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Forest Service

Grand Mesa, Uncompahgre, and Gunnison National Forests

DRAFT Forest Assessments: Designated Areas

November 2017



View of Mt. Sneffels Wilderness near the Blue Lakes Trailhead, Ouray Ranger District. The Blue Lakes Trailhead is one of the busiest wilderness trailheads on the GMUG, and one of the most difficult to manage.

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Chapter 1. Introduction

Designated areas are specific areas or features within the Grand Mesa, Uncompahgre, and Gunnison (GMUG) National Forests that have been given a permanent management designation to maintain a unique special character or purpose (36 CFR 219.19).

Such areas can be landscape scale, such as the Uncompahgre or West Elk wilderness areas, or more specific sites such as the Gothic Research Natural Area or the Alpine Tunnel and Ophir Needles special interest areas. These areas are managed more strictly than the rest of the forest due to requirements of law, regulation, or policy. The 1983 Plan preceded designation of the Old Spanish National Historic Trail, Lizard Head, Powderhorn and Fossil Ridge Wilderness Areas, Roubideau and Tabeguache Areas, and Fossil Ridge Recreation Management Area, and the Comprehensive Plan for the Continental Divide National Scenic Trail.

Congressionally designated areas (625,600 acres) and Colorado Roadless Areas (designated by regulation – 900,700 acres) comprise approximately 1,526,300 acres, or 48 percent of the land area of GMUG National Forests.

This assessment addresses current conditions and issues of designated areas on the GMUG National Forests and the existing direction as described in the current Forest Plan. Designated areas include areas that are:

- Statutorily designated by Congress (national scenic and historic trails, wild and scenic rivers, wilderness or wilderness study areas, special management areas),
- Administratively designated by the Chief of the Forest Service, the Secretary of Agriculture or other agencies and departments (critical habitat under the Endangered Species Act, Colorado roadless areas, national historic landmarks, national recreation trails, research natural areas, nationally or Forest Service-designated scenic byways), and
- Administratively designated by the Regional Forester or Chief of the Forest Service for botanical, geologic, scenic, zoological, paleontological, historical, or recreational values.

At this time, the GMUG will not address the separate but required Wilderness and Wild and Scenic Rivers inventory and evaluation processes that are governed by Chapters 70 and 80 of the 2012 Planning Rule. The wilderness process requires identification, evaluation, analysis and recommendation of lands that may be suitable for inclusion in the national wilderness preservation system (see FSH 1909.12, Chapter 70). The GMUG plans to conduct the inventory and evaluation through a separate public engagement process. Likewise, the GMUG plans to complete the identification and eligibility evaluation (see FSH 1909.12, Chapter 80) for Wild, Scenic and Recreational rivers through a separate public engagement process.

Key Issues for Existing Designated Areas on the GMUG

Develop management direction for wilderness areas that reflects contemporary thinking, such as maintaining wilderness character.

Develop management direction for the CDNST that reflects the requirements in policy and the Comprehensive management plan (U.S. Forest Service, 2009).

The 2012 Colorado Roadless Rule designated 78 Colorado Roadless Areas on the GMUG. The Colorado Roadless Rule did not require the GMUG to amend or revise the forest plan; however, the current forest plan does not explicitly coincide with or incorporate all restrictions from the Colorado Roadless Rule. The rule applies if it has more stringent restrictions in a given area, and forest plan direction applies if plan direction is more restrictive. Greater consistency of the Forest Plan with the requirements and intent of the Colorado Roadless Rule would simplify future management.

Summary of Public Input

The planning team received public input with respect to designated areas and this assessment during the summer of 2017, including emails, electronic and hand-written comments, and conversations at the public open houses, summarized here.

These comments will be more fully incorporated prior to publication of the final assessment.

We received feedback regarding the need to identify the forests' current roles and contributions, highlighting the GMUG's distinctive backcountry recreation heritage, as well as its contributions as an ecological stronghold and source of drinking water. (Please see the assessment *Benefits to People: Multiple Uses, Ecosystem Services and Socioeconomic Sustainability* for discussion of the role and contributions of the GMUG to the plan area.

Comments also provided detailed input as to what the GMUG should review for the potential need and opportunity for considering additional designated areas. The suggestions included:

- Consider Colorado Roadless Areas (CRAs) and additional roadless lands that contribute significant ecological benefits and services, including providing water, safeguarding biodiversity, and facilitating connectivity, among others;
- Review the range of ecosystems and habitat types across the forest and emphasize those types that are least-represented in current designated areas, particularly inter-mountain basins saltbrush shrubland, Colorado Plateau pinyon-juniper woodlands, Rocky Mountain gambel oak-mixed montane shrubland, Rocky Mountain lodgepole pine forest, Rocky Mountain aspen forest and woodland;
- Highlight unique features, values, and resources across the GMUG, including botanical, geological, historical, cultural, and other features that may be locally, regionally, or even nationally significant;
- Assess information on biodiversity and ecologically important areas, as well as climate refugia, migratory corridors, rivers and streams, and other features that enhance species protection and habitat connectivity;
- Conduct a wild and scenic rivers inventory;
- Assess the need and opportunity for other designations such as Research Natural Areas (RNAs); and
- Consider socio-economic factors relevant to protecting lands through conservation designations (i.e. recreation trends, economic impacts on local communities, public sentiment, etc.).

- Consider expanding current designated areas or recommending new designated areas. Specific comments included: identifying a specific area for research associated with the Rocky Mountain Biological Laboratory (RMBL);
- Consider special area designation for the Joe Hill area south of Norwood similar to the Roubideau and Tabeguache Areas;
- Consider research natural area designation for the Senator Beck Basin study plots.
- Consider designation of the Silver Thread Scenic Byway as a Dark Sky Reserve.
- In addition, several data sources were recommended to aid in informing the draft Assessment Report.

Additional public input regarding management of *existing* designated areas included the following:

- The need to improve management of high-use trailheads that access wilderness areas, including Copper Creek/Judd Falls and Blue Lakes.
- Limit new trail construction in designated wilderness so as to better provide primitive recreation opportunities.
- Desire to not develop trails or interpretation at the Ophir Needles Special Interest Area as directed in the 1991 Amended Forest Plan, to avoid drawing attention to the area.

Note that this comment summary does not include comments pertaining specifically to potential additional Wilderness on the GMUG, as inventory and evaluation of potential additional Wilderness will be addressed in a separate process per FSH 1909.12 Chapter 70.

Use of Best Available Science

This section identifies the information sources used in the Designated Areas Assessment and identifies information gaps that would help further clarify specifics related to this Assessment.

Sources

- Current 1991 Forest Plan, as amended, Record of Decision, Final Environmental Impact Statement (1991), and subsequent Forest Plan monitoring reports
- Policy, law, and Forest Service handbook or manual directives related to designated areas
- Internal, Forest-level staff recommendations in addition to annual monitoring reports
- Travel and tourism reports
- Social, environmental, and economic research reports
- Colorado State Comprehensive Outdoor Recreation Plans
- Other federal, state, or county land management planning and strategy documents
- National surveys on wilderness and other designated areas
- Colorado Natural Heritage Program and Colorado Natural Areas Program data
- National Natural Landmark information from the National Park Service

- US Fish and Wildlife Service Critical Habitat data

Gaps

- Generally, there is a lack of published documents studying how designated areas contribute to social, economic, and ecological sustainability in the broader landscape affected by the GMUG National Forests.

Chapter 2. Condition and Trends

Types, Purposes, and Locations of Designated Areas on the GMUG National Forests

Congressionally Designated Areas

Existing Congressionally designated areas on the GMUG include wildernesses, special management areas (SMAs), and national scenic and historic trails. Of the other potential types of congressionally designated areas, there are no wild and scenic rivers, national heritage areas, national monuments, national recreation areas, national scenic areas, and interstate highways on the GMUG.

Wilderness Areas

The GMUG is home to ten congressionally designated Wilderness Areas, which cover about 553,800 acres, or 18% of the Forest (Table 1). The GMUG is the lead unit for management of six of these areas, and the FS lead for a seventh (Powderhorn). The administrative designation of being a management “lead” gives the GMUG responsibility for coordinating with other units to ensure management consistency, developing policies and regulations for managing the areas, and for reporting/record-keeping.

Table 1. Congressionally Designated Areas: Wilderness Areas on the GMUG National Forest

[Sources: Wilderness.net (2017); U.S. Forest Service (2016) Land Areas of the National Forest System]

Name	Total Acres	Acres on the GMUG/District(s)	Lead Forest/District(s)
Collegiate Peaks	166,200	48,800/Gunnison	Pike-San Isabel NF/Leadville RD
Fossil Ridge	32,200	32,200/Gunnison	GMUG/Gunnison RD
La Garita	126,500	76,900/Gunnison	GMUG/Gunnison RD
Lizard Head	41,600	20,500/Norwood	GMUG/Norwood RD
Maroon Bells - Snowmass	182,900	20,600/Gunnison	White River NF/Aspen-Sopris RD
Mount Sneffels	16,500	16,500/Ouray & Norwood	GMUG/Ouray RD
Powderhorn	62,600	14,800/Gunnison	BLM/Gunnison Field Office; GMUG Gunnison RD is the FS lead
Raggeds	64,300	48,200/Paonia & Gunnison	White River NF/Aspen-Sopris RD
Uncompahgre	102,700	98,900/Gunnison & Ouray	GMUG/Ouray RD
West Elk	176,500	176,500/Paonia & Gunnison	GMUG/Paonia RD

In 2005, the Forest Service began the 10-Year Wilderness Stewardship Challenge (WSC), which sought to improve the agency’s management of designated wilderness areas. Each wilderness area was scored on a 0-10 scale in 8 separate elements, with a score of 60 out of 100 meaning the wilderness area was managed to minimum standard. All areas on the GMUG met the minimum standard in 2015. In 2016, this program was renewed for another 10 years through 2025 as the Wilderness Stewardship Performance (WSP), with 15 elements. Forests must select 10 of these elements for each wilderness area based on management needs and goals. Each element is valued at 10 points. Within each element various actions are require to gain points. Elements generally require an inventory of conditions, an action plan to make corrections and improvements, and actions taken to correct the conditions. For example, the element related to Recreation Sites calls for the following actions: 2 points for an inventory of campsites, 4 points for a plan to correct unacceptable impacts, and 10 points for correcting the impacts and regularly monitoring the condition. The minimum standard remains 60 points out of 100. Wilderness Stewardship Performance Elements and Scores as of April 17, 2017, are contained in Table 2.

Table 2. Wilderness Stewardship Performance Elements and Scores (as of April 12, 2017)

Category	Element	Fossil Ridge	La Garita	Lizard Head	Mt. Sneffels	Powderhorn	Raggeds	Uncompahgre	West Elk
Natural	Invasive Species	4	4	2	2	2	4	2	2
	Air Quality Values	0	6	6	-	-	6	-	6
	Natural Role of Fire	-	4	2	-	4	-	-	-
	Fish and Wildlife	0	-	-	-	-	-	0	-
Undeveloped	Recreation Sites	6	0	4	2	0	0	-	0
	Trails	4	-	0	2	2	0	2	0
Untrammeled	Agency Actions	0	0	0	0	0	0	0	0
Opportunities	Solitude Opportunities	0	0	0	2	0	4	2	2
	Primitive/Unconfined Recreation	-	0	-	-	-	-	-	-
Other Features	Cultural Resources	-	0	-	-	-	-	2	-
Special Provisions	Livestock Grazing	-	0	-	4	-	0	2	0
	Outfitter-Guide	4	-	-	4	4	-	-	-
Administration	Workforce Capacity	6	0	2	0	2	2	0	2
	Education	2	0	4	4	2	2	6	2
	Wild. Character Base	8	0	2	2	2	2	0	2
Additional Requirements		2	0	4	4	2	4	4	4
Total Score		36	14	26	26	20	24	20	20

The WSP scores are much lower than the previous WSC scores, as there were significant changes to the elements to increase the standard for how a wilderness is being managed. Incorporating management direction related to WSP elements in the new Forest Plan will be beneficial. Several districts are proceeding to develop baseline character assessments for their wilderness areas, as well as campsite inventories and solitude monitoring. Completion of a baseline character assessment will assist the GMUG in monitoring wilderness character in order to meet the Wilderness Act requirement of preserving wilderness character. Campsite inventories also help identify areas that need to be managed to protect natural resources and preserve wilderness character; these have been completed for some wilderness areas, but may be outdated. Solitude monitoring (through the measurement of encounters between groups of people) is also an important aspect of protecting opportunities for solitude in designated wilderness areas.

Designated Wilderness Areas on the GMUG

Collegiate Peaks

Collegiate Peaks Wilderness was designated in 1980, and now encompasses 166,200 acres. With eight 'fourteeners,' all of which are located on the Pike-San Isabel NF, this Wilderness probably possesses the highest average elevation of any Wilderness in the lower 48 states. Visitors can climb Mounts Yale, Oxford, Columbia, and Harvard (the state's third highest point), as well as Huron Peak, Missouri Mountain, Mount Belford, and La Plata Peak (the state's fifth highest point). Climbing these peaks is a very popular activity, making opportunities for solitude very elusive. The GMUG, Gunnison Ranger District coordinates management of this wilderness area with the Pike-San Isabel and White River National Forests, with the Pike-San Isabel the lead forest for management.

Fossil Ridge

Fossil Ridge Wilderness was designated in 1993, and it now has a total of 32,200 acres. The limestone Fossil Ridge rises above 13,000 feet, climbing well above tree line, and contains the fossilized remains of numerous prehistoric sea creatures. Above Lamphier Lake, a slim cut in the bare rock called Gunsight Pass opens the ridge for foot travel from the South Lottis Creek drainage basin to the Crystal Creek drainage basin. Square Top Mountain, about 12,500 feet high and about an hour's worth of climbing above Lamphier Lake, allows a virtually unparalleled view of almost half of Colorado's fourteeners. There are about 22 miles of maintained trails. The GMUG, Gunnison Ranger District manages this wilderness area.

