



East Crazy Inspiration Divide Land Exchange

Environmental Assessment



For more information, contact:

Anna Ball, Realty Specialist
10 East Babcock
Bozeman, MT 59771
Anna.ball@usda.gov
Phone: 406-579-1086

We make every effort to create documents that are accessible to individuals of all abilities; however, limitations with our word processing programs may prevent some parts of this document from being readable by computer-assisted reading devices. If you need assistance with any part of this document, please contact the Custer Gallatin National Forest at 406-587-6701.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.

Table of Contents

1.0 Introduction 1

 1.1 Introduction..... 1

 1.2 Background..... 4

 1.3 Need for Action 6

 1.4 Key Issues 7

 1.5 Decision Framework..... 7

 1.5.1 Federal Regulations..... 8

 1.5.2 Land Management Plan Consistency 8

2.0 Alternatives 10

 2.1 No Action Alternative..... 10

 2.2 Proposed Action Alternative..... 10

 2.2.1 Proposed Action Alternative Lands for Exchange 12

 2.2.2 Proposed Action Water Rights Affected 14

 2.3 Alternative 1- Modified Proposed Action..... 16

 2.3.1 Alternative 1 Lands for Exchange..... 19

 2.3.2 Alternative 1 Water Rights Affected by the Exchange 20

 2.4 Lands Considered for Exchange 20

 2.4.1 Description and Location of Lands for Both Action Alternatives 20

 2.5 Additional Elements Common to Both Alternatives 21

 Land Management Plan Area Designations 21

 Patent Reservations on Federal Lands 21

 New Trail and Trailhead Improvement 22

 Minerals 22

 Livestock Grazing Permits and Leases 24

 Fences, Roads, Irrigation Ditches, and Other Improvements..... 24

 Land Special Use Authorizations..... 24

 Recreation Special Use Authorizations..... 25

 Hazardous Materials..... 26

 2.6 Issues and Alternatives Considered but Eliminated from Detailed Analysis 26

 Issues 26

 Alternatives 26

3.0 Environmental Effects 28

 3.1 Recreation Special Designations- Inventoried Roadless Areas, Backcountry Areas and Recommended Wilderness 28

 Existing Conditions..... 28

 Desired Conditions..... 29

 Environmental Effects..... 29

 3.2 Roads, Trails and Access 33

 Introduction..... 33

 Existing Conditions 34

 Environmental Effects..... 38

 3.3 Recreation- Developed and Dispersed..... 40

 Existing Condition 40

 Environmental Effects..... 40

 Recreation Opportunity Spectrum..... 43

 Special Uses 43

3.4 Wildlife Resources.....	44
Affected Environment.....	44
Environmental Effects.....	46
3.5 Aquatic Resources	56
Existing Condition	56
Environmental Effects.....	57
3.6 Floodplains and Wetlands.....	59
Existing Condition	59
Desired Condition	59
Environmental Effects.....	59
3.7 Cultural Resources.....	60
Existing Condition	60
Desired Condition	60
Environmental Effects.....	61
3.8 Tribal Relations	62
Existing Conditions.....	62
Desired Conditions.....	63
Environmental Consequences	63
3.9 Geology and Minerals.....	65
Existing Conditions.....	65
Environmental Effects.....	65
3.10 Botanical Resources.....	67
Environmental Effects.....	67
3.11 Climate and Carbon	69
Climate.....	69
Carbon.....	69
4.0 Agencies and Persons Consulted.....	70
4.1 Tribal Partners	70
4.2 Endangered Species Act Consultation.....	70
4.3 Interdisciplinary Team.....	71
5.0 References	1

List of Figures

Figure 1. East Crazy Mountain area vicinity map and current ownership condition.....	3
Figure 2. Inspiration Divide area vicinity map and existing ownership condition.	4
Figure 3. Lands proposed for exchange in the proposed action alternative in the East Crazy Mountain area.....	11
Figure 4. Lands proposed for exchange in the proposed action alternative in the Inspiration Divide (Big Sky) area.	12
Figure 5. Map of action proposed in Alternative 1 in the East Crazy area.	18
Figure 6. Alternative 1 proposed exchange in the Inspiration Divide (Big Sky) area.	19
Figure 7. Alternatives in the Crazy Mountain Inventoried Roadless Area.	31
Figure 8. Alternatives in the Madison Inventoried Roadless Area.	32

Figure 9. A map showing the alternatives and the Crazy Mountains and South Crazy Mountain Backcountry Areas..... 33

Figure 10. Existing route access in the Crazy Mountain area and parcels for exchange in Alternative 1.. 37

Figure 11. Existing access in the Inspiration Divide area..... 38

List of Tables

Table 1. Non-federal parcels for exchange in the proposed action alternative. 13

Table 2. Federal Parcels in proposed action alternative..... 14

Table 3. Water rights affected by proposed action. 15

Table 4. Alternative 1 description of non-federal parcels to be acquired where boundaries differ from the proposed action alternative. 20

Table 5. Alternative 1 description of federal parcels for exchange where boundaries differ from the proposed action alternative. 20

Table 6. Non-federal and federal parcel mineral ownership..... 23

Table 7. Description of Crazy Mountains grazing allotments affected by land exchange..... 24

Table 8. Lands special use authorizations on federal parcels in the Crazy Mountains..... 25

Table 9. Outfitter guide permits affected by the proposed action. 25

Table 10. Alternatives considered but dismissed from detailed analysis..... 27

Table 11. Wildlife species of interest, including species proposed or listed in the Endangered Species Act and Species of Conservation Concern on the Custer Gallatin National Forest and summaries of their potential to inhabit or use the lands included in the proposed exchange. 44

Table 12. Acres of the different structural habitat states within each LAU that would be part of the exchange under the Proposed Action Alternative..... 47

Table 13. Acres of the different structural habitat states within each LAU that would be part of the exchange under Alternative 1. 48

Table 14. Changes in modeled wolverine habitat ownership under the proposed action alternative. 52

Table 15. Existing maternal, primary, and dispersal habitat in the action area and changes in ownership under Alternative 1, the modified proposed action. 53

Table 16. Mapped big game habitats associated with the Proposed Action Alternative. 54

Table 17. Mapped big game habitats associated with proposed exchange under Alternative 1 54

Table 18. Alternative 1 quantity (stream miles and lake acres) of perennial stream miles, fish and trout bearing stream miles, and lake acres on lands proposed for exchange. “Trout” indicates non-native species (rainbow, brown, and brook trout). 58

1.0 Introduction

1.1 Introduction

The Custer Gallatin National Forest is proposing to exchange federal lands for non-federal lands. The East Crazy and Inspiration Divide Land Exchange, (ECID or proposal) would affect about 10,565 acres in the proposed action alternative and 9,965 acres in alternative 1, the modified proposed action on the Bozeman and Yellowstone Ranger Districts of the Custer Gallatin National Forest. The project also includes the construction of a new trail, a minor re-route to a portion of existing trail, and trailhead improvements.

The purpose of this environmental assessment (EA) is to document and disclose the environmental effects of the proposed project and to determine whether to prepare an environmental impact statement or a finding of no significant impact.

Land exchanges are an important tool the Forest Service uses to consolidate land ownership, to acquire lands with high wildlife or recreation values, and to resolve public access issues. Exchanges present opportunities to gain lands in the public estate, though by their nature there are always tradeoffs involved when federal lands are conveyed out of public ownership. Sections 1.2 and 1.3 detail the historically complicated ownership and longstanding access issues in the east Crazy Mountain portion of the project area.

For this analysis the current National Forest Service lands proposed for exchange will be referred to as “federal lands” and the current private lands will be referred to as “non-federal lands”.

The proposed exchange is an assembled land exchange with five landowners in the Crazy Mountain area: Carroccia Family Limited Partnership (aka Carroccia Ranch Limited Partnership), Hailstone Ranch Company, Switchback Ranch, LLC, Ward & Parker Ranch, LLC, and CMR Ranch Owner, LLC and one landowner in the Inspiration Divide area: Yellowstone Development, LLC and Yellowstone Mountain Club, LLC (owners are shown in Table 1). These landowners are hereinafter collectively referred to as the “non-federal party”. An assembled land exchange is an exchange of federal land for a package of multiple ownership parcels of non-federal land consolidated for purposes of one land exchange transaction. Western Land Group, Inc. has been retained by the landowners to facilitate the land exchange and serve as the single point of contact for the non-federal party with the Forest Service.

The anticipated benefits of this proposed land exchange include:

East Crazy Mountains Area:

1. Creation of large areas of contiguous and clearly identifiable blocks of National Forest System lands in the Crazy Mountains to facilitate efficient land and resource management and improve public access.
2. Protection of sensitive areas within the Crazy Mountains Backcountry Area, Crazy Mountain Inventoried Roadless Area and South Crazy Recommended Wilderness Area through the addition of the non-federal parcels to the National Forest System. Their special designation will preserve and enhance the quiet, undeveloped, unroaded characteristics and associated social and ecological benefits including public recreational opportunities, conservation of biodiversity and improved habitat connectivity.
3. Conservation of the existing character of the Crazy Mountains by reducing the potential for development on 10 sections of private lands interior to and comingled with National Forest System lands.
4. Increased protection of high elevation lands in the Crazy Mountain Range, an important

traditional cultural area identified by the Crow Tribe.

5. Improving public recreational access and providing for perpetual public access:
 - a. Relocate Sweet Trunk Trail No. 274, to provide hikers, horsemen, and sportsmen access located on the consolidated National Forest System lands in the east Crazies.
 - b. Secure Smeller Lake and Trail No. 220 to provide for quality recreational opportunity including fishing, hiking, hunting, camping and scenic viewing.
6. Improvement of the Big Timber Canyon Trailhead by redesigning to consider parking associated with the improved public recreation opportunity provided by Sweet Trunk Trail No. 274.
7. Securing habitat at Smeller Lake for recreational fishery and Yellowstone Cutthroat Trout.

Inspiration Divide Area:

1. Provide for more efficient management of the Inspiration Divide Trail No. 8 and recreation opportunities such as hunting, camping, wildlife viewing once the trail is entirely located on National Forest System lands.
2. Provide for more efficient private lands management in the Eglise Peak area which eliminates the potential for future special use proposals associated with access or development.

A description of the lands proposed for exchange and their location can be found in section 2.5.1 below. A map of the existing condition in the east Crazy Mountain area in Sweet Grass and Park Counties, Montana is shown in Figure 1, and in the Inspiration Divide area in Madison County, Montana is shown in Figure 2.

East Crazy Inspiration Divide Land Exchange, Custer Gallatin National Forest

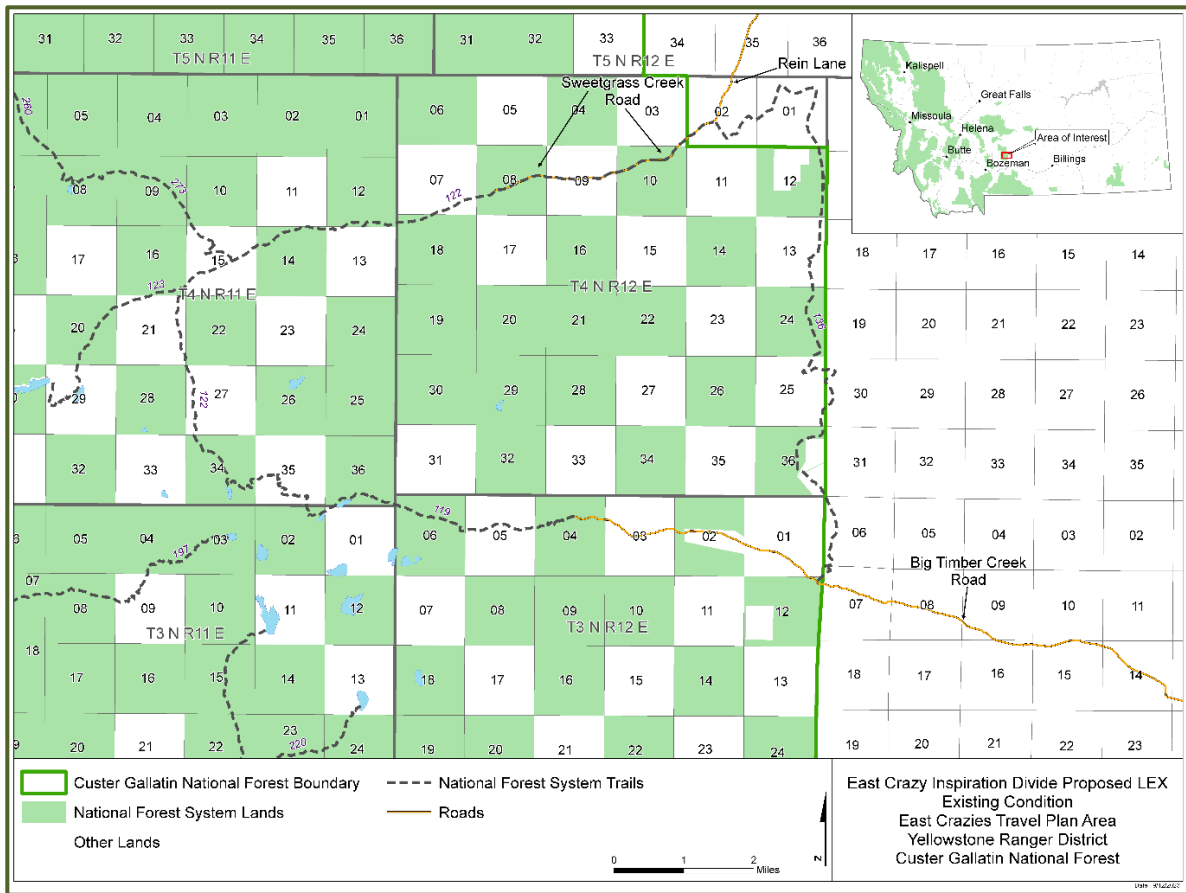


Figure 1. East Crazy Mountain area vicinity map and current ownership condition.

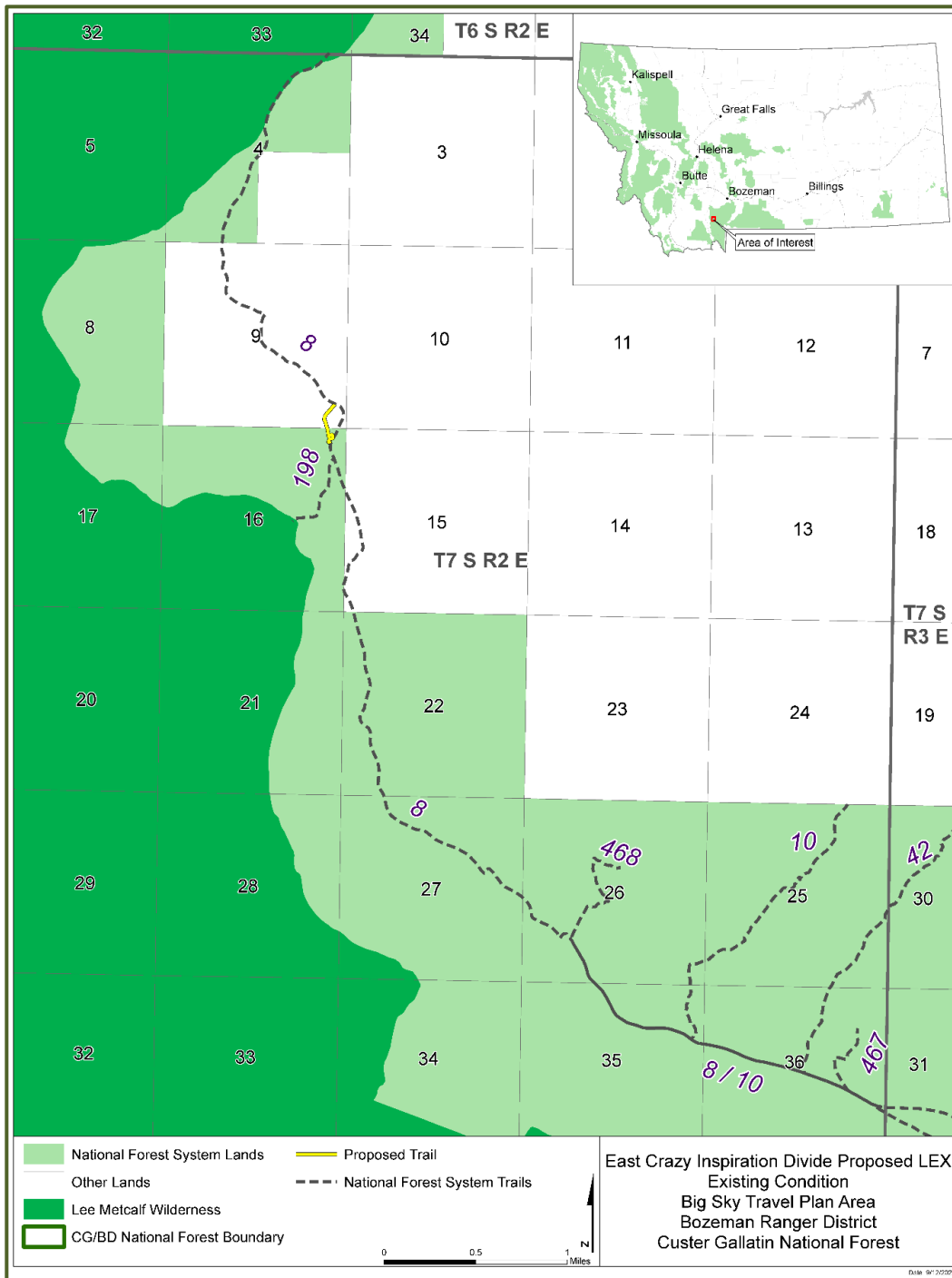


Figure 2. Inspiration Divide area vicinity map and existing ownership condition.

