

# Appendix E. Recommended Wilderness Analysis Process

## Table of Contents

Wilderness Recommendation Process .....	1
Introduction .....	1
Public Participation, Comment, and Review.....	1
Step 1: Identification and Inventory .....	2
Criteria for including lands in the inventory .....	2
Identified inventory areas.....	5
Step 2: Evaluation .....	6
Big Belts Geographic Area.....	7
Big Log Area (BB1).....	7
Hogback Area (BB2) .....	12
Trout Creek Area (BB3) .....	17
North Belts Area (BB4).....	23
Bilk Mountain Area (BB5).....	28
Camas Creek Area (BB6) .....	33
Mount Baldy Area (BB7) .....	38
Grassy Mountain Area (BB8).....	44
Willow Creek Area (BB11).....	49
Castles Geographic Area .....	54
Wapiti Peak Area (CA1).....	54
Whetstone Ridge Area (CA3) .....	60
Crazies Geographic Area .....	65
Loco Mountain Area (CR1).....	65
Bald Ridge Area (CR3) .....	70
Divide Geographic Area .....	76
Sweeney Creek Area (D2) .....	76
Electric Peak (Blackfoot Meadows) Area (D3) .....	82
Colorado Mountain Area (D5).....	88
Continental Divide North Area (D13).....	93
Elkhorns Geographic Area.....	99
Eagle Basin Area (E1) .....	99
Elkhorn Peak Area (E3).....	105
Highwoods Geographic Area .....	110
Highwood Baldy Area (H1).....	110
Arrow Prospect Area (H2) .....	115
Little Belts Geographic Area .....	121
Deep Creek Area (LB1).....	121
Big Horn Thunder Area (LB2) .....	127
Sun Mountain Area (LB3).....	133
McGee Sawmill Area (LB4).....	138
Peterson Mountain Area (LB5) .....	143

Taylor Mountain Area (LB6) .....	148
Big Baldy Area (LB8) .....	153
Eagle Creek Area (LB10) .....	159
Calf Creek Area (LB11) .....	164
North Fork Smith Area (LB15) .....	169
Middle Fork Judith Area (LB16) .....	174
East Little Belts Area (LB18) .....	180
<b>Rocky Mountain Range Geographic Area .....</b>	<b>186</b>
Badger Two Medicine Area (RM1) .....	186
Teton Blackleaf Area (RM2) .....	192
Sun Canyon Willow Area (RM3) .....	198
Sawtooth Ridge Area (RM4) .....	204
Elk Smith Area (RM5) .....	210
<b>Snowies Geographic Area .....</b>	<b>215</b>
Big Snowies Area (S1) .....	215
<b>Upper Blackfoot Geographic Area .....</b>	<b>221</b>
Dearborn Silver King Area (UB1) .....	221
Stonewall Area (UB2) .....	228
Black Mountain Area (UB3) .....	234
Anaconda Hill Area (UB4) .....	240
Paige Gulch Area (UB5) .....	246
Bear Gulch Area (UB9) .....	252
Nevada Mountain Area (UB10) .....	257
<b>Step 3: Analysis .....</b>	<b>263</b>
Alternative A .....	264
Alternatives B and C .....	269
Alternative D .....	283
Alternative E .....	298
Alternative F (Preferred Alternative) .....	298
Rationale for Excluding Wilderness Inventory Polygons .....	310
<b>Step 4: Recommendations .....</b>	<b>317</b>
<b>Attachment 1. Determination of Substantially Noticeable Vegetation Treatments .....</b>	<b>318</b>
Introduction .....	318
Treatments Evaluated and What a Viewer is Likely to See .....	318
Tree Heights and Timeframes Needed for Visual Recovery after Regeneration Harvest .....	319
Activity Code Rationale (FACTS) and Example Photographs .....	320
Review of Vegetation Treatment Mapping and Assessing Effects of Wildfire .....	323
Local Site-Specific Review .....	335
<b>Attachment 2. Final Recommended Wilderness Area Maps .....</b>	<b>337</b>
Big Log Recommended Wilderness Area .....	337

Mount Baldy Recommended Wilderness Area .....	338
Electric Peak Recommended Wilderness Area .....	339
Big Snowies Recommended Wilderness Area .....	340
Silver King Recommended Wilderness Area .....	341
Red Mountain Recommended Wilderness Area .....	342
Nevada Mountain Recommended Wilderness Area .....	343

## Acronyms

BLM	Bureau of Land Management
CDNST	Continental Divide National Scenic Trail
ESA	Endangered Species Act
FS	Forest Service
FSR	forest system road
GOTM	Gates of the Mountains Wilderness
GYE	Greater Yellowstone Ecosystem
HLC NF	Helena-Lewis and Clark National Forest
IRA	inventoried roadless area
NCDE	Northern Continental Divide Ecosystem
NF	National Forest
NFS	National Forest System
OHV	off-highway vehicle
RNA	research natural area
ROW	right-of-way
TH	trailhead
WCC	watershed condition class (Class 1=Fully functioning, Class 2= Functioning at Risk, Class 3=Impaired)
WCT	westslope cutthroat trout
WMA	wildlife management area
WQ	water quality
WSR	wild and scenic river

Page intentionally left blank.



# Wilderness Recommendation Process

## Introduction

When developing or revising a forest plan, the Forest Service must identify and evaluate lands that may be suitable for inclusion in the National Wilderness Preservation System and determine whether to recommend any such lands to be designated as wilderness. This is done in four steps: inventory, evaluation, analysis, and recommendation. This appendix describes the process and includes the outcomes of each of the four steps. Please see associated maps for detailed information.

Wilderness recommendations are only preliminary administrative recommendations; Congress has reserved the authority to make final decisions on wilderness designation.

The information used in the wilderness inventory and evaluation process was the best available information at the time of each step. The FEIS analysis may contain updated information (for example, vegetation conditions, wildlife habitat, and at-risk species status for plants, animals, and aquatic species). The updated information does not substantially change the findings of the evaluation of these polygons.

## Public Participation, Comment, and Review

The HLC NF actively engaged the public, tribes, other local governments, and State and Federal government agencies throughout this process to acquire feedback and input on the inventory, evaluation, and analysis of areas for wilderness recommendation.

Maps of the wilderness inventory polygons and documentation of the inventory process (step 1) were made available for public review in April-March of 2016. An informal public comment period was initiated for review of several resources including the wilderness inventory polygons, lands suitable for timber production, and the proposed desired conditions for the forest plan. Public forums were used to gather this public comment and review including comments gathered through a mapping tool on the web site, in-person community conversations/meetings, email responses, letters through postal mail, and through phone calls received.

In November 2016, the proposed action was released to the public and a formal comment period was initiated. The proposed action identified 9 recommended wilderness areas. Additionally, appendix F of the proposed action, detailed the wilderness evaluation (step 2) for each of the identified wilderness inventory polygons. Comments on the recommended wilderness areas and wilderness evaluation were used to develop alternatives for the DEIS.

The HLC NF draft forest plan and DEIS were released for public comment and review in June 2018. The amount and acres of recommended wilderness varied by alternative with alternative E having the least amount of recommended wilderness (0 acres) and alternative D having the most amount of recommended wilderness (474,589 acres). The DEIS did not include a preferred alternative. The analysis of the recommended wilderness areas in the DEIS (step 3) also included the suitability of motorized and mechanized means of transportation within recommended wilderness areas. The Forest received many comments on the draft plan and draft EIS regarding the acreage and management of recommended wilderness areas. Many of these comments were incorporated into the final EIS.

In May 2020 the 2020 Forest Plan and Final EIS were released for public review. The final EIS and draft record of decision identified a preferred alternative (alternative F) with a recommendation for 7 recommended wilderness areas, a total of 153,325 acres. Once through the objection period, the final

Forest Plan and ROD will recommend wilderness areas and will conclude step 4 of the wilderness inventory and evaluation process.

## Step 1: Identification and Inventory

The first step in the Wilderness Inventory and Evaluation process is to efficiently and effectively identify all lands within the plan area that may have wilderness characteristics as defined in the Wilderness Act of 1964 (16 United States Code 1131–1136, 78 Stat 890), using a transparent process. Lands included in the inventory were documented, identified on a map, and carried forward for further evaluation.

To develop the inventory of lands on the HLC NF that might be suitable for recommendation as wilderness, the Forest used three categories of inventory criteria (size, forest road improvements, and other improvements) and information obtained from the assessment of the Helena and Lewis and Clark National Forests (USDA, 2015) as directed by the Forest Service Handbook. Lands included in the inventory provided a starting point for further evaluation, and their inclusion in the inventory is not a designation that conveys or requires a particular kind of management.

### Criteria for including lands in the inventory

#### Size

A wilderness area must meet size criteria set forth in Forest Service Handbook (FSH) 1909.12, chapter 70. Lands included in the wilderness inventory within the HLC NF met one of the following size criteria:

- National Forest System Lands outside of existing designated wilderness that were at least 5,000 contiguous acres or greater;
- Areas contiguous to an existing wilderness, primitive area, administratively recommended wilderness, or wilderness inventory of other Federal ownership.

For areas less than 5,000 acres, each district ranger met with district staff to consider and determine whether such areas could be preserved in an unimpaired condition.

#### Improvements

In addition to size criteria, lands within the HLC NF were studied to determine the level of development or “improvements” that were present within these landscapes. Improvements on the landscape can be thought of in two categories: road improvements and other improvements. These improvements and how they were utilized to develop the inventory are described below.

#### Forest road improvements

Included in the inventory are the following areas with road improvements. Guidance on forest road improvement considerations can be found in Forest Service Handbook 1090.12 chap.70 sec 71.22a.

- Areas that contain maintenance level 1 roads.
- Areas with any routes that were decommissioned, unauthorized, or temporary, or forest roads that are identified for decommissioning in a previous decision document or identified as likely unneeded in a travel management plan.
- Areas with forest roads that will be reclassified to a maintenance level 1 through a previous decision document or travel plan.

- Areas with forest roads that have been proposed by the Forest Service for consideration as recommended wilderness as a result of a previous forest planning process; or areas with forest roads that the Responsible Official merits for inclusion in the inventory that were proposed for consideration through public involvement during the assessment or other public or intergovernmental participation opportunity.
- Areas with historic wagon routes, historical mining routes, or other settlement era transportation features considered part of the historical and cultural landscape of the area.
- Areas with maintenance level 2 roads that do not meet the criteria for exclusion.

Excluded from the inventory are areas that have the following road improvements:

- Permanently authorized roads validated by a Federal court or the Department of Interior for which a valid easement or interest has been properly recorded.
- Forest roads maintenance to levels 3, 4, or 5.
- Areas of forest roads maintained to level 2 (all Forest roads maintained to level 2 receive some type of mechanical treatment to ensure relatively regular and continued use).

### Other Improvements

Other improvements on the Forest were reviewed to determine whether to include or exclude certain areas in the inventory. Guidance on improvements considered can be found in Forest Service Handbook 1909.12 chap. 70 sec. 71.22b. Improvements included in the inventory:

- Heliports. Constructed features associated with heliports within the plan area are generally not visually evident.
- Timber harvest and other vegetation treatments that are not substantially noticeable. See Attachment 1.
- Areas with unpatented mining claims, since these claims tend to change year to year and location to location and generally create minimal impact.
- Areas with saleable mineral materials.
- Areas with oil and gas leases with no above ground developments.
- Areas considered for solar, wind, and geothermal where no above ground features currently exist.
- Range improvement areas with minor structural improvements such as wire and post and pole fencing. Minor spring developments (without obvious and lengthy pipelines) are also included in the inventory.
- Dispersed recreation improvements, including dispersed campsites, minor hunter and outfitter camps, occupancy spots, and minor trail access points.
- Improvements associated with motorized and non-motorized trails such as signs, trail bridges, and drainage structures.
- Ground-return telephone lines, electric lines, and powerlines if a right-of-way has not been cleared or is not required through special use authorization.
- Watershed treatment areas that are not substantially noticeable.
- Structures, dwellings, and other relics of past occupation and activity that are considered a part of the historical and cultural landscape of the area.

- Structures and infrastructure associated with special use permits that are not substantially noticeable.
- Areas with improvements that have been proposed by the Forest Service for consideration as recommended wilderness as a result of a previous forest planning process or that the Responsible Official merits for inclusion in the inventory that were proposed for consideration through public or intergovernmental participation opportunities.

If an improvement was found to be substantially noticeable, it was excluded from the inventory. Several improvements were found to be substantially noticeable across the HLC NF landscape. These improvements were identified on the inventory maps and then buffered to provide for the proper maintenance and/or management of these improvements. Other improvements excluded from the inventory include:

- Airstrips. All airstrips within the HLC NF are located next to open roads that would be excluded from the inventory. By this association, the airstrips were also excluded from the inventory.
- Permanently installed vertical structures, such as electronic installations that support television, radio, telephone, or cellular communications. These sites were buffered with a radius of 150 feet.
- Timber harvest units and other vegetative treatments that are substantially noticeable. Areas with substantially noticeable timber harvest units were excluded where a series of noticeable units were found to be present within a larger area or a drainage. See attachment 1.
- Areas containing mine waste rock, tailings, mine waste repository sites, and areas with toxic heavy metals in concentration. Polygons boundaries were buffered by 200 feet.
- Areas with identified federal and state superfund sites. This would include Upper Blackfoot Mine Complex Comprehensive Environmental Cleanup Responsibility Act (CECRA), Barker-Hughesville Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Carpenter Creek-Snow Creek (CERCLA), and Tenmile Watershed (CERCLA). The Superfund site boundaries were used for exclusion.
- Range improvements with substantially noticeable structural improvements such as large-scale water troughs and pipelines associated with these improvements. Water troughs were buffered with a radius of 150 feet. Pipelines were buffered by 75 feet either side of the pipeline.
- Developed recreation sites, including developed fee campgrounds, picnic areas, group camping and picnic sites, and large trailheads. Developed recreation sites were buffered by 200 feet.
- Powerlines with cleared rights-of-way, pipelines, and other permanently installed linear rights-of-way structures. All powerlines, pipelines, and permanently installed linear features were buffered by 150 feet on either side of the linear structure.
- Lands adjacent to development or activities that impact opportunities for solitude.
- Structures and infrastructure associated with special use permits that are substantially noticeable. Such improvements might be connected to permitted cabins, recreation residences, lodges and resorts, ski area resorts, organizational camps, and individual special use permits for road and/or water access. These improvements were buffered by 150 feet.
- Administrative sites and miscellaneous buildings used by the Forest Service. These sites/buildings were buffered by 150 feet.
- Target ranges. The area excluded was the official target range boundary.

### *Substantially noticeable*

The term “substantially noticeable” as it relates to wilderness evaluation, is not directly defined in the Forest Service Handbook 1909.12, Chapter 70. This was done purposefully to give the Responsible Official discretion and judgement based on the unique factors associated with the forest on which the wilderness inventory is being conducted.

The forest plan revision team reviewed the list in the Forest Service Handbook and made determinations on what improvements might be considered “substantially noticeable”. These determinations were based on the type of materials used to construct or develop the improvement, the connected aspects associated with utilizing the improvement, and how evident the improvement and associated features appeared on the landscape. During these determinations, the principles of scenery management were considered, as were the degree to which the landscape appears unaltered by human activities.

## Identified inventory areas

Using both the size and the improvements criteria outlined in Forest Service Handbook 1909.12, the HLC NF identified 46 distinct areas (polygons) that had potential for inclusion based off this criterion. Each of the areas identified in the wilderness inventory step were evaluated to determine their potential suitability for inclusion in the National Wilderness Preservation System using the criteria included in the Wilderness Act of 1964. The following table describes the identified wilderness inventory polygons.

**Table 1. Wilderness inventory polygons**

GA	Wilderness inventory polygon name	Wilderness inventory polygon number	Wilderness inventory polygon acres
Big Belts	Big Log	BB1	10,254
	Hogback	BB2	5,784
	Trout Creek	BB3	39,383
	North Belts	BB4	14,140
	Bilk Mountain	BB5	25,787
	Camas Creek	BB6	23,878
	Mount Baldy	BB7	18,335
	Grassy Mountain	BB8	6,194
Castles	Wapiti Peak	CA1	33,002
	Whetstone Ridge	CA3	8,676
Crazies	Loco Mountain	CR1	25,605
	Bald Ridge	CR3	13,210
Divide	Sweeney Creek	D2	7,978
	Electric Peak (Blackfoot Meadows)	D3	29,066
	Colorado Mountain	D5	8,168
	Continental Divide North	D13	4,173
Elkhorns	Eagle Basin	E1	57,279
	Elkhorn Peak	E3	15,180
Highwood	Highwood Baldy	H1	15,824
	Arrow Prospect	H2	26,210
Little Belts	Deep Creek (Tenderfoot)	LB1	89,321

GA	Wilderness inventory polygon name	Wilderness inventory polygon number	Wilderness inventory polygon acres
	Big Horn Thunder	LB2	45,334
	Sun Mountain	LB3	7,965
	McGee Sawmill	LB4	8,355
	Peterson Mountain	LB5	6,839
	Taylor Mountain	LB6	11,374
	Big Baldy	LB8	49,068
	Eagle Creek	LB10	6,337
	Calf Creek	LB11	12,598
	North Fork Smith	LB15	9,817
	Middle Fork Judith	LB16	98,312
	East Little Belts	LB18	106,178
	Rocky Mountain Range	Badger Two Medicine	RM1
Teton Blackleaf		RM2	56,002
Sun Canyon Willow		RM3	71,106
Sawtooth Ridge		RM4	15,312
Elk Smith		RM5	30,030
Snowies	Big Snowies	S1	103,480
Upper Blackfoot	Dearborn Silver King <sup>1</sup>	UB1	44,141
	Stonewall (Red Mountain, Arrastra)	UB2	30,046
	Black Mountain	UB3	10,220
	Anaconda Hill	UB4	21,539
	Paige Gulch	UB5	17,569
	Bear Gulch	UB9	5,636
	Nevada Mountain <sup>2</sup>	UB10	51,027

<sup>1</sup> Inventory polygon is located on both the Upper Blackfoot and Rocky Mountain Range GAs.

<sup>2</sup> Inventory polygon and recommended wilderness area is located on both the Upper Blackfoot and Divide GAs.

## Step 2: Evaluation

The results of the wilderness evaluation process for 46 wilderness inventory polygons on the Helena-Lewis and Clark National Forest follow. Each of the 46 polygons in the wilderness inventory were evaluated using criteria from Forest Service Handbook 1909.12 chap. 70. The Forest's planning team developed measures for these criteria to address the specific questions posed by the criteria and provide a consistent way to evaluate each area in the wilderness inventory.

This section presents the wilderness evaluations for the 46 wilderness inventory polygons, presented by geographic area and are in alphabetical order.

## Big Belts Geographic Area

### Big Log Area (BB1)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

*Question 1a. What is the composition of plant and animal communities within the area?*

**Table 2. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	Over 35% of this area is dominated by dry grasslands, and over 22% has a ponderosa pine dominance type. Roughly 23% is dominated by Douglas-fir. Shrublands make up another 12%, and just over 5% is considered transitional (no vegetation type identified) due to recent wildfires. There are small or trace amounts of other dominance types present, including lodgepole pine, limber pine, and Rocky mountain juniper.
Potential vegetation types	This area is dominated by warm dry forest potential vegetation types (51%). Dry grassland potential types are also common, representing over 34%. Small amounts of other potential vegetation types are present, including cool moist forest, mesic grasslands, shrublands, riparian, and sparsely vegetated (cliffy) areas.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 1,226 acres within BB1 is associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Functioning mature forest habitats: 75 acres potential lynx habitat (52 acres of mature multi-storied, which is optimal winter foraging habitat; note area not currently occupied by lynx) and 2600 acres of goshawk potential nesting habitat. Clark’s nutcracker presence indicates mature whitebark, ponderosa, and/or limber pine; flammulated owl and Lewis’s woodpecker presence indicate mature, open ponderosa pine. Big game: Over 5,000 acres secure elk summer habitat. Possible moose presence in riparian. Note that these habitats increase in extent and value in combination with similar in BB2 and BB3. No westslope cutthroat trout.
Known non-native wildlife species	Introduced population of mountain goats, a species native to MT but not to this mountain range. Occasional European starling, likely near perimeter of area. No known aquatic species, possibly non-native trout.

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 3. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	There are no records of past timber harvest in this area.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 88% of BB1 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2: 100%, no impacts within the polygon.

Measures	Outcome
Miles of motorized road/trail within 300' of streams	1.15 miles (southwest side of polygon, along intermittent stream)
Noticeable wildfire suppression impacts	Meriwether Fire (2007): dozer lines still visible in Hunter's Gulch and Bear's Gulch.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 4. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	Approximately 2% of the area has been influenced by prescribed fire treatments, which were determined not to be substantially noticeable because they appear similar to natural wildfire effects. The activities that occurred included broadcast burning, pile burning, and under burning from 1993 to 2009.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Hogback repeater is visible from within the polygon.
Areas of mining activities including both abandoned and active mines	None present.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data, there are no existing fences within B1.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps. Dispersed recreation sites located within the Missouri River corridor and throughout Big Log drainage.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Power and gas lines along Beaver Creek Road and the northeastern boundary of the polygon. These are not located in the polygon but visible from within it.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude	American Bar Subdivision along western boundary of the polygon. Very active river corridor with recreation activities. Minimal developments on private lands along Beaver Creek Road.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Thirty-three recorded cultural resources, including one listing historic landscape. The sites range from occupational cabin ruins, tipi ring, mining and prehistoric rock art sites.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Recommended as wilderness in the Helena NF 1986 Plan.
Number of miles of maintenance level 1 road templates.	0.0 miles



Improvement type	Presence and extent of departure from naturalness
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	No historic roads recorded; however, their presence is highly likely.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 5. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Summer motorized activities are concentrated in the Missouri River corridor.
Area available for winter motorized opportunity	No current motorized winter activity.
Proximity to private lands and non-Forest Service roads	None present.
Proximity to developed recreation sites outside of the polygon area	Refrigerator Canyon TH, Hunters Gulch TH, Big Log TH, and Missouri River Canyon TH. These THs have minimal effect on the solitude within the polygon. Coulter Campground and Meriwether Picnic Site are located along the Missouri River corridor. These sites have boat access only which creates a moderate feeling of solitude due to the sounds of boat motors. Mann Gulch Historic Landscape is located within the polygon has minimal impact to solitude.

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 6. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Except for the river corridor, which is semi-primitive motorized, the entire polygon is open for primitive and unconfined recreation.
Primitive and semi-primitive non-motorized winter recreation	Entire polygon is open for primitive and unconfined recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, hiking, horseback riding, cross country skiing, and dispersed camping.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Big Log Area (BB1) is 10,254 acres and lies adjacent to the Gates of the Mountains wilderness area. Much of this area is recognized as a recommended wilderness area in the 1986 Helena Forest Plan.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

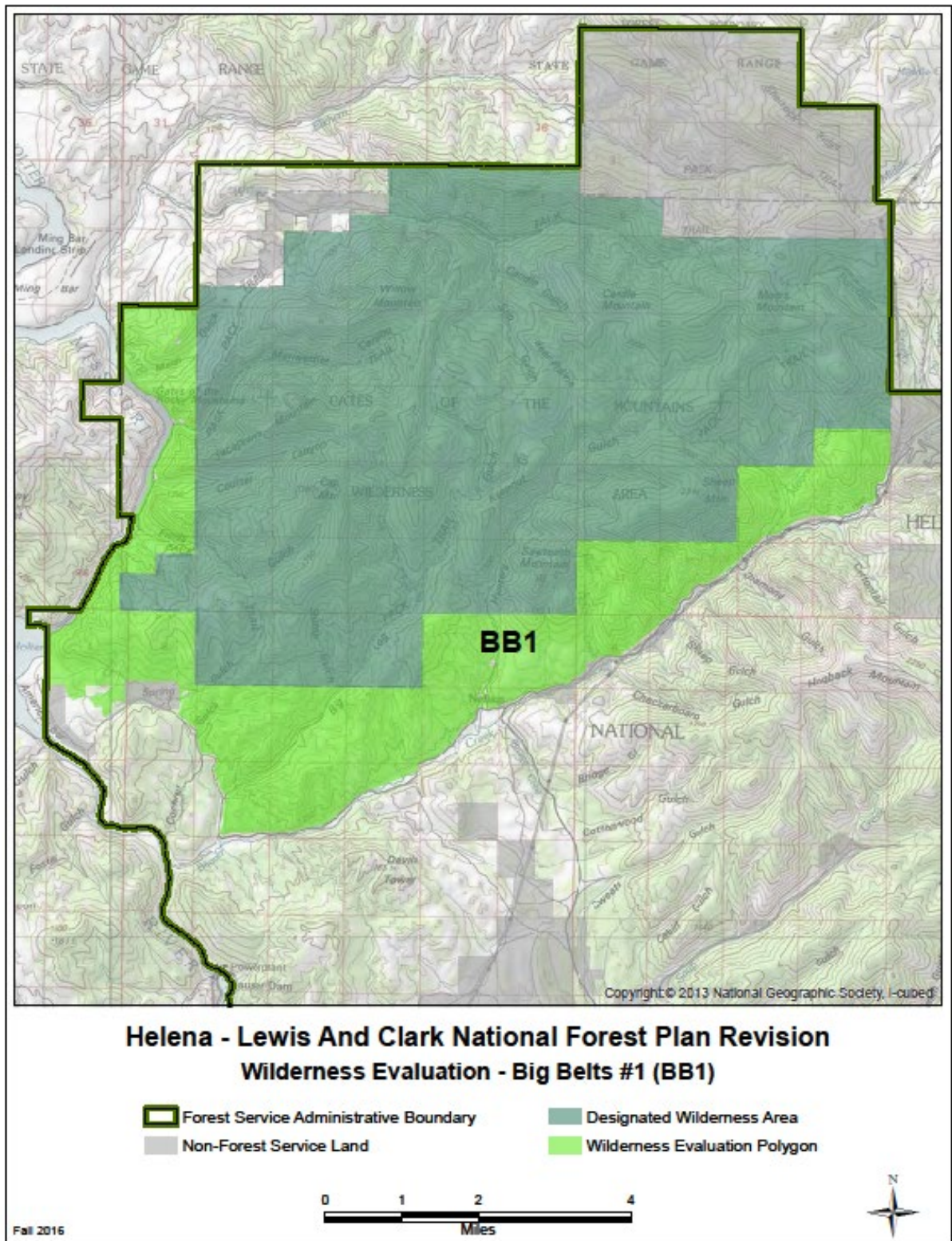
**Table 7. Features present**

Features	Description and scale
Rare plant communities	There are known occurrences of several potential plant species of conservation concern in this area, including <i>Astragalus convallarius</i> , <i>Polygonum douglasii</i> spp. <i>Austinae</i> ; <i>Lesquerella klausii</i> , and <i>Delphinium bicolor</i> spp. <i>Calcicola</i> . Limber pine, <i>Pinus flexilis</i> , is also present in trace amounts.
Rare animal species or communities	Federally listed species: Occasional, transient presence of grizzly or lynx possible. Identified as Zone 2 in NCDE Grizzly Bear Conservation Strategy, for genetic connectivity with GYE population. Potential species of conservation concern and/or state at risk species: flammulated owl, Lewis’s woodpecker. No rare aquatic species.
Rare ecosystems	Ponderosa pine forest is a community of interest for its wildlife value and is well-represented in this area.
Outstanding landscape features	Cliffs and rock formations along the river corridor and Meriwether Canyon. Missouri River. Rock formations and slot canyon in Refrigerator Canyon.
Historic and cultural resource sites	Thirty-three recorded cultural resources, including one listing historic landscape. The sites range from occupational cabin ruins, tipi ring, mining and prehistoric rock art sites, which all offer scientific and educational value.
Research natural areas	None present.
High quality water resources or important watershed features	Beaver Creek (on the boundary between BB1 and BB2) is on the list of eligible WSRs, it is listed for outstanding fishing, geology, and cultural resources.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 8. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	This polygon consists of a band of land between designated motorized routes and the Gates of the Mountains Wilderness boundary.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	No private land inholdings.
Management of adjacent lands	Designated wilderness immediately to the north and east of the polygon. Some small portions of private lands, primarily residential, to the south and southeast of the polygon. Devils Tower IRA on FS to the south. American Bar Subdivision to the south west. Missouri River corridor to the west.



## Hogback Area (BB2)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 9. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	Nearly 36% of this area is dominated by dry grassland. Another 30% supports subalpine fir/Engelmann spruce dominance types. 15% is dominated by Douglas-fir forest. Mesic shrubs are present on roughly 7%, and nearly 5% is considered sparsely vegetated. Very small amounts of other dominance types are present, including ponderosa pine, limber pine, cottonwood, and Rocky Mountain juniper.
Potential vegetation types	The area is dominated by warm dry forest potential vegetation types (78%). Based on the extent of grassland dominance types, some of this area is currently non-forested. Cool moist forest types are also represented (7%), as are dry grassland potential types (8%). Small amounts of mesic grassland, xeric shrub, riparian, and sparse potential vegetation types are also present.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 73 acres within BB2 is associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Functioning mature forest: 2700 acres potential goshawk nesting habitat, 875 acres potential lynx habitat with roughly 431 in mature multi-storied structure which is optimal lynx winter foraging habitat (note area not currently occupied by lynx and not contiguous with occupied lynx habitat). Note that these habitats increase in extent and value in combination with similar in BB1 and BB3. Possibly limited areas (up to 150 acres) of old growth habitat. Big game: 2800 acres secure elk habitat. Subalpine/alpine habitats: 155 acres potential wolverine habitat. No native aquatic species known.
Known non-native wildlife species	Introduced population of mountain goats, a species native to MT but not to this mountain range. No aquatic species known.

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 10. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	There are no records of past harvest in this area.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 98.7% of BB2 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2: 100%, impacts primarily occur outside of polygon.
Miles of motorized road/trail within 300’ of streams	0.25 mile
Noticeable wildfire suppression impacts	Only 146 acres have had wildfire since 1980 and there are no noticeable impacts of fire suppression.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 11. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	There are no substantially noticeable treatment activities in this area. There are no records of past harvest. Roughly 15% of the area, however, has been impacted by prescribed fire activities, including pile burning and under burning from 1980 to 1999. These treatments were associated with the Bull Sweats project and the effects appear similar to natural conditions.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Communication sites with antennae and buildings on Hogback Lookout. This site is located outside of the polygon but visible from within.
Areas of mining activities including both abandoned and active mines	None present.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there are no fences or water developments within BB2.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Large component of dispersed camping within northeast corner (Indian Flats). No outfitter camps.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Cleared powerline right of way along Sweats Gulch. Located outside of polygon by is visible from within.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude	Powerlines and gas lines along the Beaver Creek access road that are visible from the polygon. Private land residential developments along Beaver Creek.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area.	Only one recorded cultural resource is known within this study area.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 plan.
Number of miles of maintenance level 1 road templates	0.1 miles.
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	None known.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 12. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	No summer motorized recreation opportunities.
Area available for winter motorized opportunity	Northern 1/3 of the polygon is available for motorized winter recreation (Indian Flats area).
Proximity to private lands and non-Forest Service roads	No private land inholdings.
Proximity to developed recreation sites outside of the polygon area	Indian Flats rental cabin is accessible by vehicle and snowmobile. Has moderate impacts to solitude. Refrigerator Canyon trailhead lies along Beaver Creek road and has minimal impacts to solitude of the BB2 polygon.

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 13. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The entire polygon is open for primitive and unconfined recreation.
Primitive and semi-primitive non-motorized winter recreation	Entire polygon is open for primitive and unconfined recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, hiking, horseback riding, cross country skiing, and dispersed camping.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Hogback Area (BB2) is 5,783 acres.



Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

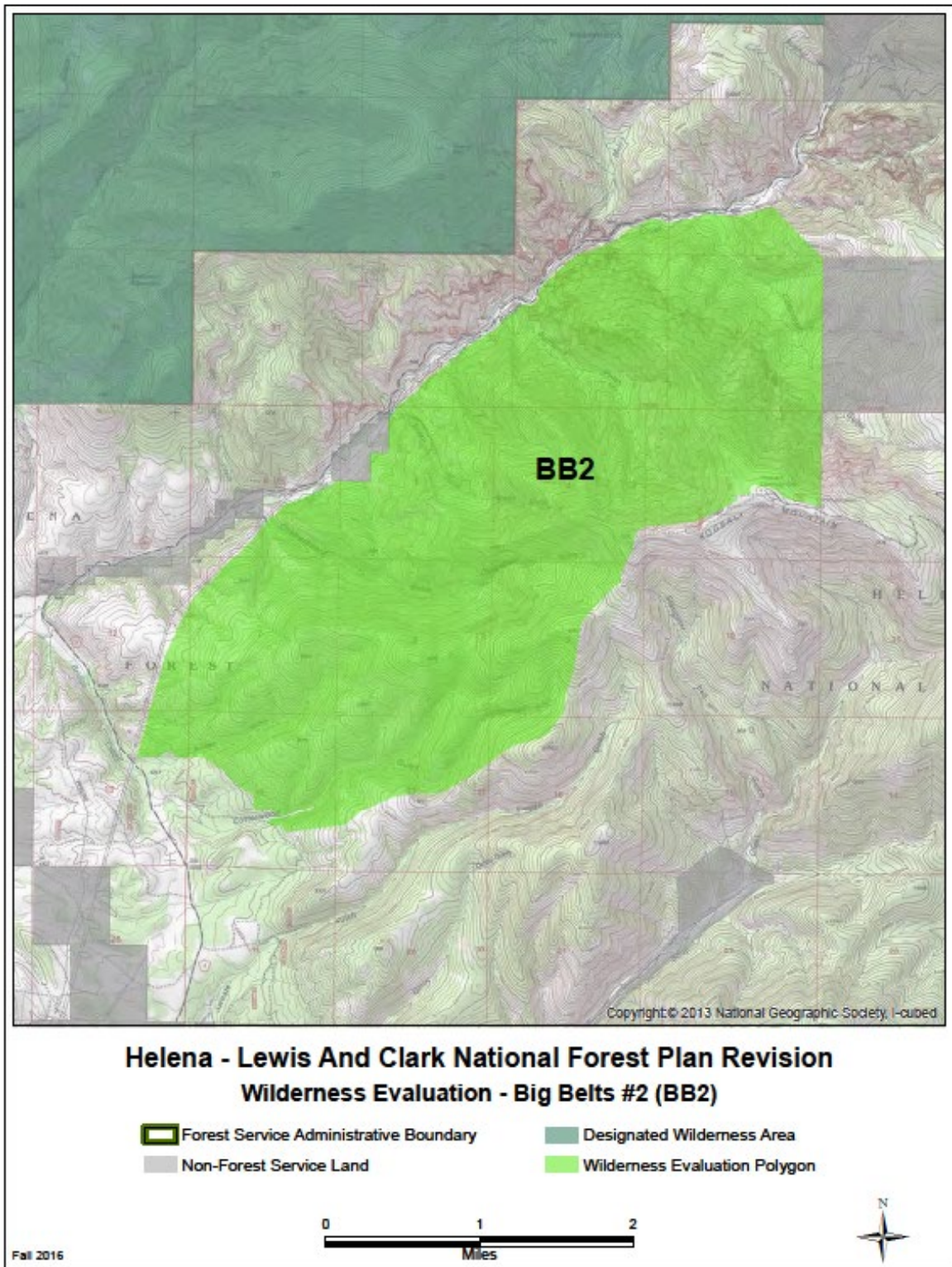
**Table 14. Features present**

Features	Description and scale
Rare plant communities	There are no records of rare plants or potential plant species of conservation concern in this area other than small amounts of limber pine ( <i>Pinus flexilis</i> ). Cottonwood is also present which is not common in general on NFS lands of the HLC NF.
Rare animal species or communities	Federally listed species: Occasional, transient presence of grizzly or lynx possible. Identified as Zone 2 in NCDE Grizzly Bear Conservation Strategy, for genetic connectivity with GYE population. Potential species of conservation concern and/or state at risk species: none documented No known rare aquatic species.
Rare ecosystems	Trace amounts of limber pine and cottonwood are present which are not abundant in many areas of the HLC NF. No rare aquatic ecosystems.
Outstanding landscape features	Steep and rugged. Beaver Creek canyon has unique rock formations and limestone cliffs. Views from Hogback lookout span the entire Helena valley.
Historic and cultural resource sites	Only one cultural resource with the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	Beaver Creek (on the boundary between BB1 and BB2) is on the list of eligible WSRs, it is listed for outstanding fishing, geology, and cultural resources.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 15. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Long rectangular piece of land that extends from the Beaver Creek drainage up to the Hogback Ridge.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	No private inholdings.
Management of adjacent lands	Some small portions of private lands, primarily residential, to the north and east edges of the polygon. Forest Service system lands to the south and southeast. Old timber harvest on the southwest.





### Trout Creek Area (BB3)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 16. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	Most of this area (over 59%) supports Douglas-fir dominated forests. Ponderosa pine forest is also common (16%). Over 13% is made up of dry grasslands. Other dominance types are present in fairly small amounts, including shrublands, lodgepole pine, subalpine fir, Engelmann spruce, limber pine, cottonwood, aspen, and Rocky Mountain juniper. The Cave Gulch fire of 2000 burned the southern portion of this area; some of this area is still regenerating and/or was converted to grassland. Nearly 5% of the area overall is still considered transitional, where no vegetation type is yet identified post-disturbance.
Potential vegetation types	The area is strongly dominated by warm dry forest potential vegetation types (84%), with only 3% supporting cool moist forest types. Dry grassland potential vegetation types are also present (13%). Very small amounts of shrubland types exist.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 3,909 acres within BB3 is associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Functioning mature forest habitat: 2500 acres potential lynx habitat (1200 acres of mature multi-storied, which is optimal winter foraging habitat; but note that area not currently occupied by lynx). 22,000 acres of goshawk potential nesting habitat (3 known nesting territories). Likely flammulated owl nesting indicates presence of mature, open ponderosa pine. Up to 2000 acres of possible old growth habitat in patches of varying size. Big game: Over 18,000 acres secure elk habitat. Possible moose presence in riparian. Subalpine/alpine: Roughly 600 acres potential wolverine habitat, wolverine observed. Note that these habitats increase in extent and value in combination with similar in BB1 and BB2. Westlope cutthroat trout in Magpie Creek (on boundary of polygon).
Known non-native wildlife species	Introduced population of mountain goats, a species native to MT but not to this mountain range. Non-native trout likely.

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 17. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	Over 99% of the area is unaffected by past harvest. Roughly 104 acres (less than 1% of the area) was harvested with a single tree selection cut; one area occurred in 1959 and the other in 1992.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 90.1% of BB3 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2:71%, Class 3:29%

Measures	Outcome
Miles of motorized road/trail within 300' of streams	11.6 miles, concentrated in the southern portion of the polygon.
Noticeable wildfire suppression impacts	Cave Gulch (2000): Noticeable fire suppression evidence in Hedges Mountain, Magpie Creek, Trout Creek and Goodman Gulch. Jimtown (2003): Noticeable fire suppression above the junction of Kingsberry and York gulches.

Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?

**Table 18. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	No substantially noticeable treatments occur within the area. Less than 1% was affected by past timber harvest, as noted above. This partial cutting blends back into the landscape fairly quickly. Roughly 3% of the area has been impacted by prescribed fire treatments, including broadcast burning, pile burning, and under burning from the 1980's to early 2000's, the effects of which may appear similar to a wildfire.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Electronic sites on Hogback Lookout and repeater site on Mount Hedges are visible from locations within the polygon.
Areas of mining activities including both abandoned and active mines	Some abandoned mines in the south end of the polygon in Never Sweat Gulch, Bar Gulch, Coxey Gulch, and Cave Gulch. Limited active mining in Kingsberry Gulch, outside of the polygon. Some active mining in Cave Gulch on private lands. These mines take away from the wilderness character of the south end of the polygon.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately ¼ mile of fencing within BB3.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Dispersed camping in Trout Creek, some of which takes place within the polygon. Dispersed camping along Magpie on the southeastern boundary of the polygon.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Powerlines along Trout Creek that lie outside of the polygon but are visible from within the polygon. Powerline that goes up to Hogback Lookout and communication site is visible from within the BB3 polygon.
Presence of watershed treatment areas including contouring, diking, and channeling	Some ditching along Trout Creek that lie within the polygon.
Lands adjacent to development or activities that impact opportunities for solitude	Community of York and residential areas up Trout Creek create moderate impacts to solitude. Seasonal motorized use in Middleman Mountain to the north of the polygon has moderate impacts to solitude and is very visible to locations within the polygon.

Improvement type	Presence and extent of departure from naturalness
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Thirty-five recorded cultural resources are within this evaluation area. Most of these sites are associated with historic mining and contain structures, dwellings and relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Plan.
Number of miles of maintenance level 1 road templates	0.9 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	No recorded historic roads are within this evaluation area, however there is high likelihood they are present on the landscape, due to the heavy historic mining in the area.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 19. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Lands south of Trout Creek to Magpie Creek is open to motorized uses with approximately 20 + miles of open designated motorized routes. Use of these trails is seasonal but sights and sounds of motorized use is very evident from within the polygon.
Area available for winter motorized opportunity	From Never Sweat Gulch to Magpie Meadows is open to winter motorized use. Magpie Road is a designated snowmobile route. Use of these routes and snowmobile areas are seasonal but sights and sounds of motorized use are evident from within the polygon.
Proximity to private lands and non-Forest Service roads	Private lands along Cabin Gulch, Trout Creek, and Cave Gulch create minor impacts to solitude within the polygon.
Proximity to developed recreation sites outside of the polygon area	Cave Gulch and Never Sweat THs provide motorized access and create moderate to high impacts to solitude. Trout Creek Canyon TH, Hanging Valley TH, Magpie Meadows TH are all nonmotorized trailheads and create minimal impacts to solitude. Vigilante Campground is located at the end of a paved road in Trout Creek and creates moderate impact to solitude. Bar Gulch rental cabin is located in Magpie Creek and creates minimal impact to solitude.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 20. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Opportunities for primitive recreation are better in the northern 1/3 of the polygon, northwest of Trout Creek and the lands surrounding Soup Creek. Upper Trout Creek has semi-primitive hiking opportunities in the summer. Hanging Valley trail is designated as a National Scenic Trail and is accessed from Magpie Meadows.

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized winter recreation	Same as the areas described above for summer non-motorized areas.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Main recreation uses are OHV riding, snowmobiling, hiking, hunting, dispersed camping, Some cross-country skiing in Trout Creek. Mountain biking in Trout Creek and Bear Trap.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Trout Creek Area (BB3) is 39,383 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 21. Features present**

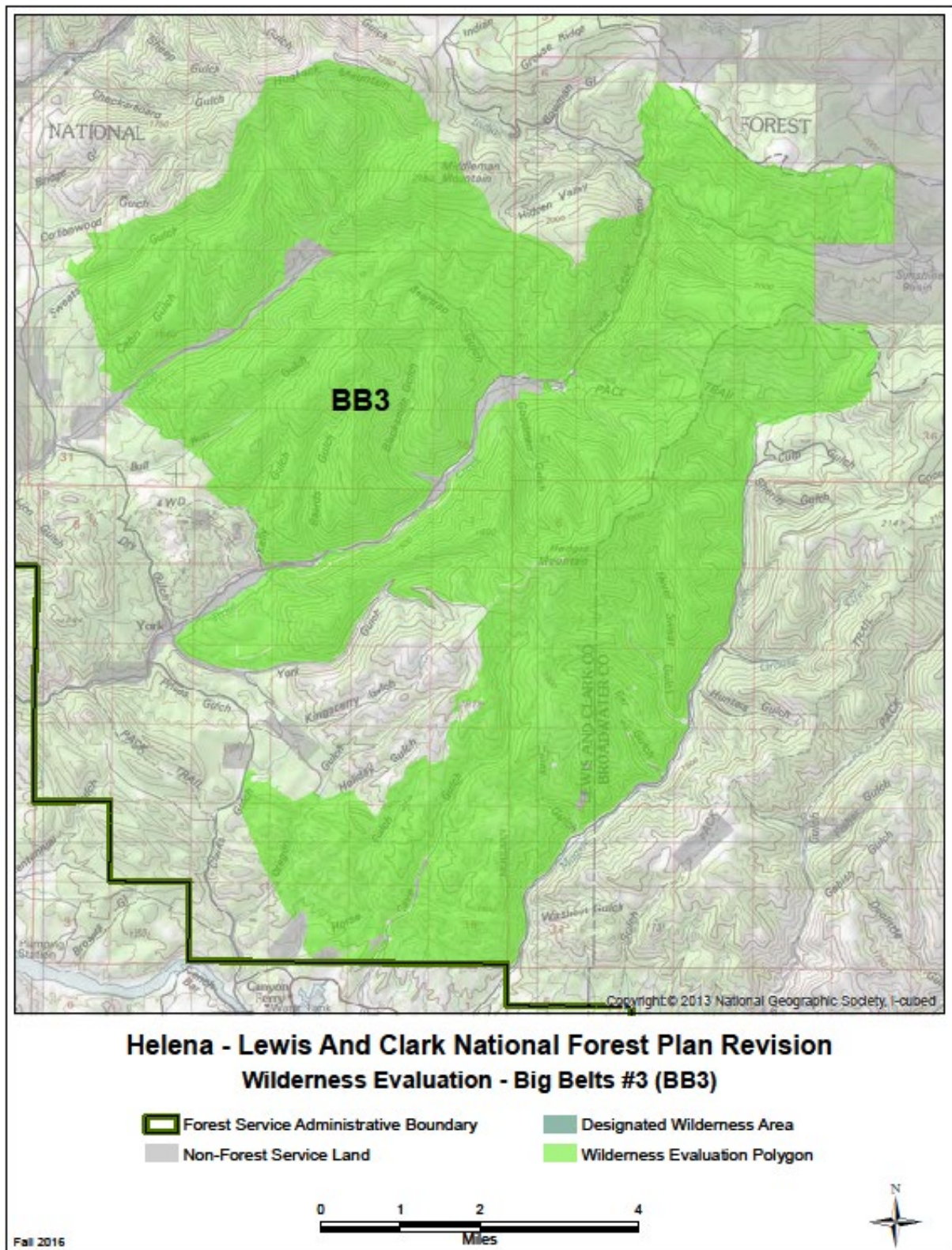
Features	Description and scale
Rare plant communities	Several potential plant species of conservation concern occur in the area, including <i>Pinus flexilis</i> , <i>Astragalus convallarius</i> , <i>Polygonum douglasii</i> spp. <i>Austinae</i> , and <i>Lesquerella klausii</i> . Antelope bitterbrush ( <i>Purshia tridentata</i> ) and mountain mahogany ( <i>Cercocarpus ledifolius</i> ) also present which are not potential SCC's but are plants of interest for the HLC NF due to their limited extent.
Rare animal species or communities	Federally listed species: Occasional, transient presence of grizzly or lynx possible. Identified as Zone 2 in NCDE Grizzly Bear Conservation Strategy, for genetic connectivity with GYE population. Potential species of conservation concern and/or state at risk species: flammulated owl likely nesting in area, western toad. No rare aquatic species known.
Rare ecosystems	Ponderosa pine, limber pine, cottonwood, and aspen are all forested communities of interest due to their wildlife value which are not abundant in many areas of the HLC NF. Grass and shrublands, particularly bitterbrush and mountain mahogany communities, are also important ecosystem components. No rare aquatic ecosystems known.
Outstanding landscape features	Hanging Valley National Scenic Trail.
Historic and cultural resource sites	Thirty-five recorded cultural resources are within this evaluation area. The majority of these sites are associated with historic mining and contain structures, dwellings and relics of past occupations, which all have the potential to yield scientific, educational or historic value.
Research natural areas	Cabin Gulch RNA in northwestern part of the polygon.
High quality water resources or important watershed features	None known.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 22. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Large landmass that extends south from Hogback Mountain to Magpie Creek. The area is fragmented by designated motorized routes and private land inholdings.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	Private lands along Soup Creek and Trout Creek. Some private inholdings along the southern border the polygon in Cave Gulch.
Management of adjacent lands	North of the polygon there is heavily roaded and harvested landscape that is seasonally open to motorized recreation. Northeast corner is bordered by private lands. East and southeast is a continuation of Forest Service system lands that are fragmented by motorized use. South and southwest is Forest Service system lands impacted by logging, mining and motorized use.





### North Belts Area (BB4)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 23. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	About 48% of BB4 supports Douglas-fir dominated forests, and 19% is dry grassland. Ponderosa pine dominance types are found on roughly 6%, and dry shrublands on 5%. There are trace or small amounts of other dominance types present as well, including lodgepole pine, Engelmann spruce, limber pine, aspen, and Rocky Mountain juniper. Due to the Cave Gulch fire of 2000 that burned the western half of the area, a substantial portion (about 17%) is mapped as “transitional”, where the vegetation is likely to become forested but the type is not yet discernible via imagery. On this dry landscape, some of these areas may be grass/shrublands for an extended period of time.
Potential vegetation types	Over 72% of the area has a warm dry forested potential vegetation type, and just over 20% has a dry grassland potential vegetation type. There are a few other potential types present in very small abundance, including cool moist forest, mesic grassland, dry shrubland, riparian, and sparse vegetation.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 1,283 acres within BB4 is associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest: 4700 acres of goshawk potential nesting habitat, but only 117 acres of mature multi-storied lynx habitat (optimal winter foraging habitat); lynx habitat scattered, not occupied. Note that these habitats increase in extent and value in combination with similar in BB5.</p> <p>Big game: 2400 acres secure elk habitat; immediately adjacent to elk calving habitat on non-NFS land. Possible moose presence in riparian. Likely breeding habitat for Townsend’s big-eared bat.</p> <p>Westslope cutthroat trout in Magpie and Avalanche Creeks.</p>
Known non-native wildlife species	<p>Introduced population of mountain goats, a species native to MT but not to this mountain range.</p> <p>Non-native trout likely.</p>

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 24. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	There are no records of past harvest in this area. It is possible that some historic tree cutting occurred prior to the time of detailed record keeping (prior to the 1950’s).
Percent of area without known invasive weeds	According to data as of 2/10/2016, 90.9% of BB4 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	<p>Class 2: 14%, Class 3: 86%</p> <p>Ratings due to grazing and dewatering impacts, roads and trails, and water quality impairments. Avalanche and Hellgate Creeks on the State 303(d) list due to these impacts.</p>

Measures	Outcome
Miles of motorized road/trail within 300' of streams	13.7 miles
Noticeable wildfire suppression impacts	Cave Gulch (2000): dozer line evidence in Hunters and Carpenter's gulches.

Question 1c. *What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 25. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	There are no records of either past harvest or prescribed fire treatments in this area.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	Multiple abandoned mines are scattered across the polygon. These mines take away from the wilderness character of most of the polygon.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately ¼ mile of fencing within BB4.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Some dispersed camping along Avalanche Road. No outfitter camps within the polygon.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None present.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude	Busy open roads that surround the polygon. Seasonal motorized trail system throughout the polygon. Snowmobiling during winter months.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Twenty-two recorded cultural resources are within this evaluation area. Most of these sites are associated with historic mining and contain structures, dwellings and relics of past occupations. This is also an area that contains a high concentration of prehistoric rock art sites.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Plan.
Number of miles of maintenance level 1 road templates	0.9 miles



Improvement type	Presence and extent of departure from naturalness
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	No recorded historic roads in this evaluation area. However, there is a high probability they exist on the landscape.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 26. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Hellgate Ridge, Doolittle Gulch, Thompson Gulch, and Hunters Gulch are all available for motorized use in the summer.
Area available for winter motorized opportunity	Groomed snowmobile routes in Magpie Creek. Open to motorized use in the winter but does not receive a lot.
Proximity to private lands and non-Forest Service roads	Private lands in Hellgate Gulch and along Avalanche Road.
Proximity to developed recreation sites outside of the polygon area	No developed recreation sites nearby.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 27. Primitive or unconfined types of recreation**

Measures	Descriptions and Locations
Primitive and semi-primitive non-motorized summer recreation	Isolated locations within McGregor Gulch, Spilling Gulch, and Shannon Gulch.
Primitive and semi-primitive non-motorized winter recreation	Entire polygon is open to winter motorized use. Not much available for primitive and semi-primitive non-motorized winter recreation use.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Rock climbing in Hellgate Gulch. Busy with hikers during hunting season.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The North Belts Area (BB4) is 14,140 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 28. Features present**

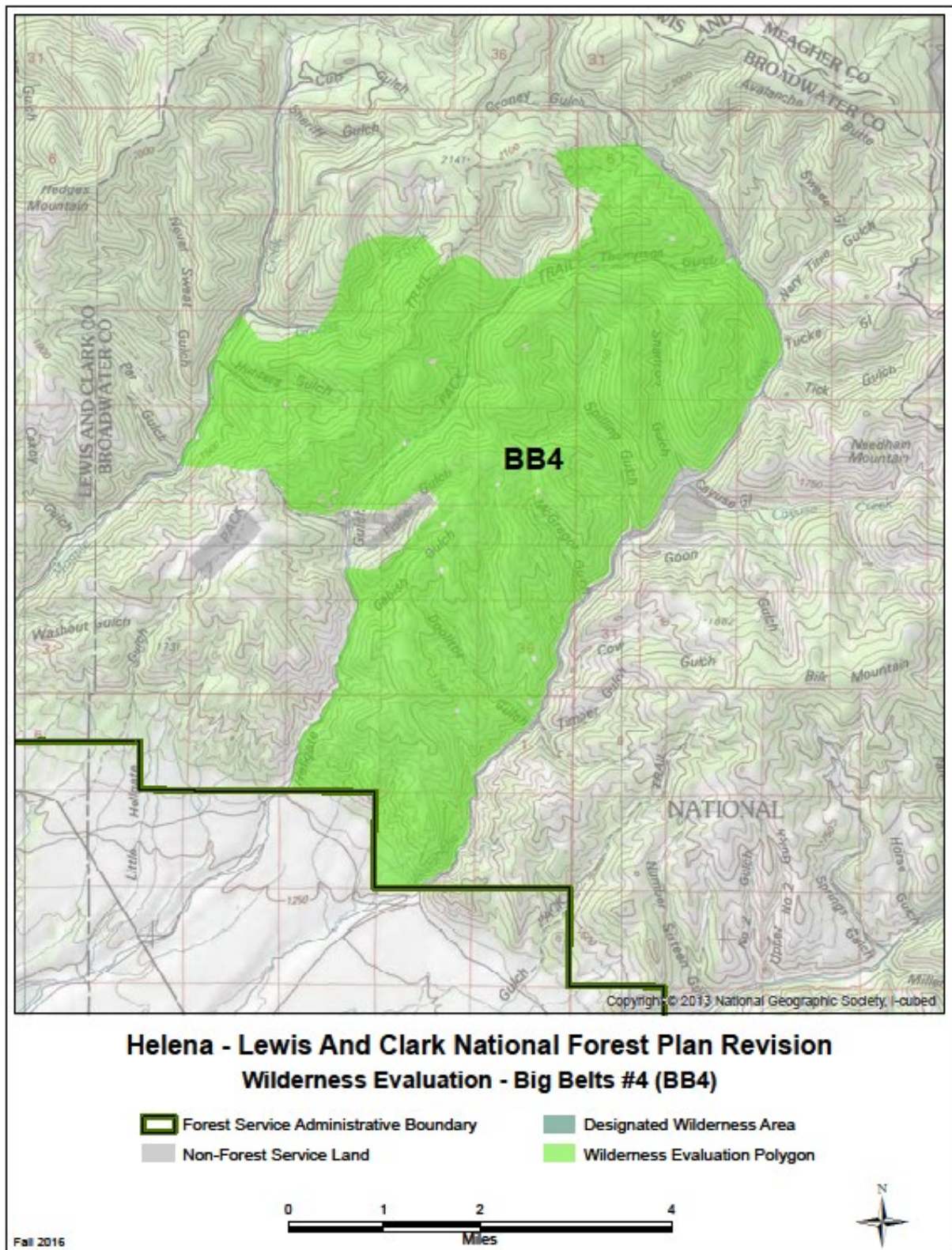
Features	Description and scale
Rare plant communities	Records show the presence of one potential plant species of conservation concern in this area, <i>Polygonus douglasii</i> spp. <i>Austinae</i> . Small amounts of limber pine, <i>Pinus flexilis</i> , are also present.

Features	Description and scale
Rare animal species or communities	<p>Federally listed species Occasional, transient presence of grizzly or lynx possible. Identified as Zone 2 in NCDE Grizzly Bear Conservation Strategy, for genetic connectivity with GYE population.</p> <p>Potential species of conservation concern and/or state at risk species: Townsend’s big-eared bat, evidence of possible breeding in or adjacent to area.</p> <p>Westslope cutthroat trout in Avalanche and Magpie Creeks.</p>
Rare ecosystems	<p>Small areas of limber pine, ponderosa pine, and aspen are mapped in this area, which are not abundant forested communities in many areas on the HLC NF. Grass and shrublands are also important vegetative communities found in this area.</p> <p>No rare aquatic ecosystems known.</p>
Outstanding landscape features	Cliffs and rock formation in Hellgate Gulch.
Historic and cultural resource sites	<p>Twenty-two recorded cultural resources are within this evaluation area. The majority of these sites are associated with historic mining and contain structures, dwellings and relics of past occupations. This is also an area that contains a high concentration of prehistoric rock art sites. The high concentration of rock art offers exceptional scientific, educational and historic value.</p>
Research natural areas	None present.
High quality water resources or important watershed features	None.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 29. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	This polygon is an irregular shape that includes portions of Hellgate Gulch, Fisher Gulch, and the west slopes of Avalanche Creek.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	All private lands are excluded from this polygon.
Management of adjacent lands	Forest Service system lands to the north, west, and east. Private lands to the south that are used primarily for agriculture.



### Bilk Mountain Area (BB5)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 30. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance type in this area is Douglas-fir, which is mapped on over 66%. Dry grasslands are also common, found on nearly 14%. Lodgepole pine forests can be found on just under 10%. Very small amounts of other dominance types are also present, including shrublands, subalpine fir, Engelmann spruce, limber pine, Rocky Mountain juniper, and a tiny trace of whitebark pine.
Potential vegetation types	Warm dry forest potential vegetation types dominated the area, covering about 80%. Dry grassland and mesic grassland potential types together make up about 14%. Cool moist forest potential types are also present, on about 4%. Very small amounts of shrubland and riparian potential types are also present.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 1,206 acres within BB5 is associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Functioning mature forest: 14,000 acres of goshawk potential nesting habitat (1 known nesting territory); 3000 acres potential lynx habitat (590 acres of mature multi-storied, which is optimal winter foraging habitat; but area not occupied by lynx). Note that these habitats increase in extent and value in combination with similar in BB4. Roughly 280 acres possible old growth habitat in patches of varying size. Big game habitats: Over 14,000 acres secure elk habitat; immediately adjacent to elk calving habitat on non-NFS land. Possible moose presence in riparian. Subalpine/alpine habitats: Roughly 2000 acres potential wolverine habitat. Westslope cutthroat trout in Avalanche Creek and White Gulch, plus a tributary to White Gulch.
Known non-native wildlife species	Introduced population of mountain goats, a species native to MT but not to this mountain range. Non-native trout likely.

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 31. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	There are no records of past harvest in the area. It is possible that some historic tree cutting occurred which predates these records (prior to the 1950’s).
Percent of area without known invasive weeds	According to data as of 2/10/2016, 95.3% of BB5 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2: 47%, Class 3: 53% Impacts from grazing and dewatering. Avalanche Creek on 303(d) list for dewatering and grazing impacts.

Measures	Outcome
Miles of motorized road/trail within 300' of streams	7.7 miles
Noticeable wildfire suppression impacts	No fire and no fire suppression impacts since 1980.

Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?

**Table 32. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	While no past harvest occurred, some prescribed burning activities did occur in this area which were determined to no longer be substantially noticeable. These treatments included under burning and broadcast burning which occurred primarily in 1988, with some small areas treated in the late 1990's and early 2000's. The effects of these treatments appear similar to wildfire.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mine.	Multiple abandoned mines in southern portion of polygon and along Avalanche Creek. These mines take away from the wilderness character of the south portion of the polygon.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 2.5 miles of fencing and 11 stock water tanks within BB5.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Dispersed camping along Avalanche Creek, Avalanche Butte, and the Ridge Road. No outfitter camps.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None present.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude	Motorized use heard and seen from roads on the perimeter.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Fifteen recorded cultural resources are within this evaluation area. Most of these sites are associated with historic mining and contain structures, dwellings and relics of past occupations. This is also an area that contains a high concentration of prehistoric rock art sites. This evaluation area also lies within the Confederate Historic Mining District, which contains numerous unrecorded historic mining related features on the landscape.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Plan.



Improvement type	Presence and extent of departure from naturalness
Number of miles of maintenance level 1 road templates.	0.2 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	One recorded historic wagon route (10 miles) is located within the evaluation area. However, there is a high probability of other historic routes related to the Confederate Historic Mining District.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 33. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Nary Time motorcycle trail in Nary Time Gulch. White Gulch road and Spring Gulch roads are open. These routes are excluded but cut across the polygon in the south portion.
Area available for winter motorized opportunity	Upper end of White Gulch is open for snowmobile.
Proximity to private lands and non-Forest Service roads	Private land inholding in White Gulch and along Cayuse Creek.
Proximity to developed recreation sites outside of the polygon area	No developed recreation sites near the polygon.

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 34. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Majority of the area open to primitive and semi-primitive recreation in Bilk Mountain and Cayuse Creek.
Primitive and semi-primitive non-motorized winter recreation	All portions of the polygon except for White Gulch which is open to snowmobiles.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hiking and horseback riding, dispersed camping along the open roads around the perimeter. Area is popular with hunters in the fall.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Bilk Mountain Area (BB5) is 25,787 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

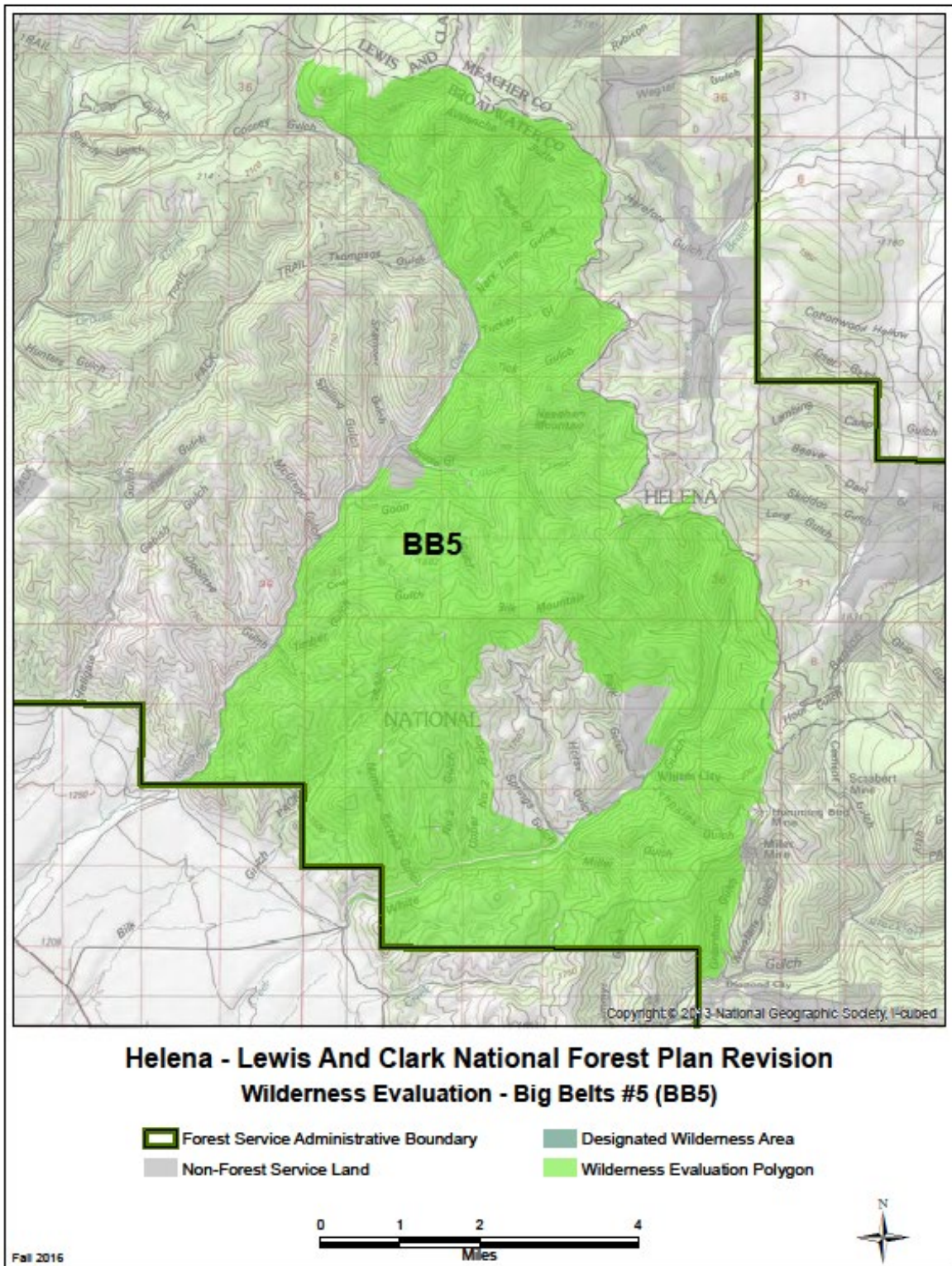
**Table 35. Features present**

Features	Description and scale
Rare plant communities	Several potential plant species of conservation concern are known to occur in the area, including <i>Cirsium longistylum</i> , <i>Lesquerella klausii</i> , <i>Pinus albicaulis</i> , and <i>Pinus flexilis</i> .
Rare animal species or communities	Federally listed species: Occasional, transient presence of grizzly or lynx possible. Identified as Zone 2 in NCDE Grizzly Bear Conservation Strategy, for genetic connectivity with GYE population. Westslope cutthroat trout in Avalanche and White Gulch
Rare ecosystems	Whitebark pine is a candidate species for listing under the ESA and is present in small amounts in this area. Other ecosystem components found in this area, including limber pine, are not abundant in many areas of the HLC NF. No rare aquatic ecosystems known
Outstanding landscape features	Pretty vistas had off of Needham Mountain, Bilk Mountain, and Cayuse Mountain.
Historic and cultural resource sites	Fifteen recorded cultural resources are within this evaluation area. The majority of these sites are associated with historic mining and contain structures, dwellings and relics of past occupations. This is also an area that contains a high concentration of prehistoric rock art sites. In addition, this evaluation area lies within the Confederate Historic Mining District, which contains numerous unrecorded historic mining related features on the landscape. All of these sites have the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	White Gulch is on the list of eligible WSRs, it is listed for outstanding its outstanding Westslope cutthroat trout fishery.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 36. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	This polygon is relatively narrow at the northern end then broadens to area that encompasses the landscapes between Avalanche Creek and Greenhorn Gulch to the east. There is a large exclusion area in the lower central part of the polygon.
Legally established rights or uses within the area	Private land ROW to private land in White Gulch.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	Private land in White Gulch and Cayuse Creek.
Management of adjacent lands	Timber management on Forest Service system lands on the north, east and western boundaries. Private land with agriculture use on the south boundary.





### Camas Creek Area (BB6)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 37. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	This area contains a mix of dominance types, ranging from Douglas-fir dominated forest (18%), to lodgepole pine (46%), to subalpine fir/Engelmann spruce mixes (25%). There are also dry grasslands (6%), and some whitebark pine forest (just over 2%). Very small amounts of other dominance types are also present, including shrublands, limber pine, aspen, and sparse vegetation.
Potential vegetation types	The area is dominated by cool moist forest potential vegetation types (69%), with warm dry forest types also common (20%). About 4% supports cold forest potential types, which is where whitebark pine would most likely thrive. There are also small amounts of grassland and shrubland potential types, and sparsely vegetated areas.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 22 acres within BB6 is associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest: 18,000 acres potential lynx habitat (2600 acres of mature multi-storied, which is optimal winter foraging habitat; note area not occupied by lynx); 13,000 acres of goshawk potential nesting habitat (1 known nesting territory); 2400 acres possible old growth habitat in patches of varying size, with substantial connected patches in the western portion of the area. Presence of Clark’s nutcracker indicates availability of mature 5-needle pine, likely whitebark pine.</p> <p>Subalpine/alpine habitat: 21,000 acres potential wolverine habitat, with approximately 9000 acres of that potential maternity habitat.</p> <p>Big game habitats: Nearly 22,000 acres secure elk habitat. Immediately adjacent to elk calving habitat on non-NFS land. Possible moose presence in riparian.</p> <p>No Westslope cutthroat trout.</p>
Known non-native wildlife species	<p>Introduced population of mountain goats, a species native to MT but not to this mountain range.</p> <p>Non-native trout likely.</p>

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 38. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	There is one small area with a record of past timber harvest; a single-tree selection harvest that occurred in 1960 and which affects less than 1% of the area (24 acres).
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.9% of BB6 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2: 27%, Class 3:73%, however, the polygon is in the headwaters of the impaired watersheds, above the impacted areas.

Measures	Outcome
Miles of motorized road/trail within 300' of streams	1.9 miles, but they don't appear to be heavily impacted.
Noticeable wildfire suppression impacts	Some fire activity but 0% affected by fire suppression.

Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?

**Table 39. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	The only vegetation treatment on record is the small single tree harvest that occurred in 1960; this treatment affects less than 1% of the area and was determined to be no longer substantially noticeable. No prescribed fire activities have occurred.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Weather station on the ridge between Atlanta Creek and Pickfoot Creek. Weather station is a few small low structures less than ¼ acre in size.
Areas of mining activities including both abandoned and active mines	There are a few abandoned mines scattered throughout. They are insignificant spatially within the polygon.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 1.1 miles of fencing within BB6.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps, however, one outfitter/guide permit for the area. Dispersed camping in Duck Creek pass and Blacktail Creek.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Small water pipelines in Spruce Creek, Boulder Creek and Atlanta Creek.
Presence of watershed treatment areas including contouring, diking, and channeling	None.
Lands adjacent to development or activities that impact opportunities for solitude	Timber harvesting activity to the north and southeast.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Currently there are only two recorded sites within this evaluation area, which are relics of past occupations. However, the northern portion is located within the Confederate Historic Mining District, therefore there is high potential for un-recorded structures, dwellings for relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Plan.
Number of miles of maintenance level 1 road templates	0.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	None known.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 40. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	None available for motorized use in summer.
Area available for winter motorized opportunity	None available for motorized use in winter.
Proximity to private lands and non-Forest Service roads	No private land inholdings.
Proximity to developed recreation sites outside of the polygon area	Stove Camp Trailhead on Duck Creek Pass on the edge of the polygon. Blacktail Trailhead on northern boundary in Blacktail Creek. This trailhead is about ¼ mile from boundary of the polygon.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 41. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Entire polygon is available for primitive and semi-primitive summer recreation.
Primitive and semi-primitive non-motorized winter recreation	Entire polygon is available for primitive and semi-primitive winter recreation but not heavily used in the winter.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hiking, horseback riding, hunting, fishing, backpacking into high mountain lakes.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Camas Creek Area (BB6) is 23,879 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 42. Features present**

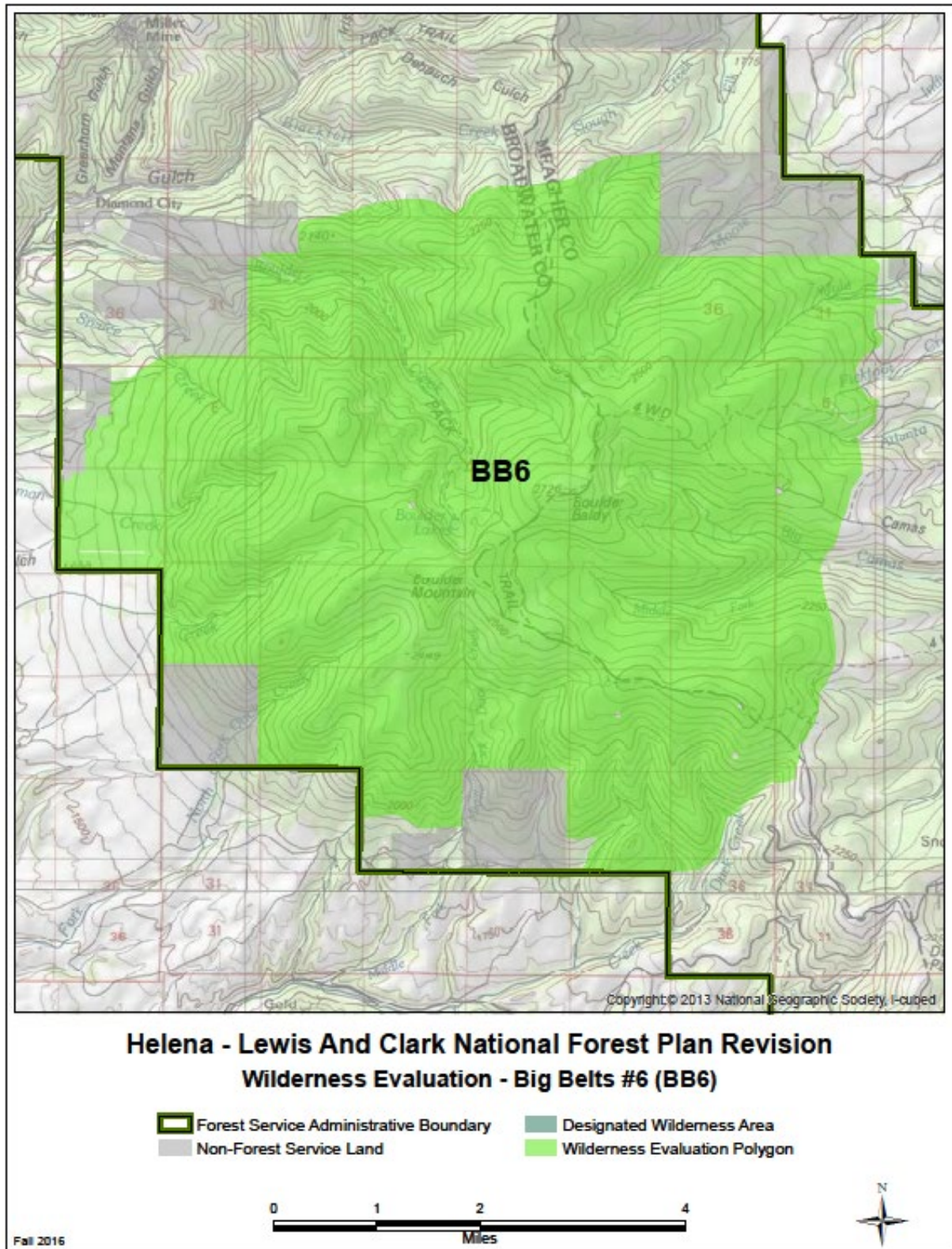
Features	Description and scale
Rare plant communities	Several potential plants of conservation concern are known to occur in this area, including <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , and <i>Cirsium longistylum</i> .
Rare animal species or communities	Federally listed species: Occasional, transient presence of grizzly or lynx possible. Identified as Zone 2 in NCDE Grizzly Bear Conservation Strategy, for genetic connectivity with GYE population. Potential species of conservation concern and/or state at risk species: wolverine No known rare aquatics.

Features	Description and scale
Rare ecosystems	Whitebark pine is a candidate species for listing under the ESA and is found in small amounts in this area. Limber pine communities are also of interest on the HLC NF. No known rare aquatic ecosystems.
Outstanding landscape features	High mountains, wide vistas, small alpine lakes.
Historic and cultural resource sites	Currently there are only two recorded sites within this evaluation area, which have the potential for scientific, educational or historic value. However, the northern portion is located within the Confederate Historic Mining District, therefore there is high potential for un-recorded historic sites associated with past mining.
Research natural areas	None present.
High quality water resources or important watershed features	Isolated headwaters area, steep, no major disturbances.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 43. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	A large circular area surrounding Boulder Mountain and Boulder Baldy peaks.
Legally established rights or uses within the area	Water rights associated with the pipelines.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	No private inholdings.
Management of adjacent lands	Timber harvest and road building on Forest Service system lands to the north and south east. Private land with agricultural and timber harvest uses to the southwest.



## Mount Baldy Area (BB7)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 44. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	This area is primarily dominated by higher elevation forests, including lodgepole pine dominance types (35%) and subalpine fir/Engelmann spruce mixes (35%). There are also some Douglas-fir forests (about 10%). Sparsely vegetated areas are also common (11%), and likely consist mainly of rocky alpine sites. Whitebark pine forest is present on about 6% of the area. Small amounts of other dominance types are also present, including grasslands, shrublands, and limber pine.
Potential vegetation types	Cool moist forest potential vegetation types dominate, representing about 68% of the area. Warm dry forests are present on about 6% at the lowest elevations, and cold forest potential types are found on about 11% at the highest elevations, representing the area where whitebark pine could most likely thrive. In addition to the sparsely vegetated (alpine) areas that cover about 11%, there are very small amounts of grassland and shrubland potential types present.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 108 acres within BB7 is associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest: Roughly 14,000 acres potential lynx habitat (2300 acres of mature multi-storied, which is optimal winter foraging habitat; note area not currently occupied by lynx); 7400 acres of goshawk potential nesting habitat. Roughly 1000 acres possible old growth habitat in patches of varying size. Presence of Clark’s nutcracker indicates availability of mature 5-needle pine, likely whitebark pine.</p> <p>Big game habitats: Nearly 16,000 acres secure elk habitat. Possible moose presence in riparian.</p> <p>Subalpine/alpine habitat: roughly 15,000 acres potential wolverine habitat, with approximately 3400 acres of that potential maternity habitat. Golden-mantled ground squirrel presence also indicative of subalpine/alpine habitats.</p> <p>Westslope cutthroat trout in Ray Creek.</p>
Known non-native wildlife species	<p>Introduced population of mountain goats, a species native to MT but not to this mountain range.</p> <p>Non-native trout likely</p>



*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 45. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	There is a record of one small commercial thinning activity that occurred in this area in 1958, representing less than 1% of the area (30 acres). There appears to be an old sale/with roads in the southwest corner of the polygon, (was private on old rec map)/section 28.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.4%% of BB7 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 19%, Class 2: 81% Polygon is in headwaters of these watersheds though, very little disturbance or impacts.
Miles of motorized road/trail within 300' of streams	0.0 miles
Noticeable wildfire suppression impacts	No recorded fire instances since 1980.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 46. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	The only record of past vegetation treatment found in this area is a 30-acre commercial thin from 1950 which was determined to no longer be substantially noticeable on the landscape.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Multiple permittees at a communication site in the northwest portion of the polygon and is visible from within the polygon.
Areas of mining activities including both abandoned and active mines	Not extensive. Only one mine mapped in northern portion of the polygon near Duck Creek Pass.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 1.1 miles of fencing within BB7.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Dispersed camping along Duck Creek Pass and at all of the upper alpine lakes. Outfitter camp near the Needles.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Abandoned powerline west of the communication site which is still visible from within the polygon.
Presence of watershed treatment areas including contouring, diking, and channeling	None.

Improvement type	Presence and extent of departure from naturalness
Lands adjacent to development or activities that impact opportunities for solitude	Surrounded by timber harvest on all four sides. Forest Service system land harvest on north, west and south. Private land harvesting on the east.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	No recorded sites. There is the potential for two historic administrative structures (fire lookouts) that have been mentioned in references but have not been visited and/or recorded.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Recommended as wilderness in the 1986 Helena Forest Plan.
Number of miles of maintenance level 1 road templates	0.7 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	None known.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 47. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Some motorized use on the road up the communication site in summer. Otherwise, the bulk of the area is non-motorized.
Area available for winter motorized opportunity	The entire polygon is non-motorized in winter.
Proximity to private lands and non-Forest Service roads	No private land inholdings.
Proximity to developed recreation sites outside of the polygon area	Gypsy Lake Campground and Trailhead to the north. Hidden Lake Trailhead on Duck Creek Pass. Edith Lake Trailhead to the south.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 48. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The entire polygon is available for primitive and semi-primitive summer recreation.
Primitive and semi-primitive non-motorized winter recreation	The entire polygon is available for primitive and semi-primitive winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hiking, horseback riding, hunting, fishing, backpacking into high mountain lakes.



Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Mount Baldy Area (BB7) is 18,335 acres. Much of this area is recognized as a recommended wilderness area in the 1986 Helena Forest Plan.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

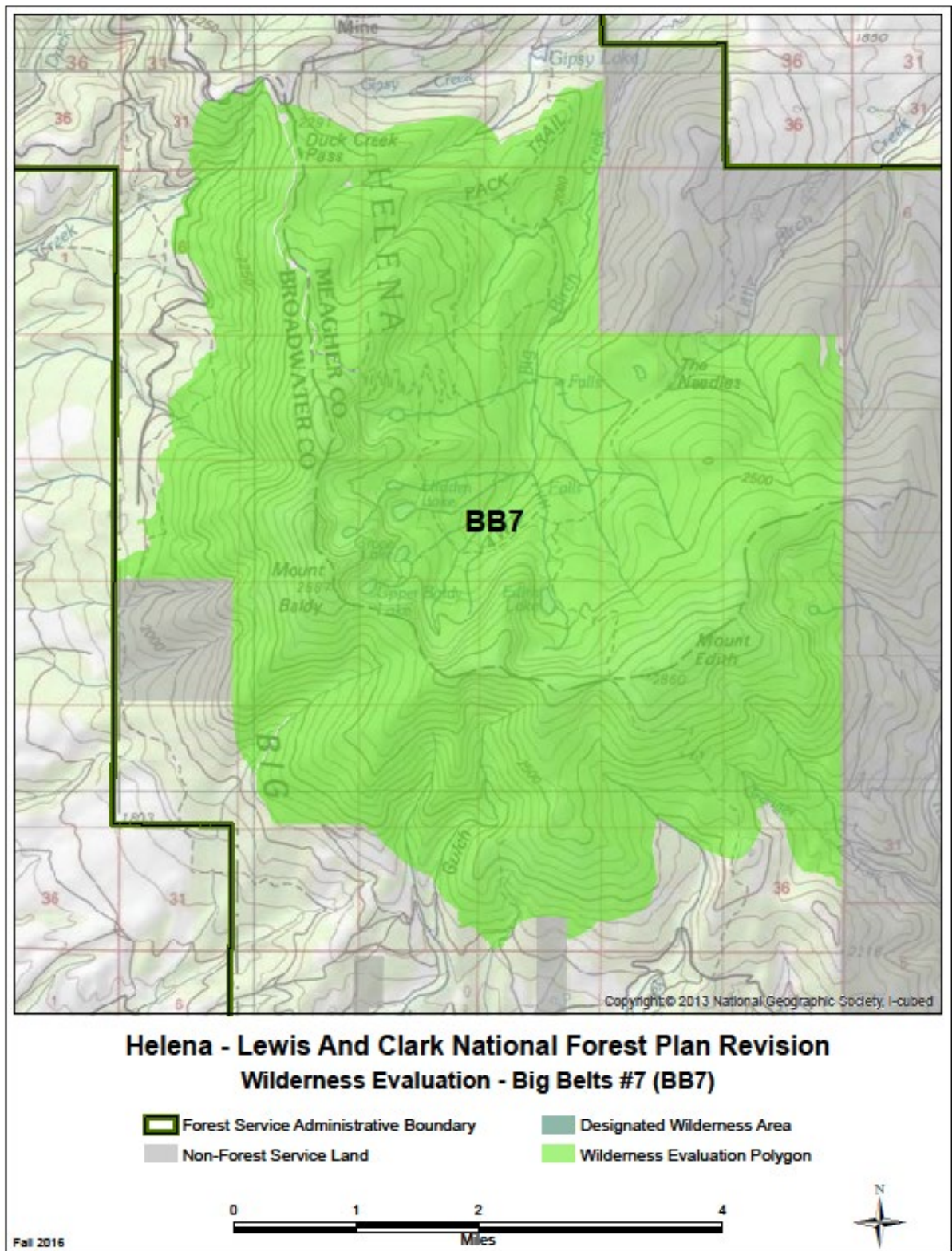
**Table 49. Features present**

Features	Description and scale
Rare plant communities	Several potential plant species of conservation concern can be found in this area, including <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , <i>Cirsium longistylum</i> , and <i>Juncus hallii</i> .
Rare animal species or communities	Federally listed species: Occasional, transient presence of grizzly or lynx possible. Identified as Zone 2 in NCDE Grizzly Bear Conservation Strategy, for genetic connectivity with GYE population. Potential species of conservation concern and/or state at risk species: wolverine, black rosy finch Westslope cutthroat trout in Ray Creek.
Rare ecosystems	The mapped area of whitebark pine dominance (6% of the area, or about 1087 acres) represents one of the more abundant whitebark communities in the Big Belts GA. The additional area of cold forest potential vegetation types represents potential expansion opportunities for this species of concern. Whitebark pine and alpine ecosystems are relatively rare and important features on the HLC NF, and whitebark is a candidate species for listing under the ESA. Several whitebark stands in this area are identified as genetically diverse areas valued for their contributions to the Regional whitebark pine rust resistant seed program. No known rare aquatic ecosystems.
Outstanding landscape features	The Needles, numerous alpine lakes, high mountain peaks and valley vistas.
Historic and cultural resource sites	None known.
Research natural areas	None present.
High quality water resources or important watershed features	Ray Creek is on the list of eligible WSRs, for westslope cutthroat trout.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 50. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Large oval-shaped area that includes the Mount Baldy, Mount Edith, and Needles areas.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	No private inholdings.
Management of adjacent lands	Timber harvest and road building on Forest Service system lands to the north, west and south. Heavily impacted private lands to the east.



