

Appendix S

**Response to Comments on the San Juan/Tres Rios
Draft Land and Resource Management Plan and Draft
and Supplemental Environmental Impact Statements**

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CHAPTER 1 – INTRODUCTION

Public involvement is critical in shaping a plan for the management of public lands. Public comments ensure a plan is designed that not only meets agency missions and legal mandates, but addresses the interests of the American public.

The National Environmental Policy Act (NEPA) and the Council on Environmental Quality (CEQ) regulations require that lead agencies evaluate comments received from persons who review a Draft Land and Resource Management Plan (LRMP)/Draft Environmental Impact Statement (EIS) and prepare a written response. This appendix is a summary of the substantive public comments received on the Draft LRMP/EIS and the Supplement to the Draft EIS for the U.S. Forest Service (USFS) San Juan National Forest (SJNF) and Bureau of Land Management (BLM) Tres Rios Field Office (TRFO) and the response to those comments.

The SJNF and TRFO provided the public a 120-day comment period for the Draft LRMP/EIS. The comment period began on December 14, 2007, and ended on April 11, 2008. A 90-day comment period was also provided on the Supplement to the Draft EIS from August 26 to November 25, 2011. Approximately 53,781 letters were received from members of the public; city, county, state, tribal and federal officials; public interest organizations; and private businesses during these two comment periods. Of these, 52,273 were form letters; the remaining 1,508 letters consisted of original responses or form letters with additional original text.

CHAPTER 2 – CONTENT ANALYSIS

A standardized content analysis process was conducted to analyze the public letters received on the Draft LRMP/EIS and Supplement to the Draft EIS (hereafter “Draft LRMP/EIS” refers to all comments received on the Draft LRMP, Draft EIS, and Supplement to the Draft EIS). Content analysis is designed to extract comments from each letter received, evaluate similar comments from different letters, and identify specific topics of concern. Additionally, content analysis ensures that every comment is considered fairly and accurately represents the breadth and depth of the public’s viewpoints. All letters and comments have been treated equally. They are not weighted by status of respondents or organizational affiliation and it does not matter if an idea was expressed by thousands of people or a single person. The content analysis process also provides a relational database capable of reporting various types of information while linking comments to the original letters.

During the content analysis process, each letter (including postcards, faxes, emails, or other documents), was assigned a unique tracking number. Content analysts then read all letters in their entirety and proceeded to identify discrete comments within them. Each letter may have contained anywhere from one to several hundred comments. Each comment was entered verbatim into a project database and coded based on the particular concern, resource consideration, or proposed management action expressed. Comments were then summarized and/or grouped into public concern statements and given a unique identifying number. Public concern statements range from broad generalities to specific points and can represent one or many comments.

Although many of the submissions were original, the majority of the responses were form letters. Form letters are five or more letters that contain identical text but are submitted by different people. Each form letter was analyzed to ensure that the concerns of all respondents were considered. If a respondent added information to a form letter, this content was considered a unique comment and coded/grouped as necessary.

2.1 Substantive vs. Non-substantive

The final step of content analysis involved determining whether a comment was *substantive or non-substantive* in nature. A *substantive* comment does one or more of the following:

- Questions, with a reasonable basis, the accuracy of the information and/or analysis in the Draft LRMP/EIS
- Questions, with a reasonable basis, the adequacy of the information and/or analysis in the Draft LRMP/EIS
- Presents reasonable alternative other than those presented in the Draft LRMP/EIS that meet the purpose and need of the proposed action and addresses significant issues
- Questions, with a reasonable basis, the merits of an alternative or alternatives
- Causes change in or revisions to the proposed action
- Questions, with reasonable basis, the adequacy of the planning process itself

Consistent with 40 Code of Federal Regulations (CFR) 1503.4(b), all substantive comments received a response.

The SJNF and TRFO are not required to respond to non-substantive comments. Although every comment was carefully considered and reviewed, non-substantive comments did not receive a detailed response. A *non-substantive* comment is categorized as one of the following:

- General comment, opinion, or position statement
- Concern is outside the scope or irrelevant to the propose action and decision
- Means of addressing the concern are already decided by law, regulation, or policy
- Concern can be better addressed through another decision process (e.g. project level analysis)
- Concern requests action that has already been considered in an alternative

After completion of the content analysis, public concerns were given to members of the interdisciplinary team for response.

CHAPTER 3 – HOW TO USE THIS COMMENT-RESPONSE DOCUMENT

Table S.1 displays the names of the individuals, organizations, and governmental agencies that commented on the Draft LRMP/EIS and the Supplement to the Draft EIS, along with their corresponding public concerns. Public concerns have alpha-numeric identifiers (e.g., AQ1) in order to facilitate tracking throughout the response process. These identifiers are for tracking purposes only, and in no way indicate ranking by priority or importance.

Table S.1 is organized alphabetically by last name, with anonymous submittals listed as “Anonymous.” To find a comment and response, locate the commenter or organization’s name in the table and then find the associated alpha-numeric public concern number(s). The letter abbreviation part of the public concern number identifies which section the public concern can be found in (e.g. AQ = Air Quality).

Table S.2 is an index of the public concern letter-abbreviations, associated sections, and the page number on which that section begins. Sections are organized alphabetically. There are some planning issues covered in the LRMP and Final Environmental Impact Statement (FEIS) for which no comments (or substantive comments) were received; those issues are not listed in this appendix as there are no substantive comments associated with them.

As an example, Bruce Adams submitted a letter that contained one associated public concern. To read the managing agencies’ response to Bruce Adam’s comment, first find his name in Table S.1, and then look at the public concern number (LR13). Next, look at Table S.2 to see which resource section the letters correspond to; LR corresponds to the “Livestock and Rangeland Management” section which begins on page 48. Turn to page 48, and find LR13 as the fifteenth public concern in this section.

If you do not see your name in the table, your comments were most likely categorized as *non-substantive* and did not receive a detailed response. Please refer to the Content Analysis section of this appendix for a detailed description of non-substantive comments.

Table S.1: Commenter Index

Last Name	First Name	Organization	Public Concern Number
Commenters on Draft – no highlight			
Commenters on Supplement – grey highlight			
Commenters on Both Draft and Supplement – crosshatch highlight			
Adams	Brent		AT31, AT37, LR10, RC25
Adams	Bruce		LR13
Aks	Howard		RN7
Alderson	George & Frances		HD1, RWA6
Alexander	Madie		RN7
Allard	Wayne	U.S. Senate	CP14, TW10, WA45
Allison	Lesli		FF14, MN29
Allison	Miscelle		CC1, CP9, CP12, FF12, RC13, RW6, WA30
Anderson	Don & Marilyn McCord		IV2
Anderson	Lynn		AQ38/PP12/PP13
Annala	Loretta		HD1, RWA1
Anonymous			RN7
Atwater	Dennis	Southwest Public Lands Coalition	AT14/CP15
Bachman	Don		MA1
Baker	William		FF15
Baker	Keith		AT36
Barlow	Kevin & Paulette		RC25
Bausch	Robert		MN23, TW32
Begay	Timothy	Navajo Nation	HC7
Belles	Mark		RC48, RC49
Birtcher	Normand	Western Excelsior Corp.	CC1, ID2, IR10, TM11, TW29,
Blackmer	Jason	SWCO Livestock Association	CC1, LR15, LR30, RC5, WS8
Blake	Seana		RWA1, RWA5
Bohan	Suzanne	U.S. Environmental Protection Agency, Region 8	AQ27, AQ29, AQ30, AQ36, AQ37
Bove	Clifford		TE14
Brewer	Doug		RC5
Brill	Aaron		RC30, RC32
Britton	Rhonda		AT33
Brown	David	BP America Prod. Co.	AQ1, AQ8 , AQ9, AQ13, AQ17, AQ18, AQ19, AQ39, AQ41, MN3, MN12, MN14, MN17, MN21, MN32, MN36, RC50, RW8, SV9, WA23, WA42, WA46
Brown	Gerald		RWA4
Brown	J. Paul		RC5, TW10
Brown	Mike		RWA4
Carroll	Michael	Wilderness Support Cent., Wilderness Society	CP13, WA4
Cassias	Pearl	Southern Ute Indian Tribe	ED8, TW45

Last Name	First Name	Organization	Public Concern Number
Commenters on Draft – no highlight			
Commenters on Supplement – grey highlight			
Commenters on Both Draft and Supplement – crosshatch highlight			
Churchwell	Ty	Trout Unlimited, Five Rivers Chapter	TW3, WA47
Clark	Matthew	Trout Unlimited	AE24, AQ23, ED7, ED8, ED9, MN41, MN49, MN72, TW34, WA49
Cochran	Michael		RWA1
Colyer	Marilyn		CC1, FF9, TE7, TW15
Crawford	Jan		AE15, AE18, AQ7, AT7, IV7, LD5, LD16, LR33, MN33, RC3, TM27, WA33, WA40, WA41, WH2
Crawford	Margaret		AQ1, MN23
Crocker-Bedford	Cole & Kara-Lynn		AT11, AT34, LD13, MA2, SO4
Cummins	Chris	Saddleback Ranch	WS8
Dayzie	Sam		MN23
Derck	Gary	Durango Mountain Resort	AE1, AE8, AE13, IR9, RC33, RW3, RWA11, SV11, SV5, WA13, WA17
Dey	Eileen	Conoco Phillips	MN38
DiLeo	Jim	Colorado Department of Public Health and Environment	AQ27, AQ38, MN77
Donovan	Dianne & Joe Griffith		AQ36
Dossey	Randy	Sheep Mt. Guides & Outfitters	RN7
Drew	Deanna	Rico Alpine Society	RC46
Eckhardt	Cheryl	National Park Service	HC11
Eden	Kari		AT22, PP1, RC2
Estelle	Beth		RWA3
Farny	Dave		RN7
Farny-Mallette	Cindy		RN7
Fearn	Stephen		WS4
Felton	Jim		AC4, AQ1, AQ4, AQ5, AQ12, AQ17, AQ21, AQ41, AT2, AT4, ED11, HC1, HC6, IR6, IR8, IR14, MN4, MN17, MN22, MN37, MN38, MN39, MN62, PP2, PP4, SS1, SV2, SV4, SV7, TW12, TW18, WA19, WA34, WS4
Fishing	Nancy		CC1, ID2, TM11
Fitzgerald	Janine		CC1, CC4, HC2, HD3, HD4, HD5, HD6, MA5, RN5, TE9
Fitzgerald	Theresa		HD1, PP11, WA12
Flaugh	Lisa		AT21, AT26
Fleming	Tim		RWA3
Flynn	Conor		RWA1, WS8
Foutz	Leeann		PP1, RC2
Fowler	John	Range Improvement Task Force	AC9, LR1, LR12, LR13, LR15, LR16, LR19, LR20, LR22, LR29, TW29, WA24, WA41
Franklin	Judith		RC14, RC17
Frantz	Nona		AT19
Frost	Clement	Southern Ute Tribal Council	HC3, HC5, LR28

Last Name	First Name	Organization	Public Concern Number
Commenters on Draft – no highlight			
Commenters on Supplement – grey highlight			
Commenters on Both Draft and Supplement – crosshatch highlight			
Frost	Kit		RWA3
Fujimoto	Shirley & Kevin Cookler	McDermott Will & Emery	PP9
Furtney	Seth		RWA1
Gardel	Holley		AT36
Gardner	Camilla		RN7
Gervais	Paul		RN7
Gilbert	Bill		WH3
Gimbel	Jennifer	Colorado Water Conservation Board, Department Natural Resources	CP2, CP3, CP13, IV5, PP5, WA29
Gogulski	Todd		RC25
Grady	Derric		RC25
Graham	Chloe		RN7
Graham	Steve		AT36, CP13, RC2, RC9
Grant	Kent	Colorado State Forest Service	AT11
Green	Allan		RC5
Gregory	Dani		RC25
Grigg	Kalin		AQ36, MN8, RC45
Grove	Debra		LD1
Grover	Ravi		AQ43
Gulliford Ph D	Andrew		HC4
Guynn	Peter & Caroline		RWA3
Hagerty	Todd		AT22, PP1
Hall	William		AT26, ED3, RC9, TE10
Hamrick	Dusty		RN7
Harper	Ned		MN65
Harrison	Randy	Intermountain Resources	TM11, TM12, TM13
Havens	Kenneth	Kinder Morgan CO ₂ Co.	AQ38, MA7, MN4, MN6, MN9, MN22, MN24, MN73, MN74, PP2, TW18, WA51
Hawthorne	Brian	Blue Ribbon Coalition	AT26, RC1
Heaton	Al	Colorado Cattlemen's Association, Rangeland Stewardship Committee	CC1, LR11, LR14, LR17, LR2, LR21, LR30, PP10, TW3, WS8
Heeter	Curtis		WA54
Helfrich	Wayne & John	Brownstein, Hyatt, Farber, Schreck	WS8
Hicks	Dusty		ED2, RC2, RC39
Hill	David	Encana Oil and Gas	AQ1, AQ3, AQ12, AQ14, AQ40, ED2, ED11, MN22, MN36, MN38, MN40, MN62, SO5, SV8, SV10, TE18
Hoch	Gregory	City of Durango	LD10
Hogan	Tim		WA37
Holm	Brent	Ridgway Ridgrunners	AT33, RC5
Holmes	Tracey Jo		WH1, WH3
Hott	R.	San Juan Conservation District	WS10
House	Ernest, Sr.	Ute Mountain Tribe	AQ11, CP10, RC13, WA22

Last Name	First Name	Organization	Public Concern Number
Commenters on Draft – no highlight			
Commenters on Supplement – grey highlight			
Commenters on Both Draft and Supplement – crosshatch highlight			
Hurst	Ronnie		RC7
Ivers	Dana		AQ1, MN23
Jaramillo	Clifford		AT33
Jefferies	Ned	La Plata-Archuleta Cattlemen's Association	CC1, LR11, LR12, LR20, LR23, LR27, LR31, LR32, RC5, TW2
Johnson	Roy		AQ3
Karmes	Sandra		AT19
Kemper	Douglas	Colorado Water Congress	AE1, PP6, WA20, WA21, WS6
Kibel	Julie	Dolores County	AT14, AT15
Kimball	Spencer	Independent Petroleum Association of Mountain States, Western Energy Alliance	AQ5, AQ38, ED5, LW3, MN17, MN22, MN24, MN40, MN41, MN42, MN38, MN62, TW35, WA50
Klatt	Ron		CC1, FF7, FF10, LR5, RN4, TW2
Kohin	Judith		RN7
Koppenhafer	Gerald & Larrie Rule & Steve Chappell	Montezuma County	AQ27, CP4, ED11, LR3, LR11, LR15, LR25, LR30, MA6, MN22, MN25, MN38, MN39, MN63, PP10
Korb	Julie		RWA1
Krefling	Adam		AT20, AT23
Krueger	Courtney	LaPlata County Planning Department	AQ38, AT16, AT17, TW36, WA64, WA65, WA67
Kuhlman	Ernie	San Juan County Commission	AT1
Kukuk	Janelle	Colorado Snowmobile	AT26, AT29, AT30, AT33, ED3, RC6, RC9, RC11, RN1, RN3,
Kuntz	David & Marti		AQ1, MN23
Kurlander	Scott		RWA7
Lalo	Marvin	Hopi Tribe	CP11
Lance	Christine		RWA1, RWA5
Landfield	Michael		MN23
Larkin	Daniel	Rocky Mt. Bighorn Society	TW10
Laur	Paul		RN6
Law	Jim		AT18, PP16, WA55, WA62, WA63, WA66, WA68
Ledgerwood	Lynn		RWA1
Lee	Brice	Colorado Public Lands Council	LR8, LR20, LR23, LR29, PP9, RC5, TW10
Leftwich	Marilyn		HD1, RWA5,
LeValley	Robbie		CC1, LR8, LR11, LR12, LR20, LR21, LR25, LR29
Libby	Sherri		RWA3
Lish	Christopher		MN23, RWA10
Littlejohn	Tony		RWA5
MacGregor	Jocko		RC23
Macomber	Clay		RC24
Mahaffey	Joe	Dolores Water Conservancy District	CP7, WS6, WS8, WS9
Maisch	Heather		AT33

Last Name	First Name	Organization	Public Concern Number
Commenters on Draft – no highlight			
Commenters on Supplement – grey highlight			
Commenters on Both Draft and Supplement – crosshatch highlight			
Malarsie	George	San Juan Basin Habitat Partnership Program	LR13
Marion	Robert		RC8, RW7
Matheny	J	Questar	ED11, MN22
May	Joan	San Miguel County Commissioners	AQ27, AQ38, AT13, MN78
McGinley	Eileen		RN7
McGuigan	Sherwood	National Mustang Assoc.	MN20, WH3
Mears	Greg		AT36
Meyers	Chris	Intermountain Resources	ID2, SS1, TE19, TM11, TM12
Miller	Sandra		RWA3
Miller	Tad		AT33
Monroe	Mary	Trails 2000	CP13, RC23, RC25, RC44, WA4
Morgan	Lorri		WH3
Moseley	Claire	Public Lands Advocacy	AQ25, AQ26, AQ27, AQ28, AQ29, AQ30, AQ33, AQ34, ED4, ED6, HC9, MN15, MN19, MN23, MN62, MN64, MN71, PP3, RC5, SV1, WA51
Muire	John	Cabot Oil & Gas Corp.	AC4, AQ1, AQ3, AQ7, AQ12, AQ21, AQ42, AT2, AT4, AT11, IR7, IR8, MA3, MA6, MN5, MN16, MN22, MN24, MN27, MN38, MN39, MN62, PP2, PP4, PP18, RC41, SS1, SV3, SV4, SV7, TE16, TW12, WA19, WA35, WS4, WS15
Mumma	John		LR10, LD12, SS3
Murphy	Sheldon	Red Rocks Ranch	LR12, LR15, LR26
Newberry	Linda	Audubon, Colorado	TW21, TW26, TW27, TW28, TW29
Norton	John		PE1, PE2, RC47
Nunn	Zachary		RN7
O'Neill	Suzanne	Colorado Wildlife Federation	TW32, TW37, MN67
Osbourne	Moraan		RN7
O'Shea Heydinger	Chris		AQ1, MN23, MN68
Padden	Kevin		WA37
Paulson	Deb		MN31, TW14

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Commenters on Draft – no highlight			
Commenters on Supplement – grey highlight			
Commenters on Both Draft and Supplement – crosshatch highlight			
Pearson	Mark	San Juan Citizens Alliance, Clearview Homeowners Assn.	AC1, AC2, AC3, AC5, AC6, AC7, AC8, AC10, AC12, AC14, AC15, AE2, AE5, AE7, AT7, AT8, AT12, AT38, CC1, CC4, CP5, CP13, DR1, FF4, FF6, FF11, FF12, HD2, IR1, IR2, IR3, IR5, IR12, IV6, LD3, LD6, LR2, LR4, LR6, LR18, LR24, LW1, LW2, MA4, MA5, MN2, MN3, MN7, MN26, MN28, MN30, PE2, RC3, RC4, RC8, RC26, RC27, RC28, RC31, RC34, RC37, RC40, RN5, RN7, RW1, RW4, RWA8, RWA9, RWA10, RWA13, SO2, SO6, SS2, SS5, SV6, TE3, TE5, TE6, TE7, TE8, TE12, TE13, TE14, TM1, TM3, TM5, TM7, TM9, TM10, TM15, TM16, TM18, TM19, TM20, TM22, TM25, TM26, TW11, TW14, TW17, TW20, TW21, TW22, TW23, TW27, TW29, WA4, WA37, WA47, WS14
Perlman	Rob	Colorado Ski Country USA	AE1, RC29, RC39, RW3
Petersen	David	Colorado Backcountry Hunters & Anglers	HD1, PE2, RWA8
Pfister	Allan	U.S. Fish and Wildlife Service	TW5, TW8, TW29
Pitcher	Davey	Wolf Creek ski area	ED1, RC7, RC38, RC39, RC51, WA25, WS2
Plantry	Jack		RN7
Pryer	Thalia		RN7
Pryor	Coco		RN7
Randolph	Dan	San Juan Citizens Alliance	AE27, AQ27, AQ31, AQ32, AQ35, AQ44, CC2, CP16, ED10, LR34, MN23, MN41, MN47, MN48, MN51, MN52, MN53, MN54, MN55, MN56, MN57, MN58, MN59, MN60, MN61, MN67, PP14, PP15, TE17, WA52, WA53, WA54, WA56, WA57, WA58, WA59, WA60
Redd	Heidi		RN7
Reece	Dennis		RC5
Reynolds	Richard	Colorado Department of Transportation	LD8, LD9, LD11
Rhoades	Clint		AT33
Riddle	Joelle	La Plata County Commission	CP13
Riggle	Don	Trails Preservation Alliance	AE16, AE17, AE20, AQ1, AT6, AT10, At19, AT20, AT23, AT25, CC3, ID1, PP7, PP18, RC2, RC10, RC12, RC41, RC42, RC43, RWA2, RWA12, TE19, TW31, TW43, TW44, WA26, WA36, WA43, WA44
Ritter	Jorg		AT36
Robinson	David		AT11, IV2
Robinson	Jean		CC1, TW10

Last Name	First Name	Organization	Public Concern Number
Commenters on Draft – no highlight			
Commenters on Supplement – grey highlight			
Commenters on Both Draft and Supplement – crosshatch highlight			
Robinson	Kristy	Conoco-Phillips Company	AE21, AE22, AE23, AQ22, AQ27, AQ38, AQ39, ED4, MN64, MN70, MN71, PP17, RW9, SO7, SO8, SO9, TW33, WA48, WA51
Robinson	Rita		RN7
Rodriguez	Latifa	Mesa Verde Backcountry Horsemen	RC14, WH3
Rogers	Kenny	Colorado Cattlemen's Association	CC1, LR8, LR20, LR23, LR29, PP9, RC5, TW10
Roybal	Julie	New Mexico Environment Department	AQ24, AQ43
Ryder	Steve	Winter Wildlands Alliance	AT27
Sanchez	David		LR2, LR19, LR20, LR22, LR26, LR29, TW29, TW42, WA24, WA41
Sanchez	Heather		CP13
Schaefer-Russell	Susie		PP1, AT23
Schaufele	Nancy		LD1, WH1, WH3
Schoonderwoerd	Leslie		AT19
Schuetz	Kathy & Russ		RC14
Schwindt	Adam		RC25
Sheftel	Janice & Adam T Reeves	Maynes, Bradford, Shipps & Sheftel, LLP	AE1, AE4, AE6, AE7, AQ13, CP6, CP7, CP14, IV2, RW6, WA13, WA18, WA19, WA24, WA27, WA28, WA31, WA33, WA38, WA39, WS1, WS3, WS4, WS5, WS6, WS7, WS8, WS9, WS11, WS12, WS13
Sherer	Jon & Kathy		RC16, RC17
Silverstein	Michael	Colorado Department of Public Health and Environment	AQ1, AQ10, AQ16
Sippy	Gaige		AQ3
Sir Jesse	Ulli		RN7
Smith	David	Bootjack Management Co.	WS8
Snyder	Phyllis		LR7, LR20, PP9, RC22, WS3, WS8
Sorenson	Linda		RC5
Sperry	Joe	Colorado Woolgrowers Association	LR8, LR29, TW10
Spezze	Thomas	CPW	AE7, AE9, AE10, AE11, AE12, AE25, AE26, AT3, AT20, AT35, ED8, IV5, IV8, LR9, SS4, MN10, MN21, MN34, MN35, MN75, MN76, PE1, SS4, TW1, TW2, TW7, TW9, TW25, TW29, TW38, TW39, TW40, TW41, WA49, WA61,
Spielman	Andrew	Wolf Creek Ski Corp	RC36, RC38, RC39
Sprung	Gary		RC23, RC25, RC44, RN6
Staber	Sara & B. Brinley		AT20, WH3
Stark	Jennifer		MN8, RC45
Storch	Mike		RC20
Sullivan	Tim	Nature Conservancy in Colorado	AC13, AT20, FF2, IV1, IV3, IV4, LR3, MN1, RW5, SV12, TE2, TE4, TW13, TW15, TW29

Last Name	First Name	Organization	Public Concern Number
Commenters on Draft – no highlight			
Commenters on Supplement – grey highlight			
Commenters on Both Draft and Supplement – crosshatch highlight			
Sumner	Bret	Beatty and Wozniak, P.C.	AQ27, AQ38, ED6, MN38, MN41, MN42, MN45, MN46, MN66, TW35, WA51,
Sykes	Tom		TW29
Talley	Tom	San Juan Wool Growers	LR8, TW10
Taylor	Janice & B Brooks		HD1, WH1, WH3
Testa	Elizabeth	Four Corners Backcountry Horsemen	RC16, RC17, RC18, RC19
Thagard	Neil	Foundation for North American Wild Sheep	LR10
Thomas	Tom	Public Access Preservation Association	AT23, PP1, RC5
Tookey	William	San Juan County Commissioner	WA16
Troxel	Tom	Intermountain Forest Association	AQ3, AQ6, AQ15, AQ20, AT5, AT9, CC1, ED11, FF1, FF3, FF5, ID1, ID2, IR7, PP8, RN2, SO1, SO3, SO6, TE1, TE9, TE10, TE11, TE15, TE19, TM2, TM4, TM6, TM8, TM11, TM13, TM14, TM17, TM21, TM23, TM24, TM28, TW4, TW6, TW7, TW16, TW19, TW24, TW26, TW29, TW30, TW31
Tuckwiller	Ross	Theodore Roosevelt Conservation Partnership	Mn19, MN23, TW1, RWA1
Valentine	Ellen		RWA1, RWA5
Vandeman	Mike		RC22
Vandenberg	George		LR10
Vankat	Drew		RC21, RC25
Vehar	V Anthony	Vehar Law Offices	PP9
Venne	Sharon		RC14
Volger	Robert		RC18, RC19
Walsh	Patrick		RC23, RN6
Walz	Barbara	Tri-State	AT11, LD1, LD2, LD4, LD7, LD14
Warburton	Beverly		HC10, RC14
Ward	Marvin	Mineral County Commissioner	CP1, ED2, RC35
Weaver	Joan		RC22
Webber	Steven	U.S. Department of Energy	LD15
Weisbach	Philip		AT36
Weiss	Carrie	Pagosa Area Water and Sanitation District	AE3, CP3, CP13, WA14, WA15, WA32
Westmoreland	Barbara & Nelson		RW10
Whalen	Tom		RWA3
Wheeler	Karen		MN67
Whitehead	Bruce	SW Water Conservation District	CP13, CP14
Whiting	Michael		MN29
Wiese	Larry	National Park Service	AC5, AQ1, FF8, LD6, LR10, LR27, TW13

Last Name	First Name	Organization	Public Concern Number
Commenters on Draft – no highlight			
Commenters on Supplement – grey highlight			
Commenters on Both Draft and Supplement – crosshatch highlight			
Wilkinson	Gary & A. Christy	San Juan Trail Riders	AT19, AT20, AT23, PP1, RC2, RC7, RC15, RC27
Winstanley	Dean	CPW	AT30, FF13
Wolf	James	Continental Divide Trail Society	IR11
Wright	Wayne		RC5
Xavier	Zita		AQ1, MN23, MN68
Young	Sandy		AT38, LR12, LR20
Zandy	Sievers		AT36
Zauberis	Lawrence		LR11, RC5
Zeller	Christi	La Plata County Energy Council	AQ25, AQ26, AQ27, AQ28, AQ29, AQ30, AQ33, AQ34, ED4, ED6, MN11, MN13, MN22, MN36, PP9
Zimmerman	Kathleen	National Wildlife Federation	MN67, MN69, TW32, TW37

Table S.2: Public Concern Sections Index

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DR	Dolores River Canyon	35
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HC	Heritage and Cultural Resources	40
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LD	Lands and Special Uses	46
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CHAPTER 4 – RESPONSE TO COMMENTS

As described in the Content Analysis section, each public concern statement was derived from one or many individual public comments. The interdisciplinary team reviewed both the public concern and the supporting comments in the preparation of the responses. A response may be general or contain specific details that address a particular comment associated with the public concern. Interested parties may contact Mark Lambert (mblambert@fs.fed.us) if they would like to review the original letters and comments.

4.1 Areas of Critical Environmental Concern

- AC1** *Public Concern: The managing agencies should give priority to designation of areas that meet Area of Critical Environmental Concern (ACEC) relevance and importance criteria as ACECs.*
- The LRMP interdisciplinary team analyzed all 22 areas that were nominated for ACEC designation, in consultation with SJNF and TRFO staff, and found that 19 areas met the relevance and importance criteria. However, as noted in the comment, not all of these areas were brought forward to be considered as potential ACECs in the FEIS alternatives (only four areas were included in the alternatives). This is contrary to BLM Manual 1613, which states, “All areas which meet the relevance and importance criteria must be identified as potential ACECs and fully considered for designation and management in resource management planning.” To correct this oversight, the BLM will consider these other 15 areas as potential ACECs during a future planning effort. In the interim, the relevance and importance values identified within these 15 areas are largely protected through specific direction in the LRMP. A description of management actions and other prescriptions proposed in the LRMP that would provide protection for the relevance and importance criteria in these 15 areas is included with area evaluations in Appendix U.
- AC2** *Public Concern: The managing agencies should discuss in greater detail the need for special management for each ACEC that meets the relevance and importance criteria to provide a fuller understanding of the effects of applying such management.*
- Appendix U contains specific rationale to describe why some nominated ACECs that meet the relevance and importance criteria may not require special management. However, this would be more fully analyzed in a plan amendment (see response to AC1) that the BLM would prepare after the LRMP is approved.
- AC3** *Public Concern: The managing agencies should expand the boundaries of special management areas to include the entirety of nominated ACECS falling partially within the special management areas’ boundaries.*
- The boundary of the Dolores River Canyon area has been revised and includes all lands within the Snaggletooth, Dolores River Canyon, and McIntyre Canyon nominated ACECs. The Dolores River Canyon area also contains a portion of the Slick Rock nominated ACEC. This would help to “protect and prevent irreparable damage” to those areas and their relevance and importance values through direction associated with the Dolores River Canyon area.
- AC4** *Public Concern: The managing agencies should identify potential ACECs by name or location in Table 3.29.1.*
- Table 3.29.1 has been deleted. The FEIS includes maps of potential ACECs by alternative, and a map is included in Appendix U displaying the location of all nominated ACECs.
- AC5** *Public Concern: The managing agencies should apply special management prescriptions to all nominated ACECs to protect rare and vulnerable plant species and to protect species biodiversity.*

The LRMP contains management prescriptions that protect rare and vulnerable plants and biodiversity throughout the planning area, and potential ACECs contain additional direction that would protect these values.

AC6 *Public Concern: The managing agencies should include an alternative that includes the nominated ACECs to comply with the BLM manual.*

BLM Manual 1613 provides direction for the designation and management of ACECs and states, "All areas which meet the relevance and importance criteria must be identified as potential ACECs and fully considered for designation and management in resource management planning." Of the 22 sites evaluated, 19 sites were found to meet both the relevance and importance criteria but only four sites were included in the Draft EIS alternatives. Those same areas, with some slight boundary modifications, are analyzed in the FEIS. The remaining 15 areas that met both relevance and importance criteria were not included in the alternatives to be analyzed as potential ACECs. To correct this oversight, the BLM will consider these other areas as potential ACECs during a future planning effort. In the interim, the relevance and importance values identified within these 15 areas would be protected through direction in the LRMP. A description of management actions and other prescriptions proposed in the LRMP that would provide protection for the relevance and importance criteria in these 15 areas is included with area evaluations in Appendix U.

AC7 *Public Concern: The managing agencies should apply special management prescriptions to the nominated Little Gypsum Valley and Big Gypsum Valley ACECs to protect rare and vulnerable plant species and to protect their species biodiversity.*

The Big Gypsum Valley and Little Gypsum Valley nominated ACECs have been combined (Gypsum Valley) and proposed for ACEC designation, and The LRMP includes special management prescriptions addressing rare and vulnerable plant species and biodiversity within the potential ACEC.

AC8 *Public Concern: The managing agencies should designate the Snaggletooth portion of the Dolores River Canyon as an ACEC to provide protection of the area's relevant and important values and wilderness character.*

Alternatives B and C include management actions that would protect wilderness characteristics found within the Snaggletooth area. Consideration of the area as an ACEC would occur during a plan amendment that would address all nominated ACECs that meet the relevance and importance criteria but were not included in one of FEIS alternatives (see response to AC1). In the interim, the relevance and importance values identified within the Snaggletooth area would be protected through other direction in the LRMP. A description of management actions and other prescriptions proposed in the LRMP that would provide protection for the relevance and importance criteria in the Snaggletooth area is included with area evaluations in Appendix U.

AC9 *Public Concern: The managing agencies should resolve the inconsistency between assertions that ACECs would not contain private lands and the identification by the managing agencies of a potential ACEC comprised partially of private lands.*

The LRMP and FEIS are clear that decisions apply only to lands and resources under the jurisdiction of the BLM or USFS, and not to private lands.

AC10 *Public Concern: The managing agencies should recognize that including the nominated McIntyre Canyon and Slick Rock Hill ACECs into the Dolores River Canyon special management area is not an adequate substitute for ACEC designation for those nominated ACECs since that special management area does not provide provisions to protect the relevant and important values (including occurrences of the canyon tree frog and a hanging garden community) in those nominated ACECs from management activities.*

The relevance and importance values identified in these areas would enjoy protection through various allocations and management actions proposed in the LRMP alternatives; however, further analysis and consideration of these areas for ACEC designation would occur during a plan amendment (see response to AC1).

AC11 *Public Concern: The managing agencies should explain in the LRMP/EIS why the Preferred Alternative does not include the Mud Springs/Remnant Anasazi ACEC, which is proposed under Alternatives A and C. In addition, please provide additional support for not including the Grassy Hills and Silvey's Pocket potential conservation areas, which are proposed under Alternative C, in the Preferred Alternative based on the important plant communities they contain.*

The Mud Springs/Remnant Anasazi ACEC (now named Anasazi Culture) is included in the Preferred Alternative. Grassy Hills and Silvey's Pocket potential ACECs meet both the relevance and importance criteria based on the important plant communities they contain (and for Silvey's Pocket, based on the two G2 ranked plant species it contains), but these potential ACECs may not expressly require additional special management attention because their relevance and importance values can be adequately protected from management activities and threats by other LRMP direction.

AC12 *Public Concern: The managing agencies should provide more accurate information regarding the nominated ACECs that were incorporated into the Dolores River Canyon Special Management Area because the locations and proposed management themes are misleading and the Little and Big Gypsum Valleys are not adequately protected.*

The boundary of the Dolores River Canyon area has been revised and includes all lands within the Snaggletooth, Dolores River Canyon, and McIntyre Canyon nominated ACECs. The Dolores River Canyon area also contains a portion of the Slick Rock nominated ACEC.

AC13 *Public Concern: The managing agencies should protect Gunnison sage-grouse by applying special management prescriptions to the San Miguel Basin ACEC.*

The LRMP contains a number of standards, guidelines, lease stipulations, and other direction that provide protections for Gunnison sage-grouse. The San Miguel Basin nominated ACEC may not require special management attention to protect Gunnison sage-grouse because of the general protections afforded under the alternatives. This would be further assessed in a plan amendment to address all nominated ACECs that were not carried forward for analysis (including San Miguel Basin) in the FEIS alternatives (see response to AC1).

AC14 *Public Concern: The managing agencies should propose all of the eight ACECs nominated jointly by the Center for Native Ecosystems and San Juan Citizens Alliance for designation because these areas meet the ACEC criteria.*

The LRMP interdisciplinary team analyzed the eight areas that were nominated for ACEC designation by the San Juan Citizens Alliance and the Center for Native Ecosystems and found that they all met the relevance and importance criteria. Because they were not brought forward to be considered as potential ACECs in the EIS alternatives, the BLM would develop a plan amendment that fully considers these areas as potential ACECs. In the interim, the relevance and importance values identified within these eight areas are largely protected through specific direction in the LRMP. A description of management actions and other prescriptions proposed in the LRMP that would provide protection for the relevance and importance criteria in these eight areas is included with area evaluations in Appendix U.

AC15 *Public Concern: The managing agencies should clearly disclose when an area is not being considered for ACEC designation because other uses have been prioritized over protection of relevant and important values in a nominated ACEC.*

The LRMP alternative themes address various priorities and emphases for managing resources within the planning area, and they each place a different emphasis on protection of different uses, resources, and values. The description of the alternative themes in Chapter 2 of the FEIS provides the information and rationale behind what is proposed in each alternative.

4.2 Aquatic Ecosystems and Species

AE1 *Public Concern: The managing agencies should revise the habitat conservation standard for Colorado River cutthroat trout.*

Please see our response to Public Concern AE8 concerning “maintaining 100% of habitat” for Colorado River cutthroat trout. Maintaining populations of Colorado River cutthroat trout is a priority for the USFS and BLM. The referenced guideline applies to existing designated conservation populations. The guideline as written is consistent with the Colorado Cutthroat Conservation Agreement and Strategy of which the USFS and BLM are signatories. The intent of the draft guideline is to maintain the few populations presently in existence. The 1982 LRMP, as amended in 1992, has 40% habitat maintenance, which applies to all fish bearing streams, not just to those with Colorado River cutthroat trout. Guidelines A.2, A.2.1, A.2.2, and A.2.3 from the Draft LRMP have been revised and rewritten. See the Aquatic Ecosystem and Fisheries section in the LRMP.

AE2 *Public Concern: The managing agencies should include Measure IV.C as a standard to avoid activities that might increase the likelihood aquatic species would be listed under the Endangered Species Act.*

We have included a new section in the LRMP (Section 2.1) that establishes an ecological framework for the conservation and management of ecosystems, habitats, and species. In Section 2.1, your concerns are addressed under Species Management Strategy, Special Status Species and Management Indicator Species, and Biological Diversity and Population Viability. The concepts of Guideline IV.C are woven into Section 2.1 and the Aquatic Ecosystem and Fisheries section (Section 2.5) of the LRMP. Potential impacts to threatened and endangered species continue to be handled through Section 7 of the Endangered Species Act and consultation with U.S. Fish and Wildlife Service (USFWS).

AE3 *Public Concern: The managing agencies should clarify how the criteria in Guideline A.2.3 and the Historical Range of Variation (HRV) criteria would be applied to streams allocated for water projects.*

We have included a new section in the LRMP (Section 2.1) that establishes an ecological framework for the conservation and management of ecosystems, habitats, and species. In Section 2.1, your concerns are discussed and clarified under Disturbances and the Historical Range of Variability, and Ecosystem Management. Relative to Guideline IV.A.2.3, we disagree with the interpretation that using reference stream conditions is an enforcement measure for HRV. Reference stream conditions are defined as the set of selected measurements and/or conditions used as representative of the natural potential condition of a stream. The selected measurements and/or conditions describe a minimally impaired watershed or reach characteristic of a stream type in an ecoregion. These reference streams can serve as a model for the potential of a stream. Because of Section 2.1, we have removed use of “reference stream conditions” from the standards and guidelines in the Aquatic Ecosystem and Fisheries section.

AE4 *Public Concern: The managing agencies should clarify whether the HRV is being used to determine which systems are historically capable of supporting fisheries.*

The LRMP does not use HRV as a means to identify "systems historically capable of supporting" fish populations. We may use several tools such as historic records to determine those streams capable of supporting fish populations. We have written a new section of the LRMP (Section 2.1) that establishes an ecological framework for the conservation and management of ecosystems, habitats, and species. In Section 2.1, your concerns are discussed and clarified under Disturbances and the Historical Range of Variability, and under Ecosystem Management.

AE5 *Public Concern: The managing agencies should concentrate monitoring of Colorado River cutthroat trout because it is more sensitive to changes in the environment than other species.*

It is our intent to continue our monitoring efforts for the Colorado River cutthroat trout along with other trout species that are more widespread.

AE6 *Public Concern: The managing agencies should revise aquatic habitat and species population requirements to comply with the 1982 Planning Rule.*

Although maintaining the minimum of 50% weighted usable area as stated in the Draft EIS was intended to provide adequate aquatic habitat to maintain viable populations of all native and/or desired non-native vertebrate species, as required under the 1982 Planning Rule, we have revised and expanded Guideline IV.A.2 and A.2.2 in the Aquatic Ecosystem and Fisheries section (Section 2.5) of the LRMP. Additionally, we have included a new section in the LRMP (Section 2.1) that establishes an ecological framework for the conservation and management of ecosystems, habitats, and species. In Section 2.1, your topics are addressed under Disturbances and the Historical Range of Variability, Ecosystem Management, Species Management Strategy, Special Status Species and Management Indicator Species, and Biological Diversity and Population Viability.