1.2 Background

The Crazy Mountains are an isolated mountain range surrounded by valleys and foothills. This glacial mountain range is known for jagged peaks, rugged terrain, and scenic views with minimal development and relatively few roads. Native Americans of the region, particularly the Crow Tribe, consider the Crazy Mountains to have sacred and historic values.

Much of the Crazy Mountains is a “checkerboard” pattern of private and federal ownership as a result of the railroad patents on odd-numbered sections which were subsequently sold into private

ownership by the railroad. These private lands are predominately cattle ranches and recreational properties. The Custer Gallatin National Forest has identified this landscape as an area where land ownership consolidation and access are priorities in the 2022 Land Management Plan (U.S. Department of Agriculture 2022a). The current landownership pattern has contributed to a century of complicated management situations on public lands and problematic access issues for both private and public users.

The Forest Service has made progress within the Crazy Mountain range through land exchanges, purchases, and rights-of-way acquisition to help resolve the checkerboard landscape, acquire access, protect critical habitat, create connectivity, and provide world class recreation opportunities.

Despite these accomplishments, the Forest has long recognized that there are no simple solutions in the work that remains on the east side of the Crazy Mountains. Making progress toward resolution takes time and requires negotiations with landowners, often in stops and starts.

Many citizens have expressed concern over the Forest Service's pursuit of land adjustments or exchanges within the Crazy Mountains. However, historic access claims, where access routes have been established by past use and practice rather than by a written conveyance to the Forest Service, are extraordinarily complicated and case specific.

Forest Service policy affords broad discretion to Forest officials in how to approach each historic access situation. Officials must consider factors such as: what routes serve the greatest access needs; content and clarity of the existing record for each route; opportunities for resolving multiple issues or cases simultaneously; inherent uncertainty of a particular litigation outcome; and maintaining cooperative relationships with neighboring landowners.

There is a long history of disagreement between the Forest Service, landowners, and the public on the use of Sweet Grass and East Trunk trails where the agency has no recorded easements across private property to access the National Forest. The 2006 Gallatin Travel Plan identified Sweet Grass and East Trunk trails as two locations with outstanding access needs. While these routes have been displayed on Agency maps, they pass through private property and were established through use and practice, rather than pursuant to a written easement allowing the public to use these routes. A "public" or "historic" interest is not the same as a written easement or conveyance. Nor is a "public" or "historic" interest equivalent to an existing use right or prescriptive easement which must be adjudicated by the court. Without a written conveyance, the only lasting way to determine whether a public access right exists is through litigation where the Agency must establish clear and convincing evidence of "open, notorious, adverse, continuous and uninterrupted use of the claimed easement for the full statutory period," which in Montana is five years.

The Sweet Grass drainage has long been disputed, with records showing disagreements dating back to the early 1950s. Efforts to develop a compromise with the landowners on the public use of the Sweet Grass area date back to 1970. The Forest Service does not currently hold a recorded easements on Sweet Grass Trail No. 122 (or Sweet Grass Road No. 199) in Sections 2, 7 and 9, T4N, R12E. In 1970, a letter of understanding was signed by the landowners and the Forest Service that allowed seasonal nonmotorized use on private lands with specific requirements. As early as 1995, private landowners began requiring the public to sign in for access to the Sweet Grass drainage. Forest Service trail maintenance has occurred from a westerly approach as far as Eagle Park located on National Forest System lands (Parcel 1). Over the last nearly 30 years, many different Forest Service representatives continued to work towards a durable solution for access in the Sweet Grass drainage but have been unable to reach a compromise.

This situation surrounding access to the Sweet Grass drainage is further complicated because Rein Lane, the access road to the Sweet Grass Trailhead and Trail and East Trunk Trail is not a National Forest System Road.

Historically, public access on the East Trunk Trail has also been complicated. Records show the trail has a mixed history of maintenance, the location has changed over time, and the trail as mapped is

not discernible or consistent on the ground. In 2015, Congressional Office inquiries regarding “historic” access on East Trunk were elevated to the Forest Service on behalf of sportsmen. The Forest Service asserted a public interest in the East Trunk Trail and prioritized developing solutions. The Forest Service worked with affected landowners to share perspectives and determine if we could find common ground towards resolutions to address longstanding issues. Over the next few years, the Forest initiated conversations with a group of east side landowners to determine the viability of a bigger solution that could meet the needs of all involved parties. Those initial conversations indicated a mutually agreeable solution might be possible, but without dedicated capacity and additional resources we would not make meaningful progress.

Around the same time, the Forest was approached by the Yellowstone Club to discuss their continued interest in a land exchange proposal that would expand Club ski terrain in the Big Sky area. The Forest had twice previously declined the proposal due to limited public benefits. Considering the previous Forest Service response, the Club asked the Forest to identify priority lands, access needs and opportunities for partnership where they could assist and possibly develop a proposal that would have public benefit. The Forest Supervisor identified public access and land consolidation needs that met Forest objectives, including priority work in the Crazy Mountains.

In 2018, the Club hired a non-federal land exchange coordinator, Western Land Group (WLG), to begin working with landowners and stakeholders to develop a proposal for a comprehensive east Crazy Mountains solution. After several years of negotiation, landowners and the Yellowstone Club entered into agreements enabling a multi-landowner exchange proposal to consolidate lands and resolve access issues.

Four landowners in the east side Crazy Mountains and the Yellowstone Club, collectively represented by WLG, submitted the “East Crazy Mountains and Inspiration Divide Public Access Improvement” land exchange proposal to the Forest and the public in July 2020.

On July 9, 2021, WLG submitted the non-federal parties’ final proposal. The Forest spent approximately one year reviewing the proposal to ensure Land Management Plan and policy compliance and conducting a detailed Feasibility Analysis. As a result of that analysis the Forest requested additional information, clarifications, and minor changes. In August 2022, the proponents added Parcel K as an element of the proposal. The Forest determined that the addition of the Smeller Lake parcel into public ownership further contributes to the consolidation efforts of this exchange and would secure perpetual access and recreational use of Smeller Lake.

In October 2022, the Forest Service and WLG signed an Agreement to Initiate a Land Exchange, a non-binding agreement representing the Forest Service and non-federal parties’ intent to move forward with a proposed land exchange. What is reflected in this document is the Forest Service’s proposed actions (proposed action alternative and alternative 1) for a land exchange that represents years of negotiations, public outreach, and agency consideration. This proposal brings forward a cooperative solution that we believe will provide long-term public access and meaningful resource and recreation benefits while consolidating public lands in the Crazy Mountains.

1.3 Need for Action

The proposed project addresses the Forest Service’s desire to consolidate federal land ownership in the east Crazy Mountains, Smeller Lake and along the Inspiration Divide for the following purposes:

1. To resolve long-standing public access and land use disputes. This includes the need to address historically complicated management of checkerboard ownership patterns and to resolve longstanding access issues surrounding the Sweet Grass Trail No. 122 (Sweet Grass) and East Trunk Trail No. 136 (East Trunk).
2. To provide for more effective and efficient natural resource management and protection of consolidated lands.

3. To improve recreational opportunities and provide for perpetual public access in the East Crazies, Smeller Lake and along Inspiration Divide.
4. To secure and protect roadless characteristics and provide a quiet, recreation opportunity consistent with the Crazy Mountain Backcountry Area and South Crazy Mountain Recommended Wilderness Area.
5. To conserve the existing traditional uses and landscape character of the Crazy Mountains by reducing the potential for development of private lands interior to and comingled with National Forest System lands.
6. To conserve wildlife connectivity and protect key habitat.
7. To protect interior sections of high country in the east Crazy Mountains, which will better protect landscapes important to the Crow Tribe.

1.4 Key Issues

Key issues are statements of cause and effect, linking environmental effects to actions, including the proposed action (FSH 1909.15, 12.4). Key issues serve to highlight effects or unintended consequences that may occur from the proposed action and alternatives, giving opportunities during the analysis to reduce adverse effects and compare trade-offs for the responsible official and public to understand.

Key issues are generated by the public, other agencies, organizations, and the Forest Service. Key issues provide focus for the analysis of environmental effects and may influence alternative development. The Responsible Official identified the following key issues after the comment period on the preliminary environmental assessment:

- If lands are exchanged out of the federal estate without development management tools, then those lands could be over developed and the character of the area could be degraded.
- If the proposed action alternative were implemented without adequate mitigation (e.g., federally held wetland deed restrictions), the project would result in net loss of wetlands.
- If lands in the Inspiration Divide area were exchanged as described in the proposed action alternative, then winter recreationists would be excluded from a portion of the popular Buck Ridge area.
- If lands in the Sweet Grass drainage were exchanged as described in the proposed action alternative, then access to water for anglers and recreationists would not be available from the newly constructed Sweet Trunk trail.

To address these issues, alternative 1, the modified proposed action was created. Alternative 1 includes elements of the proposed action and incorporates durable conservation tools such as conservation easements and protective covenants to limit development on key parcels and wetland protection through modified federal parcel boundaries and deed restrictions. Alternative 1 boundary modifications also address stream access and dispersed recreation in the Sweet Grass Drainage and retention of snowmobile riding opportunities in Buck Ridge. Additional alternatives, including those dismissed from detailed study, were considered as described in section 2.7.

1.5 Decision Framework

The Forest Supervisor of the Custer Gallatin National Forest is the responsible official who will determine whether to prepare an environmental impact statement or if a finding of no significant impact is warranted. The Forest Supervisors' decision to proceed with one of the action alternatives will be documented in a decision notice (36 CFR 220.7(c)).

The decision to be made is whether to take no action and retain the lands currently under federal ownership and Forest Service management or authorize an exchange through either the proposed action alternative or alternative 1, and related provisions. The decision will address specific components of the alternatives, including:

- Lands to be included in the exchange.
- Water rights to be transferred.
- Mineral rights to be conveyed.
- Livestock grazing and special use permits.
- Deed reservations or easements for access.
- Deed restrictions to protect resources (ex. wetlands or cultural).
- Conservation Easements or Protective Covenants to limit future development.
- Construction of Sweet Trunk Trail No. 274, relocation of Inspiration Divide Trail No. 8 and improvement of the Big Timber Canyon Trailhead.

1.5.1 Federal Regulations

The United States Forest Service is considering this proposal under the following Federal Authorities:

- General Exchange Act of March 20, 1922 (42 Stat. 465, as amended; 16 U.S.C. 485, 486);
- Federal Land Policy and Management Act of October 21, 1976 (43 U.S.C. 1716, 1717));
- Federal Land Exchange Facilitation Act of August 20, 1988 (102 Stat. 1086 as amended; 43 U.S.C. 1716).

The Federal Land Policy and Management Act of 1976, as amended, Section 206, requires that the value of exchanged lands be equal, but the exchange can be adjusted for any difference in value by cash equalization payments of up to 25% of the value of the Federal lands.

Land exchange regulations for the Forest Service are set at 36 CFR, part 254, subpart A. Forest Service Manuals 5403 and 5430.3 give direction concerning policies regarding land exchanges. Agency policy and general guidance for land exchange processes are also located in Forest Service Handbook 5409.13, chapter 30. This proposed land exchange will follow policy including:

- Forest Service Manual (FSM) 5430.2: the objective of the land exchange program is to utilize land exchanges as a tool, in concert with the purchase program, to implement Forest land and resource management planning and direction; to optimize Forest Service land ownership patterns; to further resource protection and use; and to meet the present and future needs of the American people.
- Complete land exchanges to consolidate National Forest System land and private, State, or local government land patterns, to permit needed urban or industrial expansion; or to make other adjustments in landownership clearly in the public interest (FSM 5403.1(5)).
- Achieve the optimum landownership pattern to provide for the protection and management of resource uses to meet the needs of the nation now and in the future (FSM 5402.1).

1.5.2 Land Management Plan Consistency

This environmental assessment tiers to, and incorporates by reference¹, the 2022 Custer Gallatin National Forest Land and Management Plan Final Environmental Impact Statement (U.S. Department of Agriculture 2022b;c;d;e;f).

The purpose of the Custer Gallatin National Forest Land Management Plan is to provide for social,

¹Incorporation by reference is consistent with 36 CFR 220.7(b)(3)(v); 40 CFR 1501.11 and 40 CFR 1501.12

economic, and ecological sustainability and multiple uses of the Custer Gallatin National Forest lands and resources (U.S. Department of Agriculture 2022a). This Plan sets the overall context for informed decision making by evaluating and integrating social, economic, and ecological considerations relevant to management of the national forest. Integrated plan directions, known as components, do not authorize site-specific projects, rather they provide an overarching direction, similar to zoning in a community. However, ensuring that a project complies with the Plan helps ensure that it also provides for social, economic, and ecological sustainability. This project is consistent with and guided by the Land Management Plan, as documented in the Plan Consistency Table available on the [project website](#).

The proposed project was designed to achieve goals and move toward desired conditions set forth in the Land Management Plan:

- The Custer Gallatin National Forest works with willing landowners and partners to consolidate ownership and acquire access in the Crazy Mountains (*BC-GO-LAND 01, Plan page 163*).
 - The project would achieve this goal in the east Crazy Mountains area through consolidating land ownership.
- The Crazy Mountains embody a tribal cultural landscape significant to ongoing traditional cultural practices of the Crow Tribe (*BC-DC-TRIBAL 01, Plan page 163*).
 - The project moves toward this desired condition. The Crazy Mountains are considered a tribal cultural landscape, and the higher elevations, above 2,600 meters (8,530 feet), are the locations of special importance and cultural use for the Crow Tribe. This project is beneficial to tribes because the Forest Service will be acquiring high elevation locations in the Crazy Mountains, thus securing more access (*see the Tribal Relations Report*).
- Through Custer Gallatin National Forest cooperation with willing landowners and other entities, nonfederal lands within the national forest boundary are acquired, or managed under conservation easements where needed to maintain or restore wildlife habitat structure, function, or connectivity (*FW-GO-WL 03, Plan page 53*).
 - The project would achieve acquiring nonfederal lands within the forest boundary in the Crazy Mountain area. Alternative 1, the modified proposed action includes conservation easements on some lands leaving the federal estate to move even closer to this goal.
- The Crazy Mountain Backcountry and Recommended Wilderness Areas provide for quiet, nonmotorized recreation opportunities to predominate (*BC-DC-CMBCA, Plan page 165*); and are characterized by a natural environment where ecological processes such as natural succession, wildfire, avalanches, insects and disease function as the primary forces affecting the environment (*FW-DC-RWA 03, Plan page 124*).
 - The project would move toward these desired conditions on acquired parcels because non-federal Parcels A-I, a total of about 5,176 acres would be incorporated into the Crazy Mountain Backcountry Area, and Parcel K, 640 acres, would be incorporated into the Crazy Mountain Recommended Wilderness Area as discussed in section 3.1. The parcels would then be managed to meet these desired conditions.

