

# **Helena and Lewis & Clark National Forests Forest Plan Assessment**

Chapter 8, Existing Designated Areas

2015



# Table of Contents

Introduction.....	1
Scale and Source Information Used .....	1
Public Comments.....	1
Designated Wilderness.....	2
Existing Information .....	2
Existing Condition .....	2
10-year Wilderness Challenge.....	4
Wilderness Inventory and Evaluation .....	6
Recommended Wilderness Areas .....	6
Existing Information .....	6
Current Management Direction for Recommended Wilderness Areas .....	6
Existing Condition .....	7
Wilderness Inventory and Evaluation .....	7
Wilderness Study Act Areas.....	7
Existing Information .....	7
Current Management Direction for Wilderness Study Act Areas .....	7
Existing Condition .....	8
Wilderness Inventory and Evaluation .....	8
Inventoried Roadless Areas.....	8
Existing Information .....	8
Current Management of Inventoried Roadless Areas.....	9
Existing Condition .....	9
Wilderness Inventory and Evaluation .....	10
Elkhorn Wildlife Management Unit.....	11
Existing Information .....	11
Existing Condition .....	12
Rocky Mountain Front Conservation Management Area .....	12
Existing Information .....	12
Wild and Scenic Rivers.....	13
Existing Information .....	13

Existing Condition .....	13
Eligible Wild and Scenic Rivers Inventory and Evaluation .....	15
Nationally Designated Trails .....	15
Existing Information .....	15
Existing Condition .....	15
Lewis and Clark National Historic Trail Interpretive Center .....	17
Existing Information .....	17
Existing Condition .....	17
National Historic Landmarks .....	17
Existing Condition .....	17
Nationally Significant Caves.....	18
Existing Information .....	18
Existing Condition .....	18
Research Natural Areas .....	19
Existing Information .....	19
Existing Condition .....	19
Special Areas.....	22
Existing Information .....	22
Existing Condition .....	22
Tenderfoot Creek Experimental Forest .....	23
Existing Condition .....	23
Kings Hill Scenic Byway.....	24
Existing Condition .....	24
Evaluating the Potential Need and Opportunity for Designated Areas .....	24
Contribution to Social, Economic and Ecological Sustainability.....	25
Information Needs.....	25
References .....	25

## Tables

Table 8.1 Designated wilderness areas .....	3
Table 8.2 Bob Marshall Wilderness scores for the 10-year Challenge <sup>1</sup> .....	5

Table 8.3 Scapegoat Wilderness scores for the 10-year Challenge <sup>1</sup> .....	5
Table 8.4 Gates of the Mountains Wilderness scores for the 10-year Challenge <sup>1</sup> .....	5
Table 8.5 Recommended wilderness areas.....	7
Table 8.6 Montana wilderness study act areas.....	8
Table 8.7 Inventoried roadless areas within the plan area .....	9
Table 8.8 River segments previously determined eligible for WSR classification .....	13
Table 8.9 Nationally designated trails within the plan area.....	15
Table 8.10 Currently designated and proposed research natural areas.....	19
Table 8.11 Plant associations currently unrepresented (Chadde et al. 1996) .....	21
Table 8.12 Special areas .....	23



# Existing Designated Areas

## Introduction

Milestone legislation was established by Congress in the 1960s to create a system of designated areas that included, in part, the National Wilderness Preservation System, National Wild and Scenic Rivers, and the National Trails System. These designated areas established a national system of connected conservation areas providing for the enduring resource of wilderness, protecting rivers, and preserving scenic and significant natural, historic, and cultural resources along national scenic and historic trails.

This chapter includes information on these special designated areas and the potential need and opportunity for additional designated areas within the plan area. Specially designated areas include congressionally designated wildernesses; Montana wilderness study act areas; wild and scenic rivers; national recreation, scenic and historic trails; as well as the only nationally designated wildlife management unit in the National Forest system. The plan area also encompasses recommended wilderness and inventoried roadless areas, research natural areas, nationally significant caves, national forest scenic byways, and the Lewis and Clark National Historic Trail Interpretive Center.

## *Scale and Source Information Used*

Information on designated areas is presented at two geographic scales: forestwide and by geographic area (GA). The forestwide scale provides information on relevant public laws, Forest Service process and policy, and overall direction for the designated area. Information by GA is more detailed and allows a reader interested in a specific area to find more area-specific information.

The HLC NFs used the best available data and science relevant to the plan area and management to inform the assessment of designated areas where available. Quality data was used in this assessment and the studies and reports that were used are of accepted and standardized scientific methodology and are replicable. In compiling this assessment many major sources of information were reviewed and information incorporated. References included in this assessment reflect the most relevant documents, given the scope and scale of the assessment and determined to be best available scientific information.

Much of the data on designated areas used for this assessment comes from direction provided through public law, executive orders and rules, and from Forest Service sources such as the infrastructure database, which is called INFRA. Database information and GIS mapping tools enable the HLC NFs to manage and report accurate information about their inventory of constructed features and land units.

## *Public Comments*

A number of public comments were received during the initiation of the assessment and were gathered during open houses and through postal and email submittals during the summer of 2014. Public interest is very strong for most designated areas, especially for wilderness and wild and scenic rivers. This interest comes primarily from wilderness and conservation groups. These groups are most interested in strengthening language within the plan to further protect and enhance already designated areas, taking a detailed look at creating additional special designations, and working toward establishing efforts to collaboratively manage Forest Service System lands for the benefit of designated areas and landscapes.

# Designated Wilderness

## *Existing Information*

The Wilderness Act of 1964 (Public Law 88-577) set up a system of wilderness areas across the United States and defined wilderness as a place “in contrast with those areas where man and his own works dominate the landscape... where earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain... an area of undeveloped federal lands retaining its primeval character and influences, without permanent improvements or human habitation, which is protected and managed to preserve its natural condition”.

Both the Bob Marshall and the Gates of the Mountains Wilderness Areas were originally established by the Wilderness Act (Public Law 88-577) in 1964. The remote and rugged nature of the Gates of the Mountains was first recognized in 1948 when it was established as a wild area by the United States Forest Service. It was reclassified as the Gates of the Mountains Wilderness Area in 1964 as part of the National Wilderness Preservation System established under the Wilderness Act of that same year. The Scapegoat Wilderness was established in 1972, by Public Law 92-395.

In December 2014, the National Defense Authorization Act for Fiscal Year 2015 (Public Law 113-291) (NDAA) was passed. This law included the language of the Rocky Mountain Front Heritage Act which added acres to both the Bob Marshall and the Scapegoat Wilderness Areas. With the additions from the NDAA, designated wilderness within the plan area now comprises roughly 565,158 acres, which is approximately 20% of the overall plan area.

## Current Wilderness Management Direction

General direction for management for all wilderness areas on both the Helena and Lewis & Clark National Forests is contained in the 1986 forest plans for these forests. Additionally, the Helena and Lewis and Clark National Forests work in collaboration with the Lolo and the Flathead National Forests in the overall management of the Bob Marshall Wilderness Complex (BMWC), which is composed of three large wilderness areas; the Bob Marshall, the Great Bear, and the Scapegoat. The BMWC provides management oversight and direction for more than 1.5 million acres and is jointly managed by five ranger districts on four national forests (Flathead, Lolo, Helena, and the Lewis and Clark). Detailed direction for managing this complex is provided by the Bob Marshall, Great Bear, and Scapegoat Wilderness Recreation Management Direction that was developed and officially adopted in 1987. This direction was incorporated into both the Helena and the Lewis & Clark National Forest Plans as Amendment #1 (in both plans). The portions of the Bob Marshall and the Scapegoat wildernesses which are located within the plan area lie within the Rocky Mountain Range and the Upper Blackfoot Geographic Areas.

The Gates of the Mountains Wilderness lies entirely within the Big Belts Geographic Area. This wilderness does not have a wilderness management plan. Therefore, primary management direction comes from the Helena Forest Plan.

## *Existing Condition*

The wilderness areas located within the HLC NFs are the Bob Marshall, the Scapegoat, and the Gates of the Mountains. Portions of both the Bob Marshall and the Scapegoat lie outside of the plan area on adjacent forests so management of these wilderness areas is shared with surrounding forests. The entire Gates of the Mountains Wilderness lies within the plan area and has been managed solely by the Helena National Forest.

Table 8.1 displays the three wilderness areas within the plan area, the geographic area(s) in which they can be found, and their approximate number of acres. On December 19, 2014, President Obama signed into effect NDAA, as described above. The Act established wilderness additions for both the Bob Marshall and the Scapegoat Wildernesses located within the Rocky Mountain Range Geographic Area.



**Table 8.1 Designated wilderness areas**

<b>Wilderness</b>	<b>Geographic Area</b>	<b>Total Acres Designated by Originating Laws</b>	<b>Additional Acres Designated by the NDAA<sup>1</sup></b>	<b>Total Wilderness Acres within the Plan area<sup>2</sup></b>
Gates of the Mountains	Big Belts	28,562	0	28,440
Bob Marshall	Rocky Mountain Range	1,009,356	50,401	352,437
Scapegoat	Upper Blackfoot and Rocky Mountain Range	239,936	16,711	184,281
Total Acres of Wilderness in the Plan Area				565,158

<sup>1</sup>Acres are taken directly from the National Defense Authorization Act of 2015. <sup>2</sup>Acres are approximate and derived from GIS.

Map 29, Wilderness Areas, Recommended Wilderness Areas, Wilderness Study Act Areas, and Recent Additions to Wilderness Areas can be found in appendix A.