AE7 *Public Concern: The managing agencies should provide clearer direction for protecting aquatic resources in order to clarify how the Historical Range of Variation concept is being used, to include a definition of "sustainability," and to include how the aquatic habitats that would be maintained are determined.*

We have included a new section in the LRMP (Section 2.1) that establishes an ecological framework for the conservation and management of ecosystems, habitats, and species. In Section 2.1, your topics are discussed and clarified under Disturbances and the Historical Range of Variability, and under Ecosystem Management. Maintenance of aquatic habitats is determined on a case-by-case basis, and is specific to the inherent geomorphology, flow regime, and a variety of other attributes of a stream. The LRMP does not use HRV as a means to identify "systems historically capable of supporting" fish populations. We may use several tools such as historic records to determine those streams capable of supporting fish populations. The standards and guidelines in the Aquatic Ecosystem and Fisheries section (Section 2.5) of the LRMP have been rewritten and revised to address your concerns. Please refer to the FEIS glossary for a definition of sustainability.

AE8 *Public Concern: The managing agencies should replace Design Criteria A.1 with the goals of the Tri-State Conservation Agreement.*

We maintain that Design Criteria A.1 is consistent with the Tri-State Agreement for Colorado River cutthroat trout. Since the East Fork Hermosa Creek is a formally designated conservation population of Colorado River cutthroat trout in the Tri-State Agreement (Objective 1 in the agreement) and the Hermosa Watershed is one of the locations for establishment of a self-sustaining meta-population with five viable but interconnected sub-populations (Goal 1 in the agreement), we believe that maintaining 100% of existing Colorado River cutthroat trout habitat is consistent with the Tri-State Agreement. For clarity, we are including all goals and objectives of the Tri-State Agreement in the desired conditions, objectives, and guidelines for Aquatic Ecosystems and Fisheries in the LRMP.

AE9 *Public Concern: The managing agencies should revise the description of native warm-water fish species to accurately reflect current status and threats.*

We concur that the bluehead sucker is more at risk in western Colorado than the flannelmouth sucker. However, for streams on the SJNF and TRFO, the flannelmouth sucker is equally at risk. To better reflect both situations and hybridization with white suckers, we have rewritten the two paragraphs in the FEIS. Please see the Aquatic Ecosystems and Fisheries section of the FEIS.

AE10 *Public Concern: The managing agencies should include local efforts among the reasons why the Colorado River cutthroat trout was not listed by the USFWS.*

We concur and have included the wording suggestions. Please see the Aquatic Ecosystems and Fisheries section of the FEIS.

AE11 *Public Concern: The managing agencies should correct statements related to current fish stocking efforts because many streams have self-sustaining populations of rainbow and cutthroat trout.*

We concur and have included the wording suggestions. Please see the Aquatic Ecosystem and Fisheries section of the FEIS.

AE12 *Public Concern: The managing agencies should correct statements related to declining trout populations to reflect declining trout populations in areas with altered hydrology.*
We concur and have included different wording in the Aquatic Ecosystem and Fisheries section of the FEIS.

AE13 *Public Concern: The managing agencies should revise the conclusions related to impacts on cutthroat trout because they are not based on scientific data and conflict with the Durango Mountain Resort EIS.*

Please see our response to Public Concern AE8 concerning “maintaining 100% of habitat” for Colorado River cutthroat trout. The “likely to impact” statements in the Draft EIS have been removed and we have revised the Biological Evaluation. Please see the standards and guidelines in the Aquatic Ecosystem and Fisheries section of the LRMP, the Aquatic Ecosystem and Fisheries section of the FEIS, and the Biological Evaluation.

AE14 *Public Concern: The managing agencies should clarify how road densities relate to all other anthropogenic disturbances in highly disturbed watersheds.*

The highly disturbed watershed analysis considered many impacts in addition to roads and road density. These watersheds may also include anthropogenic disturbances associated with logging, recreation, urbanization, minerals development, and water uses. It is not accurate to assume that roads are the only anthropogenic disturbance in these watersheds. However, if a watershed has a high level of anthropogenic disturbance, and also has a high level of existing impacts from the transportation network, continuing to increase new road construction would likely not contribute to watershed recovery.

AE15 *Public Concern: The managing agencies should include restrictions on activities that cause sedimentation, water temperature increases, or changes in water chemistry to protect aquatic invertebrates and aquatic ecosystems.*

We have revised and rewritten the Aquatic Ecosystem and Fisheries section of the LRMP (especially the standards and guidelines) to better address population viability of fisheries. Your suggestions have also been incorporated into the LRMP at Section 2.1 (Ecological Framework and the Conservation of Species) of the LRMP.

AE16 *Public Concern: The managing agencies should remove off-road vehicles from the list of multiple-use activities that have the potential to impact aquatic ecosystems because no evidence is provided that they do have an effect.*

Based on personal observations and experience on the SJNF and TRFO by several resource specialists, off-road vehicle use has some potential to impact some aquatic ecosystems. However, trail-based recreation impacts were removed as threats to the three warm-water sensitive fish species or the Colorado River cutthroat trout.

AE17 *Public Concern: The managing agencies should acknowledge that trail-based motorized recreation does not have a significant impact on flannelmouth sucker or Colorado River cutthroat trout.*

We have added language to the Biological Evaluation that trail-based recreation does not pose any threat to the three warm-water sensitive species or Colorado River cutthroat trout.

AE18 *Public Concern: The managing agencies should include recreation, oil and gas development, and salable mineral removal in the list of activities that could affect aquatic ecosystems.*

Potential impacts from management of these programs have been included in the revised Aquatic Ecosystems and Fisheries section of the FEIS.

AE19 *This Public Concern is captured by Public Concern PP18*

AE20 Public Concern: The managing agencies should support the assertion that road obliteration would benefit aquatic and riparian systems.

Road closures and obliteration on the public lands in southwest Colorado have been shown to be effective in improving aquatic habitat and reducing sediment loading to streams. Box Canyon Creek, tributary to the Mancos River on USFS lands was impaired from sediment derived in large part from high road densities in the watershed. The U.S. Environmental Protection Agency (EPA) conducted aquatic and sediment surveys after USFS watershed-wide road closures, obliteration, and road stabilization. The EPA found measurably improved aquatic habitat and reduced stream sediment loads in sufficient amounts to remove the stream from the Colorado 303(d) list of impaired streams. This example is more local than Redwood National Park, which is in a very wet coastal climate regime. See http://water.epa.gov/polwaste/nps/success319/co_box.cfm.

AE21 Public Concern: The managing agencies should perform a more adequate analysis of cumulative effects for aquatic ecosystems and fish species.

The analysis in the Supplement was a product of the projected oil and gas well development in the GSGP and the subsequent projected water usage with that development. Please refer to the Aquatic Ecosystems and Fish Species section of the FEIS which addresses cumulative effects of all proposed actions in addition to the oil and gas projections.

AE22 Public Concern: The managing agencies should clarify that only acre-feet of water not previously consulted on with the USFWS are subject to a formal consultation, whereas those already consulted on are considered part of the environmental baseline for listed fish evaluated in the Biological Assessment.

For these particular river basins, we generally assume that the water sources were not consulted on with the USFWS previously; hence, the consultation now. However, where previous consultation with USFWS has occurred, the anticipated water depletions with the Gothic Shale Gas Play (GSGP) development would likely exceed the previously consulted water amounts, and formal consultation with the USFWS would again be required.

AE23: Public Concern: The managing agencies should correct inconsistencies in the number of wells drilled and water depletion in drainage basins on the USFS and BLM lands and also correct inconsistencies in the Aquatic Ecosystems and Water sections.

Although the sources of water from private lands for the GSGP well drilling and completion are unknown, it would either occur in the San Juan River Basin or Dolores River Basin. The managing agencies assumed that the water to be used for well drilling and completion on public lands that come from private lands would generally come within the river basin where the well is being drilled. Appendix F discloses the agencies' best estimate of impacts by river basin. These assumptions and estimates are repeated or summarized in the Water and Aquatic Ecosystems sections of the FEIS. Although the Water section did not display the same effects analysis in the Supplement to the Draft EIS as in the Aquatic Ecosystems section, specialists did compare and coordinate their water depletion calculations and analysis in the FEIS.

AE24: Public Concern: The managing agencies should increase the No Surface Occupancy (NSO) buffers around streams and rivers to protect fisheries.

Due to the location of stream segments with existing greenback cutthroat trout and Colorado River cutthroat trout, the 0.25-mile NSO buffer is adequate to protect these populations. This stipulation includes a modification in which site-specific conditions may allow more discretion by the land manager. Additionally, a 325-foot NSO stipulation around all perennial streams to protect water quality and aquatic ecosystems, including coldwater fisheries, has been developed. Around major rivers, a 2,500-foot NSO stipulation would be imposed in the GSGP.

AE25: Public Concern: The managing agencies should perform a more detailed analysis of potential adverse cumulative impacts from increased sedimentation on fish species such as the mottled sculpin and speckled dace.

In addition to best management practices (BMPs), we would require a 325-foot NSO stipulation around all perennial streams and a 2,500-foot NSO stipulation along major rivers (water and soils

related stipulations) for leases in the GSGP. Our intent is to minimize adverse effects of erosion and sedimentation on water quality and aquatic ecosystems, including benthic dwelling aquatic fisheries such as the mottled sculpin and specked dace. A more detailed inventory and analysis of benthic dwelling aquatic fisheries may be considered at the project level.

AE26: Public Concern: The managing agencies should include a discussion of potential adverse impacts from water depletion and increased sediment from GSGP development on stream systems with fish populations in McElmo and Yellow Jacket Canyon.

A discussion of water depletion-related impacts on these stream systems has been added to the FEIS. Please refer to the Aquatic Ecosystems and Species section.

AE27: Public Concern: The managing agencies should proceed with a Biological Assessment and coordination with the USFWS and discuss when a Biological Assessment is appropriate.

Although not a cooperating agency, formal consultation with the USFWS has occurred with respect to water depletion associated with oil and gas development in the GSGP. Most USFS and BLM projects occur with informal consultation with the USFWS. Because all water sources within these river basins have not had USFWS consultation for water depletion, we generally assume any discretionary water depletion that is connected to federal actions would trigger formal consultation with the USFWS. If we discover that a water source has undergone consultation, the previously consulted allowances for water depletion have not been met, and estimates for water depletion with proposed projects stay within the approved water allowances, then no additional formal consultation is required. Informal consultation and coordination would still occur. However, when the anticipated water depletions, such as with the GSGP development, would likely exceed the previously consulted water amounts, then formal consultation with the USFWS would again be triggered.

4.3 Air Quality

AQ1 Public Concern: The managing agencies should revise the discussion of air quality monitoring.

In response to public comment, the air quality analysis has been greatly expanded and a new air quality model (CALPUFF Air Pollution Dispersion model) was used. The result of this analysis was made available for public comment and review in August 2011 in the Supplement to the Draft EIS and is included in the FEIS. The new analysis includes detailed well development scenarios, accurate well counts, monitoring data, emissions inventory, and uses a reasonable foreseeable development (RFD) scenario instead of the worst case scenario. New air quality analysis also uses the appropriate National Ambient Air Quality Standards (NAAQS), including revised ozone standards. Additional detailed information about the model, software, and data can be found in the Air Quality Analysis Technical Support Document.

AQ2 Public Concern: The managing agencies should include information regarding the Clean Water Act Section 402 permitting program and indicate that the Colorado Department of Public Health and Environment (CDPHE) is generally the National Pollutant Discharge Elimination System (NPDES) permitting agency for the planning area.

The LRMP should not repeat laws, regulations, and policies if at all possible. Applicable laws and regulations are summarized in Additional Referenced Guidance in the Water section of the LRMP.

AQ3 Public Concern: The managing agencies should revise the design criteria related to air quality because they are beyond the authority of the agencies.

The SJNF and TRFO were asked by the State of Colorado and the EPA, the state and federal regulators of air pollution, to adopt the measures listed in standard and guidelines. The Federal Land Policy and Management Act of 1976 (FLPMA) (43 United States Code [USC] 1752) requires that "public lands would be managed in a manner that would protect the quality of scientific, scenic, historical, ecological, environmental, air and atmosphere, water resource and

archaeological values" (Sec. 102). Standard and guidelines for air quality protection on the SJNF and TRFO are in compliance with this act and are within the authority of the USFS and BLM.

AQ4 *Public Concern: The managing agencies should use the NEPA process to cooperate with the State of Colorado on air quality issues.*

NEPA was used to disclose the impacts of a variety of alternatives that have a range of air quality impacts. In response to public comment, a more detailed air quality analysis was performed. This more detailed analysis was released for public comment in 2010. The State of Colorado was a stakeholder in the air quality analysis process and provided input for air pollutant dispersion model selection and modeling protocols. The more detailed air quality analysis performed in 2009 and 2010 in response to public comment to the EIS adequately discloses impacts to air quality to ensure a fully informed and well-considered decision. Additional site-specific analysis would be developed for projects with the potential for significant air quality impacts. Further coordination between the managing agencies and the State of Colorado would be accomplished through these NEPA processes, as applicable.

AQ5 *Public Concern: The managing agencies should revise the air quality goal to limit action to inviting the CDPHE to participate as a cooperating agency.*

While regulatory authority under the Clean Air Act has been delegated from the EPA to the CDPHE in establishing regional standards, the application to public lands is well recognized in both FLPMA and the National Forest Management Act (NFMA) to require the agencies to recognize the fundamental need to protect and, where appropriate, improve the quality of soil, water, and air resources. In southwest Colorado the regional implications in setting desired conditions and outcomes is a critical planning issue required by both the USFS Planning Manual and BLM Land Use Plan Handbook to be addressed in the LRMP.

AQ6 *Public Concern: The managing agencies should make the air resources objective more tangible to ensure the agencies are not responsible for actions and events beyond their control.*

Air pollution and the resulting impacts are often beyond the control of the SJNF and TRFO. Much of the long-term monitoring and modeling performed by the SJNF and TRFO can differentiate between local pollution sources and long range pollution transport. Planning area monitoring and modeling of Class I areas is critical for USFS and BLM participation in the Clean Air Act New Source Review and Prevention of Significant Deterioration (PSD) permitting processes, participation in the Four Corners Air Quality Task Force, and through the authorization of land use activities occurring on the SJNF and TRFO. Monitoring is a critical way to ensure the USFS and BLM are fulfilling air quality protection obligations for Class I areas. Monitoring using standard air quality objectives to determine the impacts to standard Class I air quality resource values (AQRVs) are reflected in the monitoring strategy of the LRMP.

AQ7 *Public Concern: The managing agencies should revise the objectives in A2-A4 because they are not achievable within the authority of either the USFS or BLM.*

The Clean Air Act of 1977 legally mandated the PSD of AQRVs on wilderness lands. The USFS is assigned the task of protecting these wilderness values. The AQRVs listed in the objectives are standard for federal land managers such as the USFS. Objectives for air quality are within the legal mandate of the Clean Air Act as assigned to the USFS.

AQ8 *Public Concern: The managing agencies should modify Objective A.4 to reduce confusion.*

Objectives regarding air quality have been revised for accuracy and clarification. Please refer to the Air Quality section of the LRMP.

AQ9 *Public Concern: The managing agencies should define "continuous" as it relates to dust abatement.*

LRMP components regarding air quality have been revised for accuracy and clarification. Please refer to the Air Quality section of the LRMP.

AQ10 *Public Concern: The managing agencies should ensure that the cumulative air quality impacts are accurately and fully described and analyzed.*

In response to public comment, air quality analysis was greatly expanded and a new air quality model was used. The results of this analysis can be found in the LRMP and FEIS. Additional information can be found in the Air Quality Analysis Technical Support Document. The emissions inventory was expanded and includes the RFD and development in the San Juan Basin.

AQ11 *Public Concern: The managing agencies should participate in local air quality monitoring and air impact mitigation to protect air quality and tribal resources.*

The air quality monitoring program has the dual goal of tracking air quality in Class I areas and ambient air quality for human health and the environment. New emphasis on monitoring ozone and mercury would continue. A new ozone monitoring station was installed in 2010 in Norwood, Colorado, to fill a data gap for the southwestern part of Colorado. Long-term monitoring of air resources and associated AQRVs for Class I areas would continue. The Class I area monitoring includes high lakes chemistry, NADP, and IMPROVE monitoring. The SJNF is an active member of the Four Corners Air Quality Task Force, an important regional air impact mitigation group and plans to continue long-term participation. The SJNF would continue working cooperatively with the tribes on air quality issues.

AQ12 *Public Concern: The managing agencies should revise the Draft EIS to reflect that the 1-Hour Ozone Standard was revoked by the EPA to provide accurate information about potential exceedances of the ozone standard.*

In response to public comment, the air quality analysis has been greatly expanded and a new air quality model (CALPUFF Air Pollution Dispersion model) was used. The result of this analysis was made available for public comment and review in August 2011 in the Supplement to the Draft EIS and is included in the FEIS. The new analysis includes detailed well development scenarios, accurate well counts, monitoring data, emissions inventory, and uses an RFD scenario instead of the worst case scenario. New air quality analysis also uses the appropriate NAAQS, including revised ozone standards. Additional detailed information about the model, software, and data can be found in the Air Quality Analysis Technical Support Document.

AQ13 *Public Concern: The managing agencies should correct the discussion of other pollutants to correctly identify pollutants, measures for controlling air quality, and the appropriate regulating bodies.*

The air quality section would be revised to add "oxides of nitrogen and sulfur;" however, ammonia is a pollutant of concern, and nitrogen and sulfur atmospheric deposition are also of great concern for Class I areas. These compounds are not oxides of nitrogen and sulfur, and are air pollutants. The typographical error in PSD was changed from "serious" to "significant." Objectives for air pertain only to the SJNF and TRFO and to no other land ownership, except where activities that produce air pollution on the SJNF and TRFO may affect the air quality of other land ownership, e.g., nearby national parks with Class I areas such as Mesa Verde National Park. The typographical error for PSD has been corrected.

AQ14 *Public Concern: The managing agencies should ensure air quality requirements are applied equitably to all construction in the planning area.*

All LRMP components for air quality have been revised for accuracy and clarification. These components address air quality protection across all the SJNF and TRFO for all activities, including oil and gas development.

AQ15 *Public Concern: The managing agencies should clarify how they would estimate the impact from wildfires on natural background air quality conditions.*

Pristine was changed to "natural conditions." Natural conditions are defined in the Federal Land Managers' Air Quality Related Values (FLAG) Phase I Report Appendix 2.B for the Weminuche wilderness Class I area. The goal is to protect natural air quality conditions (conditions substantially unaltered by humans or human activities) in the Weminuche wilderness Class I area. Natural conditions are measured directly through air quality monitoring; they are measured

indirectly using AQRVs. AQRVs for the Weminuche wilderness Class I area are lake chemistry, soil chemistry, flora and fauna assemblages, atmospheric deposition and chemistry, snow chemistry, and visibility. Natural conditions include the effects of wildfire.

AQ16 Public Concern: The managing agencies should acknowledge that oil and gas development can cause significant ozone formation.

Ozone formation is discussed in the FEIS. Please refer to the Air Quality section.

AQ17 Public Concern: The managing agencies should clarify the limits of their authority over visibility impacts under the Clean Air Act to acknowledge that they cannot regulate oil and gas facilities' emissions.

The State of Colorado and the EPA, the state and federal regulators of air pollution, requested that the SJNF and TRFO adopt the measures listed in standard and guidelines. FLPMA requires that "public lands would be managed in a manner that would protect the quality of scientific, scenic, historical, ecological, environmental, air and atmosphere, water resource and archaeological values..." (Sec. 102). Standard and guidelines for air quality protection on the SJNF and TRFO are in compliance with this act.

AQ18 Public Concern: The managing agencies should provide justification for the proposed values for visibility impairment because the suggested thresholds are not typically used.

The levels of concern for visibility impairment are defined in the FLAG Phase I Report D. 2. Visibility, Levels of Concern for Class I areas including the Weminuche wilderness. The levels of concern are standard for all Class I areas managed by the USFS, National Park Service (NPS), and USFWS.

AQ19 Public Concern: The managing agencies should provide references that support guideline thresholds for acid deposition.

The reference used is the FLAG Workgroup Phase I Report (FLAG 2010)

AQ 20 Public Concern: The managing agencies should clarify that short-term reductions in air quality are consistent with natural conditions and are an acceptable trade-off for the resulting long-term forest health.

Pristine was changed to "natural conditions." Natural conditions are defined in the FLAG Phase I Report Appendix 2.B for the Weminuche wilderness Class I area. The goal is to protect natural air quality conditions (conditions substantially unaltered by humans or human activities) in the Weminuche wilderness Class I area. Natural conditions are measured directly through air quality monitoring; they are measured indirectly using AQRVs. AQRVs for the Weminuche wilderness Class I area are lake chemistry, soil chemistry, flora and fauna assemblages, atmospheric deposition and chemistry, snow chemistry, and visibility. Natural conditions include the effects of wildfire. Tradeoffs between short-term air quality impacts from fires managed for fuels reduction and long-term forest health would need careful consideration in order to avoid large smoke impacts associated with catastrophic wildfire.

AQ21 Public Concern: The managing agencies should clarify that the agencies do not have authority over air quality under the Clean Air Act and cannot therefore regulate oil and gas emissions.

The SJNF and TRFO cooperate with State of Colorado and the EPA in air quality protection, which are acknowledged as the state and federal regulators of air pollution to protect air quality on the SJNF and TRFO. FLPMA requires that "public lands would be managed in a manner that would protect the quality of scientific, scenic, historical, ecological, environmental, air and atmosphere, water resource and archaeological values" (Sec. 102). Standard and guidelines for air quality protection on the SJNF and TRFO are in compliance with FLPMA and are within the regulatory authority of the USFS and BLM.

AQ22 Public Concern: The managing agencies should analyze long-range transport of ozone and other pollutants.

Long-range transport of ozone and ozone precursors is beyond the scope of this analysis. The CALPUFF model used for the air quality analysis used an emission inventory developed from within the modeling domain. The impacts disclosed in this analysis were from sources within the modeling domain as depicted in the FEIS Air Quality section. It is true that other larger photochemical modeling efforts, (i.e. the New Mexico Environment Department 2009 modeling effort referenced on in the Supplement to the Draft EIS) did account for long-range transport of ozone and ozone precursors.

AQ23 *Public Concern: The managing agencies should improve the discussion of air quality effects on aquatic ecosystems and include the EPA requirements for associated toxic chemicals.*

The managing agencies conducted a careful analysis of the potential air quality impacts to deposition and acid neutralizing capacity of water bodies sensitive to changes in chemistry from atmospheric deposition. The effects to water chemistry were analyzed using sensitive water bodies where baseline and trend monitoring exists and changes in chemistry from air quality impacts can be measured as required by USFS/NPS/USFWS protocols.

AQ24 *Public Concern: The managing agencies should update emission inventories used for modeling.*

The emissions inventories for the San Juan Generating Station and Four Corners Power Plant were supplied by the State of New Mexico (and from other states for other permitted pollution sources). The most recent emissions inventories available at the time of air dispersion model execution were used for this analysis.

AQ25 *Public Concern: The managing agencies should include detailed information and data regarding emissions.*

Detailed emissions information is available in the Air Quality Technical Support Document, which is available by request.

AQ26 *Public Concern: The managing agencies should not include refineries as a source type for emissions.*

New refineries were not considered as a reasonably foreseeable action or as part of the Proposed Action. Refineries with state permits may have been included in the emission inventories provided by the state agencies as used in the CALPUFF model.

AQ27 *Public Concern: The managing agencies should revise the air quality mitigation options and require all available options to reduce emissions.*

Air quality regulatory agencies require that definitive mitigation measures be developed and analyzed to mitigate the air quality impacts. As a result of public comment, the air quality mitigation options were revised and some new options were added. It is anticipated that several mitigation options in combination would be necessary to achieve the desired reduction in project emissions. The final mitigation options selected for air quality protection can be found in the Air Quality section of the Final LRMP and FEIS and are stated as part of the selected alternative in the Record of Decision (ROD).

AQ28 *Public Concern: The managing agencies should include a discussion of mid-field air modeling results.*

The analysis follows the guidelines set forth in the NEPA Air Quality Memorandum of Understanding (MOU) for Federal Oil and Gas Decisions (2011). This MOU between the U.S. Department of Agriculture (USDA), the U.S. Department of the Interior (USDI), and the EPA establishes a framework and a set of procedures that the five participating agencies would use to analyze and mitigate potential impacts associated with oil and gas development on federal lands to air quality and visibility, as well as other AQRVs. In addition, the modeling protocol was developed with the assistance of a stakeholder group consisting of the EPA, CDPHE, NPS, USFS, and BLM. Specific analysis of mid-field air quality impacts is not required for this project.

AQ29 Public Concern: The managing agencies should update the discussion of ambient ozone standards.

Clarification of the current ozone NAAQS have been added to the FEIS. The affected environment ozone discussion has also been updated for clarification. The USFS has developed a list of plant species sensitive to ozone damage to be used for monitoring environmental ozone impacts on national forests (FLAG 2010). The SJNF and TRFO have initiated ozone foliar damage monitoring; see <http://www.mountainstudies.org/index.php?q=content/ozone-bio-monitoring-project-assessment-vegetation-signs-injury-due-ozone>

AQ30 Public Concern: The managing agencies should revise tables to include accurate EPA 2012 NAAQS and ensure modeling reflects NO₂ and SO₂ 1-hour concentrations.

Tables have been revised and updated to EPA 2013 NAAQS. The modeling did reflect NO₂ and SO₂ 1-hour concentrations and was disclosed on pages 3.21 and 3.24 of the Supplement to the Draft EIS. The modeling in the LRMP and FEIS also includes these concentrations.

AQ31 Public Concern: The managing agencies should justify the greenhouse gas (GHG) emissions analysis used in the Supplement to the Draft EIS.

The GHG analysis was conducted using local GHG emissions projections, and, where available, other GHG emission information was included. Additional GHG and climate change analysis was completed for all resources for the FEIS. As land management agencies, the BLM and USFS are not yet required to formally report GHG emissions.

AQ32 Public Concern: The managing agencies should take a hard look at cumulative GHG.

A GHG assessment was completed for the Supplement to the Draft EIS. In addition, many of the mitigation options in the Supplement to the Draft EIS were developed to reduce GHG emissions. As a result of public comment, several additional mitigation options to reduce GHG emissions were added and are disclosed in the FEIS. Assessing the GHG emissions throughout the basin is outside the scope of this analysis because at the time the analysis was conducted, GHG were not regulated and were not consistently a part of the emission inventory data supplied by the states within the modeling domain. In addition, the SJNF and TRFO do not have the authority to apply mitigation measures to reduce GHG emissions on lands outside USFS/BLM jurisdiction.

AQ33 Public Concern: The managing agencies should provide documentation to support the conclusion that deposition values are in excess of the significance level.

Detailed information is provided in the Air Quality Analysis Technical Support Document. Pages 5-2 through 5-3 and 6-5 and 7-29 through 7-33, 7-72 through 7-76 discuss deposition calculations in detail. The modeling protocol is available on request.

AQ34 Public Concern: The managing agencies should perform additional analysis to support the conclusion that the nitrogen deposition significance thresholds would be exceeded to be consistent with the Northern San Juan Coal Bed Methane Project EIS.

Northern San Juan Coal Bed Methane Project (NSJB EIS) Air Quality Impact Assessment used a different modeling protocol compared to the Supplement to the Draft EIS. The Supplement to the Draft EIS analysis follows the guidelines set forth in the NEPA Air Quality MOU for Federal Oil and Gas Decisions (2011) and as determined by a stakeholder group of EPA, CDPHE, NPS, USFS, and BLM. This MOU between the USDA, the USDI, and the EPA establishes a framework and a set of procedures that the five participating agencies would use to analyze and mitigate potential impacts associated with oil and gas development on federal lands to air quality and visibility, as well as other AQRVs including deposition. This was not a requirement of the NSJB EIS, a document published in 2006. In addition, the Supplement to the Draft EIS considered and modeled the following projects, which were not modeled in the NSJB EIS: Gothic Shale Gas Play Project, Northern San Juan Basin 80-Acre Infill project, Southern Ute Indian Tribe Programmatic Environmental Assessment 80-Acre Infill project, Jicarilla Oil and Gas Leasing EIS, and Canyons of the Ancients National Monument Resource Management Plan.

AQ35 *Public Concern: The managing agencies should include a more robust air monitoring and air standards enforcement plan.*

The SJNF has one of the most rigorous and extensive air monitoring programs among BLM and USFS units nationwide and is committed to long-term air quality monitoring. In addition, the BLM has a field inspection program to ensure compliance with required mitigation measures. Air quality monitoring currently conducted by the SJNF and TRFO has been added to the FEIS summarizing the air quality monitoring conducted by the agencies.

AQ36 *Public Concern: The managing agencies should reduce the emissions of NO₂ through additional required NO_x emission reductions to mitigate the predicted exceedances.*

Although SJNF and TRFO agree that NO_x reductions are warranted, this EIS is not a PSD permit and PSD increments are irrelevant to NEPA analysis. The document cited in several places "The informal PSD information presented in Table S-3.1.9 (above)" is provided at the request of the EPA who was a stakeholder in the SJNF and TRFO air quality impact analysis. Its usefulness is to better understand potential project impacts to Class I areas. Most oil and gas emission sources are not considered "PSD major sources" under the Clean Air Act, and therefore the comparison is not a formal PSD increment analysis nor is it intended to replace such an analysis. The BLM and USFS do not have the authority to conduct regulatory PSD increment analysis.

AQ37 *Public Concern: The managing agencies should revise the naming convention in the revised Air Quality Technical Support Document to be consistent with the Supplement to the EIS.*

A statement was added to the FEIS explaining the difference between the naming conventions in the EIS and the Air Quality Analysis Technical Support Document. Please refer to the Air Quality section of the FEIS.

AQ38 *Public Concern: The managing agencies should revise the air quality standards and guidelines.*

Based on public comment, feasibility of development (e.g., production capacity of a well or type of well) and technology, air quality standards and guidelines have been revised. Please refer to the Air Quality section of the Final LRMP.

AQ39 *Public Concern: The managing agencies should remove the stipulation regarding new point sources because it duplicates federal and state law.*

There are no stipulations for air quality in the Final LRMP. However, there are standards and guidelines in the LRMP to protect air quality. In these standards and guidelines, the state regulation, or whichever measure is most protective, would be implemented.

AQ40 *Public Concern: The managing agencies should acknowledge that coalbed methane (CBM) wells and infrastructure are not cumulatively large sources of sulfur dioxide (SO₂) and volatile organic compounds (VOCs).*

The Air Quality Analysis Technical Support Document and FEIS acknowledge that natural gas development in the Four Corners region is a small, even insignificant source of sulfur pollution. However, VOCs are not an insignificant pollutant associated with the production, storage, and transport of natural gas in the area. Several stipulations and other practices have been developed to mitigate VOC emissions.

AQ41 *Public Concern: The managing agencies should correct data related to emissions from oil and gas development in Table 3.1.5*

Table 3.1.5 is not included in the FEIS. The topic of this comment is discussed and displayed in the suggested context of NAAQS in the FEIS.

AQ42 *Public Concern: The managing agencies should acknowledge that oil and gas wells and infrastructure are not large sources of air pollutants.*

The FEIS Air Quality Affected Environment section now references several studies and displays graphs showing the contribution of various air pollutants to the oil and gas sector. This sector is contrasted with other pollution sources such as coal power and mobile sources.

AQ43 *The managing agencies should consider human health impacts.*

Human health and safety was not identified as an issue during scoping and was therefore not carried forward into the analysis. However, the air quality analysis has been updated to reflect the known potential effects, including consideration of effects on health. Air quality would remain within the standards established by the state.

AQ44 *The LRMP/EIS should consider increased carbon dioxide development.*

The Supplemental to the Draft EIS was completed to address the GSGP only. Development of carbon dioxide is addressed sufficiently in the FEIS; if a significant increase in potential for development of this resource occurs, the managing agencies would address the change at that time.

4.4 Access and Travel Management

AT1 *Public Concern: The managing agencies should provide the criteria used to select roads for decommissioning.*

The Travel Management Rule at 36 CFR 61.212 requires the USFS to define a transportation system. A project-level travel management plan determines what our transportation system is, and anything not included in the transportation system is a candidate for decommissioning. Examples may include unauthorized routes, duplicate routes, unneeded timber sale roads, and roads causing resource impacts. 43 CFR 8342 provides the BLM guidance for designating areas as open, limited, or closed, as well as the designation criteria for roads and trails. How a road is closed (decommissioned) is based on a site by site consideration of resources. Objectives regarding travel and roads have been revised for accuracy and clarification. Please refer to the Access and Travel Management section of the LRMP.

AT2 *Public Concern: The managing agencies should revise Desired Condition 14.13 to indicate that roads and other rights-of-way are permitted to encroach on or cross streams and riparian areas.*

The comment refers to what is now Desired Condition 2.13.12. Desired conditions in the Access and Travel Management section do not alter or prevent the activities that may be permitted through Section 404 of the Clean Water Act, such as the construction of roads, pipelines, or other transportation systems that may encroach or cross streams riparian areas, wetlands, or other waters of the U.S. It is the goal of these desired conditions that transportation systems do not encroach in impacting ways that would alter channel function or geometry and that do not increase sediment delivery measurably.

AT3 *Public Concern: The managing agencies should include monitoring of new road development in the transportation monitoring section.*

Monitoring of new road construction is conducted at the project level rather than the plan level. Road density guidelines set forth in the LRMP for the SJNF would be used to establish maximum road densities in U.S. Geological Survey (USGS) 6th-level Hydrologic Unit Code (HUC) watersheds and in specified wildlife areas. On TRFO lands, the LRMP states that the BLM would "develop maintenance, monitoring, signing, and implementation plans during the comprehensive travel management planning process, using guidance provided in BLM H-8342 – *Travel and Transportation Handbook* for BLM routes." Projects would require an appropriate level of environmental analysis and those that would result in road density concentrations exceeding the density guidelines would require mitigation to offset possible watershed and/or wildlife impacts. Refer to Chapter 4 of the LRMP for specific travel-related items that would be monitored.

AT4 *Public Concern: The managing agencies should correct the descriptions of permanent roads to exclude roads associated with oil and gas development.*

The descriptions of permanent roads have been revised for accuracy and clarification. Roads for timber and oil and gas usually temporary and are administered through a special use permit. They are not open to public use.

AT5 *Public Concern: The managing agencies should clarify the term “stored roads” and use it consistently.*

“Stored” has been changed to “closed.” The definition for “closed,” “obliteration,” and “decommissioning” have been added to the glossary. The design criteria for water and road density have been revised. Please refer to the Water section of the LRMP.

AT6 *Public Concern: The managing agencies should revise the discussion of roads to ensure that the cited references support the assertions made.*

The references have been checked and revised where appropriate to ensure they are used correctly and support the statements in the document.

AT7 *Public Concern: The managing agencies should ensure desired conditions and objectives for road densities are consistent and reduce the road density for areas designated as Management Area (MA) 5 to reduce impacts on water resources.*

The road density guideline has been revised to be specific to USGS 6th-level HUCs and municipal watersheds. Road density guidelines are no longer tied to MA 5.

AT8 *Public Concern: The managing agencies should include a summary of the roads analysis to serve as a basis for decommissioning objectives.*

On USFS lands, the roads analysis is an internal document used as supplemental reference material during the travel management planning process. It is not a decision document and not a basis for planning-level decisions or analysis. The roads analysis process has been modified to incorporate both roads and motorized trails and is now called “travel analysis.” Travel analysis is a precursor to subsequent project-level travel management planning processes. Travel management plans would identify those roads and trails that would comprise the designated transportation system and would identify and prioritize roads and trails, which are not included in the transportation system, for decommissioning. For the BLM, 43 CFR 8342 provides guidance for designating areas as open, limited, or closed, as well as the designation criteria for roads and trails.

AT9 *Public Concern: The managing agencies should revise the design criteria related to decommissioning roads to define the term “high,” distinguish between open and closed roads, and provide for hydrologic basins that contain more than one management area.*

The term “high” in the guideline related to road and trail maintenance investment is defined through a process known as travel analysis. Through travel analysis, roads and trails are evaluated on a number of criteria to determine road-specific values and risks.

The term “high” in the route density guidelines has been eliminated and specific density thresholds are provided that are resource specific, rather than management area specific, with watersheds, water quality, and wildlife as the resources of concern. These guidelines would serve as one basis for analysis of future projects for the life of the LRMP. Project proposals that would result in road densities that exceed these guidelines may require project-specific mitigation. Travel management planning is the process by which the USFS and BLM would work toward meeting the route density guidelines through identifying the designated transportation system and identifying routes and priorities for decommissioning.

The term “open” is discussed in detail in the Access and Travel Management section introduction. For the SJNF, the designated transportation system consists of those roads and trails that are “open,” or available for public use and which are displayed on a Motor Vehicle Use Map (MVUM). Roads not displayed on the MVUM would be “closed” to public use, but may be used for administrative purposes or authorized by contract, permit, or other written authorization. For the

BLM, the term “open” refers to an area designation or a route designation. On BLM, these areas and routes would be identified on a travel management map.

AT10 *Public Concern: The managing agencies should include the number and location of all motorized trail miles to allow for assessment of impacts.*

System trail and roads information can be found in the tables presented in the Access and Travel Management section of FEIS. Tables have been separated for clarity and titles have been corrected. For the purpose of the analysis in this LRMP, the decision is for motorized suitability for the SJNF and off-highway vehicle area designations for the TRFO. These tables provide a comparison of how these travel decisions would vary by alternative. The LRMP travel decisions provide a framework for a future travel management planning process. The routes identified for inclusion in the transportation system are determined at the project-level travel management planning process.

AT11 *Public Concern: The managing agencies should not establish limitations on road construction in areas that are already leased for oil and gas development.*

The USFS would manage access in areas that are already leased according to the provisions in 36 CFR 228.12.

AT12 *Public Concern: The managing agencies should verify that objectives regarding road decommissioning and soil productivity are consistent.*

Decommissioning is achieved by a variety of methods depending on the resource conditions. Due to the variety of conditions, we cannot achieve 100% soil productivity restoration in all areas.

AT13 *Public Concern: The managing agencies should clarify that excess road density resulting from new oil and gas roads being developed would not result in closure of any roads open to the public that would not otherwise be designated for closure.*

The Supplement to the Draft EIS says road construction or reconstruction must comply with the LRMP road density guidelines, which could require decommissioning of other roads. These other roads would be identified through travel management planning, which is the process used to identify the roads that would be included in the transportation system. It is a public process that may be conducted on its own or as part of a project NEPA analysis. Following completion of this process, roads not specifically identified as part of the transportation system or roads that are not identified as being in a stored (closed) state for future administrative or permitted use are unauthorized and may be closed. Roads identified as open to the public are authorized and are not closed.

AT14 *Public Concern: The managing agencies should clarify if there are any roadless areas in the Paradox Basin and whether or not development would be allowed.*

The GSGP area does intersect with wilderness study areas (WSAs) and some lands to be managed for their wilderness characteristics. Road construction could occur in these areas only if tied to valid existing rights.

AT15 *Public Concern: The managing agencies should clarify how areas are developed for oil and gas if roads are closed in travel management plans.*

Travel management planning identifies roads needed for a variety of purposes, including resource utilization, which would be managed as part of the SJNF and TRFO transportation system. Existing roads not identified in the transportation system are not needed and become candidates for closure. Project-specific NEPA analysis would be conducted at the project level that would include identification of the transportation network needed to support the proposed project.

AT16 *Public Concern: The managing agencies should acknowledge the impacts to county roads from oil and gas development on public lands.*

A more detailed description of the impacts associated with increased industrial traffic would be developed. As a condition of the lease agreement/development plan, the operator would have to

comply with all federal, state, and local laws and regulations. Conditions of Approval may include obtainment of driveway permits, access permits, completion of project-specific traffic analyses, construction of required access improvements, and payment of impact fees to local governments. Construction of other related infrastructure (pipelines, power transmission lines, etc.) would also be required to comply with all applicable regulations.

