NF and its resources to meet the needs of the present generation without compromising the ability to meet the needs of future generations. Sustainability includes ecological, economic, and social capabilities. It requires symbiotic interaction among ecological integrity; the ability of society to produce and consume or otherwise benefit from goods and services; and the ability of society to support the network of relationships, traditions, culture, and activities that connect people to the land and to one another in vibrant communities (36 CFR 219.19).

The only livestock grazing that occurs on the Carson NF is by permit; therefore, FW-GRZ-DC-4 refers to permitted grazing (36 CFR § 222.3). FW-WFP-DC-2 and FW-GRZ-DC-4 direct management to provide forage for wildlife. Lastly, livestock grazing would only be allowed where it is determined to be appropriate, as required by FW-GRZ-S-1 and FW-GRZ-G-1. Determination of where grazing is appropriate and rangelands' capacity are determined by allotment-level NEPA analysis.

Concern Statement 730 **Range Infrastructure, Wildlife**

Support of plan components in the Carson draft plan that require range improvements to provide for the safe passage of wildlife.

Associated Comment Letter: 4893

Response

The final Plan includes FW-GRZ-S-2 and FW-GRZ-S-3, which require range improvements to provide for wildlife safe passage.

Concern Statement 731 **Fencing, Wildlife**

The final Plan should require that livestock fencing constructed on the Forest must be wildlife friendly.

Associated Comment Letters: 4835, 4880, 4925

Response

In the final Plan, FW-GRZ-S-2 states that, “New or reconstructed fencing shall allow for wildlife passage, except where specifically intended to exclude wildlife (e.g., elk exclosure fence), to protect human health and safety.”

Concern Statement 732 **Domestic Sheep and Goats, Bighorn Sheep**

The Final Plan should continue to include FW-SU-S 3, which prohibits use of domestic sheep or goats under special use permit authorization in occupied and suitable but vacant Rocky Mountain bighorn sheep habitat.

Associated Comment Letter: 4848

Response

Standard FW-SU-S-3 has been included in the final plan.

Concern Statement 733 **Domestic Sheep, Bighorn Sheep**

ln order to minimize the threat of transferring pneumonia induced bacterial pasteurella diseases, (Mannheimia hemolytic, Mycoplasma ovipneumoniae, and others), from domestic sheep and goats to wild bighorn sheep, we believe unused grazing allotments near Rocky Mountain bighorn sheep inhabited areas should be converted to cattle, and any new allotments should be released for cattle only. We also believe more emphasis should be placed on domestic sheep/goat and bighorn sheep separation in the plan, in the appropriate places. Note that these two allotments are only 5 to 6 miles from the bighorn population in the Rio Grande Gorge.

Associated Comment Letter: 4838

Response

Grazing management and class of livestock are considered as part of project-level analysis (NEPA) and outside of the scope of this programmatic analysis for the final Plan.

However, FW-GRZ-G-8 in the final Plan prohibits permit conversions of cattle allotments to domestic sheep or goats within bighorn sheep-occupied habitat or areas of high risk of contact, to mitigate the potential transfer of disease from domestic sheep to bighorn sheep. Also, FW-GRZ-S-4 requires scientifically supported strategies to be used to manage allotments to mitigate the potential transfer of disease from domestic sheep to bighorn sheep. Management Approach for Wildlife, Fish, and Plants-9 describes a strategy of converting permitted domestic sheep allotments to cattle when they overlap Rocky Mountain bighorn sheep-occupied habitat or areas of high risk of contact.

Concern Statement 734 **Collaboration, Disease Transmission**

Within the Final Plan Sustainable Rangelands and Livestock Grazing (FW-GRZ) Management Approach Item 7, add “and disease transmission” at the end of the last sentence. Page 108.

Associated Comment Letter: 4838

Response

Sustainable Rangelands and Livestock Grazing Management Approach-7 is Management Approach-8 in the final Plan and considers facilitating dialogue between New Mexico Department of Game and Fish and permit holders about ungulates, including disease transmission. Also, added to Wildlife, Fish, and Plant Management Approach-1 was the following “control and management of diseases to consider coordination with the NM Department of Game and Fish (NMDGF), USFWS, adjacent landowners, adjacent Federal and State land managers, and federally recognized tribes regarding listed and or native species about this topic.”

Concern Statement 735 **Collaboration, Private Domestic Sheep**

The Plan should include language that Forest Service, Bureau of Land Management, and New Mexico Department of Game and Fish should jointly identify where private land small domestic sheep flocks are and meet with the owners to discuss possible actions to minimize risk-of-contact to Bighorn Sheep.

Associated Comment Letter: 4838

Response

The final Plan includes Wildlife, Fish, and Plant Management Approach-1, which encourages the Forest Service to coordinate with the New Mexico Department of Game and Fish, U.S. Fish and Wildlife Service, adjacent landowners, adjacent Federal and State land managers, and federally recognized tribes regarding listed and native species. Sustainable Rangelands and Livestock Grazing management Approaches-1 and -9, along with FW-WFP-DC-11, FW-GRZ-S-4, FW-GRZ-G-8, FW-SU-S-3, DA-Wild-S-5, and DA-WSR-S-4 address possible actions to minimize risk of contact to bighorn sheep.

Concern Statement 736 **Grazing Analysis**

Assumptions used for the analysis of impacts are flawed. The Forest Service does not discuss two important issues related to the analysis of the impacts of livestock grazing. In the DEIS section identifying the assumptions used for rangeland management the DEIS is silent on how animal unit months (AUMs) are calculated and is also silent on the important issue of trespass. Because this important information is missing, the Forest Service must revise the Draft EIS to acknowledge and address the impacts of unauthorized grazing by permittees, as well as disclose how AUMs are calculated.

Associated Comment Letter: 4994

Response

The FEIS does not address unauthorized use or trespass because they are addressed by existing policy and direction (36 CFR 261.7 and FSH 2209.13). Specifically, 36 CFR 261.3 states that, “Unauthorized livestock means any cattle, sheep, goat, hog, or equine not defined as a wild free-roaming horse or burro by § 222.20(b)(13), which is not authorized by permit to be upon the land on which the livestock is located and which is not related to use authorized by a grazing permit.”

Conversions of the kind or class of livestock may be made as an administrative action where such conversion is consistent with the existing project-level NEPA analysis and decision and supported by appropriate inventory or monitoring information. Suitability and capacity (animal unit month calculations) of an allotment are considered as part of project-level analysis (NEPA) and beyond the scope of this programmatic analysis for the final Plan. Project-level analysis would address changes to authorized grazing through term grazing permits (subject to forestwide-standards and guidelines), allotment management plans, and annual operating instructions.

Concern Statement 737 **Grazing Analysis**

We expect that any subsequent NEPA document prepared during this plan revision process include additional issues and threats related specifically to domestic livestock grazing and the issues caused by that forest activity. Some possible metrics could be soil compaction, erosion, sedimentation, stream shade, nutrient enrichment, or presence of pathogens, as those are livestock impacts that the DEIS has already identified.

Associated Comment Letter: 5347

Response

The FEIS includes a Sustainable Rangelands and Livestock Grazing section in which the effects to this resource are analyzed. In addition, effects to sustainable rangelands and livestock grazing can be found throughout the analysis for other resource areas. For example, soil compaction, erosion, and sedimentation is discussed in the Soils Resources section (FEIS, Chapter 3, Environmental

Consequences for Soil Resources). Direct impacts on riparian areas from grazing including soil impacts, reduced vegetative cover, nutrient enrichment, and pathogens are described in the Environmental Consequences for Watersheds and Water Common to All Alternatives section (FEIS, Chapter 3). No additional subsequent NEPA documents related to the forest plan revision effort have been produced.

Concern Statement 738 **Grazing Analysis, Cost-benefit**

Draft DEIS fails to adequately consider the environmental impacts of livestock grazing on ecological integrity, wildlife, fisheries, and recreation. Draft DEIS also fails to consider whether the environmental costs of public lands grazing outweigh the economic benefits.

Associated Comment Letters: 4994, 5347

Response

In compliance with the 2012 Planning Rule, livestock grazing impacts have been analyzed and are discussed in the FEIS (Volume 1, Chapter 3). The economic benefits of livestock grazing are discussed in Chapter 3, Environmental Consequences for Sustainable Rangelands and Livestock Grazing.

Concern Statement 739 **Grazing Analysis**

The DEIS must address livestock sustainability and plan for the recovery and expanded habitat of all native predators. To address a significant concern, the Forest Service must apply the best available scientific information, 36 CFR § 219.3, to determine which areas of the Forest are suitable for livestock grazing, and which are not. 36 CFR § 219.7(e)(1)(v). Unfortunately, the DEIS and Draft LRMP are silent on this issue, as well as the capability of Forest Service lands to provide forage for livestock. This is a one primary example of a clear and direct failure of the Forest to apply the best available scientific information that must be remedied before the release of a final decision. The Forest Service is obligated to consider disturbances and can easily describe the livestock disturbance regime by analyzing stocking rates, rotations, season of use, and other metrics that are currently catalogued under existing range management programs. This information is required to satisfy the requirements of the planning rule.

Associated Comment Letters: 4994, 5347

Response

As stated in the 2012 Planning Rule Directives ((FSH 1909.12, 22.15), “National Forest System lands are generally suitable for a variety of uses consistent with the purposes for which they are administered (outdoor recreation, grazing, timber, watershed, and wildlife and fisheries). The identification of suitability of lands is not required for every resource or activity. For some resources, identifying the suitability of use or activity in a particular area may be more appropriately made at the project or activity level with site-specific analysis, stakeholder participation, and proposed design criteria. Every plan must identify those lands that are not suitable for timber production (§ 219.11). (36 CFR 219.7(e)(1)(v)).”

Identifying the suitability and capability of rangeland is more appropriately accomplished at the allotment level. According to the Carson 2014 Assessment (USDA FS Carson NF 2015), the forest is made up of nearly 1.5 million acres, of which 93 percent are suitable for livestock grazing. The remaining 7 percent includes developed recreation and administrative sites, ski areas, highway rights-of-way, and administrative horse pastures. Land suitable for livestock grazing is divided into grazing allotments; there are 75 allotments on the 6 ranger districts of the Carson NF. Five allotments are currently closed and nine have been placed in long-term non-use (table 6). Under all alternatives, the rangelands management and livestock grazing program has multiple mechanisms to evaluate, review, and adapt management as needed to effectively protect resources and respond to changing conditions. All 75 allotments on the Carson NF have environmental assessments that analyze probable forage production, current range condition and trend, carrying capacity, livestock distribution issues, and range improvement possibilities; these decisions are reanalyzed as conditions change or with permit renewal. Stocking decisions regarding the amount of livestock grazing authorized for each grazing allotment are considered as part of project-level analysis (NEPA) and are outside of the scope of this programmatic

analysis for the final Plan. Project-level analysis would address changes to authorized grazing through term grazing permits (subject to forestwide standards and guidelines); allotment management plans; and annual operating instructions.

Table 6. Grazing allotments on the Carson National Forest by ranger district

Status	Canjilon	El Rito	Jicarilla	Camino Real	Tres Piedras	Questa
Active	12	9	4	13	14	9
Closed	0	0	0	2	0	3
Non-use	0	0	2	0	3	4

Concern Statement 740 **Grazing Analysis, Cumulative Effects**

The DEIS also fails to address the additive effects (cumulative effects) of livestock grazing impacts coupled with drought, climate change, elk herbivory, restoration, recreation, roads, habitat fragmentation, uncharacteristic wildfire, and other stressors.

Associated Comment Letter: 5347

Response

The FEIS includes cumulative effects of livestock grazing together with impacts from other resources beginning on page 296. Cumulative impacts from livestock grazing are also included in the Final EIS within appropriate resource sections, such as wildlife, recreation, and vegetation.

Concern Statement 741 **Departure from Reference Conditions**

During the discussion on current range condition (page 283), the DEIS states that "many forest ecosystems that are used for livestock grazing are currently departed from reference condition." This statement leads the reader to assume that livestock grazing is the causal factor for the departure of ecosystems from reference conditions when, in fact, there is no evidence to support that claim or there is an entirely unrelated explanation. NMDA requests this statement be removed or edited to include other possible factors leading to a departure from reference conditions such as drought, fire suppression, erosion, or lack resource maintenance.

Associated Comment Letter: 5422

Response

The statement was clarified in the FEIS by adding, “historic use and management actions” as the causes for departure in many forest ecosystems that are used for livestock grazing.

Concern Statement 742 **Range of Alternatives**

The Carson NF has violated NEPA range of alternatives. There is no requirement for any changes in grazing management to occur until site-specific allotment management plans (AMPs) are created or revised. No alternatives propose any interim management prescriptions for livestock grazing even though the DEIS is replete with references to current grazing practices responsible for conditions that are far below the current or proposed desired conditions. The final EIS should include an alternative that changes the Carson NF grazing management.

Associated Comment Letter: 4994

Response

Under all alternatives, the rangelands management and livestock grazing program has multiple mechanisms to evaluate, review, and adapt management as needed to effectively protect resources and respond to changing conditions. Stocking decisions regarding the amount of livestock grazing authorized for each grazing allotment are considered as part of project-level analysis (NEPA) and are outside of the scope of this programmatic analysis for the final Plan. Project-level analysis would address changes to

authorized grazing through term grazing permits (subject to forestwide standards and guidelines), allotment management plans, and annual operating instructions.

Concern Statement 743 **Grazing Analysis, National Environmental Policy Act of 1976**

The Forest is violating the National Environmental Policy Act, 42 U.S.C. §4321 et seq. and its implementing regulations, 40 CFR §1500 et seq., by issuing grazing permits and making important grazing management decisions on allotments throughout the Forest without compliance with NEPA's environmental analysis or public participation requirements and by deferring all site-specific analysis to some to-be-completed-but-aspirational revision of the Forest's outdated AMPs. Analysis of impacts is indefinitely deferred. The Forest Service is illegally deferring long-overdue analysis and failing to use the best available science and ignoring known and available information. These violations are not remedied by the revision process but rather exacerbated by the clear direction to continue defer actual analysis on grazing permits: Project-level analysis would cover changes to authorized grazing through term grazing permits (subject to forest wide standards and guidelines); allotment management plans; and annual operating instructions. Unfortunately, the DEIS is the perfect example of the NEPA shell game whereby analysis is deferred from the larger planning document to yet to be conducted site-specific analysis. However, the agency has no intention of actually completing the site-specific analysis and continues to permit the underlying activity in the meantime. This is a clear violation of law and must be remedied before a final decision is implemented. The problems with deferring any action to site-specific analysis are manifold given the tremendous impact livestock grazing has had on the ecological conditions of the Carson NF.

Associated Comment Letter: 4994

Response

On the majority of the Carson NF allotments, NEPA analysis has been completed between 1996 to 2011; revision does not have a specified timeframe for completion. Furthermore, however, the Rescissions Act of 1995, Public Law 104-19 Section 504a, allows permits to be reissued when the NEPA process is considered insufficient.

Concern Statement 744 **Collaboration**

Change Sustainable Rangelands and Livestock Grazing Management Approach 7 to state “Facilitate a dialogue between New Mexico Department of Game and Fish and permit holders about ungulates (e.g., elk. deer, bighorn sheep, and livestock) and cumulative effects on allocation of forest resources.”

Associated Comment Letters: 4951, 5574

Response

Adding “allocation of forest resources” to the end of Sustainable Rangelands and Livestock Grazing Management Approach-7 does not clarify the intent of the management approach and was therefore not included in the final Plan.

Concern Statement 745 **Consultation, Permittees**

Create a plan component that requires the Forest Service to consult with grazing permittees when planning and prioritizing programs, projects and activities that may impact livestock grazing. This could be done by converting Sustainable Rangelands and Livestock Grazing Management Approach 1 into a Desired Condition. (Ties to Hassell Report Recommendation 23; Hurst Policy Memo paragraph 15).

Associated Comment Letters: 143, 4926

Response

The Grazing Permit Administration Handbook (FSH 2209.13_92.12, 92.13, 92.23, 94.3) requires that grazing permittees be involved in planning, monitoring, and projects that may impact livestock grazing.

Footnotes are also included in FW-GRZ-S-1 and FW-GRZ-G-1 citing this handbook for guidance when cooperating with permittees in the Final Plan. This is Forest Service policy, and therefore, must be followed.

Concern Statement 746 **Coordination, Permitees**

The Final Plan should include Sustainable Rangeland and Livestock Grazing Management Approaches that would facilitate coordination with permit holders, Forest Service, and other user groups to pursue mutually beneficial improvement on allotment or develop mitigation for allotment projects. At a minimum, the Final Plan should include non-profit partners in Sustainable Rangelands and Livestock Grazing Management Approaches. The Final Plan should also include a Sustainable Rangelands and Livestock Grazing Management Approach that considered allowing permittees to voluntary retire permits. Lastly, the Final Plan needs to prioritize Forest Service lands for wildlife use.

Associated Comment Letters: 4994, 5303

Response

Sustainable Rangelands and Livestock Grazing Management Approach-6 is part of the final Plan and includes partnering with other groups on allotments. The Grazing Permit Administration Handbook (FSH 2209.13_92.12, 92.13, 92.23, 94.3) requires that grazing permittees be involved in planning, monitoring, and projects that may impact livestock grazing. Footnotes are also included in FW-GRZ-S-1 and FW-GRZ-G-1 citing this handbook for guidance when cooperating with permittees in the Final Plan. This is Forest Service policy, and therefore, must be followed.

Concern Statement 747 **Partners, Permit Issuance**

Include a management approach that the Forest Service routinely notify partnering agencies when allotment grazing permits come up for renewal in order for the agencies to provide input and ensure that future grazing management plans for each allotment are created with state oversight where appropriate.

Associated Comment Letter: 5515

Response

Permit issuance is a project-level NEPA analysis and decision. Project analysis principles already exist in agency policy as codified in the Forest Service Directive System (FSH 2209.13). Public participation and notice are required by NEPA (40 CFR Part 25).

Additionally, however, in Management Approach for Sustainable Rangelands and Livestock Grazing-1: “Forest managers cooperate, collaborate, and coordinate with permit holders to respond to changing resource conditions. Cooperation, collaboration and coordination among Carson and permit holders is key to improving rangeland and forest conditions for multiple uses, moving toward desired conditions, and contributing to the socioeconomic wellbeing of local communities. In addition, collaboration among stakeholders is important, including local communities; permit holders; Federal, State, county and local government entities.”

Concern Statement 748 **Impaired Water Quality, Permit Renewal, Notification**

This National Park Service Management Program identifies the Surface Water Quality Bureau of NMED as a state agency providing other State and Federal agencies with technical advice on reducing nonpoint source pollution sources to meet state water quality standards. The Santa Fe NF Draft Plan lays out goals of meeting state water quality standards, so in particular when an allotment containing a stream body listed on the state's Impaired Waters list comes up for permit renewal the Santa Fe NF should notify the Surface Water Quality Bureau of NMED. The Carson NF’s final Plan needs to do the same.

Associated Comment Letter: 5515

Response

The Carson NF works closely with the New Mexico Environment Department (NMED) and currently has a memorandum of understanding with NMED as a cooperating government agency. The following desired conditions in the final Plan direct management to meet or surpass water quality standards provided by NMED: FW-WSW-DC-2, FW-WSW-DC-7, FW-WSW-RMZ-STM-DC-5 and 6, FW-WS-RTMZ-WB-DC-5, and FW-WSW-RMZ-SNS-DC-7. Additionally, FW-WSW-G-1 and FW-GRZ-S-1 in the final Plan require livestock management to be compatible with ecological resources (such as water quality) and best management practices to be implemented for all management activities to maintain water quality. Water quality is determined by NMED; this standard would therefore require collaboration with NMED. Management Approach for Sustainable Rangelands and Livestock Grazing-1 in the final Plan encourages collaboration with state agencies during project development.

Concern Statement 749 **Collaboration, Ungulates**

The Forest Plan should include Sustainable Rangelands and Livestock Grazing Management Approach 8: Facilitate dialogue between the New Mexico Department of Game and Fish and permit holders about ungulates (e.g., elk, deer, bighorn sheep, and livestock) and the cumulative impacts on forest resources.

Associated Comment Letter: 4848

Response

Sustainable Rangelands and Livestock Grazing Management Approach-8 is included in the final Plan.

Concern Statement 750 **Public Rangelands Improvement Act**

The Final Plan should include Public Rangelands Improvement Act in Appendix C or in the Sustainable Rangelands and Livestock Grazing (GRZ) Introduction Section.

Associated Comment Letter: 143

Response

The Public Rangelands Improvement Act is included in appendix C of the final Plan. The Granger-Thye Act of 1950 has also been added to appendix C.

Concern Statement 751 **Grazing Rights**

The final Plan needs to recognize valid existing rights that exist on the Carson NF. Allotment owners own rights associated with private land and water on the forest that enable their use of grazing allotments. The exercise of these rights, such as use of a stock water right, directly and indirectly benefits the Carson NF.

Associated Comment Letter: 5422

Response

It continues to be the position of the Forest Service that no person, community, or entity, other than the United States, holds a property interest or right in former community lands that are now part of the national forests. Community lands were set aside for grazing and other communal uses as part of land grants issued by Spain and Mexico. Grazing has occurred on these lands, in some cases for hundreds of years, but historical grazing on public lands does not confer a vested right to continue grazing.

The Forest Service has fielded inquiries over the years from the northern New Mexico ranching community regarding grazing rights, particularly in response to the Carson and Santa Fe forest plan revision efforts. The Forest Service agrees with these communities that grazing is an important resource from an economic, social, and cultural perspective. In fact, the importance of grazing is recognized in both the Traditional Communities and Uses and Sustainable Rangelands and Livestock Grazing sections of the Carson NF's final Plan. These sections are identical to those in the Santa Fe and Cibola NFs' final Plans, reflecting our collective recognition that land use crosses forest boundaries, both traditionally, and

in current practice. That being said, the Forest Service does not recognize vested grazing rights on National Forest System lands.

Recreation - REC

Concern Statement 752 **Recreation Emphasis, Opposition**

The plan’s emphasis on increasing tourism violates the National Forest Management Act and other related public laws governing the management of the Carson NF. Many communities do not support an emphasis on increasing recreation.

Associated Comment Letter: 5588

Response

As stated in the record of decision, the final Plan is compliant with the National Forest Management Act, as the plan was developed following the Final Planning Rule for National Forest System land management planning (36 CFR Part 219) and was created with an interdisciplinary approach achieving integrated consideration of physical, biological, economic, and other sciences (16 U.S.C. 1604(b), (f), (g), and (o)). Under this Act, the Forest Service is to ensure coordination of the multiple uses, including outdoor recreation and sustained yield of products and services of the National Forest System (16 U.S.C. 1604(e)(1)).

The forest conducted public workshops to develop the alternatives analyzed in the FEIS. In these workshops, demand for recreation was noted and included in alternatives 2, 3, 4, and 5, respectively (FEIS, Chapter 2, Comparison of Alternatives section). The final Plan does not influence recreational demand or trends in tourism but sets the vision for the mix of recreational opportunities that occur on the national forest.

Concern Statement 753 **Recreation Emphasis, Support**

Outdoor recreation is the leading economic driver for many of the communities in the region. In New Mexico, outdoor recreation generated over 99,000 direct jobs producing $2.8 billion in wages and salaries. Outdoor recreation generates $9.9 billion in consumer spending annually in New Mexico, producing $623 million in state and local tax revenue (1). And to quote from this Preliminary Draft, the Carson NF's estimated one million visitors to the Carson NF, 89% come for recreational pursuits (2). Based upon these numbers, the emphasis on recreation in the Draft Forest Management Plan is very low.

Associated Comment Letter: 4960

Response

Almost every resource introduction section in the final Plan mentions recreation as a provisioning and cultural ecosystem service provided by the forest. The Final Plan also includes the following plan components and management approaches that encourage recreation opportunities: FW-WSW-DC-6, FW-REC-DC 1-13; FW-REC-O 1-5; FW-REC-S 1-2; FW-REC-G-1-5; Recreation management approaches 1-5, FW-TFA-DC-1, FW-TFA-O-3-4, FW-FAC-DC-1-3, FW-SU-DC-1-8, FW-PART-DC-1-4, DA-WILD-DC-1, DA-WILD-DC-4, DA-IRA-DC-3, DA-NTRL-DC-1-11, DA-NSBW-DC-1-4, MA-DEVERES-DC-1-7, MA-PDRMA-DC-1, MA-VVMA-DC-4, and MA-SAMA-DC-3-4.

The Recreation Resource Section of the FEIS includes a discussion about the economic importance of recreation to the communities of the Carson NF.

Concern Statement 754 **Multiple Use**

The Forest is under a multiple-use mandate that requires a successful shared use environment, this includes reducing user conflicts, not by restricting uses over another one. The Forest needs to develop a specific plan for how it is going to educate all user groups and properly set user expectations in a shared

use environment. A plan component needs to be added that address this: “There is a need to include management approaches within the revised plan to address user conflicts and demands when planning towards recreation desired conditions.” This lack of an identified plan to educate user groups and properly set user expectations is a significant issue that must be dealt with in the current Forest Plan revision.

Associated Comment Letter: 24

Response

The final Plan provides direction to work with partners and volunteers in educating user groups and to reduce user conflicts (FW-PART-DC-1). A recreation objective was established to increase awareness of discouraged practices and promote visitor safety (FW-REC-O-1). Management approaches encourage providing educational information to enhance visitor experiences and partnering with local communities to co-manage a sustainable recreation program on the forest (Management Approaches for Recreation-2, and -3).

User conflicts and demands are best addressed at the project-level when specific recreation projects are being developed.

Concern Statement 755 **Conflict Resolution, Education**

The plan should include several management approaches similar to those proposed in the Santa Fe NF's draft land management plan to better educate and engage the public: Collaborate with livestock permit holders and recreationists to resolve conflicts. Consider multilingual interpretation in recreation areas popular with non-English-speaking visitors. Consider programs to educate the public on land stewardship using minimum impact principles (e.g., Leave No Trace, Tread Lightly, or Don't Bust the Crust!). Develop conservation education, visitor information, and interpretation materials to inform and engage visitors and local communities.

Associated Comment Letter: 4898

Response

The final Plan includes direction addressing conservation education (FS-REC-DC-6 and Management Approach for Recreation-5) and developing methods for providing visitor information and education (FW-REC-O-2). Management Approaches for Rural Historic Communities-8 and -10 specifically address incorporating Spanish and native languages into interpretive materials. An emphasis on facilitating discussion between livestock grazing permit holders and other groups and individuals was added to the final Plan (Management Approach for Sustainable Rangelands and Livestock Grazing-6).

Concern Statement 756 **Education**

Modify Recreation Objectives (FW-REC-O-1) (Page 118) to read: “Develop and accomplish a comprehensive strategy that raises awareness of discouraged practices (e.g., illegal dumping, shooting practices, driving on closed roads) to promote visitor safety, during the 10-year period following plan approval.”

Associated Comment Letters: 4960, 4970

Response

Recreation Objective 1 in the final Plan states, “Develop and accomplish at least 1 strategy that raises awareness of discouraged practices (e.g., illegal dumping, shooting practices, driving on closed roads) to promote visitor safety, during the 10-year period following plan approval.” The suggested language of ‘comprehensive’ was not added to this objective because the forest wanted flexibility in the type of strategy that was developed; this strategy could be comprehensive, or site-specific. Management approaches 2, 3, 5, and 6 provide guidance about educating the public and working with partners in developing those messages. This could include raising awareness of discouraged practices (Final Plan, Recreation Section).

Concern Statement 757 **Motorized Recreation**

The revised Forest Plan should include a clear objective and goal statements of how the Carson NF will enhance its role in contributing to the local economies via development and enhancement of motorized recreation opportunities.

Associated Comment Letter: 24

Response

A discussion of the importance of motorized, trail-based recreation has been added to the Recreation section introduction in the final Plan. Motorized trail opportunities have been specifically identified in FW-REC-DC-5 as among the opportunities that should be available, responsive, and adaptable. Trail planning, design, construction, and maintenance have been added as a specific emphasis for partnerships under Management Approaches for Recreation-3 and -9.

The final Plan provides a programmatic framework that guides site-specific actions, but does not authorize, fund, or carry out a specific project or activity (such as motorized recreation projects). The Plan includes desired conditions (FW-REC-DC-4, -5, -11, and -13) that direct land managers to provide both motorized and non-motorized recreation opportunities that are responsive to changing uses and trends. These desired conditions also direct land managers to provide recreation opportunities that contribute to the economic, cultural, and social vitality and well-being of surrounding communities. Projects are designed to maintain or move toward desired conditions and to be consistent with the plan over the long term. Desired conditions are not merely aspirational but require projects to be consistent and/ or move conditions toward them. Any motorized recreation project would be based in part on public interest and needs and would include consideration of economic, among other factors.

Concern Statement 758 **Developed Recreation**

In the Recreation Introduction, modify Paragraph 5 to read: "Developed recreation provides a more accessible experience with available parking, shelters, running water, or other facilities. Developed recreation experiences can also include interpretive nature trails, and purpose-built mountain bike areas including skills features and engineered trails." Many areas with enhanced mountain biking opportunities on Federal, State or other land, include planned and purpose-built structures intended to enhance participants activity and help build skills. For example, parking areas that provide access to trails can include simple structures intended for mountain bikers to ride over or balance on. These features are considered part of the developed recreation experience and should be included when thinking about developing or improving new or existing recreation opportunities on the forest.

Associated Comment Letters: 4960, 4970

Response

The introduction to the Recreation section in the final Plan was updated to include interpretive opportunities and purpose-built facilities.

Concern Statement 759 **Traditional Community Recreation**

Modify Recreation Desired Condition-3 to read: “A variety of high quality developed and dispersed recreation opportunities and activities (e.g., hunting, fishing, camping, hiking, rock climbing, mountain biking, horseback riding, family or group gatherings, fuelwood or pinon nut collecting, scenic driving, and ohv driving) are available to a diverse group of forest users, including persons with disabilities. Recreation opportunities are commensurate with the recreation setting and other natural and cultural resource values.” It seems odd to include a specific list of recreation activities for important to traditional communities and not include a similar list important to other surrounding communities. It is important to include specific inclusion of traditional community interests, but it is important that no single user group be granted more or less consideration when prioritizing desired recreational conditions.

Associated Comment Letters: 4960, 4970

Response

Activities listed in FW-REC-DC-2 in the final Plan are referred to as traditional community recreation; although the Carson NF manages them as recreational activities, they are not always considered as such by their participants. FW-REC-DC-3 directs the Carson NF to manage for a wide range of recreational activities for a diverse group of forest users. The final Plan does not list every recreational opportunity or activity that the Carson NF provides, but this in no way diminishes the importance of any activity to its participants and does not represent a prioritization for recreation management. The Carson NF provides rock climbing, mountain biking, horseback riding, and off-highway vehicle driving opportunities, along with many other activities. All activities listed in the concern statement are mentioned in the introduction to the Recreation section in the final Plan.

Concern Statement 760 **Integrated Resource Management**

Add a management approach that addresses evaluating existing recreation infrastructure and possible new opportunities for sustainable recreation (trails, trailheads, climbing access, camping sites, etc.) as the Forest Service analyzes and implements forest health and fuel management projects.

Associated Comment Letter: 5236

Response

The National Environmental Policy Act (NEPA) regulations provide for an interdisciplinary approach when developing and analyzing proposed projects (40 CFR §1501.2(a) and §1507.2(a)). This includes identifying opportunities for sustainable recreation projects when proposing forest health or fuel management projects. The final Plan does not preclude the forest from looking for these opportunities during project planning. In fact, integrated resource management is foundational to the final Plan and recognizes the need to consider ecological, social, and economic factors when implementing the Plan at the project-level. Trail opportunities have been specifically identified in FW-REC-DC-5 among opportunities that should be available, responsive, and adaptable. Trail planning, design, construction, and maintenance have been added as a specific emphasis for partnerships under Management Approaches for Recreation-3 and -9. Management Approach-10 has been added to the Recreation section in the final Plan and describes a strategy of converting existing unneeded roads into motorized or non-motorized trails to create new recreation opportunities.

Concern Statement 761 **Ecological Impacts, Wildlife Conflicts**

Compared to earlier versions of the plan REC G-1 and G-3 wording was changed from “prevent” to “minimize.” There is a significant difference here, and this change weakens resource protection. Prevent gives clean direction, while minimize is a weaker standard and allows too much discretion, is too vague to provide meaningful goals and protection measures. Please explain the reason for this change

Associated Comment Letter: 5673

Response

The wording in guidelines REC G-1 and G-3 was changed from “prevent” to “minimize” in the final Plan because the forest determined that, in a guideline, management cannot fully prevent impacts to ecological desired conditions or human and wildlife conflicts. The 2012 Planning Rule regulations for writing guidelines state that: “A guideline is a constraint on project and activity decision making that allows for departure from its terms, so long as the purpose of the guideline is met” (36 CFR 219.15(d)(3)). “Guidelines are established to help achieve or maintain a desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements” (36 CFR 219.7(e)(1)(iv)). They provide conditions that help avoid or mitigate undesirable effects. Although the language was changed from “prevent” to “minimize,” overall direction is still to provide protection from undesirable effects.

Concern Statement 762 **Native Languages**

All Forest Service signage, publications, brochures, and informational documents should be written in native languages (i.e., Spanish, Tanoan, Keres, Athabaskan) as well as in English. Signage should include traditional names for these areas as identified in consultation with local communities, as well as names currently found on Forest Service maps and other literature. The publication of documents, the increase of signage in native languages, including Spanish, will not only assist these communities in retaining their cultural integrity and recovering a culture that was lost or stolen, but will increase their access to forest resources.

Associated Comment Letters: 4856, 4926

Response

In the final Plan Federally Recognized Tribes Management Approach-9 encourages incorporation of native languages into interpretive materials as a way to highlight the American Indian culture. Management Approach-8 of the Rural Historic Communities section also addresses the need to incorporate Spanish into signage, publications, brochures, etc. The Northern New Mexico Traditional Communities and Uses sections in the final Plan include multiple plan components and strategies that focus on coordination with interested and affected communities beginning at the early stages of planning and project design, namely, FW-FRT-G-2 and FW-RHC-G-3. Management Approaches for Federally Recognized Tribes-1, 2, 3, and 4 also address collaboration with Tribes to understand their needs and develop interpretive and educational materials that promote better understanding and appreciation. Management Approaches for Rural Historic Communities-1, 2, 3, 4, 7, and 10 describe building collaborative relationships to understand rural historic community needs and develop interpretive and educational materials that promote better understanding and appreciation. The Partnerships section also includes a desired condition (FW-PART-DC-1) that directs the Carson NF to rely on partners to assist in communicating with the public. Together, these plan components and management approaches describe a commitment to working with local communities to identify opportunities to improve education and promote understanding. This includes opportunities to translate signs or documents or other materials into other languages when and where local communities identify that need.

Concern Statement 763 **Campfire Prohibition**

In order to reduce human-caused fires and provide for resource protection, the Forest Plan should prohibit the use of campfires outside of established recreational sites.

Associated Comment Letter: 160

Response

Fire restrictions are implemented when conditions warrant them. The plan addresses the role of suppression and information/education strategies to educate the public about their responsibility in helping reduce human-caused wildfires (e.g., FW-FIRE-DC-3, Management Approach for Wildland Fire Management-4).

Concern Statement 764 **Recreational Use of Technological Devices**

FW-REC-G-4 should apply to the use of technological devices and to recreation trends across the forest, not just in developed recreation sites. Delete the word “developed“ to achieve this change. Require a plan amendment in response to the emergence of new recreational uses beyond a threshold level (for example, 2 percent of visits), to ensure that the activity is ecologically and socially sustainable and does not impair ecological integrity.

Associated Comment Letter: 4856

Response

The Forest Service generally does not have the authority to manage the airspace for non-commercial aircraft. Developed campgrounds are managed more restrictively than the rest of the forest for the safety

and privacy of forest visitors. The Carson NF endorses and encourages visitors to follow tread lightly principles for responsible drone use on all public lands (www.treadlightly.org).

A plan amendment would not necessarily be required in response to new recreational uses. A monitoring question has been added to Monitoring Topic V in the final Plan to address emerging recreational uses. Impairments to ecological integrity are monitored under Monitoring Topics I and II, regardless of whether those impairments are caused by new recreational uses, existing recreational uses, or other factors.

Concern Statement 765 **Maintenance Backlog**

Add-in Draft Recreation Objective 5: ”Reduce the backlog of needed maintenance (i.e. deferred maintenance) at developed recreation areas by 50-60% from baseline levels, during the 10-year period following plan approval.” This was removed in Proposed Action with the justification that this in not “within the Carson's ability to control.” If the Forest does not have the ability to determine the maintenance of developed recreation, then this neglect comes at the expense of both the resource and stakeholders. Opportunities exist for organizing user groups to significantly assist the Carson NF in remedying the deferred maintenance backlog.

Associated Comment Letters: 4960, 4970

Response

Although reducing maintenance backlog is not entirely within the Carson’s ability to control because of budget allocations, strategic and collaborative partnerships can leverage resources to address some backlog issues and are addressed in the final Plan (specifically, Management Approaches for Recreation-3 and -4 and FW-PART-DC-1). Reducing services and/ or removing infrastructure at unsustainable facilities could allow funding to be re-directed toward more sustainable opportunities (Management Approach for Recreation-1).

Concern Statement 766 **Rio Grande Trail**

Improvements or additions to the Rio Grande Trail should provide for travel through towns and villages wherever possible so local communities can share economic opportunities associated with such a trail including providing lodging, food, resupply etc.

Associated Comment Letter: 5388

Response

Any improvements or additions to the Rio Grande Trail would occur during a project-level analysis. The final Plan provides management direction that would guide proposed projects along trails, such as the Rio Grande Trail (specifically, FW-REC-DC 4 and -13; Management Approaches-3, -4, -6, and -7).

Concern Statement 767 **Trail Demand**

Add the following Recreation Guideline: “Development of new recreational trails should consider current and growing recreational user groups including hikers and mountain bikers.” There should be some specific mention of trails, and trail expansion to meet growing needs in the guidelines as trail usage makes up a significant share of recreational usage on the forest.

Associated Comment Letters: 4960, 4970

Response

The final Plan discusses the importance of trail-based recreation (see introduction of the Recreation section). Trail opportunities (including hiking and mountain biking) have been specifically identified in FW-REC-DC-5 as among the opportunities that should be available, responsive, and adaptable. Trail planning, design, construction, and maintenance have been added as a specific emphasis for partnerships under Management Approaches for Recreation-3 and -9.

Concern Statement 768 **Trail Demand, Mountain Biking**

The Forest Plan should establish further opportunities for trail development that enhance the experience for mountain bikers, on trails that are designed for, but not exclusive to, mountain biking. Establish more mountain bike experiences across the forest to meet the demands of users and enhance the economy of local communities. Do not reduce the amount of existing mountain biking opportunities or access to these opportunities on the Forest.

Associated Comment Letters: 176, 3252, 4837, 4844, 4861, 4960, 5491, 5545, 5546

Response

The final Plan discusses the importance of trail-based recreation (see introduction to Recreation section introduction). The establishment of specific trails, however, is completed at the project-specific level, consistent with the final Plan. The Carson NF works with local communities and partners to prioritize sustainable trail development and seeks shared stewardship opportunities in the planning, implementation, and maintenance of both motorized and non-motorized trails, when applicable (FW-REC-DC-3; FW-REC-DC-5; FW-REC-DC-11; Management Approach for Recreation-7). Trail opportunities have been specifically identified in FW-REC-DC-5 as among the opportunities that should be available, responsive, and adaptable. Trail planning, design, construction, and maintenance have been added as a specific emphasis for partnerships under Management Approaches for Recreation-3 and -9.

Concern Statement 769 **Trail Demand, Non-Motorized**

The Forest should consider a blend of plan direction for Recreation under Alternative 2, Alternative 3, and Alternative 4 and needs more emphasis on developing new and maintaining existing non-motorized infrastructure on the forest. As participation in non-motorized recreation such as mountain biking continues to increase in northern New Mexico, it is important that the Forest anticipates and meets this growing demand.

Associated Comment Letter: 4960

Response

The final Plan discusses the importance of trail-based recreation (see the introduction to the Recreation section). Trail opportunities have been specifically identified in FW-REC-DC-5 as among the opportunities that should be available, responsive, and adaptable. Trail planning, design, construction, and maintenance have been added as a specific emphasis for partnerships under Management Approach for Recreation-3 and -9. The establishment of specific trails, however, is completed at the project-specific level. The Forest works with local communities and partners to prioritize sustainable trail development and seeks shared stewardship opportunities in the planning, implementation, and maintenance of both motorized and non-motorized trails, when applicable (FW-REC-DC-3; FW-REC-DC-5; FW-REC-DC-11; Management Approach for Recreation-7).

Concern Statement 770 **Trail Demand, Non-motorized**

Add the following guideline to FW-REC-G: “Development of new recreational trails should consider current and growing recreational use groups including hikers and mountain bikers.”

Associated Comment Letters: 4837, 4846

Response

In the final Plan, FW-REC-DC-5 directs management to provide recreational opportunities that are responsive to changing uses and trends and available commensurate with public interest. Specific consideration of trails has been added to this desired condition.

Concern Statement 771 **Mechanized Trail Use**

Mechanized use should occur on separate trails.

Associated Comment Letter: 4904

Response

In the final Plan, FW-REC-DC-3 describes the desire for a variety of recreation opportunities, which may include multi-use trails or trails where mechanized use is prohibited (in wilderness or recommended wilderness, for example). Separate trails are one possible approach to avoid conflicting uses (as described by FW-REC-DC-7 and required by FW-REC-G-3); however, other ways to avoid conflicting uses might be identified at the project level.

Concern Statement 772 **Single-track Trails**

Forest needs to prioritize single-track mountain bike and dirt bike use.

Associated Comment Letters: 24, 2752, 4844, 4873

Response

The final Plan discusses the importance of trail-based recreation (see introduction to Recreation section). Trail opportunities have been specifically identified in FW-REC-DC-5 as among the opportunities that should be available, responsive, and adaptable. Trail planning, design, construction, and maintenance have been added as a specific emphasis for partnerships under Management Approaches for Recreation-3 and -9.

Concern Statement 773 **Mountain Bike Trails**

Add and modify Objective #8 (from alternative 3) to FW-REC-O: “Redesign existing trails, or construct new trails to create several purpose-built mountain biking trails as part of multi-user trail systems.”

Associated Comment Letters: 4837, 4960, 5444, 5528

Response

As discussed in the Record of Decision, objectives have been selected in the final Plan that reflect a balanced distribution of Carson NF resources, based on expected budget allocations. As discussed in the FEIS, the greater emphasis on recreation under alternative 3 has tradeoffs in terms of fuels management, prescribed fire, watershed restoration, and wildlife habitat improvement (Chapter 3, Environmental Consequences for Fuels and Wildland Fire-Alternative 3; Environmental Consequences for Watersheds and Water - Alternative 3; Environmental Consequences for Species of Conservation Concern – Alternative 3). New trail construction, especially multi-trail systems will require contributions from partners and volunteers to increase the Carson NF’s capacity to plan, construct, and maintain infrastructure as described in the final Plan (FW-PART-DC-1, Management Approaches for Recreation-3, and -9). Because plan components guide Forest Service personnel, not the public (FSH 1909.12 22.1(2)(g), and objectives are based on the fiscal capability of the unit (FSH 1909.12 22.12(5), this objective was not included in the final Plan; it is not appropriate for the plan to require partnerships in order to achieve objectives. A discussion of the importance of, and demand for, all forms of trail-based recreation has been added to the introduction to the Recreation section in the final Plan. Trails have been added to FW-REC-DC-5 as a specific example of recreation opportunities that should be available commensurate with public interest and trends. Trail planning, design, construction, and maintenance have been added as a specific emphasis for partnerships under Management Approaches for Recreation-3 and -9.

Concern Statement 774 **Mountain Bike Trails**

The Forest Service should not create a trail system for mountain bikes and instead collaborate with the State Highway Dept. to make wider shoulders along all the roads through our forest lands for the safety of bicyclists and motorists.

Associated Comment Letter: 4853

Response

The final Plan includes a management approach for Transportation and Forest Access addressing the need to collaborate with adjacent stakeholders, which would include the New Mexico Department of Transportation, to develop contiguous road and trail systems across ownerships. The Forest Service does not have the authority to manage state highways but may provide comment on individual projects and project guidance if the project falls within a right-of-way or easement on National Forest System Lands. If a larger right-of-way is needed for the state highway, the Forest Service would authorize that activity (FSM 2730). The final Plan includes desired conditions that describe managing for sustainable use and diverse recreation opportunities (FW-REC-DC 4, 5, 7, and 13). This vision could include trails along highway shoulders; however, the Carson NF does not consider this type of trail alone to adequately meet public demand for the range of desired recreational opportunities and access to multiple parts of the national forest.

Concern Statement 775 **Cross-jurisdictional Trails**

The Plan should consider addressing additional recreation opportunities by assessing cross-jurisdictional trails; opportunities to tie into public transportation to high-use trailheads or create a transportation system for high volume days; install gateway stations at logical portal points.

Associated Comment Letter: 4856

Response

The plan addresses the national forest's desire to be responsive and adaptable to changing recreation uses and trends (FW-REC-DC-3, -5, -6) and that opportunities be commensurate with public need for trail access by diverse user groups. Working with neighborhoods, communities, and partners to connect users to their public lands is a strategy to reach these desired conditions (FW-REC-DC-11, FW-REC-DC-13, Management Approaches for Recreation-1, -3, -5, and -7).

Concern Statement 776 **Loop Trails, Paved Trailheads**

The Forest Plan needs to place more emphasis on recreation access by providing for the creation of more trailheads with multi-length loops for users of all types (hiking/skiing/snowshoeing) and emphasizing gateway communities. Roads to trailheads must be paved and when possible plowed in the winter.

Associated Comment Letter: 117

Response

The final Plan includes a management approach to consider developing motorized and non-motorized trail loop systems and improving connectivity of existing routes and communities (Management Approach for Recreation-7). The Plan also includes a management approach to involve local communities to help co-manage a sustainable recreation program, including planning and implementing recreation projects (Management Approach for Recreation-3). The forest provides access to trailheads along state highways in the winter, which may be plowed. These trailheads allow for access for winter recreation opportunities, such as snowshoeing, cross-country skiing, and back-country skiing. Maintenance of other designated forest system routes are based on the travel management decisions for each district; for instance, plowing is determined by the assigned maintenance-level for the individual route. Changing maintenance levels to paved routes, which allow for plowing, is a travel management decision and would occur at the project level.

Concern Statement 777 **Trail Networks**

Add the following Recreation Objective: "In response to increasing recreation demand, develop a minimum of three new non-motorized multi-user trail networks to provide increased opportunities for recreation activities including hiking, mountain-biking and horseback riding, within 10 years of plan approval."

Associated Comment Letters: 4837, 4846, 4960, 4970, 5528

Response

Although the Carson considered an objective to build trail networks under alternative 3 (FW-REC-O-8, FEIS, Appendix B, Differences Among the Revised Plan Alternatives), that objective is not included in the final Plan. Objectives must be attainable within the fiscal capability of the unit (FSH 19091.12 section 22.12(5)) and, as discussed in the Record of Decision, objectives have been selected in the final Plan that reflect a balanced distribution of Carson NF resources based on expected budget allocations. The greater emphasis on recreation under alternative 3 has tradeoffs in terms of fuels management, prescribed fire, watershed restoration, and wildlife habitat improvement and does not support the balanced approach in the final Plan (FEIS, Chapter 3, Environmental Consequences for Fuels and Wildland Fire-Alternative 3; Environmental Consequences for Watersheds and Water - Alternative 3; Environmental Consequences for Species of Conservation Concern – Alternative 3). A discussion of the importance of and demand for all forms of trail-based recreation has been added to the Recreation section introduction in the final Plan. Trails have been added to FW-REC-DC-5 as a specific example of recreation opportunities that should be available commensurate with public interest and trends. Trail planning, design, construction, and maintenance have been added as a specific emphasis for partnerships under Management Approaches for Recreation-3 and -9.

Management Approaches for Recreation-3, -6, -7, and -8 in the final Plan describe partnering with local communities, skilled stewardship organizations, volunteers, other government agencies, cooperators, and permit holders to help co-manage a sustainable recreation program, including planning, design, implementation, operations, conservation education, and maintenance, especially trails. They describe a strategy of relying on partners to help provide recreational opportunities as it is unlikely over the life of the plan that the Carson NF will have allocated funding to construct new trails. Any new trail planning and construction will need to be accomplished through partnerships as emphasized in the Partnerships section and Management Approaches for Recreation in the final Plan.

Concern Statement 778 **Trail Maintenance**

Add the following Recreation Objective: “Within 10 years of plan approval, 75 percent of the forest designated trail system is maintained to standard.” It is vital to maintain existing trails, otherwise they may functionally cease to exist except on paper. Desired Condition 10 states, “Recreation resources and facilities are well maintained and function as intended,” however, there are no Objectives that directly support achieving this desired condition. Further, there is no specific mention of trails objectives, despite trails being arguably the most used recreational resource.

Associated Comment Letters: 4960, 4970

Response

In the final Plan, FW-TFA-O-3 prioritizes maintaining 100 to 300 miles of trails annually. Over 10 years, that is 1,000 to 3,000 miles or 146 to 438 percent of the total trail miles on the Carson NF. Highly visited trails are maintained annually, while less visited trails may be less frequently and intensively maintained, depending on their trail management objective. Some existing trails are not sustainable and may be decommissioned in favor of new, more sustainable, trail systems that will take their place.

Concern Statement 779 **Trail Management**

Recreation Guidelines FW-REC-G (Page 118) Add the following Guideline: “Trails are managed to meet management objectives based on trail class and designed use.”

Associated Comment Letters: 4960, 4970, 5528

Response

Trail class is the prescribed scale of development for a trail, representing its intended design and management standards. Trail management objectives document the intended purpose and management of

a trail, based on management priorities and available resources. The Carson NF is not able to maintain all trails to a high standard using only Forest Service resources; and therefore, seeks to leverage opportunities with partners (FW-PART, Management Approach for Recreation-3, -9) especially for lower priority trails.

Annual trail management plans are based on historical maintenance requirements, the most current condition survey, a knowledge of the projected use of the trail, and a continuing evaluation of the need for certain trails. The annual trail management plan includes the total requirements for maintaining the trail system to the desired standards. Each year, the proposed plan is finalized based on final budget and staffing allocations. The following criteria are normally used in establishing priorities for trail maintenance work:

> Priority 1. Maintenance activities that would correct an unsafe condition relative to management objectives.
>
> Priority 2. Maintenance activities that minimize unacceptable resource and trail damage.
>
> Priority 3. Maintenance activities that fully restore the trail to the planned design standard.

Concern Statement 780 **Mitigation of Effects to Recreation**

Add the following Recreation Objective: “Other forest resource management activities that adversely affect recreation opportunities are mitigated upon completion to restore those recreation opportunities to their original quality, or in the event the alternative is unable to be remediated, new equivalent recreational opportunities are created within the area to replace those that have been lost.” Where necessary and important activities such as forest thinning, fire suppression affect existing recreational trails, it is vital that these trails be restored, or equivalent opportunities be created elsewhere. Already there is a lack of trail infrastructure on the forest and therefore it is important to ensure there is no net loss of opportunity due to other activities.

Associated Comment Letters: 4960, 4970, 5665

Response

A guideline has been added to the final Plan that requires reconstruction or repair of transportation infrastructure following project completion to maintain access, including for recreational uses (FW-TFA-G-10). Road and trail maintenance have been added to FW-TFA-DC-1. Additionally, in the final Plan, FW-REC-DC-8 describes the desire to keep conflicts among uses infrequent such as thinning or fire management impacts on recreation. FW-REC-DC-2 directs management to maintain a variety of high-quality developed and dispersed recreation opportunities and activities. Integrated resource management is a foundational framework that underlies the final Plan and recognizes the need for integrated consideration of ecological, social, and economic factors when implementing the Plan through project planning.

Concern Statement 781 **South Boundary and Continental Divide National Trails**

In the Recreation Introduction (Page 115) of the Plan, modify Paragraph 2 to read: “The Carson is also one of New Mexico's premier destinations for year-round mountain biking, and include both IMBA Epic designated South Boundary Trail (#164) as well as the Continental Divide Trail, which each attract recreational visitors from around the world.” On page 116, paragraphs 2 and 3 give quite a bit of detail about the motorized and snowmobile recreation. It is important to highlight that not only does mountain biking exist on the Carson, but it is a major draw for visitation, arguably the largest draft for visitor recreational activity.

Associated Comment Letter: 4960, 4970

Response

The introduction to the Recreation section in the final Plan references international visitation to the South Boundary Trail. The Continental Divide National Scenic Trail, including mountain bike use, is discussed in the National Scenic, Historic, and Recreation Trails section in the final Plan. The Recreation introduction is intended as a brief overview of all recreational resources, not a detailed description of specific amenities or recreational opportunities. As of 2012, the largest recreational draw on the Carson NF is hiking, followed by downhill skiing (USDA FS Carson NF 2015, p. 355).

Concern Statement 782 **Mechanized Use, Opposition**

Do not allow mechanized vehicles (dirt bikes, mountain bikes, ATVs, etc.) on Forest System Trails.

Associated Comment Letter: 4903

Response

The Multiple-Use Sustained-Yield Act determined that national forests shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes (Public Law 86-517, June 12, 1960). The act defines multiple use as: "The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people…" The final Plan meets the needs of the Multiple-Use Sustained-Yield Act, as documented in the Record of Decision (Findings Required by Other Laws and Relevant Directives section). The national forest has designated trails for both mechanized and non-mechanized use, with the majority of non-mechanized trails occurring within designated wilderness areas. The final Plan does not open or close any trails on the forest (ROD, Components of the Decision section); it does, however, include recreation desired conditions that aim to reduce user conflicts (FW-REC-DC-7) and allow for the availability of both motorized and non-motorized trails (FW-REC-DC-13). Additionally, two recreation standards (FW-REC-S-1 and -2) address construction of new motorized trails.

Concern Statement 783 **Motorized Use, Opposition**

Do not increase impacts from use along forest roads and from motorized uses. Restore temporary and unauthorized roads to improve habitat and reduce resource damage.

Associated Comment Letters: 196, 274, 380, 1044, 4860, 4887, 4925, 5325, 5721

Response

The Transportation and Forest Access section in the final Plan includes desired conditions that system roads and trails have minimal impacts on ecological and cultural resources (FW-TFA-DC-4). In addition, guidelines FW-TFA-G-2, -3, -4, -6, -8, and -9 address new system road construction, unauthorized roads, unneeded roads, and road maintenance impacts on terrestrial and aquatic wildlife species including at-risk species.

Concern Statement 784 **Motorized Use, Closed Roads**

The plan needs to address motorized use on closed roads or where roads are causing resource damage or impacting wildlife habitat. Limit vehicle access and reduce the amount of roads on the forest.

Associated Comment Letters: 103, 121, 155, 4841, 5238, 5399, 5561, 5612, 5646, 5717

Response

The final Plan addresses decommissioning and obliterating or naturalizing unneeded roads, as well as ensuring that road and trail infrastructure minimally impact ecological and cultural resources (FW-TFA-DC 4, 5; FW-TFA-O-1; FW-TFA-S-1 and 3; FW-TFA-G-1, -3, -4, -6, -7 and -8). Motor vehicle use off designated roads and trails is prohibited per the Travel Management Rule and travel management decisions on the Forest (Travel Management on the Camino Real Ranger District 2010; Travel Management on the Questa Ranger District, 2010; Travel Management on the West Side of the Carson National Forest, 2010; and Travel Management on the Jicarilla Ranger District, 2010).

Concern Statement 785 **Off-highway Vehicle Recreation, Demand**

The Forest Service underserves the growing demand for OHV recreation on the Forest and the motorized trail system and ROS doesn't adequately respond to existing uses.

Associated Comment Letters: 24, 157, 187, 2752

Response

Several alternatives were analyzed that address off-highway vehicle recreation use on the Forest. Alternative 3 places emphasis on motorized recreation by looking for opportunities to convert non-system routes to off-highway vehicle and/or mountain biking trails (FEIS, vol 1, Chapter 2, Alternative 3-Maximize Access and Commodity Utilization). The preferred alternative includes access and recreation plan components from alternative 2 (FEIS, vol 1, Chapter 2, Alternative 3-Restoration to Provide Diverse Ecosystem Services). As discussed in the Record of Decision, the Off-Highway Vehicle Management Area from alternative 3 was not included in the preferred alternative because we believe that user demand, collaborative opportunities for planning and maintenance, and environmental impacts would be better assessed at a project level that considers a more detailed proposal. There may be locations on the Carson NF that are more appropriate for cross-country travel than the OHVMA in alternative 3 and we believe that decision is better made at the project level, as part of a district- or forest-level travel management process (USDA FS Carson NF 2021).

As discussed in the record of decision, objectives in the final Plan reflect a balanced distribution of Carson NF resources based on expected budget allocations. The greater emphasis on recreation under alternative 3 has tradeoffs in terms of fuels management, prescribed fire, watershed restoration, and wildlife habitat improvement and does not support the balanced approach in the final Plan (FEIS, Chapter 3, Environmental Consequences for Fuels and Wildland Fire-Alternative 3; Environmental Consequences for Watersheds and Water - Alternative 3; Environmental Consequences for Species of Conservation Concern – Alternative 3). New trail construction, especially multi-trail systems, will require contributions from partners and volunteers to increase the Carson NF’s capacity to plan, construct, and maintain infrastructure as described in the final Plan (FW-PART-DC-1, Management Approaches for Recreation-3, and -9).

The existing designated motorized road and trail system (as identified in travel management decisions for the forest) was used in the analysis of motorized recreation use in the FEIS (Chapter 3, Recreation section) (Travel Management on the Camino Real Ranger District 2010; Travel Management on the Questa Ranger District, 2010; Travel Management on the West Side of the Carson NF, 2010; and Travel Management on the Jicarilla Ranger District, 2010). The final Plan addresses the potential for an increased demand for OHV use on the forest in recreation desired conditions (FW-REC-DC-4, -5, -7, -10, and -13) and recreation management approaches (1, 3, 4, 6, and 7).

The recreation opportunity spectrum (ROS) was mapped for the forest based on the 2012 Planning Rule and Forest Service regulations (36 CFR 219.19 and FSH 1909.12 23.23a), which directs mapping of desired ROS classes where the landscape can support motorized use and associated roads and motorized trails (FSH 1909.19 23.23a, Exhibit 01). The final Plan directs all project-level decisions and implementation to be consistent with the ROS classes (FW-REC-G-2).

A discussion of the importance of trail-based recreation has been added to the introduction of the Recreation section in the final Plan. Trail opportunities have been specifically identified in FW-REC-DC-5 as among the opportunities that should be available, responsive, and adaptable. Trail planning, design, construction, and maintenance have been added as a specific emphasis for partnerships under Management Approaches for Recreation-3 and -9.

Concern Statement 786 **Off-highway Vehicle Recreation, Demand**

The agency has not yet adequately responded to the identified recreation growth trend of OHV use and is a significant issue that must be dealt with in the current Forest Plan revision.

Associated Comment Letter: 24

Response

The final Plan includes the following components regarding OHV use: FW-REC-DC-3, -4, -5, -11, and -13; FW-REC-S-1 and -2; FW-REC-MA-7; and FW-TFA-S-1 and 3. The final Plan discusses the importance of trail-based recreation in the introduction of the Recreation section. A desired condition in the Recreation section directs recreation opportunities to be responsive and adaptable to changing uses and trends, which includes hikers and mountain bikers (FW-REC-DC-5). Trail opportunities have been specifically identified in FW-REC-DC-5 as among the opportunities that should be available, responsive, and adaptable. Trail planning, design, construction, and maintenance have been added as a specific emphasis for partnerships under Management Approaches for Recreation -3 and -9.

Concern Statement 787 **Off-highway Vehicles, Single-track Trails**

During early planning efforts [2005 Forest Service Travel Management Rule Subpart B planning efforts in California and other Western States], agency representatives promised the OHV community that once these initial “foundational” route networks were established and codified that they would work with the users to either bring some of these historic single-track opportunities “back onto the system” or construct new engineered single-track system trails. A strategy should be developed to replace the lost single- track experience. Retention or enhancement of high-quality single-track dirt-bike trails is no different than keeping or enhancing “quiet” single-track hiking, equestrian, and mountain-bike trails.

Associated Comment Letter: 5665

Response

Decisions regarding adding trails to the single-track system would be made at the project level, not during the plan revision process. Although no travel management decisions for these trails are addressed through plan revision, the final Plan does direct the Carson to work with partners and stakeholders and to consider designating these roads as trails (Management Approaches for Recreation-1, -3, and -6 and FW-TFA-G-3).