### **Bob Marshall Wilderness Complex**

The combined Bob Marshall, Scapegoat, and Great Bear Wilderness Areas comprise the Bob Marshall Wilderness Complex. This complex makes up an area of more than 1.5 million acres, which is the third largest in the lower 48 United States. Grizzly bear, lynx, wolverine, deer, elk, gray wolf, moose, black bear, mountain lion, mountain goat, and mountain sheep roam within the complex. Its longest axis is 110 miles and extends from the town of West Glacier in the north to near Roger’s Pass in the south. The Bob Marshall Wilderness Complex is circled by nearly 400 miles of highway. Due to its size, opportunities, and resource values, the Complex area is of national and international significance, and is considered a flagship wilderness complex in the National Wilderness Preservation System. Portions of the Bob Marshall and Scapegoat Wilderness Areas are located within the plan area and are described below.

#### ***Bob Marshall Wilderness***

With the additions from the recent passing of the NDAA, the Bob Marshall Wilderness is approximately 1,059,757 acres and is located in northwestern Montana approximately 55 miles southeast of Kalispell, Montana and 60 miles west of Great Falls, Montana. The wilderness is located on the Flathead and the Lewis and Clark National Forests. Approximately 352,437 acres of the Bob Marshall Wilderness is located within the plan area, in the Rocky Mountain Range Geographic Area.

The “Bob”, as it is commonly referred to, straddles the Continental Divide with elevations that range from 4,000 feet along the valley floor to more than 9,000 feet atop the serpentine Continental Divide. It includes the headwaters of the Flathead River to the west and the Sun River to the east.

The Bob Marshall is noted for excellent hunting, fishing, scenery, and geology. Its vast beauty is highlighted by a huge escarpment known as the “Chinese Wall.” The wall averages 1,000 feet in height and extends 22 miles along the Continental Divide. Topography ranges from rugged precipitous ridge tops to gentle sloping alpine meadows and forested river bottoms.

#### ***Scapegoat Wilderness***

With additions from the recent passing of the NDAA, the Scapegoat Wilderness is approximately 256,647 acres and is located in both the Rocky Mountain Range and the Upper Blackfoot Geographic Areas. Located just south of and bordering the Bob Marshall Wilderness, the Scapegoat also straddles the Continental Divide and is approximately 75 miles northeast of Missoula, Montana and 10 miles north of Lincoln, Montana. The Scapegoat is located on the Helena, Lolo, and the Lewis and Clark National Forests. Approximately 184,281 acres of the Scapegoat is located within the plan area.

Most of the Scapegoat lies between the elevations of 5,000 feet at the Blackfoot River to 9,400 feet at the top of Red Mountain. Topography of the Scapegoat Wilderness ranges from rugged ridge tops, to gently sloping alpine meadows, to forested slopes and river bottoms. The massive limestone cliffs of Scapegoat Mountain are an extension of the “Chinese Wall” in the adjacent Bob Marshall Wilderness.

### **Gates of the Mountains Wilderness**

The Gates of the Mountains Wilderness is located on the east slopes of the Continental Divide. At 28,562 acres, it is one of Montana’s smaller wilderness areas and is located 16 air miles north of Helena, Montana and 55 miles south of Great Falls, Montana.

The Gates of the Mountains Wilderness is characterized by massive limestone beds which naturally eroded over millions of years to create the towering cliffs and deep canyons that caused Captain Meriwether Lewis to call the area “the gates of the Rocky Mountains” during his passage up the Missouri River in 1805. This historical feature on the Missouri River is adjacent to the wilderness area and is how the wilderness got its name.

### ***10-year Wilderness Challenge***

The 10-year Wilderness Stewardship Challenge was developed by the Forest Service’s wilderness advisory group as a quantifiable measurement of the Forest Service’s success in wilderness stewardship. The goal of the challenge was to bring every one of the more than 400 wilderness areas under Forest Service management to a minimum stewardship level by the 50th Anniversary of the Wilderness Act in 2014. The challenge has 10 elements against which wildernesses were evaluated:

1. Natural role of fire in wilderness and management responses to wild land fire.
2. Nonnatives invasive plants species identification and treated.
3. Monitoring of wilderness air quality values.
4. Wilderness education plan identified and implemented.
5. Protection of solitude or primitive unconfined recreation.
6. Recreation site inventories completed.
7. Operating plans for existing outfitters and guides. Needs assessments completed for new operations or major changes.
8. Adequate wilderness direction in forest plans.
9. Information needs met through field data collection, storage and analysis.
10. Baseline workforce in place with staffing levels necessary for effective wilderness stewardship.

Over the past 8 years, there has been an upward trend for each of the 10-year challenge elements within all three wildernesses located within the plan area. As a part of the BMWC, both the Bob Marshall and the Scapegoat Wilderness Areas have received support by the other forests of the BMWC and significant use by individual parties as well as by outfitters and guides. Both of these wilderness areas saw marked improvement during the 10-Year Wilderness Challenge. The Gates of the Mountains Wilderness is a much smaller wilderness and is more difficult to access. It also improved over the course of the 10-year Wilderness Challenge but not at the rate of the other two larger wilderness areas. The 10-year Wilderness Challenge scores are documented in the following tables.

**Table 8.2 Bob Marshall Wilderness scores for the 10-year Challenge<sup>1</sup>**

Element	2006	2007	2008	2009	2010	2011	2012	2013	2014
Natural Fire	8	8	8	8	8	8	8	8	10
Nonnatives treated	5	5	5	5	6	6	6	6	6
Air Quality	10	10	10	10	10	10	10	10	10
Wilderness Education Plan	6	6	6	6	6	6	6	6	6
Protect solitude or primitive and unconfined recreation	4	4	4	8	8	8	8	8	8
Completed recreation site inventory	10	10	10	10	10	6	10	6	10
Existing outfitter & guide	6	6	6	6	6	6	6	6	6
Adequate direction in the Forest Plan	6	6	6	6	6	6	6	6	8
Information needs are met	8	8	8	8	8	8	8	8	8
Baseline workforce in place	0	0	10	8	6	8	8	6	8
<b>Total</b>	<b>63</b>	<b>63</b>	<b>75</b>	<b>75</b>	<b>74</b>	<b>76</b>	<b>76</b>	<b>74</b>	<b>80</b>

<sup>1</sup> Data retrieved from INFRA Wild 3/2015. Scores cover entire acreage of the Bob Marshall Wilderness.

**Table 8.3 Scapegoat Wilderness scores for the 10-year Challenge<sup>1</sup>**

Element	2006	2007	2008	2009	2010	2011	2012	2013	2014
Natural Fire	8	8	8	8	8	8	8	8	10
Nonnatives treated	5	5	5	6	6	6	6	6	6
Air Quality	0	10	10	10	10	10	10	10	10
Wilderness Education Plan	6	6	6	6	6	6	6	6	6
Protect solitude or primitive and unconfined recreation	4	4	4	8	8	8	8	8	8
Completed recreation site inventory	10	10	10	10	10	6	10	6	10
Existing outfitter & guide	6	6	6	6	6	6	6	6	6
Adequate direction in the Forest Plan	6	6	6	6	6	6	6	6	8
Information needs are met	8	8	8	8	8	8	8	8	8
Baseline workforce in place	0	0	8	6	6	6	8	6	6
<b>Total</b>	<b>53</b>	<b>63</b>	<b>71</b>	<b>74</b>	<b>74</b>	<b>74</b>	<b>76</b>	<b>74</b>	<b>78</b>

<sup>1</sup> Data retrieved from INFRA Wild 3/2015. Scores cover entire acreage of the Scapegoat Wilderness.

**Table 8.4 Gates of the Mountains Wilderness scores for the 10-year Challenge<sup>1</sup>**

Element	2006	2007	2008	2009	2010	2011	2012	2013	2014
Natural Fire	3	3	3	3	6	8	8	8	8
Nonnatives treated	5	5	5	5	5	5	5	6	5
Air Quality	6	6	6	6	6	10	10	10	10

Element	2006	2007	2008	2009	2010	2011	2012	2013	2014
Wilderness Education Plan	4	4	4	4	4	6	6	6	6
Protect solitude or primitive and unconfined recreation	4	6	6	6	6	6	6	6	6
Completed recreation site inventory	6	6	6	6	6	8	8	8	8
Existing outfitter & guide <sup>2</sup>	6	6	6	6	6	6	6	6	6
Adequate direction in the Forest Plan	4	4	4	4	4	6	6	6	6
Information needs are met	4	4	4	6	4	4	4	4	4
Baseline workforce in place	0	0	2	2	2	2	6	4	4
<b>Total</b>	<b>42</b>	<b>44</b>	<b>46</b>	<b>48</b>	<b>49</b>	<b>61</b>	<b>65</b>	<b>64</b>	<b>63</b>

<sup>1</sup>Data retrieved from INFRA Wild 3/2015.

<sup>2</sup>Gates of the Mountains Wilderness did not have outfitter guides during this time period.

## *Wilderness Inventory and Evaluation*

Before the responsible official invites comments on a proposed plan, a new wilderness inventory and evaluation is required. When considering the opportunity to designate additional wilderness, many of the desirable characteristics such as large blocks of undeveloped natural landscapes with undisturbed ecosystem conditions, will be considered during the inventory and evaluation for additional wilderness. Additions to existing designated wilderness will be a primary consideration in this inventory and evaluation process.

## Recommended Wilderness Areas

### *Existing Information*

During the development of the 1986 Helena and Lewis & Clark National Forest Plans, seven separate areas within the plan area were inventoried, evaluated, and identified as recommended wilderness. These recommendations were originally meant to receive additional review and possible modifications by the Chief of the Forest Service, the Secretary of Agriculture, and the President of the United States, with the final decisions of wilderness designation being reserved to Congress.