AT17 *Public Concern: The managing agencies should require stipulations for county roads impact by oil and gas development.*

A more detailed description of the impacts associated with increased industrial traffic would be developed. As a condition of the lease agreement/development plan, the operator would have to comply with all federal, state, and local laws and regulations. Conditions of Approval may include obtainment of driveway permits, access permits, completion of project-specific traffic analyses, construction of required access improvements, and payment of impact fees to local governments. Construction of other related infrastructure (pipelines, power transmission lines, etc.) would also be required to comply with all applicable regulations.

AT18 *Public Concern: The managing agencies should include an estimate of impacts from industrial water trucks.*

Estimated impacts from oil and gas development are included in each resource section of the FEIS. A more detailed description of the impacts associated with increased industrial traffic would be developed. As a condition of the lease agreement/development plan, the operator would have to comply with all federal, state, and local laws and regulations. Conditions of Approval may include obtainment of driveway permits, access permits, completion of project-specific traffic analyses, construction of required access improvements, and payment of impact fees to local governments. Construction of other related infrastructure (pipelines, power transmission lines, etc.) would also be required to comply with all applicable regulations.

AT19 *Public Concern: The managing agencies should ensure trails currently open or historically open to motorized use remain open.*

This LRMP identifies areas as suitable or unsuitable for motorized use for SJNF lands or as open, closed, or limited to motorized use on TRFO lands, and does not make any specific trail designations, or identify specific trails for motorized or non-motorized use. The process used to delineate areas identified as suitable/unsuitable or open/closed/limited for motorized use was based on numerous criteria, including the history of uses within the area, and is described in the Access and Travel Management section of the LRMP. There are several cases where trails that have been historically open to motorized use fall within areas identified as being unsuitable for motorized use. This may be the case where trails were built in areas where they are not ecologically or physically sustainable, where private property is being impacted, where critical wildlife corridors or habitat is being negatively impacted, where user conflicts necessitate a separation of certain uses, or any number of other reasons. However, site-specific travel management planning, which includes opportunities for public input and comment, must occur before trails that are currently open to motorized use can be designated as closed to that use.

AT20 *Public Concern: The managing agencies should clarify how suitability determinations were made, and clarify the definitions of suitable and unsuitable over-ground motorized use.*

The process for determining motorized suitability is described in the Access and Travel Management Section of the LRMP.

AT21 *Public Concern: The managing agencies should not group over-snow motorized use with over-land motorized use because the impacts are different.*

Impacts from over-snow and over-ground motorized travel haven been analyzed separately.

AT22 *Public Concern: The managing agencies should allow Ranger Districts and Field Offices to determine travel suitability designations.*

Motorized suitability determinations are planning-level decisions and guide subsequent, route-by-route travel management planning that typically occurs at the Field Office or Ranger District level. Before individual trails or roads can be added or eliminated, additional environmental analysis must be conducted. Ranger District and Field Office personnel were inherently involved in making the travel suitability recommendations.

AT23 *Public Concern: The managing agencies should decide on motorized suitability areas as part of the travel management process.*

Site-specific, route-by-route travel management decisions would be made during project-level analysis. The LRMP does make decisions on areas suitable for motorized travel; however, changes in routes within such areas would not be changed until separate route-by-route decisions have been made under a separate environmental analysis process.

AT24 *Combined with Public Concern AT20*

AT25 *Public Concern: The managing agencies should identify and analyze all motorized routes within cross-country travel areas that have not been legally closed because many so-called "unauthorized" routes were created within these cross-country travel areas.*

For "cross-country travel areas" (i.e., undesignated or open areas) on TRFO lands, there has been no requirement for users to stay on routes, thus routes created via cross country travel are not "unauthorized." For the USFS, an unauthorized road or trail is defined in 36 CFR 212.1 as a "road or trail that is not a forest road or trail or a temporary road or trail and that is not included in a forest transportation atlas." Motorized travel suitability is addressed in the alternatives. However, site-specific impacts would be analyzed in individual NEPA analyses when making site-specific decisions regarding designation of roads, trails, and areas for motorized and non-motorized uses.

AT26 & 28 *Public Concern: The managing agencies should revise the description of over-snow motorized use and clarify if over-snow motorized users are restricted to designated routes.*

Some statements in the Draft LRMP/EIS erroneously implied that over-snow motorized use would generally be restricted to groomed trails. These statements have been corrected to indicate that over-snow motorized use may occur on groomed trails and cross-country, where appropriate.

AT27 *Public Concern: The managing agencies should engage in winter, over-snow motorized travel planning to comply with Executive Orders 11644 and 11989.*

The SJNF would do subsequent, site-specific planning and issue a decision to address over-snow use consistent with the 2005 Travel Management Rule and in compliance with Executive Orders 11644 and 11989. The TRFO would also address over-snow motorized travel as it completes travel management planning within 5 years after the approval of this LRMP. More information on subsequent planning for over-snow use can be found in the Access and Travel Management section of the LRMP.

AT29 *Public Concern: The managing agencies should clarify how many acres would be closed to snowmobiling.*

This information can be found in Chapter 2 of the FEIS.

AT30 *Public Concern: The managing agencies should allow over-snow motorized access to the lands north of Lone Mesa State Park.*

This area has been identified as severe winter range for elk, and thus would not be an appropriate area for snowmobile use. Both the USFS and Colorado Parks and Wildlife (CPW) currently enforce seasonal winter closures in this general area for the protection of elk.

AT31 *Public Concern: The managing agencies should only allow hybrid skiing where unrestricted over-snow motorized travel is allowed.*

If a motorized over-snow recreational vehicle is involved, the activity is restricted to routes and areas where such a vehicle is allowed.

AT32 & 33 *Public Concern: The managing agencies should provide improved winter recreation staging and parking areas.*

Improvements to parking and other recreation-related facilities are site-specific actions and would be considered during subsequent implementation project planning for recreation facilities on Red Mountain Pass and other areas. This would require additional environmental analysis and opportunities for public input and comment. To facilitate this future work, the desired future conditions found under the Access and Travel Management section of the LRMP have been revised to acknowledge and address issues related to parking areas.

AT34 *Public Concern: The managing agencies should ensure that road closures do not negatively affect landowners.*

Some landowners who have property within National Forest System (NFS) or BLM lands have additional rights not afforded to the general public. Road use permits and rights-of-way can be issued to allow limited or seasonal use of otherwise closed roads and private property owners' rights, as protected by laws such as the Alaska National Interest Lands Conservation Act, would be respected and resolved on a case-by-case basis. Motorized suitability within the Dolores Canyon area is addressed in the LRMP alternatives. However, site-specific impacts would be analyzed in individual NEPA analyses when making site-specific decisions regarding designation of roads, trails, and areas for motorized and non-motorized uses, and the private landowners must ensure to engage in this particular travel management analysis.

AT35: *Public Concern: The managing agencies should separate route density guidelines from MA prescriptions because route density guidelines should be based on landscape applicability.*

Route density guidelines have been revised and are no longer associated with MA prescriptions.

AT36: *Public Concern: The managing agencies should manage motorized/non-motorized use on the southwest and northwest sides of Red Mountain Pass consistently to facilitate enforcement and to be consistent with the Grand Mesa, Uncompahgre, and Gunnison Forest Plan.*

The managing agencies did consider adjacent forest plans and other land use plans in developing the SJNF and TRFO LRMP. It is desirable to manage consistently with adjacent forests and other jurisdictions; however, suitability decisions incorporate a variety of factors and there is sometimes solid rationale to justify why management of lands adjacent to one another on differing forests may not align. In the case of Red Mountain Pass, the area to the west of U.S. Highway 550 was found suitable for over-snow motorized use due primarily to the accommodating terrain and manageability of over-snow motorized use in that area.

AT37 *Public Concern: The managing agencies should clarify whether the Hermosa Creek Trail would be closed to motorized traffic under Alternative B: Preferred Alternative*
Hermosa Creek Trail remains open to motorized use under the Preferred Alternative.

AT38 *Public Concern: The managing agencies should designate the Chicken Creek drainage, West Mancos River, and Cherry Creek area as unsuitable for motorized access because the area is sensitive to anthropogenic disturbance, is a popular quiet use area, and to be consistent with the travel management plan.*

The site-specific Mancos-Cortez Travel Management Decision designated non-motorized routes (such as the Chicken Creek, West Mancos and Cherry Creek Trail) and motorized routes (both roads and trails) within this landscape. Areas designated suitable for motorized travel may include specific non-motorized routes.

4.5 Climate Change

CC1 *Public Concern: The managing agencies should analyze and consider climate change in the LRMP revision to be consistent with statements made by the Chief of the USFS, to comply with NEPA, and to allow for monitoring and adapting to changes resulting from climate change.*

Analysis and consideration of climate change has been incorporated in the Chapter 3 in the FEIS for each of the resource areas as appropriate.

CC2 *Public Concern: The managing agencies should include a discussion of climate change in the cumulative impacts.*

A detailed analysis of climate change and climate change adaptation strategies can be found in the introduction to the Final LRMP, throughout various resources in the Final LRMP/FEIS and in Appendix G.

CC3 *Public Concern: The managing agencies should eliminate the discussion of climate change.*

The requirement to include climate change analysis in LRMP revision efforts can be found in NEPA Handbook 6.4.1 and Secretary of the Interior Order 3226: "Consider and analyze potential climate change impacts when undertaking long-range planning exercises, setting priorities for scientific research and investigations, and/or when making major decisions affecting [USDI] resources."

CC4 *Public Concern: The managing agencies should evaluate the potential for GHG emissions.*

GHG emissions analysis was completed for the FEIS. Local emissions inventories (as opposed to statewide) were used for the analysis including the Baseline Greenhouse Gas Emission Profile and Forecast for La Plata County, 2008. GHG analysis covered all of the BLM and USFS lands in southwest Colorado, including the HD Mountains. Standards, guidelines, and many mitigation measures have been developed to reduce greenhouse gas emissions.

4.6 Collaboration and Public Involvement

CP1 *Public Concern: The managing agencies should work more closely with local governments in the planning process.*

All relevant local governments were invited to be cooperating agencies for this project. The Economic, Local Government, and Demographic sections of the FEIS focused analysis on the five counties that have the greatest acreage and population associated with the planning area.

CP2 & CP3 *Public Concern: The managing agencies should ensure that the Draft LRMP is consistent with the spirit of the MOUs between the agencies and the Colorado Department of Natural Resources to make sure that the criteria used by the Colorado Water Conservation Board are used to determine stream flows.*

The MOU are incorporated in the LRMP as recognized guidance. Because the MOUs are subject to change and renegotiation by the state and federal agencies, the LRMP necessarily defers to such guidance that is developed to implement policy at a level outside the scope of the LRMP and, as is stated in the introduction, both USFS and BLM management is authorized and guided by many laws, regulations, and policies; none of which are reiterated verbatim in the LRMP.

CP4 *Public Concern: The managing agencies should improve communication and collaboration with Montezuma County and the oil and gas industry to allow them to provide meaningful input in the development, revisions, and selection of the final alternative.*

The BLM and USFS have met with interested local governments and citizens for information exchange and when requested. We are unaware of any requests from Montezuma County that we did not respond to. The BLM and USFS have had several meetings with Montezuma County (commissioners and commissions, as well as public meetings). This LRMP revision process had

an extensive public scoping process that was open to the public and included 28 public meetings in 2005. These meetings were open to everyone, and representatives from both industry and local governments did attend some of the meetings.

CP5 *Public Concern: The managing agencies should consult with CPW prior to issuing oil and gas leases to ensure that stipulations applied to a given lease provide adequate protection of habitat and sensitive species.*

The BLM and USFS have consulted with CPW on wildlife and related issues, including stipulations. The agencies would continue to work closely with CPW as lands are leased and oil and gas development is proposed.

CP6 *Public Concern: The managing agencies should have coordinated with the Governmental Water Roundtable on the Draft LRMP and provided a pre-release copy of the LRMP to offer pre-public comments.*

The Draft LRMP and EIS were made public to all interested parties simultaneously.

CP7 *Public Concern: The managing agencies should acknowledge the role of the Dolores River Dialogue in coordinating field science to address Dolores River management.*

The work of the Dolores River Dialogue is acknowledged and documented in Appendix D. The BLM and USFS would continue to participate in and accommodate such cooperative efforts to the extent possible under law, regulation and policy.

CP8 *Intentionally left blank.*

CP9 *Public Concern: The managing agencies should consult with tribal nations, not just members of the tribe.*

The BLM and USFS recognize the requirement that they work collaboratively and conduct government-to-government consultation with the 26 Native American tribes and pueblos that claim cultural affiliation with the lands managed by the TRFO and SJNF. The goal is to ensure that management issues of concern to the tribes and to the pueblos are addressed. All applicable USFS and BLM policies addressing tribal treaty rights and federal trust responsibilities would continue to be followed. The USFS and BLM would continue to recognize the unique sovereign nation status that the Native American tribes and pueblos have with the U.S. government. Individual members of any tribe may also participate in the NEPA and planning process outside the formal tribal consultation requirements.

CP10 *Public Concern: The managing agencies should work with the tribes to develop consultation protocols.*

The SJNF and TRFO work collaboratively with the tribes and conduct government-to-government consultation in accordance with law and agency direction. The agencies are very interested in developing consultation protocols with the tribes; however, establishing consultation protocols is outside the scope of this LRMP.

CP11 *Public Concern: The managing agencies should consult with the Hopi Tribe on selection and allocation of ancestral sites for educational and scientific uses, as well as interpretive development and public visitation to ensure that these areas are not impaired.*

Consultation with the Hopi and other tribes on these actions and other related activities would occur when they are proposed at the project level. This LRMP does not make any decision with regard to site selection or interpretive development.

CP12 *Public Concern: The managing agencies should notify and consult with the Ute Tribal Nation to comply with Executive Order 13175 and to comply with the Brunot Agreement and the Constitution.*

The BLM and USFS have consulted and continue to consult with the Ute Mountain Ute Tribe, consistent with Executive Order 13175. The Brunot Agreement is cited and incorporated by reference into the LRMP and FEIS and the agencies would continue to abide by its requirements.

CP13 *Public Concern: The managing agencies should extend the public comment process and increase the information provided to local citizens.*

This LRMP revision process had an extensive public scoping process that was open to the public and included 28 public meetings. All meeting materials and notes were posted on the internet (and mailed if requested). Notification of the decision to extend the comment period for 45 days was published in the *Federal Register* in March 2008 (73 *Federal Register* 11860). Additional time was granted for the EPA and CDPHE to address air quality modeling concerns. Notification of additional comment period was published for the Supplement to the Draft EIS on August 26, 2011.

CP14 *Public Concern: The managing agencies should further extend the comment period because the extension is insufficient to allow for development of thorough, thoughtful, and coordinated response.*

This LRMP revision process had an extensive public scoping process that was open to the public and included 28 public meetings in 2005. All meeting materials and notes were posted on the internet (and mailed if requested). Notification of the decision to extend the comment period for 45 days was published in the *Federal Register* in March 2008 (73 *Federal Register* 11860). Additional time was granted for the EPA and CDPHE to address air quality modeling concerns. Notification of additional comment period was published for the Supplement to the Draft EIS on August 26, 2011.

CP15 *The managing agencies did not coordinate with local governments in the development of this land management plan as required by federal and state law.*

The USFS and BLM have met all legal and regulatory requirements regarding coordination with local governments and have gone well beyond basic public involvement requirements to involve local governments and the public throughout the LRMP revision process.

CP16 *The managing agencies must urge additional agencies to cooperate on this project by enlisting them as cooperating agencies.*

The USFS and BLM invited over 30 entities to participate as cooperating agencies during this LRMP revision effort. The Town of Rico and Montezuma County responded, requesting cooperating agency status. Montezuma County did not renew its cooperating agency status when the MOU expired in 2010. The Town of Rico has continued its status as a cooperating agency throughout the planning process.

4.7 Dolores River Canyon

DR1 *Public Concern: The managing agencies should revise Desired Condition 42.2 to include wilderness character.*

The geographic scope of the Dolores River Canyon (McPhee Dam to Dolores WSA boundary) includes a variety of landscapes and levels of development. Not specifically listing wilderness values among other resources in this section does not relieve the agency's duties under Section 201 of FLPMA to maintain an inventory of all resources. An inventory of wilderness character and values for BLM lands is presented in Appendix O, and these findings are considered among other resource values and uses within the LRMP.

4.8 Economics and Demographics

ED1 *Public Concern: The managing agencies should include population increases in the analysis of direct, indirect, and cumulative recreation impacts.*

Estimated population increases are considered where relevant in the impact analysis in Chapter 3 of the FEIS. See Section 3.30 for a comprehensive analysis of demographics and associated impacts by resource.

ED2 Public Concern: The managing agencies should revise the economic analysis to include accurate, relevant information about local counties.

The economic analysis has been revised and updated to reflect the most influential potential impacts on local economies from LRMP direction (see Section 3.29 of the FEIS).

ED3 Public Concern: The managing agencies should clarify how the economic benefit numbers were calculated to explain why non-motorized uses appear to generate greater benefit than motorized uses.

The IMPLAN modeling that was used for the economic analysis is an accepted method for use in LRMP development. Inputs to the model are based on accepted and documented assumptions. The LRMP uses the best information available and has provided sufficient discussion of the topic raised in the comment.

ED4 Public Concern: The managing agencies should revise economic and demographic estimates using 2010 Census data.

We have updated the Demographics section to include demographic data from the 2010 Census.

ED5 Public Concern: The managing agencies should revise the socioeconomic analysis to accurately illustrate the beneficial economic effects oil and gas production would have on the planning area.

A detailed list of the most important changes made to the FEIS from the Draft EIS and Supplement to the Draft EIS are included in the Economics section of the FEIS. These changes include a comprehensive revision and update of the socioeconomic analysis for the FEIS and address the issues raised in the comment. For example, we updated the data sets used in modeling to the most recent available data (2010), revised the pricing of oil and gas, and revised production estimates of natural gas, revised the analysis of economic dependency for the planning area in Colorado to include recognition of the contribution of the mining industry in terms of both employment and labor income, and revised the Environmental Consequences section to show the impacts related to oil and gas exploration and development.

ED6 Public Concern: The managing agencies must comply with legal and agency administrative requirements for addressing local dependency on resources from public lands, existing conditions, and trends, as well as impacts to those trends, income, and employment by economic sector, community infrastructure, quality of life, and land use patterns.

An analysis of the local dependency on resources from public lands is presented in the Economics section of the FEIS. Conditions and trends are provided, and detailed employment by major industry in 2010 is shown. The Local Governments section includes a further subsection titled, "Impacts to Local Government Costs," where we discuss qualitatively the state and local capacity to use impact revenues from minerals development to balance development driven impact costs. The Demographics section addresses "quality of life" and deals with land use issues and patterns as well.

ED7 Public Concern: The LRMP must include more analysis of renewable resource benefits to economic and community development.

Renewable resource benefits such as grazing, timber harvest, and recreational use are included in the analysis of benefits and costs of the provision of goods and services on the TRFO and SJNF. The analyses in the Economics, Demographics, and Local Governments sections of the EIS capture these benefits in addition to the benefits associated with oil and gas development.

ED8 *Public Concern: The managing agencies must recognize the economic contributions of outdoor recreation, hunting, and angling and the potential impacts to recreation of the alternatives.*

The socioeconomic analysis was comprehensively revised and updated for the FEIS. This includes the update of recreation use estimates and spending profiles. All types of recreation were updated, from wildlife-related activities such as hunting to downhill skiing. In addition to these changes, willingness-to-pay values by recreationists used in the calculation of present net value were updated to the most current values used by the agency. All updates were used in the analysis of current conditions and impacts of alternatives. Recreation specialists determined that recreation use would not change among alternatives, and the impact analysis reflects this determination.

ED9 *Public Concern: The managing agencies should disclose the negative impacts of boom-and-bust cycles of oil and gas drilling to community lifestyles and economic sectors.*

The assumption made for planning purposes is that natural gas field exploration, development, and production would expand over the planning horizon under all alternatives, assuming that land is made available for leasing, is leased, and that market conditions support actual exploration, development, and production. Projected oil and gas development and production account for the largest difference in impact to employment, population, and local government revenue among the LRMP alternatives.

ED10 *Public Concern: The LRMP must adequately consider the private sector economics of exploration and production in the GSGP, and this information must be sufficiently incorporated into the RFD.*

The economics of exploration and production is not the subject of this LRMP, which instead focuses on the identification of lands that may be made available for oil and gas leasing and on the manner of lease stipulations that may be required to conduct exploration, development, and production in an environmentally sound manner. The economics of exploration and production is a private sector consideration that may lead to requests for oil and gas leases in the future.

ED11 *The managing agencies should revise the socioeconomic analysis.*

The socioeconomic section and analysis has been completed revised; please refer to the Economics and Demographics sections of the FEIS.

4.9 Fire and Fuels Management

FF1 *Public Concern: The managing agencies should describe the relationship between impacts related to mechanical fuels treatment and those related to fire management.*

The use of mechanical fuels treatment is fire management. We use mechanical treatment a majority of the time in the wildland urban interface (WUI). Sometimes we would use prescribed fire to remove piles created by the mechanical operation, other times we would masticate the leftover material. As for defining the impacts of mechanical treatment that is an implementation-level decision that would be evaluated in the NEPA process and the LRMP is merely stating the wide range of management options to be used on federal land. We would use a variety of mechanical, prescribed fire, and possibly chemical application to treat the landscape.

FF2 *Public Concern: The managing agencies should clearly define mechanical fuels treatment.*
A definition of mechanical fuels treatment has been added to the glossary in the LRMP.

FF3 *Public Concern: The managing agencies should revisit using wildfire as a management tool to include the costs of wildland fire used in the analysis.*

Currently, there is no significant timber industry. The SJNF needs to be managed in a wide spectrum of ways; fire is one tool to be used in doing so. The SJNF is in favor of a wide variety of management styles and methods. Timber harvest would occur in areas where appropriate and achievable, and there is an industry to provide the means necessary. Due to geographic and physical barriers only a small portion of the SJNF is available for timber harvest. Forest

management needs to be landscape wide. Fire is one tool for doing this. The current situation with the timber industry is negotiation for mutual cancellation of sales, and an industry that is upside down. If in the future industry recovers it would be in the interest of land managers to allow harvest to take place and this method would then become a priority. However, now with no industry and large sections of land that are roadless and in need of management, fire is the most likely tool. Fire would not be managed haphazardly over the landscape and there would be several management parameters to allowing a fire for resource benefit to burn. After all, these are fire dependent ecosystems that fire has played a natural role in for centuries. The intent of this section of the LRMP is to show that we would be open to using fire as a tool to reintroduce natural cycles back into the ecosystem. As for the cost of allowing fire to be used as a management tool the best example is that prescribed fire operations cost less than mechanical methods. The cost of mechanically treating or using prescribed fire the ratio is generally 5:1. It is usually five times more expensive to use mechanical methods over the use of prescribed fire. The use of fire for resource benefit shows that cost is generally half that of prescribed fire.

FF4 *Public Concern: The managing agencies should indicate that they would aggressively respond to wildland fires.*

Initial attack is a common phrase that has been used for decades in the fire management program to make the first evaluation of a wildland fire. At this point, the response could be in the form of an engine, aircraft, or other means. The primary mission at this point is to evaluate the fire based on weather, fuel, location, terrain, etc., and the managers objectives for fires located in that particular area. The actual response to the fire could be suppression, fire use, or a combination of both based on the LRMP and fire management plan(s). The LRMP does differentiate the appropriate management response in the Suitability section by management areas. It states rather that wildland fire managed for resource benefit is appropriate within any portion of the planning area. Just because managed fire may be desirable for any given area, it may not be appropriate at any given time. For example, allowing fire to burn may be desired if it can be managed as a low-intensity fire, but if fuel and forecasted weather conditions indicate otherwise, the fire may be suppressed; or if it is determined a fire that could be managed for resource benefit would require specific resources to assure it stays manageable and if all resources are committed to other fires in the United States, the fire may not be suppressed.

FF5 *Public Concern: The managing agencies should not use prescribed fire or wildland fire where it would destroy merchantable timber, and achieving desired conditions for fire frequency and severity in cool-moist mixed conifer forests, spruce-fir forests, aspen forests, and pinyon-juniper woodlands would result in too much fire and its associated risks and costs.*

The intent in using prescribed fire or wildfire for ecological benefit is not to destroy merchantable timber or to burn large amounts of the SJNF and TRFO, but to introduce a natural ecological process (fire) that would help achieve desired conditions and objectives in the LRMP (including desired conditions for fire frequency and severity in cool-moist mixed conifer forests, spruce-fir forests, aspen forests, and pinyon-juniper woodlands). Given the climatic, cultural, and ecological changes that have occurred since the reference period, it might not even be possible to recreate the fire regimes that occurred during the reference period.

FF6 *Public Concern: The managing agencies should address the issue of fuels management along the private-public land boundary.*

Desired conditions regarding fuels management and the WUI can be found in the Fire and Fuels section of the LRMP.

FF7 *Public Concern: The managing agencies should modify the assessment of future fire activity to include the assessment of the role and effects of climate change.*

Climate change information and mitigation measures are included in the LRMP and FEIS and summarized in Appendix G. It includes information on temperature trends, vegetation, and their relationship to fire. The entire climate change subject is evolving continuously and it would be extremely difficult to include specific strategies in the LRMP. On a national level, the USDA,

USDI, Association of State Foresters, and some private entities involved with fuels and fire management have published the Quadrennial Fire Review, which is a strategic assessment process conducted every 4 years to evaluate current mission strategies and capabilities against best estimates of future environment for fire management. This document is a vision of the future and guides the policies in fire management. The document is available for review on the National Interagency Fire Center website: www.nifc.gov/QFR/QFR2009Final.pdf

FF8 *Public Concern: The managing agencies should ensure that fuels management for archeological sites be carefully targeted, limited, and followed by invasive weed-control measures.*

Part of our ongoing fuels program is targeting cultural sites located in dense stands of vegetation, and we are selectively thinning these areas by hand, especially areas with rock art. We plan to continue this practice, as well as the stabilization of sites that are already experiencing erosion. Larger high-intensity fires are a big concern and we have made it a practice to seed these areas with native vegetation as soon as possible, as well as, stabilization of critical cultural sites.

FF9 *Public Concern: The managing agencies should not remove old growth pinyon-juniper because of the impact on wildlife.*

Fuel reductions methods in mature pinyon-juniper stands are primarily completed to protect developments in the WUI. As we have completed these treatments over the past 10 years, we have altered the methods of treatment to meet the objectives for wildlife. We have strived to seed all disturbed areas with native seed and have completed seeding on all projects indicated in the comment.

FF10 *Public Concern: The managing agencies should clarify what actions would be covered under the Appropriate Management Response (AMR).*

Prior to the AMR, a wildfire could either be suppressed or put into a wildland fire use fire, but not a combination of both. The AMR is designed to allow the managing agency to manage a wildland fire with both methods. For example, if a natural fire ignition started near the WUI and it is determined the fire would likely spread toward public lands with resource benefits, then managers could suppress the fire near the WUI while allowing it to burn onto the public lands. If the fire stops providing the desired resource benefit, it could be suppressed. We would be removing the term "AMR" to fit the current nomenclature of "fire management." The terminology is to follow the role of management for resource benefit. This includes point protection, full suppression, and confine and contain type strategies.

FF11 *Public Concern: The managing agencies should resolve the inconsistency between Objective G.4 and the rest of the LRMP in regard to wildland fire use.*

This objective has been rewritten for consistency and clarification. Please see the Fire and Fuels Management section of the LRMP.

FF12 *Public Concern: The managing agencies should change Desired Condition 6.17 because it is unrealistic as stated.*

Desired conditions regarding fire and fuels have been revised for accuracy and clarification. Please see the Fire and Fuels Management section of the LRMP.

FF13 *Public Concern: The managing agencies should ensure that thinning of trees in the BLM lands around Lone Mesa State Park would be permitted to be consistent with the park's Forest and Fire Fuels Assessment and Mitigation Plan.*

The BLM lands in and around Lone Mesa State Park are MA 3 in all alternatives. MA 3 allows for timber management for purposes other than timber production, like fuels mitigation. There should be no conflict with the treatments you describe.

FF14 *Public Concern: The managing agencies should include residences and evacuation routes at the upper end of the Navajo River valley in the WUI designation because only one cluster of structures is currently designated as WUI.*

The USFS and BLM would adjust the WUI designation as needed in areas where public lands and communities connect. The USFS and BLM can coordinate with local communities to assist with community wildfire protection plans to help describe the needs of protecting property in the event of a catastrophic wildfire.

FF15 *Public Concern: The managing agencies should correct the analysis of fire regimes and recommendations because it is based on inaccurate information.*

We recognize the limitations in the fire severity information, and we recognize the sampling, scale, and fire-scar interpretation biases and uncertainties associated with composite fire intervals and the methodologies used in the Grissino-Mayer et al. (2004), Romme et al. (2009), and McGarigal and Romme (2005) publications (as described in Baker and Ehle 2001 and Kou and Baker 2006), but we believe that our use and interpretation of those SJNF and TRFO-specific publications are valid, although we agree that the fire frequencies on the planning area during the reference period were likely longer than those described in those documents.

4.10 Heritage and Cultural Resources

HC1 *Public Concern: The managing agencies should revise Desired Condition 16.1 to include a definition of "significant heritage and cultural resources."*

Desired conditions regarding heritage and cultural resources have been updated for accuracy and clarification. Please refer to the Heritage and Cultural Resource section of the LRMP.

HC2 *Public Concern: The managing agencies should clarify how historic and prehistoric resources would be preserved.*

Historic and prehistoric resources would be preserved in accordance with the Secretary of the Interior's Standards for Historic Preservation. The LRMP components outlined in the LRMP provide specifics on how historic and prehistoric resources would be preserved.

HC3 *Public Concern: The managing agencies should include the Southern Ute Indian Tribe among the Indian nations with known cultural interests in the planning area.*

Both the LRMP and the FEIS have sections regarding tribal affiliation with the SJNF and TRFO. All of the tribes that have cultural affiliation with the SJNF and TRFO, including the Southern Ute Indian Tribe, are listed in tables in these documents.

HC4 *Public Concern: The managing agencies should establish an advisory board to propose the cultural and historic sites on BLM lands for inclusion in the National Register of Historic Places.*

Under the 2004 regulations for the National Historic Preservation Act, the federal agencies are required to consult with local interested parties. The SJNF and TRFO are currently working with several local groups regarding heritage and cultural resources. If local interested parties wish to form an advisory group the SJNF and TRFO would be happy to work with them. Nothing in the LRMP precludes interested parties from forming an advisory board. However, establishing a cultural resources advisory board is outside the scope of the LRMP.

HC5 *Public Concern: The managing agencies should cooperate with the Southern Ute Indian Tribe regarding tribal forest gathering activities.*

In 2005 the SJNF and TRFO initiated consultation with the Southern Ute on the Tribal Forest Protection Act. No response was received, but the SJNF and TRFO would be happy to consult with the Southern Ute on this issue. SJNF and TRFO managers would continue to allow Native Americans to collect botanical and other special forest products from the public lands within the constraint of ecological sustainability. SJNF and TRFO managers would also coordinate and collaborate with Native American governments in order to increase awareness and knowledge of culturally significant plants. SJNF and TRFO managers would continue to consult with tribes and pueblos (and knowledgeable individuals) in order to identify important cultural areas and traditional cultural properties. As part of the National Programmatic Agreement revision process,

the BLM would be contacting consulting tribes, including the Southern Ute to establish a Memorandum of Agreement (MOA) regarding formal consultation processes.

HC6 *Public Concern: The managing agencies should recognize that surface-disturbing activities can lead to beneficial impacts to cultural resources through inventories and discoveries.*

Under Cumulative Impacts in the Heritage and Cultural Resources Section of the EIS, we state, "Alternatives that result in more acres of planned and budgeted management activities, such as Alternatives A and D, may reduce adverse cumulative impacts. This is because more inventory and evaluation would be required under these alternatives. The additional inventory and evaluation may lead to more heritage/cultural resources being located, and a potential reduction of adverse cumulative impacts caused by natural processes after heritage/cultural resources are brought under appropriate management. Oil and gas management and fuels management are large contributors to the inventory and evaluation of heritage/cultural resources."

As of December 20, 2011, 73,660 acres had been surveyed for cultural resources on BLM lands within the SJNF and TRFO. A substantial percentage of this was for oil and gas development, but a considerable amount of it was for other non-oil and gas undertakings. Up to this point most of the oil and gas development has been on BLM lands within the SJNF and TRFO; therefore, it is an overstatement to claim that "hundreds of thousands of acres have been surveyed as a result of oil and gas development in the area."

HC7 *Public Concern: The managing agencies should ensure that if discoveries of cultural or historic properties are made, the Historic Preservation Department, Traditional Culture Program, would be contacted and work would be suspended until appropriate mitigation has been developed.*

This is standard policy outlined in BLM and USFS cultural and heritage manuals and handbooks including Standard Stipulations for Oil and Gas, the BLM and USFS Cultural Resource Permit Stipulations, regulations for the Native American Graves Protection and Repatriation Act, and the Archaeological Resources Protection Act.

HC8 *Public Concern: The managing agencies should ensure the oil and gas section is consistent with the Heritage and Cultural Resources section and Appendix H.*

The oil and gas section has been revised to reflect the Heritage and Cultural Resources section and Appendix H.

HC9 *Public Concern: The managing agencies should clarify that before oil and gas activities may proceed, archeological surveys must be completed to comply with Section 106 of the National Historic Preservation Act.*

The need to comply with Section 106 is addressed in the FEIS Heritage and Cultural Resources section analyzed under Impacts to Heritage and Cultural Resources from Oil and Gas Management.

HC10 *Public Concern: The managing agencies should include historic stock driveways on the Heritage Resource List to preserve historic horse and pack use.*

Stock drive ways are evaluated on a case by case basis for eligibility to the National Register of Historic Places. Segments that are determined to be eligible are preserved or mitigated in accordance with the National Historic Preservation Act. Use of these stock driveways for horse packing would in most cases be considered a compatible use of the historic resource.

HC11 *Public Concern: The managing agencies should provide greater protection for the Old Spanish Trail and include a map of it in the leasing stipulations.*

The geographic information for leasing stipulations includes a layer of the Old Spanish Trail route with a buffer to mitigate potential impacts from oil and gas leasing and development as described in the leasing stipulations (see Appendix H). Because there are more than 70 resource-specific leasing stipulations, it was not practical to provide a map of every resource, such as the Old

Spanish Trail. However, the geodatabase containing this information is available online at the SJNF and TRFO planning website at <http://www.fs.usda.gov/goto/sanjuan/planning> or http://www.blm.gov/co/st/en/fo/sjplc/land_use_planning.html. Alternative A is existing conditions and has standard lease stipulations for the Old Spanish Trail. Alternatives B and D utilize an NSO stipulation for 0.5 mile on either side of the Old Spanish Trail. Alternative C considers an NSO stipulation for 5 miles on either side of the trail. In addition to the leasing stipulations for the Old Spanish Trail, there are three objectives and standards in the LRMP for the Old Spanish Trail. Please refer to the Heritage and Cultural Resources section of the LRMP.

4.11 HD Mountains

HD1 & HD2 *Public Concern: The managing agencies should designate the HD Mountains as wilderness because of the area's natural and archeological resources to defend them against oil and gas drilling, because the excuse that they are not eligible due to noise is completely unreasonable, and because they provide a healthy wildlife ecosystem and essential habitat for sizable elk and deer herds.*

The HD Mountains are not capable/available for wilderness designation due to the current and future drilling activity associated with the gas wells in this region. Opportunities for solitude exist in the core of the area but are hindered because of the visual and audible impact from the current and future gas field production and traffic on the surrounding roads. A proposal to drill 138 new wells in the HD Mountain analysis area (federal, private, and state jurisdiction) was approved for the federal jurisdiction as documented in the Final EIS for the Northern San Juan Basin Coal Bed Methane Project in La Plata and Archuleta Counties (2007). This analysis and decision remains valid and revocation of the lease rights in for the HD Mountains is not within the scope of the decisions to be made in the LRMP revision.

HD3 *Public Concern: The managing agencies should correct inconsistencies related to whether the HD Mountains provide solitude.*

The contradiction noted regarding the HD Mountains opportunity for solitude has been revised in Appendix C.

HD4 *Public Concern: The managing agencies should provide accurate information about how the HD Mountains got their name.*

Reference to history of the name was removed as it is not relevant.

HD5 *Public Concern: The managing agencies should correctly analyze the large areas of the HD Mountains that are not slotted for oil and gas development.*

The term "slotted for oil and gas development" is not clearly defined within the comment. The entirety of the HD Mountains area is within a "high oil and gas potential" area, including CBM. Additionally, 88% (17,388 acres) of the HD Mountains Colorado Roadless Area (CRA) is currently leased for oil and gas development. Although actual development of the leases has not been extensive within the CRA to date, valid existing leases must be considered in the planning effort as their development is the decision of the leaseholder.

HD6 *The managing agencies should discuss how resources would be managed in the HD Mountains in relationship to the ROD from the previous Northern San Juan Basin EIS.*

Absent any conflict with management prescribed in this LRMP, decisions from the 2007 Northern San Juan Basin ROD are incorporated into and carried forward in the new LRMP. Where there is a conflict in prescribed management between the new LRMP and the Northern San Juan Basin ROD, this LRMP takes precedence.

4.12 Insects and Disease

ID1 *Public Concern: The managing agencies should provide more robust management strategies to ensure epidemic insect outbreaks are rare.*

Please refer to the new Insects and Diseases section in the LRMP that includes five desired conditions that better reflect the SJNF and TRFO's efforts to respond to insect outbreaks.

- ID2** *Public Concern: The managing agencies should include a fuller discussion of the impact of insect infestation in the planning area to more accurately represent the state of NFS lands, to ensure that the LRMP includes strategies to reduce the risk of insect epidemics and wildfire, and to ensure that the Rocky Mountain Landscape Simulator does not underestimate the scale and intensity of insect and fire events.*

The SJNF does not have native lodgepole pine, and our spruce-fir is a much more diverse landscape than the Routt National Forest and is not as prone to bark beetle outbreaks at the scale we have seen in the northern part of the state. That said, we do have high risks in our second growth ponderosa pine, which we have been actively managing to reduce densities, we are also seeing a great deal of bark beetle activity in other conifer species and the discovery of sudden aspen decline. If the vegetative goals we have set are accomplished we would have made great strides in reducing risk from insects, pathogens and fire. The insects and disease section has been re-written to address changing conditions. The bottom line is we feel that we do have a proactive integrated pest strategy, but we did not do a very good job of pointing it out.

4.13 Inventoried Roadless Areas

- IR1** *Public Concern: The managing agencies should designate the Bear Creek Roadless Area as MA 1 to manage the Bear Creek watershed for non-motorized use.*

Inventoried roadless areas (IRAs) (now termed CRAs) are to be managed under the 2012 Colorado Roadless Rule, which contains significant restrictions to protect these areas from development.

- IR2** *Public Concern: The managing agencies should designate the non-motorized portions of the Baldy Roadless Area as MA 1 because this area should be identified as unsuitable for over-snow motorized recreation.*

Baldy is an IRA on the SJNF and was analyzed for MA 1 prescription, as well as identified as unsuitable for winter motorized uses in Alternative C. This area would be managed under the 2012 Colorado Roadless Rule, which affords protective measures for this area.

- IR3** *Public Concern: The managing agencies should correct statements indicating that the Hermosa Creek area was not recommended as wilderness during the RARE II process.*

The Hermosa Roadless area was found to have a high wilderness attribute rating during the RARE II process. However, the USFS did not recommend 146,105 acres for wilderness due to interest in mineral development and mechanized/motorized recreation in the area. The primitive and roadless nature of the area was protected by other means within the 1983 LRMP and the 1992 amendment.

- IR4** *Public Concern: The managing agencies should include more information to explain why all IRAs meeting the available and capable requirements for wilderness designation are not being recommended for inclusion in the National Wilderness Preservation System.*

Appendix C has been revised to more fully articulate agency rationale for findings on each IRA. As a multiple-use agency, the USFS must consider other, competing uses and balance these with the need for additional wilderness designations. Congress has the authority at any time to designate any USFS land area wilderness if the area meets Wilderness Act requirements.

- IR5** *Public Concern: The managing agencies should include a desired condition for roadless areas to provide LRMP consistency.*

Management of IRAs is guided by the Colorado Roadless Rule (2012). This LRMP incorporates that rule by reference.