In considering lands for acquisition, the Management Approaches in the Plan Appendices (*Appendix A, page 79*) provide elements to consider for land ownership adjustments to protect resources and improve efficiency of management (U.S. Department of Agriculture 2022g).

This project meets these Management Approaches by involving lands that:

- Contribute to recovery of threatened or endangered species.

- Are important for wildlife connectivity and big game winter range.
- Provide for protection of important historical or cultural resources.
- Enhance recreation, public access, and protection of aesthetic values.
- Are within Recommended Wilderness, Inventoried Roadless Areas or other environmentally sensitive lands.
- Reduce expenses and support logical and efficient management.

Note: [Visit this site to view the Land Management Plan, appendices, and the NEPA documents related to the Plan.](#)

2.0 Alternatives

The action alternatives were designed to meet the need for action. Elements common to both action alternatives are detailed in section 2.5.

2.1 No Action Alternative

This alternative represents the reasonably foreseeable conditions that would be expected in the absence of the proposed land exchange. If no action is taken, no land would be exchanged, checkerboard ownership management challenges would persist, and longstanding public access disputes would remain unresolved. Additional access creating a permanent public trail connecting Big Timber Canyon and the Sweet Grass drainage would not be achieved. Smeller Lake would remain in private ownership and may potentially close to public recreation, fishing and camping opportunities.

2.2 Proposed Action Alternative

The Forest Service proposes to exchange about 4,135 acres of federal land for about 6,430 acres of non-federal land as shown in Figures 3 and 4. Associated interests would also be exchanged and are described in section 2.5. Each component of the East Crazy Inspiration Divide Land Exchange will be completed on an equal value basis (as required by FLPMA, Section 206) by mutual agreement between the Forest Service and the non-federal party, as documented in the Agreement to Initiate.

East Crazy Inspiration Divide Land Exchange, Custer Gallatin National Forest

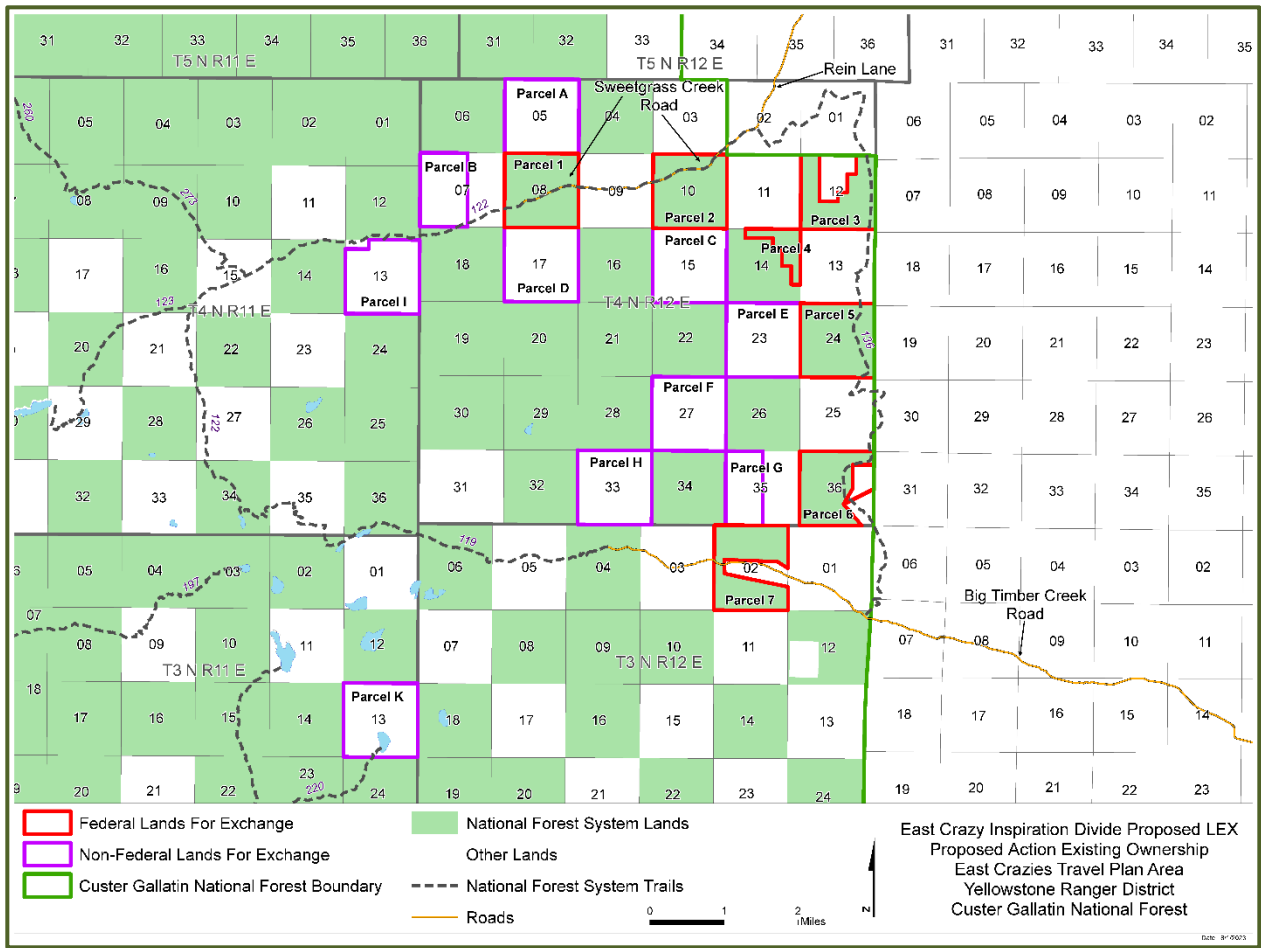


Figure 3. Lands proposed for exchange in the proposed action alternative in the East Crazy Mountain area.

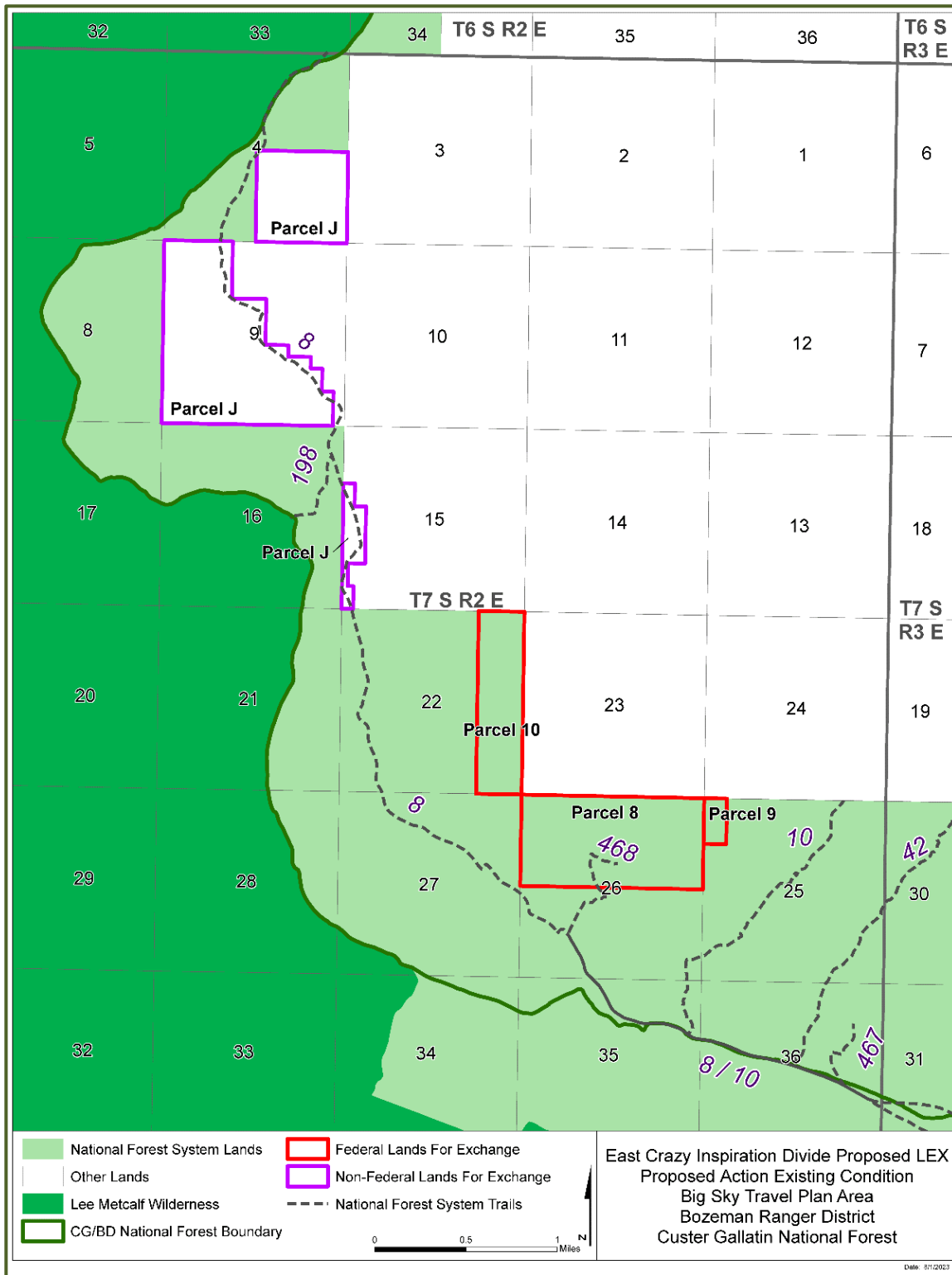


Figure 4. Lands proposed for exchange in the proposed action alternative in the Inspiration Divide (Big Sky) area.

2.2.1 Proposed Action Alternative Lands for Exchange

The proposed action alternative includes the federal and non-federal lands located in Park, Sweet Grass and Madison Counties shown in Table 1 and Table 2.

Table 1. Non-federal parcels for exchange in the proposed action alternative.

Parcel	Legal Description	Acreage	County	Owner
A	T. 4 N., R. 12 E., Section 5.	639.52	Sweet Grass	Ward & Parker Ranch, LLC
B	T. 4 N., R. 12 E., Section 7, Lots 1 thru 12.	410.28	Sweet Grass	Carroccia Ranch, LP & Carroccia Family, LP
C	T. 4 N., R. 12 E., Section 15.	640	Sweet Grass	Carroccia Ranch, LP & Carroccia Family, LP
D	T. 4 N., R. 12 E., Section 17.	640	Sweet Grass	Ward & Parker Ranch, LLC
E	T. 4 N., R. 12 E., Section 23.	640	Sweet Grass	Hailstone Ranch Company
F	T. 4 N., R. 12 E., Section 27	640	Sweet Grass	Hailstone Ranch Company
G	T. 4 N., R. 12 E., Section 35, W1/2.	320	Sweet Grass	Hailstone Ranch Company
H	T. 4 N., R. 12 E., Section 33.	640	Sweet Grass	Switchback Ranch, LLC
I	T. 4 N., R. 11 E., Section 13: NE1/4, NE1/4NE1/4NW1/4, E1/2NW1/4NE1/4NW1/4, S1/2N1/2NW1/4, S1/2NW1/4, S1/2.	615	Park	Switchback Ranch, LLC
J	T. 7 S., R. 2 E., Section 4, SE¼; Section 9, SW1/4NW1/4SW1/4NE1/4, W1/2SW1/4SW1/4NE1/4, W1/2NE1/4NW1/4, W1/2NW1/4, S1/2NE1/4SE1/4NW1/4, W1/2SE1/4NW1/4, SE1/4SE1/4NW1/4, SW1/4, W1/4SW1/4NE1/4SE1/4, S1/2SW1/4NE1/4SE1/4, SW1/4NE1/4NW1/4SE1/4, NW1/4NW1/4NW1/4SE1/4, S1/2NW1/4NW1/4SE1/4, S1/2NW1/4SE1/4, SW1/4SE1/4, SW1/4NE1/4SE1/4SE1/4, W1/2SE1/4SE1/4, and W1/2SE1/4SE1/4SE1/4; Section 15, SW1/4NW1/4SW1/4NW1/4, NW1/4SW1/4SW1/4NW1/4, S1/2SW1/4SW1/4NW1/4, W1/2NW1/4SW1/4, W1/2W1/2NW1/4SW1/4SW1/4, and W1/2SW1/4SW1/4SW1/4.	605	Madison	Yellowstone Development, LLC & Yellowstone Mountain Club, LLC
K	T. 3 N., R. 11 E., Section 13.	640	Park	CMR Ranch Owner, LLC
TOTAL ACRES: 6,429.80				

Table 2. Federal Parcels in proposed action alternative.

Parcel	Legal Description	Acreage	County	Owner
1	T. 4 N., R. 12 E., Section 8.	640	Sweet Grass	United States
2	T. 4 N., R. 12 E., Section 10.	640	Sweet Grass	United States
3	T. 4 N., R. 12 E., Section 12, lots 1 thru 4, E1/2SW1/4NE1/4, W1/2NW1/4, S1/2NE1/4SW1/4, W1/2SW1/4, SE1/4SW1/4, and W1/2SE1/4.	485.42	Sweet Grass	United States
4	T. 4 N., R. 12 E., Section 14, NE1/4NE1/4, N1/2NW1/4NE1/4, SE1/4NW1/4NE1/4, N1/2NE1/4NW1/4, SE1/4NE1/4, and E1/2NE1/4SE1/4.	150	Sweet Grass	United States
5	T. 4 N., R. 12 E., Section 24.	640	Sweet Grass	United States
6	T. 4 N., R. 12 E., Section 36, W1/2, NE1/4 excepting H.E.S. 1129 Tract B, SE1/4 excepting H.E.S. 1129 tract A and B; H.E.S. 1129 Tract C.	483.65	Sweet Grass	United States
7	T. 3 N., R. 12 E., Section 2, excepting H.E.S. No. 100.	595.80	Sweet Grass	United States
8	T. 7 S., R. 2 E., Section 26, N1/2.	320	Madison	United States
9	T. 7 S., R. 2 E., Section 25, W1/2NW1/4NW1/4.	20	Madison	United States
10	T. 7 S., R. 2 E., Section 22, E1/2NE1/4, E1/2SE1/4.	160	Madison	United States
TOTAL ACRES: 4,134.87				

2.2.2 Proposed Action Water Rights Affected

The Forest Service Handbook directs that a water rights analysis be completed to address ground or surface water rights associated with the federal and non-federal lands (FSH 5409.13, 32.45). This analysis is summarized here and is in the project record in its entirety.

To determine which water rights may be affected by the exchange, we examined water right records from the Montana Department of Natural Resources and Conservation Water Rights Division database, Preliminary Decrees issued by the Montana State Water Court, the Objection List issued by the Montana State Water Court for each basin, and records maintained by the Montana Bureau of Mines and Geology Groundwater Information Center.

With the proposed land exchange there are several categories of water rights that will transfer, require no action or will require ownership updates or amendments. See Table 3 for an overview of water rights that are detailed in the report.

Table 3. Water rights affected by proposed action.