Over the past 25+ years, a number of attempts at including recommended wilderness areas in wilderness bills brought before Congress have been unsuccessful in creating formal designations. However, on December 19, 2014, the NDAA established wilderness additions for both the Bob Marshall and the Scapegoat Wildernesses located within the Rocky Mountain Range Geographic Area. Four of the 1986 Lewis and Clark Forest Plan recommended wilderness areas were included in this legislation and have become additions to existing wilderness.

The three remaining recommended wilderness areas are located on the Helena National Forest. Management direction for these three areas is in the 1986 Helena National Forest Plan under Management Area P-3.

### *Current Management Direction for Recommended Wilderness Areas*

The current management for recommended wilderness areas is to manage so as to maintain the wilderness potential of the identified areas. As per national policy in 1923.03(3), “Any area recommended for wilderness or wilderness study designation is not available for any use or activity that may reduce the wilderness potential of an area.” Additionally, direction for management for the recommend wilderness areas in the HLC NFs is contained in the 1986 Forest Plans.

## Existing Condition

The three recommended wilderness areas that have not been designated wilderness are noted in Table 8.5.

**Table 8.5 Recommended wilderness areas**

Recommended Area Description	Geographic Area	Adjacent Designated Wilderness (if applicable)	Total GIS Acres	Acres within the Plan area <sup>1</sup>
Electric Peak	Divide*	N/A	21,556	16,655
Big Log	Big Belts	Gates of the Mountains	9,190	9,190
Mount Baldy	Big Belts	N/A	8,420	8,420
Total Acres of Recommended Wilderness in the Plan Area				34,265

<sup>1</sup>Acres are approximate and derived from GIS

\*Portions of the Electric Peak recommended Wilderness Area are located on the Beaverhead-Deerlodge NF.

Please see map 29 in appendix A.

## Wilderness Inventory and Evaluation

Before the responsible official invites comments on a proposed plan, a new wilderness inventory and evaluation is required. Many of the characteristics which are desirable when considering the opportunity to designate additional wilderness, such as large blocks of undeveloped natural landscapes with undisturbed ecosystem conditions, will be considered during the inventory and evaluation for additional wilderness. The three recommended wilderness areas on the Helena National Forest that have not been formerly designated will be considered in this analysis.

## Wilderness Study Act Areas

### Existing Information

On November 1, 1977, Congress passed the Montana Wilderness Study Act (Public Law 95-150). This Act required the Secretary of Agriculture to study and make recommendations to Congress on the wilderness suitability of nine separate National Forest areas in Montana, containing a total of 973,000 acres. In the Montana Wilderness Study Act, Congress specified that the areas be studied using the procedure in Sections 3(b) and 3(d) of the 1964 Wilderness Act (Public Law 88-577).

In November of 1979, the Regional Forester directed a regional study of three of the Montana Wilderness Study Act areas, with the remaining six to be analyzed by the respective forests. Two of these wilderness study areas reside within the plan area and were further studied in 1982. These two areas are the Middle Fork Judith, which is located in the Little Belts Geographic Area, and the Big Snowies, which is located within the Snowies Geographic Area.

### Current Management Direction for Wilderness Study Act Areas

The final decision of the 1982 planning effort for these two wilderness study areas was incorporated into the 1986 Lewis and Clark Forest Plan. This study recommended that the areas be managed as “nonwilderness” but provided that the “wilderness study areas...shall, until Congress determines otherwise, be administered by the Secretary of Agriculture so as to maintain their presently existing wilderness character and potential inclusion in the National Wilderness Preservation System”. To date, these areas are managed for their wilderness characteristics and values. Recent travel planning efforts have also supported and protected the wilderness values of these areas.

## Existing Condition

There are two wilderness study areas in the plan area, the Middle Fork Judith and the Big Snowies. Again, please see map 29 in appendix A.

Table 8.6 lists these wilderness study areas and the acreages associated with them.

**Table 8.6 Montana wilderness study act areas**

Wilderness Study Area	Geographic Area	Acres <sup>1</sup>
Middle Fork Judith	Little Belts	82,127
Big Snowies	Snowies	87,968
Total Acres		247,441

<sup>1</sup>Acres are approximate.

## Wilderness Inventory and Evaluation

Wilderness study act areas are considered to be “large blocks of undeveloped natural landscapes with undisturbed ecosystem conditions” and will be included in the wilderness evaluation process that will be completed during the forest plan revision.

## Inventoried Roadless Areas

### Existing Information

Inventoried roadless areas (IRAs) were first inventoried by the Forest Service in 1972, as part of the Roadless Area Review and Evaluation I (RARE I). The RARE I process initiated a review of National Forest System roadless areas, generally larger than 5,000 acres, to determine their suitability for inclusion in the National Wilderness Preservation System. Several thousand acres of the plan area were identified as having potential for inclusion in the National Wilderness Preservation system through the RARE I process.

RARE I received a fair amount of criticism and was never finalized. To supplement this original work, from 1977 to 1979, the Forest Service conducted a second review of these roadless lands. This second review was known as Roadless Area Review and Evaluation II (RARE II). The purpose of RARE II was to inventory all roadless and undeveloped areas in the National Forest System and recommend their allocations to “wilderness, further planning, or non-wilderness”. Additional acres were added to the IRA inventory that was started in RARE I as a result of the RARE II.

Three areas within the plan area were identified as needing “further planning” by RARE II. One of these areas, Deep Creek – Reservoir North, is located within the Rocky Mountain Range Geographic Area. This area needed further planning due to national interest in oil and gas leases in the area at that time. It was identified as Management Area N in the 1986 Lewis and Clark Forest Plan. In July of 1997, the Lewis and Clark National Forest finalized their Oil and Gas Leasing Final Environmental Impact Statement and Record of Decision (USDA 1997). In that decision, the entire Rocky Mountain Division, including the Deep Creek- Reservoir North IRA, would not be offered for oil and gas leasing. They *may* be available in the future but the Forest Service would not allow those areas to be offered by BLM under this decision. This decision resulted in Forest Plan Amendment #21 to the Lewis and Clark Forest Plan. The National Defense Authorization Act of 2015 identified the Deep Creek-North Reservoir area as an addition to the Bob Marshall Wilderness. It is now included in the management direction for that wilderness area.

The other two IRAs identified for further study by RARE II were the Middle Fork Judith and the Big Snowies. Both of these areas were also identified as Wilderness Study Act areas by the Montana Wilderness Study Act.

## Current Management of Inventoried Roadless Areas

Both the Helena and the Lewis and Clark 1986 Forest Plans provide management direction for IRAs. Additionally, management direction has been established for IRAs under the 2001 Roadless Area Conservation Rule (USDA Forest Service 2001; 36 CFR Part 294). This rule, also known as, the “2001 Roadless Rule” provides management direction for timber cutting, sale and removal, and road construction/reconstruction (36 CFR 294 Subpart B {66 FR 3244} January 12, 2001) in IRAs. Additionally, the rule established guidance for motorized trails within IRA boundaries. All IRA boundaries and acreages within the plan area were firmly established as a part of the 2001 Roadless Rule.

## Existing Condition

There are approximately 1,449,892 acres of lands within IRAs within the plan area. These IRAs constitute approximately 50% percent of the entire lands administered by the Helena and Lewis and Clark National Forests. Table 8.7 identifies each IRA and its location within the plan area.

**Table 8.7 Inventoried roadless areas within the plan area**

Inventoried Roadless Area	Geographic Area (GA)	Acres <sup>1</sup>
Big Log <sup>3</sup>	Big Belts	8,948
Camas Creek	Big Belts	29,168
Cayuse Mountain	Big Belts	20,131
Devils Tower	Big Belts	7,139
Ellis Canyon	Big Belts	5,574
Grassy Mountain	Big Belts	6,734
Hellgate Gulch	Big Belts	16,809
Holter	Big Belts	1,964
Irish Gulch	Big Belts	7,315
Middleman Mtn./Hedges Mtn.	Big Belts	32,282
Mount Baldy <sup>3</sup>	Big Belts	16,349
Total Acres in the Big Belts GA:		152,413
Castle Mountains	Castles	29,386
Total Acres in the Castles GA:		29,386
Box Canyon	Crazies	12,574
Crazy Mountains	Crazies	24,924
Total Acres in the Crazies GA:		37,498
Electric Peak <sup>3</sup>	Divide	27,858
Jericho Mountain	Divide	8,440
Lazyman Gulch	Divide	11,608
Nevada Mountain <sup>2</sup>	Divide	16,085
Total Acres in the Divide GA:		63,991
Elkhorn Wilderness Study Area Plus Additions	Elkhorns	75,415
Total Acres in the Elkhorns GA:		75,415
Highwood Baldy	Highwoods	15,293
Highwoods	Highwoods	24,360
Total Acres in the Highwoods GA:		39,653
Big Baldy	Little Belts	43,102