- IR6** *Public Concern: The managing agencies should clarify that roadless areas would be managed in accordance with the new Colorado Roadless Rule to ensure that existing lease rights would be honored.*
The Colorado Roadless Rule provides specific guidance to the USFS regarding CRA management. This rule is therefore incorporated by reference in the LRMP.
- IR7** *Public Concern: The managing agencies should leave decision space to incorporate the Colorado Roadless Rule.*
The Colorado Roadless Rule is incorporated into the LRMP and would guide the management of CRAs.
- IR8** *Public Concern: The managing agencies should use the definition of roadless areas that is consistent with existing federal regulations.*
The basis for how IRAs are defined is rooted in the 1964 Wilderness Act (Public Law 88-577; 16 USC 1131–1136), which defines wilderness and requires the Secretary of Agriculture to map wilderness and primitive areas. The procedure used by the USFS for wilderness evaluation and inventory is provided in Forest Service Handbook (FSH) 1909.12 - Land Management Planning Handbook, Chapter 70 - Wilderness Evaluation. The history of the SJNF roadless inventory and process by which the current inventory was developed is described in Volume III, Appendix C - Roadless Area Inventory and Wilderness Evaluation.
- The intent of this paragraph was not to provide a formal definition of the IRAs, but rather to disclose that the transportation system is managed to avoid new impacts within and to preserve the character of IRAs. The paragraph would be altered to eliminate potential conflict with the current or future definition of IRAs.
- IR9** *Public Concern: The managing agencies should ensure that the proposed roadless area adjacent to Durango Mountain Resort not affect the resort's implementation of new facilities.*
The IRA adjacent to the permitted Durango Mountain Resort ski area would not affect any approved developments under the current Durango Mountain Resort permit.
- IR10** *Public Concern: The managing agencies should update the inventory of roadless areas in the SJNF.*
The IRAs discussed in Volume III, Appendix C are the most recent findings for the USFS areas of the SJNF and TRFO. The inventories were conducted per agency policy and direction and were therefore carried forward through the planning process. This process is discussed in the background section of Appendix C.
- IR11** *Public Concern: The managing agencies should modify the Preferred Alternative to ensure that the Treasure Mountain roadless area would be managed so that the Continental Divide National Scenic Trail is adequately protected.*
IRAs would be protected under the Colorado Roadless Rule, which allows minimal, if any, development within these areas. Additionally, the Continental Divide National Scenic Trail is protected via other features/guidelines in the LRMP, such as visual resources and recreation.
- IR12** *Public Concern: The managing agencies should include specific desired conditions, objectives, or program emphasis for potential wilderness or roadless areas because roadless areas are a large component of the SJNF.*
The SJNF would manage CRAs consistent with the 2012 Colorado Roadless Rule.
- IR13** *Intentionally left blank.*
- IR14** *Public Concern: The managing agencies should reference and evaluate the potential impacts of the Colorado Roadless Rule on oil and gas development in the SJNF and TRFO.*

The FEIS has been updated to reflect the current situation regarding the recent Colorado Roadless Rule.

4.14 Invasive Species

- IV1 *Public Concern: The managing agencies should clarify Desired Condition 13.4 to acknowledge that roads and trails may contribute to the spread of non-native species.***
By stating this desired condition we are implicitly recognizing the role that a transportation system contributes to noxious weed management issues. We acknowledge the difficulty in managing non-native species along roads and trails; however, desired conditions are aspirational and reflect long-term goals. In addition, invasive species management within the transportation system—be it roads or trails—would be addressed in invasive action plans as roads and trails are natural spread vectors.
- IV2 *Public Concern: The managing agencies should clarify how they would control the spread of non-native plants in wilderness areas.***
This comment refers to a desired condition. Desired conditions are aspirations and reflect long-term goals. Non-native plant management within wilderness areas would be addressed either in the SJNF and TRFO invasive species action plan or project-level mitigation measures or both.
- IV3 *Public Concern: The managing agencies should include washing equipment as an objective for invasive species.***
Agency weed prevention practices are disclosed in the referenced SJNF and TRFO invasive species action plan. Prevention practices are also referenced under the objectives and standards in the Invasive Species section in the LRMP.
- IV4 *Public Concern: The managing agencies should clarify whether Objectives J.2 and J.3 exclude cheatgrass.***
Cheatgrass treatment is project specific due to the widespread occurrence of this weed across the SJNF and TRFO landscape. Cheatgrass treatment would be a priority where it presently is not common or can be controlled through management. Therefore the 25% goal could include cheatgrass control.
- IV5 *Public Concern: The managing agencies should include invasive aquatic species in the discussion of invasive species because several species are serious threats to aquatic systems.***
Aquatic invaders are specifically addressed in the SJNF and TRFO invasive species action plan, as discussed in the Invasive Species Program Emphasis section of the LRMP.
- IV6 *Public Concern: The managing agencies should add invasive plant species (including tamarisk) to the list of management indicator species (MIS) to track populations and encourage efforts toward their elimination.***
Consideration of plant species as MIS were evaluated, but the SJNF decided that direct project-level monitoring was the most site-specific and efficient monitoring method for invasive plant species.
- IV7 *Public Concern: The managing agencies should include cheatgrass and Kentucky bluegrass on the list of invasive plant species because these species allow for more erosion in riparian areas.***
Cheatgrass, which occurs on upland sites, is identified as an invasive species in the FEIS and there is an objective in the Invasive Species section of the LRMP that calls for increasing the annual acres of noxious weeds treated, which includes treating cheatgrass.
- Kentucky bluegrass, which occurs in terrestrial and riparian/wetland ecosystems on the SJNF and TRFO, does not meet our definition of invasive species because it does not cause economic or environmental harm or harm to human health. Although Kentucky bluegrass is not the desired

grass species we want in the mountain grasslands and riparian areas on the SJNF and TRFO, it does provide valuable forage for livestock and wildlife and serves as ground cover to protect soils from erosion.

IV8 *Public Concern: The managing agencies should include an evaluation of the possible transfer of unwanted nuisance aquatic species from water used during oil and gas development.*

Nuisance aquatic species would be addressed through subsequent project-level decisions, most likely through a Notice to Lessees.

4.15 Lands and Special Uses

LD1 *Public Concern: The managing agencies should expand the discussion of energy corridors and linear energy transmission authorizations to include locals need for power line rights-of-way.*

The discussion concerning designated energy corridors is limited to major facilities, not local distribution systems. Where there is no legal prohibition to authorize local electrical system rights-of-way, such proposals would be assessed based on their proposed design and location. Such systems are not restricted to designated energy corridors under the proposed LRMP.

LD2 *Public Concern: The managing agencies should allow electrical energy rights-of-way in all MAs where they are not precluded by law.*

Exclusion areas for rights-of-way, communications sites, and other land use authorizations have been specifically listed in the LRMP as guidelines under the Lands and Special Uses section to clearly identify the areas that are not available for electrical energy rights-of-way. On the SJNF, all areas within MA 1 are exclusion areas, as well as wilderness area, recommended wilderness areas, the Piedra Area, recommended suitable Wild and Scenic Rivers (WSRs) (wild segments only), and research natural areas (RNAs). On the TRFO, exclusion areas coincide with WSAs and recommended suitable WSRs (wild segments only).

LD3 *Public Concern: The managing agencies should expand the Draft LRMP's program emphasis and strategy to list and classify the types of lands that would be pursued for acquisition.*

The Draft LRMP included specific criteria in Part 3 - Design Criteria under the Lands Program section that would be used to prioritize acquisition of lands. These criteria have been updated and are found under Guidelines in the Lands and Special Uses section of the LRMP.

LD4 *Public Concern: The managing agencies should increase the corridor width for the proposed Tri-State gas and electric transmission line and correct the Nucla-Cahone transmission line voltage and Tri-State's corporate name.*

This LRMP has adopted the width in the West-wide Energy Corridor ROD. We have made corrections to the Nucla-Cahone transmission line voltage and to Tri-State's corporate name.

LD5 *Public Concern: The managing agencies should clarify whether the public would have access to public land via road access provided to Wolf Creek Village.*

The status and use of the proposed access road to Wolf Creek Village is not within the jurisdiction of the SJNF. This is under the authority of the Rio Grande National Forest.

LD6 *Public Concern: The managing agencies should transfer certain BLM public lands adjoining Mesa Verde National Park to the management of Mesa Verde National Park.*

Jurisdictional transfer of lands between federal agencies requires Congressional action and is beyond the scope of the LRMP.

LD7 *Public Concern: The managing agencies should ensure the LRMP allows for future needed utility corridors and communication and transportation infrastructure.*

Access to existing and future transportation, utility, and communication infrastructure is addressed in the Lands and Special Uses section of the LRMP and in each of the allowable use tables associated with specific areas discussed in Chapter 3 of the LRMP.

- LD8 *Public Concern: The managing agencies should clarify the boundaries of MAs to ensure they do not conflict with existing Colorado Department of Transportation rights-of-way.***
Existing rights associated with current rights-of-way would not be impacted by the designation of MAs in the LRMP.
- LD9 *Public Concern: The managing agencies should ensure that the Colorado Department of Transportation low-elevation flights would be allowed so that activities designed to increase safety are not restricted.***
The LRMP does not propose any direction that would restrict low-elevation flights, nor does it approve such actions.
- LD10 *Public Concern: The managing agencies should ensure that the road connection between Grandview and Ewing Mesa would not be precluded by the designation of the Grandview Ridge area because this connection would reduce traffic on U.S. Highways 160 and 550.***
The LRMP does not propose any direction or make any designations that would preclude construction of the connection between Grandview and Ewing Mesa. Such a proposal would require future analysis at a site-specific level.
- LD11 *Public Concern: The managing agencies should ensure that management designations would not restrict the Colorado Department of Transportation from avalanche mitigation activities.***
The LRMP does not propose any direction of designations that would preclude the Colorado Department of Transportation from conducting avalanche mitigation activities, nor does it specifically approve such activities.
- LD12 *Public Concern: The managing agencies should clarify how and where NFS lands would be disposed of.***
Lands are identified for disposal based on management, administrative, and resource needs of the respective agency. The specifics of an individual land exchange, acquisition, or disposal are based on the circumstances of the respective purpose and need for each proposal. Each exchange, acquisition, or disposal would require a site-specific decision process (NEPA) and is not within the scope of the FEIS.
- LD13 *Public Concern: The managing agencies should lease or rent recreational access and use in the Dolores River corridor from private landowners.***
The government can enter into lease or rental contracts with private landowners if there is a public benefit. This type of action is outside the scope of the FEIS and is better addressed through a separate decision process.
- LD14 *Public Concern: The managing agencies should modify the desired conditions statement related to the Dolores, Columbine, and Pagosa areas to include existing rights-of-way.***
General discussion of energy corridors and linear energy transmission authorizations (rights-of-way) is provided in the Lands and Special Uses section of the LRMP.
- LD15 *Public Concern: The managing agencies should manage transmission line corridors consistently with adjacent public lands.***
Where possible, decisions are compatible with adjoining jurisdictions but differences do exist across the landscape that may warrant treating alignment of corridors separately. The West Wide Energy Corridor of 2007 has been recognized in the LRMP to facilitate routing of electric transmission lines and energy pipelines throughout the 11 western states. Nothing in the LRMP precludes a utility from applying for a right-of-way except in designated exclusion areas.

LD16 *Intentionally left blank.*

LD17 *Public Concern: The managing agencies should use the most current Tri-State facility priority list to analyze environmental consequences.*

The SJNF and TRFO have received expressions of interest in the form of out-year plans and priority lists from several land-use constituents such as Tri-State Energy; however, analysis of these projects would be speculative and they are not considered reasonably foreseeable projects prior to receiving initial applications.

4.16 Livestock and Rangeland Management

LR1 *Public Concern: The Managing agencies should delete Desired Condition 6.16 because we question the feasibility that "All rangelands on SJNF and TRFO display satisfactory rangeland conditions."*

This desired condition has been deleted.

LR2 *Public Concern: The managing agencies should revise the objective related to rangeland management because the time frame is unrealistic and because it is not specific enough.*

Objectives regarding livestock and rangeland management have been revised. Please see Livestock and Rangeland Management in the LRMP.

LR3 *Public Concern: The managing agencies should revise Objective Q.3 to account for invasive species control issues to ensure the time frame is realistic.*

Objectives regarding livestock and rangeland management have been revised. Please see Livestock and Rangeland Management in the LRMP.

LR4 *Public Concern: The managing agencies should make Measure XVIII.A.4 a standard to ensure grazing systems provide for rest to promote plant health.*

Rangeland conditions vary across the SJNF and TRFO. Many areas are moving towards desired conditions. Therefore, the unilateral application of this guideline is not needed. The USFS and BLM can adequately manage resources with this as a guideline.

LR5 *Public Concern: The managing agencies should change the standard for grazing to measure the amount of plant material remaining.*

Standards and guidelines for rangeland vegetation have been revised. Allowable forage use is a guideline and the measurement of residual plant material can be an appropriate monitoring technique. Please refer to the Livestock and Rangeland Management section of the LRMP.

LR6 *Public Concern: The managing agencies should make Measure XVIII.A.9 a standard because livestock should not be allowed in non-functioning riparian areas and because livestock trailing should not be allowed in riparian areas.*

There are many reasons other than livestock grazing that result in riparian areas being rated as non-functional or functioning-at-risk. There are additional management tools other than complete exclusion of livestock to improve riparian conditions. Therefore, the unilateral application of this guideline is not needed. The managing agencies can adequately manage resources with this as a guideline.

LR7 *Public Concern: The managing agencies should avoid closing allotments to grazing if the area can be brought into compliance.*

This direction is only a guideline and addresses rangeland productivity and conflicts with other resources that would make livestock grazing unfeasible. On forage-producing lands, reallocation of animal unit months (AUMs) would take place in accordance with regulation and policy.

LR8 *Public Concern: The managing agencies should reconsider their evaluation of the sheep industry to consider current trends towards greater lamb and wool consumption.*

The managing agencies did address sheep and wool trends in the Livestock and Rangeland Management section in the FEIS. The intent was to identify general trends and not to provide an analysis of the economics of the sheep industry. Please see Demand for Wool and Sheep in the Affected Environment.

LR9 *Public Concern: The managing agencies should consider current and historic bighorn sheep populations in determining domestic sheep grazing suitability.*

The LRMP and FEIS identify suitability at the landscape scale. Management changes needed to maintain or improve big horn sheep viability are made at the project level using adaptive management processes. Suitable domestic sheep acres have decreased between the Draft EIS and FEIS due to management decisions at the project level.

LR10 *Public Concern: The managing agencies should close vacant domestic sheep allotments in the alpine areas to livestock use to protect bighorn sheep.*

The managing agencies coordinate bighorn sheep management with the CPW using the statewide CPW Bighorn Sheep Management Plan and incorporate individual Data Analysis Unit bighorn sheep management objectives. Domestic sheep management, using adaptive management options designed to avoid contact with bighorn sheep, is implemented at the project/allotment level. Allotment closure or other changes needed to mitigate adverse impacts to bighorn sheep are also addressed at the project/allotment level.

LR11 *Public Concern: The managing agencies should acknowledge the impact of high elk populations on native bunchgrass communities, such as Arizona fescue.*

The BLM and USFS cooperate with CPW to provide for wildlife habitat conditions capable of meeting state population objectives, and through this process the agencies do consider ongoing land uses such as livestock grazing and utilization by wildlife. Historically, Arizona fescue was a dominant forage species within the pine type, into the mountain meadow types and up to the dry mixed conifer type. It is a very palatable and desired forage species that is adversely impacted by poor rangeland management practices such as a season-long or continuous livestock grazing practices. Most of the adverse impacts, in the form of longer grazing seasons, less available livestock water, poor livestock distribution, and little knowledge of the effects of livestock grazing time and timing on vegetation, occurred prior to the advent of improved, cooperative livestock management practices we employ today. Much of the Arizona fescue that remains today is probably not preferred by livestock; this is due to the fact that what remains is older, over-mature plants that are less palatable to livestock. However, Arizona fescue plants from seedlings to adult plants are highly preferred in our observations and experience.

LR12 *Public Concern: The managing agencies should include the impacts from big game wildlife in the analysis of grazing because elk and deer represent a significant portion of the grazing in the LRMP planning area.*

Where big game forage use and other issues are a concern to resources such as riparian areas, grazing allotment-level, or even landscape-level monitoring plans should be designed to identify their scope and impact. Where monitoring establishes a need to mitigate unacceptable resource impacts caused by big game, the managing agencies would work with CPW to resolve these issues.

LR13 *Public Concern: The managing agencies should revise the Draft EIS to reflect that rangeland would be managed for both big game and livestock.*

The statement only addressed ongoing and possibly future trends and was primarily related to the effects to both big game and livestock forage availability due to increased private land development. Regardless of big game numbers continued conversion of agricultural lands to other uses would reduce available forage for both livestock and big game resulting in increased forage demand that would need to be remedied elsewhere. In addition, while big game numbers appear to be stabilized at present—especially elk—elk numbers dramatically increased in the 1980s when the original LRMP was developed and then subsequently stabilized in the 2000s.

LR14 *Public Concern: The managing agencies should include elk among the users of the land to account for the impacts of elk grazing.*

Where big game forage use issues are a concern to livestock management, allotment-level monitoring plans should be designed to incorporate big game forage use monitoring. Where monitoring establishes a need to mitigate big game/livestock forage conflicts, the managing agencies would work with CPW to resolve these issues.

LR15 *Public Concern: The managing agencies should ensure that stocking rates are presented consistently and accurately in the documents.*

The managing agencies have corrected text and table errors in the FEIS. The comparative stocking rate maps compare different levels of stocking by alternative using ranges. For example, the East Pines Common Allotment is stocked moderately (i.e., a range of 7–15 acres/AUM), which is within the actual 9.4-acre/AUM stocking range.

LR16 *Public Concern: The managing agencies should make destocking decisions on a site-specific basis to recognize permittee investments.*

On public lands managed by the BLM, decisions to close allotments are an appropriate planning-level decision per the BLM planning regulations.

LR17 *Public Concern: The managing agencies should set the allowed AUMs high enough to allow some flexibility to preserve the viability of livestock production and land conservation efforts.*

The BLM is required to determine allowable livestock AUMs in the LRMP decision. BLM grazing regulations provide flexibility to adjust permitted AUMs based on existing and subsequent changes in rangeland conditions. Changes are based on project-level decisions. Project-level changes that result in changes to permitted use shown in the LRMP are documented through a plan amendment. Comments provided address adaptive management options available at the project level.

LR18 *Public Concern: The managing agencies should reduce the AUMs in the San Miguel ACEC to protect Gunnison sage-grouse.*

Mitigation of perceived adverse livestock grazing impacts to sage-grouse within this ACEC would be addressed through managing season of use and stocking rate adjustments as needed through allotment-level monitoring. Any decisions in livestock grazing at this time would be addressed at the project/allotment level.

LR19 *Public Concern: The managing agencies should justify the departure from the Society of Range Management conversion factors because it is a significant change.*

The USFS and BLM use agency regulatory and handbook direction to determine forage demand by an AUM. Please refer to the USFS Rocky Mountain Region Rangeland Analysis and Management Training Guide (1996) and BLM grazing regulations at 43 CFR 4100 for additional guidance.

LR20 *Public Concern: The managing agencies should provide a more balanced description of grazing activities to include the positive aspects of grazing and to recognize the economic and social contributions ranching families make to the region.*

The introduction in the FEIS has been revised to acknowledge the integral role ranching families play in the planning area.

LR21 *Public Concern: The managing agencies should monitor and assess sage grouse habitat within active range allotments to determine what grazing practices should be instituted within the allotments to ensure adequate habitat is protected for sage-grouse.*

Big game forage and browse use is monitored at the landscape level as opposed to the grazing allotment level in Data Analysis Units developed by CPW. This information is provided to the USFS and BLM and used during allotment-level grazing management planning in addition to other information gathered by our grazing permittees, wildlife biologists, other agency specialists,

and rangeland managers. Any information used or gathered for planned decisions affecting grazing allotments is public information. We agree that managed livestock grazing can be compatible with protection of sage-grouse habitat. The FEIS states that the greatest impacts to livestock would be on those allotments where pasture rotations are not employed, i.e., managed livestock grazing. In most cases, rotation grazing systems are being employed on public land grazing allotments.

- LR22 *Public Concern: The managing agencies should clarify whether cattle spend a "disproportionate amount of time" in the Arizona fescue mountain grassland type.***
Cattle spend a disproportionate amount of time in grasslands (including the Arizona fescue mountain grassland type that occurs on SJNF and TRFO) since cattle prefer to graze grasses (Holechek et al. 1982, 1998) and grasslands often contain an abundance of grasses that are desirable to cattle, compared to shrublands or forests that contain less grasses or grass species that are less desirable to cattle (Clary and Leininger 2000).
- LR23 *Public Concern: The managing agencies should work closely with ranchers and grazing permittees and raise the value for grazing permittees to better manage NFS lands.***
The managing agencies acknowledge the ranching industry's contributions to maintaining open space and continuing partnerships to manage public land resources in multiple sections of the FEIS and LRMP. Please see Livestock Grazing and Rangeland Management LRMP Desired Conditions and Affected Environment in the FEIS. Additionally, open space and partnerships are acknowledged in the discussion of People and Communities and Partnerships sections in the LRMP.
- LR24 *Public Concern: The managing agencies should close vacant allotments located in wilderness areas because livestock practices can conflict with wildlife goals.***
Livestock grazing in wilderness areas is managed using guidance from the Congressional Wilderness Grazing Guidelines and the Wilderness Act. Specific actions, such as closure of vacant allotments, are analyzed at the project level.
- LR25 *Public Concern: The managing agencies should provide a broader analysis of market trends to include demand for grass-fed beef.***
This trend is discussed and revised in the FEIS.
- LR26 *Public Concern: The managing agencies should provide data to support the conclusion that there is a direct correlation between livestock numbers and impacts on soils, water, and riparian areas.***
Conclusions drawn relating to livestock and implied adverse impacts to soils, water, and riparian areas are directly correlated to unmanaged or poorly managed livestock. Livestock management plans developed to improve or maintain riparian, soil, and water conditions should result in no adverse effects due to livestock grazing.
- LR27 *Public Concern: The managing agencies should protect archeological and cultural resources from the impacts of livestock grazing.***
Potential adverse livestock grazing impacts to cultural resources are mitigated through decisions at the project/allotment level. Appropriate mitigation measures are incorporated into livestock grazing systems via the grazing permit and allotment management plan.
- LR28 *Public Concern: The managing agencies should work with tribes to provide fencing to protect tribal lands from livestock impacts.***
This specific issue cannot be addressed in the LRMP/FEIS, as it is beyond the scope of this analysis. However, the managing agencies agree that future intergovernmental discussions should take place as needed.
- LR29 *Public Concern: The managing agencies should recognize that livestock grazing is not incompatible with improving rangeland health.***

Livestock management designed to take advantage of available forage and improve rangeland health depends on the effective partnership between the grazing permittee and the managing agency. Forage use and rangeland health are not mutually incompatible goals. Successful grazing management plans developed through agency grazing decisions are a result of not only public participation through the NEPA process, but more critically, through communication and coordination with affected grazing permittees.

LR30 *Public Concern: The managing agencies should remove the restrictions on trailing livestock because trailing routes are often the only practicable way to move livestock in and out of an area.*

The comment refers to a guideline in the LRMP that recommends livestock trailing along the entire length of a riparian area should be prohibited. As a guideline this direction is appropriate and should remain part of the LRMP. Where there are no other ways to avoid trailing livestock within riparian areas, appropriate mitigation measures would be developed to facilitate livestock trailing and to maintain riparian area health.

LR31 *Public Concern: The managing agencies should work with the ranching community to address drought-related issues.*

The managing agencies discussion regarding the ongoing drought is only a discussion of recent trends. Any changes to livestock grazing management due to long-term vegetation changes due to drought would be addressed at the project/allotment level and would be implemented in consultation and cooperation with affected livestock producers.

LR32 *Public Concern: The managing agencies should acknowledge the sense of ownership and stewardship that grazing permittees have for the land.*

The managing agencies acknowledge the ranching industry's contributions to maintaining open space and continuing partnerships to manage public land resources in multiple sections of the FEIS and LRMP. Please see Livestock Grazing and Rangeland Management in the FEIS. Additionally, open space and partnerships are acknowledged in the discussion of People and Communities and Partnerships sections in the LRMP.

LR33 *Public Concern: The managing agencies should clarify whether the grazing model (the livestock grazing suitability analysis) includes protection of riparian areas from grazing damage.*

The livestock grazing suitability analysis identifies some riparian areas on the SJNF and TRFO as not suitable for livestock grazing, so those areas would be protected from the effects of livestock grazing. The livestock grazing suitability analysis identifies some other riparian areas in the planning area as suitable for livestock grazing, so those areas would not be protected from the effects of livestock grazing. Suitable riparian areas would be protected from the potential adverse effects of livestock grazing, however, through implementation of LRMP components.

LR34 *Public Concern: The managing agencies should include a more robust discussion of the impacts to livestock grazing from oil and gas development.*

The FEIS includes a discussion of impacts to livestock grazing in the alternative comparison section of the Livestock and Rangeland Management section.

4.17 Lands with Wilderness Characteristics

LW1 *Public Concern: The managing agencies should ensure that wilderness characteristics of BLM lands are preserved.*

Appendix O describes the wilderness inventory process for BLM lands, which includes a positive finding of wilderness characteristics for the Snaggletooth area. Existing oil and gas leases must be honored, but can be controlled with surface use stipulations. The Snaggletooth area, from Bradfield Bridge to Mt. Sheep Point, is identified in the LRMP as an area to be managed for its wilderness characteristics. Measures to accomplish this are described in the LRMP. Existing WSAs would continue to be managed under the BLM's Interim Management Policy for WSAs

(BLM Manual 6330), which strictly disallows any activities that would permanently impair the area's wilderness values.

LW2 *Public Concern: The managing agencies should continue to manage WSAs and other lands with wilderness characteristics to maintain those characteristics because the BLM and other agencies are obligated to inventory for, and consider a range of alternatives to protect, lands with wilderness characteristics.*

WSAs continued to be managed so as not to impair the ability of Congress to make a wilderness designation per BLM Manual 6330. An inventory of BLM lands for wilderness character has been conducted and the results of this inventory are found in Appendix O and are incorporated into the FEIS and LRMP. Management strategies for the seven identified areas of lands with wilderness characteristics are evaluated within Alternatives B and C.

LW3 *Public Concern: The managing agencies should ensure that decisions resulting from the LRMP/EIS are in accord with the FLPMA because designating BLM lands as wilderness exceeds the authority of the BLM under FLPMA.*

Wilderness characteristics are inventoried under Section 201 of FLPMA. Findings of the inventories are not used as the sole determination of land use decisions. Wilderness characteristics are to be evaluated among other resource values and potential uses during the NEPA process. The LRMP does not designate or propose any BLM wilderness area. The authority to designate wilderness is reserved by Congress under the Wilderness Act.

4.18 Management Area Descriptions and Suitability Tables

MA1 *Public Concern: The managing agencies should explain how management areas located along the border with the Grand Mesa, Uncompahgre, and Gunnison National Forests are compatible across the forest boundaries.*

The criteria used to allocate management areas throughout the SJNF are discussed in the LRMP and are further detailed in the project administrative record. One of the criteria used was compatibility with management of adjoining units and every effort was made to be consistent where appropriate. However, not all management areas identified in the LRMP are consistent with the management of adjoining units, due to different historical emphases in management, difference in current and projected uses, and for other reasons.

MA2 *Public Concern: The managing agencies should reconsider the location of MA 5 areas along the Dolores River because they are inappropriately placed between MAs 2 and 3.*

MAs with very different emphases can be placed adjacent to each other depending on the management emphasis for a particular area. There are many instances throughout the SJNF and TRFO where landscapes with a history of heavy resource development are located adjacent to areas that are undeveloped and in a more pristine natural condition. In some cases the MAs capture this multiple-use history and provide for future uses that preserve these particular characteristics of the landscape. Note that MAs no longer apply to TRFO lands.

MA3 *Public Concern: The managing agencies should designate all lands previously leased for oil and gas development as MA 5 because only Congress has the right to prohibit development once a lease has been issued.*

Previously leased lands would be managed according to the terms, conditions, and stipulations associated with the individual lease. Areas that have been available for lease but have not been leased have been considered, where appropriate, for a change in availability, restrictions, or stipulations.

MA4 *Public Concern: The managing agencies should address the Wolf Creek proposal to designate the ski area as MA 8 outside of the LRMP revision process because the ski area must demonstrate that the proposal would be consistent with existing laws, policy, and the LRMP.*

A proposal from a ski area for consideration of expansion is outside the scope of the FEIS. Various MA scenarios have been considered through the range of alternatives with regard to future potential ski area expansion.

MA5 *Public Concern: The managing agencies should designate the HD Mountains as a MA 2 to protect the unique archaeology, seeps, and springs of those mountains.*

The HD Mountains are proposed to be designated under MA 2.

MA6 *Public Concern: The managing agencies should reclassify the Paradox Basin because lands already leased for oil and gas development should be managed as MA 5.*

MAAs no longer apply to BLM lands.

MA7 *Public Concern: The managing agencies should designate all lands on which Kinder Morgan holds oil and gas leases as MA 5 because development of those leases may conflict with the desired conditions of MA 3.*

Any current lease can be exercised fully according to the terms, conditions, and stipulations associated with the particular lease until the lease expires. Note that MAAs no longer apply to BLM lands.

4.19 Minerals and Energy

MN1 *Public Concern: The managing agencies should clearly define the criteria for granting exceptions, modifications, or waivers to special stipulations.*

Waivers, exceptions, and modifications have been identified for all leasing stipulations (see Appendix H). Although it is difficult, if not impossible, to describe each and every scenario under which a waiver, exception, or modification might be allowed, regulations do allow for the lessee to request waivers, exceptions, or modifications with sufficient justification. For leases on TRFO lands, waivers, exceptions, and modifications would be considered generally and granted or denied based on agency discretion; for SJNF lands, waivers, exceptions and modifications would be granted based on the criteria identified with each stipulation. In some cases a plan amendment may be required in order to grant the request.

MN2 *Public Concern: The managing agencies should clarify whether the 4,000-acre estimated affected area is accurate for water reservoir impacts.*

The referenced table in the Draft EIS (3.15.40) did contain an error in the description of the stipulation; however, the 4,000-acre approximation was accurate. This statistic is now found in Appendix F.

MN3 *Public Concern: The managing agencies should revise the discussion of the Fruitland Formation aquifer.*

The LRMP has been revised to be consistent with direction from the Northern San Juan Basin EIS for the Fruitland Formation aquifer. In the Draft EIS, the area was identified as not available for leasing; it is now identified as available with a Controlled Surface Use (CSU) stipulation.

MN4 *Public Concern: The managing agencies should include analysis of the effects of development on existing leases.*

In the FEIS, the effects of development of existing leases are addressed in the cumulative effects analysis for each affected resource. In those sections, existing and future lease development is analyzed in relationship with other potentially impacting activities to provide an overall assessment of the effects of past, present, and reasonably anticipated activities on the environment.

MN5 *Public Concern: The managing agencies should correct references to the Gold Book to reflect the newer 2007 version.*

The LRMP and FEIS have been updated accordingly to reflect the 2007 edition.

MN6 *Public Concern: The managing agencies should clarify whether Visual Resources Design Criteria L.1 would apply to desert conditions.*

This is a guideline to be followed as applicable. In this particular case, where facilities would exceed a desired height limit and there are no practical alternatives, exceptions to this guideline would be granted.

MN7 *Public Concern: The managing agencies should include standards for energy minerals.*

The lease stipulations (LRMP, Appendix H) and standards and guidelines for other resources (e.g., riparian areas, wildlife, air quality) all apply to energy mineral development but are not repeated in the minerals sections.

MN8 *Public Concern: The managing agencies should provide further analysis of the impacts of solid mineral development.*

The LRMP contains updated solid minerals descriptions and analysis.

MN9 *Public Concern: The managing agencies should revise the discussion of fluid minerals to include the future, expected CO₂ wells Kinder Morgan expects to drill.*

The projected wells were not directly included in the original RFD or in the Supplement to the Draft EIS. For the purposes of the RFD and the questioned Kinder Morgan wells, the six to 15 CO₂ wells represent a small percentage of the total RFD projections.

MN10 *Public Concern: The managing agencies should develop standards and guidelines for oil and gas development in sensitive wildlife habitat.*

Impacts to wildlife habitat are addressed during the leasing and subsequent Application for Permit to Drill (APD) process. Many concerns related to impacts from oil and gas development on wildlife habitat are addressed in standards and guidelines in the Terrestrial Wildlife section of the LRMP and in stipulations.

MN11 *Public Concern: The managing agencies should provide an accurate and consistent acreage total for oil and gas development opportunities.*

Acreages for total oil and gas development opportunities have been revised. Please refer to the FEIS and RFD.

MN12 *Public Concern: The managing agencies should clarify how the number of acres of disturbance from oil and gas was determined.*

Acreages of disturbance from oil and gas have been revised and full explanation is given regarding how these numbers were determined. Please refer to the FEIS.

MN13 *Public Concern: The managing agencies should make sure that well count numbers are accurate and consistent.*

Well count numbers have been revised for accuracy and clarification. Please refer to the FEIS and RFD.

MN14 *Public Concern: The managing agencies should correct or explain the different amounts of total produced gas cited in the Draft EIS.*

Amounts of total produced gas have been revised. Please refer to the FEIS.

MN15 *Public Concern: The managing agencies should correct the description of directional or horizontal drilling.*

The section has been rewritten to incorporate discussion of potential for additional surface disturbance and the need to utilize proven technologies as they apply to complex geologic formations.

MN16 *Public Concern: The managing agencies should distinguish oil and gas development impacts by basin.*

The FEIS distinguishes the differences in drilling and completion, and in produced water by basin and target zone(s) by basin.

MN17 & MN18 Public Concern: The managing agencies should consider the impacts of more restrictions on oil and gas development to comply with the Energy Policy Act of 2005.

The LRMP does not propose restrictions that are inconsistent with the Energy Policy Act. Areas that are prospective for oil and gas development are either already leased or available for lease. These areas include the Paradox Basin conventional oil and gas plays (currently approximately 80% leased, the northern San Juan Basin (currently leased and fully developed) and the Paradox Basin Gothic Shale. Prospective leases on land overlying the GSGP that are not already leased have a range of stipulations that would be required to protect physical and biological resources. Where timing limitations and CSU are stipulations are prescribed, the impacts to development should be minor. Where NSO is prescribed, off-site drilling locations would be available and exceptions could be granted if the impacts of surface occupancy are concluded to be acceptable.

MN19 Public Concern: The managing agencies should include mitigation measures for oil and gas development.

The FEIS has expanded analyses of the effects of oil and gas development on physical, biological, and social resources. Mitigation is in the form of lease stipulations (Appendix H), management standards and guidelines, and application of BMPs. The evaluation of environmental consequences is based on the assumption that these mitigation measures would be applied.

MN20 Public Concern: The managing agencies should include a 5-acre setback from any water source for oil and gas activity within the Herd Management Area and McKenna Peak wilderness Area to preserve water access for the wild horse herd.

There are stipulations and standards and guidelines in the LRMP that address water quality and wildlife concerns.

MN21 Public Concern: The managing agencies should revisit the surface facility density provisions for the construction of well pads.

The agencies would revisit surface disturbance provisions at the second and third decision stages of oil and gas decision-making. This FEIS is the first stage (i.e., identification of lands available for lease and stipulations for those lands). At this first stage the exact timing and location of project-specific actions is unknown and thus the analysis of impacts is based on projected development assumptions (see Appendix F). During stage two (exploratory well approval) and stage three (APD), additional environmental analysis would be done using more detailed information (for example, using exact road and well location information). Stage three (when a lessee provides their detailed plans for development) is when the agencies can best evaluate impacts and set provisions for ground disturbance.

MN22 Public Concern: The managing agencies should acknowledge that they cannot impose stipulations or conditions of approval on valid existing oil and gas leases.

Development of existing leases is subject to valid existing rights, and the potential oil and gas development of existing leases would be consistent with LRMP direction and the terms and conditions of the lease. Activities related to future development on lands currently held under lease are generally subject to the terms and conditions under which they were originally leased. However, the managing agencies do have discretion to modify surface operations or add specific mitigation measures to the lease terms at the project level, when supported by scientific analysis and when necessary to comply with LRMP direction (Yates Petroleum Corp., IBLA 2006-213, 2006-226 and William P. Maycock, IBLA 2008-197, 2008-200).

MN23 Public Concern: The managing agencies should consider a phased approach to oil and gas leasing and development in the alternatives.

The TRFO and SJNF both considered a phased leasing approach to fluid mineral leasing. The BLM's analysis of the feasibility of a phased leasing approach revealed that a majority of TRFO

lands with medium to high potential for oil and gas production are already leased, leaving limited flexibility to guide future leasing patterns. Past leasing and development activity demonstrates that a natural progression would typically occur around areas that are already developed; e.g., areas with an existing infrastructure would be initially developed and outlying areas would be developed at the pace that existing infrastructure is expanded. Therefore, leasable mineral development should continue to be focused within current production areas first.

In contrast, on SJNF lands a majority of medium to high potential production areas have not been leased. Through its analysis, the SJNF determined that it would be appropriate to manage SJNF lands for orderly development of oil and gas resources in order to better address the resource tradeoffs that occur with oil and gas production on public lands. However, this type of approach does not need to be incorporated as part of the leasing decision; rather, it is best applied to the subsequent, discretionary implementation steps of offering available lands for lease and permitting drilling operations because the agency can consider new information as it becomes available through ongoing development and monitoring of resources. A proposed strategy for orderly leasing and development, outlining the SJNF's approach to "phased leasing and development," is included in the Minerals and Energy section of the LRMP. The strategy is designed to be flexible to accommodate unforeseen issues that may arise and applies only to SJNF lands. The intent of the strategy is to guide the pace and place of development by focusing leasing in areas within or adjacent to existing oil and gas development, and to allow the surface-managing agency to temporally guide the location of leasing activity to minimize impacts and conflicts with other multiple uses while still allowing efficient extraction of oil and gas resources. Because the strategy is not part of the oil and gas leasing availability decision, but rather a structured approach to leasing lands that are identified as available for lease, it has not been analyzed as part of any alternative in the LRMP.

MN24 *Public Concern: The managing agencies should acknowledge that the LRMP would apply to existing oil and gas leases.*

Development of existing leases is subject to valid existing rights, and the potential oil and gas development of existing leases would be consistent with LRMP direction and the terms and conditions of the lease. Activities related to future development on lands currently held under lease are generally subject to the terms and conditions under which they were originally leased. However, the managing agencies do have discretion to modify surface operations or add specific mitigation measures to the lease terms at the project level, when supported by scientific analysis and when necessary to comply with LRMP direction (Yates Petroleum Corp., IBLA 2006-213, 2006-226 and William P. Maycock, IBLA 2008-197, 2008-200).

MN25 *Public Concern: The managing agencies should provide more detail about the oil and gas stipulations to ensure they comply with existing federal law.*

Additional details regarding oil and gas stipulations have been added in Appendix H. All stipulations comply with federal law.

MN26 *Public Concern: The managing agencies should ensure the maps are consistent with the discussion of oil and gas leasing stipulations.*

We have corrected the stipulation mapping errors in the LRMP and FEIS.

MN27 *Public Concern: The managing agencies should clarify whether additional NEPA analysis would be needed prior to issuance of oil and gas leases.*

The LRMP and EIS provide the NEPA analysis by which land tracts on the SJNF and TRFO would be made available for lease. Additional NEPA analysis would be required prior to the issuance of new oil and gas leases. An additional NEPA analysis would be required prior to the surface disturbance relating to the development on that lease.

MN28 *Public Concern: The managing agencies should add objectives for fluid mineral management.*

The fluid mineral desired conditions and objectives provide a vision and emphasis for minerals management, and development of fluid minerals is also subject all LRMP components in every section of LRMP Chapters 2 and 3, as applicable. The program is carried out in an orderly fashion through the leasing program (lands made available for lease, stipulations applied to leases and the nomination and lease sales process), through gas field planning and development, and through monitoring and enforcement programs.

MN29 *Public Concern: The managing agencies should include perpetual conservation easements in the list of surface conditions eligible for NSO stipulations.*

Federal laws and regulations provide for the development of federal minerals. In areas warranted by physical and biological concerns, additional stipulations could be included to protect those critical resources. Standards and guidelines and stipulations could apply to those lands.