Water Rights to be conveyed from Federal ownership to private ownership			
Water Right No.	Parcel	Owner	Disposition Proposed Action
43BV 60160-00	Federal Parcel 2	USDA Forest Service	Transfer 100%
43BV 60158-00	Federal Parcel 3	USDA Forest Service	Transfer 100%
43B 30145848	Federal Parcel 6	USDA Forest Service	Transfer 100%
Federal parcel water rights unaffected by proposed land exchange			
Water Right No.	Parcel	Owner	Disposition
43B 171155-00	Federal Parcel 7	Switchback Ranch LLC	No change required
43B 171156-00	Federal Parcel 7	Switchback Ranch LLC	No change required
43B 181083-00	Federal Parcel 7	Switchback Ranch LLC	Amend POD & POU
43B 30138112	Federal Parcel 7	Switchback Ranch LLC	Amend geocodes
Outstanding water rights			
Water Right No.	Parcel	Owner	Disposition
43BV 30143592	Federal Parcel 3	Billy Creek Ranch Trust	US filed objection
43BV 30143593	Federal Parcel 3	Billy Creek Ranch Trust	US filed objection
43BV 30143594	Federal Parcel 3	Billy Creek Ranch Trust	US filed objection
Water Rights to be conveyed from private ownership to Federal ownership			
Water Right No.	Parcel	Owner	Disposition
40A 30139212	Non-Federal Parcel A	Ward and Parker LLC	Transfer 100%
43BV 30137749	Non-Federal Parcel B	Carroccia Family LP	Split Ownership
43BV 30143518	Non-Federal Parcel D	Ward and Parker LLC	Transfer 100%
43 BV 30143519	Non-Federal Parcel D	Ward and Parker LLC	Transfer 100%
43BV 30146156	Non-Federal Parcel I	Switchback Ranch LLC	Transfer 100%
43BV 30146157	Non-Federal Parcel I	Switchback Ranch LLC	Split Ownership
43BV 30146158	Non-Federal Parcel I	Switchback Ranch LLC	Split Ownership
Non-Federal parcel water rights to be reserved			
Water Right No.	Parcel	Owner	Disposition
43A19199200	Non-Federal Parcel K	CMR Ranch Owner LLC	Reserved
43A19199300	Non-Federal Parcel K	CMR Ranch Owner LLC	Reserved
43A19203300	Non-Federal Parcel K	CMR Ranch Owner LLC	Reserved
43A19203400	Non-Federal Parcel K	CMR Ranch Owner LLC	Reserved
Non-Federal parcel water rights unaffected by proposed land exchange			
Water Right No.	Parcel	Owner	Disposition
41H 30008927	Non-Federal Parcel J	MT FWP	No change required

2.3 Alternative 1- Modified Proposed Action

The Forest Service proposes to exchange about 3,855 federal acres for about 6,110 non-federal acres as shown in Figures 5 and 6. This alternative consists of the basic elements of the Proposed Action Alternative plus modifications we negotiated with the non-federal party that are designed to respond to public input. The changes were each crafted to achieve the goals of the exchange while reaping multiple benefits to address issues brought forward. The key modifications in this alternative are:

Wetlands Protection and Balance: Alternative 1 addresses the need to ensure that the wetland values present on the lands acquired by the Forest Service meet or exceed those present on the lands conveyed to private ownership. This is achieved by reducing the federal lands to be conveyed to retain high value wetlands in federal ownership, and through federal deed restrictions on lands conveyed with high value wetlands. Federal deed restrictions protect areas in perpetuity by placing limitations on disturbance, construction, alteration, draining, dredging, channelizing, filling or diking. Forty acres of quality wetlands were identified to receive deed restrictions to ensure they remain functioning and intact. Quality wetlands were identified based on their resource value² and contiguous nature (see the wetlands report for more detail), and accessibility to ensure compliance monitoring is conducted.

- Lands conveyed in Parcel 2 (federal to private) were reduced to retain about 200 acres of National Forest System lands containing 50 acres of high value wetlands and the associated riparian areas. The Forest Service will also retain the water right for surface water of Sweet Grass Creek within the 200 acres.
- Lands conveyed in Parcel 8 (federal to private) were reduced to retain 80 acres containing 5 acres of quality wetlands and the associated riparian areas.
- In the Inspiration Divide Area, federal deed restrictions will be placed on Parcels 8, 9, and 10. The deed restriction will protect 17 acres of wetlands and provide adequate access for monitoring.
- In the Crazy Mountains, deed restrictions will be placed on 23 acres in Parcel 7, along Big Timber Creek and Big Timber Canyon Road. The deed restriction will protect wetlands and provide adequate access for monitoring.

Access and Recreation: Alternative 1 incorporates changes that provide or retain access for dispersed recreation, hunting, fishing and trail opportunities. This is achieved by reducing the federal lands to be conveyed and securing an easement.

- Access to Sweet Grass Creek and the surrounding 200 acres will be preserved through the Parcel 2 boundary modification. Sweet Grass Creek will be available via dispersed or cross-country travel from the Sweet Trunk Trail No. 274 in Parcel C.
- Ensure perpetual public access to the proposed Sweet Trunk Trail No. 274 in Parcel D by securing an easement for about 1 mile of trail from the landowner. (The landowner will retain the northern half of Parcel D in this alternative, as shown in Figure 5.)
- Snowmobile recreational riding opportunity in the Buck Ridge area will be retained by reducing the land to be conveyed in Parcel 8 by 80 acres. This change will retain the Yellow Mule area and a bench below Eglise Ridge by shifting the boundary in Parcel 8. This change provides for a popular destination vista and a more logical turn around area for snowmobiles, reducing future potential management conflicts.
- The Eglise Rock Overlook Trail No. 468 is located on Parcel 8 and the Forest Service

² Wetland value is a factor assigned to each wetland type in relation to the highest quality wetland types (e.g., perennial slope wetland). See the wetland report for more information on values.

would reserve an easement preserving public access on this motorized trail as part of both action alternatives. The boundary changes in Alternative 1 reduce the length of trail to be reserved by reducing the acres of federal lands being conveyed.

Preservation of Character and Limited Development: Alternative 1 adds perpetual protections helping retain the character of lands being conveyed through restrictive covenants prohibiting subdivision of four parcels in the Sweet Grass Drainage and a conservation easement placed on three parcels being conveyed to private in the Inspiration Divide area. These protections are in addition to the federally held wetland deed restrictions.

- The lands leaving federal ownership in the Inspiration Divide area (Parcels 8, 9, and 10) will be protected from development by a conservation easement that will be managed by Montana Land Reliance. The conservation easement protects open space and preserves scenic views. The easement allows for skiing, ski resort structures and improvements, and other appropriate outdoor recreational uses and prohibits subdivision, mineral removal, construction of new buildings (except as allowed for recreational opportunities). This conservation easement will be recorded at closing and is a required element of the exchange.
- The lands leaving federal ownership in Sweetgrass Canyon (Parcels 1, 2, 3 and 4) will be placed under a deed restriction agreement monitored and enforced by the Sweet Grass County Conservation District. The deed restriction or restrictive covenants would prohibit subdivision into parcels under 160 acres. The deed restriction would also prohibit mineral development and exploration (oil, gas, hydrocarbons, hardrock minerals). This deed restriction agreement will be recorded at closing and is a required element of the exchange. Other private lands uses such as grazing, recreation, or vegetation management would be allowed.

East Crazy Inspiration Divide Land Exchange, Custer Gallatin National Forest

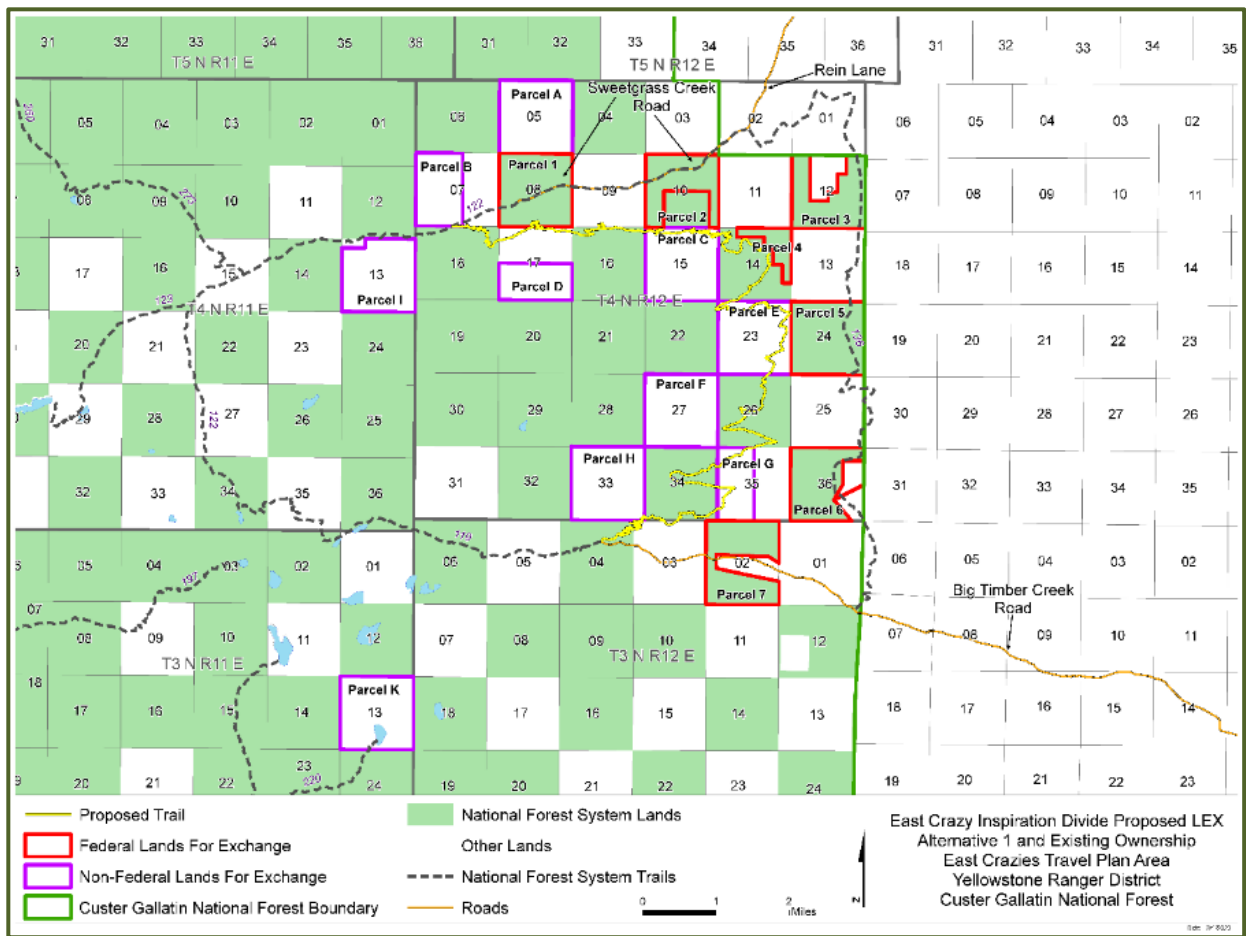


Figure 5. Map of action proposed in Alternative 1 in the East Crazy area.

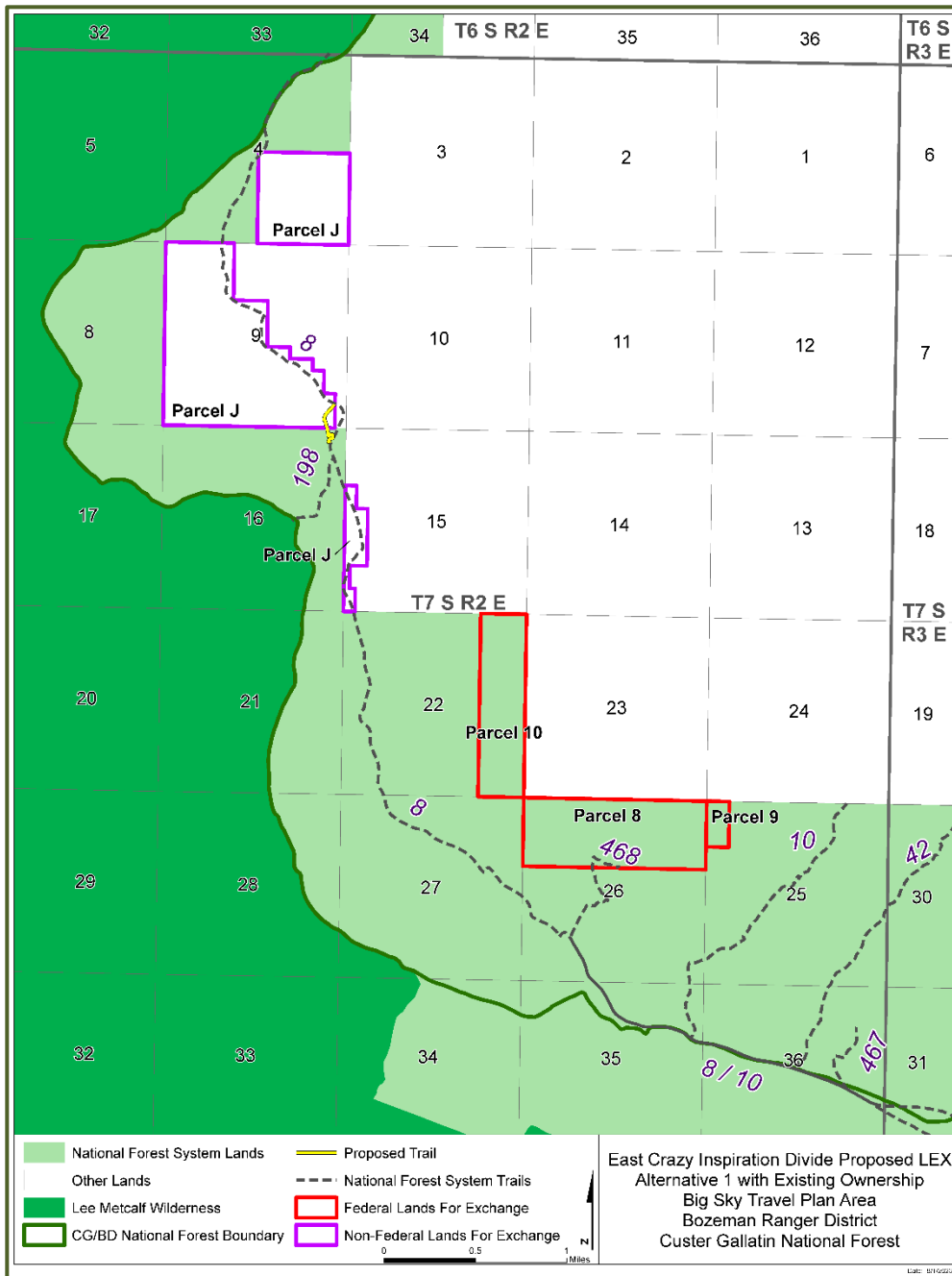


Figure 6. Alternative 1 proposed exchange in the Inspiration Divide (Big Sky) area.

2.3.1 Alternative 1 Lands for Exchange

Alternative 1 includes the federal and non-federal lands as described in the proposed action (see Tables 1 and 2) with modifications to Parcel D, Parcel 2, and Parcel 8. Lands to be conveyed in Parcel D were reduced from 640 to 320 acres, lands in Parcel 2 were reduced from 640 to 440 acres, and lands in Parcel 8 were reduced from 320 to 240 acres as described in Tables 4 and 5. In this alternative, about 3,855 acres of federal land would be exchanged for 6,110 acres of non-federal land, resulting in a net gain of 2,255 acres to the federal estate. The parcels proposed for inclusion in the land exchange are depicted in Figures 5 and 6.

Table 4. Alternative 1 description of non-federal parcels to be acquired where boundaries differ from the proposed action alternative.

Parcel	Legal Description	Acreage	County	Owner
D	T. 4 N., R. 12 E., Section 17, S1/2	320	Sweet Grass	Ward & Parker Ranch, LLC

Table 5. Alternative 1 description of federal parcels for exchange where boundaries differ from the proposed action alternative.

Parcel	Legal Description	Acreage	County	Owner
2	T. 4 N., R. 12 E., Section 10, N1/2, W1/2SW1/4, E1/2E1/2SE1/4.	440	Sweet Grass	United States
8	T. 7 S., R. 2 E., Section 26, N1/2NE1/4, N1/2NW1/4, N1/2SE1/4NE1/4, N1/2SW1/4NE1/4, N1/2SE1/4NW1/4, N1/2SW1/4NW1/4.	240	Madison	United States

2.3.2 Alternative 1 Water Rights Affected by the Exchange

Alternative 1 includes water rights as described in the proposed action alternative and shown in Table 3, except for two which were modified due to boundary modifications to Parcel 2 and Parcel D. The water rights listed below are affected by Alternative 1:

- Water Right 43BV 60160-00 located in Parcel 2 will be split with the United States retaining stock water right for livestock watering from Sweet Grass Creek where it flows through Section 10 on the retained federal lands, and Ward and Parker Ranch, LLC holding the portion of the right for livestock watering from Sweet Grass Creek as it flows through the lands being conveyed out of federal ownership.
- Water Right 43BV 30143518 and Water Right 43BV 30143519 located in the N1/2 Parcel D will be unaffected by the Exchange. Ward and Parker LLC. will retain the north half of Section 17 and all appurtenant water rights.