Concern Statement 788 **Motorized Trails**

Create an alternative that develops motorized trail systems, specifically an alternative that develops a motorized trail system across the Camino Real Ranger District using user created trails and forest system roads and trails to connect communities to each other (such as Las Mochas to Llano to Taos to Angel Fire) and to interconnect with state highways. The trails should provide enough mileage to provide solitude and require self-reliance. As well as provide areas or trails suitable for the specialized needs of observed trials motorcycles.

Associated Comment Letter: 24

Response

Management Approach for Recreation-7 in the final Plan addresses the need to work with partners to develop loop trail systems. Additionally, a discussion of the importance of trail-based recreation has been added to the introduction to the Recreation section in the final Plan. Trail opportunities have been specifically identified in FW-REC-DC-5 as among the opportunities that should be available, responsive, and adaptable. Trail planning, design, construction, and maintenance have been added as a specific emphasis for partnerships under Management Approaches for Recreation-3 and -9.

The FEIS evaluated alternative 3, which maximized access and commodity utilization. In this alternative, road decommissioning would be deemphasized and opportunities to convert non-system routes to off-highway vehicle and/or mountain bike trails would be emphasized. This alternative was analyzed fully in the FEIS but was not chosen as the preferred alternative for access and recreation. As discussed in the Record of Decision, the Off-Highway Vehicle Management Area with challenging opportunities for trials motorcycles was not included in the preferred alternative because we believe that user demand,

collaborative opportunities for planning and maintenance, and environmental impacts would be better assessed at a project level that considered a more detailed proposal. There may be locations on the Carson NF that are more appropriate for cross-country travel than the Off-Highway Vehicle Management Area in alternative 3, and we believe that decision is better made at the project level, as part of a district- or forest-level travel management process (USDA FS Carson NF 2021).

Concern Statement 789 **Off-highway Vehicle Recreation**

For motorized recreation, there is a need to enhance off-highway-vehicle opportunities for all-terrain vehicles, full size vehicles, and dirt bikes by providing a system with varying degrees of challenges; access to varied topography; access to dispersed camping opportunities; and loop trails connecting uses.

Associated Comment Letter: 24

Response

The final Plan provides opportunities to build loop trail connections (Management Approach for Recreation-7) and to address other changing uses or demands on the forest (FW-REC-DC 4, 5, and 13). Project-level travel management decisions implement any changes to off-highway-vehicle use on the forest, includes developing new areas for this motorized use. Management Approach for Recreation-7 addresses the need to work with partners to develop loop trail systems. A discussion of the importance of trail-based recreation has been added to the introduction of the Recreation section in the final Plan. Trail opportunities have been specifically identified in FW-REC-DC-5 as among the opportunities that should be available, responsive, and adaptable. Trail planning, design, construction, and maintenance have been added as a specific emphasis for partnerships under Management Approaches for Recreation-3 and -9.

Concern Statement 790 **Motorcycle Trails**

Travel management decisions did not address motorized trail opportunities for motorcycles (specifically requests for single track) and ATV/UTVs. The Carson NF is significantly underserving a specific identified public need for recreation.

Associated Comment Letter: 24

Response

Travel management decisions are made at the project level (USDA FS Carson NF 2010a, 2010b, 2011, 2013), not through plan revision. However, the final Plan acknowledges that the recreation and the tourism industries are the largest economic contributors to the region, attracting visitors from all over the country (Final Plan, Chapter 1, Distinctive Roles and Contributions section). Additionally, the plan provides management direction to address the need for motorized and non-motorized trail opportunities (FW-REC-DC-4, -5, -11, and -13). Management Approaches for Recreation-1, -3, -4, and -7 address the need to work with different partners and user groups in developing a sustainable recreation strategy, co-managing a sustainable recreation program, building long-term relationships with communities, and developing motorized loop trails systems, all of which could guide motorcycle use on the national forest. A discussion of the importance of trail-based recreation has been added to the introduction of the Recreation section in the final Plan. Trail planning, design, construction, and maintenance have been added as a specific emphasis for partnerships under Management Approaches for Recreation-3 and -9.

Concern Statement 791 **Motorcycle Only Area**

The Carson National forest should designate an area along highway 518 and highway 75 as Open to Motorcycles Only.

Associated Comment Letter: 24

Response

An Off-Highway Vehicle Management Area near highways 518 and 75 was evaluated as part of alternative 3 but is not included in the final Plan. As discussed in the Record of Decision and the FEIS, the Off-Highway Vehicle Management Area would increase sedimentation and wildlife impacts and did not support alternative 2-modified's balanced distribution of Carson NF resources based on recent budget allocations. Creation of an Off-Highway Vehicle Management Area would require contributions from partners and volunteers to increase the Carson NF's capacity to plan, construct, and maintain infrastructure as described in the final Plan (FW-PART-DC-1, Management Approaches for Recreation-3, and -9). Plan components guide Forest Service personnel, not the public (FSH 1909.12 22.1(2)(g)) and cannot require partnerships to create a management area. Trails have been added to FW-REC-DC-5 as a specific example of recreation opportunities that should be available commensurate with public interest and trends. Also, the programmatic nature of the plan cannot adequately address the site-specific planning and analysis that is required for this type of decision. The Carson NF believes it would be more appropriately examined at a project level.

Concern Statement 792 **Concern Statement 380 E-bikes**

Access for e-bikes should be consistent with other motorized forest user groups. E-Bikes should not be allowed on multi-user trails. The Forest Plan should not allow the use of E-bikes along non-motorized trails. E-bike use is not a good solution for multi-user trail access. This use could lead to unforeseen challenges, management issues, or user conflicts.

Associated Comment Letter: 4832

Response

Under current Forest Service policy, e-bikes are considered a motor vehicle (36 CFR parts 212, 251, 261, and 295 2005) and, as such, are only allowed within areas designated on the motor vehicle use map as "Roads Open to All Vehicles," "Trails Open to All Vehicles," "Trails Open to Vehicles 50 inches or Less in Width," and "Trails Open to Motorcycles Only." The final Plan provides recreation desired conditions to reduce user conflicts (FW-REC-DC-7) and address changes in uses on the forest (FW-REC-DC-5).

Concern Statement 793 **E-bike Definition**

Modify the definition of E-Bike to read: "E-bike (electric bicycle). A bicycle with an integrated electric motor that can be used for propulsion, in addition to pedaling. An e-bike is not considered a mechanized bicycle, not is it the same as a motorized vehicle. E-bikes will be managed separately and independently of those two distinct classes of vehicle." It is important to develop clear and distinct policies regarding the increased use of e-bikes on public land. There are significant discrepancies in how Federal agencies define and manage e-bikes. As the technology is new and rapidly changing, there is concern that until land management agencies have clearly defined how to regulate these new tools of recreation, they should not be lumped into traditional definitions of "motorized" or "non-motorized" use. It has been clearly established that human-powered bicycles are in no way the equivalent of motorcycles and ATVs in their impact on the trail, the environment, and other users. Currently, most e-bikes currently do not possess the torque, power, and speed of a typical motorized vehicle. At the same time, however, some can achieve speeds greater than human-powered bicycles, may allow users to obtain access to previously lesser visited areas, and will likely result in new use patterns and may result in increased impact. While the easiest management approach would be to place e-bikes into the motorized use category (as written in this plan), this fails to recognize that there is a place for e-bikes on some trails, and that essentially banning them from all non-motorized trails flies counter to our shared goal of providing more opportunities for a diversity of people to enjoy our public lands. There may be trails that are appropriate for e-bikes and other that may not be. These access decisions can be managed on a case-by-case basis. There needs to be a more nuanced and considered discussion concerning management of e-bikes on trails on the Carson NF in the future.

*Associated Comment Letters:*4960, 4970

Response

Currently, the Forest Service's Travel Management Rule defines a motor vehicle as "any vehicle which is self-propelled, other than (1) a vehicle operated on rails; and (2) any wheelchair or mobility device, including one that is battery-powered, that is designed solely for use by a mobility-impaired person for locomotion, and that is suitable for us in an indoor pedestrian area" (36 CFR parts 212, 251, 261, and 295 2005). E-bikes have a motor and are thereby self-propelled and considered motor vehicles; as such, they are subject to regulation under the Travel Management Rule.

Currently, e-bikes are allowed within the areas designated on the motor vehicle use maps as Roads Open to All Vehicles, Trails Open to All Vehicles, Trails Open to Vehicles 50 or Less in Width, and Trails Open to Motorcycles Only. Opportunities for e-bikes on existing non-motorized trails may be considered and designated as motorized trails through appropriate project-level analysis.

The Carson NF does not have authority to change the definition of an e-bike; to change the definition would be a national-level decision.

Concern Statement 794 **Rock Climbing**

Rock-climbing destinations are places of special recreational significance and should be recognized and managed in a way that protects their unique settings.

Associated Comment Letter: 5236

Response

Recreation desired conditions in the final Plan allow recreation opportunities, including rock climbing, to be responsive and adaptable to changing uses and trends, i.e., commensurate with user needs, resource capacity, and other natural and cultural resource values (FW-REC-DC-3, -5). Rock climbing is noted as an activity occurring in the Cliffs and Rocky Features section in the final Plan; Management Approach for Cliffs and Rocky Features-3 addresses the role of partnerships in co-managing sustainable rock-climbing opportunities.

Concern Statement 795 **Rock Climbing**

Rock climbing should be more clearly identified and acknowledged throughout the plan. Carson NF offers some spectacular climbing opportunities, drawing climbers from all over the state as well as neighboring states. Many climbing areas were established in the 1970s and offer well-established bolted sport routes and traditional routes with fixed anchors that require long-term maintenance. Each climbing area within Carson NF is unique, and site-specific considerations should determine the appropriate level of management.

*Associated Comment Letter:*5236

Response

Rock climbing has been added to the list of important recreation activities in the Recreation section introduction in the final Plan. The final Plan places limitations on rock climbing where it disrupts at-risk species or specialized vegetation, but does not prescribe specific management for individual rock-climbing areas, as that would be a project-level decision. Also, in the final Plan, Cliffs and Rocky Features Management Approach-3 encourages the Carson NF to partner with volunteers, rock-climbing organizations, other government agencies, cooperators, and permit holders to help co-manage sustainable rock-climbing opportunities, including planning, design, implementation, operations, and maintenance of rock-climbing areas.

Concern Statement 796 **Rock Climbing, Ecosystem Services**

Amend the final sentence in the introduction section to Cliffs and Rocky Features to read "Cultural and provisioning ecosystem services are also associated with these features and include rock art, and mineral exploitation as well as recreational activities such as rock climbing, technical mountain biking, and hiking to scenic viewpoints."

Associated Comment Letter: 4960

Response

The introduction of the Cliffs and Rocky Features section in the draft Forest Plan stated: "Ecosystem services, such as rock art, rock climbing, rock hounding, and mineral exploitation, are also associated with these features (cultural and provisioning ecosystem services)" (Draft Forest Plan, p. 82). This has been changed in the final Forest Plan to read: "Cultural and provisioning ecosystem services are also associated with these features and include rock art, and mineral exploitation as well as recreational activities such as rock climbing, technical-mountain biking, and hiking to scenic viewpoints."

Concern Statement 797 **Rock Climbing, Fixed Anchors**

The draft plan should include provisions that recognize rock climbing as a legitimate wilderness and non-wilderness activity, and the conditional use of fixed climbing anchors as appropriate. The current language regarding bolting in Carson National Forest is restrictive and places an undue burden on Forest Service managers to approve, regulate, and enforce any future climbing route development. This language is not in alignment with any other Forest Service unit in the United States and may lead to future management issues. The fixed anchor language should be updated to: "Nothing in this plan prohibits recreational rock climbing activities in the Forest, such as the placement, use, and maintenance of fixed anchors, including any fixed anchor established before the date of the enactment of this plan. Placement of rock-climbing fixed anchors may require prior authorization to maintain geological and biological features and scenic quality." Fixed anchors should be permitted across all ROS categories (with appropriate management). Fixed anchor policy should provide provisions to allow climbers to maintain and replace existing anchors as necessary.

Associated Comment Letter: 5236

Response

Rock climbing is a legitimate wilderness and non-wilderness activity and nothing in this plan prohibits recreational rock-climbing activities. Placement of new rock-climbing fixed anchors generally will require prior authorization within and outside of designated wilderness to maintain geological and biological features, scenic quality, and recreation opportunities. The Forest Service monitors the locations and best practices associated with rock climbing. Bolts are accepted in wilderness when they are required for safety or protection of the wilderness resource. They should be installed as a last resort, only after considering other less permanent techniques and in such a manner that preserves the wilderness character of the area. New bolt installation generally is not consistent with the wilderness ethic, but may be allowed as necessary to meet minimum requirements for the administration of the area for the purpose of the Wilderness Act. Existing bolts may be maintained by non-mechanized, non-motorized means.

Management Approach-3 in the Cliffs and Rocky Features section was updated to reflect the need for a potential rock-climbing advisory board: "Consider partnering with volunteers, rock-climbing organizations, other government agencies, cooperators, and permit holders to form a rock-climbing advisory board to help co-manage sustainable rock-climbing opportunities, including planning, design, implementation, operations, and maintenance of rock-climbing areas and reviewing maintenance and replacement of fixed anchors."

Concern Statement 798 **Climbing Management Plan**

A Draft Climbing Management Plan (CMP) was provided to the Questa Ranger District in May 2017. The framework of this CMP could easily be expanded for all of Carson NF and serve as a detailed and site-specific plan to manage fixed anchors and climbing within Carson NF. The Pike NF is currently implementing a similar climbing management plan to manage climbing and fixed anchors within the South Platte climbing area.

Associated Comment Letter: 5236

Response

Management Approach-3for Cliffs and Rocky Features encourages the Forest to partner with volunteers, rock-climbing organizations, other government agencies, cooperators, and permit holders to help co-manage sustainable rock-climbing opportunities, including planning, design, implementing, operating, and maintaining rock-climbing areas. Working with stakeholders to develop a climbing management plan or other documents would be one way to address climbing and managing fixed anchors.

Concern Statement 799 **Rock Climbing Infrastructure**

Existing infrastructure should be maintained and potentially expanded in established sport climbing or bouldering areas, which see a higher volume of climbers. Climbing access should be improved for all the pubic including gateway communities and underserved populations. Climbing infrastructure and access should be improved, particularly by working with partners.

Associated Comment Letters: 5236

Response

Management Approach-3 for Cliffs and Rocky Features and Management Approach in the Recreation section in the final Plan encourage the Carson NF to maintain or potentially expand sport climbing or bouldering areas by working with partners. FW-REC-DC-3 and -4 address the importance of developed and dispersed recreation opportunities, including rock climbing, and their sustainability.

Concern Statement 800 **Developed Recreation**

Currently, in the guidance for Recreation resources, the Forest Plan states that “the Carson has a variety of developed recreation facilities, including campgrounds, picnic areas, interpretative sites, fishing piers, overlooks, and trailheads.” Because skiing and riding are such a large component of developed recreation on the Carson NF, we would like these added to this list. In addition, we request that the Carson NF recognize the importance of developed summer recreation, such as mountain biking, via ferrata, and other summer activities at ski areas and the opportunities it provides the guests of the Carson NF who might otherwise not venture into the national forest.

Associated Comment Letters: 4879, 4906

Response

The final Plan changed the recreation introduction to read, “The Carson has a variety of developed recreation facilities, including campgrounds, picnic areas, mountain resorts, interpretative sites, fishing piers, overlooks, and trailheads.” Also, the importance of developed summer recreation to developed resorts is now highlighted in DEVRES-DC-6: “Focused and diverse recreational opportunities in specific areas respond to demand. Local communities can easily access these areas for a variety of year-round motorized and non-motorized experiences.”

Concern Statement 801 **Ski Area, Summer Recreation**

The Carson NF needs to recognize the importance of developed summer recreation opportunities at ski areas.

Associated Comment Letter: 4906

Response

The Developed Winter and Summer Resort (DEVRES) Management Area supports year-round developed recreation activities, including summer recreation opportunities (MA-DEVRES-DC-5). Additionally, the Ski Area Recreation Opportunity Enhancement Act clarified the authority of the Forest Service to allow approval of facilities for non-skiing snow sports and natural resource-based summer and year-round facilities and uses at ski areas permitted under the authority of the 1986 Ski Area Permit Act (16 U.S.C. 497) (Pub. L. 112-46, 125 Stat. 538).

The importance of developed summer recreation is addressed "Focused and diverse recreational opportunities in specific areas respond to demand. Local communities can easily access these areas for a variety of year-round non-motorized experiences." This language allows all recreation opportunities to be included without listing all the individual opportunities.

Concern Statement 802 **Snow Skiing and Riding**

The EIS should specifically mention the importance of snow skiing/riding and developed recreation within ski area special use permit boundaries to the recreation program.

Associated Comment Letter: 4879

Response

The importance of skiing to the Carson NF's range of recreational opportunities and to the economic vitality of surrounding local communities has been added to the FEIS (Chapter 3, Recreation, Description of Affected Environment, Developed Recreation).

Concern Statement 803 **Winter Recreation, Opposition**

General opposition to ski areas and winter recreation.

Associated Comment Letter: 5673

Response

The Forest Service has a multiple-use mission. The 2012 Planning Rule emphasizes that forest plans are intended to guide management of the national forests so they are ecologically sustainable and contribute to social and economic sustainability while providing people and communities with a range of benefits, consistent with Multiple-Use Sustained-Yield Act (15 P. Law 86-517) and National Forest Management Act of 1976 (P. Law 94-588) (77 FR 21187; FEIS, chapter 1, Introduction, Regulatory Direction, Plan Revision Under the 2012 Planning Rule). The ski areas on the forest operate under a special use permit, which is not determined by the final Plan, but a separate planning process. The final Plan does, however, provide management direction for the ski areas on the forest within the Developed Winter and Summer Resort Management Area. Special uses for ski resorts in these areas must be consistent with this and all other direction in the final Plan.

Concern Statement 804 **Sustainable Recreation**

Support for the emphasis in all action alternatives on sustainable recreation and the development of a sustainable recreation program.

Associated Comment Letters: 105, 4879

Response

The preferred alternative, described in the draft record of decision, incorporates the recreation plan components from the draft Plan, as updated by public comment, and emphasizes sustainable recreation (ROD, Decision Section and Final Forest Plan, Recreation Section).

Concern Statement 805 **Sustainable Recreation Strategy**

Rec Management Approach 1. Consider developing a sustainable recreation strategy that is economically feasible and adaptable, to include closing or decommissioning underutilized sites and infrastructure; developing new sites or trails; and upgrading existing infrastructure to meet user needs and desires. We are confused by this management approach because the Carson elsewhere refers to its Sustainable Recreation Strategy. Does this document already exist or is it something that the Carson may develop in the future?

Associated Comment Letter: 4856

Response

This contradiction has been clarified in the final Plan. The Sustainable Recreation Strategy was a short-term, internal planning document, which is now expired. The Carson NF is transitioning to strategic planning, which will be updated periodically. Both the Sustainable Recreation Strategy and strategic planning aim to identify the highest priority work to achieve and meet Forest Service and community goals and needs.

In the final Plan, reference to the outdated Sustainable Recreation Strategy document has been removed from FW-REC-O-4. That objective was updated to read: “Accomplish 2 actions to maintain recreational program relevancy, every 5 years following plan approval.” Management Approach for Recreation-1 was also changed to describe more general recreation strategies that meet user needs and desires without referencing the Sustainable Recreation Strategy document. The Sustainable Recreation Strategy did, and future recreation program strategies will, provide specific details regarding projects to implement in the future; by contrast, the final Plan provides overall management direction which those projects would support.

Concern Statement 806 **Sustainable Recreation Strategy**

The Forest Plan does not include a link to the Carson’s Sustainable Recreation Strategy. This document should also be included on the Forest’s webpage. FW-REC-O-4 states: “Modify or accomplish 2 actions within the Carson's Sustainable Recreation Strategy to maintain relevancy, every 5 years following plan approval.” The Forest needs to provide more information regarding how the sustainable recreation strategy will interact with the forest plan.

Associated Comment Letter: 4856

Response

The Sustainable Recreation Strategy was a short-term internal planning document, which has now expired. The Carson NF is transitioning to strategic planning, which will be periodically updated. Both the Sustainable Recreation Strategy and strategic planning aim to identify the highest priority work to achieve and meet Forest Service and community goals and needs.

In the final Plan, reference to the outdated Sustainable Recreation Strategy document has been removed from FW-REC-O-4. That objective has been updated to read: “Accomplish 2 actions to maintain recreational program relevancy, every 5 years following plan approval.” Management Approach for Recreation-1 was also changed to describe more general recreation strategies that meet user needs and desires without referencing the Sustainable Recreation Strategy document. The sustainable recreation strategy did, and future recreation program strategies will, provide specific details regarding projects to implement in the future; by contrast, the final plan provides the management framework for those projects.

Concern Statement 807 **Recreation Program Relevancy**

Recreation should be expanded in a sustainable manner to meet the increase in user needs, while helping the local economy that depends in part on forest recreation to take advantage of a growing user base of local and visiting recreationalists. While there are goals in the plan to develop partnerships and maintain

relevant to forest users, the Forest needs to include opportunities to improve or add infrastructure under alternative 2, where appropriate, to remain relevant to future recreational uses of the Carson NF. Under this alternative, ongoing maintenance of existing recreational infrastructure and facilities would be supported; however, new infrastructure would be unlikely to increase. This proposed management strategy seems contradictory to the alternative 2 goal to address the need to better recognize and enhance the Carson's role in contributing to local economies, including service-based sectors such as recreation and tourism.

Associated Comment Letters: 4960, 4970, 5236

Response

The final Plan includes FW-REC-DC-4, -5, -10, and -11, all of which describe recreation resources and facilities that are well maintained and recreation opportunities that are sustainable and contribute to the economic, cultural, and social vitality of surrounding communities; responsive and adaptable to changing uses and trends; and consistent with recreation settings. These desired conditions are supported by management approaches for recreation (1, 3, 4, 5, 6), which highlight the importance of relying on partnerships to meet these desired conditions and recreation objectives (FW-REC-O-1-5).

The final Plan is based on expected Carson NF capacity, which is unlikely to support new recreational infrastructure. It focuses on building partnerships to better meet recreational demand and contribute to local economies. As the FEIS summary of recreation effects states: “Under all alternatives, integration, collaboration, and active engagement with communities are essential components of creating long-term sustainable recreation programs. The importance of community stewardship and partnerships will grow increasingly important over the life of the plan, requiring agencies at all levels to share resources and increase collaborative efforts regarding sustainable resource management.”

Concern Statement 808 **Recreation Opportunity Spectrum, Setting Definitions**

Within the Recreation Section of the Draft Forest Plan (pages 115-116) there is a description of recreational opportunities, settings, and experiences as defined by the recreation opportunity spectrum. This introduction should briefly describe how each ROS setting is defined by desired conditions and indicators. Forest Service directives describe, “Use the Recreation Opportunity Spectrum (ROS) system and the ROS Users Guide (1982) to delineate, define, and integrate outdoor recreation opportunities in land and resource management planning” (FSM 2311.1).

Associated Comment Letter: 163

Response

The desired recreation opportunity spectrum is described in the Desired Recreation Opportunity Spectrum report (USDA FS Carson NF 2020c). FW-REC-G-2 directs all project-level decisions to be consistent with the desired recreation opportunity spectrum (ROS) distribution. Standards in the Recreation section provide additional guidance for specific recreation opportunity classes. The definition of recreation opportunity settings is detailed in the 1982 Recreation Opportunity Spectrum User’s Guide, which is now included in appendix C in the final Plan. The ROS system and 1982 User’s Guide are referenced in the introduction to the Recreation section in the final Plan, paragraph 9.

Concern Statement 809 **Recreation Opportunity Spectrum, Plan Components**

To meet the Planning Rule analysis requirements of using the best available scientific information and to ensure CEQ requirements for Methodology and Scientific Accuracy, ROS plan components with desired conditions, standards, and guidelines must be described in the plan.

Associated Comment Letter: 163

Response

The desired recreation opportunity spectrum is described in the Desired Recreation Opportunity Spectrum report (USDA FS Carson NF 2020c). The plan contains desired conditions that reference recreation opportunities on the forest (FW-REC-DC-3, -4, -5, -11, and -12). FW-REC-G-2 directs all project-level decisions to be consistent with desired recreation opportunities (USDA FS Carson NF 2020c). The recreation opportunity spectrum (ROS) system and the 1982 ROS User's Guide are referenced in the introduction to the Recreation section in the final Plan, paragraph 9; the User's Guide has been added to appendix C.

Concern Statement 810 **Recreation Opportunity Spectrum, Classes**

Description of Affected Environment on page 306 of the DEIS should describe that the ROS framework is divided into six major classes (Urban, Rural, Roaded Modified/Roaded Natural, Semi-Primitive Non-Motorized, Semi-primitive Motorized, and Primitive) with each class having seven setting indicators (access, remoteness, naturalness, facilities, social encounters, visitor impacts, and visitor management). The plan and EIS ROS desired condition descriptions must be consistent with the ROS class descriptions that are found in the 1982 ROS User Guide.

Associated Comment Letter: 163

Response

The six recreation opportunity spectrum classes are shown in table 58 of the FEIS; the table briefly describes the characterization of each class. The 1982 Recreation Opportunity Spectrum User's Guide contains a full description of the recreation opportunity spectrum framework and a reference to that document has been added to the FEIS (Chapter 3, Recreation, Description of Affected Environment, Recreation Setting and Opportunities). It has also been added to the Other Sources of Information section in the final Plan (appendix C). The plan does not duplicate recreation opportunity class descriptions, because the plan does not repeat existing direction (FSH 1909.12 section 22.1(2)(f)), but instead incorporates it by reference (FW-REC-G-2).

Concern Statement 811 **Recreation Opportunity Spectrum, Desired Settings**

The proposed standards, which address motorized roads, trails, and areas, are excellent and should be retained in the final plan. However, additional standards need to be included for recreation, including a standard requiring consistency with desired ROS settings and further management direction regarding motorized recreation.

Associated Comment Letter: 4856

Response

The final Plan retains standards related to motorized use in the Recreation and Transportation and Forest Access sections of the plan. FW-REC-G-2 requires project-level decisions and implementation activities to sustain recreation settings and opportunities. Desired recreation opportunity spectrum classes and setting descriptions are the preferred tools for accomplishing this guideline. Motorized recreation is managed according to travel management decisions, which are not part of this plan revision process. "Approval of a plan, plan amendment, or plan revision should not include a final decision designating roads, trails, or areas for motor vehicle use or OSV use or otherwise restricting those uses. Rather, the land management plan provides information and guidance for travel management decisions" (FSH 7709.55 11.2(1)).

Concern Statement 812 **Recreation Opportunity Spectrum, Desired Settings**

FW-REC-G-2 should be changed to a standard to better ensure consistency and compliance with desired ROS settings. Change the word "should" to "must" to make it clear that consistency is a strict requirement and not a suggestion.

Associated Comment Letter: 4856

Response

Both standards and guidelines place design or operational constraints on projects and activities and both must be followed (FSH 1909.12 sections 22.13(1) and 22.14(1)). Standards may include complete prohibitions (FSH 1909.12 section 22.13(1)), whereas the terms of a guideline may be departed from so long as its purpose is met (FSH 1909.12 sections 22.14(1)).

In the final Plan, FW-REC-G-2 requires project-level decisions and implementation activities to sustain recreation settings and opportunities. Desired recreation opportunity spectrum classes and setting descriptions are the preferred tools for accomplishing this guideline.

Concern Statement 813 **Recreation Opportunity Spectrum, Over-snow Vehicles**

Add standards that ensure consistency with desired ROS settings; ensure that all motorized designations minimize impacts, are periodically monitored, reviewed, and modified as needed; and are modified immediately when considerable adverse damage is occurring; and limit cross-country OSV use in designated areas to only when snow depth measurements at established, representative locations reach at least 18 inches. Seasonal restrictions on OSV use should be based on wildlife needs, water quality considerations, average snow depth figures, and other relevant information. Include cross-references to relevant standards for transportation and forest access (FW-TFA-S-1 and 2), which prohibit motorized use outside areas identified on the most updated motor vehicle use map and OSV use outside areas identified on the most updated over-snow vehicle use map.

Associated Comment Letter: 4856

Response

In the final Plan, FW-REC-G-2 requires project-level decisions and implementation activities to sustain recreation settings and opportunities. Desired recreation opportunity spectrum classes and setting descriptions are the preferred tools for accomplishing this guideline. Motorized vehicle use is allowed as identified on the most updated motor vehicle use map (FW-TFA-S-1). Motor vehicle use maps were developed following travel management requirements, including consideration of damage to soil, watershed, vegetation, and other forest resources; harassment of wildlife and significant disruption of wildlife habitats; and other impacts (36 CFR Subpart B § 212.55). Travel management may be revisited at any time through a separate project-level analysis. Monitoring Topic V in the final Plan assesses whether or not roads and trails are located and maintained to prevent resource degradation and if they support designed uses. Modifying motorized designations is one possible solution when considerable adverse damage is occurring because of motorized use, but other mitigating actions may also be considered.

In the final Plan, FW-TFA-S-2 requires over-snow vehicle use to conform to the most current direction; generally, restrictions shown on the 2010 visitor map continue to be the most current direction for over-snow vehicle use forestwide. In the final Plan, the Recommended Wilderness Management Area modifies this previous direction by restricting over-snow vehicle use in additional areas where it is not suitable. This has been clarified in the FEIS (Chapter 3, Environmental Consequences for Recreation Common to All Alternatives). Cross-country use of over-snow vehicles is not further restricted under the final Plan. Generally, travel analysis specific to over-snow vehicles should form the basis for any proposed changes to the designation of over-snow trails or areas (FSH 7709.55 section 13(3)).

The Transportation and Forest Access is included in the list of Related Plan Content for Recreation.

Concern Statement 814 **Recreation Opportunity Spectrum, Sipapu**

The classification of “Rural” for the existing Sipapu SUP area is accurate. The classification should be changed within the Comales Canyon IRA, because of the existing Comales Canyon motorized trail that

currently exists through this area, as well as the potential for future ski area development. The DEVRES Management Area, and the Comales Canyon IRA, should be changed to "Semi-Primitive, Motorized." This semi-primitive, motorized classification is not intended to allow road construction; rather, this classification would allow administrative use within the proposed SUP boundary via snowcat, snowmobile, UTVs, etc.

Associated Comment Letter: 4906

Response

The area along the motorized trail in Comales Canyon has a desired recreation opportunity spectrum classification of semi-primitive motorized under all alternatives, including the preferred alternative. Within the Developed Winter and Summer Resort Management Area portion of the Comales Canyon Inventoried Roadless Area the classification from alternative 3 of "semi-primitive motorized, non-roaded" has been adopted in the final Plan (preferred alternative-alternative 2-modified). The Highway 518 corridor is classified as roaded natural. A small area along Trail 20 is classified as semi-primitive motorized. The remainder of the Comales Canyon Inventoried Roadless Area is classified as semi-primitive non-motorized (USDA FS Carson NF 2020c).

Concern Statement 815 **Recreation Opportunity Spectrum, Roaded Natural Buffers**

A plan component is needed to reduce the width of buffers for the "roaded natural" classification in the recreation opportunity spectrum. The buffers that establish the roaded natural classification along many of the existing roads within the SAMA are too wide the buffer should be reduced from one mile to 600 feet (300 feet on either side of the road). This will limit motorized vehicle impacts to wildlife and reduce impacts to soil resources, helping to achieve forestwide desired conditions as well as those for this Management Area.

Associated Comment Letters: 4856, 4925, 5303

Response

The process for inventorying recreation opportunity settings is outlined in the Recreation Opportunity Spectrum User's Guide (USDA FS 1982. The 2018 Carson NF recreation opportunity spectrum inventory follows remoteness criteria for the roaded natural class, "An area designated within ½-mile from better than primitive roads and railroads" (USDA FS 1982) p. 18). The recreation opportunity spectrum describes opportunities to obtain certain recreational experiences; it does not manage vehicle impacts to wildlife, soils, or the San Antonio Management Area, each of which is addressed by final Plan components.

Concern Statement 816 **Closure Orders**

All Forest closures should be well-substantiated and lifted when determined unnecessary. Clear and timely information (on closures, trail conditions, use patterns, etc.) will facilitate positive outdoor recreation experiences and reduce conflict amongst visitors.

Associated Comment Letter: 5236

Response

Areas closed and/ or reopened for the protection of resources or the public are evaluated on a case-by-case basis, following the authorities and framework outlined in 36 CFR 261 subpart B. The Forest communicates closure information in various ways, including working with communities and partners to disperse pertinent information to the public.

Concern Statement 817 **Recreation Special Uses**

The plan components for recreation do not address recreational events, which should be subject to basic requirements concerning siting, seasonality, timing, size, event types, management requirements, potential user conflict, and public engagement.

Associated Comment Letter: 4856

Response

The final Forest Plan provides desired conditions that address recreation special uses: FW-SU-DC-6. Recreation special uses provide unique opportunities, services, and experiences for the public, in response to a demonstrated demand for a specific recreation opportunity. For example, FW-SU-DC-7 states that, "Services provided by recreation special uses enhance the recreation experiences of forest visitors, increase public understanding and respect for the Carson National Forest and nearby communities, provide for public health and safety, and have minimal impact to ecological and cultural resources." FW-SU-DC-8 states that, "Permitted outfitter and guide activities do not conflict with the experiences of other forest visitors." The final Plan also includes a guideline addressing group events; FW-SU-G-6: "Organized group events (non-motorized and motorized) authorized under a special use permit should be limited to existing NFS trails and roads, suitable developed sites, or where resource impacts are determined to be minimal."

These plan components provide guidance for project-level decisions regarding recreation special use permitting on the Forest. Specifics of seasonality, timing, size, event types, identifying user conflicts, and public engagement all occur at the project level through the National Environmental Policy Act (NEPA) analysis process.

Concern Statement 818 **Special Use Permits, Outfitters**

The Carson NF needs to continue a well-organized, efficient, and effective permitting process that will allow outfitters to continue to operate their businesses on Forest Service lands in the state of New Mexico. The plan should provide direction to develop a centralized "Statewide Special Use Permit."

Associated Comment Letter: 4867

Response

Issuance of special use permits is not directed by the final Plan, but through Forest Service regulations specifically for outfitting and guiding (FSH 2709.11). Permits issued must be consistent with the final Plan and meet screening criteria in 36 CFR 251.54(e) and FSH 2709.11, chapter 10. Developing a centralized "Statewide Special Use Permit" could occur outside of (but not as part of) the plan revision process.

Concern Statement 819 **Special Use Permit, Outfitting and Guiding**

The plan should provide additional guidance when the Forest conducts a Use Capacity Analysis for outfitting and guiding to consider the number of hunting harvest limits set by the NM Department of Game and Fish and that this information would determine fewer use days. This information needs to be considered before placing moratoriums on outfitting and guiding, which is directed by the plan.

Associated Comment Letter: 4867

Response

The final Plan includes a Management Approach for Special Uses-1 to consider authorizing special use permits for outfitting and guiding services based on current and future capacity studies. Capacity studies are conducted at a project level and have recently been completed for outfitting and guiding services (USDA FS Carson NF 2020a). However, this analysis did not include licenses for hunting in its capacity determinations, because these are determined by the State of New Mexico. Forest Service Special Use objectives for outfitting and guiding are provided in FSH 2709.11. These direct the Forest Service to

permit outfitting and guiding services that protect public health and safety and foster successful small businesses consistent with other plan direction, among other objectives. The Carson NF does not issue or limit hunting licenses; the State of New Mexico has this authority.

Concern Statement 820 **Outfitting and Guiding, Capacity Analysis**

Conduct a need and capacity analysis for outfitting and guiding and include plan components directing where, how, and to what degree outfitting and guiding will be allowed on the national forest. New authorizations and continuation of existing outfitter and guide activities should be authorized when capacity exists and uses are consistent with desired conditions for the area.

Associated Comment Letters: 4856, 5236

Response

The Carson NF recently completed the Forest-Wide Outfitter-Guide Permit Issuance Project, in which an outfitter and guide capacity analysis for the forest was completed (USDA FS Carson NF 2020a). This decision provides the basis for the forest's outfitting and guiding operations and where those are authorized to occur. The final Plan includes a management approach stating, "Consider authorizing special use permits for recreation events and outfitting and guiding services based on any current and future capacity studies and administrative capabilities" (FW-SU-Management Approach-1). This management approach allows the forest to use any updated, project-level capacity studies to inform authorization of recreation events and outfitting and guiding services on the forest.

Concern Statement 821 **Group Size Limits**

The Forest Plan should address limiting group camping sizes where there are impacts to resources or where this use disturbs fellow campers.

Associated Comment Letter: 120

Response

The final Plan states that resource damage from recreational activities is not desired (FW-REC-DC-8) and requires that campsites that result in ecological resource damage be closed or rehabilitated (FW-REC-G-5). The Forest Service is required to permit non-commercial group use of any group larger than 75 people (36 CFR 251). Under the final Plan, group sizes are further limited in wilderness areas (DA-WILD-S-1).

The group size limit at developed recreation facilities is addressed in the Recreation Site Handbook (FSH 2309.13, Ch. 10.3, Policy 2). Developed recreation sites and facilities should be planned and designed to be sustainable, providing a broad set of recreation settings, opportunities, access, and scenic character compatible with the desired recreation opportunity spectrum setting (USDA FS Carson NF 1986) and FSH 2309.13, Ch. 10.8). Each camping unit in a campground has a designated persons-at-one-time capacity (PAOT), to be determined and documented at the local level based on the number of persons for which a particular outdoor recreation feature is designed and built.

Concern Statement 822 **Signage**

There is a lack of signage across the forest and trailhead developments could be improved. Lack of signage along trails is a safety concern.

Associated Comment Letter: 5491

Response

In the final plan, FW-TFA-DC-1 and -3 direct management to provide well-marked trails with signs that are maintained and provide for traveler safety, location information, and compliance. Management Approach for Recreation-8 describes an emphasis on building partnerships with other organizations and user groups to help design, develop, and install new interpretive, trail, and developed recreation signage.

The Carson NF follows the Forest Service trail sign standards (FSH 2309.18), commensurate with scenery resources and scenic character (FW-REC-DC-9). In wilderness, for example, signage is reduced to maintain wilderness character, except at trailheads and trail junctions.

Concern Statement 823 **Law Enforcement**

For the safety of motorized trail users, there needs to be some type of law enforcement to catch folks that are blatantly breaking the law, enforce travel management decisions, prevent wood stealing.

Associated Comment Letters: 1680, 5359, 5668

Response

Land and resource management plans provide vision, strategy, guidance, and constraints. The presence of law enforcement officers is not controlled or managed by the final Plan. The filling of law enforcement positions is directed by budget allocations, which determine annual appropriations to the Forest Service, as approved by Congress.

Concern Statement 824 **Trail Maintenance, Collaboration**

The Forest Plan should emphasize the continuation of establishing collaborative opportunities with organized user groups in order to reduce the backlog of both deferred trail maintenance and to create more opportunities.

Associated Comment Letters: 176, 4837

Response

The final Plan emphasizes partnering with local communities, skilled stewardship organizations, volunteers, other government agencies, cooperators, and permit holders to help co-manage a sustainable recreation program, especially trails—this includes planning, design, implementation, operations, conservation education, and maintenance (Management Approaches for Recreation-3 and -6).

Concern Statement 825 **Trail Co-management**

Add the following Approach to Management Approaches for Recreation (page 119): “Consider partnering with volunteers from user group organizations, other government agencies, cooperators, and permit holders to help co-manage sustainable trail systems, including planning, design, implementation, operations, and maintenance of trails.” In addition to the general “recreation” management approach, trail user groups (mountain biking and OHV) have specific needs and interests that are separate from general recreation/trail management needs. The Forest needs to engage user groups when making decisions affecting recreational infrastructure.

Associated Comment Letters: 4960, 4970, 5199

Response

In the final Plan, trails have been explicitly added to Management Approach for Recreation-3 as a reason to partner and engage user groups. The Partnerships section and Management Approach for Recreation-4 emphasize the importance of engaging user groups and stakeholders.

Concern Statement 826 **Recreation, Partnerships**

Modify Objective 3 to read: “Develop multiple collaborative partnerships for the recreation program to expand public awareness, understanding, and promote responsible behavior, during the 10-year period following plan approval.” Discussion: Multiple organizations currently exist to promote recreation activities on the Carson NF, including Enchanted Circle Trails Association, Taos Mountain Bike Association, Taos Saddle Club, Enchanted Circle Off-Highway Vehicle Association, among others. It behooves the Carson to engage with each of these, and not limit itself to only one.

Associated Comment Letter: 4970

Response

Objectives are plan components that describe a rate of progress toward desired conditions (FSH 1909.12 22.12). Plan components guide and constrain Forest Service actions, not those of the public (FSH 1909.12 22.1(2)(g)). Collaboration requires willing participants; the plan cannot compel the public to work with the Forest Service. Management approaches are therefore the appropriate planning tool for describing strategies for working with the public.

The final plan emphasizes using partnerships and collaboration to leverage resources and provide sustainable recreation to meet user needs and contribute to the economic, cultural, and social vitality and well-being of surrounding communities (FW-PART components; FW-REC-DC-4, FW-REC-DC-5, FW-REC-DC-10; Management Approaches for Recreation-3, -4, and -6).

Concern Statement 827 **Recreation, Partnerships**

Add the following Management Approach to FW-REC: “Consider partnering with volunteers, mountain biking organizations, other government agencies, cooperators, and permit holders to help co-manage sustainable mountain biking opportunities, including planning, design, implementation, operations, and maintenance of mountain biking trails.”

Associated Comment Letters: 4837, 4846

Response

In the final Plan, Management Approach for Recreation-3 describes partnering to co-manage a sustainable recreation program. Trails have been added to this management approach as a specific example.

Concern Statement 828 **Adopt-a-facility**

Add the following objective to FW-REC-O: "Establish and maintain an adopt-a-facility program that engages specific user groups in the sustainable maintenance of trails, campgrounds and other recreation facilities within 1 year of plan adoption. Provide adopters with access to tools, resources and expertise needed to accomplish the sustainable maintenance of existing infrastructure."

Associated Comment Letters: 4837, 4846, 4970, 5199

Response

Plan components guide Forest Service personnel, not the public (FSH 1909.12 22.1(2)(g)) and objectives are based on the fiscal capability of the unit (FSH 1909.12 22.12(5). It is therefore not appropriate for the plan to require partnerships to achieve objectives. In the final Plan, Management Approach for Recreation-3 encourages partnering to co-manage a sustainable recreation program.

Scenery - SCN

Concern Statement 829 **Scenic Class**

Figure A-2, which depicts Scenery Management System (SMS) scenic classes is at a scale that makes it difficult to determine the category for the Sipapu Ski Area. It appears it is within the Scenic Integrity Objective (SIO) Class 1 (Very High). Based on the guidelines provided on page 126 of the Draft Forest Plan, it does not appear that that class is consistent with the existing condition of the ski area and any proposed development that may occur in that area. The Taos area is designated as a SIO Class 2, which is defined in the plan as “…areas with high scenic integrity objectives, the scenic character should appear intact but may include deviations that are not evident (e.g., completely repeat the scenic attributes of size, shape, form, line, color, texture, or patterns common to the scenic character).” The SIO class of the Sipapu Ski Area should be changed to a lower class to be consistent with a developed ski area and which has been used in other Forest Plans with ski areas.

Associated Comment Letters: 4879, 4906

Response

As depicted in Figure A-2 of the draft Plan, the Sipapu Ski Area is classified entirely as high value (class 1 or 2) scenic class; Taos Ski Valley is also entirely classified as high value (mostly class 1). Scenic class describes the importance or value of a particular landscape or portions of that landscape, based on a combination of scenic attractiveness and landscape visibility (Final Plan, Glossary), and is a consideration when determining scenic integrity objectives (USDA FS 1995) but the two are not synonymous. High scenic value does not dictate the level of development allowed in an area. Scenic integrity objectives incorporate scenic character goals and existing scenic integrity and describe degrees of deviation from the existing landscape character. Both Taos Ski Valley and Sipapu Ski Resort have scenic integrity objectives of low to moderate (USDA FS Carson NF 2020b). The scenery management system evaluation process and development of scenic integrity objectives have been clarified in the final Plan (Scenery section introduction, FW-SCEN-G-2, Glossary). The maps of scenic classes and scenic integrity objectives have been moved from Appendix A in the final Plan into the Scenic Integrity Objective Report (USDA FS Carson NF 2020b).

Concern Statement 830 **Scenic Class, Recreation Opportunity Spectrum**

The Draft Forest Plan describes Taos as “urban” on the recreation opportunity spectrum (ROS). As the “urban” classification on the ROS is reflective of the most developed condition, we feel that there is a potential discrepancy between the “high” scenic class and “urban” ROS classification.

Associated Comment Letter: 4879

Response

The Carson NF mapped scenic classes according to scenic management system framework (USDA FS 1995) and mapped recreation opportunities according to the ROS User’s Guide (USDA FS 1982) and National Recreation Opportunity Spectrum Inventory Mapping Protocol (USDA FS 2019).

An urban recreation opportunity classification is not incompatible with a high scenic class. Scenic class describes the importance or value of a particular landscape or portions of that landscape, based on a combination of scenic attractiveness and landscape visibility (Final Plan, Glossary). It does not describe the current condition (integrity) of the landscape. The recreation opportunity spectrum describes the types of recreational opportunities that the public can expect to experience based on factors such as remoteness, evidence of humans, and user density (USDA FS Carson NF 2020b). The combination of scenic class and existing scenic integrity are important to the management of recreation settings because they factor into scenic integrity objectives. There are some combinations of scenic integrity objectives and recreation opportunity spectrum classes that are more compatible than others. The recreation opportunity urban class is “fully compatible” with scenic integrity objectives ranging from low to very high (USDA FS 1995, p. F-3).

Concern Statement 831 **Scenic Integrity Objectives, Timber Management**

The Draft Plan Guideline FW-SCEN-G #3 describes that, “Management activities that result in short-term impacts inconsistent with scenic integrity objectives should achieve the scenic integrity objectives over the long term. Short-term and long-term timeframes should be defined during site-specific project planning.” This guideline does not protect scenic character areas that may be suitable for timber production. The revised forest plan cannot delay acting on the scenery management requirements established in FSH 1909.12.22.2 and 23.23f. If the “short-term” guidance is retained, it should be limited to Roaded Natural/Roaded Modified settings. Another approach would be to establish a Roaded Modified setting and a Low Scenic Integrity Objective for the areas planned for extensive vegetation management activities and road construction/reconstruction.

Associated Comment Letter: 163

Response

Management activities should be consistent with, or move scenic resources toward, scenic integrity objectives as required by FW-SCEN-G-2 in the final Plan. Interim or short-term goals may differ from long-term desired scenic character (USDA FS 1995, p 2-2). FW-SCEN-G-3 has been corrected in the final Plan to refer to scenic character rather than scenic integrity objectives.

Concern Statement 832 **Landscape Aesthetics Handbook**

The introduction to the Scenery section of the Draft Plan should include a summary of the assumptions found in the Landscape Aesthetics Handbook. "Scenic Integrity indicates the degree of intactness and wholeness of the Landscape Character; conversely, Scenic Integrity is a measure of the degree of visible disruption of the Landscape Character. A landscape with very minimal visual disruption is considered to have very high Scenic Integrity. Those landscapes having increasingly discordant relationships among scenic attributes are viewed as having diminished Scenic Integrity. Scenic Integrity is expressed and mapped in terms of Scenic Integrity levels: Very High, High, Moderate, Low, Very Low, and Unacceptably Low. Scenic Integrity is used to describe an existing landscape condition, a standard for management, or a desired future condition…Scenic integrity is defined as the degree of direct human-caused deviation in the landscape, such as road construction, timber harvesting, or activity debris. Indirect deviations, such as a landscape created by human suppression of the natural role of fire, are not included…Integrity could also be used to define the wholeness or condition of the ecosystem but it is assumed that will take place as part of the overall integrated ecosystem management process. However, a landscape character goal of high scenic integrity should also be one of high ecosystem integrity. One does not necessarily ensure the other… HIGH scenic integrity refers to landscapes where the valued landscape character 'appears' intact. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident."

Associated Comment Letter: 163

Response

The scenery management system has been clarified and summarized in the final Plan. Scenic integrity is defined in the introduction to the Scenery section introduction and is in the Glossary. FW-SCEN-G-2 provides descriptions of scenic integrity levels. Landscape Aesthetics: A Handbook for Scenery Management (USDA FS 1995) is included in appendix C as another source of relevant information.

Concern Statement 833 **Scenery Management, Deviations**

On page 323 of the DEIS scenery assumptions state, "Scenery across all alternatives is anticipated and assumed to increase as vegetation restoration treatments over the long term improve the visual landscape. As such, the capacity for improving scenery resources would ultimately be limited by the ability to maximize restoration treatments….The short-term and long-term environmental consequences to scenery as a result of resource projects and activities would be made at the time of the site-specific decision." The statement is inconsistent with Landscape Aesthetics Handbook assumptions. Scenic integrity is defined as the degree of direct human-caused deviation in the landscape, such as road construction, timber harvesting, or activity debris. Indirect deviations, such as a landscape created by human suppression of the natural role of fire, are not included.

Associated Comment Letter: 163

Response

This assumption has been corrected in the FEIS and the final Plan. The assumptions in the Scenery section are meant to summarize those described in the Landscape Aesthetics handbook, specifically, "Biological, physical and social factors create and influence scenery and interact to determine landscape character" (USDA FS 1995, p. 28). Under all alternatives, the scenery management system will be

implemented (FW-SCEN-G-2) to "serve as a communicative tool" that "allows scenery managers to be capable of interacting with values and needs of other resource disciplines" (USDA FS 1995, p. 19).

Concern Statement 834 **Scenic Integrity, Deviations**

The Plan must provide programmatic guidance to protect scenic integrity by controlling the amount and distribution of human-caused deviations. After 100 years of fire suppression, the forest should establish seral stage goals by habitat type to be implemented over decades limiting the rate of human-caused change during each planning period.

Associated Comment Letter: 163

Response

Scenic integrity is managed under the final Plan according to components in the Scenery section. FW-SCEN-DC-3 directs management to maintain intact natural and cultural scenic features and FW-SCEN-DC-5 expresses the desire for landscapes that appear natural. The first desired condition for most vegetation communities describes seral state distributions. Three subgroups make up the Forest and Shrub Riparian vegetation community, and each has unique desired seral state proportions (FW-WSW-RMZ-FSR-DC-1, -2, and -3). Seral state distribution is not applicable for the Herbaceous Riparian vegetation community. Additionally, desired seral state proportions are not defined for the Aspen vegetation community, because, on the Carson NF, aspen is not persistent, but is itself a seral state of other vegetation communities.

Concern Statement 835 **Scenic integrity, Continental Divide Trail**

Support for the CDNST's identification as a "Concern Level 1" under the SMS. Support for the management of the Trail at a "high" or "very high" level of scenic integrity and the inclusion of such language as a Guideline in the CDNST Plan Components. The scenery integrity standard should not be subject to a Forest Plan exemption if projects (both Forest Service and external) are proposed.

Associated Comment Letter: 4898

Response

Most of the Continental Divide National Scenic Trail passes through areas identified as Concern Level 1 under the scenery management system, indicating that there is a high degree of public importance placed on these landscapes as viewed from travelways and use areas. In the final Plan, DA-NTRL-G-4 protects the scenic qualities of the trail by directing management activities to be consistent with, or make progress toward, high or very high scenic integrity objectives. Management is, without exemption, constrained by the intent of guidelines (FSH 1909.12 sections 22.13, 22.14). FW-SCEN-G-3 does not exempt projects from achieving DA-NTRL-G-4, but allows short-term impacts to desired scenic character in order to achieve long-term scenic character goals. DA-NTRL-G-5 places constraints on management activities with short-term impacts on scenic character.

Concern Statement 836 **Scenic Elements, Developed and Dispersed Recreation**

Modify FW-SCEN-DC-4 to read: "Visitors have opportunities to experience important scenic elements (e.g., fall colors, rolling grasslands, picturesque vistas, and green riparian corridors) via a variety of access methods including developed and dispersed recreation trails as well as improved and unimproved roads."

Associated Comment Letters: 4960, 4970

Response

FW-REC-DC-3 in the final Plan expresses the desire for a variety of developed and dispersed recreation opportunities; FW-TFA-DC-1 describes desired access to these elements, "Roads, bridges, and trails are sustainably designed; well-marked and -maintained; provide safe and reasonable access for public travel,

recreation uses, traditional and cultural uses, and land and resource management activities; and contribute to the social and economic sustainability of local communities." Not all scenery will be equally accessible to all users using any method of transportation; for example, scenic vistas along highways are, by definition, not simultaneously available for dispersed recreation.

Traditional Communities - TRC

Concern Statement 837 **Traditional Communities, Support**

General support for recognition of traditional communities in the plan.

Associated Comment Letters: 4985, 5069, 5258, 5287

Response

The Northern New Mexico Traditional Communities and Uses sections and plan components are included in the final Plan.

Concern Statement 838 **Traditional Communities, Coordination**

Include plan language that ensures local communities are part of project design and decision.

Associated Comment Letters: 4885, 5588

Response

The Northern New Mexico Traditional Communities and Uses sections in the final Plan include multiple plan components and strategies that focus on coordination with interested and affected communities beginning at the early stages of planning and project design, namely, FW-FRT-G-2 and FW-RHC-G-3.

Concern Statement 839 **Traditional Community Precedence**

Traditional uses should have precedence over other uses not managed "in balance" with other uses. In fact, the success of many of these other uses depends on the sustained success of northern New Mexico's traditional communities.

Associated Comment Letters: 4985, 5069, 5258, 5287

Response

We agree that successful management of the Carson NF includes the sustained success of northern New Mexico's traditional communities and have added this statement to the introduction to the Northern New Mexico Traditional Communities and Uses section (Final Plan, Chapter 2). The reference to balancing traditional uses has been changed to say, "Forest management supports this traditional way of life…" (Final Plan, Chapter 2, Northern New Mexico Traditional Communities and Uses Section). The Carson NF does not assign precedence to specific uses, but manages public land resources for multiple uses "so that they are utilized in the combination that will best meet the needs of the American people" as required by the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 531). "Under the Planning Rule, ecological, social, and economic systems are recognized as interdependent, without one being a priority over the other." (FSH 1909.12 section 23.2) FW-FRT-DC-1 and FW-RHC-DC-1 in the final Plan direct management to ensure uses important for maintaining these cultures are recognized and valued as important.

Concern Statement 840 **Hiring**

Hire and follow guidance from native land managers.

Associated Comment Letter: 5702

Response

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations, and policies, the Forest Service, its employees, and institutions participating in, or administering, USDA programs are prohibited from discriminating based on race, ethnicity, national origin, or other bases. In the final Plan, FW-FRT-G-2 has been revised to clarify that the purpose of consultation with federally recognized tribes is to incorporate tribal perspectives, needs, and concerns, as well as traditional knowledge into project design and decisions.

Concern Statement 841 **Hispanic Recognition**

Hispanics should be recognized similar to federally recognized tribes.

Associated Comment Letter: 143

Response

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights, regulations, and policies, the Forest Service, its employees, and institutions participating in, or administering, USDA programs are prohibited from discriminating based on race, ethnicity, national origin, or other bases in any program or activity conducted or funded by USDA. Unlike ethnic groups, federally recognized tribes are sovereign governments with which the Federal Government has a legal trust responsibility.

Concern Statement 842 **Hispano Presence**

The plan needs to acknowledge the Hispano presence within the Carson NF and surrounding communities.

Associated Comment Letter: 4885

Response

The Hispanic presence in northern New Mexico, including on the lands now managed by the Carson NF, is discussed in the Historical Context, Distinctive Roles and Contributions, and Rural Historic Communities sections. Additionally, FW-RHC-DC-1 directs management to recognize and value the uniqueness and values of rural historic communities, including those of Hispanic heritage.

Concern Statement 843 **Rural Historic Communities, Collaboration**

Add “to build respectful and collaborative relationships” to RHC-MA-3.

Associated Comment Letter: 4926

Response

Management Approach for Rural Historic Communities-3 has been updated in the final Plan to read: “Coordinate with rural historic communities, such as land grant-merced and acequia governing bodies, to build respectful, collaborative relationships and develop collaborative proposals and projects of mutual benefit.”

Concern Statement 844 **Rural Historic Communities, Collaboration**

Add “…including cooperation, to the fullest extent possible, with cultural youth programs such as YCC or others initiated by a community land grant, pueblo, or tribe” to Management Approach 4 in RHC or create a new management approach.

Associated Comment Letter: 4926

Response

This strategy has been added to Management Approach for Rural Historic Communities-4 in the final Plan, which now reads: “Consider ways of educating northern New Mexico youth in local culture,

history, and land stewardship and for exchanging information between community elders and youth (e.g., cooperate with cultural youth programs such as Youth Conservation Corps or others initiated by a community land grant, pueblo, or tribe."

Concern Statement 845 **Rural Historic Communities, Collaboration**

Add a management approach to RHC: Work with traditional communities and governing bodies for land grants and acequias to understand their needs and build respectful, collaborative relationships; develop collaborative proposals and implement projects of mutual benefit across shared boundaries and with shared infrastructure (e.g., boundary fences or roads); develop ways of accomplishing mutually desired conditions and objectives; and collaborate in ecosystem restoration efforts.

Associated Comment Letter: 4926

Response

Management Approach for Rural Historic Communities-3 has been updated in the final Plan to include building respectful and collaborative relationships and incorporating local perspectives into collaborative proposals and projects of mutual benefit. Working across boundaries on shared infrastructure and collaborative ecosystem restoration are both now included in Management Approach for Rural Historic Communities-11.

Concern Statement 846 **Rural Historic Communities, Field Trips**

Invite the appropriate land grant and/or acequia governing body(ies) on field trips related to the planning or implementation of projects and activities with the potential to impact traditional use resources, culturally and historically significant sites, adjacent community land grant common lands or community land grant and acequia infrastructure.

Associated Comment Letter: 4926

Response

Management Approach for Rural Historic Communities-3 has been updated in the final Plan to include building respectful and collaborative relationships and incorporating local perspectives into collaborative proposals and projects of mutual benefit. The specific approach of holding field trips was not included; while the Carson NF agrees that field trips can be valuable, they also require time, planning, and coordination that, in many cases, is not necessary to understand potential impacts or to develop collaborative proposals and projects of mutual benefit. Nevertheless, the final Plan in no way prevents or discourages field trips.

Concern Statement 847 **Rural Historic Communities, Access**

Add a management approach to RHC: Work with rural historic communities to identify areas where motorized and non-motorized access to resources important to cultural and traditional needs are vital.

Associated Comment Letter: 4926

Response

This strategy is included in the final Plan as Management Approach for Rural Historic Communities-12.

Concern Statement 848 **Land Grants, Important Places**

Add a management approach to RHC: Coordinate with land grant governing bodies to protect religious and spiritual sites and forest resources important to traditional and cultural use.

Associated Comment : 4926

Response

FW-RHC-G-2 in the final Plan requires the protection of spiritually or culturally important places. Management Approach for Rural Historic Communities-3 emphasizes coordinating with land grant governing bodies to understand their concerns and develop proposals of mutual benefit.

Concern Statement 849 **Rural Historic Communities, Coordination**

Add a standard to RHC to consult with community land grant and acequia governing bodies and with livestock grazing associations and permittees to maintain continued access to traditional resources as the plan is implemented or when it is amended, revised, or updated.

Associated Comment Letter: 4926

Response

Access to traditionally used forest resources is addressed by FW-RHC-DC-3 in the final Plan. Coordination with land grant-mercedes and acequia governing bodies is required by FW-RHC-G-4. Cooperation, collaboration, and coordination with permit holders is prioritized under Management Approach for Sustainable Rangelands and Livestock Grazing-1.

Concern Statement 850 **Rural Historic Communities, Meetings**

We request that the Forest Service meets periodically with governing bodies of active community land grants and acequias adjacent to/within the national forest to discuss access to and management of forest resources.

Associated Comment Letter: 4926

Response

The final Plan includes the following plan components to ensure continued collaboration between the agency and our rural historic communities: FS-RHC-G-4; FW-RHC-MA-2, -3, -6, -7, -10 and -11.

Concern Statement 851 **Rural Historic Communities, Facility Availability**

What does #6 on page 102 mean?

Associated Comment Letter: 4921

Response

Management Approach for Rural Historic Communities-6 is a possible strategy to achieve desired conditions such as FW-RHC-DC-6 and FW-PART-DC-1 by making Carson NF facilities like office conference rooms available for community organized meetings, presentations, information sharing, and/or other community events.

Concern Statement 852 **Traditional Communities, Definition**

Change the phrase “descendants from Spain and Mexico” under traditional communities, 5th paragraph to: “descendants of communities established under the governance of Spain or Mexico.”

Associated Comment Letter: 4926

Response

This language has been clarified in the final Plan.