La Garita

La Garita Wilderness was designated upon passage of the original Wilderness Act in 1964. Additional acreage was added in 1980 by Public Law 96-560 and again in 1993 with the Colorado Wilderness Act. Out of 126,500 total acres, about 76,900 acres of the La Garita are on the GMUG, Gunnison Ranger District. Also straddling the Continental Divide, this area includes one fourteener, San Luis Peak. The Gunnison Ranger District coordinates management of this area with the Rio Grande National Forest.

Lizard Head

Congress designated the Lizard Head Wilderness in 1980 and it now has a total of 41,600 acres. Lizard Head Peak (13,113 feet) stands spire-like on the eastern side of the Lizard Head Wilderness and is shadowed by two 14,000-foot peaks, Mount Wilson and Wilson Peak. Not far to the west is El Diente (the tooth, in English), the westernmost of the state's fourteeners. Mount Wilson and El Diente are connected by a famous knife-edged ridge and both are considered difficult ascents. The summit of Lizard Head Peak, a 400-foot-tall tower of rotten rock, has been voted as one of Colorado's most dangerous and difficult climbs. Dolores Peak (13,290 feet) stands in the westernmost portion of the Wilderness. Human use is moderate to light on the 37 miles of trails. The GMUG, Norwood Ranger District coordinates management of this wilderness with the San Juan National Forest.

Maroon Bells-Snowmass

Maroon Bells-Snowmass Wilderness was designated in 1964 and it now has a total of 182,900 acres, making it Colorado's fourth largest wilderness. 100 miles of trail lead over nine passes above 12,000 feet; with extensive amounts above tree line; long glacial valleys, and alpine lakes. With six peaks rising above 14,000 feet, this area draws mountaineers by the thousands every year, as well as backpackers on a popular route that originates in Aspen. The Maroon Bells, reflected in Maroon Lake, is perhaps Colorado's most often photographed mountain scene. The GMUG, Gunnison Ranger District manages a small portion of this wilderness with the White River National Forest.

Mount Sneffels

Mount Sneffels Wilderness was designated in 1980 and it now has a total of 16,500 acres. Mount Sneffels, a 14,150-foot intrusion of igneous rock on the eastern verge of this area, stands higher than any other point in the Wilderness. In the eastern and western portions 15 miles of trail access the wilderness, including Yankee Boy Basin and the Blue Lakes Trail, which leads into the area for about 3.5 miles. The only lakes, Blue Lakes, lie below the western flank of Mount Sneffels in a deep basin, and is one of the more popular hikes on the GMUG. The Ouray Ranger District manages this wilderness area along with the Norwood Ranger District.

Powderhorn

Congress designated the Powderhorn Wilderness in 1993 and it now has a total of 62,600 acres. In this Wilderness, the northern verge of the San Juan Mountains reaches out into the Gunnison Basin, a dry land of sagebrush meadows dotted with fish-filled lakes, including Powderhorn Lakes. The Calf Creek and Cannibal Plateaus are reportedly the largest unbroken expanses of alpine tundra in the Lower 48. Visitors find terrain rolling along at around 12,000 feet with views of even higher mountains in the Elk, Sawatch, and San Juan Ranges. About 45 miles of trails access this seldom-visited area. The southern one-fourth of Powderhorn is managed by GMUG, Gunnison Ranger District, and the northern three-fourths by the Bureau of Land Management.

Raggeds

Congress designated the Raggeds Wilderness in 1980 and it now has a total of 64,300 acres. Anthracite Creek passes through the deep Dark Canyon. Oh-Be-Joyful Pass (11,740 feet),

with the Oh-Be-Joyful Creek Valley below it, was added to the area in 1993. About 50 miles of trail are located in this Wilderness. The GMUG, Paonia and Gunnison Ranger Districts coordinate management of this wilderness with the White River National Forest.

Uncompahgre

Congress designated the Uncompahgre Wilderness (originally named Big Blue) in 1980 and it now has a total of 102,700 acres. This wilderness is located in the north-central region of the San Juan Mountains in Colorado. The Uncompahgre Wilderness includes two fourteeners and at least twenty-five 13,000-foot peaks. Big Blue Creek flows off Uncompahgre Peak (14,309 feet) in this section of the San Juan Mountains. When Bureau of Land Management land was added in 1993, the name was changed from Big Blue.

Wetterhorn Peak (14,015 feet) stands not far southwest of Uncompahgre Peak. American Flats lies south of Wildhorse Peak. Numerous forks of the Cimarron River originate in the central section of this Wilderness, flowing north and merging into one stream. About 110 miles of trails reach up numerous waterways into the Wilderness. The trail up Matterhorn Creek provides access to Wetterhorn Peak after 3 miles of hiking. Most climbers approach Uncompahgre Peak on 3 miles of trail up Nellie Creek. Both peaks are extremely popular with hikers.

The GMUG, Ouray and Gunnison Ranger Districts coordinate management of this wilderness with the Bureau of Land Management in Gunnison.

West Elk

Congress designated the West Elk Wilderness in 1964 and it now has a total of 176,500 acres. The West Elk Wilderness is the fifth-largest in Colorado, and is highly primitive and infrequently visited. Only during fall hunting season do the trails and campsites fill. The topography is reflected in many of the area's geographic names: Castle Pass, Castle View, Castle Creek, and the Castles. About 200 miles of trails offer opportunities for extended loop hikes through the West Elk, and are popular as horse trails. The GMUG, Paonia and Gunnison Ranger Districts coordinate management of this wilderness.

Condition and Trends in Designated Wilderness

Aside from the Wilderness Stewardship Challenge and Wilderness Stewardship Performance evaluations, the only quantitative data available regarding current conditions are campsite inventories for certain wilderness areas that have been completed over the years. Some wilderness areas (such as the Raggeds and West Elk) have data dating back 20-30 years, others have had limited survey work completed. Anecdotal information from Forest personnel supports the conclusion that recreation use has increased on certain wilderness trails, including the Blue Lakes (Mount Sneffels) and Copper Creek (Maroon Bells-Snowmass) trails. Other trails that are seeing increased visitor use are those that access 14ers, such as Uncompahgre Peak and Mount Sneffels.

Other Designated Areas on the GMUG

Table 3. Congressionally Designated Areas: Other Designated Areas on the GMUG National Forest

[Sources: Wilderness.net (2017); U.S. Forest Service (2016) Land Areas of the National Forest System]

Name	Total Acres	Acres on the GMUG/District(s)	Lead Forest/District(s)
Roubideau Area	18,900	18,900	GMUG/Ouray RD
Tabeguache Area	17,100	9,000	GMUG/Norwood RD
Fossil Ridge Recreation Management Area	43,900	43,900	GMUG/Gunnison RD

Fossil Ridge Recreation Management Area

Fossil Ridge Recreation Management Area was designated in 1993, and now encompasses 43,900 acres near Gunnison. This area is managed in much the same way as the adjacent Fossil Ridge Wilderness, but permits motorized travel on prior established trails and routes. No new developments, including new roads, trails, and campgrounds, are allowed. Exceptions are made for the purposes of resource protection and public safety. This area was designated after the current Forest Plan, and there is a need to incorporate management direction into the revised Forest Plan.

Roubideau Area

The Roubideau Area covers 18,900 acres on the eastern edge of the Uncompahgre Plateau, Ouray Ranger District. The current Forest Plan does not contain management direction for this area which was designated in 1993 to be managed to maintain the area’s existing wilderness character and potential for inclusion in the National Wilderness Preservation System.

Tabeguache Area

The Tabeguache Area includes 17,100 acres on the western slopes of the Uncompahgre Plateau, on both the Norwood Ranger District (9,000 acres) and extending onto public land managed by the Bureau of Land Management Uncompahgre Field Office (8,100 acres). As with the Roubideau Area, the current Forest Plan does not contain management direction for this area which was designated in 1993 to be managed to maintain its existing wilderness character.

Condition and Trends in Other Designated Areas

With the exception of range condition, the GMUG has limited to no information on current conditions and trends in the Fossil Ridge RMA and Roubideau and Tabeguache Areas. For range, approximately three quarters of Tabeguache Area is in fair condition, and approximately one quarter is in good condition, with a stable trend for the area. Approximately two thirds of Roubideau Area is in good condition and approximately one third in fair, with an upward trend. Fossil Ridge has equal parts in good condition and unknown condition, with a stable trend.

National Scenic and Historic Trails

Continental Divide National Scenic Trail

Approximately 130 miles of the CDNST traverse the Gunnison Ranger District of the GMUG National Forests, from the district's southern boundary with the Rio Grande National Forest along its eastern boundary with the Pike-San Isabel National Forest and north to the White River National Forest. The trail frequently crosses the geographic divide between the adjacent forests. Designated by Congress in 1978, the nature and purposes of the CDNST are to:

- Provide for high-quality scenic, primitive hiking and horseback riding opportunities, and
- Conserve natural, historic, and cultural resources along the CDNST corridor.

The Forest Service goal in 1981 for the CDNST Comprehensive Plan was to provide a uniform trail management program reflecting the purposes of the CDNST, while providing for the use and protection of the natural and cultural resources along the Trail. The Chief of the Forest Service approved the first CDNST Comprehensive Plan in 1985. In 2009, the Comprehensive Plan was rewritten to reflect the purposes of the National Scenic Trail system as a whole, as well as identify the allowed uses that take place along the rights-of-way and located route.

For the management uses and restrictions on the CDNST, see the 2009 CDNST Comprehensive Plan (U.S. Forest Service, 2009).

Old Spanish National Historic Trail

The Old Spanish National Historic Trail was not congressionally designated until 2002, so it is not included in the 1983 forest plan or subsequent amendments. Pioneered by Antonio Armijo in 1829, the Old Spanish Trail was a trade network with several routes that carried woolens and other goods from Santa Fe to Los Angeles in Mexico's California territory. The congressionally designated East Fork of the North Branch of the Trail runs through the planning area, entering the Gunnison Basin over Cochetopa Pass and generally following the Highway 50 corridor to Grand Junction. Inventory of the trail corridor is currently being completed, and the Old Spanish National Historic Trail Comprehensive Management Plan is under development by the National Park Service and Bureau of Land Management, the designated management agencies for the trail. The plan will guide management of the trail across six states and several different management zones. Many opportunities for further research, education, and interpretation exist for this unique resource on the GMUG National Forests.

Condition and Trends on National Scenic and Historic Trails

The Continental Divide National Scenic Trail (CDNST) is primarily to be managed for non-motorized use, but much of the trail is located on open roads or motorized trails. It is also located within a more developed ROS class than is desirable for a national scenic trail. For more information on ROS classes, see the Recreation Assessment.

The exact route of Old Spanish National Historic Trail has not been mapped (per above, the inventory of the corridor is ongoing), and as a result not a lot of information is available on its current condition.

Wild and Scenic Rivers

The 1983 GMUG Forest Plan did not undertake a Wild and Scenic River eligibility study. The 2005 planning process identified 19 river/stream segments that were eligible, but because that plan was never signed and implemented, no management direction for these segments was established. The GMUG will complete the identification and eligibility evaluation (see FSH 1909.12, Chapter 80) for Wild, Scenic and Recreational rivers during this current planning effort.

Administratively Designated Areas

Administratively designated areas include critical habitat under the Endangered Species Act, experimental forests or range areas, inventoried roadless areas (under the Colorado Roadless Rule), national natural landmarks, national historic landmarks, national monuments, national recreation trails, research natural areas, State-designated scenic byways, significant caves, and wild horse and burro territories. There are no experimental forests or range areas, national historic landmarks (Telluride Historic District is on private land within the forest boundary), national monuments, significant caves, or wild horse and burro territories on the GMUG National Forests.

Critical Habitat under the Endangered Species Act

Critical habitat has been identified for two listed species on the GMUG.

1. DeBeque phacelia (*Phacelia submutica*) – a threatened plant species. Critical habitat was designated in 2012. Approximately 1,055 acres are within the Grand Mesa Geographic Area, with 965 acres occurring on the GMUG NF.
2. Gunnison sage-grouse (*Centrocercus minimus*) – a threatened bird species. Critical habitat was designated in 2014. Approximately 847,350 acres occur within the North Fork Valley, Gunnison Basin, San Juans and Uncompahgre Plateau geographic areas. Only 175,790 acres (20%) of designated critical habitat occurs on the GMUG NF.

Additional information will be reported in the At-Risk Species Assessment.

Colorado Roadless Areas

The GMUG National Forests contain 78 Colorado Roadless Areas, consisting of about 900,700 acres, or 29% of the Forest. The Forest Service mapped and identified these areas under the Colorado Roadless Rule, which provides direction for conserving and managing roadless areas on National Forest System lands in Colorado. The Colorado Roadless Rule was initiated as an opportunity to refine and update the Roadless Area Conservation Rule (2001 Roadless Rule).

In 2006, the state of Colorado petitioned the Secretary of Agriculture for a “state” roadless rule, one that would supersede the federal 2001 roadless rule and allow Colorado to address state-specific concerns. The final state rule was published in 2012, and applies to all identified roadless areas within NFS-system lands. The rule prohibits tree cutting, road construction and reconstruction, and the use of linear construction zones (pipelines, power lines, telecommunications lines, ditches, canals), with some exceptions. Within upper tier roadless areas, fewer exceptions apply. The rule does not prohibit motorized or non-motorized trail construction in roadless areas. The current Forest Plan does not contain any

direction on how to manage these areas, so current management defaults to direction within the Colorado Roadless Rule.

- *Non upper tier roadless areas:*

Non upper tier roadless areas have more exceptions to the prohibitions outlined in the rule. In addition to the exceptions outlined below for the upper tier, tree cutting is permitted when it's needed to improve wildlife habitat or to maintain or restore ecosystem health. Additional road-building and tree cutting exceptions are allowed for community fire protection purposes. In addition, roads are permitted when they are constructed to prevent resource damage, implement safety improvement projects, or for public health and safety. Linear construction zones are allowed for oil and gas pipelines (in certain circumstances), and electrical and telecommunications lines.