2.4 Lands Considered for Exchange

Both the Proposed Action Alternative and Alternative 1, the modified proposed action alternative include non-federal parcels A, B, C, D, E, F, G, H, I, J and K, and federal parcels 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 in Sweet Grass, Park, and Madison Counties as described in Tables 1, 2, 4 and 5. For the purposes of the document, all legal descriptions used herein are in Principal Meridian Montana.

The proposed land exchange will be completed on an equal value basis. If the final appraisals indicate the value of the non-federal lands exceeds the value of the federal lands, the landowners could: 1) voluntarily offer to donate additional non-federal lands to the Forest Service. in a separate transaction; 2) receive a cash equalization payment; or 3) reduce the amount of non-federal land conveyed to the Forest Service.

If the final appraisals indicate the value of the federal land exceeds the value of the non-federal lands, the Forest Service could: 1) receive a cash equalization payment; or 2) reduce the amount of federal land conveyed to private ownership.

2.4.1 Description and Location of Lands for Both Action Alternatives

Non-federal Parcels A through I and K, total about 5,825 acres in the Proposed Action Alternative and 5,505 acres in Alternative 1 and are located in Park and Sweet Grass Counties in the Crazy Mountain Range.

These parcels range from bottomlands around 6,000 feet in elevation along the Sweet Grass drainage

to steep peaks and ridges upwards of 9,000 feet in elevation. Most of the non-federal parcels are timbered drainages that lead to high elevation rocky ridges, slopes and peaks. This area includes unroaded, undeveloped, or unfragmented tracts of land that provide wildlife habitat and intact ecosystems.

Parcel J, about 605 acres in both alternatives, is located near Big Sky Basin in a landscape comprised of timbered lands, open meadows and gentle to moderate topography. This parcel is adjacent to the Madison Roadless Area, which is adjacent to the boundary of the Lee Metcalf Wilderness Area (Taylor Hilgard Unit). Parcel J lies within a critical wildlife corridor that provides connectivity between high elevation summer range and lower elevation winter range for grizzly bear, wolves, and big game species. The Forest Service holds an easement through Parcel J for Inspiration Divide Trail No. 8.

Most of Parcel J is currently subject to a Conservation Easement held by Montana Land Reliance. The Conservation Easement precludes any residential, industrial or commercial development (other than ski runs and lifts) thereby preserving the habitat, scenic, and open space values of these lands. This Conservation Easement would be amended to remove the lands in Parcel J being conveyed to the United States, and the Land Reliance will assign all of its rights and obligations under the Easement associated with Parcel J to the United States.

Federal Parcels 1 through 7 are located in the foothills of the east Crazy Mountains within Sweet Grass and Big Timber drainages ranging in elevation from 6,000 feet to 8,000 feet. Parcels 1 through 7 total about 3,635 acres in the Proposed Action Alternative and 3,435 acres in Alternative 1. The parcels include lower elevation areas in the Sweet Grass drainage and high elevation parcels dominated by timber and less vegetated openings. They are generally more gradual in topography than the non-federal parcels, though some rocky steep terrain exists.

Federal Parcels 8 through 10 total about 500 acres in the Proposed Action Alternative and 420 acres in Alternative 1 and are located near Eglise Rock (Eglise Peak) in the Big Sky Basin area. The lands are comprised of timbered lands, open meadows, and foothill shrublands and grasslands. The area is used for recreational opportunities including motorized uses, hiking, hunting, and snowmobiling.

2.5 Additional Elements Common to Both Alternatives

Land Management Plan Area Designations

Forest wide plan components would apply to the acquired lands. The plan components for the geographic areas and designated areas within which each parcel is located would also apply.

Parcels A-I and K would be incorporated into the Bridger, Bangtail, and Crazy Mountains Geographic Area. Parcels A-I would also be incorporated into the Crazy Mountains Backcountry area. Parcel K would be also incorporated into the South Crazy Mountain Recommended Wilderness Area.

Parcel J would be incorporated in the Madison, Henrys Lake, and Gallatin Mountains Geographic Area.

Patent Reservations on Federal Lands

The United States can retain certain rights through a patent of deed reservation when lands are conveyed from federal to private ownership. The United States will be reserving easements to protect trail and road access in perpetuity for the following routes:

- Sweet Trunk Trail No. 274 right-of-way crossing Parcels 1, 2, and 7, and potentially Parcels 4 and 5, as necessary.
- Big Timber Creek Road No. 197 right-of-way crossing Parcel 7.

- Eglise Rock Overlook Trail No. 468 right-of-way crossing Parcel 8.

A protective covenant in the form of a patent reservation will be placed to protect one rock cairn in Parcel 6 for 0.02 acres. This protective covenant to protect the archeological value of the site would prohibit construction, alteration, or disturbance of the ground surface, other than grazing.

New Trail and Trailhead Improvement

Sweet Trunk Trail No. 274

The Forest Service proposes to create a 22-mile trail that would replace East Trunk Trail No. 136 (about 11 miles) and a segment of Sweet Grass Trail No. 122. The segments of East Trunk and Sweet Grass Trails to be replaced would not be reserved on federal lands as part of this exchange. The trail would be called Sweet Trunk Trail No. 274. The proposed trail location is shown in Figure 5. The non-federal party would fund construction of the new trail.

The trail would provide perpetual access to the public in the east Crazy Mountains. It would become part of the larger Crazy Mountain trail network making a 40-mile loop possible. The route would be managed consistently with the Land Management Plan and Travel Plan goals in the East Crazy Backcountry Area, for non-motorized, foot and horse recreation opportunities.

While most of the trail will be located on National Forest System lands, the landowners would donate easements for small segments that cross non-federal lands if needed. Due to the topography, it may be necessary to relocate a portion of the trail off National Forest Systems lands to meet Forest Service trail design standards. Portions of the new trail that cross current federal lands which will be conveyed will be reserved in the patent.

The trail location does not change between the Proposed Action Alternative and Alternative 1, however Alternative 1 reduces the acreage of Parcel D conveyed into Federal ownership. Because of the boundary change in Alternative 1, the landowner will convey (donate) about 1 mile of a trail easement for Trail No 274.

Big Timber Canyon Trailhead Improvements

The Forest Service proposes to improve the Big Timber Canyon Trailhead. Trailhead improvements would be funded by the non-federal party and may include resurfacing the current parking area, construction of additional parking, installation of toilet facilities, and installation of an interpretive kiosk. The parties will enter into a more detailed collection agreement regarding the trail and trailhead improvements.

Inspiration Divide Trail No. 8

The non-federal party will also fund the relocation of a short segment (about 1,500 feet) of Inspiration Divide Trail No. 8 in the SE corner of T. 7 S., R. 2 E., Section 9. This relocated trail will be to National Forest System trail standards and located entirely on Forest Service lands. The proposed trail location is shown in Figure 6.

Minerals

The landowners who currently retain surface and mineral rights intend³ to convey all minerals associated with the non-federal lands to the United States.

With the exception of non-federal parcels C and D, mineral title evidence indicates mineral rights are partially held by the landowners or severed. The non-federal party will continue to diligently pursue acquisition of the outstanding mineral interests for conveyance to the United States by contacting the

³ As documented in the landowners' proposal to the Forest Service, which is available in the project record and on the project webpage.

East Crazy Inspiration Divide Land Exchange, Custer Gallatin National Forest

outstanding mineral owners to determine if they are willing to convey their mineral interests to the United States.

The Forest Service intends to convey all minerals rights associated with the federal lands to the landowners. Mineral ownerships are shown in Table 6.

Table 6. Non-federal and federal parcel mineral ownership.

Non-Federal Parcel Mineral Title		
Parcel	Owner	Mineral Ownership
A	Ward & Parker Ranch, LLC	Outstanding
B	Carroccia Ranch, LP & Carroccia Family, LP	Outstanding
C	Carroccia Ranch, LP & Carroccia Family, LP	Whole
D	Ward & Parker Ranch, LLC	Whole
E	Hailstone Ranch Company	Outstanding
F	Hailstone Ranch Company	Outstanding
G	Hailstone Ranch Company	Outstanding
H	Switchback Ranch, LLC	Outstanding
I	Switchback Ranch, LLC	Outstanding
J	Yellowstone Development, LLC & Yellowstone Mountain Club, LLC	Outstanding
K	CMR Ranch Owner, LLC	Outstanding
Federal Parcel Mineral Title		
Parcel	Owner	Mineral Ownership
1 - 10	United States	Whole

Livestock Grazing Permits and Leases

The lands proposed for exchange in the action alternatives encompass six grazing allotments in the Crazy Mountain Range: South Fork American, Sunlight, Basin, Sweet Grass, Otter Creek, and Big Timber. There are no allotments affected in the Inspiration Divide portion of the exchange.

Table 7 describes the grazing allotments within the Crazy Mountains that will be affected through the proposed land exchange. Combined, these allotments consist of approximately 44,521 acres, including 25,976 acres of National Forest System (NFS) lands, and 18,545 acres of Private Lands (PVT).

Table 7. Description of Crazy Mountains grazing allotments affected by land exchange.

Allotment	Acres	Permit Type	Permittee	Livestock #	Dates
South Fork American	9,954 (8,394 NFS/ 1,560 PVT)	Term Term on/Off	Rein Anchor Ranch, Ltd c/o Chuck Rein	280 cow/calf	06/01-11/10
Sunlight	17,718 (10,930 NFS/ 6,788 PVT)	Term Term Private	Carroccia Ranch LP	43 yearlings	07/15-09/15
Basin	1,265 (458 NFS/ 807 PVT)	Term On/Off	Nathan Anderson	113 cow/calf	07/01-09/30
Sweet Grass	970 (640 NFS/ 330 PVT)	Term On/Off	Nathan Anderson	52 cow/calf	07/01-09/30
Otter Creek	5,629 (847 NFS/ 4,782 PVT)	Term On/Off	Hailstone Ranch Co. c/o Lee Langhus	187 cow/calf	06/26-09/30
Big Timber	8,985 (4,707 NFS/ 4,278 PVT)	Term On/Off	Switchback Ranch LLC c/o Haylee Kramer	60 horses	07/06-09/05
Big Timber	8,985 (4,707 NFS/ 4,278 PVT)	Term	Carroccia Ranch LP	50 yearlings	07/15-09/15

Permits may be modified, cancelled (in whole or part) as a consequence of the exchange. Lands that are added to the Forest Service may be made available for grazing (through the grant process).

Permit holders may reserve grazing privileges on Forest Service lands for two years from the date the Service provides written notice of a land exchange being considered that affects the holders' allotments, or they may elect to waive the notification period for the right to reserve (36 CFR 222.4(a)(1)).

Fences, Roads, Irrigation Ditches, and Other Improvements

Fences, low standard roads, trails, irrigation ditches and other improvements are known to exist on the non-federal and federal lands identified for exchange. The Forest Service and landowner(s) are aware of these existing features and agree to accept title to the lands as is.

Land Special Use Authorizations

The existing lands special uses authorizations on the federal parcels are in the Crazy Mountains and are shown in Table 8.

Table 8. Lands special use authorizations on federal parcels in the Crazy Mountains.

Authorization Holder	Authorization type	Federal Parcel	Legal location
John and Sylvia Drivdahl	Easement for Agricultural Irrigation and Livestock Watering System Easement	6	T. 4 N., R. 12 E., Section 36, SE¼NW¼, S½NE¼
Northwestern Corporation (Northwestern Energy)	Permit for Powerline	2	T. 4 N., R. 12 E., Section 10, N½
Switchback Ranch, LLC c/o David Leuschen	Permit for Water System	7	T. 3 N., R. 12 E., Section 2, NW¼

Upon execution of the land exchange, these authorizations would be amended or closed as described below:

- The Agricultural Irrigation and Livestock Watering System Easement encumbers Parcel 6 and the deed to Hailstone Ranch Company will be issued subject to this easement.
- The powerline permit to Northwestern Energy would be amended to remove a portion of the line and Ward & Parker Ranch LLC will be required to grant an easement to Northwestern Energy at closing.
- The water system permit issued to Switchback Ranch LLC will be closed since the Switchback Ranch LLC will be the non-federal party acquiring the land this permit encumbers.

Recreation Special Use Authorizations

Outfitter and Guides operate in the federal parcels proposed for exchange under special use authorizations. These permits do not have specific locations but use the general landscape in the east Crazy Mountains and Big Sky areas.

In the east Crazy Mountains, four outfitters have permits that authorize day-use and overnight service days in the federal parcels proposed for exchange. Authorized services include horseback riding and fall hunting.

Three outfitters in the Big Sky area have permits that authorize day-use and overnight service days in the federal parcels proposed for exchange. Use types include hiking, overnight backpacking, horseback riding, snowmobiling, and fall hunting. Ten other outfitter and guides have use areas that include large portions of the Bozeman District and would not be likely to use those parcels because they are too remote.

Table 9. Outfitter guide permits affected by the proposed action.

Authorization Holder	Use	Federal Parcel
Sweet Grass Ranch	Day use horseback	1-7
Anchor Outfitting	Day use fall hunting	1-7
Cowboy Up Outfitters	Day use horseback and overnight fall hunting	1-7
Lazy K Bar	Day use	1-7
Jake’s Horses, Inc.	Horseback day use and overnight summer/fall	8-10
Canyon Adventures	Day use snowmobiling	8-10
Lone Mountain Ranch, Inc.	Overnight summer backpacking and pack trips	8-10

The permittees will be notified of the exchange and additional lands may be identified for use as needed. Permits will be modified to remove use on the conveyed federal parcels prior to closing.

Hazardous Materials

The Forest Service and non-federal party are not aware of any hazardous material issues on the federal or non-federal parcels. Phase I Environmental Site Assessments will be completed during the exchange process. Any recognized environmental conditions identified will be dealt with in a manner acceptable to both parties. This assessment will be conducted in accordance with 40 CFR 312 and 33 CFR 137.

2.6 Issues and Alternatives Considered but Eliminated from Detailed Analysis

Issues

The National Environmental Policy Act requires the agency to identify and eliminate from detailed study those issues that are not significant or that have been covered by prior environmental review, to narrow the scope of the analysis. Reasons for eliminating issues from detailed study include when they are: a) general opinions or position statements not specific to the proposed action; b) items addressed by other laws, regulations, or policies; c) items not relevant to the potential effects of the proposed action, or otherwise outside the scope of this analysis; or d) items that have no or negligible effects. Eliminated issues are not addressed beyond the rationale provided here.

Water Quality

No activities under any alternatives would result in any streams being listed on the 303(d) list for impaired water quality.

Wild and Scenic Rivers

There are no designated wild and scenic rivers within the project area, therefore there are no effects to designated wild and scenic rivers.

Wilderness and Wilderness Study Areas

There are no designated wilderness areas or wilderness study areas within the project area, therefore there are no effects to designated wilderness and wilderness study areas.

Parklands and Prime Farmlands

There are no parklands or prime farmland within the project area, therefore there are no effects to parklands or prime farmlands.

Social and Economic Resources

The action alternative is not anticipated to create any full-time equivalent positions, nor is it anticipated to create any impacts to social resources (county services, school systems, etc.) within nearby communities.

Alternatives

The development and analysis of alternatives in the environmental assessment process is used to inform decision makers and the public of the effect of reasonable alternatives. As per 36 CFR 220.7(b)(2) an environmental assessment “shall briefly describe the proposed action and alternative(s) that meet the need for action. No specific number of alternatives is required or prescribed.” In determining the range of alternatives to be considered, the emphasis is on what is “reasonable.” Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply a desirable alternative.

Based on comments received during the 45-day public comment period on the preliminary

environmental assessment (December 2022) the Forest Service reengaged with WLG to explore additional alternatives to be responses to the key issues identified in section 1.4. While many iterations or alternative ideas were suggested during public comment, they were not feasible or reasonable because they are outside of the decision space of the Forest Service or require willing landowners and thereby are eliminated from detailed analysis.

Table 10 demonstrates some Alternatives that have been considered and the reason why they are not being considered in detail:

Table 10. Alternatives considered but dismissed from detailed analysis.