Concern Statement 853 **Traditional Communities, Definition**

In the Northern New Mexico Traditional Communities and Uses section, 6th paragraph add land grant-merced: “A traditional community refers to a federally recognized tribe, land grant-merced or a land-based rural community that has a long-standing history in and around the lands managed by the Forest Service. It is important to call out land grants-mercedes specifically as they are communities established

under a prior sovereign that have Treaty Protected rights, which predate the establishment of the U.S. and forest system lands in New Mexico.

Associated Comment Letter: 4926

Response

The list of traditional communities in the 7th paragraph of the Northern New Mexico Traditional Communities and Uses section includes land-grant-mercedes, defined as land-based rural communities with long-standing histories.

Concern Statement 854 **Traditional Uses, Land Grants, Acequias**

Create a new section or otherwise distinguish land grants and acequias from other traditional uses.

Associated Comment Letter: 4926

Response

The Carson NF manages uses (like acequia reconstruction, headgate replacement, livestock grazing, or forest product collection), not the groups that rely on those uses. Land grants and acequias have certain rights and recognition under New Mexico state law, to which the Carson defers. A description of the unique relationship that the forest has with these groups is included in the introduction to the Rural Historic Communities and Partnerships sections in the final Plan and is clarified through multiple plan components specific to land grant-mercedes (FW-RHC-G-4; FW-CR-DC-4; Management Approaches for Rural Historic Communities-2, -3, -7, -10, and -11; Management Approach for Sustainable Forestry and Forest Products-1) and acequias (FW-RHC-DC-2, -3, and -5; FW-RHC-G-3 and -4; FW-CR-DC-4; and Management Approaches for Rural Historic Communities-2, -3, -7, -10, and -11).

Concern Statement 855 **Land Grants, Political Subdivisions of the State**

In the Northern New Mexico Traditional Communities and Uses section, 5th paragraph add a statement that recognizes that land grants are political subdivisions of the State of New Mexico, along with the relevant statute. Suggested wording: Most Land grants are political subdivisions of the State of New Mexico (§ 49-1-1 NMSA 1978).

Associated Comment Letter: 4926

Response

Recognition of land grants by the State of New Mexico, including the state statute, was added to the Rural Historic Communities section (Final Plan, Chapter 2).

Concern Statement 856 **Preexisting Legal Rights**

Certain entities have legal rights to use that predate the establishment of the Carson NF. The Forest Plan's Northern New Mexico Traditional Communities and Uses section should include more language outlining the rights of traditional communities, including discussion of the Treaty of Guadalupe Hidalgo, Kearney's Code, and two court cases: the Supreme Court case, *U.S*. v. *New Mexico* 1978; and the Court of Private Land Claims case, *USDA Forest Service* v. *Gross*.

Associated Comment Letters: 143, 4926, 4985, 5258, 5702

Response

Plan consistency requirements under the National Forest Management Act are subject to valid existing rights (see 16 U.S.C. 1604(i)). Management of National Forest System lands is guided and constrained by laws, regulations, policies, practices, and procedures that are in the Forest Service Directive System; these are generally not repeated in land management plans. This final Plan is the result of a revision process conducted in accordance with the 2012 Planning Rule (36 CFR § 219) and its 2015 planning directives (FSH 1909.12). The Carson NF is not exempt from any law enacted by Congress.

The Forest Service does not have the authority to grant rights to people on or off the Forest and the plan revision process is not meant to enforce specific rights, only to dictate how Forest Service staff perform their duties in terms of ecosystem and cultural resource management. Past court actions have affirmed:

- that the Secretary of Agriculture has the authority to regulate the use and occupancy of national forests (*United States* v. *Grimaud*, Supreme Court of the United States, 1911);
- that an individual's right to graze on National Forest System lands only exists under the regulations issued by the Secretary of Agriculture, that these regulations have the force of law, and that grazing can be relinquished but cannot be transferred to another party by contract of sale (*Bell* v. *Apache Maid Cattle Co et. al*., Circuit Court of Appeals, Ninth Circuit, 1938); and
- that the privilege of grazing on National Forest System lands under a permit cannot be a property right (*Osborne et al*. v. *United States*, Circuit Court of Appeals, Ninth Circuit, 1944).

Land rights conveyed by the Treaty of Guadalupe Hidalgo are beyond the scope of forest plan revision and are not within the authority of the Forest Service to adjudicate. Community lands were set aside for grazing and other communal uses as part of land grants issued by Spain and Mexico. These community lands became Federal public lands when ownership passed from the Mexican government to the United States at the time the Treaty of Guadalupe Hidalgo was signed in 1848. Under the Treaty, the United States agreed to recognize and protect the existing property rights of Mexican citizens. With regard to the concern by some grantees and heirs that the confirmation process did not address community land grant claims in a fair and equitable manner, the General Accounting Office has concluded, "there does not appear to be a specific legal basis for relief, because the Treaty was implemented in compliance with all applicable U.S. legal requirements" (US GAO 2004, p. 12).

Concern Statement 857 **Treaty of Guadalupe Hidalgo**

Need to add a discussion about the history of Treaty of Guadalupe Hidalgo under the Traditional Communities section.

Associated Comment Letter: 143

Response

Although the final Plan is not intended to provide a comprehensive historical settlement history of the Carson NF and surrounding communities, reference to the Treaty of Guadalupe Hidalgo has been added to the Historical Context section in the final Plan (Chapter 1, Plan Area).

Concern Statement 858 **Land Acquisition, Land Grants**

Add more detail about how the Carson NF has acquired former land grant-merced common lands through purchase or exchange.

Associated Comment Letter: 4926

Response

The history of land ownership in northern New Mexico is complex and contentious. The final Plan is not intended to provide an authoritative, all-inclusive history. A brief summary of New Mexican territorial history and the origins of National Forest System lands has been added to the final Plan (Chapter 1, Plan Area, Historical Context). A more detailed history of northern New Mexico can be found in the Assessment (USDA FS Carson NF 2015, p. 312–317). The U.S. General Accounting Office has compiled a detailed history of the adjudication of land grant claims (US GAO 2004); this document has been added to appendix C in the final Plan.

Concern Statement 859 **Northern New Mexico Policy**

Please review use of "Northern NM policy" as this is counter to proper management.

Associated Comment Letter: 4873

Response

The "Northern NM Policy" (Hurst 1972) is not regional policy and is not included in the final Plan. The final Plan recognizes the intent behind this previous guidance, seeks to improve upon past initiatives, and continues to recognize and support the traditional uses associated with the Carson NF. This has been clarified in the Northern New Mexico Traditional Communities and Uses section introduction (chapter 2).

Concern Statement 860 **Traditional Uses, Access**

Add language that requires the Carson to ensure opportunities for meaningful access to forest resources for traditional uses (e.g., livestock grazing, fuelwood gathering, acequias, and hunting) on NFS lands to sustain communities and their cultural identity and continue occupational- and subsistence-based activities that are sensitive to environmental and cultural concerns.

Associated Comment Letters: 4926, 5668

Response

The final Plan includes the Northern New Mexico Traditional Communities and Uses section, which describes traditional uses and the communities that rely on those uses to sustain themselves and their cultural identity (final Plan, Chapter 2). Access for traditional uses is addressed by FW-FRT-DC-1, -3, and -4; FW-RHC-DC-1, -3, -4, and -5; FW-RHC-G-1 and -3; and FW-FFP-DC-1, -2, and -3.

Concern Statement 861 **Traditional Uses, Definition**

There are other traditional/historic uses that predate the creation of the Forest Service in addition to those listed.

Associated Comment Letter: 143

Response

The final Plan describes traditional uses as long-standing uses that are fundamental to the interconnected economic, social, and cultural vitality of many northern New Mexico inhabitants (Chapter 2, Northern New Mexico Traditional Communities and Uses). The list of traditional uses is not all-inclusive, as indicated by the phase "not limited to" (Chapter 2, Northern New Mexico Traditional Communities and Uses). The plan directs management to make available any forest resources that are important for cultural and traditional needs, subsistence practices, and economic support (FW-FRT-DC-3, FW-RHC-DC-3).

Concern Statement 862 **Cultural Resource Protection**

Add a standard or guideline under RHC to protect cultural resources. Suggested Language: Projects and activities do not adversely impact identified religious and spiritual sites or Forest resources important to traditional and cultural use.

Associated Comment Letter: 4926

Response

Protection of places that rural historic communities regard as spiritually or culturally important is addressed by FW-RHC-G-2 in the final Plan. For individual projects, the responsible official makes a decision based on an interdisciplinary team's analysis of potential effects to all resources. While mitigation of adverse resource effects is the desired common practice, it is not always possible and therefore is not a reasonable forest Plan standard. There are instances in which actions are required under federal law (for example, the 1872 Mining Law) or where the impact to a place or property is deemed,

by administrative decision, to be less than the benefit provided by the undertaking. In these cases, if the place is a historic property (including a traditional cultural property), the Carson NF is required to work with governing bodies or representative organizations that identify as consulting parties, in the resolution of adverse effects under 36 CFR 800.6.

Concern Statement 863 Rural Historic Communities, Important Locations

Add management approach to RHC: Consider acknowledging locations identified as important by rural historic communities and managing them with an emphasis on the resilience and protection of natural and cultural resources.

Associated Comment Letter: 4926

Response

Protection of places that rural historic communities regard as spiritually or culturally important is addressed by FW-RHC-G-2 in the final Plan.

Concern Statement 864 Socioeconomic Benefits

Add Socio economic to sentence in RHC-DC 3. Suggested Language: Forest resources important for cultural and socio economic traditional needs….

Associated Comment Letter: 4926

Response

Forest products that provide economic benefits are addressed in the second clause of FW-RHC-DC-3 in the final Plan. Traditional products such as osha, piñon nuts, and clay are included in the list of products that are available for subsistence practices and economic support as “other forest products” (but are not listed again individually). FW-FFP-DC-2 directs management to make forest products available to traditional communities to contribute to the long-term socioeconomic diversity and stability of local communities.

Concern Statement 865 Traditional Uses, Soils

Add a desired condition to SOIL, “Soil resources that support cultural and traditional needs (e.g., micaceous clay) as well as those that support traditional and subsistence economic needs (e.g., gravel and soils used for building materials, including but not limited to those used to build adobes and those for traditional plastering on adobe buildings) of traditional communities are available and sustainable.”

Associated Comment Letter: 4926

Response

The Soil Resources section in the final Plan describes desired physical and chemical characteristics of the soil resource. Desired mineral products and benefits that people receive from soils are more appropriately described in the Social, Cultural, and Economic Sustainability and Multiple Use section of the plan. The collection of soils, including clay and rocks for building materials and other purposes, is included in the list of traditional uses in the Northern New Mexico Traditional Communities and Uses section introduction (Final Plan, Chapter 2). FW-FRT-DC-3 and FW-RHC-DC-3 state that available and sustainable forest resources for cultural and traditional needs are desired; micaceous clay is specifically listed in both desired conditions. Gravel and building materials are examples of “other forest products” (FW-RHC-DC-3). Finally, FW-MM-DC-5 directs management to make common variety mineral materials such as clay and gravel available, regardless of their intended use.

Concern Statement 866 Tribal Trust Responsibility

We would like to see language that recognizes that because of the trust responsibility to tribes, there may be times when concerns will necessitate greater balance between recreation and traditional uses

throughout all three forests including closing areas to recreation, as well as mining, data gathering and other activities to protect those cultural values and sites.

Associated Comment Letter: 4876

Response

Site-specific project planning includes tribal consultation, as well as analyzing recreation impacts to cultural resources and mitigating them as much as possible. As part of project-level analysis, when feasible, recreation sites are located away from cultural sites. At the plan level, numerous plan components protect cultural resources from forest management activities. For instance, FW-CR-DC-1 states that, "Cultural and historic resources (including archaeological sites, historic buildings and structures, traditional cultural properties) that possess scientific, cultural, or social values are preserved and protected. Site integrity and stability are protected and maintained on sites that are susceptible to imminent risks or threats, or where the values are rare or unique." FW-CR-DC-2 requires management to avoid impacts to cultural and historic resources from vandalism, looting, and other human influences. FW-FRT-G-1 addresses temporary closure orders to honor tribal privacy. Finally, FW-FRT-G-3 protects the physical and scenic integrity of places that federally recognized tribes regard as sacred sites, traditional cultural properties, or part of an important cultural landscape.

Concern Statement 867 **Tribal Consultation**

Collaborate with tribes and pueblos.

Associated Comment Letter: 5702

Response

The Federal Government has a trust responsibility to federally recognized tribes that arises from the United States' unique legal and political relationship with tribes. It is a legally enforceable fiduciary obligation on the part of the United States to protect tribal treaty rights, lands, assets, and resources, as well as a duty to carry out the mandates of Federal law with respect to all federally recognized tribes. This responsibility requires the Federal Government to consider the best interests of the tribes in its interactions with them and when taking actions that may affect them. In meeting these responsibilities, Forest Service managers consult with federally recognized tribes and pueblos as sovereign entities when proposed policies or management actions may affect their interests. The tribal consultation approach and process is outlined in the Plan in the Federally Recognized Tribes (FRT) section (FW-FRT-DC-1-7; FW-FRT-S-1; FW-FRT-G-1-4; Management Approaches-1–10).

Concern Statement 868 **Ancient Claims of Indigenous Peoples**

Recognize and respect the ancient claims of indigenous peoples and include them in Forest activities.

Associated Comment Letter: 5642

Response

Federal agencies are required to consult federally recognized tribes about undertakings that may affect historic properties to which a tribe attaches religious or cultural significance (36 CFR 800). Executive Order 13007 directs Federal agencies to accommodate access to and ceremonial use of Native American sacred sites by Native American religious practitioners and avoid adversely affecting the physical integrity of such sacred sites. Executive Order 13175 commits the Federal Government to work with Native American tribal governments on a government-to-government basis. In the final Plan, FW-FRT-G-2 requires consultation with federally recognized tribes to incorporate tribal perspectives, needs, and concerns, as well as traditional knowledge into project design and decisions.

Concern Statement 869 **Federally Recognized Tribes, Annual Meetings**

Include RHC-ma- #7 from page 102 in FRT.

Associated Comment Letter: 4921

Response

Management Approach for Rural Historic Communities-7 describes holding annual meetings with land grant and acequia governing bodies. The government-to-government relationship between the Forest Service and federally recognized tribes is distinct from that of other interests and constituencies under a variety of Federal authorities that require frequent consultation. These authorities direct the agency to administer forest management activities and uses in a manner that is sensitive to traditional American Indian beliefs and cultural practices and are integral in the Carson NF's relationship with federally recognized tribes. Components in the final Plan are based on agency policy and Federal authorities (e.g., American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, 2008 Farm Bill, Tribal Forest Protection Act, Executive Order 13175). The Carson NF consults with federally recognized tribes and pueblos that have aboriginal territories within, and traditional ties to, the land now administered by the Forest Service. The Carson maintains government-to-government relationships with many of these federally recognized tribes and uses a variety of avenues to achieve meaningful consultation, with the preferred method being real-time, in-person dialogue between tribal leaders and Forest Service line officers. This level of consultation is required by law and more involved than the annual meetings described by Management Approach for Rural Historic Communities-7.

Concern Statement 870 **Traditional Ecological Knowledge**

Best available scientific information should include traditional ecological knowledge.

Associated Comment Letter: 4876

Response

FW-FRT-G-2 in the final Plan requires incorporation of traditional knowledge into project design and decisions. A definition of traditional knowledge has been added to the glossary to clarify that it includes traditional ecological, social, and native knowledge (36 CFR 219.19) and other place-based and culture-based knowledge based on people's adaptations to their environment, learned through experiences with their ecological system.

Concern Statement 871 **Tribes, Minerals**

Tribal cultural concerns must be included in discussion of locatable, leasable, and salable minerals for all plans, and must continue to be strongly considered by the regional forester and other personnel in the decision-making process.

Associated Comment Letter: 4876, 4901

Response

The final Plan's Federally Recognized Tribes (FRT) section outlines desired conditions for protecting important tribal resources and sites. FW-FRT-G-2 and -3 require consultation with tribes from the start of project planning to ensure incorporation of tribal perspectives, needs, concerns, and knowledge into project design—including for proposed projects involving locatable, leasable, and salable minerals. Site-specific minerals development decisions are not part of the plan revision process, but will be made at the project-level, consistent with these plan components and existing law. The 1872 Mining Law authorizes and governs prospecting and mining for locatable minerals on Federal lands.

Concern Statement 872 **RS 2477 Roads**

The Plan fails to address Revised Statute (RS) 2477 roads and RS 2339 easements and the vested property rights to occupy and conduct certain activities on forest lands. RS 2477 roads are vested easements that exist by virtue of Federal law, the same law that created RS 2339 ditch easements. The elements are similar. If a road has been in use since before the enactment of FLPMA and if it is a public use road and has not been abandoned, then Federal law granted an easement for the road. The road need not have been originally an actual constructed road for wheeled vehicles but could have been a walking route. There is a whole body of case law, including *Southern Utah Wilderness Alliance* v. *Bureau of Land*

Management, 425 F.3d 735 (2005), providing the requirements for what constitutes a RS 2477 road. Access along roads within the inventoried roadless area could be denied for operation and maintenance of acequia infrastructure or for maintenance of the river itself. This denial violates RS 2477 rights. The final Plan should prohibit the unilateral closing and/or gating of Forest Service roads within the Carson National Forest without notice or warning and should provide public notice and allow prior public discussion as to whether any proposed Forest Service action implicates RS 2477 rights, allowing acequias and others holding such rights to come forward with proof. The final Plan should include an inventory of all RS 2477 rights within the Carson NF and should specifically find that such roads are to remain open for the purposes associated with each specific RS 2477 right. Consistent with the Plan's commitment to Historic Rural Communities, like acequias, used and needed roads and trails should remain open whether or not they technically qualify as RS 2477 roads.

Associated Comment Letters: 4985, 5069, 5258, 5287

Response

Revised Statutes (RS) 2477 and 2339 are components of the 1866 Mining Law (14 Stat. 251). RS 2477 recognized existing roads and highways on public lands that had not already been withdrawn from entry; it read, "the right of way for the construction of highways over public lands, not reserved for public uses, is hereby granted." This statute was repealed in 1976 under the Federal Land Policy and Management Act (43 U.S.C. 1701). RS 2477 property rights are held on behalf of the public, usually by counties, as public rights-of-way. State and county validation are required because, by accepting the property right of-way, the local government also accepts a legal obligation (and the consequent legal liability) to maintain those rights-of-way to ensure safe passage by the public.

RS 2339 recognizes ditch rights-of-way and their associated liability. Validation requirements are required as to the right-of-way and responsibilities therein. "Whenever, by priority of possession, rights to the use of water for mining, agricultural, manufacturing, or other purposes have vested and accrued, and the same are recognized and acknowledged by the local customs, laws, and the decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and the right of way for the construction of ditches and canals for the purposes herein specified is acknowledged and confirmed; but whenever any person, in the construction of any ditch or canal, injures or damages the possession of any settler on the public domain, the party committing such injury or damage shall be liable to the party injured for such injury or damage." (43 U.S.C. § 661)

The final Plan was prepared with the understanding that individuals and entities may have established valid rights to occupy and use National Forest System lands under laws and authorities established by Congress that are currently unknown to the Forest Service. The courts have established that such valid outstanding rights may be subject to some Federal regulation (*Sierra Club* v. *Hodel*, 848 F 2d. 1068, 10th Circuit, 1988). The final Plan recognizes that such valid outstanding rights, including RS rights-of-way established under RS 2477 and RS 2339, may exist and the Forest Service will honor such rights when it is subsequently determined that the specific facts surrounding any claim to such rights meet the criteria set forth in any respective statute granting such occupancy and use (*Washington County* v. *The United States*, 903 F. Supp. 40, D. Utah, 1995). Determinations regarding rights-of-way that existed prior to reservation of the Carson NF, including those under RS 2477 or RS 2339, are made on a case-by-case basis.

Concern Statement 873 **Acequia Maintenance, Wilderness**

Mechanical maintenance on acequia infrastructure should be allowed in wilderness, the applicable Forest Service regulation exempts routine operation and maintenance on RS 2339 ditches from special use permits except where they are located in wilderness areas. There is simply no basis in the law for this regulation. The Forest Plan should therefore clarify that all acequia easements within designated wilderness are valid and enforceable.

Associated Comment Letters: 4985, 5069, 5258

Response

Treatment of pre-existing, valid rights is provided for under the Wilderness Act, Wild and Scenic Rivers Act, specific designation laws, and agency regulations. The Forest Plan cannot deviate from, or change, these existing laws, which are not restated here.

RS 2339 was enacted to acknowledge and protect vested rights, including water rights and the rights to ditches and reservoirs used in connection with those water rights. While RS 2339 was established to recognize these pre-existing rights, it does not grant exception for non-compliance with other laws, such as the Wilderness Act. For instance, an activity may be exempt from special use authorization requirements under 36 CFR 251.50(e)(3), when the authorized officer determines that an activity is "routine operation or maintenance" within the scope of a valid RS 2339 right-of-way and is located outside of designated wilderness.

The 1964 Wilderness Act specifically prohibits the use of motorized or mechanized vehicles in designated wilderness. Acequia governing bodies would need to work with the Forest Service on a case-by-case basis to get approval to maintain acequia infrastructure with the use of motorized and/or mechanized means in designated wilderness. Recommended Wilderness Management Area Guideline 5 allows for continued maintenance of existing structures necessary for administration of an area, but this maintenance should be carried out in a manner that does not expand evidence of motor vehicle and mechanized equipment use beyond current conditions.

Concern Statement 874 **Acequias, Wilderness, Wild and Scenic Rivers**

Wilderness recommendation or wild and scenic eligibility would inappropriately limit acequias' ability to manage the watershed and stream channel upstream from diversions.

Associated Comment Letters: 4985, 5069, 5258

Response

Many acequias were established before the land on which they are located was reserved for National Forest purposes. Such acequias are within valid rights-of-way (ROW) granted by the United States under laws and treaties that pre-date the Federal Land Policy and Management Act (FLPMA). New Mexico State law affords acequias the right to divert water and maintain infrastructure that delivers water from the point of diversion to cultivatable areas and back to the stream (New Mexico Statutes - Article 2 — Ditches or Acequias, 73-2-1 through 73-2-68). Acequias established and in operation prior to March 19, 1907, may change the place of diversion, and for others, the easement around the ditch "shall be adequate to allow for reasonable maintenance, use and improvements to the ditch" (New Mexico Statutes - Section 73-2-5). The State does not afford acequias additional rights to manage the watershed above the point of diversion. However, in the final Plan, the Carson NF recognizes the importance of forest resources important for traditional uses, including acequias (FW-RHC-DC-3), and commits to working with acequia governing bodies on project design and decisions (FW-RHC-G-4). In addition, Management Approach for Rural Historic Communities-3 describes developing collaborative proposals and projects of mutual benefit.

Treatment of pre-existing, valid rights is provided for under the Wilderness Act, Wild and Scenic Rivers Act, specific designation laws, and agency regulations. The Forest Plan cannot deviate from, or change, these existing laws, which are not restated here.

Recommended wilderness boundaries have been modified to eliminate areas with known acequias (FEIS, Volume 3, Appendix F: Wilderness Process). Additionally, any eligible wild and scenic rivers have been adjusted to ensure exclusion of acequia infrastructure (FEIS, Volume 3, Appendix G: Wild and Scenic River Eligibility). Recommended Wilderness Management Area Guideline 5 allows existing structures to remain—and for the continued maintenance activities of existing structures, such as acequias—within recommended wilderness. Motorized or mechanized use could be authorized as long as

it is “carried out in a manner that does not expand the evidence of motor vehicle and mechanized equipment use beyond current conditions” (MA-RWMA-G-4).

The Forest Service has designated specific roads, trails, and areas as open to public motor vehicle use under the Travel Management Rule (USDA FS Carson NF 2010a, 2010b, 2011, 2013); these are documented on the motor vehicle use map. Public use of motor vehicles off designated roads, trails, and areas is prohibited by the Travel Management Rule, except with written authorization by the Forest Service, or as authorized by a legal right-of-way held by a public road authority. The Forest Service recognizes, however, that motorized travel outside of public motorized routes may be necessary to access acequias for routine maintenance and operation. The national forest can work with acequia governing bodies to identify instances requiring motor vehicle use on routes or in areas not identified on the motor vehicle use map and issue the correct authorization, where appropriate. This authorization would occur outside of plan revision efforts and is not directed by the final Plan.

Concern Statement 875 **Acequia Access**

Add the following to FW-RHC-DC 5. Suggested Language: Acequia systems on NFS lands are easily and conveniently accessible for operation, maintenance, repair, or improvement.

Associated Comment Letter: 4926

Response

The Carson NF cannot guarantee that acequias are easy to access, due to the remote location of some of these features; however, it works closely with acequia governing bodies to facilitate access, as directed by FW-RHC-G-3 in the final Plan. Reference to the 2019 U.S. Forest Service Southwest Region acequia guidance document has been added to the introduction to the Rural Historic Communities section and appendix C. This guidance document provides a “clear framework for efficient and effective administrative determinations concerning proposals for the maintenance, operation, access to, construction and reconstruction of acequia infrastructure on NFS lands” (USDA FS Southwest Region 2019). Use of this document to clarify Forest Service authorities and responsibilities related to acequia management and governing body coordination has been added as a strategy (Management Approach for Rural Historic Communities-13).

Concern Statement 876 **Acequia Easement Rights**

The Plan needs to include a discussion about acequia easement rights, including in designated wilderness areas and wild and scenic rivers and should not disturb or impede easement rights. The Plan should inventory these existing rights in designated wilderness and any potentially eligible rivers. Acequias are afforded "valid rights" to access acequia infrastructure that are codified in federal law (RS 2339) that are binding on federal agencies. The Plan needs to reference the R3 acequia guidance document.

Associated Comment Letters: 4985, 5069, 5258, 5287

Response

Many acequias were established before the land on which they are located was reserved for national forest purposes. Such acequias are within valid rights-of-way (ROW) granted by the United States under laws and treaties that pre-date the Federal Land Policy and Management Act (FLPMA); they do not require Forest Service authorization for the use and occupancy of NFS land within the historic ROW.

As stated in the Final Plan, “Acequias are community-operated and -organized water irrigation systems. Many of the State’s acequia associations have been in existence since the Spanish Colonial period in the 17th and 18th centuries and were historically associated with land grants-mercedes. Acequia and community ditch associations are political subdivisions of the State of New Mexico and occupy a unique place in forest management (New Mexico Statutes Annotated 1978 §73-2-28). Acequias that existed on unreserved public lands for use in connection with a valid water right, prior to the withdrawal of public lands to create the national forests, are afforded valid rights and status under National Forest System

management including the right codified in Federal law (RS 2339). Much of the water diverted by acequias comes from NFS lands and can be affected by forest management activities upstream. On July 2, 2019, the U.S. Forest Service Southwest Region issued the Southwestern Region Acequia Guidance document, acknowledging these rights and providing a framework for efficient and effective administrative determinations concerning proposals for the maintenance, operation, access to, construction and reconstruction of acequia infrastructure on NFS lands. Acequias are still relevant and vital water delivery and community organizing systems today. They modify the hydrology and riparian distribution across irrigated floodplain valleys, recharging groundwater, and delaying return flow to streams. They serve as important water infrastructure for communities, and their associations are important community organizations throughout New Mexico" (USDA FS 2019).

The final Plan is consistent with acequia easement rights. Clarification of routine operation and maintenance authorized under the Chief's Policy relating to the Act of July 26, 1866 (RS 2339) is provided in the Southwestern Region Acequia Guidance document (USDA FS 2019). Recognition of the rights and status of acequias is discussed in the Rural Historic Communities section introduction (Final Plan, Chapter 2) and the Southwestern Region Acequia Guidance document has been added to appendix C. Also, Rural Historic Communities Management Approach-13 has been added to the final Plan, which states, "Consider referencing the New Mexico Acequia Guidance document for clarification of authorities and responsibilities related to acequia management and governing body coordination." There are no acequias in designated wilderness on the Carson NF; any areas with known acequias have not been recommended as wilderness in the final Plan (FEIS, Vol 2, Appendix F Wilderness Process). Additionally, no eligible wild and scenic rivers contain acequia infrastructure (FEIS, Volume 2, Appendix G. Wild and Scenic River Eligibility).

Inventory of privately claimed rights is not a component of the forest planning process or congressional wilderness designation. Treatment of pre-existing valid rights is provided for under the Wilderness Act, specific wilderness laws, and agency regulation.

Concern Statement 877 **Acequia Infrastructure**

Work with acequia associations and permittees to maintain diversion structures and ditches in properly functioning condition and to remedy impacts (e.g., down cut channels, enlarged channels, loss of riparian habitat) that are caused by water diversions.

Associated Comment Letter: 5303

Response

The following components are included in the final Plan to ensure continual partnerships and access to acequias and infrastructure: FW-FRT-DC-2; FW-RHC-DC-2 and FW-RHC-DC-3. In 2019, the Southwestern Region of the U.S. Forest Service developed a guidance document for acequia management on National Forest System lands, which is referenced in the final Plan and included in appendix C. The regional guidance provides a framework for efficient and effective administrative determinations concerning proposals for the maintenance, operation, access to, construction, and reconstruction of acequia infrastructure on the Carson NF, including pre-proposal collaboration, assessing whether a special use authorization is needed, and determining the proper authorization, when required (USDA FS Southwest Region 2019).

Concern Statement 878 **Acequias, Ecosystem Services**

Ecosystem services acequias provide should not be compromised in any other part of the plan and the Forest Service in its final Plan should take a "do no harm" approach when it comes to acequias given the benefits - ecological, socio-cultural - acequias. Forest Service staff should receive training as to this fact and to acknowledge these rights and the legality of acequias and their maintenance in W&S DAs and MAs provide. impacts to downstream acequias need to be considered during management decisions.

Associated Comment Letters: 4885, 4985, 5069

Response

In the final Plan, Management Approaches for Rural Historic Communities-2, -3, -7, -10, -11, -12, and -13 describe strategies for working with acequia associations; FW-RHC-G-4 requires coordination with acequia governing bodies from the start of planning and project design. The relevance and vitality of acequias is discussed in the introduction to the Rural Historic Communities section. Plan components in the Rural Historic Communities section ensure that forest resources important to subsistence practices and economic practices, including acequias, are available and sustainable (FW-RHC-DC-3). Access to acequias is ensured by FW-RHC-DC-5 and FW-RHC-G-3, consistent with Federal and New Mexico State laws. The absence of language about acequias in other sections of the Plan does not imply that they are a less important consideration for forest management decisions; rather, the entire final Plan provides interconnected direction, such that direction in one resource affects the management of all resources.

Concern Statement 879 **Acequias, Stream Fragmentation**

In the draft Plan, FW-WSW-RMZ-STM-DC-2 states that water courses should not be "fragmented by infrastructure." Acequia diversions and spring developments are infrastructure. This infrastructure is directly associated with the beneficial use of existing private water rights. Any attempt to remove or otherwise hamper the use or maintenance of this infrastructure would have a direct effect on the ability of the private water rights owner to utilize their water rights.

Associated Comment Letter: 5422

Response

In the final Plan the phrase "fragmented by infrastructure" was removed from FW-WSW-RMZ-STM-DC-2. FW-WSW-RMZ-STM-DC-3 still ensures that streams are not fragmented by infrastructure, but clarifies that, "Barriers to movement only exist to protect native aquatic species from nonnative aquatic species or for agricultural benefit (e.g., headgates)."

Concern Statement 880 **Acequia Benefits**

Include discussion of the benefits of acequias under RHC. "[O]n-forest diversions have extensive effects in the irrigated floodplain valleys that are immediately adjacent to the forest. Water is dispersed across a wider area and maintains additional riparian systems and agriculture. Surface flow from unlined ditches and irrigated fields seeps into groundwater and contributes to aquifer recharge and delayed return flow to streams." The benefit of acequias should be recognized in wilderness and rec wilderness areas.

Associated Comment Letters: 4926, 4985, 5069, 5258, 5287

Response

Additional discussion of the hydrologic modification caused by acequias, and the consequent effects on irrigated floodplain valleys, has been included in the Watersheds and Water and Rural Historic Communities sections in the final Plan. There are no acequias in designated wilderness on the Carson NF; infrastructure and access requirements generally associated with acequia corridors make these incompatible with wilderness characteristics of apparent naturalness and legal manageability. A buffer was applied to all acequias during the recommended wilderness evaluation, such that these were excluded from recommendation under all alternatives (Wilderness Recommendation Process – Inventory, Evaluation, and Analysis).

Concern Statement 881 **Use of the Term Acequia**

Change the term acequia to irrigation ditch on pg. 97.

Associated Comment Letter: 4921

Response

The example in FW-FRT-DC-2 has been changed from "acequia" to "irrigation" in the final Plan.

Concern Statement 882 **Land Grants, Coordination**

Meet with the land grant community prior to acquiring land to assess their uses in the area.

Associated Comment Letter: 4926

Response

Coordination with land grant governing bodies during the early stages of planning and project design is addressed by FW-RHC-G-4 in the final Plan. In addition, Management Approaches for Rural Historic Communities-3, -7, and -10 describe an emphasis on working collaboratively, and integrating the perspectives of, land grant communities. Land grant communities are an equitable interested party that would be involved in scoping during any NEPA process for land acquisition.

Concern Statement 883 **Land Grants, Authority to Manage**

The Carson does not have authority to designate or classify prior land grant lands in any way that could impact future use by the land grant.

Associated Comment Letter: 122

Response

The Carson NF manages public lands in accordance with existing laws, policies, and regulations—including the Federal Lands Policy and Management Act of 1976 (P.L. 94-579). Under this Act, it is the policy of the United States that, "the Congress exercise its constitutional authority to withdraw or otherwise designate or dedicate Federal lands for specified purposes" and that "goals and objectives be established by law as guidelines for public land use planning, and that management be on the basis of multiple use and sustained yield unless otherwise specified by law" (43 U.S.C. §1701). Forest Service land and resource management plan development is governed by the National Forest Management Act of 1976 (P.L. 94-588) and the 2012 Planning Rule (36 CFR 219). To the extent that existing law, policy, or regulations may impact a future land grant use of public lands, the Carson NF is required to follow existing laws, policies, and regulations. The final Plan is focused on working with the public, including land grants and other historic communities, in particular, to find mutually beneficial approaches and to build respectful, collaborative relationships (Final Plan, Chapter 2, Northern New Mexico Traditional Communities section and subsections; Partnerships section).

Concern Statement 884 **Land Grants, Economic Ventures**

Include plan language that directs economic ventures from projects to local land grants.

Associated Comment Letter: 4885

Response

The Forest Service recognizes the economic needs of local community members without prejudice toward their contemporary affiliation with a Spanish or Mexican era grants confirmed by Congress or the Federal courts. In the final Plan, FW-RHC-DC-3 directs management to support local economies by making forest products available to rural historic communities such as land grants. Management Approach for Rural Historic Communities-3 describes a strategy of coordinating with land grants to understand their needs and develop collaborative proposals and projects of mutual benefit to include projects that would benefit land grants financially.

Concern Statement 885 **Land Grant Identification**

Identify land grants by ranger district to ensure that they are contacted.

Associated Comment Letter: 4926

Response

In the final Plan, FW-RHC-G-4 requires coordination with acequia governing bodies beginning in the early stages of planning and project design. A strategy of coordination and cooperation with land grant

communities is also addressed through Management Approaches for Rural Historic Communities-2, -3, -7, -10, and -13. Communication with partners is more generally addressed in FW-PART-DC-2. While the final Plan does not include a list of specific land grants by ranger district, these components provide clear direction to work with land grant communities in and around the Carson NF, including as potential projects arise.

Concern Statement 886 **Access to Fuelwood**

Address local community access and dependence on the forest, including the importance of fuelwood.

Associated Comment Letters: 169, 175, 2992

Response

The Northern New Mexico Traditional Communities and Uses section in the final Plan describes how, "[l]ong-standing use of the Carson and its natural resources are fundamental to the interconnected economic, social, and cultural vitality of many northern New Mexico inhabitants, including federally recognized tribes and pueblos, Spanish and Mexican land grants-mercedes and acequias, grazing permit holders, and other rural historic communities" (Final Plan, Chapter 2). The final Plan recognizes that, "it is important to allow opportunities for these communities to be engaged with the Carson, so that sustained use of the national forest for cultural and subsistence needs are supported" (Final Plan, Chapter 2, Northern New Mexico Traditional Communities and Uses). The Northern New Mexico Traditional Communities and Uses sections of the plan contain multiple plan components and strategies that focus on access to forest products, including fuelwood (FW-FRT-DC-3 and -4; FW-RHC-DC-3, -4, and -5; FW-RHC-G-1 and -3; FW-FFP-DC-1, -2, and -3; Management Approaches for Sustainable Forestry and Forest Products-4 and -5; and Management Approach for Rural Historic Communities-9).

Concern Statement 887 **Fuelwood Permits**

Guarantee a certain number of fuelwood permits and fuelwood areas to ensure that fuelwood is available near communities and meets local demand.

Associated Comment Letters: 4883, 4904, 4926, 5668, 5719

Response

Fuelwood availability is addressed in the final Plan by FW-FFP-DC-1, -2, and -3. Management Approaches for Sustainable Forestry and Forest Products-4 and -5, and Management Approach for Rural Historic Communities-9 describe strategies for increasing fuelwood opportunities.

Concern Statement 888 **Fuelwood, Land Grants**

Add a standard or management approach to "Coordinate with land grant governing bodies to develop a permitting process for traditional use forest products." "Coordinate with community land grant governing bodies to develop permitting and/or wood collection processes for fuelwood derived from former land grant common land."

Associated Comment Letter: 4926

Response

The Forest Service does not prejudice its recognition of the need for the collection of traditionally used forest products by members of rural historic communities based on their contemporary affiliation with a Spanish or Mexican era grant confirmed by Congress or the Federal courts. In the final Plan, FW-RHC-DC-3 directs management to make fuelwood and other forest products available to rural historic communities such as land grants. Management Approach for Rural Historic Communities-3 describes a strategy of coordinating with land grants to understand their needs and develop collaborative proposals and projects of mutual benefit.

Vegetation - VEG

Concern Statement 889 **Species Composition, Fuel Management, Inventory Data**

Recommend adding Plant Community Species Composition Section (prior to All Alpine and Tundra VEG-ALP, page 29) similar to that found in the Cibola Draft Plan (page 27). This is an important section that should be added because the protection of certain significant plant communities is vital to the cultural integrity of traditional communities that utilize certain plant species for traditional and cultural uses. There are significant plant communities throughout the Carson that are culturally important to traditional communities. Reducing fuel loads around significant plan communities ensures significant plant species protection from uncharacteristic and catastrophic wildfires. In addition, identification of significant plant communities during the project and activities planning phase should be done in dialogue with traditional communities to ensure that culturally relevant plant species are protected and preserved for use by future generations. Therefore, we recommend a Plant Community Species Composition Section be added to the Carson NF Plan as follows:

Suggested Language: Background and Description: Desired conditions in this plan describe the most characteristic site conditions and plant species for each vegetation type, as more complete descriptions of site conditions and species lists for each vegetation type would be unnecessarily exhaustive for this plan. The land manager should refer to the Terrestrial Ecological Unit Inventory database for more complete, site-specific (soil, climate, production, cover, species composition, etc.) data and to “Plant Associations of Arizona and New Mexico”(USDA FS 1997; USDA FS Carson NF 1987) for more complete species lists.

Desired Condition (FW-DC-SPC) 1. All sites support the potential natural vegetation type best adapted to site conditions. 2. At the plan unit scale, similarity of existing ground cover and overall plant species composition is greater than 66 percent to that of site potential but can vary considerably at finer scales because of a diversity of seral conditions. 3. Significant plant communities (as defined in "Background and Description" above, this section) and individual plants persist.

Objective (FW-OBJ-SPC) 1. Clear potentially damaging fuel sources from areas surrounding at least two significant plant communities annually per ranger district.

Guideline (FW-GDL-SPC) 1. Management activities should be guided by the most site-specific, accurate inventory data for soil, species composition and structure, and site potential. For example, where a woodland now occupies a historic grassland site (such as a soil classification of Mollisol - a signature of grassland ecosystems), grassland desired conditions apply. In other words, the desired condition for vegetation type should be consistent with the site's soil type with an emphasis on native annual and perennial plant communities. 2. Management programs, projects and activities should account for significant plant communities (such as oshá, poleo, and organo del campo) to protect and preserve their persistence.

Management Approaches (FW-MGAP-SPC)-1. Significant plant communities may be managed to maintain their unique characteristics and permanence. -2. Significant plant communities and individual plants may be accompanied by interpretive signs when appropriate.

Associated Comment Letter: 4926

Response

The final Plan does not include a ‘Plant Community Species Composition Section,’ as components in the suggested section are already included in other existing plan sections. DC-SPC-1-3 are addressed by FW-VEG-DC-15, which states, “Overall plant composition similarity to site potential[4] averages greater

[4] As defined by the terrestrial ecosystem unit (TEU) potential in the “Terrestrial Ecosystem Survey of the Carson NF” (TES) (USDA FS Carson NF 1987).

than 66 percent but can vary considerably at fine- and mid- scales owing to a diversity of seral conditions."

The Final Plan includes an objective to mechanically treat fuels in the Mixed Conifer Frequent Fire and Ponderosa Pine sections, which are the two most departed from reference conditions on the forest and at the highest risk of stand-replacing wildfire. Objectives were included in these two vegetation types, to move them toward desired conditions and restore historic fire regimes that support native plant communities and protect and preserve their persistence.

GDL-SPC-1 is similar to FW-VEG-DC-15 and FW-VEG-DC-5, which desire ecological conditions that support native plant and wildlife populations. GDL-SPC-2 is also addressed by FW-RHC-DC-3 and FW-FFP-DC-1, which direct management activities to provide sustainable populations of culturally important plants and minerals to traditional communities. Similarly, projects (as developed through the National Environmental Policy Act process and in compliance with the final Plan) would have to move toward these desired conditions. Lastly, FW-RHC-G-1 states, "Traditionally used products (e.g., osha, fuelwood, latillas, and vigas) should be available on the Carson to rural historic communities, except in areas with resource concerns or any areas otherwise restricted by standards or guidelines set forth in other sections of this plan, to move toward desired conditions."

FW-MGAP-SPC-1 and -2 are addressed by Management Approach for Sustainable Forestry and Forest Products-1, FW-WFP-O-6, and FW-TFA-G-9, which promote education about significant or at-risk plants and/ or require management activities to minimize habitat disturbance of significant or at-risk plants.

Concern Statement 890 **Ecosystem Restoration**

All Vegetation Community Desired Condition -3 should be modified to read, "Ecosystems maintain or are restored to provide all of their essential components…"

Associated Comment Letters: 4951, 5574

Response

Desired conditions are the aspirational vision, or the final desired state, for the Carson NF (Final Plan, Chapter 1, Plan Framework Section). Restoration describes management actions that move vegetation toward the desired condition and is not appropriate to include in a desired condition, which must not direct taking action or indicate specific tools to be used for their attainment (FSH 1909.12 22.11(2)(d)). The term recover has been added to FW-VEG-DC-3 to clarify that the intent also applies to ecosystems that are departed, not only those that already meet the desired condition.

Concern Statement 891 **Ecosystem Function, Enhancement**

Maintaining ecosystems' essential functions (including carbon storage) is the absolute minimum the Carson NF should do to protect ecosystems in the forest. Merely maintaining such essential components, processes, and functions is a low bar, and the Carson NF should aim higher by adding the following sentence: "Such essential components, processes, and functions shall be restored and/or enhanced whenever feasible."

Associated Comment Letter: 4911

Response

FW-VEG-DC-3 directs management to maintain essential ecosystem components, processes, and function. The final Plan is based on the concept of sustainability, which requires symbiotic interaction among ecological integrity, societal benefits, and the connection of people to the land and to one another in vibrant communities (Final Plan, Chapter 1, Plan Concepts). Desired conditions in the final Plan are based on the historic range of variability that supported the environments and habitats in which native species evolved. It is the aim of the Carson NF to manage ecosystems holistically in a way that does not enhance certain components above others.

We generally disagree that ecosystem components, process, or function should be enhanced, as opposed to restored and maintained. For many decades, the Forest Service managed for enhanced tree survivability and establishment by suppressing fire. While the intent was not to disrupt the system, removing fire had unintended, cascading consequences. On the other hand, recent, large, uncharacteristic wildfires across the Southwest have enhanced the processes of tree decomposition and snag creation, but have also had unintended negative consequences, such as soil loss and sediment delivery to streams. Consequently, the final Plan describes an unenhanced fire regime, based on the historic range for each vegetation community, and applies a similar approach to other resources.

Concern Statement 892 **Vegetative Conditions, Wildfire Threat, Climate Change**

Replace the language in VEG-DC-17 with: “The composition, structure, and function of vegetative conditions are resilient to the frequency, extent, and severity of disturbances, and climate variability.”

Associated Comment Letter: 4926

Response

FW-VEG-DC-17 in the final Plan states that vegetation conditions that reduce wildfire threat are desired. Direction to manage for ecosystems resilient to climate change and other disturbances is included in FW-VEG-DC-2.

Concern Statement 893 **New Mexico Forest Restoration Principles**

The Carson National Forest Plan should follow New Mexico Forest Restoration Principles. These principles for restoration should be used as guidelines for project development and they represent the “zone of agreement” where controversy, delays, appeals, and litigations are significantly reduced.

Associated Comment Letter: 5347

Response

As a member of the collaborative group that developed the New Mexico Forest Restoration Principles, the Forest Service ensured that the principles were attainable for the national forests in New Mexico. The principles serve as the foundation for restoration and sustainability in New Mexico and are reflected in the final Plan.

The 18 principles are defined in general terms and helped guide the development of final Plan components that are more specific and targeted to the Carson NF. For example, the first principle is to collaborate by actively engaging a balanced and diverse group of stakeholders. The final Plan includes FW-PART-DC that describes working with a collaborative network to increase capacity to managing forest resources, communicate with and educate the public, and achieve short- and long-term mutually shared goals. In addition, there are management approaches throughout the final plan that describe strategies for working with specific stakeholders on assessment, project design, analysis, implementation, and monitoring.

The second principle, to reduce unnatural crown fire, is addressed throughout the final Plan, specifically FW-FIRE-DC-1. The third principle is to strategically target treatments and is described by Management Approach for Wildland Fire Management-6. Principle 4 is to develop site-specific reference conditions, which were detailed in the Assessment and used to develop the vegetation desired conditions in the final Plan. Principle 5, to use low impact restoration techniques, is included in multiple places in the final Plan including FW-FFP-DC-1 and FW-WSW-G-1. Principle 6, to incorporate existing forest structure into restoration efforts is described by Management Approaches for All Vegetation Communities-1 and -3. Principle 7, to restore ecosystem composition is included in FW-VEG-DC-3. Principle 8, to protect and maintain watershed and soil integrity is included in FW-WSW-DC-1 and FW-SOIL-DC-1. Principle 9, to preserve old or large trees is included in FW-VEG-DC-4. Principle 10, to restore historic species composition is included in FW-VWG-DC-3. Principle 11, to restore process and structure is included in

FW-VWG-DC-3. Principle 12, to control exotic species is included in FW-NIS-DC-1. Principle 13, landscape heterogeneity and managing at multiple scales is expressed throughout the plan, especially FW-VEG-DC-1. Principle 14, to protect rare or sensitive habitats is included in FW-FIRE-G and FW-FFP-S-2. Principle 15, plan restoration using a landscape perspective is the purpose of the final Plan. Principle 16, grazing management is addressed in the FW-GRZ section in the final Plan. Principle 17, monitoring and adaptive management are overarching concepts of the final Plan and the monitoring plan. Principle 18, to use best available science and site-specific knowledge when restoring and managing piñon-juniper ecosystems is a requirement of the NEPA environmental analysis process.

Concern Statement 894 **Sustainable Timber and Forest Product Supply**

Add a new desired condition under VEG, "Vegetation provides a sustainable supply of timber and forest products, such as firewood, piñon nuts, vigas and latillas, herbs and forage."

Associated Comment Letter: 4926

Response

The All Vegetation Communities section in the final Plan describes desired ecological conditions. Desired benefits that people may receive from vegetation are in the Social, Cultural, and Economic Sustainability and Multiple Use section of the plan. Firewood, vigas, and latillas have been added as examples of available and sustainable desired forest products to FW-RHC-DC-3. Sustainable availability of forest products is also addressed by FW-FFP-DC-1. Additionally, FW-FFP-DC-4 encourages timber harvest that creates opportunities for small and large businesses, employment, and provides wood products. The sustained yield limit for timber is imposed by the National Forest Management Act (16 U.S.C. §§ 1611(a, b)) and reiterated by FW-FFP-S-7. Sustainable availability of forage is also addressed by FW-GRZ-DC-1.

Concern Statement 895 **Climate Resilience and Adaptation**

All Vegetation Community Desired Condition 2 should be modified to state that "Ecosystems are resilient or adaptive to the frequency, extent, and severity of disturbances (e.g., human impacts, fire in fire-adapted systems, flooding in riparian systems, insects, pathogens, and ranges of present and future climate variability)."

Associated Comment Letters: 4951, 5574

Response

In the final Plan, FW-VEG-DC-2 discusses ecosystem resilience and adaptation to disturbance, including climate variability (i.e., ecosystems are resilient and adaptive to the full range of present and future climate variability).

Concern Statement 896 **Succession**

In Vegetation desired condition 4 "succession and disturbance" should be replaced with a more accurate process description of "changes in species composition, tree growth, and mortality." This condition should be clarified to reflect the condition's intent is to have each patch of forest over 1,000 acres or larger include some old growth attributes. The desired condition should also indicate old growth stands are of variable sizes and include some large patches that are entirely or predominantly representative of old growth forest conditions.

Associated Comment Letters: 4951, 5574

Response

Changing species composition, tree growth, and mortality are examples of successional change, which includes "the different structural and compositional phases of vegetation development" (36 CFR § 219.36). A definition of succession has been added to the glossary in the final Plan. Disturbance is also an important factor in the dynamics of old-growth distribution, described in FW-VEG-DC-4 in the final

Plan. The spatial distribution and patch size of old-growth conditions varies by vegetation community and is described under vegetation community-specific desired conditions. For example, FW-PJS-DC-7, -8, and -9 describe spatial distribution and patch size specific to the Piñon-Juniper Sagebrush community.

Concern Statement 897 **Old growth Structural Components**

Management Approach-1 for All Vegetation Communities should be changed to a desired condition.

Associated Comment Letters: 4951, 5574

Response

Desired conditions are characteristics of the plan area toward which management of the land and resources should be directed. They guide the development of projects and activities; they are not intended to be commitments for specific projects or activities (Final Plan, Chapter 1, Plan Framework Section). Management approaches are strategies that convey a management emphasis; they may illustrate suggestions as to how desired conditions could be met. All Vegetation Communities Management Approach-1 describes a specific strategy of retaining certain forest structural components to help meet the desired conditions for old growth (FW-VEG-DC-1). FW-VEG-DC-1 is the long-term sustainable vision for the Carson NF. In the short term, there may be occasions when it would be appropriate to remove the vegetation described in Management Activity-1 to address forest health issues, for instance. Through a site-specific National Environmental Policy Act (NEPA) analysis, an interdisciplinary team would ensure that a project meets the long-term vision of FW-VEG-DC-1 and would consider incorporating design features such as Management Approach-1 for all Vegetation Communities to help achieve that vision.

Concern Statement 898 **Post Fire Habitats, Value**

The Draft Plan does not acknowledge the ecological value of early successional, post-fire habitats.

Associated Comment Letter: 5347

Response

Seral state proportions are measured at the landscape scale (see seral state footnote in the introduction to the All Vegetation Communities section in the final Plan, Chapter 2). Some vegetation communities may not include an early seral class as a desired condition, due to the minimum mapping unit of 5 acres. While high-severity fire at a scale finer than 5 acres may be desired in frequent-fire vegetation communities, such as ponderosa pine (FW-VEG-PPF-DC-8), that heterogeneity is unmeasurable at the landscape scale. Though an early seral state is absent from FW-VEG-PPF-DC-1 (due to scale), recognition of its appropriateness is implied in the final plan with fire behavior qualifiers such as “primarily” and “typically” (e.g., FW-VEG-PPF-DC-4). Other vegetation communities demonstrate the desire for an early seral component both quantitatively (e.g., FW-VEG-MCW-DC-1, where 50 percent of the landscape’s desired condition is described by early- to mid-seral [including aspen]) and qualitatively (e.g., FW-VEG-SFF-DC-7, where mixed and high severity are included in desired condition text, albeit infrequently, due to the nature of the fire regime).

Concern Statement 899 **Monitoring, Vegetation Communities**

Only Mixed Conifer with Frequent Fire and Ponderosa Pine ERUs are specifically referenced in the monitoring indicators. This leaves out many ERUs that provide important wildlife habitats but are not currently the most departed from desired conditions across the full ERU. These habitats include Alpine and Tundra, Pinon-Juniper Woodlands, and Sagebrush. It is unclear how Forest management under the Plan would be monitored for success in achieving desired conditions for these vegetation types. Include monitoring protocols for a broader range of ERUs that includes these important wildlife habitats.

Associated Comment Letters: 4751, 5574

Response

The plan monitoring program includes indicators to measure the condition and trend of key characteristics (composition, size class, and canopy cover) for all vegetation communities including Alpine and Tundra, Pinon-Juniper Woodlands, and Sagebrush (final Plan, Chapter 4, Monitoring Topic II). The monitoring program also measures soil condition (final Plan, Chapter 4, Monitoring Topic I); the amount of restoration needed to improve the condition and trend of terrestrial and riparian ecosystems (final Plan, Chapter 4, Monitoring Topic II) in all vegetation communities; and the status of at-risk species in high elevation forests, frequent-fire forests, woodlands, and non-wooded (alpine, shrublands) vegetation communities (final Plan, Chapter 4, Monitoring Topic II). The number of acres treated in mixed conifer with frequent fire and ponderosa pine forest are included as indicators because those vegetation communities are where most treatment occurs on the Carson NF and there are objectives for those, but no other vegetation communities, in the final Plan. Treatments in these other vegetation communities can and will still occur, where and when needed, to meet the desired conditions specified in the Forest Plan.

Concern Statement 900 **Regulated Forest Model**

We reject the regulated-forest model which assumes that complex ecosystems can be wrangled into fixed proportions of tree ages and sizes, as it ignores the complexity of process-centered ecosystem function. Restoring a forest is not an exercise in manipulating every quantifiable metric into a neat category or alleviating any form of stress that might lead to unexpected mortality.

Associated Comment Letter: 5347

Response

The final Plan manages resources in an integrated way to provide for ecological sustainability and contribute to social and economic sustainability. Plan components maintain or restore ecological integrity (structure, function, composition, and connectivity) of terrestrial and aquatic ecosystems and watersheds in the plan area as required by the 2012 Planning Rule (36 CFR 219.8), FW-VEG-DC-3 in particular. We agree that seral state is mostly defined by structure (tree density and size). Seral state is used in the final plan as a measure for analysis purposes. For those vegetation communities with seral state proportion tables, the quantitative information they contain reflects the desired condition narrative that includes additional process and function characteristics of the ecosystem. Seral state percentages (proportions) represent the approximate mid-point of the range of desired conditions described under the landscape scale and are used primarily to compute overall system departure[5] and not intended as a prescription. In other words, the seral state percentages do not need to be achieved by every project, instead a reasonable range is expected, while managing toward those percentages on average across the landscape (final plan, chapter 2, Ecological Sustainability and Diversity of Plant and Animal Communities section).

Concern Statement 901 **Ecosystem Response Unit System**

The Ecosystem Response Unit (ERU) system is based on Potential Natural Vegetation (PNV) and runs counter to the idea that ecosystems are dynamic and change over time. This outdated concept is not supported by the best available and most recent science. While site characteristics, such as soil type, remain relatively stable over time, the climate space a site experiences is changing and will continue to change as the climate warms. This negates the validity of using ERU/PNV as a management target. The ERU/PNV concept should be replaced with the natural range of variation concept, which is scientifically supported and is in compliance with FSH 1909.12. The Forest should be basing vegetation classification on actual vegetation data such as the Ohmann and Gregory (2020) imputation approach. This imputation

[5] Seral state departure is calculated at the landscape scale relying on remotely sensed information such as the Southwestern Region's midscale mapping project. The minimum mid-scale vegetation mapping unit is five acres.

approach should be adopted for vegetation classification across the forest because it is based on vegetation currently on the landscape and it also provides a mechanism for quantifying uncertainty.

Associated Comment Letters: 3228, 4894

Response

Classic potential natural vegetation concepts of climax vegetation (Tuxen 1956) are not the basis for desired conditions in the final Plan; these have long been dismissed as management targets in favor of an understanding of the dynamics, diversity (e.g., seral states), and potential services of a given vegetation type, as noted in both the 2012 Planning Rule (36 CFR 219.8, 219.9, 219.19) and agency directives (FSH 1909.12 section 23.1). The ecological response unit concept incorporates both site potential and disturbance regime (Wahlberg et al. 2014), similar to other landscape mapping (Barrett et al. 2010; Comer 2003) and is a useful organizing framework to understand past (e.g., areas of similar natural range of variation), current, and future conditions. Like other landscape mapping, the Forest Service Southwestern Region's ecosystem response units are constructs of spatial data and of map categories (e.g., 'Ponderosa Pine Forest'). Both ecosystem response units and desired conditions for vegetation communities in the final Plan do reflect the natural range of variation and ecosystem response unit models contain multiple possible succession pathways, in addition to classic succession sequences (Weisz et al. 2010; Weisz et al. 2009; Weisz and Vandendrieche 2013). Site potential remains a valuable concept for understanding basic land capability (Somodi et al. 2012).

While vegetation communities generally correspond to an ecological response unit, it is appropriate, under the final Plan, to base management on local conditions, including soils and other site-specific indicators. Vegetation communities are used as the organizing principle and, though they are based on the regional ecological response unit map and concept, the management target is defined by desired conditions that reflect a natural range of variation, current conditions, and stressors that may not have existed historically. Desired conditions may also reflect social and economic desires in terms of the services that humans expect from ecosystems (final Plan, introduction to Vegetation section).

For those vegetation communities with seral state proportion tables, the quantitative information they contain reflects the suite of desired conditions. Seral state percentages represent the approximate mid-point of the range of desired conditions described under the landscape scale and are used primarily to compute overall system departure, not intended as a prescription (final Plan, introduction to Vegetation section).

Ohmann and Gregory (2020) created a map of current, remotely sensed pixel attributes using Landsat data. The model predicts vegetation attributes in areas that have not been field verified but does not predict future vegetation response to climate effects. The Forest Service developed similar mid-scale mapping of plant communities with methods and tooling specific to Southwest vegetation and data (Mellin et al. 2008), currently being revised with new imagery and technology by Oregon State University (Henderson et al. 2019). Current vegetation attributes were used to assess current conditions and trends of vegetation and to inform the development of desired conditions in the final Plan (USDA FS Carson NF 2015). While the existing vegetation mapping used during the Carson NF's plan revision process is thematically coarser than that by Ohmann and Gregory (2020), it avoids the accuracy issues that imputation-only approaches present at mid-scales.

We find no research to support using existing vegetation mapping to determine natural range of variability, let alone using it to dismiss the wealth of research that was applied to characterize natural range of variability. Also, using an existing vegetation map (a single snapshot) to stratify an ecosystem, let alone to determine natural range of variability, is problematic, given how (1) existing vegetation conditions can change with each event (e.g., fire, beetle outbreak, regeneration harvest) and (2) generic existing vegetation can be across ecosystem types or even life zones (for example, Douglas-fir cover types can occur in dry- and wet-mixed conifer types as well as spruce-fir forest).

The Carson NF acknowledges that seasonal change, warming, and increased aridity (IPCC 2014) will affect both site potential and disturbance regime, but maintains that ecosystem response units form a reasonable baseline from which to assess past variation (natural range of variation; FSH 1909.12 section 05), the future range of variation (Somodi et al. 2012), and adaptation options.

Concern Statement 902 Ecological Response Unit, Climate Change

Ecological response unit concept is not valid in the face of climate change. Temperature increases will result in unmet evaporative demand and potentially large effects on forest ecosystems in the Southwest (Williams et al. 2012).

Associated Comment Letter: 4894

Response

The Carson NF acknowledges that seasonal change, warming, and increased aridity (IPCC 2014) will affect both site potential and disturbance regimes. Predicted future drought stress, such as that modeled by Williams et al. (2012), is referenced in the Assessment (USDA FS Carson NF 2015), in the final Plan (Chapter 1, Plan Framework, Plan Concepts, Adapting to Changing Climate Patterns), and in the FEIS (for example, Chapter 3, Assumptions Common to All Resources, Management Implications of Projected Future Climate; and Chapter 3, Environmental Consequences for Vegetation Communities and Fuels, Environmental consequences for Vegetation Common to All Alternatives). Successful land management planning is based on stratifying the landscape into meaningful landscape units. Ecological response units are groupings of plant associations that share similar ecosystem processes and successional dynamics, as well as potential vegetation under historic disturbance regimes (Wahlberg et al. 2014). We maintain that ecological response units form a reasonable foundational unit for analysis of vegetative attributes and associated ecosystem services at the landscape- and strategic-planning scales from which to assess past variation (natural range of variation; FSH 1909.12 section 05), the future range of variation (Somodi et al. 2012), and adaptation options.