- *Upper tier roadless areas:*

In these areas, tree cutting is prohibited unless it is incidental to a management activity that is not otherwise prohibited, or is for administrative purposes. Road construction is prohibited unless it is done through reserved or outstanding rights or for public health and safety. Similarly, linear construction zones are also prohibited unless done through reserved or outstanding rights or for the purpose of a water conveyance structure (with a pre-existing water decree). Future oil and gas leases require a stipulation of no surface-use occupancy, and no new road construction.

Colorado roadless areas provide many of the same types of recreation opportunities as designated wilderness, though recreationists may encounter different types of management activities than in wilderness (including, but not limited to, hazardous fuels treatments, pipelines, and powerlines). The most significant difference from Wilderness is that motorized activities and recreation and motorized trail construction are allowed in roadless areas.

National Natural Landmarks

National Natural Landmarks (NNLs) are areas designated by the Secretary of Interior that represent the best examples of outstanding biological and geological resources. The National Park Service (NPS) administers this program, but designated NNLs can have mixed land ownership or management. The NPS works with land owners/managers to conserve and protect NNLs and to enhance their scientific and educational values.

Slumgullion Earthflow

The Slumgullion Earthflow, located in Hinsdale County south of Lake City on the Gunnison Ranger District, is an example of a natural geologic process of mass wasting. The earthflow is over four miles long and 2,000 feet wide in spots. It includes two major earthflows, one from 700 years ago which resulted in the formation of Lake San Cristobal, and a more recent earthflow that is gradually covering the older slide (NPS 2017, Orłowski 2017b). The earthflow covers over 1,700 acres, and is co-managed by the GMUG and the BLM. The NPS designated this area a National Natural Landmark in 1965. The Colorado Natural Area program (CNAP) recognized this area in 1983 (CPW 2017). The BLM designated an Area of

Critical Environmental Concern around their portion of the earthflow in 1993, and the portion on the GMUG was designated as a special interest area in the 1983 Forest Plan. The USGS is monitoring slope movement which can be up to 20 feet per year (Orlowski 2017a). The CNAP monitors this area at least every three years. The 2015 field review indicated approximately 70 percent of the Englemann spruce in the upper third of the slide was dead with sporadic mortality in the lower section (CNAP 2015a). A 2016 field review indicated spruce mortality was present down to 9,100 feet in elevation and higher elevation stands were over 90 percent dead (CNAP 2016). Salvage logging operations occurred in 2015 outside of the NNL and the special interest area boundary and future monitoring will determine if there will be any impacts to the earthflow. Information signage at Windy Point is in bad condition and needs to be replaced (CNAP 2015a).

Areas Previously Considered

Additional areas on the GMUG have been nominated, evaluated, but not designated as national natural landmarks by the NPS. Sites that have been removed from consideration include (Orlowski 2017b): Silverton and Lake City Caldera Complex, Blackface, Lizard Head Pass. Other previously considered sites that are not actively being evaluated or considered for designation at this time include (Orlowski 2017b): Ophir Needles, Cochetopa Park Caldera, Elk Mountains, Fossil Ridge, Mount Bellview, Mount Sneffels, Potosi Peak, The Castles, Tomichi Dome, Waunita Hot Springs, and Gothic Research Natural Area.

National Recreation Trails

The GMUG has three National Recreation Trails (NRTs). NRTs on U.S. Forest Service lands are administratively designated by the Secretary of Agriculture.

Bear Creek National Recreation Trail

The Bear Creek Trail (#241) runs 3.5 miles from the trailhead south of Ouray on U.S. 550 to the Yellow Jacket Mine. The trail was designated as an NRT because of its unique and spectacular nature. It follows a route that miners used to take to access claims along Bear Creek. High cliffs, narrow ledges, historic mining features, and steep switchbacks are typical features of this trail.

Crag Crest National Recreation Trail

The Crag Crest Trail (#711) runs along a steep, rocky crest for about 7.7 miles between Island Lake and Eggleston Lake. The trail is point-to-point but can be extended into a loop by returning to the trailhead via the Crag Crest Lower Loop Trail. This trail has become very popular as it provides dramatic scenic views in all directions, from the Book Cliffs to the north to the San Juan Mountains to the south. On clear days the La Sal Mountains in Utah are visible to the west. This trail was designated as an NTR in 1978 and is designed to serve non-motorized use. Horses are permitted on the Loop and Cottonwood Lakes section of the trail.

Crag Crest Cross-Country Ski Trail

The Crag Crest winter ski trail was established as an NRT in 1983. Although they share the same name, the winter NRT and the summer NRT are distinct and separate routes. The winter NRT is a series of ski loops ranging from 0.8 to 7.5 miles in length. A total of 11.5 miles of

trail are designated. The winter NRT originates at the County Line trailhead, and the system is managed for non-motorized Nordic skiing.

Condition and Trends on National Recreation Trails

Trail conditions on all three NRTs are good; they see regular maintenance from both the Forest Service and partner groups. The County Line Trailhead was recently relocated and expanded, with more parking capacity and toilets/changing facilities. Use on the NRTs continues to increase, particularly on the Crag Crest summer and winter trails.

National and State Scenic Byways

The National Scenic Byway Program, authorized through the Department of Transportation, provides resources to local communities to preserve, protect, interpret, and promote the intrinsic qualities of designated byways. To be designated as a National Scenic Byway, a road must significantly meet at least one of the six scenic byway intrinsic qualities: scenic, natural, historic, cultural, archeological, or recreational. In order to be designated as an All-American Road, the road must meet the criteria for at least two intrinsic qualities and must also be considered a destination unto itself.

Scenic byways are managed to protect or preserve the scenic and recreation values and uses within the designated byway corridor, while at the same time managing the multiple-use values of the landscape. Permitted uses may include livestock grazing and timber harvest, but these activities are designed so that they resemble naturally occurring patterns or disturbances in the landscape. Motorized and non-motorized recreation is permitted in these areas. If lands along the scenic byways are made available for oil and gas leasing, surface management stipulations (controlled surface use stipulations) to protect resources may be required.

The GMUG hosts one National Scenic Byway (the Grand Mesa Scenic and Historic Byway), and shares an All-American Road (the San Juan Skyway). Four other Scenic Byways that traverse the GMUG hold State designations: Alpine Loop, Silver Thread, Unaweep-Tabeguache, and the West Elk Loop (Colorado Department of Transportation 2016).

Grand Mesa Scenic and Historic Byway

The Grand Mesa Scenic and Historic Byway was designated as a National Scenic Byway in 1996. Most of the Byway is along Highway 65, with an offshoot to the Land's End Observatory on the far west side of Grand Mesa. The total length of the route is about 63 miles, beginning in Cedaredge, Colorado, and traveling through the Grand Mesa National Forest and down to the intersection of Highway 65 with Interstate 70.

San Juan Skyway

One of the more popular National Scenic Byways in southwestern Colorado, the San Juan Skyway loops 236 miles through the Ouray and Norwood Ranger Districts of the GMUG and onto the San Juan National Forest. Popular towns along the Skyway include Ridgway, Ouray, Silverton, Durango, Cortez, and Telluride. The Skyway was designated an All-American Road, the highest level of designation, in 1996.

Alpine Loop

The Alpine Loop is a high clearance 4-wheel drive road that runs 63 miles through the heart of the San Juan Mountains. The Loop takes travelers over two 12,000-foot mountain passes (Engineer and Cinnamon Passes) and includes a route that travels between Lake City and the city of Ouray. The road between Engineer Pass and Ouray travels onto GMUG National Forest lands.

Silver Thread Scenic Byway

The Silver Thread Scenic Byway runs for 117 miles along Highway 149 between Blue Mesa Reservoir and the town of South Fork. Other attractions along the way include the towns of Lake City and Creede, the Slumgullion Earthflow, and views of Uncompahgre Peak. The Byway travels through the Gunnison Ranger District as it approaches Slumgullion Pass and enters Rio Grande National Forest after crossing Spring Creek Pass.

Unaweep – Tabeguache Scenic Byway

Running 133 miles from Whitewater to Placerville along Highways 141 and 145, the Unaweep–Tabeguache Scenic Byway skirts the western side of the Uncompahgre Plateau. The byway does not cross onto GMUG National Forest lands, but closely borders and provides access to the Uncompahgre Plateau/the Grand Valley and Norwood Ranger Districts. Other towns along the route include Gateway, Uravan, Naturita, and Norwood.

West Elk Loop Scenic Byway

The West Elk Loop is about 205 miles long, and it runs through the Gunnison National Forest as well as many of the towns that surround the GMUG, including Hotchkiss, Paonia, Crested Butte, and Gunnison. In addition to the Gunnison National Forest, the route also provides access to Curecanti National Recreation Area, Black Canyon of the Gunnison National Park, White River National Forest, and Paonia and Crawford State Parks.

Research Natural Areas (RNAs)

Research Natural Areas (RNAs) are part of a national network of ecological areas designated in perpetuity to preserve a spectrum of relatively pristine areas that represent the best examples of natural variability within important natural ecosystems found on National Forest System lands. The process to recommend RNAs is conducted through a forest planning process. RNAs are designated by the Regional Forester with concurrence of the Rocky Mountain Research Station Director.

Research natural areas may be used only for nonmanipulative and nondestructive research, study, observation and monitoring that does not modify the conditions for which the RNA was established. RNAs are excellent areas for studying ecosystems or their component parts and for monitoring succession and other long-term ecological change. They are managed to maintain natural conditions by allowing ecological processes to operate with minimal human intervention. Recreation use should be restricted or prohibited if such use threatens or interferes with the purpose for which a RNA is established. Construction of new infrastructure (roads, trails fences, buildings, signs) is prohibited unless necessary to correct resource damage. Livestock grazing is allowed only where needed to establish or maintain natural vegetative community objectives, but is not allowed on either of the two RNAs on the

GMUG. Logging and wood gathering is not permitted unless necessary to restore an area to natural conditions. Fires are allowed to burn in RNAs, unless they endanger the RNA or threaten persons or property outside the RNA. No action will be taken against endemic insects, diseases, or wild animals. Permission for research and educational activities in RNAs is obtained through the RNA coordinator for the Rocky Mountain Research Station (RMRS) and the local district ranger.

The GMUG National Forests currently contain two RNAs—a high-elevation spruce ecotype and a riparian blue spruce ecosystem. The current forest plan includes management direction for these areas under the 10A –Research Natural Areas management prescription which duplicates forest service manual direction (FSM 4063).

Table 4. Existing Research Natural Areas on the GMUG National Forests

Name	Acres (rounded)	Average Elevation	Major Plant Association
Escalante Creek	60	8,600	Blue spruce riparian
Gothic	1,080	11,020	Engelmann spruce – subalpine fir

Escalante Creek

The Escalante Creek RNA was established on the Ouray Ranger District on the Uncompahgre Plateau in 1985, as the first representative of a blue spruce riparian ecosystem in the RNA system. This area was assigned a management prescription 10A in the 1991 plan amendment. No scientific studies have occurred within this small area (60 acres). No monitoring has been done to evaluate current condition of this area.

Gothic

The Gothic RNA was established in 1931 and expanded in 1959 on the Gunnison Ranger District (formerly the Taylor River Ranger District) north of Crested Butte because it is an outstanding example of the Engelmann spruce-subalpine fir community typical of the western slope of Colorado (Ryan et al 1994). It also contains typical subalpine and alpine meadow community types. This area was assigned a management prescription 10A in the 1983 Forest Plan. The Colorado Natural Areas Program registered this as a scientific natural area in 1978.

Much research has been conducted in the Gothic RNA, primarily by scientists associated with the Rocky Mountain Biological Laboratory (RMBL) in Gothic (Ryan et al 1994, Vasquez 2017a). The RMBL has a special use permit (SUP) to conduct research on much of the Gunnison and Paonia Ranger Districts of the GMUG NF, and the Aspen-Sopris Ranger District on the White River NF. The SUP provides no exclusive rights to RMBL, but ensures the opportunity for research for 30 years. Scientist from RMBL must submit requests to conduct research in the Gothic RNA for approval by the RMRS and the Gunnison District Ranger. Not all research conducted by RMBL associated scientists occurs in the Gothic RNA due to limitations requiring any research within an RNA to be nondestructive and nonmanipulative. The RMBL makes all their research results available to the public and USFS via their website (<http://www.rmbll.org/scientists/databases/publications/>).

The Forest Service does not regularly monitor the condition of this RNA (Vasquez 2017b). The CNAP monitors this site every three years. User-created pullouts off FS Road 317 (Schofield Pass Rd.) along the eastern edge of the RNA have been blocked and signed just past a parking area. Parking and camping is allowed at these sites. The CNAP 2015 monitoring report indicated no vehicle trespass beyond existing closures is occurring, but camping and parking was occurring adjacent to the road. Introduced species (*Trifolium pretense*, *T. repens*, *Dactylis glomerata*) are found in areas close to pullouts, but no non-native species were observed in the interior of the RNA (CNAP 2015b). Illegal off-route travel extending into the RNA, including snowmobile use, has been reported by RMBL researchers in 2016 and early 2017 (Vasquez 2017b). It is an ongoing challenge to find effective ways to manage the RNA boundary to prevent prohibited travel uses given the close proximity to Road 317 and the increasing recreation use in the area (Vasquez 2017b).