Inventoried Roadless Area	Geographic Area (GA)	Acres <sup>1</sup>
Bluff Mountain	Little Belts	38,033
Calf Creek	Little Belts	10,100
Eagle Park	Little Belts	5,908
Granite Mountain	Little Belts	10,330
Middle Fork Judith	Little Belts	9,707
Middle Fork Judith WSA	Little Belts	81,069
Mount High	Little Belts	33,461
North Fork Smith	Little Belts	8,438
Paine Gulch	Little Belts	7,869
Pilgrim Creek	Little Belts	44,572
Sawmill Creek	Little Belts	11,578
Spring Creek	Little Belts	17,827
Tenderfoot-Deep Creek	Little Belts	85,546
Tollgate-Sheep	Little Belts	24,026
TW Mountain	Little Belts	8,381
Total Acres in the Little Belts GA:		439,997
Bear-Marshall-Scapegoat-Swan <sup>2, 3</sup>	Rocky Mountain Range	343,909
Sawtooth	Rocky Mountain Range	15,687
Total Acres in the Rocky Mountain Range GA:		359,596
Big Snowies	Snowies	9,254
Big Snowy Mountains WSA	Snowies	87,965
Total Acres in the Snowies GA:		97,219
Anaconda Hill	Upper Blackfoot	18,536
Bear-Marshall-Scapegoat-Swan <sup>2, 3</sup>	Upper Blackfoot	51,339
Crater Mountain	Upper Blackfoot	9,261
Lincoln Gulch	Upper Blackfoot	8,247
Nevada Mountain <sup>2</sup>	Upper Blackfoot	34,027
Ogden Mountain	Upper Blackfoot	12,144
Silver King-Falls Creek	Upper Blackfoot	6,808
Specimen Creek	Upper Blackfoot	12,362
Total Acres in the Upper Blackfoot GA:		152,724
<b>Total IRA Acres in the HLC Planning Area:</b>		<b>1,447,892</b>

<sup>1</sup>All acreages are approximate

<sup>2</sup>Located in more than one geographic area; acres reflected are what are in that particular geographic area.

<sup>3</sup>Part or all of the Inventoried Roadless Areas has been identified for recommended wilderness designation

Please see map 30 in appendix A, Inventoried Roadless Areas.

### *Wilderness Inventory and Evaluation*

An integral part of forest plan revision is to establish an updated inventory and evaluation of potential areas that could be recommended for inclusion in the National Wilderness Preservation System. Many of the desirable characteristics when considering the opportunity to designate additional wilderness, such as large blocks of undeveloped natural landscapes with undisturbed ecosystem conditions, will be considered during the inventory



and evaluation for additional wilderness. The IRA within the plan area will be included in the Wilderness Inventory and Evaluation that will be conducted as a part of the planning effort.

## Elkhorn Wildlife Management Unit

### *Existing Information*

#### Significant Legislative History

The Montana Wilderness Study Act (Public Law 95-150) identified the Elkhorn Mountain range as needing “additional study” for its potential inclusion in the National Wilderness Preservation System. Before the Montana Wilderness Study Act was finalized in 1977, and after considerable public input and hearings, Congressman John Melcher separated the Elkhorns out of the act and introduced similar but separate legislation that established an individual wilderness study area for the Elkhorns. By enacting Public Law 94-557 in 1976, Congress directed the Forest Service to evaluate approximately 77,346 acres of the Elkhorns for possible inclusion in the National Wilderness Preservation System.

Between 1977 and 1981, the Elkhorns Wilderness Study Area was analyzed to determine its inclusion into the National Wilderness Preservation System. There was high public interest in the analysis that was conducted, and much criticism from both the conservation and multiple use communities. Finally, on November 24, 1981, chief of the Forest Service, R. Max Peterson, signed a record of decision based on the analysis in the Final Environmental Impact Statement. The record of decision states, “It is my decision to recommend that the Elkhorn Wilderness Study Area not be designated wilderness. Direction will be developed for the Helena and Deerlodge Forest Plans to establish a management unit which emphasizes the very high wildlife values.” All 160,000 acres of Forest System lands within the Elkhorn Mountain Range were administratively designated as a wildlife management unit.

In 1982, President Reagan transmitted to congress his concurrence with the Secretary of Agriculture (John Block) that the Elkhorns were not suitable for inclusion in the National Wilderness Preservation System. Congress had four years to consider that recommendation and act on it, and if not, the recommendation would be automatically implemented. During that 4-year period, the Forest Service was to continue managing the study area to maintain its wilderness potential. By 1986, in the four years, congress did not act on the President’s recommendation, which automatically implemented the recommendation and released the Forest Service from its mandate to maintain the area under the designation as a wilderness study area.

In 1986-1987, both the Helena and Deerlodge Forest Plans were finalized and both included goals and standards for management of the Elkhorns. Two amendments to the Helena Forest Plan, Amendments 10 and 11, were established in 1995. These amendments provide direction for the Elkhorns in future management of the vegetative component on this landscape.

#### Cooperative Management in the Elkhorns

In the interest of managing this ecosystem with an emphasis on fish and wildlife values, the Bureau of Land Management; Montana Fish, Wildlife, and Parks; and the Helena and Beaverhead-Deerlodge National Forest entered into a memorandum of understanding (MOU) in 1992 to provide consistent management across administrative boundaries. In 2013, the Natural Resource Conservation Service (NRCS) signed on as a partner. The MOU establishes the framework for interagency cooperation and management in the Elkhorns through the identification of roles and responsibilities. Forest Service staff fulfills those roles and responsibilities through an assemblage of committees to cooperatively manage resources in the Elkhorns. A collaborative Elkhorn-specific program of work is developed annually that is decided upon by the Elkhorn Steering Committee that includes the Forest Supervisor. Additionally, there are two citizens groups at work in the Elkhorns: the Elkhorn Working Group and the Elkhorn Restoration Committee. Even though portions of the Elkhorns are located on the

Beaverhead-Deerlodge National Forest, the entire mountain range is included in the Elkhorns GA in the HLC NFs planning process. The Beaverhead-Deerlodge National Forest did not include the Elkhorns in their forest planning effort.

The Elkhorn Working Group was initially established in 2002 to advise the MTFWP, and the BLM in the development of collaborative recommendations related to wildlife/livestock management strategies in the Elkhorn's. Over time, the Elkhorns Working Group has become a catalyst for self-sustaining, local responsibility for problem solving in the Elkhorn's. The Elkhorns Working Group is composed of local landowners; representatives of the business, sporting, and environmental communities; and employees from the Forest Service, counties, BLM, and MTFWP.

The Elkhorn Restoration Committee has its roots as a subcommittee of the Elkhorns Working Group with the goal of developing a site specific project to accomplish restoration opportunities identified in the Elkhorn Vegetation Study. Because of the scale of such an undertaking, it soon became apparent that a broader group would be needed to accomplish this endeavor. As a result, a new citizen's group was formed under the umbrella of the Montana Forest Restoration Committee. The goal of the Elkhorns Restorations Committee is to work with agency staff, organizations, and other interested parties to develop site-specific proposals for landscape restoration in the Elkhorns. To date, the Elkhorns Restoration Committee has developed a desired condition and potential restoration treatment opportunities in the Crow Creek Analysis Area.

### *Existing Condition*

The Elkhorn Mountains comprise an island mountain range that lies in Broadwater, Jefferson and Lewis and Clark Counties approximately 18 air miles southeast of Helena, Montana. This prominent mountain range is approximately 21 miles long and 19 miles wide and Forest Service System lands within this mountain range total approximately 160,000 acres.

The landscapes and the vegetation of the Elkhorn Mountain range have been significantly altered by historic placer and lode mining, free range grazing, and recreation. Additionally, in the early years of European settlement, the area was heavily hunted and the populations of many big game species in the area were depleted. These influences have had serious and lasting impact on the natural resources of the area and the protection and restoration of this important landscape are some of the primary reasons it has been designated as a wildlife management area.

Please see map 31 in appendix A.

## Rocky Mountain Front Conservation Management Area

### *Existing Information*

Included in the National Defense Authorization Act of 2015 was language that established the Rocky Mountain Front Conservation Management Area. The law includes approximately 195,073 acres of federal lands managed by the Forest Service and approximately 13,087 acres of federal land managed by the Bureau of Land Management.

The stated purpose for this conservation management area is to “conserve, protect, and enhance for the benefit and enjoyment of present and future generations the recreational, scenic, historical, cultural, fish, wildlife, roadless, and ecological values of the Conservation Management Area”. The law directs the management of motorized vehicles on roads and trails, decommissioning of temporary roads, grazing, vegetation management, noxious weed management, and nonmotorized recreation opportunities.

This newly designated area lies within the Rocky Mountain Range Geographic Area and includes all of the Rocky Mountain Ranger District lands on the Lewis and Clark National Forest, except for the Badger Two Medicine area which is located at the far north end of the district.

Since passing of the law is so recent, the full impacts and implications of implementation are somewhat uncertain at the date and time of writing of this assessment. The direction provide by the NDAA will be fully incorporated into the revised forest plan.

## Wild and Scenic Rivers

### *Existing Information*

Congress passed the National Wild and Scenic Rivers System Act in 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.) for the purpose of preserving rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act is recognized for safeguarding the special character of these rivers, while also allowing for their appropriate use and development. The Act promotes river management across political boundaries and public participation in developing goals for river protection.

For wild and scenic rivers, the designated management boundaries generally average one-quarter mile on either bank in the lower 48 United States. The purpose of this one-quarter mile management corridor is to protect river-related values. For management purposes, river segments are classified as *wild*, *scenic*, or *recreational*.

- **Wild River Areas** – those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
- **Scenic River Areas** – those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
- **Recreational River Areas** – those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

Each river in the National System is administered with the goal of protecting and enhancing the outstanding remarkable values for which it was designated. Recreation, agricultural practices, transportation development, and other uses may generally continue after designation.

### *Existing Condition*

#### Existing Eligible Segments of Wild and Scenic Rivers

Following the adoption of the 1986 Plans, both the Helena and the Lewis and Clark National Forests conducted eligibility studies. The Helena National Forest identified four rivers as eligible for further study for wild and scenic river classification and the Lewis and Clark National Forest identified nine rivers as eligible.