### Grassy Mountain Area (BB8)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 51. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	Most of this area supports Douglas-fir dominated forests (78%). Dry grasslands are also common (12%). Small amounts of other dominance types are also present, including shrublands, ponderosa pine, lodgepole pine, subalpine fir, Engelmann spruce, cottonwood, and aspen. In addition, a small portion (280 acres) was burned in the Maudlow-Toston fire of 2000 and is classified as “transitional” (3%), where forest cover has not yet re-established.
Potential vegetation types	The area is dominated by warm dry forest potential vegetation types (over 81%), with dry grassland types the next most common (just over 8%). There are small amounts of other potential types present, including cool moist forest, mesic grassland, dry shrublands, riparian/wetland, and sparsely vegetated areas.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 34 acres within BB8 is associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Functioning mature forest minimal: Less than 800 acres potential lynx habitat based on existing and potential vegetation type (note area is not currently occupied by lynx). Roughly 4600 acres of goshawk potential nesting habitat. Roughly 150 acres possible old growth Approximately 2200 acres secure elk habitat. Possible moose presence in riparian. Less than 200 acres potential wolverine habitat. No westslope cutthroat trout present.
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely.

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 52. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	Records indicate that two small harvests occurred in this area in 1989, a seed tree seed cut and a shelterwood preparatory cut which together totaled 38 acres (less than 1% of the area).
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.4%% of BB8 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2: 100%
Miles of motorized road/trail within 300’ of streams	0.5 miles, but several motorized roads/trails cross through the polygon.
Noticeable wildfire suppression impacts	Maudlow-Toston: Dozer or feller-buncher fuel break through Sec. 30 and 29.

Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?

**Table 53. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	Several small vegetation treatments occurred in this area which all together total nearly 2% of the area. In addition to the two small harvests in 1989, piles were burned on roughly 74 acres. However, the pile burning occurred twice on the same area, which is the same area that was harvested; therefore, the actual footprint of activity is only about 35 acres total. These treatments were determined to be no longer substantially noticeable due to the residual vegetation appearing natural today.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Multi-structure communications complex on Grassy Mountain on the east side of the polygon.
Areas of mining activities including both abandoned and active mines.	Several abandoned mine points within polygon
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 3.2 miles of fencing and 3 stock water tanks within BB8.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Dispersed camping in Klondike Pass, Blacktail road, and south of Skidway Campground. No outfitter camps.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None known.
Presence of watershed treatment areas including contouring, diking, and channeling	None.
Lands adjacent to development or activities that impact opportunities for solitude	Motorized use on open roads surrounding the polygon. Highway 12 forms the western boundary of the polygon.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	None recorded at this time. However, there is the potential of an unrecorded historic site since old ski runs are visible west of Skidway Campground.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Plan.
Number of miles of maintenance level 1 road templates	0.3 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	None known.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 54. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	The entire eastern boundary is a motorized trail and is open for summer motorized use.
Area available for winter motorized opportunity	Area is not available for winter motorized recreation.
Private land within the polygon	No private land inholdings.
Developed recreation sites	Skidway Campground, Deep Creek Picnic area, and Blacktail Trailhead are located along Highway 12.

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 55. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The influence of Highway 12 and the motorized routes along Grassy Mountain reduce opportunities for primitive and semi-primitive non-motorized summer recreation.
Primitive and semi-primitive non-motorized winter recreation	Closed to motorized winter recreation so opportunities to experience primitive and semi-primitive winter recreation are good.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hiking, hunting, motorized recreation on eastern boundary, and cross-country skiing around Skidway.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Grassy Mountain Area (BB8) is 6,194 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 56. Features present**

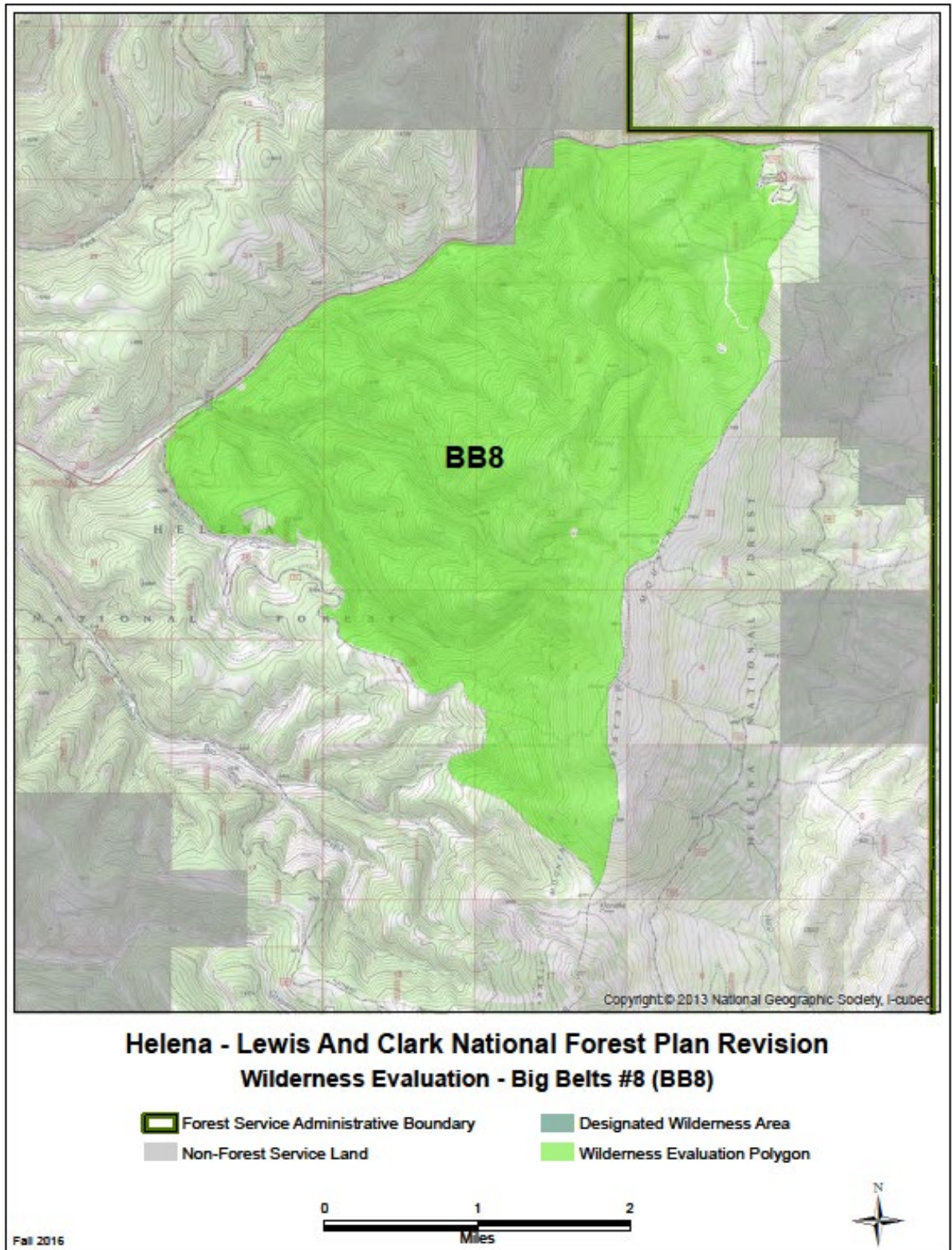
Features	Description and scale
Rare plant communities	The only potential plant of conservation concern known to occur in this area is <i>Polygonum douglasii ssp. Austinae</i> .
Rare animal species or communities	Federally listed species: Occasional, transient presence of grizzly or lynx possible. Identified as Zone 2 in NCDE Grizzly Bear Conservation Strategy, for genetic connectivity with GYE population. Potential species of conservation concern and/or state at risk species: none documented No known rare aquatic species
Rare ecosystems	There are no known rare ecosystem features related to vegetation, other than the minor presence of cottonwood and aspen which are limited in extent on the HLC NF. No known rare aquatic ecosystems.
Outstanding landscape features	High mountain vistas on Grassy Mountain.
Historic and cultural resource sites	None known at this time.
Research natural areas	None present.
High quality water resources or important watershed features	None.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 57. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Arrow-shaped land area on Grassy Mountain east of Deep Creek.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	No private inholdings.
Management of adjacent lands	Timber harvest and road building on Forest Service system lands to the northwest and southwest.





### Willow Creek Area (BB11)

This polygon includes four small parcels that all together equal 121 acres.

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. *What is the composition of plant and animal communities within the area?*

**Table 58. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	Due to recent wildfire activity, over 60% of this small area is mapped as “transitional” in VMap, indicating that the vegetation type is not identifiable although tree seedlings may be re-establishing. Roughly a third of the area is classified as dry grassland, and about 6% maps as a Douglas-fir dominance type. There are trace amounts of ponderosa pine and shrublands. Given the location and elevation of this area, grasslands may dominate the burned areas for some time, although Douglas-fir and/or ponderosa pine may also establish.
Potential vegetation types	About 68% of the area has a warm dry forested potential vegetation type, consistent with supporting Douglas-fir and ponderosa pine. 27% of the area is a dry grassland potential type, and nearly 5% is a dry shrubland potential type.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 2 acres within BB11 is associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Big game habitats: Roughly 50 acres secure elk summer habitat and roughly 125 acres bighorn sheep winter range. These habitats are not significant by themselves but increase in value paired with adjacent wilderness and potentially with BB1 and BB3. No westslope cutthroat trout.
Known non-native wildlife species	Introduced population of mountain goats, a species native to MT but not to this mountain range. None others documented. No known non-native aquatic species.

Question 1b. *What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 59. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	There are no records of past timber harvest occurring in this area.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 98.2% of BB11 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2: 100%, but no impacts in the polygons.
Miles of motorized road/trail within 300’ of streams	0.0 miles
Noticeable wildfire suppression impacts	None present.

Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?

**Table 60. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	There are no records of past timber harvest or prescribed fire activities in this area.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	None.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	None.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	None.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None.
Presence of watershed treatment areas including contouring, diking, and channeling	None.
Lands adjacent to development or activities that impact opportunities for solitude	Surrounded by undeveloped State of Montana lands.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	No known sites.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Plan.
Number of miles of maintenance level 1 road templates	0.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	None known.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 61. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Areas available for summer motorized opportunity	Area not available for summer motorized recreation.
Areas available for winter motorized opportunity	Area not available for winter motorized recreation.
Proximity to private lands and non-Forest Service roads	These parcels lie adjacent to state game management area.
Proximity to developed recreation sites outside of the polygon area	No developed recreation sites in the area. Willow Creek Trailhead outside of the Gates of the Mountains Wilderness on Montana State lands.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 62. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Entire parcels available for primitive and semi-primitive summer recreation.
Primitive and semi-primitive non-motorized winter recreation	Entire parcels available for primitive and semi-primitive winter recreation. Inaccessible in winter.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hiking and hunting.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Willow Creek Area (BB11) is only 121 acres. This polygon consists of 4 small parcels that lie adjacent to the northern boundary of the Gates of the Mountains Wilderness. There are no other Forest Service system lands in this area. They are effectively already being managed as if they are wilderness.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 63. Features present**

Features	Description and scale
Rare plant communities	There are no records of rare plants or potential plant species of conservation concern in this area.
Rare animal species or communities	Federally listed species: Occasional, transient presence of grizzly or lynx likely. Identified as Zone 2 in NCDE Grizzly Bear Conservation Strategy, for genetic connectivity with GYE population. Potential species of conservation concern and/or state at risk species: None documented

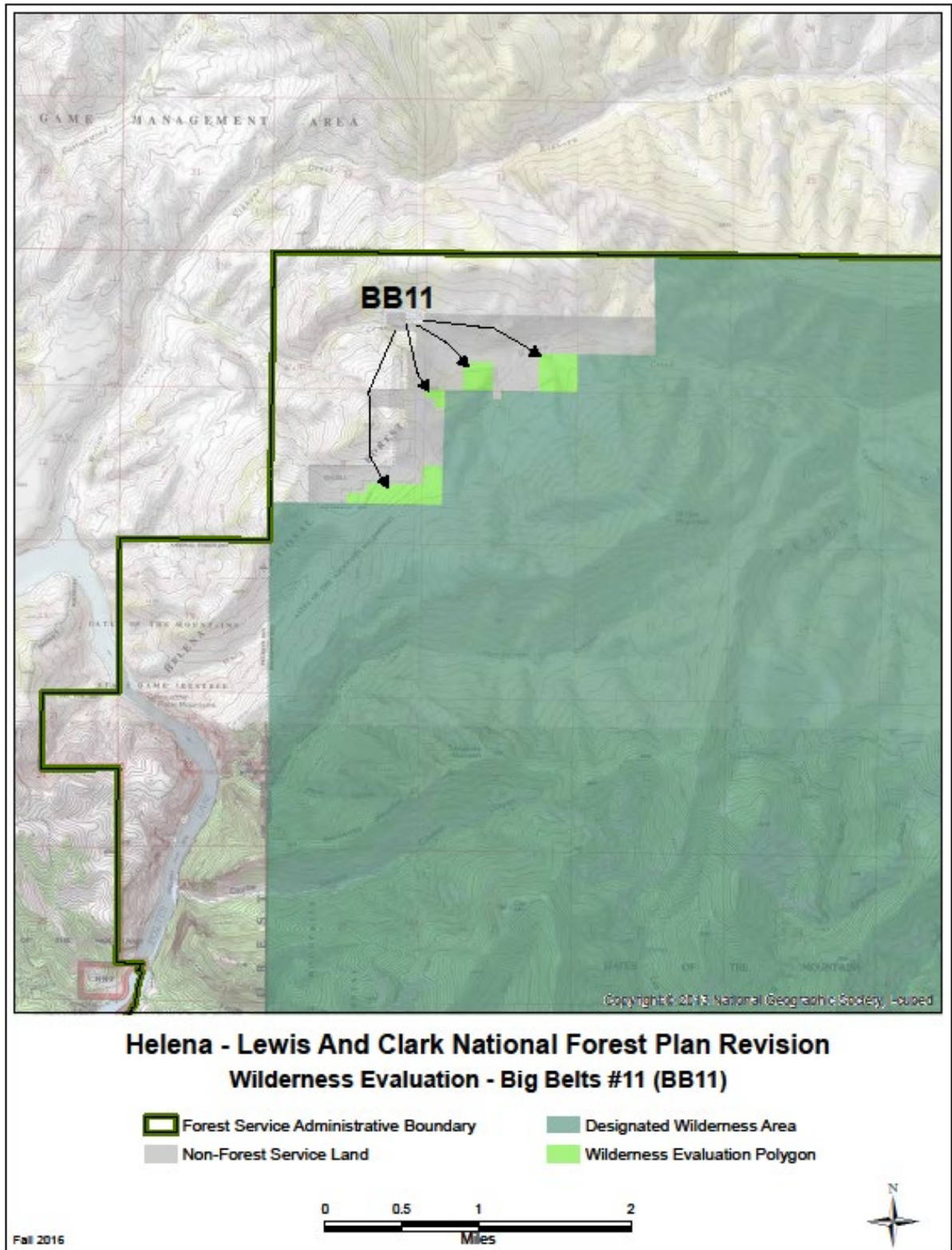
Features	Description and scale
	No rare aquatic species.
Rare ecosystems	Ponderosa pine is a species of management interest and is present in minor amounts in this area. No rare aquatic ecosystems.
Outstanding landscape features	Geologic rock features.
Historic and cultural resource sites	No known sites.
Research natural areas	None present.
High quality water resources or important watershed features	None.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 64. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Four small parcels of Forest Service system lands adjacent to the northern boundary of the Gates of the Mountains Wilderness.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	Borders a state game management area that limits access.
The presence and amount of non-Federal land in the area	No private inholdings.
Management of adjacent lands	Gates of the Mountains Wilderness to the south and state wildlife management area on all other sides.





## Castles Geographic Area

### Wapiti Peak Area (CA1)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 65. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance type in this area is lodgepole pine (pure or mixed), which covers about 56%. Douglas-fir forest is also common, representing about 19%. Subalpine fir and Engelmann spruce forests (and mixes of the two) cover about 14%. Dry grasslands are present on nearly 7%. There are small areas dominated by whitebark pine or limber pine (about 2% each). There are very small amounts of other dominance types, including shrublands and cottonwood.
Potential vegetation types	The bulk of this area has a cool moist forest potential vegetation type (68%), consistent with the dominance of lodgepole pine and Douglas-fir forest. Warm dry forest potential types make up about 24%, and dry grassland types about 5%. Trace amounts of cold forest, mesic grassland, shrublands, and riparian types are also present.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 47 acres within CA1 is associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest: Roughly 16,000 acres potential lynx habitat, with over 4200 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (area is not currently occupied by lynx). Roughly 22,000 acres of goshawk potential nesting habitat and at least one known nest territory. Roughly 150 acres possible old growth habitat in patches of varying size. Presence of Clark’s nutcracker indicates availability of mature whitebark, limber, and/or ponderosa pine.</p> <p>Approximately 15,000 acres secure elk habitat, and 1600 acres elk winter habitat and up to 2000 acres elk calving habitat. Possible moose presence in riparian.</p> <p>Roughly 2600 acres potential wolverine habitat.</p> <p>Westslope cutthroat trout in SF Willow, Richardson, Fourmile, and Cottonwood Creeks.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely.



*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 66. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	Over 99% of this area has been unaffected by past timber harvest. About 82 acres have been harvested, primarily consisting of a single-tree selection cut which occurred in 1959.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.9%% of CA1 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 10%, Class 2: 85%, Class 3: 5% Class 3 impacts are downstream from polygon
Miles of motorized road/trail within 300' of streams	10.9 miles
Noticeable wildfire suppression impacts	No impacts to the polygon from wildfire suppression.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 67. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	Less than 2% of this area has been impacted by timber harvest and prescribed fire. Approximately 82 acres have been previously harvested, including a single-tree selection cut in 1959 (75 acres) and a commercial thin (7 acres) in 1982. Ample residual trees were left after these treatments, and enough time has passed that they are no longer substantially noticeable. In addition, about 437 acres have been treated with prescribed fire from 2000 to 2004, consisting of under burning, broadcast burning, and pile burning. These treatments were also determined to be not substantially noticeable, appearing similar to wildfire. A portion of the Castles vegetation project is located within this RWA. The planned activities, including harvest, would not be an irretrievable commitment of resources and would not result in any permanent improvements within the polygon.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Repeater on Elk Peak. This has no tower, so minimal visual impact.
Areas of mining activities including both abandoned and active mines	Areas of abandoned mines scattered throughout.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 16.6 miles of fencing and 7 stock water tanks within CA1.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps. Dispersed camping throughout the polygon. Specifically, along trails and along the periphery of the polygon.

Improvement type	Presence and extent of departure from naturalness
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Water line in West Fork Cottonwood Creek.
Presence of watershed treatment areas including contouring, diking, and channeling	Ditch along Fourmile Creek. Water diversion for the city water system for White Sulphur Springs. This diversion sends water to an impoundment which is located on private land.
Lands adjacent to development or activities that impact opportunities for solitude	Outfitters to the west and south that have developments on private lands that minimally impact solitude.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are approximately 35 recorded cultural sites in this evaluation area, which represent structures, dwellings and other relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	There is one recorded historic road and five record historic trails in this evaluation area. However, there is a high probability of many historic routes in this polygon related to the past mining activity.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 68. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Most of the area is available for summer motorized activity through authorized ATV and motorcycle trails. The sights and sounds from these trails affect solitude in the entire polygon.
Area available for winter motorized opportunity	Majority of the area is open to snowmobile use in the winter. This includes uses on trails as well as cross country use.
Private land within the polygon	Two small private land inholdings: one in Grasshopper Creek and one in Warm Springs Creek. The private inholding in Grasshopper Creek is authorized for full size vehicle access. The private inholding in Warm Springs Creek has authorized ATV only access.
Developed recreation sites	There are two campgrounds north of the polygon: Grasshopper and Richardson. Both of these campgrounds create moderate impacts to lands near by these sites. Campers use the trail system by hiking, motorcycle and horses.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 69. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	There is very little opportunity to have a primitive or semi-primitive non-motorized recreation experience in the summer.
Primitive and semi-primitive non-motorized winter recreation	While the area is open for snowmobile use, the terrain and the vegetation make snowmobile travel impracticable. Because of this, there are many opportunities to have a primitive or semi-primitive non-motorized experience in the winter.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	ATVs and motorcycle riding, horseback riding, hiking, rock climbing, hunting, fishing, minimal snowmobiling, mountain biking, dispersed camping around the periphery, and recreational mining.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Wapiti Peak Area (CA1) is 33,001 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

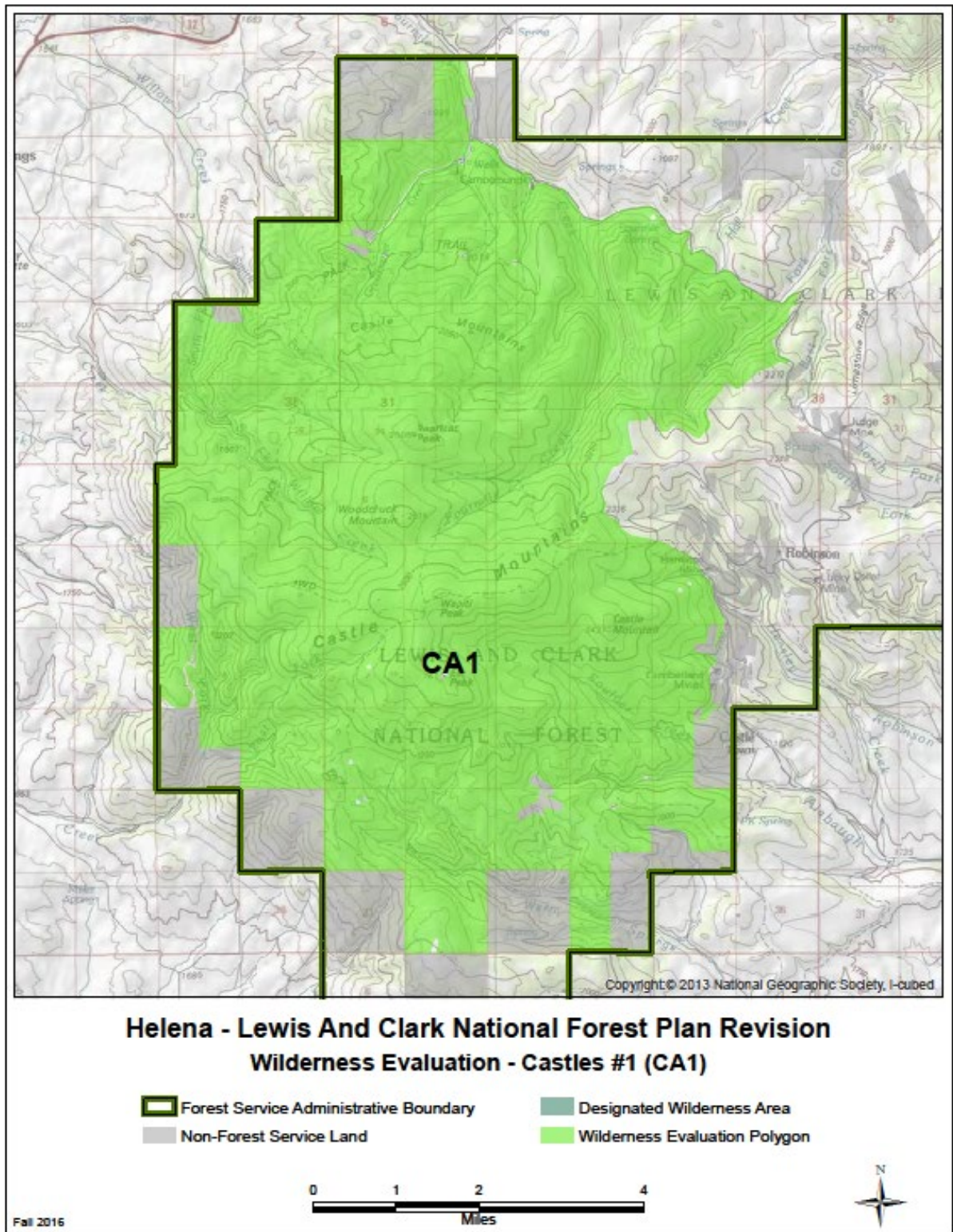
**Table 70. Features present**

Features	Description and scale
Rare plant communities	Several potential plants of conservation concern are known to be present in this area, including <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , <i>Agoseris lackschewitzii</i> , and <i>Cirsium longistylum</i> .
Rare animal species or communities	Federally listed species: Occasional, transient presence of lynx possible, but area is not within lynx critical habitat or occupied areas. Potential species of conservation concern and/or state at risk species: None documented Westslope cutthroat trout in Fourmile, Richardson, SF Willow, and Cottonwood Creeks.
Rare ecosystems	Whitebark pine and limber pine forests are considered to be relatively rare and important ecosystem components; these species are present in fairly small amounts. Whitebark pine is a candidate species for listing under the ESA. No rare aquatic ecosystems known.
Outstanding landscape features	Castle geology and outcroppings.
Historic and cultural resource sites	All recorded cultural resources in the polygon have the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	Polygon has streams with high quality water. Willow Creek is the municipal watershed for White Sulphur Springs. Area on north side of polygon has several sinkhole wetlands.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 71. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Large circular land area on the west end of the Castles.
Legally established rights or uses within the area	Private land inholdings are patented mining claims.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	Two private inholdings: one in Warm Springs Creek and on in Grasshopper Creek.
Management of adjacent lands	Polygon surrounded by large private ranchlands on the south, west, and north. Forest Service system lands on the east.



## Whetstone Ridge Area (CA3)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 72. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	Pure Douglas-fir and Douglas-fir mixed forests dominate this area, making up about 56%. Dry grasslands are also common, present on about 26% of the area. Lodgepole pine dominance types are present on just over 7%. Limber pine dominated forests are notably present on about 6%. Other types are present in very small amounts, including subalpine fir, ponderosa pine, and shrublands.
Potential vegetation types	Warm dry forest potential vegetation types dominate the area, covering about 70%. Dry grassland types are the next most common, covering 24%. These potential vegetation types are consistent with the dominance of Douglas-fir forest, grasslands, and limber pine ecotone areas. Very small amounts of other potential types, including cool moist forest, mesic grassland, xeric shrubland, and riparian types are also present.
Known non-native terrestrial plant species	According to data as of 2/10/2016, there are currently no acres within CA3 associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: Roughly 3100 acres potential lynx habitat, with over 2300 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx). Roughly 5000 acres of goshawk potential nesting habitat indicates. Roughly 200 acres possible old growth habitat and an additional 4000 acres potential as identified from aerial imagery. Both goshawk habitat and potential old growth habitat increase in value to wildlife in combination with similar habitat in NF lands immediately east of this WE polygon.</p> <p>Approximately 1300 acres secure elk habitat reflects generally open vegetation types but increases in value when combined with secure areas to east of polygon. Roughly 2800 acres elk winter habitat contiguous with additional winter range on adjacent non-NF land.</p> <p>Gray-crowned rosy finch and black rosy finch indicate presence of specific subalpine/alpine habitats.</p> <p>Observations of bird species associated with native grasslands indicates importance of that habitat type in and adjacent to this area.</p> <p>No westslope cutthroat trout.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely, but area mostly dry.



*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 73. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	100% of this area has had no timber harvest, according to available records. It is possible that historic harvest could have occurred prior to detailed record keeping (generally the 1950's).
Percent of area without known invasive weeds	According to data as of 2/10/2016, 100% of CA3 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2: 100%
Miles of motorized road/trail within 300' of streams	15.2 miles, primarily along Flagstaff Creek.
Noticeable wildfire suppression impacts	No fires since 1980.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 74. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	No past timber harvest has occurred in this area. Roughly 270 acres were impacted by an under-burn treatment in 1999 (just over 3% of the area). This treatment was determined to not be substantially noticeable, with effects like wildfire.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	Abandoned mines likely throughout.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately ½ mile of fencing and 11 stock water tanks within CA3.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps. Not a lot of dispersed camping within the polygon.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Pipelines associated with stock tanks.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude	None known.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are 16 recorded cultural resources which represent, structures, dwellings or other relics of past occupations. Some of these may not take away from the naturalness.



Improvement type	Presence and extent of departure from naturalness
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	None known.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 75. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Motorized ATV and jeep trails dissect the polygon.
Area available for winter motorized opportunity	Most of the area is available for snowmobiling in the winter.
Proximity to private lands and non-Forest Service roads	Private lands border the polygon on the north and the south.
Proximity to developed recreation sites outside of the polygon area	No developed trailheads or campgrounds.

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 76. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Very little of the area is available for primitive or semi-primitive non-motorized recreation in the summer due to the motorized trail network.
Primitive and semi-primitive non-motorized winter recreation	Very little of the area is available for primitive or semi-primitive non-motorized recreation in the winter due to the motorized trail network.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, ATV riding, Jeep trail riding, motorcycling, hiking, and snowmobiling in the winter.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Whetstone Area (CA3) is 8,676 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

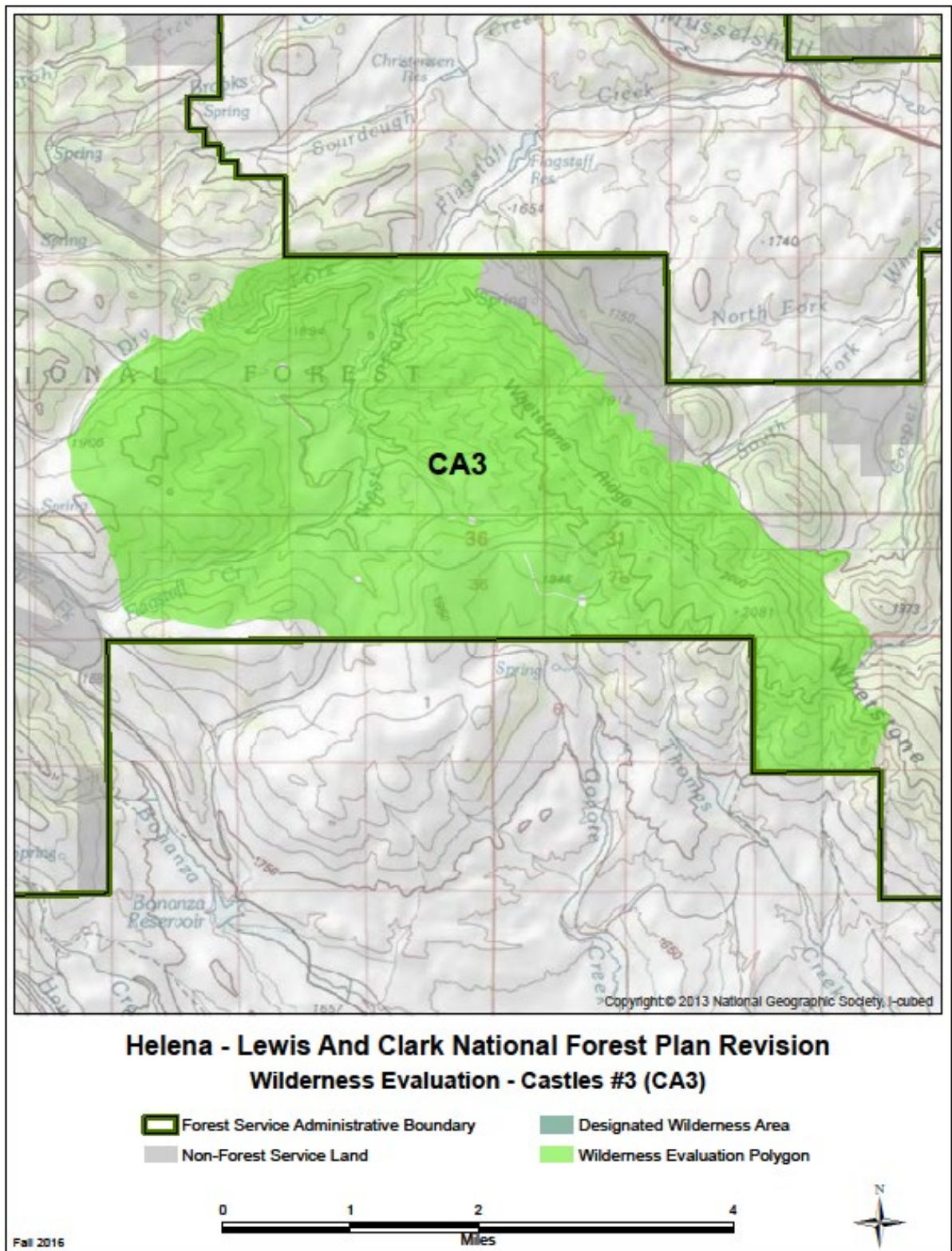
**Table 77. Features present**

Features	Description and scale
Rare plant communities	Several potential plants of conservation concern are known to occur in this area, including <i>Pinus flexilis</i> and <i>Cirsium longistylum</i> .
Rare animal species or communities	Occasional, transient presence of lynx possible, but area is not within lynx critical habitat or occupied areas. Historic and possible occasional present occurrence of Sprague's pipit (primary habitat on adjoining non-NF lands). Potential species of conservation concern and/or state at risk species: Lewis's woodpecker, Gray-crowned rosy finch, black rosy finch. Possible occasional presence of greater sage grouse, Chestnut-collared longspur, although insufficient habitat in area to support these species; primary habitats likely on adjoining non-NF lands. No rare aquatic species known.
Rare ecosystems	Limber pine-dominated areas are rare on the HLC NF, representing important ecotone ecosystems. These communities are present, generally on ridges with limestone substrate, in this area. No rare aquatic ecosystems known.
Outstanding landscape features	None known.
Historic and cultural resource sites	All recorded cultural resources in this polygon have the potential for scientific, educational or historical value.
Research natural areas	None present.
High quality water resources or important watershed features	None known

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 78. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Elliptical shaped and somewhat narrow. Fairly small.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	None within the polygon.
Management of adjacent lands	Private farm and ranchlands to the north and south. Forest Service system lands to the east and west.



## Crazies Geographic Area

### Loco Mountain Area (CR1)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 79. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	This area includes a mix of dominance types, including lodgepole pine and lodgepole pine mixes (22%), subalpine fir and Engelmann spruce mixes (22%), dry grasslands (15%), and Douglas-fir mixes (12%). A fairly substantial proportion of sparsely vegetated areas (rock, scree) are also present (19%). Roughly 5% of the area supports whitebark pine-dominated forest, and another 5% is limber pine. Trace amounts of other dominance types are also present, including shrublands and juniper.
Potential vegetation types	The most common potential vegetation type is cool moist forest (48%), with warm dry forest potential types and cold forest potential types (where whitebark pine is most likely to thrive) each present on about 9%. Sparsely vegetated potential vegetation type areas (rock and scree) represent about 23%. A small amount of this area had enough vegetation on it to be given a dominance type above. Dry grassland and mesic grassland potential types are also present on about 5% each. There are trace amounts of shrubland and riparian types.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 7 acres within CR1 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: Roughly 10,000 acres potential lynx habitat, with over 7000 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx). Roughly 8200 acres of goshawk potential nesting habitat. Less than 100 acres possible old growth habitat but an additional &gt;10,000 acres potential as identified from aerial imagery. These habitats increase in value to wildlife in combination with similar habitat in NF lands immediately west of this WE polygon.</p> <p>Approximately 22,000 acres secure elk habitat, and roughly 4200 acres elk winter habitat contiguous with additional winter range on adjacent non-NF land. Roughly 2100 acres mule deer winter range contiguous with winter range on non-NF lands. Possible moose presence in riparian/wetlands.</p> <p>Over 9000 acres potential wolverine habitat, with less than 100 acres identified as possible maternal habitat.</p> <p>No westslope cutthroat trout.</p>
Known non-native wildlife species	<p>Possibly occasional mountain goats from introduced population to south; this species is native to MT but not to this mountain range. No other non-native terrestrial wildlife species documented.</p> <p>No other non-native terrestrial wildlife species documented.</p> <p>Likely non-native trout present.</p>

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 80. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	Nearly 100% of this area has never been impacted by timber harvest. A trace amount of acreage (0.05 acres) was impacted by a commercial thin in 1974 – this is a tiny mapping sliver on the boundary.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.9% of CR1 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 49%, Class 2: 51%; Impacts related primarily to areas downstream of the polygon, but area is heavily impacted by grazing and motorized travel.
Miles of motorized road/trail within 300' of streams	0.23 miles, some motorized routes on east side and north-western corner of polygon.
Noticeable wildfire suppression impacts	No noticeable evidence of wildfire suppression impacts.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 81. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present
Presence of timber harvest or prescribed fire areas	There are essentially no harvest or prescribed fire treatments in this area, aside from a tiny mapping sliver (0.04 acres) impacted by a commercial thin in 1974.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	None present.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 2 miles of fencing and 2 stock water tanks within CR1.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Heavily used hunting camp in Big Elk Creek. Minor dispersed camp sites scattered throughout the polygon.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None present.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude	Checkerboard ownership north of the polygon receives a lot of use during hunting season.

Improvement type	Presence and extent of departure from naturalness
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Only one recorded cultural resource is known in this polygon. This site represents a relic of past occupation; however, it most likely does not take away from the naturalness.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest plan.
Number of miles of maintenance level 1 road templates	0.1 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	None known.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 82. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Motorized use along the open roads in the eastern part of the polygon. Cherry stem roads.
Area available for winter motorized opportunity	The western 1/3 of the polygon in Middle Fork of Cottonwood Creek if available for over the snow motorized vehicles both on and off the road system.
Proximity to private lands and non-Forest Service road.	Polygon bordered on north and east by private ranch lands. Checkboard on north side is busy during hunting season. Large inholding near Forest Lake on the west side.
Proximity to developed recreation sites outside of the polygon area	Forest Lake campground is located to the west of the polygon.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 83. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Most of the polygon is available for primitive and semi-primitive non-motorized recreation in the summer.
Primitive and semi-primitive non-motorized winter recreation	Eastern 2/3 of the polygon is available for primitive and semi-primitive non-motorized recreation in the winter.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hiking, horseback riding, hunting, fishing, dispersed camping, and wildlife viewing. Snowmobiling in the western portion of the polygon.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Loco Mountain Area (CR1) is 25,605 acres and borders a large undeveloped area on the Gallatin National Forest to the south.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 84. Features present**

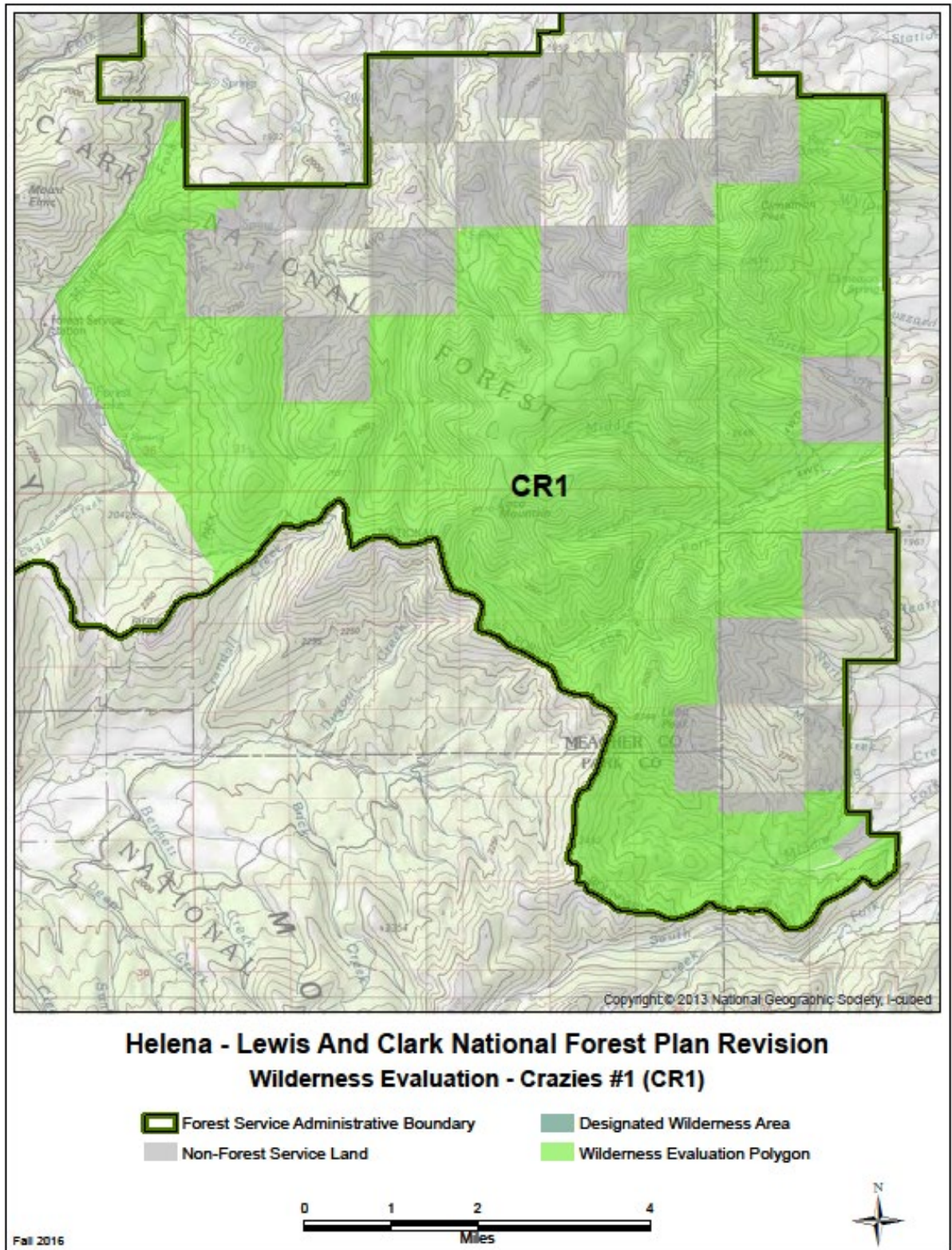
Features	Description and scale
Rare plant communities	The only potential plants of conservation concern that are known to be present in this area are five needled pines: <i>Pinus albicaulis</i> and <i>Pinus flexilis</i> .
Rare animal species or communities	Federally listed species: Occasional, transient presence of lynx possible, but area is not within lynx critical habitat or occupied areas. Potential species of conservation concern and/or state at risk species: harlequin duck No rare aquatic species.
Rare ecosystems	Whitebark pine and limber pine ecosystems are considered relatively rare and important ecosystem components on the HLC NF. Whitebark pine is a candidate species for listing under the ESA. No westslope cutthroat trout populations.
Outstanding landscape features	Bare, rocky, and high mountain peaks.
Historic and cultural resource sites	The one recorded cultural resource and the surrounding landscape have the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	None known.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 85. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Irregular shaped polygon that abuts checkerboard ownership patterns on the north and the east boundaries. Southern boundary with the Gallatin National Forest.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	Checkerboard ownership to the north and the south east but none within the polygon.
Management of adjacent lands	Polygon surrounded by large ranchlands on the north and east, Gallatin National Forest to the south, and HLC NF to the west.





### Bald Ridge Area (CR3)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 86. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	Lodgepole pine and lodgepole pine mixes are the most common dominance types, representing about 33% of the area. Douglas-fir and Douglas-fir mixes are present on 25%. Dry grasslands also make up about 25%. Subalpine fir and Engelmann spruce mixes are fairly common (9). Whitebark pine dominates on about 3%, and limber pine on about 4%. Trace amounts of other dominance types can also be found, including shrublands, mesic grasslands, and sparsely vegetated (scree) areas.
Potential vegetation types	The most common potential vegetation types are cool moist forests (44%), with warm dry forest potential types also common (21%). Cold forest potential types, where whitebark pine is most likely to thrive, are found on just over 9%. Dry and mesic grassland types together represent about 23%. Very small amounts of shrubland, riparian, and sparse potential types are also present.
Known non-native terrestrial plant species	According to data as of 2/10/2016, there are no acres within CR3 associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: Roughly 6000 acres potential lynx habitat, with over 3000 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx). Roughly 6900 acres of goshawk potential nesting habitat indicates presence of mature forest; at least 3 known nesting territories. Roughly 100 acres possible old growth habitat and an additional &gt; 7000 acres potential as identified from aerial imagery. Both goshawk habitat and potential old growth habitat increase in value to wildlife in combination with similar habitat in NF lands immediately east and to west of this WE polygon. Approximately 3300 acres secure elk habitat. Roughly 9000 acres elk winter habitat contiguous with additional winter range on adjacent non-NF land; northern half of this polygon potential elk winter range. Roughly 5800 acres mule deer winter range contiguous with winter range on non-NF lands. Possible moose presence in riparian/wetlands.</p> <p>Functioning alpine habitat: Over 4000 acres potential wolverine habitat.</p> <p>No known westslope cutthroat trout.</p>
Known non-native wildlife species	<p>Introduced population of mountain goats, a species native to MT but not to this mountain range. No other non-native terrestrial wildlife species documented.</p> <p>Non-native trout likely.</p>

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 87. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	The only harvest found in the FACTS database for this area is about 40 acres of salvage in 1990, representing less than 1% of the area. However, additional harvests occurred on formerly private lands in this polygon which were acquired by the FS in a land exchange; these activities are not found in the database because they were not FS lands when the treatment occurred. If carried forward, additional work may need to be done to identify these areas and determine if they are still substantially noticeable; and, if so, exclude from the area potentially suitable for wilderness
Percent of area without known invasive weeds	According to data as of 2/10/2016, 100% of CR3 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 55%, Class 2: 45%, Impacts in Class 2 watersheds area primarily not for impacts in the polygon, but area is heavily grazed.
Miles of motorized road/trail within 300' of streams	5.7 miles
Noticeable wildfire suppression impacts	No evidence of wildfire suppression impacts.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 88. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	The only records of vegetation management in this area is a 40 acre stand which had a salvage harvest in 1990, followed by pile burning. These activities represent less than 1% of the area.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	None present.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 3/4 mile of fencing and 12 stock water tanks within CR3.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	One outfitter guide camp in Box Canyon. Moderate number of dispersed recreation camping sites uses during hunting season. Several authorized ATV trails throughout the entire polygon.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Two Dot high voltage powerline on the northern boundary, outside of the polygon, but visible from within it. Pipelines associated with range water line developments.

Improvement type	Presence and extent of departure from naturalness
Presence of watershed treatment areas including contouring, diking, and channeling	Old water line ditch in Box Canyon in western edge of the polygon.
Lands adjacent to development or activities that impact opportunities for solitude	Surrounded by ranchlands on the west and north.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Two recorded cultural resources are within this polygon, however there is the high probability of un-recorded cultural resources which represent structures, dwellings or other relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	Old historic logging roads scar the landscape on the interior of the polygon. These are result from logging on private lands that the FS acquired in a land exchange. One recorded historic trail.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 89. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Entire polygon is bisected by seasonal ATV trails and loop trails.
Area available for winter motorized opportunity	The southern 1/3 of the polygon is open to snowmobile use.
Proximity to private lands and non-Forest Service roads	Bordered by private lands on the west and north sides of polygon.
Proximity to developed recreation sites outside of the polygon area	Forest Lake campground to the east but is about 3 miles away from the polygon.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 90. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Very little of the polygon is available for primitive and semi-primitive non-motorized recreation in the summer.
Primitive and semi-primitive non-motorized winter recreation	The northern 2/3 of the polygon is available for primitive and semi-primitive non-motorized recreation in the winter.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Authorized ATV and motorcycle riding, outfitting, horseback riding, hunting, fishing, limited hiking, dispersed camping during hunting season. Low to moderate level of snowmobiling in the winter.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Bald Ridge Area (CR3) is 13,210 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 91. Features present**

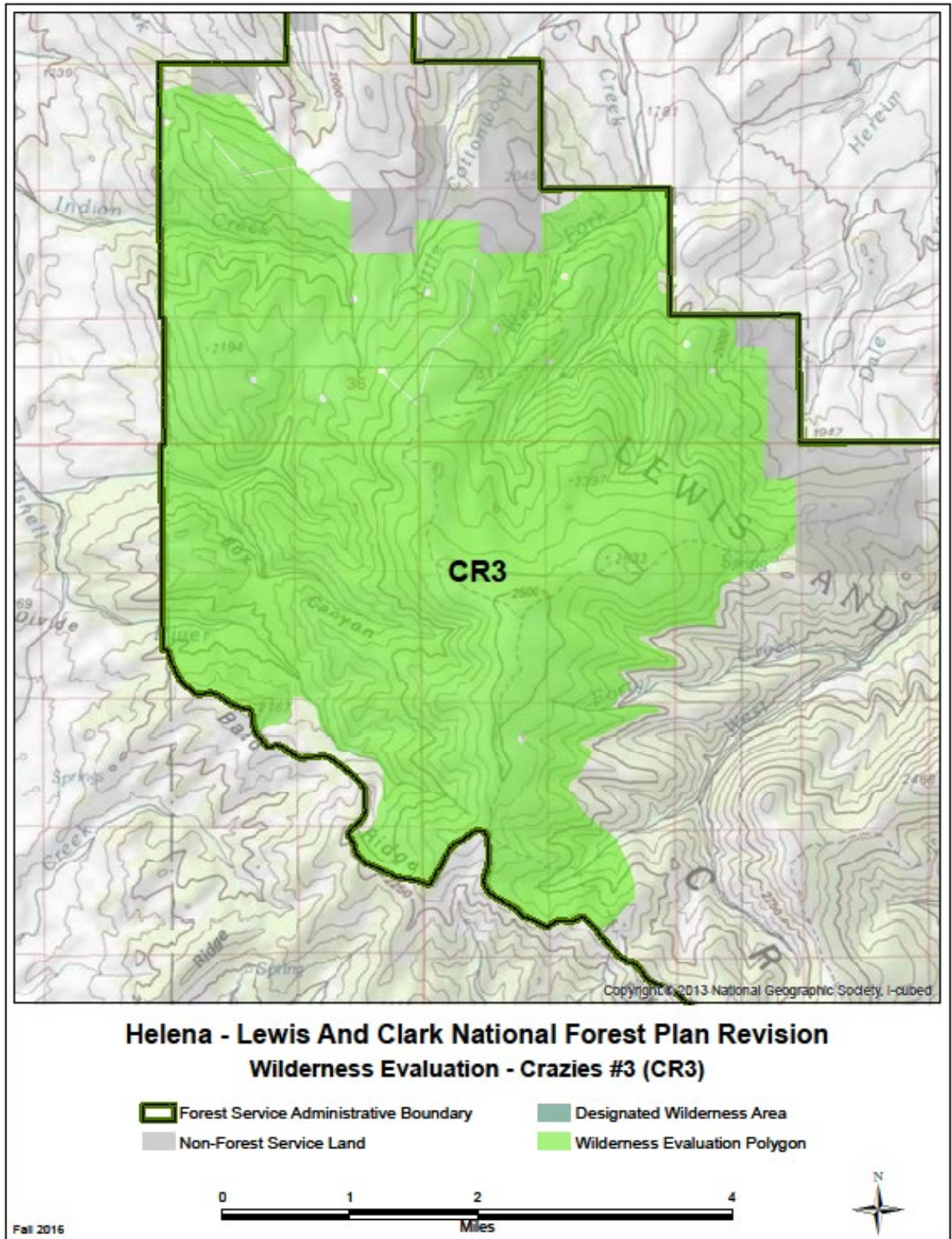
Features	Description and scale
Rare plant communities	The only known potential plant species of conservation concern that are known to occur in this area are <i>Pinus albicaulis</i> and <i>Pinus flexilis</i> .
Rare animal species or communities	Federally listed species: Occasional, transient presence of lynx possible, but area is not within lynx critical habitat or occupied areas. Potential species of conservation concern and/or state at risk species: None documented No rare aquatic species known.
Rare ecosystems	Whitebark pine and limber pine are considered relatively rare but important ecosystem components on the HLC NF. Whitebark pine is a candidate species for listing under the ESA. No rare aquatic ecosystems
Outstanding landscape features	Big, bald, grassy ridge.
Historic and cultural resource sites	All recorded sites and the surround landscape have the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	None known

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 92. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Large undeveloped area on the northwest edge of the Crazy Mountains.
Legally established rights or uses within the area	None known within the polygon.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	No private land inholdings.
Management of adjacent lands	Large private ranch land on the west and north, Gallatin National Forest to the south, and HLC NF to the east.







## Divide Geographic Area

### Sweeney Creek Area (D2)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 93. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance type in this area is Douglas-fir and Douglas-fir mixed forest, covering about 49% of the area. Lodgepole pine and lodgepole pine mixes are also abundant, growing on about 33% of the area. Ponderosa pine is also common, found on about 11%. About 4% of the area is made up of dry grasslands. Very small amounts of other dominance types are present (about 1% or less each), including mesic grasslands, shrublands, Engelmann spruce, and aspen.
Potential vegetation types	Warm dry forest potential vegetation types are the most dominant, representing about 89% of the area. This is consistent with the abundance of Douglas-fir and ponderosa pine forests. Cool moist forest potential types are found on just over 4% of the area, and grassland potential types represent roughly 4%. Small amounts of shrubland and riparian potential types are also present.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 122 acres within D2 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Functioning mature forest but largely dry types: Observed probable breeding flammulated owl indicates areas of open mature Ponderosa pine. Roughly 5900 acres of goshawk potential nesting habitat. Only 400 acres potential lynx habitat, with only about 200 acres mature multi-storied (optimal lynx winter forage). Goshawk habitat increases in value to wildlife in combination with similar habitat in area to west (WE polygon D13). Roughly 700 acres possible old growth habitat. Approximately 4000 acres secure elk habitat, immediately adjacent to winter range on non-FS system lands. Possible moose presence in riparian/wetlands. No westslope cutthroat trout.
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely.

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 94. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	Over 99% of the area has not been impacted by past timber harvest. Records show just one harvest has occurred, 58 acres of single-tree selection in 1981. It is possible that historic harvests occurred prior to detailed record keeping which began in the 1950's.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 98.5% of D2 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2: 71%, Class 3: 29%; however, impacts occur downstream of the polygon.
Miles of motorized road/trail within 300' of streams	3.6 miles
Noticeable wildfire suppression impacts	No fire occurrence since 1980.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 95. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	Less than 1% of the area (58 acres) was impacted by a single tree selection harvest in 1981; this treatment was determined to be no longer substantially noticeable. About 2% of the area has been treated with prescribed fire treatments, including broadcast burning, burning of piles, and under burning which occurred from 1981 to 2006. These treatments were also determined to be no longer substantially noticeable on the landscape. Over 97% of the area has been unaffected by treatments.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	The northern portion of this polygon is within the historic Austin Mining District. High potential for unrecorded past mining activity.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 3 miles of fencing within D2.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps. Dispersed camping along the south western edge of the polygon.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Pipeline and railroad on the northern boundary noticeable from within the polygon.

Improvement type	Presence and extent of departure from naturalness
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude.	Railroad to the north. Open roads surrounding the polygon. Highway 12 to the south is noticeable from within the polygon.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are 3 recorded cultural resources within this polygon, all represent structures, dwellings or relics of past occupation. The northern portion of this polygon is within the historic Austin Mining District. High potential for unrecorded past mining activity.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Plan.
Number of miles of maintenance level 1 road templates	1.4 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	A portions of the historic Mullan Road runs through the northern portions of this polygon. There is also the high potential of unrecorded historic routes associated with past mining.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 96. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	None available within the polygon.
Area available for winter motorized opportunity	Closed to snowmobiling within the polygon.
Proximity to private lands and non-Forest Service roads.	Private lands surround the polygon on north, east, and south.
Proximity to developed recreation sites outside of the polygon area	Snowmobile parking lot of Sweeney Creek and Austin Road.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 97. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Highway 12 noise affects the opportunities for primitive and semi-primitive summer recreation.
Primitive and semi-primitive non-motorized winter recreation	Highway 12 noise and snowmobiling on open roads affects the opportunities for primitive and semi-primitive winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Dispersed camping, hiking, mountain biking, hunting, and a short segment of the CDNST.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Sweeney Creek Area (D2) is 7,978 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

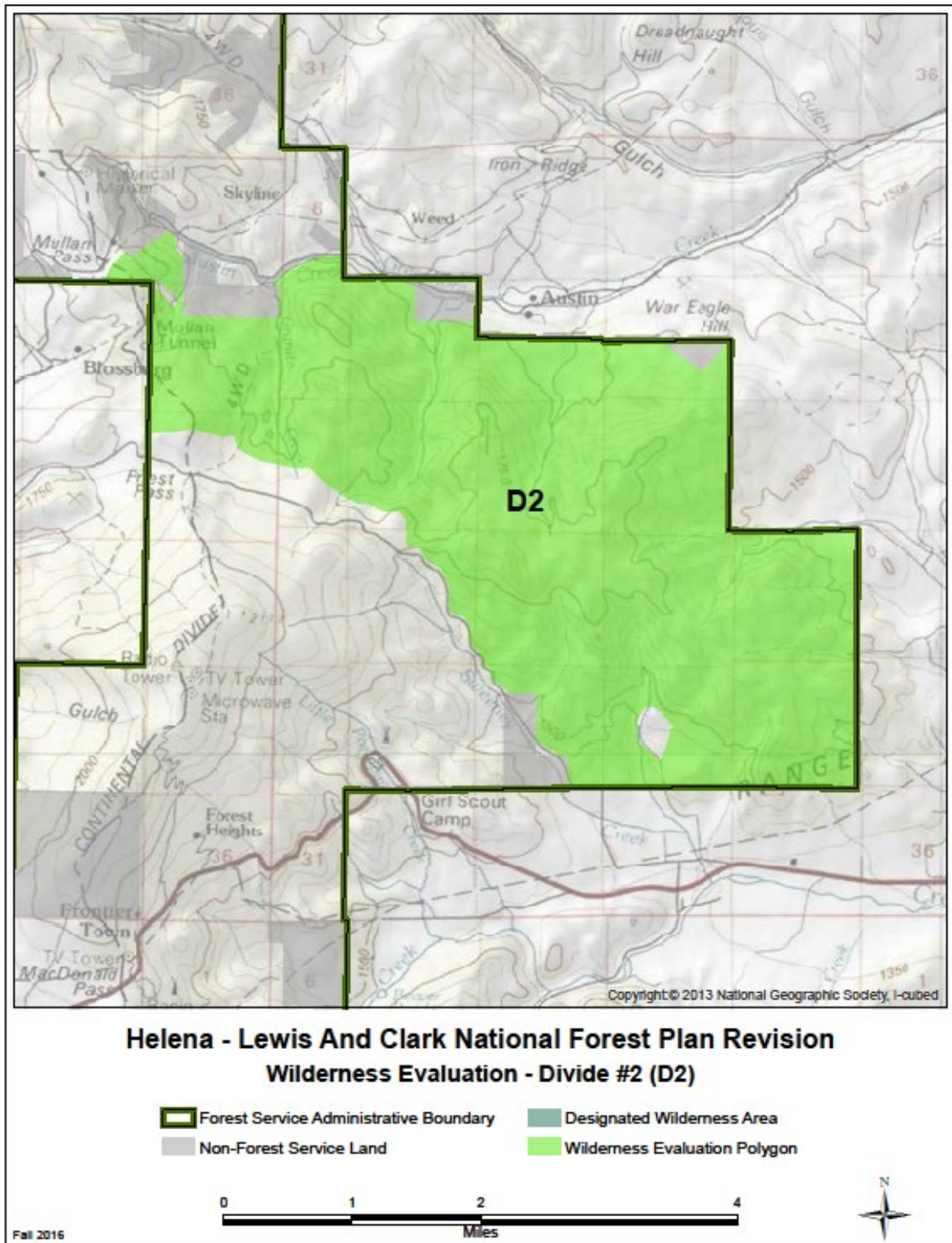
**Table 98. Features present**

Features	Description and scale
Rare plant communities	No known potential plant species of conservation concern.
Rare animal species or communities	Federally listed species: Lynx critical habitat, and within occupied area; lynx probably at very low density. Occasional, transient presence of grizzlies likely. Identified as Zone 2 in NCDE Grizzly Bear Conservation Strategy, for genetic connectivity with GYE population. Potential species of conservation concern and/or state at risk species: Flammulated owl probable breeding. Wolverine documented although little if any identified breeding habitat. No rare aquatic species present.
Rare ecosystems	No known rare vegetation communities in this area. No rare water related ecosystems.
Outstanding landscape features	None.
Historic and cultural resource sites	The historic Mullan Road has high scientific, educational and historic value. The remaining recorded cultural resources have the potential for scientific, educational and historic value.
Research natural areas	None present.
High quality water resources or important watershed features	None.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 99. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Large irregular-shaped polygon north and east of Sweeney Creek and Priest Pass.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	National Systems Trails Act (CDNST)
The presence and amount of non-Federal land in the area	Private lands along edges. No private inholdings.
Management of adjacent lands	Private lands to the north, south, east and a portion of the west. Forest Service system lands with past timber harvest and road building to the southwest.



### Electric Peak (Blackfoot Meadows) Area (D3)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 100. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance type in this area is lodgepole pine forests and lodgepole pine mixes, which are found on over 60% of the area. Douglas-fir and Douglas-fir mixed forests are also common, found on over 17% of the area. Subalpine fir and Engelmann spruce mixes make up the third most common vegetation dominance type, representing about 13% of the area. Dry grasslands are present on about 6%. Very small amounts (1% or less) of other dominance types are present, including bunch grasses and mesic grasses, shrublands, sparsely vegetated areas, and whitebark pine mixes.
Potential vegetation types	Cool moist forest potential vegetation types dominate the area, representing about 69% of the area. Warm dry forest types are also common, on 23%. Mesic grassland potential types are found on about 4%. Small amounts of other potential vegetation types are also present, including cold forest types (where whitebark pine is most likely to thrive), shrublands, and sparsely vegetated areas.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 112 acres within D3 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: Roughly 21,000 acres potential lynx habitat, with about 5600 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx). Roughly 22,000 acres of goshawk potential nesting habitat. Roughly 2100 acres possible old growth habitat in patches of varying size.</p> <p>Approximately 23,000 acres secure elk habitat. Possible moose presence in riparian/wetlands.</p> <p>Functioning subalpine/alpine habitat: Approximately 6000 acres potential wolverine habitat.</p> <p>Potential Bull Trout in Little Blackfoot River, WCT in Little Blackfoot River, Monarch Creek, No Grass Creek, Bison Creek, Ontario Creek, Larabee Gulch, Conners Gulch, and North Fork Spotted Dog Creek.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely.



*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 101. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	Records show that one small area (15 acres) in this polygon were harvested with a clearcut in 1939. This represents less than 0.5% of the area overall.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.6% of D3 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2: 67%, Class 3: 33% (Most class 3 impacts are outside of the wilderness polygon.)
Miles of motorized road/trail within 300' of streams	3.4 miles
Noticeable wildfire suppression impacts	No fire occurrence since 1980.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 102. Improvements and extent of departure from naturalness**

Improvement Type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	In total, about 16% of this polygon has been impacted by either harvest or prescribed fire. The small 15-acre clearcut that occurred in 1939 was determined to be no longer substantially noticeable due to the age of the regeneration and impacted less than .05% of this area. Fairly extensive underburns have occurred in this area, across over 4600 acres or 16% of the area. These burns occurred in 1987 and 1993 and were generally focused in grasslands. These treatments were determined to be no longer substantially noticeable on the landscape.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	This polygon is within the Elliston Historic Mining District with numerous abandoned mine features and several active mining claims. Little Blackfoot River on State 303(d) list for impacts that may be from old mining activities.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 1.2 miles of fencing and 5 stock water tanks within D3.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps. Dispersed camping throughout.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None present.

Improvement Type	Presence and extent of departure from naturalness
Presence of watershed treatment areas including contouring, diking, and channeling	None
Lands adjacent to development or activities that impact opportunities for solitude	Activities along the Little Blackfoot road are noticeable with the polygon. Some influence from Highway 12 on the northern boundary of the polygon.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are 8 recorded cultural resources and the high potential for unrecorded historic mining features associated with the Elliston Mining District. All of the recorded sites are relics of past occupations and main have standing structures.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Recommended as wilderness in the 1986 Plan.
Number of miles of maintenance level 1 road templates	2.4 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	One recorded historic trail (7miles) is within the polygon. There is a high probability of unrecorded routes associate with past mining.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor's opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 103. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Lindberger Springs trail is motorized. Bulk of the area is nonmotorized.
Area available for winter motorized opportunity	Lindberger Springs trail is part of the groomed snowmobile system. Bulk of the area is nonmotorized.
Proximity to private lands and non-Forest Service roads	Private inholding along Little Blackfoot Road.
Proximity to developed recreation sites outside of the polygon area	Kading Campground, Kading Rental Cabin, Blackfoot Meadows Trailhead, Monarch Creek Trailhead and Larabee Gulch Trailhead.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 104. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Entire polygon south of the Little Blackfoot drainage has good opportunities for primitive and semi-primitive summer recreation.
Primitive and semi-primitive non-motorized winter recreation	Entire polygon south of the Little Blackfoot drainage has good opportunities for primitive and semi-primitive winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hiking, horseback riding, hunting, fishing, mountain biking, and camping.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Electric Peak Area (D3) is 29,066 acres. This area lies adjacent to a recommended wilderness area on the Beaverhead Deerlodge National Forest which lies to the southwest of the area. Most of this area is recognized as a recommended wilderness area in the 1986 Helena Forest Plan.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

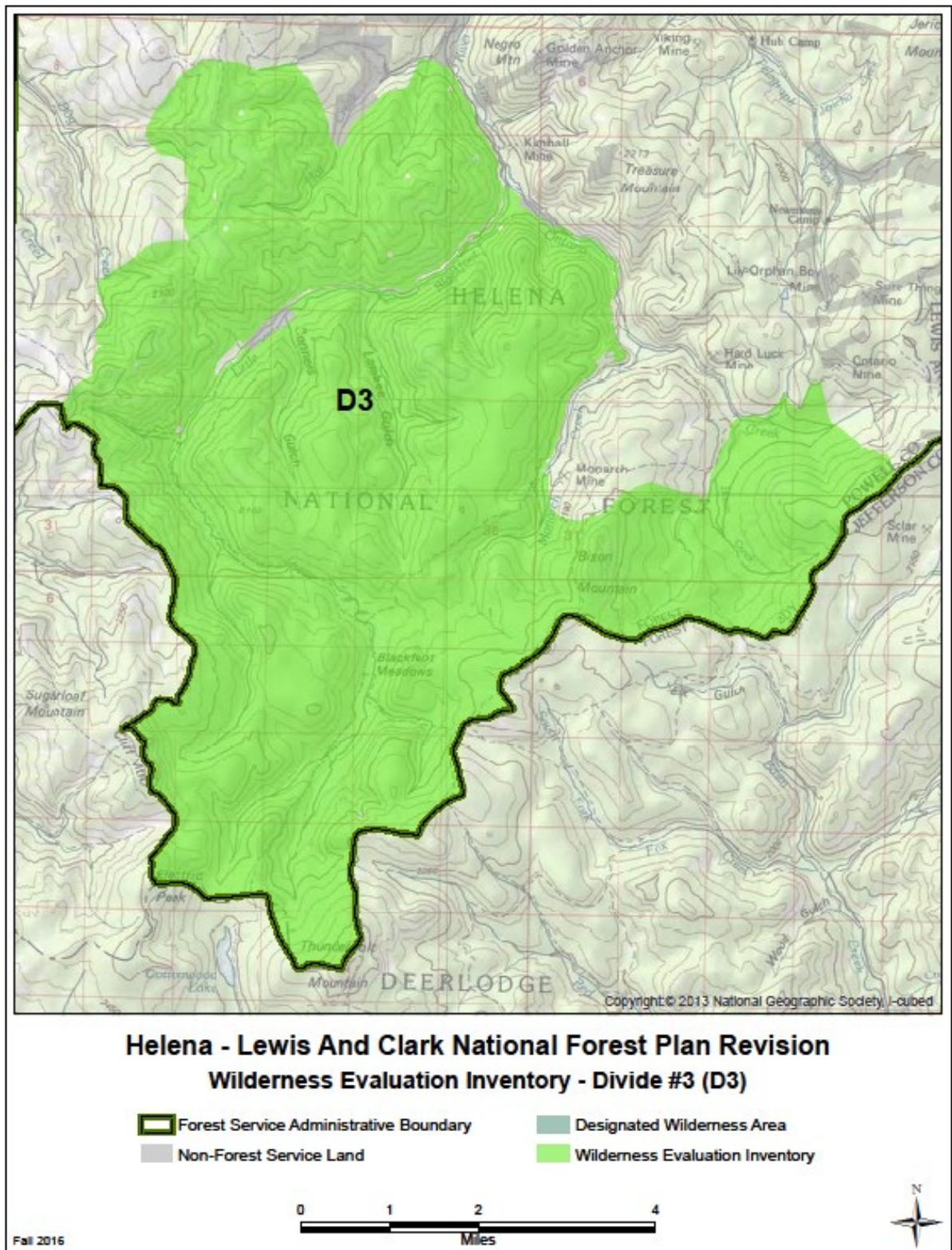
**Table 105. Features present**

Features	Description and scale
Rare plant communities	The only known potential plant species of conservation concern that occur in this area are <i>Botrychium spp.</i> and <i>Pinus albicaulis</i> .
Rare animal species or communities	Wolverine documented although little if any identified breeding habitat. Lynx may be occasionally present. Occasional, transient presence of grizzlies likely. Identified as Zone 2 in NCDE Grizzly Bear Conservation Strategy, for genetic connectivity with GYE population. Bull Trout and westslope cutthroat trout present, see above.
Rare ecosystems	Whitebark pine is a relatively rare and important ecosystem component which is found in very small amounts in this area. Whitebark pine is a candidate species for listing under the ESA. No rare aquatic ecosystems
Outstanding landscape features	Blackfoot Meadows, Bison Mountain, Thunderbolt, Electric Peak and Cliff Mountains.
Historic and cultural resource sites	All recorded cultural resources have the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	Little Blackfoot on list of eligible WSRs, it is listed for outstanding WCT fishery, potential bull trout fishery, and cultural resources.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 106. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Large, irregular-shaped polygon that follows the boundary with the Beaverhead-Deerlodge National Forest to the south and incorporates Electric Peak, Thunder Bolt Mountain, and Bison Mountain. Area surrounds landscapes around the Little Blackfoot road but does not include lands immediately adjacent to the road which were excluded from the inventory.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	National Systems Trails Act (CDNST)
The presence and amount of non-Federal land in the area	Private inholding along Little Blackfoot road.
Management of adjacent lands	Beaverhead Deerlodge National Forest (B-D NF) to the southwest and southeast. The B-D NF Electric Peak Recommended Wilderness area is adjacent to the polygon on the South. Timber harvesting and road building to the northeast and northwest on FS system lands.



### Colorado Mountain Area (D5)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 107. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	Douglas-fir forests (pure and mixed) are the most common dominance type in the area, covering about 63%. Lodgepole pine forests are also common, found on 33%. Dry grasslands can be found on about 4%. Small amounts of other dominance types can also be found, generally 2% or less, including mesic grasslands, shrublands, ponderosa pine, subalpine fir, Engelmann spruce, cottonwood, and aspen.
Potential vegetation types	The most common potential vegetation type in this area are warm dry forest types, covering 85%. Cool moist forest types are found on about 8%, and grasslands potential types make up nearly 5%. Small amounts of other potential types are also present, including shrublands and riparian types.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 112 acres within D5 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Functioning mature forest habitat: Observed breeding flammulated owl indicates areas of open mature Ponderosa pine. Roughly 1300 acres potential lynx habitat, with only about 750 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx); habitat has value largely when connected to more extensive lynx habitat to south of this polygon. Roughly 6900 acres of goshawk potential nesting habitat indicates presence of mature forest; at least one known nest territory. Roughly 500 acres possible old growth habitat in patches of varying size.  Approximately 7300 acres secure elk habitat. Possible moose presence in riparian/wetlands.  No westslope cutthroat trout.
Known non-native wildlife species	No non-native terrestrial wildlife species documented.  Non-native trout likely

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 108. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	Nearly 100% of the area has had no timber harvest. Records show some very small areas of commercial thin, improvement cutting, and single-tree selection which occurred in 1968 and 1972, and amounted to about 6 acres total, or .08% of the area.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 98.6% of D5 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2: 10%, Class 3:90%, Class 3 is due to mining impacts primarily located downstream from the polygon.



Measures	Outcome
Miles of motorized road/trail within 300' of streams	0.13 miles
Noticeable wildfire suppression impacts	No fire occurrence since 1980.

Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?

**Table 109. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	Roughly 6 acres of this area has been harvested in the past, in 1968 and 1972, with intermediate and uneven-aged cuts which left many residual trees. Due to the type and age of treatment, these treatments were no longer substantially noticeable and make up only 0.08% of the area. There are no records of past prescribed fire treatments. A portion of the Castles vegetation project is located within this RWA. The planned activities, including harvest, would not be an irretrievable commitment of resources and would not result in any permanent improvements within the polygon.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	This polygon straddles the divide between the Helena, Rimini and Clancy Historic Mining Districts. There is a high probability of un-recorded abandoned mines and/or historic mine features, including 2 mapped abandoned mine points within polygon.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 2 miles of fencing and 3 stock water tanks within D5.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps. Dispersed camping in southern half of the polygon.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None known.
Presence of watershed treatment areas including contouring, diking, and channeling	None



Improvement type	Presence and extent of departure from naturalness
Lands adjacent to development or activities that impact opportunities for solitude	Highway 12 to the north of the polygon and can be heard from within the polygon. Residential area in Colorado Gulch may be seen and heard from within the polygon.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are only two recorded sites within this polygon, however there is a high probability of un-recorded historic mine site and features. Portions of the Historic Red Mountain Flume run through this polygon. This flume is still used as part of the municipal water system for the City of Helena.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Plan.
Number of miles of maintenance level 1 road templates	2.4 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	No recorded historic routes, however, there is a high probability of un-recorded routes associated with past mining.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 110. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	No motorized opportunities present in summer.
Area available for winter motorized opportunity	No motorized opportunities present in winter.
Proximity to private lands and non-Forest Service roads	Abuts private/BLM land on north and southeast sides.
Proximity to developed recreation sites outside of the polygon area	Moose Creek Picnic area on Tenmile road to the west. Blackhall Meadows Trailhead on southeastern flank. Park City Trailhead on northeastern boundary.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 111. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation.	Entire polygon available for primitive and semi-primitive summer recreation.
Primitive and semi-primitive non-motorized winter recreation.	Entire polygon available for primitive and semi-primitive winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses.	Hiking, horseback riding, snowshoeing, cross country skiing, mountain biking, and hunting.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Colorado Mountain Area (D5) is 8,168 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

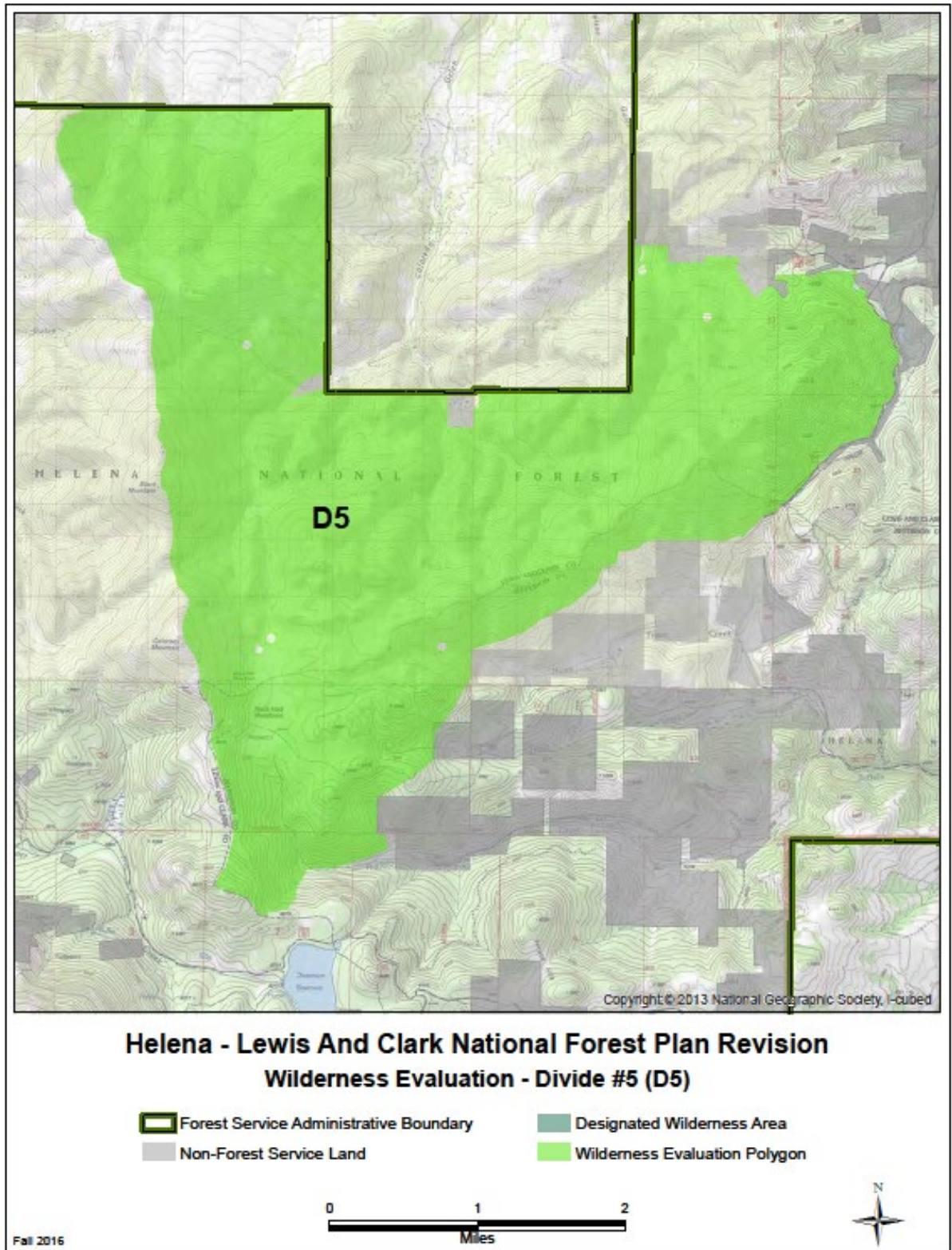
**Table 112. Features present**

Features	Description and scale
Rare plant communities	The only potential plant species of conservation concern that are known to occur in this area are <i>Cypripedium parviflorum</i> .
Rare animal species or communities	Federally listed species: lynx may be occasionally present. Occasional, transient presence of grizzlies likely. Identified as Zone 2 in NCDE Grizzly Bear Conservation Strategy, for genetic connectivity with GYE population. Potential species of conservation concern and/or state at risk species: flammulated owl, wolverine documented No rare aquatic species.
Rare ecosystems	There are no know rare terrestrial ecosystems in this area. No rare aquatic ecosystems present.
Outstanding landscape features	Black Mountain, Colorado Mountain.
Historic and cultural resource sites	All recorded sites within this polygon have the potential for scientific, educational and historic value. This is especially true for the Red Mountain Flume since it is still in operation.
Research natural areas	None present.
High quality water resources or important watershed features	Part of municipal watershed for the City of Helena.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 113. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Irregular polygon. The northern, eastern, and southern boundaries are influenced by private lands and BLM parcels. The western boundary is formed by the outer boundary of the superfund site.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	Superfund site to the west but not within the polygon.
The presence and amount of non-Federal land in the area	Two private land parcels along the northern border of the polygon in Colorado Gulch.
Management of adjacent lands	Private residential lands and BLM parcel to the north. Areas influenced by historical mining surround this polygon.



### Continental Divide North Area (D13)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 114. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	Two primary dominance types cover most of this area: Douglas-fir and Douglas-fir mixed forest (46%); and lodgepole pine and lodgepole pine mixed forest (47%). About 3% of the area is covered by dry grassland. Very small amounts, 1% or less, are represented by other dominance types including mesic grasslands, shrublands, ponderosa pine, subalpine fir, Engelmann spruce, whitebark pine, aspen, and sparsely vegetated areas.
Potential vegetation types	The area is fairly evenly split between the warm dry forest potential types (49%), and the cool moist forest types (46%). All other potential vegetation types make up about 1% or less of the area each and include cold forest (where whitebark pine may thrive), xeric grassland types, mesic grassland types, xeric shrub types, riparian types, and sparsely vegetated areas.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 38 acres within D13 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Functioning mature forest habitat: Roughly 2200 acres potential lynx habitat, with nearly 1000 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type. Roughly 3500 acres of goshawk potential nesting habitat; goshawk habitat increases in value to wildlife in combination with similar habitat in area to east (WE polygon D2). Roughly 1100 acres possible old growth habitat. Observed probable breeding flammulated owl indicates areas of open mature Ponderosa pine.  Approximately 900 acres secure elk habitat. Possible moose presence in riparian/wetlands.  Potential westslope cutthroat trout in Rich Spur Creek.
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely present.

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 115. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	There is one record of a past harvest in this area; in 1981 about 82 acres had a single-tree selection harvest. This impacted nearly 2% of the area but is no longer substantially noticeable. 98% of the area has not been impacted by timber harvest.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.1% of D13 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2:11%, Class 3: 89% impacts are downstream of the polygon in the superfund site.

Measures	Outcome
Miles of motorized road/trail within 300' of streams	0.11 miles
Noticeable wildfire suppression impacts	No fire occurrence since 1980.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 116. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	In addition to the 82-acre single tree selection cut in 1981 which impacted 2% of the area, roughly 72 acres have pile burning treatments which occurred from 1981 to 2005 which impacted another 2%. A total of about 96% of the area as currently drawn has not been impacted by vegetation treatments. These treatments were determined to be no longer substantially noticeable. A scattering of past timber harvest does exist within the perimeter of the area which are substantially noticeable, along with loop roads and treated corridors. These areas are excluded from the wilderness inventory and appear as cherry stems and donut holes in the polygon.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Macdonald Pass Communication Site is a complex communication site with numerous structures and towers. It is visible from within the polygon. Open road accesses site.
Areas of mining activities including both abandoned and active mines	Abandoned mine sites are scattered throughout the polygon.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 1.6 miles of fencing within D13.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps. Dispersed camping near Priest Pass.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	The area has numerous utility corridors related to the Mac Pass Communication site as well as to the recreation residences in the southern portion of the polygon.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude	There is a permitted shooting range on the southeast boundary. Highway 12 makes up the south boundary of the polygon and is both heard and visible from within the polygon.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Buildings associated with the shooting range and the recreation residences are visible from locations within the polygon.  Three recorded cultural resources which represent structures, dwellings or other relics of past occupations are within this polygon.