Concern Statement 903 Ecological Response Unit, Vegetation Type Distribution

Using terrestrial ecosystem unit inventory data to determine the location of ERUs is not grounded in our current scientific understanding of the factors that determine the distribution of vegetation types across landscapes.

Associated Comment Letter: 4894

Response

In the Forest Service Southwestern Region, terrestrial ecological unit inventory mapping underpins ecological response unit mapping, both spatially (map line work) and thematically (technical grouping of terrestrial ecological units similar in site potential and disturbance history). Terrestrial ecological unit inventory mapping is developed from field plots, field surveys, and photo interpretation, and updated with new information (USDA FS 1986; Winthers et al. 2005), reflecting more census than sample, and represents the best available science for ecological mapping on National Forest System lands in the Southwestern Region. Other landscape mapping, including Ecological Systems and LANDFIRE Biophysical Settings (Barrett et al. 2010; Comer 2003), were considered, but rejected in favor of a terrestrial ecosystem unit inventory-derived mapping based on a data quality comparison and an independent sample of Forest Inventory and Analysis plots.

Concern Statement 904 Ecological Response Unit, Monitoring

Using ecological response units (ERU) as the grouping unit to answer wildland fire-related monitoring questions is inappropriate because ERUs are not grounded in our current scientific understanding of the factors that determine the distribution of vegetation types across landscapes.

Associated Comment Letter: 3228

Response

Successful land management planning is based on stratifying the landscape into meaningful units. Ecological response units are groupings of plant associations that share similar ecosystem processes and successional dynamics, as well as potential vegetation under historic disturbance regimes (Wahlberg et al. 2014). They are based on a coarse stratification of biophysical themes, such as similar site potential and disturbance history (Wahlberg et al. 2014). Because they are specifically organized around historic disturbance regimes, they provide an appropriate stratification for monitoring changes in disturbance regimes. We maintain that ecological response units form a reasonable foundational unit for analysis of vegetative attributes and associated disturbance processes at the landscape- and strategic-planning scales, from which to assess past variation (natural range of variation; FSH 1909.12 section 05), the future range of variation (Somodi et al. 2012), and adaptation options.

Concern Statement 905 **Bristlecone Pine, Active Management**

No active management should occur in bristlecone pine (VEG-BP) due to its rarity on the Carson NF and risk of removing ancient trees. There is insufficient data and/or understanding of natural range of variation in bristlecone pine ecosystems to establish fixed, quantitative desired conditions.

Associated Comment Letter: 5347

Response

Bristlecone Pine vegetation community components in the final Plan are based on the best available scientific information, i.e., data that has been determined to be accurate, reliable, and relevant to the issues being considered (Forest Service Handbook 1909.12 0.07). Bristlecone pine reference seral state proportions are based on LANDFIRE[6] data, considered best available scientific information for this vegetation community. While the assessment did find an overrepresentation of closed-canopy states, bristlecone pine is too rare on the Carson NF for its condition to be accurately assessed (USDA FS Carson NF 2015, Spatial Scales for Terrestrial Ecosystems, p. 30). As stated in the assessment, information for marginally represented vegetation communities should be considered appropriately, as it may reflect a small sample size rather than actual conditions. Mature bristlecone pine has been added to Management Approach for All Vegetation Communities-1, i.e., to restore and maintain old growth desired conditions. Additionally, in the final Plan, most of the bristlecone pine vegetation community occurs within the Ash Mountain Recommended Wilderness, making it an extremely unlikely candidate for active management.

Concern Statement 906 **Bristlecone Pine, Fire**

The landscape-scale desired condition of “fire is rare in bristlecone pine and not stand replacing” contradicts the early seral desired condition of 20 percent recently burned seedling/sapling tree sizes.

Associated Comment Letter: 5347

Response

The Bristlecone Pine early seral state is described as “Recently burned; grass, forb, shrub, and seedling/sapling size trees” (FW-VEG-BP-DC-1). Recently burned areas with little grass, forbs, shrub or tree cover would be considered early seral. But areas where grass, forbs, shrubs, and seedling/sapling-sized trees dominate are also early seral regardless of whether that condition is the result of having been burned or not.

[6] U.S. Geological Service web page: www.landfire.gov

Concern Statement 907 **Gambel Oak**

Despite the frequency of Gambel oak on the Forest, the Plan does not contain a Pine-Oak ERU or similar type with Gambel oak as a primary species. Therefore, management guidance for Gambel oak must be provided with the All Vegetation Communities or other specific ERU sections. Overall, there is a need for more specific and prescriptive direction for Gambel oak, including Standards and Guidelines.

Associated Comment Letters: 4951, 5574

Response

Vegetation communities in the final Plan are based on the 10 ecological response units (ERU) in the assessment. The development and individual descriptions of ERUs can be found in Wahlberg et al. (2014). The Ponderosa Pine – Evergreen Oak and Gambel Oak Shrubland Ecological Response Units are each mapped on less than 1 acre of the Carson NF, though they are more common in the surrounding area. The final Plan therefore includes management direction for Gambel oak under other sections of the plan where it occurs as a component of other communities (e.g., VEG, VEG-MCD, -PPF, -PJO, -PJS).

Concern Statement 908 **Mixed Conifer, Ponderosa Pine, Snag Densities**

Snag densities are listed in Mixed Conifer with Frequent Fire and Ponderosa Pine Desired Conditions as having 1 to 2 snags per acre. In contrast, the regional-level conditions for forest planning developed prior to the assessment process listed desired densities as 1 to 10 snags per acre in ponderosa pine, and greater densities in dry mixed conifer communities. Therefore, the current draft of the plan represents a marked divergence and reduction from the previously expressed desired conditions. This distinction should be rectified or explained and justified within the Plan.

Associated Comment Letters: 4951, 5574

Response

The reference conditions for number of snags included in the 2015 Carson NF Assessment of Current Conditions and Trends reflects Forest Service Southwest regionally consistent values of 0.2 to 1.1 snags larger than 8 inches in the ponderosa pine forest ecological response unit and 9 snags larger than 8 inches, with 4 of those larger than 18 inches in the mixed conifer-frequent fire ecological response unit (USDA FS 2014a). The ponderosa pine forest values are based on Sánchez-Meador, Parysow, and Moore (2010). The mixed conifer-frequent fire values are based on Weisz et al. (2010) and Harrod et al. (1998).

The desired conditions for snag density in the final Plan differ slightly from reference conditions based on habitat recommendations for northern goshawk (Reynolds et al. 1992). FW-VEG-PPF-DC-10 directs 1 to 2 snags per acre in the ponderosa pine forest vegetation community and FW-VEG-MCD-DC-11 directs 3 snags larger than 18 inches and 8 snags larger than 8 inches per acre in the mixed conifer with frequent-fire vegetation community.

Concern Statement 909 **Dwarf Mistletoe**

Mistletoe witches' brooms confer positive wildlife benefits when present at moderate levels, but their occurrence is still described as an "infestation" of host trees in Mixed Conifer with Aspen, Mixed Conifer with Frequent Fire, and Ponderosa Pine desired conditions. This language should be modified to represent "dwarf mistletoe occurrences," not "infestations."

Associated Comment Letters: 4451, 5574

Response

The word "infestation" has been changed to either "occurrence" or "infection" in the final Plan.

Concern Statement 910 **Aspen**

General support for management of aspen.

Associated Comment Letter: 4887

Response

The Introduction in the final Plan includes a section titled, "Need for Changing the 1986 Plan." The third item in this section describes the need to, "Update plan direction to enhance aspen health and resilience through managing regeneration (i.e., the use of wildland fire or other disturbances) and existing aspen stands."

In addition, numerous plan components in the Aspen section (VEG-ASP) relate to managing this species. Finally, the following components from the final Plan also focus on aspen management: FW-VEG-DC-8; FW-VEG-SFF-DC-1; FW-VEG-SFF-DC-10; FW-VEG-SFF-DC-14; FW-VEG-MCD-DC-13; FW-FFP-MA-9; FW-FFP-MA-11; and DA-VFSYU-DC-5.

Concern Statement 911 **Aspen, Management Approaches**

The Aspen ERU includes Desired Conditions and Management Approaches for healthy tree regeneration. These plan components are not carried over to the Mixed Conifer with Aspen ERU and should be incorporated.

Associated Comment Letters: 4951, 5574

Response

Because aspen (VEG-ASP) occurs as an early seral component of other vegetation communities (as discussed in the VEG-ASP description and in a footnote in the introduction to VEG section of Chapter 2), the desired conditions associated with VEG-ASP apply to any vegetation community where aspen-dominated seral states are present. Although implied, aspen regeneration is also explicit in the final Plan, where aspen is a desired presence (e.g., FW-VEG-MCW-DC-13).

Concern Statement 912 **Aspen, Wildlife Habitat**

Alternative 4 would create the largest quantity of aspen forests among the alternatives, with some aspen occurring in larger patch sizes. Based on positive interactions between this aspen distribution and wildlife habitat, the Forest should incorporate identified management activities from alternative 4 (increased amount of fire on the landscape) into the proposed action.

Associated Comment Letters: 4911, 5505

Response

While aspen is desirable habitat for many species, the higher fire severities associated with alternative 4 may also have negative habitat impacts, such as loss of canopy cover and increased soil erosion, sterility, and hydrophobicity (FEIS, Chapter 3, Vegetation Communities and Fuels, Environmental Consequences for Fuels and Wildland Fire – Alternative 4). Alternative 4 would have the greatest negative impact from uncharacteristic stand-replacing wildfire on habitat for wildlife (FEIS, Chapter 3, Environmental Consequences for Wildlife, Fish, and Plants). The increase in fire under FW-MCD-O-2 and FW-PPF-O-2 in alternative 4 is the result of additional capacity gained by a large reduction in resources committed to mechanical treatment. As described in the record of decision, the final Plan adopts a more balanced approach, which includes some mechanical pre-treatment and creates opportunities for more successful ecological and fire management outcomes.

Concern Statement 913 **Piñon-juniper, Seral State Proportions**

The final plan needs to clarify whether treatments are permitted within persistent piñon-juniper woodland types, including the Piñon-Juniper Woodland ERU. PJO guideline 1 conflicts with the desired seral proportions (only 10% in non-tree, recently burned or grass, forb and shrub classes), and the Piñon-Juniper Woodland Standard stating that seral grasslands created by previous vegetation treatments shall be managed to piñon-juniper woodland vegetation unless in a Grassland Maintenance Management Area. The plan should clarify whether treatments would be allowed in PJO.

Associated Comment Letters: 4951, 5574

Response

FW-PJO-G-1 and FW-PJS-G-4 have been modified in the final plan to be consistent with the desired seral state proportions. FW-PJO-G-1 and FW-PJO-S-1 are consistent. The standard applies where the PJO vegetation community overlaps a grassland maintenance management area and management area guidance applies. Piñon-juniper woodlands that have been previously converted to grasslands and are in the Grassland Maintenance Management Area (GMMA) should be managed according to desired conditions for GMMA and not PJO. Treatments that move piñon-juniper toward desired conditions are allowed under the final Plan.

Concern Statement 914 **Sagebrush, Grazing, Tree Encroachment**

We recommend more aggressive objectives for addressing impacts of grazing and tree encroachment to help restore and maintain the fragile sage community.

Associated Comment Letter: 4887

Response

The sagebrush vegetation community on the Carson NF has a low seral state departure, but is trending away from reference conditions (FEIS, Chapter 2, Vegetation Communities and Fuels Section). In the final Plan, objectives for sagebrush were not created, as current departure from reference condition is low and sagebrush is at a lower risk than other ecosystems. In the final Plan, FW-SAGE-DC-1 states that no trees are desired in this vegetation community. Additionally, FW-VEG-SAGE-DC-2 directs management to maintain or move sagebrush toward reference conditions. Management Approach for Sagebrush-1 encourages the consideration of management activities to enhance diversity and productivity to support wildlife.

Forestwide plan components for Sustainable Rangelands and Livestock Grazing (FW-GRZ-DC-5, FW-GRZ-S-1 and FW-GRZ-G-2) direct the Carson NF to maintain site-appropriate levels of shrub vegetation and ensure compatibility of livestock management with Sagebrush desired conditions.

Concern Statement 915 **New Mexico Rare Plant Conservation Strategy**

Please add the New Mexico Rare Plant Conservation Strategy to the list of sources of information for wildlife, fish, and plants in appendix C of the draft Plan. It is available through: http://www.emnrd.state.nm.us/SFD/documentsNMRarePlantConsStrategy_Final_reduced.pdf.

Associated Comment Letter: 4924

Response

The New Mexico Rare Plant Conservation Strategy was added to appendix C of the final Plan, under Other Sources of Information.

Watersheds and Water - WSW

Concern Statement 916 **Water Plan Components, General Support**

General support of the desired conditions for watersheds, the narrative on the importance of water resources on the Carson NF and the challenges they face, as well as the discussion on Outstanding National Resource Waters (ONRWs) and Priority Watersheds.

Associated Comment Letters: 5303, 5515

Response

The Watershed and Water desired conditions and introduction are included in the final Plan, with minor additions and clarification. The Outstanding National Resource Waters and Priority Watersheds discussions in the Watershed and Water section introduction are also included in the final Plan, with corrections to the footnote regarding State regulations.

Concern Statement 917 **Water plan components, general opposition**

Generally, the Plan does not adequately address or prioritize watershed, wetland, riparian, streams (especially on intermittent and ephemeral streams), and water quality protection or commit to restoration or managing multiple uses especially in light of climate change.

Associated Comment Letter: 5673

Response

The final Plan has incorporated climate change into the management of resources and has pinpointed desired conditions and objectives that increase the ecological resiliency of the Carson NF to predicted changes in climate. For example, vegetation management practices in the final Plan can reduce drought stress and the risk of uncharacteristic fire, both of which are consequences of changing temperature and precipitation regimes combined with uncharacteristically dense and fuel-laden forests. Management practices are also designed to allow for the flexibility to address changing conditions over time.

The final Plan provides a programmatic framework that guides site-specific actions, but does not authorize, fund, or carry out projects or activities, including riparian or watershed improvement projects. The final Plan includes management direction for watersheds, wetland, riparian, streams, and water quality within the Soil Resources (SL), Watersheds and Water (WSW), Riparian Management Zones (WSW-RMZ), Streams (WSW-RMZ-STM), Waterbodies (WSW-RMZ-WB), Springs and Seeps (WSW-RMZ-SNS), Wetland Riparian (WSW-RMZ-WR), and Forest and Shrub Riparian (WSW-RMZ-FSR) resource sections. The final Plan also includes objectives established for the work considered most important to address the needs to change and make progress toward the desired conditions found in the above resource sections. Objectives FS-WSW-O-1-2, FW-WSW-RMZ-O-1, FW-WSW-RMZ-STM-O-1-2, and FW-WSW-RMZ-SNS-O-1 would commit work to improve watersheds, riparian areas, and streams.

Concern Statement 918 **Water, Alternative 2, Opposition**

Alternative 2, the Proposed Action, as written, does not provide for improvement of watershed conditions, protection of wetlands, streams, riparian areas, and intermittent and ephemeral waters, or account for the scale of future climate change impacts.

Associated Comment Letters: 4911, 5673

Response

Forestwide components, described in chapter 2 of the final Plan, address protection and restoration of watershed conditions, water quality, wetlands, and riparian areas at multiple scales.

These forestwide plan components describe a setting that reflects not only healthy ecological systems, but also social and economic considerations needed for long-term sustainability and provision of ecosystem services—including, climate regulation and soil stabilization (regulating), food and wood products (provisioning), nutrient cycling (supporting), and aesthetic and cultural values (cultural).

Forestwide plan components for Watersheds and Waters (WSW) provide additional information related to maintaining and restoring watershed function through definition of geomorphic, hydrologic, and biotic integrity; desire for resilient ecological components; sustainable soil, riparian, and watershed conditions to sustain groundwater recharge of aquifers; connection of aquatic habitats supportive of self-sustaining populations of native fish and other aquatic and riparian species; watershed conditions that support multiple uses with no long-term decline of ecological condition; and attainment of State of New Mexico water quality standards (FW-WSW-DC 1-7); priorities for restoration (priority watersheds) describe areas where plan objectives for restoration focus on maintaining or improving watershed condition; and FW-WSW-O-1 and several guidelines (FW-WSW-G-1 to -4) outline specifics related to annual treatment rates and guidance for best management practices, road and other infrastructure limitations, management of meadows to provide groundwater recharge, and minimizing impacts from water withdrawals in or near riparian management zones.

Concern Statement 919 **Water, Grazing Impacts**

Plan needs to discuss the impacts of livestock grazing on riparian, aquatic, and wetland habitats.

Associated Comment Letter: 5347

Response

The effects of livestock grazing on riparian, aquatic, and wetland habitats is not described in the final Plan, but is addressed in the FEIS in the riparian section (Chapter 3, Vegetation Communities and Fuels, Environmental Consequences for Riparian) and the section about livestock grazing activities in watersheds (Chapter 3, Watersheds and Water, Environmental Consequences for Watersheds and Water Common to All Alternatives, Livestock Grazing Activities).

Concern Statement 920 **Watershed Management, Collaboration**

Work with local, State, and Tribal governments, land grants, non-governmental organizations, and other stakeholders to identify improvement projects, priorities for protection and management of watersheds especially in priority watersheds (Watershed Condition Classification Framework), and high-quality areas (e.g., designated and eligible Wild and Scenic Rivers, Outstanding National Resource Waters, and Wetland Jewels).

Associated Comment Letter: 5303

Response

In the final Plan, the Partnership section discusses working with partners to achieve short- and long-term mutually shared goals (FW-PART-DC-1) and promoting collaborative development of Forest priorities (FW-PART-DC-2). Additionally, FW-WSW-O-1 has been updated to include “other community priorities” and Management Approach for Watersheds and Water-5, which describes an emphasis on working with interested parties to identify priority watersheds, has been added.

Concern Statement 921 **Water Use, Tribal Consultation**

Inform Taos Pueblo of any changes in water use on the forest. This includes contiguous land parcels or land connected via downstream users through any irrigation features, streams, or rivers.

Associated Comment Letter: 5786

Response

Any new water use or change of an existing water use requires compliance with New Mexico Office of the State Engineer policy and procedure. Public notice requirements of the Office of the State Engineer are intended to advise the public and determine harm to existing water rights. In addition, the final Plan provides guidance for consultation with federally recognized tribes (FW-FRT-G-2); specifically, the Forest Service is required to consult and coordinate with Tribes (Executive Order 13175 Consultation and Coordination with Indian Tribal Governments, 2000 and Section 106 of the National Historic Preservation Act, 1966). This consultation is critical when proposed management activities have a potential to affect tribal interests, including natural or cultural resources of importance.

Concern Statement 922 **Groundwater Recharge**

Page 63, Watersheds and Water. The second paragraph begins with a statement that, “The Carson is an important source of groundwater recharge (regulating ecosystem service).” Replace the word “important” with “vital.”

Associated Comment Letters: 4951, 5574

Response

The word “important” has been replaced with “vital” in the final Plan.

Concern Statement 923 **Acequia Benefits, Tribal Communities**

In the section on Watersheds and Water, pg 63, 4th paragraph - why is this paragraph here? If it is going to be kept, there needs to be a paragraph that tribal communities are interconnected with the water and have been utilizing and have prayers, songs, ceremonies, and traditions with the water.

Associated Comment Letter: 4921

Response

The fourth paragraph in the Watersheds and Water section introduction describes the benefits people derive from acequia irrigation. The interconnection of tribal communities with water is discussed in the first paragraph of that introduction and has been expanded in the final Plan. The introduction to the Federally Recognized Tribes section also mentions the cultural and sacred importance of "a great diversity of landscapes and sites," including water features. FW-FRT-DC-2 describes an appreciation and understanding of tribal communities and uses, including the connection to water and FW-FRT-DC-4 directs management to provide access for Federally recognized tribes to sacred sites, including water features.

Concern Statement 924 **Water Resources, Cultural Value**

Improve plan components which will protect and foster healthy water resources, including for cultural values they hold.

Associated Comment Letters: 4876, 4921

Response

Plan components in the Watersheds and Water section in the final Plan protect and foster heathy water resources (FEIS, Chapter 3, Environmental Consequences for Watersheds and Water). The traditional cultural significance of water is mentioned in the Watersheds and Water section introduction and has been further developed in the final Plan. Traditional uses by tribal communities has been added to FW-WSW-DC-6 as an example of a desired multiple use that watersheds support.

Concern Statement 925 **Antidegradation Policy**

Add a standard or guideline that explicitly states that management actions cannot proceed if they are anticipated to cause long-term degradation of water-quality or watershed health, with an emphasis on drinking water supplies. Include the following forest plan component: Management actions should not cause long-term degradation to water resources, including lakes, streams, wetlands, and groundwater. Particular attention should be paid to public water supplies, sole source aquifers, and source water protection areas.

Associated Comment Letters: 4911, 5303

Response

Under the New Mexico State antidegradation policy, the Carson NF is required to manage, maintain, and protect surface water quality, except when the State Water Quality Control Commission finds that "lower water quality is necessary to accommodate important economic and social development in the area in which the water is located" (N.M. Code R. § 20.6.4.8 section (A)(2). This determination, along with assurances that developments that lower water quality meet additional requirements under State law, are the sole responsibility of the State of New Mexico. In the final Plan, FW-WSW-DC-6 protects watershed health and FW-WSW-DC-7 directs management to meet State water quality standards for all surface and groundwater resources. FW-WSW-G-1 requires all management activities to apply best management practices to maintain water quality, water quantity, and timing of flows and to prevent or reduce accelerated erosion.

Concern Statement 926 **Tier 1 Waters**

Plan is not consistent with state water law which forbids any decline in water quality in Tier 1 waters, whether short or long in duration.

Associated Comment Letter: 4911

Response

Tier 1 waters include all waters of the United States, as described in the Clean Water Act, 40 CFR 131.12(a)(1), and NM Code 20.6.4.8(A)(1). State law requires that the level of water quality necessary to protect the existing uses be maintained and protected (NM Code 20.6.4.8(A)(1). The law does not forbid any decline in water quality and, in fact, explicitly permits degradation under certain conditions (NM Code 20.6.4.8 (A)(4)). The final Plan is consistent with this State law and FW-WSW-DC-7 directs management to meet State water quality standards for designated uses.

Concern Statement 927 **Local Water Quality Regulations**

To further ensure surface water quality standards are met, applicable local or county regulations must be followed by all projects conducted under this plan.

Associated Comment Letter: 5515

Response

The Forest complies with all existing Federal, State, and local laws, policies, and regulations applicable to the management of National Forest System lands.

Concern Statement 928 **Water Quality, New Mexico Environment Department**

Work closely with New Mexico Environment Department on water quality management in the forest (e.g., maintaining memorandum of understanding, development of total maximum daily load (TMDL) determinations, developing watershed-based plans, designing and implementing 319 grants).

Associated Comment Letter: 5303

Response

Collaboration is a basic tenet of the final Plan and is required by the strategy of an “all lands approach” to land management and interaction with other Federal, State, and local agencies, as well as partners and other interested parties (Chapter 1, Plan Framework, Plan Concepts). The national forests in New Mexico and the New Mexico Environment Department are parties to a memorandum of understanding (MOU) titled, “New Mexico Water Quality Protection Agreement” (NMED and USDA FS Southwestern Region 2017). The purpose of that MOU is “to document the cooperation between the parties with the common objective of improving and protecting the quality of New Mexico’s waters by implementing progressive watershed-based restoration protection programs to meet applicable water quality standards” (NMED and USDA FS Southwestern Region 2017, emphasis added). The Carson NF’s interaction and collaboration with the New Mexico Environment Department occurs routinely in coordination meetings (at least annually); project implementation through Clean Water Act Sec. 319 funded activities; and coordination during the implementation of recurrent monitoring and planning efforts, such as development of total maximum daily load (TMDL) determinations; and subsequent development of watershed-based plans to implement water quality improvement projects designed to reduce pollutant loads to waters within the management authority of the national forest.

Concern Statement 929 **State Water Quality Standards**

To avoid unnecessarily limiting the component to only one facet of the State's water quality standards the language should be modified as follows: “Water quality meets or surpasses State of New Mexico water quality standards for designated uses.”

Associated Comment Letter: 4911

Response

The national forests in New Mexico and the New Mexico Environment Department are parties to a memorandum of understanding (MOU) titled, "New Mexico Water Quality Protection Agreement." The purpose of that MOU is "to document the cooperation between the parties with the common objective of improving and protecting the quality of New Mexico's waters by implementing progressive watershed-based restoration protection programs to meet applicable water quality standards" (NMED and USDA FS Southwestern Region 2017, emphasis added).

Concern Statement 930 **State Water Quality Standards, Impaired Streams**

Add an objective that within 5 years of plan approval, all 7 currently impaired streams that are located entirely within the Carson NF will meet water quality standards. In addition, a new stream objective (4) is needed to outline a plan for the remaining 49 streams, such as, "A comprehensive assessment of sources of impairment and actions that the Carson NF can take to reduce sources of pollution in impaired waters will be completed within 10 years of plan approval." Ensure that streams meet water quality standards within 10 years.

*Associated Comment Letter:*4911

Response

Some factors that impact impairments are outside of the Forest Service's ability to manage. Assessment of sources of impairments are the responsibility of the State. The final Plan directs management to move toward or meet State water quality standards under FW-WSW-DC-7. Restoration may take more time than the life of the plan.

Concern Statement 931 **Watershed Proper Functioning Condition**

The Carson NF should assess alternatives that will provide, over the lifespan of the plan (or at least by some date certain given agency resource limitations) properly functioning watersheds pursuant to the Forest Service Watershed Condition Framework and, further, compliance with New Mexico's Water Quality Standards, promulgated pursuant to the Clean Water Act and New Mexico Water Quality Act, such that all surface waters are either removed from the Clean Water Act's 303(d) list of impaired waters or are making substantial progress toward removal from the 303(d) list.

Associated Comment Letter: 4911

Response

FW-WSW-DC-1 in the final Plan directs management to move toward proper functioning condition. As noted, restoration activities may take more time than the life of the plan and are dependent on agency and partner capacity.

Concern Statement 932 **Stream Impairment Causes**

Page 64 of the Carson Draft Land Management Plan states that according to NMED the most common cause of impairment is "high water temperature as a result of reduced shading or reduced stream flows from drought or water diversion." This is a misrepresentation of NMED's probable causes from the total maximum daily load (TMDL) documents prepared for each impaired stream. Most often, the probable cause listed for high temperature is reduced riparian shading due to overgrazing by ungulates (elk, cattle, deer), including overgrazing by domestic animals whose levels are not reduced to correspond with drought conditions (see page 30, NMED 2018).

Associated Comment Letter: 5515

Response

The draft Plan did not identify probable sources of reduced stream shading, though they are discussed in the Assessment (USDA FS Carson NF 2015, p. 131) and in the FEIS (Chapter 3, Environmental Consequences for Riparian Common to all Alternatives; and Chapter 3, Environmental Consequences for

Watersheds and Water Common to All Alternatives, Livestock Grazing Activities). Drought and water diversion were included in the draft Plan as probable sources of reduced stream flow; these probable sources have been removed from this sentence to clarify its meaning.

We stand by the statement that high water temperature is caused mainly by reduced shading and exacerbated by drought and diversion. This is consistent with the 2015 Carson NF-specific analysis of stream impairments documented in the Assessment (USDA FS Carson NF 2015, p. 143). We do not believe that this analysis is inconsistent with the 2018-2020 report (NMED 2018), which shows that temperature is the chief cause of surface water impairment for rivers and streams statewide (p. 24). While specific sources are not attributed to particular impairments in the 2018-2020 report, the report does summarize top probable sources, which include grazing, wildlife, and loss of riparian habitat (41 percent of all probable sources statewide) and flow alternations, diversions, and drought impacts (16 percent of all probable sources statewide). Other sources listed (septic, road runoff, bank modification, waterfowl) are either not significant sources on the Carson NF or not relevant to high water temperatures. Recreation is also identified as a source but is less significant (6 percent of all probable sources statewide).

Concern Statement 933 **Water Quality Monitoring**

Monitor for compliance with Federal and State water quality standards (no net loss of wetlands, in-kind mitigation of vegetation for seeps/springs, hydrological interactions (groundwater and surface water specific, comprehensive of water quality and quantity concerns), habitat connectivity and wildlife/biodiversity aspects).

Associated Comment Letter: 5333

Response

The Army Corps of Engineers permitting process ensures compliance with State and Federal regulations under the Clean Water Act. In addition, design criteria developed through the NEPA process for specific projects address water quality and aquatic habitat. Best management practice monitoring is reported regionally and evaluates effectiveness on a random selection of completed management activities.

Concern Statement 934 **Notification of Accidental Discharge**

All parties involved in the project should be aware of notification requirements for accidental discharges as specified at 20.6.2.1203 NMAC.

Associated Comment Letter: 5515

Response

Coordination with the New Mexico Drinking Water Bureau is commonplace when community drinking water sources may be at risk. The final Plan includes language that addresses accidental discharges and best practices for avoiding accidental discharges of pollutants (FW-WSW-RMZ-G 4, FW-WSW-RMZ-STM S 2, FW-WSW-RMZ-WB S 2, and FW-WSW-RMZ-WR S 3). Any owner of a facility, including the Forest Service, must notify the State of any accidental discharge per 20.6.2.1203 NMAC.

Concern Statement 935 **Watershed Restoration**

The Forest Plan needs to address protecting and restoring watershed conditions, water quality, wetlands, and riparian areas, and protect intermittent and ephemeral waters. Watershed plan components should focus on restoring wetlands and watershed features across a broad landscape and facilitate dispersion of wildlife and livestock. Language in the desired conditions should include specific language to identify how watershed functions will be restored. Plan components that restore watershed conditions and improve water quality, should also not negatively impact sustainable energy development or the grazing of cattle or other livestock.

Associated Comment Letters: 127, 196, 1044, 4883, 4887, 4911, 4925, 5364, 5489, 5561, 5617, 5785

Response

The final Plan addresses protection and restoration of watershed conditions, water quality, wetlands, and riparian areas at multiple scales in the general vegetation section (FW-VEG-DC 1, 2, 9, 11 – landscape scale, FW-VEG-DC 16, 17 – mid scale, and FW-VEG-DC 20, 21 – fine scale), as well as in critical vegetation community sections, such as Montane Sub-alpine Grasslands (FW-VEG-MSG-DC 2, 3, 4 – landscape scale and FW-VEG-MSG-DC 9, 10 – mid-scale) for example.

These forestwide plan components describe a setting that reflects not only healthy ecological systems, but also social and economic considerations needed for long-term sustainability and provision of ecosystem services—including, climate regulation and soil stabilization (regulating), food and wood products (provisioning), nutrient cycling (supporting), and aesthetic and cultural values (cultural).Montane Sub-alpine Grasslands are pointed out as an example of the role played by vegetation communities in maintaining hydrologic function, soil stability and function, and nutrient cycling. Other vegetation community sections in the final Plan provide similar direction regarding managing toward sustainable conditions related to other watershed functions, such as snow retention, water infiltration/recharge, etc. Any future activities, such as grazing and energy developments, must be consistent with the final Plan, but would be evaluated on a project-level basis, i.e., based on site-specific conditions and factors.

Forestwide plan components for Watersheds and Waters (WSW) provide additional information related to the maintenance and restoration of watershed function through definition of geomorphic, hydrologic, and biotic integrity; desire for resilient ecological components; sustainable soil, riparian, and watershed conditions to sustain groundwater recharge of aquifers; connection of aquatic habitats supportive of self-sustaining populations of native fish and other aquatic and riparian species; watershed conditions that support multiple uses with no long-term decline of ecological condition; and attainment of State of New Mexico water quality standards (FW-WSW-DC-1-7). Priority Watersheds (identified in Chapter 2) describe areas where plan objectives for restoration focus on maintaining or improving watershed condition. FW-WSW-O-1 and forestwide Guidelines (FW-WSW-G-1-4) outline more specifics related to annual treatment rates and guidance for best management practices, road and other infrastructure limitations, management of meadows to provide groundwater recharge, and minimizing impacts from water withdrawals in or near riparian management zones.

Concern Statement 936 **Watershed Restoration, Prioritization**

Watershed restoration efforts should be prioritized to take place in areas above acequia diversions.

Associated Comment Letter: 5588

Response

As stated in chapter 1 (Purpose of the Plan section), the final Plan does not prioritize projects or activities. Rather, the Carson NF's priorities fit within the framework set forth in the land management plan, but are based on many variables and evolve and are reassessed continually by Forest Service leadership, in collaboration with the public. The final Plan encourages working collaboratively to plan and accomplish projects. In regards to acequias, Management Approach-1 for Sustainable Forestry and Forest Products and Management Approach-10 for Rural Historic Communities encourage the Carson NF to consider working with acequia governing bodies to discuss shared opportunities and to design projects that contribute to the cultural integrity of the many forest-dependent traditional communities. Projects are also often prioritized based on ecological conditions and wildfire risk. Wildland Fire Management-Management Approach-6 describes a strategy of prioritizing treatments based on their benefit to ecological integrity or the ability to manage future fires to protect values at risk.

Concern Statement 937 **Integrated Resource Management**

Add a management approach to combine vegetation and water resource projects such as: FW-VEG-MA 12: Consider pairing vegetation management projects with activities to restore or enhance stream and riparian habitat, improve floodplain connectivity, and improve habitat conditions for aquatic and riparian-dependent species.

Associated Comment Letter: 5303

Response

Integrated resource management is fundamental to the final Plan (Chapter 1, Plan Framework, Plan Concepts), as well as the National Environmental Policy Act project planning process. Integrated resource management is a multiple-use approach that recognizes the interdependence of ecological resources and therefore considers ecological, social, and economic factors holistically (36 CFR 219.19).

Concern Statement 938 **Stream Function, Road Impacts**

Include restoration objectives in the final plan to restore stream function and habitat, decommission and naturalize non-system roads, and install erosion control treatments to stabilize head cuts and limit road impacts. Include an objective to maintain or improve watershed health and function by decommissioning unneeded and temporary roads. Include plan components that mitigate new road construction by obliterating or naturalizing unneeded or temporary roads where it will benefit fish and wildlife or improve water quality.

Associated Comment Letters: 196, 380, 5303

Response

Transportation and Forest Access (FTA) addresses management of both National Forest System roads and motorized and non-motorized trails. FW-TFA-DC 5 addresses decommissioning unneeded roads and trails to reduce impacts to ecological resources (i.e., watersheds, wildlife, and soil erosion) and improve wildlife habitat connectivity. Further guidance related to unneeded roads and their management is found in FW-TFA-O 1. Mitigation for the construction of new system roads and resource damage offset is contained in FW-TFA-G 2.

Concern Statement 939 **Riparian Area Improvement**

The primary strategy to improve riparian areas should be watershed restoration.

Associated Comment Letter: 5489

Response

Watershed restoration is a chief strategy used by the Carson NF to improve watershed resources, including riparian areas. Other strategies that are not related to restoration, such as grazing or recreation management, are also valuable tools that the national forest uses to improve riparian condition.

Concern Statement 940 **Water Withdrawal**

Include the following standard from the Santa Fe NF draft management plan: Projects that withdraw water from surface water resources or groundwater must ensure that water is maintained at levels that will protect management uses and forest resources, including aquatic species, their habitats, and water quality, while not impacting the uses by traditional users, including land grant-merced communities and acequias.

Associated Comment Letters: 4926, 5303

Response

The final Plan, includes a similar component (FW-WSW-DC-3) that addresses groundwater quantity and recharge in aquifers; FW-WSW-DC-5 addresses the quality and quantity of aquatic and riparian habitat;

water quality is addressed by FW-WSW-DC-7. Water withdrawal from surface water resources is not entirely within the Carson NF's authority to manage and is regulated by the State of New Mexico. Most groundwater withdrawal occurs off the Carson NF on private land (USDA FS Carson NF 2015, p. 162). Traditional water users are addressed by FW-RHC-DC-3.

Concern Statement 941 **Watersheds, Multiple Uses**

Rewrite WSW-DC-6 to include additional examples of multiple uses: "Most watersheds support multiple uses (e.g., timber, cultural uses, traditional uses, human subsistence, recreation, and grazing) with no long-term decline in ecological conditions, although some watersheds are reserved to preserve ecological functions and may support more limited uses (e.g., municipal watersheds)." This new wording best describes the impacts of uses on watersheds and differentiates between Wild and Scenic River designated watersheds and subsistence utilized watersheds. This new wording shows that watersheds are utilized without long-term effects and are done so in an ecologically friendly manner.

Associated Comment Letter: 4926

Response

The Carson NF desires that all watersheds support multiple uses. The list of multiple uses included in FW-WSW-DC-6 is not exhaustive and does not permit or prohibit, by omission, any specific use in any particular watershed. Managing for multiple uses means managing the various renewable national forest surface resources so that they are used in the combinations that will best meet the needs of the American people, without impairment to the productivity of the land. Multiple uses conform to changing needs and conditions and some land will be used for less than all of the resources (16 U.S.C. § 531). The specific combination of desired uses in any watershed depends on factors such as existing designations, plan direction, other land use restrictions, available resources and their condition, and public demand. Impacts of uses are described in the FEIS, not the final Plan.

Concern Statement 942 **Watershed Proper Functioning Condition**

Because the Carson NF states that some watersheds will not reach proper function (draft plan, pg. 63 - while restoration can restore proper function of many watersheds, some of those at risk are likely to remain at risk) a desired condition stating that all watersheds are "functioning properly" (DC 1) is not a realistic target. Instead, we recommend Carson NF include a desired condition specific to properly functioning watersheds, and one specific to those watersheds functioning at risk or impaired.

Associated Comment Letter: 5303

Response

Desired conditions describe aspirations or visions of a future state; however, they do not need to be achievable over the life of the plan (FSH 1909.12 22.11(2)(c)). We stand by the statement that some "at-risk" watersheds are likely to remain "at-risk" over the life of the plan but maintain that the desired future state is that all watersheds function properly. While the Watershed Condition Classification is a useful tool for managing priorities, the full suite of indicators that drive determination of condition class must be acknowledged in evaluating which 'functioning-at-risk' watersheds can or cannot be improved, given funding, workforce capacity, and other factors outside the scope of the final Plan. FW-WSW-DC-1 has been clarified in the final Plan to include resiliency of watersheds that cannot be managed to a proper functioning condition classification.

Concern Statement 943 **Watershed Restoration Action Plans**

The Forestwide Management Approach 1 for the Water Resources section suggests that Watershed Restoration Action Plans (WRAP) are considered for priority watersheds. We ask that this be included as more than just a suggestion. Please include a standard or guideline requiring a WRAP is completed for each Priority Watershed and that the Forest and its partners must attempt to complete it within one calendar year from the time of designation.

Associated Comment Letter: 5303

Response

Land management plans do not compel future actions such as developing any additional specific plans. The intent of Management Approach 1 for Watersheds and Water is to provide flexibility for the development of watershed restoration action plans for priority watersheds into the future. Watershed restoration action plans are one possible approach for watershed restoration planning. Flexibility is inferred in the wording of this management approach when the words "similar processes" are used to allow consideration for other types of documents – such as a Watershed Based Plan which is prescribed by the Environmental Policy Act and used by the New Mexico Environment Department as a basis for application of Clean Water Act Section 319 funds. This management approach is also considerate of the Forest capacity to develop such plans.

Concern Statement 944 **Soils, Vegetative Cover**

Add this DC to VEG section "Vegetative cover and litter are distributed across the soil surface in adequate amounts to limit erosion and contribute to soil deposition and development. Soil cover and herbaceous vegetation protect soil, facilitate moisture infiltration, and contribute to plant and animal diversity and ecosystem function."

Associated Comment Letter: 4926

Response

FW-SL-DC-3 in the final Plan addresses vegetative cover and litter that promote soil function, including by limiting erosion and contributing to soil deposition and development. This desired condition applies to all soil types in all vegetation types across the Carson NF. The desire for organic ground cover and herbaceous vegetation that protects soils, facilitates moisture infiltration, and contributes to plant and animal diversity and ecosystem function is included in the final Plan as FW-VEG-DC-9.

Concern Statement 945 **Soils, Rutting**

Include a Guideline stating that work will be temporarily halted when ruts of six inches or greater in depth occur from trucks and equipment on saturated soil. This condition is generally consistent with Bureau of Land Management Gold Book standards and New Mexico Mining and Minerals Division provisions for mine permits operating on public lands.

Associated Comment Letter: 4951

Response

Mining permits are consistent with all applicable policies and regulations, including the Bureau of Land Management Gold Book standards and New Mexico Mining and Minerals Division provisions. In the final Plan, FW-SL-G-1 and -2 apply to all ground-disturbing management activities; they require minimization of soil impacts and prevention of soil compaction that would affect hydrological function. FW-WSW-G-1 requires all management activities, including mining, to apply best management practices. Best management practices include avoiding soil disturbance during "periods when soils are particularly prone to unacceptable erosion, rutting, or compaction;" strengthening "the road base if roads are tending to rut;" restricting "use if road damage such as unacceptable surface displacement or rutting is occurring;" and increasing "soil-bearing capacity [to] reduce rutting from expected vehicle traffic" (USDA FS 2012a).

Concern Statement 946 **Soil pH**

Add a monitoring question to monitor soil pH: THIS ACIDIFICATION KILLS FORESTS resulting in out of control wildfires and creates Nitrogen overloads for run-off and feeds toxic algae blooms in water bodies, i.e., Abiquiu Reservoir and others downstream.

Associated Comment Letters: 49, 5430

Response

Soil pH on the Carson NF ranges from approximately 5.7 (moderately acidic) to approximately 8.2 (moderately alkaline), depending on parent material, precipitation, and other factors (NRCS 2020; USDA FS Carson NF 1987). Drivers of wildfire are well understood; however, we are not aware of a demonstrated connection between soil pH and wildfire behavior. Algal blooms are typically related to warm water temperatures, high light intensities, and stable water conditions associated with low flows and minimal turbulence. The source of nutrients (nitrogen or phosphorous) can be from external sources, but often are attached to sediment within a water body. Carson NF management generally has little effect on soil pH and pH management has not been identified as a need to change existing management direction or a risk to ecological integrity. While monitoring trends in soil acidification may help understand related impacts, it is not a useful way to measure management effectiveness or progress toward achieving or maintaining the plan's desired conditions or objectives.

Concern Statement 947 **Waterbodies, Sedimentation**

Adopt the following desired condition from the Rio Grande NF's final management plan: The sediment regime within water bodies is within the natural range of variation. Elements of the sediment regime include the timing, volume, rate, and character of sediment input, storage, and transport.

Associated Comment Letter: 5303

Response

In the final Plan, FW-WSW-RMZ-WB-DC-5 addresses water quality (including total dissolved solids and turbidity) in waterbodies. FW-WSW-RMZ-DC-1 desires properly functioning riparian ecosystems; these include vegetation, landform, large coarse woody debris, litter, and root masses that capture sediment, filter contaminants, dissipate stream energy and overland flow from uplands to protect and enrich soils and stabilize banks and shorelines. FW-WSW-G-1 requires adherence to best management practices to maintain water quality, water quantity, and timing of flows, and to prevent or slow erosion.

Concern Statement 948 **Sediment Monitoring**

The Carson NF should develop a monitoring protocol to accurately track sediment impairments caused by roads on streams, and allow for public input. It may be that fixing 2 stream crossings every 5 years is inadequate to address sediment impacts from roads in a manner that achieves desired conditions for streams and water.

Associated Comment Letter: 5303

Response

Monitoring Topic I measures best management practices implementation and effectiveness for protecting watershed condition, including water quality (Chapter 4, Monitoring Topic I). Monitoring protocols to evaluate sedimentation from roads do not exist at a programmatic (i.e., forest plan) scale; it is therefore not appropriate as a plan monitoring indicator.

The final Plan directs management to maintain sediment movement within the natural range of variability (FW-WSW-RMZ-STM-DC-1), regardless of source. Water quality is an appropriate indicator of sedimentation, regardless of the source of impairment. Water quality is the first indicator in the Watershed Condition Assessment (USDA FS 2011a), which is included in Monitoring Topic I of the final plan (watershed proper functioning condition, Chapter 4, Monitoring Topic I). The State of New Mexico Environment Department measures stream water quality on a rotating basis and FW-WSW-DC-7 directs management to meet State water quality standards. Field evaluation of road conditions is routine, and improvement and correction of those problems is performed annually within the capacity of the national forest road maintenance crew. The objective to "repair at least 2 road/stream crossings every 5 years" (FW-WSW-RMZ-STM-O-2) reflects the Carson NF's expected capacity to address these needs. The Transportation and Forest Access (FTA) section of the final Plan outlines desired conditions, objectives, standards, guidelines, and management approaches for forest road and trail management.

Concern Statement 949 **Best Management Practices**

Require BMPs for all management practices including contractor/grantee/lessee permits.

Associated Comment Letters: 112, 5333

Response

Best management practices are required under the final Plan by FW-WSW-G-1.

Concern Statement 950 **Water Features, Road Location**

The Draft Forest Plan provides forest wide guidance for Watershed and Water resources and states that "new or rerouted roads, infrastructure, and recreation sites, or similar constructed facilities should not be located within 300 feet of water resource features, except where necessary for stream crossings or to provide for resource protection to avoid the long-term adverse impacts associated with the occupancy and modification of floodplains and water resource features." Existing conditions do not meet this guideline. This guideline could prevent needed ski area improvements that could be accomplished with the same end goal as this guideline through the use of project-specific BMPs and Project Design Criteria.

Associated Comment Letters: 4879, 4906

Response

FW-WSW-G-2 has been modified as follows: "New or rerouted roads should not be located within 300 feet of water resource features…"

Concern Statement 951 **Section 404 Permitting**

Should a Section 404 permit be required, coordination with the U.S. Army Corps of Engineers is recommended to ensure compliance with Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials and regulatory requirements of Section 404(b)(1) of the Clean Water Act. Discussion of this matter should be included in the Final EIS.

Associated Comment Letter: 5577

Response

Any permit needed under Section 404 of the Clean Water Act would be identified during project-level analysis; as well, such activities are routinely vetted with the U.S. Army Corps of Engineers and the New Mexico Environment Department to ensure compliance with Section 401 (Water Quality Certification) of the Clean Water Act. An environmental impact statement provides "discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment" (40 CFR § 1502.1) The FEIS is not intended to outline procedural compliance requirements.

Concern Statement 952 **Water Rights Administration**

The State Engineer is the administrator of the waters in the State of New Mexico on the National Forest System Lands and the State of New Mexico Office of the State Engineer issues water rights. The general public needs to know this and is part of a very informative and interesting story which the Plan ignores.

Associated Comment Letter: 143

Response

Licensing and adjudication of water rights in the State of New Mexico is the responsibility of the Office of the State Engineer. The final Plan describes the objectives and goals for management of natural resources within the authority of the Carson NF; it does not determine the validity of water uses or rights associated with those uses.

Concern Statement 953 **Private Water Rights**

Add language that specifically recognizes the private water rights associated with many streams and springs within the forest and their legal right to put their associated water rights to beneficial use.

Associated Comment Letter: 5422

Response

Licensing and adjudication of water rights in the State of New Mexico is the responsibility of the Office of the State Engineer. The final Plan describes the objectives and goals for management of natural resources within the authority of the Carson NF. The Carson NF recognizes private rights as defined under State law; where private water rights associated with a stream or spring on the Carson NF exist, the Office of the State Engineer has the authority to permit diversion of water to satisfy that water right.

Concern Statement 954 **Water Rights, Stream Flows**

Streams Desired Conditions (FW-WSW-RMZ-STM-DC) #6 refers to "quantity and timing of stream flows" being sustained at "levels that maintain or enhance essential ecological functions." This desired condition does not take precedence over existing private water rights associated with a stream.

Associated Comment Letter: 5422

Response

The final Plan guides the Carson NF's management, in places and of resources, over which the Forest Service has authority. The desired condition referenced is appropriate for all streams within the management authority of the national forest. Where private water rights associated with a stream channel on the Carson exist, the Office of the State Engineer has the authority to permit diversion of water to satisfy that water right.

Concern Statement 955 **Water Rights, Instream Flow**

Consider opportunities to secure instream flows (water rights) for the purposes of maintaining, improving, or sustaining aquatic and riparian ecosystems and restoration of natural stream hydrology.

Associated Comment Letters: 5303, 5347

Response

New Mexico water law and statutes are based on the doctrine of "prior appropriation," which states that: (1) the right to use water is obtained by "taking" or diverting the water from its source, (2) water must be put to "beneficial use," (3) the amount of water claimed is limited to the amount of water beneficially used, (4) the first in time is first in right, and (5) water claimed must be "used" or the right is subject to forfeiture. Instream flows generally do not qualify as water rights under this doctrine.

A recent exception to this general rule of a required taking put to beneficial use was a request made to the New Mexico Office of State Engineer to recognize "fish and wildlife uses" instream via a lease of water rights on the Rio Gallina. This lease was time-limited (5 years), required that the current use of water (irrigation) be ceased during the term of the lease, and the conditions of approval were mute to any renewal of the lease.

The only other exception to this taking and beneficial use requirement is the instream flow necessary to protect outstandingly remarkable values associated with the congressional designation of a water under the Wild and Scenic Rivers Act of 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.).

The Forest Service keeps apprised of developments in New Mexico water law and will avail itself of appropriate legal tools.

Concern Statement 956 **Downstream Water Rights, Taos Ski Valley**

The additional development of water resources in the Taos Ski Valley are of particular concern. There are eleven irrigation ditches that take their water from the Rio Hondo. In most years there is not enough water available. It is imperative that the Forest Service monitor this development and object to any encroachment on or abuse of public water sources.

Associated Comment Letter: 4872

Response

Where private water rights associated with a stream channel exist on the Carson NF, the Office of the State Engineer has the authority to permit diversion to satisfy that water right; the Carson NF does not monitor these State water permits. Any discharge of pollutants into navigable waters or dredge and fill material into waters of the United States is regulated by the Environmental Protection Agency, under the terms of the Clean Water Act (33 U.S.C. 1342 and 1344). Routine recreational permit administration includes regular monitoring of the permit holder. If a permittee is operating outside the bounds of the permit, the Forest Service will send a notice of non-compliance; immediate cease-and-desist orders may be issued in the case of risks to public safety or egregious violations and permits revoked if there is a failure to remedy. Any proposed development would be evaluated through a National Environmental Policy Act process that would evaluate potential impacts and compliance with existing law.

Concern Statement 957 **Stream Proper Functioning Condition**

We encourage the Carson NF to identify how it will ensure that streams are functioning properly and are resilient, and how it will prioritize restoration.

Associated Comment Letter: 4911

Response

The final Plan describes physical and biological indicators of proper function as desired conditions for streams (FW-WSW-RMZ-STM-DC-1-11); plan standards describe protective measures (FW-WSW-RMZ-STM-S-1-2). Proper vegetative cover, in-stream woody material, stream bed composition, and streambank stability are described in guidelines (FW-WSW-RMZ-STM-G-1-4). Riparian Management Zones desired conditions (FW-WSW-RMZ-DC 1-11) describe additional indicators pertinent to proper functioning stream conditions (i.e., vegetation density and structure, floodplain access, filtering sediment, dissipation of stream energy, and diverse native vegetation present).

Concern Statement 958 **Floodplain Connectivity**

Protecting and restoring floodplain connectivity will be an important component to achieving the desired conditions in this section and should therefore be referenced in plan components. Its inclusion could be done by adding a reference to floodplain connectivity in the existing desired conditions, as well as altering existing guidelines to account for it.

Associated Comment Letter: 5303

Response

The final Plan addresses floodplain connectivity in several places. FW-WSW-RMZ-STM-DC-4 directs that streams and their adjacent floodplains should be managed so that they are connected. FW-WSW-RMZ-STM-DC-6 addresses streamflows and floodplain morphology. FW-WSW-RMZ-STM-DC-9 addresses stream characteristics and floodplain connectivity. FW-GRZ-G-2 directs management to sustain proper stream channel morphology and floodplain function.

Concern Statement 959 **Floodplain Connectivity**

Support for reconnecting the flood plain with the stream channel wherever possible as described in the plan.

Associated Comment Letter: 4845

Response

FW-WSW-RMZ-STM-DC-4 in the final Plan directs that streams and their adjacent floodplains are connected.

Concern Statement 960 **Streambank Vegetative Cover**

We recommend the addition of the following language to Desired Condition 2: "There is sufficient vegetative cover to provide bank stability, trap and retain sediment, regulate temperature, and contribute to floodplain function."

Associated Comment Letters: 4925, 5303

Response

In the final Plan, FW-WSW-RMZ-DC-1 desires adequate vegetative cover to capture sediment, filter sediment, dissipate stream energy and overland flow to protect and enrich soils and stabilize banks and shorelines. FW-WSW-RMZ-DC-4 addresses site-appropriate shade to regulate water temperature in streams. FW-WSW-RMZ-STM-DC-4 addresses floodplain function.

Concern Statement 961 **Stream Fragmentation**

Support for FW-WSW-RMZ-STM-DC 2 and DC 3 that recognize fragmentation may be necessary to protect native aquatic species from nonnatives.

Associated Comment Letter: 5303

Response

FW-WSW-RMZ-STM-DC-3 is included in the final Plan. FW-WSW-RMZ-STM-DC-2 is also included; its intent is the same as in the draft Plan, although the duplicated discussion of infrastructure development (found in FW-WSW-DC-4) was removed.

Concern Statement 962 **Streams, Barriers**

Barriers to aquatic species movement should be authorized "only when necessary to protect native aquatic species . . . [etc.]" to ensure that barriers are installed only as a last resort.

Associated Comment Letter: 4911

Response

In the final Plan, FW-WSW-RMZ-STM-DC-3 states that barriers to aquatic species movement are only desired if they protect native aquatic species or provide agricultural benefit. The necessity and authorization of any particular barrier would be analyzed on a site-specific basis and in coordination with other relevant authorities, such as the New Mexico Department of Game and Fish, the New Mexico Office of the State Engineer, and the Army Corps of Engineers. FW-WSW-RMZ-STM-DC-2 directs management to protect aquatic connectivity important to at-risk species.

Concern Statement 963 **Seep and Spring Restoration**

The plan would be improved by mentioning the potential benefits of allowing restoration of seeps and springs to enhance wetland, riparian, stream, or watershed components (this could be included as a management approach).

Associated Comment Letter: 5303

Response

The final Plan describes the ecosystem services (benefits) of riparian areas, including those around seeps and springs, in the introduction to the Riparian Management Zones section (chapter 2). A discussion of these benefits has also been added to the FEIS (Chapter 3, Watersheds and Water, Environmental Consequences for Watersheds and Water Common to All Alternatives, Riparian Management Zones). The intent of restoration is to reestablish the composition, structure, pattern, and ecological processes

necessary to facilitate ecosystem sustainability, resilience, and health under current and future conditions (36 CFR 219.19). That is, restoration reestablishes those ecosystem processes that provide benefits. The final Plan addresses the ecosystem services that seeps and springs provide in the Seeps and Springs section introduction. The purpose for seep and spring restoration is described by FW-WSW-RMZ-SNS-DC-1, -3, -5, and -7.

Concern Statement 964 **Spring Development**

Alternative 4's ban on new spring development should not be included in the final management plan.

Associated Comment Letters: 5303, 5489

Response

As discussed in the record of decision, spring development is a useful management tool for providing wildlife habitat, managing permitted grazing, and protecting riparian areas. FW-WSW-RMZ-SNS-S-2 of alternative 4, which banned new spring development, is not included in the final Plan.

Concern Statement 965 **Springs, Commercial Development**

Do not allow commercial development adjacent to springs.

Associated Comment Letter: 4860

Response

Any commercial activity or development on National Forest System lands administered by the Carson NF would need to be permitted and comply with appropriate spring (WSW-RMZ-STM), riparian management zone (FW-WSW-RMZ), and watershed (FW-WSW) direction in the final Plan.

Concern Statement 966 **Outstanding National Resource Waters**

Correct the phrase “outstanding natural resource waters” to reflect the assumed intention of the Forest to reference “outstanding national resources waters.”

Associated Comment Letter: 4911

Response

“Natural” has been replaced with “national,” where it was incorrect in the Watershed and Water section footnote and in the glossary; “resource” has been kept in the singular, consistent with the term, “Outstanding National Resource Waters.”

Concern Statement 967 **Outstanding National Resource Waters**

Outstanding National Resource Waters plan components should be added to the Watershed and Water or Streams sections of the plan. Additional protections should be added to the State regulations for Outstanding National Resource Waters in the plan.

Associated Comment Letters: 4911, 5303, 5303

Response

The Carson NF manages Outstanding National Resource Waters in compliance with New Mexico State regulations (NMSA 1978, §§ 74-6-1 to 74-6-17). The New Mexico Water Quality Control Commission is the control agency for administering the Federal Clean Water Act (33 U.S.C. §1251 et seq. (1972)), including authority over Outstanding National Resource Waters. Protection and management of all water resources are described in the FW-WSW section in the final Plan.

Concern Statement 968 **Outstanding National Resource Waters**

Include a list of Outstanding National Resource Waters where they are discussed in the introduction or reference a list of these waters if it exists later in this document.

Associated Comment Letter: 5588

Response

A complete list was included in the Assessment Report (USDA FS Carson NF 2015, pp. 459-460) and is referenced in the final Plan, where appropriate.

Concern Statement 969 Outstanding National Resource Waters, Water Quality

Add plan components for preventing and reversing water quality impairments on the forests, especially for Outstanding National Resource Waters.

Associated Comment Letters: 196, 4911, 5303

Response

FW-WSW-DC-7 in the final Plan requires management to meet State water quality standards. This direction is in alignment with the State of New Mexico's antidegradation policy and is addressed by the memorandum of understanding between the State of New Mexico Environment Department and the USDA Forest Service, Southwestern Region.

Concern Statement 970 Outstanding National Resource Waters, Compliance

It is appropriate for the Forest to articulate, in the forest plan, how it will comply with Outstanding National Resource Waters regulations and to communicate the steps the Forest will take to implement Outstanding National Resource Waters protections.

Associated Comment Letter: 4911

Response

The Carson NF will comply with the relevant Antidegradation Policy and Implementation Plan regulations (20.6.4.8 NMAC) and the memorandum of understanding between the State of New Mexico Environment Department and the USDA Forest Service, Southwestern Region. The State Memorandum of Understanding is included in appendix C; however, there is no need to re-iterate law, rule, or policy in the Final Plan.

Concern Statement 971 Outstanding National Resource Waters, Collaboration

If degradation of water quality is detected in an Outstanding National Resource Water (ONRW), coordinate with water quality agencies to monitor and draft an action plan to remedy the degradation. Create a new ONRW management approach, objective, or standard: "If degradation of water quality is detected in an ONRW, the responsible official will conduct a meeting with state water quality officials and other interested parties, and will draft an action plan that details potential sources of the degradation and actions to take to address and/or remedy the degradation."

Associated Comment Letters: 4911, 5303

Response

The national forests in New Mexico and the New Mexico Environment Department are parties to a memorandum of understanding (MOU) titled, "New Mexico Water Quality Protection Agreement." Part IV. E. 1-2 of that MOU articulates the responsibility of the Carson NF for designated Outstanding National Resource Waters (ONRW) under the State's Antidegradation Policy for ONRWs (paragraphs 3 and 4 of Subsection A of 20.6.4.8 NMAC). The final Plan is consistent with the MOU.

Concern Statement 972 Outstanding National Resource Waters, Temporary Degradation

ONRW footnote needs to be clarified: the language regarding piscicide applications is not accurate. While the State's continuing planning process explains that piscicide applications "may" be allowed in

ONRWs, they are not completely exempt from ONRW requirements. Instead, piscicide application would fall under the general temporary degradation requirements that apply to all restoration projects. Unlike acequia maintenance and operations, which is given explicit exemption in the applicable regulations, piscicide application in relation to ONRWs is not mentioned in the regulations.

Edit Footnote 7 as follows: Other management activities may result in temporary and short-term changes in water quality, when those activities have been allowed by the State and either result in restoration or maintenance of the chemical, physical, or biological integrity of the ONRW and have been allowed by the State or are necessary to mitigate an immediate threat to public health or safety.

Associated Comment Letter: 4911

Response

The language in footnote 9 in the final Plan (footnote 7 in the draft Plan) has been corrected.