Determinations for eligibility were made using the process outlined in the National Wild and Scenic Rivers System Act. The results of these studies were documented in forest plan amendments to both National Forest plans. Please see map 32 in appendix A, Existing Eligible Wild and Scenic Rivers. Table 8.8 lists each eligible segment by geographic area, description, length, and the outstanding remarkable values identified for each.

**Table 8.8 River segments previously determined eligible for WSR classification**

Segment Name	Geographic Area	Potential Classification	Outstanding Remarkable Values	Location/Description	Miles
Beaver Creek	Big Belts	Recreational	Fisheries	From Nelson to where Beaver Creek intersects the Missouri River	4.5

Segment Name	Geographic Area	Potential Classification	Outstanding Remarkable Values	Location/Description	Miles
Missouri River Section (10A)	Big Belts	Scenic	Fisheries Wildlife Recreation Geology Natural	Hauser Dam to Cochran Gulch	2.5
Smith River	Big Belts and Little Belts	Scenic	Scenic Recreation Geology Fisheries Wildlife Cultural	National Forest land north to Tenderfoot Creek to NF south of Deep Creek	11.8 <sup>1</sup>
Little Blackfoot River	Divide	Wild	Fisheries	Segment 1: From the Little Blackfoot River Trailhead to the area to the south of the Little Blackfoot Meadows	6.0
	Divide	Recreational	Fisheries	Segment 2: From the Little Blackfoot River Trailhead to the Beaverhead/Deerlodge NF boundary	5.0
Tenderfoot Creek	Little Belts	Scenic	Fisheries	Falls to Smith river	4.6 <sup>2</sup>
Green Fork Straight Creek	Rocky Mountain Range	Wild	Scenic Geology	Headwaters to Straight Creek	4.5
Middle Fork Judith River	Little Belts	Recreational	Cultural	Junction with Arch Coulee to Forest boundary	4.8
North Badger Creek	Rocky Mountain Range	Scenic	Fisheries	Confluence with Pool Creek to Falls	7.3
Dearborn River	Rocky Mountain Range	Scenic	Scenic	Headwaters to Forest Boundary	18.1
North Fork Sun River	Rocky Mountain Range	Wild	Wildlife	Segment 1: Confluence with Fool Creek to Wilderness Boundary Segment	25.4
	Rocky Mountain Range	Recreational	Recreation	Segment 2: Wilderness boundary to confluence with South Fork Sun River	1.3
South Fork Sun River	Rocky Mountain Range	Wild	Recreation	Headwaters at Sun Lake to confluence with South Fork Sun River	25.5
North Fork Birch Creek	Rocky Mountain Range	Wild	Scenic Geology	Headwaters to Forest boundary	6.6
Copper Creek	Upper Blackfoot	Recreational	Fisheries	Mouth of Copper Creek where it joins with Landers Fork to the confluence North Fork Copper Creek	5.0
<b>Total Miles of eligible sections of Wild and Scenic Rivers</b>					<b>132.9</b>

<sup>1</sup> The length of the river is actually 23 miles; however, potential classification only applies to approximately 11.8 miles of Lewis and Clark National Forest System land along the river.

<sup>2</sup>The length between the upper and lower boundary is 8.6 miles; however, potential classification only applies to approximately 4.6 miles of Lewis and Clark National Forest System land along the creek.

## *Eligible Wild and Scenic Rivers Inventory and Evaluation*

An inventory of eligible rivers for inclusion in the wild and scenic rivers system is also required for forest plan revision and will be completed as a part of the revision process. Rivers that have already been identified as eligible will receive another hard look to determine if additional outstanding and remarkable values are present or if the extent of the eligible area may be expanded.

## Nationally Designated Trails

### *Existing Information*

The National Trails System Act (Public Law 90-543) was signed into law by President Lyndon B. Johnson on October 2, 1968. The purpose of the act was "to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation." This act authorized three types of trails: 1) National Scenic Trails, 2) National Recreation Trails, and 3) connecting-and-side trails. In 1978 National Historic Trails were also added to the national trail system. While National Scenic Trails and National Historic Trails may only be designated by Congress, National Recreation Trails may be designated by the Secretary of Interior or the Secretary of Agriculture to recognize exemplary trails of local and regional significance in response to an application from the trails managing agency or organization. Through designation, these trails are recognized as part of America's National Trail System.

### *Existing Condition*

There are 33 nationally designated trails within the plan area. Please see map 33 in appendix A, Special Designated Roads and Trails.

Table 8.9 lists the nationally designated trails within the plan area. The table shows the national designation of these trails as well as the overall length. Of these trails, only two receive additional earmark funding from Congress for their overall maintenance and interpretation: Continental Divide National Scenic Trail (CDNST) and the Lewis and Clark National Historic Trail.

**Table 8.9 Nationally designated trails within the plan area**

<b>Trail Name</b>	<b>Trail #</b>	<b>Geographic Area</b>	<b>National Designation</b>	<b>County</b>	<b>Miles<sup>1</sup></b>
Hanging Valley	247	Big Belts	Scenic	Lewis and Clark	6
Mt. Helena	373	Divide	Scenic	Lewis and Clark	6
North Fork Deep Creek	303	Little Belts	Recreation	Cascade, Meagher	6
Ming Coule	307	Little Belts	Recreation	Meagher	3
South Fork Deep Creek	316	Little Belts	Recreation	Meagher Cascade	5
Blankanbaker	320	Little Belts	Recreation	Meagher	4
Deep Creek Ridge	338	Little Belts	Recreation	Meagher Cascade	6
Monument Ridge	339	Little Belts	Recreation	Cascade	2
Crystal Lake	404	Snowies	Recreation	Fergus	2
Continental Divide (CDNST)	337	Divide	Scenic	Lewis and Clark	68
Two-Med-Heart Butte (CDNST)	101	Rocky Mountain Range	Scenic	Pondera	4

Trail Name	Trail #	Geographic Area	National Designation	County	Miles <sup>1</sup>
North Fork Badger (CDNST)	103	Rocky Mountain Range	Scenic	Pondera	1
North Fork Sun (CDNST)	110	Rocky Mountain Range	Scenic	Teton	4
Rock Creek (CDNST)	111	Rocky Mountain Range	Scenic	Lewis and Clark	12
Open Fork (CDNST)	116	Rocky Mountain Range	Scenic	Lewis and Clark	6
North Fork Red Shale (CDNST)	130	Rocky Mountain Range	Scenic	Lewis and Clark	7
Summit Campground Cutoff (CDNST)	133	Rocky Mountain Range	Scenic	Glacier	2
Elk Calf Mountain (CDNST)	137	Rocky Mountain Range	Scenic	Glacier and Pondera	10
Lee Creek-Sidney Creek (CDNST)	141	Rocky Mountain Range	Scenic	Pondera	5
Kip Creek (CDNST)	142	Rocky Mountain Range	Scenic	Pondera	3
Elbow Creek (CDNST)	145	Rocky Mountain Range	Scenic	Pondera	4
Muskrat Creek (CDNST)	147	Rocky Mountain Range	Scenic	Pondera	7
North Wall (CDNST)	174	Rocky Mountain Range	Scenic	Lewis and Clark	11
Wall Trail (CDNST)	175	Rocky Mountain Range	Scenic	Lewis and Clark	6
My Lake (CDNST)	194	Rocky Mountain Range	Scenic	Lewis and Clark	4
South Fork Sun(CDNST)	202	Rocky Mountain Range	Scenic	Lewis and Clark	13
West Fork Sun (CDNST)	203	Rocky Mountain Range	Scenic	Lewis and Clark	16
Dearborn River (CDNST)	206	Rocky Mountain Range	Scenic	Lewis and Clark	9
Blacktail-Landers Fork (CDNST)	207	Rocky Mountain Range	Scenic	Lewis and Clark	3
Straight Creek (CDNST)	212	Rocky Mountain Range	Scenic	Lewis and Clark	10
Elbow Pass (CDNST)	248	Rocky Mountain Range	Scenic	Lewis and Clark	3
Continental Divide National Scenic Trail	440	Upper Blackfoot	Scenic	Lewis and Clark	65
Lewis and Clark National Historic Trail	N/A	Upper Blackfoot and Big Belts	Historic	Lewis and Clark and Powell	12.9
Total Miles					313

<sup>1</sup>Miles are approximate and rounded to the nearest tenth

## Continental Divide National Scenic Trail

The Continental Divide National Scenic Trail (CDNST) is managed according to the National Trails Act, the CDNST Study Reports and Final Environmental Impact Statement, and the CDNST Comprehensive Plan (as amended) for the purpose of providing:

- “A continuous, appealing trail route, designed for the hiker and horseman, but compatible with other land uses.”
- Access for hikers and stock into the diverse country along the Continental Divide in a manner which will assure a high quality recreation experience while maintaining a constant respect for the natural environment.

There are approximately 289 miles of the CDNST located within the plan area. Approximately 65 miles of the trail is located in the Upper Blackfoot Geographic Area, approximately 68 miles is located within the Divide Geographic Area, and approximately 156 miles is located within the Rocky Mountain Range Geographic Area.

A map of the CDNST can be found in appendix A.