Improvement type	Presence and extent of departure from naturalness
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Plan.
Number of miles of maintenance level 1 road templates	2.2 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	None known. High potential of unrecorded historic routes associated with past occupation.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 117. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Road to the communication site is open for summer use.
Area available for winter motorized opportunity	Motorized equipment used on the Mac Pass groomed ski trails. Area is not open for snowmobiling.
Proximity to private lands and non-Forest Service roads	Frontier Town is a private inholding in the south part of the polygon.
Proximity to developed recreation sites outside of the polygon area	Nordic Ski Trail system parking lot in southern boundary off of Highway 12. Prickly Pear shooting range in the southeast portion of the polygon. Sweeney Creek snowmobile parking area south east of the polygon.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 118. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	A portion of the CDNST within the polygon is non-motorized. Opportunities for primitive and semi-primitive non-motorized recreation occur in areas away from the communication site, shooting range, and the Priest Pass road.
Primitive and semi-primitive non-motorized winter recreation	Opportunities for primitive and semi-primitive non-motorized winter recreation occurs in areas away from the communication site, shooting range, and the Mac Pass groomed cross-country ski trails. A portion of the CDNST passes through this polygon.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, hiking the CDNST, mountain biking, and cross-country skiing.



Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Continental Divide North Area (D13) is 4,123 acres. This polygon is less than 5,000 acres in size. Year-round motorized access to the communication site and the groomed cross-country ski trails in the core portion of the polygon would make it difficult to manage as wilderness. Additionally, the sights and sounds from Highway 12 reduce opportunities for solitude within the polygon; however, this area is very special to many members of the public and was evaluated for this analysis.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

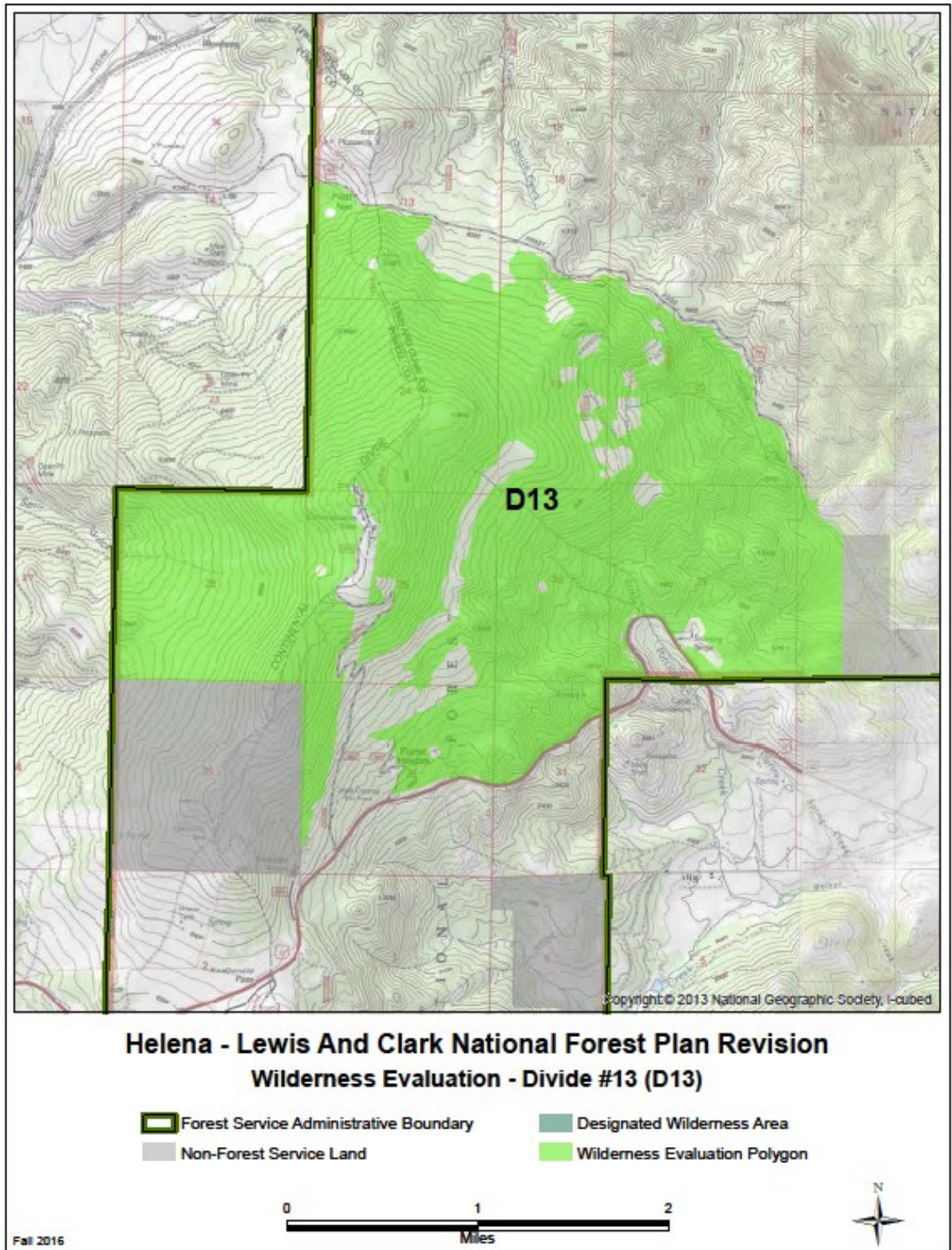
**Table 119. Features present**

Features	Description and scale
Rare plant communities	No known potential plant species of conservation concern are known to occur in this area, aside from very small amounts of <i>Pinus albicaulis</i> indicated by VMap.
Rare animal species or communities	Federally listed species: Lynx critical habitat, and within occupied area; lynx probably at very low density. Occasional, transient presence of grizzlies likely. Identified as Zone 2 in NCDE Grizzly Bear Conservation Strategy, for genetic connectivity with GYE population. Potential species of conservation concern and/or state at risk species: flammulated owl probable breeding. Wolverine documented although little if any identified breeding habitat.
Rare ecosystems	There are no known rare ecosystems, aside from the small occurrence of whitebark pine which is a relatively rare and important ecosystem component on the HLC NF. Whitebark pine is a candidate species for listing under the ESA. No known rare aquatic ecosystems.
Outstanding landscape features	Continental Divide
Historic and cultural resource sites	All recorded cultural resources in this polygon have the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	None.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 120. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Irregular polygon shape. The outer boundary is formed by private lands on the west and portions of the south and east. An open road forms the boundary on the north and east and the boundary of the superfund site forms much of the southern boundary.
Legally established rights or uses within the area	Communication site is significant to Helena, the county, and the state.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	National Systems Trails Act (CDNST)
The presence and amount of non-Federal land in the area	Frontier Town in the southern portion of the polygon.
Management of adjacent lands	Superfund site to the south. Private land for agriculture purposed to the south and southwest. Forest Service system lands to the north and northeast.



## Elkhorns Geographic Area

### Eagle Basin Area (E1)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 121. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance type in this area is lodgepole pine and lodgepole pine mixes, which cover about 50%. A substantial portion of this area burned in the Warm Springs fire of 1988, and the majority of regeneration is lodgepole pine. Douglas-fir and Douglas-fir mixed forests are also common at lower elevations, covering about 18% of the area. Subalpine fir and Engelmann spruce forests can also be found on 14%. Sparsely vegetated areas, such as scree/rock, are present on about 9%. Dry grasslands represent 5%. Small amounts of other dominance types, covering about 1% or less each, also occur, including mesic grasslands, shrublands, ponderosa pine, whitebark pine, aspen, juniper, and trace amounts of limber pine.
Potential vegetation types	This area is dominated by cool moist forest potential vegetation types, which are found on about 49% of the area, and where lodgepole pine, subalpine fir, and Engelmann spruce are most likely found. About 30% of the area has warm dry forest potential vegetation types. A small area, about 6%, has cold forest potential types, where whitebark pine is most likely to thrive. Xeric and mesic grassland potential types together make up about 5%, and sparsely vegetated potential areas about 9%. Trace amounts of shrubland and riparian potential types are also present.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 2,812 acres within E1 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: 15,000 acres potential lynx habitat, with only about 750 acres mature multi-storied (optimal lynx winter forage (area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 28,000 acres of goshawk potential nesting habitat; at least one known nest territory. Roughly 1100 acres possible old growth habitat in patches of varying size.</p> <p>Approximately 48,000 acres secure elk habitat. Possible moose presence in riparian/wetlands. Over 22,000 acres bighorn sheep habitat in eastern portion although disease transmission from domestic sheep has caused significant die-offs.</p> <p>Over 27,000 acres potential wolverine habitat with roughly 3200 acres maternal habitat but note that this area is not contiguous with other areas of wolverine occupancy.</p> <p>Westslope cutthroat trout in multiple drainages: Warm Springs, Dutchman, Prickly Pear, EF McClellan, Tepee, Beaver, Longfellow, Eureka, and SF Crow Creeks.</p>
Known non-native wildlife species	Introduced population of mountain goats, a species native to MT but not to this mountain range; competition with native

Plant and animal communities	Composition
	bighorn sheep may be an issue. No other non-native terrestrial wildlife species documented. Non-native trout likely present

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 122. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	There are no records of past harvest in this area. 100% of the area is unaffected by harvest. Detailed harvest records are available starting generally in the 1950's. Anecdotally it is likely that some historic logging in accessible areas, such as the removal of fuelwood and mining timbers, occurred during initial settlement of the area.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 95.1% of E1 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2: 99%, Class 3: 1% primarily rated at risk for water quality, aquatic habitat, and road and trail impacts.
Miles of motorized road/trail within 300' of streams	3.5 miles, primarily along eastern and southern edges
Noticeable wildfire suppression impacts	Warm Springs Fire (1988): hand lines still evident in Badger Creek.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 123. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	No modern harvest has occurred in this area. However, about 3,410 acres, or 6% of the area, has had prescribed fire treatments. These treatments include broadcast burning, pile burning, and underburning which has occurred from 1987 to 2005. These activities were determined to not be substantially noticeable, with effects similar to wildfire.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present within the polygon.
Areas of mining activities including both abandoned and active mines	Mining impacts in multiple watersheds. Middle Fork Warm Springs, Prickly Pear, Wilson, Crow and Beaver Creek are all 303(d) listed for mining impacts/channel modifications. Multiple abandoned mines throughout polygon.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 1/2 mile of fencing and 10 stock water tanks within E1.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps. Dispersed camping throughout the polygon.

Improvement type	Presence and extent of departure from naturalness
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Pipeline located on the western edge of the polygon.
Presence of watershed treatment areas including contouring, diking, and channeling	None
Lands adjacent to development or activities that impact opportunities for solitude	Timber harvest, road building, urban interface surrounding the polygon.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Twenty-four recorded cultural resources within this polygon. This polygon is also within the Park-Indian Historic Mining district which has numerous associated mining sites and features.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Plan.
Number of miles of maintenance level 1 road templates.	2.9 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	No recorded historic routes, however, there is a high probability of unrecorded routes associated with past mining.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 124. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	No motorized recreation within the polygon.
Area available for winter motorized opportunity	No motorized recreation within the polygon.
Proximity to private lands and non-Forest Service roads	Two small parcels of private inholdings for mining purposes.
Proximity to developed recreation sites outside of the polygon area	Pole Creek Trailhead, Tizer Lakes Trailhead, Poe Park Trailhead, Hall Creek Trailhead, Jump Off Trailhead, Eagle Guard Station Rental Cabin, Edith Basin Trailhead, South Crow Lakes Trailhead, Willard Creek Trailhead, and Crow Creek Trailhead.



Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor's ability to feel a part of nature?

**Table 125. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The entire polygon is available for primitive and semi-primitive summer recreation.
Primitive and semi-primitive non-motorized winter recreation	Moderate to low motorized access into Tizer Basin for winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, hiking, horseback riding, fishing, mountain biking, limited snowmobiling, and camping.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Eagle Basin Area (E1) is 57,279 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

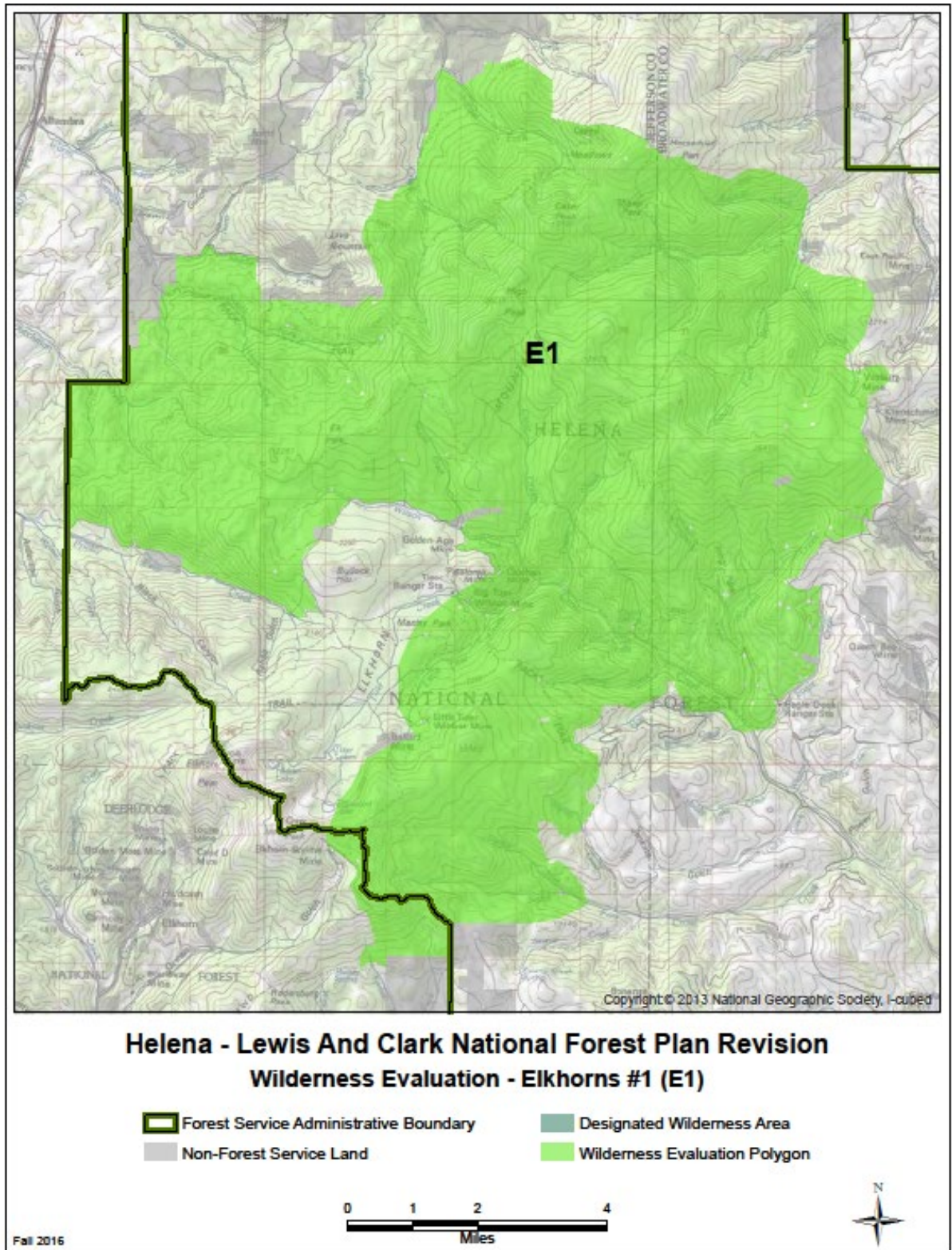
**Table 126. Features present**

Features	Description and scale
Rare plant communities	The potential plant species of conservation concern that are known to occur in this area include <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , and <i>Phlox kelseyii</i> var. <i>Missoulensis</i> .
Rare animal species or communities	Federally listed species: Lynx may be occasionally present. Occasional, transient presence of grizzlies likely. Identified as Zone 2 in NCDE Grizzly Bear Conservation Strategy, for genetic connectivity with GYE population. Potential species of conservation concern and/or state at risk species: wolverine documented, western toad. Several drainages with westslope cutthroat trout, see above.
Rare ecosystems	Limber pine, whitebark pine, aspen, and ponderosa pine are all vegetative communities of interest on the HLC NF due to their relatively low abundance and value for wildlife habitat. These communities are present in small amounts in this area. Whitebark pine is a candidate species for listing under the ESA. No rare aquatic ecosystems.
Outstanding landscape features	High elevation vistas and Crow Creek waterfalls.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, education or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	McClellan Creek is a municipal watershed for East Helena.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 127. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Large irregular-shaped polygon within the interior of the Elkhorns Mountain range.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	Small private inholdings.
Management of adjacent lands	Timber harvest and road building to the southeast, north, and northwest. Mining activities surrounding the polygon.



### Elkhorn Peak Area (E3)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 128. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	This area is dominated by lodgepole pine and lodgepole mixed forests (41%) and subalpine fir and Engelmann spruce mixed forests (31%). Douglas-fir and Douglas-fir mixed forests area also common, covering about 23%. Sparsely vegetated areas (such as rock/scree) are found on just under 3%. Very small amounts of other dominance types are also present, representing less than 1% of the area each, including grasslands, shrublands, ponderosa pine, whitebark pine, and aspen.
Potential vegetation types	Most of the area supports cool moist forest potential vegetation types (nearly 76%). Warm dry forest potential types are found on 16%, and cold forest types (where whitebark pine is most likely to thrive) are found on just over 4%. Very small amounts of other potential types are also present, including grassland, shrubland, and riparian potential vegetation types.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 237 acres within E3 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: Roughly 6,000 acres potential lynx habitat, with about 2700 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 9200 acres of goshawk potential nesting habitat; at least one known nest territory. A minimum of 6 acres possible old growth habitat; old growth data not available for BDNF portion.</p> <p>Approximately 8700 acres secure elk habitat, and up to 2700 acres elk winter range contiguous with additional winter range on adjacent non-NF land. Possible moose presence in riparian/wetlands.</p> <p>Functioning subalpine/alpine habitat: Over 8300 acres potential wolverine habitat with roughly 600 acres maternal habitat but note that this area is not contiguous with other areas of wolverine occupancy.</p> <p>Westslope cutthroat trout in Muskrat and Prickly Pear Creeks.</p>
Known non-native wildlife species	<p>Introduced population of mountain goats, a species native to MT but not to this mountain range. No other non-native terrestrial wildlife species documented.</p> <p>Non-native trout are likely to be present.</p>

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 129. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	There are no records of past harvest occurring in this area; 100% is unaffected by this activity. However, it is possible that some historic logging could have occurred prior to record keeping, during initial settlement of the area.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 98.4% of E3 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 32%, Class 2: 68%, but the polygon is mostly in the headwaters of these watersheds, upstream of mining impacts
Miles of motorized road/trail within 300' of streams	3.4 miles (along Ninety-cent Gulch and a tributary of Rawhide Gulch).
Noticeable wildfire suppression impacts	No evidence of fire suppression since 1980.

Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?

**Table 130. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	No known harvests or prescribed fire treatments have occurred in this area.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	There are several mines within the polygon, most are downstream or outside of the polygon.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there no range improvements within E3.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps. Dispersed camping on the eastern boundary near Tizer Lakes and the Bullock Hill area.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None known.
Presence of watershed treatment areas including contouring, diking, and channeling	None
Lands adjacent to development or activities that impact opportunities for solitude	None.

Improvement type	Presence and extent of departure from naturalness
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Only one recorded cultural resource within this polygon. However, the Elkhorn Historic Mining District shares the eastern border, so there is a high probability of un-recorded historic mine sites and features.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Plan.
Number of miles of maintenance level 1 road templates	0.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	None known.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 131. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Open roads on north, east and south around the edges of the polygon. Year-round motorized trails in southern portion of the polygon.
Area available for winter motorized opportunity	Year-round motorized trails in southern portion of the polygon.
Proximity to private lands and non-Forest Service roads	Private lands along Tizer road. No private inholdings within the polygon.
Proximity to developed recreation sites outside of the polygon area	None present.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 132. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The northern portion of the polygon is available for primitive and semi-primitive summer recreation.
Primitive and semi-primitive non-motorized winter recreation	The northern portion of the polygon is available for primitive and semi-primitive winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, hiking, horseback riding, ATV riding, and mountain biking.



Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Elkhorn Peak Area (E3) is 15,180 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

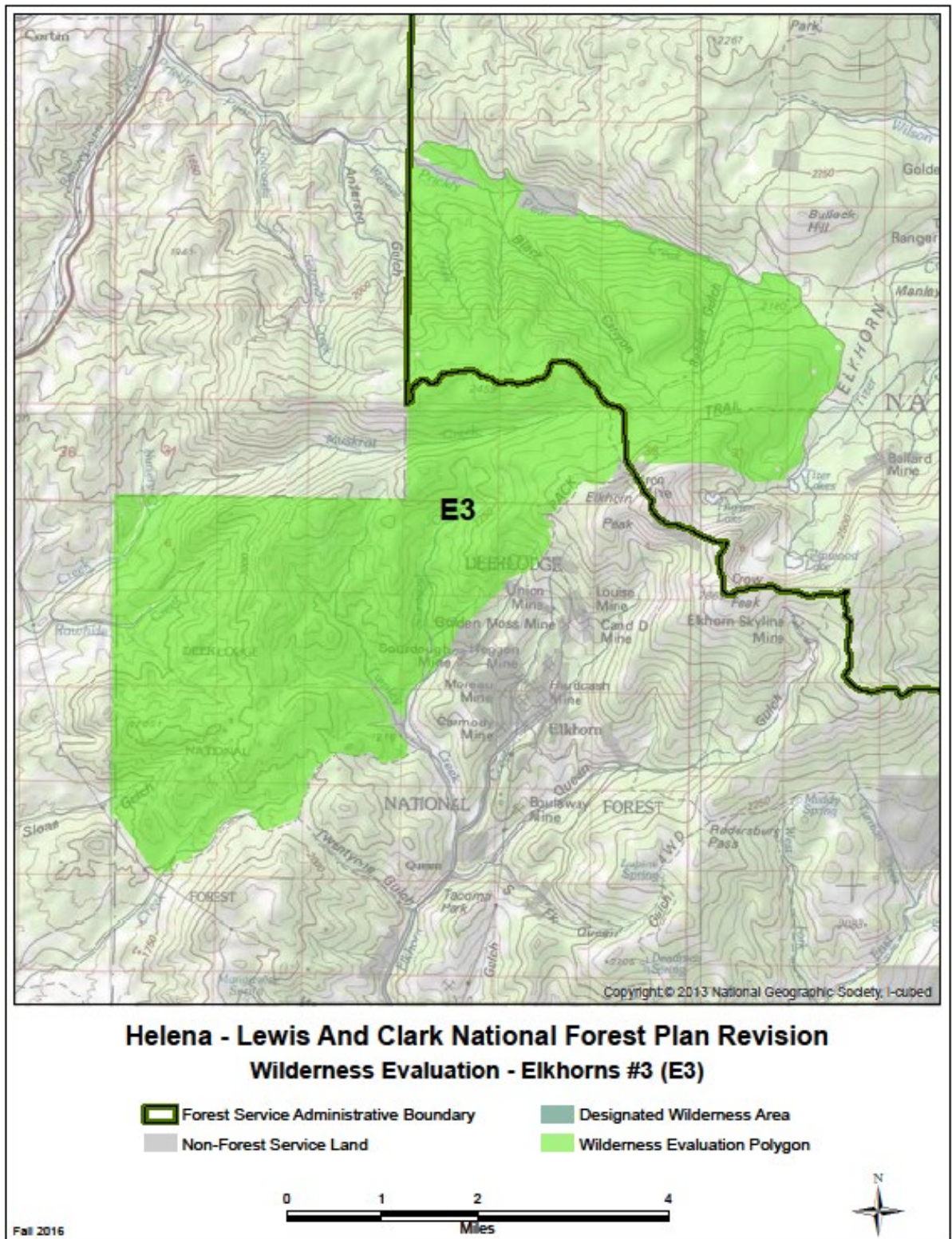
**Table 133. Features present**

Features	Description and scale
Rare plant communities	The only potential plant species of conservation concern known to occur in this area is <i>Pinus albicaulis</i> .
Rare animal species or communities	Federally listed species: Lynx may be occasionally present. Occasional, transient presence of grizzlies likely. Identified as Zone 2 in NCDE Grizzly Bear Conservation Strategy, for genetic connectivity with GYE population. Potential species of conservation concern and/or state at risk species: none documented Several streams with westslope cutthroat trout, see above.
Rare ecosystems	Whitebark pine, ponderosa pine, and aspen forests are all vegetation communities of interest on the HLC NF due to their relatively low abundance and importance for habitat. These species are present in small quantities in this area. Whitebark pine is a candidate species for listing under the ESA. No rare aquatic ecosystems.
Outstanding landscape features	Elkhorn Peak on southern boundary.
Historic and cultural resource sites	The one recorded site has the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	There are high quality areas above mining locations which contain westslope cutthroat trout, possibly protected by poor water quality "barrier".

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 134. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	A large irregular block of undeveloped land in the southwestern portion of the Elkhorn Mountains. Western boundary follows private land.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	No private inholdings.
Management of adjacent lands	Western boundary is formed by private lands. Forest Service system lands to the north, east, and south.



## Highwoods Geographic Area

### Highwood Baldy Area (H1)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 135. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance type in this area is Douglas-fir dominated forest, which is found on about 38% of the area. Lodgepole pine dominated forests are also common, covering about 29% of the area. Dry grasslands can be found on 20%. Subalpine fir and Engelmann spruce mixed forests grow on about 5% of the area, at the highest elevations. Aspen dominated areas cover about 4% of the area. Other dominance types are present in very small amounts, including mesic grasslands, shrublands, ponderosa pine, limber pine, and cottonwood.
Potential vegetation types	The most common potential vegetation types are warm dry forest types, representing about 64% of the area. Cool moist forest types can be found on nearly 9%. Dry grassland potential types are found on 17% of the area. Riparian types, where aspen and cottonwood can be found, represent 5% of the area. Small amounts of mesic grassland and shrubland potential types are also present.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 442 acres within H1 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: Roughly 5800 acres potential lynx habitat, with about 3000 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 10,300 acres of goshawk potential nesting habitat; known nest territories. Approximately 6000 acres potential old growth habitat based on habitat type and aerial photo interpretation; occurs in patches of varying size.</p> <p>Approximately 11,000 acres secure elk habitat. Roughly 6000 acres elk winter range and 3200 acres mule deer winter range contiguous with additional winter range on adjacent non-NF land.</p> <p>Less than 150 acres potential wolverine habitat; this area is not contiguous with other areas of wolverine occupancy.</p> <p>Westslope cutthroat trout in North Fork and Middle Fork of Little Belt Creek.</p>
Known non-native wildlife species	<p>Introduced population of mountain goats, a species native to MT but not to this mountain range. No other non-native terrestrial wildlife species documented.</p> <p>Non-native trout likely.</p>

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 136. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	There are no records of past harvest in this area; 100% of the polygon is unaffected by this activity. It is possible that historic logging could have occurred prior to detailed record keeping which generally began in the 1950's.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 97.2% of H1 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1:35%, Class 2: 65%. Most impacts are downstream of the polygon, but the area within the polygon has been heavily impacted by grazing, especially the east side.
Miles of motorized road/trail within 300' of streams	0.2 miles
Noticeable wildfire suppression impacts	No fire occurrence since 1980.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 137. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	No past harvest is known to have occurred. About 71 acres, or 0.45% of the area, has been impacted by a prescribed fire treatment (an underburn in 1985 and 1988). This treatment was determined to be no longer substantially noticeable.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Highwood Baldy electronic site is a large, busy development and is visible from within the polygon.
Areas of mining activities including both abandoned and active mines.	None known.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 7.7 miles of fencing and 22 stock water tanks within H1.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Some dispersed camping, most prevalent during hunting season. No outfitter camps in the area.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Buried electric lines under the road to Highwood Baldy. May be others that provide service to private inholdings. Some of the stock tanks have small water lines associated with them.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude	Busy residential subdivision on the western edge of the polygon. Helicopter use at Highwood Baldy.

Improvement type	Presence and extent of departure from naturalness
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Nine recorded cultural resources within this polygon. All represent structures, dwellings or other relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	None known.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 138. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	FSR 8830, 8816, and 8832. FSR 8832 is the road to the communication site on Highwood Baldy. South Fork Highwood Creek road (FSR 121) bisects H1 and H2. This route has 8-9 fords on it and is traveled by 4 x4 vehicles.
Area available for winter motorized opportunity	No cross-country travel at all but all the roads and the motorized trail system is open.
Proximity to private lands and non-Forest Service roads	Private lands surround the polygon on the north, west and south sides. Forest Service Road 121 provide the eastern boundary. There are some private land inholdings accessed by this road.
Proximity to developed recreation sites outside of the polygon area	There is a campground and trailhead in Thain Creek in H2 that are outside of and to the east of H1.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 139. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The entire area, except for the area around Highwood Baldy, is available for primitive or semi-primitive non-motorized recreation. Only two non-motorized trails in H1, located in North Fork of Little Belt Creek and Deer Creek.
Primitive and semi-primitive non-motorized winter recreation	The entire polygon except for the area by Highwood Baldy, FSR 8832 and 8816, is available for primitive and semi-primitive non-motorized recreation in winter.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Fishing, limited hiking, hunting, wildlife viewing, mountain biking, motorcycle riding, and ATV riding. Snowmobiling in the winter.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Highwood Baldy Area (H1) is 15,824 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 140. Features present**

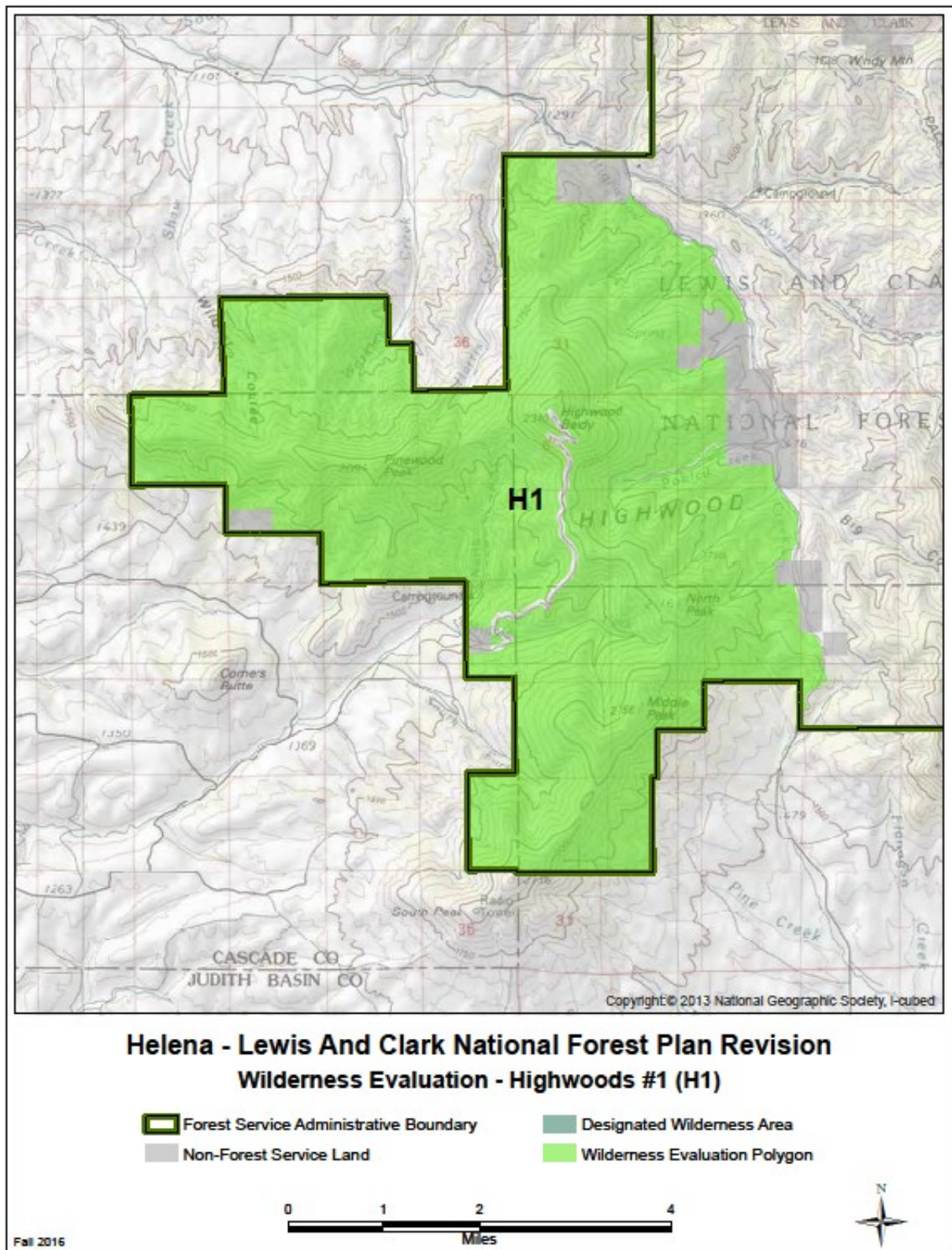
Features	Description and scale
Rare plant communities	The only potential plant species of conservation concern known to occur in this area is <i>Pinus flexilis</i> .
Rare animal species or communities	Federally listed species: none documented. Potential species of conservation concern and/or state at risk species: none documented. Westslope cutthroat trout in North Fork and Middle Fork Little Belt Creeks.
Rare ecosystems	Limber pine forests are a vegetation community of interest on the HLC NF due to their relatively low abundance and habitat importance. Aspen forests and riparian areas are also of interest, and this polygon contains one of the higher proportions of aspen dominated riparian areas on the HLC NF. No known rare aquatic ecosystems.
Outstanding landscape features	Steep open parks and unique geology.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	None significant.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 141. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	The west half of the Highwood Mountain range.
Legally established rights or uses within the area	None known. Maybe water rights.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	There are large private land inholdings along FSR 121.
Management of adjacent lands	Polygon is surrounded by large private ranches on the south, west, and north sides. Large block of roadless Forest Service system lands on the east.





## Arrow Prospect Area (H2)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 142. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance types found in this area are relatively evenly split between lodgepole pine dominated forests (covering 36% of the area); Douglas-fir dominated forests (29%), and dry grasslands (27%). In addition, subalpine fir and Engelmann spruce mixed forests cover about 3%; and aspen dominated forests are found on 2%. Other dominance types are present in very small amounts (less than 1% each), including mesic grasslands, shrublands, ponderosa pine, limber pine, cottonwood, and juniper.
Potential vegetation types	The most common potential vegetation types are warm dry forest types, which occur on over 63% of the area. Dry grassland potential types are also common, representing 23%. Cool moist forest types are found on 6%, and riparian potential vegetation types represent 4%. Trace amounts of mesic grassland, xeric shrubland, and mesic shrubland potential vegetation types can also be found.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 195 acres within H2 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: Roughly 8000 acres potential lynx habitat, with about 2800 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 16,000 acres of goshawk potential nesting habitat; known nest territories. Approximately 6900 acres potential old growth habitat based on habitat type and aerial photo interpretation; occurs in patches of varying size.</p> <p>Nearly 14,000 acres secure elk habitat. Roughly 8600 acres elk winter range and 2100 acres mule deer winter range contiguous with additional winter range on adjacent non-NF land.</p> <p>Less than 200 acres potential wolverine habitat; this area is not contiguous with other areas of wolverine occupancy.</p> <p>Westslope cutthroat trout in Big Coulee, Cottonwood (Arrow), and Boyd Creeks.</p>
Known non-native wildlife species	<p>Introduced population of mountain goats, a species native to MT but not to this mountain range. No other non-native terrestrial wildlife species documented.</p> <p>Non-native trout likely present.</p>

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 143. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	Over 99.9% of the area has been unaffected by past timber harvest. The only harvest on record in this area is 12 acres of commercial thinning that occurred in 1973, although it is possible that additional “historic logging” could have occurred prior to FS record-keeping.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.3% of H2 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 44%, Class 2:56%. Impacts include riparian disturbance due to grazing and road and trail impacts.
Miles of motorized road/trail within 300’ of streams	19.2 miles
Noticeable wildfire suppression impacts	No fire suppression evidence on the landscape.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 144. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	The only harvest known to have occurred in this area is a small commercial thin (12 acres) that occurred in 1973. Due to the residual trees being left and the time since treatment, it was determined that this area is no longer substantially noticeable. However, a substantial portion of the area has been impacted by prescribed fire treatments. From 1986 to 1989, approximately 8,634 acres (33% of the area) was treated with broadcast burning or underburning. These treatments were focused in grassland areas. Due to the time since treatment and effects like wildfire, these treatments were determined to be no longer substantially noticeable.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present but electronic site on Highwood Baldy is visible from within the polygon.
Areas of mining activities including both abandoned and active mines	None known.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 26.3 miles of fencing and 37 stock water tanks within H2.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Dispersed camping sites along the Thain Creek Road, Cottonwood Creek, and Shonkin Road. No outfitters in this polygon.

Improvement type	Presence and extent of departure from naturalness
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structure.	Missile site in the southwest corner of the polygon probably has a buried line of some kind. Some of the stock tanks have small water lines associated with them.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude	Developments associated with large ranch lands. Helicopter use at Highwood Baldy and around missile site.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Recreation residence tracts along Thain Creek Road. Buildings associated with Cow Camps along FSR 121, and next to the road in Shonkin Creek. There are approximately 20 recorded cultural resources within this polygon. These cultural resources represent structures, dwellings and other relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	There are 10 recorded historic routes in this polygon (40 miles).

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor's opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 145. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	There are approximately 25 + miles of motorcycle loop trails in the northern portion of the polygon.
Area available for winter motorized opportunity	The motorized trail system is open to over snow vehicles in the winter.
Proximity to private lands and non-Forest Service roads	Private lands surround the polygon on the north, east, and south sides. Forest Service Road 121 provides the western boundary. There are some private land inholdings accessed by this road.
Proximity to developed recreation sites outside of the polygon area	There is a campground and trailhead in Thain Creek. Activities from these developments are heard from within the polygon. There are 3 recreation residences along Thain Creek and Thain Creek Guard station is located within the drainage.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 146. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The 1/3 of the area, away from the motorized trails, is available for primitive and semi-primitive non-motorized recreation.
Primitive and semi-primitive non-motorized winter recreation	The 1/3 of the area, away from the motorized trails, is available for primitive and semi-primitive non-motorized recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Fishing, limited hiking, hunting, wildlife viewing, mountain biking, motorcycle riding, and ATV riding. Snowmobiling in the winter.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Arrow Prospect Area (H2) is 26,210 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 147. Features present**

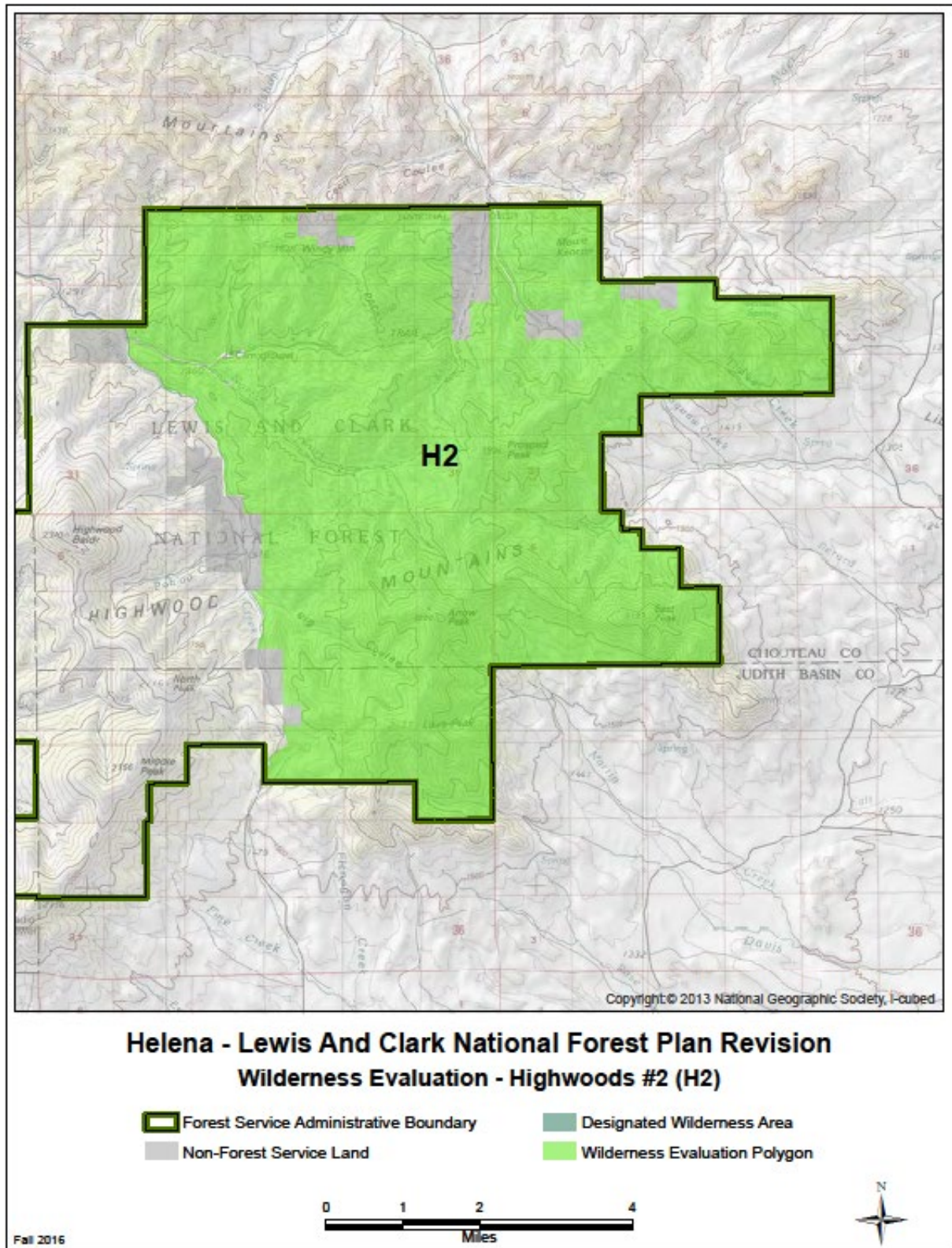
Features	Description and scale
Rare plant communities	The only potential plant species of conservation concern known to occur in this area is <i>Pinus flexilis</i> .
Rare animal species or communities	Federally listed species: Transient lynx documented; area not considered occupied and not contiguous with occupied areas. Historic record of Sprague’s pipit: this is a grassland bird and primary habitat on adjacent non-NF land. Potential species of conservation concern and/or state at risk species: gray-crowned rosy finch, dwarf shrew; historic records of greater sage grouse, chestnut-collared longspur; both species grassland types and primary habitat on adjacent non-NF land. Lewis’s woodpecker. Westslope cutthroat trout in Boyd, Cottonwood (Arrow), and Big Coulee Creek.
Rare ecosystems	Limber pine, ponderosa pine, and aspen forests are all considered vegetation communities of interest on the HLC NF due to their relatively low abundance and importance for habitat. These are present in fairly small amounts in this area. No rare aquatic ecosystems.
Outstanding landscape features	Steep open parks and unique geology.
Historic and cultural resource sites	All recorded cultural resources in this polygon have the potential for scientific, educational, or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	North Fork Highwood and Big Coulee Creeks are on the draft list in the 2015 Wild and Scenic Rivers Eligibility Study; they are listed for their outstanding westslope cutthroat trout fisheries.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 148. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	The east half of the Highwood Mountain range. Public access to this polygon is limited by lack of legal access through private lands.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	There are large private land inholdings along FSR 121.
Management of adjacent lands	Polygon is surrounded by large private ranches on the south, east, and north sides. Large block of roadless Forest Service system lands on the west.





## Little Belts Geographic Area

### Deep Creek Area (LB1)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 149. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance types in this area are Douglas-fir dominated forests, which cover about 67%, and lodgepole pine dominated forests, which cover about 17%. Dry grasslands and subalpine fir/Engelmann spruce mixed forests are also common, each covering about 5%. Nearly 3% of the area supports ponderosa pine forest. Very small amounts (less than 1% each) of other dominance types are also present, including shrublands, whitebark pine, limber pine, cottonwood, aspen, and juniper.
Potential vegetation types	The bulk of this area supports either warm dry forest potential vegetation types (58%) or cool moist forest potential types (34%). Dry grassland potential types are found on about 5%. Small amounts of other potential types are also present, including cold forest types (where whitebark pine may grow), shrublands, riparian, and sparsely vegetated areas.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 532 acres within LB1 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: roughly 27,000 acres potential lynx habitat, with about 14,000 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 67,000 acres of goshawk potential nesting habitat indicates presence of mature forest. Approximately 1600 acres existing, and 46,000 acres potential old growth habitat based on habitat type and aerial photo interpretation; occurs in patches of varying size.</p> <p>Nearly 53,000 acres secure elk habitat. Roughly 23,000 acres elk winter range, 11,000 acres elk calving habitat, and 27,000 acres mule deer winter range all contiguous with additional winter range on adjacent non-NF land. Moose may be present in riparian areas.</p> <p>Roughly 6300 acres potential wolverine habitat.</p> <p>Probable golden eagle and possible peregrine falcon nesting areas in NE portion along Smith River.</p> <p>Westslope cutthroat trout in North Fork and South Fork Deep Creek, South Fork Tenderfoot, and Logging Creeks.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely present.

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 150. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	There are no records of past harvest in this area. 100% of the area is unaffected by this activity.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.4% of LB1 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 61%, Class 2: 39%; Impacts are mainly outside/downstream of polygon
Miles of motorized road/trail within 300' of streams	27.1 miles
Noticeable wildfire suppression impacts	No evidence of fire suppression.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 151. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	There are no records of past harvest or prescribed fire activities in this area.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Radio communications site on Monument Peak Lookout.
Areas of mining activities including both abandoned and active mines	Active recreational gold mine in Placer Creek. Other abandoned mines along FSR 839, within the polygon.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 5 miles of fencing and 11 stock water tanks within LB1.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Outfitter camps in Lobley Gulch, Double Gulch, junction of the Smart Fork, and Parker Ridge. Boat camps along the Smith River. Dispersed camping throughout the polygon, both during summer and hunting seasons.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Electric line along Logging Creek road might be seen from the interior of the polygon.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude	Private inholding where they outfit from Deep Creek Park, recreation residences along the periphery, Monument peak rental cabin with communication site.

Improvement type	Presence and extent of departure from naturalness
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Monument Peak. Mine adits. There are approximately 23 recorded cultural resources within this polygon. They all represent relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	1.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	Old wagon roads into Deep Creek Park in the western part of the polygon. Remnants of old telephone line from Monument Peak down Daisy Creek. Two recorded historic routes (8 miles) are within this polygon. However, there is a high potential for unrecorded routes.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 152. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Motorized trail around Deep Creek Park to the Smith River. Motorized trails on the eastern portion of the polygon (motorcycle and ATV trails). National motorized recreation trails on Monument Ridge, Deep Creek Ridge, and Blankenbaker Flats.
Area available for winter motorized opportunity	Snowmobile corridor from Monument Peak, Bald Hills to Tenderfoot. Snowmobile corridor along boundary with FSR 839. All other areas closed to winter motorized uses.
Proximity to private lands and non-Forest Service roads	Private inholding in Deep Creek Park. Private lands along the Smith River to the west and along the northern boundary.
Proximity to developed recreation sites outside of the polygon area	Logging creek Campground, Monument Peak Lookout Cabin rental, recreation residences along the Logging Creek Road. Deep Creek, Taylor Hills, Balsinger, and Pilgrim Trailheads.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 153. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	There are two areas with primitive and semi-primitive non-motorized summer recreation. One is located south of Deep Creek Park and north of the Tenderfoot. The other is located north of motorized trail 311 to the forest boundary, excluding the area west of Blankenbaker Flats.
Primitive and semi-primitive non-motorized winter recreation	Very little opportunity for primitive or semi-primitive non-motorized winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses.	Hunting, fishing, backpacking, horseback riding, boating on the Smith River, mountain biking, ATV riding, motorcycle riding, and snowmobiling in the two corridors.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Deep Creek Area (LB1) is 89,321 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 154. Features present**

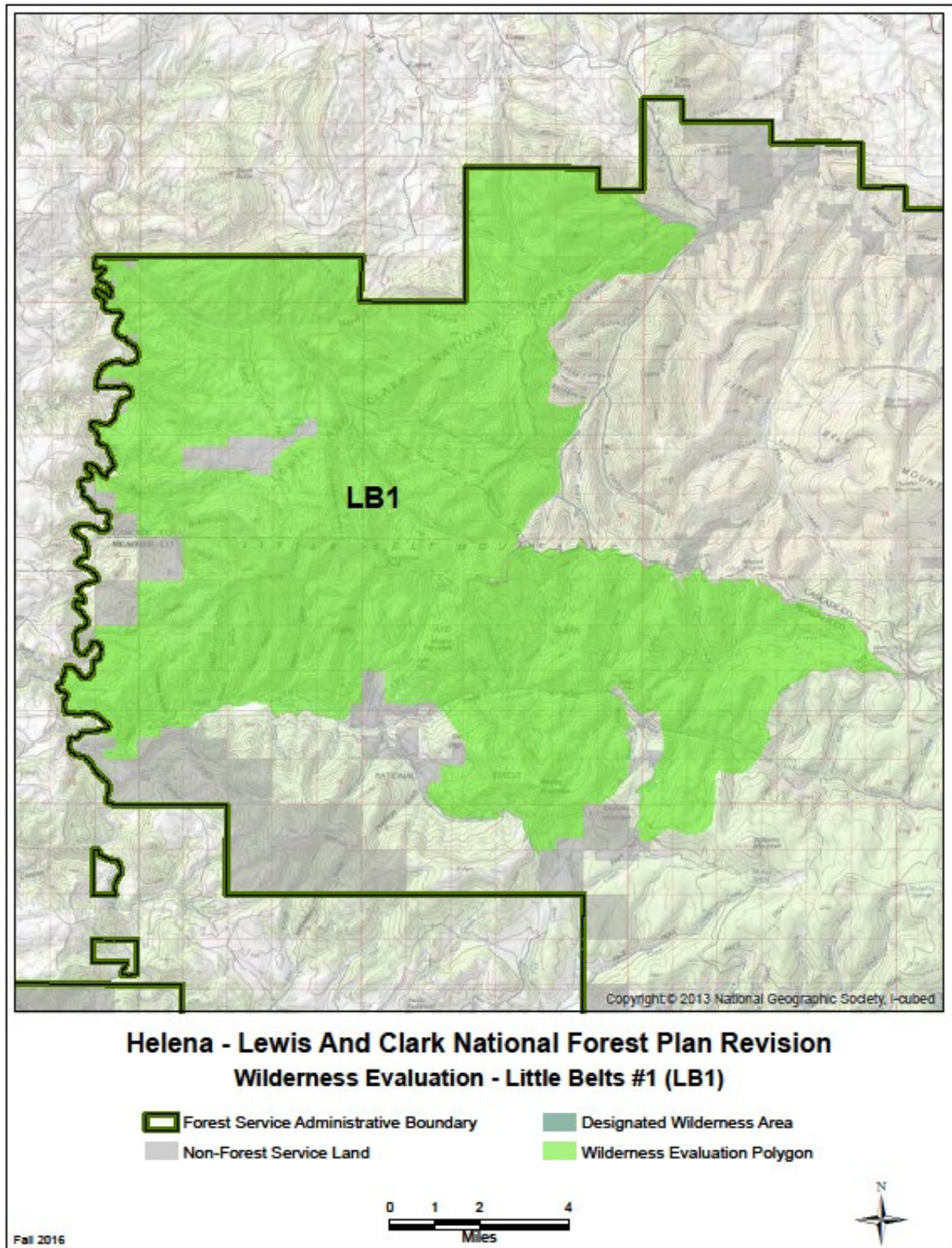
Features	Description and scale
Rare plant communities	Several potential plants of conservation concern are known to occur in this area, including <i>Pinus flexilis</i> , <i>Pinus albicaulis</i> , and <i>Funaria americana</i> .
Rare animal species or communities	Federally listed species: Transient lynx could be occasionally present, but area is not within or contiguous with areas occupied by lynx. Potential species of conservation concern and/or state at risk species: wolverine, possibly harlequin duck (Smith River) Westslope cutthroat trout in North Fork and South Fork Deep Creek, Logging Creek and South Fork Tenderfoot Creek.
Rare ecosystems	Ponderosa pine, limber pine, and whitebark pine are vegetation ecosystem components of interest on the HLC NF due to their limited abundance and habitat value. Whitebark pine is a candidate for listing under the ESA. These species are present in very small amounts in this area.
Outstanding landscape features	Smith River and waterfalls on Tenderfoot Creek.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	Tenderfoot Creek and tributaries have very high-water quality. Tenderfoot Creek and the Smith River (on western boundary of polygon) are both eligible WSR segments. Deep Creek has high water quality and high value westslope cutthroat trout population.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 155. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Large irregular shaped polygon in the west end of the Little Snowies GA. Polygon extends from the Smith River east to Logging Creek and the Divide Road along the ridgeline.
Legally established rights or uses within the area	Special Uses ROW access to Deep Creek Park.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	Deep Creek Park private land inholding.
Management of adjacent lands	Private ranch lands to the north. Subdivisions, ranch lands, and the Smith River corridor on the west. Forest Service system lands to the east and south.





## Big Horn Thunder Area (LB2)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. *What is the composition of plant and animal communities within the area?*

**Table 156. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance types found in this area are Douglas-fir dominated forests, which cover about 56% of the area. Lodgepole pine dominated forests are also common, found on about 22%. Subalpine fir and Engelmann-spruce mixes can be found at higher elevations, covering about 13% of the area. Other types are relatively rare; dry grasslands and sparsely vegetated areas (rock and scree) are found on about 3% each, and ponderosa pine dominated forests are found on 2%. Other types are rare but present, making up less than 1% each, including shrublands, whitebark pine, limber pine, cottonwood, and aspen.
Potential vegetation types	The main potential vegetation types found in this area are warm dry forest types (42%) and cool moist types (52%), consistent with the abundance of Douglas-fir and lodgepole pine forests. Dry grassland and sparsely vegetated potential types are found on between 2-3% each. Trace amounts of other types occur, include the cold forest type (where whitebark pine may grow), shrubland types, and riparian types where cottonwood and aspen are most likely found.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 64 acres within LB2 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: 22,000 acres potential lynx habitat, with approximately 11,000 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 29,000 acres of goshawk potential nesting habitat, with some known nest territories. Approximately 4000 acres existing and over 30,000 acres potential old growth habitat based on habitat type and aerial photo interpretation; occurs in patches of varying size. Presence of Clark’s nutcracker indicates mature whitebark, ponderosa, and/or limber pine. Also functioning snag habitat.</p> <p>Approximately 30,000 acres secure elk habitat; 5800 acres mule deer winter range along northern edge contiguous with same on non-NF land. Moose may be present in riparian areas.</p> <p>Functioning subalpine/alpine habitat: Approximately 8,000 acres potential wolverine habitat.</p> <p>Westslope cutthroat trout in Pilgrim, Deer, Horn and Tillinghast Creeks.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely present.

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 157. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	There are no records of past harvest in this area; 100% is unaffected by this activity.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.9% of LB2 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 37%, Class 2: 63%. Impacts in class 2 watersheds are primarily downstream/ outside of polygon.
Miles of motorized road/trail within 300' of streams	17.3 miles, motorized trail along the entire length of Pilgrim Creek
Noticeable wildfire suppression impacts	Goblin Gulch Fire (2012): Some handlines constructed/rehabed, helispot constructed/rehabbed. However, break in timber continuity evident.

Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?

**Table 158. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	There are no known areas of timber harvest in this area. A minimal amount of prescribed burning has occurred, consisting of 15 acres of pile burning in 1995. This activity makes up only 0.04% of the area and was determined to no longer be substantially noticeable on the landscape.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	Historic mining in patented mining inholding. Abandoned historic mine in Timber Gulch. Private land withholding with historic mining in Pilgrim Creek. Abandoned mining exploration pits on Thunder Mountain in Goblin Gulch.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there are approximately 2 miles of fencing and 4 stock water tanks within LB2.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Hunting camps along Pilgrim Creek and Thunder Mountain trail.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Electric line along Logging Creek road might be seen from the interior of the polygon.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.

Improvement type	Presence and extent of departure from naturalness
Lands adjacent to development or activities that impact opportunities for solitude	Recreation residences along the periphery in Logging Creek. Deer Creek Estates on the south boundary of LB2.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Cabins in Big Timber Creek and top of Iron Creek, close to the private inholding. There are 12 recorded cultural resources within this polygon, all represent relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	2.4 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	Historic road from Belt Creek up Holter Gulch to mining claim. Historic road from Logging Creek up to Big Timber Gulch. Old roadbed up Pilgrim Creek. There are 2 recorded historic routes (67 miles) within this polygon.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 159. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	All non-motorized except for Pilgrim Creek, Tobin Gulch, and Deer Creek trails which are open seasonally for motorcycles.
Area available for winter motorized opportunity	Snowmobile corridor along boundary with FSR 839. All other areas closed to winter motorized uses.
Proximity to private lands and non-Forest Service roads	Two private land inholdings. One is on the north side of Big Horn Mountain. One is in the bottom of Pilgrim Creek at the junction with Deer Creek. Deer Creek Estates subdivision to the south of the polygon.
Proximity to developed recreation sites outside of the polygon area	Logging creek Campground, recreation residences along the Logging Creek Road. Deep Creek, Taylor Hills, Balsinger, and Pilgrim Trailheads.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 160. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Areas east and west of the Pilgrim Creek Trail are available for primitive and semi-primitive non-motorized summer recreation.
Primitive and semi-primitive non-motorized winter recreation	Majority of the polygon is available for primitive and semi-primitive non-motorized recreation in the winter.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Motorcycle riding, horseback riding, fishing, archery, rifle hunting, and mountain biking.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Big Horn Thunder Area (LB2) is 45,334 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 161. Features present**

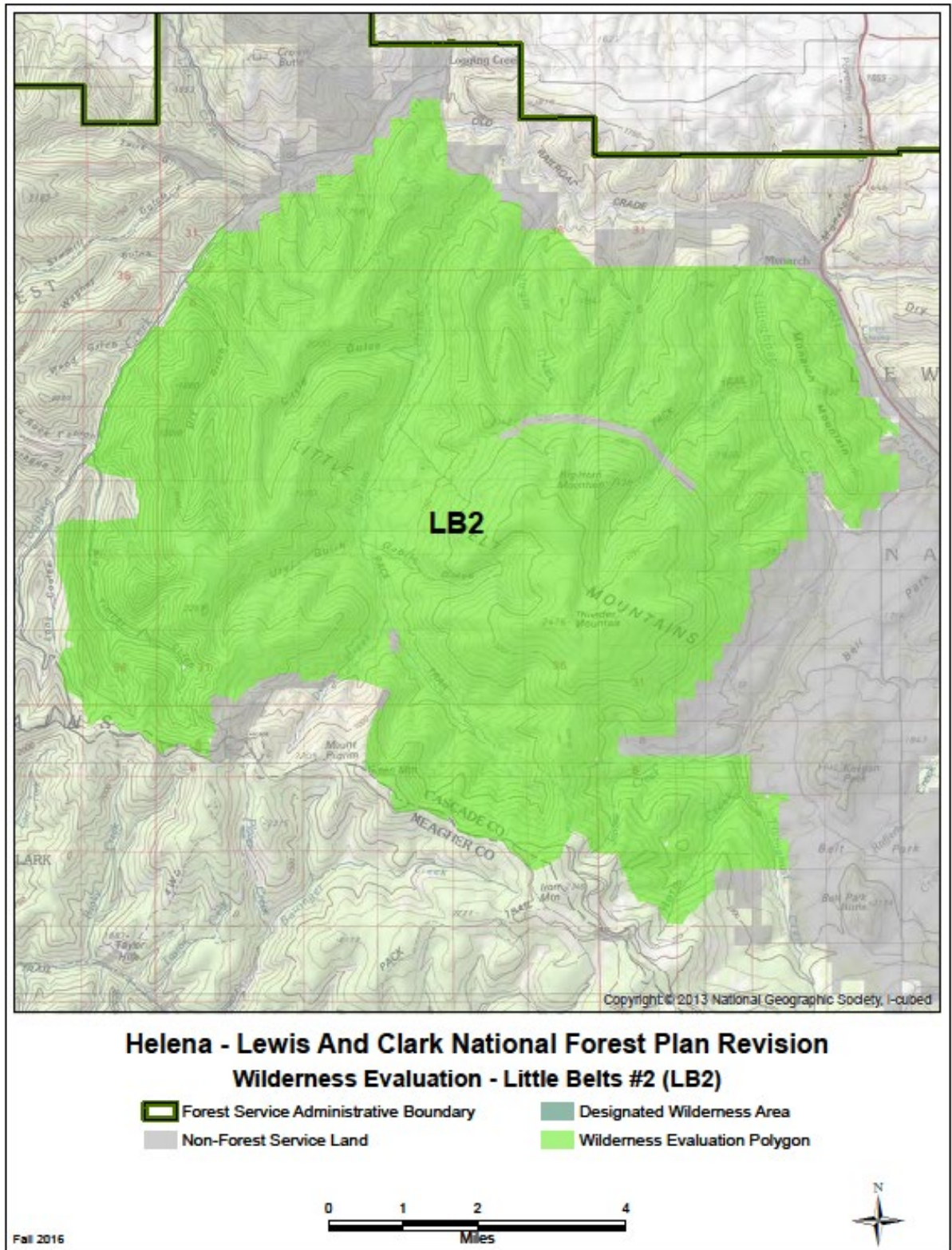
Features	Description and scale
Rare plant communities	The potential plant species of conservation concern known to occur in this area include <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , and <i>Elymus innovates</i> .
Rare animal species or communities	Federally listed species: Transient lynx could be occasionally present, but area is not within or contiguous with areas occupied by lynx. Potential species of conservation concern and/or state at risk species: none documented Westslope cutthroat trout in Pilgrim, Deer, Horn and Tillinghast Creeks.
Rare ecosystems	Whitebark pine is a candidate for listing under ESA. Whitebark pine, limber pine, ponderosa pine, and aspen vegetation communities are all of interest on the HLC NF due to their limited abundance and importance for habitat. These types are present in very small amounts in this area. No rare aquatic ecosystems
Outstanding landscape features	Big Horn Mountain, Thunder Mountain, Pilgrim Creek, Tillinghast Creek, and rock scree around Thunder Mountain.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	Pilgrim Creek has high quality WCT fishery, good water quality, and is included in the draft list of potential WSRs for its high quality westslope cutthroat trout fishery. Tillinghast Creek also is high quality up high in the watershed, above cattle impacts.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 162. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	A large undeveloped landscape east of Logging Creek and southwest of Monarch. The polygon includes all of the Thunder Mountain and the main stem of Pilgrim Creek.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	Private land inholdings in Deer Creek and Thunder Mountain.
Management of adjacent lands	Private ranch lands to the east in Belt Park. Forest Service system lands and privates along the north boundary. Logging Creek and Divide road on the west and south boundaries. Deer Creek Estates on the southern border.





## Sun Mountain Area (LB3)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 163. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	Nearly 54% of this small area is dominated by Douglas-fir forests, and lodgepole pine forests are found on about 15%. A fairly large proportion, 16%, is considered transitional where forest regeneration is still initiating after the Monarch fire of 2001. About 6% of the area (at higher elevations) supports subalpine fir and Engelmann spruce mixed forest, and ponderosa pine dominated areas are found at the lowest elevations (3%). Dry grasslands are found on nearly 3%. Other dominance types are found in trace amounts, generally 1% or less, and include shrublands, limber pine, and aspen.
Potential vegetation types	Warm dry forest potential vegetation types are the most common, found on 76% of the area, and commonly support limber pine, ponderosa pine, and Douglas-fir. Cool moist forest types cover about 18%, where lodgepole, spruce, and fir are more likely to grow. Dry grassland potential types are found on 4%. Trace amounts of other types are present, including shrublands and riparian potential vegetation types.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 67 acres within LB3 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: 3400 acres potential lynx habitat, with approximately 1400 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 4600 acres of goshawk potential nesting habitat.</p> <p>Approximately 700 acres existing, and 3500 acres potential old growth habitat based on habitat type and aerial photo interpretation; occurs in patches of varying size.</p> <p>Approximately 4600 acres secure elk habitat; 1900 acres mule deer winter range contiguous with same on non-NF land.</p> <p>Moose may be present in riparian areas.</p> <p>Functioning subalpine/alpine habitat: Fewer than 70 acres of potential wolverine habitat.</p> <p>No westslope cutthroat trout.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. If present, non-native trout likely

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 164. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	Some records of past harvest are found in this area, indicating that roughly 4% was impacted. Treatments consisted of a commercial thin in 1974 and 1976. 96% of this area is unaffected by harvest treatments.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.2% of LB3 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2: 100%, but impacts are primarily downstream/ outside of polygon.
Miles of motorized road/trail within 300' of streams	0.0 miles
Noticeable wildfire suppression impacts	Monarch Fire (2011): visible breaks in the timber from old hand lines and helispot.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 165. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	Roughly 4% of this area (304 acres) was harvested in the 1970's. This treatment included the retention of leave trees; due to this and the time since treatment, these areas were determined to be no longer substantially noticeable. In addition, roughly 40 acres had the prescribed burning treatment of burning piles in 2001; this was also determined to not be substantially noticeable and impacted less than 0.5% of the area.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	None known.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 1/2 mile of fencing and 70.5 acres of vegetation treatments are within LB3.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps. Dispersed camping in Dry Fork Belt Creek.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Utility corridors outside of the polygon on the southwest boundary. Powerline corridor along Dry Fork Belt Creek.

Improvement type	Presence and extent of departure from naturalness
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude	Community of Monarch. Subdivisions on the western and southern boundaries. Heavily used dispersed area in Dry Fork Belt Creek.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	None known.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	None known.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 166. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	No authorized motorized trails.
Area available for winter motorized opportunity	Closed to snowmobiles and winter motorized use.
Proximity to private lands and non-Forest Service roads	Dry Fork Belt Creek is a Cascade County road. Private roads accessing residential areas on the south border of the border of polygon. Highway 89 to the west of the polygon.
Proximity to developed recreation sites outside of the polygon area	Borders a high use, heavily impacted dispersed recreation area in Dry Fork Belt Creek.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 167. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The entire polygon is available for primitive and semi-primitive non-motorized summer recreation.
Primitive and semi-primitive non-motorized winter recreation	The entire polygon is available for primitive and semi-primitive non-motorized winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hiking, horseback riding, and hunting.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Sun Mountain Area (LB3) is 7,965 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 168. Features present**

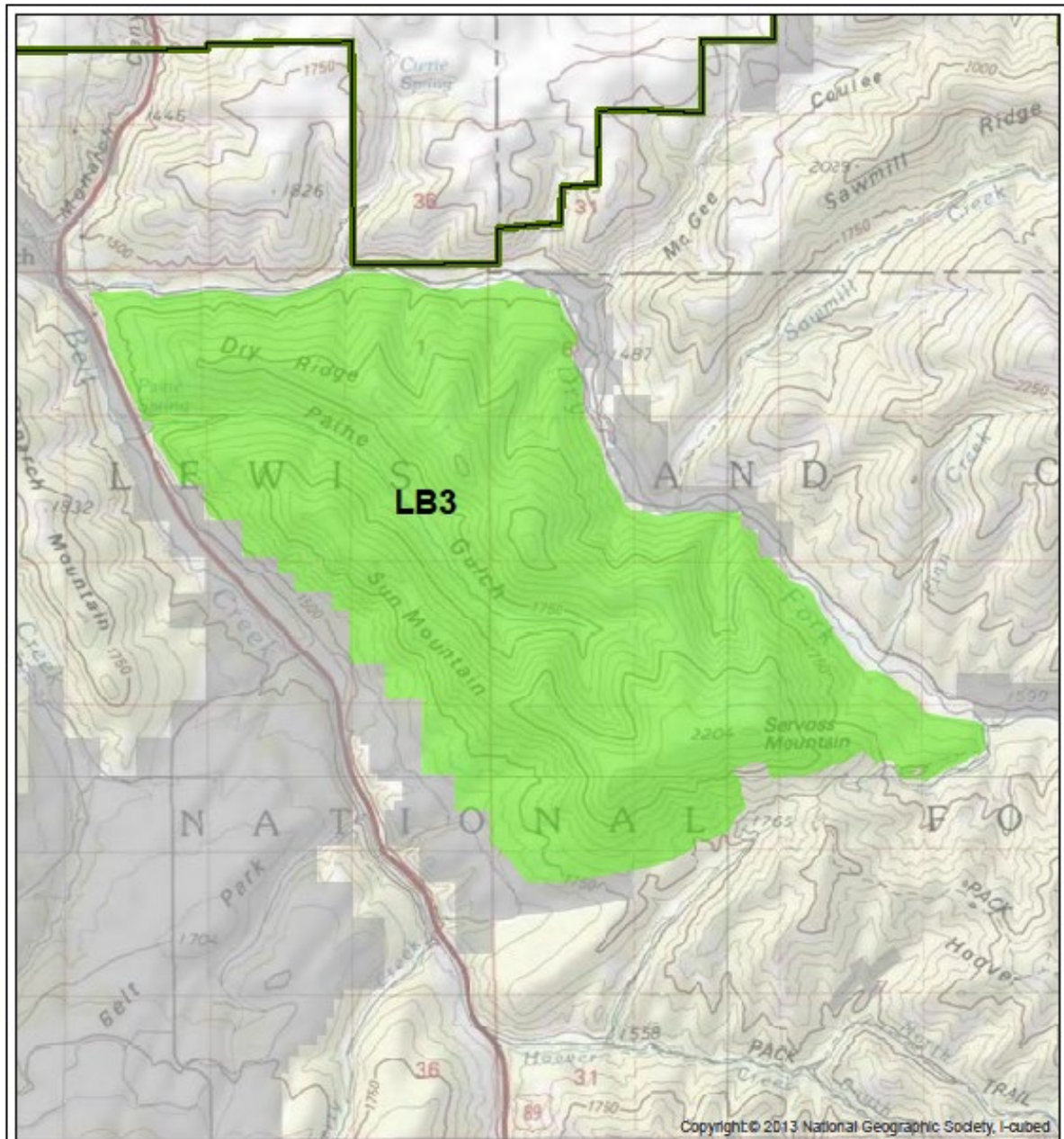
Features	Description and scale
Rare plant communities	The potential plants of conservation concern known to occur in this area include <i>Pinus flexilis</i> and <i>Cirsium longistylum</i> .
Rare animal species or communities	Federally listed species: transient lynx could be occasionally present, but area is not within or contiguous with areas occupied by lynx. Potential species of conservation concern and/or state at risk species: none documented. No rare aquatic species known.
Rare ecosystems	Very small amounts of ponderosa pine, aspen, and limber pine vegetation communities are found in this area, which are types of interest on the HLC NF due to their low abundance and habitat importance. No known rare aquatic ecosystems.
Outstanding landscape features	Limestone cliffs.
Historic and cultural resource sites	No recorded cultural resources in this polygon.
Research natural areas	Paine Gulch RNA.
High quality water resources or important watershed features	Madison limestone.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.





**Table 169. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Relatively narrow rectangle between State Highway 89, Dry Fork Belt Creek road (county road), and the Ruby Hen Road (FSR).
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	None within the polygon.
Management of adjacent lands	Rural and private residential developments along Highway 89 and Belt Creek to the southwest. Dispersed recreation and private lands in Dry Fork Belt Creek to the east. Forest Service system lands to the south. Forest Service system and state lands to the north.





### Helena - Lewis And Clark National Forest Plan Revision Wilderness Evaluation - Little Belts #3 (LB3)

-  Forest Service Administrative Boundary
-  Designated Wilderness Area
-  Non-Forest Service Land
-  Wilderness Evaluation Polygon



Fall 2016



## McGee Sawmill Area (LB4)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 170. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance types in this area are Douglas-fir dominated forests (covering 40%) and lodgepole pine dominated forests (covering 33%). Subalpine fir and Engelmann spruce mixed forests are also common, found on 13%. Sparsely vegetated areas, such as rock and scree, are found on nearly 7%, and dry grasslands dominate on just over 3%. Ponderosa pine and limber pine forests make up just under 2% each. Very small amounts (less than 1% each) of other dominance types are also present, including shrublands, whitebark pine, and cottonwood.
Potential vegetation types	The area is fairly evenly dominated by two main potential vegetation groups: warm dry forest types (45%), and cool moist forest types (44%). Sparsely vegetated areas represent 7%, and dry grassland potential types are found on 2%. Other types making up 1% or less each include cold forest types (where whitebark pine may grow), shrubland types, and riparian types.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 21 acres within LB4 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: 3500 acres potential lynx habitat, with approximately 1500 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 5200 acres of goshawk potential nesting habitat, some known nesting territories. Approximately 915 acres existing, and 3500 acres potential old growth habitat based on habitat type and aerial photo interpretation; occurs in patches of varying size.</p> <p>Approximately 7000 acres secure elk habitat; fewer than 1000 acres elk winter range and 3500 acres mule deer winter range contiguous with same on non-NF land. Moose may be present in riparian areas.</p> <p>Functioning subalpine/alpine habitat: Roughly 1100 acres of potential wolverine habitat.</p> <p>Westslope cutthroat trout in Sawmill Creek.</p>
Known non-native wildlife species	<p>No non-native terrestrial wildlife species documented.</p> <p>Non-native trout likely present.</p>

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 171. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	About 99.9% of the area has been unaffected by harvest, according to available harvest records. About 9 acres were harvested with a commercial thin in 1974, representing 0.11% of the area.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.79% of LB4 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2: 100%; impacts are primarily outside of polygon
Miles of motorized road/trail within 300' of streams	0.0 miles.
Noticeable wildfire suppression impacts	No fire occurrence records since 1980.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 172. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present
Presence of timber harvest or prescribed fire areas	The only known vegetation treatment to have occurred in this area is the 9-acre commercial thin in 1974 which was determined to be no longer substantially noticeable. No known prescribed fire treatments have occurred within the polygon, although some large fuel reduction treatment units lie adjacent to the boundary.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None.
Areas of mining activities including both abandoned and active mines	None known.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 1/10 <sup>th</sup> mile of fencing and 1 stock water tank within LB4. There are approximately 140 acres of vegetation treatments within LB4.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps within polygon. Numerous dispersed camping sites along Dry Fork Belt Creek.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Powerline corridor along Dry Fork Belt Creek. Missile communication line is located in McGee Coulee.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude	Heavily used dispersed area in Dry Fork Belt Creek. Superfund site to the east.

Improvement type	Presence and extent of departure from naturalness
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Old cabin in an unnamed drainage of Sawmill Creek. No recorded cultural resources within this polygon, however there is the potential for unrecorded cultural resources.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	1.4 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	No recorded historic routes.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor's opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 173. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Area is not available for summer motorized use.
Area available for winter motorized opportunity	Area is not available for winter motorized use.
Proximity to private lands and non-Forest Service roads	Polygon borders private lands along the Dry Fork Belt Creek road. Polygon borders private ranch lands to the north. Dry Fork Belt Creek road is a Cascade County road.
Proximity to developed recreation sites outside of the polygon area	Borders a high use, heavily impacted dispersed recreation area in Dry Fork Belt Creek.

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor's ability to feel a part of nature?*

**Table 174. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The entire polygon is available for primitive and semi-primitive non-motorized summer recreation.
Primitive and semi-primitive non-motorized winter recreation	The entire polygon is available for primitive and semi-primitive non-motorized winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hiking, horseback riding, fishing and hunting.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The McGee Sawmill Area (LB4) is 8,355 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

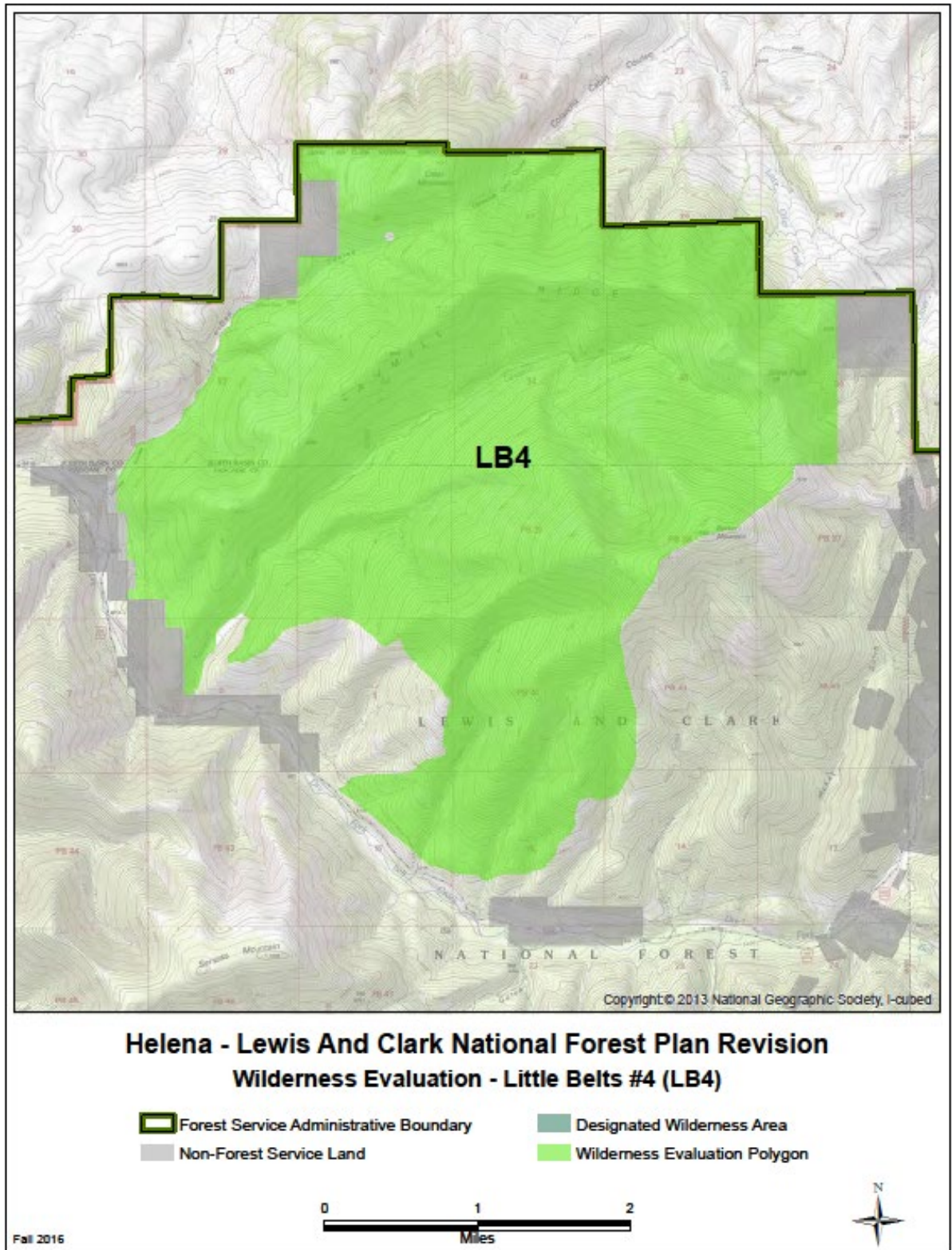
**Table 175. Features present**

Features	Description and scale
Rare plant communities	The only potential plant species of conservation concern known to occur in this area include <i>Pinus albicaulis</i> and <i>Pinus flexilis</i> .
Rare animal species or communities	Federally listed species: Transient lynx could be occasionally present, but area is not within or contiguous with areas occupied by lynx. Potential species of conservation concern and/or state at risk species: none documented. Westslope cutthroat trout in Sawmill Creek.
Rare ecosystems	Whitebark pine is a candidate for listing under ESA. Whitebark pine, limber pine, and ponderosa pine are all vegetation communities of interest on the HLC NF due to their limited abundance and habitat importance. These are present in very small amounts in this area. High quality WCT habitat in Sawmill Creek, segment goes dry below population due to limestone, so the population is protected.
Outstanding landscape features	A few limestone cliffs.
Historic and cultural resource sites	None known.
Research natural areas	None present.
High quality water resources or important watershed features	High quality westslope cutthroat trout population.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 176. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Irregular shaped polygon north of Dry Fork of Belt Creek road. Polygon is formed by private land to the north and private lands and the Barker-Hughesville superfund site on the south and the east.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	None present.
Management of adjacent lands	Ranch lands to the north. National Forest system lands to the south. Superfund to the east and west. Dry Fork Belt Creek road to the west.



## Peterson Mountain Area (LB5)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 177. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance types in this area include lodgepole pine dominated forests (covering 42%) and Douglas-fir dominated forests (found on 29%). Subalpine fir and Engelmann spruce mixed forests are also common at higher elevations, growing on about 11% of the area. Dry grasslands are found on 10% of the area, and limber pine dominated forests are found on nearly 5%. Trace amounts (covering less than 1% of the area each) are also found, including shrublands, ponderosa pine, whitebark pine, aspen, and juniper.
Potential vegetation types	Two main potential vegetation type groups occur in this area: cool moist forest types (49%) and warm dry forest types (38%). Dry grassland potential types are the next most common, representing about 6% of the area. Other types found include shrubland, riparian, and sparse vegetation potential types.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 60 acres within LB5 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Functioning mature forest habitat: 2300 acres potential lynx habitat, with approximately 970 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 4200 acres of goshawk potential nesting habitat, some known nesting territories. Approximately 200 acres existing, and 4300 acres potential old growth habitat based on habitat type and aerial photo interpretation; occurs in patches of varying size.  Approximately 5600 acres secure elk habitat; fewer than 150 acres elk winter range and 1700 acres mule deer winter range contiguous with same on non-NF land. Moose may be present in riparian areas.  Functioning subalpine/alpine habitat: Roughly 1100 acres of potential wolverine habitat.  Westslope cutthroat trout in Lost Creek.
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely present

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 178. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	100% of the area has no record of past timber harvest.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.1% of LB5 is not associated with invasive plant inventories.



Measures	Outcome
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2:100%, but sits at headwaters of 3 watersheds, impacts are occurring downstream of polygon
Miles of motorized road/trail within 300' of streams	0.1 mile
Noticeable wildfire suppression impacts	No fire occurrence records since 1980.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 179. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	No harvest is known to have occurred in this area. However, records show that roughly 150 acres have been impacted by prescribed fire treatment, consisting of underburns from 1983 to 2005 that occurred along the boundary. These treatments were determined to not be substantially noticeable and make up about 2% of the area.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	None.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there are approximately 5 miles of fencing and 1 stock water tank and 72 acres of vegetation treatments within LB5.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps. Limited dispersed camping along the southeast edges of the polygon.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Water line in Peterson Creek.
Presence of watershed treatment areas including contouring, diking, and channeling	None.
Lands adjacent to development or activities that impact opportunities for solitude	Ranching activity on private land surrounding the polygon.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	No recorded cultural resources within this polygon.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.0 miles

Improvement type	Presence and extent of departure from naturalness
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation.	None known.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 180. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	None of the area is open or available for summer motorized recreation.
Area available for winter motorized opportunity	Snowmobile use allowed along Lone Tree corridor. Rest of the polygon to the north is restricted for winter motorized use.
Proximity to private lands and non-Forest Service roads.	Private lands surround the polygon on the north, south, portions on the east and the west.
Proximity to developed recreation sites outside of the polygon area	None present.