Concern Statement 973 **Priority Watersheds, Review**

In the absence of specific Priority Watershed designations included in the forest plan, a management approach should be added that the Carson NF review its Priority Watershed designations with interested stakeholders and partners on a recurring basis.

Associated Comment Letter: 5303

Response

Management Approach for Watersheds and Water-5 has been added to the final Plan to emphasize working with interested stakeholders and partners to identify priority watersheds. The Carson NF's current priority watersheds are not listed in the final Plan because they are intended to change over time (Final Plan, Chapter 2, Watersheds and Water, introduction). According to the watershed condition framework, the number of priority watersheds should "correspond to a reasonable and achievable program of work over the next 5 years" (USDA FS 2011b). The Watershed and Water section in the final Plan discusses reevaluating priority watersheds every 5 years, based on a variety of factors including, "alignment with other objectives and priorities of the Forest Service and other agencies and organizations" (Chapter 2, Watersheds and Water, introduction).

Concern Statement 974 **Stream Buffers**

The Draft Plan should create stream buffers along all perennial streams.

Associated Comment Letter: 5303

Response

The final Plan prescribes riparian management zones that direct management along perennial streams (FW-WSW-RMZ). Riparian management zones include those portions of watersheds around lakes, perennial and intermittent streams, and open water wetlands that have characteristic riparian vegetation and provide riparian function. Riparian management zones have plan components that define the desired physical and biological attributes of this resource (FW-WSW-RMZ-DC 1-9) and constrain management within the buffer (FW-WSW-RMZ-G-1-4).

Concern Statement 975 **Riparian Areas**

Add a new desired condition to WSW: "Riparian areas around all lakes, perennial and intermittent streams, springs, and open water wetlands contribute to healthy watersheds while providing for multiple uses (including, but not limited to, grazing, recreation, vegetation management, and traditional uses by tribal and land grant communities and acequia associations)."

Associated Comment Letter: 4926

Response

FW-WSW-RMZ-DC-1 describes the desired contributions for riparian areas. The introduction to the Riparian Management Zone section also discusses some ways that wetlands contribute to healthy watersheds. While multiple uses are desired on the Carson NF, as described in FW-WSW-DC-6, not all uses are appropriate for all places. The Riparian Management Zone section and water resource subsections that follow (Streams, Waterbodies, Springs and Seeps, Wetland Riparian, and Forest and Shrub Riparian) provide management direction to guide decisions regarding specific uses in riparian areas.

Concern Statement 976 **Riparian Areas, Recreation**

Add a guideline to the recreation section of the plan that address impacts from recreation use around water. Suggested language: "Where water is a focus of recreational use, new or redesigned recreation sites and trails near riparian areas should be designed to provide sustainable access to water to prevent erosion, trampling, disturbance to wildlife, and inadvertent introduction of nonnative and undesirable biota and disease to protect associated values such as riparian habitat and clean water."

Associated Comment Letters: 4951, 5574

Response

The final Plan has guidelines that address management activities, including recreational use, within riparian management zones, FW-WSW-RMZ-G-2, and FW-REC-G-1 states that recreation activities should be compatible with and managed adaptively to minimize impacts along streams, seeps, springs, lakes, and wetlands.

Concern Statement 977 **Riparian Management Zones**

Add a standard limiting management activities within riparian management zones to only those that maintain or restore connectivity, function, composition, and structure.

Associated Comment Letters: 4893, 4925, 5303, 5569

Response

In the final Plan, FW-RMZ-G-2 limits management activities, permitted uses, and structural developments to those that move toward desired conditions for water, soils, and vegetation—including connectivity, function, species composition, and structure (especially the following desired conditions: FW-WSW-DC-1, -4; FW-VEG-DC-1, -3, -9, -10, and -15; and FW-SL-DC-1).

The final Plan places limitations on management activities through FW-WSW-RMZ-G-2 and DC-5, and FW-WSW-DC-4 and -6 to maintain connectivity and proper functioning condition (including vegetation structure and composition).

Concern Statement 978 **Riparian Management Zones, Width**

If a fixed buffer is applied, the Department recommends extending the riparian management zone to a minimum distance of 150 feet from the edge of all waterbodies

Associated Comment Letters: 4911, 4951, 5574

Response

The final Plan applies a minimum riparian management zone buffer of 100 feet around all perennial and intermittent waterbodies (FW-WSW-RMZ-G-1), consistent with the 2012 Planning Rule (36 CFR 219.8(a)(3)(ii)). However, the exact extent of riparian management zones includes all areas that provide riparian and aquatic ecosystem functions and connectivity and may extend beyond 100 feet based on a site-specific evaluation (FW-WSW-RMG-G-1).

Concern Statement 979 **Riparian Management Zones, Fish-bearing Streams**

Create tiered riparian management zones based on the fish-bearing status of streams.

Associated Comment Letter: 5303

Response

Streams on the Carson NF have not been mapped based on their fish-bearing status. Final Plan components provide protections to streams (fish-bearing or not) to meet desired conditions for riparian habitats and aquatic species. The intent of the Riparian Management Zone Management Area is to protect and maintain riparian functions. Impacts to fish that might originate beyond riparian areas are discussed in other sections in the final Plan (e.g., FW-WSW, FW-TFA, FW-REC, FW-GRZ). Additionally, FW-WSW-RMZ-STM-DC-9 describes habitat conditions that support native fish populations and applies to all streams, regardless of the size of a riparian management zone that surround them.

Concern Statement 980 **Riparian Management Zones, Intermittent and Ephemeral Streams**

Include intermittent and ephemeral streams in riparian management zones. Adopt the Santa Fe NF language: FW-RWE-G1: Riparian management zones (RMZ) should be defined by either a site-appropriate delineation of the riparian area (including one site potential tree height) or a buffer of 100 feet from the edges (e.g., each bank) of all perennial and intermittent streams, lakes, seeps, springs, and other wetlands or 15 feet from the edges of the ephemeral channels. The exact width of RMZs may vary based on ecological or geomorphic factors or by waterbody type but includes those areas that provide riparian and aquatic ecosystem functions and connectivity. The waterbody itself is considered part of the RMZ.

Associated Comment Letters: 150, 196, 380, 969, 4893, 4911, 4925, 5303, 5569, 5669

Response

The final Plan includes intermittent streams in the default 100-foot riparian management zone buffer, as required by FSH 1909.12 23.11e(1)(G)(ii) and adds a 15-foot buffer around ephemeral streams, consistent with the Santa Fe NF plan (FW-WSW-RMZ-G-1).

Concern Statement 981 **Riparian Management Zones, Vegetation**

RMZ-DC-2 is difficult to interpret because the goal of achieving “adequate recruitment and reproduction” is highly subjective and general in nature. The desired condition should be revised to state that “Recruitment and reproduction of riparian vegetation is sufficient to maintain and to restore riparian management zones to within reference conditions....”

Associated Comment Letters: 4951, 5574

Response

The intent of FW-WSW-RMZ-DC-2 is that species composition reflects the desired conditions for the vegetation community, which are based on reference conditions, where known. This has been clarified in the final Plan (FW-WSW-RMZ-DC-2).

Concern Statement 982 **Riparian Management Zones, Floodplain Connectivity**

Modify Desired Condition 6 to push the management of RMZs toward floodplain connectivity where appropriate to stream class and geography. In its current form, the desired condition refers to floodplain habitat without a direct link to floodplain connectivity.

Associated Comment Letter: 5303

Response

Floodplain connectivity is addressed in Streams desired conditions (FW-WSW-RMZ-STM-DC-4, -6, and -9).

Concern Statement 983 **Riparian Management Zones, Restoration Prioritization**

RMZ-O-1 should not be tied to priority watersheds but should apply forestwide.

Associated Comment Letter: 5303

Response

FW-WSW-RMZ-O-1 does not prohibit riparian restoration outside of priority areas of the forest. The intent of priority watersheds is to focus restoration on those areas that the forest has targeted for implementation of an integrated suite of activities because they are not functioning properly, but have potential to be improved through management. Focusing riparian restoration as described in FW-WSW-RMZ-O-1 is therefore appropriate in the context of overall watershed restoration. Additionally, "other community priorities" are included in FW-WSW-RMZ-O-1 in the final Plan.

Concern Statement 984 **Riparian Management Zones, Restoration**

Include an objective in the Riparian Management Zone direction to restore 200 to 300 acres of riparian areas annually.

Associated Comment Letter: 4893

Response

Direction to annually restore 200 to 300 acres of nonfunctioning and functioning-at-risk riparian areas is included in the final Plan as FW-WSW-RMZ-O-1.

Concern Statement 985 **Riparian Management Zones, Fencing**

Riparian Management Zone objective 2 should directly reference fencing as a component of riparian infrastructure and should include riparian zone composition of native obligate wetland species as a component of this objective.

Associated Comment Letters: 4951, 5574

Response

The final Plan addresses native obligates in riparian management zones in FW-WSW-RMZ-DC-3. The desire for vegetation community-specific species composition is stated in many places throughout the plan. For instance, FW-VEG-DC-15, FW-WSW-RMZ-WR-DC-3, FW-WSW-RMZ-FSR-DC-8 and -9 describe desired native plant composition and apply in riparian management zones. Fencing has been added to the list of management activities in FW-WSW-RMZ-G-2 that should occur at levels or scales that help riparian areas move toward water, soils, and vegetation desired conditions.

Concern Statement 986 **Riparian Management Zones, Treatments, Activities**

Add a guideline to Riparian Management Zones: Management activities, including vegetation treatments, in riparian areas should only be implemented to maintain or restore the diversity of both native riparian plant species and vegetations structure. Activities within riparian areas should avoid or otherwise mitigate adverse impacts to the abundance and distribution of desirable native species. Some exceptions may occur if vegetation treatments are needed to protect property or cultural sites.

Associated Comment Letter: 5303

Response

FW-WSW-RMZ-G-2 in the final Plan limits activities, uses, and development to those that move water, soils, and vegetation toward desired conditions, including species composition and vegetation structure; an exception for vegetation treatments that protect cultural sites has been added. Native obligate wetland species are desired according to FW-WSW-RMZ-DC-3. FW-WSW-RMZ-WR-DC addresses species composition and structure in the Wetland Riparian vegetation community. In the Forest and Shrub Riparian vegetation community, FW-WSW-RMZ-FSR-DC-5 addresses vegetation structure and FW-WSW-RMZ-FSR-DC-7, -8, -9, -10, and -12 address species composition.

Concern Statement 987 **Riparian Management Zones, Herbivory**

Add a guideline to Riparian Management Zones: Herbivory of riparian plants should not cause long-term trends away from desired riparian conditions.

Associated Comment Letter: 5303

Response

Desired conditions are descriptions of characteristics toward which management of the land and resources should be directed (36 CFR 219.7(e)(1)(i)). That is, any management that would cause long-term trends away from desired conditions is not consistent with the components in the final Plan. Herbivory of riparian areas by managed livestock grazing is addressed by FW-GRZ-DC-6: “Native obligate wetland species and a diversity of riparian plant communities are desired in wetland and riparian areas.” FW-GRZ-S-1 requires livestock management to be compatible with capacity and address departures from ecological conditions and FW-GRZ-G-2 requires livestock grazing within riparian management zones to be managed to sustain proper stream channel morphology, floodplain function, and riparian vegetation desired conditions. Wildlife is managed by the State of New Mexico; wildlife herbivory is outside the Carson NF’s authority to control. Management Approach for Sustainable Rangelands and Livestock Grazing-8 describes a strategy of working with grazing permittees and the State of New Mexico to incorporate cumulative impacts of all herbivores in planning and permitting.

Concern Statement 988 **Riparian Management Zones, Willow Carrs**

Add a guideline to Riparian Management Zones: Grazing and other management activities in the riparian management zone should provide healthy willow carrs, which can provide the structural nesting habitat requirements for riparian-associated birds.

Associated Comment Letter: 5303

Response

In the final Plan, FW-VEG-DC-15 addresses plant composition generally (i.e., in terms of similarity to site potential), while FW-WSW-RMZ-FSR-DC-8 directs management to provide willow where the potential exists. Moreover, native obligate wetland species and a diversity of riparian plant communities are desired in wetland and riparian areas according to FW-GRZ-DC-6. Specific to grazing, FW-GRZ-G-2 requires that grazing within riparian management zones be managed to sustain riparian vegetation desired conditions, including structure and native species such as willow. Together, these plan components provide direction supporting the maintenance or recovery of willow carr vegetation, where appropriate.

Concern Statement 989 **Riparian Management Zones, Pesticides**

The final Plan should prohibit use of any pesticides in the riparian zone. The umbilical tissue of every child born in the United States today has in excess of 170 chemicals that our grandparents did not have, and with our skyrocketing rates of chemically caused degenerative disease, it would be best to do all we can to keep the water pristine beginning at the headwaters.

Associated Comment Letter: 4845

Response

The Forest Service is required to follow laws, regulations, and policies. As required by 40 CFR Part 156, the Forest Service must follow all pesticide label requirements, including during application in riparian zones. FW-NIS-S-1 in the final Plan requires the Carson NF to apply best management practices and guidance from the most current Forest Service Southwestern Region Guidance for Invasive Species Management. In the case of chemical application near sensitive habitat (e.g., developed sites, known at-risk plants, riparian areas), FW-NIS-G-4 requires the Carson NF to use techniques (e.g., buffers, type of chemicals, mixtures) to minimize effects on native species and sensitive habitats. The final Plan provides a programmatic framework that guides site-specific actions, but does not authorize, fund, or carry out any projects or activities. Project-specific NEPA environmental analysis would be completed prior to any pesticide application on the Carson NF.

Concern Statement 990 **Riparian Management Zones, Savanna Conditions**

Educate the public about historic savanna conditions in the riparian zone and across the landscape prior to the condition today where the grass component of the ecosystem is much diminished.

Associated Comment Letter: 4845

Response

We find no evidence that riparian zones on the Carson NF were historically savannas. The desired condition for non-herbaceous riparian areas (Forest and Shrub Riparian) varies by group in the final Plan, but includes closed-canopy states (FW-WSW-RMZ-FSR-DC-1, -2, and -3) and diverse structure and age class distribution (FW-WSW-RMZ-FSR-DC-5). Abundant and contiguous grass cover consistent with site potential is desired under FW-VEG-DC-15 and -16. Conservation education is desired under FW-REC-DC-6.

Concern Statement 991 **Riparian Management Zones, Mineral Operations Prohibition**

Include a standard prohibiting mineral operations within riparian management zones.

Associated Comment Letters: 4893, 4925, 5303

Response

The New Mexico Mining and Minerals Division of the State of New Mexico has the authority to issue mining permits for dredge mining under authority of the 1872 Mining Act. Most commonly, the permit type associated with riparian areas is known as a “wet” permit, which allows an individual to seek minerals occurring in intermittent streams, perennial streams, or other bodies of water. This type of permit has specific requirements and exclusions to allow for this type of mining/dredging while considering potential impacts to surface waters of the State of New Mexico.

FW-WSW-RMZ-STM-G-5 has been added to the final plan: (*In-stream authorized and other management activities that have the potential to directly deliver sediment to at-risk species core habitats should be limited to times outside of spawning and incubation seasons for those species, to protect spawning fish, eggs, and embryos*.).

Other relevant desired conditions, standards, guidelines, and management approaches can be found in the Minerals and Mining (MM) section in the final Plan.

Concern Statement 992 **Wetland Riparian Proper Functioning Condition**

Wetland Riparian Resources Desired Conditions. Conditions include maintaining healthy vegetative and hydrologic conditions for open water wetlands, slope wetlands, marshes, wet meadows, cienegas, bogs, and fens. However, they lack inclusion of any standardized metrics such as the Bureau of Land Management's properly functioning condition protocol that is applied to springs and seeps. The Plan

should incorporate similar objective assessment protocols that provide a more objective record of wetland conditions on the Forest.

Associated Comment Letters: 4951, 5574

Response

Desired conditions for wetland habitat are addressed by FW-WSW-DC-4 and -5; FW-WSW-RMZ-WR-DC-1, -4 and -5; and FW-WSW-RMZ-DC-2. Desired conditions for wetland function are addressed by FW-WSW-DC-1-3, -6 and -7 and FW-WSW-RMZ-DC-1, -4, and -5. In the final Plan, a footnote has been added to FW-RMZ-DC-1 to clarify that proper functioning condition for all riparian areas, including wetlands, can be defined "by the Bureau of Land Management's properly functioning condition protocol or a similar metric."

Concern Statement 993 **Watershed Condition Framework**

Create an objective that references the Watershed Condition Classification framework to track watershed health and improvement over time, such as: Improve condition class on at least one identified priority watershed, as defined by the national Watershed Condition Framework, every 10 years following plan approval. Improving watershed condition using the WCC framework is a better, science-based objective to tracking watershed improvements over time.

Associated Comment Letters: 4925, 5303

Response

The suggested objective has been added to the final Plan (FW-WSW-O-2).

Concern Statement 994 **Watershed Condition Framework**

Tracking acres treated for watershed restoration is an important component of monitoring, however acres treated do not necessarily equate to an improvement in conditions. Use the Watershed Condition Framework to monitor watershed health to understand how successful the Carson NF is in achieving desired conditions for watersheds.

Associated Comment Letter: 5303

Response

The effectiveness of watershed restoration projects is best measured by project-specific monitoring. The final Plan does include indicators for both the number of acres treated to improve watershed condition and the percentage of watersheds in proper functioning condition (Chapter 4, Monitoring Topic I). The Watershed Condition Framework is the nationally consistent reconnaissance-level approach used by the Forest Service to classify watershed condition (USDA FS 2011b) and will be used to measure the second indicator.

Concern Statement 995 **Springs Database**

Results of field assessments to determine spring conditions should be submitted to the Springs Online database maintained by the Springs Stewardship Institute (https://springsdata.org!).

Associated Comment Letters: 4951, 5574

Response

A management approach has been added to the Springs and Seeps section in the final Plan referencing the Springs Stewardship Institute protocol and online database (Management Approach for Springs and Seeps-1).

Wildlife - WLF

Concern Statement 996 **Aquatic and Terrestrial Sections**

Draft Plans for both the Cibola NF and Santa Fe NF split the Wildlife, Fish, and Plants section into subsections for Aquatic Species and Habitats, and Terrestrial Species and Habitat. The Carson NF Final Plan should split this section into subsection for more effective treatment of the resource and for consistency with nearby forest plans.

Associated Comment Letters: 4951, 5574

Response

The Carson NF did not use the subsection approach, as all plan components in the Wildlife, Fish, and Plants section applied to both terrestrial and aquatic species and habitat. Also, not all terrestrial and aquatic species and their habitat plan components are found in the Wildlife, Fish, and Plants resource section; most are within other resource sections of the plan. The plan components are similar to those in the Cibola and Santa Fe national forests' plans; the Carson final Plan is just organized differently. We believe that either approach results in the same treatment of the resource.

The final Plan does not have discrete or standalone plan components for each resource. Rather, it is important that resource plan components are considered as a whole and combined to meet the requirements for ecological integrity, a diversity of plant and animal communities, multiple-use management, ecologically sustainable production of goods and services, and that they contribute to economic and social sustainability. All of these requirements go hand-in-hand.

To effectively manage toward the desired conditions of a forest resource, project planners and decision makers must ensure that they use the entire plan and not just the plan components listed for that resource. Effective integrated resource management recognizes the interdependency of ecological, social, cultural, and economic resources and that management of one resource can influence the management or condition of other resources.

At the end of many resource sections, there is a subsection called "Related Plan Content," which lists the most relevant resources related to that section. It is recommended that these—as well as other resources not listed, but also considered important to a specific project—are reviewed by project planners and decision makers.

Concern Statement 997 **Wildlife Habitat Priority**

Wildlife and habitat protection must be given the same priority as forest uses.

Associated Comment Letter: 4925

Response

The final Plan provides a management framework that balances wildlife and habitat protection with multiple forest uses. The goal of most management decisions made on the Carson NF is to balance multiple uses across the national forest.

The Forest Service operates under the Multiple-Use Mandate, which states, "The management of all the various renewable surface resources of the NFS should be managed so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output, consistent with the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 528–531) (36 CFR 219.19)."

Concern Statement 998 **Protected Wildlife Areas**

Increase the size of protected wildlife areas and limit resource extraction.

Associated Comment Letter: 4928

Response

The preferred alternative (alternative 2-modified) includes two management areas with plan components that recognize the importance of valuable wildlife habitat: San Antonio and Valle Vidal Management Areas (Carson National Forest Final Land Management Plan, Chapter 3, Management Area direction: MA-SAMA-DC-1-4; MA-SAMA-S-1-7; MA-SAMA-G-1; Management Approaches for San Antonio Management Area-1-7; MA-VVMA-DC-1-5; MA-VVMA-S-1-20; MA-VVMA-G-1-2; and Management Approaches for Valle Vidal Management Area-1-3).

As described in the draft Record of Decision (USDA FS Carson NF 2021), the Rio Grande Cutthroat Trout Management Area proposed in alternative 4 was not brought forward into the preferred alternative because it would focus native aquatic species restoration work exclusively within these management areas, rather than forestwide or at the discretion of the New Mexico Department of Game and Fish. The New Mexico Department of Game and Fish manages Rio Grande cutthroat trout and would have more authority and better knowledge of where on the Carson NF Rio Grande cutthroat restorations should take place. As such, the Rio Grande Cutthroat Trout Management Area was not carried forward into the final Plan. However, Rio Grande cutthroat trout restoration and management are emphasized forestwide within the final Plan.

Within the Valle Vidal Management Area in the final Plan, MA-VVMA-S-17-20 addresses mineral resource extraction. Within the San Antonio Management Area, MA-SAMA-S-5 and -7 address mineral resource extraction. Both activities may occur within these management areas, but they would have to adhere to laws, regulations, policies, and plan direction for those types of actions.

Concern Statement 999 **Species Specific Plan Components**

Include species-specific standards and guidelines that have direct, positive impacts on certain species of concern such as native species and lynx. Certain species of concern are disproportionately negatively affected by road construction.

Associated Comment Letters: 4835, 4911

Response

Plan components (coarse and fine filter) and management approaches that maintain or improve ecological conditions and minimize threats to species of conservation concern (such as lynx) can be found in the FEIS Volume 3, appendix H, Table 63: Species Crosswalk: Plan Components for At-Risk Wildlife Species and other Wildlife. These include forestwide desired conditions, objectives, standards, guidelines, and management approaches. Forest-wide Ecological Sustainability and Diversity of Plant and Animal Communities plan components and management approaches will have direct, positive impacts on at-risk and native species. Plan components were developed for an array of at-risk species and not for specific species and at-risk species were considered when developing ecological plan components.

With respect to road construction, plan components TFA-G-6-10 and TFA-DC-4 in the Transportation and Forest Access section were developed with the protection of at-risk species in mind.

Concern Statement 1000 **Species Recovery**

The All Vegetation Desired Conditions section should include “Habitats and refugia for rare, endemic, and culturally important species are intact, functioning, and sufficient for species persistence and recovery of self-sustaining populations” and “Ecological conditions provide suitable habitat to support and sustain rare or endemic species and support recovery of self-sustaining populations.”

Associated Comment Letters: 5347

Response

FW-VEG-DC-21 in the final Plan includes the word "sustain" and FW-VEG-DC-14 was modified to add the phrase, "…and recovery of self-sustaining populations."

Concern Statement 1001 **Species on the Carson National Forest**

"The Carson is home to large mammals, such as mule deer, elk, bighorn sheep, pronghorn, mountain lion, and black bear, as well as many other smaller species." Add the word smaller as it adds clarity to statement.

Associated Comment Letter: 5588

Response

The word smaller has been added to this sentence in the final Plan.

Concern Statement 1002 **Definition of Human Disturbance**

Wildlife, Fish, and Plant Desired Condition 7 should be modified to state that "species are free from harassment and human disturbance, including Forest recreation activities and facilities, at a scale that impacts vital functions (such as breeding, feeding, rearing young, and migration and dispersal) that could affect persistence of the species."

Associated Comment Letters: 4951, 5574

Response

Forest recreation activities and facilities are two of many possible activities encompassed by the term, "human disturbances" in FW-WFP-DC-7; this broad term is preferred to developing an exhaustive list, which could require frequent revision as new activities arise. "Seasonal and daily movements" have been added to the desired condition as examples of vital functions that may be impacted.

Concern Statement 1003 **Fisheries Management Plans**

Why was the New Mexico Department of Game and Fish fisheries management plan removed from VVMA-DC-3?

Associated Comment Letter: 5673

Response

In the final Plan, Valle Vidal Management Area Management Approach-2 provides for coordinating with the New Mexico Department of Game and Fish, so that activities are consistent with the agency's fisheries management plans. Wildlife, Fish, and Plants Management Approach-14 in the final Plan provides similar management considerations. Management approaches are more appropriate than desired conditions for following New Mexico Department of Game Fish fisheries management plans, because direction in State plans may change and ongoing coordination with the agency is therefore more important than strict adherence to any existing plans.

Concern Statement 1004 **Fisheries Management Plan**

Similar to the Management Approach 3 for the Valle Vidal Management Area (Consider coordinating with the New Mexico Department of Game and Fish, so that management activities are consistent with the agency's fisheries management plans), include in the Wildlife, Fish, and Plant section an approach to align with the Department's fisheries management goals as defined in the 2016 Statewide Fisheries Management Plan. The Statewide Fisheries Management Plan identities the Department's management efforts to conserve native and non-native sportfish, fishes of conservation concern, and aquatic invertebrates throughout New Mexico.

Associated Comment Letters: 4951, 5574

Response

Wildlife, Fish, and Plants Management Approach-14 in the final Plan states, "Consider coordinating with the New Mexico Department of Game and Fish on native fish restoration efforts, so that management activities are consistent with the agency's fisheries management plans."

Concern Statement 1005 **Migration Corridors, Bighorn Sheep**

Our wildlife are under tremendous environmental stress as it is and most of the time there is nothing anyone can do about it. You have the power to protect these migration corridors and the bighorn sheep. I hope you will have the vision and the wisdom to do so for these creatures as well as our next generation!

Associated Comment Letter: 3857

Response

The final Plan includes components addressing bighorn sheep and the risk of disease transmission from domestic sheep (e.g., FW-WFP-DC-11). For a complete list of relevant components, see Section 5 of Appendix H in Volume 3 of the FEIS.

Habitat connectivity is also addressed in the Wildlife, Fish, and Plants section (FS-WFP-DC-4 and -5), as well as by vegetation plan components. For a complete list of relevant components, see Section 4 of Appendix H in Volume 3 of the FEIS.

Concern Statement 1006 **Big Game Calving and Wintering**

Mining and Minerals Desired Conditions 1 (FW-MM-DC-1) should state that "Energy, mineral, and mining activities meet the legal mandates to facilitate the development of minerals in a manner that minimizes adverse impacts to surface and groundwater resources, watershed and forest ecosystem health, wildlife and wildlife habitat including critical seasonal areas such as fawning/calving or wintering areas for big game."

Associated Comment Letters: 4951, 5574

Response

Because "critical seasonal areas such as fawning/calving or wintering areas for big game" are inherently part of wildlife habitat, the addition is unnecessary. Additionally, FW-WFP-G-4 in the final Plan addresses big game disturbance from mineral extraction. When appropriate, seasonal restrictions would be applied through best management practices at the project level.

Concern Statement 1007 **Aquatic Species, Dredge Mining**

The final Plan needs to incorporate the following plan component for dredge mining activities to mitigate impacts to aquatic species (from Rio Grande NF's Final Management Plan):

- G-MIN-1: Recreational dredging does not cause substantial surface disturbance. Activities in or near streams are conducted to maintain water quality and avoid impacts to fish habitat. (Forestwide)
- G-MIN-2: To protect water quality and fish habitat in recreational dredging:
    - ♦ Limit the use of the practice to outside of critical life-stage periods in streams that have Rio Grande cutthroat trout core conservation populations.
    - ♦ The Forest geologist (or designated authority) will review the notice of intent prior to the commencement of activities.
    - ♦ Where possible, retain existing instream and riparian vegetation and other features, including but not limited to trees, bushes, shrubs, weeds, or tall grasses along streambanks, natural, large wood debris, and large boulders.

- ♦ Operations should not change the stream channel to direct water flow into a streambank or cause bank erosion or destruction of the natural form or the stream channel.
- ♦ Whenever practical, prevent the release of silt, sediment, sediment-laden water, or any other deleterious substances into the watercourse.
- ♦ Keep equipment and machinery in good operating condition, power washed, and free of leaks, excess oil, and grease.
- ♦ Locate the point of discharge to the creek immediately downstream of the worksite to minimize disturbance to downstream populations and habitats. (Forestwide)

- G-MIN-3: Follow instream activity maps. Carry out activities during conditions of low flow, when trout redds (spawning sites with potential eggs and larval fish present in the gravel) are not present, and when there is the least risk to fish and wildlife populations and habitat. (Forestwide)
- G-MIN-4: All motorized vehicles (cars, trucks, jeeps, off-road vehicles) are restricted to motorized trails or legally open roads. This reduces impacts to vegetation and minimizes erosion, stream turbidity, and sedimentation. (Forestwide)
- G-MIN-5: Contain all fuel-operated tools (generators, etc.) in a spill tray during operation, maintenance, and refueling. Do not refuel or service equipment within 100 feet of a stream. (Forestwide)
- G-MIN-6: Operate machinery and tools from the bank of the stream to minimize impacts and to better enable mitigation of sedimentation. (Forestwide)
- G-MIN-7: Upon completion of the operations:
  - ♦ Restore all disturbed in-channel or active floodplain habitats upon completion of operations to a condition that is enhanced from their original state.
  - ♦ Remove all equipment, supplies, and nonbiodegradable materials from the site.
  - ♦ Remove all plants, animals, or mud and drain all water from equipment prior to leaving the site. (Forestwide)

Associated Comment Letters: 4895, 5303

Response

The final Plan must follow all Federal and State laws, regulations, and policies. As such, most of the suggested guidelines are regulated by the New Mexico Department of Energy, Minerals, and Natural Resources Mining and Minerals Division. All dredge mining interests on the Carson would have to obtain a permit from New Mexico Department of Energy, Minerals and Natural Resources Mining and Minerals Division and follow their requirements. The interested parties would also have to follow the Clean Water Act. Even though most of the guidelines listed above are required by State regulations, the final Plan also has the following plan components that would ensure impacts from dredge mining are minimized:

Proposed G-MIN-1: required by state regulation and covered in final Plan by FW-VEG-G-3, FW-SL-G-1, FW-WSW-RMZ-DC-4, and FW-WSW-RMZ-STM-DC-5.

Proposed G-MIN-2, bullet one: FW-WSW-RMZ-STM-G-5 was added to the final Plan to provide protection for aquatic species during spawning season.

Proposed G-MIN-2, bullet two: FW-MM-S-3 was added to the final Plan, “Prior to operating, any suction dredging using a 2-inch hose or larger or excavating greater than 2 cubic yards per year must submit a notice of intent identifying the area involved, the nature of the proposed operations, the route of access to the area of operations, and the method of transport.

Proposed G-MIN-2, bullet three: Required by State regulation and covered in final Plan by FW-WSW-RMZ-DC-1-5.

Proposed G-MIN-2, bullet four: Required by State and covered in the final Plan by FW-WSW-RMZ-DC-9, FW-WSW-RMZ-G-2, FW-WSW-RMZ-STM-DC 9, FW-WSW-RMZ-FSR-DC-5.

Proposed G-MIN-2, bullet five: Required by State and covered in the final Plan by FW-WSW-RMZ-STM-G-3 and FW-WSW-RMZ-STM-G-4.

Proposed G-MIN-2, bullet six: Required by Clean Water Act and covered in the final Plan by FW-WSW-RMZ-STM-S2 Heavy equipment and vehicles used for instream management activities shall be free of petroleum-based fluid residue and shall not leak.

Proposed G-MIN-2, bullet seven: Required by State and covered in the final Plan by FW-MM-DC-1.

Proposed G-MIN-3: FW-WSW-RMZ-STM-G-5 was added to the final plan to provide protection for aquatic species during spawning season.

Proposed G-MIN-4: Covered in final Plan by FW-TFA-S-1 and FW-WSW-RMZ-G-3.

Proposed G-MIN-5: Required by State and covered in final Plan by FW-WSW-RMZ-G-4.

Proposed G-MIN-6: Required by State and covered in final Plan by FW-WSW-RMZ-G-3.

Proposed G-MIN-7, bullet one: Required by State, FW-MM-DC-2, FW-MM-G-1-2.

Proposed G-MIN-7, bullet two: Required by State, FW-MM-DC-2, FW-MM-G-1-2.

Proposed G-MIN-7, bullet three: Required by State and covered in final Plan by FW-WSW-RMZ-STM-S-1.

Concern Statement 1008 **New Mexico Species of Greatest Conservation Need**

Within the draft Plan the second paragraph of the Wildlife Introduction provides an overview of the number of wildlife species present on the Forest. It should also include a statement that the Forest supports New Mexico Species of Greatest Conservation Need, based on the 2016 State Wildlife Action Plan for New Mexico. The final Plan should cross reference Species of Conservation Concern with New Mexico Species of Greatest Conservation Need. This paragraph should also include the Federal Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act as relevant mandates for protecting wildlife resources present on the Forest.

Associated Comment Letters: 4951, 5574

Response

The third paragraph of the introduction to the Wildlife, Fish, and Plants section references the 2019 State Wildlife Action Plan. The Potential Species of Conservation Concern Report notes that all species from the New Mexico Species of Greatest Conservation Need list were evaluated as Species of Conservation Concern for the Carson NF. The Carson NF develops projects and activities consistent with the final Plan, as well as with applicable laws, regulations, and executive orders. Federal mandates such as the Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act are listed in appendix C in the final Plan.

Concern Statement 1009 **Species List**

Over 1,000 species of plants and animals occur on the Carson National Forest. [Should cite the spreadsheet of plants on the carson and the wildlife list for the region or subset for the carson.]

Associated Comment Letter: 5588

Response

The project record includes a database of all species that occur on the Carson NF, developed as part of the identification of forest's list species of conservation concern. The data sources used are described in the Assessment (USDA FS Carson NF 2015).

Concern Statement 1010 **Timing Restrictions**

Use seasonal closures to mitigate big game disturbance during breeding and on wintering grounds from recreation and other activities that cause disturbance.

Associated Comment Letter: 4887

Response

Plan components addressing big game disturbance from recreation have been included in the final Plan: FW-WFP-DC-7, FW-WFP-G-4, MA-SAMA-DC-2, and MA-VVMA-DC-2. Additionally, the Valle Vidal Management Area includes plan components specifically addressing seasonal closures to mitigate disturbance to big game species (MA-VVMA-S-1 and -2).

Concern Statement 1011 **Timing Restrictions, Migratory Birds**

Avoid prescribed burning and managed fires from mid-May through mid-July during the migratory bird breeding season.

Associated Comment Letter: 5604

Response

The final Plan complies with the Migratory Bird Treaty Act as described in the record of decision (ROD) (Findings Required by Other Laws and Relevant Directives section). The final Plan includes a desired condition that directs management to reduce harassment and human disturbances at a scale that impacts vital functions (e.g., breeding, feeding, and rearing young) and could affect persistence of the species (FW-WFP-DC-7). Determinations regarding the necessity of limiting operating periods to reduce risk to nesting migratory birds are made at the project level.

Concern Statement 1012 **Timing Restrictions, Fish Habitat**

The final Plan should include timing restrictions for any active management that can have a negative impact to fish habitat and behavior to coincide with spawning cycles of native fish.

Associated Comment Letter: 5303

Response

FW-WSW-RMZ-STM-G-5 in the final Plan includes such restrictions: "In-stream authorized and other management activities that have the potential to directly deliver sediment to at-risk species core habitats should be limited to times outside of spawning and incubation seasons for those species, to protect spawning fish, eggs, and embryos."

Concern Statement 1013 **Hunting and Fishing**

The discussion of fishing and hunting-related recreation is largely superficial within the Plan and EIS. Desired Conditions are primarily encapsulated within the goal that "Recreation activities important to traditional communities (e.g., hunting, fishing, camping, family or group gatherings, fuelwood or pinion nut collecting, and scenic driving) are available." A more detailed discussion of fishing and hunting on the Forest would be appropriate within the Recreation section of the EIS. Fishing and hunting should comprise one of the short paragraphs within the Dispersed Recreation section on page 305 of the EIS and could include information such as the number of hunts, days, species, etc., available on the Forest. This information would expand upon the discussion of hunting and fishing opportunities on page 85 of the Plan. The published 2011 National Survey of Fishing, Hunting, and Wildlife Associated Recreation: New Mexico (https://www.census.gov/prod/2013pubs/fhw11-nm.pdf), and the 2016 National Survey of

Fishing, Hunting, and Wildlife-Associated Recreation (https://wsfrproqrams.fws.gov/subpages/nationalsurvey/nat survey2016.pdf) may provide relevant and useful material to include in the EIS.

Associated Comment Letters : 4951, 5574

Response

The FEIS added the following discussion of hunting and fishing to the Recreation section, “In New Mexico, outdoor recreation generated over 99,000 direct jobs producing $2.8 billion in wages and salaries. Outdoor recreation generates $9.9 billion in consumer spending annually in New Mexico, producing $623 million in state and local tax revenue” (Outdoor Industry Association 2017). Of the Carson NF's estimated one million visitors, 89% come for recreational pursuits (USDA FS Carson NF 2015). Hunting and fishing are described as dispersed recreation; as such, FW-REC-DC-2-5 would ensure that there are opportunities to hunt and fish on the forest and that these opportunities would continue in order to contribute to the economic, cultural, and social vitality of surrounding communities.

Hunting and fishing are also discussed in the Wildlife, Fish, and Plants and Distinctive Roles and Contributions sections. Estimated county-level and state-wide contributions of hunting and fishing to the state’s economy are provided in the Wildlife, Fish, and Plants section of the EIS and data from Southwick Associates (2014).

Concern Statement 1014 **Hunting**

The Plan should give strong weight to Executive Order 13443 which states "facilitate the expansion and enhancement of hunting opportunities". The plan should include relevant components within the John D. Dingell, Jr. Conservation, Management, and Recreation Act (2019).

Associated Comment Letter: 113, 4887

Response

National Forest System lands are managed in accordance with relevant laws, regulations, and policies and include Executive orders, such as Executive Order 13443. The Carson NF develops projects and activities to be consistent with the direction found in the plan, as well as applicable laws, regulations, and Executive orders. Appendix C in the final Plan incorporates and references Executive Order 13443 and the Conservation Act.

Hunting is recognized as a Distinctive Role and Contribution of the Carson NF (Final Plan, Distinctive Roles and Contributions section). Hunting is also described in the introduction to the Wildlife, Fish, and Plants; Northern New Mexico Traditional Communities and Uses; Recreation; Rural Historic Communities; and San Antonio Management Area sections of the final Plan. The following plan components also address hunting: FW-FRT-DC-2; FW-RHC-DC-2; and FW-REC-DC-2.

Management Approaches for Wildlife, Fish, and Plants-1 through -6 allow for the potential expansion and enhancement of hunting opportunities through continued coordination with partner agencies like the New Mexico Department of Game and Fish.

Concern Statement 1015 **Hunting and Fishing, Opposition**

As a New Mexican, I would like to see the end of fishing and hunting on public lands!

Associated Comment Letter: 2692

Response

Hunting is recognized as a Distinctive Role and Contribution of the Carson NF (Final Plan, Distinctive Roles and Contributions section). Hunting and fishing are included as a distinctive role and contribution due to their history on the forest and contributions to the local communities and heritage of the forest. Management of the Carson must adhere to relevant laws, including the Multiple-Use and Sustained-Yield Act of 1960. This act states that national forests “be administered for outdoor recreation, range,

timber, watershed, and wildlife and fish purposes" (Public Law 86–517; approved June 12, 1960). Fishing and hunting are considered outdoor recreation activities and are valuable tools for managing wildlife and fish populations.

Concern Statement 1016 **Predator Hunting, Opposition**

Protect apex predators, ban predator hunting, especially bobcat, puma, and bear.

Associated Comment Letters: 5596, 5605

Response

Hunting is an activity managed and regulated by the New Mexico Department of Game and Fish. The final Plan includes Management Approach-1 in the Wildlife, Fish, and Plants section, which identifies the need to coordinate with the New Mexico Department of Game and Fish in managing native species.

Concern Statement 1017 **Hunting and Fishing, Game Species**

Game species support traditional ways of life [hunting and fishing] and employment for outfitters and guides.

Associated Comment Letter: 5588

Response

The final Plan supports habitat for species that provide hunting and fishing opportunities, as well as encouraging coordination with the New Mexico Department of Game and Fish in managing native species (FW-WFP-DC-1, -2, -5-7, and -9-11; FW-WFP-G-1, -4, and -6; Management Approaches for Wildlife, Fish, and Plants-1-6).

Concern Statement 1018 **Hunting, Trapping, Fishing**

The Forest Plan should add desired conditions that maintain the quality of hunting, trapping, and fishing opportunities.

Associated Comment Letter: 4887

Response

The final Plan includes desired conditions providing for game and fish species habitat, and therefore, for hunting and fishing opportunities (FW-WFP-DC-1, -2, -4-6; FW-REC-DC-2 and -3). It also encourages coordination with the New Mexico Department of Game and Fish to manage native species (FW-WFP-DC-1, -2, -5-7, -9-11; FW-WFP-G-1, -4, and -6; Management Approaches for Wildlife, Fish, and Plants-1-6).

Concern Statement 1019 **Hunting Access**

Rocky Mountain Elk Foundation recommends consideration of public land access needs in forest planning efforts, including close collaboration with state wildlife agencies to create or maintain access to the national forest that are important for managing wildlife as well as providing access for hunting opportunities.

Associated Comment Letters: 113, 4887

Response

The final Plan includes management direction to address access for recreational opportunities on the national forest, including hunting and fishing (FW-REC-DC-2, -4, -13; Management Approaches for Wildlife, Fish, and Plants-1 and -5). Project-level decisions are required for any specific roads or access needs and would follow management direction in the final Plan.

Concern Statement 1020 **Collaboration, Wildlife**

Promote cooperation with other agencies such as Bureau of Land Management, Federal and State Highway Administration, private entities, New Mexico Department of Game and Fish, and others in order to reduce or mitigate wildlife-vehicle collisions, facilitate connectivity between seasonal habitats, monitor and develop best available science regarding wildlife population trends, habitat, and movement, and establish appropriate management actions and mitigations during project design and implementation.

Associated Comment Letters: 4835, 4925

Response

The final Plan includes plan components that address these concerns; they are: Management Approaches for Wildlife, Fish, and Plants-1, -4 and -6 and FW-FGA-G-6, -7, and -8.

Concern Statement 1021 **Collaboration, Big Game**

We encourage the Carson NF to continue to work collaboratively with the New Mexico Department of Game and Fish, Colorado Parks and Wildlife, Tribes, private landowners, and any other related State and Federal agencies to monitor and develop best available scientific information with regard to elk calving and other big game population trends, habitat and movement.

Associated Comment Letter: 4901

Response

As reflected in the following components, the final Plan recognizes the need for coordination on management of big game species, including monitoring: FW-WFP-DC-1, -2, -4, -5 and -6; FW-WFP-O-5; FW-WFP-G-4; Management Approaches for Wildlife, Fish, and Plants-1, -3, -4, and -8.

Concern Statement 1022 **Collaboration, Native Fish**

Include in the final Plan a management approach with specific reference to collaboration with New Mexico Department of Game and Fish on native fish restoration efforts for controlling undesirable nonnative species. Within New Mexico, departments expend considerable efforts planning and implementing projects to control and remove nonnative fish species, typically using piscicides to restore and protect native fish populations

Associated Comment Letter: 4951

Response

The final Plan includes Wildlife, Fish, and Plants Management Approach-14, which states, “Consider coordinating with the New Mexico Department of Game and Fish on native fish restoration efforts, so that management activities are consistent with the agency’s fisheries management plans.”

Concern Statement 1023 **Collaboration, Focal Species Monitoring**

New Mexico Department of Game and Fish biologists can provide technical assistance in designing focal species monitoring systems.

Associated Comment Letter: 4951

Response

The New Mexico Department of Game and Fish is a cooperating agency and has provided technical assistance in designing focal species monitoring systems for the final Plan.

Concern Statement 1024 **Collaboration, Rio Grande Cutthroat Trout**

Include a management approach to work collaboratively with New Mexico Department of Game and Fish, Trout Unlimited, and other conservation organizations to restore riparian, stream habitat, reduce

competition, install fish barriers, and restore Rio Grande cutthroat trout populations to appropriate streams

Associated Comment Letters: 4895, 5303

Response

Watershed and Water Management Approach-4, in the final Plan, states, "Consider collaborating with New Mexico Department of Game and Fish, Trout Unlimited, and other conservation organizations to restore riparian, stream habitat, reduce competition, install fish barriers, and restore Rio Grande Cutthroat Trout populations."

Concern Statement 1025 **Consultation, Rio Grande Cutthroat Trout**

The Pueblo would like to be involved in any consultation regarding the status of potential Species of Conservation Concern that occur on Taos Pueblo Lands, particularly the Rio Grande cutthroat trout.

Associated Comment Letter: 5786

Response

By law, the Carson NF is required to perform Tribal Consultation (Executive Order 13175) as part of the National Environmental Policy Act process for all projects; This includes consulting with the Taos Pueblo.

Concern Statement 1026 **Collaboration, Habitat connectivity**

The Center for Large Landscape Conservation has the ability to collaborate with the Carson NF Planning Team on designing and conducting a series of wildlife connectivity analyses to ensure that the Final Plan incorporates the best available scientific information while meeting Forest-specific objectives. These analyses would focus on both structural and functional connectivity and be used to identify areas within the planning area and between it and adjacent Federal land management units that are predicted to have high importance for regional connectivity of both generalist species and specialist species that use forest, grassland, shrubland, and alpine habitats.

Associated Comment Letter: 4835

Response

The final Plan includes Management Approach-3 in the Wildlife, Fish, and Plants section that identifies the need to work collaboratively with federally recognized tribes and pueblos, New Mexico Department of Game and Fish, State agencies, adjacent Federal land managers, local agencies, U.S. Fish and Wildlife Service, sportsman's and conservation groups, adjacent landowners, to identify wildlife migration routes forestwide and important habitat to improve or maintain connectivity for terrestrial species.

Concern Statement 1027 **Collaboration, Areas of Connectivity Conservation**

The Center for Large Landscape Conservation would like to be a partner in analyzing wildlife connectivity on the Carson that could result in the designation of "Areas of Connectivity Conservation" similar to areas designated on the Flathead NF.

Associated Comment Letter: 4835

Response

Management Approach for Wildlife, Fish, and Plants- 3 in the final Plan describes working collaboratively with groups such as the Center for Large Landscape Conservation to identify wildlife migration routes and maintain connectivity for terrestrial species. The final Plan does not include designated corridor management areas, but plan components provide for habitat connectivity; section 4 of appendix H in the FEIS lists all the plan components that address habitat connectivity.

Concern Statement 1028 **Habitat Connectivity Restoration**

Clarify Appendix H. Section 2 of the DEIS Volume 3. Thinning project for forest restoration must be required in the Plan to manage for seral state to maintain both old and new growth for an overall healthy ecosystem as well as fire suppression. The final Plan within fuelwood, thinning, vegetation restoration, and timber programs should include plan components to improve and encourage wildlife migration routes.

Associated Comment Letter: 120

Response

Appendix H, Section 2 of the FEIS Volume 3 has been clarified to explain that this section is a compilation of all plan components that will maintain or improve seral state, snag density, acres of coarse woody debris, disconnect floodplains, limited or specific soil conditions, and specific ecological features or conditions. Also included in this section are all plan components that reduce the risk of catastrophic fire, invasive vegetation encroachment, invasive predation, ground and soil disturbance, intrusive human activities, pesticides or chemical retardant, introduced disease or unnatural spread, and human-made features. These plan components apply to every resource across the national forest, including forest restoration. All plan components that improve wildlife habitat connectivity, which will encourage wildlife migration routes, can be found in Appendix H, Section 4 of the FEIS, Volume 3. These plan components apply to every resource across the national forest, including fuelwood, thinning, vegetation restoration, and timber programs.

Concern Statement 1029 **Water Developments**

Increase the proposed construction/maintenance of water developments for wildlife and livestock (currently at 20 to 30 over 10 years).

Associated Comment Letter: 4887

Response

Objectives in the Wildlife, Fish, and Plants section in the final Plan are consistent with the development of objectives under the 2012 Planning Rule and Forest Service directives. Objectives should be based on reasonably foreseeable budgets and must be attainable within the fiscal capability of the unit (36 CFR 219.9(e)(1)(ii) and FSH 1909.12 Chapter 20 section 22.12(5)). Construction and maintenance of 20 to 30 water developments for wildlife and livestock over 10 years is reasonable, based on foreseeable budgets. However, this objective does not limit the amount of construction or maintenance for water developments that could be achieved, were additional resources to become available through additional funding or partnerships.

Concern Statement 1030 **Water Availability**

Include an objective to maintain, improve, or install at least one water feature per year to improve water availability for wildlife or livestock where natural water sources are limited.

Associated Comment Letter: 5303

Response

The final Plan includes the following objective (FW-WFP-O-2) to “reconstruct or maintain 20 to 30 existing water developments for wildlife, during each 10-year period,” equivalent to 2 to 3 per year.

Concern Statement 1031 **Habitat Restoration Measurement**

We have concern with how the FWP objective to restore or enhance 50,000 to 150,000 acres of terrestrial habitat will be measured. Simply counting all vegetation management activities as restoring or enhancing watersheds and wildlife habitat is not a reliable, science-based measurement. The final plan

should elaborate on how this objective will be measured, and this should include a clear, science-based measure for "enhancement or restoration."

Associated Comment Letter: 5303

Response

The Forest Service tracks terrestrial habitat enhancement accomplishments according to business rules set forth in the Natural Resource Manager Watershed Improvement Tracking (WIT) system. WIT manages data, observations, and planning details about sites that need to be or have been restored or improved to benefit watershed and aquatic ecosystem health and function. WIT tracks site conditions, administrative plans and actions, and outcomes. Procedures for reporting restoring or enhancing watersheds and wildlife habitat can be found within Terrestrial Wildlife Habitat Accomplishment Reporting Procedures (USDA FS 2016, 2018a).

Concern Statement 1032 **Mechanical Treatment, Wildlife**

The Draft Plan and DEIS make what seems like hundreds of references to the beneficial values of forest restoration on a variety of ERUs, watersheds, habitats, and wildlife species. Sure, mechanical thinning in appropriate locations followed by restoration of natural fire regimes has profound impacts on a range of values. But there are risks. It is crucial that a critical analysis of the potential harms of logging on species such as the spotted owl is completed as part of this plan revision.

Associated Comment Letter: 5347

Response

The FEIS discloses both beneficial and negative effects from mechanical treatments in the Vegetation; Soils, Water, and Watershed; and Wildlife, Fish and Plants sections. Additionally, the U.S. Fish and Wildlife Service consulted on the Carson NF's programmatic Biological Assessment of plan impacts to Mexican spotted owl and other federally listed species and issued a Biological Opinion.

Concern Statement 1033 **Wildlife Plan Components, Support**

We applaud the Carson NF for the inclusion of excellent plan components in the Wildlife, Fish, and Plants (FWP) section. We ask that these plan components be included in the Final plan. We are in strong support of the inclusion of desired conditions that emphasize ecological and habitat conditions to ensure species sustainability and persistence on the landscape, including the importance of habitat connectivity. We also believe it is important that habitat connectivity not only exist, but that the movement of species throughout the region is known.

Associated Comment Letters: 113, 4848, 4856, 4860, 4871, 4880, 4881, 4887, 4889, 4901, 5303, 5405, 5569, 5591

Response

The final Plan includes plan components that addresses desired conditions and emphasize ecological and habitat conditions to ensure species sustainability and persistence on the landscape, including habitat connectivity. Wildlife habitat connectivity allows terrestrial and aquatic animals to move freely through their environment to access necessary resources or fulfill basic life-cycle needs. It may be negatively impacted by two primary factors: impaired ecological conditions and physical obstructions. The FEIS (volume 3, appendix H, Section 4, table 132) lists plan components and management approaches related to habitat connectivity that are carried forward into the final Plan. Management Approach for Wildlife, Fish, and Plants-3 encourages collaborating with New Mexico Department of Game and Fish to identify movement of species.

Concern Statement 1034 **Habitat Connectivity**

Adopt and establish management that provides wildlife with habitat connectivity and balances traditional land use values with habitat needs.

Associated Comment Letters: 4840, 5580

Response

Wildlife habitat connectivity allows terrestrial and aquatic animals to move freely through their environment to access necessary resources or fulfill basic life-cycle needs. The FEIS (volume 3, appendix h, section 4, table 132) lists plan components and management approaches related to habitat connectivity that are carried forward into the final Plan.

Adopting and establishing management that provides wildlife with habitat connectivity and balances traditional use values with habitat need can be demonstrated by all alternatives in the FEIS. Plan components associated with the Valle Vidal and San Antonio Management Areas promote habitat connectivity and wildlife habitat needs, while also providing for traditional multiple-use values (MA-VVMA-DC-2, MA-SAMA-DC-1-2, MA-SAMA-DC-4, MA-SAMA-S-1-7, and MA-SAMA-G-1).

Concern Statement 1035 **Habitat Connectivity**

The plan should contain a standard in the Fish, Wildlife, and Plants Section that encourages working with stakeholders, landowners, and managers to identify wildlife migration routes forestwide as well as important habitats for improving or maintaining connectivity for terrestrial species.

Associated Comment Letters: 4951, 5303

Response

The final Plan includes components that address working with State agencies, tribes and pueblos, Federal agencies, etc., to identify wildlife migration routes and linkages and barriers to wildlife movements (Management Approaches for Wildlife, Fish, and Plants-3 and -4). Appendix H, Section 4 of the FEIS (Volume 3) identifies components related to providing for habitat connectivity.

Concern Statement 1036 **Habitat Connectivity**

Develop species-specific standards and guidelines for connectivity.

Associated Comment Letters: 4835, 4911

Response

Wildlife habitat connectivity allows terrestrial and aquatic animals to move freely through their environment to access necessary resources or fulfill basic life-cycle needs. It may be negatively impacted by two primary factors: impaired ecological conditions and physical obstructions. The final Plan includes components that address ecological conditions and physical obstructions that may impact multiple species. The FEIS (volume 3, appendix H, section 4, table 132) lists plan components and management approaches related to habitat connectivity. The FEIS Volume 3, Appendix H, Section 4, discusses habitat connectivity plan components for all wildlife, from insects to game species. Habitat connectivity refers to the ability of terrestrial and aquatic animals to move freely about their environment to access necessary resources or seek other individuals within their species to fulfill basic life-cycle needs. Connectivity may be negatively impacted by two primary issues: impaired ecological conditions and physical obstructions. In Section 4 in of the FEIS Volume 3, Appendix H lists final plan components (including desired conditions, standards, guidelines, objectives, and management approaches) related to habitat connectivity for wildlife ranging from insects to game species found within the final Plan.

Concern Statement 1037 **Habitat Connectivity, Triggers**

Establish triggers that lead to a change in management that improves connectivity.

Associated Comment Letter: 4925

Response

The final Plan does not include triggers or any other direction that compels specific actions or guarantees specific results (FSH 1909.12 21). The Carson NF uses an adaptive planning and monitoring framework that allows changes to management, based on monitoring results, new information, and/ or changing conditions. If conditions change beyond that anticipated in the final Plan, amendments can be used to adjust the plan before the next revision (Final Plan, Chapter 1, Plan Framework, Adaptive Planning and Management).

Concern Statement 1038 **Disease Transmission**

On page 85, Wildlife, Fish, and Plants Desired Condition 5 should be modified to include language that "Habitat connectivity and distribution provide for genetic exchange, daily and seasonal movements of animals, and predator-prey interactions across multiple spatial scales, while minimizing the potential for disease transmission among animals and species."

Associated Comment Letters: 4951, 5574

Response

The final Plan addresses disease transmission among animals and species with forestwide Ecological Sustainability and Diversity of Plant and Animal Communities plan components; these include FW-WFP-DC-11, FW-CAM-G-2, FW-MA-CAM-1, and FW-NIS-G-1. FW-MA-WFP-1 was modified to read, "control and management of diseases; and the management of sport and native fishes and animals, including the identification of refugia for native fish and animals."

Social, Cultural, Economic Sustainability, and Multiple Use components FW-GRZ-S-4 and FW-GRZ-G-8 mitigate the potential transfer of disease from domestic sheep to bighorn sheep.

The final Plan includes Appendix B: Proposed and Possible Actions, which describes actions that may occur in the plan area during the life of the plan. These include forestwide management actions listed in the Wildlife, Fish, and Plants section (pp. 238–239), which assist in minimizing the potential for disease transmission among various species.

Concern Statement 1039 **Habitat Connectivity, Terrestrial and Aquatic**

Add terrestrial and aquatic species to the end of Wildlife, Fish, and Plant Management Approach 3.

Associated Comment Letter: 5303

Response

This suggested language was added to Wildlife, Fish, and Plant Management Approach-3, which now reads, "Consider working collaboratively with federally recognized tribes and pueblos, New Mexico Department of Game and Fish, State agencies, adjacent Federal land managers, local agencies, U.S. Fish and Wildlife, sportsman's and conservation groups, adjacent landowners, to identify wildlife migration routes forestwide and important habitat to improve or maintain connectivity for terrestrial and aquatic species."

Concern Statement 1040 **Habitat Connectivity**

Support for the coordination with other entities to identify wildlife migration routes as well as barriers to movement.

Associated Comment Letter: 4893

Response

Wildlife, Fish, and Plants Management Approach-3 encourages coordination with other entities (Federal, State, etc.) to identify wildlife migration routes as well as barriers to movement.

Concern Statement 1041 **Habitat Connectivity**

Monitor for trends in landscape integrity and permeability of the forest, and larger landscape, over time by considering human modification that contributes to fragmentation, including roads, residential development, energy development, transmission corridors, and other development.

Associated Comment Letter: 4925

Response

Monitoring Topic II in the final Plan includes a monitoring question regarding the condition and trend of key vegetation characteristics that together describe landscape integrity. Monitoring Topics I and II include monitoring indicators for the number of fish passage barriers removed or created and miles of aquatic habitat restored. The causes of landscape-scale fragmentation listed in the comment are generally not under the control of the Forest Service. That is, more development occurs outside the Carson NF than occurs within its boundaries.

Residential development is not allowed on National Forest System lands. Under the final Plan, energy development would be conducted in accordance with FW-MM-DC-1, which requires minimization of adverse impacts to wildlife and wildlife habitat. New transmission corridors are prohibited under FW-SU-S-2. Potential impacts from new roads would be offset by mitigating actions (FW-TFA-G-2). Unneeded roads would be obliterated or naturalized at a rate of at least 20 miles every 10 years under FW-TFA-O-1. Any impacts from infrastructure development would be evaluated and mitigated as necessary at the project level and would comply with connectivity plan components listed in appendix H of the FEIS, Volume 3.

The limited extent of impacts resulting from this type of infrastructure development would be much less than the positive impacts to landscape integrity from vegetation management improving habitat conditions and connectivity, for instance, as that described in FW-PPF-O-1 and O-2 and FW-WSW-O-1. Additionally, trends in vegetation integrity are monitored under Monitoring Topic II. Specifically, vegetation composition, size class, and canopy cover are monitored along with the amount of treatment of Mixed Conifer with Frequent Fire, Ponderosa Pine Forest, degraded habitat, impaired riparian, nonnative invasive species, aquatic habitat, and streams.

The Plan monitoring program is not intended to depict all monitoring, inventorying, and data-gathering activities undertaken on the national forest, nor is it intended to limit monitoring to just the questions and indicators listed in chapter 4 in the final Plan; it is designed to monitor and adjust the Plan.

Concern Statement 1042 **Habitat Connectivity, Core Habitat**

Identify where large core protected areas currently exist, both within the forest and larger landscape, and the connections that exist between them. Until more data are available that describe these core areas and connections in more detail, it is important to ensure that blocks of habitat maintain a high degree of connectivity between them, and that blocks of habitat do not become fragmented in the short term. Utilize management direction offered above to maintain and/or restore connections between these core protected areas.

Associated Comment Letter: 4925

Response

Wildlife habitat connectivity refers to the ability of terrestrial and aquatic animals to move freely through their environment to access necessary resources or fulfill basic life-cycle needs. It may be negatively impacted by two primary factors: impaired ecological conditions and physical obstructions. The FEIS (volume 3, appendix H, section 4, table 132) lists plan components and management approaches related to habitat connectivity. Also, the Wildlife, Fish, and Plants section of the FEIS includes an analysis of habitat connectivity as it relates to wildlife as part of a discussion about environmental consequences. Lastly, the final Plan includes the San Antonio and Valle Vidal Management Areas, which provide a large area of connected wildlife habitat.