## Lewis and Clark National Historic Trail

The Lewis and Clark National Historic Trail (LCNHT) is the historic trail that commemorates the Lewis and Clark Expedition of 1804 to 1806. The entire route is 3,700 miles long and extends from Wood River, Illinois, to the mouth of the Columbia River in Oregon. The overall trail is administered by the National Park Service, but individual sites along the trail are managed by different federal, state, local, tribal, and private organizations and agencies. This historic trail is not a traditional hiking-only trail and can also be traveled by car, boat, and/or horseback. Many interpretive centers, signs, and recreation facilities are located along the entire length of the trail.

Approximately 12.9 miles of the trail are located on forested lands within the planning area. Recreation sites within the plan area that specifically tie to the LCNHT include the Lewis and Clark National Historic Trail Interpretive Center (LCIC) in Great Falls, Montana, as well as Lewis and Clark Pass in Alice Creek in the Upper Blackfoot Geographic Area and Meriwether Day Use site within the Big Belts Geographic Area.

A map of the LCNHT can be found in appendix A.

## Lewis and Clark National Historic Trail Interpretive Center

### *Existing Information*

On October 28, 1988 Congress passed Public Law 100-552, establishing the Lewis and Clark Interpretive Center (LCIC). This law authorized the Forest Service to plan, build, and manage this facility. While the LCIC is a valued resource within the Lewis and Clark National Forest, its enabling legislation and mission are vastly different from the plan area as a whole. Due to this strong mission and to its tie to the enabling legislation, further analysis of the interpretive center will not be incorporated into the forest plan revision process.

### *Existing Condition*

On May 5, 1998, after 10 years of fund raising, planning and construction, the LCIC opened its doors. The building is approximately 25,000 square feet and includes a 158 seat theater, a 6000 square foot exhibit hall, and a 1500 square foot resource center that is used for education programming, training center, and reception area. The facility is open year round and serves about 45,000 visitors and 4,000 children annually. Approximately 20% of the visitors to the center come from foreign countries, primarily Canada.

## National Historic Landmarks

### *Existing Condition*

Currently there are no National Historic Landmarks located within the planning area. However, two are located very near (within 100 miles) the Rocky Mountain Range Geographic Area. These two historic landmarks are Camp Disappointment and the Great Falls Portage and have the potential to be influenced by the management of the landscapes within the plan area.

Camp Disappointment is located on Cut Bank Creek near Browning, Montana on the Blackfeet Reservation. This important landmark marks the campsite of Captain Meriwether Lewis on his trip home from the Pacific in 1806. It

represents the northernmost point reached by the Lewis and Clark Expedition and was identified using scenic landmarks and visual points located along the Rocky Mountain Range.

The Great Falls Portage National Historic Landmark is located both near and through the community of Great Falls, Montana. This landmark represents the 18 mile, 31 day portage around the Great Falls of the Missouri, one of the most difficult ordeals of the Lewis and Clark expedition. A portion of this landmark touches the Sulphur Springs, noted in journals as reviving Sacajawea, who lay very ill in the nearby lower portage camp. Even though the Sulphur Springs lies on lands managed by the Montana Department of Fish, Wildlife, and Parks, the Forest Service has an agreement with MTFWP for maintaining the trails and interpretation at this site.

## Nationally Significant Caves

### *Existing Information*

The Federal Cave Resources Protection Act of 1988 (PL 100-691) provides specific authority to protect cave resources on federal lands. This act recognizes that significant caves on federal lands are an invaluable and irreplaceable part of the Nation's natural heritage; and in some instances, these significant caves are threatened due to improper use, increased recreational demand, urban spread, and lack of specific statutory protection. The act includes the following direction:

- Identification of significant caves on federal lands
- Regulation or restriction of use of significant caves, as appropriate
- Entering into volunteer management agreement with persons of the scientific and recreational caving community
- Imposing the confidentiality of information concerning the nature and location of significant caves
- Issuing permits for the collection and removal of cave resources, and
- Prohibited acts and criminal and civil penalties

### Forest Plan Direction for Cave Management

After the passing of the Federal Cave Resources Protection Act of 1988 (PL 100-691), the Lewis and Clark National Forest passed Amendment #13 to the forest plan. This created management standard N-3 to Special Areas and provided direction for cave inventory, management and protection.

### *Existing Condition*

The Helena National Forest has eight nationally significant caves and the Lewis and Clark National Forest has two. These caves are a very small subset of the total number of known caves within the plan area but reflect activity in the 1990's by the Forest Service to inventory and evaluate the caves within the plan area. All of these caves were identified and listed due to their recreational significance.

Geology within the plan area is especially favorable for extensive cave resources. The plan area is rich in underlying limestone bedrock formations and 'exhumation' history. Many caves were formed while the limestone formations were below ground and are seen now because of mountain uplift. *Reference Caves of Montana* by Newell Campbell (Montana Bureau of Mines and Geology Bulletin 105 1978) describes an inventory of 83 caves in the Little Belts, Snowies, Crazies, and Castles Geographic Areas and 20 caves within the Rocky Mountain Range Geographic Area. According to Campbell's work, there are approximately 8-10 additional caves located within or very near the Divide Geographic Area.



The Montana Natural Heritage program has been instrumental in the monitoring and research of bat populations within the caves of Montana. Recent surveys in Lick Creek Cave from March 2014 show that some *Myotis* bat populations are increasing while the Townsend's big-eared bats are decreasing (Corbett, 2011).

In 2009, wildlife biologists discovered the bat disease white nose syndrome. This disease has infected and been highly fatal to numerous bat colonies across the eastern seaboard into Maine and as far west as Missouri. Wildlife biologists project that it is probably a matter of time before the disease moves into the Rocky Mountains of the west. However, recent survey work indicates that the fungus is still not present in local caves (Corbett, 2011).

Recreation use of several caves within the plan area has resulted in degradation to the cave resource, and/or, management issues. For example, Lick Creek Cave within the Little Belts Geographic Area has had visitor use for decades and the cave contains abundant graffiti, broken speleothems and garbage. Ophir Cave within the Divide Geographic Area also has recreation related issues. In the past 5-10 years there has been one fatal accident and several other human safety-related issues occurred. Keeping the public safe while they explore these sites is of continued management concern. The Forest Service and other agencies have been working on potential management measures for caves, such as education programs and a permit system, to protect against the spread of disease in bats and limit recreation damage to the cave resource, but none have been formally adopted in the northern region to date.

## Research Natural Areas

### *Existing Information*

The Organic Administration Act of June 4, 1897 authorizes the Secretary of Agriculture to designate research natural areas. Special designations, 36 CFR 219.23 and 36 CFR 219.25, advise that forest planning shall provide for the establishment of research natural areas. Areas of important forest, scrubland, grassland, alpine, aquatic, and geologic types that have special or unique characteristics of scientific interest and importance will be identified and proposed as lands needed to complete the national research natural area network. Additionally, research natural area identification, establishment and management are outlined in FSM 4063.

### *Existing Condition*

Research natural areas are permanently established to maintain areas of natural ecosystems and areas of special ecological significance. These protective designations attempt to maintain natural ecosystem components and processes and are cooperatively identified, established and managed with the USDA Forest Service Rocky Mountain Research Station. The designated areas form a long-term network of ecological reserves established as baseline areas for non-manipulative research, education, and the maintenance of biodiversity. They are administratively designated by the Regional Forester with research station director concurrence. In some cases stewardship management is needed to maintain or restore the target plant communities in research natural areas, including actions such as invasive weed control or prescribed fire. For example, the Wagner Basin Research Natural Area has recently been treated to control the spread of spotted knapweed. These management activities are also coordinated between the national forests and the research station.

Table 8.10 displays the existing designated research natural areas within the plan area, the purpose for establishment, and the acres associated with each.

**Table 8.10 Currently designated and proposed research natural areas**

Research Natural Area	Geographic Area	Purpose for Establishment	Designated	Proposed	Acres <sup>1</sup>
Cabin Gulch	Big Belts	Douglas-fir with bunchgrass understory.	X		2408
Bartleson Peak	Little Belts	Spruce/cleft leaf groundsel and	X		1600

Research Natural Area	Geographic Area	Purpose for Establishment	Designated	Proposed	Acres <sup>1</sup>
		cinquefoil/Idaho fescue habitat types			
O'Brien Creek	Little Belts	A variety of riparian vegetation types, an un-entrenched, moderate to gentle gradient stream.	X		692
Onion Park	Little Belts	Tufted hairgrass-sedge, subalpine fir/grouse whortleberry and subalpine fir/bluejoint reedgrass; mesic meadow	X		1208
Paine Gulch	Little Belts	Long-lived seral Douglas-fir on subalpine fir series sites, seral ponderosa pine and limber pine communities on Douglas-fir series sites.	X		2403
Wagner Basin	Rocky Mountain Range	Unique wetland complexes containing large populations of Giant helleborine and yellow lady's-slipper.	X		939
Walling Reef	Rocky Mountain Range	High-elevation forest, shrubland, grassland, wetland, and alpine ecosystems.	X		834
Greathouse Peak	Snowies	Alpine tundra plant communities on an alpine plateau composed of calcareous (limestone) substrate	X		1280
Big Snowy – Old Baldy	Snowies	Alpine tundra plant communities on an alpine plateau composed of calcareous (limestone) substrate	X		1866
Minerva Creek	Snowies	Ponderosa pine/snowberry interspersed with meadows	X		336
Granite Butte	Upper Blackfoot	Subalpine fir and white bark pine habitat types, high alpine non forest habitat types and wet meadows. (see text for potential change regarding this proposed RNA)		X <sup>2</sup>	394
Indian Meadows	Upper Blackfoot	Douglas fir/blue huckleberry, Douglas fir/pine grass, Douglas fir/elk sedge, Subalpine fir/beargrass, Subalpine fir/bluejoint, Subalpine fir/menziesia and wet meadows.	X		949
Red Mountain	Upper Blackfoot	Subalpine fir and whitebark pine habitat types, high alpine non forest habitat types, scree and type I and II streams	X		1901
Total RNA Acres					16,955

<sup>1</sup>All acreages are approximate. <sup>2</sup>Potential change regarding the Granite Butte Proposed RNA. See text below.