Considered Alternative	Rationale for Elimination from Detailed Study
<p>Direct Purchase</p> <p>The Forest Service would purchase the non-federal lands and associated interests, described within section 1.4, from the private owners (Parcels A-K) and retain the proposed National Forest System lands for exchange.</p>	<p>Rationale:</p> <p>Forest Service policy for land exchanges requires consideration of a direct purchase alternative (FSH 5409.13).</p> <p>These landowners are not willing to sell their land to the Forest Service.</p> <p>Private landowners have only expressed interest in exchanging the non-federal lands for the federal lands located within, and adjacent, to their private lands.</p>
<p>Direct Right of Way/Easement Purchase</p> <p>The Forest Service would purchase easements for Rein Lane Road, Sweet Grass Trail, East Trunk Trail and Smeller Lake Trail.</p>	<p>Rationale:</p> <p>These landowners are not willing to sell or grant a right of way or easement to the Forest Service on private lands near, within or adjacent to these locations.</p> <p>If viable this alternative would only meet some of the need identified for the exchange. Notably public access would be improved.</p> <p>However, other benefits of lands consolidation and designated area protection would not be achieved.</p>
<p>Direct Right of Way/Administrative Easement Purchase</p> <p>The Forest Service would purchase administrative only easements for Rein Lane Road and Sweet Grass Road.</p>	<p>Rationale:</p> <p>These landowners are not willing to sell or grant a right of way or administrative easement to the Forest Service on private lands near, within or adjacent to these locations.</p> <p>If viable this alternative would only meet some of the need identified for the exchange. Notably public access and the need to consolidate lands would not be addressed.</p>
<p>Consider Six Individual Projects Rather than an Assembled Exchanges</p> <p>The Forest Service would meet and negotiate with landowners individually and process/evaluate each exchange independently.</p>	<p>Rationale:</p> <p>Individual projects with each landowner were determined not to be viable early in the process as described in the background section because the holistic public benefits could not be achieved without broader consideration.</p> <p>In addition, assembled land exchanges often result in reduced administrative costs and consider the direct, indirect and cumulative environmental effects of the proposal in totality.</p>

Considered Alternative	Rationale for Elimination from Detailed Study
<p>Legislated Land Exchange</p> <p>The Land Exchange should be legislated by Congress rather than follow the Forest Service administrative process.</p>	<p>Rationale:</p> <p>The Forest Service believes an open and inclusive process is important for the consideration of this proposal. The Forest Service has the authority, granted by congress, to process land exchange cases in accordance with Forest Service land exchange regulations at Title 36, Code of Federal Regulations, part 254, subpart A (36 CFR, part 254, subpart A), except for land exchanges and interchanges authorized by the Small Tracts Act of January 12, 1983 (16 U.S.C. 521c - 521i) which are subject to 36 CFR part 254, subpart C (FSM 5570 and FSH 5509.11). Legislative proposals may be initiated by the Forest Service or a non-agency entity. However, Forest Service personnel are prohibited from supporting or opposing a legislative proposal until the Secretary of Agriculture determines the official position of the Administration (FSM 1510.1). Forest Service personnel are also statutorily prohibited by anti-lobbying laws (18 U.S.C. sec. 1913) from attempting to influence a member of Congress to support or oppose the proposal. The non-Federal exchange party, or other interested parties, may promote legislation on their own behalf (sec. 31.13a).</p>

3.0 Environmental Effects

Specialists’ individual reports are hereby incorporated by reference (36 CFR 220.7(b)(3)(v) and 40 CFR 1501.12) and are available in their entirety in the project record.

This section summarizes, but does not fully repeat, the potential effects of the alternative actions on specific resources. Past management actions that may have a potential to cumulatively lead to an effect have been accounted for in the current condition baseline, which is generally discussed within existing conditions sections. There are currently no proposed projects that are considered “reasonably foreseeable future actions” (36 CFR 220.3) within the proposed land exchange areas that would lead to a cumulative impact other than those discussed within the sections below.

For many resources, No Action, is the same as the current condition. Without implementing the proposed land exchange, the current condition would continue. The no action alternative serves a baseline against which the environmental effects of the action alternatives can be compared.

3.1 Recreation Special Designations- Inventoried Roadless Areas, Backcountry Areas and Recommended Wilderness

Existing Conditions

The East Crazy Inspiration Divide project involves Inventoried Roadless Areas (IRA), Backcountry Areas (BCA) and Recommended Wilderness Areas (RWA). This analysis tiers to the Final Environmental Impact Statement for the Custer Gallatin National Forest Land Management Plan. Please [see Volume 2](#) for more on recommended wilderness and backcountry areas (sections 3.22.2 and 3.22.4).

Other Designated Areas

There are no eligible Wild and Scenic River segments, Designated Wild and Scenic Rivers or Designated Wilderness in or near any of the parcels to be exchanged.

Desired Conditions

2001 Roadless Area Conservation Rule

The 2001 Roadless Rule established prohibitions on road construction, road reconstruction, and timber harvesting on 58.5 million acres of inventoried roadless areas on National Forest System lands. The intent of the 2001 Roadless Rule is to provide lasting protection for inventoried roadless areas within the Forest Service in the context of multiple-use management. The final environmental impact statement for the 2001 Roadless Rule stated that, “For lands acquired through exchange, Forest Service regulation states that those lands within areas having an administrative designation set through the land management planning process, shall automatically become part of the area within which they are located, and shall be managed in accordance with the laws, regulations, and land management plans applicable to the area (36 CFR 254.3(f)).”

Backcountry Areas

Backcountry areas are generally undeveloped or lightly developed. They are either unroaded, or have few, primitive roads. Some are both unroaded and untrailed. Backcountry areas provide for more remote, semi-primitive recreation opportunities, both motorized and nonmotorized, depending on the area (U.S. Department of Agriculture 2022a).

Key components of the Crazy Mountain Backcountry Area include:

- Quiet, nonmotorized recreation opportunities predominate.
- New permanent or temporary roads shall not be allowed.
- The backcountry area is not suitable for motorized transport. The backcountry area is not suitable for mechanized transport, except use of game carts.

Recommended Wilderness

Recommended wilderness areas are lands that have the potential to become designated as official wilderness through future legislation. The Forest Service only recommends these lands to the U.S. Congress for consideration. Congress, and ultimately the President, must establish legislation through a wilderness bill.

Key desired conditions for recommended wilderness areas include:

- Recommended wilderness areas maintain their existing wilderness characteristics, to preserve opportunities for inclusion in the National Wilderness Preservation System.
- Recommended wilderness areas provide outstanding opportunities for solitude or primitive and unconfined recreation. Impacts from visitor use do not detract from the natural setting.
- Recommended wilderness areas are characterized by a natural environment where ecological processes such as natural succession, wildfire, avalanches, insects, and disease function as the primary forces affecting the environment (U.S. Department of Agriculture 2022b).

Environmental Effects

No Action

This alternative represents reasonably foreseeable conditions that would be expected in the absence of the proposed land exchange. Under this Alternative, the Forest Service and non-federal party would not exchange lands. The existing landownership pattern would remain; limited public access and checkerboard ownership management challenges would persist.

Under the no action Alternative, the area would continue in its existing configuration. Future development of interior private lands including logging, structures, or other commercial ventures

within these areas would have the potential to impact the surrounding qualities of the Federal lands or drive other requests for special use authorizations within the IRA, BCA and RWA.

Effects of the Action Alternatives

Under the 2022 Land Management Plan, the plan components for the geographic areas and designated areas within which each parcel is located would apply to lands acquired in the exchange.

The Forest assumes that the desired qualities of designated areas (listed in the desired conditions section above, including things like “opportunities for solitude” and “quiet recreation predominates) are achieved through management consistent with Land Management Plan direction. This project does not propose management actions or any changes in plan direction. So, the effects of the project on designated areas were measured in terms of affected acreage (size). The spatial boundary for analysis is the land boundaries described in each proposed action alternative and the temporal boundary for analysis is not limited because the change in ownership may last indefinitely.

Because lands are managed consistently with Plan direction, and this project does not propose to change Plan direction, we assume that desired conditions in designated areas (listed in the desired conditions section above)

Crazy Mountain Inventoried Roadless Area (IRA)

The Crazy Mountain IRA is currently 82,091 acres. Portions of three federal parcels (1, 2 and 4), and all of federal parcel 5, would be conveyed to non-federal ownership. These parcels would no longer be designated as inventoried roadless and would not receive roadless protections. These parcels are generally on the border of the IRA, and are adjacent to private lands or development.

Ten of the non-federal parcels (A, B, C, D, E, F, G, H, I, K) are either entirely or partially surrounded by the Crazy Mountain IRA. These sections are interior, undeveloped checkerboard sections within the broader Crazy Mountain IRA. While mapped IRA boundaries (established by the 2001 Roadless Rule) would not change, the interior sections would be protected by the surrounding roadless area management. Acquired lands would be managed as either BCA or RWA and would therefore receive protections similar to inventoried roadless designation and maintain their undeveloped character. The proposed changes for each alternative are shown in Figure 7

Proposed Action Alternative: In the proposed action alternative, 1,111 acres currently designated as inventoried roadless (about 1.4% of the IRA) on parcels 1, 2, 4 and 5 would be conveyed out of the federal estate and no longer receive roadless protections. The Forest would acquire 5,816 acres that would be adjacent and mostly interior to the Crazy Mountain IRA. There would be a net increase of 4,705 acres adjacent to the IRA.

Alternative 1, Modified Proposed Action: In alternative 1, 920 acres currently designated as inventoried roadless (about 1.1% of the IRA) on parcels 1, 2, 4 and 5 would be conveyed out of the federal estate and no longer receive roadless protections. The Forest would acquire 5,497 acres that would be adjacent and mostly interior to the Crazy Mountain IRA. Therefore, there would be a net increase of 4,577 acres adjacent to IRA, which is 128 fewer acres than the proposed action alternative.

East Crazy Inspiration Divide Land Exchange, Custer Gallatin National Forest

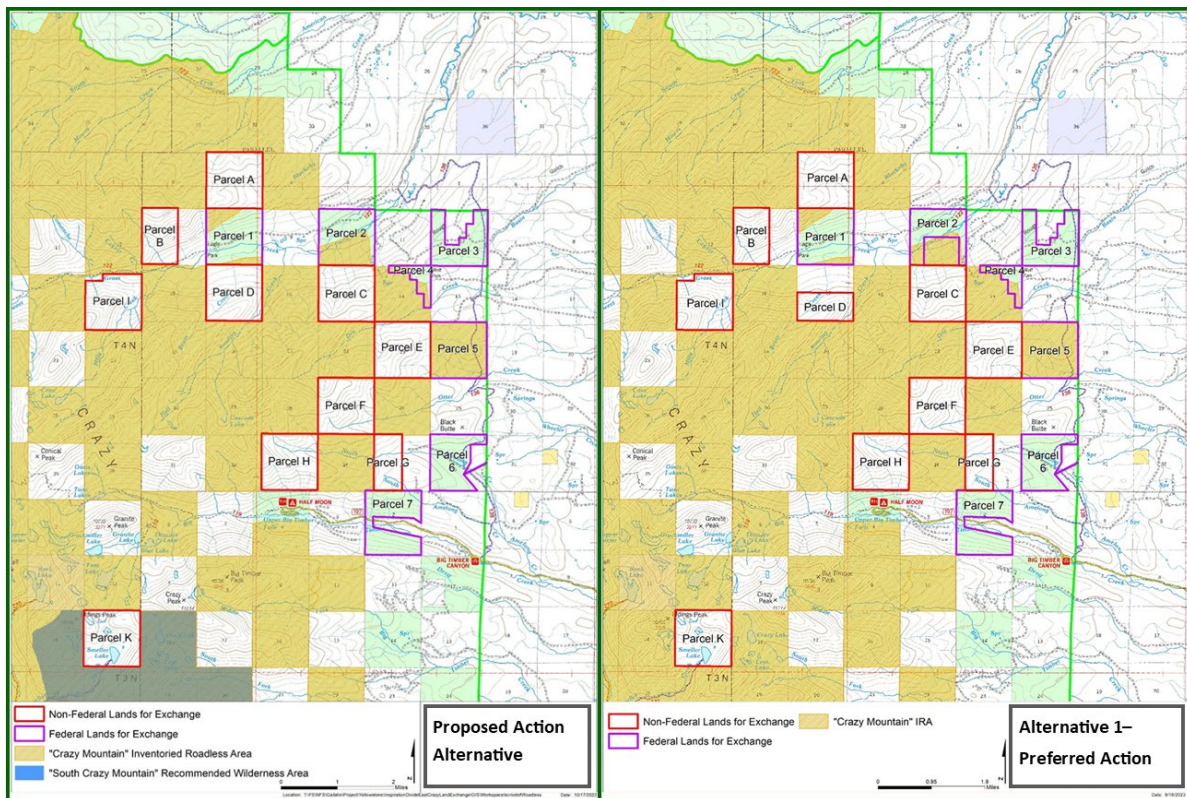


Figure 7. Alternatives in the Crazy Mountain Inventoried Roadless Area.

Madison Inventoried Roadless Area (IRA)

The Madison IRA is currently 127,856 acres. The federal parcels to be conveyed (parcels 8, 9, and 10) are at the boundary of a private housing development but are generally less developed in character. The proposed project would result in these parcels no longer be designated IRA, and they would lose their roadless protections.

The non-federal parcel to be acquired (J) is adjacent the Madison Roadless Area and private lands, and near the Lee Metcalf Wilderness. Parcel J consists of 605 acres of undeveloped lands. The proposed actions are shown in Figure 8.

Proposed Action Alternative: In the proposed action alternative, 500 acres would be conveyed (about 0.4% if the IRA) and would no longer receive roadless protection. The acquired Parcel J would be managed consistently with the adjacent roadless. There would be a net increase of 105 acres.

Alternative 1, Modified Proposed Action: In alternative 1, 420 acres would be conveyed (0.3% of the IRA) and would no longer receive roadless protection. However, in this alternative, these federal parcels would be protected from development by a conservation easement that will be managed by Montana Land Reliance. These conservation easements allow for skiing and other appropriate outdoor recreational uses and preclude residential and further development. The acquired Parcel J would be managed consistent with adjacent roadless; the Forest Service would experience a net gain of 185 acres.

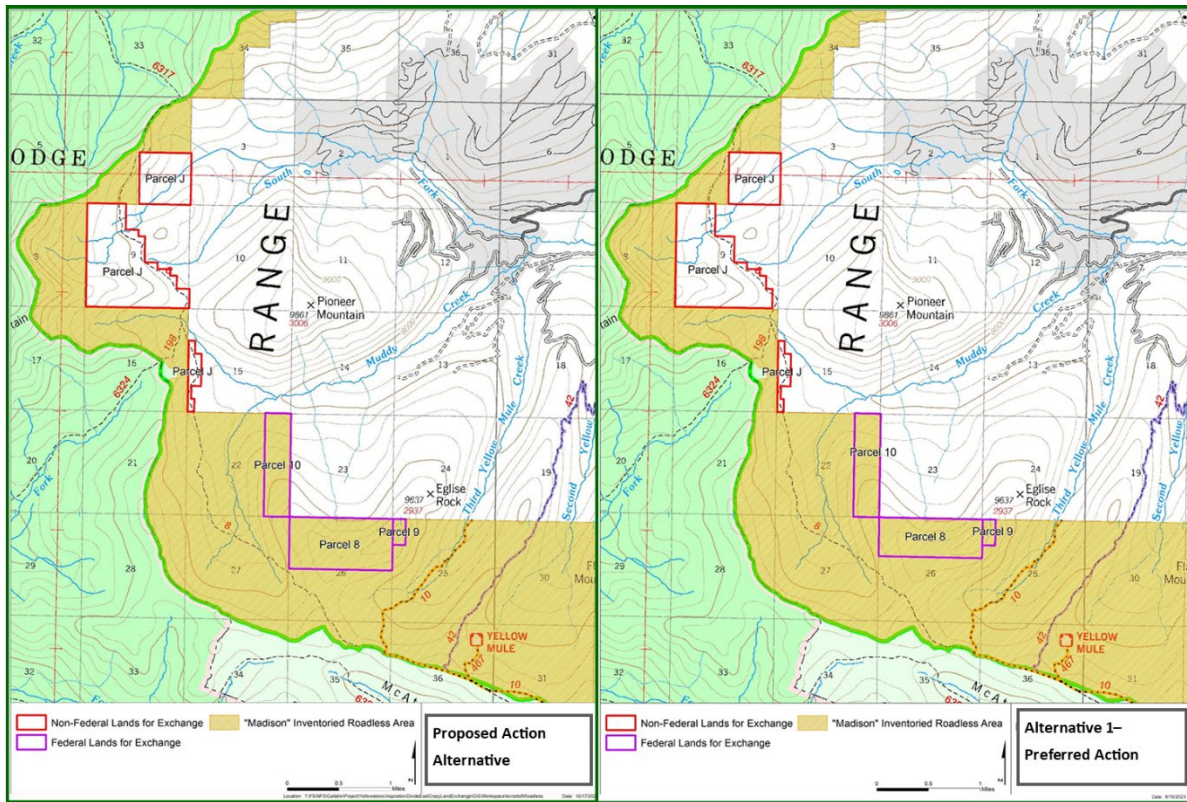


Figure 8. Alternatives in the Madison Inventoried Roadless Area.