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 181. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The entire polygon is available for primitive and semi-primitive non-motorized summer recreation.
Primitive and semi-primitive non-motorized winter recreation	The entire polygon is available for primitive and semi-primitive non-motorized winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, hiking and fishing.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Peterson Mountain Area (LB5) is 6,839 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

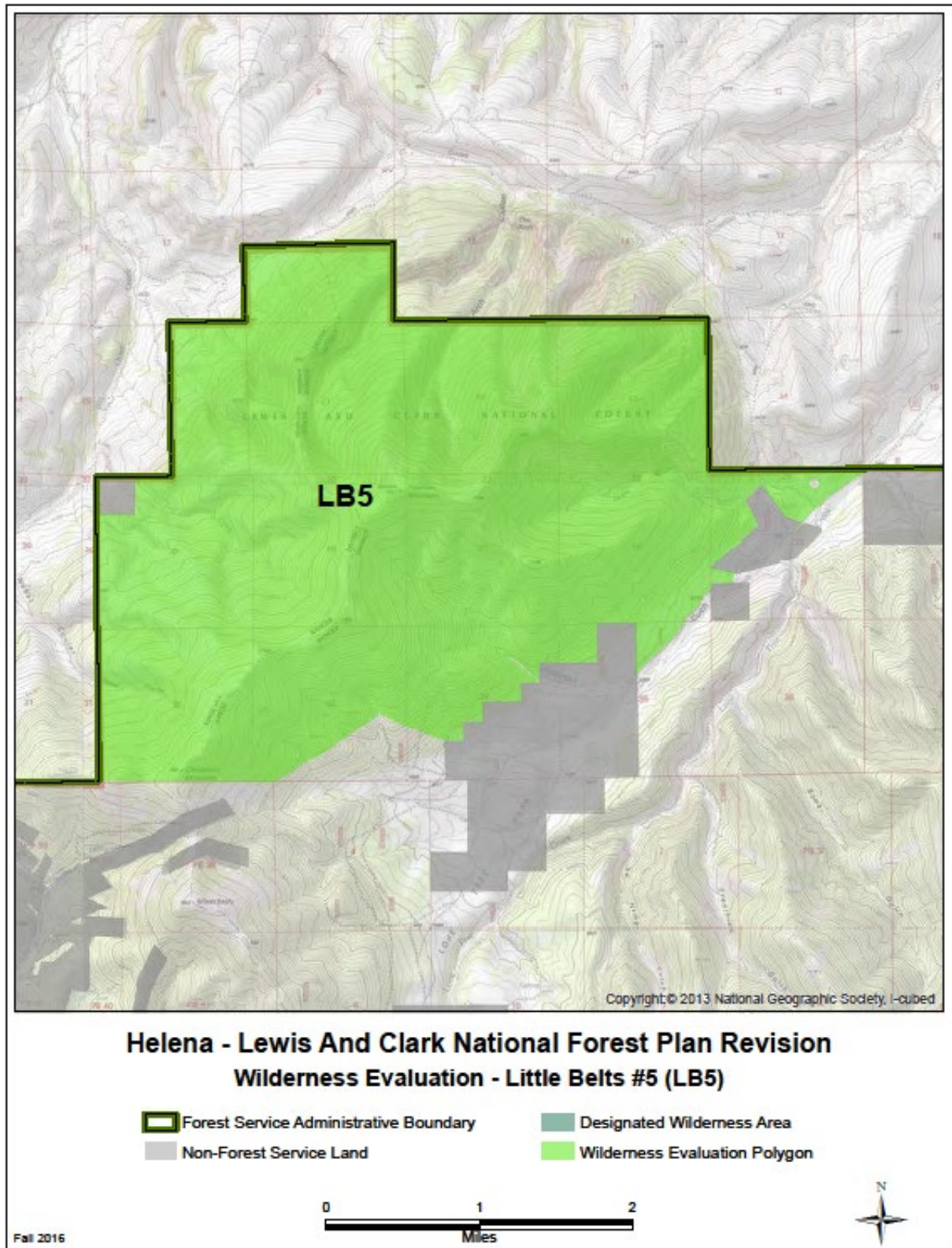
**Table 182. Features present**

Features	Description and scale
Rare plant communities	The only potential plants of conservation concern that are known to occur in this area are <i>Pinus albicaulis</i> and <i>Pinus flexilis</i> .
Rare animal species or communities	Federally listed species: transient lynx could be occasionally present, but area is not within or contiguous with areas occupied by lynx. Potential species of conservation concern and/or state at risk species: none documented. Westslope cutthroat trout population in Lost Creek.
Rare ecosystems	Whitebark pine is a candidate for listing under the ESA. Whitebark pine, limber pine, ponderosa pine, and aspen are all considered vegetative communities of interest on the HLC NF and are present in very small amounts in this area. No rare aquatic ecosystems.
Outstanding landscape features	Peterson Mountain
Historic and cultural resource sites	None known.
Research natural areas	None present.
High quality water resources or important watershed features	None, area is relatively dry.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 183. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Remote and undeveloped polygon formed by private ranchlands on the west, north, and portions of the east and south.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	Private land surrounds the polygon but no private inholdings.
Management of adjacent lands	Private agriculture lands to the north west and portion of the east of the polygon. BLM parcels on the west and north. Forest Service system lands on the south and portions of the eastern boundary. Superfund site surrounding Barker-Hughesville on portion of the southern boundary.



## Taylor Mountain Area (LB6)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 184. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The two most common dominance types in this area are lodgepole pine dominated forests (covering 37% of the area), and Douglas-fir dominated forests which are found on about 36% of the area. Subalpine fir and Engelmann spruce mixed forests are also common at higher elevations, growing on about 11% of the area. Limber pine dominated forests cover nearly 8%. Dry grasslands and sparsely vegetated areas (rock/scree) each cover about 4%. Other types are present in very small amounts, covering less than 1% of the area each, including shrublands, ponderosa pine, whitebark pine, and aspen.
Potential vegetation types	The two potential vegetation types that dominate this area are warm dry forest types (49%) and cool moist forest types (43%). Dry shrubland potential types are found on 3% and are likely encroached with conifers since shrub dominated areas are less common. Very small amounts of other potential types that occur include cold forest (where whitebark may grow) and riparian types.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 19 acres within LB6 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: 3900 acres potential lynx habitat, with approximately 1900 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 7400 acres of goshawk potential nesting habitat, some known nesting territories. No existing but up to 5000 acres potential old growth habitat based on habitat type and aerial photo interpretation; occurs in patches of varying size.</p> <p>Approximately 7200 acres secure elk habitat; fewer than 150 acres elk winter range and only 400 acres mule deer winter range contiguous with same on non-NF land. Moose may be present in riparian areas.</p> <p>Functioning subalpine/alpine habitat: Roughly 1000 acres of potential wolverine habitat.</p> <p>No known westslope cutthroat trout populations.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. No known aquatic non-natives.

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 185. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	100% of this area is unaffected by past harvest, according to available records.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.8% of LB6 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 8%, Class 2: 92% Polygon is upstream of most impacts.
Miles of motorized road/trail within 300' of streams	2.2 miles, but streams are primarily intermittent.
Noticeable wildfire suppression impacts	No fire occurrence since 1980.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 186. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	There are no records of past harvest in this area. However, records show that roughly 291 acres have had a prescribed fire treatment, consisting of underburns that occurred from 2003 to 2005, and pile burning in 1996. These treatments affected nearly 3% of the area, are located along the edge of the area, and were determined to not be substantially noticeable (with effects similar to wildfire).
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	None
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 2 miles of fencing and 4 stock water tanks and 161 acres of vegetation treatments within LB6.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Dispersed recreation along private land boundary on the west. No outfitter camps.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None present.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude	Ranching activity on private land surrounding the polygon.



Improvement type	Presence and extent of departure from naturalness
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area.	One recorded cultural resource in this polygon, which represents a relic of past occupation.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process.	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates.	4.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation.	None known.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 187. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Polygon is not open for motorized use in summer.
Area available for winter motorized opportunity	Snowmobile use allowed along Lone Tree corridor. Rest of the polygon is restricted for winter motorized use.
Proximity to private lands and non-Forest Service roads	Private lands surround the polygon.
Proximity to developed recreation sites outside of the polygon area	None present.

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 188. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The entire polygon is available for primitive and semi-primitive non-motorized recreation.
Primitive and semi-primitive non-motorized winter recreation	The entire polygon is available for primitive and semi-primitive non-motorized recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, hiking, and horseback riding.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Taylor Mountain Area (LB6) is 11,374 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

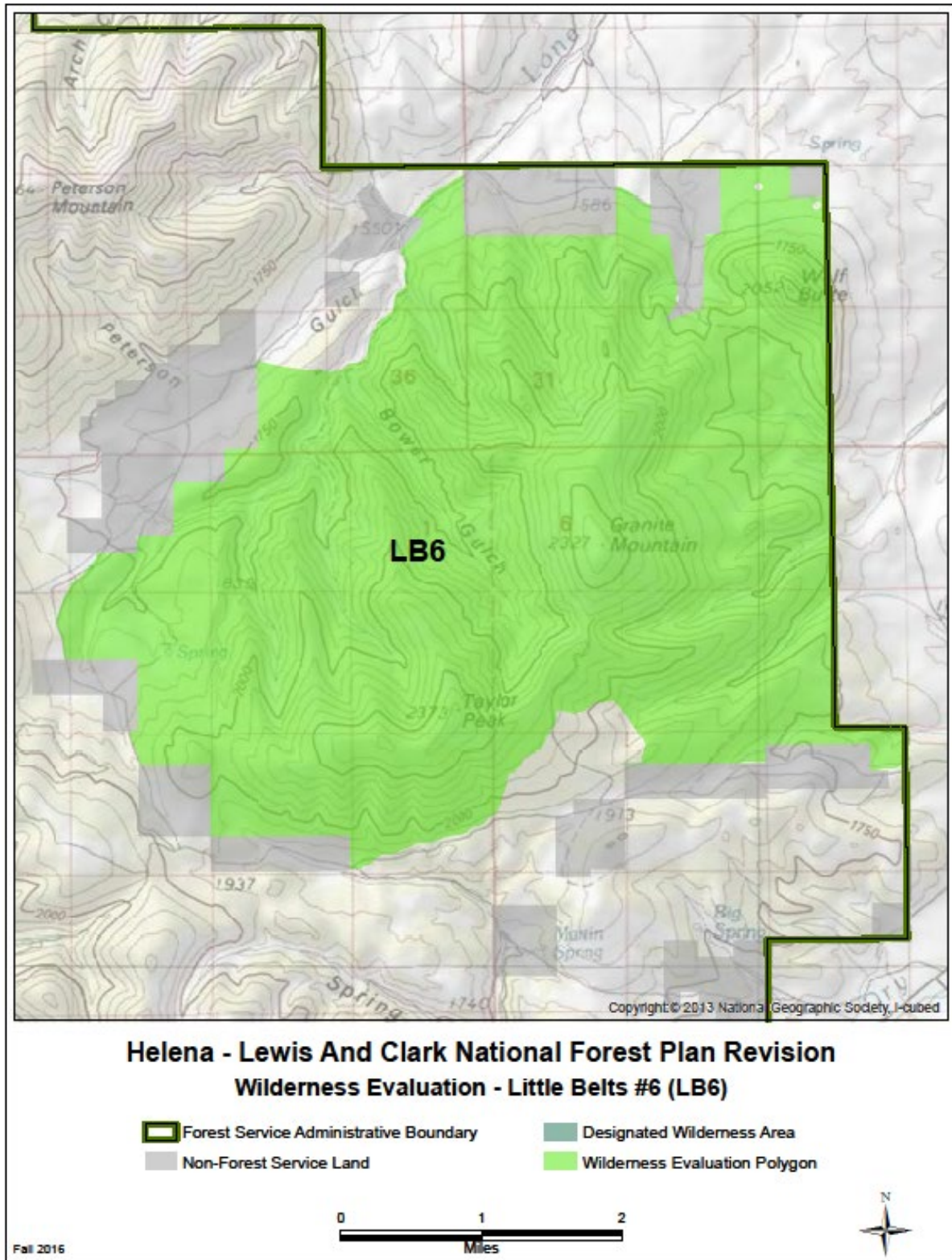
**Table 189. Features present**

Features	Description and scale
Rare plant communities	The only potential plants of conservation known to occur in this area are <i>Pinus ablicaulis</i> and <i>Pinus flexilis</i> .
Rare animal species or communities	Federally listed species: transient lynx could be occasionally present, but area is not within or contiguous with areas occupied by lynx. Potential species of conservation concern and/or state at risk species: none documented. No rare aquatic species known.
Rare ecosystems	Whitebark pine is a candidate for listing under the ESA. Limber pine dominated forests are more common in this polygon than in most areas on the HLC NF. Whitebark pine, limber pine, ponderosa pine, and aspen are all vegetation communities of interest on the HLC NF are present in low amounts in this area. No rare aquatic ecosystems known.
Outstanding landscape features	Taylor Peak, Taylor Mountain, Wolf Butte
Historic and cultural resource sites	The one recorded cultural resource has the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	No high-quality resources, area primarily dry.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 190. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Semi-circular polygon shape with irregular boundaries. Encompasses Wolf Butte, Granite Mountain, Taylor Peak, and Taylor Mountain.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	No private inholdings. Polygon surrounded by private.
Management of adjacent lands	Private agriculture lands to the north, east, portions on the west of the polygon. Small BLM parcels on the east. Montana State lands on portions of the north. Forest Service system lands on the south and portions of the western boundary.



## Big Baldy Area (LB8)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 191. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	Lodgepole pine dominated forests are the most common dominance type in this area, covering over 41%. Douglas-fir dominated forests are also common at lower elevations (covering about 22% of the area), as are subalpine fir and Engelmann spruce mixed forests at higher elevations (covering 21%). Dry grasslands and sparsely vegetated areas (rock and scree) each cover about 6% of the area. Limber pine dominated forests are found on just over 2%. Other types are present in very small amounts (covering less than 1% of the area each), and include shrublands, ponderosa pine, whitebark pine, aspen, and juniper.
Potential vegetation types	Cool moist forest potential vegetation types dominate the area, found on about 70%. Warm dry forest types are the next most common at 16%. Dry grassland potential types are found on about 5%, and sparse vegetation types cover 6%. A small area, about 3%, are cold forest types where whitebark pine may grow. Trace amounts of shrublands and riparian types are present.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 149 acres within LB8 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: 23,000 acres potential lynx habitat, with approximately 9700 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 28,000 acres of goshawk potential nesting habitat, some known nesting territories. 3900 acres existing but up to 24,000 acres potential old growth habitat based on habitat type and aerial photo interpretation; occurs in patches of varying size. Presence of Clark’s nutcracker indicates mature whitebark, limber, and/or ponderosa pine.</p> <p>Approximately 18,000 acres secure elk habitat. Moose may be present in riparian areas.</p> <p>Functioning subalpine/alpine habitat: Roughly 22,000 acres of potential wolverine habitat; presence of black rosy finch, pika. Westslope cutthroat trout populations in Dry Wolf, Placer, Dry Fork Belt, Oti Park, NF Hoover, Carpenter (above mining impacts—acts as barrier), Bender, Palisade, and Chamberlain Creeks.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout are likely present

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 192. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	About 99.8% of the area has been unaffected by past harvest. Records indicate that about 106 acres have been previously harvested, consisting primarily of a commercial thin in 1968.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.7% of LB8 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 35%, Class 2: 65%, however, the polygon is upstream of most of the impacted areas. There are some mining impacts in the polygon.
Miles of motorized road/trail within 300' of streams	23.4 miles
Noticeable wildfire suppression impacts	No fire suppression evidence on the landscape.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 193. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	The past commercial thin activity (1968) which affected less than 0.3% of this area was determined to not be substantially noticeable due to the residual trees left and time since treatment. In addition, some pile burning from 2000 to 2010 has occurred along the boundary in this area, affecting about 24 acres (less than 0.1% of the area) and was also determined to not be substantially noticeable.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Communication repeater on Big Baldy. There is a small building associated with this site.
Areas of mining activities including both abandoned and active mines	Past mining activities concentrated in areas outside of but next to the polygon. Abandoned mines scattered throughout the polygon.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately $\frac{3}{4}$ of a mile of fencing and 1 stock water tank within LB8.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps. Dispersed camping throughout the polygon. Motorized trails throughout.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Pipeline along northern boundary. No powerlines within the polygon but visible from the within the polygon.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.

Improvement type	Presence and extent of departure from naturalness
Lands adjacent to development or activities that impact opportunities for solitude	Obvious mining activity in the Carpenter Creek area as well as the Barker-Hughesville area.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are 55 recorded cultural resources within this polygon, all represent relics of past occupation.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.1 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	Twenty recorded historic routes (156 miles) are within this polygon.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 194. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	There are motorized trails throughout the entire polygon.
Area available for winter motorized opportunity	No groomed trails. From Lucy Park up to Pioneer Ridge and from Pioneer Ridge to Big Baldy are open for cross country snowmobile use.
Proximity to private lands and non-Forest Service roads	Private land inholding in North Fork of Hoover Creek. Private mining lands in Neihart Carpenter Creek and in the Barker-Hughesville area. Residential areas in the Neihart area. Western boundary formed by Highway 89.
Proximity to developed recreation sites outside of the polygon area	Bender Trailhead, Memorial Falls, Dry Wolf Campground, Dry Wolf rental cabin, Hoover Trailhead, Aspen Campground, and Many Pines Campground.

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 195. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Opportunities exist in places away from motorized trails throughout the polygon.
Primitive and semi-primitive non-motorized winter recreation	Majority of the area is available for primitive and semi-primitive nonmotorized recreation north of the snowmobiling along Lucy Park, Pioneer Ridge and Big Baldy in the south portion of the polygon. Jefferson Creek is a heavily used non-motorized winter recreation area that is surrounded by motorized use.



Measures	Descriptions and locations
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, horseback riding, fishing, hiking, cross country skiing, snowshoeing, back country skiing, snowmobiling, motorbike riding, ATV riding, and dispersed camping.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Big Baldy Area (LB8) is 49,068 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

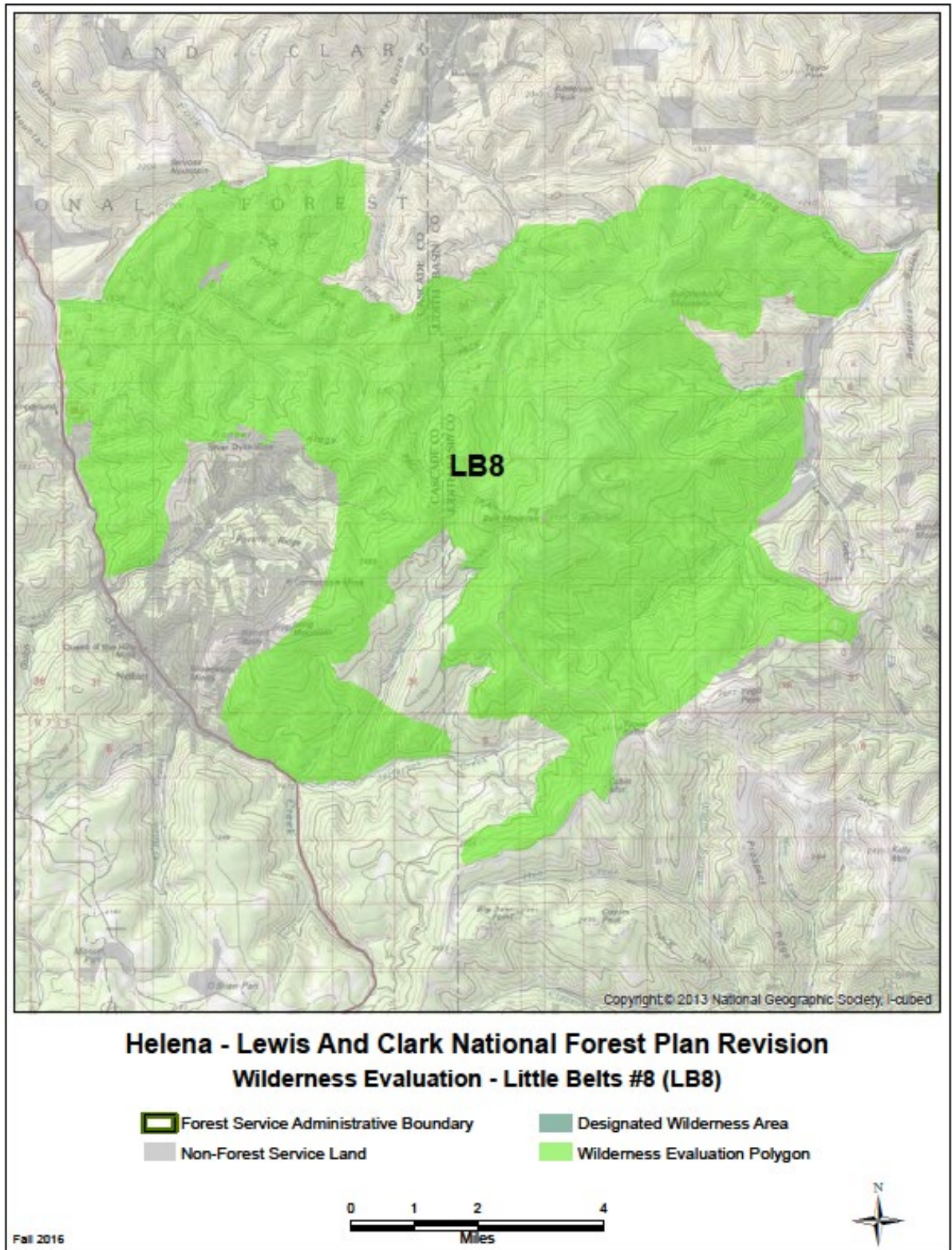
**Table 196. Features present**

Features	Description and scale
Rare plant communities	The potential plant species of conservation concern that are known to occur in this area include <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , <i>Botrychium spp.</i> , <i>Goodyera repens</i> , and <i>Cirsium longistylum</i> .
Rare animal species or communities	Federally listed species: transient lynx could be occasionally present, but area is not within or contiguous with areas occupied by lynx. Potential species of conservation concern and/or state at risk species: Townsend’s big-eared bat, black rosy finch, wolverine Several westslope cutthroat trout populations, see above.
Rare ecosystems	Whitebark pine is a candidate for listing under the ESA and is present in trace amounts in this area. Limber pine, ponderosa pine, and aspen are also vegetative communities of interest on the HLC NF and are present in small amounts in this area. Hoover Creek has high quality westslope cutthroat trout population.
Outstanding landscape features	Big Baldy, Memorial Falls
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational, or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	Hoover Creek has high water quality. Other steams not impacted by mining have high quality as well.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 197. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Very large, irregular shaped polygon extending from Highway 89 on the west to Dry Wolf Creek road on the east. Summit of the area is Big Baldy Mountain.
Legally established rights or uses within the area	Likely some related to mining.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	Superfund sites located adjacent to the polygon on the north and the south.
The presence and amount of non-Federal land in the area	Private land inholding in the North Fork of Hoover Creek.
Management of adjacent lands	Private mining lands in the Neihart-Carpenter Creek and Barker-Hughesville areas. Forest Service system lands surround the polygon. Private residential areas in Neihart, Carpenter Creek, and Dry Wolf areas.



### Eagle Creek Area (LB10)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 198. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The diversity of dominance types is relatively low in this area. Most of the area is covered by lodgepole pine dominated forests (62%), although Douglas-fir dominated forests are also common, growing on about 21%. Dry grasslands are found on 11%. Very small amounts (representing about 1% or less of the area each) of other dominance types are present, including shrublands, rock/scree, Engelmann spruce, and aspen.
Potential vegetation types	The most common potential vegetation types in this area include cool moist forest types (found on 47%) and warm dry forest types (found on 37%). Dry grassland potential types are also common (11%). Minor amounts of other potential vegetation types also occur, including shrubland and riparian types.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 7 acres within LB10 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: Roughly 1400 acres potential lynx habitat, with less than 200 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 4900 acres of goshawk potential nesting. Approximately 50 acres existing, and 4000 acres potential old growth habitat based on habitat type and aerial photo interpretation; occurs in patches of varying size.</p> <p>Nearly 4000 acres secure elk habitat. Moose may be present in riparian areas.</p> <p>Roughly 3600 acres elk calving habitat contiguous with additional calving habitat in WE polygon LB11 and other NF and non-NF land.</p> <p>Less than 30 acres potential wolverine habitat.</p> <p>No westslope cutthroat trout populations.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely present.

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 199. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	100% of this area is unaffected by past harvest according to available records.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.9% of LB10 is not associated with invasive plant inventories.

Measures	Outcome
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 79%, Class 2: 21% Area has heavy grazing impacts.
Miles of motorized road/trail within 300' of streams	0.40 miles
Noticeable wildfire suppression impacts	No fire occurrence records since 1980.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 200. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	There are no records of either past harvest or prescribed fire treatments in this area.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	None
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 1/2 mile of fencing and 4 stock water tanks within LB10.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps. Dispersed camping on the periphery of the polygon, especially on the north and east boundaries.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None present.
Presence of watershed treatment areas including contouring, diking, and channeling	None.
Lands adjacent to development or activities that impact opportunities for solitude	Private agricultural lands to the west, south, and north. These lands are used primarily for ranching and timber harvesting.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are four recorded cultural resources within this polygon, which represent relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	There are two recorded historic routes (9 miles).

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 201. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Entire polygon is non-motorized.
Area available for winter motorized opportunity	Entire polygon is open to snowmobiling but dense timber limits travel throughout the entire polygon.
Proximity to private lands and non-Forest Service roads	Private lands on the north, west, and south boundaries of the polygon.
Proximity to developed recreation sites outside of the polygon area	None.

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 202. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Entire polygon is available for primitive and semi-primitive non-motorized recreation in the summer.
Primitive and semi-primitive non-motorized winter recreation	Entire polygon is available for primitive and semi-primitive non-motorized recreation in the winter.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, hiking, horseback riding, fishing, snowmobiling, cross country skiing, outfitting for hunting, and mountain biking.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Eagle Creek Area (LB10) is 6,337 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 203. Features present**

Features	Description and scale
Rare plant communities	No potential plant species of conservation concern are known to occur in this area.
Rare animal species or communities	Federally listed species: transient lynx could be occasionally present, but area is not within or contiguous with areas occupied by lynx. Potential species of conservation concern and/or state at risk species: western toad No rare aquatic species.

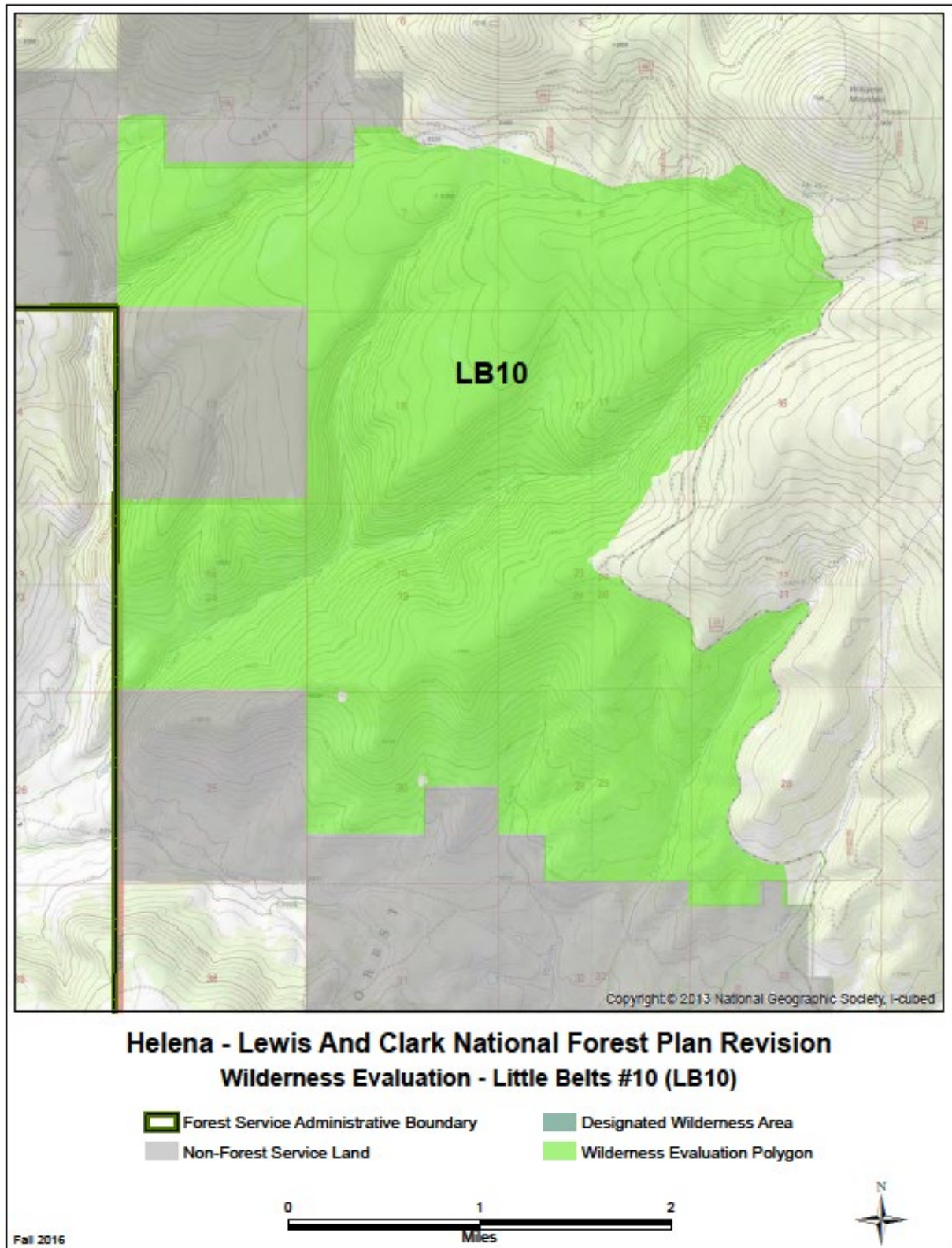


Features	Description and scale
Rare ecosystems	Aspen communities are of interest on the HLC NF due to their limited abundance and habitat importance; aspen is present in very small amounts in this area. No rare aquatic ecosystems.
Outstanding landscape features	No outstanding features.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	None.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 204. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Irregular polygon of moderate size. North, west and south sides are formed by private checkerboard ownership.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	Private lands surrounding on north, west, and south but no private land inholdings.
Management of adjacent lands	Private lands used for timber harvest, road building, and agriculture. Forest Service system lands on the east.



### Calf Creek Area (LB11)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 205. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance types in this area are lodgepole pine dominated forests, which cover about 68% of the area. Douglas-fir dominated types are also common and growing on about 22% of the area. Subalpine fir and Engelmann spruce mixed forests are found at higher elevations, on 5% of the area. Dry grasslands cover about 3%. Trace amounts of other dominance types are present, representing 1% or less of the area each: shrublands, rock/scree, whitebark pine, limber pine, and aspen.
Potential vegetation types	The most common potential vegetation types are the cool moist forest types, representing 67% of the area. Warm dry forest types make up about 28%. Xeric grassland and xeric shrubland potential types each are found on about 2%. Trace amounts of riparian types can also be found.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 31 acres within LB11 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: Roughly 3500 acres potential lynx habitat, with approximately 675 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 10,000 acres of goshawk potential nesting habitat. Approximately 700 acres existing, and 7000 acres potential old growth habitat based on habitat type and aerial photo interpretation; occurs in patches of varying size.</p> <p>Approximately 3500 acres secure elk habitat. Roughly 1600 acres elk calving habitat contiguous with additional calving habitat in WE polygon LB10 and other NF and non-NF land. Moose may be present in riparian areas.</p> <p>Approximately 2700 acres potential wolverine habitat.</p> <p>No westslope cutthroat trout populations.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely.

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 206. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	Records show that over 99.9% of this area is unaffected by past timber harvest. About 11 acres (0.08%) were impacted by harvests (salvage and clearcut) in 1957 and 1958.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.8% of LB11 is not associated with invasive plant inventories.

Measures	Outcome
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 9%, Class 2: 91% Grazing Impacts, motorized trails
Miles of motorized road/trail within 300' of streams	11.6 miles, motorcycle trails along Calf and Allan Creeks.
Noticeable wildfire suppression impacts	No fire suppression impacts evident on landscape.

Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?

**Table 207. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	The 11 acres of past harvest that occurred in this area in the 1950's affected 0.08% of the area and are no longer substantially noticeable due to the time that has passed. In addition, about 217 acres (1.72% of the area) have been impacted by prescribed fire treatments, consisting of underburns in 2012 and 2014. These treatments occurred near the southern boundary and were also determined to not be substantially noticeable due to their effects appearing similar to low severity wildfire.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	None
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 1/10 <sup>th</sup> of a mile of fencing within LB11.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps. Dispersed camping on the periphery of the polygon and dispersed camping along Moose Creek Road.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None present.
Presence of watershed treatment areas including contouring, diking, and channeling	None.
Lands adjacent to development or activities that impact opportunities for solitude	Polygon has several motorized trails that cross the middle of the polygon.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are 20 recorded cultural resources within this polygon, all represent relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.

Improvement type	Presence and extent of departure from naturalness
Number of miles of maintenance level 1 road templates.	0.4 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	There are 12 recorded historic routes (75 miles).

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 208. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Motorized trails throughout the polygon.
Area available for winter motorized opportunity	Entire polygon is open for snowmobile use.
Proximity to private lands and non-Forest Service roads	Private lands to the south have harvest activities and cattle grazing. No private inholdings in the polygon.
Proximity to developed recreation sites outside of the polygon area	Calf Creek Rental Cabin, Sheep Creek Fishing Access, Moose Creek Campground.

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 209. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation.	Two non-motorized trail segments in West Fork of Calf Creek and Cabin Creek. Primitive non-motorized recreation is limited.
Primitive and semi-primitive non-motorized winter recreation	Most of the polygon is available for snowmobiling. Trail in West Fork of Calf Creek is available for primitive non-motorized use.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, hiking, horseback riding, mountain biking, fishing, motorcycle use, dispersed camping and snowmobiling.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Calf Creek Area (LB11) is 12,598 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 210. Features present**

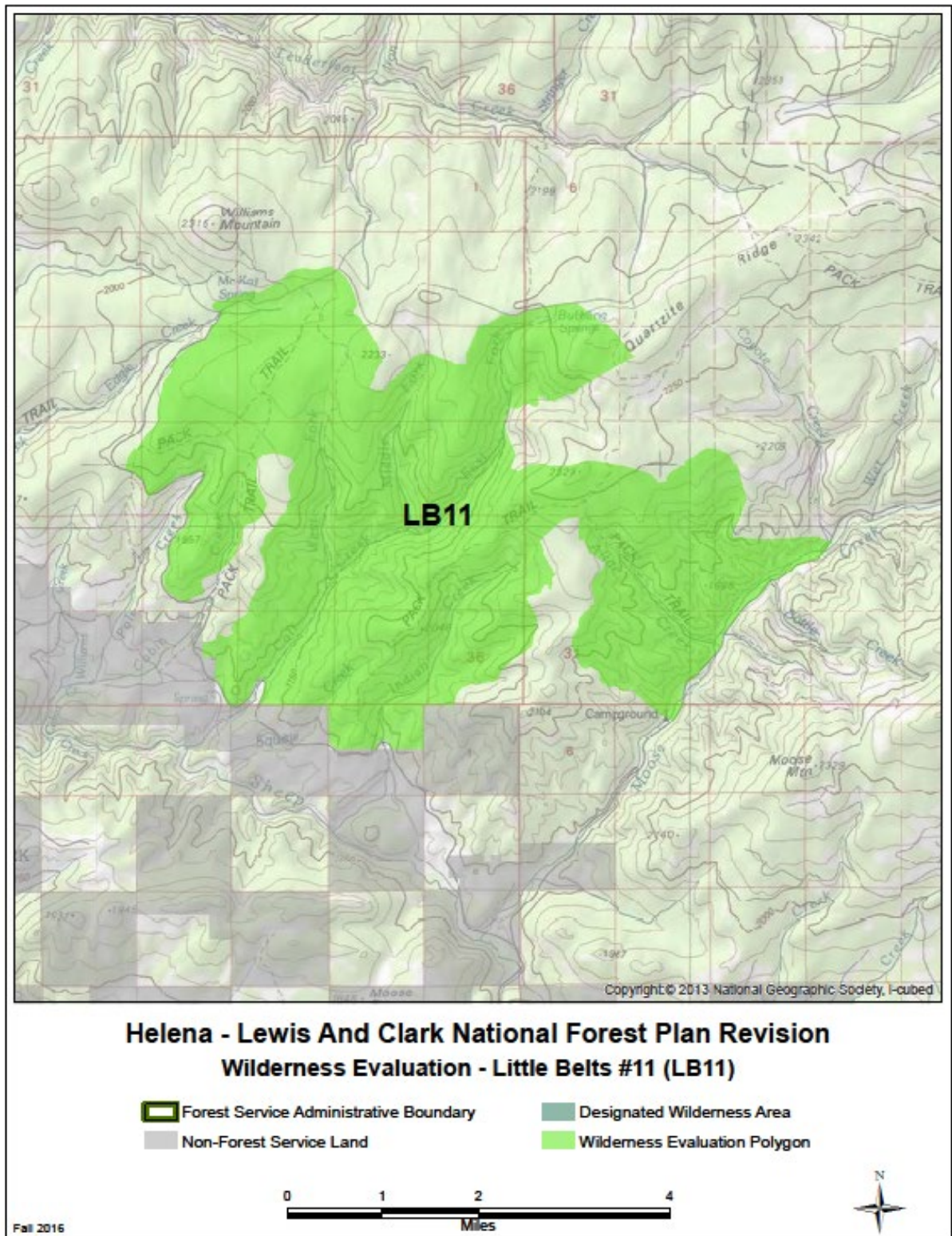
Features	Description and scale
Rare plant communities	The potential plant species of conservation concern that are known to occur in this area are <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , and <i>Agoseris lackschewitzii</i> .
Rare animal species or communities	Federally listed species: transient lynx could be occasionally present, but area is not within or contiguous with areas occupied by lynx. Potential species of conservation concern and/or state at risk species: wolverine. No rare aquatic species.
Rare ecosystems	Whitebark pine is a candidate species for listing under the ESA and may be present in trace amounts in this area. Ponderosa pine, limber pine, and aspen are all vegetative communities of interest on the HLC NF and are also present in very small amounts. No rare aquatic ecosystems.
Outstanding landscape features	Allen Park, Crescent Park, Williams Park
Historic and cultural resource sites	All recorded cultural resource within this polygon have the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	None.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 211. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Moderate sized irregular shaped polygon south of Tenderfoot Creek Experimental Forest in Calf Creek and Pole Creek. Substantially noticeable timber harvesting and road building make intrusions into the polygon area.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	Private lands to the south outside of the polygon. No private land inholdings.
Management of adjacent lands	Private lands to the south. Forest Service to the north, west, and east. Tenderfoot Creek Experimental Forest to the north.





## North Fork Smith Area (LB15)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 212. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance types in this area include subalpine fir and Engelmann spruce mixed forests, which cover about 34% of the area, and Douglas-fir dominated forests, which cover about 31%. Lodgepole pine forests are also found on 6%, and dry grasslands on 9%. A substantial portion – about 15% - of this area is considered “transitional”, where no dominance type is identified yet as forests are regenerating after a disturbance (the Ant Park fire). Whitebark pine forests are found on over 3% of this area. Other dominance types can be found in trace amounts – less than 1% of the area each – including shrublands and limber pine.
Potential vegetation types	The most common potential vegetation types are warm dry forest types, covering 46% of the area. Cool moist forest potential types are also common (39%), and cold forest types (where whitebark pine grows best) are found on about 5%. Dry grassland potential types are found on about 7% of the area. Other types that are present in small amounts include mesic grassland, mesic shrubland, and xeric shrubland potential types.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 2 acres within LB15 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: Roughly 2500 acres potential lynx habitat, with approximately 1700 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 3500 acres of goshawk potential nesting habitat, with some known nest territories. Both lynx and goshawk habitat of greatest value when in combination with similar habitat to SE, not in WE polygons. Approximately 400 acres existing, and 5400 acres potential old growth habitat based on habitat type and aerial photo interpretation; occurs in patches of varying size. Presence of boreal owl also indicates functioning mature, high elevation forest with complex structure in some areas.</p> <p>Approximately 4200 acres secure elk habitat. Roughly 300 acres elk calving habitat and less than 150 acres winter range contiguous with additional calving and winter habitat on adjacent non-NF land.</p> <p>Approximately 5000 acres potential wolverine habitat with roughly 540 acres of potential maternal habitat. Moose may be present in riparian areas.</p> <p>No westslope cutthroat trout populations.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely present.

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 213. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	100% of this area has been unaffected by past harvest, according to available records.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.9% of LB15 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2: 100%, but most impacts occur outside the polygon.
Miles of motorized road/trail within 300' of streams	0.2 miles
Noticeable wildfire suppression impacts	Lost Fork Fire (2001) & Ant Park Fire (2003): Dozer line rehabbed; dozer/hand lines in grass habitats/recovered; breaks in timber continuity in N. Fork Smith River & N. Fork Musselshell River.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 214. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	This area has been unaffected by harvest. However, about 207 acres (just over 2% of the area) have been affected by prescribed burning, consisting of underburning in 1997 and 1998, and less than an acre of pile burning in 2003. Due to the type of treatment and time since treatment, these treated areas were determined to be no longer substantially noticeable. More expansive treatment areas do exist adjacent to the polygon.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	None
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 4.6 miles of fencing within LB15.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No outfitter camps. Dispersed recreation areas around Spur Park, Ant Park, along FSR 47 on the eastern boundary, and along the northern boundary of the polygon.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Two Dot powerline forms the east and northeast boundary.
Presence of watershed treatment areas including contouring, diking, and channeling.	None

Improvement type	Presence and extent of departure from naturalness
Lands adjacent to development or activities that impact opportunities for solitude	None present.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Ant Park Warming Hut. There are 4 recorded cultural resources within this polygon, all represent relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	3.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	One recorded historic routes (6miles) lies within this polygon.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 215. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	No motorized trails within the polygon.
Area available for winter motorized opportunity	Entire polygon available for snowmobiling.
Proximity to private lands and non-Forest Service roads	Private lands and BLM parcels to the south.
Proximity to developed recreation sites outside of the polygon area	Ant Park Warming Hut.

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 216. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The entire polygon is available for primitive and semi-primitive non-motorized recreation in the summer.
Primitive and semi-primitive non-motorized winter recreation	The entire polygon is available for primitive and semi-primitive non-motorized recreation in the winter, but cross-country snowmobiling is allowed but use is limited due to heavy timber.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, hiking, fishing, and snowmobiling.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The North Fork Smith Area (LB15) is 9,817 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 217. Features present**

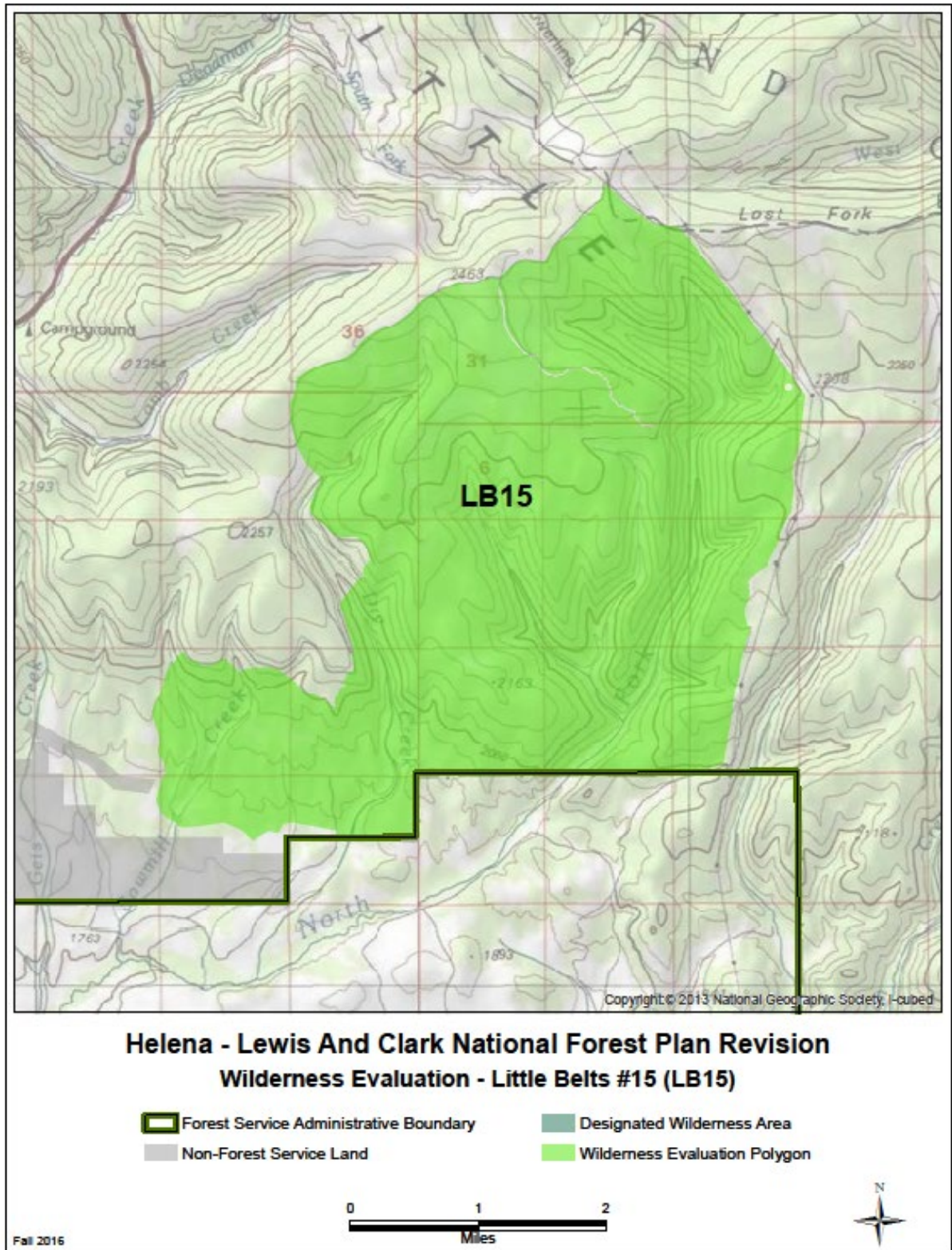
Features	Description and scale
Rare plant communities	The potential plant species of conservation concern that are known to occur in this area include <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , <i>Cirsium longistylum</i> , and <i>Phlox kelseyii</i> var. <i>Missoulensis</i> .
Rare animal species or communities	Federally listed species: transient lynx could be occasionally present, but area is not within or contiguous with areas occupied by lynx. Potential species of conservation concern and/or state at risk species: western toad. No rare aquatic species.
Rare ecosystems	Whitebark pine is a candidate species under the ESA and is present in this area. Limber pine communities are also of interest on the HLC NF and are found in small quantities. No rare aquatic ecosystems.
Outstanding landscape features	None present.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	Very little water in polygon. Large spring (head of NF Smith) is on edge of polygon, but stream is dry within polygon.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 218. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Smaller polygon in the upper end of the North Fork of Smith Creek.
Legally established rights or uses within the area	Two Dot electrical line.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	None present.
Management of adjacent lands	Forest Service system lands on north, west and east. Private lands and BLM on the south.







## Middle Fork Judith Area (LB16)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 219. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance types in this area consist of Douglas-fir dominated forests which can be found on about 41% of the area. Subalpine fir and Engelmann spruce mixes are also common, growing on over 22%. Lodgepole pine forests dominate about 15%. Dry grasslands are the next most common and are found on about 8% of the area. Limber pine forests are present on nearly 6%. Other dominance types are present in very small amounts – covering 1% or less of the area each – including shrublands, ponderosa pine, rock/scree, and whitebark pine. Although several large fires have occurred in this area over the years, only 2% are still considered in “transition” (or regenerating).
Potential vegetation types	This area is dominated by cool moist forest potential vegetation types, which are found on 55% of the area and likely to support lodgepole pine, subalpine fir, and Engelmann spruce along with Douglas-fir. About 33% of the area has warm dry forest potential types, where Douglas-fir is also common. About 7% of the area has a dry grassland potential type, and nearly 2% has a cold forest type where whitebark pine is most likely to grow. Small amounts of other potential vegetation types are present, including shrubland and riparian types.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 104 acres within LB16 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: 46,000 acres potential lynx habitat, with approximately 34,000 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 50,000 acres of goshawk potential nesting habitat, with some known nest territories. Both lynx and goshawk habitat of greatest value when in combination with similar habitat to SE, not in WE polygons. Approximately 19,000 acres existing and over 40,000 acres potential old growth habitat based on habitat type and aerial photo interpretation; occurs in patches of varying size.</p> <p>Approximately 57,000 acres secure elk habitat. Roughly 17,000 acres elk calving habitat and less than 1200 acres winter range contiguous with additional calving and winter habitat on adjacent non-NF land. Moose may be present in riparian areas.</p> <p>Functioning subalpine/alpine habitat: Approximately 41,000 acres potential wolverine habitat with roughly 5700 acres of potential maternal habitat. Black rosy finches documented. Westslope cutthroat trout populations in Elk, Yogo, WF Stiner, Corral, Harrison, Cleveland, and Weatherwax Creeks and Lost Fork Judith River.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native fish likely present.

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 220. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	Over 99% of the area is unaffected by past timber harvest. Records indicate that about 199 acres have been harvested in the past, consisting of commercial thinning, salvage, shelterwood, and clearcutting activities that occurred from 1958 to 1985.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.9% of LB16 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 25%, Class 2: 50%, Class 3: 25%; Lower Middle Fork Judith River (and watershed) heavily impacted by road crossings and grazing. Upper Watershed, Cleveland Creek, high quality.
Miles of motorized road/trail within 300' of streams	27.8 miles
Noticeable wildfire suppression impacts	<p><i>Sandpoint fire (1985) &amp; Russian Flats Fire (2008):</i> All dozer/handlines rehabbed; breaks in timber continuity; old rotten stumps from fireline suppression efforts.</p> <p><i>Lost Fork Ridge Fire (2000):</i> Dozerline rehabbed; dozer/hand lines in grass habitats/recovered; breaks in timber continuity in W. Fork Lost Fork Creek, Burris and Sandpoint Creek.</p> <p><i>Lost Fork Fire (2001):</i> Dozerline rehabbed; dozer/hand lines in grass habitats/recovered; breaks in timber continuity in N. Fork Smith River &amp; N. Fork Musselshell River.</p> <p><i>Ant Park (2003):</i> Dozerline rehabbed; 200' wide fuel break created by fellerbuncher and 100% timber removed within corridor; breaks in timber continuity. Powerline ROW clearing. Hazardous tree harvest along road to N.fork Smith River and where ties in with Sandpoint fire scar.</p>

Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?

**Table 221. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	Russian Flats Airstrip not in but south of the polygon.
Presence of timber harvest or prescribed fire areas	Past harvest has impacted less than 1% of the area (199 acres) from 1958 to 1985 – due to the time since treatment and/or type of treatment, these areas have been determined to not be substantially noticeable today. Additional areas (about 414 acres) have been impacted by prescribed burning treatments as well, consisting primarily of pile burning from 1982 to 2003.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	A few abandoned mines on north and west side of polygon.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements	According to current data there is approximately 1/10 <sup>th</sup> of a mile of fencing and 7 stock water tanks within LB16. In addition, there have been 321 acres of vegetation improvements conducted

Improvement type	Presence and extent of departure from naturalness
(chaining, burning, spraying, potholing, and so forth)	within LB16.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Two outfitter camps on Forest Service; both within the Lost Fork Judith. Dispersed camping scattered throughout.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Two Dot electrical line borders the polygon on the southwest side.
Presence of watershed treatment areas including contouring, diking, and channeling	None
Lands adjacent to development or activities that impact opportunities for solitude	Motorized roads and trails on the north side of the polygon including: Woodchopper Ridge trail, Kelly Mountain trail and Middle Fork Judith road. Private land in the middle of the polygon. Additional motorized trails and use on the periphery of the polygon.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Burris Cabin in Lost Fork Judith Creek. There is approximately 84 recorded cultural resources within this polygon, all represent relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	There are 21 recorded historic routes (97 miles) within this polygon.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 222. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Motorized trails limited to the northeast portion of the polygon. Open road to private lands in the Middle Fork Judith drainage.
Area available for winter motorized opportunity	Open to snowmobile use in the outer 1-mile perimeter of the polygon. Core of the polygon is closed to snowmobile use.
Proximity to private lands and non-Forest Service roads	Private land inholdings within the core of the polygon. Private lands in the Grendah Mountain and Yogo Peak areas.
Proximity to developed recreation sites outside of the polygon area	Judith Guard Station cabin rental, Judith Campground. Holiday Camp Trailhead, Indian Hill Campground, Hay Canyon Campground, Dry Pole Campground, Musselshell Warming Hut, Bear Gulch SST, recreation residences in Middle Fork Judith and on Sandpoint Ridge.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 223. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Majority of the area is available for primitive and semi-primitive non-motorized recreation in summer.
Primitive and semi-primitive non-motorized winter recreation	Majority of the area is available for primitive and semi-primitive non-motorized recreation in winter.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Horseback riding, fishing, hunting, mountain biking, motorcycle riding, ATV riding, dispersed camping, cross country skiing, snowshoeing outfitting in the fall, and snowmobiling along the periphery.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Middle Fork Judith Area (LB16) is 98,311 acres. This area is also a wilderness study area.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

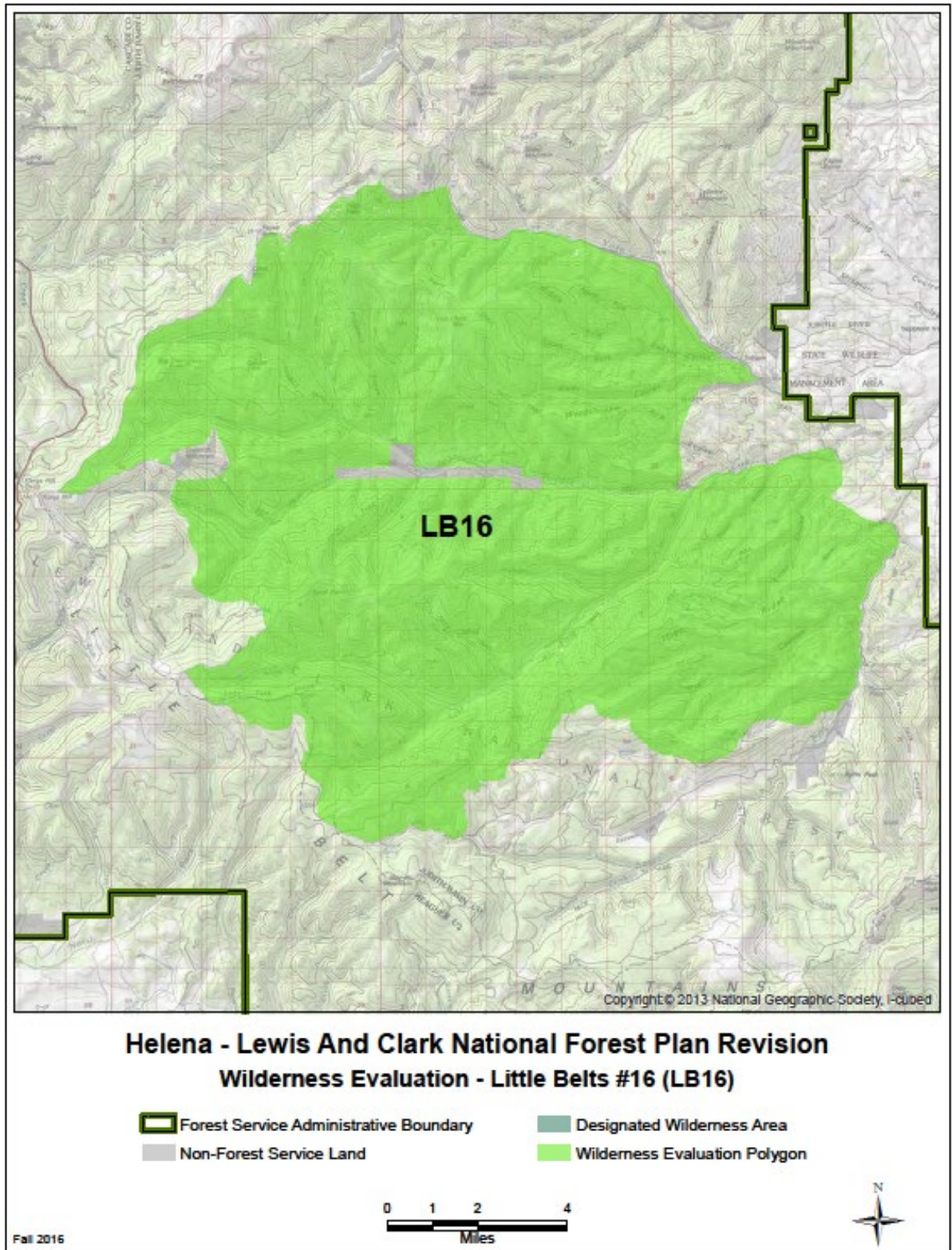
**Table 224. Features present**

Features	Description and scale
Rare plant communities	The potential plant species of conservation concern that are known to occur in this area include <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , <i>Phlox kelseyii</i> var. <i>Missoulensis</i> , <i>Goodyera repens</i> ; <i>Cirsium longistylum</i> , and <i>Aquilegia brevistyla</i> .
Rare animal species or communities	Federally listed species: Transient lynx could be occasionally present, but area is not within or contiguous with areas occupied by lynx. Potential species of conservation concern and/or state at risk species: wolverine, black rosy finch, western toad, dwarf shrew Multiple drainages with westslope cutthroat trout populations, see above.
Rare ecosystems	Whitebark pine is a candidate species under ESA and is present in small amounts in this area. Limber pine forests are more extensive here and are a vegetative community of interest on the HLC NF. No rare aquatic ecosystems known
Outstanding landscape features	Middle Fork Judith River, Yogo Peak is on the northern boundary.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	Upper watershed/ Cleveland Creek high quality. Middle and South Fork (on southeast boundary of polygon) Judith River on list of potentially eligible WSRs. Both streams are listed for outstanding cultural values, and the South Fork is also listed for the outstanding westslope cutthroat trout fishery.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 225. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	This large polygon takes in the upper most reaches of the Middle Fork of the Judith River. There are some private land inholdings within the center of the polygon but otherwise very little development.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	Majority of the area is designated the Middle Fork Judith Wilderness Study Act area.
The presence and amount of non-Federal land in the area	Private land inholdings in the center of the polygon. Private lands in the Grendah Mountain and Yogo Peak area.
Management of adjacent lands	Polygon surrounded by Forest Service system lands. Judith River State Wildlife Management area outside of the polygon to the northeast.





## East Little Belts Area (LB18)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 226. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance types in this area are forests dominated by Douglas-fir, which cover over 42% of the area. Roughly 21% of the area has lodgepole pine dominated forest cover, and subalpine fir and Engelmann spruce mixes are found on 15%, at the higher elevations. Limber pine dominated forests also represent a fairly substantial amount of the area (over 13%), and dry grasslands are present on about 4%. Trace amounts (generally covering 1% or less of the area each) of other dominance types are also present, including shrublands, ponderosa pine, whitebark pine, and juniper. Nearly 2% is considered sparsely vegetated (i.e., scree or rock).
Potential vegetation types	The most common potential vegetation types are warm dry forest types, representing over 56% of the area. These sites likely support most of the ponderosa pine, limber pine, and Douglas-fir forests described above. Cool moist forest potential vegetation types are also common, on 38% of the area, and likely correspond to the lodgepole pine, subalpine fir, and Engelmann spruce forests. Dry grassland types are found on about 3%. Trace amounts of other potential vegetation types are also present, including cold forest (where whitebark pine may be found), shrubland, and riparian types.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 1,369 acres within LB18 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: 37,000 acres potential lynx habitat, with approximately 21,000 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 58,000 acres of goshawk potential nesting habitat, with some known nest territories. Approximately 6500 acres existing and over 50,000 acres potential old growth habitat based on habitat type and aerial photo interpretation; occurs in patches of varying size. Clark’s nutcracker presence indicates mature whitebark, limber, and/or ponderosa pine communities.</p> <p>Approximately 36,000 acres secure elk habitat. Roughly 5700 acres elk calving habitat and 11,000 acres winter range contiguous with additional calving and winter habitat on adjacent non-NF land. Moose may be present in riparian areas.</p> <p>Functioning subalpine/alpine habitat: Approximately 25,000 acres potential wolverine habitat with roughly 900 acres of potential maternal habitat.</p> <p>No westslope cutthroat trout populations.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely present.

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 227. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	About 99.9% of this area has had no past timber harvest. Roughly 102 acres were affected by past harvest according to available records, consisting of commercial thinning, salvage cutting, and single-tree selection cutting that occurred from 1960 to 1993.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 98.7% of LB18 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 36%, Class 2: 62%, Class 3: 2% Impacts are primarily motorized trails and grazing.
Miles of motorized road/trail within 300' of streams	105 miles
Noticeable wildfire suppression impacts	No fire suppression impacts evident on landscape.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 228. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	In addition to the 102 acres of past harvest (0.1% of the area), consisting of commercial thinning, salvage cutting, and single-tree selection cutting that occurred from 1960 to 1993, there have also been about 1,514 acres (1.43% of the area) of prescribed fire treatments in this area. The fire treatments consisted of broadcast burning, jackpot burning, and underburning from 1963 to 2015. 98.48% of the area remains unaffected by vegetation treatments. Due to the time since treatment and/or the type of treatment (fire), none of the treatments within the evaluation boundary are considered to be substantially noticeable. The treatments are generally clustered in one area (near Jellison Place) and could be excluded from the polygon if desired.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Communication sites on Mount High and one on Stevens Butte. Mount High has a small building. The site on Steven Butte has a large cinder block building and towers with evidence of old electrical lines.
Areas of mining activities including both abandoned and active mines	There are a few abandoned mines on the west end of the polygon.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 4 miles of fencing and 15 stock water tanks within LB18.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Outfitter camps in Jellison Place and Antelope Gorge. Dispersed camping throughout.

Improvement type	Presence and extent of departure from naturalness
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Old electrical lines to Stevens Butte communication site.
Presence of watershed treatment areas including contouring, diking, and channeling	None
Lands adjacent to development or activities that impact opportunities for solitude	Heavy dispersed recreation on the southern and western borders of the polygon. Motorized trails throughout the polygon.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Stevens Butte building. Buildings associated with Lucky Boy mine in Basin Creek. There are approximately 60 recorded cultural resources within this polygon, all represent relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.4 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	There are 16 recorded routes (67 miles) within this polygon.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor's opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 229. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	The entire polygon has authorized motorized jeep, ATV and motorcycle trails for summer recreational use.
Area available for winter motorized opportunity	Southern portion of the polygon is open for snowmobile motorized use. Bartleson RNA is closed for winter motorized use.
Proximity to private lands and non-Forest Service roads	Private agriculture lands on the northern, eastern and southern boundaries of the polygon.
Proximity to developed recreation sites outside of the polygon area	Jellison Place Trailhead and Campground, Basin Creek, Spring Creek Campground, Daisy Dean Campground and Trailhead, Haymaker dispersed site, Dry Pole dispersed site, Pierce Park Trailhead.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 230. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	There are limited opportunities for primitive and semi-primitive non-motorized recreation in the summer.
Primitive and semi-primitive non-motorized winter recreation	The northern portion of the polygon has some opportunity for primitive and semi-primitive non-motorized recreation in the winter.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, horseback riding, fishing, hiking, snowmobiling, motorbike riding, ATV riding, jeep trail/UTV riding and dispersed camping.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The East Little Belts Area (LB18) is 106,178 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 231. Features present**

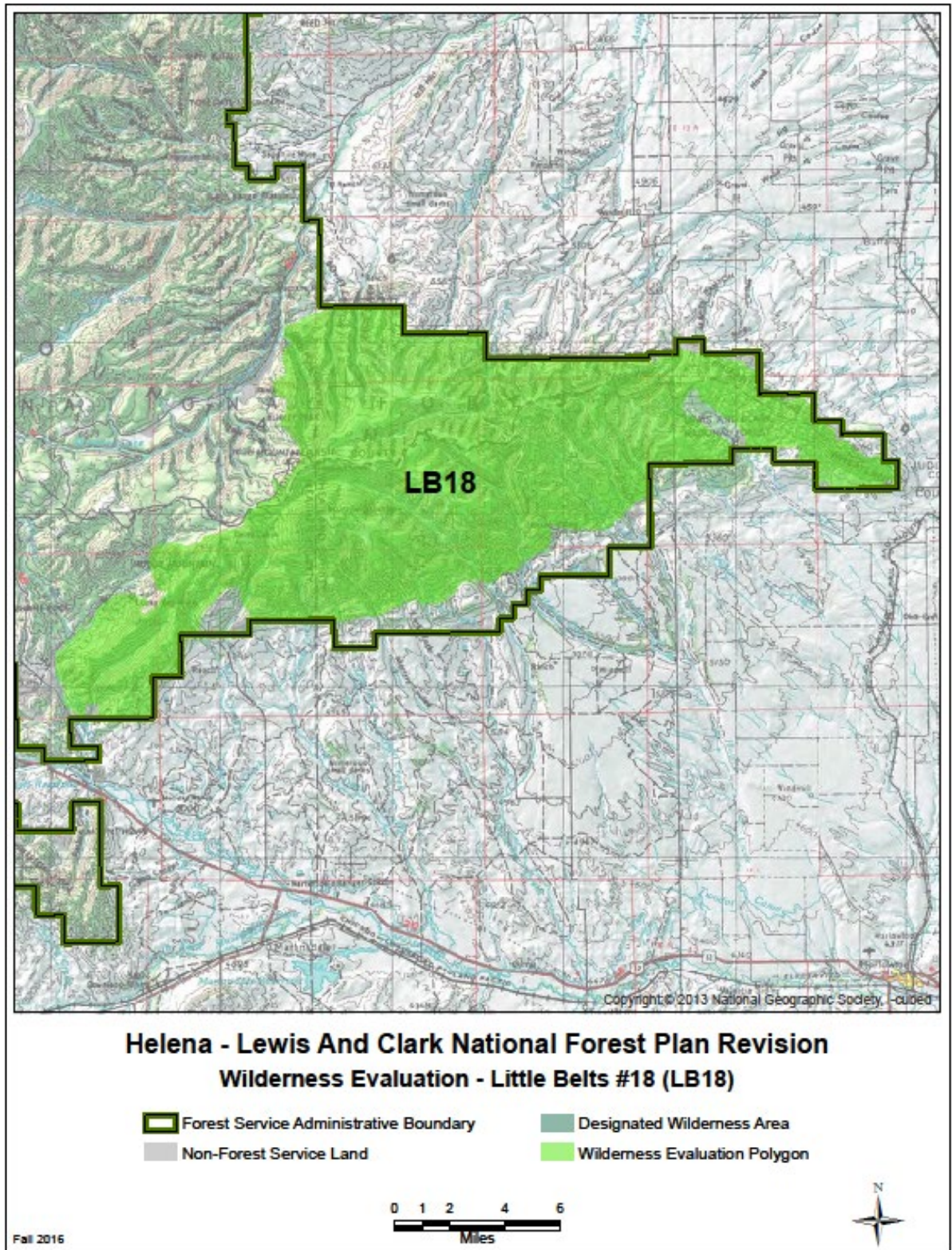
Features	Description and scale
Rare plant communities	The potential plant species of conservation concern that are known to occur in this area include <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , <i>Aquilegia brevistyla</i> , <i>Goodyera repens</i> , <i>Cirsium longistylum</i> , and <i>Polygonum douglasii</i> spp. <i>Austinae</i> .
Rare animal species or communities	Federally listed species: Transient lynx could be occasionally present, but area is not within or contiguous with areas occupied by lynx. Potential species of conservation concern and/or state at risk species: none documented. No rare aquatic species present.
Rare ecosystems	Whitebark pine is a candidate species for listing under the ESA and is present in trace amounts in this area. Limber pine communities are also of interest on the HLC NF because they are generally rare and under consideration as a potential SCC; this forest type is present in relatively high abundance in this area, as are the characteristic rocky, limestone ridges where it thrives. No rare aquatic ecosystems present.
Outstanding landscape features	Daisy Notch, Morrisy Narrows, Haymaker Narrows, Nevada Narrows, Daisy Narrows
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational or historic value.
Research natural areas	Bartleson Peak
High quality water resources or important watershed features	None

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 232. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	A large linear shaped polygon that stretches from Dry Pole Canyon/Daisy Peak east to the Forest Service boundary in Roberts Creek. The polygon includes both sides of the divide between the Musselshell and Judith Ranger Districts.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	Haymaker WMA is located south and outside of the polygon.
The presence and amount of non-Federal land in the area	Private lands surround the polygon but no private land inholdings.
Management of adjacent lands	Private agriculture lands on the norther, eastern and southern boundaries of the polygon. Forest Service system lands along portions of the southern boundary as well as the western boundaries. BLM lands along the northern boundary.







## Rocky Mountain Range Geographic Area

### Badger Two Medicine Area (RM1)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 233. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance types in this area include Douglas-fir dominated forests (covering about 22%); lodgepole pine dominated forests (covering 15%), and subalpine fir and Engelmann spruce mixed forests (covering 24%). There is a substantial amount of the area that is sparsely vegetated (14%), due to rocky and cliffy areas; and about 7% is covered by grasslands. In addition, a substantial proportion of the area (15%) is considered to be “transitional” in terms of vegetation due to recent wildfire activity. In these areas, forests will likely regenerate but are not yet typed. The recent fires include the Skyland, Challenge Creek, and Family Peak fires which affected more than half of the area. Trace amounts of other dominance types are also present, including shrublands, whitebark pine, limber pine, cottonwood, and aspen.
Potential vegetation types	The area is dominated by cool moist forest potential vegetation types, which are found on about 52% and likely support mixes of Douglas-fir, lodgepole pine, subalpine fir, and Engelmann spruce. About 22% of the area has a warm dry forest potential vegetation type, where Douglas-fir is also common. About 4% of the area has a cold forest potential type, where whitebark pine is most likely to be found. Dry grassland types make up about 4%, and mesic grasslands about 2%. The sparsely vegetated areas (14%) do not have a potential vegetation type. Trace amounts of shrubland and riparian potential types are also present.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 2,596 acres within RM1 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: 55,000 acres potential lynx habitat, with approximately 17,000 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type. Roughly 28,000 acres of goshawk potential nesting habitat, at least 3 known nesting territories.</p> <p>Big game: Approximately 120,000 acres secure elk habitat. 24,000 acres elk winter range and 9500 acres elk calving habitat, both tied to similar on adjoining Blackfeet Indian Reservation. Moose present. Up to 60,000 acres mountain goat habitat including kidding areas</p> <p>Functioning subalpine/alpine habitat: Roughly 84,000 acres of potential wolverine habitat including 46,000 acres potential maternal habitat.</p> <p>Grizzly bears, wolves present.</p> <p>Harlequin ducks in most major streams.</p> <p>Westslope cutthroat trout present in South Fork Two Medicine River and tributaries as well as North Badger, Lee, Badger Cabin, Red Poacher, South Badger, Lonesome, Muskrat, and</p>

Plant and animal communities	Composition
	Elbow Creeks. The South Badger and tributaries portion is a meta-population.
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely.

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 234. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	Over 99.8% of the area has been unaffected by past timber harvest. Available records show that about 224 acres were harvested in the past, consisting of commercial thinning and single-tree selection in 1987 and a patch clearcut in 2002.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 97.9% of RM1 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 85%, Class 2: 15%; All impacts are downstream of the polygon
Miles of motorized road/trail within 300' of streams	2.3 miles
Noticeable wildfire suppression impacts	Skyland Fire (2007) & Family Peak Fire (2015): Dozer and hand lines rehabbed, some still evident on landscape on northeastern boundary of fire perimeter.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 235. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present
Presence of timber harvest or prescribed fire areas	Over 99% of the area has been unaffected by past vegetation treatments. In addition to the 224 acres of harvest that occurred, about 17 acres were affected by pile burning. None of these treatments are considered substantially noticeable. Substantial recover time has occurred since the thinning and selection treatments which left ample reserve trees. A patch clearcut would typically be considered noticeable, but aerial imagery and District expertise determined that this treatment was also not noticeable. There may have been other historic treatments in the area, or the exercising of tribal rights related to harvest, which are not recorded in the available data.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Electronic site on Mount Baldy and Half Dome Crag are visible from within RM1.
Areas of mining activities including both abandoned and active mines	One abandoned mine in Muskrat Creek.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	Fences in the northern and eastern part of the parcel.

Improvement type	Presence and extent of departure from naturalness
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	One active outfitter base camp at the confluence of Benson and Two Medicine River. Summit Campground and Trailhead along Highway 2 (not touching the polygon). There is a trail access point at Palookaville.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Utility corridor along Highway 2 but is outside of polygon. None within polygon.
Presence of watershed treatment areas including contouring, diking, and channeling	None known
Lands adjacent to development or activities that impact opportunities for solitude	Railway, utility corridor, and campground along Highway 2. Electronic site on Mount Baldy which is access by SUP road.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are 69 recorded cultural resources within this polygon, all represent relics of past occupation. The Badger-Two Medicine Traditional Cultural District is also within this polygon.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.1 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	Twenty-four recorded historic routes (122 miles) are within this polygon. Most of these routes are historic trails.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 236. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	There are no areas available for summer motorized recreation in this polygon.
Area available for winter motorized opportunity	There are no areas available for winter motorized recreation in this polygon
Proximity to private lands and non-FS roads	Private land inholdings on the north and east.
Proximity to developed recreation sites outside of the polygon area	Summit Campground, Summit TH, False Summit, and Lubec TH along Highway 2. Can hear these activities from within the polygon. Can hear the train from the Badger Cabin.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 237. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The entire polygon is available for primitive and semi-primitive non-motorized summer recreation.
Primitive and semi-primitive non-motorized winter recreation	The entire polygon is available for primitive and semi-primitive non-motorized winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, outfitting, horseback riding, hiking, fishing, mountain biking (not specifically designed), cross country skiing in the north end. Unauthorized snowmobiling occurring in Pool Creek and Crescent Cliffs.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Badger Two Medicine Area (RM1) is 125,795 acres. This area lies adjacent to the Bob Marshall wilderness complex to the west.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Table 238. Features present**

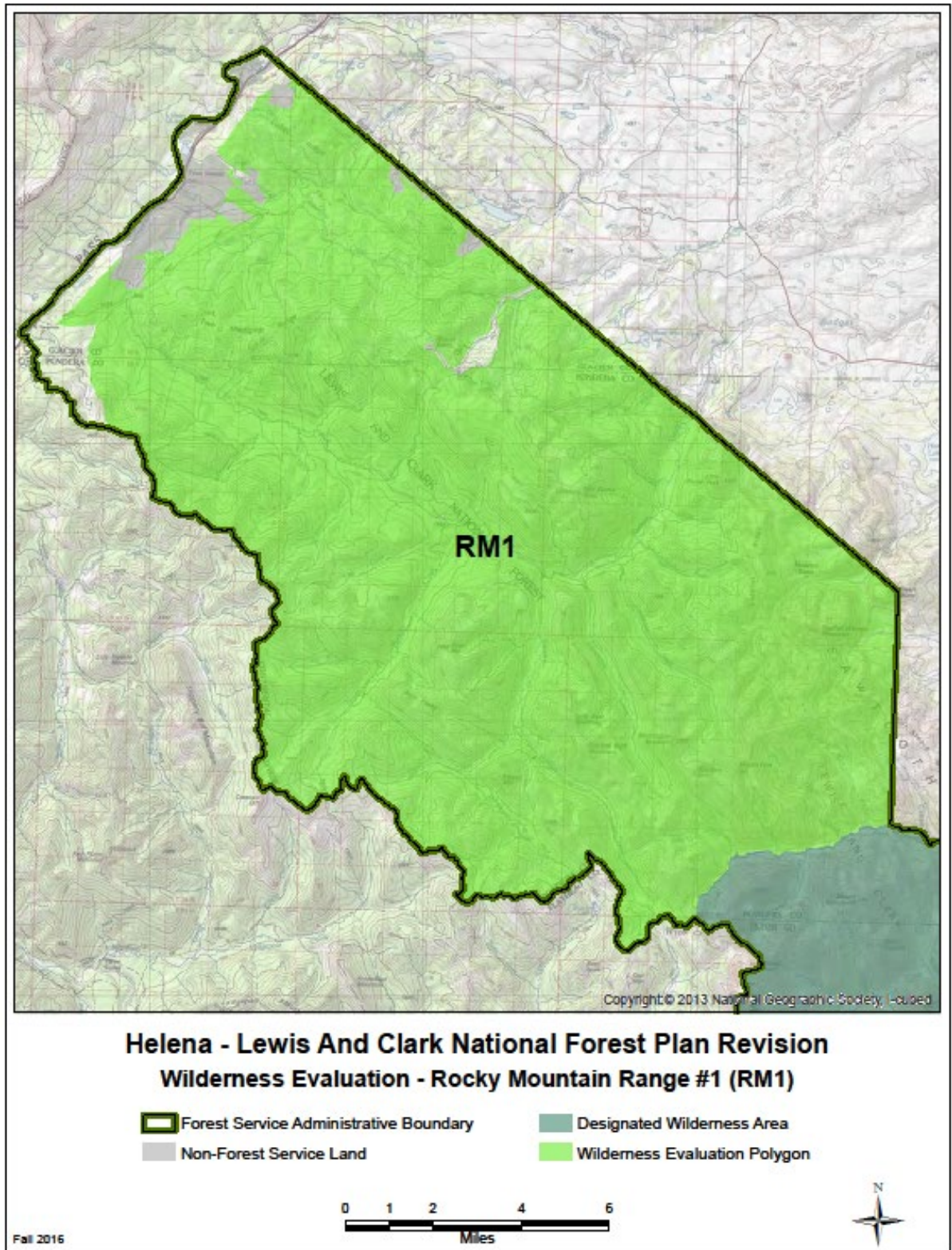
Features	Description and scale
Rare plant communities	The potential plant species of conservation concern that are known to occur in this area include <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , <i>Polygonum douglasii</i> spp. <i>Austinae</i> , <i>Saussurea densa</i> , <i>Potentilla nivea</i> var. <i>pentaphylla</i> , <i>Physaria saximontana</i> var. <i>Dentate</i> , Northern wildrye, <i>Cypripedium passerinum</i> , <i>Antennaria pulvinata</i> , and <i>Allium fibrillum</i> .
Rare animal species or communities	Federally listed species: grizzly bear (within Recovery Zone and proposed Primary Conservation Area), Canada lynx (within designated Critical Habitat). Potential species of conservation concern and/or state at risk species: wolverine, harlequin duck, western toad, possibly transient fisher, possibly white-tailed ptarmigan. Westslope cutthroat trout populations, see above.
Rare ecosystems	A relatively long list of potential plant SCC's are found here. Whitebark pine is a candidate species for listing under the ESA and is found in trace amounts. Westslope cutthroat trout meta-population in Badger Creek and tributaries.
Outstanding landscape features	Waterfalls and river canyons on Badger Creek and Two Medicine River. Scenic river drainages in Two Medicine River, Badger, and North Fork Birch Creek (WSR). Really high subalpine and alpine mountains along the southern portion of the polygon. Unique place names such as Kill 'em Quick Creek and adopted native names for mountains in there.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational, or historic value, especially the Badger-Two Medicine Traditional Cultural District.
Research natural areas	None present.
High quality water resources or important watershed features	High quality water throughout polygon, high quality fisheries habitat. North Badger Creek and 3 tributaries (Lee Creek, Red Poacher Creek and Badger Cabin Creeks) are included on the

Features	Description and scale
	draft list of eligible WSRs for their outstanding westslope cutthroat trout meta-population. South Fork Two Medicine, North Fork and South Fork Badger, and North Fork Birch Creeks are all included on the draft list of eligible WSRs for their outstanding cultural values.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 239. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	The Badger Two Medicine is a large, well known landscape at the northern tip of the Rocky Mountain Ranger district. It borders the Bob Marshall Wilderness complex as well as the Blackfoot Reservation and is influenced by private lands and activity along the Highway 2 corridor along the northern boundary.
Legally established rights or uses within the area	The 1895 Agreement with Blackfeet Nation concerning the ceded strip which gives rights to value of ceremonial, spiritual and personal use. There are 4 oil and gas lease holders with 19 leases predominantly within the northwest half of the area.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	National Systems Trails Act (CDNST)
The presence and amount of non-Federal land in the area	Private land inholdings on the north end and along the reservation boundary.
Management of adjacent lands	Bob Marshall Wilderness Complex to the south and southwest on both the Flathead and the HLC NF. Flathead NF lands are non-wilderness to the west. Glacier Park to the northwest. Blackfeet Reservation land on the east and northeast.





## Teton Blackleaf Area (RM2)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 240. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance types in this area include Douglas-fir dominated forests, which are found on 32% of the area, and subalpine fir and Engelmann spruce forests, which are found on 25%. Lodgepole pine forests are less common, covering about 5%, and grasslands can also be found on about 7%. A notably high proportion of this area is sparsely vegetated (20%), such as cliffy rocky areas. In addition, about 10% of the area is “transitional”, meaning that the site is reforesting after a disturbance and doesn’t have a vegetation type yet. These areas are associated with recent wildfire areas, primarily the Fool Creek fire. Small amounts of other dominance types are also present, generally making up about 1% or less of the area each: shrublands, whitebark pine, limber pine, cottonwood, and aspen.
Potential vegetation types	The most common potential vegetation types in this area are warm dry forest potential types and cool moist forest types (each found on about 33% of the area). Much of the remainder of the area is covered by sparsely vegetated areas (rock/scree often found above treeline and making up 20% of the area). Cold forest potential types are also found on about 6%, where whitebark pine would most likely be found, and dry grassland types represent nearly 5%. Riparian potential types are found on about 2%, where aspen and cottonwood are most likely to be found. Trace amounts of shrubland types are also present.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 601 acres within RM2 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: 19,000 acres potential lynx habitat, with approximately 5300 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type. Roughly 9,000 acres of goshawk potential nesting habitat, at least 3 known nesting territories. Presence of Clark’s nutcracker indicating mature whitebark and/or limber pine.</p> <p>Big game: Approximately 40,000 acres secure elk habitat. 11,000 acres elk winter range part of which adjoins state managed Blackleaf and Ear Mountain Wildlife Management Areas; and 7900 acres elk calving habitat. Moose present adjoins key moose winter habitat in Pine Butte Swamp Preserve (owned by The Nature Conservancy). Up to about 35,000 acres mountain goat habitat including kidding areas; up to 13,000 acres bighorn sheep habitat including about 2200 acres lambing habitat.</p> <p>Functioning subalpine/alpine habitat: Roughly 31,000 acres of potential wolverine habitat including 3900 acres potential maternal habitat.</p> <p>Grizzly bears, wolves present.</p> <p>Harlequin ducks in most major streams.</p>

Plant and animal communities	Composition
	Habitat for cliff-nesting raptors, including peregrine falcon, golden eagle, prairie falcon. Westslope cutthroat trout in NF and SF Dupuyer, North Fork, Middle Fork, and South Fork Teton Creeks, Green Gulch, Rierdon Gulch, and Waldron, SF Waldron Creeks
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Likely non-native trout present.