Special Interest Areas

The Forest Service can designate special interest areas with outstanding natural characteristics or unique recreation and cultural values in seven different categories (FSM 2372.05): scenic, geologic, botanical, zoological, paleontological, historical and recreational. Special interest areas are managed to maintain, protect, enhance and, where appropriate, develop and interpret for public education or recreation their unusual characteristics. Special interest areas vary in size depending on their site-specific resource values and management emphasis. Authority to designate special interest areas varies between the Secretary of Agriculture, Chief, Regional Forester and Forest Supervisor, depending on the size and purpose for designating the area. Designations can be rescinded if the reason for the designation is no longer applicable. Recommendations are made through a forest planning process and management direction intended to maintain or enhance the purpose for which an area was designated should be included in the forest plan. The setting typically is natural but will vary depending on the area. Evidence of human activities or habitation is consistent with the characteristics for which the area is established. These areas are managed to maintain their special interest values.

The current forest plan designated five special interest areas totaling approximately 2,000 acres (Table 5).

Table 5. Existing Special Interest Areas on the GMUG National Forests

[Acreage calculated from 10C management prescription areas.]

Name	Acres (rounded)	Average Elevation	Category
Slumgullion Earthflow	800	11,400	Geological
Dry Mesa Dinosaur Quarry	60	7,500	Paleontological
Ophir Needles	500	11,500	Geological
Alpine Tunnel Historic District	580	11,000	Cultural
Mount Emmons Iron Fen	70	10,000	Botanical

Slumgullion Earthflow

The Slumgullion Earthflow is described above under National Natural Landmarks.

Dry Mesa Dinosaur Quarry

The Dry Mesa Dinosaur Quarry, located on the Uncompahgre Plateau west of Delta, is a 55 acre site located within the Jurassic Morrison formation and contains fossils from approximately 140 million years ago. The site was actively excavated from 1972 – 2002 by scientists from Brigham Young University. Fossil remains from over 30 different types of creatures have been unearthed (dinosaurs, pterosaurs, crocodiles, turtles, lungfish, shrew-like mammal) including one of the largest sauropod species ever found, and at least one species found nowhere else. BYU remains the collections manager for the removed fossils. This area was designated as a special interest area in the 1983 Forest Plan. During the 1990's public tours were offered during active digs, and the FS maintained an interpretive presence on site until 2004. The site has since been reclaimed to protect the fossil layer. This area is an important paleontological site. The bedrock formation that forms this site is present in surrounding slopes and there is potential that future scientific work may occur in this area. (Mauch 2017, Schumacher 2017). See the Paleontological Resources Assessment for the GMUG National Forests for additional information.

Ophir Needles

The Ophir Needles is a geologic formation formed by alpine erosion etching out topographic spires from highly pointed intrusive rock, located 10 miles south of Telluride, in the San Juans Geographic Area. This intrusion cuts sharply across a varied sequence of sedimentary and volcanic rocks over a range of about 1,000 feet. This location was evaluated but not designated as a National Natural Landmark by the NPS. It was designated as a geological special interest area in the 1991 plan amendment. No facilities exist at this location and no special management actions occur at this site.

Alpine Tunnel Historic District

The Alpine Tunnel Historic District was designated as a cultural special interest area in the 1991 plan amendment and the area was designated as a National Historic District in 1996. Located approximately 40 miles east of Gunnison along Forest Road 839, this district consists of three non-contiguous parcels of railroad built as part of the Denver, South Park and Pacific Railroad. A portion of the tracks reach 11,523 feet in elevation, making this the highest section of railroad in the world. The Palisades parcel, known for its cribbing to stabilize the narrow points of the railroad route, was partially damaged by an avalanche in 2016, as was the road accessing the historic district. There is currently a closure order in place for this area, however non-motorized trail access to the historic district is still available. Plans to repair the road and Palisades are in the works. See the Cultural and Historic Resources Assessment for more discussion.

Mount Emmons Iron Fen

The Mount Emmons Iron Fen, located on the south side of Mount Emmons west of Crested Butte in the Gunnison Basin Geographic Area, was designated as a special interest area in the 1991 plan amendment. The area was also designated by the State of Colorado as a Colorado Natural Area in 1999. This site contains an iron fen, an extremely rare type of wetland known to occur only in the southern Rocky Mountains. This area contains a significant population of roundleaf sundew (*Drosera rotundifolia*), currently a regional forester sensitive species

which is listed as a G5S2 species (rare in Colorado but relatively common elsewhere within the range) by the Colorado Natural Heritage Program (CNHP). This area is one of two known sites in Colorado where the sundew can be found. Habitat for several dragonfly species with restricted ranges also occurs here. Various types of research has occurred in this area: ground water monitoring, monitoring of sundew population, microbial cadmium resistance, sundew and ant interaction. Because this is a special interest area, manipulative research may occur, as long as it does not endanger the area.

An Articles of Designation between the Colorado Natural Areas Program (CNAP) and the Gunnison Ranger District outlines management responsibilities and restrictions for this area, as detailed in the Management Area Direction section, below. The CNAP monitors condition of this area and reports to the USFS. The USFS agreed to continue to manage the area in accordance with the current forest plan 10C management direction (see below under Management Area Direction) and to maintain the area as a natural area.

In May 2015 this area experienced a rain-on-snow event resulting in substantial water flow coming from the Iron Fen spilling onto Kebler Pass Road. Water concentrated on a cut slope above the road, causing the slope to collapse, putting the entire road fill at risk. To prevent road failure, Gunnison Ranger District personnel used a small excavator to deepen, widen and extend an existing ditch 160 feet through portions of the Iron Fen, to capture water before it affected the road. Beginning in the summer of 2015, the USFS working in cooperation with the Coal Creek Watershed Coalition, Gunnison County, US Army Corps of Engineers and Dr. David J. Cooper, developed a restoration plan to 1) permanently fix the chronic issue of water from the fen threatening the Kebler Pass Road, and 2) restore damage from the 2015 emergency actions and restore the old ditch. Phase 1 – construction of a rockery wall, spillway, culverts and rip-rap on the Kebler Pass Road designed to protect the roadway yet allow for natural surface and sub-surface flow from the fen – was completed in 2016. Phase 2 – restoration of the ditch and impacted fen area by back-filling, placement of sediment dams and revegetation with native wetland plant species – is scheduled for completion in 2017. Monitoring to determine when desired outcomes are reached will occur (Speas 2017).

Chapter 3. Sustainability

Contribution of Designated Areas to Sustainability

Sustainability in the context of designated areas places an emphasis on valuing, protecting, and preserving special areas and their unique benefits for present and future generations. A variety of designated areas are present on the GMUG National Forest, but the most prominent of which in terms of acreage and spatial distribution across the Forest, is wilderness. A substantial amount of literature addresses the values, contributions, and benefits of wilderness. Although the focus of this section is wilderness, the concepts and findings extend to other designated areas and protected public lands on the Forest, including Colorado Roadless Areas, national scenic trails, special interest areas, scenic byways, and research natural areas.

With respect to economic sustainability, rural areas with natural resource amenities, like wilderness, experience higher regional economic growth rates than rural areas without

natural resource amenities (Deller et al., 2001). Similarly, the West’s most popular national parks, monuments, wilderness areas, and other public lands offer a competitive advantage in attracting employees to the region’s growing high-tech and services industries (Holmes and Hecox, 2004). Proximity to wilderness is also an important reason why 45% of long-time residents and 60% of recent transplants to the West live in or move to counties containing wilderness (Headwaters Economics, 2012).

Chapter 4. Existing Forest Plan Direction for Designated Areas

Forest-wide Goals and Objectives

Designated Wilderness

Goals

The current Forest plan provides several goals for wilderness management, including:

- Emphasizing primitive wilderness opportunities.
- Managing a majority of the wilderness acres at the “full service management level”. (This is an undefined term).
- Implementing indirect methods for controlling wilderness use.

Table 6. Current Management Objectives for GMUG Wilderness Areas

[Units Defined: M Acres, Thousand Acres; %FSM/RSM, Percentage Full Service Mgt/Reduced Service Mgt; MWVD, Thousand Wilderness Visitor Days.]

Wilderness	Unit of Measure	1990	1991-2000	2001-2010	2011-2020
Wilderness Mgt.	Thousand Acres	515.4	515.4	515.4	515.4
Management Level	%FSM/RSM*	60/40	60/40	60/40	60/40
Wilderness Use	MWVD	194	223	268	322

*%FSM/%RSM (in this table) is based on an outdated management concept that was vaguely defined as the level of service provided (full or reduced), and for which percentage of the time.

There are no identified goals or objectives for management of other designated areas on the GMUG.

Management Area Direction

Designated Wilderness and Areas

Designated wilderness and areas to be managed to protect their wilderness character fall into several wilderness management prescriptions in the current plan. The distribution between management prescriptions is shown in Table 7.

Table 7. Wilderness Management Prescription Distribution within Existing Wilderness Areas

Management Prescription	Acres	Percent
8A - Pristine Wilderness Setting	107,900	19%
8B – Primitive Wilderness Setting	224,500	39%
8C – Semi-Primitive Wilderness Setting	186,800	32%
8D – Provide for Limited Areas of High-Density Day Use ¹	1,100	0%
8 – Wilderness or Areas to be Managed as Wilderness designated in the 1993 Colorado Wilderness Act	59,600	10%

¹ White River NF, lead forest for Maroon Bells-Snowmass Wilderness Area, mapped prescription areas for GMUG portion of wilderness in 1984 Forest Plan Management Prescription Area 8A (provides for pristine wilderness opportunities). More information is contained in the text below.

From the Forest Plan, Page III-155: The management emphasis is for the protection and perpetuation of essentially pristine bio-physical conditions and a high degree of solitude for both wildlife and humans with no perceptible evidence of past human use.

All resource management activities are integrated in such a way that evidence of current human use, including permitted and recreation livestock, is not noticeable the following season, or so that natural biological processes are not adversely or artificially changed over time by human use.

Management Prescription Area 8B (provides for primitive wilderness opportunities):

From the Forest Plan, Page III-159: Management emphasis is to provide for the protection and perpetuation of natural biophysical conditions. On-site regulation of recreation use is minimal. Travel is cross-country or by use of a low-density constructed trail system.

Management Prescription Area 8C (provides for semi-primitive wilderness opportunities):

From the Forest Plan, Page III-166: Management emphasis is to provide for the protections and perpetuation of essentially natural bio-physical conditions. Solitude and a low level of encounters with other users or evidence of past use is not an essential part of the social setting. Human travel is principally on system trails. Designated campsites are used and show evidence of repeated, but acceptable levels of use.

All resource management activities are integrated in such a way that current human use leaves only limited and site specific evidence of their passing. Areas with evidence of unacceptable levels of past use are rehabilitated and the affected area restored. Range allotments with authorized permanent structures and authorized mineral exploration activities requiring multi-year surface occupancy facilities may be present within the area. Scientific and other authorized practices utilizing non-motorized equipment, but requiring up to season-long occupancy, are compatible.

Management Prescription Area 8D (provides for limited areas of high-density day-use)

From the White River NF 1984 Forest Plan, page III-213 (U.S. Forest Service 1984): Management emphasis is to provide for the protection and perpetuation of essentially natural bio-physical conditions inside wilderness boundaries which are adjacent to and accessed

from urban or rural development or heavily used developed recreation sites. Human use is characterized by large numbers of day-users traveling relatively short distances into the wilderness.

Management activities are integrated so that the bio-physical wilderness resources are protected from unacceptable change, and day-users are made aware of the purposes of wilderness management. Management is directed towards providing a generally natural appearing setting. A trail system directs the user within the area and leads the overnight user through to other management areas. Opportunities to make official visitor contacts are frequent. There are no developed sites within the wilderness. Facilities such as bridges necessary for user safety or bio-physical resource protection may be present.

A plan amendment to the White River NF plan in 1986 (Amendment No. FY 86-11) added a recreation appendix with management direction to manage high density use (8D) areas in wilderness to change their status to semi-primitive (8C). It is not clear if corresponding mapping changes were completed, so approximately 1,100 acres of 8D are shown in Table 7.

Management Prescription Area 8 (wilderness and areas to be managed as wilderness):

The Fossil Ridge Wilderness, Roubideau and Tabeguache Areas were designated in the 1993 Colorado Wilderness Act. A management prescription 8 was assigned to these locations to denote they are to be managed as wilderness, but no specific wilderness settings have been assigned.