Crazy Mountains Backcountry Area (BCA)

The 30,642-acre Crazy Mountains BCA is adjacent to 9 non-federal parcels (A, B, C, D, E, F, G, H, I) involved in this exchange. The non-federal parcels are all interior to the Backcountry Area as shown in Figure 9. None of the federal parcels to be conveyed (parcels 1 through 7) are in the BCA. So, there would be no loss of any lands currently designated as BCA in either action alternative.

Proposed Action Alternative: In the proposed action alternative, about 5,825 would be acquired and added to the backcountry area, resulting in about a 19% increase in area.

Alternative 1, Modified Proposed Action: In alternative 1, about 5,505 acres would be acquired and added to the backcountry area, resulting in about an 18% increase in area.

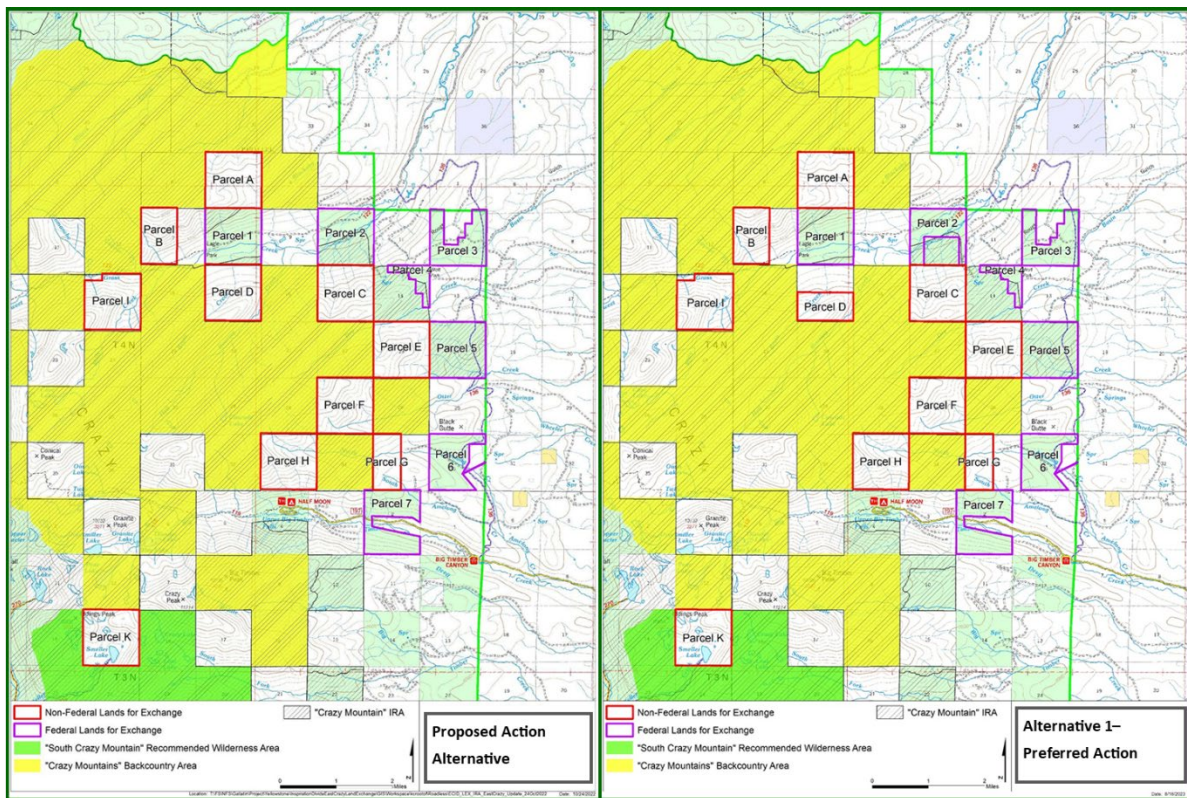


Figure 9. A map showing the alternatives and the Crazy Mountains and South Crazy Mountain Backcountry Areas.

South Crazy Mountain Recommended Wilderness Area (RWA)

Parcel K is surrounded on three sides by the 9,619 acre South Crazy Mountain Recommended Wilderness Area, as shown in Figure 9. The proposed exchange in both action alternatives would add Parcel K (640 acres) to the South Crazy Mountain RWA, increasing the RWA size to 10,260 total acres. No federal lands to be conveyed are designated as recommended wilderness, wilderness, or wilderness study areas.

Past, Present, and Foreseeable Activities Relevant to Cumulative Effects Analysis

There are currently no proposed projects that are considered “reasonably foreseeable future actions” (36 CFR 220.3) within the proposed land exchange areas that would lead to a cumulative impact other than those discussed within each section.

3.2 Roads, Trails and Access

Introduction

There are several historic routes in the Crazies that cross private land and have been used to access National Forest System lands, some for which the Forest Service has acquired recorded easements and several that do not have recorded easements. In the 2006 Travel Management Plan (U.S. Department of Agriculture 2006), the Custer Gallatin National Forest identified the need to acquire additional access within the Crazies for the purpose of recreation and administration of the Forest.

This Travel Plan identified and established travel planning areas and identified opportunities for public recreation use and access using the Forest’s Road and trail system. The East Crazy Inspiration Divide Land Exchange proposal involves two travel planning areas: The East Crazies Travel Planning Area and the Big Sky Travel Planning Area.

Existing Conditions

East Crazy Travel Plan Area Access

Sweet Grass Road No. 990

Sweet Grass Road No. 990 crosses Parcel 2 and ends at the junction with Sweet Grass Trail No. 122 in Parcel 1. It is accessed via Rein Lane (a nearly 7-mile private road). There has been discussion over the years regarding public access across Rein Lane to the Sweet Grass drainage. Rein Lane is depicted as a private road in INFRA and as non-Forest Service jurisdiction on maps published by the Agency. Direction and route designation in the Land Management Plan and Travel Plan do not speak to this road. Consequently, Sweet Grass Road is unavailable for the administration of the Forest System as shown in Figure 10.

The Travel Plan designated Sweet Grass Road No. 990 on Parcels 1 and 2 to be an administrative motorized route; but not open to public motorized use. The road is not designated on the intermingled non-federal lands in the Sweet Grass drainage, making it noncontiguous. Sweet Grass Road No. 990 is depicted on the 2012 Visitor Map, with the administrative road symbology “motorized use is prohibited” but the “route is otherwise open to foot and stock” as decided in the Travel Plan and depicted in the INFRA database.

Within the Travel Plan, the Forest determined access to the area was inadequate and identified the need and desire to acquire road access to the Forest Service boundary and across the current checkerboard private in-holdings in the Sweetgrass Area (*Travel Plan Table I-3, pages I-4 through I-8*).

Sweet Grass Road No. 990, crosses Parcels 1 and 2 and in the Proposed Action and Alternative 1 would not reserve access across the federal lands for administrative or public use.

Sweet Grass Trail No. 122

Sweet Grass Trail No. 122 is currently depicted as beginning in T. 4 N., R. 12 E., Section 2, running coincident with Sweet Grass Road No. 990 for approximately 3.6 miles to T. 4 N., R. 12 E., Section 8, where the road terminates. The start of Trail No. 122 was traditionally shown as starting in Section 8 at Eagle Park through the 1980s. In late 1990s, the trail locations shifted to be shown as starting in Section 2, coincident with Road No. 990. The trail crosses intermingled private and Forest Service lands for approximately 11 miles and ends in T. 4 N., R. 11 E., Section 34, at the junction with Big Timber Creek Trail No. 119 at the Conical Peak Saddle.

While there has been longstanding discussion over the public use of Sweet Grass Trail No. 122, the Forest Service does not hold recorded easements in T. 4 N., R. 12 E., Sections 2, 7 and 9 (*2006 Travel Plan, Appendix A*). The Forest Service does hold recorded easements for the remainder of the trail as shown in Figure 10.

The Travel Plan designated this trail as non-motorized and non-mechanized. It is currently managed from the west to T. 4 N., R. 12 E., Section 8, as a Trail Class 3 trail for foot and stock use. Within the Travel Plan, the Forest determined access to the area was inadequate and identified the need and desire to “Perfect trail access across private in-holdings within Sweetgrass...” (*Travel Plan Table I-3, pages I-4 through I-8*).

In both action alternatives, Sweet Grass Trail No. 122 would not be reserved for administrative or public use in Parcel 1.

East Trunk Trail No. 136

The East Trunk Trail No. 136 (aka Trail No. 115) is currently depicted as beginning in T. 3 N., R. 12 E., Section 1, at the junction with Big Timber Creek Road No. 197 and ending at Sweet Grass Road No. 990 in T. 4 N., R. 12 E., Section 2. The trail crosses intermingled private and Forest Service lands for approximately 11 miles.

The trail is shown on Forest Service maps dating back to 1925, although it is absent from the 1962 and 1973 maps, the trail location has changed over time with the most substantial changes occurring at the northern most extent at its terminus on private property in Sweet Grass Creek.

East Trunk trail is coincident with two segments of administrative roads, the Amelong Creek Road No. 7083 in T. 3 N., R. 13. E., Section 6 and T. 4 N., R. 13. E., Section 31, and Amelong Creek Spur No. 7083-C in T. 4 N., R. 12 E., Section 36. The administrative roads are not open to the public for motorized use.

There has been longstanding discussion over the public use of East Trunk Trail No. 136. The Forest Service currently holds one trail easement that is about 600 feet in length where the trail begins at Big Timber Creek Road No. 197. There are no other recorded easements where the trail crosses private lands as shown in Figure 10. The trail has not been regularly maintained and is difficult to locate on the ground.

The Travel Plan designated this trail as non-motorized. It was incorrectly shown as open to mountain bikes and depicted incorrectly on the 2012 Visitor Map; the easement referenced above only allows for foot and horse.

Within the Travel Plan, the Forest determined access to the area was inadequate and identified the need and desire to “Perfect trail access across private in-holdings ...along trail No 115...” (*Travel Plan, Table I-3, pages I-4 through I-8*).

These routes cross Parcels 3, 5 and 6. East Trunk Trail No. 136 would not be reserved for administrative or public use as part of the action alternatives.

Big Timber Creek Road No. 197

The Big Timber Creek Road No. 197 begins at the end of the County Road No. 25 in T. 3 N., R. 12 E., Section 12 and travels through private and Forest for about 4 miles before it ends at the Halfmoon Campground and trailhead in T. 3 N., R. 12 E., Section 4.

The Forest Service holds recorded easements for the entire length of the road where it crosses private property as shown in Figure 10.

The Travel Plan designated this road as open to highway vehicles and is open year-round as depicted on the 2012 Visitor Map. Portions of the route are currently plowed for private ranch activities under a road use permit.

This route crosses Parcel 7 and the Forest Service will reserve an easement along Big Timber Creek Road No. 197 as part of the Proposed Action Alternative and Alternative 1.

Big Timber Creek Trail No. 119

The Big Timber Creek Trail No. 119 begins in T. 3. N., R. 12 E., Section 4 at the trailhead located at the end of Big Timber Creek Road No. 197. The trail crosses intermingled private and Forest Service lands for about 6 miles to Conical Pass and the junction with Sweet Grass Trail No. 122 in T. 4 N., R. 11 E., Section 34.

The Forest Service holds recorded easements for the entire length of the trail across private property as shown in Figure 10. The Travel Plan designated this trail as non-motorized and open only to foot and horse travel as dictated by the easements.

The Big Timber Creek Trail No. 119 does not cross any parcels included in the action alternatives. The Forest Service has recorded easements for public access on the entirety trail across all land ownerships.

Smeller Lake Trail No. 220

This trail is entirely on National Forest System lands up to the boundary of the private lands in T. 3 N., R. 11 E., Section 13(Parcel K). The Forest Service does not hold a recorded easement in Parcel

K, to access Smeller Lake. There is no recorded easement providing for public use of Smeller Lake within Parcel K.

This route was determined to be open to foot, horse, and mountain bikes and has been identified as a route that there is a need for additional access within the Travel Plan. In the 2022 Land Management Plan, this trail is no longer suitable for mountain bike use because it now crosses into the South Crazy Recommended Wilderness Area.

Within the Travel Plan, the Forest determined access to the area was inadequate and identified the need and desire to “Acquire Trail access...to Smeller Lake on Smeller Lake Trail No. 220 in section 13” (*Travel Plan Table I-3, pages I-4 through I-8*).

Parcel K would be acquired in both action alternatives and additional easements would not need to be secured.

Other Area Administrative Roads

The Travel Plan designated four roads within the project area as administrative motorized routes; but not open to public motorized use. These routes include:

- Billy Creek Road No. 7085
- Amelong Creek No. 7083
- Amelong Creek A Spur No. 7083-A
- Amelong Creek C Spur No. 7083-C

All four administrative roads are depicted on the 2012 Visitor Map, with the administrative road symbology “motorized use is prohibited” but the “route is otherwise open to foot and stock” as decided in the Travel Plan and depicted in the INFRA database. In some instances, as noted they are coincident with nonmotorized trails.

These routes all cross National Forest System lands and private lands; the Forest Service does not hold recorded easements where they cross private lands making them inaccessible for the administration of the National Forest System, as shown in Figure 10. As such, these routes would not be reserved for administrative or public use where they cross Parcels 2, 3, 4, 5 and 6 in either action alternative.

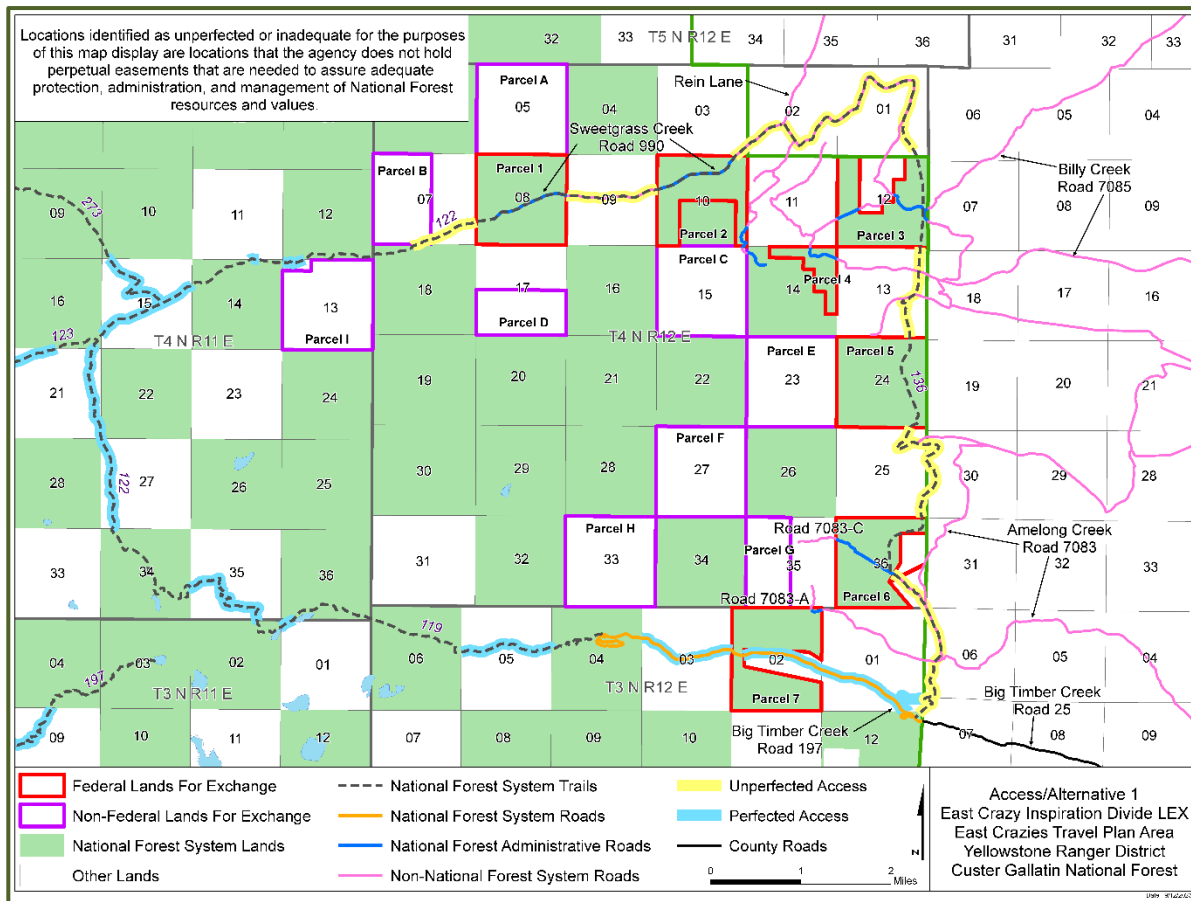


Figure 10. Existing route access in the Crazy Mountain area and parcels for exchange in Alternative 1.