MN30 *Public Concern: The managing agencies should treat split-estate parcels in ways similar to other parcels regarding NSO stipulations.*

These split estate parcels would be managed in accordance within existing federal laws and regulations.

MN31 *Public Concern: The managing agencies should designate all potential Gunnison sage-grouse habitat as NSO.*

The LRMP and FEIS consider a range of alternatives to address management of Gunnison sage-grouse habitat, including a number of protective actions related to oil and gas development. An NSO stipulation is proposed for oil and gas leasing in occupied Gunnison sage-grouse habitat, and other alternatives consider these areas as not available for leasing. An NSO stipulation for potential habitat may not be necessary, as the LRMP proposes a number of other protective actions for Gunnison sage-grouse habitat. Other leasing stipulations analyzed as part of the planning process include noise restrictions, seasonal timing restrictions, and winter concentration stipulations. A complete list of lease stipulations is included in Appendix H.

MN32 *Public Concern: The managing agencies should revise the assumptions regarding the future of CBM wells to better reflect current plans and information.*

Assumptions regarding the future of CBM wells have been updated and revised. Please refer to the 2010 RFD and FEIS.

MN33 *Public Concern: The managing agencies should require that CBM producers disclose what substances they use and how contaminated fluids would be controlled.*

Currently there are Colorado State rules in place addressing this issue, as well as BLM proposed regulations. The agencies would also manage and address these issues in accordance within existing federal laws and regulations.

MN34 *Public Concern: The managing agencies should revisit the analysis of mineral development to account for the increase in uranium mining and resultant impacts.*

While we acknowledge the rapid change in projected activity for solid leasable and locatable mineral development, the BMPs that the federal agency would apply to proposed development plans of operation have not been lessened or altered by potential increases in activity. Protections for sage-grouse, bats, and other listed species remain in effect.

MN35 *Public Concern: The managing agencies should develop standards and guidelines for uranium development to protect wildlife.*

To the extent accorded by law, wildlife standards and guidelines should generally address the issues that arise due to conflicts between uranium development and wildlife. BMPs for uranium development have also been developed by the BLM, but are not reprinted in the LRMP. Site-specific plans of operation would include BMPs that are appropriate to the proposed operation.

MN36 *Public Concern: The managing agencies should reevaluate the decision to increase NSO acres because the limits of horizontal drilling were not adequately considered.*

NSO stipulations are applied where we have concluded that the surface development of oil and gas is not compatible with the physical and biological resource to be protected. We realize that there is a limit to horizontal drilling reach and to both economic and technical efficiency, but we want to continue to make certain lands available for lease and to allow the lessee to determine whether to pursue leasing within the constraints required. We also recognize that surface disturbance associated with multiple wells on one pad may approach or exceed single wells on multiple pads. However, the concentration of activities to fewer well sites is a positive form of mitigation and may be appropriate in some situations. In some gas plays such as the GSGP, horizontal drilling is a standard operating procedure.

MN37 *Public Concern: The managing agencies should clarify that their ability to manage the public lands is constrained by their obligations to holders of valid existing oil and gas leases.*

Development of existing leases is subject to the lease terms granted. Mitigation, expressed as Conditions of Approval for lease operations would be reasonable and within the terms of the existing lease.

MN38 *Public Concern: The managing agencies should clarify that the RFD scenario is not a limit or threshold on future development.*

It is clearly stated in the RFD/RFD Addendum that the RFD scenario is an estimate only. The associated impacts analyzed in the LRMP are based on the number of wells in the RFD. The threshold on future development is related to these impacts and not the specific number of wells. Impacts were updated and analyzed in the Supplement to the Draft EIS and are included in the FEIS.

MN39 *Public Concern: The managing agencies should revise the RFD scenario because it is unreasonably low.*

The RFD has been revised. Please refer to the 2010 Addendum to the RFD.

MN40 *Public Concern: The managing agencies should revise the description of the RFD scenario as it relates to high, moderate, and low potential for oil and gas development.*

The RFD was revised in 2010 to include areas of high, moderate, and low potential (see Figure 9, 2010 RFD).

MN41 *Public Concern: The managing agencies should analyze the potential effects of potash exploration and development in the FEIS and develop management guidelines for potash exploration and development.*

As stated in the LRMP, the development of solid leasable minerals such as potash is subject to the same stipulations and other LRMP direction as oil and gas development. The FEIS and LRMP have been updated to better address potash exploration, development potential, and effects of development. Potential effects of specific development scenarios, such as subsidence, would be analyzed at the appropriate scale during the project-specific permitting process.

MN42 *Public Concern: The managing agencies should state that potash exploration or development cannot infringe upon or restrain development of existing oil and gas leases, and should include language that allows for orderly production of both potash and oil and gas resources while not compromising valid existing rights.*

The BLM has the right to develop multiple mineral estates in the same location. Junior mineral rights should not unduly interfere with a senior mineral right. However, even if there is only one mineral lease in place, the holder of any mineral lease should not develop that resource in a way that unduly impairs, contaminates, or degrades other resources, including other federal mineral resources, those that are already leased, or which may reasonably be expected to be leased in the future.

MN43 & MN44 have been combined with other Public Concerns.

MN45 *Public Concern: The managing agencies should include analysis of the impacts of the Gunnison sage-grouse stipulations upon federal oil and gas leasing.*

This stipulation has been reviewed in light of its potential to impact leasing and possible production within the project boundaries. For production, it is acknowledged that under some scenarios, directional drilling for smaller tracts under an NSO stipulation related to Gunnison sage-grouse may still allow for a potential full oil and gas development of that area. For large contiguous tracts of occupied habitat, it is acknowledged that the NSO could negatively affect potential drainage of those areas, (i.e., directional drilling may not drain all resources within the NSO boundary). Waivers, exceptions and modifications could add more variability to potential development. The actual impact would be determined when the lands in question were leased and development proposed, and would be disclosed at that time in a separate NEPA analysis.

MN46 *Public Concern: The managing agencies should disclose the total effect of all the stipulations and restrictions upon energy development.*

The cumulative impacts analysis in the Fluid Minerals section of the FEIS has been revised to disclose the potential impacts to mineral development by alternative due to resource restrictions within moderate and high development potential areas.

MN47 *Public Concern: The managing agencies should evaluate the potential for hydrogen sulfide in the GSGP.*

There is the risk of the occurrence of H₂S in any well in the Paradox Basin drilled into the Paradox Formation and deeper (including the GSGP). There simply is the potential, and the consequences (other than air quality) primarily relate to personal safety and range from no impact on personal health to death (worst case). When encountered during drilling and completion operations, H₂S is typically flared because it is usually associated with combustible natural gas hydrocarbon components, making it a very short-term impact event even to air quality resources.

The Colorado Oil and Gas Conservation Commission (COGCC) currently requires H₂S contingency plans be submitted by operators drilling GSGP wells in the Paradox Basin in order to monitor and mitigate the risks to human health and safety. The BLM would require similar plans on federal mineral estate lands, in compliance with Onshore Order No. 6. This Onshore Order contains all the necessary mitigations to minimize risks to human health and safety when operating in H₂S prone areas. H₂S would be further addressed at the APD stage and the operator's state-required contingency plan.

MN48 *Public Concern: The managing agencies should carefully analyze and disclose cumulative impacts of the uranium mining expansion that may occur in the Uravan Mineral Belt in Mesa, Montrose, and San Miguel Counties.*

Congress has assigned all authority regarding the management of uranium and associated mineral resources to the U.S. Department of Energy (DOE) on DOE leases. The BLM would analyze and disclose for cumulative effects as required by NEPA and law as exploration and operational activities occur on federal minerals under BLM jurisdiction.

MN49 *Public Concern: The managing agencies should update the 2010 Addendum to the RFD in order to responsibly analyze environmental impacts.*

There has been only very limited development of GSGP drilling since the RFD was finalized and an update is not needed.

MN50 *has been combined with other Public Concerns.*

MN51 *Public Concern: The managing agencies should support assumptions that GSGP gas would not contain certain impurities.*

The assumption that natural gas produced in the GSGP would be relatively free of impurities is a general assumption based on limited information from operators currently pursuing the play. In addition, we are unaware of any specialized systems that have been installed to process

impurities (H₂S, CO₂, etc.) from natural gas in GSGP-producing wells between the well head and the sales pipeline. To our knowledge, only one well to date has encountered any H₂S while drilling the GSGP, presumably due to migration via subsurface faulting. This well was ultimately plugged and abandoned. Thus, the production of H₂S-rich gas is not a product being produced, delivered, and transported within the existing infrastructure.

MN52 *Public Concern: The managing agencies should revise the RFD's projections regarding conventional oil exploration because industry is less interested in pursuing an exploratory drilling program than the RFD indicates.*

In 2006, there was significant industry interest by several operators in the GSGP and the BLM and USFS sought to ensure that this potential activity was considered and analyzed. Since that time the interest in the play has subsided with the decrease in natural gas prices. However, it is not unreasonable to expect that industry interest in the play may be re-established if natural gas prices rebound in the future. Since the RFD represents the scenario for unconstrained, oil and gas development, it is not uncommon for actual activity levels to fall below projected RFD estimates. This approach, however, allows the BLM and USFS to analyze for a scenario with maximum, reasonable projected drilling rates and surface disturbance.

MN53 *Public Concern: The managing agencies should revise assumptions of well pad disturbance because estimates in the RFD and Supplement to the Draft EIS do not match the COGCC's estimates.*

With the increasing utilization of pitless, closed loop drilling systems combined with "waterless" (nitrogen or carbon dioxide) foam fracturing techniques currently being employed for horizontal completions in the area, both of which result in smaller well pad footprints, it is assumed that these surface disturbance estimates are reasonable.

MN54 *Public Concern: The managing agencies should discuss the implication of the type production curve for GSGP wells.*

The "type production curve" represents only the projected production for an individual well only. In order to support the Supplement to the Draft EIS analysis and planning effort, however, additional work was performed to estimate the annual number of producers, the number of wells that would be producing annually, and the cumulative amount of annual production in both table and graphic form. An estimated 1,556 wells were expected to be continuously placed online and progressively depleted throughout the 15-year scenario period. Infrastructure considerations were then integrated into the analysis (e.g., the air quality model), with limited initial production from relatively low numbers of primarily exploratory and appraisal wells being able to either utilize much of the existing infrastructure in the area (such as pipelines) or requiring construction of only a few new smaller facilities (such as offset compressor stations). Later in the RFD scenario period, substantial production from hundreds of development wells was estimated and it was assumed that construction of larger, regional compressor stations would occur in the project area. Although this detailed annual drilling, success rate, and total production model was not presented in the 2009 RFD Addendum, it would be added as an appendix to that document and be available for public review. Such data may or may not advocate the use of a phased drilling approach in the project area.

MN55 *Public Concern: The managing agencies should discuss the implications of multiple operators in the GSGP.*

The RFD Addendum does not assume that a single operator would be developing GSGP. It is expected, however, that only a very limited number of companies would be active in the play based on the history of operations in the Paradox Basin. As such, the likelihood of redundant infrastructure would be significantly reduced.

MN56 *Public Concern: The managing agencies should clearly define and explain "exploratory" vs. "development" in the RFD.*

The terms exploratory, appraisal, and development wells represent common yet precise definitions developed by the oil and gas industry. The Dictionary of Petroleum Exploration,

Drilling & Production (Hyne 1991) defines an "exploratory well" as "a well drilled in order to locate an undiscovered petroleum reservoir, either by discovering a new field or a new shallower or deeper reservoir in a previously discovered field. An exploratory well can also be drilled to significantly extend the limits of a discovered reservoir." An "appraisal well" is defined as "a well drilled after a discovery well to gain more information on the producing reservoir such as the elevation of the oil-water contact. Appraisal wells are often cored. An appraisal well is a step-out or delineation well." A "development well" is "a well drilled into a producing reservoir that already is reasonably well delineated. The development well would have several producing wells on adjacent drilling and spacing units. Development wells are drilled to efficiently drain the reservoir and have very low risk." Annual projections for the drilling and completion of exploratory and development wells were provided as part of the 2010 RFD addendum and the projections were used in the FEIS analysis.

MN57 Public Concern: The RFD's assumptions that pipeline capacity would increase to fully serve projected new production from the GSGP, and that only a single new major gas transmission pipeline would be required to develop the GSGP, are unsupported by current industry proposals, permits, or other evidence.

The current pipeline assumptions are logical and general and consistent with the purpose of the RFD to estimate the case of maximum and unconstrained industry activity. Specific assumptions on location, size, or time frame for construction of any pipelines are not practical at this point. The agencies cannot speculate with any greater detail, nor can the agencies control when industry decides to address the issue. Market and economic conditions would determine when industry proposes additional pipeline(s) if and when the GSGP becomes economically viable.

MN58 Public Concern: The RFD's assumption that the availability of water would not be constrained is unsupported.

The current water availability assumption is a logical and general one and consistent with the purpose of the RFD to estimate the case of maximum and unconstrained industry activity. Additional assumptions on water availability are not practical at this point. The agencies cannot speculate with any greater detail, nor can the agencies control the potential limits on water availability. Those factors that influence the availability of water for oil and gas development are beyond the agency's control. Thus, oil and gas development would depend on currently unknown influencing factors for future water availability. Lastly, emerging technologies such as water recycling and/or waterless fracing may significantly reduce the water volumes needed to develop the GSGP.

MN59 Public Concern: The RFD's assumption that regional wellhead gas prices would match optimistic national gas price projections is unreasonable.

The assumptions in the RFD were based natural gas price forecasts released by the U.S. Energy Information Administration. If regional prices are higher or lower, there may be some related impact on pace of development. If the development scenario in the RFD results in future impacts greater than those analyzed in the FEIS, then a future plan amendment would be required.

MN60 Public Concern: The BLM should not rely on the questionable assumption that operators would have a success rate between 60% and 80% with exploratory wells in the GSGP.

This assumption was developed internally and then discussed with industry counterparts and is considered reasonable. The GSGP is a regional hydrocarbon bearing source rock throughout the Paradox Basin of southwest Colorado. Of the first four initial GSGP gas wells drilled in 2006 and 2007, two were deemed discovery wells (i.e., a success rate of 50%). It is not unreasonable to assume that over time, future exploratory drilling in the play would be guided by the results of earlier drilling and an overall success rate of 60% in the first 7 years and escalating to 80% during the last 2 years of the scenario could conceivably be attained.

MN61 Public Concern: The scope of the additional oil and gas development considered in the Supplement to the Draft EIS is very narrowly focused on the GSGP, and fails to review the

impacts of numerous oil and gas developments in the broader region, including the Hovenweep, Chimney Rock, and Mancos Shale/Niobrara hydrocarbon potential.

Projections for the oil and gas developments in the broader region have been addressed in the 2006 RFD and were confirmed as still valid in the 2010 RFD Addendum. Hovenweep, Chimney Rock, and Mancos Shale/Niobrara hydrocarbon potential is still in the wildcat exploratory stage of activity in southwest Colorado. These resource plays are currently highly speculative and there is simply not enough information with which to formulate a defensible RFD scenario. If unconventional shale gas/oil plays other than the GSGP become established in the future, then the LRMP can be updated to address the new potential and its impacts.

MN62 The managing agencies should provide formal notice of the intent to withdraw lands from oil and gas leasing to comply with Section 204 of the FLPMA.

The BLM and USFS would follow all applicable laws and regulations with respect to withdrawing lands from mineral entry.

MN63 The recreational value of Haycamp Mesa is over-stated and should not be under a CSU stipulation based on recreational value; standard stipulations should be applied.

Haycamp Mesa was under a CSU stipulation in the Draft EIS because the area was identified as a "Structured Recreation Management Area," however, this designation has been removed from the LRMP, so the associated CSU stipulation no longer applies to this area. CSU stipulations do still apply to some areas on Haycamp Mesa due to the presence of other, non-recreation related resources.

MN64 The range of alternatives of lands available for oil and gas leasing is insufficient because the number of acres under the various stipulations does not change considerably between alternatives.

The LRMP has been revised to offer an expanded range of the various leasing stipulations as they apply to each alternative. As a result, while the overall range of land available and not available for oil and gas leasing has not changed significantly from the Draft to the Final LRMP, the potential leasing and development scenarios are measurably broader based on the application of stipulations.

MN65 The managing agencies did not consider an alternative that limits oil and gas leasing in specific areas or in the entire planning area.

The USFS and BLM have analyzed an alternative that allows no oil and gas leasing, and have also presented various scenarios within the alternatives that restrict oil and gas leasing in specific areas based on the applied stipulations.

MN66 According to BLM Handbook H-1601-1, App. C. II. F. at 16, an analysis must be included in the EIS that demonstrates that the least restrictive lease stipulation that would offer adequate protection of a resource has been selected.

The BLM handbook does acknowledge that the least restrictive stipulation would be used to provide for adequate resource protection. This is ensured through the NEPA process, which is required for all oil and gas development proposals to disclose and address potential impacts to specific resources. During the NEPA process, the appropriate and least restrictive stipulation would be identified to address and protect resources.

MN67 The managing agencies must consider the Citizens Proposed San Juan Master Leasing Plan as an additional alternative in the Final LRMP and FEIS.

The Citizens Proposed San Juan Master Leasing Plan was considered and is addressed in detail in Appendix R.

MN68 The managing agencies should protect air and water resources by requiring closed loop drilling, high efficiency compressors/pumps, methane capture, renewable energy power sourcing, low or no-bleed pneumatic controls, solar-powered telemetry for well field data, or other effective measures.

Most of these ideas were incorporated as either standards, guidelines, or as mitigation measures in the Final LRMP.

MN69 *The Final LRMP for the SJNF and TRFO should include a clear statement that oil and gas development within the planning area must be conducted in compliance with all fish and wildlife habitat conservation measures required by the COGCC.*

All actions allowed through the LRMP on public lands must be conducted in compliance with applicable law, regulation, or policy, including requirements developed by the COGCC.

MN70 *The RFD is not accurate and so the range of alternatives is not broad enough.*

A revised RFD was prepared as the basis for the new information and changed circumstances which resulted in the preparation of the Supplement to the Draft EIS. The FEIS offers a broad range of alternatives.

MN71 *The RFD should be revised to project additional wells, pads, and surface disturbance by incorporating recompletions.*

The new RFD does take into account the variation in potential well development, including recompletions. The RFD reflects a relatively unrestricted development scenario.

MN72 *The managing agencies should consider wildlife and fisheries habitat values, regulatory direction, geological suitability, and quality of experience in their determination of what lands are suitable for fluid mineral development.*

The BLM and USFS have taken these values into account in developing the range of alternatives for lands unavailable for leasing, as well as stipulations for lands that are available.

MN73 *The LRMP must recognize the difference between CO₂ production and traditional natural gas production and differentiate the proposed management direction for each type of process.*

Regulations (43 CFR 3000.0(a)) explicitly define gas as "any fluid, either combustible or noncombustible, which is produced in a natural state from the earth and which maintains a gaseous or rarified state at ordinary temperatures and pressure conditions." The managing agencies are thus mandated to regulate the extraction of CO₂ gas identical to that of natural gas resources.

MN74 *The LRMP should expressly state that collocation of wells and other facilities may not be possible for CO₂ production and that this guideline would only apply where technologically and economically feasible.*

Recent CO₂ development projects within the planning area have shown that collocation of wells and other facilities is highly feasible with constraints that are directly comparable to those of oil and natural gas development projects in the area.

MN75 *The LRMP should include additional surface facility density limitations and caps on total allowable surface disturbance in the GSGP area to protect unique wildlife resource values and outstanding hunting and fishing opportunities.*

These recommendations were reviewed and in several cases incorporated into the revised stipulations as proposed in the LRMP.

MN76 *The LRMP/FEIS should be revised to accurately reflect the actual pad size of a GSGP well.*

A standard in the LRMP requires that operators drill with pitless closed loop drilling systems. Such systems do not require the use of large, excavated reserve pits (as have been previously permitted by COGCC), therefore reducing the size of the overall pad footprint.

MN77 *It is unclear whether the impacts from potential infrastructure needed to support production estimates as stated in the Supplement to the Draft EIS are analyzed; they should be included if they are not already.*

The environmental impacts of pipeline development and other facilities are addressed for each impacted resource in the respective sections of Chapter 3 of the FEIS.

MN78 *The LRMP should include a new standard that requires a field wide plan of development to be created when there is a request for a change in spacing order.*

A master development plan would be required at the site-specific development stage and any spacing changes would be addressed during a subsequent decision process and associated level of analysis at that stage.

4.20 Perins Peak Wildlife Habitat Management Area

PE1 *Public Concern: The managing agencies should include Animas City Mountain in the Perins Peak Habitat Management Area to comply with agreement CO-03 WHA-T1.*

Animas Mountain is included in the Perins Peak Wildlife Habitat Management Area in the LRMP.

PE2 *Public Concern: The managing agencies should analyze the effects of placing part of the Animas Mountain Habitat Management Area in MA 7 to provide a rationale for the management change.*

Animas Mountain is included in the Perins Peak Wildlife Habitat Management Area in the LRMP.

4.21 Planning, Policy, Process

PP1 *Public Concern: The managing agencies should develop the LRMP after the districts have prepared their Environmental Assessments to allow for development of a comprehensive, feasible, and sustainable plan and to meet their commitment to work with partners collaboratively.*

All projects and activities authorized by the BLM and the USFS must be consistent with the LRMP, and activities such as travel management route determinations must ultimately be consistent with the LRMP or the LRMP must be amended through a public process. Concurrent activities by the district/field offices continue during LRMP revision under current planning guidance and appropriate regulatory and budget requirements. This LRMP revision considers appropriate public and agency input as a collaborative effort and planning is designed to be an iterative process during plan development and afterward to be able to address changing laws and demands.

PP2 & PP3 *Public Concern: The managing agencies should ensure that the BLM and USFS each execute the ROD for the FEIS and LRMP to ensure each agency is meeting its obligations to prepare land use plans and comply with NEPA.*

There would be three separate RODs signed: a BLM LRMP Decision, a USFS LRMP Decision, and a USFS Oil and Gas Leasing Availability Decision. Each ROD would document the specifics of each separate agency decision.

PP4 *Public Concern: The managing agencies should clarify the individual legal responsibilities of the BLM and the USFS with regard to development of this LRMP.*

While many similarities exist between each agency's legal responsibilities and planning policies and practices, there are important differences that were not clearly articulated in the Draft LRMP and EIS. These differences have been clarified in the LRMP and FEIS.

PP5 *Public Concern: The managing agencies should include a re-opener clause to allow for a LRMP amendment should collaborative efforts generate a new alternative that would meet the goals of the existing LRMP to encourage stakeholders to continue their collaborative efforts.*

Land management planning under both BLM and USFS regulations provide a process for amending LRMP decisions based upon changing conditions.

PP6 Public Concern: The managing agencies should ensure that directions, standards, and guidelines in the LRMP do not exceed the authority of the agencies.

The LRMP clearly sets forth the relationship of federal land management to other management direction and relationships to local management strategies. General management principles identified in the LRMP specifically addresses the relationship the commenter makes related to Colorado State Water Law and collaborative approaches to management.

PP7 Public Concern: The managing agencies should correct statements equating the USFS travel management regulations to the BLM's process because they are inaccurate.

The discussion regarding each agency's travel management regulations and policies has been revised to address any inaccuracies.

PP8 Public Concern: The managing agencies should revise the desired conditions to make them more specific and less vague, and to reduce redundancy.

By definition, desired conditions are "broad-scale" goals and "overarching" aspirations, thus many are fairly general statements about future conditions of the landscape. See LRMP Section 1.4.1, Land and Resource Management Plan Components, for a definition of desired conditions.

PP9 & PP10 Public Concern: The managing agencies should manage federal lands for multiple use.

While purporting to support the concept of multiple use, a number of comments were focused primarily on making sure a specific use could be maintained without limitations. Both USFS and BLM guidance on developing land management plans recognize that plans need to consider present and potential uses of the public lands; consider the relative scarcity of the values involved and the availability of alternative means and sites for realizing those values; weigh long-term benefits to the public against short-term benefits; provide for compliance with applicable pollution control laws, including state and federal air, water, noise, or other pollution standards or implementation plans; and consider the policies of approved state and tribal land resource management programs that may affect the resources of the public lands. The LRMP has used a systematic interdisciplinary approach to achieve a stated balance under the principles of multiple use.

PP11 Public Concern: The managing agencies should add an index.

An index has been added for the LRMP and FEIS.

PP12 The LRMP does not disclose criteria for deviating from a guideline at the project level.

The rationale for deviating from a guideline must be recorded as part of a project decision, accompanied by an explanation of how the intent of the guideline is being met through alternative means. At this time it is impossible to know what scenarios might warrant deviation from a guideline. See LRMP Section 1.4.1 for more information about deviating from a guideline.

PP13 The definition of a standard implies that one can deviate from it as long as the action is analyzed and documented.

Deviation from a standard requires a land use plan amendment that would either modify the standard to allow for the deviation or eliminate the standard. The responsible official must include rationale for why an amendment is necessary and appropriate.

PP14 The Supplement to the Draft EIS is silent on how the agencies would monitor and enforce adherence to the standards and guidelines.

Monitoring and enforcing adherence to standards and guidelines occurs during project-level implementation of actions allowed under the LRMP.

PP15 The Supplement to the Draft EIS fails to consider a broad enough range of alternatives.

The FEIS does consider a broad range of alternatives with respect to individual resource programs, areas, and when taken as a whole. The Supplement to the Draft EIS focused narrowly

on fluid mineral leasing and did not represent the full range of alternatives presented in the Draft EIS and FEIS.

PP16 *The LRMP/FEIS is unclear as to what time period the 15% change in land, water, and air conditions would be measured by. A baseline condition should also be established for air and water resources to facilitate effective monitoring.*

The BLM and USFS do conduct ongoing long-term monitoring of air and water resources to establish baseline conditions and to understand when trends of changing conditions occur. However 15% acceptable change is not a universal measure of a threshold of acceptable change. For example, the acceptable limit of a change for acid neutralizing capacity in a lake used to monitor atmospheric deposition is less than a 10% change from baseline conditions. The acceptable limit of change for air quality visibility in a Class I area is 5% change compared to natural unimpaired conditions. The time period is not relevant to these thresholds since the change is being measured against unimpaired natural conditions.

PP17 *The EIS must include a complete cumulative analysis.*

The FEIS contains cumulative analyses for all resources and resource programs as applicable.

PP18 *Public Concern: The managing agencies should remove references to personal communications from the Draft EIS because the public cannot review or inspect the record of such communication and to comply with 40 CFR 1502.24 and CEQ regulations.*

Statements made by agency scientists and other professionals can be an excellent source of information due to the site-specific knowledge and familiarity with the landscape they possess and may at times be referenced in the analysis. This is in full compliance with CEQ regulations at 40 CFR 1502.24 and, as they are part of the project record, these statements are available for the public to inspect.

4.22 Recreation

RC1 *Public Concern: The managing agencies should revise the analysis of existing recreation conditions to include a more complete and accurate accounting of existing opportunities and improve the analysis of impacts.*

This comment is specific to potential reductions in motorized vehicle recreation opportunities on the SJNF and TRFO. Travel management related discussions are included in both the recreation and access and travel management sections of the FEIS. The descriptions of existing conditions found therein are intended to provide a general picture of existing opportunities (e.g. miles of roads and motorized trails), the existing variety of recreational uses (motorized and non-motorized), and to illustrate any expected changes in recreational demands due to changing societal demographics over the life of the LRMP. These sections have been reviewed and updated where necessary to be reflective of the current condition.

RC2 *Public Concern: The managing agencies should not use subjective criteria to determine recreation impacts because values conflicts are impossible to regulate.*

User perceptions, meaning impacts to recreational users, are appropriate in an LRMP. The agency acknowledges this type of analysis is subjective but it cannot be ignored. Individual area and route designations for motorized use would analyze impacts of motorized use in more detail than this LRMP, which would include additional public involvement and more quantified analysis of impacts. Management decisions can help alleviate conflicts between users by segregating uses in time and space on the public lands.

RC3 *Public Concern: The managing agencies should balance recreation needs with the need to protect other resources when determining whether to close areas to recreational use.*

The intent of any LRMP is to balance various uses and land allocations, which includes recreation. The Preferred Alternative was developed with this intent.

- RC4 *Public Concern: The managing agencies should revise Recreation Objective L.2 to eliminate open areas for motorized recreation.***
This comment refers to what is now Objective 2.14.59. This objective sets a 5-year timeline for eliminating cross-country motorized travel on SJNF lands and severely restricting it on TRFO lands; it does not establish or promote any open area designations. The LRMP travel decisions for over-ground motorized travel do not include any "open" areas for cross-country travel on SJNF lands and only 23 acres are designated for cross-country use on TRFO lands. Winter over-snow motorized travel suitability recommendations do allow for cross-country travel.
- RC5 *Public Concern: The managing agencies should not prioritize recreational uses over other uses including grazing, big game wildlife, and maintenance of large, unroaded, intact ecosystems.***
As multiple-use agencies, the USFS and BLM are required to consider a variety of uses across the landscape, including recreation. Recreation tends to be concentrated along motorized roads and trails, leaving much of the area lightly, if at all, affected by intensive recreation use by the public. The Preferred Alternative makes every effort to balance uses and activities across the SJNF and TRFO in such a way to allow for multiple use and sustainability over the life of the LRMP.
- RC6 *Public Concern: The managing agencies should provide supporting documentation of claims that recreational uses are increasing.***
The Recreation section of the FEIS contains several references and statistics that attest to the increase, and expected increase, in recreational uses on the SJNF and TRFO through the life of the LRMP. Regional population growth estimates for southwest Colorado provide another basis for expected increases in recreation uses on the SJNF and TRFO (La Plata County statistics, 2011).
- RC7 *Public Concern: The managing agencies should support greater recreational use because the number of participants, trips, and activity days are increasing for many activities faster than population growth; to preserve these experiences for future generations; and to account for the increased popularity of outdoor recreation.***
The LRMP allows for a wide variety of recreational uses to continue on the SJNF and TRFO.
- RC8 *Public Concern: The managing agencies should acknowledge community support for the segregation of recreational uses.***
Public involvement, as described in the FEIS, describes the process that was instrumental in guiding the development of the LRMP. In particular, highly used areas, or areas with ongoing user conflicts, were carefully analyzed in the LRMP. The LRMP contains some actions to alleviate these conflicts through area designations and travel suitability recommendations.
- RC9 *Public Concern: The managing agencies should substantiate claims that increasing recreational use is polarizing users.***
The wording in question has been revised. Please refer to the Recreation section of the LRMP and FEIS.
- RC10 *Public Concern: The managing agencies should remove the unsubstantiated statements regarding recreation, specifically Cordell 1999.***
Specific, statistical reference in the Draft LRMP to Cordell 1999 has been removed. References to National Visitor Use Monitoring Program surveys and general reference to Cordell 1999 are valid in that section. Specific information in third paragraph of section removed.
- RC11 *Public Concern: The managing agencies should revise the discussion of recreation noise impacts to use less biased language and to reflect the important role distance plays in potential disturbance.***

Desired conditions regarding noise impacts have been revised to reflect this concern. Noise has been replaced with "sound". A distance of 0.5 mile from road/motorized corridors has been added to the desired condition.

RC12 *Public Concern: The managing agencies should revise the desired condition related to campsite closures to confine agency action to what is spelled out in regulations and laws.*

Desired conditions descriptions do not represent a discrete agency action unless specific actions to achieve them are proposed within the LRMP.

RC13 *Public Concern: The managing agencies should ensure that Native American hunting rights are upheld throughout the planning area.*

The LRMP does not make decisions that infringe upon Native American hunting rights.

RC14 *Public Concern: The managing agencies should increase recognition of horseback riding because it is a traditional use.*

Motorized use has become a much more contentious issue than traditional horseback use, and therefore receives what may appear to be a disproportionate amount of consideration in the LRMP. However, that does not diminish the relative importance of equestrian use on the SJNF and TRFO, nor does that additional consideration diminish equestrian access or opportunities. Cross-country equestrian and non-motorized use is allowed nearly without exception across the planning area, and there are many areas conducive to this type of use due to terrain and the open nature of the forest/subalpine zones. Cross-country travel by motorized users is not allowed in any area of the SJNF, and on only 23 acres of the TRFO; uses are therefore segregated by default.

RC15 *Public Concern: The managing agencies should include a discussion of the impacts of horseback riding.*

If impacts from horseback riding were significant, they would be discussed in the LRMP/FEIS. When compared to other SJNF and TRFO-wide issues addressed in the LRMP, horseback use was not deemed a significant contributor of impacts.

RC16 *Public Concern: The managing agencies should ensure that horseback riding would be permitted because horseback riding is a popular, traditional use and because horseback riding and hiking should be included among dispersed uses.*

Equestrian uses are not significantly restricted by the management actions and land use allocations recommended in the LRMP. Not listing equestrian use in the referenced section does not affect equestrian access and use on the SJNF and TRFO. Such use would continue to be considered in any future NEPA analysis tiered to the LRMP.

RC17 *Public Concern: The managing agencies should add horse use to the other uses mentioned for Sauls Creek, Beaver Meadows, Williams Creek, Turkey Springs, First Fork of the Piedra, and the Lower Hermosa Campground.*

The omission of equestrian use in an area's description is not an indicator of the appropriateness or current level of such use in an area. The existence of trailer parking and other equestrian-related facilities explicitly allows for this type of use, and no decisions are proposed in the LRMP that would restrict horse use in the Lower Hermosa area. Horseback use is a long-standing traditional use across the planning area that would continue to be allowed unless valid reasons to restrict it are realized.

RC18 *Public Concern: The managing agencies should revise the LRMP to include horseback riding as a use in the Geographic Area descriptions, HD Mountains, and Structured Recreation Management Areas.*

The Structured Recreation Management Areas mentioned in the comment were not carried forward into the LRMP for the reasons described in Appendix E. This change does not affect equestrian access within those areas, and any future site-specific NEPA for those areas would be an open public process and would include consideration of equestrian use and access. A brief

description of traditional horseback use has been added to the introduction section for each of the three geographic areas.

RC19 Public Concern: The managing agencies should include horseback riding as a use of the Durango Special Recreation Management Area (SRMA).

SRMAs target a specific range of uses and users, and this strategy is intended to minimize use conflicts and improve public safety and enjoyment of the areas. Although horseback use is not recommended to be restricted in these areas, if that type of use is recognized and encouraged in the LRMP and subsequent SRMA plan, there are bound to be conflicts between equestrian users, hikers, and bicyclists if all uses are concentrated onto these urban-proximate trail networks.

RC20 Public Concern: The managing agencies should not exempt mountain biking from restrictions because mountain biking should be treated the same as other recreational uses.

Bicycling is being considered in the LRMP along with the many other uses on the SJNF and TRFO in a manner to reduce user conflicts and provide for public safety. The agencies have no authority to allow mechanized use in wilderness.

RC21 Public Concern: The managing agencies should establish designated-routes-only and open-unless-closed policies for managing mountain biking access because they are effective methods of managing heavily used areas and backcountry areas.

This topic is in some ways outside the scope of the LRMP, as this planning process does not address individual route or area designations. Those decisions would be made during travel management planning on a landscape scale. Regardless, the LRMP does not make a "designated routes only" recommendation for bicycles; this would be reserved to site-specific travel management efforts and analysis. In general, bicycles are allowed on all motorized trails and many non-motorized trails unless specifically restricted (i.e., wilderness or pedestrian only). The "user created trails" that the comment refers to are unauthorized and possibly illegal. Although mountain bike use is not restricted (in most areas) to designated/established trails, any construction of trail tread or other features requires appropriate environmental analysis and agency approval. Individual travel planning efforts, at a smaller scale, are based on the most recent and complete route inventory and would accept user group information regarding existing routes and network recommendations.

RC22 Public Concern: The managing agencies should acknowledge that mountain biking does result in impacts including accelerated erosion, impacts on wildlife and plants, and effects on other trail users.

Impacts associated with mountain biking are considered along with other impacts from various forms of recreation across the SJNF and TRFO. A specific acknowledgement regarding impacts (or a lack thereof) from mountain biking is not necessary, and the impacts associated with this type of use are more appropriately analyzed during project-level travel management planning efforts that would continue to be conducted for the SJNF and TRFO.

RC23 & RC24 Public Concern: The managing agencies should not use the term "mechanized," or if they do use it they should clarify what it means.

The term "mechanized" is used throughout the document to refer to equipment that operates by mechanical means. The term "mechanical transport" is used in reference to bicycle use and is defined as any contrivance that moves people or material in or over land, water, or air that has moving parts, that provides a mechanical advantage to the user, and that is powered by a living or non-living power source. This includes, but is not limited to, bicycles, game carriers, carts, and wagons. It does not include wheelchairs when used as necessary medical appliances. It also does not include skis, snowshoes, rafts, canoes, sleds, travois, or similar primitive devices without moving parts.

RC25 Public Concern: The managing agencies should not combine mountain biking with motorized recreation in the consideration of impacts.

Relative impacts of various types of trail use are not quantified at this scale of analysis. At the landscape planning level, the agency is identifying in general which uses may be most appropriate in different locations across the planning area. Project-level travel management planning continues to be conducted across the planning area within smaller units and is the appropriate venue to compare the relative impacts, compatibility, and allocation of trails to the wide variety of potential uses.

RC26 *Public Concern: The managing agencies should include standards and guidelines for ski area management.*

Each ski area is analyzed under a project-specific EIS and the subsequent operating plan stems from the EIS findings. The objectives in the LRMP would help guide ski area planning and developments through the life of the LRMP, but the decisions and findings of the ski area EIS remain the binding decisions.

RC27 *Public Concern: The managing agencies should revisit the four-season focus of the desired conditions because it may not comply with the National Forest Ski Area Permit Act of 1986.*

The Ski Area Recreation Opportunity Enhancement Act amended the 1986 National Forest Ski Area Permit Act to allow for multi-season uses in these areas as part of the permit.

RC28 *Public Concern: The managing agencies should include non-recreation amenities in the desired conditions for ski areas to limit the negative impacts on water, soils, wetlands, and wildlife habitat.*

Ski area EISs and the subsequent operating plans mitigate significant impacts stemming from ski area developments. This LRMP does not affect existing ski area permits, authorized facilities, and activities approved in those decisions and permits. Only a modest expansion of the Wolf Creek Pass ski area is considered in this LRMP (Alternatives B and D) and that expansion would be contingent on a site-specific EIS to be prepared by the permittee in the future and subject to USFS approval.

RC29 *Public Concern: The managing agencies should remove the reference to the Built Environment Image Guide as it applies to ski areas because it is inconsistent with earlier assurances by the agencies.*

The statement implying consistency in architectural styles across the public lands has been removed.

RC30 *Public Concern: The managing agencies should correct the Draft EIS to accurately reflect the acreage of the Silverton Mountain Ski Area because the lease covers approximately 1,300 acres, not 1,201 acres.*

The ski area lease covers approximately 1,300 acres while the Special Recreation Permit for heli-skiing operations covers about 13,000 acres. The correction to the acreage has been made in the LRMP.

RC31 *Public Concern: The managing agencies should correct the estimates of future downhill skier visitation.*

The agency acknowledges the lack of reference for the disputed citation and has changed the increase in annual skiing days by 2050 to 14%. The reference to Cordell 1999 on Draft EIS page 3.397 indicating an anticipated rapid increase in downhill skiing visitation has been removed. The agency acknowledges the original reference to Cordell 1999 was not appropriate in this context.

RC32 *Public Concern: The managing agencies should preserve the existing lease terms for the Silverton Mountain ski area.*

This LRMP does not affect the long-term lease for Silverton Mountain, which is managed and administered by the TRFO.

RC33 Public Concern: The managing agencies should allow all ski resort-related operations as described in the Durango Mountain Resort EIS and the Special Use Permit.

This LRMP would not supersede any previous decisions regarding ski area use permits and developments; however, adjustments to permits can be made when they are renewed.

RC34 Public Concern: The managing agencies should prohibit additional ski area development in the East Fork of Hermosa Creek to protect Colorado River cutthroat trout and water quality and quantity.

No expansion of Durango Mountain Resort is being considered at this time. Any such proposal would be subject to additional NEPA analysis specific to the proposal.

RC35 Public Concern: The managing agencies should support the potential expansion of the Wolf Creek ski area to support the economy of Mineral County.

The expansion of Wolf Creek Pass ski area is included in Alternatives B and D. However, any such expansion would be fully and specifically addressed in a subsequent EIS to be prepared by the ski area and subject to USFS approval.