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 241. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	About 96.6% of this area has been unaffected by previous harvest. Available records show that about 1,891 acres have been harvested from 1982 to 1999. The most common treatment was the creation of fuel breaks.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 98.9% of RM2 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 84%, Class 2: 9%, Class 3: 6%. Impacts from past fire to water quality, channel conditions
Miles of motorized road/trail within 300' of streams	13.08 miles
Noticeable wildfire suppression impacts	Fool Creek Fire (2007): hand lines rehabbed; little to no impacts evident on landscape due to use of existing roads/trails and terrain features.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 242. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present
Presence of timber harvest or prescribed fire areas	When considering both fire and prescribed fire, about 93% of this area has been unaffected by treatments. In addition to the 1,891 acres of harvest, primarily fuel break creation from 1997 to 1999, there have also been about 1,446 acres of pile burning from 1980 to 2010. Many of this pile burn areas overlap and are associated with the fuel break treatments; therefore, the actual footprint of affected area is less than indicated by these numbers. Further, aerial photography and District personnel expertise determined that none of these treatment areas are substantially noticeable today.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Electronic site visible on Mount Wright.
Areas of mining activities including both abandoned and active mines	One abandoned mine within polygon

Improvement type	Presence and extent of departure from naturalness
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data, there are no range improvements within RM2.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Teton Pass Ski Resort. West Fork, Cave Mountain, Mill Falls, and Elko CG. West Fork, Blackleaf, Cave Mountain, Rierdon, Jones creek, and South Fork Teton THs. Snowmobile parking lot on North Fork Teton Road. Dispersed camping along Blackleaf Canyon road, north fork Teton road, south fork Teton road and green gulch road. Outfitter end of road facility at West Fork Teton confluence with North Fork Teton. 7 Lazy P Guest ranch located on the Middle fork of the Teton river. Seven rec. residences along the North Fork Teton River.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Utilities up the Teton River to the Ski area. Power also to Cave Mountain and the 7 lazy P. Phone lines are buried in the shoulder.
Presence of watershed treatment areas including contouring, diking, and channeling	Signs of dozer work for channeling of Middle Fork and North Fork Teton Rivers subsequent to the 1964 flood.
Lands adjacent to development or activities that impact opportunities for solitude	None present.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are 43 recorded cultural resources within this polygon, all represent relics of past occupation.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	1.8 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	There are 16 recorded historic routes (103 miles) in this polygon.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 243. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	The North Fork Teton and South Fork Teton roads provide the only motorized access into this polygon.

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for winter motorized opportunity	Snowmobiles are permitted along the North Fork Teton, South Fork Teton and South Waldron river corridors. There is a small winter play area in the upper South Waldron Creek area.
Proximity to private lands and non-Forest Service roads.	None present.
Proximity to developed recreation sites outside of the polygon area.	Teton Pass Ski Resort. West Fork Campground, Cave Mountain, Mill Falls, and Elko CG. West Fork, Blackleaf, Cave Mountain, Rierdon, Jones creek, and South Fork Teton THs. Snowmobile parking lot on North Fork Teton Road. Dispersed camping along Blackleaf Canyon road, north fork Teton road, south fork Teton road and green gulch road. Outfitter end of road facility at West Fork Teton confluence with North Fork Teton. 7 Lazy P Guest ranch located on the Middle fork of the Teton river. Seven Rec Residences along the North Fork Teton River. West Fork Rental cabin which sits on the North Fork Teton River. Activities at these sites create sights and sounds that are visible within the polygon. The road system and activities along create noise but there is still lots of opportunity for solitude once away from these roads.

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 244. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Except for the North Fork Teton and South Fork Teton roads, the entire polygon provides opportunities for primitive and semi-primitive non-motorized summer recreation.
Primitive and semi-primitive non-motorized winter recreation	Except for the North Fork Teton, South Fork Teton and South Waldron areas, the entire polygon provides opportunities for primitive and semi-primitive non-motorized winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, hiking, fishing, snowshoeing, cross country skiing, backcountry downhill skiing and snowboarding, technical rock climbing, snowmobiling, and outfitting.

**Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.**

The Teton Blackleaf Area (RM2) is 54,251 acres. This area lies adjacent to the Bob Marshall Wilderness Complex to the west.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

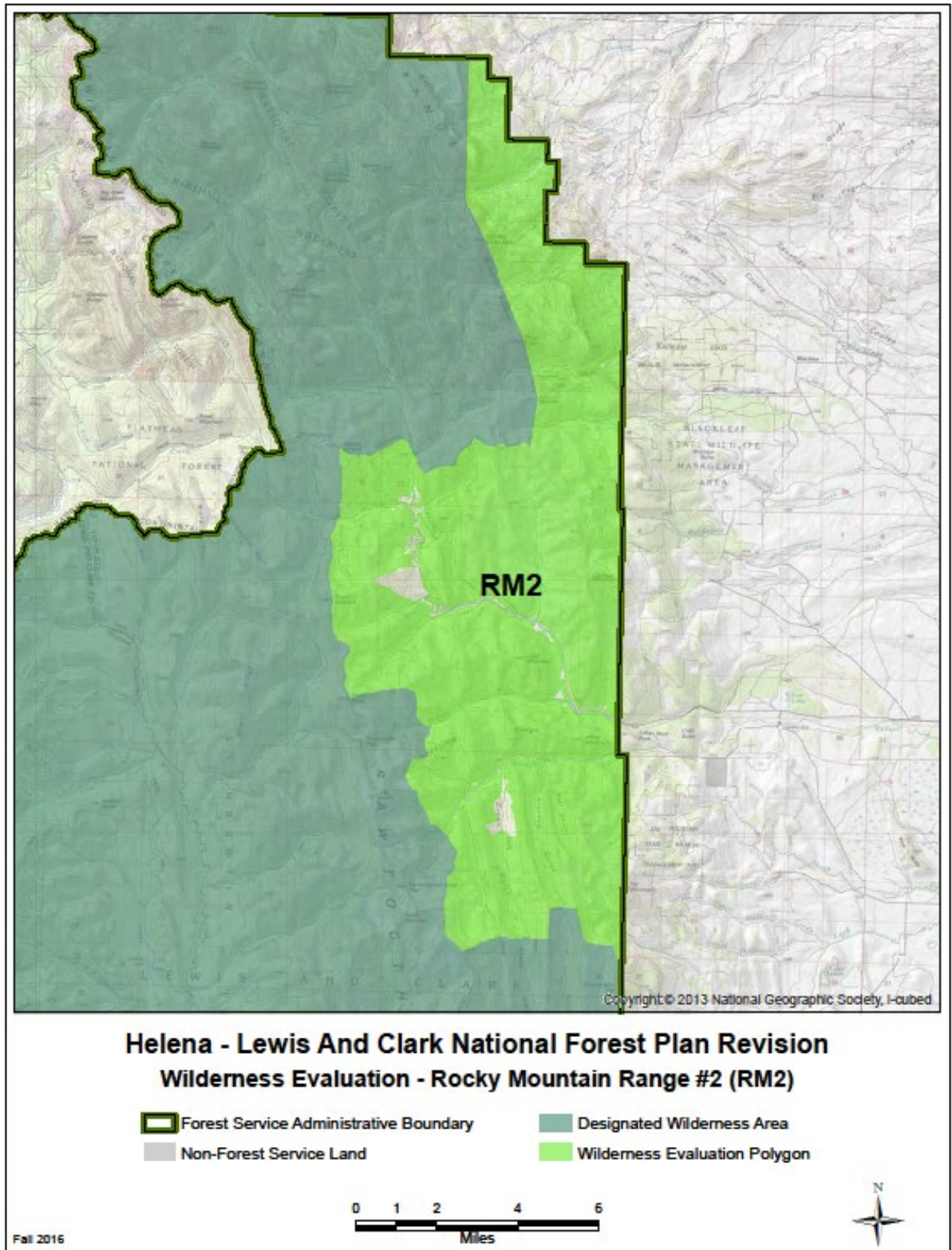
**Table 245. Features present**

Features	Description and scale
Rare plant communities	The potential plant species of conservation concern that are known to occur in this area include <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , <i>Ranunculus pedatifidus</i> , <i>Erigeron lackschewitzii</i> , <i>Physaria saximontana var. dentate</i> , <i>Oxytropis podocarpa</i> , <i>Saussaurea densa</i> , <i>Botrychium spp.</i> , and <i>Astragalus lackschewitzii</i> .
Rare animal species or communities	Federally listed species: grizzly bear (within Recovery Zone and proposed Primary Conservation Area), Canada lynx (within designated Critical Habitat). Potential species of conservation concern and/or state at risk species: wolverine, harlequin duck, pika, peregrine falcon (including nesting), western toad. Westslope cutthroat trout, see above.
Rare ecosystems	The most notable unique ecosystem in this area are the treeline and sparsely vegetated areas. Trace amounts of whitebark pine are present, which is a candidate species for listing under the ESA. Small amounts of other vegetation communities are of interest, including riparian areas. A fairly high number of potential plant species of conservation concern are found here. No rare aquatic ecosystems.
Outstanding landscape features	Walling Reef, cliff faces, canyons and waterfalls, Muddy Creek, mountain peaks.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational, or historic value.
Research natural areas	None.
High quality water resources or important watershed features	High water quality outside of burned areas.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 246. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	An elongated polygon just east of the Bob Marshall Wilderness complex that includes lands around the North Fork Teton and South Fork Teton rivers.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	Polygon resides within the Conservation Management Area
The presence and amount of non-Federal land in the area	None.
Management of adjacent lands	Wilderness to the north, south, and west of the polygon. Agriculture and grazing lands to the east. Blackleaf State Wildlife Management Area to the east of the polygon and a little south of Blackleaf canyon.





## Sun Canyon Willow Area (RM3)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 247. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance types in this area are Douglas-fir dominated forests, which cover about 51% of the area. Subalpine fir and Engelmann spruce mixed forests are also common, found on about 16%, and lodgepole pine forests cover about 9%. Sparsely vegetated areas (rock/scree) are found on about 11%, and grasslands cover nearly 8%. Small amounts of other dominance types, generally covering 1% or less of the area each, also occur, including shrublands, whitebark pine, limber pine, cottonwood, aspen, and a slight trace of ponderosa pine.
Potential vegetation types	The most common potential vegetation types in this area are in the cool moist forest group, covering about 42% of the area. Warm dry forest types are present on about 32%, and cold forest potential types (where whitebark pine is most likely to grow) are present on 5%. Xeric grassland and mesic grassland types each make up about 3%, and both shrublands and riparian types are represented in very small amounts. The remainder of the area is considered sparsely vegetated (11%), primarily consisting of cliffy areas or high peaks above treeline.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 1,205 acres within RM3 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: 22,000 acres potential lynx habitat, with approximately 2700 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type. Roughly 21,000 acres of goshawk potential nesting habitat, at least 10 known nesting territories. Presence of Clark’s nutcracker indicating mature whitebark and/or limber pine.</p> <p>Big game: Approximately 51,000 acres secure elk habitat. 23,000 acres elk winter range part of which adjoins state-managed Sun River Wildlife Management Area; and 9800 acres elk calving habitat. Moose may be present. Up to about 10,000 acres mountain goat habitat. Key area for nationally significant bighorn sheep population: over 27,000 acres bighorn sheep habitat including over 17,000 acres lambing habitat.</p> <p>Functioning subalpine/alpine habitat: Roughly 27,000 acres of potential wolverine habitat including 6000 acres potential maternal habitat. Golden mantled ground squirrel also present. Grizzly bears, wolves present.</p> <p>Habitat for cliff-nesting raptors, including peregrine falcon, golden eagle, prairie falcon.</p> <p>Westslope cutthroat trout in Little Willow and North Fork Ford Creeks.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely.

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 248. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	About 94% of this area has been unaffected by past timber harvest. Records show that over 4,300 acres have been harvested, primarily consisting of fuel break treatments (3,717 acres total) that occurred in 1997 and 1999. The other harvests consisted of thinning, partial cuts, and clearcuts that occurred from 1982 to 1992.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 98.3% of RM3 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 61%, Class 2: 39%
Miles of motorized road/trail within 300' of streams	10.4 miles
Noticeable wildfire suppression impacts	No fire suppression impacts evident on the landscape.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 249. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present
Presence of timber harvest or prescribed fire areas	In addition to the harvest treatments (about 4,300 acres) that have occurred, prescribed fire treatments have also been conducted in this area. The fire treatments consisted primarily of broadcast burning and underburning from 1990 to 2010, as well as pile burning from 1982 to 2011. In total, all vegetation treatment acres represent about 15% of the area, leaving 85% untouched. However, many of the prescribed fire areas overlap with past timber harvest areas, so the actual footprint of treatment is less. In addition, aerial photography and District personnel expertise determine that none of these treatments are substantially noticeable on the landscape.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Electronic site visible on Renshaw Mountain.
Areas of mining activities including both abandoned and active mines	Patented mining claim Lange Creek.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there are approximately 8 miles of fencing and 6 stock water tanks and 1632 acres of vegetation treatments within RM3.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Dispersed sites associated with roads but none interior.

Improvement type	Presence and extent of departure from naturalness
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Both buried and above ground along Sun Canyon and Beaver Willow roads.
Presence of watershed treatment areas including contouring, diking, and channeling	Gibson Dam and dozer channeling along the road but visible from within the polygon.
Lands adjacent to development or activities that impact opportunities for solitude	None known.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Reclamation Flats Cabin – SUP with FWP. Ford Coulee Cabin at the head of Gibson Reservoir. Old Whites Cabin tract. There are 103 recorded cultural resources within this polygon, all represent relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.7 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	There are 18 recorded historic routes (~110 miles) in this polygon. Most of these routes are trails.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 250. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	While most of the polygon is non-motorized, there is an open ATV route along the Beaver Willow Road.
Area available for winter motorized opportunity	There is some snowmobiling that occurs on the Benchmark road at the south end of and outside of the polygon. The rest of the polygon is not available for motorized winter recreation.
Proximity to private lands and non-Forest Service roads	Lange Creek mining claim. K-L guest ranch at head of Gibson Reservoir, Mortimer Gulch Subdivision on Beaver Willow Road, Hidden Valley Ranch on Beaver Willow Road, Reissing Ranch on Willow Creek.
Proximity to developed recreation sites outside of the polygon area	Multiple activities along the Sun Canyon, Beaver Willow and Benchmark roads that impact the polygon through sight and sound. Including Campgrounds, Trailheads, Outfitter facilities, resorts, administrative sites, and recreation residences.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 251. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The entire polygon is available for primitive and semi-primitive non-motorized summer recreation.
Primitive and semi-primitive non-motorized winter recreation	Except for areas near the open roads, the entire polygon is available for primitive and semi-primitive non-motorized winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting and trapping, hiking, horseback riding, camping, recreation aviation, mountain biking, cross country skiing, snowshoeing, snowmobiling along the roads and uses by recreation residence and resorts in the area.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Sun Canyon Willow Area (RM3) is 67,328 acres. This area lies adjacent to the Bob Marshall Wilderness Complex to the west.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

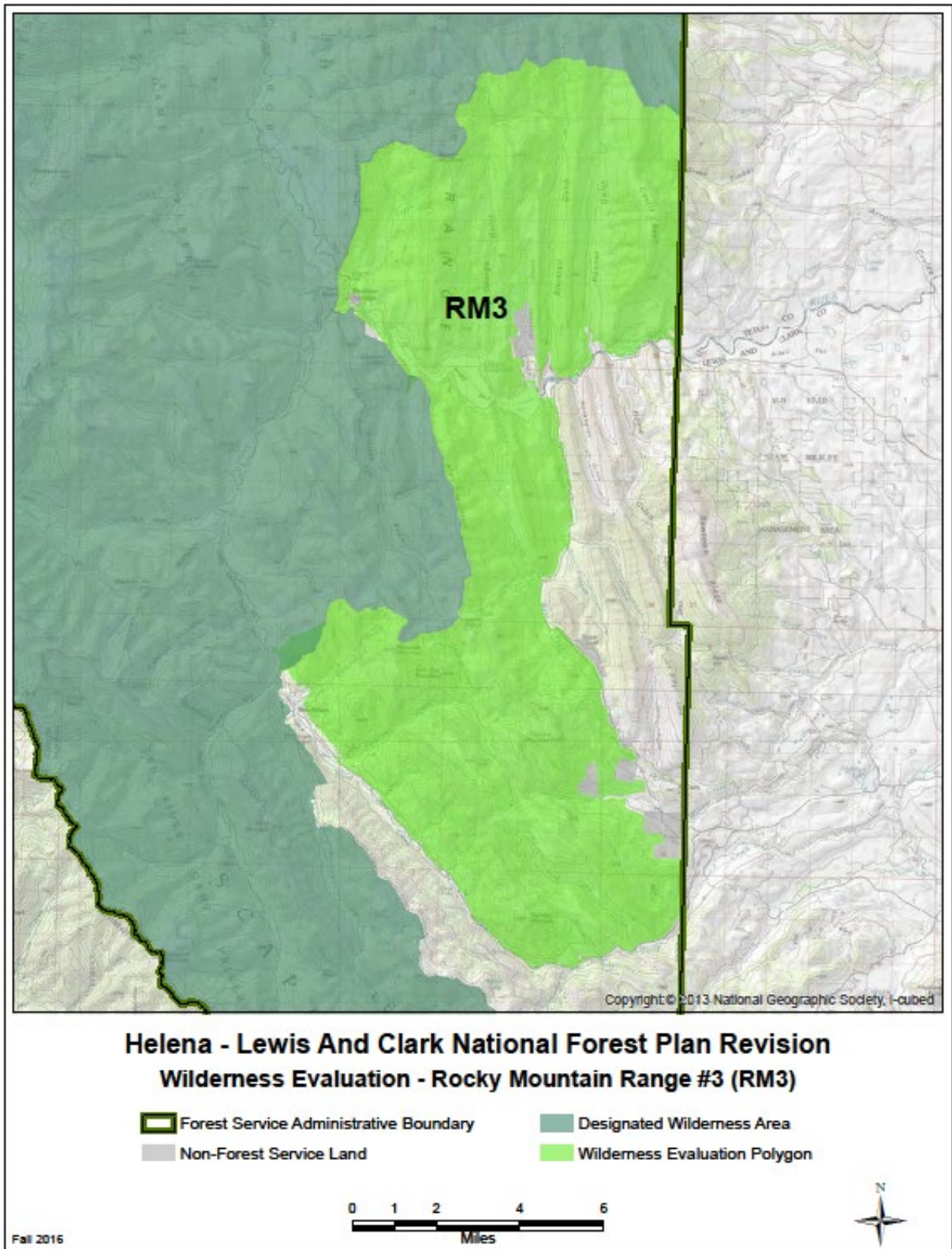
**Table 252. Features present**

Features	Description and scale
Rare plant communities	The potential plant species of conservation concern that occur here include <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , <i>Antennaria pulvinata</i> , <i>Emerorchis rotundifolia</i> , <i>Cypripedium passerinum</i> , <i>Cypripedium parviflorum</i> , <i>Epipactis gigantea</i> , <i>Gentianopsis macounii</i> , <i>Botrychium spp.</i> , and <i>Polygonium douglasii ssp. Austinae</i>
Rare animal species or communities	Federally listed species: grizzly bear (within Recovery Zone and proposed Primary Conservation Area), Canada lynx (portion of area within designated Critical Habitat) Potential species of conservation concern and/or state at risk species: wolverine, western toad, harlequin duck. Two creeks with westslope cutthroat trout present, see above.
Rare ecosystems	Whitebark pine is a candidate species for listing under the ESA and is present in small amounts in this area. Many other potential plant species of conservation occur here as well. Trace amounts of ponderosa pine are present, which are very rare in this geographic area.
Outstanding landscape features	Sun Canyon, dramatic cliff facing.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational, or historic value.
Research natural areas	Wagner Basin RNA.
High quality water resources or important watershed features	Headwaters of Sun Creek very unique. High quality water throughout polygon.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 253. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	An elongated and irregular-shaped polygon adjacent to the Bob Marshall Wilderness Complex. This polygon includes undeveloped landscapes surrounding the Sun River and Benchmark area.
Legally established rights or uses within the area	Gibson Reservoir and dam managed by the Bureau of Reclamation.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	The polygon resides in a conservation management area.
The presence and amount of non-Federal land in the area	Private inholdings at Mortimer Gulch in Sun Canyon, K-L at head of Gibson Reservoir, along Willow Creek and Beaver Willow Road, and the Lange Creek mining claim.
Management of adjacent lands	Wilderness to the north and west. RM4 polygon to the east along with private lands mostly agriculture and grazing. Benchmark Road forms the southern boundary of the polygon.





## Sawtooth Ridge Area (RM4)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 254. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The primary dominance types that occur in this area are Douglas-fir dominated forests, which cover about 77% of the area. Dry grasslands and sparsely vegetated areas (rock/scree) cover about 8% each. Lodgepole pine forests, as well as subalpine fir/Engelmann spruce forests, are each represented at about 3% each. Other dominance types are present only in trace amounts, covering less than 1% of the area each, and include shrublands, whitebark pine, limber pine, and aspen.
Potential vegetation types	The most common potential vegetation types are warm dry forest types, which make up about 58% of the area and likely support the bulk of the Douglas-fir forests. About 25% of the area has cool moist forest potential types, likely supporting mixed Douglas-fir, lodgepole pine, subalpine fir, and Engelmann spruce forests. Xeric and mesic grassland types each cover just over 3% each. Small amounts of cold forest, shrubland, and riparian types are also present. The remainder of the area is made up of sparsely vegetated areas (8%).
Known non-native terrestrial plant species	According to data as of 2/10/2016, 368 acres within RM4 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: 4000 acres potential lynx habitat, with approximately 730 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type. Roughly 5000 acres of goshawk potential nesting habitat.</p> <p>Big game: Approximately 1200 acres secure elk habitat. 6600 acres elk winter range part of which adjoins state-managed Sun River Wildlife Management Area; and 400 acres elk calving habitat. Moose may be present. Key area for nationally significant bighorn sheep population: over 8000 acres bighorn sheep habitat and over 6000 acres lambing habitat.</p> <p>Functioning subalpine/alpine habitat: Roughly 3000 acres of potential wolverine.</p> <p>Grizzly bears, wolves present.</p> <p>Habitat for cliff-nesting raptors, including golden eagle, prairie falcon</p> <p>Westslope cutthroat trout in Little Willow Creek and Lime Gulch.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native fish likely.

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 255. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	About 99.5% of this area has been unaffected by timber harvest. Roughly 71 acres have been harvested, consisting of partial selection cutting (uneven-aged management) in 1989 and 1993.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 97.6% of RM4 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 78%, Class 2: 22%
Miles of motorized road/trail within 300' of streams	15.4 miles
Noticeable wildfire suppression impacts	No fire occurrence records found since 1980.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 256. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present
Presence of timber harvest or prescribed fire areas	In addition to the 71 acres of past harvest, there have been prescribed fire treatments in this area totaling about 1,958 acres and consisting of underburns from 1993 to 1996, broadcast burning in 2009, and burning of piles from 1988 to 2011. In total, all of these treatment acres represent about 13% of the area. However, some of these treatments overlapped on the same area, so the actual footprint of treatment is less. In addition, a review of aerial photography and District personnel expertise confirmed that none of these treatments are substantially noticeable on the landscape.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	None present.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there are approximately 1.6 miles of fencing, 3 stock water tanks and 595 acres of vegetation treatments within RM4.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	None present.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Utility lines buried in the open road system in Sun Canyon and Beaver Willow.

Improvement type	Presence and extent of departure from naturalness
Presence of watershed treatment areas including contouring, diking, and channeling	Some diking along the Beaver Creek Road system. Not within the polygon.
Lands adjacent to development or activities that impact opportunities for solitude	None present.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are 28 recorded cultural resources within this polygon, all represent relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	There are 8 recorded historic routes (~100 miles) in this polygon.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor's opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 257. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	While most of the polygon is non-motorized, there is an open ATV route along the Beaver Willow Road. This route lies outside of the polygon area but potentially impacts solitude within it.
Area available for winter motorized opportunity	None of the polygon is available for winter motorized recreation.
Proximity to private lands and non-Forest Service roads	Stoner Place Subdivision along the Beaver Willow road.
Proximity to developed recreation sites outside of the polygon area	Home Gulch Campground, Beaver Creek TH, Stoner Place TH, Lime Gulch TH.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 258. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The entire area is available for primitive and semi-primitive non-motorized summer recreation.
Primitive and semi-primitive non-motorized winter recreation	The entire area is available for primitive and semi-primitive non-motorized winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, hiking, mountain biking, cross country skiing, open ATV route along the Beaver Willow Road.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Sawtooth Ridge Area (RM4) is 15,423 acres. This area lies adjacent to the Bob Marshall Wilderness Complex to the west.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

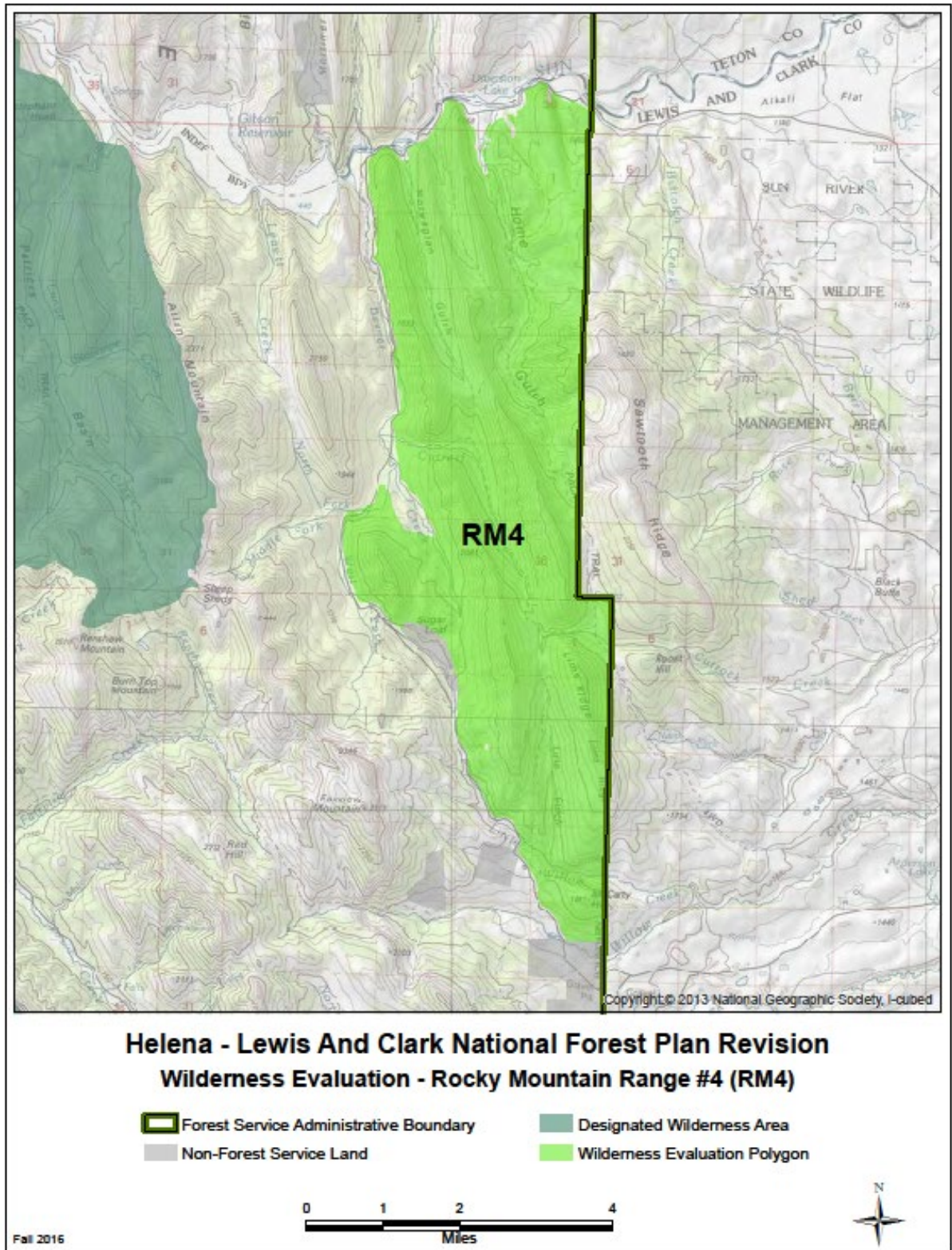
**Table 259. Features present**

Features	Description and scale
Rare plant communities	The potential plant species of conservation concern that are known to occur in this area include <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , and <i>Amerorchis rotundifolia</i> .
Rare animal species or communities	Federally listed species: grizzly bear (within Recovery Zone and proposed Primary Conservation Area), Canada lynx (portion of area within designated Critical Habitat) Westslope cutthroat trout in Little Willow and Lime Gulch.
Rare ecosystems	Whitebark pine is a candidate species for listing under the ESA and is present in small amounts in this area. Limber pine and aspen communities are also of interest, but present only in trace amounts. No rare aquatic ecosystems known.
Outstanding landscape features	Sawtooth Ridge, north-south running reefs, cliffs.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational, or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	None, area is relatively dry.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 260. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	An elongated and irregular-shaped polygon that is located between the Beaver Willow Road to the west and private agricultural lands on the east.
Legally established rights or uses within the area	None present.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	Stoner Place subdivision along Beaver Willow Road, piece of the Hidden Valley Ranch along Beaver Willow Road.
Management of adjacent lands	State Sun River Wildlife Management Area, BLM, and private agriculture and grazing.





## Elk Smith Area (RM5)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 261. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance types in this area are lodgepole pine dominated forests, which cover about 44% of the area. Douglas-fir forests are also common, growing on over 29%. Subalpine fir and Engelmann spruce mixed forests are found on 10%, and dry grasslands cover about 6%. Sparsely vegetated areas, likely rock/scree above treeline, are found on about 9%. Other dominance types are present only in trace amounts (covering 1% or less of the area), and include shrublands, whitebark pine, limber pine, cottonwood, and aspen. Although most of the area burned in the Canyon Creek fire of 1988, most of the area regenerated leaving only a trace area still considered to be transitional.
Potential vegetation types	Cool moist forest potential vegetation types are the most common in the area, representing about 54%. Warm dry forest potential types are also common, found on 29%. Xeric and mesic grassland types each make up about 3%, and riparian types are found on nearly 2%. Other types are present only in trace amounts and include cold forest (where whitebark pine is most likely to grow) and shrubland types. The remainder of the area is sparsely vegetated (8%).
Known non-native terrestrial plant species	According to data as of 2/10/2016, 157 acres within RM5 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: 16,000 acres potential lynx habitat, with approximately 2000 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type. Roughly 5900 acres of goshawk potential nesting habitat, at least 6 known nesting territories.</p> <p>Big game: Approximately 18,000 acres secure elk habitat. 1400 acres elk winter range; and 9000 acres elk calving habitat. Moose present. Approximately 1200 acres bighorn sheep winter habitat and 1400 acres lambing habitat.</p> <p>Functioning subalpine/alpine habitat: Roughly 9600 acres of potential wolverine habitat including 2400 acres potential maternal habitat.</p> <p>Well-developed bog/fen habitat in northwestern portion, with northern bog lemming documented.</p> <p>Grizzly bears, wolves present.</p> <p>Habitat for cliff-nesting raptors, including peregrine falcon, golden eagle, prairie falcon.</p> <p>Westslope cutthroat trout populations in Moudess and Petty Creeks.</p>
Known non-native wildlife species	No non-native terrestrial wildlife species documented. Non-native trout likely.

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 262. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	About 98.6% of the area has been unaffected by past harvest. Available records show that about 409 acres have had a past harvest, consisting primarily of commercial thins, salvage, and single tree selection cuts from 1981 to 1989.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.5% of RM5 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 49%, Class 2: 51% Impacts are all downstream of the polygon.
Miles of motorized road/trail within 300' of streams	11.8 miles
Noticeable wildfire suppression impacts	Canyon Creek (1988): Suppression lines rehabbed, but still evident along the northern fire perimeter boundary.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 263. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	Along Benchmark road which is excluded from the polygon.
Presence of timber harvest or prescribed fire areas	In addition to the past harvests that occurred in the 1980's and affected about 1.4% of the area, there were pile burning activities conducted on about 708 acres from 1984 to 1997, impacting an additional 2.4%. A total of 97.6% of the area was unaffected by treatments. In addition, the pile burning may have overlapped some of the past harvest areas. None of these treatments were determined to be substantially noticeable today.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Steamboat Mountain repeater.
Areas of mining activities including both abandoned and active mines	Abandoned mine in Horse Mountain. Historic mining in Smith Creek.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 1/10 <sup>th</sup> mile of fencing and 3 stock water tanks within RM5.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Dispersed camping along Benchmark and Elk Creek. End of the road outfitter camps but none within the polygon.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Utilities along and under parts of the Benchmark and the Elk Creek Roads.
Presence of watershed treatment areas including contouring, diking, and channeling	Post 1964 streambed manipulation in Benchmark, and Wood Creek. Outside of polygon along main roads.

Improvement type	Presence and extent of departure from naturalness
Lands adjacent to development or activities that impact opportunities for solitude	Benchmark Airstrip along the Benchmark road.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are 17 recorded cultural resources within this polygon, all represent relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	1.8 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	There are 8 recorded historic routes (21 miles) in this polygon.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. *What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 264. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	There are motorcycle trails in the Petty Crown and Elk Creek/Bailey Basin areas.
Area available for winter motorized opportunity	None of the area is available for winter motorized recreation.
Proximity to private lands and non-Forest Service roads	Private inholding in Elk Creek.
Proximity to developed recreation sites outside of the polygon area	Campground, recreation residences, trailheads, livestock facilities, airstrip along the Benchmark road. There are minimal impacts out of the road corridor.

Question 2b. *What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 265. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Primitive and semi-primitive non-motorized recreation in the summer away from Petty Crown and Elk Creek areas. There are impacts to solitude to areas that lie near the Benchmark road.
Primitive and semi-primitive non-motorized winter recreation	The entire polygon is available for primitive and semi-primitive non-motorized recreation in the winter. Due to snowmobiling along the Benchmark road, there are impacts to solitude to areas that lie near the road.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, hiking, fishing, skiing, camping, recreation aviation, snowmobiling, and uses by recreation residence and resorts in the area.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Elk Smith Area (RM5) is 30,030 acres. This area lies adjacent to the Bob Marshall Wilderness Complex to the west.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

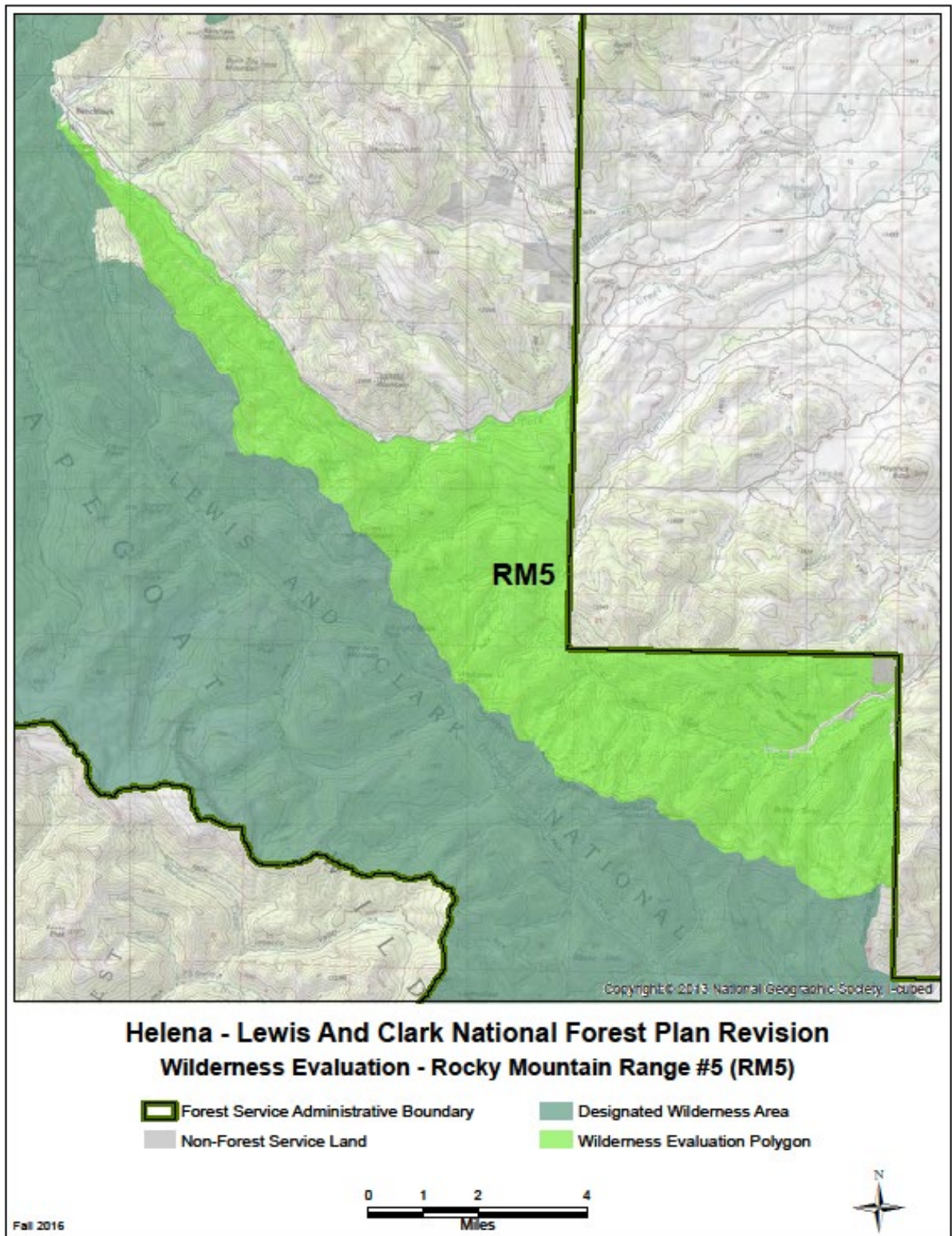
**Table 266. Features present**

Features	Description and scale
Rare plant communities	The potential plant species of conservation concern that are known to occur in this area include <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , <i>Scorpidium scorpioides</i> , <i>Listera borealis</i> , <i>Platanthera obtusata</i> , <i>Cardamine rupicola</i> , and <i>Erigeron lackschewitzii</i> .
Rare animal species or communities	Federally listed species: grizzly bear (within Recovery Zone and proposed Primary Conservation Area), Canada lynx (most of area within designated Critical Habitat) Potential species of conservation concern and/or state at risk species: wolverine, western toad, harlequin duck, northern bog lemming. Westslope cutthroat trout in Moudess and Petty Creeks.
Rare ecosystems	Whitebark pine is a candidate species for listing under the ESA and is present in trace amounts in this area. Other potential plants of conservation concern occur here, and other vegetation communities of interest (limber pine and aspen) are present in very small amounts. Beaver complex in Elk Smith area.
Outstanding landscape features	Cliffs and reefs and waterfalls, Crown mountain and White-Water Creek.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational, or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	Beaver complex in Elk Smith area. Wood Creek on the draft list of eligible WSRs for outstanding wildlife habitat.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 267. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	An elongated polygon that is bordered by the Bob Marshall Wilderness Complex on the southwest, the Benchmark road on the north and private lands on the north and east.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	Conservation management area.
The presence and amount of non-Federal land in the area	Private inholding in Elk Creek.
Management of adjacent lands	Wilderness to the south and west. Benchmark Road to the north, private lands to east (mostly ranch lands).



## Snowies Geographic Area

### Big Snowies Area (S1)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 268. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The dominance types in this area gradate from Douglas-fir dominated forests (covering about 31% of the area), to lodgepole pine forest (22%), to subalpine fir and Engelmann spruce forests (29%). Sparsely vegetated areas (such as rock/scree) are found on about 8%, and dry grasslands cover 5%. Whitebark pine dominated forest is found on about 4%, at the highest elevations. Trace amounts of other dominance types, representing less than 1% of the area each, are also present, including shrublands, ponderosa pine, limber pine, cottonwood, and aspen.
Potential vegetation types	The common potential vegetation types are evenly split between warm dry forest potential types (40%) and cool moist forest types (42%). Cold forest potential vegetation types are present on about 3%, which is where whitebark pine is most likely to grow. Dry grassland types also make up about 5%. Trace amounts of shrublands and riparian types are also present. Sparsely vegetated areas (rock/scree) make up the remainder of the area.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 65 acres within S1 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: 39,000 acres potential lynx habitat, with approximately 11,000 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type (note area is not currently occupied by lynx and is not contiguous with occupied lynx habitat). Roughly 34,000 acres of goshawk potential nesting habitat, with some known nest territories. Approximately 1400 acres existing and roughly 50,000 acres potential old growth habitat based on habitat type and aerial photo interpretation; occurs in patches of varying size. Clark’s nutcracker presence indicates mature whitebark, limber, and/or ponderosa pine communities.</p> <p>Approximately 85,000 acres secure elk habitat. Roughly 2400 acres elk winter range and 7800 acres mule deer winter range contiguous with additional calving and winter habitat on adjacent non-NF land largely on south boundary. Moose may be present in riparian areas.</p> <p>Functioning subalpine/alpine habitat: Approximately 31,000 acres potential wolverine habitat with roughly 3900 acres of potential maternal habitat.</p> <p>Westslope cutthroat trout populations in WF Cottonwood, WF Cottonwood, Cottonwood, EF Big Spring, and Halfmoon Creeks.</p>
Known non-native wildlife species	<p>Introduced population of mountain goats, which are native to Montana but not native to this mountain range.</p> <p>Non-native trout likely present.</p>



*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 269. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	About 99.8% of this area is unaffected by past timber harvest. Available records indicate that about 205 acres have been harvested, including shelterwood cuts and overstory removals in the 1950's, and a small salvage cut in 1990. These treatments are located in the Timber Creek area.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.9% of S1 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 82%, Class 2: 18%, some grazing impacts in polygon, NF Flatwillow Creek on 303(d) list.
Miles of motorized road/trail within 300' of streams	29.0 miles
Noticeable wildfire suppression impacts	Windy Point Fire (1994): hand line rehabbed; break in timber continuity (hard edges along west and south flanks of fire).

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 270. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	The 205 acres of past timber harvest affected about 0.2% of this area, and due to the age since treatment and/or type of treatment are no longer substantially noticeable on the landscape. Several more recent or notable harvests nearby are excluded from the evaluation boundary. The only prescribed fire treatments that have occurred in the boundary are 377 acres of pile burning, mostly occurring in 2004. A few of these acres (43) were done in 1991 on the same acres as the salvage harvest. Over 99.6% of the area is unaffected by vegetation treatments.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Radio communication site on West Peak which is very low profile and creating minimal effects.
Areas of mining activities including both abandoned and active mines	A couple of abandoned mines in Swimming Woman Creek.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 0 miles of fencing and 20 stock water tanks within S1.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	No overnight outfitter and guide camps within the polygon. Some minor overnight use by hikers and permitted hiker outfitters adjacent to the trail system. Northwest portion of the polygon receives moderate hunting with permit.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Water pipeline for agricultural use for the Half Moon Ranch in Half Moon Creek.

Improvement type	Presence and extent of departure from naturalness
Presence of watershed treatment areas including contouring, diking, and channeling	Channeling associated with the water pipeline for Half Moon Ranch.
Lands adjacent to development or activities that impact opportunities for solitude	Minimal ranchland, dude ranching, and outfitting developments.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are 26 recorded cultural resources within this polygon, all represent relics of past occupations.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	2.1 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	There are 2 recorded historic routes (7 miles) in this polygon.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor's opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 271. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Southern ¼ of the polygon is open to motorized use on designated trails. Trails number 653 and 652 and FS roads 8954, 656, 823, 15878 and 270A. These roads and trails are located in Swimming Woman Creek, Careless Creek, East Fork Timber Creek, East Fork Blake Creek and motorized road (FSR 275 and 275A) into the Crystal Lake complex.
Area available for winter motorized opportunity	Over snow motorized recreation in the western portion of the polygon in West Gulch, Dry Pole, and up to West Peak. Also snowmobiling permitted in Black Ridge, Green Pole Canyon and East Fork up to Jump Off Peak. From Neil Creek to Swimming Woman along 652 and 653 trails. Winter motorized uses around Crystal Lake.
Proximity to private lands and non-Forest Service roads	Polygon is primarily surrounded by private ranchlands. Also bordered by BLM on the southeastern side of the range.
Proximity to developed recreation sites outside of the polygon area	Crystal Lake complex is heavily used during the summer months. There is dispersed camping in Swimming Woman, Careless Creek, and Timber Creek canyons, particularly during the fall hunting season. Trailheads at Neil Creek, Ulhorn and Cottonwood Creek

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 272. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Best opportunities for primitive and semi-primitive non-motorized recreation in the summer is the entire polygon north of Trails 652 and 653.
Primitive and semi-primitive non-motorized winter recreation	The entire polygon is available for primitive and semi-primitive non-motorized recreation, except for those areas open to snowmobiles on the western portion of the polygon.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hiking, horseback riding, dispersed camping, back country skiing, fishing, mountain biking, caving, hunting, snowmobiling, ATV riding, and motorcycling.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Big Snowies Area (S1) is 103,480. Much of this area lies within the Big Snowies wilderness study area.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

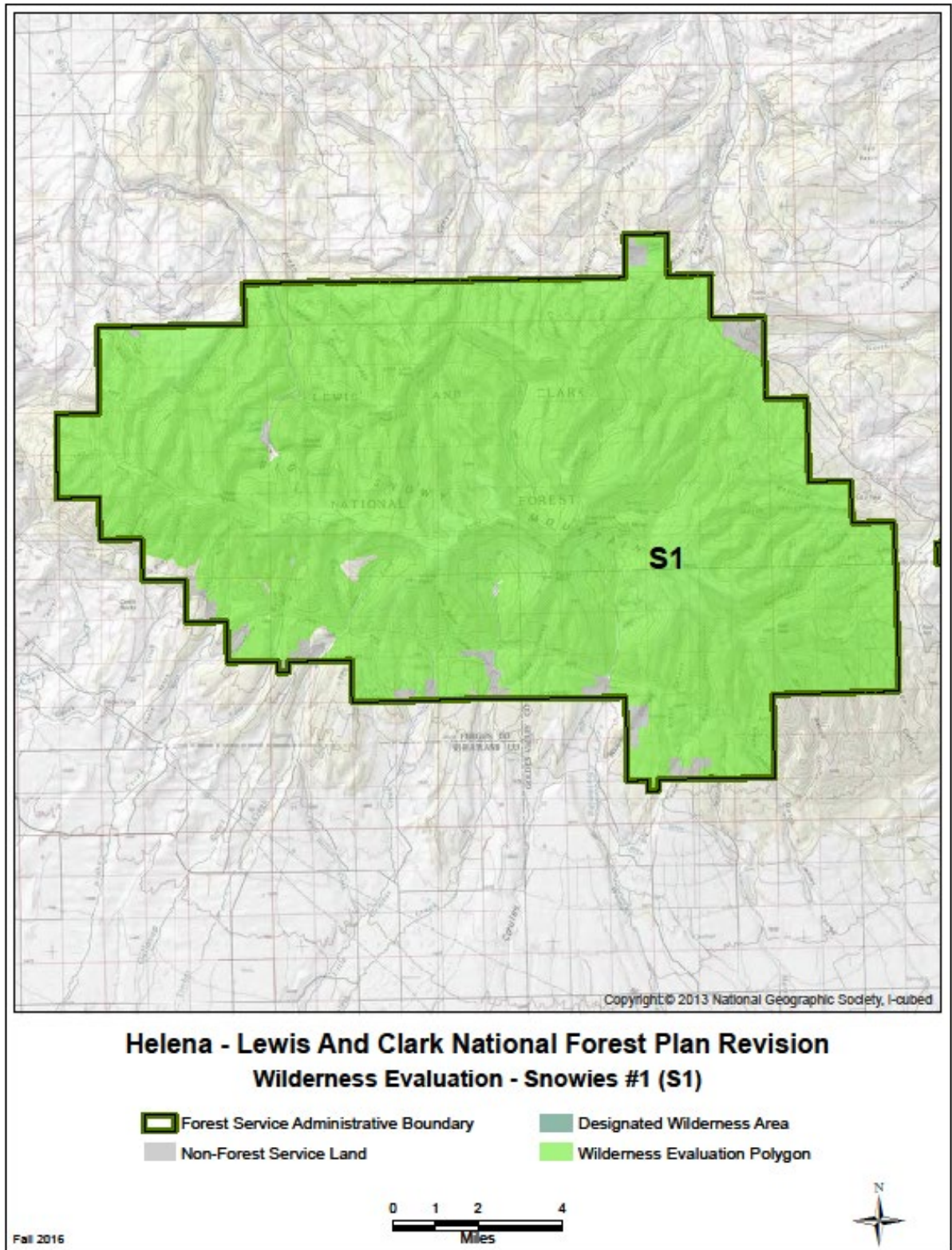
**Table 273. Features present**

Features	Description and scale
Rare plant communities	The potential plant species of conservation concern that are known to occur in this area include <i>Pinus albicaulis</i> , <i>Pinus flexilis</i> , <i>Cirsium longistylum</i> , <i>Goodyera repens</i> , <i>Dryas integrifolia</i> , and <i>Physaria saximontana var. dentate</i> .
Rare animal species or communities	Federally listed species: historic record of a Canada lynx, but area is not occupied and is isolated from occupied areas Potential species of conservation concern and/or state at risk species: dwarf shrew. Several westslope cutthroat trout populations, see above.
Rare ecosystems	Whitebark pine is a candidate species for listing under the ESA and is present in this area. <i>Goodyera repens</i> is particularly noted as occurring across this mountain range. Other vegetation communities of interest on the HLC NF are also present in very small amounts, including limber pine, ponderosa pine, and aspen. No rare aquatic ecosystems.
Outstanding landscape features	Big cirque basins in Careless Creek and Swimming Woman Creek. Ice Caves, big broad open ridge.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational, or historic value.
Research natural areas	Big Snowy – Greathouse Peak (1279 acres). Big Snowy – Old Baldy (1866 acres).
High quality water resources or important watershed features	Swimming Woman Creek eligible for WSR listing for its outstanding geologic features. The stream also has high water quality. Big Spring is the municipal watershed for Lewistown.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 274. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	The major portion of the Big Snowy Mountain range.
Legally established rights or uses within the area	Water right in Half Moon Creek.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known. Much of this polygon has also been designated by Congress as the Big Snowies Wilderness Study Act area.
The presence and amount of non-Federal land in the area	Some minor private land adjacent to the polygon, scattered along the southern and northeastern boundaries.
Management of adjacent lands	Large component of large ranches and agriculture lands. Residential subdivision in Neil Creek. Trailheads on BLM and private in Ulhorn, Cottonwood Creek. Half Moon Ranch, outfitting, and dude ranches.



## Upper Blackfoot Geographic Area

### Dearborn Silver King Area (UB1)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 275. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The area is commonly dominated by Douglas-fir and lodgepole pine dominance types, each making up roughly 30% of the overall composition (60% total). Mixes of Douglas-fir and lodgepole pine represent an additional 5%. Dry grasslands are fairly common, present on roughly 16% of the area. Subalpine fir mixes make up nearly 8%. Small amounts of other dominance types occur in small amounts (less than 2% each), including Engelmann spruce, whitebark pine, limber pine, cottonwood, aspen, and Rocky Mountain juniper. In addition, just over 7% of the area is considered “transitional”, where recent disturbance has removed forest cover but regeneration is expected.
Potential vegetation types	The area contains a high proportion of cool moist forest potential vegetation types (44%), with warm dry forest types also common (37%). The xeric grassland and mesic grassland potential types each represent roughly 7%. The cold forest potential vegetation type, at high elevations where whitebark pine is most likely to thrive, is present on 1%. Small amounts of mesic shrublands, riparian/wetland, and sparse potential types are also present.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 527 acres UB1 is associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	<p>Functioning mature forest habitat: 18,000 acres potential lynx habitat, with approximately 4900 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type. Roughly 15,000 acres of goshawk potential nesting habitat; some known nesting territories. About 1900 acres low-moderate probability fisher habitat in south portion.</p> <p>Big game: Approximately 41,000 acres secure elk habitat. 1300 acres elk winter range; and over 5000 acres elk calving habitat. Moose likely present.</p> <p>Functioning subalpine/alpine habitat: Roughly 11,000 acres of potential wolverine habitat including 800 acres potential maternal habitat.</p> <p>Grizzly bears, wolves present.</p> <p>Westslope cutthroat trout populations present in Alice Creek and tributaries (including Toms, Wildcat, and Telephone Gulches and Bear Creek) as well as Landers Fork Creek, Falls Creek and Indian Meadows Creek. No mapped Bull Trout populations, but habitat is present, especially Landers Fork Creek.</p>
Known non-native wildlife species	European starlings and house sparrows documented but location unclear; likely at periphery near off-Forest dwellings. Non-native trout are likely to be present.



Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 276. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	99.72% of this area has no record of past harvest in the FACTS database, although it is possible “historic” logging treatments occurred prior detailed record-keeping (generally the 1950’s). The small area with recorded harvest is roughly 124 acres, most of which occurred in the 1960’s although one unit was harvested in the 1990’s.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 98.8% of UB1 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 57%, Class 2: 43%. Primary impacts in the Class 2 areas are non-native aquatic species, and road and trail effects.
Miles of motorized road/trail within 300’ of streams	Possibly 3.4 miles but may be non-motorized.
Noticeable wildfire suppression impacts	Snow/Talon Fire (2003): dozer line & staging areas rehabbed but remain evident on landscape; breaks in timber continuity in Falls Creek and Indian Meadows Creek. Canyon Creek Fire (1988): suppression lines rehabbed, but still evident along the northern and southeastern fire perimeter boundary; hard vegetation edge.

Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?

**Table 277. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	Substantially noticeable treatments were determined with a detailed methodology and excluded from the evaluation area. Some past treatments which are no longer considered noticeable occur in the evaluation area. The FACTS database shows roughly 4,999 acres of such treatments total (11% of the total UB1 area), 33 acres of timber harvest and 4,966 acres of prescribed fire. Some of the fire activities may overlap (i.e., a pile burn and a broadcast burn could occur on the same acre at different times) and therefore actual acres impacted could be slightly less. The harvest (salvage) was intermediate in nature (leaving residual trees) and occurred in the 1990’s; it has likely had sufficient time to be visually recovered from the treatment. The fire treatments have occurred since the 1980’s, but the most acres have been implemented after 2000 as part of the Alice Creek restoration project. Although not much time has passed since implementation (including burning of piles and broadcast burning), local specialists indicated that these areas are natural in appearance.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Repeater/electronic site on Silver King Mountain. This has a buffer of 150 feet diameter around it but will be visible from within UB1.
Areas of mining activities, including both abandoned and active mines	No significant historic mining activity is known to occur in this area.

Improvement type	Presence and extent of departure from naturalness
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is five miles of fencing and two stock water tanks within UB1. Fences to exclude grazing in the aspen stands along the bottom of Alice Creek. These are temporary in nature and will be removed after aspen grows up.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Heavily used dispersed camp sites are located with 300 feet along Alice Creek Road. The Lewis and Clark pass trail is a very popular day hike.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines pipelines, and other permanently installed linear right-of-way structures	None present.
Presence of watershed treatment areas including contouring, diking, and channeling	None Known
Lands adjacent to development or activities that impact opportunities for solitude	Alice Creek Ranch and Silver King Ranch are located along the southern border of UB1. There are also outfitter corrals and the Indian Meadows trailhead and guard station at the south west corner of UB1.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Several past occupational sites can be found within this area. These sites represent occupational use of this location which span thousands of years. No historic (complete or fully) standing structures are known to be present, however intact subsurface deposits are known to exist. Several interpretive signs exist in the area for the Alice Creek National Registered Historic District and the Lewis and Clark National Historic Trail.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plans.
Number of miles of maintenance level 1 road templates	1.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes or other settlement era transportation	There are two historic road segments in the south east portion of UB1, east of Alice Creek Road.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 278. Impacts influencing solitude**

<b>Impacts</b>	<b>Mitigating factors</b> (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunities	Alice Creek Road in the bottom of the drainage. It is a low speed road, so intrusions are generally minimal. Cannot see or hear the road from the CDNST or popular hiking trails in the area. There are not motorized trails within the polygon.
Area available for winter motorized opportunities	Snowmobiles are allowed on Alice Creek road in the winter but is route is not heavily used by snowmobiles at this time. Other than Alice Creek road, cross country snowmobile use is prohibited in the remainder of the polygon.
Proximity to private lands and non-Forest Service roads	Alice Creek Ranch and Silver King ranch at the southern border. Currently low intrusiveness of sights and sounds from these private ranches. Subdivision to the north in Falls Creek-Joslin area and big ranches to the east of the polygon.
Proximity to developed recreation sites outside of the polygon area	Alice Creek Trailhead at the end of Alice Creek Road. Indian Meadows Trailhead, guard station, campground, and outfitter corrals at the southwestern edge.

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 279. Primitive or unconfined types of recreation**

<b>Measures</b>	<b>Descriptions and locations</b>
Primitive and semi-primitive non-motorized areas available for summer recreation	Except for the area immediately adjacent to the Alice Creek road, the entire polygon is available for primitive and semi-primitive summer recreation.
Primitive and semi-primitive non-motorized areas available for winter recreation	Except for the area immediately adjacent to the Alice Creek road, the entire polygon is available for primitive and semi-primitive winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, fishing, hiking, horseback riding, dispersed camping, snowshoeing, cross country skiing, and snowmobiling along Alice Creek road. Historic interpretation along the upper portions of Alice Creek, Landers Fork and in the Lewis and Clark pass area.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Dearborn Silver King Area (UB1) is 44,140 acres. This area lies adjacent to the Scapegoat wilderness area.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

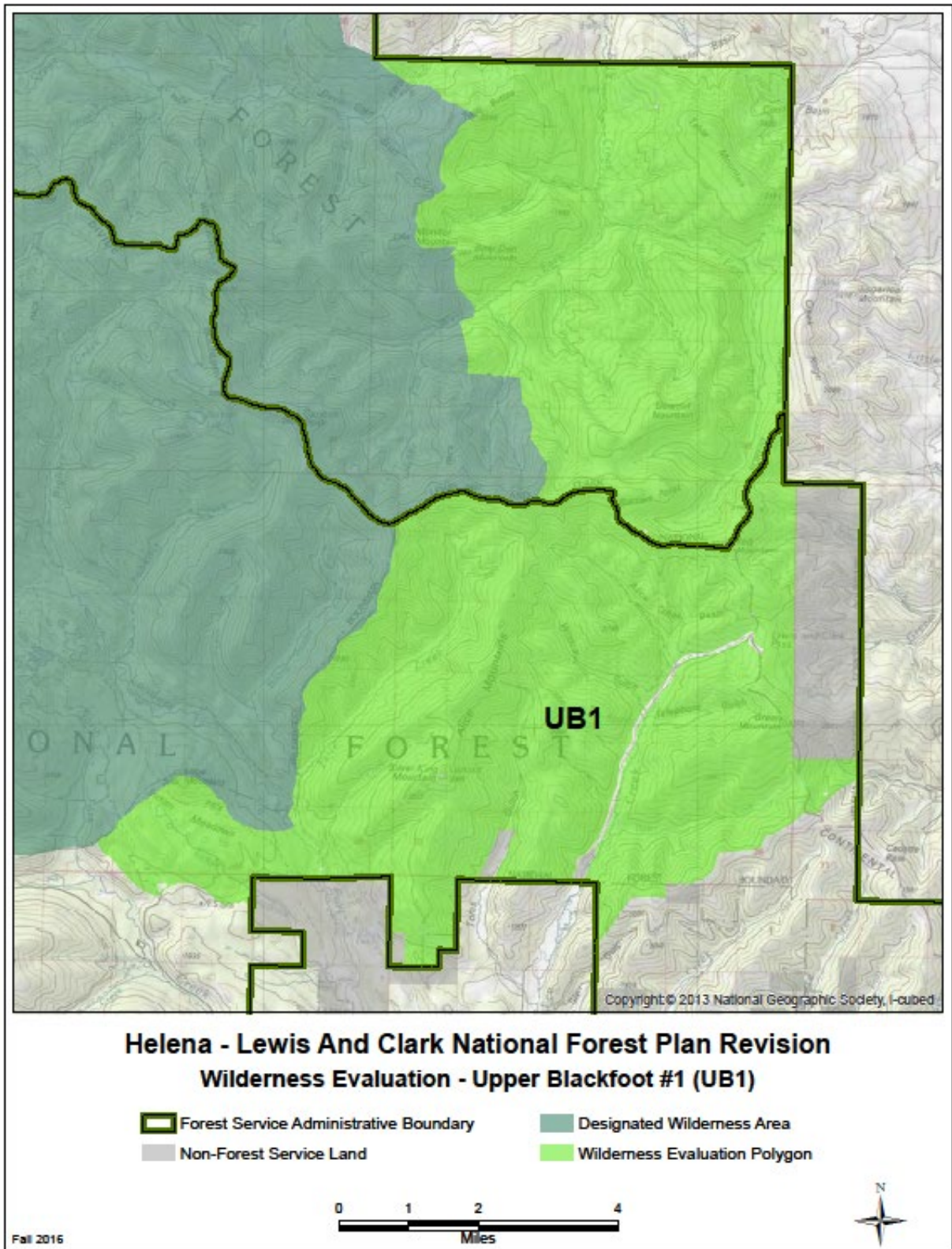
**Table 280. Features present**

Features	Description and scale
Rare plant communities	Records indicate that the following potential species of conservation concern are present in this area: <i>Pinus albicaulis</i> ; <i>Pinus flexilis</i> ; <i>Erigeron flagellaris</i> ; <i>Amerorchis rotundifolia</i> ; <i>Lesquerella klausii</i> ; <i>Phlox kelseyii</i> var. <i>Missoulensis</i> ; <i>Draba densifolia</i> ; <i>Botrychium</i> spp.; <i>Tetraplodon mnioides</i> ; <i>Drosera linearis</i> ; <i>Drosera anglica</i> ; <i>Carex livida</i> ; <i>Schoenoplectus subterminalis</i> .
Rare animal species or communities	Federally listed species: grizzly bear (within Recovery Zone and proposed Primary Conservation Area), Canada lynx (within designated Critical Habitat). Potential species of conservation concern and/or state at risk species: western toad, fisher (likely transient), trumpeter swan. Fisheries: Westslope cutthroat trout in Alice Creek, Landers fork and Tom's Gulch.
Rare ecosystems	Whitebark pine communities are of interest due to the species' status as a candidate for listing under the ESA. A small proportion of this area has whitebark pine present and potential (roughly 1%). Several notable locations occur which a mix of whitebark pine and limber pine, which have been the focus of some prescribed fire restoration treatments.
Outstanding landscape features	Limestone reef caves in upper Alice Creek. Blowout Mountain and Flattop. Falls creek has many waterfalls.
Historic and cultural resource sites	Thirteen known historic and cultural resources sites are located within this evaluation area. One of these sites is the Alice Creek Historic District which is listed in the National Register of Historic places and contains numerous sites which can be associated with this historic travel corridor. In addition, the Lewis and Clark National Historic Trail passes through this area. Overall, this location has high potential for the presences of historic and cultural resource sites, as well as scientific and educational value in regard to cultural resources.
Research natural areas	Indian Meadows RNA.
High quality water resources or important watershed features	Alice and Landers Fork Creeks are included in the draft WSR eligibility study. Landers Fork is listed for outstanding bull trout habitat and Alice Creek is listed for outstanding cultural resources.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 281. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	A large irregular shaped polygon that wraps around the southeastern corner of the Scapegoat wilderness. The northern half of the polygon is located within the Rocky Mountain GA and the southern half is located within the Upper Blackfoot GA.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	Conservation management area in the Rocky Mountain Ranger District. National Systems Trails Act (CDNST)
The presence and amount of non-Federal land in the area	All non-Federal lands were excluded from the inventory and evaluation. No private inholdings.
Management of adjacent lands	Logging and ranching on both private and state ownership in areas south of the polygon. Agriculture and grazing to the east. Residential subdivision to the north. Wilderness to the west.





## Stonewall Area (UB2)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 282. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	This area is characterized by productive conifer forest. Subalpine fir and subalpine fir/spruce mixes are the most common, found on roughly 23% of the area. Douglas-fir and lodgepole pine forests are also common, each dominating up about 22% of the area. A small amount of whitebark pine dominance types are also found (nearly 3%). Trace amounts of other dominance types can be found at less than 1% (ponderosa pine and limber pine). Notably, nearly 20% of this area is considered “transitional” as a result of recent fires; these areas are currently non-forested but generally expected to regenerate to forests.
Potential vegetation types	Cool moist forested potential vegetation types dominate this area (47%), with warm dry forest potential types also common (28%). This area also has a relatively high proportion of cold forest potential types (16%), where species such as whitebark pine may thrive. Roughly 6% of the area is only sparsely vegetated, especially on high elevation, rocky sites. Very small amounts of non-forested potential types are present, representing roughly 3% total, with mesic and xeric grasslands the most common types.
Known non-native terrestrial plant species	According to data as of 2/10/2016 70 acres within UB2 is associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Functioning mature forest habitat: 21,000 acres potential lynx habitat, with approximately 7100 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type. Roughly 10,000 acres of goshawk potential nesting habitat, with some known nest territories. Approximately 1800 acres possible old growth habitat in patches of varying size. About 700 acres low-moderate probability fisher habitat. Approximately 18,000 acres secure elk habitat. Moose present. Functioning subalpine/alpine habitat: approximately 24,000 acres potential wolverine habitat with roughly 16,000 acres of potential maternal habitat. Grizzly bears, Canada lynx, wolves present. Westslope cutthroat trout populations in Copper, Snowbank, Liverpool, Stonewall, NF Arrastra and Dry Creeks and Bull Trout also present in Copper Creek.
Known non-native wildlife species	No non-native terrestrial or avian species known; non-native trout likely present.

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 283. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	99.61% of this area has not been impacted by past timber harvest found in the FACTS database. It is possible “historic” logging occurred in some accessible areas prior to detailed record keeping (generally the 1950’s). The database shows roughly 116 acres have been harvested, mostly in the 1990’s.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.8% of UB2 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 7%, Class 2: 93% Arrastra Creek on 303(d) list for streambank modification, road runoff
Miles of motorized road/trail within 300’ of streams	5.5 miles
Noticeable wildfire suppression impacts	<i>Snow/Talon Fire (2003)</i> : dozer line and staging areas rehabbed but still evident in Falls Creek and Indian Meadows Creek. <i>Keep Cool Fire (2006)</i> : dozer lines rehabbed but still evident in headwaters of Liverpool Creek. <i>Sucker Creek Fire (2015)</i> : dozer lines rehabbed but still evident in Sucker Creek.

Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?

**Table 284. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present
Presence of timber harvest or prescribed fire areas	Substantially noticeable treatments were determined with a detailed methodology and excluded from the evaluation area. Some past treatments which are no longer considered noticeable occur in the evaluation area. The FACTS database shows roughly 258 acres of such treatments total (less than 1% of the total UB2 area), 116 timber harvest and 142 acres prescribed fire. The harvest was intermediate or uneven-aged in nature, leaving ample residual trees, and occurred in the 1990’s; therefore, these areas are likely visually recovered from the treatment. The burning treatments, which included broadcast burning, burning piles, and underburning, primarily also occurred in the 1990’s and in some cases overlap the same acres that were harvested. Treated areas are primarily confined to the eastern boundary of the evaluation area, near existing roads.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Electronic site on Stonewall Mountain. This is accessed by an ATV trail. Homeland Security repeater site.

Improvement type	Presence and extent of departure from naturalness
Areas of mining activities including both abandoned and active mines	Upper cotter Creek has a significant road network around the mine. Is substantially noticeable. Stonewall Creek patented mining claim with access road is also substantially noticeable. This evaluation area lies within the Lincoln Historic Mining District which contains numerous mining related features. Most of the historic mining is centralized around drainage bottoms and stream channels.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there are no range improvements located within UB2.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	ATV trail to Stonewall Mountain creates a cherry stem into the center part of UB2. Copper Bowls very popular snowmobiling area. Snowbank Lake Picnic Area and Copper Creek Campground just north of UB2. Arrastra Creek TH is located to the southwest portion of UB2 along Beaver Creek road. Administrative Lookout on Stonewall Mountain.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	Underground powerline along ATV trail to Stonewall Mountain.
Presence of watershed treatment areas including contouring, diking, and channeling	There is some older diversion ditches for past mining activity along Stonewall Creek. These are currently being reclaimed.
Lands adjacent to development or activities that impact opportunities for solitude	Beaver Creek and Copper Creek roads are open year-round to motorized uses. Stonewall Creek patented mining claim and access road affects surrounding area.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Stonewall Lookout. It is safe to assume there are several undocumented relics of historic mining related to the Lincoln Historic Mining District landscape. At this time there is only one recorded cultural resource in this evaluation area.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	2.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	There are several undocumented road templates associated with historic mining in this location, since it is located with a historic mining district.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 285. Impacts influencing solitude**

<b>Impacts</b>	<b>Mitigating factors</b> (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	There are three motorized routes within the polygon. These are located on Stonewall Mountain. The rest of the area is not available for summer motorized uses.
Area available for winter motorized opportunity	Except for the Red Mountain RNA and the top of Stonewall Mountain and ridgeline, this majority of the polygon is open to cross country snowmobile use. Additionally, there are several designated snowmobile trails in the area and a snowmobile play area in the upper reaches of Copper Creek.
Proximity to private lands and non-Forest Service roads	Patented Mining claim in Stonewall Creek. Open access road to this land.
Proximity to developed recreation sites outside of the polygon area	Arrastra Creek Trailhead along Beaver Creek, Copper Creek CG, Snowbank Lake Picnic Area, Stonewall Mountain TH, Sucker Creek TH.

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 286. Primitive or unconfined types of recreation**

<b>Measures</b>	<b>Descriptions and locations</b>
Primitive and semi-primitive non-motorized areas available for summer recreation	Portions of the polygon adjacent to the Scapegoat Wilderness and the eastern portions of the polygon are available for primitive and semi-primitive non-motorized recreation in the summer.
Primitive and semi-primitive non-motorized areas available for winter recreation	Much of the area is available for cross country snowmobile use. The Red Mountain RNA and areas across the Stonewall Mountain ridge would have some opportunity for primitive and semi-primitive non-motorized recreation in winter.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, fishing, hiking, horseback riding, ATV riding, mountain biking, motorcycle riding, snowmobiling, and dispersed camping.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Stonewall Area (UB2) is 30,046 acres. This area lies adjacent to the Scapegoat wilderness area.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

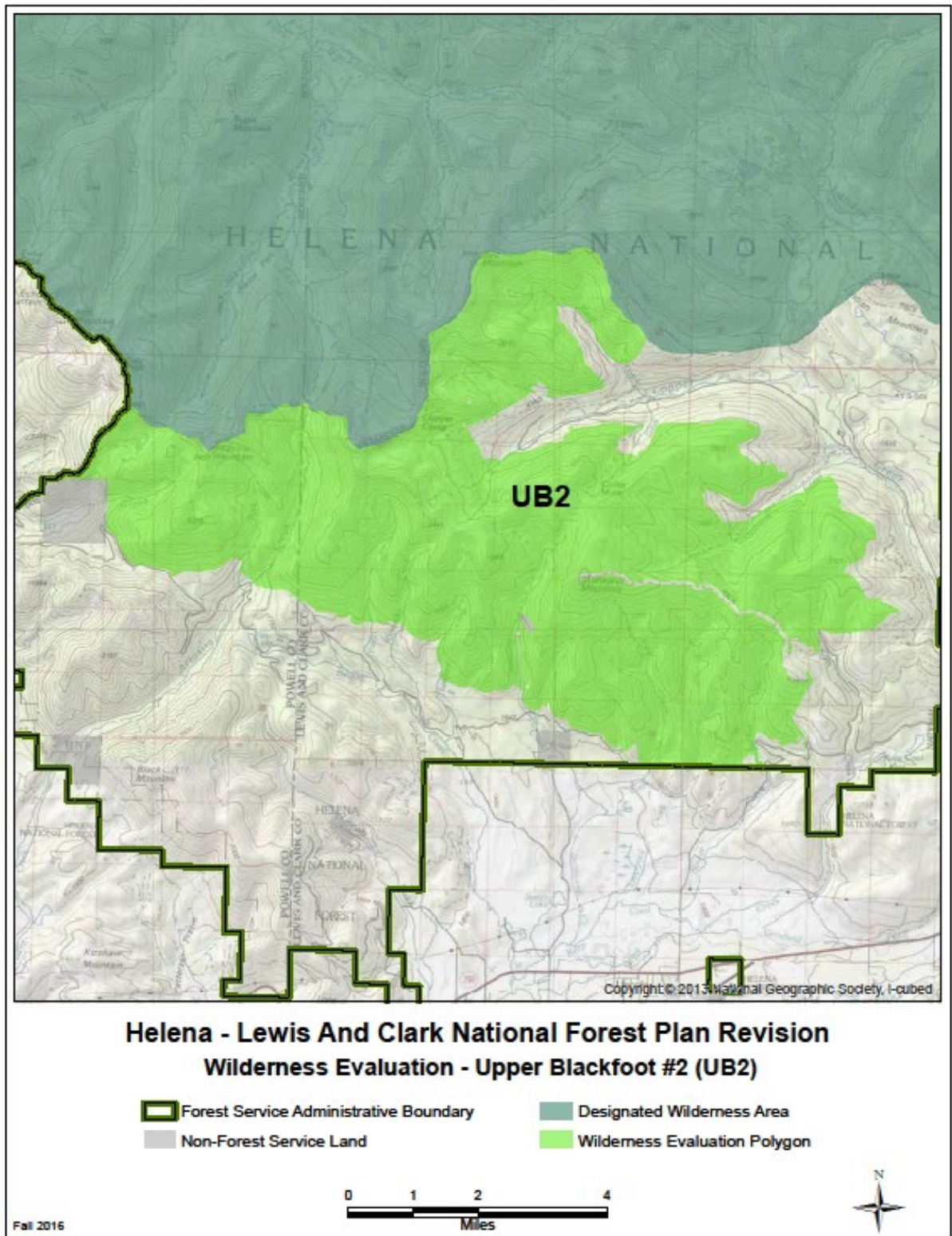
**Table 287. Features present**

Features	Description and scale
Rare plant communities	The only potential plant species of conservation concern that are known to occur in this area are <i>Pinus albicaulis</i> and <i>Cardamine rupicola</i> . It's possible that <i>Pinus flexilis</i> could also occur.
Rare animal species or communities	Federally listed species: grizzly bear (within Recovery Zone and proposed Primary Conservation Area), Canada lynx (within designated Critical Habitat). Potential species of conservation concern and/or state at risk species: fisher (likely transient). Westslope cutthroat trout in Stonewall Creek, Dry Creek, NF Arrastra Creek, Park Creek, and Liverpool Creek; Bull Trout in Copper Creek and Snowbank Creek.
Rare ecosystems	Whitebark pine communities are of interest due to the species' status as a candidate for listing under the ESA. A small proportion of this area has whitebark pine present (3%) and potential (roughly 16% in the cold types). Fires in suitable sites may offer potential for whitebark pine regeneration. Snowbank Creek has the highest density of Bull trout spawning on the Forest.
Outstanding landscape features	Copper Lakes in upper Copper Creek.
Historic and cultural resource sites	Besides the Lincoln Historic Mining District, only one recorded cultural resource lies within this evaluation area. However, several sites lie just outside of the proposed boundary.
Research natural areas	Red Mountain RNA.
High quality water resources or important watershed features	Westslope cutthroat trout streams, bull trout fisheries, Snowbank and Copper Creek are included on the draft list of eligible WSR streams for fisheries outstanding remarkable value.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 288. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	The large irregular-shaped polygon lies immediately south of the Scapegoat Wilderness and includes Stonewall Mountain and the upper reaches of Copper Creek.
Legally established rights or uses within the area	Right of way along Stonewall Mountain Tail for powerline, and Department of Homeland Security repeater site.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	Stonewall Creek patented mining claim.
Management of adjacent lands	Wilderness to the north. State land managed for timber production to the south. Mix of timber harvested areas (FS), nature conservancy, state land, and private ownership to the east.





## Black Mountain Area (UB3)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 289. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	This area is dominated by conifer forest. Douglas-fir dominance types are the most common, present on 52% of the area. Lodgepole pine dominance types are also common, growing on roughly 28% of the area. Subalpine-fir and Engelmann spruce mixes grow on about 16%. Trace amounts of other forest types are present, including whitebark pine and cottonwood. Nearly 3% of the area is considered “transitional”, where disturbance events (fire) have caused mortality and the forest has not yet regenerated. Less than 1% of the area is made up of grass or shrublands.
Potential vegetation types	Cool moist forest potential vegetation types dominate the area and are estimated to cover over 73%. Warm dry forest potential types are mapped on about 25%. Less than 1% of the area is mapped as cold forest potential types, where whitebark is most likely to thrive. Trace amounts are non-forested potential vegetation types, primarily grasslands.
Known non-native terrestrial plant species	According to data as of 2/10/2016 448 acres within UB3 is associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Functioning mature forest habitat: 7700 acres potential lynx habitat, with approximately 3700 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type. Roughly 7200 acres of goshawk potential nesting habitat, with some known nest territories. Approximately 2200 acres possible old growth habitat in patches of varying size. Clark’s nutcracker presence indicates mature whitebark, limber, and/or ponderosa pine communities. Approximately 8900 acres secure elk habitat. Moose present. Functioning subalpine/alpine habitat: Approximately 5200 acres potential wolverine habitat with roughly 1100 acres of potential maternal habitat. Grizzly bears, Canada lynx, wolves present. Fisheries: Westslope cutthroat trout and Bull Trout in Arrastra Creek.
Known non-native wildlife species	No non-native terrestrial or avian species known. Non-native fish are likely to be present.

*Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?*

**Table 290. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	99.99% of the area has no records of past timber harvest in the FACTS database, although it is possible that “historic” logging (prior to the 1950’s) may have occurred before detailed records were kept. Only 0.77 acres in this area have been affected by harvest (salvage in 1979).
Percent of area without known invasive weeds	According to data as of 2/10/2016 95.6% of UB3 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 3%, Class 2: 97% Arrastra and Ward Creeks on 303(d) list for streambank modification, road runoff
Miles of motorized road/trail within 300’ of streams	1.3 miles
Noticeable wildfire suppression impacts	No fire suppression impacts evident on landscape.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 291. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	Substantially noticeable treatments were determined with a detailed methodology and excluded from the evaluation area. Some past treatments which are no longer considered noticeable occur in the evaluation area. The FACTS database shows roughly 96 acres of such treatments total (roughly 1% of the total UB3 area), 0.77 acres timber harvest and 96 acres prescribed fire. The harvest was an intermediate salvage, leaving ample residual trees, and occurred in 1979; therefore, this area is likely visually recovered from the treatment. There was a local account of a clearcut and roads in the SE portion of the area. A review of aerial imagery confirms the presence of an obviously cleared area with a switchback road that appears to either pre-date FACTS records, or be a result of land acquisition, and is roughly 50 acres in size. The burning treatments, which included broadcast burning and underburning, occurred in the 1960’s and in the 1990’s.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	Building on Black Mtn., possibly used for communications site.
Areas of mining activities including both abandoned and active mines	No mining within UB3. However, there is some mining to the east in Lincoln Gulch. Small portions of the historic Lincoln Ditch Complex run through this evaluation area.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there are no range improvements within UB3.

Improvement type	Presence and extent of departure from naturalness
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Arrastra Creek TH to the north along Beaver Creek. Pine Grove CG to the east in Beaver Creek. Area identified for mountain bike trail in TP. Cross country snowmobile use is allowed across all of UB3.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None known.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude	Beaver Creek and Lone Point road are open to motorized use year-round. Lands adjacent to UB3 have active timber harvest and mining claims.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	No recorded structures or dwelling, only a small portion of the historic Lincoln Ditch Complex runs through this area. This area has not received very much cultural resource inventories, therefore there is potential for unrecorded relics of the past.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.2 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	None known. No historic road template recorded, however there is the potential for unrecorded features.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor's opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 292. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	There are no motorized trails within the polygon.
Area available for winter motorized opportunity	The entire polygon is available for cross country snowmobile use.
Proximity to private lands and non-Forest Service roads	None present.
Proximity to developed recreation sites outside of the polygon area	Arrastra Creek TH to the north along Beaver Creek. Pine Grove CG to the east in Beaver Creek.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 293. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized areas available for summer recreation	The entire polygon is available for primitive and semi-primitive non-motorized use.
Primitive and semi-primitive non-motorized areas available for winter recreation	Even though the area is open for cross country snowmobile use in the winter, there are still many opportunities for primitive and semi-primitive winter recreational use.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	No constructed trails within this polygon. Area primarily used during hunting season and for hiking. Has potential for mountain biking. No designated snowmobile routes but entire area open to cross country snowmobile travel.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Black Mountain Area (UB3) is 14,303 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

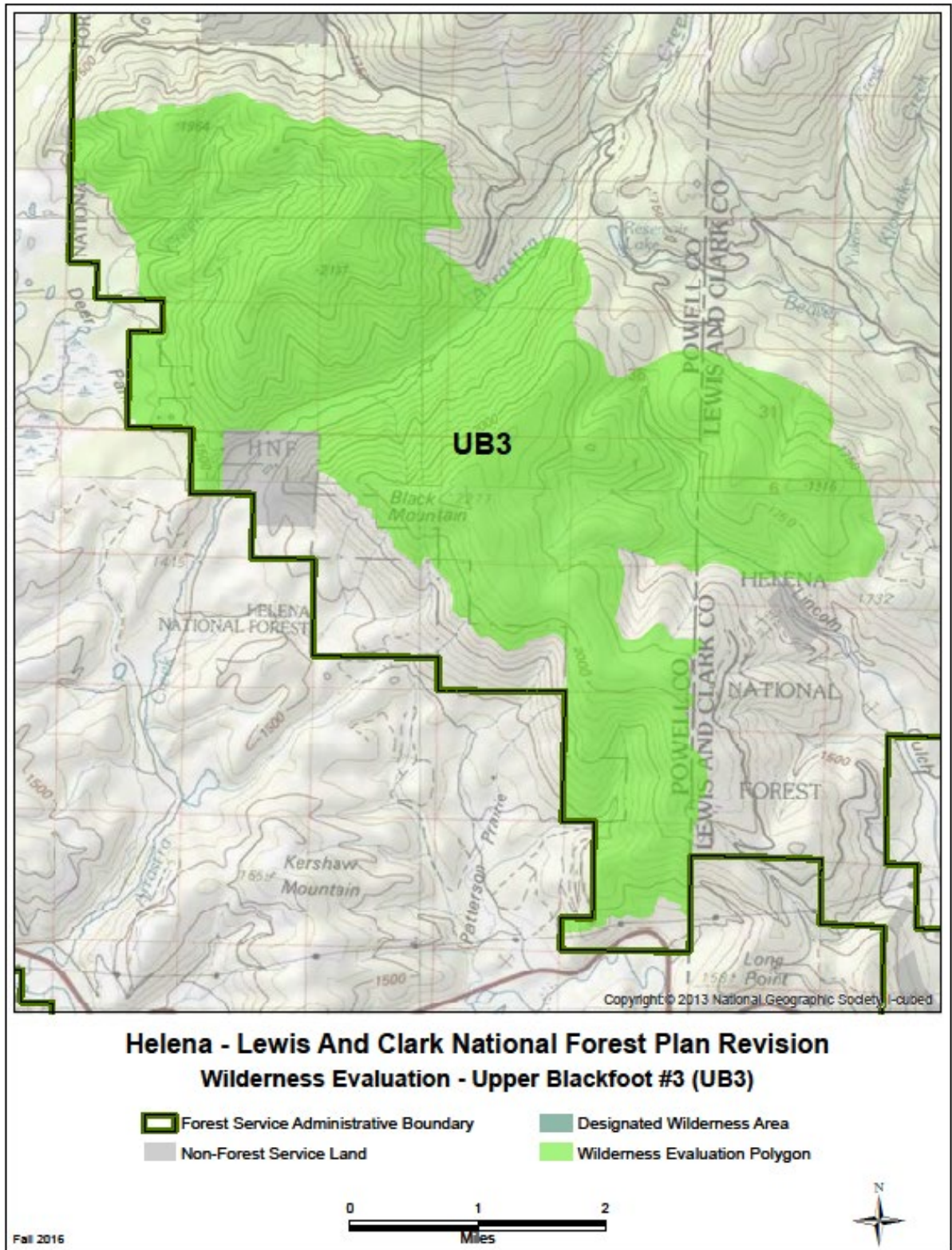
**Table 294. Features present**

Features	Description and scale
Rare plant communities	The only potential plant species of conservation concern that is known to occur in this area is <i>Pinus albicaulis</i> . Further, although not mapped in VMap, the presence of scattered or minor components of western larch are likely present; this is not a potential SCC but is a species of interest on the HLC NF.
Rare animal species or communities	Federally listed species: grizzly bear (within Recovery Zone and proposed Primary Conservation Area), Canada lynx (within designated Critical Habitat). Potential species of conservation concern and/or state at risk species: western toad. Bull and WCT in Arrastra Creek.
Rare ecosystems	Whitebark pine is a candidate species for listing under the ESA and is found in this area. This area is in also proximity to known stands of western larch, which are rare on the HLC NF and limited to the far western portion of the Upper Blackfoot GA. No known rare aquatic ecosystems.
Outstanding landscape features	None present.
Historic and cultural resource sites	A small partition of the historic Lincoln Ditch Complex runs through this evaluation area. Other than the ditch complex, no recorded cultural resources.
Research natural areas	None present.
High quality water resources or important watershed features	Bull Trout habitat/Arrastra Creek

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 295. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	An irregular shaped polygon the upper slopes of Black Mountain, Lincoln Gulch and either side of Arrastra Creek.
Legally established rights or uses within the area	None known
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known
The presence and amount of non-Federal land in the area	No private land inholdings within the polygon.
Management of adjacent lands	Forest Service system land managed for timber production to the north and east. South of polygon is private residential and mixed ownership with state of MT. Mix of private and BLM to the west.