Concern Statement 1043 **Habitat Connectivity, Transportation Infrastructure**

Include more provisions related to transportation infrastructure and related wildlife mitigation

Associated Comment Letter: 4835

Response

Forestwide Ecological Sustainability and Diversity of Plant and Animal Communities plan components in the final Plan address protective wildlife mitigations related to transportation infrastructure. Relevant plan components include FW-TFA-DC-4-5, FW-TFA-O-1, FW-TFA-S-1-3, FW-TFA-G-1-3, and FW-TFA-G-5-10. Plan components to improve habitat connectivity for wildlife species can be found in the FEIS (volume 3, appendix H, section 4).

Concern Statement 1044 **Wildlife Migration Corridors**

Protect wildlife migration routes within the plan. Designate and map wildlife movement corridors within Forest lands, as well as points on the Carson NF border where important movement corridors intersect surrounding private lands. By mapping corridors and core habitat, management standards, guidelines, and objectives can then be established to promote wildlife movement in key areas on the Forest. No mention of large mammal habitat connectivity improvements at demonstrated road crossings and removal of retired and/or obsolete fences and other human-made barriers were included in the draft Plan.

Associated Comment Letters: 170, 187, 404, 1028, 1409, 1627, 2012, 2844, 2977, 3018, 3071, 3430, 3727, 4484, 4835, 4884, 4901, 4908, 4925, 4995, 5643, 5674, 5711

Response

Wildlife migration routes, particularly for large mammals are accommodated in forestwide direction in the final Plan through habitat connectivity plan components. Wildlife habitat connectivity allows terrestrial and aquatic animals to move freely through their environment to access necessary resources or fulfill basic life-cycle needs. It may be negatively impacted by two primary factors: impaired ecological conditions and physical obstructions. The FEIS (volume 3, appendix H, section 4, table 132) lists plan components and management approaches related to habitat connectivity (including migration routes) for large mammals, among other wildlife. These plan components in the final Plan include standards, guidelines, objectives, and management approaches to promote wildlife movement in key areas on the national forest. For instance, FW-WFP-G-6 requires removal of retired and/or obsolete fences and other human-made barriers.

The final Plan also includes the Valle Vidal and San Antonio Management Areas, which comprise contiguous lands and emphasize habitat for wildlife, including large ungulates. Management Approaches -1 and -2 for the San Antonio Management Area specifically address habitat connectivity.

Wildlife movement corridors may best be identified during site-specific project-level analysis (Wildlife, Fish, and Plant Management Approach-3), as corridors are not static, i.e., they can change through the life of the Plan.

Concern Statement 1045 **New Mexico Wildlife Habitat Linkage Assessment**

Incorporate into the Final Plan: Final Report: New Mexico Wildlife Habitat Linkage Assessment (https://www.researchgate.net/publication/326468937). This report documented that elk and pronghorn migration is significant across the Carson as these animals move between the Tusas/San Juan Mountains and the Sangre de Cristo Mountains.

Associated Comment Letter: 168

Response

This report is cited as a reference in the analysis of habitat connectivity in the FEIS. Based in part on data from this report and public comment, the responsible official decided to include Valle Vidal and San Antonio Management Areas in the final Plan (see Record of Decision). Also, Appendix H, Section 4 of Volume 3 of the FEIS details all plan components related to wildlife habitat connectivity.

Concern Statement 1046 **Habitat Connectivity, Alternative 4**

Alternative 4 goes farther to address concerns regarding wildlife corridors, fragmentation, and connectivity of wildlife movement. Note- the New Mexico state legislature and various agencies including BLM, state land office, New Mexico Department of Game and Fish, U.S. Fish and Wildlife Service, and the Forest Service and State of Colorado are also on advisory councils to work on wildlife corridors and the proposed alternative 2 does not meet this management direction adequately.

Associated Comment Letter: 5673

Response

Wildlife migration routes, notably for large mammals, have been addressed through forestwide final Plan components relating to habitat connectivity. Wildlife habitat connectivity allows terrestrial and aquatic animals to move freely through their environment to access necessary resources or fulfill basic life-cycle needs. It may be negatively impacted by two primary factors: impaired ecological conditions and physical obstructions. The FEIS (volume 3, appendix H, section 4, table 132) lists plan components and management approaches related to habitat connectivity for large mammals and other wildlife. These include plan components to promote wildlife movement in key areas on the Carson NF, for instance, FW-WFP-G 6 requires removing retired and/or obsolete fences and other man-made barriers to improve habitat connectivity.

The final plan includes the Valle Vidal and San Antonio Management Areas. These comprise contiguous lands and emphasize habitat for wildlife, including large ungulates. Management Approaches -1 and -2 for the San Antonio Management Area specifically address habitat connectivity.

Wildlife movement corridors may be identified on a site-specific basis through project-level analysis (Wildlife, Fish, and Plant Management Approach-3), as corridors may change through the life of the Plan.

The Final Plan also includes Wildlife, Fish, and Plants Management Approaches-3-6 and -8, which encourage the Forest Service to work with the New Mexico Department of Game and Fish, and other local, State, and Federal agencies; sportsman groups; scientific communities; and private landowners in support of wildlife connectivity.

Concern Statement 1047 **Wildlife Migration, Valle Vidal, San Antonio**

Include plan language to strengthen the protection of wildlife migration corridors in San Antonio and Valle Vidal Management Areas.

Associated Comment Letters: 177, 196, 572, 1416, 1551, 1767, 4881

Response

Final Plan components for the San Antonio Management Area and the Valle Vidal Management Area provide improved habitat connectivity for wildlife migration, e.g., FW-WFP-DC-5; FW-WFP-O-4 and -5; FW-WFP-G-6 and -8; Management Approach for Wildlife, Fish and Plants-8; FW-TFA-DC-5; FW-TFA-G-7 and -8; Management Approach for Lands-1; and Management Approach for San Antonio Management Area -1 and -2. For a full list of the plan components that address habitat connectivity within the final Plan, see Section 4 of Appendix H in Volume 3 of the FEIS.

Concern Statement 1048 **Habitat Connectivity, Wild and Scenic Rivers**

Designated Wild and Scenic Rivers that flow through the Forest have stringent conservation guidelines, the Forest should assess connectivity along these corridors with the aim of including explicit guidelines to protect connectivity along these river corridors in the final Plan. In doing so, vital aquatic and riparian corridors will be designated as geographic areas of significance for connectivity of both aquatic and terrestrial species in the final Plan.

Associated Comment Letter: 4835

Response

Designated wild and scenic rivers are already designated areas and are mapped within the final Plan. Designated areas are geographic locations that are managed differently from forestwide areas. Designated wild and scenic rivers are given three classifications and are classified based on the amount of development within the wild and scenic river corridor. Designated wild and scenic rivers with a Wild River classification are those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. Scenic River classification are rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads, and lastly Recreational River classification are rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past. Regardless of classification, each river in the national system is administered with the goal of protecting and enhancing the values that caused it to be designated, and protecting the free-flow nature of the river corridor. The designation as well as habitat connectivity plan components found in the FEIS Volume 1 Appendix H Section 4 would ensure connectivity of these designated rivers for terrestrial and aquatic species.

Concern Statement 1049 **Wildlife Corridors**

Protect and expand wildlife corridors.

Associated Comment Letter: 5631

Response

The final Plan includes direction to improve habitat connectivity in these plan components: FW-WFP-DC-5; FW-WFP-O-4 and -5; FW-WFP-G-6 and -8; Management Approach for Wildlife, Fish and Plants-8; FW-TFA-DC-5; FW-TFA-G-7 and -8; Management Approach for Lands-1; and Management Approach for San Antonio Management Area-1 and -2. For a full list of final Plan components that address habitat connectivity, see Section 4, Appendix H, of Volume 3 of the FEIS.

Concern Statement 1050 **Habitat Connectivity, Standards**

There are more than 50 mentions of connectivity in the 3rd draft of the Forest Plan. Fifteen of those are specific, numbered, enforceable management stipulations. Seven of those 15 are guidelines and objectives, rather than less actionable “desired conditions.” However, the Plan does not have a single standard that specifically addresses connectivity.

Associated Comment Letter: 4835

Response

The final Plan manages for habitat connectivity via the suite of plan components listed. Standards are included where they are necessary to constrain projects or activities, but are not required to manage every resource and do not mandate conditions beyond those affected by a project.

Desired conditions describe specific social, economic, and/or ecological characteristics of the plan area, toward which management of the land and resources should be directed (36 CFR 219.7(e)(1)(i)). The final Plan includes a specific desired condition for habitat connectivity (FW-WFP-DC-5) and directs forest management to move toward that desired condition.

Objectives are a concise, measurable, and time-specific statement of a desired rate of progress toward a desired condition (36 CFR 219.9(e)(1)(ii)). The final Forest Plan includes two objectives regarding habitat connectivity (FW-WFP-O-4 and -5), which show how the forest plans on meeting desired condition FW-WFP-DC-5.

Guidelines are a constraint on project activity decision making that allows for departure from its terms, so long as the purpose of the guideline is met (36 CFR 219.15(d)(3)). Guidelines are established to help

achieve or maintain a desired condition, avoid or mitigate undesirable effects, or meet applicable legal requirements (36 CFR 219.7(e)(l)(iv)); actions may diverge from a guideline's terms, as long as its purpose is met (36 CFR 219.15(d)(3)). Two guidelines in the final Plan address habitat connectivity: FW-WFP-G-6 and -8.

Standards are a mandatory constraint on project activity decision making, established to help to achieve or maintain desired conditions, avoid or mitigate undesirable effects, or meet applicable legal requirements (36 CFR 219.7(e)(l)(iii)). Although the final Plan does not have standards specific to habitat connectivity, several other plan components (including those just discussed) promote maintenance and restoration of wildlife habitat connectivity across the national forest. For a full list of these components, see Section 4, Appendix H, in Volume 3 of the FEIS.

Concern Statement 1051 **Monitoring, Connectivity, Integrity**

Ensure that a monitoring plan includes useful monitoring questions around aquatic connectivity and ecological integrity.

Associated Comment Letter: 4925

Response

The final Plan includes monitoring questions and indicator topics to maintain or improve aquatic connectivity and ecological integrity (Monitoring topic I, II, and VI, Chapter 4: Plan Monitoring Program). The plan monitoring program was developed collaboratively with other agencies, organizations, and individuals, in consultation with Tribes, while coordinating with Forest Service Research and State and Private Forestry.

Under the 2012 Planning Rule, monitoring consists of two elements: the plan monitoring program and broader-scale monitoring strategies. Together, these support adaptive management in that monitoring will demonstrate if a change in plan components guiding resource management is needed. Specifically, monitoring is continuous and provides feedback for the planning cycle by testing assumptions, tracking relevant conditions over time, and measuring management effectiveness. It uses the best available scientific information, while remaining within the financial and technical capabilities of the agency.

Concern Statement 1052 **Red River, River Otter Movement**

I would like to see implementation of measures on the Red River to facilitate river otters moving up into the trout-rich waters in that part of your forest.

Associated Comment Letter: 5711

Response

Components in the final Plan will benefit habitat for river otters; these include all components in the forestwide Watershed and Water section. For instance, FW-WSW-RMZ-STM-DC-3 describes aquatic species as able to move throughout their historic habitat, including opportunities for seasonal and opportunistic movements; FW-WSW-DC-5 describes aquatic and riparian habitats that support self-sustaining wildlife populations; finally, specific desired stream habitat attributes are described by FW-WSW-RMZ-STM-DC-9.

Concern Statement 1053 **Wildlife-Vehicle Collisions**

Implement a pilot project to develop a standardized methodology for reporting and collecting data on wildlife-vehicle collisions and wildlife carcasses along roads on the Forest.

Associated Comment Letter: 4835

Response

Most roads where wildlife collisions are likely to occur on the Carson NF are under management by New Mexico Department of Transportation or counties; monitoring and collecting data on wildlife-

vehicle collisions and carcass reporting is therefore generally under these agencies' jurisdictions. Nevertheless, the final Plan provides management direction relating to wildlife movement, specifically, habitat connectivity, for designated National Forest System (NFS) roads. In the Transportation and Forest Access section, for example, FW-TFA-DC 5 encourages the decommissioning of unauthorized roads as one way to reduce impacts to habitat connectivity. Additionally, FW-TFA-G-7 and -8 encouraging that methods used in roadwork (such as fences, underpasses, overpasses, larger culverts) and the NFS road and trail system, overall, accommodate wildlife movement. Additionally, the final Plan recognizes the need to work with the New Mexico Department of Transportation and counties when developing projects, as addressed in Management Approach for Wildlife, Fish, and Plants-4.

Concern Statement 1054 **Wildlife-Vehicle Collision Thresholds**

Define wildlife-vehicle collision (mortality) and traffic volume (connectivity) thresholds for when the Forest must consider wildlife mitigation on highways.

Associated Comment Letter: 4835

Response

All state highways that travel through Carson NFS lands are under the jurisdiction of the New Mexico Department of Transportation and wildlife-vehicle collisions (mortality) and traffic volume (connectivity) thresholds would therefore be under their purview. However, Management Approaches for Wildlife, Fish, and Plants-3, -4, and -8 encourage coordination with New Mexico Department of Transportation to address potential mitigations regarding habitat connectivity (i.e., wildlife movement). Also, FW-TFA-G-7 required use of methods that accommodate wildlife movement (e.g., fencing, underpasses, overpasses, larger culverts) in constructing or reconstructing highways or high traffic NFS roads, with the specific methods decided at the project level through the National Environmental Policy Act process.

Concern Statement 1055 **Highway Wildlife Crossing, Fencing**

Coordinate communication with New Mexico Department of Transportation (DOT) where National Forest System lands abut highways and DOT maintains fencing. Recently in Taos Canyon, DOT erected a new fence that is completely wildlife incompatible and Carson NF personnel had no knowledge until informed by a local resident. The Carson now cannot get the fence fixed to accommodate wildlife crossing.

Associated Comment Letter: 151

Response

Coordination with the New Mexico Department of Transportation is included in the final Plan through various components: Wildlife, Fish, and Plants Management Approach-3 and -4; FW-TFA-G-6 and -8 (which guide Forest Service management along roads); and FW-GRZ-S-2 (which guides Forest Service management of fencing).

Concern Statement 1056 **Big Game Species, Recreation**

Desired conditions that support recreational development and activities should be implemented in a manner which does not degrade or adversely affect forest resources, particularly big game species that can be sensitive to motorized and non-motorized recreation.

Associated Comment Letter: 4887

Response

The final Plan includes components that mitigate recreational development and activities' (motorized and non-motorized) adverse effects to big game species: FW-WFP-DC-7, FW-WFP-G-3 and -4, FW-REC-G-1, FW-TFA-S-1 and -2, and FW-TFA-G-10.

Concern Statement 1057 **Wildlife, Recreation**

Winter, including over-snow vehicle use, and summer recreation activities should conform to best available scientific knowledge for mitigating impacts to big and small game, federally protected species, Forest Service Species of Conservation Concern, and other special status and sensitive wildlife species.

Associated Comment Letters: 4925

Response

Various final Plan components mitigate the impact of winter and summer recreational activities to game species, federally listed species, species of conservation concern, and other wildlife species: FW-REC-G-1, FW-WFP-DC-7, FW-WFP-G-3 and -4, FW-TFA-S-1, and FW-TFA-G-10. The final Plan also addresses over-snow motorized use; for instance, FW-TFA-S-2 and MA-VVMA-S-3 restrict that use to specific areas on the forest in part to mitigate wildlife impacts. These plan components were developed using the best available scientific information, as described in the draft Record of Decision (Best Available Scientific Information section).

Concern Statement 1058 **Cliff Habitat, Rock Climbing**

Additional guidelines should be added to the Carson NF plans to further clarify future management of cliff habitat where rock climbing and nesting activities may overlap. Closing specific climbs or sections of cliff within the immediate vicinity of an active nest protects nesting peregrines and minimizes public use restrictions. Applying viewshed analysis to determining raptor closure areas results in well-informed closure areas that are both protective and minimal. The Carson NF should utilize tailored buffer zones specific to the topography, viewshed and nest location to close specific climbing routes or cliffs.

Associated Comment Letter: 5236

Response

The final Plan includes the following components to protect raptor nesting on cliffs: FW-CRF-DC-2, FW-CRF-G-2, and FW-WFP-G-3. Specifically, FW-CRF-DC-2 directs the Forest to manage cliffs to provide cover and nesting habitat for wildlife. FW-CRF-G-2 requires that rock climbing and related recreation activities do not disrupt the life processes of cliff or rocky feature at-risk species; additionally, FW-WFP-G-3 requires management activities to avoid disturbance at known active raptor nests and fledging areas by using timing restrictions, adaptive percent utilizations, distance buffers, or other means of avoiding disturbance; the specific mitigations would be based on the best available information and site-specific factors (e.g., topography and available habitat). Viewshed analysis is one approach that could be used to delineate necessary restrictions; selection of this or other approaches would be decided on a case-by-case (project-level) basis.

Concern Statement 1059 **Rock Climbing, Caving, Mine Exploration.**

Language in the plan and EIS should be updated to separate climbing activities from caving and mine exploration, as they are very different activities and use patterns.

Associated Comment Letter: 5236

Response

In the final Plan, cave and cliffs/rocky features are considered habitat types, not activities. Management direction for cave habitats can be found in the Cave and Abandoned Mine (FW-CAM) section, and for cliffs and rocky features in the Cliff and Rocky Feature (FW-CRF) section. Plan components that reference caving or rock-climbing activities may be found in the Cave and Abandoned Mine (FW-CAM), Cliff and Rocky Feature (FW-CRF), and Recreation (FW-REC) sections.

In the Wildlife, Fish, and Plants analysis section of FEIS, cave-like structures, cliffs, and rocky features were analyzed together as a habitat type for wildlife and plant species, not as recreational activities; effects described in this section referred to caves and cliffs as habitat. The Wildlife cumulative effects section references caving and rock climbing and identifies potential risks related to white-nose syndrome associated with cave and mine exploration (but not rock-climbing), “Caving and rock-climbing are

popular recreational activities in some areas and may increase in the future, but these activities require specialized training and/or equipment and they are not likely to increase as rapidly as other types of recreation. Recreational cave and mine exploration on all land ownerships can lead to an increased rate of the spread of diseases such as white-nose syndrome. There is a decontamination protocol in place for cavers on NFS lands, which should aid in slowing the spread on NFS lands, but diseases may continue to be spread elsewhere. Because both people and bats may carry diseases and travel long distances, disease can be spread across a wide area. Disease control requires a cooperative effort. Multiple agencies are monitoring bats, which will help support adaptive management and response to outbreaks."

Wildlife – Species of Conservation Concern SCC

Concern Statement 1060 **Species of Conservation Concern Evaluation**

The risk to ERU (habitat) spruce-fir is listed as "low" across the Forest (Potential Species of Conservation Concern - Carson NF, page 30), based on modeling. While models can be useful tools, it is sometimes necessary to take one's head out of the computer, look around and ask is the model reflecting reality? In this case, the model output is not even close to what is happening on the ground. Likely the model does not consider climate change or what is actually happening next door. Much of the statement is not correct. SFF departure from normal is not just from legacy logging. You continue to destroy spruce-fir at Taos Ski Valley (glading and new trails), and logging on Tres Piedras District. Population and abundance data for boreal owl, pine grosbeak, American marten, and snowshoe hare is unknown state-wide and within the forest; however, these species have been observed within the Spruce-fir Forest (SFF) ERU (USDA FS Carson NF 2015, p. 46 of assessment) throughout the Carson NF. SFF in Wilderness and roadless areas is subject to human activities. Climate change, which is human-caused, will impact these areas like everywhere else. Look at the Rio Grande NF adjacent to the Carson NF on the north. All SFF forest on the Carson NF, especially mature and Old Growth, is at HIGH risk. You state, "Over the next 100 years, spruce-fir habitat on the Carson NF will approach reference conditions." That is very unlikely. It is highly probable all mature and old growth SFF will be lost on the Carson NF, similar to the Rio Grande NF adjacent to the north. Do you have some reason to believe that climate change stops at the New Mexico/Colorado border?

Associated Comment Letter: 4851

Response

To the extent that climate change degrades spruce-fir forest habitat in the future, such impacts are not within the inherent capability of the plan area to affect or influence and are therefore not an appropriate basis for the listing of a species of conservation concern (FSH 1909.12 23.13c(4)(c)).

The commenter misrepresents the Carson NF's assessment of climate change vulnerability in the spruce-fir forest ecological response unit, based on a response to comment regarding species of conservation concern (Potential Species of Conservation Concern Comments and Response to Comments, p. 17); that response does not detail the complete assessment of spruce-fir forest condition trend, included in the Assessment (USDA FS Carson NF 2015). However, we stand by the conclusion that the continued long-term persistence of American marten is not at risk on the Carson NF and it is not classified as a species of conservation concern because: (1) as the commenter notes, population and abundance of this species is unknown; (2) spruce-fir forest is well-distributed across the forest; and (3) and habitat is not normally subject to impacts from management activities due to habitat remoteness. The conclusion in the comment response that "their preferred habitat (spruce-fir) is secure" is clarified below.

Despite modeling that shows spruce-fir forest departure improving in the future, in the Assessment, we agree that these forests "likely face…significant threats that were not modeled…." (USDA FS Carson NF 2015:50). Specifically, the Carson describes spruce-fir forests as "one of the most vulnerable" ecological response units to climate change, "with over a quarter of its extent on the Carson NF highly or very highly vulnerable" (USDA FS Carson NF 2015: 50). This view is based on modeling from the

Climate Change Vulnerability Assessment and is repeated in the FEIS (Chapter 3, Environmental Consequences for High Elevation Forests Common to All Alternatives).

High vulnerability to climate change indicates higher potential for significant alteration of structure, composition, or function (USDA FS Carson NF 2015: 281), but it is incorrect to conclude that all mature and old-growth spruce-fir forests will be lost on the Carson NF. Negative impacts are likely, as documented in the FEIS (Chapter 3, Environmental Consequences for High Elevation Forests Common to All Alternatives), but those impacts are difficult to quantify. "Complex interactions will occur among species as they migrate and adapt in response to changing environmental conditions" and "the specific expression of or interaction among impacts is uncertain" (FEIS, Chapter 3, Management Implications of Projected Future Climate and Environmental Consequences for High Elevation Forests Common to All Alternatives, respectively).

Modeling of the hazard of tree mortality due to insects and disease over a 15-year time frame (2013–2027) predicts significant, though not nearly complete, basal area loss in spruce-fir forests on the Carson NF (Krist et al. 2015). The majority (57 percent) of spruce-fir forests on the Carson NF are predicted to experience less than 25 percent basal area loss and only 16 percent are predicted to experience more than 50 percent loss (figure 7). Basal area loss is likely to continue or accelerate over the second half of the life of the plan and be compounded by other factors such as fire. However, there is no clear evidence that these impacts will result in environmental conditions that would be incapable of maintaining viable populations of American marten or other spruce-fir dependent species.

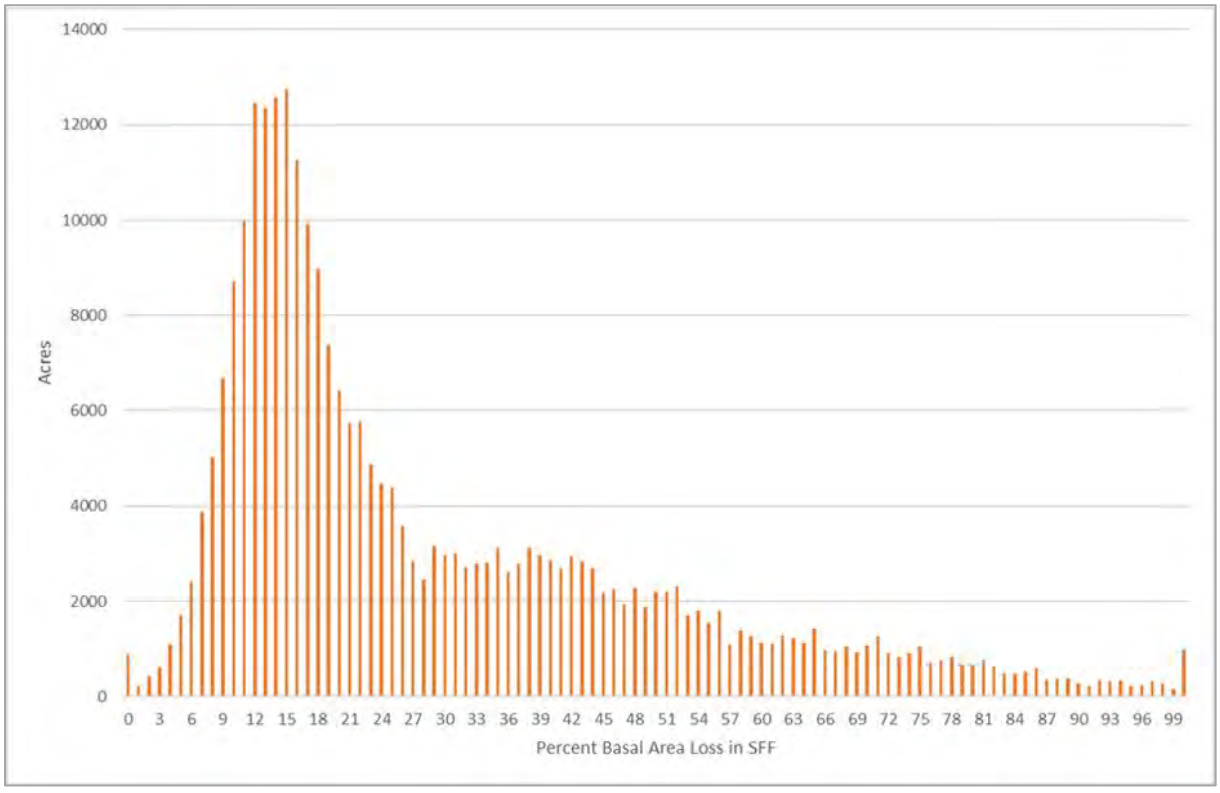


Figure 7. Acres of spruce-fir forest on the Carson NF by predicted basal area loss (2013 through 2027) (Krist et al. 2015)

Concern Statement 1061 **Black and Brown-capped Rosy-finch**

There is substantial concern regarding the capability of black and brown-capped rosy-finch species to persist over the long term in the Carson NF due to four vulnerability factors: (1) these species face high

threats, (2) these species have limited ranges, (3) these species have specialized habitat needs, (4) these species have low population densities.

Associated Comment Letter: 4897

Response

Little is known about the black and brown-capped rosy finches in New Mexico because the two species inhabit high mountain meadows in the winter and alpine tundra in the summer, making detection difficult (Poole 2018). On the Carson NF, the alpine and tundra ecological response unit (ERU) is very susceptible to climate change and, given its current limited extent and elevation constraints, it is likely to decline in western mountain systems more generally (USDA FS 2010b). However, the alpine and tundra ERU's departure from reference conditions is currently low on the Carson NF such that, even when intensified by climate change, it would still likely be only moderately departed in the future (USDA FS Carson NF 2015:298). Also, 86 percent of alpine and tundra habitat on the Carson NF already receives the highest level of protection, having been designated as wilderness. Designated wilderness areas provide high-quality and contiguous alpine tundra habitat and are less influenced by human and management activities.

Black and brown-capped rosy finches have been observed on the Carson NF year-round (Bird Conservancy 2018; USDA FS Carson NF 2014). However, there are no population or abundance data on the Carson NF—or for New Mexico overall (NMPIF 2016a). Because these species breed in relatively isolated alpine habitat, and especially in steep, rocky terrain, it is unlikely that human or management activities will occur on their breeding grounds or influence their future status (NMPIF 2016a; Poole 2018). There is insufficient population, abundance, and summer occurrence information to permit evaluation of whether the black and brown-capped rosy finches' long-term persistence is currently at risk on the Carson NF. Because of the lack of data regarding potential threats, it is not possible to list them as a species of conservation concern at this time.

Concern Statement 1062 **Flammulated Owl**

There is substantial concern regarding the capability of flammulated owl to persist over the long term in the Carson NF due to two vulnerability factors: (1) this species has a low reproductive rate and (2) this species has specialized habitat needs.

Associated Comment Letter: 4897

Response

As stated in the directives outlining criteria for determining species of conservation concern (SCC), species with NatureServe status ranks of G1-3/T1-3 or S1 or S2 should be considered (FSH 1909.12, Sections 12.52c and 12.52d). According to NatureServe (2020), the flammulated owl has a ranking of G5/N5B/S3 and therefore does not meet this criterion for consideration as a species of conservation concern. Additionally, population estimates for the state are lacking (NMPIF 2016b), further excluding this species from consideration as a species of conservation concern.

At the same time, forest-level data indicate a robust presence on the Carson. Specifically, flammulated owl was the most-detected owl during Mexican spotted owl (MSO) surveys; it has been documented on MSO forms for the last several years (personal communication, Jay Gatlin, Wildlife Biologist, Camino Real Ranger District, 2015–2016). Based on these data, this species appears secure on the Carson NF and its continued long-term persistence is not considered to be at risk.

Concern Statement 1063 **Virginia's Warbler**

Add Virginia's warbler as a species of conservation concern on the Carson NF due to three vulnerability factors: (1) this species has a rapidly declining population, (2) this species is specialized upon narrow habitat conditions, and (3) this species faces high threats. Virginia's warbler is a narrow habitat specialist, dependent upon ponderosa pine forests with significant patches of oak in specific size classes. Studies

suggest it depends upon patches of small to medium-sized Gambel oak (up to 5.9 inches diameter at breast height), is absent from areas lacking oak in these size classes, and is found in significantly lower densities in areas with smaller patches of oak in these size classes. Oak is a high-quality firewood product, placing it at risk from over collection. Additionally, climate change models suggest ponderosa pine forests will contract throughout the Southwest due to climate change, placing increasing firewood collection pressure on the remaining Gambel oak. In addition to being a habitat specialist, Virginia's warbler is also a ground nester, making is sensitive to overgrazing effects on grazing allotments throughout the Carson NF.

Associated Comment Letter: 4897

Response

As stated in the directives (FSH 1909.12 section 12.52d) regarding determination of species of conservation concern, species with NatureServe status ranks of G1-3/T1-3 or S1 or S2 ranking system should be considered. Virginia’s warbler has a ranking of G5/N5/S3 (NatureServe 2016) and does not meet the criteria for species of conservation concern.

In addition, according to Carson NF migratory bird surveys (Beason et al. 2006, 2007), the population trend for this species on the forest is stable. Carson NF migratory bird surveys were used instead of other surveys, as these provide specific population data for this species on the Carson NF, whereas other surveys provide population data for all of New Mexico.

Virginia’s warbler is mostly found within pinon-juniper woodlands and, on the Carson NF, the future trend for pinon-juniper woodlands is stable or increasing (USDA FS Carson NF 2015, p. 65). Virginia’s warbler is also associated with oak habitat. In the final Plan, numerous plan components relating to the Ecological Sustainability and Diversity of Plant and Animal Communities, specifically, oak habitat for the Virginia’s warbler, maintain or improve ecological conditions; these include FW-VEG-DC-8, FW-VEG-MA-1, FW-MCD-DC-14, FW-PPF-DC-11, 14, FW-PJO-DC-11-12, and FW-PJS-DC-11-12.

Finally, the Social, Cultural, and Economic Sustainability and Multiple Use plan components for Sustainable Rangelands, and Livestock Grazing (GRZ) provide sufficient standards and guidelines guarding against threats and stressors for Virginia’s warbler; these include FW-GRZ-S-1 and FW-GRZ-G-2-5.

In summary, Virginia’s warbler’s primary pinon-juniper woodlands habitat is stable and is well-distributed across the national forest and various plan components would maintain or improve oak habitat important to this species. The population trend for Virginia’s warbler on the Carson NF is increasing; therefore, this species appears secure within the Carson NF and its continued long-term persistence is not at risk.

Concern Statement 1064 **Grace's Warbler**

Grace's warbler should be listed as a species of conservation concern because it is one of the fastest declining species in New Mexico. Grace's warbler has a small range that includes only the mountains of the southwestern United States and northern Mexico. In the small range it occupies, it can be locally abundant, however, the best available science shows this is not indicative of a lack of conservation concern. The Forest Service claims, “It is expected that management actions meeting the desired conditions outlined in this plan would have a positive effect on Grace's warbler.” The literature does not support this statement. A recent extensive literature review by the New Mexico Avian Conservation Partners shows that Grace's warbler is very sensitive to changes in canopy cover, and many, if not most, thinning projects reduce canopy cover levels below that needed for this species. Based on the best available science, it is difficult to impossible to know if treatments are going to have a positive effect on Grace's warbler populations. The Forest Service also states that “detecting this species within treatment units would indicate that habitat conditions on the landscape are moving toward the stated desired conditions.” This statement is not supported by the best available science. A recent extensive literature

review for Grace's warbler by the New Mexico Avian Conservation Partners showed most thinning prescriptions resulted in a population decline. Presence/absence data does not provide information regarding whether a population is declining, increasing, or stable. Simple detection data should not be used as an indicator of appropriate habitat conditions, because a species could be declining due to inadequate habitat conditions, but still be present at the time of surveying. Statistically robust surveys that show population trends are recommended to determine appropriate habitat conditions for Grace's warbler.

Associated Comment Letter: 4897

Response

According to Carson NF migratory bird surveys (Beason et al. 2006, 2007), Grace's warbler was detected in high numbers every year within all suitable habitats and had a stable population trend. Also, according to New Mexico Department of Game and Fish (2016, 2017a), Grace's warbler was the most commonly detected species during the surveys of Sandia, Manzano, Magdalena, San Mateo, Zuni, Jemez, San Juan, and Sangre de Cristo mountain ranges. As stated in the 2012 Planning Rule directives (FSH 1909.12 section 12.52d), species with status ranks of G1-3/T1-3 or S1 or S2 on the NatureServe ranking system should be considered as species of conservation concern. Grace's warbler has a NatureServe Ranking of G5/S3b; therefore, it does not meet the criteria for consideration as a species of conservation concern.

Additionally, since Grace's warbler habitat is well-distributed across the forest and, its populations are stable or increasing, it appears secure on the Carson NF, and its continued long-term persistence is not at risk.

Grace's warbler's response to both timber and fire management within its preferred habitat has been relatively well-studied. In general, abundance of this species declined in stands that are severely thinned, including clearcuts (Block and Finch 1997 and references therein), overstory removal plots (Kalies et al. 2010), and areas affected by wildfire (T. H. Johnson and Wauer 1996; Kalies et al. 2010). However, Grace's warbler was detected in areas with small-diameter removals and thinning and burning treatments (Block and Finch 1997; Kalies et al. 2010). Due to its dependency on mature trees and open understory, this species is a good indicator for healthy ponderosa pine and dry mixed conifer woodlands as outlined within the desired conditions in the final Plan.

Concern Statement 1065 **Grace's Warbler**

There is substantial concern regarding the capability of Grace's warbler to persist over the long term in the Carson NF due to four vulnerability factors: (1) this species has a rapidly declining population, (2) this species has specialized habitat needs (3) This species faces high threats, (4) This species has a small range. Research suggests current forest conditions are suboptimal for Grace's warbler. Additionally, recent research strongly suggests many, if not most, of the thinning prescriptions employed in the southwestern United States reduce canopy cover levels below that needed by this species.

Associated Comment Letter: 4897

Response

Selection of species of conservation concern is based on the risk of persistence on each individual forest, and the resource condition and activities vary from forest to forest. Capability to persist on the Carson NF is based on the Carson's resource condition and activities.

As stated in the 2012 Planning Rule directives (FSH 1909.12 section 12.52d), species with status ranks of G1-3/T1-3 or S1 or S2 in the NatureServe ranking system should be considered as species of conservation concern. According to NatureServe (2020), Grace's warbler has a ranking of G5/N5B/S3B, and thus, does not meet the criteria for further consideration as a species of conservation concern.

Furthermore, according to Carson NF migratory bird surveys (Beason et al. 2006, 2007), Grace's warbler was regularly detected in high numbers within all suitable habitats and had a stable population trend. Also, according to New Mexico Department of Game and Fish (2016, 2017a), Grace's warbler was the most commonly detected species during the surveys of Sandia, Manzano, Magdalena, San Mateo, Zuni, Jemez, San Juan, and Sangre de Cristo mountain ranges. Based on these data, this species appears secure on the Carson NF and its continued long-term persistence is not at risk.

Grace's warbler response to both timber and fire management within its preferred habitat has been relatively well-studied. In general, abundance of this species declined in stands that are severely thinned, including clearcuts (Block and Finch 1997 and references therein), overstory removal plots (Kalies et al. 2010), and areas affected by wildfire (Johnson and Wauer 1996; Kalies et al. 2010). However, Grace's warbler was detected in areas with small-diameter removals and thinning and burning treatments (Block and Finch 1997; Kalies et al. 2010). Due to its dependency on mature trees and open understory, this species is a good indicator for healthy ponderosa pine and dry mixed conifer woodlands as outlined within the desired conditions in the final Plan.

Concern Statement 1066 **Lewis's Woodpecker**

There is substantial concern regarding the capability of Lewis's woodpecker to persist over the long term in the Carson NF due to four vulnerability factors: (1) this species has a rapidly declining population, (2) this species is specialized upon narrow habitat conditions, (3) this species faces high threats, and (4) this species has a small population size.

Associated Comment Letter: 4897

Response

There is insufficient population or abundance information to evaluate whether a Lewis's woodpecker is at risk for persistence within the Carson NF. In New Mexico, Lewis's woodpecker usually occurs below 8,000 feet elevation and uses open ponderosa pine and oak woodlands (NMPIF 2019). It is absent from dense ponderosa stands, where fire suppression and grazing have prevented development of an open forest structure (NMPIF 2019). The Carson NF does not have ponderosa pine-oak woodlands, which is primarily used by this species, but does have 312,900 acres of ponderosa pine habitat. The ponderosa pine forest on the Carson NF is highly departed from reference condition, however, because it is extremely dense (USDA FS Carson NF 2015). It is unknown whether Lewis's woodpecker is using the Carson NF for breeding or merely on occasion. According to eBird (2020), hundreds of Lewis's woodpeckers have been seen foraging on the Carson NF; however, according to Beason et al (2006, 2007), this species mainly occurs outside the Carson NF, as the Carson NF vegetation is too dense and has minimal oak.

Populations are reported to be most abundant in northeastern Arizona, north-central New Mexico, south-central Colorado, northern California, Washington, Oregon, and Idaho during the breeding season (Gough et al. 1998; Poole 2018). Population information for Lewis's woodpecker is lacking for New Mexico (NMPIF 2019) and, as noted above, it is not clear that Lewis's woodpecker uses the Carson NF (Beason et al. 2006, 2007).

Finally, as stated in the directives (FSH 1909.12 section 12.52d), species with status ranks of G1-3/T1-3 or S1 or S2 on the NatureServe ranking system should be considered for species of conservation concern. According to NatureServe (2020), this species has a ranking of G4/N4B/S3B, meaning that it does not meet this criterion for species of conservation concern consideration.

Concern Statement 1067 **Bighorn Sheep, Livestock Permitting**

We support Sustainable Rangelands and Livestock Grazing Guideline Eight (FW-GRZ-G-8), "Permit conversions to domestic sheep or goats should not be allowed within bighorn sheep-occupied habitat to mitigate the potential transfer of disease from domestic sheep to bighorn sheep." We are not only concerned about the health of bighorn sheep, but also rare and sensitive plants in alpine habitat. We favor

the Sustainable Rangelands and Livestock Grazing standard in alternative 4 that would not allow permitted domestic sheep grazing to overlap with bighorn sheep-occupied habitat.

Associated Comment Letter: 4924

Response

FW-GRZ-G-8 is included in the final Plan. As described in the record of decision, FW-GRZ-S-4 under alternative 4 was not brought forward in the final Plan due to its socioeconomic impact on grazing and multiple-use opportunities. As stated in the FEIS, "This standard would require domestic sheep to be removed and would not allow the flexibility to utilize the most appropriate management strategies for site-specific situations to mitigate the potential of disease transmission to bighorn sheep. This standard would increase cost to the permit holder as they would have to pay for appropriate infrastructure to convert from sheep to cattle in the area. If the permit holders could not covert to cattle, then domestic sheep would have to be relocated. This would result in a loss of income to the ranchers and a decrease in economic and social benefits to the surrounding communities." (Chapter 3, Environmental Consequences for Sustainable Rangelands and Livestock Grazing – Alternative 4)

Concern Statement 1068 **Bighorn Sheep, Livestock Permitting**

Big game species like bighorn sheep should not be introduced into areas where it displaces sheep permit holders from their allotments without negotiations and without adequate monetary compensation and paid according to the highest and best use. Permits under no circumstance should be cancelled or revoked by the Forest Service for this purpose.

Associated Comment Letter: 143

Response

A standard in alternative 4 (Domestic sheep grazing allotments shall not be authorized within bighorn sheep-occupied habitat to mitigate the potential transfer of disease from domestic sheep to bighorn sheep) was analyzed in the FEIS as part of alternative 4. This standard was not brought forward into the final Forest Plan, due to socioeconomic impacts to grazing and multiple-use opportunities (Draft Record of Decision, Decision Section).

The New Mexico Department of Game and Fish is responsible for wildlife management actions, such as introducing native species like bighorn sheep. However, the final Forest Plan does include Management Approach for Wildlife, Fish, and Plants-1, which encourages coordination with the New Mexico Department of Game and Fish on reintroductions, introductions, or transplants of native species.

Concern Statement 1069 **Bighorn Sheep, Livestock Permitting**

Wildlife, Fish, Plants Management Approach 9 states, "consider converting permitted domestic sheep allotments that are within Rocky Mountain bighorn sheep-occupied habitat to permitted cattle allotments." This is vague and missing any true direction, as it is unclear whether consideration would result in action, and without a timeline associated with this suggested conversion, allotments could just as soon be retired before they are converted to cattle.

Associated Comment Letter: 4899

Response

Management approaches are tools or strategies that can be used to meet plan component direction; they provide options for plan implementation and represent possibilities, preferences, or opportunities, rather than obligatory actions. Wildlife, Fish, and Plants Management Approach-9 is one option that management could take to achieve Wildlife, Fish and Plant Desired Conditions (FW-WFP-DC-11) and Sustainable Rangelands and Livestock Grazing Standard 4 (FW-GRZ-S-4), which states, "Within bighorn sheep-occupied habitat or areas of high risk of contact domestic sheep allotments shall be managed (e.g., fencing, increased herding, herding dogs, potential vaccine, or other scientifically supported strategies) to mitigate the potential transfer of disease from domestic sheep to bighorn sheep."

Concern Statement 1070 **Bighorn Sheep, Domestic Sheep**

Due to the high probability of a disease transfer occurrence between domestic sheep and bighorn sheep, we believe Rocky Mountain bighorn sheep should be designated as a species of conservation concern.

Associated Comment Letters: 127, 153, 155, 177, 178, 4838, 4841, 4848, 4868, 4871, 4880, 4881, 4889, 4899, 4997, 5271, 5643, 5705, 5717

Response

Rocky Mountain bighorn sheep was evaluated as a potential species of conservation concern and did not meet the criteria for identification as such. See Potential Species of Conservation Concern Report for rationale. However, the Carson NF did include the following plan components and management approaches to minimize the risk of disease transmission between bighorn sheep and domestic sheep in the final Plan: FW-WFP-DC-11 (this is where the Carson NF would like risk to be in future), WFP-Management Approach-9, FW-GRZ-S-4, FW-GRZ-G-8, GRZ-Management Approach-7, FW-SU-S-3, DA-WILD-S-5, and DA-WSR-S-4. Appendix H, Section 5 of the FEIS, Volume 3, also has a plan component crosswalk of all plan components and management approaches that would maintain or improve ecological condition and mitigate threats for bighorn sheep.

Concern Statement 1071 **Bighorn Sheep, Pack Goats**

Support the inclusion of DA-WILD-S-4 and DA-WSR-S-4 which prohibit pack goats within wilderness and designated wild and scenic rivers.

Associated Comment Letter: 4848

Response

DA-WILD-S-4 and DA-WSR-S-4 are included in the final Plan.

Concern Statement 1072 **Bighorn Sheep, Domestic Sheep**

The DEIS under all alternatives does not include effective plan components to reduce risk of disease transmission between bighorn sheep and forest permitted domestic sheep.

Associated Comment Letter: 4994

Response

All action alternatives add fine-filter plan components for the Rocky Mountain bighorn sheep to direct management emphasis on mitigating the potential for disease transmission to bighorn sheep from domestic sheep or goats. The Western Association of Fish and Wildlife Agencies Wild Sheep Working Group (2012) cautions “that BMPs (best management practices) that work in one situation may or may not work in other situations; BMPs need to be developed for site-specific situations (Schommer 2009), and evaluated for effectiveness.” Alternative 2-modified, the selected alternative, includes plan component FW-GRZ-S 4, which states, “Within bighorn sheep-occupied habitat or areas of high risk of contact, domestic sheep allotments shall be managed (e.g., fencing, temporal separation, increased herding, herding dogs, or other scientifically supported strategies) to mitigate the potential transfer of disease from domestic sheep to bighorn sheep.” This standard will allow the flexibility to use the most appropriate management strategies for site-specific situations to mitigate the potential of disease transmission to bighorn sheep based on site-specific variables concerning topographic features of the landscape, herd dynamics, temporal and spatial information, and other best available science. These strategies could include, but are not limited to, double fencing, converting domestic sheep permits to cattle permits, or vacating the allotment completely. This standard, along with other plan components, would mitigate the potential for disease transmission to bighorn sheep from domestic sheep or goats, while allowing the flexibility for site-specific information.

Alternative 4 also includes plan component FW-GRZ-S 4, but it states, “Domestic sheep allotments shall not be authorized within bighorn sheep occupied habitat to mitigate the potential transfer of disease from

domestic sheep to bighorn sheep." This standard would require domestic sheep to be removed and would not allow the flexibility to utilize the most appropriate management strategies for site-specific situations to mitigate the potential of disease transmission to bighorn sheep. This standard with the other plan components would mitigate the potential for disease transmission to bighorn sheep from domestic sheep or goats.

The FEIS analyzed the effects of plan components in addressing the risk of disease transmission to bighorn sheep in the Public Interest Species: Rocky Mountain Bighorn Sheep section of the Wildlife, Fish, and Plants analysis.

Concern Statement 1073 **Bighorn Sheep, Domestic Sheep**

Plan components to minimize disease transmission for bighorn sheep need to include foraying range, and not just occupied habitat. Domestic sheep grazing must be also prohibited in areas near bighorn occupied habitat where quantitative assessments indicate a risk of contact with foraying bighorn sheep. Quantitative assessments incorporating best available science, including the risk of contact model are both feasible and necessary. Qualitative assessments are not appropriate given the Carson's record of repeatedly dismissing or ignoring known aspects of bighorn sheep biology and interspecies disease dynamics, including during this plan revision process.

Associated Comment Letters: 4848, 4951, 4994, 5303, 5574

Response

The following additional language was incorporated in the final Plan to include foraying into plan components: "Within bighorn sheep-occupied habitat or areas of high risk of contact…" This additional language includes the following footnotes: "As defined by New Mexico Department of Game and Fish or best available science and based on risk of contact models or best available science…" This plan component would include bighorn sheep foraying from non-Carson NF lands. To comply with the guideline, a risk of contact model or best available science would have to be used to figure out if area is high risk of contact. The following plan components include this addition: FW-NIS-S-3; Management Approach for Wildlife, Fish, and Plants-9; FW-GRZ-S-4; FW-GRZ-G-8; and FW-SU-S-3.

Concern Statement 1074 **Bighorn Sheep, Domestic Sheep**

Guidance contained in the domestic sheep allotment AOIs demonstrates that the Carson NF is aware of the risks posed to the Rio Grande Gorge herd from the Santos and Servilleta allotments. These AOIs include instructions for herders to reduce straying, including alterations to sheep camp movement requirements, requirements for counts, bighorn observation reporting instructions, and other measures to reduce the likelihood of contact between domestic sheep and bighorn sheep. While these measures are not effective, they nonetheless indicate the known high risk the allotments pose to bighorn sheep.

Associated Comment Letter: 4994

Response

Risk of contact for a specific allotment would be addressed through project-level NEPA analysis and would be required, by FW-DC-11 in the final Plan, to be determined by risk of contact modeling or best available science. The risk of contact assessment in appendix 1 of Potential Species of Conservation Concern Report was for all bighorn sheep herds on the Carson NF combined; the determined risk was low. In this regard, the Potential Species of Conservation Concern Report states, "For the Rio Grande Gorge herd there is no direct overlap between Carson NF permitted domestic sheep allotments and occupied bighorn sheep habitat (1 low rating and Figure 6). There is Carson NF permitted domestic sheep allotments within 10 miles of this herd (3 high rating), and private and other federally permitted domestic sheep flocks within 10 miles of this herd (3 high rating and Figure 7). The risk rating for this individual herd is 2.3 (moderate)."

Concern Statement 1075 **Bighorn Sheep, Domestic Sheep**

There are grazing allotments on Carson NF-managed land, which could lead to domestic sheep/goat and wild sheep contact. Any physical contact at all, will result in an elevated probability of impacting the survivability of the bighorn herd in the Rio Grande Gorge. Two of these allotments, the Santos and Servilleta present a potential problem for the bighorn sheep in the Rio Grande Del Norte National Monument and the Taos Pueblo lands. It is also conceivable that infected Rocky Mountain bighorn sheep could move from the Rio Grande Gorge back to Wheeler Peak. If domestic sheep were to be placed onto these two allotments, on the west side of the Rio Grande Gorge, they could easily infect the large herd in the gorge. ln the worst case, a single domestic sheep/goat contact with a bighorn sheep on one of these allotments could impact the 400 wild sheep jointly managed by the BLM and the Taos Pueblo. If this herd were to be lost, or seriously reduced in size, it would have a significant impact on public visitation and outdoor enjoyment in the Rio Grande Del Norte National Monument, as well as an economic impact of several hundred thousand dollars annually for the Taos Pueblo and the New Mexico Department of Game and Fish.

Associated Comment Letter: 4838

Response

Livestock type, capacity, suitability, and risk of contact for a specific allotment is addressed through project-level NEPA analysis. Project decisions, based on such analysis, to permit domestic sheep grazing must comply with the final Plan and would include assessing the risk of contact to bighorn sheep, as directed by FW-DC-11, through either risk of contact modeling or best available science.

The final Plan addresses the potential transfer of disease from domestic sheep to bighorn sheep with seven plan components (found in the following sections: Wildlife, Fish, and Plants; Sustainable rangeland and Livestock Grazing; Nonnative Invasive Species; Designated Wilderness; Special Use; and Designated Wild and Scenic River).

The following plan components use the New Mexico Department of Game and Fish definition of bighorn sheep-occupied habitat or best available science. “Areas of high risk of contact” are based on risk of contact models or best available science. FW-NIS-S-3 requires that domestic goats and sheep not be used to control invasive plants in native bighorn sheep-occupied habitat or areas of high risk of contact. FW-GRZ-S-4 requires that, within bighorn sheep-occupied habitat or areas of high risk of contact, domestic sheep allotments be managed to mitigate the potential transfer of disease from domestic sheep to bighorn sheep (e.g., fencing, temporal separation, increased herding, herding dogs, potential vaccine, or other scientifically supported strategies). WFP-Management Approach-1 encourages forest managers to coordinate with the New Mexico Department of Game and Fish, the U.S. Fish and Wildlife Service, adjacent landowners, adjacent Federal and State land managers, and federally recognized tribes regarding listed and native species; reintroductions, introductions, or transplants and habitat improvements of listed or native species; control or eradication of nonnative species; control and management of diseases; and the management of sport and native fishes and animal, including the identification of refugia for native fish and animals. Management Approach-9 for Wildlife, Fish, and Plants encourages forest managers to consider converting permitted domestic sheep allotments that are in Rocky Mountain bighorn sheep-occupied habitat or areas of high risk of contact to permitted cattle allotments. FW-GRZ-G-8 prohibits permit conversions to domestic sheep or goats within bighorn sheep-occupied habitat or areas of high risk of contact, to mitigate the potential transfer of disease from domestic sheep to bighorn sheep. FW-SU-S-3 prohibits special use permit authorization for domestic sheep or goats (e.g., by outfitters and guides or for filming) in bighorn sheep-occupied habitat. DA-WILD-S-5 prohibits unpermitted pack goats in wilderness. DA-WSR-S-4 prohibits unpermitted pack goats in the Rio Grande Wild and Scenic River corridor. These plan components will mitigate risk of disease transmission between domestic sheep and bighorn sheep on the Carson NF.

Concern Statement 1076 **Bighorn Sheep, Domestic Sheep**

Taos Pueblo Wilderness Program has concerns about the forest plan revision and any changes made to existing areas that permit sheep grazing, or any plans to create future areas for domestic sheep grazing within Carson NF.

Associated Comment Letter: 5786

Response

Tribal consultation with Taos Pueblo is required by law and is ongoing. The Carson NF will continue to provide Taos Pueblo with project-level NEPA information. Also, currently the Forest and Taos Pueblo are a part of Rio Grande bighorn sheep working group. Management Approach-1 for Wildlife, Fish, and Plant in the final Plan encourages forest managers to coordinate with the New Mexico Department of Game and Fish, the U.S. Fish and Wildlife Service, adjacent landowners, adjacent Federal and State land managers, and federally recognized tribes regarding listed and native species reintroductions, introductions, or transplants; habitat improvements of listed or native species; control or eradication of nonnative species; control and management of diseases; and the management of sport and native fishes and animals, including the identification of refugia for native fish and animals. FW-GRZ-G-8 prohibits permit conversions to domestic sheep or goats in bighorn sheep-occupied habitat or areas of high risk of contact, to mitigate the potential transfer of disease from domestic sheep to bighorn sheep. Finally, FW-WFP-DC-11 directs management to maintain at (or decrease to) 'low,' the risk of disease transmission from permitted domestic sheep or goats to bighorn sheep.

Concern Statement 1077 **Bighorn Sheep, Alpine and Tundra**

There appears to be no clear reference to habitat improvement or maintenance within alpine tundra and rocky feature habitat specifically for bighorn sheep in the Carson NF management plan. Due to climate change, the forest canopy will most likely encroach into the alpine areas. We believe this should be more clearly addressed in the Management Plan. Currently, encroachment of tree/shrub vegetation is reducing the amount of forage available to bighorn sheep and other alpine wildlife. This is especially important during the winter months. With increasing bighorn sheep herd size coupled with reduced available habitat, there is increased probability that bighorn sheep forays off Wheeler Peak, the Pecos and Latir alpine areas will occur. This will result in greater risk of contact with domestic sheep and goats.

Associated Comment Letter: 4838

Response

Under the final Plan, projects implemented in the alpine and tundra and rocky feature habitats would have to move toward desired conditions for these habitats to be in compliance with the Plan. Appendix H, Section 5 of the FEIS, Volume 3 lists all plan components and management approaches that maintain and improve ecological condition and mitigate threats for Rocky Mountain bighorn sheep, including plan components for alpine and tundra vegetation communities and rocky features.

Most alpine and tundra habitat is within designated wilderness or recommended wilderness. The Plan follows the Wilderness Act, which does not allow mechanical treatment in wilderness; additionally, the plan discourages mechanical uses in recommended wilderness. The Wilderness Act of 1964 established the terms and conditions for designation and management of wilderness on national forests; all subsequent legislation designating wilderness adopts its direction, but may contain additional special provisions or exceptions for management of a particular area. Typically, these special provisions allow for consideration of activities or Section 4c Prohibited Uses; however, approval is not mandatory, and a minimum requirements analysis should be completed. Any changes to the Wilderness Act would have to be made by Congress. Table 40 in the FEIS Volume 1 lists plan language to mitigate impacts to wildlife from climate change.

The following additional language was incorporated in the final Plan to include foraying in plan components: "Within bighorn sheep-occupied habitat or areas of high risk of contact…." This additional

language includes the following footnotes: “As defined by New Mexico Department of Game and Fish or best available science and based on risk of contact models or best available science….” This plan component would include bighorn sheep foraying from non-Carson NF lands. To comply with the guideline, a risk of contact model or best available science would have to be used to determine if an area has a high risk of contact. The following plan components include this addition: FW-NIS-S-3; Management Approach for Wildlife, Fish, and Plants-9; FW-GRZ-S-4; FW-GRZ-G-8; and FW-SU-S-3.

Concern Statement 1078 **Bighorn Sheep, Domestic Sheep**

Supporting public comments of action alternatives that include plan components and management approaches that are intended to provide strategies for mitigating potential pathogen transmission to Rocky Mountain bighorn sheep from domestic sheep or goats.

Associated Comment Letters: 4838, 4848

Response

The final Plan includes plan components that provide strategies for mitigating potential pathogen transmission to Rocky Mountain bighorn sheep from domestic sheep or goats (FW-NIS-S 3; FW-WFP-DC 11; Management Approach for Wildlife, Fish, Plants-9; FW-GRZ-S-4; FW-GRZ-G-8; Sustainable Rangelands and Livestock Grazing Management Approach-8; FW-SU-S-3; DA-WILD-S-4; and DA-WSR-S-4) .

Concern Statement 1079 **Bighorn Sheep, Domestic Sheep**

Within the Potential Species of Conservation Concern Report, Step 2 of Appendix 1 references the proximity of Santos and Servilleta allotments as being within 6 miles from occupied bighorn sheep habitat whereas the graph depicts the Servilleta allotment within 5 miles. The summary goes on to state that there has been no known and/or reported sighting of foraying bighorn sheep in or near any of these Carson NF permitted domestic sheep grazing allotments. This portion seems to suggest that because a foray into the allotment has not yet occurred, the risk of infection is low. However, in evaluating sheep habitat, the Technical Staff of the Desert Bighorn Council recommends at minimum an 8-mile separation between bighorn and domestic sheep unless topographic features or physical barriers prevent—of which the Carson NF has neither. In addition, the 2007 FONSI Decision regarding Livestock Grazing Management for the Carson Mojino, East Pino, Servilleta, and Tres Orejas Allotments found that the Carson-Mojino allotment presented a high risk of disease transmission to the Rio Grande Gorge herd, when the herd population at the time was a mere 23 sheep, and the Carson-Mojino allotment was further from occupied sheep habitat (5.02 aerial miles) than the existing Servilleta allotment (4.26 aerial miles). We ask that there be more consistency in Carson NF's decisions of what constitutes high risk.

Associated Comment Letter: 4899

Response

In the Potential Species of Conservation Concern Report, Appendix 1, Step 2, the proximity of Santos and Servilleta allotments was changed to “within 5 to 6 miles.” Also, recently acquired information about bighorn sheep foraying on the Carson NF was added to the appendix. According to the decision notice and finding of no significant impact for the Servilleta, Tres Orejas, Carson Mojino, and East Pino Allotments Project, no risk of contact modeling or assessment was completed (USDA FS Carson NF 2007). Lastly, the Carson NF performed a risk of contact assessment as part of the Potential Species of Conservation Concern Report, Appendix 1; which defined ‘high risk.’ That risk of contact assessment was used during this planning process.

According to the 2012 Planning Rule Directives (FSH 1909.12, 12.52a), the regional forester is responsible for identifying the Species of Conservation Concern for a plan area, not individual herds within the plan area. As such, bighorn sheep were evaluated as a single SCC across the Carson NF, in compliance with 2012 Planning Rule Directives (FSH 1909.12, 12.52c). In the Potential Species of

Conservation Concern Report, Appendix 1, the Carson notes that the Rio Grande herd was at risk of foraying into areas occupied by domestic herds on both public and private lands; however, for all bighorn herds across the Carson NF, the risk of contact was assessed as low. Determining the risk of contact for individual allotments would be completed during site-specific environmental analysis for grazing permit. The final Plan provides a programmatic framework that guides site-specific actions, but does not authorize, fund, or carry out any projects or activities (including grazing permits).

Concern Statement 1080 **Bighorn Sheep, Domestic Sheep**

Within the Potential Species of Conservation Concern Report, Step 2 of Appendix 1 addresses the habitat trend to be considered stable, which is justified by ecological characteristics being primarily changed through geologic forces. However, the Long Range Plan for the Management of Rocky Mountain Bighorn Sheep in New Mexico, which the Draft cites several times, also states “the susceptibility of bighorn sheep to diseases and parasites transmitted during contacts with domestic sheep and goats and the continuing loss of low elevation habitat constitute circumstances to which this plan must give special consideration.” In addition, the appendix never gives any consideration to competition with livestock and ungulates for suitable forage. While bighorn sheep are generalists, they can be adversely affected by poor range conditions such as low forage availability and diversity. Being that the presence of nearby livestock allotments is guaranteed to alter the forage availability in the Carson NF, it seems reasonable that resource and forage quality needs some level of consideration in the decision to qualify bighorn sheep habitat as “stable.” Bighorn sheep face considerable grazing competition from domestic and wild ungulates. Ongoing presence of domestic sheep and other ungulates on and adjacent to bighorn sheep habitat is a stressor that impairs Forest Service lands from providing the ecological conditions that bighorn sheep require. In the Rio Grande NF, for example, it was recognized as a potential risk factor that Rocky Mountain bighorn sheep compete with domestic sheep, elk, and pronghorn antelope, among other ungulates. Competition with domestic livestock has long played a role in the decline of mountain sheep across the West. Surprisingly, the risk of competition from other species is not mentioned a single time in the Carson NF's evaluation of Rocky Mountain bighorn sheep as a potential species of conservation concern.