RC36 Public Concern: The managing agencies should not designate the Wolf Creek area as MA 3 because the designation is inconsistent with the Draft EIS analysis and it would not allow for expansion of skiing operations around Wolf Creek.

The FEIS analyzes a range of alternatives for designation of MAs on lands surrounding the Wolf Creek ski area, which reflect the varying desired uses (as communicated during scoping and public comment periods) that could occur on those lands in the future. An MA 3 designation on lands surrounding Wolf Creek, as considered in Alternative C, is not inconsistent with the FEIS analysis; this designation would emphasize uses that are different from developed ski opportunities on adjacent lands. Potential future expansion of the Wolf Creek ski area has been considered in the FEIS, though it is not analyzed in detail, and could be accommodated through MA designations as proposed in Alternatives B and D. However, the LRMP approves no such expansion; any future expansion of the ski area would require separate NEPA analysis and an associated public involvement process.

RC37 Public Concern: The managing agencies should remove the historically proposed East Fork and Wolf Creek Valley ski areas from MA 8 because currently available data do not support estimates of rapid growth in skier visitation in the future.

The FEIS analyzes a range of alternatives for designation of MAs on SJNF lands that consider the public's varying desired uses of lands, including developed ski areas. Alternatives A and D of the FEIS would accommodate a ski area proposal through an MA 8 designations for the East Fork area. The Wolf Creek Valley ski area proposal would only be accommodated through an MA 8 designation under Alternative A. Neither the East Fork nor the Wolf Creek Valley ski areas are allocated as an MA 8 under Alternatives B or C.

RC38 & RC39 Public Concern: The managing agencies should apply a management designation to the Wolf Creek area that would meet the increases in demand for heavily or highly developed outdoor winter recreation.

Expansion of the Wolf Creek ski area could potentially help meet increases in demand for developed outdoor winter recreation, and future expansion has been considered in the FEIS, though it is not analyzed in detail. Potential future expansion could be accommodated through MA designations as proposed in Alternatives B and D. However, the LRMP approves no such expansion; any future expansion of the ski area would require separate NEPA analysis and an associated public involvement process.

RC40 Public Concern: The managing agencies should not designate the Wolf Creek ski area as MA 8 because they have not sufficiently disclosed the impacts of ski area expansion and to protect lynx habitat and roadless area characteristics.

The MA 8 designation is specific to highly developed areas such as ski areas. Any future EIS analyzing ski area expansion would require USFWS consultation regarding lynx and would also address potential impacts to roadless areas.

RC41 *Public Concern: The managing agencies should revise descriptions of Recreation Opportunity Spectrum (ROS) settings to acknowledge that there is no authority for excluding all human recreation activity and to clarify that primitive ROS settings include only areas recommended for wilderness designation by the USFS.*

None of the ROS settings/zones exclude human recreational activity. The primitive ROS zone is used infrequently outside designated wilderness in areas typically adjacent to existing wilderness or that have outstanding wilderness values inherent to them.

RC42 *Public Concern: The managing agencies should disclose the effects of expanding the semi-primitive, non-motorized areas to include data supporting the determinations.*

ROS recommendations as mapped in the LRMP do not change (reduce or expand) route designations or motorized access opportunities. Landscape-scale travel planning efforts would be analyzed and determine the designated route networks. See the motorized travel suitability section for areas identified as "suitable with opportunities," which could lead to expanded opportunities for motorized recreation in the future.

RC43 *Public Concern: The managing agencies should revise the ROS boundaries to allow motorized access on primitive motorized trails.*

ROS zones, as depicted in the LRMP maps, are an attempt to depict recreation zones and help guide future recreation management decisions. They do not represent binding land use allocations. Motorized use can be allowed in primitive and semi-primitive ROS areas on routes designated for such uses under travel management planning. The statement in question regarding the appropriateness of recreation is just that, a statement which acknowledges that recreational uses are not always appropriate in all areas. The LRMP does not base any land allocation decisions on this statement. Examples of this type of area could be archaeological sites, which are found throughout the SJNF and TRFO, or any of the several RNAs and the very specific or rare ecotypes they are being created to protect.

RC44 *Public Concern: The managing agencies should ensure that mountain biking would be allowed in primitive settings in the ROS to be consistent with the MOU between the USFS and the International Mountain Bicycling Association.*

The ROS settings as depicted in the LRMP maps are not binding land use decisions, and in and of themselves do not restrict bicycle use within the primitive ROS zones. Bicycle use can be allowed on trails within any ROS zone. Nonetheless, the primitive ROS zone (outside existing wilderness) comprises a very small portion of the SJNF and TRFO acreage and would not substantially affect bicycle access in future recreation/travel management planning within those limited areas.

RC45 *Public Concern: The managing agencies should assign the Storm Peak, Lizard Head, and Calico IRAs the ROS of semi-primitive non-motorized to be consistent with past travel management plans.*

Of the three areas mentioned, the Storm Peak and Lizard Head are IRAs. These areas would be managed under the recently adopted 2012 Colorado Roadless Rule, which includes management actions to protect roadless values. Motorized uses are not prohibited by that rule, but must be managed appropriately. The Colorado Roadless Rule supersedes the ROS zone recommendations, which are intended as area guidelines for recreation. The Calico area referenced is not an IRA analyzed in Appendix C. However, the Calico National Recreation Trail is currently open to certain types of motorized use under the travel plan for that area (Rico-West Dolores).

RC46 *Public Concern: The managing agencies should change the ROS for the Calico and Storm Peak IRAs from semi-primitive motorized to semi-primitive non-motorized to reflect the non-motorized status envisioned by the 1992 plan amendment.*

Calico is not included as an IRA in Appendix C. The area currently has designated motorized routes, including the Calico National Recreation Trail. Storm Peak is an IRA and would be managed under the 2012 Colorado Roadless Rule, which would supersede the ROS zone determination in the LRMP.

RC47 *Public Concern: The managing agencies should clarify the ROS designations for the Perins Peak/Animas Mountain Habitat Management Area because the reason for the mixture of classifications is not apparent.*

There are two ROS designations in the referenced areas; roaded natural and semi-primitive motorized. Both areas are urban-proximate and are easily accessible for recreation and the ROS designations reflect that. Existing seasonal wildlife closures would remain in effect to protect winter big-game habitat.

RC48 *Public Concern: The managing agencies should revise the map of the Cortez SRMA to show Mud Springs Recreation Management Zone.*

Mud Springs is now included as a Recreation Management Zone within the Cortez SRMA. The area is proposed for management as an SRMA as well as an ACEC emphasizing cultural resource protection.

RC49 *Public Concern: The managing agencies should revise the descriptions of the Recreation Management Zones RMI and RM2 to identify which zone contains the Phil's East and Sam's World areas.*

Appendix E provides a detailed description of, and guidance for, each proposed SRMA. The Cortez SRMA is comprised of two Recreation Management Zones: 1) the Montezuma Triangle (including Phil's World, Chutes and Ladders, Summit, and Aquaduct) and 2) Mud Springs. Chutes and Ladders refers to the area previously described as Phil's World East.

RC50 *The managing agencies should ensure that recreation objectives take into account oil and gas development.*

The various uses of public lands within the planning area have been considered in this planning effort, resulting in the development of standards, guidelines, leasing stipulations, and other mitigation measures aimed at ensuring that multiple uses of the public lands, including recreation and energy development, can continue sustainably into the future.

RC51 *The expansion areas as proposed by the Wolf Creek ski area should be incorporated into the alternatives.*

Both areas of expansion have been incorporated into the alternatives.

4.23 Research Natural Areas

RN1 *Public Concern: The managing agencies should clarify whether winter motorized use would be allowed in the general area proposed for RNA designation because the Draft EIS states that summer motorized use would be prohibited.*

Motor vehicles (including snowmobiles and motorcycles) are prohibited in the summer and winter in all RNAs. One of the purposes of designating RNAs is to identify a reference area where natural conditions have been maintained because of a lack of human presence or management. Motorized use demands a more intensive management presence and can contribute to impacts that could adversely influence the natural integrity of the area and the purpose for which it was designated.

RN2 *Public Concern: The managing agencies should discuss the environmental consequences of proposed RNAs on timber management and forest products.*

Timber harvest and the collection of special forest products are prohibited in RNAs, but the overall impacts to timber management are negligible because of the small amount of overlap between the suitable timber base and proposed RNAs. The designation of RNAs would have very little or no effect on special forest products collection because special forest products are not being collected in the areas proposed for RNA designation.

RN3 *Public Concern: The managing agencies should not designate the proposed Grizzly Peak and Electra Lake areas as RNAs because of the conflicts with existing land uses. The lands in question are currently classified as “suitable” for over-snow travel in Alternatives A and B.*

Motor vehicles (including snowmobiles and motorcycles) are prohibited in the summer and winter in all RNAs (including Grizzly Peak and Electra); in the Draft EIS, these areas were shown as suitable for motorized use, while the management prescriptions for RNAs clearly identified that motorized travel would not be allowed within RNAs. This contradiction has been corrected in the FEIS so that all areas proposed for RNA designation are shown as unsuitable for summer and winter motorized use.

RN4 *Public Concern: The managing agencies should not designate the proposed Hermosa area as an RNA if the associated lands would also be designated as a wilderness area because the designation is unnecessary.*

The potential Hermosa RNA would be established through this LRMP, while wilderness designation would occur through an act of Congress. If the area were designated wilderness in the future, the agency would examine whether the RNA would still serve its original purpose and would still be necessary. Wilderness and RNA overlapping designations can be appropriate in certain cases as each designation has a different purpose.

RN5 *Public Concern: The managing agencies should designate Ignacio Creek as an RNA because of its old growth ponderosa pine and mixed conifer forests, and because of its other desirable attributes.*

Some of the lands in the potential Ignacio Creek RNA are suitable for RNA designation because they are mostly unaltered by past management actions, because they are in a vacant livestock grazing allotment, and because they contain rare old growth ponderosa pine and mixed conifer forests. The ROD for the NSJB EIS denies access to enter those lands, but those lands are still leased and could be developed in the future if the companies who own the leases could show that they could enter those lands without causing adverse environmental impacts to the soils, water, and streams of these lands. Granting surface access would result in adverse effects that would make those lands unsuitable for RNA designation. Because of this uncertainty, the Ignacio Creek area is not recommended for RNA designation at this time.

RN6 *Public Concern: The managing agencies should allow bicycling in RNAs because they allow hiking and the impacts are about the same.*

Bicycles are prohibited in RNAs because that activity does not coincide with the basic objectives and purpose of RNA establishment, which includes maintaining natural ecological conditions and protecting against human-caused environmental disturbances. Other uses such as hiking could be restricted in an RNA in the future if it was determined that the purposes of the RNA were being adversely impacted by these uses.

RN7 *Public Concern: The managing agencies should close the Grizzly Peak NRA to snowmobiling.*

Motor vehicles (including snowmobiles and motorcycles) are prohibited in the summer and winter in all RNAs (including Grizzly Peak); in the Draft EIS, this area was shown as suitable for motorized use, while the management prescriptions for RNAs clearly identified that motorized travel would not be allowed within RNAs. This contradiction has been corrected in the FEIS so that all areas proposed for RNA designation are shown as unsuitable for summer and winter motorized use.

4.24 Riparian Areas and Wetland Ecosystems

RW1 *Public Concern: The managing agencies should add more soils-related objectives including one associated with fens, to ensure that the desired conditions in the LRMP can be met and to ensure that direction in the USFS's Soil Management Handbook (FSH 2509.18, including the R-2 Supplement, 1992) is met.*

The Riparian Areas and Wetland Ecosystems section of the LRMP contains an objective that states that within 15 years, three fens on the TRFO and two fens on the SJNF with impaired function should be treated. This would likely include improving the soil conditions of those fens. In addition, there is a standard in the same section that long-term adverse effects to the soils in fens from management activities in or adjacent to them must not occur. There is also a guideline in the Terrestrial Ecosystem section of the LRMP that states that ground disturbance should be limited or otherwise mitigated on organic soils in order to protect the ecological integrity of these rare and unique soils. There are numerous other soils-related objectives, standards, and guidelines in both the Riparian Areas and Wetland Ecosystems and Terrestrial Ecosystems sections of the LRMP that focus on preventing adverse impacts to the soils on the SJNF and TRFO and would help ensure that desired conditions in the LRMP and direction in FSH 2509.18 can be met.

RW2 *Public Concern: The managing agencies should include information on the various types of wetlands.*

Riparian and wetland ecosystems on the SJNF and TRFO consist of a general type and four physiognomic types that include evergreen riparian forests, deciduous riparian forests, deciduous riparian shrublands, riparian area, and wetland herbaceous lands (which includes fens and hanging gardens) (Redders 2003). This information is included in the LRMP and was added to FEIS.

RW3 *Public Concern: The managing agencies should define the spatial scale of riparian areas to ensure the design criteria for these areas are appropriately applied.*

The Riparian Area and Wetland Ecosystems sections of the FEIS and LRMP describe and define riparian areas and wetlands. LRMP components for riparian areas have been rewritten for accuracy and clarification. In addition, oil and gas leasing stipulations related to perennial streams, water bodies, riparian areas, and fens include very specific buffer distances for the purpose of maintaining proper functioning condition of these areas. The definitions provided in the FEIS and LRMP, and the specific buffer distances provided in the oil and gas leasing stipulations would help ensure that LRMP components are appropriately applied.

RW4 *Public Concern: The managing agencies should make Measure V.D a standard because livestock should not be allowed to consume 40% of a year's growth of cottonwoods or willows.*

This standard has been converted to a guideline and revised for accuracy and clarification. The new guideline now states that livestock browsing should not remove more than 25% of the annual leader growth of hydrophytic shrubs and trees. Please refer to the Riparian Area and Wetland Ecosystems section of the LRMP.

RW5 *Public Concern: The 14 G2 ranked riparian area community types that occur on SJNF and TRFO need protection.*

There is a guideline in the Riparian Area and Wetland Ecosystems section of the LRMP that states that agency actions should avoid or otherwise mitigate long-term adverse impacts in riparian area and wetland ecosystems that have plant communities with G1, G2, S1, or S2 NatureServe Plant Community Conservation Status Ranks.

RW6 *Public Concern: The managing agencies should define "desirable native plant species" and "native plant species in fens," describe the consequences to a stream if narrowleaf or Rio Grande cottonwood trees are removed, and explain if the desired conditions related to these items are associated with the HRV concept.*

Native plant species (including those that occur in fens) are species that were present in an area before European settlement in that area. Narrowleaf and Rio Grande cottonwood trees are the keystone species for the narrowleaf and Rio Grande cottonwood community types, respectively. Removing narrowleaf and Rio Grande cottonwood trees from those types would remove the key ecological components of those communities, which would significantly change their composition and structure, and eliminate the stream bank stability and wildlife habitat values they provide. Desired conditions related to these items are associated with the HRV concept because native plant species dominated the vegetation during the reference period when HRV conditions prevailed.

RW7 *Public Concern: The managing agencies should include the wetlands and fens associated with the Grindstone Lake/Upper Rough Canyon areas in the desired conditions to protect the high density of fens in the area.*

The desired conditions related to wetlands and fens found in the Riparian Area and Wetlands Ecosystems section of the LRMP apply to the wetlands and fens associated with the Grindstone Lake/Upper Rough Canyon areas.

RW8 *Public Concern: The managing agencies should clarify the expected riparian impacts from oil and gas development.*

The section discussing the effects of fluid and solid minerals development on riparian areas and wetland ecosystems has been rewritten to clarify expected impacts from oil and gas development. Please refer to the Riparian Areas and Wetland Ecosystem section of the FEIS.

RW9 *Public Concern: The managing agencies should rewrite the cumulative impacts for riparian areas and wetland ecosystems to more accurately predict potential impact.*

The cumulative impact assessment for riparian areas and wetland ecosystems has been rewritten for accuracy and clarification. Please refer to the Riparian Areas and Wetland Ecosystem section of the FEIS.

RW10 *Public Concern: The managing agencies should not allow drilling in Hartman Draw without considerable setbacks to protect the endangered stream orchid and the nearby vineyards and orchards.*

Hartman Draw and the lands adjacent to it on all sides do not occur on SJNF and TRFO, so the SJNF and TRFO have no authority over what occurs on those lands. Note that stream orchid is not a federally listed threatened or endangered species, but it is a relatively rare plant that has a NatureServe Conservation Status Rank in Colorado of S2.

4.25 Recommended Wilderness Areas

RWA1 *Public Concern: The managing agencies should expand the MA 1 protections to include Ice Lake Basin, Engineer Mountains, and the remainder of the IRAs in the Grizzly Peak RNA and should propose new wilderness for areas adjacent to possible wilderness in San Miguel County.*

Wilderness recommendations within this LRMP are based on objective analysis, not on current or potential wilderness legislation. An RNA is being proposed in the LRMP that would provide additional protections for parts of the Grizzly Peak area. IRAs are to be managed under the 2012 Colorado Roadless Rule, which has significant limitations regarding active management projects. Areas within MA 3 (the proposed management for the areas referenced in this comment) would not allow permanent road building and has restrictions on other permanent developments such as recreation sites and prohibits commercial timber activities. Motorized travel also has significant restrictions within MA 3 zones.

RWA2 *Public Concern: The managing agencies should not select and recommend areas for consideration in the Wilderness Preservation System out of a belief that they have a "private right to act" because the continuous expansion of the Wilderness Preservation System by repeated re-inventories of the same lands is not supported by the Wilderness*

Act, FLPMA, or NFMA; because the agencies have no legal authority to retain core undeveloped lands or to maintain large contiguous blocks of undeveloped land; and because the USFS does not have the authority to recommend wilderness designation or to add any acreage to the roadless or WSA inventories.

Only Congress has the authority to designate wilderness. The USFS, through the land use planning processes, serves to inform Congress which public land areas meet Wilderness Act criteria for wilderness designation. The BLM and USFS have authority to conserve and manage natural resources under a multiple use umbrella. Not all land uses can occur within the same areas without compromising resource values. The agencies seek a balanced approach to land management that does include protection for areas as undeveloped due to the unique values and resources found in those areas. Through the land use planning process, the USFS can and does make wilderness recommendations, which are not to be confused with actual wilderness designation. In this case, only a small fraction of the planning area's CRAs are recommended for wilderness.

RWA3 Public Concern: The managing agencies should designate the Hermosa Creek area as wilderness to provide an area that is free from motorized and mechanized use.

The USFS does not have authority to designate wilderness areas. However, Alternatives B and C recommend various areas as wilderness, including part(s) of the Hermosa drainage. Away from primary trail corridors, the area already provides abundant opportunities to recreate without encountering bicycles or motorized vehicles.

RWA4 Public Concern: The managing agencies should acknowledge that wilderness designation of the Hermosa Creek area would leave no viable alternative route for mountain bikers traveling along the Colorado Trail.

If Congress were to designate lands as wilderness according to the LRMP recommendations, mountain biking would likely be prohibited on the Colorado Trail within the portion that lies within the Hermosa recommended wilderness area.

RWA5 Public Concern: The managing agencies should designate the Hermosa-Hesperus Peak area as wilderness and establish a non-motorized trail in Bear Creek.

Although the USFS can make wilderness recommendations, wilderness designation is reserved to Congress. Future trail developments, such as the Bear Creek trail mentioned in the comment, are site-specific actions to be analyzed under separate project-level NEPA processes.

RWA6 Public Concern: The managing agencies should designate the Hermosa-Hesperus Peak area as wilderness to protect the entire watershed plus the headwaters of Bear Creek.

Although the USFS can make wilderness recommendations, wilderness designation is reserved to Congress. Other MA classes in the LRMP contain protections for areas (e.g., MAs 1 and 2), thus wilderness is not the only tool for protecting special or sensitive watershed areas within the LRMP.

RWA7 Public Concern: The managing agencies should not designate East Hermosa Creek as wilderness because it already is a nationally known single-track destination.

The Preferred Alternative (Alternative B) does not recommend areas east of Hermosa Creek for wilderness designation, thus not affecting bicycle use along the Hermosa Creek Trail.

RWA8 Public Concern: The managing agencies should support a possible redrawing of the current proposed Hermosa wilderness boundaries to accommodate the bicycle lobby's concerns.

Through the LRMP, the USFS recommends that the western portion of the Hermosa area be designated as wilderness in Alternative B, which, if enacted by Congress, could have the effect of prohibiting mountain bike use on a portion of the Colorado Trail. The USFS is aware of and values the local discussions that have resulted in alternative proposals for this area and would participate as allowed by law in any Congressional proposal that addresses these lands and their various uses.

RWA9 Public Concern: The managing agencies should designate Treasure Mountain IRA as wilderness to preclude consideration of the one-time proposed Wolf Creek Valley ski area. Although the USFS can make wilderness recommendations, wilderness designation is reserved to Congress. Areas are recommended for wilderness based on the purposes set forth in the Wilderness Act, and not necessarily to preclude potential alternative uses of the land.

RWA10 Public Concern: The managing agencies should propose wilderness designation for portions of the San Miguel IRA to link the Weminuche and South San Juan wilderness areas.

The geographic location of the San Miguel IRA does not lend itself as a linkage corridor between the Weminuche and South San Juan wilderness areas. Appendix C describes the rationale for not recommending this area as wilderness, and the LRMP designates the area as MA 3 to protect roadless area values from being compromised by development.

RWA11 Public Concern: The managing agencies should revise the map of the proposed Hermosa wilderness to ensure that there is no conflict between the proposed wilderness and the Special Use Permit of the San Juan Ski Company.

As currently mapped, there is only about 7 acres of overlap between the San Juan Ski Company permit boundary and the proposed Hermosa wilderness bill map. This particular area is small and of little actual ski value due to its slope aspect and lack of accessibility. Therefore, if the wilderness were designated as currently mapped there would be an insignificant to nonexistent impact on the ski operation.

RWA12 Public Concern: The managing agencies should evaluate the effects on management and values of adjacent lands as a consequence of wilderness designation because such an evaluation is mandated by USFS Title 36 regulation.

The areas recommended for wilderness designation in the Preferred Alternative have been carefully selected and this process has included assessing potential effects of their possible designation by Congress as wilderness. Only the west Hermosa area is not adjacent to existing wilderness, and this particular recommended area has been developed considering such issues as mineral rights, ski area operations, motorized/mechanized uses, etc.

RWA13 Public Concern: The managing agencies should consider whether areas serve as linkages in landscape-scale ecosystems in the analysis of wilderness suitability.

The use of Treasure Mountain as a Canada lynx linkage corridor between the Weminuche and South San Juan wilderness areas is only a small component to a wilderness recommendation. Lynx are protected through the ESA and the recommendation of Treasure Mountain CRA for wilderness designation would not in itself add protection to the species. The CRA is proposed as a MA 3 and has the stated goal of maintaining a relatively unaltered land where natural ecological processes operate mostly free from human influences.

4.26 Soils

SO1 Public Concern: Soil erosion and sedimentation from roads used for timber harvest activities have been reduced compared to what they used to be, and there is reason to expect that they would continue to be reduced in the future.

Impacts to uplands soils are discussed in the FEIS under the Terrestrial Ecosystems section. This includes a discussion on impacts from past management activities, and the environmental consequences of future management activities, including timber harvest. As stated in this section, impacts to soils from timber harvest are dependent on many factors, but given the application of standards and guidelines, soil erosion should be short-lived, localized, and would affect a relatively small number of acres. Refer to the Terrestrial Ecosystems section of the FEIS for more information.

SO2 Public Concern: The managing agencies should strengthen the desired conditions and design criteria for soils.

Soils is now included in the Terrestrial Ecosystems section of the FEIS and LRMP. Many of the LRMP components related to soils have been rewritten. Please refer to the Terrestrial Ecosystems section of the LRMP.

SO3 *Public Concern: The managing agencies should revise the discussion of soil erosion and water quality related to the Missionary Ridge fire because it understates the effects.*

Soils is now included in the Terrestrial Ecosystems section of the FEIS. The information referred to in this comment regarding soil erosion and water quality related to the Missionary Ridge fire has been deleted.

SO4 *Public Concern: The managing agencies should restrict grazing on areas containing bunchgrasses and biological soil crusts to increase the abundance and distribution of these resources.*

Bunchgrasses and biological soil crusts, which are important ecological components on the SJNF and TRFO, would be protected by LRMP components found in the Terrestrial Ecosystems and Livestock and Rangeland Management sections of the LRMP. Specifically, there is a guideline in the Terrestrial Ecosystems section of the LRMP that states that management activities in areas with biological soil crusts should be designed to minimize adverse impacts to the soil crusts. Many of the LRMP components in the Livestock and Rangeland Management section would help ensure that bunchgrasses are maintained, that herbaceous plant species and utilization guidelines be identified at the project level, that season-long grazing in individual units be phased out, and that provide for periodic rest to forage species during critical growing seasons. Implementing LRMP components and achieving desired conditions should maintain or increase the abundance and distribution of bunchgrasses and biological soil crusts across the SJNF and TRFO.

SO5 *Public Concern: The managing agencies should clearly define how NSO stipulations apply to soils, and "erodible soils" should be defined.*

An NSO stipulation would be applied to several specific soil survey map units prone to mass movement. In addition, a CSU stipulation would be applied to lands with shale soils, lands with gypsum soils, and lands with biological soil crusts. Appendix H shows a list of the soil survey units with NSO and describes the purpose, justification, exceptions, modifications, and waivers associated with each NSO and CSU stipulation. Erodible soils are defined as soils that are highly susceptible to detachment and movement when disturbed (this term now appears in the glossary).

SO6 *Public Concern: The managing agencies should add standards for soil protection to prevent irreversible damage and should change the current guidelines for soils into standards.*

There are several standards in the LRMP that would provide for soil protection and prevent irreversible damage, including one that prevents the construction of new permanent roads and utilities in protected areas (which make up approximately 47% of terrestrial ecosystems on the SJNF and TRFO). NSO leasing stipulations would also be applied to several specific soil survey map units prone to mass movement, and CSU leasing stipulations would be applied to lands with shale soils, lands with gypsum soils, and lands with biological soil crusts. Both the LRMP components and the special lease stipulations found in Appendix H would help protect soils and prevent irreversible damage to the soil resource.

SO7 *Public Concern: The managing agencies should revise the direct and indirect impacts to soils and remove the reference to "soil productivity" as they are too vague and better addressed at the project level.*

Soils is now included in the Terrestrial Ecosystems sections of the FEIS and LRMP. The direct and indirect impacts for soils have been revised for accuracy and clarification. A definition of the term "soil productivity" is included in the glossary. It is defined as the inherent capacity of a soil to support the growth of specified plants or plant communities.

SO8 *Public Concern: The managing agencies should remove or revise the impacts to soils and vegetation from atmospheric deposition of nitrogen and move discussions of water quality and vegetation to those resource sections.*

Soils are now discussed as part of the Terrestrial Ecosystems section. The paragraph on atmospheric deposition of nitrogen describes potential effects to the soils and vegetation communities on the SJNF and TRFO based on non-local studies, but we think that those studies are relevant to soils in general and that they can be applied to this area.

SO9 *Public Concern: The managing agencies should revise the cumulative impacts analysis for soils in the Paradox Basin because the impacts are overstated.*

The cumulative impacts analysis for soils has been revised and specific reference to impacts occurring over a large scale for up to 30 years has been deleted.

4.27 Special Status Species

SS1 *Public Concern: The managing agencies should clarify the role and validity of "SJNF and TRFO Highlight Species" to ensure compliance with FLPMA and NFMA and should clarify the roles and obligations of the different agencies with regards to special status species management.*

Highlight species were used as a planning tool in the development of the LRMP's ecosystem management approach. Certain species representing a broad spectrum of conditions and needs across the planning area were selected in order to develop a strategy around those conditions and needs. Highlight species have no legal status, and no specific BLM or USFS policy or direction associated with them; they serve no further functionality past development of the ecosystem management approach and various LRMP components. Special status species on TRFO and SJNF lands include federally listed species, species proposed for federal listing, candidate species for federal listing, Region 2 Regional Forester's sensitive species, and Colorado BLM State Director's sensitive species. The roles and obligations of each agency regarding special status species are explained under the heading of Biological Diversity and Population Viability in Section 2.1.4 – Ecosystem Management. LRMP components and design criteria for special status species have been reviewed and rewritten for accuracy and clarification where needed.

SS2 *Public Concern: The managing agencies should manage Gypsum Valley cateye as a sensitive species until the plant is granted BLM sensitive status.*

Gypsum Valley cateye is now designated as a BLM Colorado State Director's sensitive species and would be managed as such.

SS3 *Public Concern: The managing agencies should ensure that species that should be treated as sensitive or management indicator species be added to the LRMP to avoid confusion.*

Compiling sensitive species lists involves consideration at the BLM state and USFS regional levels and does not involve analysis at the BLM area/national forest planning level. It is therefore not within the scope of this analysis. BLM and USFS sensitive species are subjected to rigorous consideration before being included into the sensitive species program. These lists and candidates are reviewed periodically for conformance to program criteria by the state and regional offices for adjustments to the species lists. All LRMP components (including standards and guidelines) regarding special status species have been reviewed and rewritten for clarification and accuracy where needed.

SS4 *Public Concern: The managing agencies should add northern leopard frog, American pika, boreal toad, and burrowing owl to the list of sensitive species because they are all special status species.*

Compiling sensitive species lists involves consideration at the BLM state and USFS regional levels and does not involve analysis at the BLM area/national forest planning level. It is therefore not within the scope of this analysis. BLM and USFS sensitive species are subjected to rigorous consideration before being included into the sensitive species program. These lists and

candidates are reviewed periodically for conformance to program criteria by the state and regional offices for adjustments to the species lists.

- SS5 *Public Concern: The managing agencies should revise Measure VII.A to indicate that Knowlton's pincushion cactus would be avoided during project design and implementation because it is an endangered species, and should rewrite Measure VII.D so that livestock grazing practices that result in a decrease in the abundance or distribution of Knowlton's pincushion cactus would be changed.***

There are no known populations of Knowlton's pincushion cactus on the SJNF or TRFO, but potentially suitable habitat for this species does exist within the planning area. A standard has been added to the LRMP that states that projects or activities in habitat occupied by federally listed plant species, or in designated critical habitat, must be designed and conducted in a manner that preserves the primary constituent elements needed to sustain the life history processes of those federally listed plant species. All relevant laws, regulations, and policies regarding the management of federally listed plant species would be followed in the implementation of the LRMP.

4.28 Scenery and Visual Resource Management

- SV1 *Public Concern: The managing agencies should give equal weight to aesthetic uses and commodity values in the analysis process.***

The EIS contains a range of alternatives that represent various mixes of multiple uses on public lands. It is not the intent of the alternatives to be the same as each other or to offer equal measures of commodity vs. amenity. Each alternative offers a different balance of commodity uses and aesthetic uses, and amenity values.

- SV2 *Public Concern: The managing agencies should not impose Visual Resource Management (VRM) Class II restrictions on lands outside the McKenna Peak WSA in order to create a buffer because the agencies have already leased these lands for oil and gas development.***

These areas have been assigned the VRM Class II to protect the visitor experience/recreation setting that this class offers. The inherent landscape character and viewing distances make it possible to implement energy developments while maintaining a VRM Class II. A VRM II does not preclude energy or other developments but requires careful development to meet the Class II standard.

- SV3 *Public Concern: The managing agencies should acknowledge that neither VRM Class I nor VRM Class II requires an NSO stipulation to comply with the BLM's Handbook.***

The BLM does not require that VRM Class I or II areas have an NSO stipulation. However, the SJNF and TRFO LRMP can include NSO stipulations on some VRM Class I and II areas as an appropriate and effective management practice for visually sensitive landscapes. The NSO stipulations would apply to new leases, not existing leases.

- SV4 *Public Concern: The managing agencies should revise the VRM designations to account for existing oil and gas leases and other existing resource uses to comply with existing case law.***

BLM VRM classes as described in Handbook 8431-1 indicate that multiple resource activities can occur within VRM Class II areas. However, it is within the authority of the BLM to assign an NSO stipulation to some VRM Class II areas that are particularly visually sensitive on the SJNF and TRFO and include scenic byways, river corridors, and scenic trails. The SJNF and TRFO LRMP has alternatives with VRM classifications that are intended to be consistent with existing lease rights.

- SV5 *Public Concern: The managing agencies should ensure that all MA 8 lands receive a Scenic Integrity Objective (SIO) designation of "low" to reduce potential future management conflicts.***

The entire Durango Mountain Resort special use permit area is designated low SIO and is all within MA 8. MA 8 no longer applies to Silverton Mountain, and this area would be designated as VRM Class II because there are no "cut" and managed ski runs. The permit area remains predominantly natural appearing.

SV6 *Public Concern: The managing agencies should designate the Snaggletooth portion of the Dolores River Canyon Special Management Area a VRM Class I because the area represents a unique visual resource.*

The Dolores River Management Plan calls for the Snaggletooth segment of the river to be managed as a VRM Class II, which is basically the same as the inventory class for that area. The presence of the road (below Mt. Sheep Point) and power line are contributing factors to that decision.

SV7 *Public Concern: The managing agencies should revise Desired Conditions 17.1 through 17.10 to state that the new VRM restrictions cannot be applied to existing oil and gas leases.*

Agency planning policy requires that a plan revision identify VRM classes and SIOs for every acre on BLM and NFS lands, respectively. The desired conditions are accompanied in the LRMP by standards and guidelines and stipulations that guide how projects would comply with the LRMP's desired conditions. The LRMP requirements would apply to all energy development on SJNF and TRFO no matter if it occurs on already leased lands.

SV8 *Public Concern: The managing agencies should revise Table 3.22.4 to reflect the Onshore Oil and Gas Order Number 1.*

The table referred to in this comment is now Table 3.15.5. This table pertains to oil and gas facilities that are currently in operation, not pads that have been fully reclaimed. Interim reclamation, as referred to in the Onshore Oil and Gas Order, occurs after initial construction and development of a facility and minimizes the overall footprint of a well pad, but does not wholly reclaim a site, so the direct impacts disclosed in the table are valid for operating wells. Complete reclamation would not occur until after the operational life of the well, which often takes up to 25 years or more.

SV9 *Public Concern: The managing agencies should revisit the visual impact analysis for oil and gas because most well structures do not impact views from the background or middle ground zones.*

All oil and gas developments on current or potential future lease areas would be subject to BMPs, standard or more restrictive lease stipulations, and in many cases further stipulations through the site-specific APD process. With appropriate application of visual mitigation in siting, design, and construction of new developments, it is expected that all projects can be implemented in a manner that meets VRM/SIO objectives within the high oil and gas potential areas.

SV10 *Public Concern: The managing agencies should clarify the visual screening requirements because they could increase costs sufficiently to preclude development of leases.*

All oil and gas developments on current or potential future lease areas would be subject to BMPs, standard or more restrictive lease stipulations, and in many cases further stipulations through the site-specific APD process. With appropriate application of visual mitigation in siting, design, and construction of new developments, it is expected that all projects can be implemented in a manner that meets VRM/SIO objectives within the high oil and gas potential areas.

SV11 *Public Concern: The managing agencies should reduce the SIO from "high" to "moderate" or "low" for the lands on the east side of U.S. Highway 550, across from the Durango Mountain Resort.*

Existing developments under Durango Mountain Resort's use permit would not need to be altered due to the high SIO designation. All future developments would require site-specific environmental analysis that would take into account potential visual impacts. Trails are typically acceptable within high SIO areas, and their design/construction can be modified to protect scenic

integrity (e.g., non-linear design, partial vegetation/tree thinning, scalloping clearance edges, etc.). Trailhead developments, although not acceptable within high SIO areas, are by default located adjacent to open roadways and would therefore not be expected to be built within the body of the subject high SIO area. Using this reasoning, trailhead and parking facilities would not be entirely excluded from the high SIO area, but their construction in such a location may entail some design/siting modifications to reduce visual impacts to/from the adjacent high SIO areas. The high SIO designation is intended to protect the current state of the high-quality viewshed that forms the backdrop for the Durango Mountain Resort, the U.S. Highway 550 corridor, and other nearby forest lands.

SV12 *Public Concern: The managing agencies should classify the BLM portion of Paradox Basin as VRM Class IV.*

The BLM portion of the Paradox Basin represents a wide range of landscapes with unique visual resources. Included within this broad geologic formation are features such as Disappointment, Dry, and Gypsum Valleys, the Dolores River Canyon including a 17,000-acre WSA, the Spring Creek Wild Horse Herd Management Area, the 21,000-acre McKenna Peak WSA, and multiple mesas. A Visual Resource Inventory (VRI) has been completed that found the full range of existing scenic values represented in this basin. During the LRMP process, VRM classes and VRM class boundaries are free to follow VRI Classes and VRI class boundaries, or to be wholly different from them. VRM classes reflect management objectives for allowable levels of visual modification inclusive of other resources and administrative responsibilities. As such, the BLM is not considering only one VRM class for this diverse landscape, but rather a spectrum of management classes. Under Alternative B, the management classes would range from VRM Class I for the WSA; VRM Class 2 primarily in the Dolores River Canyon, the Herd Management Area, and certain lands that would be managed to maintain their wilderness characteristics; VRM Class III throughout the majority of the remainder of the unit that encompasses oil and gas production facilities in Dry Creek Basin and Horse Range Mesa, and existing uranium mines in Big Gypsum Valley; and VRM Class IV generally associated with DOE uranium lease tracts.

4.29 Terrestrial Ecosystems

TE1 *Public Concern: The managing agencies should revise the Terrestrial Ecosystem objectives to have time frames consistent with the life of the LRMP.*

The time frames for the Terrestrial Ecosystem objectives were reviewed and changed where necessary to be consistent with the typical lifespan of an LRMP.

TE2 *Public Concern: The managing agencies should include objectives for regionally significant vegetation types, including objectives to address the integrity of alpine vegetation in the Silverton area and the integrity of the pinyon-juniper forest.*

The LRMP includes objectives for the spruce-fir forest, aspen forest, cool-moist mixed conifer forest, warm-dry mixed conifer forest, ponderosa pine forest, semi-desert shrublands and grasslands, and alpine areas, which are major vegetation types on the SJNF and TRFO that represent a significant portion of the total acreage in the Southern Rocky Mountains and Colorado Plateau Ecoregions. Although the LRMP does not have specific objectives for the pinyon-juniper woodland vegetation types, it provides desired conditions and design criteria for this type, which would help to protect their ecological integrity and the native species associated with them. Please refer to the Terrestrial Ecosystems section of the LRMP.

TE3 *Public Concern: The managing agencies should revise Objective F.2 (increasing the young aspen development stage) to reflect current data on aspen regeneration.*

Objectives regarding aspen forests have been reviewed and rewritten where necessary to reflect current data on aspen regeneration. Please refer to the Terrestrial Ecosystems section of the LRMP.

TE4 *Public Concern: The managing agencies should include Gray's Townsend daisy and the riparian natural communities of boxelder-narrowleaf cottonwood/red osier dogwood*

forest, strapleaf willow shrubland, and narrowleaf cottonwood-rocky mountain juniper as unique resources in the HD Mountains.

Gray's Townsend daisy and the riparian natural plant communities of boxelder-narrowleaf cottonwood/red osier dogwood forest, strapleaf willow shrubland, and narrowleaf cottonwood-rocky mountain juniper forest have been added to the HD Mountains section of the LRMP as important resources.