Table 8. Existing Forest Plan Direction for Designated Wilderness Areas

Current Standards and Guidelines	Is this direction currently implemented?	Is this direction still applicable in its current form?	Has there been a change in law, policy, regulation, or science that applies to this direction? If so, what is the change?	How might the direction be modified to reflect these changes?
Meet stated visual quality objective a. Do not allow negative deviation from an Adopted Visual Quality Objective (VQO) of retention.	Yes, but need to change to scenery management terminology	Yes	Yes	Need to change to scenery management terminology
Do not provide interpretive facilities at cultural resource sites, nor restore or enhance cultural resources for recreation purposes.	Yes	Yes	No	
Permit only those uses authorized by wilderness legislation, which cannot reasonably be met on non-Wilderness lands.	Yes	Yes	No	
Provide opportunities for human isolation, solitude, self-reliance and challenge while traveling cross-country and on system trails.	Yes	Yes	No	
Utilize a permit system to manage use levels and patterns during the summer use period based upon the following criteria: When acceptable use levels, as specified in the individual prescriptions, are exceeded during 20 percent of the summer use season, or When acceptable capacities, as specified in the individual prescriptions, in primitive or pristine management areas are exceeded on 10 percent or more of the days in the summer use season Apply a permit system to an entire wilderness, not just impacted portions of a wilderness.	No	No	No	
Do not impose party-size limits during traditionally light-use seasons or during fall hunting seasons unless necessary to prevent unacceptable levels of change to the biological and physical resources.	Yes	Yes	No	

Current Standards and Guidelines	Is this direction currently implemented?	Is this direction still applicable in its current form?	Has there been a change in law, policy, regulation, or science that applies to this direction? If so, what is the change?	How might the direction be modified to reflect these changes?
Maximum party-size limit for the summer use period is 25 people and/or recreational stock. Party size limits less than 25 people and/or recreational stock will be established where biological and physical resource capability cannot support that level of use. Party sizes established for protection of biophysical resources will set limits for both people and recreational stock. Parties larger than established limits may be allowed under permit on a case-by-case basis when compatible with other wilderness management objectives.	Yes	Yes	No	
Do not issue permits for or encourage competitive contest events, group demonstrations, ceremonies, and other similar events.	Yes	Yes	No	
Prohibit dogs or require them to be physically controlled on a leash. Exceptions will be made for permittee's working dogs, and for hunting dogs while hunting during legal seasons.	No	Yes	No	
Prohibit recreational stock along lake shores and stream banks except for watering and through-travel.				
Require users camping overnight with recreational stock to carry cubed, pelleted, or rolled feed and/or certified weed-free hay where grazing is prohibited.				
Control overnight grazing of recreational stock in alpine and Krummholz ecosystems according to use standards. Base range condition on the standards in the Range Analysis Handbook (FSH 2209.21).				
Prohibit new range improvement structure other than corrals, fences or water developments essential to sustain current permitted numbers.	Yes	Yes	No	

Current Standards and Guidelines	Is this direction currently implemented?	Is this direction still applicable in its current form?	Has there been a change in law, policy, regulation, or science that applies to this direction? If so, what is the change?	How might the direction be modified to reflect these changes?
Implement revegetation only for rehabilitation of areas in less than "fair" range condition based upon their natural potential. Use only native species for revegetation. Implement only where natural vegetation possibilities are poor and only where degradation was due to human activities. Base range condition on the standards in the Range Analysis Handbook (FSH 2209.21).	Yes	Yes	No	
Permit fish and wildlife research and management utilizing guidelines adopted by the International Association of Fish and Wildlife Agencies.	Yes	Yes		
Close or rehabilitate dispersed sites where unacceptable environmental damage is occurring. Close sites that cannot be maintained in Frissell Condition Class 1, 2, or 3. Rehabilitate sites that are in Frissell condition classes 4 or 5.	No			
Take appropriate suppression action on man-caused wildfires.				
Maintain fire-dependent ecosystems using prescribed fires ignited naturally. Reclaim areas disturbed as part of fire control activities to meet the visual quality objective of retention. Allow naturally occurring fires to burn under approved wilderness fire area management plan.	No	No	Yes	Need to change to scenery management terminology. Do not have fire management plans for wilderness areas.
Protect air quality-related values from adverse effects from air pollution. See criteria and standards in FSM 2120.	No			
Control natural insect or disease outbreaks in wilderness only when justified by predicted loss of resource value outside of wilderness. Conduct analysis in accordance with FSM 3440.				
Control problem animals on a case-by-case basis in cooperation with other agencies (FSM 2610) using methods directed at the offending animal but which present the least risk to other wildlife, and/or visitors.				

Research Natural Areas (RNA)

Existing Research Natural Areas have a management prescription 10A. Emphasis is on research, study, observations, monitoring and educational activities that are nondestructive and nonmanipulative and that maintain unmodified conditions.

Table 9. Existing Forest Plan Direction for Research Natural Areas

Current Standards and Guidelines	Is this direction currently implemented?	Is this direction still applicable in its current form?	Has there been a change in law, policy, regulation, or science that applies to this direction? If so, what is the change?	How might the direction be modified to reflect these changes?
Meet stated visual quality objective a. Do not allow negative deviation from an Adopted Visual Quality Objective (VQO) of retention.	Yes, but need to change to scenery management terminology	Yes	Yes	Need to change to scenery management terminology
Prohibit construction of developed recreation sites.	Yes	Yes	No	
Discourage or prohibit public use which contributes to impairment of research or educational values.	Yes, user created routes closed beyond parking/camping site along Schofield Pass Road.	Yes	No	
Permit and encourage use by scientists and educators.	Yes, all research activities are approved by RMRS and District Ranger.	Yes	No	
Prohibit any direct habitat manipulation.	Yes	Yes	No	
Restrict grazing by livestock to that essential for the maintenance of a specific vegetation type	Yes	Yes	No	
Use special use permits or cooperative agreements to authorize and document scientific activity	Yes	Yes	No	
Withdraw from mineral entry in conformance with Section 204 of Federal Land Policy and Management Act of 1976.	No, only the Gothic RNA has been withdrawn from mineral entry.	Yes	No	Escalante Creek RNA needs to be withdrawn from mineral entry.

Current Standards and Guidelines	Is this direction currently implemented?	Is this direction still applicable in its current form?	Has there been a change in law, policy, regulation, or science that applies to this direction? If so, what is the change?	How might the direction be modified to reflect these changes?
Monument all corners or turning points and document and record the monumentation in the establishment report. Mark boundaries in the field when appropriate to ensure integrity of the area.	Yes	Yes	No	
Generally physical improvements, such as roads are not permitted	Yes	Yes	No	
Limit trails to those needed for access to conduct research and for educational purposes	Yes	Yes	No	
Extinguish wildfires endangering the RNA. Allow fires within the RNA to burn undisturbed unless they threaten person or property outside the area, or the uniqueness of the RNA a. Leave fire-caused debris for natural decay.	Yes	Yes	No	
Do not reduce fire hazard with the RNA.	Yes	Yes	No	
Use special closures when necessary to protect the RNA from actual or potential damage from public use. a. Issue closure order under provisions of 36 CFR 261.50.	Yes	Yes	No	
Take no action against endemic insects, diseases or wild animals.	Yes	Yes	No	

Special Interest Areas (SIA)

Existing Special Interest Areas have a management prescription 10C, which means that emphasis is on management of unusual scenic, historical, geological, botanical, zoological, paleontological, or other special characteristics to protect and where appropriate, foster public use and enjoyment of these areas. The following direction applies:

Table 10. Existing Forest Plan Direction for Special Interest Areas

Current Standards and Guidelines	Is it direction currently implemented?	Is this direction still applicable in its current form?	Has there been a change in law, policy, regulation, or science that applies to this direction? If so, what is the change??	How might the direction be modified to reflect these changes?
Manage for adopted Visual Quality Objective (VQO). a. Special Interest Area-Adopted VQO. Slumgullion Earthflow-Retention Mount Emmons Iron Fen-Retention Ophir Needle-Retention Alpine Tunnel – Partial Retention Dry Mesa Quarry-Modification	Yes, but need to change to scenery management terminology. Need to use correct area names.	Yes	Yes	Need to change to scenery management terminology.
Prohibit construction of developed recreation sites.	Yes	No, need to modify to keep development to the minimum necessary for public enjoyment of the areas.	No	Consider modifying direction for specific areas where visitor-use is occurring.
Semi-primitive non-motorized, semi-primitive motorized and rural recreation opportunities can be provided.	Yes	Yes	No	

Current Standards and Guidelines	Is it direction currently implemented?	Is this direction still applicable in its current form?	Has there been a change in law, policy, regulation, or science that applies to this direction? If so, what is the change??	How might the direction be modified to reflect these changes?
<p>Provide roaded natural recreation opportunities within ½ mile of Forest arterial, collector and local roads with better than primitive surfaces which are open to public travel.</p> <p>Provide semi-primitive motorized recreation opportunities with a low to moderate incidence of contact with other groups and individuals with ½ mile of designated local roads with primitive surfaces and trails open to motorized recreation use.</p> <p>Where local roads are closed to public motorized recreation travel, provide for dispersed non-motorized recreation opportunities. Manage recreation use to provide for the incidence of contact with other groups and individuals appropriate for the established ROS class.</p> <p>Provide semi-primitive non-motorized recreation opportunities in all areas more than ½ mile away from roads and trails to motorized recreation use.</p> <p>a. See Forest Management Requirements for maximum use and capacity levels.</p> <p>b. Specify off-road vehicle restrictions based on ORV use management.</p>	<p>Yes</p>	<p>Yes</p>	<p>No</p>	<p>This direction could be eliminated if Recreation Opportunity Setting (ROS) decisions are made in the revised plan</p>
<p>Permit undesignated sites in Frissell condition class 1 through 3 where unrestricted camping is permitted.</p>	<p>No</p>	<p>No</p>	<p>Yes</p>	<p>Consider modifying to allow occupancy and use of the area's resources to the extent they neither interfere with the primary values for which the area was established nor negatively affect the visitor's experience.</p>

Current Standards and Guidelines	Is it direction currently implemented?	Is this direction still applicable in its current form?	Has there been a change in law, policy, regulation, or science that applies to this direction? If so, what is the change??	How might the direction be modified to reflect these changes?
Discourage or prohibit any public use which contributes to impairment of research or educational values in the Dry Mesa Dinosaur Quarry area.	Yes	Yes	No	
Permit and encourage use by scientists and educators.	Yes	Yes	Yes	Yes
Provide signing for interpretation and protection of Ophir Needle, Alpine Tunnel, Slumgullion Earthflow and Dry Mesa Dinosaur Quarry.	No. No signage occurs at Ophir Needle or Dry Mesa Dinosaur Quarry. Slumgullion Earthflow and some Alpine Tunnel signage needs to be repaired.	Yes	No	Need to determine where interpretive/protection signing is desired.
Prohibit any direct habitat manipulation.	Yes	Yes	No	
Manage livestock distribution and stocking rates to be compatible with special interest feature.	Yes	Yes	No	
Use special use permits or cooperative agreements to authorize and document scientific activity	Yes	Yes	No	
Withdraw from mineral entry in conformance with Section 204 of Federal Land Policy and Management Act of 1976.	No. Only a portion of the Ophir Needles has been withdrawn from mineral entry.	Yes	No	Need to withdraw areas from mineral entry
Monument all corners or turning points and document and record the monumentation in the establishment report. Mark boundaries in the field when appropriate to ensure integrity of the area.	No	Yes	No	Change language to refer to management plan. No establishment report for SIAs

Current Standards and Guidelines	Is it direction currently Implemented?	Is this direction still applicable in its current form?	Has there been a change in law, policy, regulation, or science that applies to this direction? If so, what is the change??	How might the direction be modified to reflect these changes?
Develop trails for interpretation and self-study for Ophir Needles and Slumgullion Earthflow.	No. No trails have been established	Yes	No	Need to work with partners (NPS, BLM, CNHP) to develop interpretation plan.
Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area. a. Prompt control of all wildfire.	Yes	Yes	No	

Additional direction within the Articles of Designation for the Mount Emmons Iron Fen signed between the State of Colorado and the Gunnison Ranger District (June 4, 1999) includes:

- Improvements are acceptable if deemed necessary to protect the area for the purposes for which it is established.
- Harvest of timber will not be authorized within the property.
- Natural insect infestations or disease outbreaks will be controlled only when justified by predicted loss of resource values... protective actions may be taken at the discretion of the USFS.
- There shall be no surface occupancy allowed in connection with any oil and gas leasing or extraction, depending on the specific policies adopted in the Forest Plan Revision.
- Public mechanized vehicle access will be prohibited off existing roads. Access trails, if any, will be open to foot traffic only and will be located and designed to protect wetland hydrology and ecology, *Drosera rotundifolia* habitat and to minimize other biophysical and visual impacts. General public access and recreation use will be discouraged.
- Revegetation will only be implemented for rehabilitation of areas where degradation was due to human activities and where natural vegetation possibilities are poor. Only local native species will be used for revegetation.
- The USFS will cooperate with the [CPW] efforts to inventory, map and monitor the plant species of special concern on the property, and in investigating the hydrologic sources of water which support the wetland.
- The USFS will consider RNA status for the property during the Forest Plan revision process.
- The USFS will cooperate with the [CPW] efforts in producing a periodic report on the condition and use of the site.
- Gunnison County road maintenance crew must obtain permission from the USFS prior to any additional road maintenance or erosion control beyond yearly road maintenance of the section of Kebler Pass Road (County Road #12) on the south edge of the Property.

Existing Management Plans

With the exception of the CDNST Comprehensive Plan, the GMUG does not currently have separate management plans for designated areas on the Forest. Currently none of the existing Research Natural Areas nor the Special Interest Area have existing management plans. Existing Research Natural Areas have Establishment Reports which were completed at the time the areas were established (1931 for Gothic, 1985 for Escalante Creek). Management direction for special interest areas should be included in the forest plan (FSM 2372.03).

Forest Plan Consistency with External Plans for Designated Areas Issues in the Broader Landscape

Although the GMUG does not have separate management plans for any of its designated areas, other pertinent plans and policies are noted above in the discussion for each of the designated areas. These plans include, but are not limited to:

- Management plans for adjacent BLM lands, including the Powderhorn Wilderness and Wilderness Study Areas.
- Management plans for adjacent National Park Service lands.
- Management plans for adjacent National Forests that share wilderness areas with the GMUG, including the White River, Pike-San Isabel, Rio Grande, and San Juan.

Chapter 5. Potential Need and Opportunity for Additional Designated Areas

Note that this Designated Areas Assessment does not include an inventory and evaluation of individual land areas for potential designations; separate processes to inventory and evaluate potential wilderness will be conducted for potential additional Wilderness, and eligibility process for potential Wild & Scenic Rivers (see FSH 1909.12, Chapters 70 and 80).

Are there published documents or proposals that identify an important need or potential for a designated area?

In July 2006, the GMUG National Forest published the Comprehensive Evaluation Report (CER), a component of the forest plan revision process underway at that time. The CER identified a number of areas recommended for Wilderness, eligible Wild and Scenic River segments, and potential additional RNAs and SIAs, which have not been administratively designated.

Table 11. Areas Recommended for Wilderness on the GMUG National Forests, per 2005 Planning Rule

[GMUG CER (2006).]