Associated Comment Letters: 4899, 4901

Response

According to the 2012 Planning Rule Directives (FSH 1909.12, 12.52c), one of the criteria to determine whether a species is secure and that its continued persistence in the plan area is not at risk is knowledge of the species’ habitat trends and distribution. This criterion was used to determine whether bighorn sheep was a species of conservation concern for the Carson NF. The best available science was used to determine habitat trends for the Carson, as described in the Carson NF Assessment Report of Ecological, Social, and Economic Conditions, Trends, and Sustainability (USDA FS Carson NF 2015). In this assessment, current condition and future trends of ecological response units (ERUs, vegetation types) were modeled using the Vegetation Dynamics Development Tool (ESSA 2007) (VDDT). This tool was used to simulate stand structure 15 years, 100 years, and 1,000 years into the future under current management. The data presented in the Terrestrial Vegetation (p. 34) and Riparian Vegetation (p. 116) sections of the assessment report (USDA FS Carson NF 2015) are modeled at the plan or forestwide scale of analysis. Additional VDDT modeling for departure at current conditions was performed at the local scale for terrestrial ecosystems (USDA FS Carson NF 2015, p. 13). Habitat trends from this modeling were used in the analysis of bighorn sheep in the Potential Species of Conservation Concern Report. Consideration of competition between bighorn sheep and livestock or other ungulates for suitable forage was also considered in this analysis, as described in the FEIS.

Concern Statement 1081 **Bighorn Sheep Population**

Within the Potential Species of Conservation Concern Report, Step 2 of Appendix 1, it states that for bighorn sheep an increasing population is a "stable" population. As quoted by William Dunn in his bighorn habitat evaluation, "the survival of a population is never guaranteed no matter how large it is." Therefore, it unreasonable that an increasing population trend would be used to justify the assumed likelihood that bighorn sheep would persist in the Carson NF when so many catastrophic factors are present.

Associated Comment Letter: 4899

Response

In accordance with the 2012 Planning Rule Directives for the development of Species of Conservation Concern (FSH 1909.12, 12.52c), one of the criteria to determine whether a species is secure and its continued persistence in the plan area is not at risk is knowledge of species abundance (population trend) and distribution. This is one of the criteria used to determine whether the bighorn sheep is secure and its continued persistence is not at risk in the planning area. The complete evaluation can be found in the Potential Species of Conservation Concern Report.

Concern Statement 1082 **Bighorn Sheep, Domestic Sheep**

While the draft plan contains several desired conditions, standards, objectives and guidelines associated with protecting the Rocky Mountain bighorn sheep that inhabit Carson NF lands, there is no plan to address the possibility of bighorn sheep living on BLM-managed land being infected by domestic sheep on Carson NF-managed lands. Sustainable Rangelands and Livestock Grazing Standards (FW-GRZ-S) Item 4 does not address the case where bighorn sheep from non-Carson NF lands come into contact with domestic sheep or goats on Carson NF-managed lands. Also, suggest emphasizing the importance of maximum separation distances somewhere in this plan.

Associated Comment Letter: 4838

Response

The following additional language was incorporated in the final Plan to include foraying into plan components: "Within bighorn sheep occupied habitat or areas of high risk of contact…" This additional language includes the following footnotes: "As defined by New Mexico Department of Game and Fish or best available science and based on risk of contact models or best available science…" This plan component would include bighorn sheep foraying from non-Carson NF lands. To comply with the guideline, a risk of contact model or best available science would have to be used in order to figure out if area is high risk of contact. The following plan components include this addition: FW-NIS-S-3; Management Approaches for Wildlife, Fish, and Plants-9; FW-GRZ-S-4; FW-GRZ-G-8; and FW-SU-S-3.

Additionally, maximum separation distances, included in component FW-GRZ-S-4, is one management solution that could mitigate the potential transfer of disease from domestic sheep to bighorn sheep. Temporal separation was added to FW-GRZ-S-4 as another management solution.

Concern Statement 1083 **Bighorn Sheep, Domestic Sheep**

Wildlife, Fish and Plant Desired Condition (FW-WFP-DC-11), "Risk of disease from permitted domestic sheep or goats to bighorn sheep is low." This plan component is not addressed in the objectives (FW-WFP-O), in the guidelines (FW-WFP-G), or within Sustainable Rangelands and Livestock Grazing Desired Conditions (FW-GRZ-DC). The Final Plan should include an item 8: "Transmission of disease from livestock to wildlife or from wildlife to livestock is minimized," page 106.

Associated Comment Letter: 4838

Response

Projects must move toward desired conditions, including FW-WFP-DC-11; thus, projects would have to decrease the risk of disease to comply with the final Plan. Also, FW-GRZ-S-4 requires allotments to be managed to mitigate the potential transfer of disease, which would also minimize the risk of disease transmission from livestock to wildlife.

Concern Statement 1084 **Bighorn Sheep, Evaluation**

Rocky Mountain bighorn sheep should be a species of conservation concern. According to the Forest Service's 2012 Planning Rule, a species of conservation concern is a species "that is known to occur in the plan area and . . . that the best available scientific information indicates substantial concern about the species' capability to persist over the long term." 26 CFR § 219.9(c). There is no dispute as to the fact that Rocky Mountain bighorn sheep are native and known to occur in the plan area. For determining whether there is substantial concern, Forest Service guidance directs the agency to consider factors including: "species identified as SCCs in adjoining NFS plan areas," "significant threats to populations or habitat from stressors on and off the plan area," "restricted ranges," and "restricted habitat within the plan area." FSH 1909.12 ch 10, §12.52(d)(5)(c). Every single one of these factors exist with respect to Rocky Mountain bighorn sheep in the Carson NF. The U.S. Forest Service and Rocky Mountain bighorn sheep advocates have a shared interest in working toward the long-term persistence of wild sheep in national forests. Historically, Rocky Mountain bighorn sheep were well-distributed across the western United States, numbering well over a million animals. However, this once prolific population began a sharp decline in the mid-1800s to early 1900s as a result of loss of habitat, unregulated hunting, and devastating disease exposure. These factors resulted in massive die offs of Rocky Mountain bighorn sheep and many of the herds residing in lower elevation areas that were near or accessible to human communities were completely wiped out. Accordingly, even with recent recovery efforts, it is now estimated that there are only about 45,000 Rocky Mountain bighorn sheep remaining in the U.S. Considering a large amount of State, Federal and tribal dollars have been allocated to restoring, reintroducing, and studying Rocky Mountain bighorn sheep within New Mexico and across the West, it is critical that this species continue to be managed with a high level of concern—as a species of conservation concern.

Associated Comment Letter: 4901

Response

The Carson NF followed the 2012 Planning Rule directives (FSH 1909.12 §12.52(d)(5)(c)) when evaluating bighorn sheep as a species of conservation concern (SCC). The directives state that, "When developing the list of potential SCCs, consideration must also be given to: Species identified as SCCs in adjoining NFS plan areas (including plan areas across regional boundaries)." Bighorn sheep was considered a possible species of conservation concern because it occurs on the Carson NF, was a species of concern by Taos Pueblo, a sensitive species of adjoining Federal lands, and identified as a species of conservation concern on adjoining Federal lands. Through the species of conservation concern evaluation, the Forest determined that this species does not currently warrant species of conservation concern listing on the Carson NF because the bighorn population trend is increasing, its habitat is stable and abundant, and the overall likelihood of contact with domestic sheep for the Carson NF bighorn sheep population is low (see Potential Species of Conservation Concern Report for evaluation).

According to FSH 1909.12, 23.13c, species-specific plan components are not required for circumstances outside of the authority of the Forest Service. An example of such a circumstance is given in FSH 1909.12, 23.13c: "Domestic sheep grazing on private lands intermixed with or adjacent to National Forest System lands in the west. The contact of bighorn sheep with domestic sheep can transmit diseases to bighorn sheep and can cause die-offs of the affected bighorn sheep herds. Therefore, a reduction in viable populations of bighorn sheep may occur because of land use outside National Forest System lands." Sheep grazed on private lands have been identified as one possible off-forest stressor for Carson bighorn sheep, but is beyond the authority of the Forest Service to mitigate.

See also responses to Concern Statement 1080 and Concern Statement 1089.

Concern Statement 1085 **Bighorn Sheep, Best Available Science**

Best available science mandates listing of Rocky Mountain bighorn sheep. Under the 2012 Planning Rule, the responsible official must “use the best available scientific information to inform the planning process” and must “document how the best available scientific information was used to inform . . . the plan or amendment decision.” 36 CFR § 219.3. For the reasons outlined below, the Forest Service failed to use the best available scientific information (BASI) in making their determination that there is not substantial concern about the species' ability to persist. In this letter, we respectfully submit that the BASI dictates that Rocky Mountain bighorn sheep must be managed as an SCC. BASI can come from a number of sources, but most notably the Planning Rule requires the responsible official to “coordinate with or provide opportunities for . . . the public to provide existing information” for the planning process. 36 CFR § 219.5(a)(1). Under regulation and agency guidance, it is critical to leverage the expertise provided by the public when the Forest Service is identifying species of conservation concern. FSH 1909.12 ch 20, § 21.22(a)(1)(d)-(e); 36 CFR § 219.6.

Associated Comment Letter: 4901

Response

The best available science that the Carson NF used to evaluate bighorn sheep as a species of conservation concern is listed in the reference section of the Potential Species of Conservation Concern Report. The Carson NF Potential Species of Conservation Concern list was released to the public in 2015, and has been available for public input since this time. The Carson NF has met with other government agencies and other public interest groups on numerous occasions to discuss bighorn sheep (see public involvement section of the FEIS).

Concern Statement 1086 **Bighorn Sheep, Cross Boundary Management**

Under Forest Service guidance, the agency must consider “species identified as SCCs in adjoining NFS plan areas.” FSH 1909.12 ch 10, §12.52(d)(5)(c). Rocky Mountain bighorn sheep is identified as a species of conservation concern in an adjoining plan area to the Carson NF, the Rio Grande NF. This factor alone should have merited discussion in the evaluation of potential species of conservation concern, yet nowhere in the evaluation did the Forest Service acknowledge management of Rocky Mountain bighorn sheep as a species of conservation concern in the Rio Grande NF. In the Rio Grande evaluation process, a listed threat and risk factor for Rocky Mountain bighorn sheep was “interagency and cross-boundary management.” Rio Grande NF, Rocky Mountain Bighorn Sheep: SCC Overview, at 7 (2016). In explaining this risk factor, the Forest Service stated that "coordination and consistency of management approaches regarding risk of contact with domestic sheep, monitoring, permit administration, and communication remains a significant barrier to bighorn sheep management across the landscapes that support their long-term viability and population persistence." If this were a risk factor in the Rio Grande NF, it is also a risk factor in the Carson NF. Listing Rocky Mountain bighorn sheep as a species of conservation concern in the Carson NF would be the first step toward fulfilling the Forest Service's commitment to adopting a consistent management approach to the species. In many other parts of the Carson Forest Plan, the agency points to the numerous similarities in habitat and wildlife conditions between both the Carson and the Rio Grande. For instance, the region of comparison for wildlife outstandingly remarkable values in the wild and scenic river context relies on the similarities between the four ecoregional provinces that intersect the Carson NF. Carson NF, Wild and Scenic River Eligibility Evaluation, at 6 (2018) (“the wildlife within this proposed region of comparison are similar in terms of species composition and habitat characteristics”). The Rio Grande NF is squarely in that region. The cumulative effects analysis also lumps together the Carson NF and Rio Grande NF, noting that plants and animals in both forests alike will be vulnerable to the consequences of future resource use, recreation, and climate change. Carson NF, Draft EIS, at 385 (2019). Given the interconnectedness between the two areas, the Forest Service should aim for consistency in management approach and list

Rocky Mountain bighorn sheep as a species of conservation concern in the Carson. Based on the need for consistent management between national forests, the best available scientific information, and public input and support, there is substantial concern about the persistence of Rocky Mountain bighorn sheep in the Carson NF over the long term. Consistent with stated Forest Service direction for identification and selection of species of conservation concern, Rocky Mountain bighorn sheep meet the criteria for being identified as a species of conservation concern. FSH 1909.12 ch 10, §12.52.

Associated Comment Letter: 4901

Response

The Carson NF followed the 2012 Planning Rule directives (FSH 1909.12 ch10, §12.52(d)(5)(c)) in evaluating bighorn sheep as a species of conservation concern (SCC), including consideration of species identified as SCCs in adjoining NFS plan areas (including plan areas across regional boundaries)." Bighorn sheep was considered a possible species of conservation concern because it occurs on the Carson NF, is a species of concern for Taos Pueblo, a sensitive species on adjoining Federal lands, and identified as a species of conservation concern on adjoining Federal lands. The Carson then evaluated whether bighorn sheep should be a species of conservation concern on the Carson NF. The Carson NF does not have the same bighorn sheep habitat conditions, population trends, or threats as the Rio Grande NF bighorn sheep herds; the determination of bighorn sheep as a species of conservation concern was therefore different for the Carson NF than the Rio Grande NF.

The risk factor of "coordination and consistency of management approaches regarding risk of contact with domestic sheep, monitoring, permit administration, and communication remains a significant barrier to bighorn sheep management across the landscapes that support their long-term viability and population persistence," identified for the Rio Grande NF bighorn sheep herds is not a risk factor for the Carson NF herds because the Carson NF is a member of the Rio Grande Gorge Bighorn Sheep Herd Working Group and has a good working relationship with the New Mexico Department of Game and Fish, Taos Pueblo, and Taos BLM Field Office. Please see the Potential Species of Conservation Concern Report for more detailed rationale as to why bighorn sheep was not determined to be a species of conservation concern on the Carson NF.

Concern Statement 1087 **Bighorn Sheep, Domestic Sheep**

Disease, as the Forest Service correctly notes, remains one of the biggest threats to the continued persistence of the bighorn sheep. All 14 public-land grazing states with bighorn sheep have experienced at least one bighorn sheep respiratory disease die-off in the last 14 years, and most have had numerous events. According to data compiled by the Western Association of Fish and Wildlife Agencies Wild Sheep Working Group (WAFWA WSWG), a total of 13,391 animals have been lost to these events since 1980. In addition, WAFWA WSWG estimates that as a result of these respiratory disease events, nearly 11,000 lambs born to surviving ewes died of pneumonia within a few months. While the initial loss of adult animals is significant, it is the ongoing depressed lamb recruitment in the years following respiratory disease events that impedes herd recovery and threatens persistence. Despite conservationist and researcher's keen interest in mitigating the risk of disease transmission to bighorn sheep, disease will continue to threaten the species for the foreseeable future. Currently, some of the herds in the plan area are more at risk of disease than the species of conservation concern documentation purports to indicate. For instance, one of the herds in the Carson is at a high risk of foraying into areas occupied by domestic herds on both public and private land, based on the given metrics. A threat to one herd is not reduced simply by averaging out the risk factor among all the herds in the plan area. Yet, the Forest Service has attempted to do exactly that. Considering the susceptibility of the species to potential disease epizootics, adopting the most protective management approach available— identifying Rocky Mountain bighorn sheep as a species of conservation concern—is necessary and within the authority and inherent capability of the agency.

Associated Comment Letter: 4901

Response

According to the 2012 Planning Rule Directives (FSH 1909.12, 12.52a), the regional forester is responsible for identifying the species of conservation concern for a plan area, not individual herds within the plan area. As such, bighorn sheep were evaluated as a single species of conservation concern across the Carson NF, in compliance with 2012 Planning Rule Directives (FSH 1909.12, 12.52c). In the Potential Species of Conservation Concern Report, Appendix 1, the Carson notes that the Rio Grande herd was at risk of foraying into areas occupied by domestic herds on both public and private lands; however, for all bighorn herds across the Carson NF, the risk of contact was assessed as low. Risk of contact for a specific allotment is managed at a project-level review; application of a risk of contact model and/ or best available science to this end would be required by FW-WFP-DC-11 in the final Plan. The selected alternative (alternative 2-modified) includes fine-filter plan components for Rocky Mountain bighorn sheep, directing management emphasis on mitigating the potential for disease transmission to bighorn sheep from domestic sheep or goats, including in occupied and foraying habitat.

Concern Statement 1088 **Bighorn Sheep, Herd Size**

Rocky Mountain bighorn sheep may also be at risk due to current herd sizes and each herd's relative isolation. Estimates for herd capacity rely on a study and state plan conducted and drafted over a decade and a half ago. There has likely been movement between herds in the intervening years, and two of the five herds in the Carson NF do not have an identified carrying capacity. Therefore, a decision based in part on potentially outdated scientific information regarding carrying capacity and herd size does not represent a decision supported by best available scientific information.

Associated Comment Letter: 4901

Response

In the Potential Species of Conservation Concern Report, Appendix 1, carrying capacity was included as additional information about individual bighorn sheep herds; it was not the basis for decision-making regarding the potential of bighorn sheep as a species of conservation concern. Carson NF bighorn sheep population trend information provided by New Mexico Department of Game and Fish from 2004 to 2018 is one of the criteria used to evaluate bighorn sheep potential as a species of conservation concern; this information was the most up-to-date data available at the time of the assessment.

Concern Statement 1089 **Bighorn Sheep, Isolation**

The Forest Plan directs the agency to consider “restricted ranges” and “restricted habitat within the plan area” when determining which species should be listed as species of conservation concern. FSH 1909.12 ch10, §12.52(d)(5)(c). Rocky Mountain bighorn sheep populations in the Carson NF have restricted ranges and restricted habitat within the plan area. By their nature, bighorn sheep are altitudinal migrants and remain isolated in restricted alpine zones throughout much of the year. Their habitat is also restricted as a result of intentional management strategies—due to the risk of disease transmission, herds have been largely managed to remain separate from one another. The isolation of Rocky Mountain bighorn sheep means that each herd, if and when there is a disease event, is at greater risk of extirpation. There are no reserve herds to take a diseased herd's place, and thus a herd's stable population numbers in a given year cannot be taken as an indication of long-term health and stability. Isolation also severely restricts the genetic diversity of each herd, further putting at risk the species' persistence in the plan area and region. As it stands, there is no such movement and genetic interchange among the isolated herds within the Carson NF, or among herds in the region generally. Until such a meta-population structure has been established, the Forest Service must account for the risk posed by herd isolation. Managing the species as a species of conservation concern will allow the agency to implement the proper plan components necessary for achieving that goal.

Associated Comment Letter: 4901

Response

Suitable bighorn sheep habitat is abundant and habitat trend is stable. According to the Carson NF 2014 Assessment (USDA FS Carson NF 2015), screes, cliffs, and rock features are widespread microsites within all vegetation communities. These ecological characteristics are inherently stable for long periods of time because they are changed primarily by geologic forces. While the majority of the Rocky Mountain bighorn sheep on the Carson NF are found in the alpine and tundra (ALP) ERU (Assessment p. 34) and wilderness, two herds are found at lower elevation. The Rio Grande Herd is found in the cliff and rocky habitat of the Rio Grande Gorge, and the Red River herd was bighorn sheep from either the Latir or Wheeler Peak herd that expanded into lower-elevation suitable rocky feature habitat in Red River Canyon. The Carson NF has ample unoccupied habitat available for herd expansion, as demonstrated by the Red River herd. The management and genetic interchange of bighorn sheep herd is under the purview of New Mexico Department of Game and Fish.

Concern Statement 1090 **Bighorn Sheep, Plan Components**

The wildlife plan components built into the land management plan (LMP) do not offer sufficient protections for the Rocky Mountain bighorn sheep. One of the purposes of the 2012 Planning Rule was to supply the Forest Service with the authority to maintain the persistence of native species in a plan area through complementary ecosystem (coarse-filter) and species-specific (fine-filter) approaches. 36 CFR § 219.9. Listing a species as a species of conservation concern is the only way to guarantee that a species will be managed via a fine-filter approach; among other tools, species of conservation concern listing allows the Forest Service to address non-habitat risks that endanger species viability. 36 CFR § 219.9(b). For example, fine-filter components allow specific timing restrictions, based on individual species' needs. The threat of disease epizootics, habitat fragmentation and herd isolation, lack of regional and inter-agency coordination, and all the other risks are threats that can only be adequately addressed through a fine-filter management approach. Beyond opening up the opportunity for more Rocky Mountain bighorn sheep-specific plan components, species of conservation concern listing would mean that bighorn sheep are given additional protections currently outlined in the land management plan. There are a number of plan components that only direct protective management standards and approaches to species listed as species of conservation concern. For example, cliffs and rocky features, which the Forest Service acknowledges provide “important habitat for Rocky Mountain bighorn sheep,” only have protective plan components for species of conservation concern. Carson NF, Draft LMP, at p. 83 (2019) (“consider working with public affairs . . . State and other Federal agency partners . . . and the public to internally and externally increase the awareness of valuation of these features, especially for threatened, endangered, and species of conservation concern.”). One desired condition for wildlife, fish, and plants throughout the Carson is “ecological conditions [that] improve conditions for species of conservation concern.” In contrast, the LMP only seeks ecological conditions that would sustain populations of unlisted native species. Given the threats to Rocky Mountain bighorn sheep, the goal should be improving the conditions for the species, not merely sustaining them. Plan monitoring is a crucial tool for assessing progress and effectiveness of plan implementation. However, in the LMP, some monitoring components are reserved only for the status of ecological conditions related to the various at-risk species within the plan area (which includes species of conservation concern). Carson NF, Draft LMP, at 179 (2019). If Rocky Mountain bighorn sheep are not listed as a species of conservation concern, the ecological conditions that support their habitat will not be effectively monitored. To be sure, the land management plan includes forestwide plan components for wildlife, fish, and plants. However, there are very few Rocky Mountain bighorn sheep-specific plan components. The first, a desired condition, is that “risk of disease transmission from permitted domestic sheep or goats to bighorn sheep is low.” The next management approach is to “consider converting permitted domestic sheep allotments that are within Rocky Mountain bighorn sheep-occupied habitat to permitted cattle allotments.” Two sustainable rangelands and livestock grazing standards are that “domestic sheep allotments shall be managed . . . to mitigate the potential transfer of disease from domestic sheep to bighorn sheep, within bighorn sheep-occupied habitat” and “permit conversion to domestic sheep or goats should not be

allowed within bighorn sheep-occupied habitat." Special use permit authorization, to allow use of domestic sheep or goats (by outfitters and guides, e.g.), is prohibited in Rocky Mountain bighorn sheep-occupied habitat. However, it is notable that the desired conditions are only aspirational and do not place any requirements on Forest Service management of Rocky Mountain bighorn sheep. Likewise, plan objectives are only projections and not actionable constraints. The only action-forcing plan components that directly affect Rocky Mountain bighorn sheep have to do with avoiding disease transmission from domestic sheep and goats. Those components do not go far enough in granting the Forest Service the authority and flexibility to deal with future disease issues as they arise, and they in no way address the myriad other threats to the species.

Associated Comment Letter: 4901

Response

According to the 2012 Planning Rule, "Desired Conditions describe the aspirational vision for the Carson NF. They are the ecological, cultural, and socioeconomic aspirations toward which management of the land and resources of the plan area is directed. They are not commitments or final decisions allowing specific projects or activities; rather, they guide the development of projects and activities. Projects are designed to maintain or move toward desired conditions and to be consistent with the plan over the long term" (FSH 1909.12 § 22.11) Desired conditions are therefore not merely aspirational but require projects to be designed to move toward them.

The final Plan includes the following plan components that would improve or maintain ecological conditions for bighorn sheep: FW-VEG-DC-1-3, FW-VEG-DC-5, FW-VEG-DC-10-11, FW-VEG-DC-14, FW-VEG-VEG-DC-20, Vegetation Management Approach-7, FW-VEG-ALP-DC-1-4, FW-ALP-DC-6-7, FW-CFR-DC-1-3, FW-WFP-DC-1-2, FW-WFP-DC-4-6, FW-WFP-DC-9,FW-TFA-DC-5, DA-WILD-DC-1-4, MA-RWMA-DC-1-4, MA-VVMA-DC-1-3, MA-SAMA-DC-1-2, FW-WFP-O-1-2, FW-PAR-DC-2-3, and Wilderness Management Approach-4.

The final Plan also includes the following plan components to mitigate all threats from Forest Service management activities to bighorn sheep: FW-VEG-ALP-G-1, FW-CRF-G-1, Cliffs and Rocky Features Management Approach-1, FW-WFP-DC-7, FW-WFP-DC-11, FW-WFP-G-4, Wildlife, Fish, and Plants Management Approaches-1-6 and -8-9, FW-NIS-S-3, FW-GRZ-DC-4, FW-GRZ-S-1-4, FW-GRZ-G-8, Sustainable Rangelands and Livestock Grazing Management Approaches-6 and -8-9, FW-REC-G-1, FW-TFA-G-7-8, FW-SU-S-3, Special Uses Management Approach-4, DA-WILD-S-5, Wilderness Management Approach-4, and DA-WSR-S-4. All of the plan components that provide ecological habitat needs and mitigate threats for bighorn sheep are listed in the FEIS (Volume 3, Appendix H, Section 5). Effects by alternative have been analyzed for bighorn sheep in the FEIS (Volume 1; Wildlife, Fish, and Plants Environmental Consequences Species of Public Interest Section). Lastly, the final Plan includes a monitoring question related to bighorn sheep (Chapter 4, Monitoring Topic V11).

Concern Statement 1091 **Bighorn Sheep, Evaluation Criteria**

Rocky Mountain bighorn sheep should be a Species of Conservation Concern. Among the rationale used for excluding Rocky Mountain bighorn sheep as an SCC was because they are huntable. Based on conversations with Forest Service Washington Office Wildlife Program staff, whether or not a species is hunted is immaterial to species of conservation concern consideration. The Forest Service cannot rationally use hunting as both a risk factor and as evidence of a species not being at risk, as it attempts to do in the Carson NF Plan. FSH 1909.12 ch10, §12.52(b)(4). The fact that hunting is permitted in a given year is only relevant for assessing the health of a herd or population in that given year, not its health in the long term. Even if hunting is not a risk factor for Rocky Mountain bighorn sheep, the fact that the species is huntable in no way disqualifies it from being listed as a species of conservation concern. Also, under regulation and agency guidance, it is critical to leverage the expertise provided by the public when the Forest Service is identifying species of conservation concern. FSH 1909.12 ch 20, § 21.22(a)(1)(d)-(e); 36 CFR § 219.6.

Associated Comment Letter: 4901

Response

Rocky Mountain bighorn sheep has been evaluated as a species of conservation concern (see Potential Species of Conservation Concern Report, Appendix 1). As detailed in that report, the rationale for not identifying Rocky Mountain bighorn sheep as a species of conservation concern includes Rocky Mountain bighorn sheep are secure within the Carson NF and their continued long-term persistence is not at risk, since their population trend is increasing, habitat trend is stable, and the overall likelihood of contact with domestic sheep for the Carson NF bighorn sheep population is low. The report also acknowledges that the species is available for hunting, but that the population of the herds on the Carson is increasing.

Lastly, the Carson NF began its forest plan revision process, including evaluation of potential species of conservation concern in May 2014. The initial potential list of species of conservation concern contained 1,384 species, which included Rocky Mountain bighorn sheep. The Carson NF then identified which of these 1,384 species actually occurred on the forest. Internal databases (USDA FS 2014b), breeding bird species survey data (Beason et al. 2006, 2007), New Mexico Department of Game and Fish Species of Greatest Conservation Concern (NMDGF 2016), and museum databases, including Arctos Collection Management Information System (Arctos 2014), Biota Information System of New Mexico (BISON-M 2020), Natural Heritage New Mexico (NHNM 2014), New Mexico Biodiversity Collections Consortium (NM BCC 2009), Southwest Environmental Information Network (SEINet 2020) were queried for forest-specific observations. In addition to the databases and citations above, Forest Service biologists at the Carson NF Supervisor's Office and ranger districts, as well as the Southwestern Regional Office, were consulted in the development of the potential species of conservation concern list. Subject matter experts were interviewed via personal communications. Staff at Natural Heritage New Mexico (R. McCollough), New Mexico Department of Game and Fish (J. Stuart, N. Quintana, L Pierce, C. Hayes, S. Liley, R. Hansen, J. Caldwell, R. Winslow, E Goldstein, E. Rominger, B. Lang, J. Davidson), New Mexico Museum of Natural History (J.T. Giermakowski); New Mexico State University (J. Frey), U.S. Fish and Wildlife Service (E. Hein), and others were able to review internal records and databases or rely on agency specialists to further filter the list. Public participation also contributed to this list.

Concern Statement 1092 **Bighorn Sheep, Occupied Habitat**

All plan components that state occupied bighorn sheep habitat should be rewritten to include suitable but currently vacant or core Rocky Mountain bighorn sheep habitat.

Associated Comment Letters: 4848, 5673

Response

Suitable but currently vacant or core Rocky Mountain bighorn sheep habitat was not added to the bighorn sheep plan component within the final Plan because suitable or core habitat does not account for foraying rams that move into unsuitable habitat. Also, core habitat range has not been defined within New Mexico for bighorn sheep. Thus, bighorn sheep plan components were changed to read, "Within bighorn sheep-occupied habitat or areas of high risk of contact…" This additional language includes the following footnotes: "As defined by New Mexico Department of Game and Fish or best available science and based on risk of contact models or best available science…." This language would include bighorn sheep foraying from non-Carson NF lands. To comply with the guideline, a risk of contact model or best available science would have to be completed to determine if an area poses a high risk of contact.

At Risk Species Plan Components - ARS

Concern Statement 1093 **Riparian and Aquatic Species**

Plan should explain specifically how components will protect and conserve at-risk riparian and aquatic species. In order to meet the Planning Rule's requirements, it is necessary for the Forest Service to provide a logic trail for each species, from its (1) necessary ecological conditions, to (2) specific plan components, to (3) conditions that would result from the plan components, to the (4) legal sufficiency of those conditions. The documentation must show that because of the plan components, the at-risk species will meet all of the regulatory criteria. Specifically, for species of conservation concern viability, the documentation must show that the species of conservation concern will (1) continue to persist over the long term, (2) with sufficient distribution to be (3) resilient and (4) adaptable to stressors and likely future environments, as per the definition of a viable population in 36 CFR 219.19.Riparian and aquatic at-risk species recovery and viability. The Draft Plan fails to provide proper plan components to enable at-risk species to persist within the Carson NF. The planning rule established a system for developing land management plans likely to promote the conservation of listed species occurring within the NFS, and that the elements of these plans dealing with endangered and threatened species constitute a program for their conservation, as described by section 7(a)(l) of the Act. In other words, the planning rule provides the Section 7(a)(1) platform, and individual plans provide the scaffolding to build out conservation programs. The Carson NF has failed to adequately utilize this platform.

Associated Comment Letters: 4911, 4925

Response

The ecological conditions required by riparian and aquatic at-risk species are included in the final Plan within Watershed (WSW), Riparian Management Zones (WSW-RMZ), Streams (WSW-RMZ-STM), Waterbodies (WSW-RMZ-WB), Springs and Seeps (WSW-RMZ-SNS), Wetland Riparian (WSW-RMZ-WR), and Forest and Shrub Riparian (WSW-RMZ-FSR) plan components. However, references to individual species were removed from components in an effort to ensure that components are more broadly protective of all at-risk species requiring such habitats, rather than being limited to specific species. A list of species of conservation concern in each vegetation section includes those species that rely on that vegetation community and have coarse/fine filter plan components incorporated in that section to maintain their persistence. The final Plan lists coarse-scale ecosystem level components first, followed by fine-filter species-specific components. If a plan component provides protections at an ecosystem level (i.e., sufficiently address the risk factors and/or habitat requirements for at-risk species), no fine-filter components are needed.

The FEIS (Volume 1, Chapter 3, Wildlife, Fish, and Plants section) and the final biological assessment analyze the effects of plan components on federally listed species and species of conservation concern (together referred to as at-risk species). Also, Appendix H in FEIS Volume 3 lists plan components that address ecological condition needs and mitigate threats for each individual species of conservation concern. Plan components listed in Appendix H in FEIS Volume 3 would provide for the conservation of federally listed species and the persistence of species of conservation concern on the Carson NF. The Carson NF Biological Assessment and USDI Fish and Wildlife Service Biological Opinion (Plan Components Providing for Species Persistence section) explain how plan components provide protection and conservation for listed species over the life of the plan and help to provide the 7(a)(1) conservation actions for the Mexican spotted owl, southwestern willow flycatcher, and Canada lynx.

Concern Statement 1094 **Threatened and Endangered Species**

The Draft Plan components do not sufficiently “provide the ecological conditions necessary to: contribute to the recovery of federally listed threatened and endangered species,” “does not put sufficient restrictions with standards and guidelines on threats and stressors such as livestock grazing and recreation,” and “maintain a viable population of each species of conservation concern within the plan

area," in accordance with Section 219.9. Fine-filter plan components do not provide many of the finer-scale habitat requirements of the identified at-risk species.

Associated Comment Letter: 4925

Response

The FEIS Volume 1, Wildlife, Fish, and Plants section and Final BA analyze the effects of plan components on federally listed species and species of conservation concern (at-risk species).

A list of plan components (coarse and fine filter) and management approaches that adequately maintain or improve ecological conditions and minimize threats for at-risk species can be found in the FEIS, Volume 3, Appendix H: Species Crosswalk: Plan Components for At-Risk Wildlife Species and other Wildlife; these include forestwide desired conditions, objectives, standards, guidelines, and management approaches. Plan components and management approaches in the Forestwide Ecological Sustainability and Diversity of Plant and Animal Communities chapter in the final Plan contribute to the recovery of federally listed threatened and endangered species and maintain a viable population of each species of conservation concern within the plan area. The ecological conditions required by at-risk species are included in vegetation plan components; however, reference to individual species was removed from components in an effort to ensure that components are more broadly protective of all at-risk species that require such habitats, rather than being limited to specific species. There is a list of species of conservation concern in each vegetation section that includes those species that rely on that vegetation community and have coarse/fine filter plan components incorporated in that section to maintain their persistence.

In the final Plan, the Social, Cultural, and Economic Sustainability and Multiple Use plan components for Sustainable Rangelands, Livestock Grazing (GRZ), and Recreation (REC) provide standards and guidelines to minimize threats and stressors for at-risk species. These plan components include FW-GRZ- S-1, FW-GRZ-G 2-5, FW-REC-S 1-2, FW-REC-G-1-3, and FW-REC-G-5.

The final Plan lists coarse-scale ecosystem level components first, followed by fine-filter species-specific components. Fine filter plan components are not needed if the coarse-filter components sufficiently address the risk factors and/or habitat requirements for at-risk species.

Concern Statement 1095 **Monitoring**

Concerned for monitoring at-risk aquatic species. We support the indicators included in this section of the monitoring plan. This includes the number of fish passage barriers removed or created, number of roads decommissioned within the riparian management zone, number of culverts removed or upgraded, number of activities with stream miles of habitat, stream miles treated for non-native invasive species improvements are all excellent measures of habitat improvements and should reliably monitor changes on the forest for many at-risk aquatic species.

Associated Comment Letter: 5303

Response

These indicators are included in Chapter 4 in the final Plan, Plan Monitoring Program. Under the 2012 Planning Rule, monitoring consists of two elements: the plan monitoring program and broader-scale monitoring strategies. Together, these support adaptive management by demonstrating if a change is needed in plan components or other plan content that guides management of resources in the plan area. Broader-scale monitoring strategies are developed by the regional forester and are not completed as part of plan revision.

Concern Statement 1096 **Aquatic Species Habitat**

The final Plan should include monitoring of flow and temperature regimes in stronghold at-risk aquatic species habitats and future planned restoration zones.

Associated Comment Letter: 5303

Response

Stream flow is under the authority of the State of New Mexico. Included in Monitoring Topic II, Chapter 4 in the final Plan is the following monitoring question: "Are management actions making progress toward desired conditions for native aquatic species? " The indicator for this question is 303d temperature exceedance. This monitoring will be completed every 10 to 15 years and depends on State reports of these data.

Concern Statement 1097 **Species of Greatest Conservation Need**

Within the All Vegetation Communities Guidelines and Management Approaches, provide for structural elements that benefit at-risk and federally listed species. Also work with New Mexico Department of Game and Fish to identify and promote habitat for New Mexico Species of Greatest Conservation Need as well as state threatened and endangered species to prevent Federal listing.

Associated Comment Letters: 4951, 5574

Response

Section 1 of Appendix H of the FEIS lists all final Plan components that address federally listed species habitat needs, at both a coarse- and fine-filter level; Section 2 of Appendix H lists plan components for Species of Conservation Concern. The final Plan also includes Management Approaches for Wildlife, Fish, and Plants-1 and -2, which address working cooperatively with the New Mexico Department of Game and Fish to manage at-risk species.

Concern Statement 1098 **Grazing Effects**

The Draft Plan and DEIS fail to acknowledge and analyze the effects of livestock grazing on federally listed species, sensitive species, and species of concern, collectively termed "at risk' species.

Associated Comment Letter: 5347

Response

In compliance with 2012 Planning Rule, livestock grazing impacts have been analyzed, with additional impacts discussed in the Final EIS Volume 1 for the Carson National Forest Land Management Plan FEIS in all other resource sections FEIS (Volume 1, Chapter 3).

In compliance with the 2012 Planning Rule, livestock grazing impacts have been analyzed, with impacts on federally listed species, sensitive species, and species of conservation concern discussed in the FEIS, in the Environmental Consequences section for Wildlife, Fish, and Plant. Also, the Vegetation and Wildlife Affected Environment and Wildlife Species Status sections include discussion of livestock as a threat to individual species and historic impacts from livestock grazing. The analysis is based on changes from the current forest plan (alternative 1) that can be meaningfully assessed.

See also Volume 3 of Appendix H in the Final EIS for a list of plan components that improve or maintain ecological conditions and minimize threats from ground-disturbing activities, such as that of livestock grazing to individual species.

Concern Statement 1099 **Grazing Effects**

Any subsequent NEPA document prepared during the forest plan revision process must include the best available science that documents the impacts of livestock grazing on at-risk species and the ecological integrity of their riparian and upland habitats, and add livestock grazing as a threat for analysis of effects to all of the plans identified at-risk species. Also, individual impacts to riparian areas should be evaluated as issues that impact at-risk species.

Associated Comment Letter: 5347

Response

All project-level activities are required to follow the National Environmental Policy Act (NEPA) and subsequent regulations (40 CFR Parts 1500-1508) and policies (FSH 1909.15 Chapters 10-60) outlined for analysis. NEPA regulations specify that the agency uses best available scientific information when conducting an analysis (40 CFR 1502.24). Interdisciplinary teams and scoping comments received on individual projects would identify the issues and potential effects that should be analyzed (40 CFR 1507.7). Scoping comments and other public involvement help the interdisciplinary team identify issues on individual projects and effects are disclosed through the analysis process and decision document. Analysis of federally listed species would be consistent with the Endangered Species Act, Section 7 for agency consultation.

The FEIS (Chapter 3, Vegetation Communities and Fuels, Watersheds and Water, Wildlife, Fish, and Plants sections), biological assessment (Final Biological Assessment for the Carson National Forest Land Management Plan), and final biological opinion (U.S. Fish and Wildlife Service, Final Biological Opinion for the Carson National Forest Land Management Plan) include an analysis of the impacts and threats of livestock grazing on at-risk species as well as their habitat.

Additionally, the following components in the final Plan address these issues and threats: FW-WSW-DC 2, 5 and 6; FW-WSW-S-1; FW-WSW-MA-3; FW-RMZ-DC 1-9; FW-RMZ-G-2; FW-WSW-RMZ-STM-DC 1-11; FW-WSW-RMZ-STM-G 1-4; FW-WSW-RMZ-WB-DC 2 and 6; FW-WSW-RMZ-SNS-DC 2 and 8).

Concern Statement 1100 **Logging Effects**

There is uncertainty regarding the spotted owl and that uncertainty is not limited to that bird. A number of at-risk species, including northern goshawk, Jemez mountain salamander, Canada lynx, pinyon jay, and a number of aquatic species, have been shown to be negatively affected by logging, rendering the DEIS analysis of mechanical harvesting effects inadequate.

Associated Comment Letter: 5347

Response

Although aggressive thinning may reduce owl habitat quality in a specific location, the final Plan has the potential to improve habitat quality from a landscape perspective. The final Plan uses well-placed thinning and prescribed fire treatments to reduce the likelihood of large losses of habitat as a result stand-replacing fire and improve the habitat quality of marginal stands. As stated in the environmental consequence section for federally listed species and species of conservation concern in the FEIS, “A recent synthesis by Gutierrez et al. (2017) highlights the benefits of mixed-severity fire in northern spotted owl habitat in California and noted that strategically placed landscape treatments can reduce fire severity and spread and that by combining fuel treatments with prescribed and managed fire the extent of high-intensity fires in the Sierra Nevada could be effectively reduced under most conditions. On the Kaibab NF in Arizona, Reynolds et al. (2017) assessed the effects of mixed fire severity on goshawk productivity in the Warm Fire footprint, a 91 square-mile fire that burned in ponderosa pine and mixed-conifer forests. The focus of their study was to assess how low- and high-severity fire affected nest survival and productivity. They assessed post-fire activity at 20 territories in areas of high- and low-severity fire and found that territories that lost more than 75 percent of the forest to moderate- and high-severity fire were not reoccupied, while territories that lost between 50 to 75 percent of the forest to moderate- and high-severity had only 43 percent reoccupation following the fire. Post-fire occupancy of a nest area in a burned territory depended on the availability of at least one alternate nest stand in the territory that had escaped high-severity fire. Their study demonstrates management strategies for mixed fire. Ray et al. (2014) found that forest treatments such as thinning and prescribed fire in ponderosa pine forest had relatively minor effects on goshawk occupancy compared to stand-replacing fire that had occurred in the same area. Their study demonstrated active forest restoration is necessary to avoid the more pronounced and widespread degradation or loss of habitat.” While some individual at-risk species

could be impacted by mechanical treatment actions on the national forest, these activities would not adversely affect the viability of the species and could enhance species habitat overall.

Concern Statement 1101 **Alpine Habitat**

Considering the limited extent of alpine habitat and the ERU's sensitivity to climate change, marmot and pika should be added to the at-risk species lists.

Associated Comment Letter: 5347

Response

American pika and yellow-bellied marmot inhabit rocky outcrops and/or talus accumulations; these are key ecosystem characteristics within various vegetation ERUs across the Carson NF, which are relatively isolated, in remote areas, and not normally subject to impacts from management activities (BISON-M 2020). Rocky outcrops and talus accumulations are well-distributed throughout the Carson NF and have not changed from historic reference condition (USDA FS Carson NF 2015 pp. 31-34). Additionally, these species are generally found in the alpine and tundra vegetation community (USDA FS Carson NF 2015, p. 34). Alpine and tundra on the Carson NF is very susceptible to climate change and, given its current limited extent and elevation constraints, is likely to decline in western mountain systems (USDA FS 2010b). However, alpine and tundra on the Carson NF is currently similar to its reference condition and even under a changing climate, change is predicted to become only moderately departed into the future (USDA FS Carson NF 2015, p. 298). Also, 86 percent of alpine and tundra on the Carson NF already receives the highest level of protection, having been designated as wilderness. Designated wilderness areas provide high-quality and contiguous alpine tundra habitat, and are less influenced by human and management activities.

Yellow-bellied marmot and American pika do not meet the criteria for identification as species of conservation concern because there are insufficient population and distribution data to analyze to determine if there are threats to long-term persistence (FSH 1909.12, 12.52c). Additionally, however, as discussed above, there are no concerns regarding quality or quantity of habitat; specifically, the habitat these species use is well-distributed across the national forest and the key ecosystem characteristic trend is stable. Finally, the remoteness of their habitat means that it is not normally subject to impacts from management activities, such that there are no concerns regarding a future decline in this habitat from forest activities.

Concern Statement 1102 **At-risk Species Habitat**

The plan must protect biodiversity and essential habitat for at-risk species. The Forest Service must lead the way in protecting biodiversity and essential habitat for at-risk species such as the New Mexico meadow jumping mouse, Jemez Mountain salamander, Rio Grande cutthroat trout, Mexican spotted owl, and others.

Associated Comment Letter: 4925

Response

In the final plan, forestwide plan components for Ecological Sustainability and Diversity of Plant and Animal Communities provides for biodiversity and essential habitat for at-risk species. Desired conditions and other plan components in each vegetation community account for the needs and requirements of at-risk species and wildlife more generally dependent on these major vegetation types. Relevant components include FW-VEG-DC 1-3, FW-VEG-DC 5, FW-VEG-DC 10-12, FW-VEG-VEG-DC 19-20, FW-VEG-MCW-DC 1-9, FW-MCW-DC 12, FW-VEG-MCD-DC 1-6, FW-VEG-MCD-DC 8-11, FW-VEG-MCD-DC 19-20, FW-VEG-PPF-DC 1-4, FW-VEG-PPF-DC 6-8, FW-VEG-PPF-DC 10, FW-VEG-PPF-DC 12, and FW-VEG-PPF-DC 15-18.

Other plan components that contribute to biodiversity and essential habitat for at-risk species can be found in Appendix H, Section 1 of the FEIS, Volume 3. Specifically, the Carson NF has identified 32 at-

risk species; six of which are federally listed (threatened or endangered), while 26 species have been identified as species of conservation concern. Plan components (coarse and fine filter) and management approaches that improve or maintain ecological conditions and minimize threats for each of these species can be found in the FEIS (e.g., table 64 for the New Mexico meadow jumping mouse, table 72 for the Rio Grande cutthroat trout, and table 60 for the Mexican spotted owl. No table for the Jemez Mountain salamander was provided, because this species does not occur on the Carson NF).

Concern Statement 1103 **Cutthroat Trout**

Plan components for Rio Grande cutthroat are insufficient.

Associated Comment Letter: 4925

Response

The FEIS provides an analysis of the plan components in the final Plan that provide for Rio Grande cutthroat trout habitat (FEIS, Volume 1. Chapter 3. Affected Environment and Environmental Consequences, Wildlife, Fish, and Plants section). The final Plan maintains sustainable populations of aquatic species, including Rio Grande cutthroat trout, by supporting healthy ecosystems and limiting activities that can negatively impact the species. A complete list of plan components that address habitat needs for the Rio Grande cutthroat trout can be found in table 72 of appendix H of the FEIS.

Concern Statement 1104 **Cutthroat Trout**

Restore Rio Grande cutthroat trout to their historic range and protect them from threats such as drought and wildfire.

Associated Comment Letter: 5303

Response

The final Plan provides plan components that address issues and threats related to the Rio Grande cutthroat trout, including direction to restore native species (FW-WFP-DC-2 and -10; FW-WFP-O-3 and 5; and Management Approach for Wildlife, Fish, and Plants-1). A full list of plan components that address threats to this species can be found in table 72 of appendix H in the FEIS, volume 3.

Concern Statement 1105 **Cutthroat Trout**

Protect Rio Grande cutthroat trout and riparian habitat by restoring native trout to their historic range and complete projects to improve aquatic connectivity. This work should be coupled with standards to protect high-value riparian habitat and free-flowing rivers and streams. And provide species access to larger watersheds with interconnected streams and tributaries.

Associated Comment Letters: 196, 380, 969, 5031, 5303

Response

Rio Grande cutthroat trout habitat is addressed in the final Plan through many plan components; a full list can be found in table 72 of appendix H in the FEIS. The final Plan directs management to generally maintain free-flowing rivers and streams with connected habitat except where barriers to movement protect native aquatic species from nonnative aquatic species or benefit agricultural uses (FW-WSW-RMZ-STM-DC-2 and -3).

Concern Statement 1106 **Cutthroat Trout**

Support of including plan components for maintaining the viability and the Rio Grande cutthroat trout in alternative 2. General opposition to Rio Grande Cutthroat Trout Management Area in alternative 4. The final Plan should emphasize Rio Grande cutthroat trout management.

Associated Comment Letter: 4895

Response

Components in the final Plan that maintain or improve ecological conditions and minimize threats for Rio Grande cutthroat trout can be found in the FEIS Volume 3, Appendix H, Table 72: Species Crosswalk: Plan Components for At-Risk Wildlife Species and other Wildlife. These include desired conditions, objectives, standards, guidelines (coarse and fine filter), and management approaches. Forestwide Ecological Sustainability and Diversity of Plant and Animal Communities Plan Components and management approaches in the final plan emphasize restoration of habitat for the Rio Grande cutthroat trout, while maintaining viability of the species.

Concern Statement 1107 **Cutthroat Trout, Other Uses**

Balance the protection of Rio Grande cutthroat trout and riparian habitat with the needs of other forest uses (e.g., grazing, road use).

Associated Comment Letter: 1044

Response

The final Plan provides for Rio Grande cutthroat trout and riparian habitats, while also providing for other forests uses, such as grazing and road use. The FEIS analyzes the effects of five alternatives, including the final Plan, on Rio Grande cutthroat trout, riparian habitat, and forest uses, including grazing, as well as the impacts of grazing on Rio Grande cutthroat trout and riparian habitat (Volume 1, Chapter 3, Wildlife, Fish, and Plants section and Sustainable Rangelands and Livestock Grazing sections).

Concern Statement 1108 **Cutthroat Trout, Ecological Needs**

The following threats and ecological needs for Rio Grande cutthroat trout should be included in the final Plan and FEIS.

The threats include: catastrophic fire; invasive species; disease; predation; groundwater depletion and streamflow diversion, roads; trails; facilities; non-native plant species and upland species encroachment; uncharacteristic fire in riparian and adjacent areas; mining, unmanaged herbivory leads to loss or damage of riparian characteristics; disturbance to soil in these areas due to unmanaged herbivory; dispersed camping; construction and maintenance activities can decrease plant cover and impacts riparian hydrology and increase erosion and sedimentation; culverts under roads can serve as barriers to movement; lack of connectivity and the loss of a metapopulation structure inhibit genetic heterogeneity and increases the risk of inbreeding depression; spring developments for livestock or wildlife use decreases water available for local ecosystems; grazing pressure decreases streambank stability due to riparian vegetation removal and trampling further degrades these areas; trampling in wet areas can also spread chytrid disease; timber harvesting eliminates sources of woody debris used for cover by Rio Grande cutthroat trout.

The ecological conditions include: riparian areas; springs; cold clear perennial streams with stable temperatures, well-vegetated streambanks; suitable summer water temperatures are above 46.0 °F and below 73 to 76 °F; spawning occurs during high water flows during snowmelt recession; beaver ponds provide winter habitat for Rio Grande cutthroat trout; spawning and egg-laying habitats include gravels that are oxygenated by water flow and clear of fine sediment; fry prefer shallow slow-moving backwaters, margins, and side-channels with available vegetative cover of aquatic or overhanging plants; as juveniles grow, they move to higher velocity stream channels; deep pools, such as those created by beaver dams or large downed trees, are important summer and overwinter habitat because they require less energy expenditure than higher-velocity waters; Pools also provide protection from high summer temperatures, winter ice, and land-based predators; Older trout prefer lower velocity riffles as well as pools; Rio Grande cutthroat trout may use undercut streambanks and woody debris for refugia; streams unencumbered by dams and other human structures allowed for migration and movement to enable gene flow.

Associated Comment Letter: 4925

Response

Components in the final Plan that maintain or improve ecological conditions and minimize threats for Rio Grande cutthroat trout can be found in the FEIS, Volume 3, Appendix H, Table 72: Species Crosswalk: Plan Components for At-Risk Wildlife Species and other Wildlife. These include desired conditions, objectives, standards, guidelines (coarse and fine filter), and management approaches. Forestwide Ecological Sustainability and Diversity of Plant and Animal Communities plan components and management approaches in the final Plan maintain ecological conditions and mitigate threats for the Rio Grande cutthroat trout.

The FEIS Volume 3, Appendix H, Section 2, includes an at-risk species crosswalk, which references all components in the final Plan that address issues and threats for at-risk species, such as the Rio Grande cutthroat trout. For an analysis of these issues and threats, please refer to chapter 3 of volume 1 of the FEIS. Issues include habitat that is departed from reference conditions and in need of restoration (coarse-filter approaches), while threats include anthropomorphic (human-based) activities that are negatively impacting at-risk species (including livestock grazing and timber harvest). These are usually addressed through fine-filter plan components. Managing for Rio Grande cutthroat trout is often a combination of coarse- and fine-filter plan components.

Also, the FEIS (Volume 3, Appendix H, Section 4) discusses plan components relevant to habitat connectivity for aquatic animals, such as the Rio Grande cutthroat trout. Habitat connectivity refers to the ability of aquatic animals, such as the Rio Grande cutthroat trout, to move freely about in their environment to fulfill basic life-cycle needs. Connectivity may be negatively impacted by two primary issues: impaired ecological conditions and physical obstructions. Section 4 of the FEIS (Volume 3, Appendix H) lists plan components and management approaches related to habitat connectivity in the final Plan, i.e., that maintain ecological conditions and mitigate threats for the Rio Grande cutthroat trout.

Lastly, the FEIS (Volume 1, Affected Environment section for the Rio Grande Cutthroat Trout, page 162), lists threats to this species. These include hybridization and food competition with nonnative species. Additionally, threats from changes in ecological conditions from management actions such as livestock grazing, recreation, and roads include reduction of in-stream flow, increased sedimentation levels, loss of riparian coarse woody debris, population fragmentation due to stream dewatering, and increased temperature from the loss of overhanging banks and woody and herbaceous riparian vegetation. The components referenced in the final plan would contribute to maintain ecological conditions and mitigate threats for the Rio Grande cutthroat trout.

Concern Statement 1109 **Cutthroat Trout, Risks**

The EIS should include some expanded discussion of the implications of the risks to Rio Grande cutthroat trout, and how they are addressed in the Plan.

Associated Comment Letters: 4951, 5574

Response

The FEIS addresses impacts to the Rio Grande cutthroat trout in chapter 3 (Wildlife, Fish, and Plants section, specifically, in the Species of Conservation Concern, Rio Grande cutthroat trout section). Plan components that provide for Rio Grande cutthroat trout habitat—including addressing specific threats to the species—can be found in table 72 of appendix H in the FEIS.

Concern Statement 1110 **Cutthroat Trout, Surface Occupancy**

Prohibit surface occupancy around Rio Grande cutthroat streams by including a standard to prohibit surface occupancy one-quarter mile around Rio Grande cutthroat streams.

Associated Comment Letters: 196, 380, 4880, 5098, 5303, 5569

Response

The Carson NF did not conduct an oil and gas leasing analysis for the final Plan. Should any future oil and gas leasing take place on the national forest, a site-specific project analysis will be required. Any future or current oil and gas leasing projects would be subject to the following plan components: FW-WSW-RMZ-STM-G-2, FW-MM-DC-1, and FW-MM-G-1.

Concern Statement 1111 **Cutthroat Trout, Anglers**

The Rio San Antonio is an extremely important Rio Grande Cutthroat trout creek, and it and its tributaries. The Tio Grande, Nutrias, and Tanques need more attention and work by the government to protect them, not less. Including protective measures to favor native Rio Grande cutthroat trout over nonnative brown trout. Some of these waters are "Red Chile" waters, which allows for unlimited harvest of all species except Rio Grande cutthroat trout. The concept of anglers being a management tool here is way out of step.

Associated Comment Letter: 4962

Response

The final Plan (FW-PART-DC-1) encourages the Carson NF to work with interested partners to undertake restoration efforts for the Rio Grande cutthroat trout on Rio San Antonio and its tributaries. These restoration efforts would occur through site-specific, project-level work. Notably, restoration projects for Rio Grande cutthroat trout would be conducted by following final Plan components and management approaches (FW-WFP-O-3 Management Approaches for Wildlife, Fish, and Plants-1, -3, -5, -6, -11, and -14.

For a comprehensive list of all final plan components relating to the management of Rio Grande cutthroat trout, refer to the FEIS (Volume 3, Appendix H, Table 72: Species Crosswalk: Plan Components for At-Risk Wildlife Species and other Wildlife); these includes desired conditions, objectives, standards, guidelines (coarse and fine filter), and management approaches.

Pertaining to "Red chile" waters that allow unlimited harvest of all species except Rio Grande cutthroat trout, this management tool is designated by the New Mexico Department of Game and Fish and is not under the management of the Carson NF. Nevertheless, this effort will only enhance the restoration of the Rio Grande cutthroat trout on the Rio San Antonio and its tributaries.

Concern Statement 1112 **Cutthroat Trout, Alternative 4, Support**

Recommend applying the Rio Grande Cutthroat Trout Management Area restoration objectives in alternative 4 across the entire forest.

Associated Comment Letters: 4951, 5303

Response

The final Plan includes the following objective from the Rio Grande Cutthroat Trout Management Area: Reduce nonnative fish within native fish populations in 4 to 6 stream reaches, during each 10-year period following plan approval (FW-WFP-O-3).

Concern Statement 1113 **Cutthroat Trout, Education**

Create educational experiences around Rio Grande cutthroat trout, their natural history and importance.

Associated Comment Letter: 5303

Response

The final Plan includes plan components that address education; topics such as Rio Grande cutthroat trout can be included in those educational messages (FW-WFP-O-6; Management Approach for Recreation-2).

Concern Statement 1114 **Cutthroat Trout, Recreation**

Develop recreational Rio Grande Cutthroat Trout fishery opportunities intended to engage Forest users with native fish.

Associated Comment Letter: 5303

Response

The final Plan includes a management approach that encourages collaboration with State agencies on reintroductions, introductions, or transplants and habitat improvements for native species, such as the Rio Grande cutthroat trout (Wildlife, Fish, and Plant Management Approach-1). The final Plan includes plan components that address education; topics such as Rio Grande cutthroat trout can be included in those educational messages (FW-WFP-O-6; Management Approach for Recreation-2).

Concern Statement 1115 **Cutthroat Trout, Chub, Sucker**

Within the Final Plan recommend the following management and plan components for Rio Grande chub to include: (1) Develop a desired condition for the Rio Grande chub that contains the following ecological conditions: pools with overhanging brush and banks; cool water stream reaches; fast-flowing streams; sand, cobble, or gravel substrate; low levels of sedimentation (2) With standards and guidelines, restrict and limit to the extent possible or mitigate the effects of riparian threats and stressors in Rio Grande cutthroat trout habitat. These include livestock grazing, invasive plant encroachment, roads, development, mining, timber harvest, and recreation. (3) Develop the following recommended management actions into plan components: Protect riparian areas to minimization sediment input due to anthropogenic causes (e.g., road building, timber harvest); (4) Develop a standard to prohibit the release of nonnative fish; (5) Develop a program and associated plan components for eradicating nonnative fish in streams and within the historical range of Rio Grande sucker may also be considered; Restore historical streamflow regimes; Implement a monitoring methodology to determine and track Rio Grande sucker distribution and abundance; Ensure that barriers do not fragment populations—a healthy riparian corridor is important to overall aquatic ecosystem function; Alter the livestock grazing rotation or fencing of riparian areas in degraded habitat areas; Ensure the proper future design of stream culverts (i.e., size and gradient to allow fish passage).

Associated Comment Letter: 4925

Response

Plan components in the final Plan that maintain or improve ecological conditions and minimize threats for Rio Grande chub can be found in the FEIS (Volume 3, Appendix H, Table 72: Species Crosswalk: Plan Components for At-Risk Wildlife Species and other Wildlife); these include FW-WSW-DC-4, FW-WSW-DC-7, FW-WSW-G-1, FW-WSW-RMZ-DC-4, FW-WSW-RMZ-G-2, FW-WSW-RMZ-STM-DC-1-3, FW-WSW-RMZ-STM-DC- 6, FW-WSW-RMZ-STM-DC- 8-9, FW-WSW-RMZ-STM-G-3-4, FW-WSW-RMZ-WB-DC 3-4, FW-GRZ-DC-4, FW-GRZ-DC-6-7, FW-GRZ-S-1, FW-GRZ-G-1-3, and FW-WFP-O--5. Management Approach for Watersheds and Water-3 also contributes to ecological conditions for the Rio Grande chub.

FW-WFP-O-3-4 directs the Forest to reduce nonnative fish within native fish populations in 4 to 6 stream reaches during each 10-year period following plan approval, as well as improve wildlife or aquatic habitat connectivity by removing unneeded structures (e.g., fences, roads, cattleguards, culverts, and spring developments) or completing improvement projects (e.g., remove barriers, restore dewatered stream segments, connect fragmented habitat, wildlife passage friendly fences, etc.) in at least 10 to 20 locations during each 10-year period following plan approval. Additionally, FW-WFP-DC-6 calls for habitat configuration and availability and species genetic diversity to allow long-distance range shifts of plant and wildlife populations in response to changing environmental and climatic conditions. Barriers to movement may exist to protect native species and prevent movement of nonnative species (e.g., a fish structure to protect Rio Grande cutthroat trout from nonnative invasion). The State of New Mexico

manages instream flow and water rights; as these are not managed by the Forest Service, no related plan components are included in the final Plan.