- TE5 Public Concern: The managing agencies should protect the old growth ponderosa pine in the Smoothing Iron MA 2 special interest area because the existing old growth concentration can be used as the focus to create larger forests.**
The Smoothing Iron area is within MA 2. Areas within MA 2 are considered special areas and are managed in order to protect or enhance their unique characteristics. The Smoothing Iron area was designated as MA 2 because of the presence of old growth recruitment areas. Management in these areas would focus on the protection and enhancement of this unique characteristic.
- TE6 Public Concern: The managing agencies should designate old growth ponderosa pine forest restoration sites as MA 2.**
Ponderosa pine stands with significant old growth attributes (and lands adjacent to those stands) in the Smoothing Iron and House Creek areas were identified as ponderosa pine old growth forest recruitment areas and designated under MA 2 as special or unique areas.
- TE7 Public Concern: The managing agencies should protect old trees and old growth forests.**
Old trees (including aspen) and old growth forests are protected on the SJNF and TRFO through LRMP components found in the Terrestrial Ecosystems section of the LRMP, and through the application of a CSU stipulations for oil and gas development in old growth forests and woodlands.
- TE8 Public Concern: The managing agencies should include an objective to prioritize increasing the proportion of spruce-fir and cool-moist mixed conifer forests exhibiting old growth characteristics to help move these forests toward desired conditions**
As shown in Table 2.2.1 in the LRMP, the current percentage of spruce-fir forests in old growth (26.5%) is within the desired range (25%–35%). The current percentage of cool-moist mixed conifer forests in old growth (17%) is slightly below the desired amount (20%–30%). Although the LRMP does not contain an objective to increase the proportion of cool-moist mixed conifer forests that are in the old growth development stage, it does contain a guideline that states that if the desired conditions for the development stage of a terrestrial ecosystem type are underrepresented, management activities should be designed to move that development stage closer to the desired conditions, and another that states that within landscapes not meeting desired conditions for old growth, mixed conifer forest stands that currently are not in the old growth development stage, but that contain significant old growth attributes should be prioritized as old growth recruitment areas, largely based on tree age and distribution across the SJNF, and managed for their old growth values.
- TE9 Public Concern: The managing agencies should have standards and guidelines for the recruitment of old growth stands including ones associated with their distribution on suitable and unsuitable timberlands.**
There are guidelines in the LRMP that state that within landscapes not meeting desired conditions for old growth, ponderosa pine forest stands, and mixed conifer forest stands that currently are not in the old growth development stage, but that contain significant old growth attributes should be prioritized as old growth recruitment areas, largely based on tree age and distribution across the SJNF, and managed for their old growth values.
- TE10 Public Concern: The managing agencies should revise Table 41 to revise snag requirements.**
The table referred to in the comment showing desired conditions for snags and large wood is now Table 2.2.3 in the LRMP. This table has been revised.

- TE11** *The managing agencies should provide a better definition of snag to clarify the relationship between Guideline A.40 and Standards A.41, A.42, and A.43.*
These guidelines have been deleted. LRMP components regarding snags have been revised and placed in the Terrestrial Ecosystems section. A definition of the term "snag" is provided in the glossary as a standing dead tree.
- TE12** *Public Concern: The managing agencies should include a standard requiring retention of larger snags.*
The desired conditions for snags and large wood on the SJNF and TRFO were reviewed and revised. The changes made include refining the number of snags per acre desired in different size classes for spruce-fir, cool-moist mixed conifer, aspen, warm-dry mixed conifer, and ponderosa pine forests. The revised table showing desired conditions for snags and large wood is included in the Terrestrial Ecosystems section of the LRMP.
- TE13** *Public Concern: The managing agencies should require retention of larger down dead pieces in spruce-fir and cool-moist mixed conifer forests to provide moisture retention, erosion reduction, and wildlife habitat.*
The desired conditions for snags and large wood on the SJNF and TRFO were reviewed and revised. The changes made include refining the number and size of snags per acre desired in spruce-fir, cool-moist mixed conifer, aspen, warm-dry mixed conifer, and ponderosa pine forests. The revised table showing desired conditions for snags and large wood is included in the Terrestrial Ecosystems section of the LRMP.
- TE14** *Public Concern: The managing agencies should protect the old growth ponderosa pine forests.*
LRMP components in the Terrestrial Ecosystems section are expected to be sufficient to protect old growth in all vegetation types.
- TE15** *Public Concern: The managing agencies should clarify the second sentence of the last paragraph on page 27 of the Draft EIS, in regard to the term "unmanaged," and clarify the scale that that sentence refers to.*
The term "unmanaged" in this context refers to historic livestock grazing that occurred prior to the areas being managed by the USFS or BLM.
- TE16** *Public Concern: The managing agencies should define "landscape linkage areas."*
Linkage areas are defined in the glossary as areas that provide connectivity between blocks of lynx habitat. Linkage areas occur both within and between geographic areas, where basins, valleys, or agricultural lands separate blocks of lynx habitat, or where lynx habitat naturally narrows between blocks.
- TE17** *Public Concern: The managing agencies should clarify the potential impacts to special biological diversity features from oil and gas development.*
Even though oil and gas development could quadruple, impacts to special biological diversity features would be minimal because these areas are protected by NSO stipulations. Please note, for organizational consistency the Special Biological Diversity Features section has been moved into Terrestrial Ecosystems and Riparian Areas and Wetland Ecosystems.
- TE18** *Public Concern: The managing agencies should define what "rare or unique vegetation types" and "structural representations" are, where they are, and if industry would have access to them.*
In the Mineral and Energy: Fluid Minerals section of the FEIS, the words "those rare or unique vegetation types or structural representations" were used to describe old growth forests, special botanical areas, and RNAs. Special lease stipulations would be applied at the lease issuance stage to old growth forests and woodlands (CSU), special botanical areas (NSO), and RNAs (NSO). Appendix H shows all special lease stipulations and describes the purpose, justification, exceptions, modifications, and waivers associated with each NSO and CSU stipulation. Maps

showing the location of special botanical areas and RNAs can be found in the FEIS. Old growth areas are typically determined at the project level and are not shown on maps in the FEIS or LRMP.

- TE19 *Public Concern: The managing agencies should revise the discussion of impacts on unroaded areas to clarify that lightly used roads do not cause habitat fragmentation.***
The Special Biological Diversity Features section of the Draft EIS was deleted along with the associated “unroaded lands” paragraph and the Dobson et al. (1999) reference. Information related to unroaded and undeveloped lands on SJNF and TRFO and their ecological significance is now located in Section 2.1 – Ecological Framework and the Conservation of Species.

4.30 Timber Management and Special Forest Products

- TM1 *Public Concern: The managing agencies should clarify whether desired conditions vary between lands that are suitable or not suitable for timber production.***
Desired conditions for timber and other forest products have been revised. Desired conditions now reflect efforts to “maintain[s] or improve[s] ecosystem function, resilience, and sustainability” when conducting “forest vegetation management that results in, among other objectives, meeting needs or demands for forest product offerings.” Note that this is just one of eight conditions that the SJNF would strive to meet when timber products result from forest vegetation management. Also note that the desired condition to maintain or improve ecosystem function falls across lands classified as “suitable” or “not suitable” for timber production. We do not believe in pursuing forest vegetation treatments—on suitable or not suitable lands—that could compromise ecosystem function in the long term. The range of forest vegetation conditions and associated functions are highly complex and varied, and best suited, to be addressed in project-level analyses.
- TM2 *Public Concern: The managing agencies should revise Desired Condition 19.1 to include commodities and contributions to local economies.***
The desired conditions regarding timber have been rewritten for consistency and clarification. Please see the Timber and Other Forest Products section of the LRMP.
- TM3 *Public Concern: The managing agencies should add a desired condition that identifies timber harvest as a strategy for restoring ecologically desired forest conditions because the current desired conditions fail to identify restoration of degraded forests as a desired outcome.***
The approach taken with the LRMP in regards to desired conditions is to state desired conditions that are reached through management. Given the comments above, we feel that “program objectives” is the section of the LRMP best suited to disclose the tools that would be used to meet desired conditions. There are several areas where program objectives speak to the appropriate use of timber harvest to achieve desired conditions. For instance, there are five different program objectives, under Terrestrial Ecosystems, that speak to the use of harvest to meet differing objectives in various cover types. There are numerous other areas in the LRMP, or FEIS, that make mention of timber harvest as a means to meet forest vegetation goals.
- TM4 *Public Concern: The managing agencies should consider removing slash from areas that would be subject to prescribed burn.***
The design criterion dealing with slash from mechanical forest vegetation treatments has been revised to better apply to the treatment(s) and forest cover type in question, allowing flexibility to adjust to differing site conditions. Please refer to the Terrestrial Ecosystems section of the LRMP.
- TM5 *Public Concern: The managing agencies should revise Objective P.3.2 to ensure it is consistent with other direction in the LRMP regarding the quantity of harvest of cool-moist conifer and spruce-fir forests.***

The objectives regarding timber have been rewritten for consistency and clarification. Please see the Timber and Other Forest Products section of the LRMP.

TM6 *Public Concern: The managing agencies should provide detailed descriptions of desired slash levels.*

The guideline for managing slash has been rewritten. Please refer to the Terrestrial Ecosystems section of the LRMP. Please note that detailed descriptions of desired slash levels are best addressed in project-level analyses, given the wide range of site conditions that could occur.

TM7 *Public Concern: The managing agencies should ensure that proposed timber suitability is consistent with Guideline II.D for soils to protect watersheds that are most sensitive to anthropogenic disturbance.*

Most of the watersheds sensitive to anthropogenic disturbance are found on the west side of the forest and are associated with high gradient streams and steep canyon side slopes. Although the entire watershed is labeled as sensitive, the real concern lies with the streams and the canyon slopes. During the process of determining lands suitable for timber production (as per NFMA), lands where irreversible soil damage may occur if timber management treatments are implemented are removed from the suitable base. In this process the canyon side slopes and valley bottoms were removed from suitability. The intent of including the watersheds most sensitive to anthropogenic disturbance in the Draft LRMP was to highlight watersheds that may have site specific concerns as a coarse filter, but not necessarily to say that disturbance cannot occur in them.

TM8 *Public Concern: The managing agencies should resolve conflicts between the LRMP and timber contracts in regards to slash loads.*

A guideline addressing slash resulting from forest vegetation treatments has been revised for accuracy and clarification. Please refer to the Terrestrial Ecosystems section of the LRMP.

TM9 *Public Concern: The managing agencies should increase the number of seedlings per acre to certify adequate conifer regeneration.*

The number of seedlings required to restock a conifer stand can vary widely—both within stands and from stand to stand—and is based on a silvicultural prescription written by a certified silviculturist. The minimum number in Table 2.9.3 is just a minimum, and may be increased based on the prescription, or a prescription may only require as few as 150 seedlings in some cases. Increasing the number to 300 could result in planting excess seedlings, and most planting comes at a high cost when one includes all aspects tied to planting (i.e., gathering cones, extracting and storing seed, sowing seed and caring for seedlings, lifting, packaging and refrigeration of seedlings, shipping to a planting site, planting, and monitoring of planted trees). Expected mortality, form, and vigor are always considered before a silviculturist certifies a stand. The intent is to re-establish a stand to meet future timber production objectives on suitable timberlands except in cases where a harvest objective was other than timber production.

TM10 *Public Concern: The managing agencies should avoid the use of seed cutting because it is inappropriate for ponderosa pine and mixed conifer stands.*

The seed-tree silvicultural system is rarely used on the SJNF and TRFO, and that trend would be expected to continue over the life of this revised LRMP. We do intend to retain this system as a means to meet objectives in the rare occasions where it may be the most effective silvicultural tool. As noted in *Silvicultural Systems for the Major Forest Types of the United States* (USFS 1983), "[t]he seed tree...method [is] appropriate depending on insect and disease infestations and site and stand conditions." Particularly on moist sites, moderate to severe dwarf-mistletoe infested stands may best be harvested under a seed-tree prescription, taking advantage of the few less infected trees to regenerate a site. This method can also be used in areas of high bark beetle risk.

TM11 Public Concern: The managing agencies should correct the estimates of demand for timber because reduced demand is directly related to USFS budget constraints and not industry capacity.

As stated in the FEIS, both timber demand and timber industry capacity have decreased, particularly demand for conifer-based products. This trend has been ongoing for many years. Demand for such products could see an increase during the period of this revised LRMP but there is no current compelling evidence for such a trend at this time. USFS budgets do have an impact on timber product offerings, but the history of mill closures over the last two decades, coupled with recent numerous no-bid offerings, provide evidence for the statement above. The severe downturn in the regional and national economy, and its influence on wood product values, has had a profound effect on timber purchaser viability; unfortunately, recovery from this downturn is expected to be slow, further delaying significant increases in timber product demand.

TM12 Public Concern: The managing agencies should add forest health to the goals of the LRMP revision to avoid the worst-case scenarios.

Section 2.1 of the revised LRMP establishes an “ecological framework” that sets the stage for management of SJNF and TRFO lands over the life of this LRMP. Though the term “forest health” is not explicitly stated, the ecological framework incorporates key concepts that tie directly to fostering and maintaining sustainability and resilience of the forest environment—or, in other words, ensuring forest health. The desired conditions, objectives, and other key components of the LRMP establish and enforce goals for ensuring forest health.

TM13 Public Concern: The managing agencies should revise the language related to timber harvest to eliminate the appearance of bias against active forest management.

We agree that forest health is an important issue. The recent and potential impacts of insects and disease on the forest environment have been bolstered in the FEIS. We believe the FEIS and LRMP better reflect the need to bring this to the attention of forest staff and affected publics, and to provide direction to effectively influence forest health where possible. Also, we have attempted to better disclose the limitations of the SJNF to affect forest health, given that 1) the bulk of the SJNF is without roaded access for treatments requiring motorized equipment (particularly, vehicles) and 2) expansion of wildland fire to serve to positively influence forest health entails substantial challenges.

TM14 Public Concern: The managing agencies should use active management, including timber harvest to enhance old growth attributes.

Our standards and guidelines allow "projects that maintain, improve, or restore old growth components or function."

TM15 Public Concern: The managing agencies should not permit salvage logging within MA 3 following fire, insect outbreaks, or wind events because it is inconsistent with the objectives for the management area.

Salvage logging could only take place outside roadless areas. The bulk of MA 3 is roadless. Note the description indicates that "Roads...are present, although uncommon. Management activities are allowed, but limited." Hence, the majority of MA 3, regardless of disturbance by fire, insects and disease, or wind, would not undergo salvage logging and would reflect the result of natural ecological processes.

Within the limited roaded portions of MA 3, salvage logging could be initiated to provide for public safety along open roads or adjacent private land following mortality-inducing disturbance events (similar to efforts conducted following the Missionary Ridge wildfire of 2002). It might also be used to reduce future fuel loading (say, prior to standing dead falling and adding to ground fuels). There are many such areas adjacent to private lands where this would be appropriate from a WUI standpoint. We believe the scale of such harvesting would not detract from the overall "natural landscapes with limited management" theme of MA 3 lands.

Lastly, from a suitability standpoint, timber "production" would be prohibited in MA 3 lands. The intent is to have salvage harvest, like many tools, as a means to meet other objectives, like the examples above.

TM16 *Public Concern: The managing agencies should not prioritize harvesting trees killed by fire, insects, or wind throw because of the lack of science supporting this priority.*

Removal of dead trees to capture their value and provide forest products to the American people is part of the desired conditions for the timber program. There are good reasons to retain dead trees for wildlife habitat, soils protection, etc.; however, given the very active insect and disease conditions currently, there is generally many more dead trees than are required to meet those needs. We may need to prioritize the removal of trees killed by insects, disease, fire, or wind throw over green trees to utilize them prior to decay. Harvest of dead in lieu of green trees is just good resource conservation given that the dead trees are useable only for a short time and live trees would continue to grow and generate wood fiber. All projects on the SJNF and TRFO need not improve or achieve desired ecological conditions if they meet other desired conditions such as timber production, public safety, fuels treatment etc., and do not create unacceptable environmental costs.

TM17 *Public Concern: The managing agencies should include timber harvest as a tool to achieve the desired condition for spruce-fir and cool-moist mixed conifer and to support the desired condition for aspen.*

Although there are large acreages of these timber types on the forest, most are in wilderness or roadless areas. Hence, of the total SJNF and TRFO acres of cool-moist mixed conifer, only about 19% falls in suitable timberlands (that is, roaded, less than 35% slope, and appropriate for ground-based harvesting equipment). Similarly, approximately 15% and 23% fall in suitable timberlands for spruce-fir and aspen, respectively.

We agree that timber harvest should be used as a tool for the management of these timber types. However, it would be difficult to increase harvest levels in the short term while meeting other desired conditions within lands suitable for harvest. Within the roaded portion of these timber types the mix of age classes is much more evenly distributed, limiting the need for harvest, during the life of this LRMP. Roadless portions of the forest have a much higher proportion of mature stands, but fire, or insects and disease, would be the primary agents of change in those areas.

TM18 *Public Concern: The managing agencies should reconsider the proposal to harvest 50 acres of spruce-fir forests each year because there is no ecological justification for harvest of this forest type.*

We agree that hazardous fuels treatments are rarely needed in the spruce-fir type. There are other objectives expected to be met over this limited scale. For instance, within MA 5 timber production is an objective. Timber harvest may occur within these lands to provide forest products to the American people, as long as it can be accomplished within environmental constraints. For instance we have identified the need to establish young age classes of spruce-fir forests. As a result of fire suppression, these forests have missed the small-scale disturbances that occur with small fires that create openings and opportunities for new regeneration to become established. Uneven-aged management, group selection and single-tree selection have been proposed to both mimic those natural disturbances, and provide forest products. We recognize that most large-scale disturbance would occur due to insects (i.e., spruce beetle) or fires; that is why we have proposed a very small proportion of the spruce-fir stands to be converted to young age classes by timber harvest (50 acres per year out of 498,000 acres of spruce-fir cover type). (The current spruce beetle epidemic, largely falling within and encompassing the eastern two-thirds of the Weminuche wilderness, is resulting in a major shift in development stage within the spruce-fir forest type.)

TM19 *Public Concern: The managing agencies should clarify when timber harvest could occur when it is incompatible with desired conditions and objectives.*

There are no lands suitable for timber production outside MA 5; however, timber harvest is allowed for purposes other than timber production, such as hazardous fuels reduction, forest restoration, hazard tree removal, or improvement of forest health. Since timber harvest would only occur in these areas for purposes other than timber production, the desired conditions, objectives, and standards and guidelines for other resources apply and would drive projects. In such cases, timber harvest is used as a tool to meet such objectives. Reasons to harvest would be variable and difficult to list. Harvest levels, as displayed in Table 8, under "other lands," could vary widely, depending on a number of factors such as the rate of development at or near the WUI coupled with climate change. Together, these two factors may drive a need for fuels reduction and forest restoration in MA 7 or similar lands. The largest acreage of "other lands" where timber harvest could occur is found in MA 3, which restricts road construction to temporary roads for fuels or restoration treatments. In addition, restrictions on activities within roadless areas would severely limit timber harvest primarily to the proportionally small roaded portions of MA 3. We believe, given the above, that the LRMP and other regulatory direction provide adequate guidance for timber harvesting activities.

TM20 *Public Concern: The managing agencies should provide the criteria for determining timber harvest suitability to clarify the differences between the alternatives.*

The process for determining timber harvest suitability is driven by and clearly identified in the planning regulations and NFMA and was not repeated in this LRMP. The only lands that are suitable for timber production are mapped as MA 5, which varies by alternative. Timber harvest may occur on "other lands" if MA direction allows and the lands are tentatively suitable (biologically capable and administratively available). However, those lands are not considered suitable for timber production and hence, are not included in the calculation of allowable sale quantity (ASQ). There are no roadless lands based on the new inventory included in the LRMP that are mapped as suitable for timber production (MA5). All lands that would have irreversible soil damage occur if timber management treatments are implemented have been removed from suitability and tentative suitability.

TM21 *Public Concern: The managing agencies should monitor volume sold for timber.*

The SJNF and TRFO do track timber sale volumes, as is evident from Figure 3.9.2 in the FEIS. As to the question whether timber sale volume should become a formal monitoring effort, volume sold is not legally required and is, to a great degree, affected by factors beyond the control of SJNF and TRFO decision-makers—primarily industry demand for material coupled with appropriated funding by Congress. Sale volume would always be an important issue, but we do not feel it should become a monitoring requirement due to inability to control the above factors.

TM22 *Public Concern: The managing agencies should not increase the intensity of aspen harvest.*

Information presented in the FEIS points out that demand for aspen products for local industry amounts to about 13 million board feet (MMBF) annually. The projected volume under the Preferred Alternative would provide about 43% of the annual demand. A question that arose at a 2004 aspen workshop was whether the SJNF and TRFO could provide half of that annual demand. Tables 2.2.1 and 2.2.2 in the LRMP reflect a large proportion of mature closed aspen forests, more so than is desired. Hence, increasing aspen harvests over the life of this LRMP would better meet local industry demand and desired conditions for age class distribution.

TM23 *Public Concern: The managing agencies should increase the projected spruce fir timber harvest acres to achieve a higher proportion of young spruce fir.*

The current, ongoing spruce beetle epidemic, while disappointing to many publics given the widespread mortality in Engelmann spruce (and to a lesser extent, blue spruce), is likely serving to help meet desired conditions for expanding acres dominated by the young development stage. The loss of overstory spruce is stimulating growth in understory spruce and fir (i.e., seedlings, saplings, and poles), where established. In addition, young spruce-fir stands are found within the suitable timber base as a result of past harvests. The bulk of mature spruce-fir is found in wilderness and roadless, where active timber management is not allowed.

TM24 *Public Concern: The managing agencies should acknowledge that timber harvest does not affect streamside vegetation.*

Timber harvest can affect streamside vegetation. An example, discussed in the FEIS, could be where road construction or reconstruction occurs across a stream course. In cases where trees need to be removed at the intersection of streamside and road corridors, an impact to that vegetation would result. Given the expected minimal road construction or reconstruction associated with this LRMP, the impacts would be limited. Also, if not properly buffered, timber harvest could have an influence on streamside vegetation, largely through sedimentation from adjacent harvested areas (e.g., from erosion off of skid trails into the streamside corridor). However, little effect to streamside vegetation from timber harvest should result based on the LRMP planning components.

TM25 *Public Concern: The managing agencies should evaluate the impact of sudden aspen decline on aspen populations.*

The SJNF vegetation simulator modeling indicates annual net growth of 14,135 hundred cubic feet in the aspen strata not including aspen treated in the mixed conifer types, which is 141% of the volume needed to sustain the 500-acre figure estimated in the LRMP and includes historical levels of mortality. The long-term effects of sudden aspen decline are yet unknown, but the effects are primarily focused on lower-elevation stands, which do not represent the most productive portion of the aspen suitable base. If significant changes in suitable acres do occur that would make a change in ASQ necessary, the LRMP would need to be amended; however, that does not appear to be necessary at this time. As we continue to apply adaptive management and monitor mortality levels in all species, estimates of acres treated may change. These are only estimates of harvest levels and are affected by many variables.

TM26 *Public Concern: The managing agencies should resolve the contradictions in desired conditions, objectives, standards, and guidelines related to biomass removal during timber harvest and fuel reduction efforts.*

All LRMP components regarding biomass removal during timber harvest and fuel reductions have been updated for accuracy and clarification.

TM27 *Public Concern: The managing agencies should clarify how clearcuts would help develop desired age class diversity.*

Age-class diversity is measured at the landscape scale or larger. Aspen grows in even-aged stands. The desired condition is to have even-aged stands of varied ages classes across the landscape rather than most stands of the same age. Clearcuts stimulate regeneration (via suckering) of the youngest age class (seedlings), which then grow up through the various age classes to maturity in approximately 100 years.

TM28 *Public Concern: The managing agencies should modify the Timber Sale Program Quantity to show annual sale of 6.5 MMBF of aspen.*

The FEIS does not recommend or commit the SJNF and TRFO's to meeting 50% of the annual aspen demand. The discussion specific to aspen actually ends with: "Can 50% of the annual aspen demand...be sold off of the SJNF, while operating within the consensus reflected by [agreed-upon parameters surfaced at an aspen workshop in 2004]?" The San Juan growth and yield information determined that, based on assumptions of long-term sustained yield capacity, the SJNF and TRFO can consistently produce 500 acres of aspen harvest, or approximately 5.65 MMBF. The estimated volume would provide about 43% of the annual 13 MMBF demand, while meeting other SJNF and TRFO desired conditions, objectives, standards, and guidelines.

4.31 Terrestrial Wildlife

TW1 *Public Concern: The managing agencies must make use of all the best available scientific information in regard to elk and mule deer to account for more recent and accurate data on the population objectives for those species including information on impacts on elk and mule deer from roads, traffic, and oil and gas development.*

The LRMP and FEIS have been updated with the best available scientific information in regard to elk and mule deer. Please refer to the Terrestrial Wildlife section of these documents.

TW2 *Public Concern: The managing agencies should revise the assumptions related to big game herd populations because winter range is the limiting factor and it is shrinking.*

The assumptions related to big game herd populations have been updated for accuracy and clarification. Winter range is identified as an increasingly important factor for big game and is considered to the extent applicable within the analysis of impacts on big game.

TW3 *Public Concern: The managing agencies should support conservation of adjacent private lands and assist landowners in receiving compensation from CPW for losses attributable to big game.*

Reimbursements to private landowners for game damage are beyond the scope of USFS and BLM authorities. CPW does have a game damage program to reimburse landowners for game damage if program criteria are met. The agencies coordinate with CPW on projects occurring on federal lands that support the state effort and concerns for private land impacts. These cooperative projects, involving many partners, are designed to improve winter range habitat on public lands with the intention of helping to reduce big game dependence on private agricultural lands. The condition of thousands of acres of winter range is being improved over the planning area under this cooperative effort.

TW4 *Public Concern: The managing agencies should not provide habitat for elk above the population objectives to allow for other resource programs and objectives.*

Desired conditions regarding elk have been rewritten for accuracy and clarification. Desired conditions in the LRMP are such that habitat on SJNF and TRFO are not the limiting factor in meeting CPW population objectives. Elk populations are currently within the long-term state population objectives outlined for the three elk herds within the SJNF and TRFO. Elk are considered generalists and utilize a variety of habitats that also support a variety of agency multiple use objectives including timber uses. Traditionally, populations of wildlife species are managed by the state through use of tools such as harvest through hunting.

TW5 *Public Concern: The managing agencies should include language to adopt the Canada lynx conservation measures provided by the Southern Rockies Lynx Amendment.*

The Southern Rockies Lynx Amendment has been finalized since the publication of the Draft LRMP. It has been adopted as direction for this LRMP revision. The Terrestrial Wildlife section of the LRMP and FEIS has been updated for accuracy and clarification.

TW6 *Public Concern: The managing agencies should revise Desired Condition 10.4 to refer to Canada lynx habitat and not populations to be consistent with the other desired conditions.*

Desired conditions for Canada Lynx have been removed and replaced by Desired Condition 2.3.1 that addresses habitat and population linkages.

TW7 *Public Concern: The managing agencies should publish a map of proposed Canada lynx habitat for review and comment prior to release of the FEIS to ensure that effects are accurately analyzed and disclosed.*

The Southern Rockies Lynx Amendment has been completed since the Draft LRMP was published and has been adopted as direction for the LRMP revision. This amendment, which included habitat definitions, was open to public review and comment during that development process. Mapping lynx habitat was an administrative process that utilized the current definition of habitat outlined in the amendment and adjustments for local conditions. This was done as a coordinated effort between adjacent USFS units and agency specialists for the landscapes that share a similar ecological condition in southwest Colorado along with close coordination with the USFS, CPW, and other managing agency units involved in the remapping efforts. The maps are available to the public on request.

- TW8 Public Concern: The managing agencies should identify all lynx habitat linkage areas and provide for their long-term maintenance.**
Landscape linkage areas on the SJNF and TRFO and LRMP components related to them (which provide for their long-term protection) are described in the Terrestrial Wildlife sections of the LRMP and FEIS.
- TW9 Public Concern: The managing agencies should incorporate standards and guidelines to protect wild sheep populations from disease transmission from domestic sheep.**
Appropriate LRMP-level standards and guidelines are incorporated to address disease transmission from domestic sheep and goats to wild bighorn populations.
- TW10 Public Concern: The managing agencies should discontinue the policy of eliminating sheep grazing on existing allotments because science does not yet support a connection between domestic sheep and bighorn sheep population declines.**
The LRMP sets overall guidance through standards and guidelines concerning bighorn sheep and domestic livestock. This guidance is implemented at subsequent stages of planning through a variety of proposed management activities designed to achieve overall LRMP direction. The agencies do not have a policy of eliminating sheep grazing on existing allotments. Decisions concerning individual allotment management and status are made through the administrative and/or NEPA process at the “project level” and, as such, are beyond the scope of decisions being made within this LRMP revision.
- TW11 Public Concern: The managing agencies should acknowledge that extensive stands of sagebrush are required for sage-grouse populations to persist.**
An analysis of existing conditions of sage-grouse habitat is contained in the FEIS. The impacts of the alternatives in the LRMP to sage-grouse and sage-grouse habitat are disclosed in the FEIS.
- TW12 Public Concern: The managing agencies should revise the desired conditions for Gunnison sage-grouse because they are unduly restrictive.**
Desired conditions for terrestrial wildlife have been rewritten, and there are no desired conditions specific for Gunnison sage-grouse. However, desired conditions that address habitat conditions for special status species would apply to Gunnison sage-grouse.
- TW13 Public Concern: The managing agencies should add objectives to address management of Gunnison sage-grouse.**
An objective was added to address Gunnison sage-grouse habitat.
- TW14 Public Concern: The managing agencies should add objectives and desired conditions aimed at restoring and maintaining viable populations of Gunnison sage-grouse to avoid contributing to the need to list the species under the ESA.**
Desired conditions for special status species would apply to Gunnison sage-grouse and Gunnison sage-grouse habitat. An objective was added to address Gunnison sage-grouse habitat.
- TW15 Public Concern: The managing agencies should manage lands for the protection of Gunnison’s prairie dogs because the montane portions of their range contain populations that are eligible for listing under the ESA.**
Consultation with the USFWS indicates that all populations of Gunnison’s prairie dog occurring across SJNF and TRFO are still considered as the prairie population and not the montane population. The prairie species is a BLM and USFS sensitive species and is considered and managed, as such, under each agency’s guidance for the sensitive species program.
- TW16 Public Concern: The managing agencies should revise the discussion of the impacts of roads on raptors to allow for variances when birds have adapted to routine human disturbance.**

The FEIS has been updated to address raptor habitation to increased activity. Refer to the section titled Wildlife Issues Related to Migratory Birds.

TW17 *Public Concern: The managing agencies should include nesting conservation measures that are specific to bald eagles.*

Conservation measures have been developed that are specific to various raptor species. Bald eagles have conservation measures that are specific to bald eagle biology.

TW18 *Public Concern: The managing agencies should remove references to MIS from the LRMP because current planning rules eliminate this requirement and to clarify that this requirement would not apply to BLM lands and to comply with current planning rules and court rulings.*

The LRMP is written under the provisions of the 1982 Planning Rule. As such, MIS are a required component of the planning process. MIS apply to NFS lands (as required by 36 CFR 219); they do not apply to BLM lands.

TW19 *Public Concern: The managing agencies should revise the design criteria for marten because they would prevent management of spruce-fir forests.*

Design criteria for marten and other MIS have been removed from the LRMP as applying these standards and guidelines to MIS is not compatible with the purpose of using these species to monitor change from management activity.

TW20 *Public Concern: The managing agencies should revise Objective I.8 because logging would harm habitat for marten.*

The objective for pine marten has been re-written to address management actions to improve marten habitat.

TW21 *Public Concern: The managing agencies should revise or delete Objective I.1 because it provides no useful guidance because it is vague and provides insufficient concrete guidance.*

Objective I.1 was replaced by Objective 2.3.24. The intent of the objective remains unchanged. This objective did not identify specific species to improve habitat in order to provide flexibility and allow for project to improve habitat for species not addressed in other objectives.

TW22 *Public Concern: The managing agencies should revise Objective I.5 to clarify what constitutes improvement of Abert's squirrel habitat.*

The objective for Abert's squirrel habitat references the Abert's squirrel species assessment for SJNF. Habitat requirements are identified in the species assessment.

TW23 *Public Concern: The managing agencies should revise or delete Objective I.7 because it would not likely benefit mountain bluebird and it would not reduce sudden aspen decline.*

The objective for mountain bluebird has been deleted.

TW24 *Public Concern: The managing agencies should revise the design criteria for Abert's squirrel because they are conflicting and unclear.*

Design criteria for Abert's squirrel and other MIS have been removed from the LRMP as applying these standards and guidelines to MIS is not compatible with the purpose of using these species to monitor change from management activity.

TW25 *Public Concern: The managing agencies should revise the MIS objective for mule deer and elk because they are too conservative.*

There are no MIS objectives for mule deer. The MIS objective for elk calls for improvement of 5,000 acres over the life of the LRMP, which would constitute significant habitat improvement. Objectives are partially based on what agencies feel they can accomplish based on current workload, budget, and personnel.

- TW26** *Public Concern: The managing agencies should include MIS monitoring including use of CPW data and clarification of the use of habitat to gauge population health and to ensure adequate protection of ecosystems and species.*
The management of MIS applies only to NFS lands as required by the 1982 Planning Regulations at 36 CFR 219; it does not apply to BLM lands. MIS serve several related functions in LRMP development and implementation. MIS are intended as a tool to establish explicit objectives for wildlife and fish habitat, analyze the degree to which alternatives meet those objectives, and monitor the effects of implementation. Changes in MIS populations or their habitats may indicate that current management is affecting the composition, structure, or function of those habitats, resulting in LRMP direction not being met, and need for changes in management direction. The SJNF would use data from CPW and other sources to inform MIS analysis and trends.
- TW27** *Public Concern: The SJNF should increase the numbers of MIS to fully address potential management activities to ensure there are indicators for most proposed management activities and major vegetation types, and because the proposed list is inadequate to cover the range of conditions and ecosystems that should be monitored.*
The LRMP includes an adequate number of MIS species to monitor the SJNF major management issues and challenges. MIS serve several related functions in LRMP development and implementation. MIS are intended as a tool to establish explicit objectives for wildlife and fish habitat, analyze the degree to which alternatives meet those objectives, and monitor the effects of implementation.
- TW28** *Public Concern: The SJNF should include a MIS for mountain grasslands to monitor for impacts from grazing.*
The LRMP includes an adequate number of MIS species to monitor the SJNF major management issues and challenges. Impacts from grazing are monitored with different approaches, including project-level analysis.
- TW29** *Public Concern: The SJNF should reconsider the identified MIS to ensure that the best indicator species have been selected.*
The SJNF utilized the five principals for use in selection of MIS as identified in "Region 2 Management Indicator Species Selection Process and Criteria" by Hayward, G.D., N.M. Warren, B. Parrish, M. Williams, C. Liggett, and V. Starostka (2004). The LRMP includes an adequate number of MIS species and those that are most effective for monitor the SJNF major management issues and challenges.
- TW30** *Public Concern: The SJNF should describe suitable or optimal habitat for each MIS.*
Habitat models have been developed for the terrestrial MIS wildlife species. The Draft EIS describes habitat characteristics for these MIS on pages 3.163 through 3.166, and this information is also included in the FEIS. A more detailed discussion, which includes suitable and optimal habitat, is found in the project record for the MIS assessments. This is available for review upon request.
- TW31** *Public Concern: The managing agencies should add a discussion of the potential for snowmobiles to cause snow compaction and the consequences for coyotes.*
The Southern Rockies Lynx Amendment recognizes that snow compaction may affect individual lynx. The amendment provides for the flexibility to evaluate and accommodate where research indicates there would be no harm to lynx. The Southern Rockies Lynx Amendment was in draft form at the time of the Draft LRMP publication. The LRMP has been updated to include Southern Rockies Lynx Amendment direction and research considerations concerning snow compaction.
- TW32** *Public Concern: The managing agencies should revise the timing limitations to place greater limitation on direct and indirect losses of big game winter range and should include production and reclamation in restricted activities.*
Timing limitations for big game winter range and parturition only restrict construction and drilling and were developed in coordination with CPW. Production and maintenance may continue

during the critical dates. Standards and guidelines, desired conditions, and objectives provide guidance for project and activity decision making in order to protect resources such as wildlife and their habitat, during and after development.

TW33 *Public Concern: The managing agencies should adequately define "threshold levels of concern" and remove the inaccurate term "unregulation oil and gas development" in the direct and indirect impacts section for wildlife.*

The direct and indirect impacts to wildlife from oil and gas development have been revised for accuracy and clarification. Please refer to the Terrestrial Wildlife section of the FEIS.

TW34 *Public Concern: The managing agencies should restrict development or apply NSO stipulations in critical elk and mule deer habitat.*

The managing agencies have coordinated with CPW in the identification of important habitat and effective guidance for elk and mule deer on public lands. Stipulations, standards and guidelines, objectives, and desired conditions have been written to protect critical elk and mule deer habitat during development.

TW35 *Public Concern: The managing agencies should remove the 4-mile NSO restriction around Gunnison sage-Grouse lek sites and revise stipulations to be consistent with the Gunnison sage-Grouse Rangewide Conservation Plan.*

The Supplement to the Draft EIS and leasing stipulations do not include an NSO at a 4-mile buffer around leks. There is a timing limitation at a 4-mile buffer around leks and a NSO at a much smaller buffer distance of 0.6 mile contained in the CSU stipulation. The 0.6-mile NSO buffer is consistent with the Gunnison Sage-grouse Rangewide Management Plan.

TW36 *Public Concern: The managing agencies should clarify which maintenance activities would be impacted by timing limitations for wildlife.*

Timing limitations for wildlife have been revised for clarification.

TW37 *Public Concern: The managing agencies should include mitigation measures in addition to season/timing limitations for wildlife.*

The LRMP includes mitigation measures for the protection of wildlife beyond those associated with timing limitations; additional mitigation measures may be addressed during subsequent project level analysis.

TW38 *Public Concern: The managing agencies should develop specific standards and guidelines to protect wildlife in the GSGP area.*

Additional standards, guidelines, and leasing stipulations have been developed to address wildlife concerns in areas where development may occur (including the GSGP). Please refer to the Terrestrial Wildlife section of the Final LRMP and Appendix H.

TW39 *Public Concern: The managing agencies should perform a more thorough evaluation of the impacts to wildlife from existing leases in the GSGP.*

The impact analysis have been revised and impacts to wildlife from existing leases and future leasing, based on the RFD scenario, are analyzed by alternative.

TW40 *Public Concern: The managing agencies should include a discussion of potential impacts of development in the GSGP on Columbian sharp-tail grouse and address noise impacts to both Columbian sharp-tailed grouse and the Gunnison sage-grouse.*

Impacts to Gunnison sage-grouse are addressed in the Terrestrial Wildlife section of the FEIS. Impacts to sharp-tailed grouse are address in Appendix T.

TW41 *Public Concern: The managing agencies should included additional limitations on noise and the density of surface facilities to support existing population levels of all terrestrial wildlife in the GSGP.*

Additional standards, guidelines, and leasing stipulations have been developed to address potential effects to terrestrial wildlife species (including noise-related direction). Guidelines have been developed specific for Gunnison sage-grouse to address noise (2.3.71) and density of facilities (2.3.72). Please refer to the Terrestrial Wildlife section of the LRMP and Appendix H.

TW42 *Public Concern: The managing agencies should explain how cattle grazing has a positive impact on elk winter range.*

The FEIS addresses beneficial effects associated with livestock grazing including improvement in plant vigor that increases forage quantity and quality for herbivorous and omnivorous mammals.

TW43 *Public Concern: The managing agencies should remove the Miller et al. 1996 reference on page 3.153 of the Draft EIS because it is inconsistent with the cited research.*

The FEIS has been updated with references that use the best available science. The reference cited by the commenter has been removed in this context.

TW44 *Public Concern: The managing agencies should remove the section titled "Landscape Connectivity" because it is not within the scope of the SJNF and TRFO LRMP.*

Landscape connectivity is very much within the scope of the LRMP since lynx, which is a wide-ranging threatened species that occurs on SJNF and TRFO, needs access to multiple landscapes and landscape connectivity to facilitate its need for food, mates, and genetic interchange.

TW45 *Mule deer migration corridors should be designated within MA 2 and should contain a standard that all projects, activities, and infrastructure would be designed, timed, and located to ensure continued successful migration of mule deer.*

The LRMP contains standards and guidelines that address wildlife corridor protection, as well as oil and gas leasing stipulations that take movement corridors into consideration. Including all corridors within MA 2 would not be the appropriate tool to protect these areas because movement corridors are dynamic and should be recognized across all the various MAs.

4.32 Water

WA1 *Public Concern: The managing agencies should consider additional application of NSO lease stipulations for wells in all watersheds (with the possible exception of Disappointment Valley) in the Final LRMP/FEIS.*

The LRMP has been revised to include new stipulations and standards and guidelines protective of groundwater across the planning area. Please refer to the Water section of the LRMP and Appendix H.

WA2 *Public Concern: The managing agencies should include more information on efforts to reduce or minimize pollutant loads and restore support for designated beneficial uses for the impaired waters and specify whether the proposed activities are consistent with pollutant load allocations or water quality targets established in total maximum daily loads.*

Objectives regarding water have been rewritten for clarification and accuracy, including an objective for waters not meeting the state's beneficial uses. Please refer to the Water section of the LRMP.