A map of the research natural areas can be found in appendix A.

Kingsberry Gulch Proposed Research Natural Area in the Big Belt Geographic Area was identified in the original 1986 Helena National Forest Plan. In 1997, via Helena Forest Plan Amendment #16, this area was dropped as an official research natural area. It was officially substituted with the Cabin Gulch Research Natural Area, which has similar vegetation, aspect and slope.

### Potential Need and Opportunity for Additional Designated Areas

As described in Table 8.7, Granite Butte is currently identified as a proposed research natural area that has not yet been formally established. There are a variety of concerns associated with this proposed research natural area. The primary concern is the ATV use in the area. To alleviate this concern, in 2008 a suitable substitute not subject to

ATV impacts was sought for the proposed Granite Butte Proposed Research Natural Area. This proposed substitution area, encompassing Poe Park and Manley Park in the Elkhorns, supports a mountain grassland habitat similar to Granite Butte. The Poe-Manley site was field checked in 2008 and was found to be worthy of research natural area designation.

The primary difference between the two locations is that the Granite Butte site has a ribbon forest - snow glade feature that hosts special plant communities that are uncommon in the area and not present at the Poe/Manley site. This snow glade-ribbon forest should be considered for potential designation as a special botanical area. Because the nomination of the Poe/Manley site as a replacement for the Granite Butte site is a site-specific proposal, it will take place outside of the forest planning process, which has a broader, more programmatic mandate.

*Future Plant Association Considerations*

Original research natural area target assignments for plant associations on the national forests in Region 1 were given in the 1983 Regional Planning Guide. The Northern Region Status and Needs Assessment for Research Natural Areas (Chadde et al. 1996) updated the planning guide, and recommended additional unrepresented plant associations on each national forest in Region 1 so that the entire range of associations in the Northern Region can be represented in the research natural area network.

The recommendations provided in Chadde et al. (1996) will need thorough review to prioritize associations as far as what is present or appropriate on the ground. This will require not only closer review of the documents, but long-term field review and assessment followed by appropriate decisions. Given time and resource limitations, most of this effort will necessarily come after completion of the forest plan revision.

Table 8.11 identifies those unrepresented plant associations within the plan area that should be considered in future designation of research natural areas within the plan area.

**Table 8.11 Plant associations currently unrepresented (Chadde et al. 1996)**

Forest	Common Name	Scientific Name	Priority
Helena	Subalpine fir/ elk sedge	Abies lasiocarpa/Carex geyeri	Medium
	Spruce/false Solomon's seal	Picea/Smilacina stellata	High
	Limber pine/rough fescue	Pinus flexilis/Agropyron spicatum	Medium
	Ponderosa pine/rough fescue	Pinus ponderosa/Agropyron spicatum	High
	Ponderosa pine/red osier dogwood	Pinus ponderosa/Cornus stolonifera	High
	Ponderosa pine/Idaho fescue	Pinus ponderosa/Festuca idahoensis	High
	Ponderosa pine/ Antelope bitterbrush	Pinus ponderosa/Purshia tridentata	High
	Douglas fir/heartleaf arnica	Pseudotsuga menziesii/Arnica cordifolia	High
	Douglas fir/red osier dogwood	Pseudotsuga menziesii/Cornus stolonifera	High
	Douglas fir/birch leaf spirea	Pseudotsuga menziesii/Spiraea betulifolia	Medium
	Sagebrush/rough fescue	Artemisia tridentata/Agropyron spicatum	Medium
	American dwarf birch/sedge	Betula glandulosa/Carex	Medium
	Shrubby Cinquefoil/tufted hair grass	Potentilla fruticosa/Deschampsia cespitosa	High
	Idaho fescue/western wheatgrass	Festuca idahoensis - Agropyron smithii	High
Lewis and Clark	Subalpine fir/heartleaf arnica	Abies lasiocarpa/Arnica cordifolia	Unfilled/Moderate
	Subalpine fir/elk sedge	Abies lasiocarpa/Carex geyeri	Moderate
	Subalpine fir/clematis	Abies lasiocarpa/Clematis columbiana	Moderate
	Subalpine fir/sweet-scented bedstraw	Abies lasiocarpa/Galium triflorum	Moderate
	Subalpine fir/dwarf whortleberry	Abies lasiocarpa/Vaccinium cespitosum	Moderate

Forest	Common Name	Scientific Name	Priority
	Spruce/false Solomon's seal	Picea/Smilacina stellata	High
	Spruce/ dwarf whortleberry	Picea/Vaccinium cespitosum	Moderate
	Ponderosa pine/red osier dogwood	Pinus ponderosa/Cornus stolonifera	High
	Douglas fir/heartleaf arnica	Pseudotsuga menziesii/Arnica cordifolia	High
	Douglas fir/rough fescue	Pseudotsuga menziesii/Festuca scabrella	High
	Douglas fir/ dwarf whortleberry	Pseudotsuga menziesii/Vaccinium cespitosum	Moderate
	Douglas fir/common huckleberry	Pseudotsuga menziesii/Vaccinium globulare	Moderate
	Sagebrush/rough fescue	Artemisia tridentata/Festuca scabrella	High
	American dwarf birch/sedge	Betula glandulosa/Carex	Medium
	Shrubby Cinquefoil/tufted hair grass	Potentilla fruticosa/Deschampsia cespitosa	High
	Shrubby Cinquefoil/Idaho fescue	Potentilla fruticosa/Festuca idahoensis	High
	Bluebunch wheatgrass-western wheatgrass	Agropyron spicatum - Agropyron smithii	High
	Rough fescue	Festuca scabrella - Agropyron spicatum	High
	Rough fescue	Festuca scabrella - Festuca idahoensis	High
	Broadleaf cattail	Typha latifolia	Medium

## Special Areas

### *Existing Information*

Forest Service Manual Chapter 2370 provides direction for special recreation designations, also known as special areas or special interest areas. Special areas may be designated for sites with scenic, geological, botanical, zoological, paleontological, archaeological, historical, recreational, or other special characteristics or special values. An analysis of the need and desirability for special areas should be included in the forest plan (FSM 2372.2). Special area sites are considered to be established, proposed, candidate, and nominated and each of these have special review requirements established for them.

### *Existing Condition*

Special areas are certain limited areas of National Forest System lands not designated as wilderness and containing outstanding examples of plant and animal communities, geological features, scenic grandeur, or other special attributes that merit special management (FSM 2370). These areas can be designated administratively. Designated special areas are managed to emphasize recreational or other specific values for which they have been identified. Other uses are permitted in the areas to the extent that these uses are in harmony with the purpose for which the area was designated. Management direction for each special area is included in the forest plan, or in a plan amendment for areas established after the forest plan was approved.

Since the implementation of the 1986 plans, only four areas within the plan area were identified as potential special areas: Lick Creek Cave, Jumping Creek, Green Timber Basin-Beaver Creek, and Our Lake. These areas have not been formally established and each is in need of further review prior to being recommended for establishment or formal approval. Table 8.12 identifies each area, the geographic area it is located within, the stage of approval, and the acreage associated with each, if pertinent.

**Table 8.12 Special areas**

Special Area	Geographic Area	Establishment Category	Special Area Type	Acres <sup>1</sup>
Lick Creek Cave	Little Belts	Proposed	Geologic/Cave Resource	--
Jumping Creek	Little Belts	Proposed	Botanical	275
Green Timber Basin – Beaver Creek	Rocky Mountain Range	Candidate	Botanical	76
Our Lake	Rocky Mountain Range	Nominated	Botanical	100
Total Acres				451

<sup>1</sup>All acreages are approximate.

Of the areas identified as having potential for special area designation, only Lick Creek Cave has had additional research conducted. This large cave has been identified in a number of publications noting its special qualities as an important cave resource. Research for this assessment was unable to ascertain whether Lick Creek was ever formally established as a special area. However, in this time period, the Lewis and Clark National Forest passed Amendment #13 to the forest plan. This created Management Standard N-3 to Special Areas and provided direction for cave inventory, management, and protection.

### Special Area Recommendations

It is recommended that further review be completed for the above identified special areas during the forest plan revision process. Additionally, other special areas within the plan area should also be considered or studied for this forest planning effort.

## Tenderfoot Creek Experimental Forest

### *Existing Condition*

The USDA Forest Service’s system of experimental forests and ranges provides an incredible wealth of records and knowledge of environmental change in natural and managed forest and rangeland ecosystems across the United States. The research branch of the Forest Service manages these experimental forests. The present system of 80 experimental forests and ranges has been established progressively since 1908; many sites were established more than 50 years ago. The system provides places for long-term science and management studies in major vegetation types of the 195 million acres of public land administered by the Forest Service. Individual sites range from 47 to 22,500 acres in size.

The Tenderfoot Creek Experimental Forest is managed by the Rocky Mountain Research Station, based in Missoula Montana, and encompasses 9,125 acres of the headwaters of Tenderfoot Creek in the Little Belt Mountains on the Lewis and Clark National Forest. Tenderfoot Creek is a major tributary of the Smith and Missouri Rivers, thus providing an important hydrologic resource for much of central Montana. Lodgepole pine and mixed lodgepole pine with Engelmann spruce and subalpine fir stands occupy about 8,681 acres, wet meadows cover 311 acres, and drier grass and scree slopes make up another 133 acres. Elevations range from 6,035 to 7,941 feet.