### Anaconda Hill Area (UB4)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 296. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance types in this area are Douglas-fir dominated forests, which cover about 64% of the area. Also common are lodgepole pine forests, covering nearly 20%. Subalpine fir and Engelmann spruce mixed forests are found on about 9%, and dry grasslands cover 5%. Other dominance types are found in small amounts, generally covering 1% or less of the area, including shrublands, limber pine, whitebark pine, aspen, and a trace of ponderosa pine. A small area (about 2%) is considered “transitional”, where forest cover has not yet recovered after a recent disturbance.
Potential vegetation types	The most common potential vegetation types are warm dry forest types, found on about 57% of the area, likely supporting mainly Douglas-fir. Cool moist forest types make up about 37%, and likely Douglas-fir, lodgepole pine, fir and spruce can be found on these sites. Just a trace amount of cold forest types is present. Dry grassland types cover about 2%, and mesic grassland types about 3%, along with a trace of dry shrubland types.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 76 acres within UB4 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Functioning mature forest habitat: 9900 acres potential lynx habitat, with approximately 4300 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type. Roughly 13,000 acres of goshawk potential nesting habitat. Less than 150 acres possible old growth habitat. Approximately 13,000 acres secure elk habitat. Moose present. Less than 200 acres potential wolverine habitat. Grizzly bears, Canada lynx, wolves present. Westslope cutthroat trout in Anaconda and Sandbar Creeks, no mapped Bull Trout populations, but habitat is likely present.
Known non-native wildlife species	No non-native terrestrial or avian species known Non-native trout are likely present

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 297. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	There are no records of past harvest in this area, although it is possible that some historic cutting could have occurred prior to Forest Service record keeping. In particular, in Section 25 on the western side, aerial imagery shows extensive roads and modified vegetation that appears to have been harvested.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.6% of UB4 is not associated with invasive plant inventories.

Measures	Outcome
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 54%, Class 2: 24%, Class 3: 24% (but this is the watershed with the superfund site, downstream of inventory unit). Sandbar Creek on 303(d) list for mining impacts, SF Dearborn River on list from grazing impacts
Miles of motorized road/trail within 300' of streams	0.7 miles
Noticeable wildfire suppression impacts	No large fire occurrence records since 1980.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 298. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present
Presence of timber harvest or prescribed fire areas	Over 99% of this area has had no vegetation treatments of any kind according to available data. There are no records of past harvest. About 207 acres of prescribed burning has occurred, consisting of broadcast burning in 1979 which affected less than 1% of the area, and is no longer substantially noticeable today. However, in addition to the treatments found in available records, some additional areas appear to have been harvested on the western side of the polygon (Section 25). These areas appear well-regenerated but may still be noticeable to viewers on the ground.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present within UB4 however, electronic site on Sunset Mountain to the north is visible from within the polygon.
Areas of mining activities including both abandoned and active mines	This area overlaps two historic mining districts with numerous unrecorded features associated with past and current mining.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there are no range improvements within UB4.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	There is a trail access point at Rogers Pass and developed trailhead at Flesher Pass. The CDNST Trail bisects the polygon.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None known.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.

Improvement type	Presence and extent of departure from naturalness
Lands adjacent to development or activities that impact opportunities for solitude	Extensive mining operations in the Mike Horse drainage. Traffic from Highway 200 and Highway 279 create site and sound impacts. Open roads within proposed to go away in TP. Road to trail conversion proposed south in Sandbar Creek.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	Only three recorded historic properties lie within the boundaries of this study area, however the two historic mining districts overlap this area. There are most likely numerous unrecorded historical and cultural features associated with the historic mining landscape.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness areas in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates.	0.7 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation.	No recorded historic roads. However, there is a high likelihood that numerous unrecorded historic routes associated with past mining exists on the landscape.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor's opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 299. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	There are no motorized trails within the polygon.
Area available for winter motorized opportunity	There is a mixture of areas open and closed to cross country snowmobile use in this polygon.
Proximity to private lands and non-Forest Service roads	The entire polygon is surrounded by private lands. The northern, eastern and portions of the southern boundaries are with private agricultural lands. The western boundary is formed by Highway 200 and areas with mining impacts.
Proximity to developed recreation sites outside of the polygon area	Fletcher Trailhead is the only developed site near the polygon. There is a dispersed trailhead at the top of Roger's Pass, but it does not have any constructed features and functions as an access point for trails in that area.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 300. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The entire polygon is available for primitive and semi-primitive non-motorized summer recreation. However, the sights and sounds of Highway 200 and nearby mining activities may affect solitude.
Primitive and semi-primitive non-motorized winter recreation	The opportunities for primitive and semi-primitive non-motorized recreation in winter are limited to those areas that do not allow for cross country snowmobiling.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, hiking, and horseback riding, and mountain biking primarily along the CDNST. Snowmobiling occurs in places within the polygon.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Anaconda Hill Area (UB4) is 22,318 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

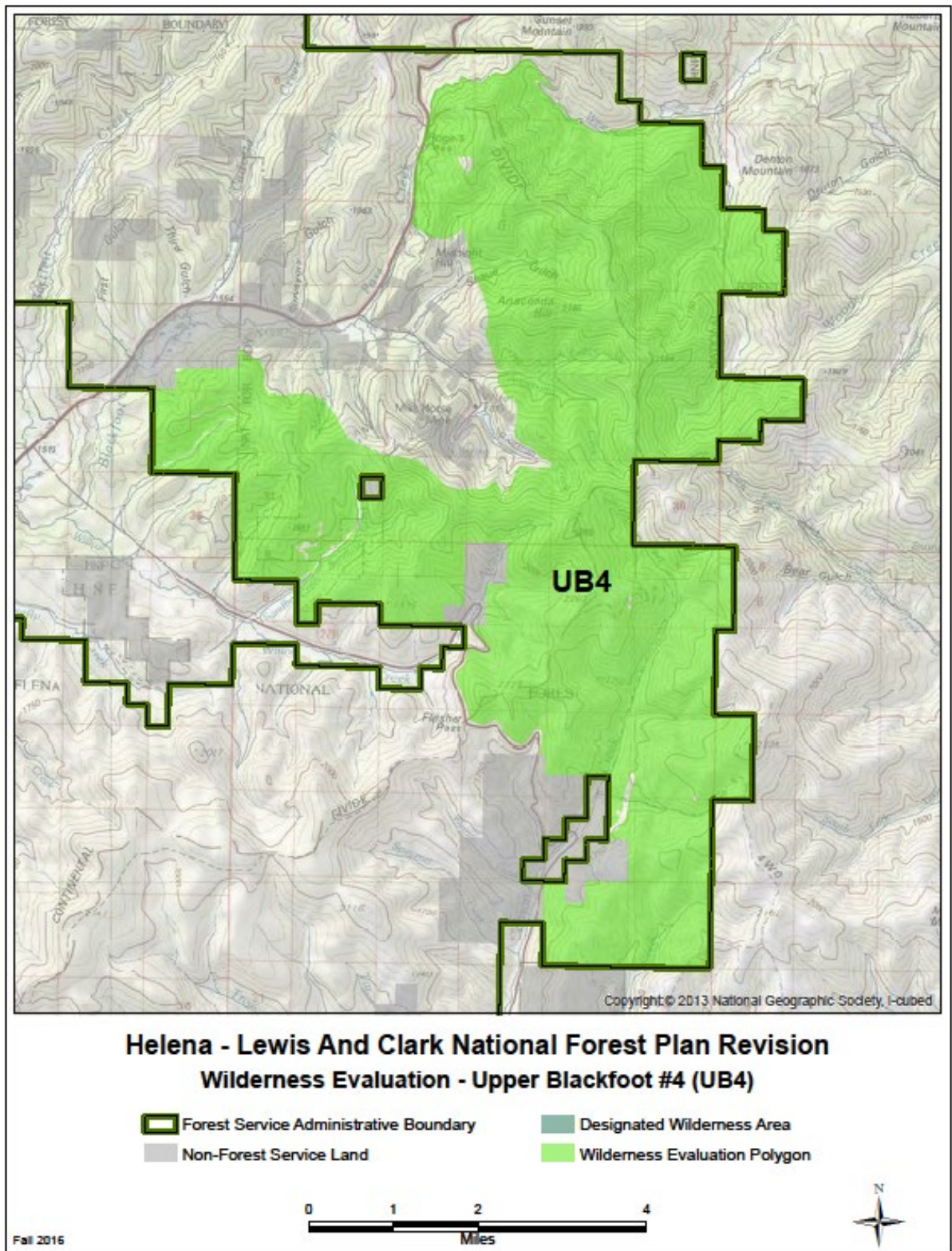
**Table 301. Features present**

Features	Description and scale
Rare plant communities	The potential plant species of conservation concern that are known to occur in this area include <i>Pinus albicaulis</i> , <i>Draba densifolia</i> , and <i>Lesquerella klausii</i> .
Rare animal species or communities	Federally listed species: grizzly bear (within Distribution Zone and proposed management Zone 1), Canada lynx (within designated Critical Habitat). Potential species of conservation concern and/or state at risk species: wolverine Westslope cutthroat trout in Sandbar and Anaconda Creeks.
Rare ecosystems	Whitebark pine is a candidate species for listing under the ESA and is present in very small amounts in this area. Other vegetation communities of interest on the HLC NF also occur here in very small amounts, including limber pine, aspen, and ponderosa pine. No rare aquatic ecosystems known.
Outstanding landscape features	Open ridges of the Continental Divide. Red cliffs along the southern portion of the CDNST.
Historic and cultural resource sites	Only five recorded historic and cultural sites lie in this study area. However, it’s highly likely that numerous unrecorded sites are on the landscape, which could contain scientific or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	Anaconda Creek is important westslope cutthroat trout fishery.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 302. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	This a large, irregular shaped polygon that straddles the continental divide east and south of Roger's Pass.
Legally established rights or uses within the area	Highway ROWs for Highways 200 and 279. Interior patented mining claim and road associated with it in Sandbar Creek.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	National Systems Trails Act (CDNST)
The presence and amount of non-Federal land in the area	Patented mining claim and road associated with it in Sandbar Creek.
Management of adjacent lands	Active mining to the west in Mike Horse Creek. Agriculture and ranching to the east and south.





### Paige Gulch Area (UB5)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 303. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most common dominance types in this area are either Douglas-fir dominated forests (growing on about 52% of the area) and lodgepole pine dominated forests (growing on about 44% of the area). Subalpine fir and Engelmann spruce mixed forests can be found on about 3%, and dry grasslands cover about 2%. Trace amounts of other dominance types, representing less than 0.5% of the area each, are also found and include shrublands, ponderosa pine, limber pine, and aspen.
Potential vegetation types	Cool moist forest types are the most common potential vegetation types in this area, covering about 61% where the likely species present include Douglas-fir, lodgepole pine, fir and spruce. Warm dry forest types are found on 36%, and likely support mostly Douglas-fir. Other potential vegetation types present represent about 1% or less each of the area, and include xeric grassland, mesic grassland, and xeric shrubland types.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 157 acres within UB5 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Functioning mature forest habitat: 11,000 acres potential lynx habitat, with approximately 4400 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type. Roughly 15,000 acres of goshawk potential nesting habitat. Approximately 10,000 acres secure elk habitat. Moose present. Roughly 1000 acres potential wolverine habitat. Grizzly bears, Canada lynx, wolves present. Fisheries: Westslope cutthroat trout in Black Diamond, Trout Creek, Specimen Creek, and small tributaries. No Bull Trout populations mapped in the polygon, but habitat is likely to be present.
Known non-native wildlife species	No non-native terrestrial or avian species known. Non-native trout likely.

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 304. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	A little over 98% of this area has been unaffected by past timber harvest. According to available records, about 296 acres have been harvested in the past, consisting primarily of salvage cutting in 1963 but also including small clearcut, sanitation, and shelterwood cuts from 1963 to 2012.

Measures	Outcome
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.1% of UB5 is not associated with invasive plant inventories.
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 32%, Class 2: 35%, Class 3: 32%. Class 2/3 impacts generally relate to mining impacts downstream from WI unit. No 303(d) listed streams.
Miles of motorized road/trail within 300' of streams	3.1 miles
Noticeable wildfire suppression impacts	No large fire occurrence records since 1980.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 305. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present
Presence of timber harvest or prescribed fire areas	About 296 acres, or 1.69% of this area, has had past harvest, primarily in 1963. The most recent treatment was a small sanitation cut in 2012 which left reserve trees. Although all of these areas were determined to be no longer substantially noticeable, most past harvest areas are adjacent to the main road in the middle of the polygon and could be excluded from the boundary if desired. In addition to the harvest, about 1,617 acres in this area have had prescribed burning treatments, consisting primarily of underburning in the 1990's, and broadcast burning for wildlife habitat improvement from 2012 to about 2014. District personnel determined that these treatments were also not substantially noticeable, with effects similar to wildlife. Altogether, vegetation treatments have affected about 9% of the area within this evaluation boundary. Additional past cutting is adjacent to the boundary.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	None present.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there are no range improvements within UB5.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	There is a developed trailhead at Flesher Pass. Cummings cabin rental on the northwest. CDNST bisects. Stemple Pass cross country ski trails. Paige Gulch road is open to snowmobiles in winter and is open to motorized travel in the summer. Cross country snowmobile travel is open in the northwestern part of the polygon.
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None internally.

Improvement type	Presence and extent of departure from naturalness
Presence of watershed treatment areas including contouring, diking, and channeling	None known
Lands adjacent to development or activities that impact opportunities for solitude	Active mining in 7UP mining complex to the west. Internal timber harvest and road building by the FS. Highway 200 and residential areas to the north. Residential acres to the south and east.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are 6 recorded cultural resources within this polygon. This polygon is within the Stemple-Gould Historic Mining District, therefore it has a high potential for unrecorded sites associated with past mining.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.0 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	No recorded historic routes, however, there is a high probability for unrecorded historic routes associated with past mining in the area.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 306. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	There are no motorized trails within the polygon.
Area available for winter motorized opportunity	North of the CDNST is open to cross country snowmobiling; south of the CDNST is closed to cross country snowmobiling. Snowmobiling allowed on the Paige Gulch road.
Proximity to private lands and non-Forest Service roads	None present.
Proximity to developed recreation sites outside of the polygon area	Flesher Pass Trailhead. Cummings cabin rental on the northwest.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 307. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	The entire polygon is available for primitive and semi-primitive non-motorized summer recreation. Motorized uses do currently occur on the CDNST in this area.
Primitive and semi-primitive non-motorized winter recreation.	The areas south of the CDNST, which are closed to cross country snowmobiling, are available for primitive and semi-primitive non-motorized winter recreation.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, snowmobiling, hiking, mountain biking, and cross-country skiing.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Paige Gulch Area (UB5) is 20,145 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

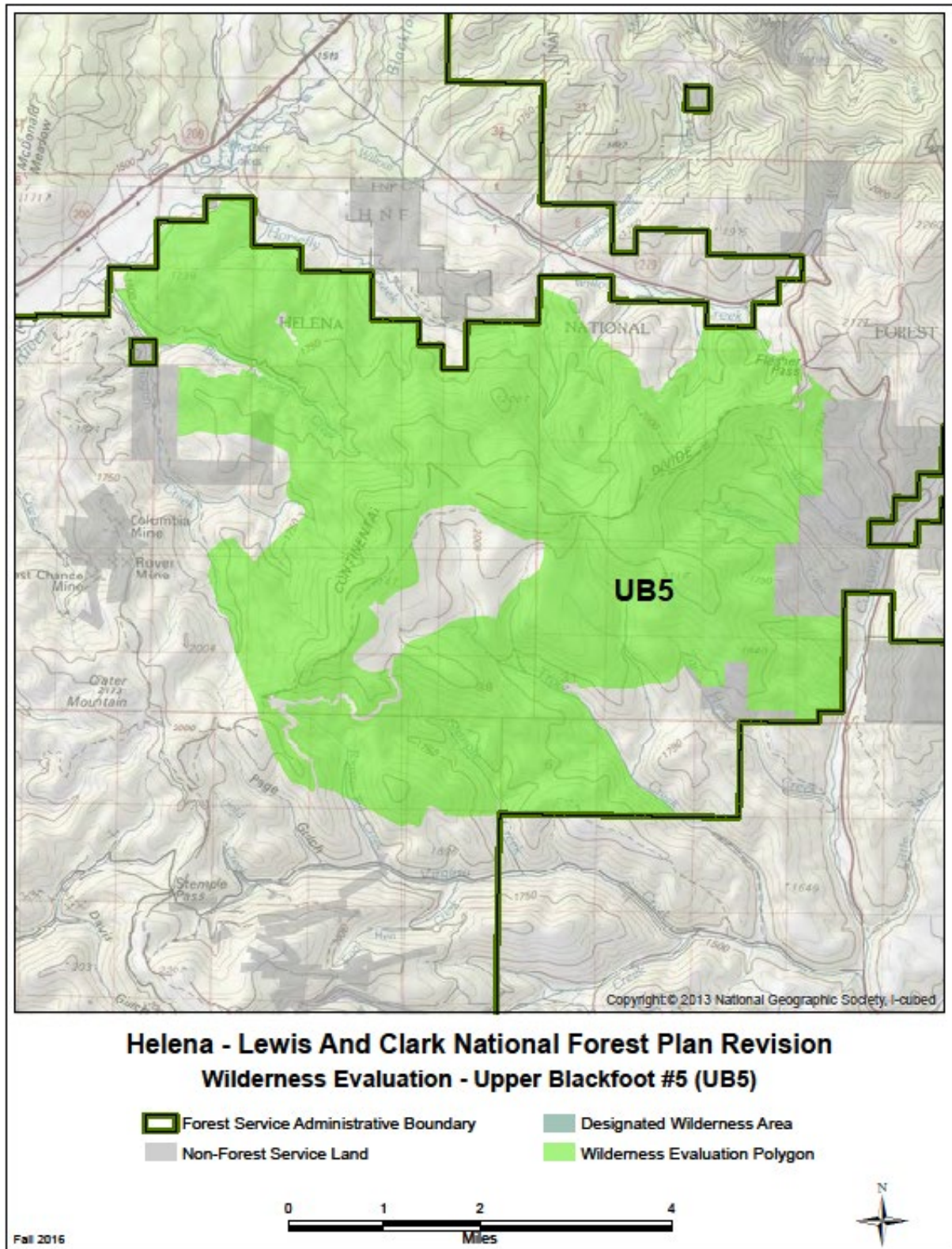
**Table 308. Features present**

Features	Description and scale
Rare plant communities	The only potential plant species of conservation that is known to occur in this area is <i>Pinus albicaulis</i> , although it is also possible that <i>Pinus flexilis</i> could occur.
Rare animal species or communities	Federally listed species: grizzly bear (within Distribution Zone and proposed management Zone 1), Canada lynx (within designated critical habitat). Potential species of conservation concern and/or state at risk species: western toad. No bull trout, several streams with westslope cutthroat trout (see above).
Rare ecosystems	Whitebark pine is a candidate species for listing under the ESA and is present in small amounts in this area. No known rare aquatic ecosystems.
Outstanding landscape features	Open, scenic ridges along the CDNST.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational, or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	None present.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 309. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	The area is a large irregular shaped polygon that stretches south and west of Flesher Pass. There is a large exclusion area in the upper reaches of Paige Gulch.
Legally established rights or uses within the area	None known.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	None present.
Management of adjacent lands	The northern boundary is private residential. The western boundary is active mining and timber harvesting and Stemple Pass cross country ski trails. The southern boundary is private residential, ranching, and timber harvest. The eastern boundary is Highway 279 and residential areas.





### Bear Gulch Area (UB9)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 310. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	There is a relatively low diversity of dominance types in this area. The most abundant types are lodgepole pine dominated forests, which cover about 53% of the area. Douglas-fir dominated forests are also common, found on about 40% of the area. Subalpine fir and Engelmann spruce forests grow on just over 6%. Trace amounts of other dominance types are present and represent less than 1% of the area each, and include grasslands, shrublands, and cottonwood.
Potential vegetation types	The most common potential vegetation types are cool moist forest types, representing over 61% of the area and likely supporting Douglas-fir, lodgepole pine, fir, and Engelmann spruce. Warm dry forest potential types are found on 36%, where Douglas-fir likely dominates. Other potential types are present and cover 1% or less of the area each, and include xeric grassland, mesic grassland, and xeric shrubland types.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 102 acres within UB9 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Functioning mature forest habitat: 4600 acres potential lynx habitat, with approximately 1500 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type. Roughly 4800 acres of goshawk potential nesting habitat. Presence of flammulated owl indicates mature, open ponderosa pine habitat. Approximately 2700 acres secure elk habitat. Moose present. Roughly 2000 acres potential wolverine habitat. Grizzly bears, Canada lynx, wolves present. Fisheries: Westslope cutthroat trout in EF Willow Creek, possibly Jefferson Creek Trib., McClellan Gulch, and Fields Gulch. Bull Trout mapped in Poorman Creek, along the northern boundary of the polygon.
Known non-native wildlife species	No non-native terrestrial or avian species known. Non-native trout likely.

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 311. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	100% of the area is unaffected by past harvest. There are no records of harvest occurring here, although it is possible that historical logging could have occurred prior to Forest Service record keeping. There is nothing noticeable on aerial photography.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 88.2% of UB9 is not associated with invasive plant inventories.

Measures	Outcome
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 2: 36%, Class 3: 64% Class 3 primarily due to impacts downstream of WE polygon.
Miles of motorized road/trail within 300' of streams	1.1 miles
Noticeable wildfire suppression impacts	No large fire occurrence records since 1980.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 312. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present.
Presence of timber harvest or prescribed fire areas	There are no records of past harvest in this area, although there are many harvest units immediately adjacent to the boundary. Prescribed fire treatments have occurred within the area, consisting of about 686 acres of broadcast burning and underburning in 1992 and 2002. This affected about 12% of the area; however, these treatments were determined to not be substantially noticeable, with effects similar to low or mixed severity wildfire.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present.
Areas of mining activities including both abandoned and active mines	Roads to the abandoned mine sites are still evident. There are active mines along the east boundary of the polygon.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there are no range improvements within UB9.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	Motorized trail (Helmville-Gould) along southwestern corner. Minimally developed trailhead to the west (Dalton Mountain).
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None present.
Presence of watershed treatment areas including contouring, diking, and channeling	None present.
Lands adjacent to development or activities that impact opportunities for solitude	There is evidence of mining and timber harvest surrounding the entire polygon. There are agricultural uses to the north.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are 10 recorded cultural resources within this polygon. This polygon is also within the McClellan/Sauerkraut Historic Mining District which has the high probability of unrecorded sites associated with past mining. Old mining cabins and evidence of mining activity along the western edge. Crisscrossed with old trails and roads.

Improvement type	Presence and extent of departure from naturalness
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	0.8 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	No recorded historic routes within this polygon. However, there is the potential for unrecorded historic routes associated with past mining in the area.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

*Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?*

**Table 313. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	Motorized use on Helmville-Gould trail and dispersed cross country foot traffic.
Area available for winter motorized opportunity	Entire area open to cross country snowmobile travel.
Proximity to private lands and non-Forest Service roads.	None present.
Proximity to developed recreation sites outside of the polygon area.	Dalton Mountain trailhead (minimally developed).

*Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?*

**Table 314. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Most of the area holds opportunities for primitive and semi-primitive non-motorized recreation. These opportunities may be limited in the portions of the polygon that lie adjacent the Helmville-Gould trail which is open to motorized use in the summer.
Primitive and semi-primitive non-motorized winter recreation	The area is available for primitive and semi-primitive non-motorized uses in winter, but the presence of cross-country snowmobile uses may affect these experiences.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, hiking, horseback riding, and ATV riding in the summer. Snowmobiling in the winter.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Bear Gulch Area (UB9) is 7,591 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

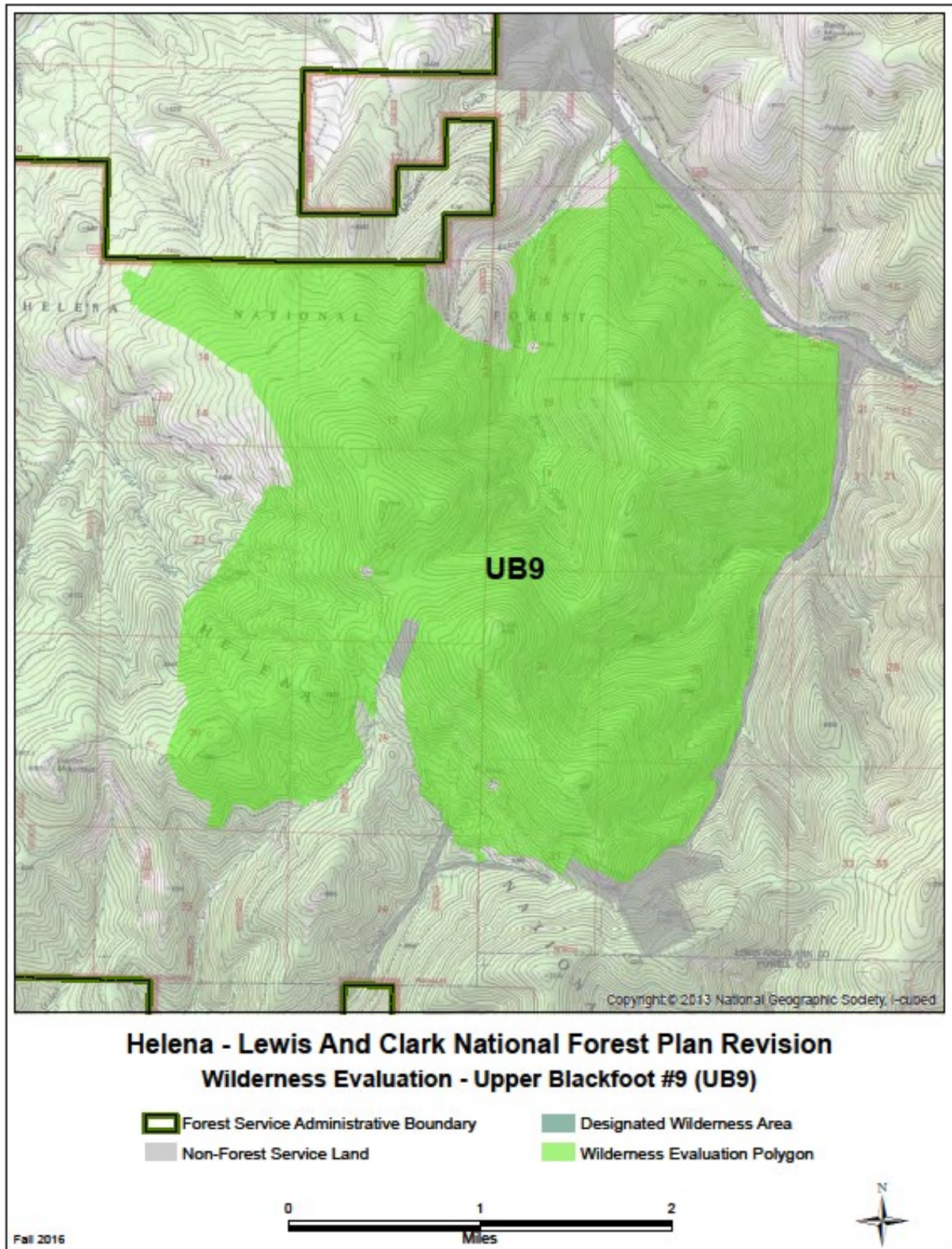
**Table 315. Features present**

Features	Description and scale
Rare plant communities	There are no potential plant species of conservation concern that are known to occur in this area.
Rare animal species or communities	Federally listed species: grizzly bear (within Distribution Zone and proposed Management Zone 1), Canada lynx (within designated critical habitat). Potential species of conservation concern and/or state at risk species: flammulated owl. Fisheries: Westslope cutthroat trout in EF Willow Creek, possibly Jefferson Creek Trib., McClellan Gulch, and Fields Gulch.
Rare ecosystems	There are no known rare terrestrial ecosystems in this area. No known rare aquatic ecosystems.
Outstanding landscape features	None.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational, or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	Bull Trout and westslope cutthroat trout fisheries.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 316. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	Irregular shaped polygon which lies south and west of Poorman Creek. Shape of the polygon on the west side is influenced by patented mining claims.
Legally established rights or uses within the area	None present.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	None known.
The presence and amount of non-Federal land in the area	No private land inholdings within the polygon. Patented mining claims lay outside of the polygon around the border.
Management of adjacent lands	Timber production and mining to the south and west. Rangeland to the north. Strip of private lands along McClellan Creek to the east.



## Nevada Mountain Area (UB10)

Criteria 1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities within the area?

**Table 317. Plant and animal communities**

Plant and animal communities	Composition
Existing vegetation dominance types	The most abundant dominance types in this area are lodgepole pine dominated forests, which cover about 44% of the area. Douglas-fir dominated forests are also common, found on about 39% of the area. Subalpine fir and Engelmann spruce mixed forests occur on roughly 13% of the area, and dry grasslands are found on nearly 2%. Other dominance types are present in very small amounts, representing less than 1% of the area each, and include shrublands, whitebark pine, limber pine, cottonwood, and aspen. There are some sparsely vegetated areas as well (scree/rock).
Potential vegetation types	The most common potential vegetation types in this area are the cool moist forest types, which represent about 65% of the area and likely support pure or mixed forests of Douglas-fir, lodgepole pine, fir, and spruce. Warm dry forest potential types are found on about 32%, and likely primarily support Douglas-fir. Cold forest types are found on just over 1%, where whitebark pine is most likely to grow. Very small amounts of other potential types are also present, including xeric grassland, mesic grassland, and xeric shrubland types.
Known non-native terrestrial plant species	According to data as of 2/10/2016, 335 acres within UB10 are associated with invasive plant inventories.
Status and extent of existing native wildlife species and communities	Functioning mature forest habitat: 35,000 acres potential lynx habitat, with nearly 12,000 acres mature multi-storied (optimal lynx winter forage) based on existing and potential vegetation type. Over 36,000 acres of goshawk potential nesting habitat. Approximately 33,000 acres secure elk habitat. Roughly 29,000 acres potential wolverine habitat. Grizzly bears, Canada lynx, wolves present. Westslope cutthroat trout and Bull Trout in Nevada Creek, WCT in Washington and Threemile Creeks.
Known non-native wildlife species	No non-native terrestrial or avian species known. Non-native trout likely.

Question 1b. What is the extent to which the area reflects ecological conditions that would normally be associated with the area without human intervention?

**Table 318. Ecological conditions**

Measures	Outcome
Percent of area without past timber harvest	Available records show that there have been about 291 acres of past harvest in this area, consisting of thinning, uneven-aged cuts, liberation cuts, and seed tree cuts from 1964 to 1992. There was also a small clearcut in 1958. These areas cover about 0.57% of the area; over 99% of the area has been unaffected by harvest.
Percent of area without known invasive weeds	According to data as of 2/10/2016, 99.3% of UB10 is not associated with invasive plant inventories.



Measures	Outcome
Percent of area within watersheds in watershed condition classes 1, 2, and 3	Class 1: 9%, Class 2: 31%, Class 3: 60%. Class 3 primarily due to mining activities occurring downstream from WE polygon; Washington Creek watershed impacted by dewatering, dredge mining, roads, and grazing. Washington Creek is on 303(d) list for mining impacts and Nevada Creek is on 303(d) list for Agriculture, Grazing Sources, Placer Mining, Resource Extraction issues—but could be related to activities downstream of the polygon.
Miles of motorized road/trail within 300' of streams	10.4 miles
% of area without noticeable wildfire suppression impacts	No large fire occurrence records since 1980.

*Question 1c. What is the extent to which improvements in the area represent a departure from apparent naturalness?*

**Table 319. Improvements and extent of departure from naturalness**

Improvement type	Presence and extent of departure from naturalness
Airstrips	None present
Presence of timber harvest or prescribed fire areas	All of the past harvests that occurred in this area (291 acres total, from 1958 to 1992) were determined to be no longer substantially noticeable on the landscape. In addition to harvest, about 2,375 acres (or 4.65% of the area) has been treated with prescribed fire. About 80 acres of this were pile burning or jackpot burning following past harvest treatments. The remainder (and bulk) of the burning was underburning from 1991 to 2004, most commonly as part of the Poorman project. These areas were also determined to be not substantially noticeable on the landscape, with effects similar to wildfire. Over 95% of the evaluation area has been unaffected by any vegetation treatment.
Presence of permanently installed vertical structures, such as electronic installations including cell towers, television, radio, and telephone repeaters	None present
Areas of mining activities including both abandoned and active mines	Mining impacts/roads in Washington Creek, primarily downstream of WE polygon, roads around Nevada Creek too, mostly downstream of polygon. Active mining in this polygon, including placer plus lode mining. There are a lot of known unpatented claims with pre-existing rights.
Range improvement areas, involving minor structural improvements (fences or water troughs) and non-structural improvements (chaining, burning, spraying, potholing, and so forth)	According to current data there is approximately 1 mile of fencing and 2 stock water tanks within UB10.
Recreational improvements, such as occupancy spots, or minor hunting, or outfitting camps within the polygon area	The Helmville-Gould Trail is designated for motorized use. The CDNST is motorized/non-motorized and bisects the polygon. There are non-motorized trails in Nevada Creek, Prickly Pear Gulch and Washington Gulch. The Nevada Creek TH is located west of the polygon. The Nevada Creek Admin Cabin is in Nevada Creek. The Helmville Gould TH is located on eastern edge. Snowmobiles are not authorized in the polygon area.

Improvement type	Presence and extent of departure from naturalness
Presence of ground-return telephone lines, electric lines, and power lines if a right-of-way has not been cleared. Visible presence of power lines, pipelines, and other permanently installed linear right-of-way structures	None present. ROW in Washington Creek for patented mining claim inholdings.
Presence of watershed treatment areas including contouring, diking, and channeling	None known.
Lands adjacent to development or activities that impact opportunities for solitude	Mines in Washington Creek to the west. Timber harvest and road building to the north. Active timber harvest on FS lands to west. Stemple Pass road to the north.
Structures, dwellings, and other relics of past occupation that are considered part of the historical and cultural landscape of the area	There are 28 recorded cultural resources within this polygon. This polygon also overlaps three historic mining districts with have numerous unrecorded relics of past mining activity.
Areas that have been proposed by the FS for consideration as recommended wilderness as a result of previous Forest planning process	Not recommended as wilderness in the 1986 Forest Plan.
Number of miles of maintenance level 1 road templates	10.9 miles
Number of miles of historic road templates, including historic mining routes, wagon routes, or other settlement era transportation	No recorded historic routes. However, there is the high potential for unrecorded routes associated with past mining.

Criteria 2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a. What impacts are pervasive and influence a visitor’s opportunity for solitude? What are the factors that may mitigate those impacts?

**Table 320. Impacts influencing solitude**

Impacts	Mitigating factors (include topography and screening that influence pervasive sights and sounds)
Area available for summer motorized opportunity	There are three motorized trails within the polygon: Trail 467 (Helmville-Gould), Trail 487, and Trail 440 (part of the CDNST).
Area available for winter motorized opportunity	Except for an area just south of Jefferson Creek which is open to cross country snowmobiling, the rest of the area is closed to cross country snowmobile use.
Proximity to private lands and non-Forest Service roads	Patented mining claims and access road in Washington Creek.
Proximity to developed recreation sites outside of the polygon area	Nevada Creek TH, Helmville Gould TH, and Seller Gulch TH. Nevada Creek Admin Cabin in Nevada Creek.

Question 2b. What primitive-type or unconfined-type of recreation activities are available in the area that would contribute to the visitor’s ability to feel a part of nature?

**Table 321. Primitive or unconfined types of recreation**

Measures	Descriptions and locations
Primitive and semi-primitive non-motorized summer recreation	Except for areas immediately surrounding the 3 motorized trails, there are abundant opportunities available for primitive and semi-primitive recreation in the summer.
Primitive and semi-primitive non-motorized winter recreation	Except for the area just south of Jefferson Creek where cross country snowmobiling is allowed, most of this polygon is available for primitive and semi-primitive recreation in the winter.
Known existing primitive/unconfined types of recreation uses, including nonconforming uses	Hunting, CDNST, hiking, horseback riding, and mountain biking. Some ATV use on non-motorized trails.

Criteria 3. Evaluate how an area less than 5,000 acres is of a sufficient size to make its preservation and use in an unimpaired condition practicable.

The Nevada Mountain Area (UB10) is 58,531 acres.

Criteria 4. Evaluate the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

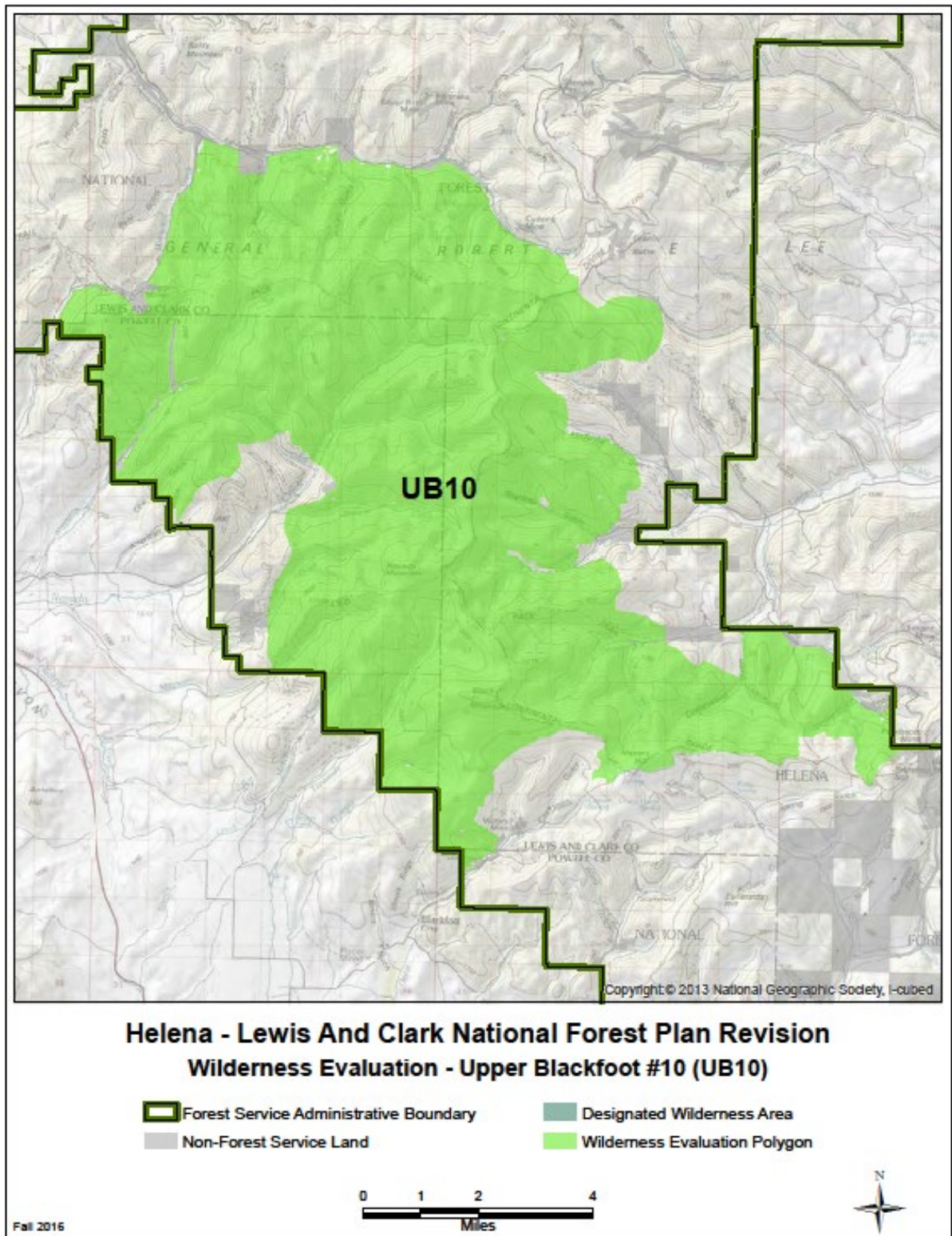
**Table 322. Features present**

Features	Description and scale
Rare plant communities	The only potential plant species of conservation concern known to occur in this area are <i>Pinus albicaulis</i> and <i>Pinus flexilis</i> .
Rare animal species or communities	Federally listed species: grizzly bear (within Distribution Zone and proposed Management Zone 1), Canada lynx (within designated critical habitat). Potential species of conservation concern and/or state at risk species: none documented. Westslope cutthroat trout and Bull Trout in Nevada Creek, westslope cutthroat trout in Washington and Threemile Creeks
Rare ecosystems	Whitebark pine is a candidate species for listing under the ESA and is present in very small amounts in this area. Limber pine and aspen communities are also of interest on the HLC NF and are present in small amounts as well. No known rare aquatic ecosystems.
Outstanding landscape features	Nevada Mountain, Black Mountain and open scenic ridges along the CDNST.
Historic and cultural resource sites	All recorded cultural resources within this polygon have the potential for scientific, educational, or historic value.
Research natural areas	None present.
High quality water resources or important watershed features	Bull Trout and westslope cutthroat trout populations.

Criteria 5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

**Table 323. Wilderness characteristics**

Factors	Description and scale
Shape and configuration of the area	A large polygon that includes much of the undeveloped mountainous landscape surrounding Nevada Mountain on both sides of the continental divide.
Legally established rights or uses within the area	Patented mining claims and access road inholding. There are a lot of known unpatented claims with pre-existing rights.
Specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics	National Systems Trails Act (CDNST)
The presence and amount of non-Federal land in the area	Patented mining claim in Washington creek.
Management of adjacent lands	Mining and timber harvesting surround the polygon. There is extensive rangeland in the Helmville Valley. The Great Divide Ski Area is visible from the CDNST in several locations.



## Step 3: Analysis

After the evaluation step, the forest identified nine (9) recommended wilderness areas to be included in the proposed action. The proposed action was then released for public review and comment.

Based on input received during this public participation period, the responsible official identified potential changes to the recommended wilderness areas (RWAs) identified in the proposed action to be studied as various alternatives in the DEIS. Not all of the lands included in the inventory and evaluation steps are required to be carried forward in an alternative and studied in the DEIS.

After additional public review and comment on the DEIS, the responsible official identified an additional alternative in the FEIS – Alternative F. Alternative F is the preferred alternative.

A summary of the alternatives is outlined below:

- Alternative A: No action alternative. Currently three recommended wilderness areas are identified in the 1986 Forest Plans.
- Alternative B: Proposed action. Nine (9) recommended wilderness areas. No motorized or mechanized means of transportation are suitable within RWAs.
- Alternative C: Nine (9) recommended wilderness areas. Motorized and mechanized means of transportation would continue to be suitable within RWAs as per current travel plans.
- Alternative D: Sixteen (16) recommended wilderness areas. No motorized or mechanized means of transportation would be suitable within RWAs.
- Alternative E: No recommended wilderness areas proposed.
- Alternative F: Preferred Alternative. Six (6) recommended wilderness areas. No motorized or mechanized means of transportation suitable within RWAs.

Maps of the RWAs included in each of the alternatives are in appendix A of the FEIS.

Table 324 provides a snapshot of the RWAs that are included in each alternative, including the GA where it is located, the inventory polygon it originated from, and the approximate acres.

**Table 324. Recommended wilderness areas included in each alternative**

RWA	GA	Wilderness inventory polygon	Alternative A (acres)	Alternatives B and C (acres)	Alternative D (acres)	Alternative F (preferred) (acres)
Big Log	Big Belts	BB1	9,150	7,086	7,086	7,035
Camas Creek	Big Belts	BB6	--	--	22,350	--
Mount Baldy	Big Belts	BB7	8,420	8,314	8,314	8,141
Wapiti Peak	Castles	CA1	--	--	30,606	--
Loco Mountain	Crazies	CR1	--	--	24,977	--
Electric Peak	Divide	D3	16,657	18,296	26,900	18,239
Colorado Mountain	Divide	D5	--	--	14,189	--
Deep Creek	Little Belts	LB1a	--	14,490	14,490	--
Tenderfoot Creek	Little Belts	LB1b	--	--	45,870	--
Big Horn Thunder	Little Belts	LB2	--	--	47,107	--



<b>RWA</b>	<b>GA</b>	<b>Wilderness inventory polygon</b>	<b>Alternative A (acres)</b>	<b>Alternatives B and C (acres)</b>	<b>Alternative D (acres)</b>	<b>Alternative F (preferred) (acres)</b>
Middle Fork Judith	Little Belts	LB16	--	--	62,452	--
Big Snowies	Snowies	S1	--	95,299	95,299	66,894
Silverking	Upper Blackfoot	UB1	--	20,088	20,088	18,568
Red Mountain	Upper Blackfoot	UB2a	--	1,901	1,901	1,897
Arrastra Creek	Upper Blackfoot	UB2b	--	8,257	8,257	--
Nevada Mountain	Upper Blackfoot	UB10	--	39,345	44,702	--
<b>Total acres</b>			<b>34,227</b>	<b>213,076</b>	<b>474,589</b>	<b>120,774</b>

In addition to the analysis in the DEIS and FEIS, the FSH 1909.12, chapter 70, requires that the following items be discussed for each RWA in each Alternative where it was identified:

- The name of the area and number of acres to be considered for recommendation;
- The location and a summarized description of a boundary for each recommended area;
- A brief description of the general geography, topography and vegetation of the recommended area;
- A brief description of the current uses and management of the area.
- A description of the area's wilderness characteristics and the ability to protect and manage the area to preserve its wilderness characteristics;
- A brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives;
- A brief summary of the ecological and social characteristics that would provide the basis for the area's suitability for inclusion in the National Wilderness Preservation System.

## Alternative A

Alternative A, the no-action alternative is based on the 1986 Forest Plan, which has three RWAs totaling approximately 34,265 acres. The three recommended wilderness areas are: Electric Peak in the Divide GA, and Big Log and Mount Baldy RWAs in the Big Belts GA. These three RWAs are under the current guidance provided in the 1986 Helena NF Plan. Allowance of motorized and mechanized means of transportation are determined by current travel plans for these areas. For see the recommended wilderness analysis, sections 3.21.7 and 3.21.8 in the final EIS.

**Table 325. Recommended wilderness areas in alternative A**

<b>RWA</b>	<b>GA</b>	<b>Wilderness inventory polygon</b>	<b>Alternative A (Acres)</b>
Big Log	Big Belts	BB1	9,190
Mount Baldy	Big Belts	BB7	8,420
Electric Peak (Blackfoot Meadows)	Divide	D3	16,655
<b>Total acres</b>			<b>34,265</b>

### Big Log Recommended Wilderness Area

The Big Log RWA was included in the 1986 Helena NF Plan. The area description is based on the Big Log wilderness inventory polygon, Big Belts 1 (BB1), and is in the Big Belts geographic area.

**Table 326. Big Log Recommended Wilderness Area (alternative A)**

Analysis criteria	Description
Acres	9,190
Description of the recommended boundary	<p>The Big Log RWA in alternative A lies in three parcels, adjacent to the Gates of the Mountains wilderness area in the Missouri River and Beaver Creek drainages. Two of the parcels are located along the western edge of the Wilderness, with the third parcel located to the south of the Wilderness.</p> <p>The northern most parcel on the west side of the Wilderness lies to the north of the Meriwether Picnic Area and the Gates of the Mountains geologic formation along the Missouri River. This parcel extends from the wilderness boundary to the Missouri River and includes the lower reaches of the Mann Gulch drainage.</p> <p>The southwestern parcel on the west side of the Wilderness boundary is located south of the Meriwether Picnic Area and extends south to the American Bar area. It includes all lands between the Wilderness boundary and the Missouri River, except for a small exclusion along the river where the Coulter Campground is location in the lower Coulter Canyon drainage.</p> <p>The parcel along the southern boundary of the Wilderness area extends from the wilderness boundary south to a buffer strip along the Beaver Creek Indian Creek Road (FSR 138). The eastern boundary of this parcel is located along the section line between Sections 7 and 8 8 T12N R2W. The western boundary of this parcel extends along the section line boundary between Section 22 and 23 in Gilman Gulch.</p>
Description of the geography, topography, and vegetation	<p>Much of the area is moderately steep to very steep, with limestone cliff features, especially adjacent to the Missouri River, as well as other unique geological landforms. Existing vegetation includes dry grasslands, shrub lands, open and dry ponderosa pine forests, and Douglas-fir forests, along with small amounts of lodgepole pine, and Rocky Mountain juniper.</p>
Current uses and management	<p>The 1986 Helena NF Plan included much of this area as an RWA. All parcels are available for primitive recreation opportunities. There are currently no motorized trails, open roads, or motorized over snow uses in this area.</p>
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized uses.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has outstanding unconfined and primitive recreation opportunities such as horseback riding, hiking, backpacking, dispersed camping, hunting, and cross-country skiing.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude and the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. Areas that are closer to the Gates of the Mountains wilderness have greater opportunity for solitude, and this diminishes in areas closer to the Missouri River and the Beaver Creek road.</p> <p><b>Other Features of Value</b> –Features of this area include an introduced population of mountain goats; cliffs and rock formations along the river corridor and Meriwether Canyon; the unique rock formations and slot canyon in Refrigerator Canyon; many cultural resources including cabin ruins, tipi ring, mining and prehistoric rock art sites; and the Beaver Creek eligible Wild &amp; Scenic River; and rare plant and animal species such as grizzly bear, lynx, Flammulated owl, and Lewis’ woodpecker.</p>

Analysis criteria	Description
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because the area is adjacent to existing wilderness and has been managed as recommended wilderness since 1986. It is also within Big Log inventoried roadless area and is adjacent to the Devil’s Tower inventoried roadless area to the south. There are no motorized uses.
Summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>This area is currently being managed as an RWA under the 1986 Helena Forest Plan. Big Log RWA is located adjacent to the existing Gates of the Mountain wilderness and would expand it.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.</p>
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>o The naturalness of the area is very high and is affected primarily by natural forces, has mostly intact ecological integrity, and contains many indigenous species.</li> <li>o The undeveloped quality of the area is very high, and there are no motorized uses.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>o The area offers outstanding opportunity for solitude.</li> <li>o There is high amount of primitive and/or unconfined recreation, such as, but not limited to, horseback riding, hiking, backpacking, dispersed camping, hunting, and cross-country skiing.</li> </ul>

**Mount Baldy Recommended Wilderness Area**

The Mount Baldy RWA was included in the 1986 Helena NF Plan. The area description is based on the Mount Baldy wilderness inventory polygon, Big Belts 7 (BB7), and is in the Big Belts geographic area.

**Table 327. Mount Baldy Recommended Wilderness Area (alternative A)**

Analysis Criteria	Description
Acres	8,420
Description of the recommended boundary	<p>The Mount Baldy RWA is in the headwaters of Big Birch and Little Birch Creeks in the Big Belts geographic area. It includes numerous high elevation mountain lakes and the prominent topographic features of Mount Baldy, Mount Edith, and the Needles.</p> <p>The northern boundary of the RWA follows the hydrologic divide south and west between the Gypsy Creek and Big Birch Creek drainages. The boundary connects to the top of the ridge south of the radio tower. (Note: The RWA boundary includes FSR 4023-082.)</p> <p>The boundary then follows the top of the ridge south and then east, including the tops of Mount Baldy and Mount Edith peaks. The boundary line is located on the eastern boundary of Sections 12 and 13 of T8N R4E. Then the northern boundary of Sections 11 and 12 of T8N R4E. The boundary again heads due north on the east side of Section 3 T8N R4E and Section 34 T9N R4E. The boundary ends on the hydrologic divide between Gypsy Creek and Big Birch Creek drainages.</p>
Description of the geography, topography, and vegetation	This area includes several high peaks (Mount Baldy and Mount Edith), and includes the Needles rock formations, numerous alpine lakes, and valley vistas. Vegetation is dominated by high elevation lodgepole pine and subalpine fir/Engelmann spruce forests, with some Douglas-fir forests. Sparsely vegetated areas are common, including rocky alpine sites. Whitebark pine forest is also present, along with grasslands, shrub lands, and limber pine.
Current uses and management	The 1986 Helena Forest Plan includes this area as an RWA. The entire polygon is available for primitive and semi-primitive recreation. There are no open roads, motorized trails, or motorized over snow uses. There are 13.6 miles of nonmotorized trail.

Analysis Criteria	Description
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized uses.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities, including, but not limited to, horseback riding, hiking, backpacking, dispersed camping, and hunting.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. This is slightly diminished near the communication site road in the summer.</p> <p><b>Other Features of Value</b> – Features of this area include an introduced population of mountain goats; numerous high alpine lakes; the Needles unique rock formations; unique wetland vegetation; and rare plant and animal species such as whitebark pine, grizzly bear, lynx, wolverine, black rosy finch, and west slope cutthroat trout in Ray Creek.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage wilderness characteristics is high because the area has been managed as an RWA since 1986 and contains no private inholdings. The area is in the Mount Baldy Inventoried Roadless Area. The only administrative motorized use is on the road to the communication site in the summer. There are no motorized uses.
Summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	This area is currently being managed as an RWA under the 1986 Helena Forest Plan. The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high, with no motorized uses.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude.</li> <li>○ There is high amount of primitive and/or unconfined recreation such as, but not limited to: horseback riding, hiking, backpacking, dispersed camping, and hunting.</li> </ul>

### Electric Peak Recommended Wilderness Area

The Electric Peak RWA is included in the 1986 Helena NF Plan. The area description is based on the Blackfoot Meadows wilderness inventory description for Divide 3 (D3). It is in the Divide geographic area.

**Table 328. Electric Peak Recommended Wilderness Area (alternative A)**

Analysis criteria	Description
Acres	16,655

Analysis criteria	Description
Description of the recommended boundary	The Electric Peak RWA is in the Little Blackfoot River drainage and the northern boundary follows the Little Blackfoot River from the headwaters to the confluence with Ontario Creek. The eastern boundary begins at the confluence of Little Blackfoot River and Ontario creek and traverses a ridgeline up toward the Continental Divide, extending around the base of Bison Mountain and ending on the top of the ridge at the Continental Divide. The remainder of the boundary of this RWA is located on the Forest boundary between the Deerlodge and the Helena-Lewis and Clark National Forests. A long stretch of this boundary line follows the Continental Divide.
Description of the geography, topography, and vegetation	This RWA is in the Divide GA. Portions of this RWA were identified as the Electric Peak RWA in the current 1986 Helena NF Plan. The Electric Peak RWA lies along the Continental Divide National Scenic Trail and includes several mountain peaks that are well over 8000 feet in elevation. Vegetation is dominated by lodgepole pine forests, with Douglas-fir also common as well as subalpine fir and Engelmann spruce. Less common vegetation types include grasslands, shrub lands, and whitebark pine forests.
Current uses and management	Much of the area has been managed as an RWA since 1986. The entire polygon is available for non-motorized summer and winter recreation. There are no open roads or motorized trails, but approximately 11 acres within the polygon is available for motorized over-snow uses. There are 16.3 miles of nonmotorized trail.
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized trails or roads, and minimal motorized over-snow use.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: horseback riding, hiking, hunting, fishing, mountain biking, and camping.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. The opportunity for solitude is somewhat diminished in portions closest to Highway 12 and where the Little Blackfoot road is visible.</p> <p><b>Other Features of Value</b> –Features of this area include the Little Blackfoot eligible wild and scenic river; cultural resources; and rare plant and animal species such as whitebark pine, grizzly bear, lynx, bull trout, and west slope cutthroat trout.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because the area has been managed as an RWA since 1986 and is adjacent to an RWA on the adjacent Beaverhead-Deerlodge NF. It is also within the Electric Peak inventoried roadless area. There are two private inholdings: one along the Little Blackfoot Road (FSR 227), and the other along Ontario Road (FSR 123). There are currently no motorized trails or open roads, but a small area is available for over-snow motorized use.
Summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>This area is currently being managed as an RWA in the 1986 Helena NF Plan.</p> <p>Outstanding opportunities for solitude.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.</p>

Analysis criteria	Description
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>○ There are no motorized trails or open roads.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude.</li> <li>○ There is high amount of primitive and/or unconfined recreation activities such as, but not limited to, horseback riding, hiking, hunting, fishing, and camping.</li> </ul>

## Alternatives B and C

Alternatives B and C identify nine (9) areas to be RWAs. These RWAs were identified after the HLC NF conducted a wilderness inventory and evaluation. Identifying an area as RWA in the 2020 Forest Plan does not create a wilderness, as only Congress has the right to designate wilderness by passing legislation

The nine RWAs identified in alternatives B and C would be managed to protect their wilderness characteristics. Alternative C was developed to address comments received from the public regarding the suitability of motorized and mechanized means of transportation within RWAs. In alternative C, all RWA boundaries and descriptions would be the same as alternative B except that motorized and mechanized means of transportation (including bicycles) within RWAs would be suitable in alternative C. The detailed descriptions for the RWAs are the same under alternative C as those described above under alternative B.

The nine RWAs in alternatives B and C are located within five GAs and total approximately 213,076 acres. These RWAs were derived from the wilderness inventory polygons identified in the first step of the wilderness evaluation process, but do not necessarily include all the original acres. They were selected based on consideration of the information in the wilderness evaluation, which indicated these areas had wilderness characteristics such as naturalness, undeveloped, outstanding opportunities for solitude or a primitive and unconfined recreation or other special features such as ecological, geological, or scientific, educational, scenic or historic value.

Boundaries for the individual RWAs are located on naturally occurring ridgelines, stream bottoms, or other locatable features on the landscape. Please also refer to the recommended wilderness analysis, sections 3.21.7 and 3.21.8 of the final EIS. For specific boundary locations of recommended wilderness areas, see maps provided in appendix A.

**Table 329. Recommended wilderness areas (alternatives B and C)**

RWA	GA	Wilderness inventory polygon	Acres
Big Log	Big Belts	BB1	7,086
Mount Baldy	Big Belts	BB7	8,314
Electric Peak	Divide	D3	18,296
Deep Creek	Little Belts	LB1a	14,490
Big Snowies	Snowies	S1	95,299
Silver King	Upper Blackfoot	UB1	20,088
Red Mountain	Upper Blackfoot	UB2a	1,901
Arrastra Creek	Upper Blackfoot	UB2b	8,257
Nevada Mountain	Upper Blackfoot	UB10	39,345
<b>Total acres</b>			<b>213,076</b>



### Big Log Recommended Wilderness Area

The Big Log RWA was included in the 1986 Helena NF Plan. The area description is based on the Big Log wilderness inventory polygon, Big Belts 1 (BB1). This area is included as an RWA in alternatives A, B, C, and D. The boundary is the same for alternatives B, C, and D, and varies slightly for alternatives A and F.

**Table 330. Big Log Recommended Wilderness Area (alternatives B and C)**

Analysis criteria	Description
Acres	7,086
Description of the recommended boundary	<p>This RWA consists of several parcels of land adjacent to the existing Gates of the Mountains Wilderness area on the northern and southern boundary of the wilderness. The northern areas consist of four small parcels in the Willow Creek drainage. All are located adjacent to the northern border of the wilderness.</p> <p>The southern parcel extends along the entire southern border of the existing Gates of the Mountains Wilderness from the American Bar/Big Log Creek area on the west to the Gilman Gulch Area on the east. The southern parcel also lies adjacent to the wilderness boundary and extends south to a 300-foot buffer area along the north side of the Beaver Creek -Indian Creek Rd (FS Road 138).</p>
Description of the geography, topography, and vegetation	<p>Much of the area is moderately steep to very steep, with limestone cliff features, especially adjacent to the Missouri River, as well as other unique geological landforms. Existing vegetation includes dry grasslands, shrub lands, open and dry ponderosa pine forests, and Douglas-fir forests, along with small amounts of lodgepole pine, and Rocky Mountain juniper.</p>
Current uses and management	<p>The 1986 Helena NF Plan included much of this area as an RWA. All parcels are available for primitive recreation opportunities. There are currently no motorized trails, open roads, or motorized over snow uses in these areas. Within this RWA, there are 5.3 miles of non-motorized trail.</p>
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized uses.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has outstanding unconfined and primitive recreation opportunities such as horseback riding, hiking, backpacking, dispersed camping, hunting, and cross-country skiing.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. Areas that are closer to the Gates of the Mountains wilderness have greater opportunity for solitude, and this diminishes in areas closer to the Missouri River and the Beaver Creek road.</p> <p><b>Other Features of Value</b> –Features of this area include an introduced population of mountain goats; cliffs and rock formations along the river corridor and Meriwether Canyon; the unique rock formations and slot canyon in Refrigerator Canyon; many cultural resources including cabin ruins, tipi ring, mining and prehistoric rock art sites; and the Beaver Creek eligible Wild &amp; Scenic River; and rare plant and animal species such as grizzly bear, lynx, Flammulated owl, and Lewis’ woodpecker.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	<p>The ability to protect and manage these wilderness characteristics is high because the area is adjacent to existing wilderness and has been managed as recommended wilderness since 1986. It is also within Big Log inventoried roadless area and is adjacent to the Devil’s Tower inventoried roadless area to the south. There are no motorized uses.</p>

Analysis criteria	Description
<p>Summary of the factors considered, and the process used in evaluating the area and developing the alternatives</p>	<p>A large portion of this area was previously included as an RWA in the 1986 Helena Forest Plan.</p> <p>Big Log RWA is located adjacent to the existing Gates of the Mountain wilderness and would expand it.</p> <p>High interest exists for this area to be an RWA; most public comments received were in favor of the designation.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.</p>
<p>Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System</p>	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high and is affected primarily by natural forces, has mostly intact ecological integrity, and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high, and there are no motorized uses.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude.</li> <li>○ There is high amount of primitive and/or unconfined recreation, such as, but not limited to, horseback riding, hiking, backpacking, dispersed camping, hunting, and cross-country skiing.</li> </ul>

**Mount Baldy Recommended Wilderness Area**

The Mount Baldy RWA was included in the 1986 Helena NF Plan. The area description is based on the Mount Baldy wilderness inventory polygon, Big Belts 7 (BB7). This area is included as an RWA in alternatives A, B, C, D and F. The boundary is the same for alternatives B, C, and D, and varies slightly for alternatives A and F.

**Table 331. Mount Baldy Recommended Wilderness Area (alternatives B and C)**

Analysis criteria	Description
<p>Acres</p>	<p>8,314</p>
<p>Description of the recommended boundary</p>	<p>The Mount Baldy RWA is in the headwaters of Big Birch and Little Birch Creeks in the Big Belts geographic area. It includes numerous high elevation mountain lakes and the prominent topographic features of Mount Baldy, Mount Edith, and the Needles.</p> <p>The northern boundary of the RWA follows the hydrologic divide south and west between the Gypsy Creek and Big Birch Creek drainages. At the top of the ridge the boundary remains approximately 300 feet to the east of the radio tower as well as the microwave spur road (FSR 4023-082).</p> <p>The boundary then follows the top of the ridge south and then east, including the tops of Mount Baldy and Mount Edith peaks. The boundary line heads due north at the private property line along Sections 12 and 13 of T8N R4E. It then cuts across the northeast corner of Section 12 and returns to the property boundary along the northern boundary of Sections 11 and 12 of T8N R4E.</p> <p>The boundary again heads due north on the east side of Section 3 T8N R4E and Section 34 T9N R4E. The boundary ends on the hydrologic divide between Gypsy Creek and Big Birch Creek drainages.</p>
<p>Description of the geography, topography, and vegetation</p>	<p>This area includes several high peaks (Mount Baldy and Mount Edith), and includes the Needles rock formations, numerous alpine lakes, and valley vistas. Vegetation is dominated by high elevation lodgepole pine and subalpine fir/Engelmann spruce forests, with some Douglas-fir forests. Sparsely vegetated areas are common, including rocky alpine sites. Whitebark pine forest is also present, along with grasslands, shrub lands, and limber pine.</p>
<p>Current uses and management</p>	<p>The 1986 Helena Forest Plan includes this area as an RWA. The entire polygon is available for primitive and semi-primitive summer and winter recreation. There are no open roads, motorized trails, or motorized over snow uses. There are 13.6 miles of nonmotorized trail.</p>

Analysis criteria	Description
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized uses.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities, including, but not limited to, horseback riding, hiking, backpacking, dispersed camping, and hunting.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. This is slightly diminished near the communication site road in the summer.</p> <p><b>Other Features of Value</b> –Features of this area include an introduced population of mountain goats; numerous high alpine lakes; the Needles unique rock formations; unique wetland vegetation; and rare plant and animal species such as whitebark pine, grizzly bear, lynx, wolverine, black rosy finch, and west slope cutthroat trout in Ray Creek.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage wilderness characteristics is high because the area has been managed as an RWA since 1986 and contains no private inholdings. The area is in the Mount Baldy Inventoried Roadless Area. The only administrative motorized use is on the road to the communication site in the summer. There are no motorized uses.
Summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>A large portion of this area has been previously included as an RWA in the 1986 Helena Forest Plan.</p> <p>High interest exists for this area to be recommended for wilderness.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.</p>
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high as much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high, with no motorized uses.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude.</li> <li>○ There is high amount of primitive and/or unconfined recreation such as, but not limited to: horseback riding, hiking, backpacking, dispersed camping, and hunting.</li> </ul>

**Electric Peak Recommended Wilderness Area**

The area description for the Electric Peak RWA is based on the Blackfoot Meadows wilderness inventory description, Divide 3 (D3) which is in the Divide geographic area. The Electric Peak RWA is included in alternatives A, B, C, D, and F. The boundary for the Electric Peak RWA is the same in alternatives B and C. However, the boundary delineation differs in alternatives A, D, and F.

**Table 332. Electric Peak Recommended Wilderness Area (alternatives B and C)**

Analysis criteria	Description
Acres	18,296

Analysis criteria	Description
Description of the recommended boundary	<p>The Electric Peak RWA follows the Little Blackfoot River southwest from its confluence with Ontario Creek. The boundary is located approximately 300 feet south of FSR 227 and excludes private lands in the bottom of the drainage.</p> <p>Once beyond the campground at the end of the road, the boundary follows the centerline of the Little Blackfoot River until the Little Sunshine Camp trails (FS Trail 227-009). It then follows the centerline of this trail to the top of the ridge which is also the HLC NF Boundary with the Deerlodge NF.</p> <p>The RWA boundary then follows the HLC NF boundary to the south and east along the top of the ridgeline over topographic features such as Cliff Mountain, Electric Peak, and Thunderbolt Mountain. The RWA leaves the HLC/Deerlodge NF boundary at a point south of Bison Mountain and heads north across the top of Bison Mountain. It then follows a ridge line north west toward Monarch Creek and follows the centerline of Monarch Creek until FSR 4104.</p> <p>The RWA boundary follows a 300-foot buffer along the west side of FSR 4101, in Monarch Creek, and then FSR 123 in Ontario Creek. The boundary continues to the north, maintaining the 300-foot buffer with FSR 123 until it meets the boundary of the RWA near the confluence of Little Blackfoot River and Ontario Creek.</p>
Description of the geography, topography, and vegetation	<p>This RWA is in the Divide GA. Portions of this RWA were identified as the Electric Peak RWA in the current 1986 Helena NF Plan. A portion of the Electric Peak RWA lies along the Continental Divide National Scenic Trail and includes several mountain peaks that are well over 8000 feet in elevation. Vegetation is dominated by lodgepole pine forests, with Douglas-fir also common as well as subalpine fir and Engelmann spruce. Less common vegetation types include grasslands, shrub lands, and whitebark pine forests.</p>
Current uses and management	<p>Much of the area has been managed as an RWA since 1986. The entire polygon is available for non-motorized summer and winter recreation. There are no open roads or motorized trails, but approximately 11 acres within the polygon is available for motorized over-snow uses. There are 16.3 miles of nonmotorized trail.</p>
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized trails or roads, and minimal motorized over-snow use.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: horseback riding, hiking, hunting, fishing, mountain biking, and camping.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. The opportunity for solitude is somewhat diminished in portions closest to Highway 12 and where the Little Blackfoot road is visible.</p> <p><b>Other Features of Value</b> –Features of this area include the Little Blackfoot eligible wild and scenic river; cultural resources; and rare plant and animal species such as whitebark pine, grizzly bear, lynx, bull trout, and west slope cutthroat trout.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	<p>The ability to protect and manage these wilderness characteristics is high because the area has been managed as an RWA since 1986 and is adjacent to the Electric Peak RWA on the adjacent Beaverhead-Deerlodge NF. It is also within the Electric Peak inventoried roadless area. There are two private inholdings: one along the Little Blackfoot Road (FSR 227), and the other along Ontario Road (FSR 123). There are currently no motorized trails or open roads, but a small area is available for over-snow motorized use.</p>
Summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Most of the area was previously included as an RWA in the 1986 Helena NF Plan.</p> <p>Outstanding opportunities for solitude.</p> <p>High interest exists for this area to be recommended for wilderness.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.</p>

Analysis criteria	Description
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high as much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>○ There are no motorized trails or open roads.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude.</li> <li>○ There is high amount of primitive and/or unconfined recreation activities such as, but not limited to, horseback riding, hiking, hunting, fishing, and camping.</li> </ul>

### Deep Creek Recommended Wilderness Area

The Deep Creek RWA is derived from the Deep Creek Tenderfoot wilderness inventory area, Little Belts 1a (LB1a) in the Little Belts geographic area. The RWA boundary is the same in alternatives B, C, and D.

**Table 333. Deep Creek Recommended Wilderness Area (alternatives B and C)**

Analysis criteria	Description
Acres	14,490
Description of the recommended boundary	The northern boundary of the Deep Creek RWA is located on the HLC NF boundary. It borders private lands along the northern boundary of Sections 32, 33, 34, 35, and 36 in T16N R4E. This is also the Cascade/Meagher County line. The western boundary of the RWA follows the Smith River, remaining approximately ¼ east of the centerline of the river. The south and eastern boundaries of the RWA follow several minor drainages and the tops of ridgelines in the headwaters of Deep Creek, while staying away from the motorized trails in the area.
Description of the geography, topography, and vegetation	Deep Creek RWA is in the northwestern corner of the Little Belts GA. This area is bordered by the Smith River on the west, private lands to the north and south, and by motorized national recreation trails to the south and east. The primary access to this area is from the Smith River, private lands, and from motorized national recreation trails. Existing vegetation is dominated by Douglas-fir and lodgepole pine. Dry grasslands and subalpine fir/Engelmann spruce forests are also common, with some ponderosa pine. Small amounts of other types are present, including shrub lands, whitebark pine, limber pine, cottonwood, aspen, and juniper.
Current uses and management	The area lies in the Tenderfoot- Deep Creek inventoried roadless area. There are currently no motorized recreation uses or open roads within the Deep Creek RWA. There are 12.9 miles of non-motorized trail.
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are currently no motorized uses.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: Hunting, fishing, backpacking, horseback riding, boating on the Smith River, and mountain biking.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance.</p> <p><b>Other Features of Value</b> – Features include the eligible wild and scenic Smith River; cultural resources; and rare species such as whitebark pine, lynx, wolverine, and west slope cutthroat trout.</p>

Analysis criteria	Description
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because it is a large polygon adjacent to NFS lands to the east and south. There is only one private inholding, along Deep Creek Park. There are no motorized uses.
A summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Outstanding opportunities for solitude.</p> <p>High interest exists for this area to be recommended for wilderness.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.</p>
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high as much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high as there are currently no motorized recreation uses.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude.</li> <li>○ There is high amount of primitive and/or unconfined recreation for hunting, fishing, backpacking, horseback riding, and boating on the Smith River.</li> </ul>

### Big Snowies Recommended Wilderness Area

This RWA is derived from the Big Snowies wilderness inventory area, Snowies 1 (S1) in the Big Snowies geographic area. It includes all lands designated as the Big Snowies Wilderness Study Area (WSA). The boundary is the same in alternatives B, C, and D but varies in alternative F.

**Table 334. Big Snowies Recommended Wilderness Area (alternatives B and C)**

Analysis criteria	Description
Acres	95,299
Summarized description of the recommended boundary	The northern boundary of the Big Snowies RWA generally follows the HLC NF boundary line with adjacent private property owners. Crystal Lake Road and the Crystal Lake Recreational area are not included in the RWA and the boundary follows a buffer of 300 feet on either side of the road, the outer edges of the campground, picnic area and boat launch areas, and around the edge of Crystal Lake. The eastern boundary follows the HLC NF boundary with adjacent private lands. The southern boundary follows the HLC NF boundary from the east end of the RWA until Neil Creek. At Neil Creek the RWA boundary buffers the Neil Creek Connection Trail (Trail 653) and the Southside Trail (Trail 652) to Sleeping Woman Creek. This motorized route is not included in the RWA boundary. The southwest boundary follows the HLC NF property line with BLM. The western boundary follows the HLC NF boundary line north until it connects with the northern boundary line.
Description of the geography, topography, and vegetation	This RWA encompasses most of the island mountain range of the Big Snowies and is dominated by limestone geology and karst topography which conceals many caves including an ice cave on West Peak. The RWA is also characterized at its highest elevations by a tree-less plateau of alpine with rock and tundra. The dominant vegetation includes Douglas-fir, lodgepole pine, subalpine fir and Engelmann spruce forests. Sparsely vegetated areas (such as rock/scree) are also found along with grasslands, whitebark pine, and very small occurrences of shrub lands, ponderosa pine, limber pine, cottonwood, and aspen.



Analysis criteria	Description
Current uses and management	<p>This area has been managed as a wilderness study area since 1977 and lies within the Big Snowies inventoried roadless area. It contains several research natural areas. Portions of the area are popular with mountain bike users in the summer and snowmobile users in the winter months. The southern portion of the polygon is open to motorized use in the summer, containing 11.8 miles of open road and 0.1 miles of motorized trail. Primitive and semi-primitive non-motorized recreation opportunities are provided in the entire polygon north of Trails 652 and 653 in the summer. There are 98.3 miles of nonmotorized trail in the polygon. Winter motorized recreation is allowed on 13,145 acres.</p>
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention; however, there are some motorized uses associated with open roads in the summer and over-snow uses in portions of the area in the winter.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: Hiking, horseback riding, dispersed camping, back country skiing, fishing, mountain biking, caving, and hunting.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. The opportunity for solitude is diminished in portions of the polygon that contain motorized trails (area north of Trails 653 and 653 in the summer; and where snowmobiles are allowed in the winter in the western portion of the polygon).</p> <p><b>Other Features of Value</b> – Features of this area include an introduced population of mountain goats; cirque basins in Careless Creek and Swimming Woman Creek; ice caves; several research natural areas; Swimming Woman eligible Wild and Scenic River; municipal watershed for Lewistown; cultural resources; and rare plant and animal species such as <i>Goodyera repens</i>, whitebark pine, lynx, dwarf shrew, and west slope cutthroat trout.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	<p>The ability to protect and manage these wilderness characteristics is high because it has been managed as a wilderness study area since 1977 and covers most of the island mountain range of the Big Snowies. There is some private land adjacent to the polygon. There are some motorized summer and over-snow uses as described above.</p>
A brief summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Currently is Congressionally designated as a wilderness study act area.</p> <p>Outstanding opportunities for solitude; very remote area.</p> <p>High interest exists for this area to be recommended for wilderness.</p>
Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high as much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high as most of this area is unroaded.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude</li> <li>○ There is high amount of primitive and/or unconfined recreation for hiking, horseback riding, dispersed camping, back country skiing, fishing, caving, and hunting.</li> </ul>

### Silver King Recommended Wilderness Area

This RWA is derived from the Silver King wilderness inventory area, Upper Blackfoot 1 (UB1) in the Upper Blackfoot geographic area. The boundary is the same in alternatives B, C, and D.

**Table 335. Silver King Recommended Wilderness Area (alternatives B and C)**

Analysis criteria	Description
Acres	20,088
Summarized description of the recommended boundary	<p>The northwest boundary of the Silver King RWA lies adjacent to the Scapegoat Wilderness area. This northern boundary then follows east along the Continental Divide National Scenic Trail (Trail 440) on the top of the ridge until its intersection with the East Fork Falls Creek Trail (Trail 219). From this intersection the boundary heads north, along the ridgeline, to the top of Red Mountain. Beyond the top of Red Mountain, the boundary continues in a north-easterly direction following the ridgeline to the north east corner of Section 36 of T17N R7W. The boundary then heads due south following section lines until it reaches the ridge just east of Lewis and Clark Pass. From there, the boundary heads west over the pass and down Alice Creek, keeping just to the north side of Lewis and Clark Pass Trail (Trail 493). The boundary then stays to the north and west of the Alice Creek Road (FSR 293) including buffing out a short spur into Wildcat Gulch. It continues along the west side of Alice Creek Road until the HLC FS boundary with private lands. It then follows the private land boundary west until Indian Meadows Creek. At Indian Meadows Creek it buffers all developments in the area, including the FS administrative cabin and facilities, the campground, the trailhead, and the main access roads. Just beyond the campground loops it follows a ridge to the northwest and connects to the boundary of the Scapegoat Wilderness.</p>
Brief description of the general geography, topography, and vegetation	<p>The Silver King RWA is in the Upper Blackfoot and Rocky Mountain Range GAs north and east of Lincoln, Montana, and lies adjacent to the Scapegoat Wilderness Area in the upper reaches of the Alice Creek and Landers Fork drainages. The area is dominated by Douglas-fir and lodgepole pine forests, with dry grasslands, subalpine fir forests, and small amounts of Engelmann spruce, whitebark pine, limber pine, and cottonwood, aspen, and Rocky Mountain juniper. Wildfire disturbances have been prominent in this polygon.</p>
Current uses and management	<p>This area is adjacent to the Scapegoat Wilderness, and within the Silver King-Falls Creek inventoried roadless area. A portion is also within the Rocky Mountain Front Conservation Management Area. It contains one research natural area. There are no motorized trails or open roads; the entire polygon is available for primitive and semi-primitive non-motorized summer recreation. There are 20.8 miles of nonmotorized trail. Most of the area is available for primitive and semi-primitive non-motorized winter recreation, except for 17 acres which are open for motorized over-snow uses.</p>
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized uses except for a small area where over-snow motorized use is allowed in the winter.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: Hunting, fishing, hiking, horseback riding, dispersed camping, snowshoeing, and cross-country skiing. Historic interpretation along the upper portions of Alice Creek, Landers Fork and in the Lewis and Clark pass area.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. Solitude is slightly diminished near the Alice Creek road.</p> <p><b>Other Features of Value</b> – Features of this area include the Alice Creek National Registered Historic District, the Lewis and Clark National Historic Trail; Limestone Reef caves; Blowout Mountain and Flatop; waterfalls on Falls Creek; many historic and cultural resources; Alice and Landers Fork eligible Wild and Scenic Rivers; and rare plant and</p>

Analysis criteria	Description
	animal species such as grizzly bear, western toad, fisher, trumpeter swan, whitebark pine, lynx, bull trout, and west slope cutthroat trout.
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because it is adjacent to the Scapegoat Wilderness, lies within an inventoried roadless area. There are no private inholdings. There are currently no motorized trails or open roads, but a small area is available for over-snow motorized use.
A brief summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Outstanding opportunities for solitude; very remote area.</p> <p>Adjacent to the Scapegoat Wilderness area.</p> <p>High interest exists for this area to be recommended for wilderness.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species, including Canada lynx and grizzly bear.</p>
Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high and there are no motorized trails.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude</li> <li>○ There is high amount of primitive and/or unconfined recreation for hunting, fishing, hiking, horseback riding, dispersed camping, snowshoeing, and cross-country skiing as well as historic interpretation along the upper portions of Alice Creek, Landers Fork and in the Lewis and Clark pass area.</li> </ul>

### Red Mountain Recommended Wilderness Area

This RWA is derived from the Red Mountain wilderness inventory area, Upper Blackfoot 2a (UB2a) in the Upper Blackfoot geographic area. The boundary for this RWA is the same in alternatives B, C, D and F.

**Table 336. Red Mountain Recommended Wilderness Area (alternatives B and C)**

Analysis criteria	Description
Acres	1,901
Description of the recommended boundary	The western, northern, and eastern boundaries of the Red Mountain RWA follow the boundary of the Scapegoat Wilderness. The southeast boundary primarily follows the ridgelines and the centerline of the Red Creek drainage. This RWA includes the Red Mountain research natural area that is location here.
Description of the general geography, topography, and vegetation	The Red Mountain RWA is locate south and east of Red Mountain Peak in Red Creek, within the Copper Creek drainage. This area is characterized by subalpine fir, Engelmann spruce, Douglas-fir, and lodgepole pine forests with a small amount of whitebark pine, ponderosa pine and limber pine. Much of this area has been recently impacted by wildfire and some is in a non-forested or newly reforested state.
Current uses and management	This area is adjacent to the Scapegoat Wilderness and is within the Bear-Marshall - Scapegoat–Swan inventoried roadless area. The Red Mountain research natural area is located within the RWA boundary. There are no open roads or motorized trails, and no motorized over-snow uses, the entire polygon is available for primitive and semi-primitive non-motorized recreation. There is less than 0.1 miles of nonmotorized trail.

Analysis criteria	Description
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized uses or open roads.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: hunting, fishing, hiking, horseback riding, and dispersed camping.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance.</p> <p><b>Other Features of Value</b> – Features of this area include the Copper Lakes; the Lincoln Historic Mining District; a research natural area; Snowbank and Copper Creek eligible Wild and Scenic Rivers; and rare plant and animal species such as grizzly bear, whitebark pine, lynx, bull trout, and west slope cutthroat trout.</p>
The ability to protect and manage the area so as to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because it is adjacent to the Scapegoat Wilderness, has been managed as a research natural area since 1986, and there are no motorized uses in the area. There is one patented mining claim in the polygon.
A summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Outstanding opportunities for solitude.</p> <p>Adjacent to the Scapegoat Wilderness area.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species, including Canada lynx and grizzly bear.</p>
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>• The naturalness of the area is very high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>• The undeveloped quality of the area is very high because the area is unroaded and there are no motorized uses.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>• The area offers outstanding opportunity for solitude.</li> <li>• There is high amount of primitive and/or unconfined recreation for hunting, fishing, hiking, horseback riding, and dispersed camping.</li> </ul>

**Arrastra Creek Recommended Wilderness Area**

This RWA is derived from the Arrastra wilderness inventory area, Upper Blackfoot 2b (UB2b) in the Upper Blackfoot geographic area. The boundary for this RWA is the same in alternatives B, C, and D.