WA3 *Public Concern: The managing agencies should more fully explain whether and/or how each of the proposed actions would contribute to the dewatering of the Fruitland Formation.*

Dewatering of the Fruitland Formation has been addressed in greater detail in the FEIS. Please refer to the Environmental Consequences of the Water section in the FEIS.

WA4 *Public Concern: The managing agencies should create a watershed restoration objective for the Hermosa Creek headwaters to enhance watershed function and integrity.*

Objectives regarding water and watershed restoration have been rewritten for accuracy and clarification. Please refer to the Water section of the LRMP.

WA5 *Public Concern: The managing agencies should include information regarding discharge into navigable waters and the applicability of Section 401 of the Clean Water Act to permitting and licensing activities in the planning area.*

The LRMP should not repeat laws, regulations, and policies if at all possible. Applicable laws and regulations are summarized in Additional Referenced Guidance in the Water section of the LRMP.

WA6 *Public Concern: The managing agencies should include information in the Final RMP/FEIS regarding how the rest of the water is disposed of, and information regarding disposal of produced water from any future CBM development in the planning area.*

The LRMP has been revised to include new stipulations and standards and guidelines addressing the recycling and disposal of water in association with oil and gas activities across the planning area. The FEIS Environmental Consequences Water section also discusses water disposal in conjunction with oil and gas activities. Please refer to the Water section of the LRMP, FEIS, and Appendix H.

WA7 *Public Concern: The managing agencies should incorporate specific mitigation measures from guidance documents into the sections of Chapter 3 Volume 1 above, in the Design Criteria section, or as an Appendix.*

The design criteria in the LRMP include mitigation measures in the form of standard and guidelines and in the additional referenced guidance. We do not specifically list the mitigation measures from the additional referenced guidance documents because there are many mitigation measures that apply to different areas and different circumstances and because better methods may be identified in the future.

WA8 *Public Concern: The managing agencies should include a standard and/or objective in the Design Criteria (Volume 2) for waters not meeting the state's beneficial uses under existing conditions.*

Objectives regarding water have been rewritten for clarification and accuracy, including an objective for waters not meeting the state's beneficial uses. Please refer to the Water section of the LRMP.

WA9 *Public Concern: The managing agencies should state that any discharges of dredged or fill material associated with individual permits or leases may require a Clean Water Act 404 permit, which would include an additional full alternatives and impacts analysis.*

The LRMP does not repeat laws, regulations, and policies if at all possible. Applicable laws and regulations are summarized in Additional Referenced Guidance in the Water Section of the LRMP.

WA10 *Public Concern: The managing agencies should include information regarding regulation pursuant to the Safe Drinking Water Act, including information and regulation of public water supplies for communities within the planning area.*

The LRMP should not repeat laws, regulations, and policies if at all possible. Applicable laws and regulations are summarized in Additional Referenced Guidance in the Water section of the LRMP.

WA11 *Intentionally left blank.*

WA12 *Public Concern: The managing agencies should include monitoring in the desired conditions for water quality and quantity.*

Monitoring would be addressed in the monitoring and evaluation section of the LRMP and has been addressed in other NEPA decisions for the HD Mountains (e.g. NSJB EIS, 2006). Water

quality and quantity monitoring is a high priority for the SJNF and TRFO in the HD Mountains due to the produced water issues associated with CBM gas production and other activities. Monitoring is also a priority because the SJNF and TRFO must protect its vested water rights for the springs, seeps, and reservoirs. If monitoring shows impacts to surface and ground water resources where federal water rights are affected, and the impacts are related to CBM gas production, augmentation plans through the Colorado Water Court would be required. The SJNF and TRFO, in cooperation with the COGCC and others, have already started long-term monitoring of surface water and groundwater in the HD Mountains.

WA13 *Public Concern: The managing agencies should revise the desired condition related to groundwater to ensure that valid existing rights are not negatively impacted.*

Ground water protection is addressed as a standard in the LRMP. FLPMA (43 USC 1752) states, "Terms and conditions must minimize damage to scenic and aesthetic values and fish and wildlife habitat and otherwise protect the environment " (Sec. 302, 504, 505).

WA14 *Public Concern: The managing agencies should clarify whether further development could be prohibited by Desired Condition 3.13.*

Desired conditions regarding water have been rewritten for clarification and accuracy. Please see the desired conditions in the Water section of the LRMP.

WA15 *Public Concern: The managing agencies should clarify Desired Condition 3.15 and its impact on existing diversions.*

Desired conditions regarding water have been rewritten for clarification and accuracy. Please see the desired conditions in the Water section of the LRMP.

WA16 *Public Concern: The managing agencies should clarify Desired Condition 46.10 to ensure that water quality would meet or exceed attainable state standards to ensure the document is not used in legal actions or against future mining activities.*

The desired conditions regarding for water quality have been rewritten for accuracy and clarification. Please refer to the Water section of the LRMP.

WA17 *Public Concern: The managing agencies should acknowledge the apparent conflict between proposed water rights objectives and regional direction.*

This comment does not cite the correct USFS policy and direction regarding water rights policy. National USFS policy can be found at Forest Service Manual (FSM) 2500 Chapter 2540 Water Uses and Development. The portions of the LRMP cited are in compliance with USFS policy and regulations.

WA18 *Public Concern: The managing agencies should include a comprehensive table of water-related LRMP items to make the LRMP clear and easy to understand.*

The LRMP is organized in such a manner that water-related items are now much easier to locate (Sections 2.1, 2.4, 2.5, and 2.6). In addition, we have included a crosswalk to LRMP components related to aquatic population viability (see Appendix Q).

WA19 *Public Concern: The managing agencies should reference USFS regulations regarding areas managed for municipal water supplies to clarify when NFS lands are managed for municipal water supplies.*

Citation of regulatory authority for municipal water supplies can be found in the Additional Referenced Guidance in the Water Section of the LRMP. In addition, new desired condition statements have been added regarding municipal watersheds and several new stipulations address this issue.

WA20 *Public Concern: The managing agencies should recognize their responsibility to facilitate water development to comply with the Organic Administration Act and court rulings.*

Interpretations of existing law, regulation, and policy may differ. Resolution of these issues is outside the scope of the LRMP.

WA21 *Public Concern: The managing agencies should revise direction related to instream flow and future water development to comply with state law.*

The LRMP direction related to instream flows and future water developments is intended to be responsive to federal laws, policies, and regulations. Depending on the nature of the proposed federal action, state law may or may not be applicable.

WA22 *Public Concern: The managing agencies should ensure that project-specific requirements to protect water quality are implemented and enforced to protect tribal water resources.*

The SJNF and TRFO actively participates in watershed organizations for the Dolores River, Mancos River, Lightner Creek, Hermosa Creek, Pine River, and many other groups. It is anticipated SJNF and TRFO participation in watershed groups would continue into the future. The concept of cooperation with individuals and groups interested in water issues is also discussed in the Water Strategy section of the LRMP.

WA23 *Public Concern: The managing agencies should add BMPs to the discussion of sedimentation to reduce sediment transfer to water.*

BMPs are cited under Additional Referenced Guidance in the Water section of the LRMP. Specifically, many standard BMPs and other design criteria for the protection of water quality can be found at Region 2 FSH 2509.25-2006-1, the USDI/USDA Gold Book BLM/WO/ST-06/021+3071/rev 07, and others.

WA24 *Public Concern: The managing agencies should clarify that the water rights would be used beneficially.*

Desired conditions and objectives for water specifically state they apply to water rights owned by the SJNF and TRFO. Livestock watering rights could be obtained by the SJNF and TRFO for livestock owned by the SJNF and TRFO or under permit. Please refer to the Water section of the LRMP.

WA25 *Public Concern: The managing agencies should revise direction related to water rights to comply with the guidance in the Watershed Conservation Practices Handbook.*

National USFS policy for water rights can be found at FSM 2500 Chapter 2540 Water Uses and Development. The portions of the LRMP cited are in compliance with USFS policy and regulations. The legal authority and direction to monitor, manage and administer special uses on NFS lands, including those project pertaining to water uses and development, and including the requirement to assert terms and conditions can be found at 36 CFR 251, Sec. 50 Subpart B. The use of the FSH 2509.25 is used for watershed conservation practices.

WA26 *Public Concern: The managing agencies should revise the description of the Organic Act as it relates to watershed management to provide an accurate representation of the intention of the act.*

References to the Organic Act have been deleted and would not be included in the FEIS.

WA27 *Public Concern: The managing agencies should clearly define "reference conditions" and how they are related to the HRV to be consistent with the White River Review Decision.*

Reference conditions and their relationship to the HRV and sustainable ecosystems on SJNF and TRFO are more clearly described in the Final LRMP in the Historic Range of Variability section.

WA28 *Public Concern: The managing agencies should revise the water management provisions to ensure they comply with the Four Cornerstones policy.*

The White River Discretionary Review (and Four Cornerstones Policy) does not apply to the SJNF or TRFO. Please see the Water Strategy section of the LRMP where the MOU between the state of Colorado and the USFS and BLM is cited.

WA29 *Intentionally left blank.*

WA30 Public Concern: The managing agencies should clarify that groundwater rights belong to the State of Colorado to comply with the USDA Technical Guide.

In the case of non-tributary groundwater, the state does not own the groundwater; the surface landowner is the owner of non-tributary groundwater. This fact is recognized under Colorado Revised Statute 37-90-137(4), which governs permits to withdraw groundwater from non-tributary aquifers. Section (4)(b)(II) reads as follows: Subject to the provisions of subsections (1) and (2) of this section, the amount of such groundwater available for withdrawal shall be that quantity of water; exclusive of artificial recharge, underlying the land owned by the applicant or underlying the land owned by another: (A) who has consented in writing to the applicant's withdrawal. In the case of tributary groundwater, the state does have jurisdiction over water rights. The SJNF and TRFO is mandated to manage all water resources, including groundwater through FLPMA (43 USC 1752), which requires that "public lands would be managed in a manner that would protect the quality of scientific, scenic, historical, ecological, environmental, air and atmosphere, water resource and archaeological values" (Sec. 102). The SJNF and TRFO have authority to manage ground water on USFS and BLM lands.

WA31 Public Concern: The managing agencies should define "favorable conditions of flow" to be consistent with court precedents and state law.

Desired conditions address the concepts of both good water quality and adequate water quantity to support multiple use management as directed in the Multiple Use Sustained Yield Act of 1960 (16 USC 528), and the NMFA: "Forest programs must protect and/or improve the quality of soil and water." and "Fish habitat must maintain viable populations of existing native and desired non-native vertebrate species." (36 CFR 219.19) and FLPMA (43 USC 1752), which requires that "public lands would be managed in a manner that would protect the quality of scientific, scenic, historical, ecological, environmental, air and atmosphere, water resource and archaeological values" (Sec. 102). The SJNF and TRFO have authority to manage for both water quantity and water quality USFS and BLM lands. Desired conditions are overarching "goal" statement. As such, quantification is unnecessary.

WA32 Public Concern: The managing agencies should clarify the extent to which requirements for instream flow to enhance aquatic ecosystems would affect domestic water providers.

The LRMP's desired conditions, objectives, and standards address the necessity of instream flows to support aquatic ecosystems. Details about how much flow, and the environmental and socioeconomic impacts would be analyzed at the site-specific project level. The water suitability section discusses which management areas could allow water development.

WA33 Public Concern: The managing agencies should revise the discussion of water diversions because the agencies have no authority to limit water development.

The USFS and BLM disagree. FLPMA (43 USC 1752) states, "Terms and conditions must minimize damage to scenic and aesthetic values and fish and wildlife habitat and otherwise protect the environment " (Sec. 302, 504, 505).

WA34 Public Concern: The managing agencies should clarify that the production impacts associated with conventional natural gas development are not the same as those associated with CBM natural gas development.

This issue is analyzed and disclosed in more detail in the Water section of the FEIS. It is acknowledged that large volumes of produced water are most common with CBM gas production primarily in the San Juan Basin.

WA35 Public Concern: The managing agencies should clarify the limits of their authority over water quality under the Clean Water Act.

States are responsible, with oversight from the EPA, for setting state water quality standards. Per Section 313 of the Clean Water Act, the USFS must comply with these state standards in the same manner and to the same extent as a nongovernmental entity. Therefore, the USFS or BLM cannot authorize activities on the SJNF and TRFO that do not comply with State Water Quality Standards.

WA36 Public Concern: The managing agencies should provide evidence that roads significantly affect sediment loading.

Studies cited in the FEIS show that roads are widely recognized as a significant contributor of sediment to streams, especially in forested watersheds. In particular, streams of the Dolores Ranger District were put on the State of Colorado 303(d) list for water quality impairment as a result of sediment delivery to the stream. The primary source of sediment leading to the 303(d) listing was the extensive road network. This case in point can be found at <http://www.epa.gov/waters/tmlddocs/10003.pdf>

WA37 Public Concern: The managing agencies should protect the Dolores River and associated watersheds.

The LRMP designates the Dolores River Canyon as a special area with special protection and management to protect the ecological, water related, recreation, and scenic values of the river corridor. The LRMP also shows that 128.77 miles of the Dolores River and certain tributaries are Suitable for inclusion in the Wild and Scenic Rivers System. The SJNF and TRFO would be required to manage the suitable river miles using interim protective management. The FEIS Water - Environmental Consequences section discusses the potential impacts to water quality and water quantity from future activities of oil and gas leasing and development, grazing, travel management, and other activities that might affect the lower Dolores watershed.

WA38 Public Concern: The managing agencies should clarify how the rate of overbank flows was determined.

"The best approximation is obtained by constructing a frequency curve, reading the discharge having a recurrence interval of 1.5 years in the annual flood series, obtaining a corresponding gage height from the rating curve, and checking the height against field observations," from Data on the Frequency of Bankfull Discharge, Dunne, T. and L. Leopold, 1978. Water in Environmental Planning. W.H. Freeman and Co., New York, pp. 610–613.

WA39 Public Concern: The managing agencies should not file a statement of opposition to a water right unless one of the agencies owns a potentially affected water right.

The SJNF and TRFO policy regarding statements of opposition is within the authority of the SJNF and TRFO and follows Washington direction. USFS Manual 2500, Chap. 2540, Subpart 2541.31 "Notify states of instream flow needs by: (a) filing protests of application for water rights if the exercise of such water rights would adversely affect National Forest resources or water rights of the United States". In addition, by participating within the state water rights appropriation system, the SJNF and TRFO is merely attempting to address water rights issues in a forum advocated by water users and the State of Colorado. By participating in the Colorado water rights system, the SJNF and TRFO is working within an established framework and shows respect for the state's authority to allocate water. The rules, regulations, policy and laws which may relate to water use issues on federal lands, which the SJNF and TRFO must also comply, include but are not limited to FLPMA, ESA, Clean Water Act, 36 CFR 251.50.

WA40 Public Concern: The managing agencies should establish a standard setback distance from stream and river corridors and lake shores for timber production.

The FSH 2509.25 establishes management measures to protect the "water influence zone," which includes the geomorphic floodplain, riparian ecosystem, and inner gorge. These areas are to be managed to the benefit of the riparian, wetland, and aquatic community. The SJNF and TRFO must comply with FSH 2509.25.

WA41 Public Concern: The managing agencies should not acquire water rights for livestock or irrigation.

The federal government does own land on which irrigation and grazing occurs for federal purposes, for example, at guard stations and work stations where federally owned livestock are grazed. Water rights are acquired through the state appropriative system. FSM 2500, Chapter 2540, Section 2541.35 directs the SJNF and TRFO to "[c]learly inform the permittee that the

authorization does not confer any legal right to the use of water, nor does it provide a basis for acquiring such a right against the United States” (also FSM 2782 and 2783.12).

WA42 Public Concern: The managing agencies should verify the figures related to water production from CBM wells.

The figures related to water production from CBM wells have been updated for clarification and accuracy. Please refer to the Water section of the FEIS.

WA43 Public Concern: The managing agencies should acknowledge that obliteration of roads is not needed to reduce sediment delivery because simple abandonment is sufficient.

Simple abandonment of roads that have active erosion and high potential of sediment delivery to waterways are high priority for stabilization. Prior to any road stabilization measures, the SJNF and TRFO would survey the road and design management measures necessary to eliminate or reduce sediment delivery to streams and water-dependent ecosystems. This may involve obliteration, spot rehabilitation, closure, maintenance, or many other sediment reducing options.

WA44 Public Concern: The managing agencies should verify accuracy of Table 3.3.3 and Table I-1 to ensure data is consistent.

The tables are displaying similar but different data. In Table 3.3.3 the value displayed is road density, while in Table I-1 the parameter displayed is anthropogenic disturbance, for which road density is 1 out of 6 contributing factors. This means that watersheds that have many miles of roads, but little other disturbance, might not rank highly in terms of anthropogenic disturbance. Additionally, the methodology for the calculation of road density is slightly different for each table, so some minor variations can occur.

WA45 Public Concern: The managing agencies should ensure that the LRMP would not supplant state water law with respect to the allocation and development of the state's water resources to be consistent with assurances provided by the Undersecretary of Agriculture.

The LRMP appropriately recognizes state authority in the management of water rights while recognizing the need to manage water use on the SJNF and TRFO in order to meet terrestrial, aquatic, and/or other resource management desired conditions and objectives in a manner that minimizes potential negative impacts to the environment.

WA46 Public Concern: The managing agencies should correct the discussion of dewatering to be consistent with the NSJB EIS.

The commenter's reliance solely on the Cox report fails to reflect a large body of data/modeling that shows that portions of the NSJB could be hydrologically connected, in areas, to surface water sources. (e.g., Norwest Modeling Report). The purpose of environmental impacts analysis is to disclose the potential impacts of proposed developments; the language used "which may," "may lead to," reflects a level of uncertainty exists and must consequently be discussed. Additionally, 0.07% depletion reflects a large absolute volume of real water, especially in basins that are over appropriated. Exact consistency with the NSJB EIS would require ignoring new, presumably more accurate information that has come to light since the signing of the NSJB EIS.

The commenter is correct that the Colorado Division of Water Resources administers water rights in the state of Colorado. However, the environmental impacts associated with development are the purview of the USFS, not the state of Colorado. Indeed the Colorado Division of Water Resources modeling efforts show that in areas that are proposed for development in the NSJB, groundwater is deemed to be tributary (i.e., hydrologically connected to surface waters). The commenter's assertion that depletions would be minimal and can therefore be dismissed is misguided, given that any water depletion in over appropriated basins is of concern, and any water depletion has the potential to impact ecosystems.

WA47 Public Concern: The managing agencies should strengthen the standards for protection of water resources, aquatic ecosystems, and aquatic species to comply with the 1982 Planning Rule.

LRMP components for water, aquatic ecosystems and aquatic species have been updated and revised. Please refer to these sections of the Final LRMP.

WA48 Public Concern: The managing agencies should revise the discussion of purchasing water for drilling to include the use of treated produced water from public lands.

The sentence discussing the purchase of water for drilling was been revised. Please refer to the Water section of the FEIS.

WA49 Public Concern: The managing agencies should revise analysis of the impacts from groundwater withdrawals, produced water impacts, surface water stream withdrawals and reductions, and reservoir draw-downs during oil and gas development it is inadequate.

The oil and gas decision made for the LRMP revision is identifying lands available for lease and what stipulations (i.e., mitigation measures) apply to the lands that are available for lease. This is the first of three stages of analysis for oil and gas development. At subsequent analysis stages (i.e., Stage 3--Application for Permit to Drill or Field Development), specific project proposal(s) would be analyzed. At the LRMP revision analysis stage, the analysis is based on assumptions about how the field might develop if the lands identified for lease are subsequently leased and developed. Since there are currently no specific project proposals this analysis does not identify sources of water for use in gas exploration or production, beyond that fact that diversion and/or development of new water sources for gas exploration and development would be prohibited on federal lands.

WA50 Public Concern: The managing agencies should remove all references to TEDX in the Water section of the EIS because it has failed to prove a link between chemical exposure to groundwater and materials during fracturing operations.

The provided attachment (QEPA report dated January 2008) critiques a document that was not referenced. The Colburn et al. 2010 reference was published in a peer-reviewed journal, and as such was subject to extensive third-party review by experts in the field and is a more valid tool for informing management decisions than either the QEPA report, or the 2007 TEDX report (neither of which appears to have been subjected to a peer-review process). After reading the 2007 TEDX report, the QEPA January 2008 report, and the 2010 Colburn et al. journal article, the assertion that the 2010 Colburn article is similar to the 2007 TEDX report is false. The SJNF and TRFO acknowledges some of the concerns raised by the 2008 QEPA report, particularly with respect to the identification of pathways by which chemicals can move to human receptors, however, to use that as a justification to ignore that potential health impacts on humans from chemicals used in exploration and production activities is counter to prudent land management practices. As used, the Colburn et al. 2010 is not identifying potential pathways, rather it is identifying the potential negative health impacts of the chemicals themselves. The guidelines for fluid additives have been revised in the FEIS/Supplement to the Draft EIS, and an additional requirement has been added to ensure full disclosure of chemicals used during exploration and production activities. These disclosure requirements mirror those required by COGCC Rule 205A.

WA51 Public Concern: The managing agencies should not make closed-loop drilling systems a blanket requirement.

The use of closed loop pitless drilling systems is required where feasible (see Standard 62.6.31). The water and soil related leasing stipulations and notices provide for exceptions to CSU stipulations, when approved by the Authorized Officer. These requirements are provided for under 43 USC 1712, as well as 43 CFR 228 and 43 CFR 3160.

WA52 Public Concern: The managing agencies should require operators to delineate an "area of review" around a well or group of wells that would be hydraulically fractured to identify pathways for contaminants to reach groundwater.

The specifics of monitoring/modeling and baseline data collection that are demanded by the commenter are beyond the scope of the EIS/Supplement to the Draft EIS. The level of detail demanded involves issues that could be considered during subsequent project level NEPA analysis and does not involve analysis at the BLM/USFS planning level. General monitoring guidelines are set forth within the CSU Stipulation for Municipal Watersheds and Public Water Supplies, and COGCC Rules 608, 317, and 317B are enforced on federal lands. Additionally the BLM/USFS retain the authority to be more restrictive in the application of monitoring/modeling when or if it is deemed necessary during subsequent levels of review.

WA53 *Public Concern: The managing agencies should require operators to identify all wells that penetrate the producing and confining zones to ensure they would not become conduits for injected or formation fluids.*

The specifics of monitoring and baseline data collection that are demanded by the commenter are beyond the scope of the LRMP and FEIS and would be addressed during project-level analysis. However, a new guideline has been added creating a requirement for monitoring pressures in adjacent abandoned wells during high volume hydraulic fracturing operations.

WA54 *Public Concern: The managing agencies should require operators to collect baseline data to characterize water quality.*

The specifics of monitoring/modeling and baseline data collection that are demanded by the commenter are beyond the scope of the LRMP/FEIS. The level of detail demanded involves issues that could be considered during subsequent project-level NEPA analysis and does not involve analysis at the BLM/USFS planning level. General monitoring guidelines are set forth within the CSU Stipulation for Municipal Watersheds and Public Water Supplies, and COGCC Rules 608, 317, and 317B are enforced on federal lands. Additionally the BLM/USFS retain the authority to be more restrictive in the application of monitoring/modeling when or if it is deemed necessary during subsequent levels of review.

WA55 *Public Concern: The managing agencies should include explicit documentation on the procedures for the safe reduction and sequestration of all waste materials to sludge.*

The exact specifics of the handling and disposition of drilling fluids are unknown at this time since no specific development proposals or plans have been submitted at this time. The SJNF and TRFO have established sufficiently stringent and flexible standards, guidelines, and leasing stipulations to ensure safe handling and disposition of drilling fluids. Additional, more detailed analysis would be performed at the project level when actual drilling proposals are evaluated during future NEPA analysis.

WA56 *Public Concern: The managing agencies should consider the risks related to water quality and unconventional fossil fuel extraction, such as shale gas.*

The purpose of this analysis is to establish lands available for lease, not to lease lands, which would involve subsequent analysis. The broad standards, guidelines, and leasing stipulations brought forth with this document, combined with subsequent project-level analysis would sufficiently mitigate the impacts of fluid mineral development in the analyzed area. The SJNF and TRFO keep apprised of ongoing research in industry, academia, and other federal agencies (EPA, USGS). As the results of this research become available it would be integrated into subsequent NEPA analysis and decisions.

WA57 *Public Concern: The managing agencies should require detailed characterization, planning and baseline testing prior to any oil and gas development to protect groundwater.*

The exact specifics of well design, construction, and monitoring of potential environmental impacts involve issues that would be considered during subsequent project-level NEPA analysis and does not involve analysis at the BLM/USFS planning level. General monitoring guidelines are set forth within the CSU Stipulation for Municipal Watersheds and Public Water Supplies, and COGCC Rules 608, 317, and 317B are enforced on federal lands. Additionally the BLM/USFS

retain the authority to be more restrictive in the application of monitoring when it is deemed necessary during subsequent levels of review.

WA58 *Public Concern: The managing agencies should include more protective measures for municipal watershed that are currently included in Appendix H.*

The SJNF and TRFO believe that the existing NSO/CSU stipulations, standards, and guidelines are sufficiently protective of areas mentioned so as to prevent significant degradation of watershed resources.

WA59 *Public Concern: The managing agencies should require operators to disclose the chemicals that are used in hydraulic fracturing or to determine the chemical composition of flowback and produced water.*

The standards, guidelines, and leasing stipulations of the Draft EIS/Supplement to the Draft EIS have been updated to require disclosure of fracking fluids to the SJNF and TRFO with the following language: "Operators shall include reports that disclose the complete chemical makeup of all materials and additives used in the proposed and actual drilling, completion, and stimulation fluids without regard to original source additive. Additionally, operators shall disclose the trade name, purpose, Chemical Abstracts Service Number, and percentage by mass for all chemicals used in the entire drilling, completion, and stimulation operation." The SJNF and TRFO is not under a legal obligation to provide the information demanded under the remainder of this comment and feels that the standards, guidelines, and leasing stipulations are sufficiently stringent to ensure that applicable laws, policies, and regulations are enforced.

WA60 *Public Concern: The managing agencies should include detailed requirements for water management plans.*

The managing agencies understand the desire for extensive detail requested by the commenter. However, at this time a specific project has not been proposed. The elements listed by the commenter are important and have been addressed in a general manner in the FEIS. More detailed analysis would be conducted during project-level NEPA analysis.

WA61 *Public Concern: The managing agencies should incorporate a standard for the centralized liquid gathering systems including measures to exclude wildlife from the ponds.*

Specific measures such as those requested would be analyzed on a by case basis during subsequent NEPA review once specific project proposals are received.

WA62 *Public Concern: The managing agencies should make guidelines related to flowback and watertight tanks standards.*

Standards and guidelines regarding flowback and watertight tanks have been revised. Please refer to the Water section of the Final LRMP.

WA63 *Public Concern: The managing agencies should include information regarding cooperation with local emergency responders and medical facilities regarding chemicals contained in fracing fluids.*

Notification requirements for reporting spills are contained in COGCC Rule 906B as well as NTL-3A, disclosure of chemicals is provided for under COGCC Rule 205A. Additionally, disclosure of chemicals is required by guidelines and leasing Stipulations contained in the FEIS.

WA64 *Public Concern: The managing agencies should revise assumptions regarding the disposal of waste water and fracing material.*

Assumptions regarding the disposal of waste water and fracing material have been revised. Please refer to the Water section of the FEIS.

WA65 *Public Concern: The managing agencies should add language to the discussion of injection wells to include information about underground injection control regulations in the state of Colorado.*

Language regarding underground injection control regulations and injection wells has been revised. Please refer to the Water section of the FEIS.

WA66 Public Concern: The water usage calculations in the Supplement to the Draft EIS seem contradictory and erroneous if based on the well projections disclosed in the same document.

Water calculations were completed for wells drilled on the federal mineral estate. Based on operator reports in similar situations, the SJNF and TRFO used 4.2 million gallons (100,000 barrels) per well, not the 6 million gallons the commenter used. Additionally the commenter did not account for the 40% recycle rate that is anticipated to be achieved on a large percentage (75%) of the wells (listed in the water assumptions). Usage of the 4.2 million gallons, 977 wells, and the anticipated recycle rates yields the approximate water usages discussed in the Supplement to the Draft EIS. The 1,800 well projection is addressed under cumulative impacts and refers to wells on both federal and non-federal lands.

WA67 Public Concern: The managing agencies should provide clarification on the interaction of state (COGCC, CDPHE and Colorado Department of Water Resources) and federal regulations.

The guideline 3Ai has been removed as the wording was ambiguous, and was already covered under other regulations. A guideline for removal of pit liners from the site has been created, and the standard for closed loop drilling systems has been changed to a guideline such that the Authorized Officer can authorize exceptions when warranted. While the USFS and BLM agree that data related to the origin and amount of fresh water obtained for drilling and completion could be useful, water rights are administered exclusively by the State of Colorado.

WA68 Public Concern: The managing agencies need to ensure that adequate response plans are in place before spills or emergencies; the requirements in New York State's Revised Draft Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program (2011) should be used to accomplish this.

The requirements set forth within the referenced emergency response plan are already functionally achieved through the Application of COGCC and federal rules, including, but not limited to, COGCC Rules 317B, 906, and 908, BLM Onshore Order 3, and NTL-3A.

4.33 Wild Horse Herd Management

WH1 Public Concern: The managing agencies should elevate the Herd Management Area of Spring Creek Basin to Wild Horse Range status to protect the Spring Creek Basin herd.

The wild horses in the Spring Creek Herd Management Area are protected under the Wild and Free-Roaming Horses and Burros Act of 1971. The designation of a range would not necessarily provide any additional protection.

WH2 Public Concern: The managing agencies should revise the herd management level for the Spring Creek Basin Herd Management Area to ensure that the level is appropriate for the area.

LRMP components regarding wild horse herd management have been revised and include the desired population range. Please refer to the Wild Horse Herd Management Area section in the LRMP.

WH3 The managing agencies should broaden the objectives for wild horse herd management.

The Wild Horse Management Area is primarily managed using the revised 2005 Wild Horse Herd Management Area Plan. The Herd Management Area Plan addresses concerns such as partnerships, population, genetics, and resource conditions. Additionally, resource issues such as controlling noxious weeds or preserving pygmy sagebrush are addressed in other areas of the Plan. There are existing leases in the herd management area that are developed and others undeveloped, but through the leases terms, provide the right to development. New leases issued under the requirements of the preferred LRMP address oil and gas development within the herd

management area. Commenters are also encourage to review the Additional Guidance section of the Wild Horse Herd Management Area portion as that section addresses many of the concerns of wild horse herd management beyond what is addressed in this LRMP.

4.34 Wild and Scenic Rivers

WS1 *The managing agencies should explain how management guidance for streams identified as suitable would be developed.*

General management guidance for stream segments found suitable is provided in FSH 1909.12 Chapter 80 and BLM Manual 6400. Both of these documents provide management guidelines for how agencies are to preserve river characteristics pending any action by Congress to designate or release rivers from further study. The guidelines address a number of management concerns, including proposed water resources projects, hydroelectric projects, minerals extraction, road and trail construction, utility rights-of-way, motorized travel, fish and wildlife projects, vegetation management, recreational facilities, and livestock grazing. In most cases, the guidelines presented in the handbook and manual provide for authorization of these activities as long as 1) the free-flowing nature of the segment is preserved, 2) ORVs are protected, and 3) the proposed action would not degrade the classification (i.e., wild, scenic, or recreational) identified in the inventory or subsequent suitability analysis. The guidelines provided in the two documents are not to be repeated in agency plans, but are to be reflected in various plan components such as desired conditions, objectives, guidelines, and suitable uses to enable review of proposed design of projects and activities. Future NEPA review of proposed projects would offer opportunities for detailed consideration of the handbook and manual guidelines, as well the application of LRMP components. These future reviews would also offer opportunity for public input and collaborative efforts to help ensure workable solutions.

WS2 *The managing agencies should clarify the conflicting information in the Draft LRMP and Draft EIS regarding the San Juan River system.*

Specific comments identified what was perceived as a conflict between WSR determinations and management area guidance for areas of NFS lands, in particular the use of MA 4. WSR findings or determinations of suitability are not necessarily in conflict with the MA 4 guidance, especially for stream segments classified as scenic or recreational. MA 4 would, however, include additional restrictions on timber harvest and mineral development in addition to what might otherwise be allowable under FSH 1909.12 Chapter 80 guidelines for interim protection of suitable stream segments.

WS3 *The managing agencies should include a full discussion of potential water rights conflicts.*

The Draft EIS did disclose potential conflicts with water rights and proposed water developments. Additional discussion of these potential conflicts has been included in the FEIS and revised Appendix D. Furthermore, FSH 1909.12 Chapter 80 and BLM Manual 6400 include guidelines to be followed in reviewing water development proposals. The USFS Handbook, for instance, requires that water resources projects be analyzed “as to their effect on a river’s free-flow, water quality, and outstandingly remarkable values (ORVs), with adverse effects prevented to the extent of existing agency authorities (such as special-use authority).” The BLM and USFS have long provided interim protection to several stream segments previously found suitable within the planning area with few conflicts with water users and valid existing rights. Should a river segment be designated wild and scenic by Congress, there would indeed be a federal reserved water right associated with it. The appropriation date for such a right would be the date of the act establishing the WSR. This right would be administered through the state’s water court system like other existing water rights.

Throughout Appendix D, the work of several community-based river study groups has been acknowledged. To date, these groups have spent a great deal of effort identifying and considering potential conflicts with water rights and future water developments. Final reports of these groups would be made available as additional information to be reviewed if the wild and

scenic river recommendation is made to Congress to help ensure that efforts to designate rivers under the Wild and Scenic Rivers Act (WSRA) are well informed of potential conflicts.

WS4 *The managing agencies should include a full discussion of potential positive and negative impacts of WSR designation.*

Additional information has been added to the FEIS and revised Appendix D in response to this comment. In addition, BLM Manual 6400 and FSH 1909.12 Chapter 80 provide details on how proposed water resources projects are to be reviewed. See also the response to WS3.

WS5 *The managing agencies should provide a full discussion of the compelling need for WSR designation.*

The WSRA requires “consideration shall be given by all Federal agencies involved to potential national wild, scenic and recreational river areas, and all river basin and project plan reports submitted to the Congress shall consider and discuss any such potentials. The Secretary of the Interior and the Secretary of Agriculture shall make specific studies and investigations to determine which additional wild, scenic and recreational river areas within the United States shall be evaluated in planning reports by all Federal agencies as potential alternative uses of the water and related land resources involved” (WSRA Section 5(d)).

Alternatives to potential wild and scenic river designation are discussed in Appendix D. Determinations of suitability are based on a review of these options. In addition, Appendix D acknowledges the efforts of community-based river workgroups that have been exploring options to WSR designation and states that the final reports of these groups would be made available as additional information to be reviewed if the WSR recommendation is made to Congress to help ensure that efforts to designate rivers under the WSRA are well informed of potential conflicts.

WS6 *The managing agencies should conduct a WSR suitability designation review process outside the Draft LRMP and Draft EIS revision process.*

As acknowledged in several comments, the agencies require a review of eligibility through planning documents and state a preference for making determinations of suitability during land use planning. For this particular effort, the agencies chose to complete suitability determinations through the LRMP revision process. Rationale for completing suitability determinations through the BLM and USFS plan revisions include: 1) the LRMP revisions present an appropriate opportunity for public involvement, 2) determinations can be made in context with all other planning decisions, 3) WSR analysis in the LRMP revision process is much more efficient in terms of staff time and other production expenses, and 4) determinations at this time allow eligible stream segments that are not determined to be suitable to fall back to being managed according to general management for the planning area as described in the various LRMP components, precluding the need to apply WSR interim guidelines to those segment not determined to be suitable.

WS7 *The managing agencies should appropriately establish the percentage of land in private versus federal ownership as required for WSR designation.*

Comments were concerned with what was perceived as misleading information stemming from the aggregation of federal and private miles of stream and acreage presented in the tables of Appendix D. Linear distance and land area estimates were presented in Appendix D in an effort to display the very differences identified by the commenter and were completed in accordance with agency guidance for preparing the appendix.

WS8 *The managing agencies should, or should not, list certain segments of various rivers as suitable for WSR designation.*

Segment-specific comments and brief responses are provided in Appendix D. Appendix D also includes the rationale for why the agencies identified potential WSR designation as the most appropriate method of protecting the free-flowing character of the suitable stream segments and their ORVs. Some segments have had changes made to the suitability finding since the Draft EIS was published.

WS9 *The managing agencies should not request federal reserved water rights on the Dolores River below McPhee.*

A federal reserved water right would be established for a WSR established through Congress per the WSRA. The responsible federal management agency would, therefore, not request a reserved water right but would be involved in quantifying that right should Congress pass legislation to establish a WSR. Water availability and the amount of water needed to protect the ORVs carried forward in legislation would be considered in making this quantification.

WS10 *The managing agencies should not designate the Piedra or San Juan Rivers as WSR because federal reserve water rights would impede water service to landowners.*

Additional information has been added to the FEIS and revised Appendix D in response to this comment. In addition, BLM Manual 6400 and FSH 1909.12 Chapter 80 provide details on how proposed water resources projects are to be reviewed. See also the response to WS3.

WS11 *The managing agencies should clarify why a wilderness designation and Colorado Water Conservation Board Instream Flow water rights are insufficient to safeguard ORVs.*

Segment-specific comments and brief responses are provided in Appendix D. Depending on the specific ORVs identified for a stream reach, wilderness designations or State of Colorado instream flow protections may provide sufficient protection of stream values. However, neither the Wilderness Act nor the Colorado Instream Flow Program is intended to fully protect free-flowing character or stream-specific ORVs.

WS12 *The managing agencies should explain how ORVs for recreation are determined.*

The eligibility criteria are: "Recreational opportunities are, or have the potential to be, popular enough to attract visitors from throughout or beyond the region of comparison or are unique or rare within the region. River-related opportunities include, but are not limited to, sightseeing, interpretation, wildlife observation, camping, photography, hiking, fishing, hunting, and boating. The river may provide settings for national or regional usage or competitive events."

WS13 *The managing agencies should specify that the update of the 1990 Dolores River Management Plan would be used to reconcile SJNF and TRFO's obligations with Dolores Water Conservancy District obligations.*

The Dolores River Management Plan would be one useful tool that is used to resolve and reconcile the complex water issues associated with the Dolores River. However, the LRMP does not specify that the update of the Dolores River Management Plan would be the only avenue through which these issues could be resolved.

WS14 *The managing agencies should explain how the Navajo Trail and eight other trails leading out of the Dolores River Corridor are related to WSR eligibility designation for the river itself.*

These trails are not related to eligibility. A comprehensive description of transportation and facilities is required for each segment in Appendix D, and these trails are described because they are in the corridor. This comment appears to be directed toward the West Dolores River. Agency guidance requires the disclosure of transportation and other facilities within the study river corridor in river suitability analyses. The West Dolores was not found suitable in Appendix D.

WS15 *The managing agencies should ensure that landowners adjacent to the Dolores River would not be negatively affected by management decisions.*

Findings of suitability and WSR designation do not directly affect private property rights. The WSRA confers no federal authority over private land use or local zoning. Private portions of study river segments are included in suitability analyses to provide context and to disclose potential conflicts that could stem from mixed ownership. Including private portions of stream segments in the study of eligibility and suitability can also help to inform Congress, federal, state and local governments, and private citizens in their future decision making.

Where private landowners need access or other improvements on public lands within designated WSR corridors, the proposed uses would be evaluated based on how they would affect the free-flowing character of the stream segment and how they might impact the classification of the river (i.e., wild, scenic, or recreational) and the identified ORVs. For river segments designated with a recreational classification, the construction of roads and even bridges is not necessarily prohibited, but the ORV of scenery could restrict such improvements on public lands.

There are a number of publications available that explore the impacts of WSR designation on private property. A 2008 Report to the Utah Governor's Public Lands Office titled *Impacts of Wild and Scenic River Designation* (Keith, J., et al., Utah State University) provides a general discussion of the various impacts of designation and a survey of published literature that may be useful for commenters further review.

4.35 Wilderness, Wilderness Study Areas

WW1 Public Concern: The managing agencies should continue to provide for multiple use on lands outside of WSA because the BLM may not unlawfully apply the WSA non-impairment standard to lands found to contain wilderness characteristics.

As directed by IM-2011-154, the BLM conducted an inventory of wilderness resources, which is detailed Appendix O. The IM clearly states that the findings of the inventory are not to be used to make final management determinations for these areas, rather that wilderness characteristics (if found) would be considered among other resource values in the planning process.