Name	Geographic Area	Approximate Acreage
Munsey/Erickson	North Fork	2,630
Beaver	Gunnison	3,590
Soap Creek	Gunnison	5,550
Curecanti	Gunnison	5,950
Poverty Gulch	Gunnison	5,540
Whetstone*	Gunnison	12,820
Granite Basin	Gunnison	9,220
Union	Gunnison	1,560
Sawtooth	Gunnison	22,800
Cochetopa Creek	Gunnison	1,600
Cataract	Gunnison	9,980
Matterhorn	San Juan	3,590
Failes Creek/Soldier Creek	San Juan	6,200
Little Cimarron	San Juan	4,220
Turret Ridge	San Juan	5,170
Whitehouse Mountain	San Juan	10,330
Last Dollar/Sheep Ck	San Juan	3,630
Wilson	San Juan	950
Unaweep	Uncompahgre	8,350
Total Acres		123,680

* Further review would likely have precluded this area from recommendation, due to existing patented and unpatented mining claims.

Table 12. Eligible Wild and Scenic Rivers on the GMUG National Forests, per 2005 Planning Rule

[GMUG CER (2006).]

Name	Geographic Area	Length	Class
Oh Be Joyful Creek – 1A	Gunnison	4.8 miles	Wild
Oh Be Joyful Creek – 1B	Gunnison	1.2 miles	Recreational
Oh Be Joyful Creek – 1C	Gunnison	3.1 miles	Wild
Oh Be Joyful Creek – 1D	Gunnison	1.2 miles	Scenic
Slate River	Gunnison	3.5 miles	Wild
East River	Gunnison	6.7 miles	Recreational
Lower Taylor River	Gunnison	20.2 miles	Recreational
West Elk Creek	Gunnison	15.8 miles	Wild
Upper West Soap Creek	Gunnison	2.8 miles	Wild
Tabeguache Creek	Uncompahgre	3.7 miles	Wild
Escalante Creek	Uncompahgre	1.5 miles	Scenic
Bear Creek (Ouray)	San Juan	3.0 miles	Scenic
Cow Creek	San Juan	5.1 miles	Wild
Wetterhorn Creek	San Juan	1.0 miles	Wild
Wildhorse Creek	San Juan	1.4 miles	Wild
Difficulty Creek	San Juan	1.8 miles	Wild
Bear Creek (Telluride)	San Juan	2.8 miles	Recreational
Bridal Veil Falls	San Juan	N/A	Recreational
Ingram Falls	San Juan	N/A	Recreational

Potential Research Natural Areas

The 1983 Forest Plan and 1991 Amended Forest Plan both refer to a proposed Tabeguache Research Natural Area. An Establishment Record for this area was prepared in 1991, however; this area was never designated. A wildfire burned over half the area in 1995. Suppression efforts resulted in dozer line and felled trees within the proposed area. A revised Establishment Record was never completed.

In 1993 the Rocky Mountain Region and the Rocky Mountain Research Station RNA committee developed a strategy to identify target ecosystem representation for the Region 2 RNA system. The intent was to expand the RNA system within the region to represent the ecological diversity in Region 2. RNA designations are land allocation decisions that most frequently occur during forest plan revisions. Each National Forest in Region 2 was asked to identify high quality areas of cover types or plant associations known to occur on that forest, especially unique or under-represented types that had minimal conflicts with existing uses. Criteria included: vacant or closed allotments, complete watersheds, areas with unique or representative ecosystems types identified for each forest, areas that support populations of TES species, good examples of aquatic/wetland/riparian communities, areas at lower elevations outside of wilderness, areas in wilderness, roadless with no motorized uses, minimal non-motorized recreational use, little or no evidence of past management. The

GMUG identified 12 potential research natural areas which were then inventoried by the Colorado Natural Heritage Program (CNHP). During 2003, district staffs reviewed the CNHP inventories and the Mt Emmons Iron Fen SIA and assessed them according to criteria in the FSM 4063 and Guidelines for Research Area Analysis by National Forests in the Rocky Mountain Region. These evaluations were based on:

1. Quality – how well a site represents the targeted ecosystem type or protected biodiversity elements. Does the area capture a large proportion of known biotic and environmental variability (successional stages) of the ecosystem type being represented? Is the area large enough to provide unmodified conditions or large enough for a TES population? -
2. Condition – how much the site has been degraded or altered from natural or optimal conditions. Does the area contain non-native species, roads, trails, other infrastructure, past logging, grazing?
3. Viability – the likelihood of long-term survival for the ecosystem and its protected biodiversity. Does the area have connectivity to other natural areas, is an entire watershed included, are natural disturbance processes operating?
4. Defensibility – extent to which the ecosystem and biodiversity elements can be protected from extrinsic human factors. Are activities on surrounding areas influencing the proposed area?

Potential research natural areas were remapped to reflect only those portions that met the above criteria. Evaluations for potential RNAs are included in the GMUG 2006 Comprehensive Assessment. Only three areas were carried forward for consideration as potential RNAs in the 2007 GMUG proposed plan, proposed for Management Theme 2 – Minimal Use Special Areas, which would provide for conservation of representative, unique or rare ecosystems or ecological components.

Table 13. Potential Research Natural Areas on the GMUG National Forests, Recommended for Designation in 2007 Proposed Plan

Name	Acres (rounded)	Average Elevation	Major Plant Association	Proposed Management
Mt. Emmons Iron Fen	170	10,000	Wetland Iron Fen	Theme 2 RNA
Big Atkinson Breaks	3,190	7,700	Pinyon Woodland	Theme 2 RNA
Lower Battlement Mesa	6,800	7,200	Pinyon Woodland	Theme 2 RNA

Mount Emmons Iron Fen

This area is currently a special interest area (see description above). A slightly larger area is proposed for consideration as a potential RNA per agreement in an Articles of Designation with the CNAP, which has identified this area as a Natural Area. This area is located in the Gunnison Basin Geographic Area, Gunnison Ranger District. It contains Englemann spruce and subalpine fir ecosystems surrounding an iron fen, which contains one of only two known populations of roundleaf sundew (*Drosera rotundifolia*) in Colorado. This is a sensitive, carnivorous plant. The area is in high quality, except where emergency actions were taken to enlarge and extend an existing ditch in 2015 to capture overland flow from the fen which was

threatening the Kebler Pass Road, below the fen. Work to correct the chronic drainage problem above the road was completed in 2016. Restoration of the ditch and rehabilitation of the fen where it was damaged will occur in 2017 and monitoring will follow to ensure hydrologic processes and natural vegetation are restored. There has been no logging or cattle grazing in over 30 years. Private land borders the eastern edge of the area. Roads surround the area. Unpatented mining claims overlap the entire area. The area is not currently available for oil and gas leasing. Research has occurred on this site in the past under special use permits (see existing SIA descriptions above). If this area were to become a research natural area, future research would be limited to nonmanipulative and nondestructive methods, which would prohibit some ongoing research on ant/sundew interactions.

Big Atkinson Breaks

Located on the Uncompahgre Plateau Geographic Area, Grand Valley Ranger District, this area contains good to high quality examples of pinyon-juniper woodland and Gambel oak shrubland, including old-growth stands of ponderosa pine and Douglas-fir. Overall condition is good. There has been no past logging. Some riparian areas are in exceptional condition with minimal changes and relatively few exotic species. Visible past impacts include several old roadways that are slowly revegetating, cut stumps along the roadways. Cheatgrass is common in the pinyon-juniper woodlands. The area is surrounded by federal public land with no urban, industrial or agricultural areas upwind or upstream. The area as mapped is defensible and locatable on the ground. The area has medium potential for oil and gas resources and low to medium potential for locatable minerals. There are no pending oil and gas leases. Existing stipulations for oil and gas development are timing limitations and no surface occupancy. The area is in the Club/Campbell Point allotment. No suitable timber exists in the area however firewood cutting for pinyon and juniper would need to be eliminated. Open roads #598 and #668, ATV trail #616 and horse trail #622 surround the perimeter of the area. The area is approximately equivalent to the Johnson Basin Upper Tier Colorado Roadless Area.

Lower Battlement Mesa

Located in the Grand Mesa geographic area, Grand Valley Ranger District, this area is adjacent to the Lower Battlements RNA designated on the White River National Forest. In combination with the existing White River RNA, this area represents a large assemblage of unique and diverse plant communities typical of the Green River and Wasatch formations. The pinyon-juniper series is well represented. Other important types include shale barrens, cold desert shrublands, mixed mountain shrublands, oak thickets and Douglas-fir forests. Critical habitat for the DeBeque phacelia (*Phacelia submutica*) occurs within this area along with habitat for other sensitive plant species. The area is large enough to allow ecological processes to function naturally. The area is in very good ecological condition. There has been no past woodcutting or logging and drainages remain intact. There are no roads, trails or structures. It is not within a grazing allotment. Cheatgrass is widespread in the area. This area falls within the Sunnyside Colorado Roadless Area. Oil and gas leases exist in the area, however stipulations for oil and gas exploration are no surface occupancy due to steep slopes. Guzzlers for bighorn sheep exist within the area to provide water for a low elevation bighorn sheep herd.

Proposed Special Interest Areas

During the GMUG forest plan revision process in the early 2000s, both internal and external interests identified potential special interest areas. The 2006 Special Interest Area Comprehensive Assessment identified five potential special interest areas; however, only four were carried forward into the 2007 proposed plan (Table 14). In addition, the Red Mountain Mining District has been discussed as a potential special interest area subsequent to the previous planning efforts.

Table 14. Potential Special Interest Areas on the GMUG National Forests – 2007 Proposed Plan

Name	Acres (rounded)	Elevation	Proposed Management	Category
Ironton Park Fen	320	9,700	Theme 2 SIA	Botanical and Cultural
Taylor-Willard	511	12,000	Theme 2 SIA	Botanical – shared with White River; note: retain road travel through pass
Wager Gulch Iron Fen	474	11,500	Theme 2 SIA	Botanical
Spring Creek Spring	4	8,300	Theme 2 SIA	Hydrological

Ironton Park Fen

The Colorado National Heritage Program (CNHP) identifies the Ironton Park as a Potential Conservation Area with a biodiversity significance rank of B2 - Very High Biodiversity Significance, a protection urgency rank of P1 – Immediately Threatened/Outstanding Opportunity, and a management urgency rank of M3 - Needed within 5 years to maintain quality. According to the 2017 Level 1 Potential Conservation Area Report (CNHP 2017) this area is located six miles south of Ouray along Highway 550, the Ironton Park fen occupies a level area where Red Mountain Creek has spread out into several channels creating the largest wetland in the Uncompahgre Basin. The creek is dammed to form Crystal Lake at the north end of the valley. About 300 acres of the site is dominated by bog birch (*Betula glandulosa*), which accounts for 70 percent of the shrub cover. Planeleaf willow (*Salix planifolia*) covers 20 percent, with bareground willow (*S. brachycarpa*), Drummond willow (*S. drummondiana*) and Rocky Mountain willow (*S. monticola*) making up the remaining 10 percent. The understory consists of beaked sedge (*Carex utriculata*), water shedge (*C. aquatilis*), tufted hairgrass (*Deschampsia cespitosa*) and Canada wildrye (*Elymus canadensis*). The soils are permanently saturated and have peat accumulations. The site contains a good occurrence of a globally imperiled iron fen.

The majority of the area was acquired in 2004 and is now National Forest System Land. Highway 550 bisects the fen. Red Mountain Creek has been dredged and some areas near the highway have been filled. Acidification from mining activity has eliminated aquatic vertebrate species from the ecosystem. Sedimentation from the highway further degrades water quality. Mine tailing cleanup and containment work upstream has occurred and additional reclamation work could improve the condition of the area.

Wetland vegetation has been shown to be effective in collecting heavy metals from acid mine drainage, so the area may help mitigate environmental impacts resulting from past mining in the area.

Taylor-Willard

The potential Taylor-Willard Special Interest Area is located approximately twelve miles south of Aspen, CO, on the border between the White River and Gunnison National Forests. It includes approximately 1400 acres, 500 of which is located on the Gunnison National Forest just south of Taylor Pass. The area located on the White River National Forest is currently being managed as a special interest area with an emphasis on sensitive and endangered alpine plant species. The area occupies parts of T12S, R84W, Sections 9-10, 15-17 and 20-22, in rolling terrain, consisting of alpine tundra and wetlands, and small areas of Engelmann spruce and subalpine fir. This area was inventoried by the CNHP as a potential RNA.

The area lies within the Elk Mountains, a westward extension of the Sawatch Range. Most of the area is above timberline with elevations ranging from 11,200 to 12,300 feet. Uplands consist of dry, gravelly tundra dominated by alpine grasses and sedges, dwarf prostrate shrubs, Engelmann spruce, and cushion plants. Common species are whortleberry (*Vaccinium sp.*), alpine avens (*Geum rossii*), arctic and snow willows (*Salix arctica* and *S. reticulata*), Hooker's mountain avens (*Dryas octopetala*), moss campion (*Silene acaulis*) and alpine clover (*Trifolium dasyphyllum*). In lower lying wet areas there are thickets of low willows and sedge meadows. The area is significant for the number of identified rare high-alpine plants that have been found to occur there.

The area around Taylor Pass and Taylor Lake receives heavy recreation use.

Spring Creek Spring

The Spring Creek hydrologic site consists of two small wetlands in T. 128S., R. 89W. Sec. 10. Site No.1 is approximately 0.8 acres in size located at UTM, N299528.16 and E 4322664.68. Site No.2 is approximately 1.8 acres in size located at N299582.16 and E 4322948.65.

The sites represent unusual and interesting features that support important ecological processes and wetland ecosystems. The sheer volume of groundwater discharge makes these sites unusual for western Colorado. The source of water is snowmelt and rain run-off from the Ragged Mountains, which has percolated through massive landslide debris deposit forming a westward flowing colluvial/alluvial ground water flow system. Vegetation of the Spring Creek sites is complex for such small areas. Species present include *Carex aquatilis*, *Carex utriculata*, *Corydalis caseana*, *Senecio triangularis*, *Cardamine cordifolia* and an exotic invasive *Trifolium repens*.