**Table 337. Arrastra Recommended Wilderness Area (alternatives B and C)**

Analysis criteria	Description
Acres	8,257

Analysis criteria	Description
Description of the recommended boundary	The northern boundary of the Arrastra Creek RWA follows the Scapegoat Wilderness boundary. The western boundary follows a ridgeline between Rock Creek and Dry Creek, which is also the HLC NF boundary with the Lolo NF. The boundary then follows the northern and eastern sides of Section 16 T15N R10W. On the south, the boundary of the RWA buffers the Beaver Creek-Dry Creek road (FSR 12611). In Section 25 T15N R10W, the boundary leaves the Beaver Creek-Dry Creek road and follows north buffering an area with substantially noticeable roads and vegetative treatments along the north side of the road. The boundary then follows the centerline of Klondike Creek north until the top of the ridge. The boundary then follows the ridgeline northwest until it connects again with the Scapegoat Wilderness boundary.
Description of the geography, topography, and vegetation	The Arrastra Creek RWA is in the Upper Blackfoot GA north and west of Lincoln, Montana, and lies adjacent to the Scapegoat Wilderness Area in the upper reaches of the Beaver Creek and Dry Creek drainages. It includes Arrastra Mountain. This area is characterized by subalpine fir, Engelmann spruce, Douglas-fir, and lodgepole pine forests with a small amount of whitebark pine, ponderosa pine and limber pine.
Current uses and management	This area is adjacent to the Scapegoat Wilderness and is within the Bear - Marshall - Scapegoat – Swan inventoried roadless area. There are no open roads or motorized trails, and therefore the area is available for primitive or semi-primitive nonmotorized recreation in the summer. There are 7.9 miles of nonmotorized trails. There are 2,239 acres that are open to motorized over-snow use; the remainder of the area is available for primitive or semi-primitive nonmotorized recreation in the winter.
Description of the wilderness characteristics and the ability to protect and manage the area so as to preserve its wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no open roads or motorized trails, but a portion of the area does allow motorized over-snow use.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: hunting, fishing, hiking, horseback riding, and dispersed camping.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. These opportunities are diminished in the winter where motorized use is allowed.</p> <p><b>Other Features of Value</b> – Features include; the Lincoln Historic Mining District; a research natural area, rare plant and animal species such as grizzly bear, whitebark pine, lynx, bull trout, and west slope cutthroat trout.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because the area is adjacent to the Scapegoat Wilderness. There are currently no motorized trails or open roads, but there is some motorized over-snow use allowed in portions of the area in the winter. There are 7.9 miles of nonmotorized trails within the RWA.
Summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Outstanding opportunities for solitude.</p> <p>Adjacent to the Scapegoat Wilderness area.</p> <p>High interest exists for this area to be recommended for wilderness.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species, including Canada lynx and grizzly bear.</p>

Analysis criteria	Description
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity, and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high because the area is unroaded.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude</li> <li>○ There is high amount of primitive and/or unconfined recreation for hunting, fishing, hiking, horseback riding, and dispersed camping.</li> </ul>

### Nevada Mountain Recommended Wilderness Area

The Nevada Mountain RWA is derived from the Nevada Mountain wilderness inventory in the Upper Blackfoot 10 (UB10) in the Upper Blackfoot geographic area. It is included in alternatives B, C, and D. The boundary is the same in both alternatives B and C but includes additional acreage in alternative D.

**Table 338. Nevada Mountain Recommended Wilderness Area (alternatives B and C)**

Analysis criteria	Description
Acres	39,345
Description of the recommended boundary	<p>The northern boundary of the Nevada Mountain RWA follows a buffer along Stemple Pass Road (FSR 13040) and South Fork Poorman Road (FSR 12882). This buffer strip also excludes private lands and other developments along the Poorman Creek drainage in this area.</p> <p>The eastern boundary follows a ridgeline south east in Sections 28 and 33 of T13N R07W. At the top of the ridge the boundary buffers the Cellar Gulch Trail (Trail 312) and continues a southern trajectory on a ridgeline into the bottom of the North Fork of Little Prickly Pear Creek. Once in the bottom of the drainage the boundary follows private property lines until it reaches McQuinthy Gulch Road (FSR 12011). The boundary then buffers along either side of road and continues south up and over the ridgeline into the South Fork Little Prickly Pear Creek. The boundary then buffers the South Fork Little Prickly Pear Road (FSR 18186). The boundary continues south up an unnamed drainage over the top of the ridge into the Deadman Creek drainage. It follows the bottom of Deadman for a short distance that traverses the ridge between the Left-Hand Fork Deadman Creek and Cottonwood Gulch to Meyers Hill.</p> <p>The southern boundary moves west from Meyers Hill, buffering Ophir Cave Road (FSR 11690). It continues west along the Continental Divide National Scenic Trail at the top of the ridge, until Black Mountain where it leaves the CDNST to continue in a west and southwest direction on the western ridges of Black Mountain.</p> <p>The western boundary follows private property lines west and north in the Threemile, McKay, Mitchell, and Shingle Mill Creek drainages. When the boundary hits Nevada Creek it buffers the Nevada Creek Road (FSR 12527 and 12529). It then traverses Huckleberry Creek to the top of the ridge and follows a minor ridge down into Washington Creek. It buffers the Washington Gulch Road (FSR 11987) to its end then heads north to a point at the top of the ridge in Section 33 T13N R08W. It then passes over into the headwaters of McClellan Gulch where it follows McClellan Gulch north to Poorman Creek, buffering out all privately held lands and developments.</p>



Analysis criteria	Description
Description of the geography, topography, and vegetation	Nevada Mountain RWA is located south and west of Lincoln, Montana in the Upper Blackfoot and Divide GAs. It includes Nevada Mountain, Black Mountain, and the head end of many drainages such as Nevada Creek and Washington Creek, as well as several smaller drainages that flow into Poorman Creek. The area straddles the continental divide, and portions of the Continental Divide National Scenic Trail cross through it. This area is characterized by lodgepole pine forests, along with Douglas-fir, subalpine fir, Engelmann spruce, and dry grasslands. Less common types are present include shrub lands, whitebark pine, limber pine, cottonwood, and aspen. There are some sparsely vegetated areas as well (scree/rock).
Current uses and management	This area is in Nevada Mountain inventoried roadless area. There is active mining in the polygon. There are no open roads or motorized trails; the entire polygon is available for primitive and semi-primitive non-motorized summer recreation.
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized trails or open roads within the area.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: hunting, hiking (including the Continental Divide National Scenic trail), horseback riding, and mountain biking.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. These opportunities are diminished in the winter in areas where motorized use is allowed.</p> <p><b>Other Features of Value</b> – Features of this area include Nevada Mountain, Black Mountain, and open scenic ridges along the Continental Divide National Scenic Trail; cultural resources; and rare plant and animal species such as grizzly bear, whitebark pine, lynx, bull trout, and west slope cutthroat trout.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because the RWA is within Nevada Mountain inventoried roadless area. There are patented mining claims and access road inholdings in the polygon. There are no motorized trails or open roads.
A summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Outstanding opportunities for solitude.</p> <p>Aligns with the management of the Continental Divide National Scenic Trail.</p> <p>High interest exists for this area to be recommended for wilderness, including collaborative comments from diverse stakeholders.</p> <p>The location and configuration are in an area important for habitat connectivity for large, wide-ranging wildlife species, including Canada lynx and grizzly bear.</p>
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity, and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high because the area is unroaded.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude</li> <li>○ There is high amount of primitive and/or unconfined recreation for hunting, hiking (including the Continental Divide National Scenic trail), and horseback riding.</li> </ul>

## Alternative D

Alternative D responds to comments received from the public asking the Forest to consider an alternative that increased the number of RWAs and primitive recreation opportunities on the forest. Alternative D identifies sixteen (16) areas as recommended wilderness. These recommended wilderness areas include the nine areas identified for alternatives B and C, as well as seven additional areas with wilderness characteristics. Additional acreages were also added to the Nevada Mountain and Electric Peak Recommended Wilderness Areas in this alternative. In total, the recommended wilderness areas in alternative D are located across seven GAs and total approximately 474,589 acres.

All recommended wilderness areas in alternative D were derived from the original wilderness inventory polygons identified in the first step of the wilderness evaluation process, but do not necessarily include all the original acres of those wilderness inventory polygons. Please also refer to the recommended wilderness analysis, sections 3.21.7 and 3.21.8 of the FEIS. For specific boundary locations of recommended wilderness areas, see maps provided in appendix A.

**Table 339. Recommended wilderness areas (alternative D)**

<b>RWA</b>	<b>GA</b>	<b>Wilderness inventory polygon</b>	<b>Acres</b>
Big Log	Big Belts	BB1	7,086
Camas Creek	Big Belts	BB6	22,350
Mount Baldy	Big Belts	BB7	8,314
Wapiti Peak	Castles	CA1	30,606
Loco Mountain	Crazies	CR1	24,977
Electric Peak	Divide	D3	26,900
Colorado Mountain	Divide	D5	14,189
Deep Creek	Little Belts	LB1a	14,490
Tenderfoot Creek	Little Belts	LB1b	45,870
Big Horn Thunder	Little Belts	LB2	47,107
Middle Fork Judith	Little Belts	LB16	62,452
Big Snowies	Snowies	S1	95,299
Silver King	Upper Blackfoot	UB1	20,088
Red Mountain	Upper Blackfoot	UB2a	1,901
Arrastra Creek	Upper Blackfoot	UB2b	8,257
Nevada Mountain	Upper Blackfoot	UB10	44,702
<b>Total acres</b>			<b>474,589</b>

### Big Log Recommended Wilderness Area

The Big Log RWA was included in the 1986 Helena NF Plan. The area description is based on the Big Log wilderness inventory polygon, Big Belts 1 (BB1) in the Big Belts GA. The boundary is the same for alternatives B, C, and D. A detailed description of the Big Log RWA is described in alternative B above.

### Camas Creek Recommended Wilderness Area

This RWA is derived from portions of the Camas Creek Wilderness Inventory Area, Big Belts 6 (BB6) in the Big Belts geographic area. This RWA is included only in alternative D.

**Table 340. Camas Creek Recommended Wilderness Area (alternative D)**

Analysis criteria	Description
Acres	22,350
Description of the recommended boundary	<p>The northeast boundary of the Camas Creek RWA's follows private land boundary lines in the Elk Creek and Moose Creek drainages. The eastern boundary then buffers the Atlanta Mule Road (FSR 575) south to Atlanta Creek. The boundary then heads south to the top of Camas Ridge. It buffers the Pickfoot Spur #3F1 Road (FSR 575-F1) to a point on the ridge in the southeast corner of Section 8 T09N R04E. It heads to the south, crosses Big Camas Creek then heads up a southwest ridgeline in Section 17 T09N R04E. At the top of the ridge, the boundary follows the Meagher/Broadwater County line, south to a saddle in the southwest corner of Section 19. It then follows Duck Creek until its intersection with a private land boundary in Section 36 T09N R03E. The boundary then follows private land west and north until it enters Middle Fork Duck Creek. In Section 21 T09N R03E, the boundary heads to the tip of a ridge and back down again until it joins once again with a private land boundary. It then follows the private line boundaries west and then north establishing the western boundary of the RWA. In Section 29 T10N R03E, the boundary follows the ridgeline between the Boulder Creek and Blacktail Creek drainages, eventually crossing over the ridge into the Elk Creek drainage. The boundary follows the Elk Creek drainage north and east until it intersects the private property boundary line between Sections 25 and 26 in T10N R03E.</p>
Description of the geography, topography, and vegetation	<p>Camas Creek RWA is in the Big Belts GA and contains the high peaks of Boulder Mountain and Boulder Baldy. It also contains the Boulder Lakes and Camas Lakes. This area contains a mix of vegetation, including Douglas-fir, lodgepole pine, and subalpine fir/Engelmann spruce forests. There are also dry grasslands, whitebark pine forest, and very small amounts of shrub lands, limber pine, aspen, and sparse vegetation (scree slopes).</p>
Current uses and management	<p>This area is in Camas Creek inventoried roadless area. There are no motorized trails or motorized over-snow uses, but 0.3 miles of open road occur in the polygon. Most of the area is available for primitive and semi-primitive non-motorized recreation opportunities. There are 16 miles of nonmotorized trails.</p>
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized trails or motorized over-snow uses. 0.3 miles of open road are present in the area.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: hiking, horseback riding, hunting, fishing, and backpacking into high mountain lakes.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. This value is diminished near the open road.</p> <p><b>Other Features of Value</b> – Features of this area include an introduced population of mountain goats; the Confederate Historic Mining District; high mountains (Boulder Mountain and Boulder Baldy), wide vistas, and small alpine lakes; and rare plant and animal species such as grizzly bear, whitebark pine, lynx, and wolverine.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	<p>The ability to protect and manage these wilderness characteristics is high because it is within Camas Creek inventoried roadless area. There are no private land inholdings. There are no motorized trails or motorized over-snow uses. There are currently 0.3 mile of open road.</p>

Analysis criteria	Description
Summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Outstanding opportunities for solitude.</p> <p>High interest exists for this area based on public comment.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.</p>
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude</li> <li>○ There is high amount of primitive and/or unconfined recreation for hiking, horseback riding, hunting, fishing, and backpacking into high mountain lakes.</li> </ul>

**Mount Baldy Recommended Wilderness Area**

The Mount Baldy RWA was included in the 1986 Helena NF Plan. The area description is based on the Mount Baldy wilderness inventory polygon, Big Belts 7 (BB7). This area is included as an RWA in alternatives A, B, C, D, and F. The boundary is the same for alternatives B, C, and D, and varies in alternatives A and F. Detailed information of the Mount Baldy RWA in alternative D is the same as described above under alternative B.

**Wapiti Peak Recommended Wilderness Area**

This RWA was derived from the Wapiti Peak wilderness inventory area, Castles 1 (CA1) in the Castles geographic area. This RWA is included only in alternative D.

**Table 341. Wapiti Peak Recommended Wilderness Area (alternative D)**

Analysis criteria	Description
Acres	30,606
Description of the recommended boundary	<p>From the Grasshopper Campground, the northern boundary of the Wapiti Peak RWA heads east buffering the Fourmile Road (FSR 211) and Richardson Campground accessed by FSR 211-A. The RWA boundary heads south in the south half of Section 23 T09N R08E. It heads south west following the ridgeline that separates the Fourmile Creek and West Fork Checkerboard Creek drainages. At the top of Yankee Jim Ridge, the boundary buffers the Yankee Jim, Hamilton Ridge, and Hamilton Creek Jeep Trails. Then the boundary buffers the Castle Checkerboard road, which is a private road that provides access into mining claims in this area. The RWA continues south following along the private land boundary in these areas, around several private property boundaries in the Castle, Boulder, and Alabaugh Creek drainages. On the southern portion of the RWA, the boundary continues to follow private boundary lines in the Warm Springs and Cottonwood Creek drainages. The western boundary of the RWA follows private property lines north from the East and West Cottonwood Creek drainages to Willow Creek drainage. It then follows private property boundary lines in Grasshopper Creek and buffers the Grasshopper Road (FSR 9211) until it connects again near Grasshopper Campground. There are 3 private land inholdings with in the RWA in Sections 21 and 28 T08N R08E. These 3 parcels would remain privately held and would be surrounded by the RWA.</p>

Analysis criteria	Description
Description of the geography, topography, and vegetation	Wapiti Peak RWA is in the west side of the Castles GA and contains a series of high peaks including Beartrap Peak, Woodchuck Mountain, Wapiti Peak, Elk Peak, and Castle Mountain. The area is characterized by numerous castle-like outcrops of granite. Most of the higher elevations are covered by forest with large open grasslands dominating the lower elevations. The most common vegetation is lodgepole pine forest, as well as Douglas-fir, subalpine fir, and Engelmann spruce. Dry grasslands are also present, along with small amounts of whitebark pine, limber pine, including shrub lands, and cottonwood.
Current uses and management	This area is in the Castle Mountains inventoried roadless area. With 6.1 miles of open road and 31.9 miles of motorized trail, most of the area is available for summer motorized activity and therefore there is little opportunity for primitive or semi-primitive non-motorized recreation in the summer. There are 9.5 miles of nonmotorized trail. Most of the area is also open to snowmobile use in the winter, although the terrain and vegetation make this use impracticable and therefore there are opportunities for primitive or semi-primitive non-motorized recreation in the winter.
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – Much of this area is undeveloped and not affected by human intervention. However, motorized use is allowed on open roads and trails in the summer, as well as over-snow use over most of the area in the winter.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has unconfined and primitive recreation opportunities: horseback riding, hiking, rock climbing, hunting, fishing, mountain biking, dispersed camping around the periphery, and recreational mining.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude in the winter as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. Opportunities for solitude in the summer are diminished by current motorized uses.</p> <p><b>Other Features of Value</b> – Features of this area include Castle geology and outcroppings; cultural resources; municipal watershed for White Sulphur Springs; sinkhole wetlands; and rare species such as whitebark pine and west slope cutthroat trout.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because this area is within the Castle Mountains inventoried roadless area. There are two small private land inholdings (patented mining claims). Existing motorized uses on open roads and motorized trails, along with over-snow motorized use in the winter, would be unsuitable in RWAs in alternative D. In addition, existing mechanical means of transport on nonmotorized trails would also be unsuitable under alternative D. A portion of the Castles vegetation project is located within this RWA. The planned activities, including harvest, would not be an irretrievable commitment of resources and would not result in any permanent improvements within the polygon.
A summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Opportunities for solitude</p> <p>High interest exists for this area based on public comment.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.</p>

Analysis criteria	Description
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity, and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is high.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers opportunities for solitude.</li> <li>○ There is high amount of primitive and/or unconfined recreation for horseback riding, hiking, rock climbing, hunting, fishing, dispersed camping around the periphery, and recreational mining.</li> </ul>

**Loco Mountain Recommended Wilderness Area**

This RWA was derived from the Loco Mountain wilderness inventory polygon, Crazies 1 (CR1). It is included only in alternative D.

**Table 342. Loco Mountain Recommended Wilderness Area (alternative D)**

Analysis criteria	Description
Size	24,977
Description of the recommended boundary	<p>The northern boundary of the Loco Mountain RWA begins at the confluence of Castle Creek with the Middle Fork Cottonwood Creek. The boundary then follows the centerline of Castle Creek until it intersects the private property line formed by the western edge of Section 19 T06N R11E. From there, the RWA boundary follows private property boundary lines south and east. In the north east corner, the boundary continues along private property lines south buffering along the Station Spring Road (FSR 9285) in Station Creek, Big Elk Road (FSR 654) in Big Elk Creek, and American Fork Road (FSR 9297) in the Middle Fork American Fork Creek. The southern boundary of the Loco Mountain RWA follows the HLC NF boundary with the Gallatin NF from the ridge south of American Fork Road to north end of Target Rock. The boundary then heads north, crossing the Middle Fork Cottonwood Creek bypassing an area with visible timber harvest. The boundary follows a ridgeline down into the bottom of Middle Fork Cottonwood Creek and then follows the centerline of the drainage north until it intersects private property. The boundary then follows the private property lines to the north end of Forest Lake. The boundary then continues north and northeast on the centerline of Middle Fork Cottonwood Creek until the confluence with Castle Creek.</p>
Description of the geography, topography, and vegetation	<p>Loco Mountain RWA is located on the east side of the Crazies GA, at the north end of the mountain range and shares a border with the Gallatin NF. The area contains a number of high, craggy peaks covered in talus, scree, and boulders. Vegetation on the upper ridges is mostly alpine and lacks forest cover. Glaciation has imparted many of these landforms with sharp and scoured edges. The vegetation includes lodgepole pine, subalpine fir, Engelmann spruce, and Douglas-fir forests as well as dry grasslands, whitebark pine forest, and limber pine. Small amounts of shrub lands and juniper are also present.</p>
Current uses and management	<p>This area is in the Crazy Mountains inventoried roadless area. There are no open roads or motorized trails; the entire area is available for primitive and semi-primitive nonmotorized recreation use in the summer. There are 23.5 miles of nonmotorized trails. Motorized over-snow uses are currently allowed in 4,754 acres; the remainder of the area is available for primitive and semi-primitive non-motorized recreation in the winter.</p>



Analysis criteria	Description
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no open roads or motorized trails, but motorized over-snow uses are currently allowed in a portion of the area.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: hiking, horseback riding, hunting, fishing, dispersed camping, and wildlife viewing.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. The opportunity for solitude is diminished in the winter where over-snow motorized use is allowed.</p> <p><b>Other Features of Value</b> – Features of this area include bare, rocky and high mountain peaks; and rare plant and animal species such as whitebark pine and harlequin duck.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	<p>The ability to protect and manage these wilderness characteristics is high because it is within the Crazy Mountains inventoried roadless area. The land to the north of the polygon is checkerboard ownership that is busy during hunting season. There are no private land inholdings. There are no open roads or motorized trails. Approximately 4,754 acres are available for motorized over-snow use. There are 23.5 miles of nonmotorized trail.</p>
Summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Outstanding opportunities for solitude</p> <p>High interest exists for this area based on public comment.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.</p>
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability include:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high as much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability include:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude.</li> <li>○ There is high amount of primitive and/or unconfined recreation for hiking, horseback riding, hunting, fishing, dispersed camping, and wildlife viewing.</li> </ul>

**Electric Peak Recommended Wilderness Area**

The Electric Peak RWA is included in the 1986 Helena NF Plan. The area description is based on the Blackfoot Meadows wilderness inventory description, Divide 3 (D3). This area is included as an RWA in alternatives A, B, C, D, and F. The boundary is the same in Alternatives B, C and F, but includes additional acreage in alternative D. Other than the boundary and acres, all other analysis criteria are the same for Electric Peak and is described above in alternative B.

**Table 343. Electric Peak Recommended Wilderness Area (alternative D)**

Analysis criteria	Description
Acres	26,900
Description of the recommended boundary	From Thunderbolt Mountain, the RWA boundary extends north and east along the HLC/Deerlodge NF boundary. The boundary is located on the Continental Divide as well as the Jefferson/Powell County line. The RWA continues north and east to a point along

Analysis criteria	Description
	<p>the ridge just south of FSR 495 (Telegraph Road). From there it runs north along the centerline of an unnamed creek to its confluence with Ontario Creek.</p> <p>From this location, the RWA boundary is located west along the centerline of Ontario Creek until the confluence with Bison Creek. Then the boundary follows the centerline of Bison Creek from its confluence with Ontario creek south to an unnamed drainage in Section 28. The boundary then follows the unnamed drainage to the east, up onto the ridge southeast to the top of Bison Mountain.</p> <p>It then follows a ridge line northwest toward Monarch Creek and follows the centerline of Monarch Creek until FSR 4104. The RWA boundary follows a 300-foot buffer along the west side of FSR 4101, in Monarch Creek, and then FSR 123 in Ontario Creek. The boundary continues to the north, maintaining the 300-foot buffer with FSR 123 until it meets the boundary of the RWA near the confluence of Little Blackfoot River and Ontario Creek.</p> <p>The boundary follows the Little Blackfoot River southwest from its confluence with Ontario Creek. The boundary is located approximately 300 feet on either side of FSR 227 and excludes private lands and Kading Campground in the bottom of the drainage. With the 300-foot buffer on either side of FSR 227 and around Kading Campground, there is a “cherry-stemmed” effect created in the middle of the RWA.</p> <p>The RWA boundary continues north maintaining a 300 feet buffer west of FSR 227 until the confluence of the buffer are with Hat Creek. The boundary then heads southwest along the centerline of Hat Creek, excluding private property in Hat Creek. The boundary follows an unnamed tributary of Hat Creek almost due west to the top of Baldy Ridge.</p> <p>The boundary then follows the high points of Baldy Ridge, south and west until the top of the Continental Divide, which is also the forest boundary between the HLC NF and the Deerlodge NF.</p> <p>Then the RWA boundary follows the HLC NF boundary to the south and east along the top of the ridgeline over topographic features such as Cliff Mountain and Electric Peak, finally ending at Thunderbolt Mountain.</p>

**Colorado Mountain Recommended Wilderness Area**

This RWA is derived from portions of the Colorado Mountain wilderness inventory polygon, Divide 5 (D5), located in the Divide geographic area. Colorado RWA is only included in alternative D.

**Table 344. Colorado Mountain Recommended Wilderness Area (alternative D)**

Analysis criteria	Description
Acres	14,189
Description of the recommended boundary	<p>The northern boundary of the Colorado Mountain RWA follows private property lines in the Tenmile Creek, Colorado Gulch, Nelson Gulch, and Grizzly Gulch drainages. The eastern boundary then follows the irregular-shaped private property boundary until it reaches Grizzly Gulch Road (FSR 723). Continuing south the boundary buffers Grizzly Gulch Road, Travis Creek Road (FSR 4000), and North Fork Travis Road (FSR 137) until it intersects private lands in Section 29 T09N R14W. It follows the private property boundaries south through North Fork Travis, Travis, and Buffalo Creeks. South of Buffalo Creek the boundary follows a minor drainage southwest toward Chessman Reservoir. At the reservoir the boundary buffers the Chessman Road (FSR 299) which passes along the northern edge of the reservoir and drops down into Beaver Creek. In the lower end of Beaver Creek, the boundary skirts around private land and road developments in the Rimini area. North of Rimini, the boundary buffers private lands and the Rimini Road (FSR 695) in the bottom of the Tenmile Creek drainage. At Moose Creek, the boundary buffers out the Moose Creek-Tenmile Road (FSR 1880) and private property in this area. It continues north buffering along the Rimini Road until it intersects private property in the Lazyman Gulch area. The boundary than follows the private property boundaries until it reaches the northern boundary of the RWA. There are two small private inholding parcels within the interior of the RWA. These small parcels are not included as a part of the RWA and would continue to be privately held.</p>

Analysis criteria	Description
Description of the geography, topography, and vegetation	Colorado Mountain RWA is in the upper reaches of the Colorado Gulch drainage in the Divide GA, southwest of Helena, Montana. The busy, dispersed recreation area known as the South Hills is located to the east. This RWA contains Black Mountain and Colorado Mountain. Douglas-fir forests are the most common vegetation type. Lodgepole pine forests are also common, with small amounts of dry grasslands, mesic grasslands, shrub lands, ponderosa pine, subalpine fir, Engelmann spruce, cottonwood, and aspen.
Current uses and management	This area is in Lazyman Gulch inventoried roadless area. There are no open roads or motorized trails; the entire polygon is available for primitive and semi-primitive non-motorized recreation in the summer. A portion of the area (1,240 acres) is open for motorized over-snow uses; the remainder of the area is available for primitive and semi-primitive nonmotorized recreation in the winter. There are 1.9 miles of nonmotorized trail.
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no open roads or motorized trails. A small portion of the area is open for motorized over-snow uses.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: hiking, horseback riding, snowshoeing, cross country skiing, mountain biking, and hunting.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude in most of the polygon as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. This opportunity is diminished where Highway 12 can be heard; where the residential area in Colorado Gulch may be seen and heard; and where over-snow motorized uses occur in the winter.</p> <p><b>Other Features of Value</b> – Features of this area include Black Mountain and Colorado Mountain; Helena, Rimini, and Clancy Historic Mining Districts; historic Red Mountain Flume; municipal watershed for the city of Helena; and rare plant and animal species such as grizzly bear, lynx, Flammulated owl, and wolverine.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because it is within Lazyman Gulch inventoried roadless area. However, there are 2 private land inholdings; the northern boundary is adjacent to private land; and the western boundary is adjacent to a superfund site. There are no open roads or motorized trails; however motorized over-snow use is allowed in a portion of the area. This use, along with mechanized means of transport on nonmotorized trails, would be unsuitable in RWAs in alternative D. A portion of the Tenmile vegetation project is located within this RWA. The planned activities, including harvest, would not be an irretrievable commitment of resources and would not result in any permanent improvements within the polygon.
Summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Opportunities for solitude.</p> <p>High interest exists for this area based on public comment.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.</p>
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability include:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability include:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude.</li> </ul>

Analysis criteria	Description
	<ul style="list-style-type: none"> <li>○ There is high amount of primitive and/or unconfined recreation for hiking, horseback riding, snowshoeing, cross country skiing, and hunting.</li> </ul>

**Deep Creek Recommended Wilderness Area**

This RWA is derived from the Deep Creek Tenderfoot wilderness inventory area, Little Belts 1a (LB1a). It is in the Little Belt Mountains geographic area. The boundary is the same for alternatives B, C, and D. Detailed information of the Deep Creek RWA is described above under alternative B.

**Tenderfoot Creek Recommended Wilderness Area**

This RWA is derived from the Deep Creek Tenderfoot Creek wilderness inventory polygon, Little Belts 1b (LB1b). It is included only in alternative D.

**Table 345. Tenderfoot Creek Recommended Wilderness Area (alternative D)**

Analysis criteria	Description
Acres	45,870
Description of the recommended boundary	<p>The northern boundary of the Tenderfoot RWA begins near the confluence of Bear Gulch with the Smith River in Section 30 T15N R04E. It buffers the Bear Gulch (Trail #260) and Simmons Park (Trail #263) trails until the intersection with private property in Section 28. From there the border follows the private property line to the east, and then north, to the top of the ridge. The boundary then heads south and east buffering the Smith River (Trail #311), Strawberry Ridge (Trail #317), Smart Fork (Trail#352), and Old Baldy (Trail #301) trails until Monument Peak. At monument peak the boundary continues east buffering the Monument (FSR 3497) and Monument Ridge (FSR 268) roads until they intersect the Rugby Creek Trail (Trail #330). The boundary heads south and east buffering the Rugby Creek and Balsinger to Taylor (Trail #343) trails until the former intersects with the Divide Road (FSR 839). The boundary then buffers the Divide road until Central Park. From Central Park the boundary heads south and west buffering Lost Stove road (FSR 3483) and Lost Stove Trail (Trail #346) to Tenderfoot Creek. At Tenderfoot Creek the boundary crosses Tenderfoot Creek buffering the Tenderfoot Creek Trail (Trail #342) then continues south buffering the Williams Mountain Trail (Trail #347). The boundary buffers the William Mountain Road (FSR #3465) and Williams Park Road (FSR #586) south and east to private lands at Eagle Park. At Eagle Park the boundary heads north and buffers out the Reynolds Park road (FSR 3472) and the private property at Reynolds Park at the far north end of the road. The boundary follows private property lines around Reynolds Mountain, and continuing west, buffers along the South Fork Tenderfoot Road (FSR 6424). Continuing north and west, the boundary buffers out private lands in the lower reaches of the South Fork Tenderfoot Creek where it intersects with Tenderfoot Creek. West of this confluence, the boundary heads west on the centerline of Tenderfoot Creek until it connects with private property along the Smith River. The western boundary of the RWA follows a ¼ mile buffer from the center of the Smith River north to private property in the Cow Coulee area. The boundary then follows private property lines north to its northern boundary near Bear Gulch.</p>
Description of the geography, topography, and vegetation	<p>The Tenderfoot Creek RWA is located within the Tenderfoot Creek drainage in the Little Belt Mountains GA. Existing vegetation is dominated by Douglas-fir and lodgepole pine. Dry grasslands and subalpine fir/Engelmann spruce forests are also common, and some ponderosa pine is present. Very small amounts of other types are also present, including shrub lands, whitebark pine, limber pine, cottonwood, aspen, and juniper.</p>
Current uses and management	<p>The area lies within the Tenderfoot- Deep Creek inventoried roadless area. There are no open roads, but there are 5.9 miles of motorized trail and 5,872 acres open to motorized over-snow motorized use; primitive and semi-primitive nonmotorized recreation opportunities are provided in the remainder of the area. There are also 29.7 miles of nonmotorized trail.</p>

Analysis criteria	Description
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no open roads, but motorized trails are currently present along with some areas open to motorized over-snow use.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: hunting, fishing, backpacking, horseback riding, and mountain biking.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance.</p> <p><b>Other Features of Value</b> – Features of this area include the waterfalls on Tenderfoot Creek; Tenderfoot Creek eligible wild and scenic river; cultural resources; and rare plant and animal species such as whitebark pine, lynx, wolverine, and west slope cutthroat trout.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because it is a large polygon adjacent to NFS lands to the east and south. There are some motorized summer and over-snow uses as described above.
Summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Outstanding opportunities for solitude.</p> <p>High interest exists for this area to be recommended for wilderness.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.</p>
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability include:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is high.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability include:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude</li> <li>○ There is high amount of primitive and/or unconfined recreation for hunting, fishing, backpacking, and horseback riding.</li> </ul>

**Big Horn Thunder Recommended Wilderness Area**

This RWA is derived from the Big Horn Thunder wilderness inventory polygon, Little Belts 2 (LB2). It is included only in alternative D.

**Table 346. Big Horn Thunder Recommended Wilderness Area (alternative D)**

Analysis criteria	Description
Acres	47,107

Analysis criteria	Description
Description of the recommended boundary	<p>The northern boundary of the Big Horn Thunder RWA begins at Logging Creek Campground and follows private property lines north and east to Belt Creek. The boundary follows the centerline of Belt Creek south for approximately ¼ mile until it intersects the section line between Sections 26 and 27 of T16N R06E. The boundary then follows the west and south boundary of Section 26 until it intersects private lands, where it follows the private land boundaries east, buffering out Kaelyn's Road (FSR 3360). The boundary continues east along private property boundaries, until the community of Monarch where it then heads west along private land holdings in this area. The boundary continues south, following private land boundaries and paralleling Highway 89 until the Belt Park area. The boundary follows private property boundaries around the perimeter of Belt Park. At Tillinghast Creek, the boundary follows the centerline of Tillinghast until it reaches Horn Creek, where it follows the center line of Horn Creek southwest to the top of the ridge. On the top of the ridge the boundary heads west and north buffering out Divide Road (FSR 839) and Sheep Herders Road (FSR 6447). The boundary follows the property boundary around private lands in the head end of Deer Creek and Timber Gulch, then continues westward along the Divide Road. At the head end of Long Coulee, the boundary heads north, still buffering the Divide Road. This continues until Section 26 of T15N R05E where it buffers out an area of roads and past timber harvesting. The boundary continues north, again buffering the Divide road which is now located in the bottom of Logging Creek. The western boundary ends just north of the Logging Creek Campground.</p> <p>There are 3 parcels of private property within the interior of the Big Horn Thunder RWA. These would remain in private ownership and would not be considered a part of the RWA.</p>
Description of the geography, topography, and vegetation	<p>The Bighorn Thunder RWA is located east of Logging Creek and north of the Divide Road in the Little Belt Mountains GA. It contains the high mountain peaks of Big Horn Mountain and Thunder Mountain. Pilgrim Creek runs north and south and bisects the area. The most common vegetation types are Douglas-fir and lodgepole pine forests, with some subalpine fir and Engelmann-spruce at higher elevations. Minor amounts of other types also occur, including dry grasslands, sparsely vegetated areas (rock and scree), ponderosa pine, shrub lands, whitebark pine, limber pine, cottonwood, and aspen.</p>
Current uses and management	<p>This area is within the Pilgrim Creek inventoried roadless area. There are 2.6 miles of open road. There are also 3 motorized trails open seasonally (summer) to motorcycles, totaling 15.7 miles. The areas east and west of the Pilgrim Creek Trail are available for primitive and semi-primitive non-motorized summer recreation. There are 11.2 miles of nonmotorized trail. There is a snowmobile corridor along the boundary with FS road 839 totaling 2,308 acres; the remainder of the polygon is available for primitive and semi-primitive non-motorized recreation in the winter.</p>
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. Motorized uses currently occur on open roads, motorized trails, and in areas open to motorized over-snow use.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: horseback riding, fishing, archery, rifle hunting, and mountain biking.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude in most of the polygon as the sights and sounds of human activities and improvements are screened</p>

Analysis criteria	Description
	by topography or do not have impact due to distance. This opportunity is diminished where motorized uses are allowed. <b>Other Features of Value</b> – Features of this area include Big Horn Mountain, Thunder Mountain, Pilgrim Creek, Tillinghast Creek, and rock scree under Thunder Mountain; cultural resources; and rare species such as whitebark pine and west slope cutthroat trout.
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because it is within the Pilgrim Creek inventoried roadless area. There are 2 private inholdings, and recreation residences along the periphery. Under alternative D, motorized use on open roads, motorized trails, and in areas open to motorized over-snow use would be discontinued, along with mechanized means of transport.
Summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	Outstanding opportunities for solitude. High interest exists for this area based on public comment.
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	The <u>ecological characteristics</u> that provide the basis for suitability include: <ul style="list-style-type: none"> <li>○ The naturalness of the area is high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is high.</li> </ul> The <u>social characteristics</u> that provide the basis for suitability include: <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude.</li> <li>○ There is high amount of primitive and/or unconfined recreation for horseback riding, fishing, archery, and hunting.</li> </ul>

**Middle Fork Judith Recommended Wilderness Area**

This RWA is derived from portions of the Middle Fork Judith wilderness inventory polygon, Little Belts 16 (LB16). It also includes portions of the Middle Fork Judith Wilderness Study area. It is only included in alternative D.

**Table 347. Middle Fork Judith Recommended Wilderness Area (alternative D)**

Analysis criteria	Description
Acres	62,452
Description of the recommended boundary	The eastern boundary of the Middle Fork Judith RWA buffers the Ettien Ridge Trail northwest following the Middle Fork Judith River and a private property parcel. The eastern boundary then buffers Schaeffer Ridge Trail, Woodchopper Ridge Trail, Morris Creek Trail and Yogo Creek Road. The northern boundary follows private property parcels and buffers Dry Wolf Road northwest. The western boundary buffers Dry Wild Road to the west. The southwestern boundary borders patented mining claims south on the existing ridgeline and buffering Sand Point Road. The boundary continues southwest following the North Fork of the Musselshell River Divide Road to the southwest. The southern boundary buffers Burnt Ridge Road and existing ridgeline to complete the area.
Description of the geography, topography, and vegetation	The Middle Fork Judith RWA is in the Little Belt Mountains GA. It includes the lower Lost Fork and Middle Fork of the Judith River with the major high points being Yogo Peak, Cabin Mountain, Grendah Mountain, Sandpoint Mountain, and Lost Fork Ridge. The most common vegetation types consist of Douglas-fir, subalpine fir, Engelmann spruce, and lodgepole pine forests. Dry grasslands also occur, along with limber pine, shrub lands, ponderosa pine, rock/scree, and whitebark pine. Several large fires have occurred in this area recently.



Analysis criteria	Description
Current uses and management	Most of this area is in the Middle Fork Judith wilderness study area; and is in within Middle Fork Judith inventoried roadless area. There are 0.7 miles of open road, but no motorized trails. In addition, about 4,996 acres are open to motorized over-snow use (the outer perimeter of the polygon). There are 56 miles of nonmotorized trails. Most of the area is available for primitive and semi-primitive nonmotorized recreation in both summer and winter. The Russian Flats airstrip is located near the polygon.
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are 0.7 mile of open road and approximately 4,996 acres open to motorized over-snow recreation uses.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: horseback riding, fishing, hunting, mountain biking, dispersed camping, cross country skiing, and snowshoeing outfitting.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude in most of the polygon as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. This opportunity is diminished in proximity to the Russian Flats airstrip, and where motorized uses are allowed.</p> <p><b>Other Features of Value</b> – Features of this area include the Middle Fork Judith River; Yogo Peak; cultural resources; Judith River eligible Wild and Scenic River; and rare plant and animal species such as wolverine, black rosy finch, western toad, dwarf shrew, whitebark pine and west slope cutthroat trout.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because it has been managed as a Wilderness Study Area since 1977.
Summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Most of the area has been a wilderness study act area since 1977.</p> <p>Outstanding opportunities for solitude.</p> <p>High interest exists for this area based on public comment.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.</p>
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability include:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability include:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude.</li> <li>○ There is high amount of primitive and/or unconfined recreation for horseback riding, fishing, hunting, dispersed camping, cross country skiing, and snowshoeing outfitting in the fall.</li> </ul>

### Big Snowies Recommended Wilderness Area

This RWA is derived from the Big Snowies wilderness inventory area, Snowies 1 (S1) in the Snowies geographic area. The boundary is the same in alternatives B, C, and D and includes all lands designated as the Big Snowies Wilderness Study Area (WSA). The boundary differs in alternative F and excludes the western half of the WSA. Detailed information about the Big Snowies RWA for alternative D is the same as described above in alternative B.

### Silver King Recommended Wilderness Area

This RWA is derived from the Dearborn Silver King wilderness inventory area, Upper Blackfoot 1 (UB1) in the Upper Blackfoot geographic area. The boundary is the same in alternatives B, C, D and varies slightly in alternative F. The detailed analysis criteria about the Silver King RWA is the same as described above in alternative B.

### Red Mountain Recommended Wilderness Area

This RWA is derived from the Red Mountain wilderness inventory area, Upper Blackfoot 2a (UB2a) in the Upper Blackfoot geographic area. The boundary includes the Red Mountain research natural area and is the same in alternatives B, C, D, and varies slightly in alternative F. Detailed information about the Red Mountain RWA in alternative D is the same as described above in alternative B.

### Arrastra Creek Recommended Wilderness Area

This RWA is derived from the Arrastra wilderness inventory area, Upper Blackfoot 2b (UB2b) in the Upper Blackfoot geographic area. The boundary is the same in alternatives B, C, and D. Detailed information of the Arrastra RWA is the same as described above under alternative B.

### Nevada Mountain Recommended Wilderness Area

This RWA is derived from the Nevada Mountain wilderness inventory area, Upper Blackfoot 10 (UB10). It is included in alternatives B, C, D and F. The boundary delineation for the Nevada Mountain area is slightly different for both alternative D as compared to alternatives B and C. The boundary for this area in alternative F is different from alternatives B, C, and D and is described below.

**Table 348. Nevada Mountain Recommended Wilderness Area (alternative D)**

Analysis criteria	Description
Acres	44,702 acres
Description of the recommended boundary	<p>The northern boundary of the Nevada Mountain RWA follows a buffer along Stemple Pass Road (FSR 13040) and South Fork Poorman Road (FSR 12882). This buffer strip also excludes private lands and other developments along the Poorman Creek drainage in this area. The boundary follows a ridgeline south east in Sections 28 and 33 of T13N R07W. At the top of the ridge the boundary buffers the Cellar Gulch Trail (Trail 312) and continues on a southern trajectory on a ridgeline into the bottom of the North Fork of Little Prickly Pear Creek. Once in the bottom of the drainage the boundary follows private property lines until it reaches McQuinthy Gulch Road (FSR 12011). The boundary then buffers along either side of the road and continues south up and over the ridgeline into the South Fork Little Prickly Pear Creek. The boundary then buffers the South Fork Little Prickly Pear Road (FSR 18186). The boundary continues south up an unnamed drainage to the top of the ridge between South Fork Little Prickly Pear Creek and the Deadman Creek drainage. It then continues along ridgelines into the bottom of Deadman Creek where it follows private property boundaries toward the east until Lost Horse Creek. The boundary then follows Lost Horse Creek to the headwaters, following private property boundaries. At the top of the drainage, it follows a ridge to points near the top of Roundtop Mountain. From Roundtop Mountain, the boundary heads west, buffering Ophir Cave Road (FSR 11690) which is also the Continental Divide National Scenic Trail (CDNST) in this area. It leaves the Ophir Cave Road near Meyers Hill to continue west along the Continental Divide National Scenic Trail at the top of the ridge, until Black Mountain where it leaves the CDNST to continue in a west and southwest direction on the western ridges of Black Mountain. The boundary follows private property boundaries west and north in the Threemile, McKay, Mitchell, and Shingle Mill Creek drainages. When the boundary hits Nevada Creek it buffers the Nevada Creek Road (FSR 12527 and 12529). It then traverses</p>

Analysis riteria	Description
	<p>Huckleberry Creek to the top of the ridge and follows a minor ridge down into Washington Creek. It buffers the Washington Gulch Road (FSR 11987) to its end then heads north to a point at the top of the ridge in Section 33 T13N R08W. It then passes over into the headwaters of McClellan Gulch where it follows McClellan Gulch north to Poorman Creek, buffering out all privately held lands and developments. The RWA consists of two parcels. The large parcels northeastern boundary traverses the Helmville-Gould pack trail and a segment of the Continental Divide National Scenic Trail north following Poorman Creek to the northwest bordering patented mining claims. The western boundary follows the McClellan Gulch to the Helmville-Gould pack trail and existing ridgeline to Huckleberry Creek west. The southwestern western boundary then buffers Nevada Creek Road and a private property land parcel to the southwest following the Geographic area boundary. The southern boundary follows the Black Mountain ridgeline and follows the Continental Divide over the ridge of Myers Hill. The southeast boundary follows the ridgeline to the South Fork of Little Prickly Pear Road, the ridgeline and buffering McQuinthy Gulch Road bordering a private property parcel. The boundary continues Northeast on the ridgeline crossing the Helmville-Gould pack trail, bordering a segment of the Continental Divide National Scenic Trail bordering a private inholding and following the Geographic area boundary to complete the area. The small parcel section borders a patented mining claim section to complete the area.</p>
<p>Description of the geography, topography, and vegetation</p>	<p>Nevada Mountain RWA is located south and west of Lincoln, Montana in the Upper Blackfoot and Divide GAs. It includes Nevada Mountain, Black Mountain, and the head end of many drainages such as Nevada Creek and Washington Creek, as well as several smaller drainages that flow into Poorman Creek. The area straddles the continental divide, and portions of the Continental Divide National Scenic Trail cross through it. This area is characterized by lodgepole pine forests, along with Douglas-fir, subalpine fir, Engelmann spruce, and dry grasslands. Less common types are present include shrub lands, whitebark pine, limber pine, cottonwood, and aspen. There are some sparsely vegetated areas as well (scree/rock).</p>
<p>Current uses and management</p>	<p>This area is in Nevada Mountain inventoried roadless area. There is active mining in the polygon. There are no open roads or motorized trails; the entire polygon is available for primitive and semi-primitive non-motorized summer recreation. 8,878 acres south of Jefferson Creek are open to motorized over-snow use; the remainder of the area is available for primitive and semi-primitive non-motorized recreation in the winter. There are 30.5 miles of nonmotorized trails.</p>
<p>Description of the wilderness characteristics</p>	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized trails or open roads within the area.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: hunting, hiking (including the Continental Divide National Scenic trail), horseback riding, and mountain biking.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. These opportunities are diminished in the winter in areas where motorized use is allowed.</p> <p><b>Other Features of Value</b> – Features of this area include Nevada Mountain, Black Mountain, and open scenic ridges along the Continental Divide National</p>

Analysis criteria	Description
	Scenic Trail; cultural resources; and rare plant and animal species such as grizzly bear, whitebark pine, lynx, bull trout, and west slope cutthroat trout.
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because the RWA is within Nevada Mountain inventoried roadless area. There are patented mining claims and access road inholdings in the polygon. In alternatives B/C, there are no motorized trails or open roads; however, over-snow motorized use is allowed on a portion of the area.
A summary of the factors considered, and the process used in evaluating the area and developing the alternative(s).	<p>Outstanding opportunities for solitude.</p> <p>Aligns with the management of the Continental Divide National Scenic Trail.</p> <p>High interest exists for this area to be recommended for wilderness, including collaborative comments from diverse stakeholders.</p> <p>The location and configuration are in an area important for habitat connectivity for large, wide-ranging wildlife species, including Canada lynx and grizzly bear.</p>
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability include:</p> <ul style="list-style-type: none"> <li>o The naturalness of the area is very high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>o The undeveloped quality of the area is very high because the area is unroaded.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability include:</p> <ul style="list-style-type: none"> <li>o The area offers outstanding opportunity for solitude</li> <li>o There is high amount of primitive and/or unconfined recreation for hunting, hiking (including the Continental Divide National Scenic trail), and horseback riding.</li> </ul>

## Alternative E

Alternative E responds to comments received from public comments asking the Forest to consider an alternative that does not identify RWAs and increases the amount of forest lands available for timber production. While the wilderness inventory displays many areas and acres that possess wilderness characteristics, alternative E is designed specifically to respond to the public comment and does not include any RWAs.

In alternative E, there would no longer be RWA on the forest and the three existing RWAs (Big Log, Mount Baldy, and Electric Peak) would no longer be designated as such. These areas would no longer be managed for their wilderness characteristics. Since all three of these areas are also IRA's they would be managed for their unroaded character but would be subject to management practices allowable in IRAs and WSAs. Please also refer to the inventoried roadless area, recommended wilderness area, and wilderness study area analysis, sections 3.21.5, 3.21.6, 3.21.7, 3.21.8, 3.22.7, and 3.22.8 of the FEIS.

## Alternative F (Preferred Alternative)

Alternative F is the preferred alternative and was developed after the consideration of public comments on the DEIS. This alternative is only analyzed in the FEIS.

Alternative F identifies seven (7) recommended wilderness areas. The seven recommended wilderness areas in alternative F are located within four geographic areas and total approximately 153,325 acres. These recommended wilderness areas were derived from the original wilderness inventory polygons identified in the first step of the wilderness evaluation process, but do not necessarily include all of those

original acres. They were selected based on consideration of the information in the wilderness evaluation, which indicated these areas had wilderness characteristics such as naturalness, undeveloped, outstanding opportunities for solitude or a primitive and unconfined recreation or other special features such as ecological, geological, or scientific, educational, scenic or historic value.

The selection of the 153,325 acres for RWA under alternative F was carefully considered in the context of the balancing other multiple use considerations in the overall Forest Plan. Where the identified RWA shares a boundary with private lands, the RWA boundary was moved approximately 300 feet away from the private property lines. This distance would provide flexibility in addressing natural resource concerns adjacent to private land ownership.

Table 349 provides the name of each recommended wilderness area in alternative F, the inventory polygon it originated from, the geographic area in which it is located, and the approximate acres of the recommended wilderness area. The maps for each recommended wilderness area are in appendix A.

**Table 349. Recommended wilderness areas in alternative F**

RWA	GA	Wilderness inventory polygon	Alternative F (Acres)
Big Log	Big Belts	BB1	7,035
Mount Baldy	Big Belts	BB7	8,141
Electric Peak	Divide	D3	18,239
Big Snowies	Snowies	S1	66,894
Silver King	Upper Blackfoot	UB1	18,568
Red Mountain	Upper Blackfoot	UB2a	2,500
Nevada Mountain	Upper Blackfoot and Divide	UB10	31,948
<b>Total acres</b>			<b>153,325</b>

**Big Log Recommended Wilderness Area**

The Big Log RWA was included in the 1986 Helena NF Plan. The area description is based on the Big Log wilderness inventory polygon, Big Belts 1 (BB1) in the Big Belts GA. The boundary for the Big Log RWA remains the same in alternatives B, C, and D, but varies slightly in alternative F. This is a result of moving the boundary line 300 feet away from private property lines along Beaver Creek to allow flexibility for natural resource management next to private lands.

**Table 350. Big Log Recommended Wilderness Area (alternative F)**

Analysis criteria	Description
Acres	7,035
Description of the recommended boundary	<p>The Big Log RWA consists of several parcels of land adjacent to the existing Gates of the Mountains Wilderness area. These parcels lie along the northern and southern boundaries of the wilderness.</p> <p>The northern areas consist of four small parcels in the Willow Creek drainage. All are located adjacent to the northern border of the wilderness. The locations and configuration of these four parcels are the same as in alternatives B, C, and D.</p> <p>The southern parcel is large and extends along the entire southern border of the wilderness from the American Bar/Big Log Creek area on the west to the Gilman Gulch Area on the east. The southern parcel also lies immediately adjacent to the wilderness boundary and extends south to a 300-foot from the north side of the Beaver Creek - Indian Creek Rd (FS Road 138).</p> <p>Several private properties exist along the Beaver Creek-Indian Creek Road. The Big Log RWA boundary along these private properties will remain 300 feet off-set from the private property lines. This distance will provide flexibility in addressing natural resource concerns adjacent to private lands.</p>

Analysis criteria	Description
Description of the geography, topography, and vegetation	Much of the area is moderately steep to very steep, with limestone cliff features, especially adjacent to the Missouri River, as well as other unique geological landforms. Existing vegetation includes dry grasslands, shrub lands, open and dry ponderosa pine forests, and Douglas-fir forests, along with small amounts of lodgepole pine, and Rocky Mountain juniper.
Current uses and management	The 1986 Helena NF Plan included much of this Big Log area as an RWA. The lands identified for recommended wilderness are available for primitive recreation opportunities in both summer and winter. There are currently no motorized trails, open roads, or motorized over snow uses in these areas. Within this RWA, there are 5.3 miles of non-motorized trail.
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized uses.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: horseback riding, hiking, backpacking, dispersed camping, hunting, and Nordic skiing.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. Areas that are closer to the Gates of the Mountains wilderness have greater opportunity for solitude, and this diminishes in areas closer to the Missouri River and the Beaver Creek road.</p> <p><b>Other Features of Value</b> – Features of this area include an introduced population of mountain goats; cliffs and rock formations along the river corridor and Meriwether Canyon; the unique rock formations and slot canyon in Refrigerator Canyon; many cultural resources including cabin ruins, tipi ring, mining and prehistoric rock art sites; and the Beaver Creek eligible Wild &amp; Scenic River; and rare plant and animal species such as grizzly bear, lynx, Flammulated owl, and Lewis' woodpecker.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because the area is adjacent to existing wilderness and has been managed as recommended wilderness since 1986. It is also within Big Log inventoried roadless area and is adjacent to the Devil's Tower inventoried roadless area to the south. Motorized uses and mechanized means of transportation would not be suitable within RWAs in alternative F.
Summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>A large portion of this area was previously included as an RWA in the 1986 Helena Forest Plan (alternative A).</p> <p>Big Log RWA is located adjacent to the existing Gates of the Mountain wilderness and would build upon the wilderness values in the area.</p> <p>High interest exists for this area to be an RWA; most public comments received were in favor of the designation.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.</p>
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high, is affected primarily by natural forces, has mostly intact ecological integrity, and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high, and there are no existing motorized uses.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude.</li> <li>○ Most of the area allows for primitive and/or unconfined recreation, such as, but not limited to, horseback riding, hiking, backpacking, dispersed camping, hunting, and cross-country skiing.</li> </ul>

### Mount Baldy Recommended Wilderness Area

The Mount Baldy RWA was included in the 1986 Helena NF Plan. The area description is based on the Mount Baldy wilderness inventory polygon, Big Belts 7 (BB7). This area is included as an RWA in alternatives A, B, C, D, and F. The boundary is the same for alternatives B, C, and D. It varies slightly in alternative F. This is a result of moving the boundary line 300 feet away from private property lines to allow flexibility for natural resource management next to private lands.

**Table 351. Mount Baldy Recommended Wilderness Area (alternative F)**

Analysis criteria	Description
Acres	8,141
Description of the recommended boundary	<p>The Mount Baldy RWA is in the headwaters of Big Birch and Little Birch Creeks in the Big Belts geographic area. It includes numerous high elevation mountain lakes and the prominent topographic features of Mount Baldy, Mount Edith, and the Needles.</p> <p>The northern boundary of the RWA follows the hydrologic divide south and west between the Gypsy Creek and Big Birch Creek drainages. At the top of the ridge the boundary remains approximately 300 feet buffer around the radio tower as well as along the microwave spur road (FSR 4023-082).</p> <p>The boundary then follows the top of the ridge south and then east, including the tops of Mount Baldy and Mount Edith peaks.</p> <p>The boundary line heads due north 300 feet off-set from the private property line along Sections 12 and 13 of T8N R4E. It then cuts across the northeast corner of Section 12 and returns to within 300 feet of the property boundary along the northern boundary of Sections 11 and 12 of T8N R4E.</p> <p>The boundary again heads due north 300 feet off-set from Section 3 T8N R4E and Section 34 T9N R4E. The boundary ends on the hydrologic divide between Gypsy Creek and Big Birch Creek drainages.</p>
Description of the geography, topography, and vegetation	<p>This area includes several high peaks (Mount Baldy and Mount Edith), and includes the Needles rock formations, numerous alpine lakes, and valley vistas. Vegetation is dominated by high elevation lodgepole pine and subalpine fir/Engelmann spruce forests, with some Douglas-fir forests. Sparsely vegetated areas are common, including rocky alpine sites. Whitebark pine forest is also present, along with grasslands, shrub lands, and limber pine.</p>
Current uses and management	<p>The 1986 Helena Forest Plan includes this area as an RWA. The entire polygon is available for primitive and semi-primitive summer and winter recreation. There are no open roads, motorized trails, or motorized over snow uses. There are 13.6 miles of nonmotorized trail.</p>
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with an area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized uses.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities, including, but not limited to horseback riding, hiking, backpacking, dispersed camping, mountain biking, and hunting.</p> <p><b>Solitude</b> – There are outstanding opportunities for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. This is slightly diminished within proximity to the communication site road in the summer.</p> <p><b>Other Features of Value</b> –Features of this area include an introduced population of mountain goats; numerous high alpine lakes; the Needles unique rock formations; unique wetland vegetation; and rare plant and animal species such as whitebark pine, grizzly bear, lynx, wolverine, black rosy finch, and west slope cutthroat trout in Ray Creek.</p>



Analysis criteria	Description
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage wilderness characteristics is high because the area has been managed as an RWA since 1986 and contains no private inholdings. The area is in the Mount Baldy Inventoried Roadless Area. The only administrative motorized use is on the road to the communication site in the summer. There are no motorized uses. Motorized uses and mechanized means of transportation are not suitable within RWAs in alternative F.
Summary of the factors considered, and the process used in evaluating the area and developing the alternatives	A large portion of this area has been previously included as an RWA in the 1986 Helena Forest Plan (alternative A). High interest exists for this area to be recommended for wilderness. The location and configuration of the Mount Baldy RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	The <u>ecological characteristics</u> that provide the basis for suitability: <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high, is affected primarily by natural forces, has mostly intact ecological integrity, and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high, with no existing motorized uses.</li> </ul> The <u>social characteristics</u> that provide the basis for suitability: <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude.</li> <li>○ Most of the area offers primitive and/or unconfined recreation such as, but not limited to horseback riding, hiking, backpacking, dispersed camping, and hunting.</li> </ul>

**Electric Peak Recommended Wilderness Area**

The area description for this RWA is based on the Electric Peak wilderness inventory description, Divide 3 (D3) which is in the Divide geographic area. The Electric Peak RWA is included in alternatives A, B, C, D, and F. The boundary for the Electric Peak RWA is the same in alternatives B and C. However, the boundary delineation differs in alternatives A, D, and F. In alternative F, the boundary changes are the result of moving the boundary line 300 feet away from private property lines to allow flexibility for natural resource management next to private lands.

**Table 352. Electric Peak recommended wilderness area (Alternative F)**

Analysis criteria	Description
Acres	18,239
Description of the recommended boundary	The Blackfoot RWA follows the Little Blackfoot River southwest from its confluence with Ontario Creek. The boundary is located approximately 300 feet south of FSR 227 and excludes private lands in the bottom of the drainage. The boundary off-sets private lands by 300 feet. Once beyond the campground at the end of the road, the boundary follows the centerline of the Little Blackfoot River until the Little Sunshine Camp trail (FS Trail 227-009). It then follows the ridgeline to the south of this trail to the top of the ridge which is also the HLC NF Boundary with the Deerlodge NF. The RWA boundary then follows the HLC NF boundary to the south and east along the top of the ridgeline over topographic features such as Cliff Mountain, Electric Peak, and Thunderbolt Mountain. The RWA leaves the HLC/Deerlodge NF boundary at a point south of Bison Mountain and heads north across the top of Bison Mountain. It then follows a ridge line north west toward Monarch Creek and follows the centerline of Monarch Creek until FSR 4104. The RWA boundary follows a 300-foot buffer along the west side of FSR 4101, in Monarch Creek, and then FSR 123 in Ontario Creek. The boundary continues to the north, maintaining the 300-foot buffer with FSR 123 until it meets the boundary of the RWA near the confluence of Little Blackfoot River and Ontario Creek.
Description of the geography,	This RWA is in the Divide GA. Portions of this RWA were identified as the Electric Peak RWA in the current 1986 Helena NF Plan. The Electric Peak (Blackfoot Meadows) RWA lies along the Continental Divide National Scenic Trail and includes several

Analysis criteria	Description
topography, and vegetation	mountain peaks that are well over 8000 feet in elevation. Vegetation is dominated by lodgepole pine forests, with Douglas-fir also common as well as subalpine fir and Engelmann spruce. Less common vegetation types include grasslands, shrub lands, and whitebark pine forests.
Current uses and management	Much of the area has been managed as an RWA since 1986. The entire polygon is available for non-motorized summer and winter recreation. Motorized recreational uses and mechanized means of transportation would be unsuitable within RWAs in alternative F.
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized trails or roads, and minimal motorized over-snow use.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: horseback riding, hiking, hunting, fishing, mountain biking, and camping.</p> <p><b>Solitude</b> – Most of the area provides outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. The opportunity for solitude is somewhat diminished in portions of the RWA closest to Highway 12 and near the Little Blackfoot road.</p> <p><b>Other Features of Value</b> – Features of this area include the Little Blackfoot river which is eligible for consideration as a wild and scenic river; cultural resources; and rare plant and animal species such as whitebark pine, grizzly bear, lynx, bull trout, and west slope cutthroat trout.</p>
The ability to protect and manage the area so as to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because the area has been managed as an RWA since 1986 and is adjacent to an RWA on the adjacent Beaverhead-Deerlodge NF. It is also within the Electric Peak inventoried roadless area. There are two private inholdings: one along the Little Blackfoot Road (FSR 227), and the other along Ontario Road (FSR 123). Motorized uses and mechanized means of transportation would be unsuitable within RWAs in alternative F.
Summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>Most of the area was previously included as an RWA in the 1986 Helena NF Plan alternative A).</p> <p>There are outstanding opportunities for solitude.</p> <p>Public interest is high for designating this area as recommended wilderness.</p> <p>The location and configuration of the Electric Peak RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species.</p>
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high, is affected primarily by natural forces, has mostly intact ecological integrity, and contains many indigenous species.</li> <li>○ There are no motorized trails or open roads.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude.</li> <li>○ Most of the area allows for primitive and/or unconfined recreation activities such as, but not limited to, horseback riding, hiking, hunting, fishing, and camping.</li> </ul>

### Big Snowies Recommended Wilderness Area

This RWA is derived from the Big Snowies wilderness inventory area, Snowies 1 (S1) in the Big Snowies geographic area. Portions of this RWA also fall within the Big Snowies Wilderness Study Area (WSA). The boundary in alternative F is different from the boundary for alternatives B, C, and D. This change reduces the size of the RWA by approximately 28,405 acres and concentrates the RWA in the eastern

portion of the Big Snowy Mountain Range. Additionally, in alternative F, the boundary line is off set 300 feet away from private property lines to allow flexibility for natural resource management next to private lands.

**Table 353. Big Snowies Recommended Wilderness Area (alternative F)**

Analysis criteria	Description
Acres	66,894
Summarized description of the recommended boundary	<p>The northern boundary of the Big Snowies RWA follows the HLC NF boundary line but is off set from private property lines by 300 feet.</p> <p>The eastern boundary also follows the HLC NF boundary with adjacent private lands, again, off-setting all private property lines by 300 feet.</p> <p>The southern boundary follows the HLC NF boundary from the east end of the RWA until Swimming Woman Creek. At Swimming Woman Creek buffers the Southside Trail (Trail 652) and the Neil Creek Connection Trail (Trail 653) by 300 feet until the hydrologic divide between West Fork Timber Creek and East Fork Blake Creek.</p> <p>The western boundary follows the hydrologic boundary north between West Fork Timber Creek and East Fork Blake Creek until the top of the primary ridge. At the top it follows the ridge south east until the hydrologic boundary between East Fork Rock Creek and a tributary to West Fork Cottonwood Creek. The western boundary continues north on this hydrologic divide until Jump Off Peak. At Jump Off Peak it follows north along the top of the ridge between the upper reaches of East Fork Green Pole Canyon and the West Fork Cottonwood Creek Drainage. The boundary leaves the hydrologic divide between these two watersheds just north of Lime Cave Peak. It then follows the centerline of the Hay Canyon drainage north until it intersects the 300 foot off-set with private lands at the northern boundary of the RWA.</p>
Description of the geography, topography, and vegetation	<p>This RWA encompasses approximately 70% of the entire island mountain range of the Big Snowies and is dominated by limestone geology and karst topography which conceals many caves including an ice cave on West Peak. The RWA is also characterized at its highest elevations by a tree-less plateau of alpine with rock and tundra. The dominant vegetation includes Douglas-fir, lodgepole pine, subalpine fir and Engelmann spruce forests. Sparsely vegetated areas (such as rock/scree) are also found along with grasslands, whitebark pine, and very small occurrences of shrublands, ponderosa pine, limber pine, cottonwood, and aspen.</p>
Current uses and management	<p>This area has been managed as a wilderness study area since 1977. It also lies within the Big Snowies inventoried roadless area and contains several research natural areas. Primitive and semi-primitive non-motorized recreation opportunities are provided in the entire polygon north of Trails 652 and 653 in the summer. There are 59.4 miles of nonmotorized trail within the RWA.</p>
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention; however, there are some motorized uses on some of the primitive open roads in the summer in southern part of the RWA. There are no over-snow uses in the RWA in this alternative.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: Hiking, horseback riding, dispersed camping, back country skiing, fishing, mountain biking, caving, and hunting. There are some motorized uses along open roads in the southern portion of the RWA.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. The opportunity for solitude is diminished in portions of the RWA closer to the motorized trails (Trails 653 and 653) near the southern boundary of the RWA and open roads within the southern portion of the RWA.</p> <p><b>Other Features of Value</b> – Features of this area include an introduced population of mountain goats; cirque basins in Careless Creek and Swimming Woman Creek; ice caves;</p>

Analysis criteria	Description
	several research natural areas; Swimming Woman eligible Wild and Scenic River; municipal watershed for Lewistown; cultural resources; and rare plant and animal species such as <i>Goodyera repens</i> , whitebark pine, lynx, dwarf shrew, and westslope cutthroat trout.
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because it has been managed as a wilderness study area since 1977 and covers most of the island mountain range of the Big Snowies. There are private lands adjacent to the polygon. There are existing motorized uses as described above. These uses, along with mechanized uses on nonmotorized trails, would be unsuitable in alternative F. These changes in suitability may be reflected in a future site-specific decision and would reduce the amount of motorized and mechanized recreation access in each RWA.
A brief summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	Designation as a wilderness study act area Outstanding opportunities for solitude; very remote area. High interest exists for this area to be recommended for wilderness.
Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high as much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high as most of this area is unroaded.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude</li> <li>○ There is high amount of primitive and/or unconfined recreation for hiking, horseback riding, dispersed camping, back country skiing, fishing, caving, and hunting.</li> </ul>

### Nevada Mountain Recommended Wilderness Area

The Nevada Mountain RWA is derived from the Nevada Mountain wilderness inventory area, Upper Blackfoot 10 (UB10) in the Upper Blackfoot geographic area. A portion of this area also lies within the Divide GA. It is included in alternatives B, C, D, and F. The boundary in alternative F is different from the boundary for alternatives B, C, and D.

The size and shape of the Nevada Mountain RWA in alternative F is different from the other alternatives. There is a reduction in the size of the RWA from 39,345 acres in alternatives B and C and 44,702 acres in D to approximately 31,948 acres in alternative F. Additionally, in alternative F, the boundary line of the RWA is off set 300 feet from private property lines to allow flexibility for natural resource management next to private lands. The primary change in alternative F lies along the northern boundary of the RWA and is described in more detail below.

**Table 354. Nevada Mountain Recommended Wilderness Area (alternative F)**

Analysis criteria	Description
Acres	31,948

Analysis criteria	Description
Description of the recommended boundary	<p>The northern boundary of the Nevada Mountain RWA is located approximately 300 feet south of the Helmville-Gould trail (Tr. #467) from the west side of the hydrologic divide of Washington Creek east to the intersection of Trail #467 with the Continental Divide Trail (Trail #440). The boundary continues east along Trail #440 until it intersects Cellar Gulch Trail (Trail #434) remaining 300 feet to the south of these trails.</p> <p>At the intersection of Trail #440 with Trail #435, the eastern boundary of the RWA heads south remaining 300 feet to the west of the Cellar Gulch Trail (Trail #435). The boundary then heads east and then south following the inventoried roadless area boundary and including the head end of the North Fork Little Prickly Pear, South Fork Little Prickly Pear, and Deadman Creek drainages.</p> <p>The southern boundary begins east of Meyers Hill in the headwaters of the Left-Hand Fork of Cottonwood Gulch. The boundary heads west over the top of Meyers Hill, following the inventoried roadless area boundary which is also the boundary between the IRA and the winter recreation area to the south. The boundary generally follows the hydrologic divide between Ophir Creek and Deadman until the head end of Georgia Creek. It follows the center line of Georgia Creek until it intersects the Forest boundary. At the Forest boundary line, which is also the boundary line with private property, the western boundary of the RWA heads north remaining 300 feet off set from the private boundary lines, allowing for flexibility of management in these areas. The boundary follows 300 feet off set from these private property boundaries west and north in the Threemile, Sixmile, Mitchell, and Shingle Mill Creek drainages. When the boundary hits Nevada Creek it buffers the Nevada Creek Road (FSR 12527 and 12529). It then traverses Huckleberry Creek to the top of the ridge and follows a minor ridge down into Washington Creek. It buffers the Washington Gulch Road (FSR 11987) to its end then heads north to a point at the top of the ridge in Section 33 T13N R08W and meets up with northern boundary 300 feet south of the Helmville-Gould Trail (Trail #467).</p>
Description of the geography, topography, and vegetation	<p>Nevada Mountain RWA is located south and west of Lincoln, Montana in the Upper Blackfoot and Divide GAs. It includes Nevada Mountain, Black Mountain, and the head end of many drainages such as Nevada Creek, Washington Creek, North Fork Little Prickly Pear Creek, and Deadman. The area straddles the continental divide, and portions of the Continental Divide National Scenic Trail cross through it. This area is characterized by lodgepole pine forests, along with Douglas-fir, subalpine fir, Engelmann spruce, and dry grasslands. Less common types are present include shrub lands, whitebark pine, limber pine, cottonwood, and aspen. There are some sparsely vegetated areas as well (scree/rock).</p>
Current uses and management	<p>This area is in Nevada Mountain inventoried roadless area. There is active mining in the polygon. There are no open roads or motorized trails within the RWA, and most of the area is available for primitive and semi-primitive non-motorized recreation. Motorized and mechanized means of transportation would be unsuitable within RWAs in alternative F.</p>
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized trails or open roads within the area.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities such as hunting, hiking (including the Continental Divide National Scenic trail), and horseback riding.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance.</p> <p><b>Other Features of Value</b> – Features of this area include Nevada Mountain, Black Mountain, and open scenic ridges along the Continental Divide National Scenic Trail; cultural resources; and rare plant and animal species such as grizzly bear, whitebark pine, lynx, bull trout, and west slope cutthroat trout.</p>

Analysis criteria	Description
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because the RWA is within Nevada Mountain inventoried roadless area. There are patented mining claims and access road inholdings in the polygon. Motorized recreation uses and mechanized means of transportation would not be suitable within RWAs in alternative F.
A summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Outstanding opportunities for solitude.</p> <p>Aligns with the management of the Continental Divide National Scenic Trail.</p> <p>High interest exists for this area to be recommended for wilderness, including collaborative comments from diverse stakeholders.</p> <p>The location and configuration are in an area important for habitat connectivity for large, wide-ranging wildlife species, including Canada lynx and grizzly bear.</p>
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>o The naturalness of the area is very high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>o The undeveloped quality of the area is very high because the area is unroaded.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>o The area offers outstanding opportunity for solitude</li> <li>o There is high amount of primitive and/or unconfined recreation for hunting, hiking (including the Continental Divide National Scenic trail), and horseback riding.</li> </ul>

### Silver King Recommended Wilderness Area

The Silver King RWA is derived from the Dearborn Silver King wilderness inventory area, Upper Blackfoot 1 (UB1) in the Upper Blackfoot geographic area. The boundary for this RWA is the same in alternatives B, C, and D but varies along the Continental Divide and along private lands in alternative F. The RWA boundary along the Continental Divide lies approximately 150 feet south of the Continental Divide Trail (TR #440) allowing mechanical means of transportation along this route. The southern boundary line of the RWA is off set 300 feet from all private property lines to allow flexibility for natural resource management next to private lands.

**Table 355. Silver King Recommended Wilderness Area (alternative F)**

Analysis criteria	Description
Acres	18,568
Summarized description of the recommended boundary	<p>The northwest boundary of the Silver King RWA lies adjacent to the Scapegoat Wilderness area. This northern boundary then follows east along the Continental Divide National Scenic Trail (Trail 440) on the top of the ridge until its intersection with the East Fork Falls Creek Trail (Trail 219) near the top of Red Mountain. The boundary continues east and south paralleling the Continental Divide trail until it reaches the ridge just east of Lewis and Clark Pass. (Note: The RWA boundary remains 150 feet off the Continental Divide Trail to allow mechanized travel from East Fork Falls Creek Trail along the Continental Divide to Rodgers Pass.)</p> <p>From Lewis and Clark Pass, the boundary heads west over the pass and down Alice Creek, keeping just to the north side of Lewis and Clark Pass Trail (Trail 493). The boundary then stays to the north and west of the Alice Creek Road (FSR 293), buffing out a short spur into Wildcat Gulch. It continues along the west side of Alice Creek Road until the HLC FS boundary with private lands. It then follows the private land boundary west until Indian Meadows Creek. The boundary remains 300 feet from the private land ownership lines in order to provide some flexibility in addressing natural resource concerns adjacent to private land ownership.</p> <p>At Indian Meadows Creek, the boundary buffers all developments in the area, including the FS administrative cabin and facilities, the campground, the trailhead, and the main</p>

Analysis criteria	Description
	access roads. Just beyond the campground loops it follows a ridge to the northwest and connects to the boundary of the Scapegoat Wilderness.
Brief description of the general geography, topography, and vegetation	The Silver King RWA is in the Upper Blackfoot GA north and east of Lincoln, Montana, and lies adjacent to the Scapegoat Wilderness Area in the upper reaches of the Alice Creek and Landers Fork drainages. The area is dominated by Douglas-fir and lodgepole pine forests, with dry grasslands, subalpine fir forests, and small amounts of Engelmann spruce, whitebark pine, limber pine, and cottonwood, aspen, and Rocky Mountain juniper. Wildfire disturbances have been prominent in this polygon.
Current uses and management	This area is adjacent to the Scapegoat Wilderness, and within the Silver King-Falls Creek inventoried roadless area. It contains one research natural area. There are no motorized trails or open roads; the entire polygon is available for primitive and semi-primitive non-motorized summer recreation. Most of the area is available for primitive and semi-primitive non-motorized winter recreation.
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized uses except for a small area where over-snow motorized use is allowed in the winter.</p> <p><b>Unconfined and/or primitive recreation</b> – This area has an outstanding amount of unconfined and primitive recreation opportunities: Hunting, fishing, hiking, horseback riding, dispersed camping, snowshoeing, and cross-country skiing. Historic interpretation along the upper portions of Alice Creek, Landers Fork and in the Lewis and Clark pass area.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance. Solitude is slightly diminished near the Alice Creek road.</p> <p><b>Other Features of Value</b> – Features of this area include the Alice Creek National Registered Historic District, the Lewis and Clark National Historic Trail; Limestone Reef caves; Blowout Mountain and Flattop; waterfalls on Falls Creek; many historic and cultural resources; Alice and Landers Fork eligible Wild and Scenic Rivers; and rare plant and animal species such as grizzly bear, western toad, fisher, trumpeter swan, whitebark pine, lynx, bull trout, and west slope cutthroat trout.</p>
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage these wilderness characteristics is high because it is adjacent to the Scapegoat Wilderness and lies within an inventoried roadless area. There are no private inholdings. There are currently no motorized trails or open roads, but a small area is available for over-snow motorized use. Motorized recreation use and mechanized means of transportation would not be suitable within RWAs in alternative F.
A brief summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Outstanding opportunities for solitude; very remote area.</p> <p>Adjacent to the Scapegoat Wilderness area.</p> <p>High interest exists for this area to be recommended for wilderness</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species, including Canada lynx and grizzly bear.</p>



Analysis criteria	Description
Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The naturalness of the area is very high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>○ The undeveloped quality of the area is very high and there are no motorized trails.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>○ The area offers outstanding opportunity for solitude</li> <li>○ There is high amount of primitive and/or unconfined recreation for hunting, fishing, hiking, horseback riding, dispersed camping, snowshoeing, and cross-country skiing as well as historic interpretation along the upper portions of Alice Creek, Landers Fork and in the Lewis and Clark pass area.</li> </ul>

### Red Mountain Recommended Wilderness Area

The Red Mountain RWA is derived from the Red Mountain wilderness inventory area, Upper Blackfoot 2a (UB2a) in the Upper Blackfoot geographic area. The boundary for this RWA is the same in alternatives B, C, and D. However, the southern boundary of the RWA varies slightly in alternative F. In response to public comment, the southern boundary was moved farther south to the top of the ridgeline thereby incorporating more of the Red Creek drainage into the recommended wilderness area.

**Table 356. Red Mountain Recommended Wilderness Area (alternative F)**

Analysis criteria	Description
Acres	2,500
Description of the recommended boundary	The western, northern, and eastern boundaries of the Red Mountain RWA follow the boundary of the Scapegoat Wilderness. The southeast boundary primarily follows the ridgeline between Red Creek and the tributary to Copper Creek to the south. This RWA includes the Red Mountain research natural area.
Description of the general geography, topography, and vegetation	The Red Mountain RWA is located south and east of Red Mountain Peak in Red Creek, within the Copper Creek drainage. This area is characterized by subalpine fir, Engelmann spruce, Douglas-fir, and lodgepole pine forests with a small amount of whitebark pine, ponderosa pine and limber pine. Much of this area has been recently impacted by wildfire and some is in a non-forested or newly reforested state. It includes the majority of the Red Creek drainage.
Current uses and management	Red Mountain RWA lies adjacent to the Scapegoat Wilderness and is within the Bear-Marshall - Scapegoat-Swan inventoried roadless area. The Red Mountain research natural area is also located within the recommended wilderness area. There are no open roads or motorized trails, and no motorized over-snow uses, the entire polygon is available for primitive and semi-primitive non-motorized recreation. There is less than 0.1 miles of nonmotorized trail.
Description of the wilderness characteristics	<p><b>Natural Quality</b> – The majority of this area is very natural appearing and the current vegetation is primarily affected by natural ecological processes. Most of this area has intact ecological integrity and generally appears to reflect ecological conditions that would be associated with the area without human intervention.</p> <p><b>Undeveloped</b> – The majority of this area is undeveloped and not affected by human intervention. There are no motorized uses or open roads.</p> <p><b>Unconfined and/or primitive recreation</b> – The Red Mountain recommended wilderness area is primarily used for unconfined and primitive recreation opportunities such as hunting, fishing, hiking, horseback riding, and dispersed camping.</p> <p><b>Solitude</b> – There is outstanding opportunity for solitude as the sights and sounds of human activities and improvements are screened by topography or do not have impact due to distance.</p> <p><b>Other Features of Value</b> – Features of within close proximity to this recommended wilderness area include the Copper Lakes; the Lincoln Historic Mining District; a research natural area; Snowbank and Copper Creek, eligible Wild and Scenic Rivers; and rare plant</p>

Analysis criteria	Description
	and animal species such as grizzly bear, whitebark pine, lynx, bull trout, and west slope cutthroat trout.
The ability to protect and manage the area to preserve its wilderness characteristics	The ability to protect and manage the wilderness characteristics within this area is high because it lies adjacent to the Scapegoat Wilderness, has been managed as a research natural area since 1986, and there are no motorized uses within the area. There is one patented mining claim in the polygon. There is one very short segment (<0.1 miles) of nonmotorized trail. Mechanized means of transportation would not be suitable on this non-motorized trail segment in alternative F.
A summary of the factors considered, and the process used in evaluating the area and developing the alternative(s)	<p>Outstanding opportunities for solitude.</p> <p>Adjacent to the Scapegoat Wilderness area.</p> <p>The location and configuration of this RWA helps maintain or enhance habitat connectivity for large, wide-ranging wildlife species, including Canada lynx and grizzly bear.</p>
Summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <u>ecological characteristics</u> that provide the basis for suitability include:</p> <ul style="list-style-type: none"> <li>• The naturalness of the area is very high and much of the area is affected primarily by natural forces, has mostly intact ecological integrity and contains many indigenous species.</li> <li>• The undeveloped quality of the area is very high because the area is unroaded and there are no motorized uses.</li> </ul> <p>The <u>social characteristics</u> that provide the basis for suitability include:</p> <ul style="list-style-type: none"> <li>• The area offers outstanding opportunity for solitude.</li> <li>• There is high amount of primitive and/or unconfined recreation for hunting, fishing, hiking, horseback riding, and dispersed camping.</li> </ul>

## Rationale for Excluding Wilderness Inventory Polygons

The reasons for excluding wilderness inventory polygons, or portions thereof, from further analysis in one or more alternative in the FEIS are documented in the following table. Maps of all wilderness inventory polygons are provided in appendix A of the 2020 Forest Plan.

**Table 357. Summary of rationale for exclusion of wilderness inventory polygons by alternative**

GA	Wilderness inventory polygon name	Wilderness inventory polygon number	Wilderness inventory polygon acres	Recommended wilderness acres alts. B and C	Recommended wilderness acres alt. D	Recommended wilderness acres in alt. F	Recommendation/rationale for exclusion
Big Belts	Big Log	BB1	10,254	7,086	7,086	7,035	Recommended with modifications in alternatives A, B, C, D, and F.
	Hogback	BB2	5,784	0	0	0	Not recommended due to motorized system roads and trails that affect opportunities for solitude.
	Trout Creek	BB3	39,383	0	0	0	Not recommended due to motorized system roads and trails that affect opportunities for solitude.
	North Belts	BB4	14,140	0	0	0	Not recommended due to motorized system roads and trails that affect opportunities for solitude.
	Bilk Mountain	BB5	25,787	0	0	0	Not recommended due to motorized system roads and trails that affect opportunities for solitude.
	Camas Creek	BB6	23,878	0	22,350	0	Recommended in alternative D only in response to public comment. Not recommended in alternatives B/C and F due to existing resource management activities in this area that would be inconsistent with wilderness characteristics.
	Mount Baldy	BB7	18,335	8,314	8,314	8,141	Recommended with modifications in alternatives B, C, D and F.
	Grassy Mountain	BB8	6,194	0	0	0	Not recommended due to impacts to solitude created by activities around Highway 12 and the adjacent subdivision.
Castles	Wapiti Peak	CA1	33,002	0	30,606	0	Recommended in alternative D only in response to public comment. Not recommended in alternatives B/C and F because of motorized trails that affect solitude and opportunities for primitive and semi-primitive nonmotorized recreation.