The Tenderfoot Creek Experimental Forest is representative of the vast expanses of lodgepole pine (*Pinus contorta* var. *latifolia*) found east of the Continental Divide in Montana and is typical of fire-prone forests at moderate to high altitudes in the Northern Rocky Mountains. Forest stands are classified as 1-aged (47% of the forested area) and 2-aged (53% of the forested area) which were created by past stand replacement and mixed severity fires (see Fire History of Tenderfoot Creek Experimental Forest). Engelmann spruce (*Picea engelmannii*) grows in the area's sparse but species-rich wetlands, subalpine fir (*Abies lasiocarpa*) is found in older stands

throughout the forest and whitebark pine (*Pinus albicaulis*) graces the higher ridge tops. Several naturally occurring open meadows, rich in herbaceous plants, exist throughout the experimental forest.

Research emphasis within the experimental forest was expanded in 1991 to develop and evaluate ecosystem-based treatments for sustaining productivity and biodiversity of lodgepole pine forests and watersheds. The Tenderfoot Research Project was developed to take a multi-disciplinary approach to evaluating ecosystem-based treatments in lodgepole pine stands. Treatments serve as demonstration sites where the public can view new management alternatives and multiple technical reports and papers have been published as a result of the research activities associated with this experimental forest.

A map of the Tenderfoot Creek Experimental Forest can be found in appendix A.

## Kings Hill Scenic Byway

### *Existing Condition*

The Kings Hill Scenic Byway is a 71-mile long National Forest Scenic Byway that begins at the junction of US Highways 89 and 12 near White Sulphur Springs, Montana. This scenic byway travels north to Armington Junction near Belt, Montana. Approximately 40 miles of the byway passes through National Forest System lands located in the Little Belts Geographical Area. U.S. Highway 89 is a primary route for motorists traveling between Glacier and Yellowstone National Parks. The entire length of US Highway 89 was designated as Montana's Centennial Highway in 1989 by the state of Montana.

The route winds its way along mountain streams with beautiful mountain vistas and limestone outcrops, highlighting the fascinating mining and range history of the area and the many outdoor recreation opportunities. The route provides access to national forest campgrounds, numerous dispersed camping opportunities, cross-country and downhill skiing, snowmobile play areas, and numerous trails and roads.

A number of interpretive signs along the route highlight the many scenic, historic, and recreation features found along the scenic byway. Some of these signs are located on National Forest System lands but several are located on private and state lands and provide interpretations to these lands as well.

A map of the Kings Hill Scenic Byway can be found in appendix A.

## Evaluating the Potential Need and Opportunity for Designated Areas

The designated areas identified for the plan area within this assessment considered the potential need and opportunity for additional designated sites. Some of these additions were recognized through field visits and internal Forest Service study, while others were identified through outside organizations and special interests. A brief summary of some of this information is listed below. Much of this information will be used in the formulation of a proposed plan.

### Published Documents/Research for Consideration

In August 2012, Montanans for Healthy Rivers published the Wild and Scenic Rivers Eligibility Report. This document identified all of the rivers within Montana that the organization feels are eligible for official Wild and Scenic River designation. This information will be considered in the wild and scenic river evaluation process under the 2012 Planning Rule.

### Unrepresented Ecosystems or Land Types

The Wilderness Society, the Regional/Station Research Natural Area Committee (an internal Forest Service committee), and other conservation groups have expressed interest in providing additional study and potential designation of unrepresented ecosystems and land types. Additional review of unrepresented and

underrepresented ecosystems is anticipated as a part of the wilderness evaluation and the research natural area discussions that will take place during forest plan revision process.

### Rare or Outstanding Resources

While many of the landscapes within the plan area are unique, there are a number of rare and outstanding resources that could be recognized and designated as special interest areas. Some of these include unique plant communities, unique geologic and cave resources, and historic and cultural areas.

### Unique Recreation or Scenic Areas

The Smith River corridor has been identified by the Montana Department of Fish, Wildlife and Parks as a unique recreation area requiring permitting and special management. Recreational use of this area is growing in popularity and use. Additionally, this area is noted for its outstanding cultural and scenic values. Due to these unique values, this area could be considered for potential designation as a special recreation area.

### Unique Education, Historic, Cultural, or Research Opportunities

As discussed previously, Chadde et al. (1996) identified a number of additional vegetation associations to be included in the research natural area network. These could be to be reviewed and recommended for additional inclusion into the research natural area program.

A number of historic and cultural areas could also benefit from designation and recognition by the forest plan. Please see chapter 11 for more information.

## Contribution to Social, Economic and Ecological Sustainability

A discussion of how designated areas contribute to the social, economic, and ecological sustainability of the plan area is included in chapter 5, Social, Cultural, and Economic Conditions.

## Information Needs

- Finalized maps for the additions to the Bob Marshall and Scapegoat Wilderness Areas as a result of the National Defense Authorization Act of 2015.
- Finalized maps for the Conservation Management Unit on the Rocky Mountain Ranger District as a result of the National Defense Authorization Act of 2015.

## References

- Bradford, Paul. 2011. Letter of Correspondence from Regional Forester. National Recreation Trails Designation. Missoula, MT: USDA Forest Service Northern Region. 1p.
- Campbell. Newell, 1978. Reference Caves of Montana. Montana Bureau of Mines and Geology Bulletin 105. <<http://cavingtheworld.com/montanainfo/cavesofmontana.pdf>>
- Chadde. S.W., S. F. Kimball, A.G. Evenden. 1996. Research Natural Areas of the Northern Region: Status and Needs Assessment. Unpublished Report on file with U.S, Department of Agriculture. Missoula, MT: U.S. Department of Agriculture Forest Service, Northern Region. Pages 150-151 and 153-154.
- Colburn. Kevin, S. Bosse, M. Fiebig, C. Frissell, B. Randall, and S. Christensen. 2012. Wild and Scenic River Eligibility Report, Second Edition. Montana's for Healthy Rivers.

- Corbett, Jason. 2011. Evaluation and Management of Select Natural Cave and Abandoned Mine Features of the Lewis and Clark and Helena National Forests, Montana, Bat Conservation International. Unpublished report on file with USDA Forest Service, Townsend Ranger District, Helena National Forest. 89 p.
- Nationally Designated Trails: <[www.americantrails.org/ee/index.php/nationalrecreationtrails](http://www.americantrails.org/ee/index.php/nationalrecreationtrails)>
- National Historic Landmarks in Montana: <[www.nps.gov/nhl/find/statelists/mt.htm](http://www.nps.gov/nhl/find/statelists/mt.htm)>
- President Ronald Reagan Official Letters <[www.reagan.utexas.edu/archives/speeches/1982/91382e.htm](http://www.reagan.utexas.edu/archives/speeches/1982/91382e.htm)>
- Tenderfoot Creek Experimental Station <[www.fs.fed.us/rm/tenderfoot-creek/](http://www.fs.fed.us/rm/tenderfoot-creek/)>
- United States Department of Agriculture, Forest Service. Forest Service Manuals and Handbook. USDA Forest Service Headquarters, Washington D.C. Available online at; <http://www.fs.fed.us/im/directives/>.
- United States Department of Agriculture, Forest Service. 1979. *Roadless Area Review and Evaluation Final Environmental Impact Statement*. FS-325. Washington, D.C.: US Government Printing Office. 113 p.
- United States Department of Agriculture, Forest Service. 1982. Middle Fork Judith and Big Snowies Montana Wilderness Study Act Areas Final Environmental Impact Statement. Great Falls, MT: USDA Forest Service, Lewis and Clark National Forest.
- United States Department of Agriculture, Forest Service. 1986a. Helena National Forest Land and Resource Management Plan. Helena, MT: USDA Forest Service, Helena National Forest.
- United States Department of Agriculture, Forest Service. 1986b. Lewis and Clark National Forest Land and Resource Management Plan. Great Falls, MT. USDA Forest Service, Lewis and Clark National Forest.
- United States Department of Agriculture, Forest Service. 1987. Bob Marshall, Great Bear, and Scapegoat Wilderness Recreation Management Direction. USDA Forest Service, Flathead, Helena, Lewis and Clark and Lolo National Forests.
- United States Department of Agriculture, Forest Service. 1992. Kings Hill Scenic Byway Master Plan, Lewis and Clark National Forest, Kings Hill Ranger District, Cascade and Meagher Counties. Unpublished document on file with USDA Forest Service, Lewis and Clark National Forest. 19 p.
- United States Department of Agriculture, Forest Service. 1996. Northern Region (R1) Selected Special Interest Areas (Botanical, Geological, Scenic). Unpublished document on file with USDA Forest Service. Missoula, MT: U.S. Department of Agriculture Forest Service, Northern Region. 8 p.
- United States Department of Agriculture, Forest Service. 1997. Lewis and Clark National Forest Oil and Gas Leasing Final Environmental Impact Statement. Great Falls, MT: USDA Forest Service and United States Department of Interior, Bureau of Land Management.
- United States Department of Agriculture, Forest Service. 2009. The 2009 Continental Divide National Scenic Trail Comprehensive Plan. Washington, D.C.: USDA Forest Service Chief's Office. 26 p.
- United States Department of the Interior, Bureau of Outdoor Recreation. 1976. Continental Divide Trail Study Report. Washington, D.C.: United States Department of Interior.
- Wilderness :< [www.wilderness.net/index.cfm](http://www.wilderness.net/index.cfm)>