Concern Statement 1116 **Rio Grande Sucker**

The final Plan should include the following recommended management and plan components for Rio Grande sucker: (1) Develop a desired condition for the Rio Grande sucker that contains the following ecological conditions: pools, riffles, and glides; stream gradients of about 3 percent or less; substrate of small boulders and cobble; stream velocity between approximately 1 to 4 feet per second; water depth between about 4 to 16 inches; low content of fine sand-silt sediment. (2) Include standards and guidelines to, restrict and limit to the extent possible or mitigate the effects of riparian threats and stressors in Rio Grande sucker habitat. These threats include livestock grazing, invasive plant encroachment, roads, development, mining, timber harvest, and recreation. (3) Develop the following recommended management actions into plan components to protect riparian areas by minimizing sediment input due to anthropogenic causes (e.g., road building, timber harvest). (4) Develop a standard to prohibit the release of nonnative fish. (5) Develop a program and associated plan components for eradicating nonnative fish in streams and within the historical range of Rio Grande sucker may also be considered. Restore historical streamflow regimes. Implement a monitoring methodology to determine and track Rio Grande sucker distribution and abundance. Ensure that barriers do not fragment populations; a healthy riparian corridor is important to overall aquatic ecosystem function. Alter the livestock grazing rotation or fencing riparian areas in degraded habitat areas. Ensure the proper future design of stream culverts (i.e., size and gradient to allow fish passage).

Associated Comment Letter: 4925

Response

Plan components within the final Plan that maintain or improve ecological conditions and minimize threats for Rio Grande sucker can be found in the FEIS Volume 3, Appendix H, Table 72: Species Crosswalk: Plan Components for At-Risk Wildlife Species and other Wildlife. These include FW-WSW-DC-4, FW-WSW-DC-7, FW-WSW-G-1, FW-WSW-RMZ-DC-4, FW-WSW-RMZ-G-2, FW-WSW-RMZ-STM-DC- 1-3, FW-WSW-RMZ-STM-DC- 6, FW-WSW-RMZ-STM-DC- 8-9, FW-WSW-RMZ-STM-G-3-4, FW-WSW-RMZ-WB-DC 3-4, FW-GRZ-DC-4, FW-GRZ-DC-6-7, FW-GRZ-S-1, FW-GRZ-G-1-3, and FW-WFP-O-5. Watershed and Water Management Approach-3 considers rest-rotation management within allotments to improve wetland or riparian areas that are rated as functional-at-risk or non-functional to contribute to ecological conditions for the Rio Grande sucker.

FW-WFP-O-3-4 directs the Forest to reduce nonnative fish within native fish populations in 4 to 6 stream reaches during each 10-year period following plan approval and improve wildlife or aquatic habitat connectivity by removing unneeded structures (e.g., fences, roads, cattleguards, culverts, and spring developments) or completing improvement projects (e.g., remove barriers, restore dewatered stream segments, connect fragmented habitat, wildlife passage friendly fences, etc.) in at least 10 to 20 locations during each 10-year period following plan approval. Also, FW-WFP-DC-6 calls for habitat configuration and availability and species genetic diversity to allow long-distance range shifts of plant and wildlife populations in response to changing environmental and climatic conditions. Barriers to movement may exist to protect native species and prevent movement of nonnative species (e.g., a fish structure to protect Rio Grande cutthroat trout from nonnative invasion). The State of New Mexico manages instream flow and water rights; as this is not managed by the Forest Service, no related plan components are included in the final Plan.

Concern Statement 1117 **Rio Grande Chub**

Plan components for Rio Grande chub are insufficient.

Associated Comment Letter: 4925

Response

The FEIS provides an analysis of plan components in the final Plan that provide for Rio Grande chub habitat is included in the FEIS, Volume 1 (Chapter 3. Affected Environment and Environmental Consequences, Wildlife, Fish, and Plants section). This analysis finds that habitat needs and threats to continued persistence of Rio Grande chub are addressed by plan components. A list of these plan components can be found in table 72, appendix H, in the FEIS.

Concern Statement 1118 **Goshawk Surveys**

Since goshawks are a major species of concern in New Mexico, I am very surprised that the Carson NF would propose such a lack of surveys. Goshawk surveys should be required in the new plan as they are on other national forests in this state.

Associated Comment Letter: 102

Response

Species of conservation concern, such as northern goshawk, are not surveyed at the plan level. Ecological Sustainability and Diversity of Plant and Animal Communities plan components found in the final Plan address the management of northern goshawks at known nest locations and post-fledging areas (FW-VEG-SFF-G-2-5, FW-VEG-ASP-G-2-4, FW-VEG-MCW-G-3-6, FW-VEG-MCD-G-3-6, and FW-VEG-PPF-G-5-8). Northern goshawk presence or absence will be monitored at the project level in accordance with the plan components mentioned above.

Concern Statement 1119 **Mexican Spotted Owl, Recovery Plan**

We appreciate the plan revisions regarding the Mexican Spotted Owl Recovery Plan.

Associated Comment Letter: 168

Response

The final Plan includes components that are in compliance with the Mexican Spotted Owl Recovery Plan (FW-WFP-G-1); the forest consulted with the U.S. Fish and Wildlife Service (U.S. Fish and Wildlife Service, Final Biological Opinion for the Carson National Forest Land Management Plan).

Concern Statement 1120 **Mexican Spotted Owl, Recovery Plan**

Mexican spotted owl recovery is only possible if the Forest Service fully commits to implementing and complying with the 2012 Recovery Plan. Toward this end, we urge the Forest Service to include plan components and provide robust supporting analysis in its environmental impact statement.

Associated Comment Letters: 4894, 5347

Response

The final Plan includes guidelines that incorporate habitat management objectives and species protection measures from the most recent approved 2012 U.S. Fish and Wildlife Service recovery plan (FW-WFP-G-1; FW-VEG-G-1); see appendix H in the FEIS for a crosswalk of all plan components addressing issues and threats for the Mexican spotted owl. Additionally, the FEIS includes analysis of environmental effects to Mexican spotted owls (Chapter 3, Environmental Consequences for Wildlife, Fish, and Plants, Federally Listed Species section). The Fish and Wildlife Service consulted on the Carson NF's programmatic Biological Assessment of plan impacts to Mexican spotted owl and other federally listed species and issued a Biological Opinion per Section 7(a)(2) of the Endangered Species Act (Final Biological Assessment for the Carson National Forest Land Management Plan and U.S. Fish and Wildlife Service, Final Biological Opinion for the Carson National Forest Land Management Plan) .

Concern Statement 1121 **Mexican Spotted Owl, Recovery Plan**

The Forest Service must delineate a plan for long-term, range-wide population and habitat monitoring consistent with the 2012 Recovery Plan. It is crucial that a critical analysis of the potential harms of logging on species such as the spotted owl is completed as part of this plan revision.

Associated Comment Letters: 4894, 5347

Response

The Forest Service has been conducting annual, region-wide (in New Mexico and Arizona) monitoring for Mexican spotted owl since 2014, consistent with the 2012 Recovery Plan. The Biological Assessment analyzes environmental threats and impacts to Mexican spotted owls, including logging, and includes a crosswalk of all plan components that address these threats and issues (appendix C).

Concern Statement 1122 **Mexican Spotted Owl, Habitat**

The Forest Service must identify, map, and manage for Mexican spotted owl recovery habitat as defined in the 2012 Recovery Plan.

Associated Comment Letter: 4864

Response

See appendices B and D of the Final Biological Assessment for the Carson National Forest Land Management Plan for Mexican spotted owl habitat maps and descriptions. Also see the Biological Assessment appendix C for a crosswalk of plan components that minimize issues and threats to Mexican spotted owls. The Fish and Wildlife Service consulted on the Carson NF's programmatic Biological Assessment of plan impacts to Mexican spotted owl and other federally listed species and issued a Biological Opinion based on the 2012 Recovery Plan (Final Biological Assessment for the Carson National Forest Land Management Plan and U.S. Fish and Wildlife Service, Final Biological Opinion for the Carson National Forest Land Management Plan).

Concern Statement 1123 **Mexican Spotted Owl, Monitoring**

The Forest Service must delineate required pre- and post-project monitoring consistent with the 2012 Recovery Plan for all activities, including, but not limited to, forest management activities (thinning, logging, prescribed burns, etc.), livestock grazing, oil and gas development, mining, and recreation (in particular, motorized recreation). This is especially relevant to the agency's unsupported claim that timber management will benefit Mexican spotted owl and its habitat. Such scientific experiments remain unproven.

Associated Comment Letter: 4894

Response

The final Plan incorporates measures recommended by the Fish and Wildlife Service Biological Opinion, which include pre- and post-project monitoring, when applicable (U.S. Fish and Wildlife Service, Final Biological Opinion for the Carson National Forest Land Management Plan). The final Plan also includes guidelines that incorporate habitat management objectives and species protection measures from the most recent approved 2012 Fish and Wildlife Service Recovery Plan (FW-WFP-G-1; FW-VEG-G-1). See appendix H in the FEIS for a crosswalk of plan components relating to issues and threats for the Mexican spotted owl.

Prather et al. (2007) state, "In some cases carefully designed thinning and burning treatments may actually enhance habitat quality for Mexican spotted owls, while aggressive treating of adjacent, forest stands can reduce fire hazard across the landscape, thus better protecting both human communities and owl habitat. Thus, far from being mutually exclusive objectives, forest restoration and the conservation of Mexican spotted owls can be compatible given careful planning on a broad scale, as was suggested by Beier and Maschinski (2003) and Noss et al. (2006). Although aggressive thinning may reduce owl

habitat quality in a specific location, when examined from a landscape perspective, well-placed thinning and prescribed fire can enhance overall owl habitat quality, both through improving the quality of marginal stands and reducing the likelihood of large losses of habitat from stand-replacing fire. If large portions of the landscape burn at high severity, however, owl populations are unlikely to persist (Jenness et al. 2004). Thus, well-designed treatments that reduce the extent and severity of wildfires while maintaining suitable owl habitat are likely to be beneficial in the long term."

Concern Statement 1124 **Mexican Spotted Owl, Monitoring**

The EIS must analyze the cumulative impacts of all management activities on Mexican spotted owl, and include the results of any and all monitoring data collected as part of those activities, as required by the existing Forest Plan and Mexican spotted owl Biological Opinions. This includes pre- and post- project monitoring and population and habitat monitoring.

Associated Comment Letter: 4894

Response

The FEIS includes an analysis of environmental impacts to the Mexican spotted owl, including cumulative effects (Chapter 3, Environmental Consequences for Wildlife, Fish, and Plants, Cumulative Environmental Consequences for Wildlife, Fish, and Plants section). The FEIS analysis of effects included the results of all monitoring the forest has conducted, per project-specific biological opinions, and forest plan monitoring.

Concern Statement 1125 **Mexican Spotted Owl, Fire**

Counter to the 2012 Mexican Spotted Owl Recovery Plan claims, Mexican spotted owls thrive in post fire environments, therefore, there is no risk to spotted owl habitat from fire and no need for "restoration" projects of fire-adapted forests (see evidence from Nuttall-Gibson Fire, 2004, Coronado NF).

Associated Comment Letter: 5347

Response

Recent research suggests that Mexican spotted owls can persist and successfully reproduce, at least over the short term, in areas that have been burned at low to moderate severity (Bond et al. 2002; Jenness et al. 2004). If large portions of the landscape burn at high severity, however, owl populations are unlikely to persist (Jenness et al. 2004). Thus, well-designed treatments that reduce the extent and severity of wildfires while maintaining suitable owl habitat are likely to be beneficial in the long term (Prather et al. 2007).

Concern Statement 1126 **Lynx, Activity Effects**

Numerous forest management activities may impact Canada lynx on the Carson NF. Vegetation management, fuel reduction programs to reduce the risk of uncharacteristically severe wildfires, road and travel management activities, actions that directly or indirectly affect lynx habitat, actions that reduce snowshoe hare populations (the primary food source for lynx), and other activities on the Carson NF may impact lynx. The forest must account for these activities during the Section 7 Endangered Species Act consultation process in the NEPA analysis prepared for the Carson forest plan. In addition, we urge the forest to include specific plan components in the draft forest plan that will adequately protect Canada lynx.

Associated Comment Letter: 4911

Response

The FEIS includes an effects analysis of forest management activities such as vegetation management, fuels reduction, and recreation uses (FEIS, volume 1, chapter 3). The Biological Assessment and Biological Opinion also analyzed effects to Canada lynx at the programmatic level (Final Biological

Assessment for the Carson National Forest Land Management Plan and U.S. Fish and Wildlife Service, Final Biological Opinion for the Carson National Forest Land Management Plan). The final Plan includes guidelines that incorporate habitat management objectives and species protection measures related to lynx (FW-WFP-G-1; FW-VEG-G-1); appendix C in the Biological Assessment includes a crosswalk of all plan components that mitigate issues and threats for the Canada lynx.

Concern Statement 1127 **Lynx, Consultation**

To ensure that lynx on the Carson NF are adequately protected, and to ensure Forest Service compliance with the Endangered Species Act (ESA), we recommend the Forest Service consult with the Fish and Wildlife Service regarding potential impacts of forest management activities (at both the plan and project or site-specific level) on lynx, as required under Section 7 of the Endangered Species Act.

Associated Comment Letter: 4911

Response

As part of the plan revision process, the Carson NF consulted with Fish and Wildlife Service regarding lynx and other federally listed species. The Fish and Wildlife Service reviewed the Carson NF's programmatic Biological Assessment of plan impacts to Canada lynx and issued a Biological Opinion. A crosswalk of all plan components relating to issues and threats for the Canada lynx is included in appendix C of the Biological Assessment and the Fish and Wildlife Service analysis, (i.e., the U.S. Fish and Wildlife Service, Final Biological Opinion for the Carson National Forest Land Management Plan). At the project level, additional ESA Section (7)(2) consultation will occur where applicable.

Concern Statement 1128 **Lynx, Critical Habitat**

Work with the Fish and Wildlife Service to carefully review and evaluate lands for designation as lynx critical habitat (the Fish and Wildlife Service is currently under a court order to review and evaluate all lands within the Southern Rockies including the Carson NF for potential designation as critical habitat).

Associated Comment Letter: 4911

Response

In compliance with the Endangered Species Act, the Forest Service will work with the Fish and Wildlife Service on any recommendations for designation of lynx critical habitat on the Carson NF.

Concern Statement 1129 **Lynx, Cross Boundary Management**

Coordinate with the Rio Grande NF on forest plan lynx standards to ensure that cross border management is consistent and provides sufficient protections to ensure that lynx are able to continue to recover and recolonize their historic range, which includes the Carson NF. Incorporate the Southern Rockies Lynx Management Direction into the Carson Forest Plan.

Associated Comment Letters: 4911, 4925

Response

An analysis and crosswalk of the Canada Lynx Southern Rockies Management Direction can be found in appendix C, section 4 of the Final Biological Assessment. Southern Rockies Management Direction objectives were considered and have corresponding plan components in the final Plan; these are listed in appendix C, section 4 of the Final Biological Assessment.

Concern Statement 1130 **Lynx, Effects**

Take a hard look at how the revised forest plan may directly, indirectly, or cumulatively impact lynx, lynx habitat, and prey species on the Carson NF.

Associated Comment Letter: 4911

Response

The FEIS, Biological Assessment, and Biological Opinion analyze environmental impacts on Canada lynx (Chapter 3, Environmental Consequences for Wildlife, Fish, and Plants, Federally Listed Species section; Final Biological Assessment for the Carson National Forest Land Management Plan; and U.S. Fish and Wildlife Service, Final Biological Opinion for the Carson National Forest Land Management Plan).

Concern Statement 1131 **Lynx, Suitable Habitat**

Protect suitable lynx habitat on the Carson NF, including mature multi-forest stands that contain high levels of horizontal cover important for denning and foraging.

Associated Comment Letters: 4911, 5711

Response

The following plan components mitigate the issues and threats to Canada lynx and provide for suitable lynx habitat in mature, multi-storied stands: FW-VEG-SFF-DC-1-16; FW-VEG-SFF-G-1-5; FW-VEG-ASP-DC-1-9; and FW-VEG-ASP-G-1-4. A list of all plan components that mitigate threats and issues to Canada lynx can be found in appendix C, table 28 in the Final Biological Assessment and appendix H, table 63 of the FEIS.

Concern Statement 1132 **Lynx Conservation and Assessment Strategy**

Consider and incorporate science and management recommendations in the August 2013 Lynx Conservation and Assessment Strategy.

Associated Comment Letter: 4911

Response

The final Plan relied on the 2013 Lynx Conservation and Assessment Strategy to determine lynx habitat needs and identify issues and threats; these were then incorporated into plan components. Additionally, the Final Biological Assessment incorporates science from the 2013 Lynx Conservation and Assessment Strategy for analyzing habitat needs, issues, and threats.

Concern Statement 1133 **Lynx, Critical Habitat**

Add forest plan components to protect and restore lynx primary constituent elements, as identified by the Fish and Wildlife Service.

Associated Comment Letter: 4911

Response

The Fish and Wildlife Service has not designated critical habitat for lynx on the Carson NF. The final Plan includes components that maintain or improve lynx habitat (for a complete list, see Final Biological Assessment for the Carson National Forest Land Management Plan, Appendix C, Table 28, and FEIS, Appendix H, Table 63).

Concern Statement 1134 **Lynx, Trapping**

Consider reasonable restrictions on trapping and snaring within occupied lynx habitat in the Carson NF to prevent lynx from being accidentally caught in traps set for other species, including bobcats.

Associated Comment Letter: 4911

Response

The New Mexico Department of Game and Fish regulates and manages trapping (State Law State Law 17-2-1 NMSA 1978 at https://law.justia.com/codes/new-mexico/2006/nmrc/jd_ch17art2-8235.html). The final Plan addresses the need to work collaboratively with the New Mexico Department of Game and Fish on federally listed species, such as lynx (Management Approach for Wildlife, Fish, and Plants-2).

Concern Statement 1135 **Yellow-billed Cuckoo**

Include the following plan components to address ecological condition for the western yellow-billed cuckoo: * multiple layers, dense patches of broad-leaved deciduous trees, usually with a relatively thick understory, greater than 37 acres; * dense closed canopy for a core area of at least 11 to 12 acres, * habitat width: greater than 2,000 feet, * canopy height: greater than 16 feet, * breeding patches of 50 acres. Also incorporate an analysis of the following threats from the SCC Report (p. 34, Table 10) into the FEIS: Harassment (e.g., human presence disrupting species during sensitive life stages, dogs, disturbance from mining, recreational, oil and gas development activities, target shooting), and obstructions (e.g., dams, barriers, roads, collisions with wind turbines or vehicles).

Associated Comment Letter: 4925

Response

Components in the final Plan that maintain or improve ecological conditions and threats for western yellow-billed cuckoo are listed in the FEIS (Volume 3, Appendix H, Table 61: Species Crosswalk: Plan Components for At-Risk Wildlife Species and other Wildlife). Forestwide Ecological Sustainability and Diversity of Plant and Animal Communities plan components and management approaches in the final Plan contribute to improving habitat and the recovery of the western yellow-billed cuckoo. Based on public comment, threats from the Species of Conservation Concern Report were incorporated in the FEIS Wildlife, Fish, and Plants section.

Concern Statement 1136 **Yellow-billed Cuckoo**

The final listing rule (79 Fed. Reg. 59992) for the western yellow-billed cuckoo identified the following threats as listing factors for the species: habitat loss due to dams and alteration of hydrology, surface and ground water diversion, encroachment of levees and flood control and bank stabilization structures into the river channel and floodplain, transportation systems, habitat loss and degradation from livestock grazing activities, habitat loss and degradation due to conversion to nonnative vegetation, use of tamarisk by western yellow-billed cuckoos, wildfire, climate change, inadequate regulatory mechanisms, widely separated habitat patches, and pesticides.

Associated Comment Letter: 4925

Response

The FEIS includes an analysis of the threats included in the final listing rule for the western yellow-billed cuckoo (FEIS, Volume 1. Chapter 3. Affected Environment and Environmental Consequences, Wildlife, Fish, and Plants section). Plan components that address these threats and provide for western yellow-billed cuckoo habitat can be found in table 61 in appendix H of the FEIS.

Concern Statement 1137 **Southwestern Willow Flycatcher**

Include the following in the final plan components for southwestern willow flycatcher:

Dense riparian vegetation with thickets of trees and shrubs that can range in height from about 2 to 30 meters (about 6 to 98 feet). Lower-stature thickets (2 to 4 meters or 6 to 13 feet tall) are found at higher-elevation riparian forests and tall-stature thickets are found at middle- and lower-elevation riparian forests; 1. Areas of dense riparian foliage at least from the ground level up to approximately 4 meters (13 feet) above ground or dense foliage only at the shrub or tree level as a low, dense canopy; 2. Sites for nesting that contain a dense (about 50 percent to 100 percent) tree or shrub (or both) canopy (the amount of cover provided by tree and shrub branches measured from the ground); 3. Dense patches of riparian forests that are interspersed with small openings of open water or marsh or areas with shorter and sparser vegetation that creates a variety of habitat that is not uniformly dense. Patch size may be as small as 0.1 hectare (0.25 acre) or as large as 70 hectares (175 acres); 4. Primary constituent element 2—Insect prey populations. A variety of insect prey populations found within or adjacent to riparian floodplains or moist environments, which can include: flying ants, wasps, and bees (Hymenoptera); dragonflies (Odonata); flies (Diptera); true bugs (Hemiptera); beetles (Coleoptera); butterflies, moths,

and caterpillars (Lepidoptera); and spittlebugs (Homoptera); 5. Areas of dense riparian foliage at least from the ground level up to approximately 4 meters (13 feet) above ground or dense foliage only at the shrub or tree level as a low, dense canopy; 6. Sites for nesting that contain a dense (about 50 percent to 100 percent) tree or shrub (or both) canopy (the amount of cover provided by tree and shrub branches measured from the ground); 7. Dense patches of riparian forests that are interspersed with small openings of open water or marsh or areas with shorter and sparser vegetation that creates a variety of habitat that is not uniformly dense. Patch size may be as small as 0.1 hectare (0.25 acre) or as large as 70 hectares (175 acres).

Associated Comment Letter: 4925

Response

A list of components in the final Plan that maintain or improve ecological conditions and minimize threats for southwestern willow flycatcher can be found in the FEIS (Volume 3, Appendix H, Table 61: Species Crosswalk: Plan Components for At-Risk Wildlife Species and other Wildlife). Forestwide Ecological Sustainability and Diversity of Plant and Animal Communities plan components and management approaches in the final Plan contribute to improving habitat and the recovery of the southwestern willow flycatcher. Plan components that provide for primary constituent elements of southwestern willow flycatcher are discussed in the Carson NF Biological Assessment and U.S. Fish and Wildlife Service Biological Opinion.

Concern Statement 1138 **Southwestern Willow Flycatcher**

Recommend management for special management considerations and protections for the southwestern willow flycatcher from final critical habitat rule (78 Fed. Reg. 357):

- Restore adequate water-related elements to improve and expand the quality, quantity, and distribution of riparian habitat. Special management may: increase efficiency of groundwater management; use urban water outfall and irrigation delivery and tail waters for vegetation improvement; maintain, improve, provide, or reestablish instream flows to expand the quality, distribution, and abundance of riparian vegetation; increase the width between levees to expand the active channel during overbank flooding; and manage regulated river flows to more closely resemble the natural hydrologic regime.
- Retain riparian vegetation in the floodplain. Special management may include the following actions: avoid clearing channels for flood flow conveyance or plowing of floodplains; and implement projects to minimize clearing of vegetation (including exotic vegetation) to help ensure that desired native species and exotic vegetation persist until an effective riparian vegetation improvement plan can be implemented.
- Manage biotic elements and processes. Special management may include the following actions: manage livestock grazing to increase flycatcher habitat quality and quantity by determining appropriate areas, seasons, and use consistent within the natural historical norm and tolerances; reconfigure grazing units, improve fencing, and improve monitoring and documentation of grazing practices; manage wild and feral hoofed mammals (ungulates) (e.g., elk, horses, burros) to increase flycatcher habitat quality and quantity; and manage keystone species such as beaver to restore desired processes to increase habitat quality and quantity.
- Protect riparian areas from recreational impacts. Special management may include actions such as managing trails, campsites, off-road vehicles, and fires to prevent habitat development and degradation in flycatcher habitat.
- Manage exotic plant species, such as tamarisk or Russian olive, by reducing conditions that allow exotics to be successful, and restoring or reestablishing conditions that allow native plants to thrive.

- Manage fire to maintain and enhance habitat quality and quantity. Special management may include the following actions: suppress fires that occur; and reduce risk of fire by restoring elevated groundwater levels, base flows, flooding, and natural hydrologic regimes in order to prevent drying of riparian areas and more flammable exotic plant species from developing; and reduce risk of recreational fires.
- Evaluate and conduct exotic plant species removal and native plant species management on a site-by-site basis.
- Manage or reduce the occurrence, spread, and effects of biocontrol agents on flycatcher habitat.

Associated Comment Letter: 4925

Response

Management consideration for the southwestern willow flycatcher on the Carson NF will be in compliance with the most recent approved U.S. Fish and Wildlife Service recovery plan and Fish and Wildlife Service Biological Opinion, as required by the final Plan (FW-VEG-G-1 and FW-WFP-G-1).

A list of components in the final Plan that address ecological conditions and threats for southwestern willow flycatcher can be found in the FEIS (Volume 3, Appendix H, Table 61 (page 188): Species Crosswalk: Plan Components for At-Risk Wildlife Species and other Wildlife). Analysis of effects to southwestern willow flycatcher can be found in the Biological Assessment, which also includes effects analysis of primary constituent elements for southwestern willow flycatcher.

Concern Statement 1139 **Northern Leopard Frog**

Northern leopard frogs should be considered at-risk due to their limited range and moderate to high risk within their habitats. Plan components for northern leopard frog are insufficient. The Assessment (Vol. 1, p. 221) provided some additional details in its list of threats that should be added to the EIS.

Associated Comment Letter: 4925

Response

The northern leopard frog is considered an at-risk species (species of conservation concern) in the final Plan and FEIS.

Plan components (coarse and fine filter) and management approaches that maintain or improve ecological conditions and minimize threats to the northern leopard frog can be found in the FEIS (Volume 3, Appendix H, Table 71: Species Crosswalk: Plan Components for At-Risk Wildlife Species and other Wildlife). Forestwide Ecological Sustainability and Diversity of Plant and Animal Communities plan components and management approaches in the final Plan would improve ecological conditions for the northern leopard frog.

Based on public comments received on the draft environmental impact statement, the Carson updated the cause of threats to the northern leopard frog in the Wildlife, Fish, and Plants section of the FEIS to include those listed in the Assessment.

Concern Statement 1140 **New Mexico Meadow Jumping Mouse, Habitat**

Riparian areas with the features of “springs” and “permanent water” is too general a portrayal of the ecological conditions needed by the jumping mouse, and this limiting description has contributed to the failure of the Draft Plan to provide the conditions necessary to contribute to the species' recovery.

Associated Comment Letter: 4925

Response

In the final Plan, components (coarse and fine filter) and management approaches that improve or maintain ecological condition and minimize threats to New Mexico meadow jumping mouse are not only found in the Riparian, Springs, and Waterbodies sections, but also in the Watershed and Water, Streams,

Wetland Riparian, and Forest and Shrub Riparian sections. References to individual species were removed from plan components in an effort to ensure that such components are more broadly protective of all at-risk species that require such habitats, rather than being limited to select species. Within each individual vegetation habitat section is a list of species of conservation concern that rely on that vegetation type and have coarse/fine filter plan components incorporated in the vegetation section to maintain their persistence.

All components within the final Plan that maintain or improve ecological conditions and minimize threats for New Mexico meadow jumping mouse can be found in the FEIS (Volume 3, Appendix H Section 1 and 2: Species Crosswalk: Plan Components for At-Risk Wildlife Species and other Wildlife). Forestwide Ecological Sustainability and Diversity of Plant and Animal Communities plan components in the final plan contribute to the recovery of the New Mexico meadow jumping mouse.

Concern Statement 1141 **New Mexico Meadow Jumping Mouse, Habitat**

Prioritize restoration and protection of crucial habitat for the New Mexico meadow jumping mouse.

Associated Comment Letter: 4925

Response

In the final Plan, components (coarse and fine filter) and management approaches that improve or maintain ecological condition and minimize threats to New Mexico meadow jumping mouse are not only found in the Riparian, Springs, and Waterbodies sections, but also in the Watershed and Water(WSW), Streams (WSW-RMZ-STM), Wetland Riparian (WSW-RMZ-WR), and Forest and Shrub Riparian (WSW-RMZ-FSR) sections. Objectives that contribute to restoration of the New Mexico meadow jumping mouse habitat are FW-WFP-O-1, FW-RMZ-O-1, FW-STM-O-1, and FW-WSW-O-1.

A list of all relevant components can be found in the FEIS (Volume 3, Appendix H: Species Crosswalk: Table 64, Plan Components for At-Risk Wildlife Species and other Wildlife). Forestwide Ecological Sustainability and Diversity of Plant and Animal Communities Plan Components and management approaches in the final plan contribute to the restoration of crucial habitat for the New Mexico meadow jumping mouse.

Concern Statement 1142 **New Mexico Meadow Jumping Mouse, Critical Habitat**

The Fish and Wildlife's 2014 Species Status Assessment for the jumping mouse identified the following requirements for the species, and these conditions were incorporated as primary constituent elements for designated critical habitat (81 Fed. Reg. 14264): Riparian communities along rivers and streams, springs and wetlands, or canals and ditches that contain:

- Persistent emergent herbaceous wetlands especially characterized by presence of primarily forbs and sedges (*Carex* spp. or *Schoenoplectus pungens*).
- Scrub-shrub riparian areas that are composed of willows (*Salix* spp.) or alders (*Alnus* spp.) with an understory of primarily forbs and sedges.
- Flowing water that provides saturated soils throughout the jumping mouse's active season that supports tall (average stubble height of herbaceous vegetation of at least 61 centimeters (24 inches)) and dense herbaceous riparian vegetation composed primarily of sedges (*Carex* spp. or *Schoenoplectus pungens*) and forbs, including, but not limited to, one or more of the following associated species: Spikerush (*Eleocharis macrostachya*), beaked sedge (*Carex rostrata*), rushes (*Juncus* spp. and *Scirpus* spp.), and numerous species of grasses such as bluegrass (*Poa* spp.), slender wheatgrass (*Elymus trachycaulus*), brome (*Bromus* spp.), foxtail barley (*Hordeum jubatum*), or Japanese brome (*Bromus japonicas*), and forbs such as water hemlock (*Circuta*

douglasii), field mint (*Mentha arvense*), asters (*Aster* spp.), or cutleaf coneflower (*Rudbeckia laciniata*).

- Sufficient areas of 9 to 24 kilometers (5.6 to 15 miles) along a stream, ditch, or canal that contains suitable or restorable habitat to support movements of individual New Mexico meadow jumping mice.
- Adjacent floodplain and upland areas extending approximately 100 meters (330 feet) outward from the boundary between the active water channel and the floodplain (as defined by the bankfull stage of streams) or from the top edge of the ditch or canal.

We recommend the following or similar language for a desired condition for the New Mexico meadow jumping mouse, which can provide an example for others: The Forest supports at least 6 New Mexico meadow jumping mouse populations resilient to the effects of uncharacteristic fire, drought, and climate change. Each population consists of at least 68 to 181 acres of suitable habitat across 15 contiguous miles of perennial flowing waterways. Designated critical and potentially suitable recovery habitat is characterized by dense herbaceous vegetation dominated by sedges and forbs, which provides shelter, hiding cover, nesting materials, and food (seeds and insects). Vegetation stands an average of 24 inches high. Suitable habitat patches are no greater than 650 feet apart to enable daily and seasonal movements. Intact upland areas that stretch well over 330 feet laterally from the streambank to provide dryer habitat for nesting, giving birth, and hibernating.

Associated Comment Letter: 4925

Response

The Carson NF has no designated critical habitat for the New Mexico meadow jumping mouse, and therefore, no required primary constituent elements. However, the final Plan has components (coarse and fine filter) that minimize threats to and provide ecological conditions that support this species. Desired conditions that address habitat requirements for the New Mexico meadow jumping mouse are included in the forestwide Riparian, Springs, Waterbodies, Watershed, Streams, Wetland Riparian, Forest, Wildlife, Fish, Plants and Shrub Riparian sections (FW-WSW-RMZ-WB-DC-2, FW-WSW-RMZ-WB-DC-4, FW-WSW-RMZ-SNS-DC-2, FW-WSW-RMZ-SNS-DC-4, FW-WSW-RMZ-WR-DC-3, FW-WFP-DC-10, and FW-WSW-RMZ-RSR-DC-7, 11, 13). In floodplains, FW-WSW-RMZ-DC-6 and FW-WSW-RMZ-STM-DC-4 provide for favorable habitat. Forestwide objectives that improve habitat for New Mexico meadow jumping mouse include FW-WSW-O-1, FW-WSW-RMZ-O-1, FW-WSW-STM-O-1, and FW-WFP-O-1, 4, 5. Any new fencing would require project-level analysis guided by the following plan components: FW-GRZ-DC-7, FW-GRZ-O-1, and FW-GRZ-G-2. Utilizing beavers to improve habitat conditions for the New Mexico meadow jumping mouse is described by FW-WSW-RMZ-DC-5, FW-WSW-RMZ-FSR-DC-12, Forest and Shrub Riparian Management Approach-1, and Wildlife, Fish, and Plants Management Approaches -11 and -12 in the final Plan. Consistency with the State New Mexico meadow jumping mouse recovery plan is required by FW-VEG-G-1 and emphasized in Wildlife, Fish, and Plants Management Approaches-1, -2, -8, and -13.

A list of all components in the final Plan that address ecological conditions and threats for New Mexico meadow jumping mouse can be found in the FEIS (Volume 3, Appendix H: Species Crosswalk: Table 64 on page 191. Plan Components for At-Risk Wildlife Species and other Wildlife). Forestwide Ecological Sustainability and Diversity of Plant and Animal Communities plan components and management approaches in the final Plan contribute to provide favorable habitat conditions and recovery for the New Mexico meadow jumping mouse.

The plan addresses habitat patch size and distribution, or wildlife habitat connectivity. It describes terrestrial and aquatic animals moving freely through their environment to access necessary resources or fulfill basic life-cycle needs. The FEIS (Volume 3, Appendix H, Section 4, Table 132) lists plan components and management approaches related to habitat connectivity for the New Mexico meadow jumping mouse that are carried forward into the final Plan.

Concern Statement 1143 **New Mexico Meadow Jumping Mouse, Grazing**

Vegetation in New Mexico meadow jumping mouse habitat is extremely sensitive to cattle activity. The DEIS admits that recent surveys did not successfully locate any mice, but does not connect the dots that the mouse's habitat has been grazed heavily by livestock for well over 100 years and this is the primary cause that no mice are present. The impacts occur even with low numbers of cows. The final rule designating critical habitat for the jumping mouse outlined special management considerations and protections to prevent threats to the primary constituent elements of which several are relevant to the Forest: “excessive grazing pressure,” “water use and management,” “severe wildfires,” “unregulated recreation,” and the “reduction in the distribution and abundance of beaver ponds."

Associated Comment Letters: 4925, 5347

Response

The FEIS analyzes livestock grazing, severe wildfires, altered water regimes, and climate change as threats to the New Mexico meadow jumping mouse (Chapter 3, Wildlife, Fish, and Plants section). The final Plan regulates recreation via components in the FW-REC section, among others (e.g., FW-REC-DC-8). Management Approach for Forest and Shrub Riparian-1 encourages beaver reintroduction. Primary constituent elements are relevant to federally listed critical habitat under the Endangered Species Act; however, there is no designated critical habitat for the New Mexico meadow jumping mouse on the Carson NF. Final Plan components aimed at addressing habitat measures that would improve conditions for the New Mexico meadow jumping mouse include FW-GRZ-S-1, FW-GRZ-DC-4 and 6, WG-GRZ-2, Management Approach-3 for Wildlife, Fish, and Plants; see also table 64 in appendix H of the FEIS for a full crosswalk of final Plan components that relate to issues and threats for the New Mexico meadow jumping mouse.

Concern Statement 1144 **New Mexico Meadow Jumping Mouse, Grazing**

In the DEIS, how has the vegetation departed from natural range of variation for habitat utilized by New Mexico meadow jumping mouse? Is it departed by grazing?

Associated Comment Letter: 5347

Response

Causes for departure from natural range of variation, including historic and current livestock grazing, are discussed in the FEIS (Volume 1, Wetland Riparian and Forest and Shrub Riparian affected environment, Vegetation section). Also, threats to New Mexico meadow jumping mouse (and their causes) are described in the FEIS (Volume 1, environmental consequences section for Federally Listed Species).

Concern Statement 1145 **New Mexico Meadow Jumping Mouse, Critical Habitat**

The Carson NF should consider Dr. Frey's recommendations in her peer review report on the Fish and Wildlife Service's proposed critical habitat areas for New Mexico meadow jumping mouse to be the best available scientific information. The 2013 peer review, commissioned by the Fish and Wildlife Service to assess its initial critical habitat proposal for the species (78 Fed. Reg. 37328), argued that the Fish and Wildlife Service 's proposed critical habitat was inadequate to prevent extinction. The following adjustments should be made to augment critical habitat and protect additional potentially suitable habitat and the primary constituent elements:

- Suitable habitat needs for a resilient population -- The Fish and Wildlife Service considered the size of connected areas of suitable habitat needed for resilient jumping mouse populations to be 68 to 181 acres along 5.6 to 15 miles of flowing streams. Dr. Frey contends that 15 miles be the minimum length for contiguous suitable habitat.
- Necessary area of adjacent floodplain -- The FWS considered 330 feet to be an adequate area for adjacent floodplain and upland habitat to be protected in designated critical habitat segments. Frey

references Trainor et al. (2012), suggesting that the width may need to be at least twice the 330 feet.

- Additional critical habitat units—Dr. Frey recommended additional critical habitat be designated—a new unit labeled “Upper Rio Grande.” Dr. Frey notes, this unit is based on deeper historical records from Fort Burgwin, Taos County, and Santa Fe, Santa Fe County (Frey 2006, 2008). Fort Burgwin is located on the Rio Grande del Rancho near Taos. I surveyed this area in 2012, but could not verify persistence of *Z. h. luteus* (Frey 2012). However, I found the habitat in this area to be particularly well suited *for Z. h. luteus* and extensive. Most of the suitable habitat is on lands managed by Carson National Forest and is on the Olla Ranchos Allotment, which has not been grazed by livestock since 1991. Boundaries of suitable habitat extend from the junction of the Rio Chiquito and Rio Grande del Rancho upstream to 8,000 feet elevation on the Rio Grande del Rancho, Rito de la Olla, and Rio Chiquito. The portion that occurs on the Carson NF should be incorporated into the management area: Upper Rio Grande Unit.

Associated Comment Letter: 4925

Response

The Fish and Wildlife Service designates critical habitat under the Endangered Species Act. Critical habitat was designated for the New Mexico meadow jumping mouse in 2016 (50 CFR Part 17). There is no designated critical habitat on the Carson NF; however, if critical habitat is designated in the future, the Forest would follow Endangered Species Act requirements. The Carson NF will coordinate with the Fish and Wildlife Service to use the best available scientific information for the designation of critical habitat for the New Mexico meadow jumping mouse (FW WFP-G-1, Wildlife, Fish, and Plants Management Approach-1).

Management consideration for the New Mexico meadow jumping mouse on the Carson NF will be guided by following the most recent approved Fish and Wildlife Service recovery plan (FW-VEG-G-1 and FW-WFP-G-1).

Components in the final Plan that address ecological conditions (including potential primary constituent elements) and threats for New Mexico meadow jumping mouse can be found in the FEIS (Volume 3, Appendix H, Table 64): Species Crosswalk: Plan Components for At-Risk Wildlife Species and other Wildlife. These plan components will maintain the persistence of New Mexico meadow jumping mouse; a special management area is not needed to do so. The “Upper Rio Grande area” is currently within a vacant allotment, partially within southwestern willow flycatcher critical habitat, and therefore, experiences very limited human disturbance. If any future projects were to take place in the area, the Forest would have to consult with Fish and Wildlife Service, as New Mexico meadow jumping mouse is a federally listed species for the Carson NF.

Concern Statement 1146 **Bats, White Nose Fungus**

The draft plan needs to address the possible spread of white nose fungus (a bat disease) from recreational cavers as well as climbers, who occasionally enter caves.

Associated Comment Letter: 5236

Response

The final Plan addresses this concern through the following guideline in the Caves and Abandoned Mines section: FW-CAM-G-2.

Concern Statement 1147 **Big Game, Active Management**

Elk and elk habitat should be considered a focus for management planning efforts. Elk and other big game serve 'distinct roles and contributions' to multiple user types on the Forest (viewing, hunting, etc.) and the Forest Plan plays an important role in supporting future big game populations. The Plan should

incorporate recent research on the benefits of actively managed landscapes and relevant components of Executive Order 13855 on active management on America's forests (2018).

Associated Comment Letter: 4887

Response

As elk are a forest generalist species, various components in the Vegetation and Wildlife, Fish, and Plants section in the final Plan would provide suitable habitat for elk, especially FW-WFP-DC-1-2 and FW-VEG-DC-5. FW-WFP-DC-1-2 state that sustainable populations of wildlife, which would include elk, are supported by healthy ecosystems enabling species to adapt to changing environmental conditions. FW-VEG-DC-5 states that ecological conditions affecting habitat quality, distribution, and abundance contribute to self-sustaining populations of native and desirable nonnative plants and animals that are healthy, well-distributed, genetically diverse, and connected. FW-REC-DC-2 promotes hunting and wildlife viewing as recreation activities across the national forest. Plan components that promote habitat connectivity needed by elk can be found in appendix H, section 4 of the FEIS (Volume 3). The Carson NF must follow all laws, regulations, and policies and, as such, the Carson NF must follow Executive Order 13855, which promotes the active management of America's national forests to address the challenges of wildland fire. Please see the FEIS Volume 1 Fire Management effects analysis to see how the risk of fire is managed across all alternatives.

Concern Statement 1148 **Big Game, Coordination**

The Plan should include components relating to elk and other big game that mandates coordination with state wildlife agencies, including state wildlife plans, private landowners, and others and integrate state agency goals for elk into the plan.

Associated Comment Letter: 4887

Response

The final Plan includes updated language in the Introduction to the Wildlife, Fish, and Plants section referencing the New Mexico State Wildlife Action Plan. A new management approach was also added in the Wildlife, Fish, and Plants section (#14) and Nonnative Invasive Species section (#5). Three additional management approaches in the final Plan describe coordinating and working with the New Mexico Department of Game and Fish in managing wildlife: Wildlife, Fish, and Plants Management Approach-1; Nonnative Invasive Species Management Approach-1; and Valle Vidal Management Approach-2.

Concern Statement 1149 **Elk, Population**

Where elk populations are at or over population objectives consider elk occurrence specific to Forest Service and other land ownership within game units when assessing elk utilization.

Associated Comment Letter: 4887

Response

The following components in the final Plan emphasize coordinating with the New Mexico Department of Game and Fish in managing animals such as elk on the Carson NF: Wildlife, Fish, and Plant Management Approach-1 and Sustainable Rangelands and Livestock Grazing Management Approach-8. Elk utilization on Forest Service and other land ownerships is assessed by the New Mexico Department of Game and Fish.

Concern Statement 1150 **Elk, Public Access**

Rocky Mountain Elk Foundation requests additional objectives aimed at maintaining habitat conditions that support healthy elk herds and that maintain existing public access to the areas for hunting, fishing, and trapping.

Associated Comment Letter: 4887

Response

The final Plan highlights the importance of big game hunting, fishing, and trapping opportunities (see Introduction, Distinctive Roles and Contributions). It also includes numerous plan components relating to elk habitat, herds, and public access: FW-VEG-DC-5, -10, -14; Management Approach for Vegetation-7; FW-WFP-DC-1, -2, -4, -5, -7; FW-WFP-O-4 and 5; FW-WFP-G-4, -6, -8; Management Approaches for Wildlife, Fish, and Plants-1, -3, -4, -5, -6, and -8; FW-LANDS-DC-1.

Concern Statement 1151 **Elk, Livestock Grazing**

To have sustainable livestock grazing and sustainable rangeland programs, this issue of the elk must be addressed along with the damage elk cause to livestock drinkers, forage, fences, etc. The Forest Service cannot continue to manage the range resource impact the elk are having, and put the blame solely on the ranchers.

Associated Comment Letter: 143

Response

Big game is managed by the New Mexico Department of Game and Fish. Additionally, there is a final Plan component addressing cooperation and coordination related to livestock and ungulate grazing (Range and Livestock Grazing Management Approach-7).

Concern Statement 1152 **Elk, Recreation**

Inclusion of desired conditions, goals, and/or guidelines that provide seasonal protection (during critical times) for elk and other wildlife from impacts of recreation (via roads, trails and associated motorized and non-motorized traffic).

Associated Comment Letter: 4887

Response

Ecological Sustainability and Diversity of Plant and Animal Communities plan components in the final Plan include desired conditions and guidelines that provide seasonal protection (i.e., during critical times) for elk and other wildlife from impacts the of recreation; these components include FW-WFP-DC-5, FW-WFP-DC-7, FW-WFP-G-4, and FW-TFA-G-6-9.

Concern Statement 1153 **Mule Deer**

The Draft Plan on page 58, Pinon-Juniper Sagebrush Guidelines. Guidelines 2 through 4 address retention of key habitat features that serve a variety of uses. The Final Plan should include provision of habitats as described within the Habitat Guidelines for Mule Deer: Colorado Plateau Shrubland and Forest Ecoregion (http://www.wildlife.state.nm.us/download/conservation/habitat-handbook/projectguidelines/ Habitat-Guidelines-for-Mule-Deer-Colorado-Plateau-Shrubland-and-ForestEcoreqion. pdf). Similar Guidelines should also be included for the Sagebrush ERU.

Associated Comment Letters: 4951, 5574

Response

'Habitat Guidelines for Mule Deer Colorado Plateau Shrubland and Forest Ecoregion' was reviewed and guidelines suggested in it are addressed in the final Plan through various components or would be allowed at the project level under the final Plan. Components in the final Plan are integrated to address a variety of ecological and human needs in a holistic manner. In this case, guidelines for mule deer are not exclusively addressed within the vegetation type they utilize. Instead, plan components in piñon-juniper woodland, piñon-juniper sagebrush, and sagebrush would all provide ecological conditions for mule deer (e.g., FW-WFP-DC- 1-2, FW-WFP-G-4-6, FW-GRZ-DC-4, FW-WSW-RMZ-DC-1-2, FW-WSW-RMZ-G-2, FW-GRZ-S-1-2, FW-GRZ-G-1, FW-WFP-G-4, WFP Management Approach-1 and -13, GRZ Management Approach-1). Plan components listed in FEIS (Volume 3, Appendix H) related to habitat

connectivity would allow for application of management guidelines suggested in 'Habitat Guidelines for Mule Deer Colorado Plateau Shrubland and Forest Ecoregion' during project-level decisions.

Concern Statement 1154 **Beaver**

Add plan components that address how land managers are to resolve conflict to sustain and protect ecological integrity for beavers. Adopt a guideline advising that lethal removal of beaver will only be considered after nonlethal strategy options have been exhausted.

Associated Comment Letters: 4901, 4911, 4951, 5098, 5347, 5574

Response

Final Plan components address the sustainability and protection of ecological integrity for beaver. Pertinent plan components are related to riparian management zones and watershed health. Riparian management zones include those portions of watersheds around lakes, perennial and intermittent streams, and open water wetlands that have characteristic riparian vegetation and provide riparian function. FW-WSW-RMZ-DC 5 provides for habitat and movement that maintain and disperse populations of riparian-dependent species, including beaver. FW-WSW-RMZ-FSR-DC 13 acknowledges that beaver play a role in wetland development and riparian dynamics. Wildlife, Fish, and Plants Management Approach-11 allows for beaver to build and maintain beaver dams. Finally, newly incorporated in the final Plan, Wildlife, Fish, and Plants Management Approach-12 provides for consideration of non-lethal strategies when beaver need to be relocated.

Concern Statement 1155 **Beaver**

Beaver should be restored to suitable unoccupied habitat on the Carson NF in order to increase ecological integrity and help manage for the protection of other at-risk species.

Associated Comment Letter: 4901

Response

Beaver introduction/reintroduction is regulated by the New Mexico Department of Game and Fish. The final Plan includes Management Approach for Wildlife, Fish, and Plants-1, which encourages coordination with agencies such as the New Mexico Department of Game and Fish. Management Approach for Wildlife, Fish, and Plants-10 specifically calls for coordination with the New Mexico Department of Game and Fish in relation to allowing beavers to build and maintain dams. Final Plan components FW-WSW-RMZ-FSR-DC-5 and -13 and Management Approach for Forest and Shrub Riparian-1 provide further guidance related to beavers and beaver habitat.

Concern Statement 1156 **Beaver**

Work with the Game & Fish to reintroduce beaver into the Valle Vidal in order to heal the struggling watersheds.

Associated Comment Letter: 126

Response

See Concern Statement 1155, which addresses forestwide plan components for beaver. With respect to the Valle Vidal Management Area, MA-VVMA-DC-1 desires beaver habitat.

Concern Statement 1157 **Pollinators**

The Final EIS should assess current conditions with the aim of establishing standards that promote connectivity for native pollinators.

Associated Comment Letter: 4835

Response

Habitat connectivity refers to the ability of native pollinators to move freely about their environment to access necessary resources or seek other individuals within their species to fulfill basic life-cycle needs. Habitat connectivity may be negatively impacted by two primary issues: impaired ecological conditions

and physical obstructions. Final Plan components promoting ecological conditions for pollinators include FW-VEG-DC-10-11, FW-VEG-DC-18, FW-VEG-G-3, FW-WFP-DC-8, and FW-WFP-G-5. The FEIS (Volume 3, Appendix H, Section 4, Table 132) lists all plan components and management approaches that promote habitat connectivity for native pollinators.

Concern Statement 1158 **Pollinators**

Coordinate with the public and partners to conserve and manage pollinators and pollinator habitat. We suggest that a pollinator section be added to the Plan that includes desired conditions, objectives, guidelines, standards, and goals to provide for connected pollinator habitat along roadways and beyond.

Associated Comment Letters: 4835, 4951, 5574

Response

Ecological Sustainability and Diversity of Plant and Animal Communities management approaches in the final Plan encourage coordination amongst partners to conserve and manage pollinators (i.e., Management Approach for Wildlife, Fish, and Plants-1. FW-VEG-DC-18 directs conservation and management of pollinators and their habitat. Similarly, FW-WFP-DC-8 provides for foraging habitat for native pollinator species within plant communities across the Carson NF.

Social, Cultural, and Economic Sustainability and Multiple Use plan components in the final plan encourage coordination with the public and partners to conserve and manage pollinators and pollinator habitat (e.g., FW-PART-DC-3).

Habitat connectivity refers to the ability of native pollinators to move freely about their environment to access necessary resources or seek other individuals within their species to fulfill basic life-cycle needs. Habitat connectivity may be negatively impacted by two primary issues: impaired ecological conditions and physical obstructions. The FEIS Volume 3, Appendix H, Section 4, Table 132 on page 239, lists all plan components and management approaches that promote habitat connectivity for native pollinators. These plan components include desired conditions, objectives, guidelines, and standards that provide for connected pollinator habitat along roadways and beyond.

Concern Statement 1159 **Arizona Willow**

Ensure there are adequate plan components to sustain Arizona willow, including monitoring.

Associated Comment Letter: 4925

Response

The final Plan includes components that would benefit Arizona willow (FW-RMZ-FSR-DC-1, -2, -7, -8, -11, and -12; FW-FSR-G-1; FW-RMZ-DC-2, -3, -6, and -9; FW-RMZ-G-2; FW-GRZ-DC-4 and -6; FW-GRZ-S-1; FW-GRZ-G-1 and -2). Monitoring of Arizona willow would occur at the project level, as necessary. Forest Plan monitoring includes only focal species and Arizona willow is not a focal species.

Concern Statement 1160 **Arizona Willow, Grazing**

The draft EIS fails to include livestock grazing as a threat to Arizona willow.

Associated Comment Letter: 5347

Response

The FEIS includes an analysis of livestock grazing effects on riparian habitat, which includes Arizona willow. See Chapter 3, Environmental Consequences for Species of Conservation Concern Common to Action Alternatives 2, 3, 4, and 5, Riparian Associates.

Concern Statement 1161 **Focal Species**

The final Plan should include the addition of the following focal species in piñon-juniper woodlands: Juniper titmouse (*Baeolophus ridgwayi*) and Woodhouse's scrub-jay (*Aphelocoma woodhouseii*). Both of these species occur across a broad range of piñon-juniper habitat types, and both are piñon-juniper specialist species of high conservation concern (according to the New Mexico Avian Conservation

Partners). Monitoring of these species would provide an accurate portrayal of habitat quality in the Carson NF.

Associated Comment Letters: 4897, 4951

Response

According to the 2012 Planning Rule directive (FSH 1909.12, 32.13c), "The purpose for monitoring the status of focal species over time is to provide insight into the following:

1. Integrity of ecological systems on which focal species depend,
2. Effects of management on those ecological conditions,
3. Effectiveness of the plan components to provide for ecological integrity and maintain or restore ecological conditions, and
4. Progress towards achieving desired conditions and objectives for the plan area. It is not expected that a focal species be selected for every element of ecological conditions."

Objectives are designed to make progress toward attaining desired condition and help set the basis for priority areas or activities (1909.12 22.12); they focus management on certain areas or activities. Focal species are indicators of progress toward achieving objectives and associated desired conditions. The final Plan has no piñon-juniper habitat objectives because, as this habitat type is not highly departed, piñon-juniper is not a focus of active or ongoing management (USDA FS Carson NF 2015). The purpose of focal species is to monitor project effects toward desired condition. Because of the limited active management in this habitat type, monitoring focal species in piñon-juniper would not contribute additional knowledge about desired project effects.

Concern Statement 1162 **Focal Species**

The Draft Plan's list of Focal Species (page 184) includes only two species, and is insufficient to meet the 2012 Planning Rule's direction for providing "inference to the integrity of the larger system to which it belongs, and ... meaningful information regarding the effectiveness of the plan in maintaining or restoring ecological conditions to maintain the diversity of plant and animal communities." Resource limitations may preclude monitoring an extensive set of species present across all vegetative types in the Forest. However, the premise that focal species only need to apply to those ERUs most departed from reference conditions (and where the greatest number of project activities are anticipated) is flawed. Plan-directed management occurs across the entire Forest, even where it includes conscious decisions to allow ecological processes to proceed without active intervention.

Considerations for focal species given in the Plan include species ability to be effectively monitored within the financial capability of the Forest, being sufficiently abundant to detect change in status, having standardized monitoring approaches, and exhibiting population responses to habitat stressors. If limited resources dictate a cap on focal species monitoring activities, the final Plan should recommend community-level monitoring (e.g., for birds or small mammals) that includes individual species responsive to Forest management conditions. This approach evaluates biological community or guild-level data to provide greater statistical power, and reveal composition and structure patterns informative of habitat conditions. Community-level data could indicate whether overall composition is changing, and individual focal species such as the species below could be used to assess directionality of those changes relative to desired conditions. New Mexico Department of Game and Fish biologists would be available to provide technical assistance in designing such a monitoring system for focal species.

The final Plan should include the following focal species by ecological response unit: Ponderosa pine: Grace's warbler, Virginia's warbler, pygmy nuthatch, northern goshawk; Mixed conifer: Grace's warbler, Williamson's sapsucker, northern goshawk; Riparian (montane): Lewis's woodpecker, olive-sided flycatcher; Piñon-juniper: pinyon jay, juniper titmouse, black-throated gray warbler; Sage: vesper sparrow, sagebrush sparrow, sage thrasher.

Associated Comment Letters: 4951, 5574

Response

According to the 2012 Planning Rule directive (FSH 1909.12, 32.13c), "Every plan monitoring program must identify one or more focal species and one or more monitoring questions and associated indicators addressing the status of the focal species." Thus, the Carson NF is in compliance with the 2012 Planning Rule in including two focal species in the final Plan.

The final Plan encourages the use of partnerships to accomplish forest management, including monitoring (Partnership Management Approach-2). The plan monitoring program is not intended to depict all monitoring, inventorying, and data-gathering activities undertaken on the national forest, nor is it intended to limit monitoring to just the questions and indicators listed in the chapter 4 in the final Plan. While the monitoring plan is designed to monitor and adjust the final Plan, it is not the appropriate place to include direction to encourage partnerships for monitoring. However, monitoring plans and strategies are constrained by the fiscal and technical capabilities of the agency and should consider use of available information sources and partnerships to expand capabilities.

Focal species are defined by the 2012 Planning Rule as "A small subset of species whose status permits inference to the integrity of the larger system to which it belongs and provides meaningful information regarding the effectiveness of the plan in maintaining or restoring ecological conditions to maintain the diversity of plan and animal communities… commonly selected based on their functional role in ecosystems" (36 CFR § 219.19).

The final Plan includes Grace's warbler as a focal species for ponderosa pine and mixed-conifer habitat type. Grace's warbler response to both timber and fire management within the species' preferred habitat has been relatively well-studied. Virginia's warbler, northern goshawk, Williamson's sapsucker, and pygmy nuthatch were not selected as focal species because the species are either difficult to monitor, not abundant enough to measure change in status, and/ or the species' responses to management activities are not well known.

For forested riparian habitat, Lewis's woodpecker and olive-sided flycatcher are not good indicators for forest riparian habitat across all elevations as these species are only associated with lower- to mid-elevation riparian systems. Chapter 4 Monitoring Topic II in the final Plan includes monitoring questions to assess if management actions are maintaining or moving riparian vegetation toward desired conditions.

For piñon-juniper habitat types, pinyon jay are difficult to monitor and not abundant enough to measure change in status. See also Concern Statement 1161 for further responses.

Lastly, objectives are designed to make progress toward attaining desired conditions and help set the basis for priority areas or activities (1909.12 22.12). Objectives focus management on certain areas or activities. Focal species are indicators of progress toward achieving objectives and associated desired conditions. The final Plan does not have sagebrush shrubland habitat objectives because sagebrush shrubland is not a focus of active or ongoing management. Due to limited active management activities in this habitat type, monitoring focal species here would not contribute to additional knowledge about desired project effects.

Concern Statement 1163 **Focal Species**

Designate elk and pronghorn as focal species and develop monitoring questions that help assess effectiveness of plan direction related to connectivity.

Associated Comment Letter: 4925

Response

Habitat connectivity allows for terrestrial and aquatic animals to move freely about their environment to access necessary resources or seek other individuals within their species to fulfill basic life-cycle needs.

Connectivity may be negatively impacted by two primary issues: impaired ecological conditions and physical obstructions.

Focal species are defined by the 2012 Planning Rule as "A small subset of species whose status permits inference to the integrity of the larger system to which it belongs and provides meaningful information regarding the effectiveness of the plan in maintaining or restoring ecological conditions to maintain the diversity of plan and animal communities… commonly selected based on their functional role in ecosystems" (36 CFR § 219.19). Focal species are not selected to make inferences about other species. For elk and pronghorn to be a focal species, they would have to provide meaningful information regarding the effectiveness of the plan in maintaining or restoring ecological conditions.

Elk are forest generalists and are found in every habitat type and in every seral state condition across the Carson NF; pronghorn occur in limited locations on the Carson NF. Pronghorn and elk are more affected by impaired physical obstructions than impaired ecological conditions. The most common trend indices for monitoring elk and pronghorn include minimum counts, spotlight or ground counts, and pellet group surveys. Unfortunately, most of these commonly used trend indices are hampered by false assumptions that usually result in trend information of uncertain value, and few trend indices have been calibrated to actual population size (Keegan et al. 2011). Consequently, these methods are seldom used by management agencies to monitor populations because of the inherent problems and inaccuracies in these methods. For population estimates, the most used and probably best method is an aerial sight-bias (sightability) model (Otten et al. 1993; Samuel et al. 1987). Sightability model surveys are expensive to conduct because they require the use of a helicopter and sightablility models do not provide meaningful information regarding habitat use by elk and pronghorn. Therefore, identifying elk and pronghorn as a focal species would not contribute additional knowledge about desired project effects.

Chapter 4 (Monitoring Topic II) in the final Plan includes several monitoring questions that help assess effectiveness of plan direction related to habitat connectivity.

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