The Ragged Bench Trail traverses across the upper edge of Site No. 1. A grazing enclosure was constructed at Site No. 1 in 2003 in order to protect groundwater and climate monitoring equipment. This enclosure will help with restoration of wetland plant communities.

Wager Gulch Iron Fen

The CNHP identifies the Wager Gulch Iron Fen as a Potential Conservation Area with a biodiversity significance rank of B2 - Very High Biodiversity Significance, with a values rank of V1 – Outstanding values. The Wager Gulch Iron Fen is an unusual ecological type not commonly found in the western United States. It is an iron fen that has over 16 inches of organic soil or peat, very low pH (3.4) water, and primary support from groundwater flow. It encompasses approximately 474 acres.

Ecological types within the fen are primarily an Engelmann spruce-subalpine fir-bog birch (*Abies bifolia*-*Picea engelmannii*-*Betula glandulosa*)/Sphagnum moss plant community. The Colorado Natural Heritage is ranking iron fens with spruce as G2 S2, globally and state imperiled. This community is found growing on deep organic Histosol soils. Limonite deposits are also present. Other plant species found in the fen are various sedges (*Carex*), Labrador tea (*Ledum glandulosum*), elephantella (*Pedicularis groenlandica*), heartleaf arnica (*Cardamine cordifolia*), star gentian (*Swertia perennis*), Canada reedgrass (*Calamagrostis canadensis*), and brook saxifrage (*Micranthes odontoloma*). A planeleaf willow/water sedge (*Salix planifolia*/*Carex aquatilis*) plant community is found on the southwest edge of the fen.

The site is bisected by Road # 568. Recreation use in the area is increasing.

Are there other proposals for designated areas before Congress, in proposals from collaborative efforts or from previous plans?

See previous section for discussion of the proposed designated areas in the 2007 GMUG Proposed Plan.

San Juan Mountain Wilderness Act

The San Juan Mountains Wilderness Act was originally introduced in 2009 by then Congressman John Salazar to add acres of Wilderness to the GMUG and the San Juan NFs. Colorado Senators Mark Udall and Bennet introduced a similar bill in the Senate in 2011 and 2013. In February 2016, Senator Bennet's office requested updated maps in anticipation of reintroducing the bill. Senator Bennet's staff is currently outreaching this proposal but no official changes have yet been made. Currently, the draft proposal includes:

- 3,400 acres to be added to the Lizard Head Wilderness.
- 21,300 acres to be added to the Mount Sneffels Wilderness.
- 8,600 acres of the McKenna Peak Wilderness Study Area (only on Public Land administered by the BLM) to be designated as Wilderness.
- 800 acres to be designated as the Liberty Bell East Special Management Area, which will allow the Hard Rock 100 competitive running event to continue to be authorized.
- 21,600 acres to be designated as the Sheep Mountain Special Management Area. Existing uses including heliskiing will be allowed to continue but no new roads or other developments will be permitted. Roughly half would include NFS land on the Uncompahgre NF and half on the San Juan NF.

- 6,600 acres to be withdrawn from minerals in Naturita Canyon.

Gunnison Public Lands Initiative

The Gunnison Public Lands Initiative (GPLI) is a coalition of stakeholders that has released an initial proposal that recommends that key public lands in Gunnison County with exceptional recreation, wildlife natural, grazing, scenic, scientific and water values be permanently protected. They are focused on new legislation for wilderness and special management areas on National Forest and BLM lands in Gunnison County.

2007 GMUG Proposed Plan

The Forest received a citizens' proposal during the mid-2000's plan revision effort, entitled "Mountains to Mesas", which was submitted by a coalition of environmental or conservation organizations. The primary goal of this alternative was to protect and restore the native biological diversity of the forest (HCCA et al 2005). This proposal identified management prescriptions in three broad categories:

1. Cores reserves and linkages (1,545,600 acres, 52 percent of the alternative). Core reserves were defined as large blocks of relatively intact ecosystems with minimal human disturbance (HCCA et al 2005) and linkages were defined as areas to allow for species movement between core reserves. This category was comprised of prescriptions for existing Wilderness (546,300 acres, 18 percent), recommended for wilderness (784,100 acres, 26 percent), research natural areas (9,300 acres, <1 percent) and wildlife linkage (191,800 acres, 6 percent) and a special management area for the Rocky Mountain Biological Laboratory (14,200 acres, < 1 percent).
2. Low Use Compatible areas (916,200 acres, 31percent of the alternative). These areas were proposed to insulate core reserves and linkages from human impacts and include mostly habitat for various wildlife species (bighorn sheep, lynx, Gunnison sage grouse, and big game winter range), non-motorized recreation, areas for ecological restoration, and special interest areas.
3. Minimum-High Use Compatible areas (455,400 acres, 15 percent of the alternative). These areas were proposed to allow moderate to high motorized and mechanized travel and recreation, timber management and ski resorts.

Only portions of the Mountains to Mesas alternative related to various types of area designations. For this assessment, the original proposal was compared to the 2007 Proposed Plan, 2012 Colorado Roadless Areas, designated critical habitat, and modeled lynx habitat to provide context:

- Only 12 percent of the Mountains to Mesas recommended wilderness coincided with the 2007 Proposed Plan recommended for wilderness area.
- Approximately 70percent of the Mountains to Mesas recommended for wilderness areas are now included in Colorado Roadless Areas.
- Only six percent of the Mountains to Mesa Research Natural Areas prescription coincide with the 2007 Proposed Plan Research Natural areas.

- Only seven percent of the Mountains to Mesa special management area for the RMBL coincides with the existing research natural area. Approximately 74 percent of the Mountains to Mesas RMBL special management area is now in Colorado Roadless Areas.
- Approximately 27 percent of the low use compatible category met the criteria for and are now included in Colorado Roadless Areas. Approximately 7 percent of minimum-high use compatible areas are now in Colorado Roadless Areas.
- Critical habitat for Gunnison sage-grouse has been designated for this listed species since the 2007 proposed plan, and it covers a larger area than the proposed Gunnison sage grouse habitat from the Mountains to Mesas.
- Similarly, lynx habitat has been identified for the listed Canada lynx by modeling forest vegetation. The modeled lynx habitat also covers a much larger area than proposed as lynx habitat prescription in the Mountains to Mesas alternative.
- The special interest area prescription in the Mountains to Mesas alternative is approximately equal to the existing special interest area.

Are there specific land types or ecosystems present in the plan that are not currently represented or minimally represented?

Generally, all of the wilderness areas on the GMUG National Forest are high elevation. An objective of the National Wilderness Preservation System is a system of lands that reflect the rich ecological diversity of all of the lands across the United States, including ecological types and vegetation communities such as aspen, whitebark pine, sagebrush, grasslands, and xeric shrublands, and the living organisms that rely on those communities.

For the current GMUG planning process, the terrestrial assessment identifies 15 ecosystems on the GMUG. Alpine uplands have a high level of protection via designated areas on the GMUG (81% of the ecosystem is in a designated area). Most ecosystems have about half of their area in these special categories. Some exceptions include sagebrush, ponderosa pine, and bristlecone-limber pine, which all have less than 20% in these categories (See *Terrestrial Assessment* for more detail regarding ecosystem representation in designated areas on the GMUG).

Are there rare or outstanding resources in the plan area appropriate to specific types of designated areas?

There are ecological, botanical, and aquatic resources that could be appropriate for specific types of designated areas. Table 12, Table 13, and Table 14 above show resources that were previously identified as eligible wild and scenic rivers and potential research natural areas and special interest areas.

Are there known opportunities to highlight unique recreational or scenic areas in the plan area to provide for sustainable recreation opportunities?

As depicted in Table 12, the 2006 CER identified 19 river segments that were eligible for further consideration as wild and scenic rivers. The plan revision process at that time was not completed, nor was a suitability study completed for the eligible segments. The outstandingly remarkable values identified for these rivers or river segments included scenery, recreation, and wild classes. An updated eligibility study, consistent with FSH 1909.12 Chapter 80, is needed to consider these and other segments on the GMUG during the Forest Plan Revision process.

Is there scientific or historical information that suggests a unique opportunity to highlight specific educational, historic, cultural, or research opportunities?

The GMUG has completed hundreds of evaluations for the National Register of Historic Places (National Register) on documented heritage resource sites on the GMUG National Forest. One site, the Alpine Tunnel Historic District, was identified as a special interest area in the 1991 amended plan and was subsequently placed on the National Register in 1996. The GMUG has not presently identified additional areas for designation based on their historic or cultural characteristics (Karchut 2017).

The Dry Mesa Dinosaur Quarry is also currently a special interest area. Considered a very important fossil site in the region and the country, there is potential for future research activities; however, this site is currently reclaimed to protect the fossil resources.

The existing Gothic research natural area and the Mount Emmons Iron Fen special interest area have both been subject to past and current research activities. Additional potential research natural areas and proposed special interest areas have been identified (see discussions of potential research natural areas and potential special interest areas above) as high quality examples of unique or important ecosystems.

Wilderness, inventoried roadless areas, and research natural areas are recognized in numerous reports as important areas for research. The Final EIS for Rulemaking for Colorado Roadless Areas (2012) identifies roadless areas as important reference landscapes in which to base research that may be useful as a comparison to study the effects of more intensely managed areas. These areas may also contain additional traditional cultural properties or sacred sites.

Has a need or opportunity for specific designated areas been identified in the plans of States, Tribes, counties, and other local governments?

For more information on interests of Tribes, see the *Cultural and Historic Resources Assessment* and the *Areas of Tribal Importance Assessment*. The planning team is not aware of plans of the state, counties, or other local governments for specific designated areas.

Are there known important ecological roles such as providing habitat or connectivity for species at risk that could be supported by designation?

The ecological roles that additional designations could play in providing habitat or connectivity for at-risk species is an area where more information is needed.

Chapter 6. Potential Need for Plan Changes to Respond to Designated Areas Issues

- The 1983 Plan preceded designation of the Old Spanish National Historic Trail, completion of the Comprehensive plan for the Continental Divide National Scenic Trail, Powderhorn and Fossil Ridge Wilderness Areas, Roubideau and Tabeguache Areas, and Fossil Ridge Recreation Management Area. Direction is needed for these areas.

Designated Wilderness Areas

- Incorporating aspects of the Wilderness Stewardship Performance effort in Forest Plan direction can assist with management of designated wilderness areas. In addition, consider a goal in the revised Forest Plan to bring each wilderness up to the minimum management standard set by the WSP.
- The current Plan contains direction that requires a fire management plan for natural ignition fire management, but as of spring 2017 these plans do not exist for all wilderness areas on the Forest. Consider re-evaluating this direction in context of current fire management plan needs.
- Consider evaluating resource capacity guidelines for ROS classes in wilderness, particularly in areas with growing use. These hot spots include access points and trails to Colorado Fourteeners, and popular trailheads and trails such as the Blue Lakes trail (Ouray RD) and Copper Creek and Oh-Be-Joyful trails (both on the Gunnison RD). Consider increased solitude and campsite monitoring in these areas to assess impacts to wilderness character and natural resources.
- The current Plan requires the use of Frissell Condition Classes in monitoring dispersed camping in wilderness. New inventory methods have been developed since the last Plan, and may provide a better and more consistent method of measuring resource impacts related to recreation use.
- The Forest needs to precisely map constructed features that define wilderness boundaries.
- Consider Forest Plan management direction for the GMUG portions of the Maroon Bells-Snowmass, Collegiate Peaks, and Lizard Head wilderness areas. The designated leads for these wilderness areas are the White River, Pike-San Isabel, and San Juan National Forests, respectively. Management direction each of these wilderness area was contained in previous versions of each of these Forests' management plans. Two of these plans have been revised and no longer contain direction for the GMUG portions of these areas. The Pike and San Isabel National Forests will be revised in the future. Coordination of direction from these other plans is needed with the GMUG revision. The GMUG is lead

on the LaGarita Wilderness. The Rio Grande NF is currently revising their plan, so the GMUG will need to coordinate with that Forest.

National Scenic and Historic Trails

- The current Plan does not address bicycle use on the CDNST. The CDNST Comprehensive Plan allows for bicycle use after consideration of where that use substantially interferes with the nature and purposes of the trail. Some of the CDNST is on motorcycle routes and some is on NFS roads, which is inconsistent with the nature and purposes of the Trail. The CDNST was routed on these roads/trails because they were a convenient location and the law allowed for this and for the motorized use to continue. Consider addressing in the Forest Plan.
- Consider plan direction which is consistent with the CDNST Comprehensive Plan.
- Consider direction for vegetation management along the CDNST in context of insect and disease epidemics.
- Recognize the Old Spanish National Historic Trail, which was not congressionally designated until 2002, so it is not included in the 1983 forest plan or subsequent amendments. A Comprehensive Management Plan for the Old Spanish National Historic Trail is currently being developed by the National Park Service.

Critical Habitat under Endangered Species Act

- Critical habitat for two threatened species under the Endangered Species Act (ESA) has been designated which occurs on the forest: Debeque phacelia (*Phacelia submutica*) and Gunnison sage-grouse (*Centrocercus minimus*). The existing forest plan makes no reference to this critical habitat or the need for related special management direction. This need for change needs to be coordinated with species planning.

Colorado Roadless Areas (CRA)

- The rule prohibits tree cutting in CRAs with few exceptions (incidental personal or administrative use; needed habitat improvement for threatened, endangered proposed or sensitive species; needed to maintain or restore ecosystem characteristics; hazardous fuel treatments within community protection zones). Lands currently identified as suitable for timber harvest for timber production purposes occur within CRAs on the GMUG, since CRAs were designated subsequent to the 1991 Forest Plan, as amended. In the process of updating suitable timber for the revised Forest Plan, reflect the CRAs and their restrictions in the process.
- The rule prohibits road construction or reconstruction in CRAs with few exceptions (needed for reserved or outstanding rights; realignment needed to reduce resource damage or improve public health and safety), and there is a distinction between permanent and temporary roads. Any excepted roads are closed to public motorized use. Consider including Forest plan direction to reiterate these Colorado Roadless Rule restrictions, as well as the Colorado Roadless Rule's limitations on linear construction zones within CRAs.