GA	Wilderness inventory polygon name	Wilderness inventory polygon number	Wilderness inventory polygon acres	Recommended wilderness acres alts. B and C	Recommended wilderness acres alt. D	Recommended wilderness acres in alt. F	Recommendation/rationale for exclusion
	Whetstone Ridge	CA3	8,676	0	0	0	Not recommended due to existing motorized trails and motorized activity that affect solitude and opportunities for primitive and semi-primitive nonmotorized recreation.
Crazies	Loco Mountain	CR1	25,605	0	24,977	0	Recommended in alternative D only in response to public comment.  Not recommended in alternatives B/C because checkerboard ownership and adjacent private lands affect FS ability to manage as wilderness and limit public access.
	Bald Ridge	CR3	13,210	0	0	0	Not recommended due to motorized trails and activity that affect solitude and opportunities for primitive and semi-primitive nonmotorized recreation.
Divide	Sweeney Creek	D2	7,978	0	0	0	Not recommended because motorized activity outside of the polygon affects solitude within it.
	Blackfoot Meadows	D3	29,066	18,296	26,900	18,239	RWA named Electric Peak. Recommended with modifications in alternatives B, C, D, and F because of outstanding opportunities for solitude.
	Colorado Mountain	D5	8,168	0	14,189	0	Recommended in alternative D only in response to public comment.  Not recommended in alternatives B, C, and F due to proximity to private lands and population center that affect opportunities for solitude, and FS management that would be inconsistent with wilderness characteristics.
	Continental Divide North	D13	4,173	0	0	0	Not recommended due the effects to wilderness solitude from communication sites, shooting range, Highway 12, Priest

GA	Wilderness inventory polygon name	Wilderness inventory polygon number	Wilderness inventory polygon acres	Recommended wilderness acres alts. B and C	Recommended wilderness acres alt. D	Recommended wilderness acres in alt. F	Recommendation/rationale for exclusion
							Pass road, and groomed snowmobile trails within the polygon.
Elkhorns	Eagle Basin	E1	57,279	0	0	0	Not recommended because the Elkhorns GA is managed as a wildlife management unit.
	Elkhorn Peak	E3	15,180	0	0	0	Not recommended because the Elkhorns GA is managed as a wildlife management unit.
Highwood	Highwood Baldy	H1	15,824	0	0	0	Not recommended because wilderness characteristics are affected by electronics site and adjacent private lands; and there is a lack of public access.
	Arrow Prospect	H2	26,210	0	0	0	Not recommended because existing motorized trails in summer and winter affect solitude experience.
Little Belts	Deep Creek (Tenderfoot)	LB1a LB1b	89,321	14,490	14,490	0	Most of the inventory polygon was not recommended due to motorized uses. The remainder was partitioned into LB1a and LB1b.
				0	45,870	0	In alternatives B, C, and D, LB1a (Deep Creek) is recommended based on outstanding opportunities for solitude and ecological characteristics.  In alternative D, LB1b (Tenderfoot Creek) is recommended in response to public comment and ecological characteristics.
	Big Horn Thunder	LB2	45,334	0	47,107	0	In alternative F, both Deep Creek and parts of Tenderfoot Creek were identified as primitive ROS areas rather than as RWA's.  Recommended in alternative D only in response to public comment.

GA	Wilderness inventory polygon name	Wilderness inventory polygon number	Wilderness inventory polygon acres	Recommended wilderness acres alts. B and C	Recommended wilderness acres alt. D	Recommended wilderness acres in alt. F	Recommendation/rationale for exclusion
							Not recommended in alternatives B/C and F because motorized use affects solitude.
	Sun Mountain	LB3	7,965	0	0	0	Not recommended because open motorized roads, residential areas, and recreation areas impact solitude.
	McGee Sawmill	LB4	8,355	0	0	0	Not recommended because the Dry Fork Belt Creek road affects solitude.
	Peterson Mountain	LB5	6,839	0	0	0	Not recommended because activities on surrounding private land affect opportunities for solitude.
	Taylor Mountain	LB6	11,374	0	0	0	Not recommended because activities on surrounding private land affect opportunities for solitude.
	Big Baldy	LB8	49,068	0	0	0	Not recommended because motorized use throughout limits opportunities for solitude, plus impacts from historic mining.
	Eagle Creek	LB10	6,337	0	0	0	Not recommended because adjacent private land, checkerboard ownership, and motorized routes affect opportunities for solitude and manageability.
	Calf Creek	LB11	12,598	0	0	0	Not recommended because motorized trails and snowmobiling limit opportunities for solitude.
	North Fork Smith	LB15	9,817	0	0	0	Not recommended because surrounding motorized use and winter motorized access limit opportunities for solitude.
	Middle Fork Judith	LB16	98,312	0	62,452	0	Recommended in alternative D in response to public comment.  Not recommended in alternatives B/C and F because motorized trails and private inholdings accessed by open roads impact solitude.
	East Little Belts	LB18	106,178	0	0	0	Not recommended because motorized trails affect opportunities for solitude.

GA	Wilderness inventory polygon name	Wilderness inventory polygon number	Wilderness inventory polygon acres	Recommended wilderness acres alts. B and C	Recommended wilderness acres alt. D	Recommended wilderness acres in alt. F	Recommendation/rationale for exclusion
Rocky Mountain Range	Badger Two Medicine	RM1	125,795	0	0	0	Not recommended because existing Blackfeet Nation reserved rights may conflict with wilderness characteristics.
	Teton Blackleaf	RM2	56,002	0	0	0	Not recommended because solitude is affected by open roads and snow play area; and the area is a Conservation Management Area.
	Sun Canyon Willow	RM3	71,106	0	0	0	Not recommended because activities along Sun Canyon Road, Beaver Willow Road, Benchmark Road Area, and Mortimer Gulch area affect solitude; and the area is a Conservation Management Area.
	Sawtooth Ridge	RM4	15,312	0	0	0	Not recommended because of the effects to solitude from Sun Canyon and Beaver Willow roads; and the area is a Conservation Management Area.
	Elk Smith	RM5	30,030	0	0	0	Not recommended because motorized activities affect solitude, and the area is a Conservation Management Area.
Snowies	Big Snowies	S1	103,480	95,299	95,299	66,894	Recommended with modifications in alternatives B, C, and D because the area is remote and has excellent opportunities for solitude. In alternative F, in response to public comment, an RWA is identified for the more remote, eastern part of the range. The western part of the range is identified as a primitive (summer) and semi-primitive motorized (winter) recreation area.
Upper Blackfoot	Dearborn Silver King <sup>1</sup>	UB1	44,141	20,088	20,088	18,568	Recommended with modifications in alternatives B, C, D, and F because the area is adjacent to the Scapegoat Wilderness and has excellent opportunities for solitude. Renamed Silver King as the RWA does not include lands within the Dearborn drainage.



GA	Wilderness inventory polygon name	Wilderness inventory polygon number	Wilderness inventory polygon acres	Recommended wilderness acres alts. B and C	Recommended wilderness acres alt. D	Recommended wilderness acres in alt. F	Recommendation/rationale for exclusion
	Stonewall (Red Mountain, Arrastra)	UB2	30,046	1,901	1,901	1,897	Most of the inventory polygon was not recommended due to existing motorized uses. The remainder was partitioned into UB2a and UB2b. In alternatives B, C, and D, UB2a (Red Mountain) and UB2b (Arrastra) are recommended because they are adjacent to the Scapegoat Wilderness and offer outstanding opportunities for solitude. In Alternative F, only Red Mountain is identified as an RWA. Arrastra was not identified as an RWA but would be managed as a primitive ROS area instead.
				8,257	8,257	0	
	Black Mountain	UB3	10,220	0	0	0	Not recommended because snowmobile use limits opportunities for solitude.
	Anaconda Hill	UB4	21,539	0	0	0	Not recommended because motorized uses near the polygon impact opportunities for solitude.
	Paige Gulch	UB5	17,569	0	0	0	Not recommended because motorized uses impact opportunities for solitude.
	Bear Gulch	UB9	5,636	0	0	0	Not recommended because motorized uses and patented mining claims affect solitude.
	Nevada Mountain <sup>2</sup>	UB10	51,027	39,345	44,702	0	Recommended with modifications in alternatives B, C, D, and F based on opportunities for solitude and ecological characteristics.

1 Inventory polygon is located on both the Upper Blackfoot and Rocky Mountain Range GAs.

2 Inventory polygon and recommended wilderness area is located on both the Upper Blackfoot and Divide GAs.

## Step 4: Recommendations

The draft record of decision identifies the following seven (7) areas as the preliminary administrative recommendation (recommended wilderness) in alternative F. See attachment 2 for individual maps of the recommended wilderness areas.

The decision maker carefully considered a range of recommended wilderness areas, as well as other allocations, to determine the mix of land and resource uses that would best meet public needs. The areas recommended in this decision are an appropriate distribution for the Forest in consideration of the wilderness evaluation for each area, alternative analyses, and public comments.

**Table 358. Recommended wilderness areas in alternative F (preferred alternative)**

<b>RWA</b>	<b>GA</b>	<b>Wilderness Inventory Polygon</b>	<b>Alternative F (Acres)</b>
Big Log	Big Belts	BB1	7,035
Mount Baldy	Big Belts	BB7	8,141
Electric Peak (Blackfoot Meadows)	Divide	D3	18,239
Big Snowies	Snowies	S1	66,894
Silver King	Upper Blackfoot	UB1	18,568
Red Mountain	Upper Blackfoot	UB2a	2,500
Nevada Mountain	Upper Blackfoot and Divide	UB10	31,948
<b>Total acres</b>			<b>153,325</b>

# Attachment 1. Determination of Substantially Noticeable Vegetation Treatments

## Introduction

This paper outlines the process used to determine if vegetation treatments on the landscape are substantially noticeable relative to the wilderness inventory for Forest Plan Revision. Our definition of substantially noticeable is: “what a viewer will likely see when viewing harvest areas and associated roads from the background, mid-ground and foreground of an area to assist in determining whether or not vegetation treatments, timber harvest, and prior road construction were substantially noticeable and, consequently, whether or not they are included or excluded from the wilderness evaluation inventory.” The following characteristics may be visible after vegetation treatments. The timeframe in which these characteristics exist varies.

- Foreground (0-0.5 miles away): Roads; stumps; logging slash; vegetation may be noticeably more open, evenly distributed, and/or absent.
- Midground (0.5-4 miles away) and Background (4 or more miles away): Roads; geometric edges; vegetation may appear more open, evenly distributed, and/or absent.

The steps of the analysis included:

- Step 1. Define substantially noticeable characteristics associated with vegetation treatments.
- Step 2. Determine the timeframes needed to achieve visual recovery after treatments.
- Step 3. Map areas with vegetation treatment that are substantially noticeable. Identify areas that have burned since treatment and determine if they are still substantially noticeable.
- Step 4. Conduct internal and external review of rationale and mapping.

## Treatments Evaluated and What a Viewer is Likely to See

For this analysis, vegetation treatments can be categorized into 3 main types. The descriptions below provide an overview of each type and what a viewer may see in the foreground, midground, and background.

### Prescribed Fire and Fuels Treatments

Prescribed fire and fuels treatments include activities often accomplished by hand or prescribed fire. Activities such as slashing and hand piling reduce the number of small trees and create small diameter stumps. Prescribed burning may consume surface fuels, small trees, and cause some overstory tree mortality. Dead and scorched trees remain on the landscape. In the foreground, factors such as stumps, slash, and slash piles are visible until piles are burned or the slash decomposes into the grass, shrub, and litter layer (generally within 5 years). Some treatments may be accomplished with mechanical equipment, such as piling and burning large jackpot piles. Prescribed burning is visible through charred vegetation for a short time, but often appears similar to the effects of wildfire. Treatment unit shapes and residual tree densities are often irregular and indistinguishable from the natural landscape when viewed from the middle or background. These treatments are generally not considered substantially noticeable, except for fuel breaks which may be delineated with geometric patterns.

## Intermediate Treatments and Uneven-Aged Regeneration Harvests

Intermediate treatments remove some trees in a stand, leaving behind residual trees (i.e., thinning). Treatments in young stands, such as precommercial thinning, are often accomplished by hand, and may leave residual trees on a relatively even spacing. Small stumps and slash are visible in the foreground for 5 to 15 years depending on site conditions; as material starts to decompose it becomes covered with grasses, shrubs, and the litter layer. In the middle and background the regular spacing of trees could be visible. Intermediate treatments in mature stands, such as commercial thinning, are often accomplished with ground-based mechanical equipment. Stumps and logging slash would be visible in the foreground in the short term. Because of their larger size, stumps may be visible for decades. Because residual trees are left, often roads are not highly visible. In some cases, treatments were accomplished with skyline logging methods, creating linear corridors; delineated in units with geometric edges; and/or created low tree densities that are visible from the midground and background for decades until tree crowns and understory development softens the pattern. Conversely, some treatments are irregular in shape and residual density, and blend in almost immediately in the middle and background. Uneven-aged treatments, such as single tree selection, are designed to regenerate trees but the appearance is similar to an intermediate treatment. Intermediate and uneven-aged treatments are substantially noticeable for 5 to 20 years depending on the specific treatment.

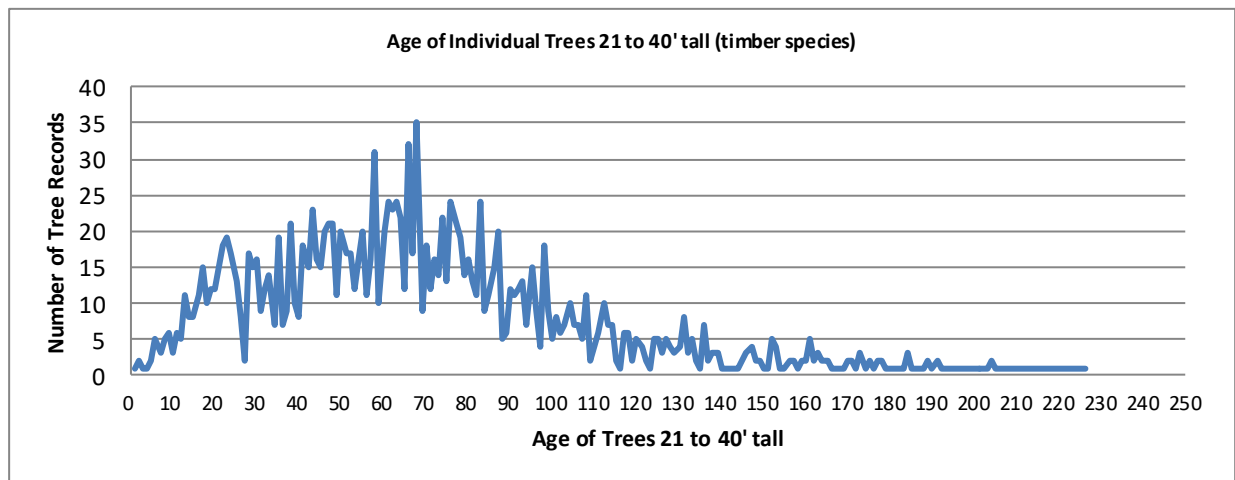
## Even-aged Regeneration Harvest

Even-aged regeneration harvests generally remove most of the existing trees, and include treatments such as clearcuts, seed tree, and shelterwood cuts. These activities are often associated road building and may be followed by prescribed burning. In the past, clearcuts were often delineated with geometric edges that contrast with unharvested areas. Recent harvests tend to be more irregularly delineated and with more patches of reserve trees. Seedtree and shelterwood cuts leave behind scattered residuals and in some cases appear like a thinning. Nevertheless, it is assumed that most regeneration harvests left behind few trees. In the foreground, logging slash is visible in the short term and stumps may be visible for decades, although grass and shrub cover may cover them on some sites. Road cuts are evident in the foreground for a long time. The delineation between harvested and unharvested areas diminishes as young trees grow and reduce views. In the middle ground, roads and geometric patch shapes are visible until newly established trees grow to a height that blocks visibility of the road and blends in with the landscape. These characteristics are similar for the background except that the viewer may not have a continuous line of sight, as the features may be interrupted by terrain and vegetation. When seen from the background, harvested areas are typically distinct and noticeable as compared to unharvested areas until trees re-grow. Roads within and surrounding the harvested area are particularly visible during the first few decades. Steep terrain or poor re-stocking/slow growth can increase the visibility of roads and require longer time periods before trees are tall enough to block a continuous view of the road and reduce the delineation between harvested and unharvested areas.

## Tree Heights and Timeframes Needed for Visual Recovery after Regeneration Harvest

Factors such as tree height, stand density, and topography influence when a regeneration harvest area is no longer substantially noticeable. There is a range of variability across the HLC, but generally it is assumed that tree heights of 21 to 40 feet are needed to achieve visual recovery (Ministry of Forests, British Columbia 1994), depending on topography and treatment unit delineation. The timeframe needed for trees to grow to this height range varies because height growth, especially in young, immature tree stands, depends upon site productivity and species. An analysis of existing vegetation data (FIA plots) on the HLC was done to determine an average timeframe needed to achieve this height range. The analysis provided a summary of the age of trees and stands that are 21 to 40 feet tall. Metadata can be found in the project file (VegSubstNoticeable\_Heights\_Analysis.xlsx).

Individual tree data on forested plots was examined for species commonly harvested (Douglas-fir, lodgepole pine, western larch, subalpine fir, and Engelmann spruce). Figure 1 shows the age/height relationships recorded. Outliers ranged from 10 years to over 300 years old; however, most trees were between 33 and 99. The mode (most common) age was 80. Trees that met the lower end of the range (21') averaged 62 with a mode of 55.



**Figure 1. Age/height relationship of individual trees 21-40' tall, of timber species**

Plot level information was also reviewed. Plots in cover types most commonly harvested were included (dry Douglas-fir, mixed mesic conifer, lodgepole pine, and spruce/fir). These data showed that plots between 21 and 40' tall had an average age of 44. Plots in the lower end of the desired height range (21 to 25 feet) averaged 31 years old.

Timber harvest was usually conducted on the more productive sites. Generally, tree regeneration following harvest is established within 5 years per National Forest Management Act (NFMA) requirements. Accounting for the 5-year establishment period, and the range of ages seen in data, an average timeframe of 55 years is used to represent a point in time that, in general, areas harvested with even-aged regeneration methods have ceased to be substantially noticeable.

## Activity Code Rationale (FACTS) and Example Photographs

The Forest Activity Tracking System (FACTS) is a corporate database that provides the best available data for activities that occur on NFS land. The same acre often has a sequence of activities. The following table lists activity codes found in FACTS on the HLC NF, along with the determination as to whether it is considered substantially noticeable, and for what period of time. "Date completed" is utilized to reflect when treatment actually occurred on the ground.





**Table 359. FACTS codes and rationale for substantially noticeable**

Activity	Code(s)	Substantially noticeable?	Rationale
Broadcast/jackpot/underburn/ecosystems/wildlife burn	1111, 1113, 6101	No	Appearance similar to wildfire.
Wildfire (fuels ben/fire use)	1115-1118	No	Wildfire, natural effects.
Yarding	1120	No	Disturbance not visible more than 1 season.
Burn of piles	1130	No	Appearance similar to wildfire.
Rehab burn piles	5633	No	Restoration of natural vegetation.
Range grazing systems	2000	No	Grazing not obvious; affects grass/shrub.
Fireline construction	1140	Yes – 5 yrs	Visible foreground. Could include construction with equipment. Usually rehabbed after burn.
Rearrangement or slashing; lop and scatter; site prep slashing	1150, 1160, 4455	Yes – 10 yrs	Tree cutting usually by hand, <6" diameter. Stumps/slash visible foreground. Material "melts" into grass/forb/shrub/litter.
Compacting/crushing	1152	Yes – 10 yrs	Woody material scattered but grass/forb recover quickly and chunks "melt" into grass/forb/shrub/litter.
Piling of natural or activity fuels	1153	No	Piles only visible in foreground until burned in <5 years.
Chipping of natural or activity fuels	1154	No	Chips usually removed, spread, or burned.
Natural abatement-natural or activity fuels; misc	1156, 1256, 1169	No	No action; natural process. Try to group with something?
Fuel break and maintenance; Permanent land clearing; harvest without restocking	1180, 4270, 4242	Yes – permanent	Stumps foreground, geometric edge mid/background, maintained indefinitely, usually on roads, ridges, near communities. May be road buffers, powerlines, etc..
Clearcut - patch, strip, stand, salvage, w/or w/o reserves	4111, 4113, 4115, 4117	Yes – 55 yrs	Regen harvest, often geometric in the past w/ roads.
Prep cut shelterwood, seedtree	4121, 4122	Yes – 20 yrs	Visually appears similar to thinning.
Shelterwood or seed tree seed cut (w/reserves) w/ or w/o leave trees	4131, 4132	Yes – 55 yrs	Shelter/seed trees left for a period of time while regen establishes, then are removed.
Shelterwood or seedtree final cut, or removal w/ LT's or reserves	4141, 4142, 4146, 4148, 4196	Yes – 55 yrs	Overstory removal from regeneration; some reserves could be left. regeneration harvest.
Single-tree selection	4151	Yes – 20 yrs	Visually appears like a thinning, only small gaps created.
Group selection cut	4152	Yes – 20 yrs	Usually 1/3 of stand removed in small patches.
2-aged shelterwd or seedtree est or removal w/ res.	4183, 4193, 4194	Yes – 20 yrs	Seed/shelter trees left indefinitely for 2-storied appearance. Timeframes more similar to intermediate harvest.
Improvement cut; commercial thin	4210, 4220	Yes – 20 yrs	Intermediate harvest, ample residuals, usually irregular.
Liberation cut; overstory removal from regen w/ or w/o reserves	4211, 4143	Yes – 50 yrs	Overstory is removed from well-established regeneration, generally at least 5' tall.
Sanitation or salvage (Intermediate)	4231, 4232	Yes – 20 yrs	Thinning of dead or special product trees (post/poles), intermediate.
Natural changes (excludes fire)	4250	No	Natural changes (bugs or wind).

Activity	Code(s)	Substantially noticeable?	Rationale
Tree planting, seeding, natural regen, animal dmg, seeding, planting propagules	4411, 4431, 4432, 4448, 4450, 4451, 4452, 4453, 4460, 4461, 7030, 7031	No	Planting/reforestation looks similar to natural process.
Leave tree protection, disease control, insect prevention/control	4466, 8100, 8200, 8220	No	Pulling slash away, or application of pheromones etc – not visually impactful.
Burning site prep for planting, seeding, or naturals	4471, 4481, 4491	No	Looks similar to wildfire.
Chemical or manual site prep for planting, naturals, seed; fertilizing	4472, 4475, 4495, 4550	No	Minimal ground or veg disturbance; short term impact to localized areas of grass/shrub; not visible for more than 1 growing season.
Mechanical site prep for planting, seeding, or nats	4474, 4484, 4494	No	Scarification of soil – grass/forb/shrub recovery with conifers fairly rapid (1 season).
Individual tree or area release/weed or precom thin; other stand tending; wildlife slash	4511, 4521, 4570, 6133	Yes – 5 yrs	Small stumps/slash visible foreground only.
Prescribed burn or other control of understory veg	4540, 4541	No	Looks similar to natural disturbance.
Seed production areas, seed orchards or genetic plantation establishment, maintenance	4931, 4932, 4933, 4934, 4940, 4941, 4950, 4951, 4981	Yes– permanent	Maintained for specific seed/genetic tests. Regular tree spacing, stakes, tags, etc..
Wildlife habitat improv	6050, 6080	No	Effects similar to natural conditions.

From FACTS data dictionary. Only codes currently recorded on the HLC are included. Codes that indicate no effects to vegetation are NOT included: 1100, 1182, 2035, 2101, 2111, 2121, 2242, 2321, 2341, 2360, 2510, 2530, 2550, 3170, 3190, 3191, 4038, 4290, 4301, 4310, 4314, 4315, 4318, 4320, 4331, 4341, 4342, 4343, 4344, 4346, 4381, 4382, 4383, 4384, 4391, 4392, 4393, 4401, 4402, 4403, 4404, 4406, 4409, 4501, 4502, 4504, 4506, 4509, 4631, 4632, 4633, 4910, 4920, 4953, 5215, 5217, 5300, 5510, 5530, 5550, 5633, 6000, 6010, 6030, 6100, 6120, 6410, 6421, 6430, 6450, 6620, 7075, 8110, 8210, 9300.



<p><b>Intermediate Harvest, Foreground, &gt;20 years after harvest:</b></p>	<p><b>Intermediate Harvest, Middle Ground, &gt;20 years after harvest:</b></p>
	
<p><b>Seedtree Regeneration Harvest, Foreground, &lt;30 after harvest</b></p>	<p><b>Clearcut Harvest, Mid to Background, &lt;5 years after harvest</b></p>
	

**Figure 2. Example photographs of vegetation treatments**

## Review of Vegetation Treatment Mapping and Assessing Effects of Wildfire

Wildfire may soften edges of vegetation treatments as well as consume stumps, standing trees, and logging residual to reduce the visual effect of treatments. However, it may also expose roads and skid trails. To ensure the accuracy of areas mapped as substantially noticeable vegetation treatments, stands that later burned in a wildfire were reviewed to determine if the fire ameliorated the visual effects. The latest fire history layer (2014) and additional 2015 fire areas were intersected with the substantially noticeable vegetation treatment layer to create a layer depicting treatment areas that experienced a burn after the treatment. This resulted in roughly 500 treated stands being flagged for review across 38 wildfire areas. Specialists reviewed each stand with 2014 imagery and made the determination of whether or not the treatments are still substantially noticeable. If treated areas still appeared substantially noticeable, they were flagged as “Y” and no change was made. If treated areas were determined to no longer be substantially noticeable, they were flagged as “N” and included back into the wilderness inventory. In some cases, the fires were so recent as to not be reflected in aerial imagery; in these cases, the stands were flagged as “M”, and are considered to be substantially noticeable until such time that more information is available.

### Big Belts

Several large fires in the Big Belts GA affected some vegetation treatment areas; primarily the Maudlow-Toston and Cave Gulch fires of 2000. Past vegetation treatments occurred across this GA outside of the wilderness and inventoried roadless areas.

**Table 360. Wildfire areas and vegetation treatment areas reviewed for substantially noticeable conditions**

Fire name and year	FACTS unit ID	Treatment type and year	Rationale	Substantially noticeable?
Maudlow-Toston 2000	011201A300100003000	Stand Clearcut 1968	Fire burned surrounding landscape, so all stands regenerating; no vegetation delineation or roads visible.	No
	011201A300100001000	Stand Clearcut 1968		
	011201A270300090000	Stand Clearcut 1973		
	011201A270300001000	Stand Clearcut 1973		
	011201A260100072000	Seed Tree 1989		
	011201A260100030000	Stand Clearcut 1968		
	011201A260100075000	Seed Tree 1964		
	011201A260100002000	Seed Tree 1964		
	011201A260100009000	Stand Clearcut 1968		
	011201A260100006000	Stand Clearcut 1973		
	011201A260100060001	Shelterwood 1973		
	011201A260100012000	Stand Clearcut 1968		
	011201A260100005000	Shelterwood 1970		
	011201A260200054000	Liberation 1989		
	011201A260200053000	Liberation 1989		
	011201A270300116000	Stand Clearcut 1976	Fire generally avoided these areas; regeneration vegetation delineation and roads still noticeable. Harvest is common across the landscape surrounding these stands.	Yes
	011201A270300005000	Stand Clearcut 1973		
	011201A270300004000	Stand Clearcut 1973		
	011201A270300003000	Stand Clearcut 1973		
	011201A270300006000	Stand Clearcut 1974		
	011201A270300013000	Stand Clearcut 1986		
	011201A270300010000	Stand Clearcut 1987		
	011201A270300008000	Stand Clearcut 1987		
	011201A270200013000	Stand Clearcut 1987	Fire does not appear to have affected these stands substantially.	Yes
	011201A270100156001	Liberation 1987		
	011201A270100004000	Liberation 1987		
	011201A270100001000	Stand Clearcut 1963		
	011201A270100002000	Stand Clearcut 1963	Fire did not burn much in stands; vegetation delineation noticeable.	Yes
	011201A270200131000	Stand Clearcut 1964		
	011201A270200001000	Stand Clearcut 1964		
	011201A270200018000	Clearcut and Lib 1986	Stand indistinguishable from adjacent meadows.	No
	011201A270200002000	Stand Clearcut 1963		
	011201A270200010001	Liberation 1987	Regenerating vegetation delineation still obvious. In some stands, only small portions in fire perimeter. Roads visible.	Yes
	011201A270200010000	Stand Clearcut 1963		
	011201A270200006000	Stand Clearcut 1963		
	011201A270100003000	Stand Clearcut 1964		
	011201A270200007000	Stand Clearcut 1963		
	011201A270200004000	Stand Clearcut 1964		
	011201A270200005000	Stand Clearcut 1964		

Fire name and year	FACTS unit ID	Treatment type and year	Rationale	Substantially noticeable?
Cave Gulch 2000	011201A500200020000	Stand Clearcut 1972	Fire did not burn, vegetation change and roads obvious.	Yes
	011201A510100004000	Stand Clearcut 1968	Fire burned across landscape blurring lines between harvested and unharvested.	No
	011201A510100002000	Stand Clearcut 1964		
	011201A510100015000	Stand Clearcut 1982	Tiny sliver burned – most of units unaffected by fire.	Yes
	011201A510100012000	Liberation 1983		
	011201A510100016001	Seed Tree 1982	Fire burned lower intensity, treatments still obvious compared to adjacent stands and roads visible.	Yes
	011201A510100018000	Seed Tree 1982		
	011201A510100014000	Seed Tree 1982		
	011201A510100017000	Stand Clearcut 1982		
	011201A510100011000	Stand Clearcut 1971	Fire stand-replaced adjacent stands, vegetation delineation not obvious.	No
	011201A510100003000	Stand Clearcut 1964		
	011201A530200002000	Stand Clearcut 1973	Fire did not affect units, vegetation delineation and roads remain obvious.	Yes
	011201A530200004000	Stand Clearcut 1973		
	011201A530200012000	Stand Clearcut 1981		
	011201A500200001000	Stand Clearcut 1965	Fire burned adjacent stands and blurred edges of vegetation; no roads.	No
	011201A500200005000	Stand Clearcut 1985		
	011201A500200009000	Stand Clearcut 1965		
	011201A500200010000	Stand Clearcut 1966	Fire impacted the stands little and delineation obvious from adjacent stands and logging associated roads very visible.	Yes
	011201A500200003000	Stand Clearcut 1966		
	011201A500200011000	Stand Clearcut 1966		
	011201A500200004000	Stand Clearcut 1972		
	011201A500200119000	Stand Clearcut 1972		
	011201A460200007000	Seed Tree 1981		
	011201A460100016000	Seed Tree 1984		
	011201A460100007000	Seed Tree 1981		
	011201A500200002000	Stand Clearcut 1964	Partially obvious vegetation lines with adjacent stand; roads highly visible.	Yes
	011201A460100001000	Stand Clearcut 1974	Fire burned in mosaic nearby but vegetation lines and roads still clearly noticeable.	Yes
	011201A460100013000	Stand Clearcut 1973		
	011201A460100020000	Stand Clearcut 1984		
	011201A460100014000	Seed Tree 1981		
011201A530200013000	Stand Clearcut 1984			
011201A460100015000	Seed Tree 1981			
011201A460100018000	Stand Clearcut 1984	Fire stand-replaced adjacent stands, blurring vegetation delineation and no harvest-associated roads visible		
011201A460100019000	Stand Clearcut 1984			
011201A460100002000	Stand Clearcut 1974			
011201A460100017000	Seed Tree 1984			

Fire name and year	FACTS unit ID	Treatment type and year	Rationale	Substantially noticeable?
Cabin Gulch 2015	011201A240300236001	Improvement Cut 2014	Harvest & burned after aerial photo – effects unknown.	Possible
	011201A240300236002	Improvement Cut 2014		
	011201A250100142000	Slashing 2010	Small trees cut & burned – no visible vegetation lines.	No
Lakeside 2010	011202A220100057001	Slashing 2008	Fire burned across slashed area, indistinguishable from untreated fire area	No
Sheep Camp 2003	011201A560100086000	SingleTreeSelect 1998	Fire did not affect.	Yes
Kelly Gulch Complex 2013	011202A170100015000	Harv w/o Restock 1999	Tiny portion burned	Yes
	011202A170100013000	Harv w/o Restock 1999	Tiny portion burned	Yes
	011202A160200010000	Harv w/o Restock 1999	Tiny portion burned	Yes
Meriwether 2007	011202N003132143003	Slashing 2006	Tiny sliver burned	Yes
	011202N003132141002	Rearrangement of Fuels	Tiny sliver burned	Yes

### Castles

Past substantially noticeable vegetation treatments were fairly limited in the Castles GA, with a large part of the GA being inventoried roadless. No wildfires have occurred in any substantially noticeable vegetation treatments mapped in this GA.

### Crazies

Substantially noticeable treatments in the Crazies GA are somewhat limited in extent. Only a few of these areas were by wildfires.

**Table 361. Wildfire areas and vegetation treatment areas reviewed for substantially noticeable conditions**

Fire name and year	FACTS unit ID	Treatment type & year	Rationale	Substantially noticeable?
Forest Lake/Smith Creek 1994	011506A220100005000	Stand Clearcut 1988	Fire didn't burn in the unit.	Yes
Cottonwood 1966	011506A230400056000	Stand Clearcut 1961	Fire does not appear to have burned in the unit.	Yes
	011506A230400057000	Stand Clearcut 1961		Yes

### Divide

There are many substantially noticeable treatments across the landscape in the Divide GA; however, very few were burned by wildfire after being treated.

**Table 362. Wildfire areas and vegetation treatment areas reviewed for substantially noticeable conditions**

Fire name and year	FACTS unit ID	Treatment type and year	Rationale	Still substantially noticeable?
Snowshoe 1974	011203A340100003000	Stand Clearcut 1971	Only a small sliver burned	Yes
	011203A340100007000	Stand Clearcut 1971	Regen and roads visible	Yes
	011203A340100012000	Stand Clearcut 1971	Sparse regen, roads	Yes
	011203A340100009000	Stand Clearcut 1971	Only a small sliver burned	Yes
	011203A340100011000	Stand Clearcut 1971	Sparse regen, roads	Yes

## Elkhorns

Most of the substantially noticeable vegetation treatments in the Elkhorns GA are located in the southern portion and are comprised of hand slashing and prescribed burning treatments. Relatively small and scattered harvest treatments occurred as well in other areas. The only fire area that impacted substantially noticeable vegetation treatments in the Elkhorns GA was the Warm Springs fire of 1988.

**Table 363. Wildfire areas and vegetation treatment areas reviewed for substantially noticeable conditions**

Fire name and year	FACTS unit ID	Treatment type and year	Rationale	Substantially noticeable?
Warm Springs 1988	011203A290200001000	Stand Clearcut 1973	Fire removed delineation of vegetation. Roads noticeable.	Yes
	011203A290200005000	Liberation 1966	Fire removed delineation of vegetation and no harvest associated road network.	No
	011203A280100001000	Shelterwood 1964		
	011203A280100002000	Stand Clearcut 1965		
	011203A280100003000	Stand Clearcut 1964		
	011203A280100011000	Shelterwood 1964		
	011203A280100008000	Stand Clearcut 1964		
	011203A280100007000	Stand Clearcut 1964		
	011203A280100004000	Stand Clearcut 1965	Vegetation delineation and roads still visible; fire burned around these areas.	Yes
	011201A010100005000	Stand Clearcut 1971		
	011201A010100006000	Stand Clearcut 1971		
	011201A010100003000	Shelterwood 1971		
	011201A010100004000	Stand Clearcut 1968		
	011201A010100002000	Shelterwood 1969		
	011201A010100001000	Shelterwood 1969		
	011201A020100001000	Seed Tree 1971	Fire removed delineation of vegetation and associated road appears re-vegetated.	No

## Highwoods

The small Highwoods GA burned extensively around the turn of the last century and the primary multiple use occurring on the landscape is grazing. No substantially noticeable vegetation treatments have been mapped in the Highwoods GA.

## Little Belts

Substantially noticeable vegetation treatments are fairly extensive across the roaded portions of this GA. Some of these stands burned in a handful of relatively small wildfires.

**Table 364. Wildfire areas and vegetation treatment areas reviewed for substantially noticeable conditions**

Fire name and year	FACTS unit ID	Treatment type and year	Rationale	Substantially noticeable?
Anderson Peak 1970	011504A650100001000	Stand Clearcut 1969	Fire did not affect, vegetation and roads starkly obvious.	Yes
	011503A700200003000	Stand Clearcut 1967		
Iron Claim 1988	011504A620900008000	Shelterwood 1987	Vegetation lines are indistinguishable.	No
	011504A620900005000	Shelterwood 1987		
Turkey 1990	011504A610900016000	Seed Tree 1987		No

Fire name and year	FACTS unit ID	Treatment type and year	Rationale	Substantially noticeable?
	011504A610900025000	Stand Clearcut 1987	Vegetation lines are indistinguishable from surrounding landscape.	
	011504A610900026000	Seed Tree 1987		
	011504A610900018000	Stand Clearcut 1987		
Tollgate 1998	011504A600400006000	Commercial Thin 1996	Fire did not substantially impact these stands.	Yes
	011504A600400003000	Commercial Thin 1996		
High Springs 2000	011504A510400013000	Shelterwood 1992	Vegetation lines are indistinguishable from surrounding landscape.	No
	011504A510400014000	Shelterwood 1985		
	011504A510400028000	Stand Clearcut 1962		
Coyote 1996	011507A110400208000	Stand Clearcut 1995	Roads are still obvious.	Yes
	011507A110800103000	Stand Clearcut 1994		
	011507A110800102000	Stand Clearcut 1993		
	011507A110400032000	Stand Clearcut 1995	Vegetation lines no longer obvious.	No
	011507A110400098000	Stand Clearcut 1995		
	011507A110400030000	Stand Clearcut 1978		
	011507A110500098000	Stand Clearcut 1994		
	011507A110500002000	Stand Clearcut 1994		
	011507A110500031000	Stand Clearcut 1988		
	011507A110800025000	Stand Clearcut 1989		
	011507A110800008000	Stand Clearcut 1962		
	011507A110800107000	Stand Clearcut 1979		
	011507A110800011000	Stand Clearcut 1962		
	011507A110800029000	Stand Clearcut 1979		
	011507A110700054000	Stand Clearcut 1993		
	011507A110700038000	Stand Clearcut 1988		
	011507A110700112000	Stand Clearcut 1992		
	011507A110700017000	Stand Clearcut 1969		
	011507A110500012000	Stand Clearcut 1962	Vegetation lines are still evident.	Yes
	011507A110800101000	Stand Clearcut 1993		
	011507A110800099000	Stand Clearcut 1993		
	011507A110800018000	Clearcut/TL area 1974	Vegetation lines, vegetative patterns and roads are still evident.	Yes
	011507A110800122000	Genetic Evaluation Plantation Establishment		
	011507A110800055000	Stand Clearcut 1979		
	011507A110500025000	Stand Clearcut 1975	Vegetation lines are no longer obvious but roads are still visible.	Yes
	011507A110800098000	Stand Clearcut 1995		
	011507A110500009000	Stand Clearcut 1962	Vegetation lines and roads are still evident.	Yes
011507A110800007000	Stand Clearcut 1960			
011507A110800072000	Stand Clearcut 1962			
011507A110800100000	Stand Clearcut 1993			
011507A110800047000	Stand Clearcut 1984			
011507A110800035000	Stand Clearcut 1989			

Fire name and year	FACTS unit ID	Treatment type and year	Rationale	Substantially noticeable?
	011507A110700011000	Stand Clearcut 1962		
	011507A110700013000	Stand Clearcut 1961		
	011507A110600072000	Stand Clearcut 1995		
	011507A110600001000	Stand Clearcut 1971		
	011507A110600073000	Stand Clearcut 1995		
	011507A110600074000	Stand Clearcut 1995		
	011507A110600003000	Stand Clearcut 1973		
Whitetail Ck 1970	011506A330300004000	Stand Clearcut 1964	Fire did not affect unit.	Yes
Mill Ck Sale 1966	011506A320500003000	Stand Clearcut 1964	Fire did not affect unit.	Yes
Hoover 2011	011504A500300025000	Stand Clearcut 1997	Fire did not affect majority of units, still obvious.	Yes
	011504A500300008000	SPA Establish 1989		
Lyon Creek 1972	011506A310500004000	Stand Clearcut 1965	Fire did not impact unit.	Yes
Smokey Mountain 1969	011507A060100008000	Stand Clearcut 1971	Fire did not substantially impact these treated areas; vegetation lines still obvious on landscape.	Yes
	011507A060100002000	Stand Clearcut 1961		
	011507A060200002000	Stand Clearcut 1963		
	011507A060200003000	Stand Clearcut 1963		
	011507A060200005000	Stand Clearcut 1971		
Newlan Ck 1985	011507A070200009000	Shelterwood 1981	Fire did not affect unit.	Yes
Thornquist 1973	011507A080300012000	Stand Clearcut 1971	Fire did not affect unit.	Yes
Miller Gulch 1967	011507A080200003000	Stand Clearcut 1964	Fire did not affect majority of units; still obvious.	Yes
	011507A080200001000	Stand Clearcut 1964		
	011507A100800036000	Stand Clearcut 1964		
Cross Creek 1970	011504A500100023000	Stand Clearcut 1962	Vegetation lines are still evident.	Yes
	011504A500100027000	Stand Clearcut 1960		
	011504A500900025000	Stand Clearcut 1963		
	011504A500900024000	Stand Clearcut 1960		
	011506A350400012000	Stand Clearcut 1961	Roads and vegetation lines still obvious.	Yes
	011504A500900031000	Stand Clearcut 1960		
	011504A500900051000	Stand Clearcut 1960		
	011504A500900033000	Stand Clearcut 1960		
	011504A500900004000	Stand Clearcut 1960	Vegetation lines not obvious.	No
	011504A500100026000	Stand Clearcut 1960		
	011504A500400014000	Stand Clearcut 1960	Roads and vegetation lines still obvious.	Yes
	011504A500900023000	Stand Clearcut 1960		
	011504A500400011000	Stand Clearcut 1960		
	011504A500400008000	Stand Clearcut 1960		
Harley Creek 2008	011503A750300005000	Stand Clearcut 1972	Vegetation lines are still evident.	Yes
	011503A750300002000	Stand Clearcut 1963		
Wilson Park 1970	011503A760400002000	Stand Clearcut 1966	Vegetation lines no longer obvious.	No
	011503A760500001000	Stand Clearcut 1968		



Fire name and year	FACTS unit ID	Treatment type and year	Rationale	Substantially noticeable?
Willow Park 1991	011503A500900091000	Patch Clearcut 1960	Softened by fire but some vegetative lines are still evident.	Yes
	011503A350400042000	Stand Clearcut 1990	Vegetation lines are still evident.	Yes
	011503A350400016000	Stand Clearcut 1965	Vegetation lines not obvious.	No

## Rocky Mountain Range

Vegetation treatments are not common in the Rocky Mountain Range GA, due to the rugged terrain and extent of wilderness areas. Some substantially noticeable vegetation treatments are recorded in the far northern part of the GA, and along the eastern edge. Several of these treated stands have burned in wildfires.

**Table 365. Wildfire areas and vegetation treatment areas reviewed for substantially noticeable conditions**

Fire name and year	FACTS Unit ID	Treatment type and year	Rationale	Substantially noticeable?
Fool Creek 2007	011501A060500001000	Seedtree (SPA) 1982	Fire softened edges, no vegetation delineation or road visible.	No
	011501A080200001000	Stand Clearcut 1969	Fire stand-replaced, unit edges still very visible.	Yes
	011501A080700001000	Stand Clearcut 1970	Fire eliminated vegetation delineation but road visible.	Yes
Skyland Fire 2007	011501A330600047000	Commercial Thin 2002	Fire stand replaced unit.	No
	011501A330600044000	Commercial Thin 2002	Fire only burned tiny sliver	Yes
	011501A330600016000	Patch Clearcut 2002	Fire burned portions but majority of unit not burned and vegetation delineation still noticeable	Yes
	011501A330600005000	Commercial Thin 2002		
	011501A330600007000	Patch Clearcut 2002		
	011501A330500001000	Commercial Thin 2002		
	011501A330100041000	Patch Clearcut 2002	Fire burned into edges, no visible vegetation delineation or roads.	No
	011501A330100040000	Patch Clearcut 2002	Fire stand-replaced, no visible vegetation delineation or roads.	No
	011501A330300016000	Patch Clearcut 2002		
	011501A330100004000	Stand Clearcut 1960	Also burned in Challenge Creek 1998. Fire avoided treated area.	Yes
011501A330100003000	Stand Clearcut 1960	Also burned in Challenge Creek 1998. Stand-replaced, no vegetation delineation visible.	No	
Challenge Creek 1998	011501A330100001000	Stand Clearcut 1966	Stand-replaced, no vegetation delineation visible or roads.	No
	011501A330100002000	Stand Clearcut 1966		
Ford Creek 2006	011501A500300005000	Fuel Break 1999	Tiny sliver burned	Yes

## Snowies

The Little Snowies portion of this GA had a scattering of substantially noticeable vegetation treatments. The Big Snowies portion of this GA has had very few substantially noticeable vegetation treatments, which are fairly small and scattered. No wildfires occurred after the completion of any treatments in this GA.

## Upper Blackfoot

Substantially noticeable vegetation treatments occurred across the roaded portions of this GA. Some of these have been affected by wildfire, most extensively the Snow Talon fire of 2003. Some stands burned in Snow Talon re-burned in the Sucker Creek fire.

**Table 366. Wildfire areas and vegetation treatment areas reviewed for substantially noticeable conditions**

Fire name and year	FACTS Unit ID	Treatment type and year	Rationale	Substantially noticeable?
Davis 2010	011204A320300186002	Slashing 2008	Vegetation lines are still evident.	Yes
Moose/Wasson 2003	011204A370200321000	Stand Clearcut 1991	Roads and vegetation lines are still evident.	Yes
	011204A370200232000	Shelterwood 1976	Vegetation lines are still evident.	Yes
	011204A370200216000	Shelterwood 1976		
	011204A370200322000	Stand Clearcut 1990		
	011204A370200219000	Shelterwood 1976	Roads still visible.	Yes
011204A370200319000	Stand Clearcut 1991	Vegetation lines not evident.	No	
Copper Creek Fire 1998	011204A170100102000	Stand Clearcut 1963	Roads are evident.	Yes
	011204A170100107000	Stand Clearcut 1963		
	011204A170100120000	Stand Clearcut 1963		
Snow Talon 2003	011204A190100119000	Stand Clearcut 1990	Roads are evident.	Yes
	011204A190100020002	Stand Clearcut 1997		
	011204A200100112000	Stand Clearcut 1971		
	011204A200100124000	Stand Clearcut 1991		
	011204A170100119001	Patch Clearcut 1989		
	011204A170200187000	Stand Clearcut 1990		
	011204A170200184000	Stand Clearcut 1969		
	011204A170200107000	Stand Clearcut 1968		
	011204A170200104000	Stand Clearcut 1969		
	011204A170200105000	Stand Clearcut 1969		
	011204A170200129000	Stand Clearcut 1967		
	011204A170100137000	Stand Clearcut 1964		
	011204A170100120000	Stand Clearcut 1963		
	011204A170100102000	Stand Clearcut 1963		
	011204A170100100000	Stand Clearcut 1963		
	011204A170100107000	Stand Clearcut 1963		
	011204A190200095000	Stand Clearcut 1989		
	011204A170100131000	Patch Clearcut 1963		
011204A200100110000	Stand Clearcut 1966			

Fire name and year	FACTS Unit ID	Treatment type and year	Rationale	Substantially noticeable?
	011204A200100064000	Stand Clearcut 1987		
	011204A200100113000	Patch Clearcut 1971		
	011204A200100114000	Stand Clearcut 1972		
	011204A190100036000	Stand Clearcut 1971		
	011204A200200136000	Stand Clearcut 1989		
	011204A200200148000	Stand Clearcut 1989		
	011204A200200150000	Stand Clearcut 1989		
	011204A210200018000	Stand Clearcut 1963, Re-burned 2015 (Sucker Ck)	Roads and vegetation lines are still evident after Snow Talon Fire in 2003. The effects of Sucker Creek are unknown.	Possible
	011204A210200128000	Shelterwood 1963, Re-burned 2015 (Sucker Ck)		
	011204A210200022000	Stand Clearcut 1963, Re-burned 2015 (Sucker Ck)		
	011204A210100056000	Stand Clearcut 1967, Re-burned 2015 (Sucker Ck)		
	011204A210100189000	Shelterwood 1989, Re-burned 2015 (Sucker Ck)		
	011204A210200179000	Stand Clearcut 1989	Roads and vegetation lines are still evident.	Yes
	011204A200200151000	Stand Clearcut 1989		
	011204A200200152000	Stand Clearcut 1989		
	011204A190100068000	Seed Tree 1977		
	011204A200200153000	Stand Clearcut 1989		
	011204A200200156000	Stand Clearcut 1987		
	011204A190100120001	Stand Clearcut 1990		
	011204A190100125000	Stand Clearcut 1997		
	011204A190100055000	Stand Clearcut 1971		
	011204A190100050000	Patch Clearcut 1971		
	011204A190100020001	Stand Clearcut 1997		
	011204A190100021000	Stand Clearcut 1971		
	011204A190100124000	Stand Clearcut 1991		
	011204A190100017000	Stand Clearcut 1971		
	011204A170200058000	Stand Clearcut 1969		
	011204A170200186000	Stand Clearcut 1969		
	011204A170200185000	Stand Clearcut 1969		
	011204A170200126000	Stand Clearcut 1968		
	011204A170100078000	Stand Clearcut 1964		
	011204A170100090000	Stand Clearcut 1964		
	011204A200100028000	Stand Clearcut 1967		
	011204A170200169000	Stand Clearcut 1963		

Fire name and year	FACTS Unit ID	Treatment type and year	Rationale	Substantially noticeable?
	011204A170200133000	Stand Clearcut 1967		
	011204A200100118000	Stand Clearcut 1989		
	011204A200100123000	Stand Clearcut 1991		
	011204A200100007000	Patch Clearcut 1968		
	011204A200100011000	Stand Clearcut 1966		
	011204A190200125000	Patch Clearcut 1968		
	011204A190200133000	Patch Clearcut 1968		
	011204A200100024000	Stand Clearcut 1966		
	011204A200100046000	Stand Clearcut 1972		
	011204A200100111000	Stand Clearcut 1971		
	011204A200100098000	Stand Clearcut 1973		
	011204A200100048000	Patch Clearcut 1972		
	011204A190100123000	Stand Clearcut 1990		
	011204A190100121000	Stand Clearcut 1990		
	011204A190100022000	Stand Clearcut 1971		
	011204A210200043000	Shelterwood 1963	Fires softened edges of the old units. Roads and vegetation lines no longer evident.	No
	011204A210200044000	Stand Clearcut 1963		
	011204A210200122000	Shelterwood 1963		
	011204A190100072000	Shelterwood 1966		
	011204A190100069000	Shelterwood 1966		
	011204A200200154000	Stand Clearcut 1988		
	011204A200200155000	Stand Clearcut 1988		
	011204A190100054001	Stand Clearcut 1997		
	011204A190100052001	Stand Clearcut 1990		
	011204A190100037000	Stand Clearcut 1990		
	011204A190100033000	Stand Clearcut 1971		
	011204A190100028000	Stand Clearcut 1962		
	011204A190100027000	Stand Clearcut 1963		
	011204A190100019000	Stand Clearcut 1971		
	011204A200100120000	Stand Clearcut 1987		
	011204A200200157000	Stand Clearcut 1986		
	011204A200100119000	Stand Clearcut 1987		
	011204A200100014000	Stand Clearcut 1989		
	011204A170200192000	Patch Clearcut 1993		
	011204A170100044000	Stand Clearcut 1964		
	011204A170200137000	Stand Clearcut 1968		
	011204A170100139000	Stand Clearcut 1989		
	011204A170100129000	Patch Clearcut 1971		
	011204A170100127000	Stand Clearcut 1989		
	011204A200100115000	Patch Clearcut 1983		
	011204A190200132000	Liberation 1989		

Fire name and year	FACTS Unit ID	Treatment type and year	Rationale	Substantially noticeable?
	011204A200100067000	Stand Clearcut 1971		
	011204A210200128000	Shelterwood 1963		
Sucker Creek 2015	011204A210200018000	Stand Clearcut 1963	The effects of the Sucker Creek fire could not be seen with imagery because it occurred so recently. These sites cannot be ruled out without field visits or newer photography. In some cases, the SnowTalon fire also burned these areas previously and they remained evident after that burn.	Possible
	011204A210200022000	Stand Clearcut 1963		
	011204A210100056000	Stand Clearcut 1967		
	011204A210200184001	Sanitation 2012		
	011204A210200122000	Shelterwood 1963		
	011204A210200043000	Shelterwood 1963		
	011204A210200044000	Stand Clearcut 1963		
	011204A210200123000	Stand Clearcut 1963		
	011204A210200045000	Stand Clearcut 1963		
	011204A210200124000	Patch Clearcut 1978		
	011204A210200073000	Stand Clearcut 1962		
	011204A210200071000	Patch Clearcut 1970		
	011204A210200070000	Patch Clearcut 1970		
	011204A210200126000	Stand Clearcut 1965		
	011204A210200089000	Stand Clearcut 1965		
	011204A210200084000	Patch Clearcut 1967		
	011204A210100141000	Stand Clearcut 1962		
	011204A210100127000	Seed Tree 1961		
	011204A210100186000	Shelterwood 1989		
	011204A210100184000	Shelterwood 1989		
	011204A210100185000	Shelterwood 1989		
	011204A210100109000	Patch Clearcut 1965		
	011204A210100179000	Shelterwood 1990		
	011204A210100182000	Shelterwood 1989		
	011204A210200035000	Patch Clearcut 1967		
	011204A210100180000	Shelterwood 1990		
	011204A210100183000	Shelterwood 1990		
	011204A210100076000	Stand Clearcut 1968		
	011204A210100189000	Shelterwood 1989		
	011204A210100181000	Patch Clearcut 1989		
	011204A210100055000	Stand Clearcut 1967		
	011204A21010056000	Stand Clearcut 1967		
011204A210200019000	Seed Tree 1997, Burned 2003 (Snow Talon), Reburn 2015			
011204A210200183000	Stand Clearcut 2006			
011204A210200182000	Stand Clearcut 2006, Burned 2003 (Snow Talon), Re-burn 2015	Vegetation lines and roads no longer evident.	No	

Fire name and year	FACTS Unit ID	Treatment type and year	Rationale	Substantially noticeable?
	011204A200200162000	Seed Tree 2006, Burned in 2003 (Snow Talon), Reburn 2015		
Alice #2 2007	011204A120100116001	Slashing 2007 – RX Wildlife Burn	Breaks in vegetation are evident.	Yes

### Local Site-Specific Review

After completing the wilderness inventory mapping, local personnel reviewed the draft product. In several specific cases, the local staff stated that the vegetation treatment mapped as substantially noticeable was in fact no longer noticeable, due to the sparseness of the treatment and/or subsequent prescribed burning treatments. These specific areas that initially met the criteria for substantially noticeable (Table 2) are included back in the wilderness inventory and considered to be no longer substantially noticeable.

- Alice Creek prescribed burning units, Upper Blackfoot GA
- Hogum prescribed burning unit, Upper Blackfoot GA
- Fuel break treatment areas, Rocky Mountain Range GA
- Wildlife habitat slash treatment areas, Snowies GA

The FACTS SUIDs associated with these included treatments are listed in the table below.

**Table 367. Stands with vegetation treatments included back in inventory based on site specific determination**

011501A100200009000	011501A330300016000	011501A090100013000	011501A090100028000
011501A100200027000	011501A060100009000	011501A090100014000	011501A660200022000
011501A100200012000	011501A060100014000	011501A090100015000	011501A660200023000
011501A100200014000	011501A060100015000	011501A090100016000	011501A600200001000
011501A100200016000	011501A060100016000	011501A090100017000	011501A500300005000
011501A100200018000	011501A090100003000	011501A090100018000	011501A500300009000
011501A100200019000	011501A090100004000	011501A090100019000	011501A500300010000
011501A100200020000	011501A090100005000	011501A090100020000	011501A500300011000
011501A100200021000	011501A090100006000	011501A090100021000	011501A500300012000
011501A100200022000	011501A090100007000	011501A090100022000	011501A500300013000
011501A100200023000	011501A580400007000	011501A590200010000	011204A110300130000
011501A100200025000	011501A580400008000	011501A590200011000	011204A120100070000
011501A100200030000	011501A580400009000	011501A590200012000	011204A120100114000
011501A100200031000	011501A580400010000	011501A590200023000	011204A120100116001
011501A100200034000	011501A580400011000	011501A590200024000	011204A120100116002
011501A500500016000	011501A580400012000	011501A590200025000	011204A120100117000
011501A580400025000	011501A580400013000	011501A590200026000	011204A120100118000
011501A580400026000	011501A580400014000	011501A590200027000	011204A120100119000
011501A580100004000	011501A580400015000	011501A590200028000	011204N003066528001
011501A580100005000	011501A580400016000	011501A590300013000	011204N003066528002

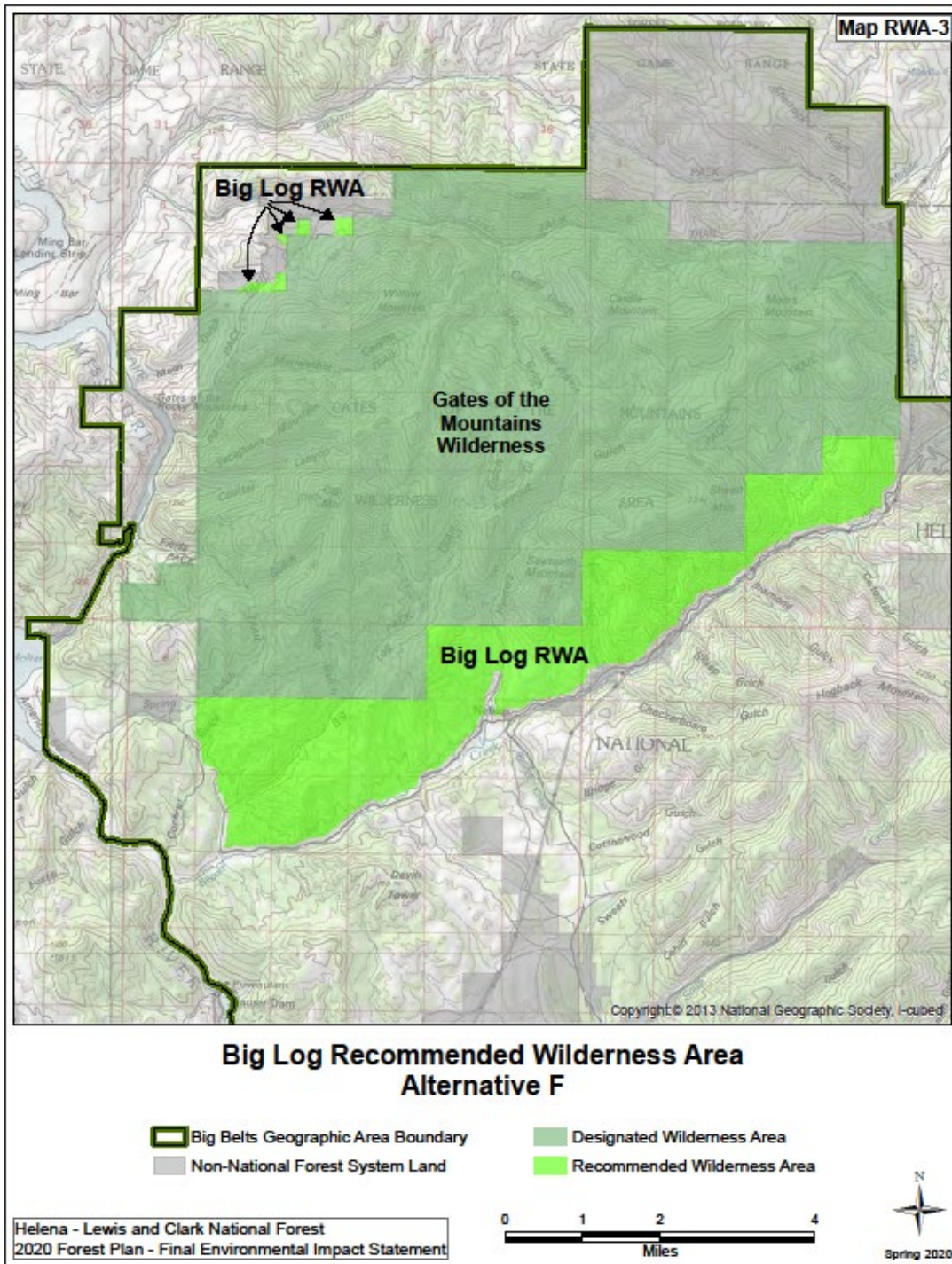
011501A580100008000	011501A580400017000	011501A590300014000	011204N003066529000
011501A580100009000	011501A580400018000	011501A590300015000	011501A500100052000
011501A580100010000	011501A580400019000	011501A590300017000	011501A500100053000
011501A580100011000	011501A580400020000	011501A590300020000	011501A500100052000
011501A580100012000	011501A580400021000	011501A590300022000	011501A500100053000
011501A580100013000	011501A090100008000	011501A590300032000	011204A280300026000
011501A580100014000	011501A090100009000	011501A500300005000	011204A280300167000
011501A580100015000	011501A090100010000	011204A110200075000	011204A280300168001
011501A580100016000	011501A090100011000	011204A110200090000	011204A280300168001
011501A580400001000	011501A090100012000	011501A090100023000	011204A280300169000
011501A580400002000	011501A580400022000	011501A090100024000	011204A280400133002
011501A580400003000	011501A580400023000	011501A090100025000	011204A280400133005
011501A580400004000	011501A580400024000	011501A090100026000	011204A280400133006
011501A580400005000	011501A580400027000	011501A090100027000	011501A500300014000
011501A580400006000	011501A580400028000	011204A110200092001	011501A500300016000
011504A160100030000	011501A580400029000	011204A110200144000	011501A500300017000
011504A160100031000	011501A590200002000	011204A110200145000	011501A500300018000
011504A160100032000	011501A590200003000	011204A110200146000	011501A500500015000
011504A160100033000	011504A160400034000	011504A160400035000	



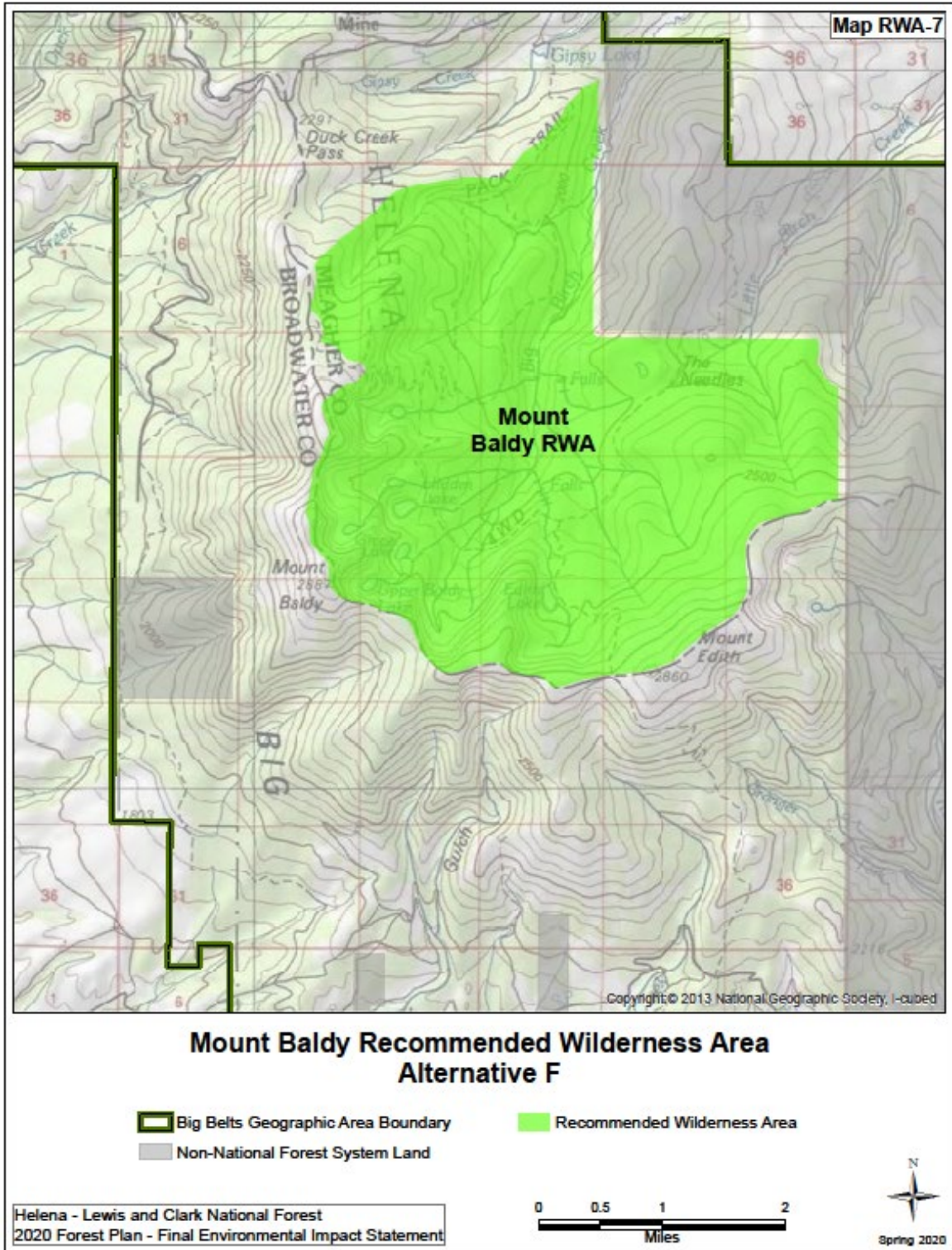


# Attachment 2. Final Recommended Wilderness Area Maps

## Big Log Recommended Wilderness Area

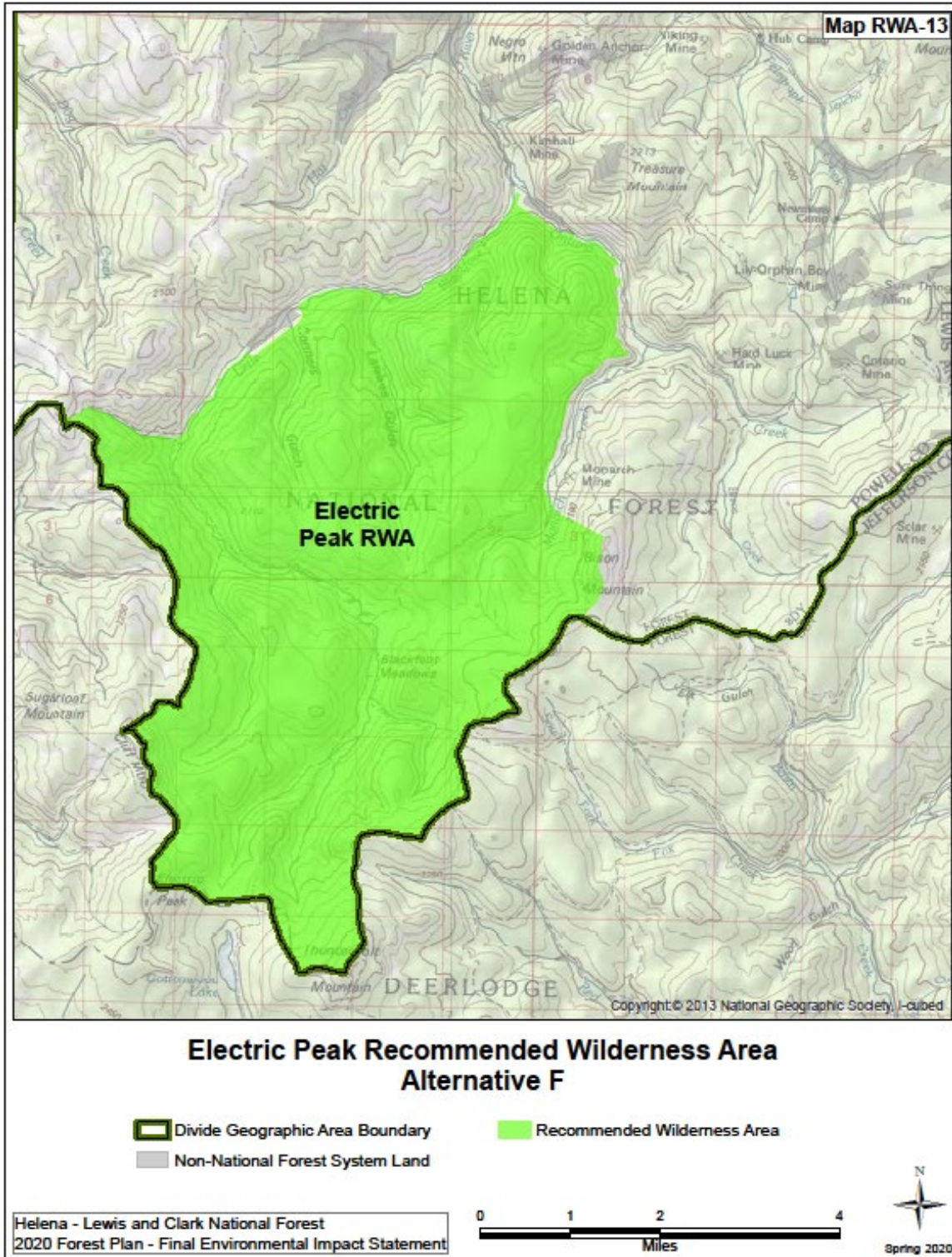


# Mount Baldy Recommended Wilderness Area

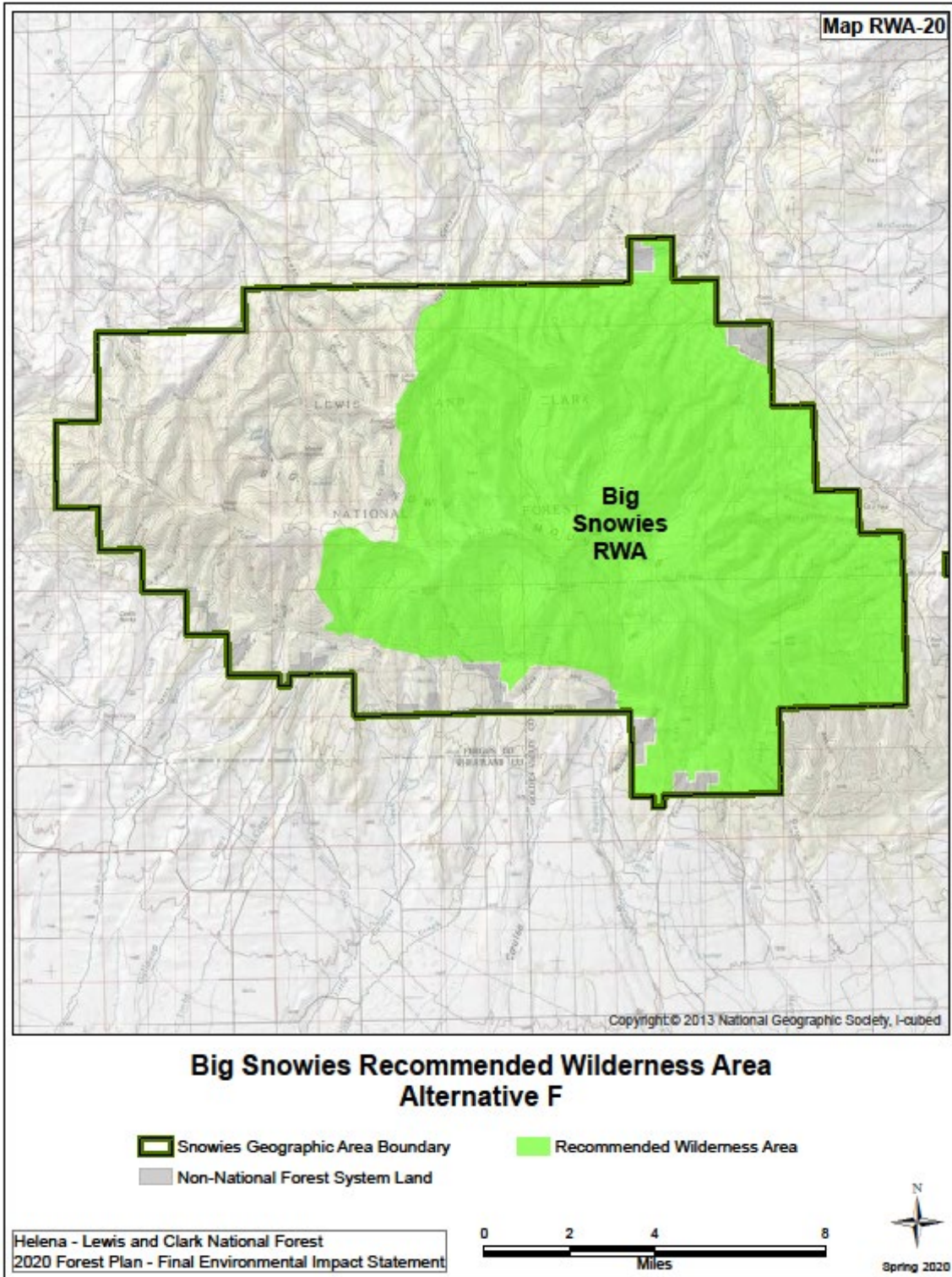




# Electric Peak Recommended Wilderness Area

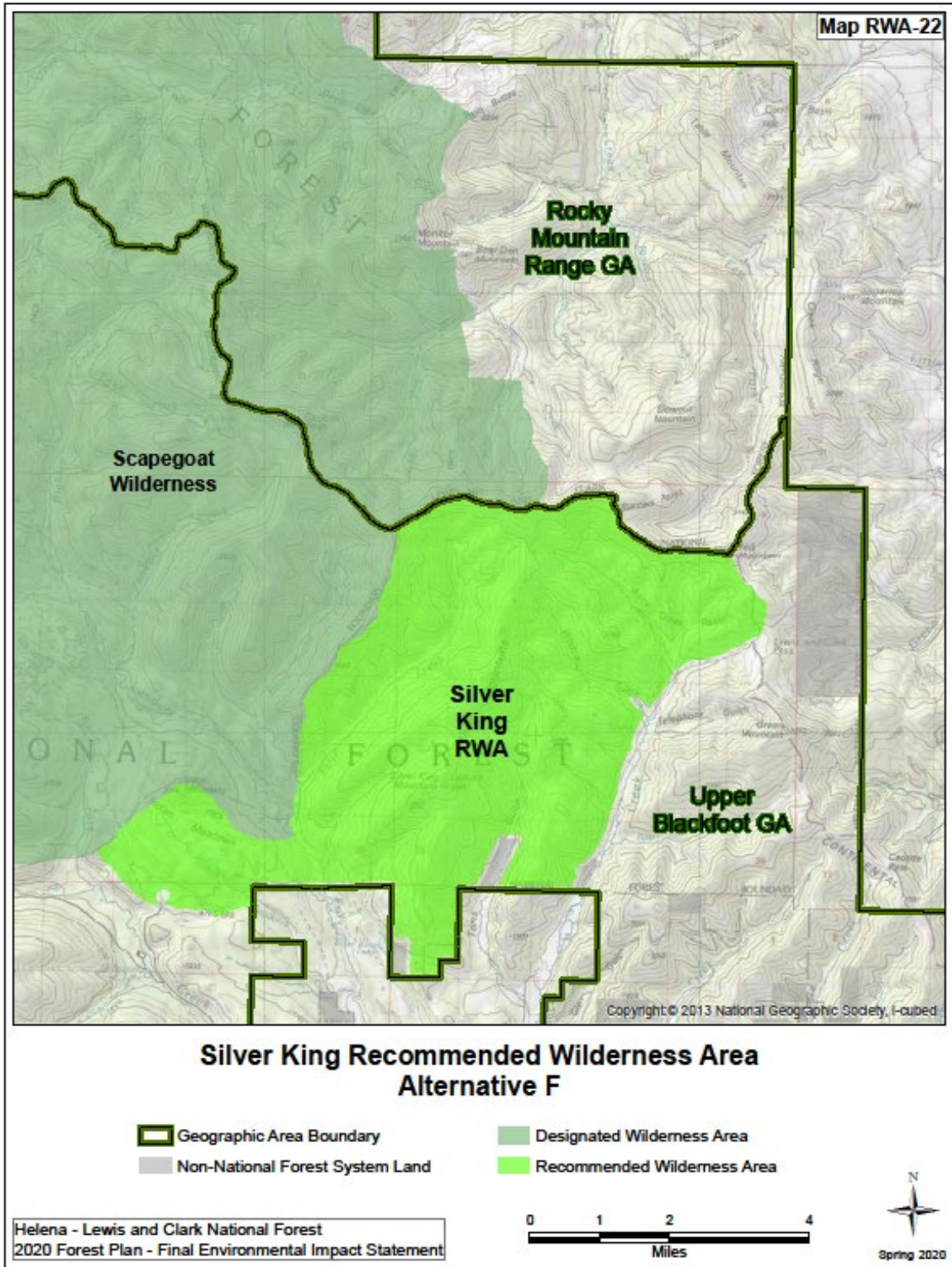


# Big Snowies Recommended Wilderness Area

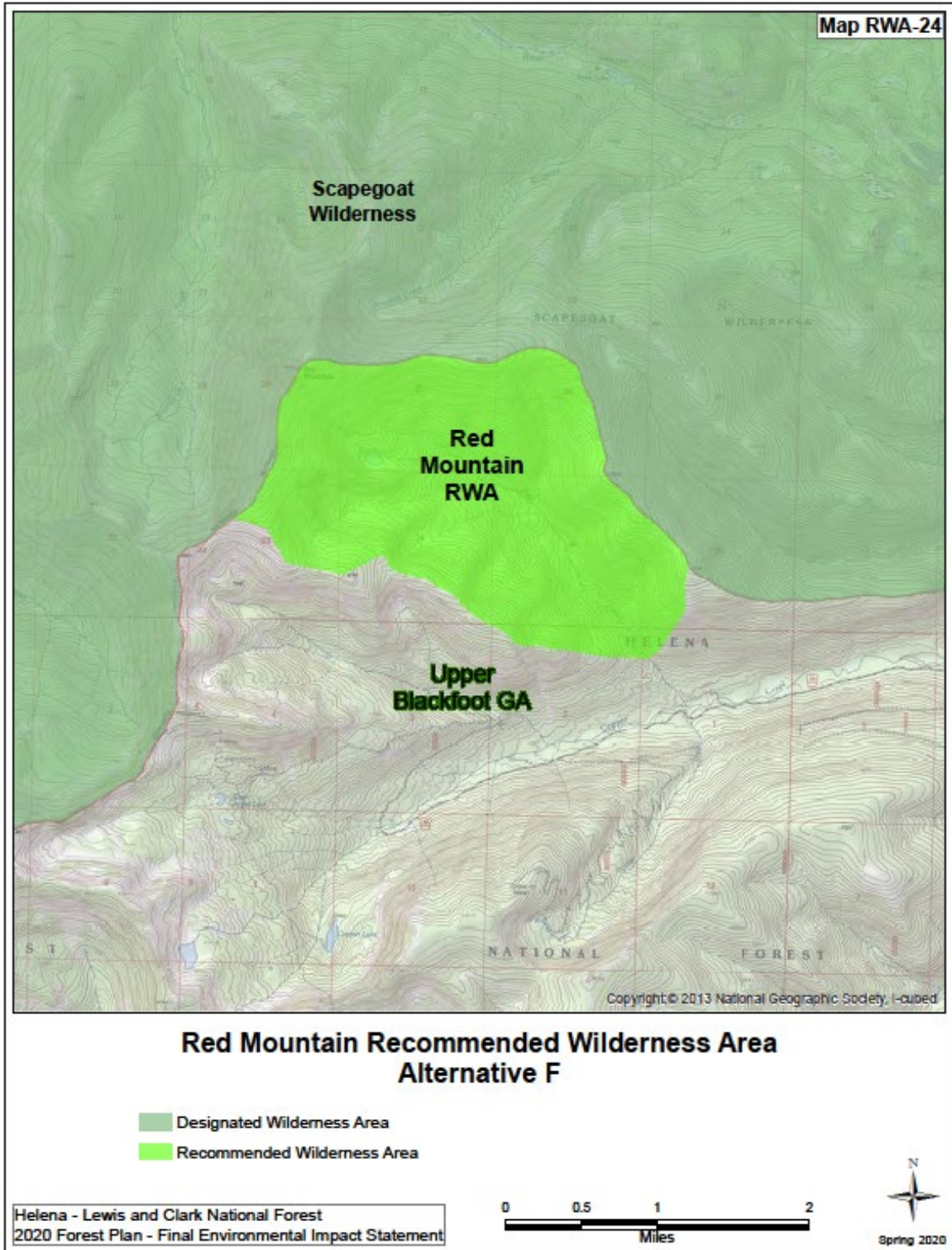




# Silver King Recommended Wilderness Area

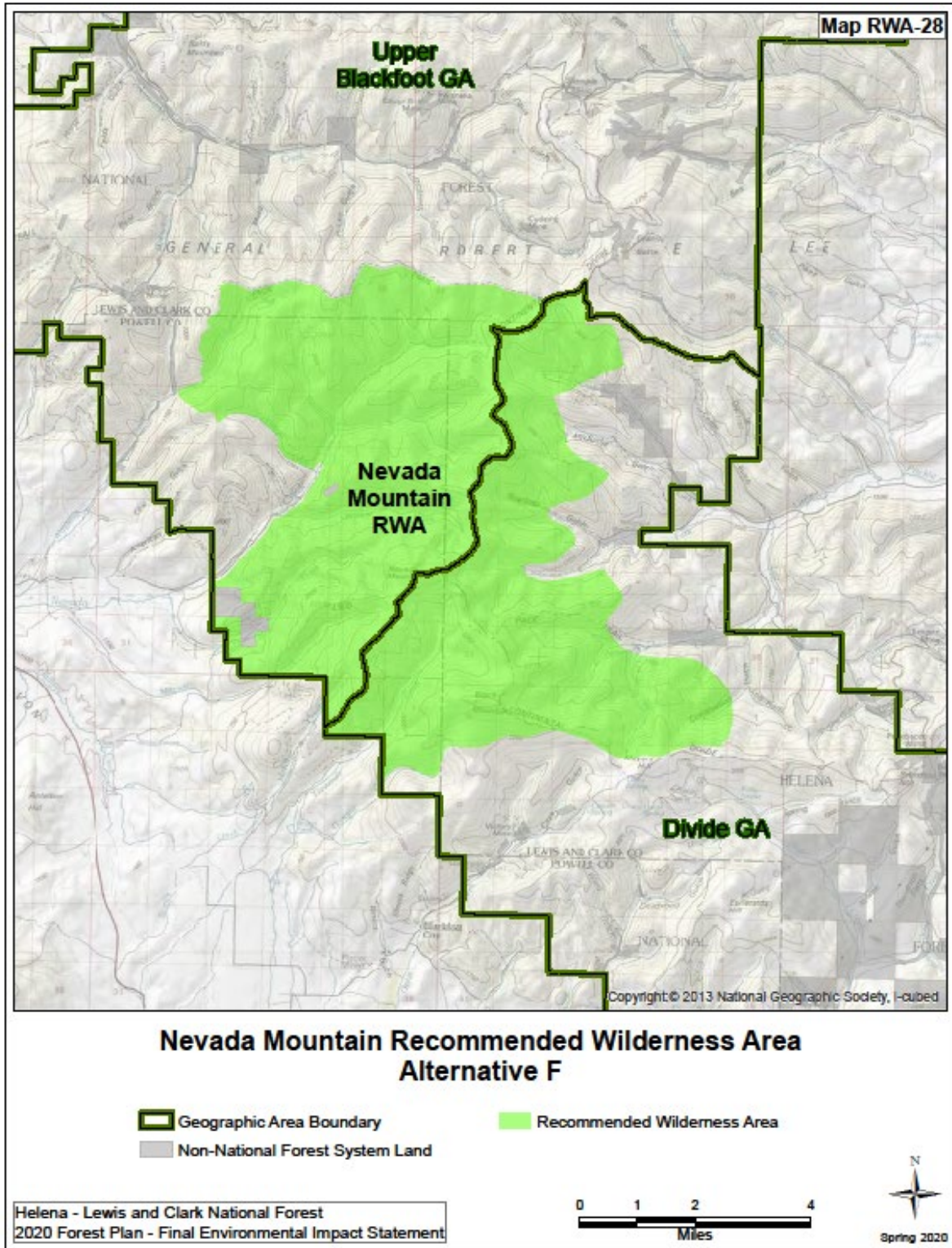


# Red Mountain Recommended Wilderness Area





# Nevada Mountain Recommended Wilderness Area





Page intentionally left blank.