- Forest plan desired conditions may need to differentiate between areas within and outside CRAs to reflect difference in available management options.

Research Natural Areas (RNA)

- Consider modified boundaries adjacent to FS Road 317 (Schofield Pass Road/ Gothic Road) or other appropriate management tools to prevent prohibited off-route travel in the Gothic RNA.

Special Interest Areas (SIA)

- Consider direction to complete management plans for special interest areas following designation. Official boundary descriptions and maps need to be created for all existing SIAs and any future designations.
- Areas designated as SIAs need to be withdrawn from mineral entry.
- Interpretive trails in Slumgullion Earthflow and Ophir Needles SIAs, as specified in the 1991 Amended Forest Plan, have never been built. Coordination with NPS, BLM and CNAP on interpretation and signing for the Slumgullion Earthflow would enhance public information and appreciation for the area.
- There is a need to work with the NPS to ensure that any forest activities in the Slumgullion Earthflow area, specifically wildland fire suppression efforts, will not impact the USGS slope movement monitoring sensors.

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Appendix A: Colorado Roadless Rule

294.42 Prohibition on tree cutting, sale, or removal.

(a) *General.* Trees may not be cut, sold, or removed in Colorado Roadless Areas, except as provided in paragraph (b) and (c) of this section.

(b) *Upper Tier Acres.* Notwithstanding the prohibition in paragraph (a) of this section, trees may be cut, sold, or removed in Colorado Roadless Areas upper tier acres if the responsible official determines the activity is consistent with the applicable land management plan, and:

(1) Tree cutting, sale, or removal is incidental to the implementation of a management activity not otherwise prohibited by this subpart; or

(2) Tree cutting, sale, or removal is needed and appropriate for personal or administrative use, as provided for in 36 CFR part 223, subpart A.

(c) *Non-Upper Tier Acres.* Notwithstanding the prohibition in paragraph (a) of this section, trees may be cut, sold, or removed in Colorado Roadless Areas outside upper tier acres if the responsible official, unless otherwise noted, determines the activity is consistent with the applicable land management plan, one or more of the roadless area characteristics will be maintained or improved over the long-term with the exception of paragraph (5) and (6) of this section, and one of the following circumstances exists:

(1) The Regional Forester determines tree cutting, sale, or removal is needed to reduce hazardous fuels to an at-risk community or municipal water supply system that is:

(i) Within the first one-half mile of the community protection zone, or

(ii) Within the next one-mile of the community protection zone, and is within an area identified in a Community Wildfire Protection Plan.

(iii) Projects undertaken pursuant to paragraphs (c)(1)(i) and (ii) of this section will focus on cutting and removing generally small diameter trees to create fuel conditions that modify fire behavior while retaining large trees to the maximum extent practical as appropriate to the forest type.

(2) The Regional Forester determines tree cutting, sale, or removal is needed outside the community protection zone where there is a significant risk that a wildland fire disturbance event could adversely affect a municipal water supply system or the maintenance of that system. A significant risk exists where the history of fire occurrence, and fire hazard and risk indicate a serious likelihood that a wildland fire disturbance event would present a high risk of threat to a municipal water supply system.

(i) Projects will focus on cutting and removing generally small diameter trees to create fuel conditions that modify fire behavior while retaining large trees to the maximum extent practical as appropriate to the forest type.

(ii) Projects are expected to be infrequent.

(3) Tree cutting, sale, or removal is needed to maintain or restore the characteristics of ecosystem composition, structure and processes. These projects are expected to be infrequent.

(4) Tree cutting, sale, or removal is needed to improve habitat for federally threatened, endangered, proposed, or Agency designated sensitive species; in coordination with the Colorado Department of Natural Resources, including the Colorado Division of Parks and Wildlife.

(5) Tree cutting, sale, or removal is incidental to the implementation of a management activity not otherwise prohibited by this subpart.

(6) Tree cutting, sale, or removal is needed and appropriate for personal or administrative use, as provided for in 36 CFR part 223, subpart A.

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§294.43 Prohibition on road construction and reconstruction.

(a) *General.* A road may not be constructed or reconstructed in a Colorado Roadless Area except as provided in paragraphs (b) and (c) of this section.

(b) *Upper Tier Acres.* Notwithstanding the prohibition in paragraph (a) of this section, a road may only be constructed or reconstructed in Colorado Roadless Area upper tier acres if the responsible official determines that the conditions in subsection 1 or 2 are met.

(1) A road is needed pursuant to reserved or outstanding rights, or as provided for by statute or treaty, or

(2) A road is needed to protect public health and safety in cases of an imminent threat of flood, fire or other catastrophic event that, without intervention, would cause the loss of life or property.

(3) For any road construction/reconstruction authorized pursuant to this provision, subject to the legal rights identified in 36 CFR 294.43(b)(1), the responsible official must determine:

(i) Motorized access, without road construction is not feasible;

(ii) When proposing to construct a forest road, that a temporary road would not provide reasonable access;

(iii) Road construction is consistent with the applicable land management plan direction;

(iv) Within a native cutthroat trout catchment or identified recovery watershed, road construction will not diminish, over the long-term, conditions in the water influence zone and the extent of the occupied native cutthroat trout habitat; and

(v) That watershed conservation practices will be applied to all projects occurring in native cutthroat trout habitat.

(c) *Non-Upper Tier Acres.* Notwithstanding the prohibition in paragraph (a) of this section, a road or temporary road may only be constructed or reconstructed in Colorado Roadless Areas outside upper tier acres if the responsible official determines:

(1) That one of the following exceptions exists:

(i) A road is needed pursuant to reserved or outstanding rights, or as provided for by statute or treaty;

(ii) Road realignment is needed to prevent irreparable resource damage that arises from the design, location, use, or deterioration of a forest road and that cannot be mitigated by road

maintenance. Road realignment may occur under this paragraph only if the road is deemed essential for administrative or public access, public health and safety, or uses authorized under permit, easement or other legal instrument;

(iii) Road reconstruction is needed to implement a road safety improvement project on a forest road determined to be hazardous on the basis of accident experience or accident potential on that road;

(iv) The Regional Forester determines a road or temporary road is needed to allow for the construction, reconstruction, or maintenance of an authorized water conveyance structure which is operated pursuant to a pre-existing water court decree with the use of the road limited to the water right identified in the pre-existing water court decree (see also §294.44(b)(2));

(v) A temporary road is needed to protect public health and safety in cases of imminent threat of flood, fire, or other catastrophic event that, without intervention, would cause the loss of life or property;

(vi) The Regional Forester determines a temporary road is needed to facilitate tree cutting, sale, or removal (§294.42(c)(1)) within the first one-half mile of the community protection zone to reduce the wildfire hazard to an at-risk community or municipal water supply system;

(vii) The Regional Forester determines a temporary road is needed to facilitate tree cutting, sale, or removal (§294.42(c)(3)) within the first one-half mile of the community protection zone to maintain or restore characteristics of ecosystem composition, structure and processes;

(viii) A temporary road is needed within a Colorado Roadless Area pursuant to the exploration or development of an existing oil and gas lease that does not prohibit road construction or reconstruction, including the construction of infrastructure necessary to transport the product, on National Forest System lands that are under lease issued by the Secretary of the Interior as of July 3, 2012. The Forest Service shall not authorize the Bureau of Land Management to grant any request for a waiver, exception, or modification to any oil or gas lease if doing so would result in any road construction within a Colorado Roadless Area beyond that which was authorized by the terms and conditions of the lease at the time of issuance; or

(ix) A temporary road is needed for coal exploration and/or coal-related surface activities for certain lands with Colorado Roadless Areas within the North Fork Coal Mining Area of the Grand Mesa, Uncompahgre, and Gunnison National Forests as defined by the North Fork Coal Mining Area displayed on the final Colorado Roadless Areas map. Such roads may also be used for collecting and transporting coal mine methane. Any buried infrastructure, including pipelines, needed for the capture, collection, and use of coal mine methane, will be located within the rights-of-way of temporary roads that are otherwise necessary for coal-related surface activities including the installation and operation of methane venting wells.

(2) If proposed road construction/reconstruction meets one of the exceptions, subject to the legal rights identified in §294.43(c)(1), the responsible official must determine:

(i) Motorized access, without road construction is not feasible;

(ii) When proposing to construct a forest road, that a temporary road would not provide reasonable access;

- (iii) Road construction is consistent with the applicable land management plan direction;
- (iv) Within a native cutthroat trout catchment or identified recovery watershed, road construction will not diminish, over the long-term, conditions in the water influence zone and the extent of the occupied native cutthroat trout habitat; and
- (v) That watershed conservation practices will be applied to all projects occurring in native cutthroat trout habitat.

(d) *Road construction/reconstruction/decommissioning project implementation and management.* The following elements will be incorporated into any road construction/reconstruction projects implemented within Colorado Roadless Areas.

(1) *Road construction/reconstruction.* If it is determined that a road is authorized in a Colorado Roadless Area, conduct construction in a manner that reduces effects on surface resources, and prevents unnecessary or unreasonable surface disturbance.

(2) *Road decommissioning.* Decommission any road and restore the affected landscape when it is determined that the road is no longer needed for the established purpose prior to, or upon termination or expiration of a contract, authorization, or permit, if possible; or upon termination or expiration of a contract, authorization, or permit, whichever is sooner. Require the inclusion of a road decommissioning provision in all contracts or permits. Design decommissioning to stabilize, restore, and revegetate unneeded roads to a more natural state to protect resources and enhance roadless area characteristics. Examples include obliteration, denial of use, elimination of travelway functionality, and removal of the road prism (restoration of the road corridor to the original contour and hydrologic function).

(3) *Road designations.* The designation of a temporary road constructed or reconstructed pursuant to this subpart may not be changed to forest road except where a forest road is allowed under paragraphs (b) and (c) of this section.

(4) *Road use.* Use of motor vehicles for administrative purposes by the Forest Service and by fire, emergency, or law enforcement personnel is allowed. All roads constructed pursuant to paragraphs (b) and (c) of this section shall prohibit public motorized vehicles (including off-highway vehicles) except:

- (i) Where specifically used for the purpose for which the road was established; or
- (ii) Motor vehicle use that is specifically authorized under a Federal law or regulation.

(5) *Road maintenance.* Maintenance of roads is permissible in Colorado Roadless Areas.

[77 FR 39602, July 3, 2012, as amended at 81 FR 91821, Dec. 19, 2016]

§294.44 Prohibition on linear construction zones.

(a) *General.* A linear construction zone may not be authorized in Colorado Roadless Areas except as provided in paragraph (b) and (c) of this section and §294.48 (a).

(b) *Upper Tier Acres.* Notwithstanding the prohibition in paragraph (a) of this section, a linear construction zone may only be authorized within Colorado Roadless Area upper tier acres if the Regional Forester determines the LCZ is needed:

- (1) Pursuant to reserved or outstanding rights, or as provided for by statute or treaty.

(2) For the construction, reconstruction, or maintenance of an authorized water conveyance structure which is operated pursuant to a pre-existing water court decree (see §294.43(c)(1)(iv));

(c) *Non-Upper Tier Acres.* Notwithstanding the prohibition in paragraph (a) of this section, a linear construction zone may only be authorized within Colorado Roadless Area non-upper tier acres if the Regional Forester determines the LCZ is needed:

(1) Pursuant to reserved or outstanding rights, or as provided for by statute or treaty.

(2) For the construction, reconstruction, or maintenance of an authorized water conveyance structure which is operated pursuant to a pre-existing water court decree (see §294.43(c)(1)(iv));

(3) For the construction, reconstruction, or maintenance of existing or future authorized electrical power lines or telecommunication lines. Electrical power lines or telecommunication lines within Colorado Roadless Areas will only be authorized if there is no opportunity for the project to be implemented outside of a Colorado Roadless Area without causing substantially greater environmental damage; or

(4) For the construction, reconstruction or maintenance of a pipeline associated with operation of an oil and gas lease that allows surface use within a Colorado Roadless Area or the construction, reconstruction or maintenance of a pipeline needed to connect to infrastructure within a Colorado Roadless Area from outside a Colorado Roadless Area where such a connection would cause substantially less environmental damage than alternative routes. The construction of pipelines for the purposes of transporting oil or natural gas through a Colorado Roadless Area, where the source(s) and destination(s) of the pipeline are located exclusively outside of a Colorado Roadless Area, shall not be authorized.

(d) *Proposed Linear Construction Zones.* If a proposed linear construction zone meets one of the above exceptions, then the following must be determined:

(1) Motorized access, without a linear construction zone, is not feasible;

(2) A linear construction zone is consistent with the applicable land management plan direction;

(3) A linear construction zone is no wider than its intended use;

(4) Within a native cutthroat trout catchment or identified recovery watershed, a linear construction zone will not diminish, over the long-term, conditions in the water influence zone and the extent of the occupied native cutthroat trout habitat;

(5) Reclamation of a linear construction zone will not diminish, over the long-term, roadless area characteristics; and

(6) That watershed conservation practices will be applied to all projects occurring in catchments with occupied native cutthroat trout habitat.

(e) *Linear construction zone decommissioning.* Where a linear construction zone is authorized in a Colorado Roadless Area, installation of the linear facility will be done in a manner that minimizes ground disturbance, including placement within existing right-of-ways where feasible. All authorizations approving the installation of linear facilities through the use of a linear construction zone shall include a responsible official approved reclamation

plan for reclaiming the affected landscape while conserving roadless area characteristics over the long-term. Upon completion of the installation of a linear facility via the use of a linear construction zone, all areas of surface disturbance shall be reclaimed as prescribed in the authorization and the approved reclamation plan and may not be waived.



**United States Department of Agriculture
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