Big Sky Travel Plan Area: Trails and Access

Inspiration Divide No. 8

The Inspiration Divide Trail No. 8 is a 16.4 mile trail, about 6 miles of which are in the vicinity of the project area. Within the project vicinity the trail begins in T. 7 S., R. 2 E., Section 26 and continues to its terminus along the Lee Metcalf Wilderness Boundary, as shown in Figure 11.

The Forest holds recorded easements for the entire length of the trail where it crosses private property in in T. 7 S., R. 2 E., Sections 9 and 15. Per the easements, Travel Plan designation, and the 2012 Forest Visitor map, this segment of trail is non-motorized.

The trail crosses two portions of Parcel J (T. 7 S., R. 2 E., Sections 9 and 15). Acquisition of Parcel J is included in both action alternatives and will allow the Forest Service to efficiently manage the trail corridor and any beneficial adjacent Forest uses.

Eglise Rock Overlook Trail No. 468

The Eglise Rock Overlook Trail No. 468 is an approximately 1.7-mile spur trail that leaves Inspiration Divide Trail No. 8 and is located in T. 7 S., R. 2 E., Section 26.

The entire route is located on the Forest as shown in Figure 11. The current Motor Vehicle Use Map shows Trail 468 as open to vehicles 50” or less from 6/16-12/01. The Over Snow Vehicle Use Map shows the area directly adjacent to Trail No. 468 as open to snowmobiles yearlong.

The Eglise Rock Overlook Trail No. 468 in located on Parcel 8 and the Forest Service would reserve an easement on this motorized trail in both action alternatives. Boundary changes in Alternative 1

reduce the length of trail to be reserved by reducing the acres of Forest Service lands being conveyed.

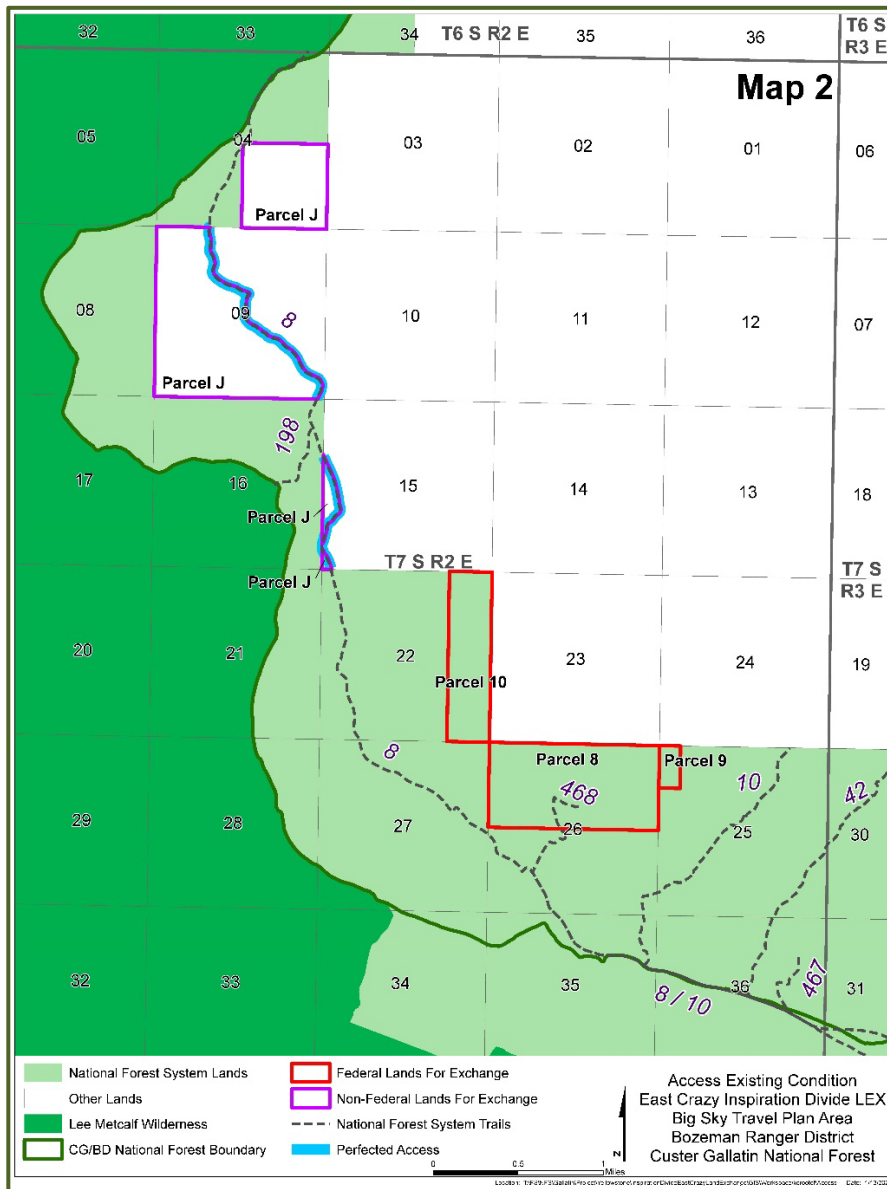


Figure 11. Existing access in the Inspiration Divide area.

Environmental Effects

No Action Alternative

The No Action alternative would leave road and trail access as they currently exist and would not address management needs for landownership consolidation and improvement of public and administrative access into the Crazies.

Limited public access, checkerboard ownership management challenges, and uncertainty would persist.

Proposed Action Alternative

Landownership consolidation creates long-term benefit to the management of the National Forest including resolving outstanding access needs and eliminating longstanding uncertainty and

confusion regarding access to Forest System lands. The Proposed Action Alternative focuses on resolving access with the construction of Sweet Trunk Trail No. 274 on Forest Service and across private lands through recorded easements, in lieu of the uncertain, unperfected status of Sweet Grass Trail and East Trunk Trail that traverse a substantial area of private lands.

The Sweet Trunk Trail will provide direct access to consolidated Forest Service lands and will support a wide diversity of resource management needs, recreation opportunities and ensure perpetual access and use for future generations.

The acquisition of Parcel K will eliminate the need to perfect additional access on the Smeller Lake Trail and allow for public use of the Lake.

The proposed exchange would result in about two miles of the Inspiration Divide Trail No. 8 which currently cross private lands, to be located on Forest Service lands. The Eglise Rock Overlook Trail No. 468 is partially located on lands that will be conveyed out of federal ownership. The United States will reserve a public access easement for the portion of this trail on Parcel 8 if conveyance out of federal ownership occurs.

The Proposed Action Alternative would move towards Land Management Plan goals and would be consistent with the expected outcomes of the Travel Plan for lands and access within the Crazy Mountains and is consistent with the Plans in the Inspiration Divide area.

Alternative 1- Modified Proposed Action

The anticipated effects of Alternative 1 related to road and trail access are generally the same those discussed in the Proposed Action Alternative.

The differences in this alternative are: 1) it would require the acquisition of an easement across Parcel D for the Sweet Trunk Trail No. 274, and 2) the length of a trail reservation along Eglise Rock Overlook No. 468 across Parcel 8 would be reduced. The Recreation Report includes discussion of the developed and dispersed recreation opportunities associated with Alternative 1, including retaining dispersed recreation access in Parcel 2 from the Sweet Trunk Trail No. 274 to the Sweet Grass drainage and the retention of snowmobile terrain in Parcel 8.

Effects Common to Both Alternatives

The Proposed Action Alternative and Alternative 1 both move the forest towards the goals, objectives, and desired conditions as laid out in the Land Management Plan and is consistent with the expected outcomes of the Travel Plan. The Action alternatives seek to provide access to Forest Service lands that are reasonable, perpetual, and move towards the objectives set forward in the Land Management Plan for the Crazy Mountain Backcountry area, the South Crazy Recommended Wilderness Area (as detailed in section 3.1) and the Inspiration Divide area.

The Sweet Trunk Trail will provide direct access to consolidated Forest Service lands and ensure perpetual access and use for future generations. It will also support a wide variety of resource management needs and quiet, non-motorized and non-mechanized recreation opportunities as consistent with the Crazy Mountain Backcountry Area.

The addition of the 22 mile Sweet Trunk Trail will improve the connectivity and overall access to the east Crazy Mountains. It would become part of the larger east Crazy trail network providing a 40 mile loop around the eastern part of the Crazy mountains.

The acquisition of Parcel K will eliminate the need to perfect or acquire additional access on the Smeller Lake Trail.

Easements acquired for Sweet Trunk Trail No. 274 and Smeller Lake Trail No. 220, along with retention of the Big Timber Creek Road No. 197, will provide public access to National Forest System lands. The isolated segments of administrative routes that would not be retained in lands

leaving federal ownership have been determined to be in excess of the needs to operate the Forest transportation system because they lack connectivity to the Forest or other public routes.

The proposed exchange would result in segments of the Inspiration Divide Trail No. 8 that currently cross private lands, about two miles, to be located on National Forest System lands.

3.3 Recreation- Developed and Dispersed

Existing Condition

Recreational use of the East Crazy area includes non-motorized activities such as hiking, backpacking, stock use, hunting and fishing. It is valued for a backcountry and primitive experience. A small number of outfitter guides, described in Table 9, are authorized in and use the area.

The Big Sky area, over a period of years, has become a mecca for ski resorts, development and growth. Inspiration Divide and Eglise Rock are situated on the boundary between the two large privately-owned ski resorts of Big Sky and the Yellowstone Club and National Forest System lands.

The Inspiration Divide portion of the project area is generally in the Buck Ridge area. The incredibly scenic views from this ridge capture Lone Peak and beyond to the rugged peaks of the Taylor Hilgard. The Buck Ridge trail is motorized in summer and winter and is a very desirable and popular location for year-round recreation, especially winter snowmobile use.

The proposed land exchange lies within big game management units for deer and elk (units 360 and 580), antelope (units 360 and 506), black bear (units 341 and 580), moose (units 303 and 360), mountain goat (units 313 and 325), and mountain lion (units 304 and 580).

Environmental Effects

Access for roads and trails is discussed in depth in the Roads and Trails Access Report and special area designations (backcountry areas, inventoried roadless, etc.) are discussed in the Designated Areas Report.

Issues are cause and effect statements. For the recreation resource, if lands are exchanged, then the amount and quality of recreation opportunities can change. So, the issues for analysis for recreation opportunities are the quality and quantity of: a) developed recreation sites, b) dispersed recreation opportunities, c) trails. We also qualitatively discuss Recreation Opportunity Spectrum designations. For analysis, we reviewed appropriate Forest Service Policy, the Custer Gallatin Land Management Plan, performed field visits to gather information, and used Custer Gallatin National Forest geospatial data.

The spatial boundary for analysis is the lands proposed for exchange in each alternative, and the temporal boundary for analysis was not limited because ownership changes have the potential to last in perpetuity.

No Action

Developed Recreation Opportunities

Currently, no developed recreation sites exist within the land exchange parcels. The popular Big Timber Canyon trailhead is adjacent to the parcels in the Crazies. The trailhead sees high visitation in the summer months and trails lead to many high alpine lakes. The infrastructure at the trailhead is minimal with one outhouse, a hitch rail, and a parking area that is rough and unevenly surfaced. On most summer weekends the trailhead is full beyond capacity and visitors often park past the bounds of the trailhead.

Dispersed Recreation Opportunities

Hunting: Hunting opportunities and big game units would continue to be managed as they currently

are, under the direction of Montana Fish Wildlife and Parks. Checkerboard landownership and the inability to cross at section corners limits hunting opportunities on existing isolated sections of public land.

Foot and Stock Travel: Currently within the East Crazies land exchange parcels, the public has foot and stock access to Sweet Grass Creek through private land, with owner permission. Foot and stock use is minimal on the eastern edge of the Crazies between Big Timber and Sweet Grass Canyon; public access on East Trunk #136 is not perfected and the trail is difficult to locate.

In the Inspiration Divide area near Big Sky, non-motorized uses are currently minimal due to the distance from trailhead access points. Foot use from adjacent private land occurs occasionally.

Motorized and Mechanized Travel: The East Crazy area does not have any current motorized opportunities.

The land exchange parcels in the Inspiration Divide area near Eglise Rock are open to motorized use and are popular yearlong with motorized users. In the winter months, snowmobiling in the Buck Ridge/Eglise Rock area is extremely popular. Buck Ridge is groomed multiple times a week by a local snowmobile club under Agreement with the Forest Service and is heavily recreated, both on the groomed route and off-trail in open play areas. Over-snow use typically slows to a stop around mid-March and then builds when the trail opens again to summer motorized use mid-June. Use would continue unchanged in the no active alternative.

Trails

There are several existing trails located or mapped on parcels involved in the exchange, please see section 3.2 in the environmental assessment for a detailed description.

Smeller Lake 220: In the East Crazy area, access to Smeller Lake would not be guaranteed because the Forest does not hold a recorded easement.

East Trunk Trail No. 136 and Sweet Grass Trail No. 122: In the Crazy Mountains, the East Trunk Trail No. 136, as well as a segment of Sweet Grass Trail No. 122 are mapped on checkerboard lands in Parcels 1-7 and A-I. Access to these trails is not perfected, so if no action is taken public access will remain contentious and uncertain.

Inspiration Divide Trail No. 8: The Inspiration Divide Trail No. 8 is a 16.4 mile trail with approximately 6 miles located within the vicinity of the project. If no action were taken, this trail would continue to pass through private land. The Forest holds recorded easements for the entire length of the trail where it crosses private property. This segment is open to non-motorized public use.

Eglise Rock Overlook Trail No. 468: The Eglise Rock Overlook Trail No. 468 is an approximately 1.7 mile spur trail that leaves Inspiration Divide Trail No. 8. The Eglise Rock Overlook Trail would remain on public land and is currently open to wheeled vehicles 50 inches or less with seasonal designation; it is open to snowmobiles yearlong.

Effects of the Action Alternatives

Developed Recreation Opportunities

Under both action alternatives, the Big Timber Canyon Trailhead would be improved. Trailhead improvements would be funded by the non-federal party and may include resurfacing the current parking area, construction of additional parking, installation of toilet facilities, and installation of an interpretive kiosk. The improvements would meet the current above-capacity needs of the trailhead and would also serve to support the increased use from the new Sweet Trunk Trail.

Dispersed Recreation Opportunities

Hunting: For both action alternatives, Montana Fish Wildlife and Parks, the agency that manages

wildlife in Montana, would continue to offer hunting opportunities on public lands in this area as part of their management of big game. While there would be a change in hunting opportunity, the secured public access routes and consolidated landownership would allow for a greater dispersal of hunters onto Federal lands in the East Crazy mountains.

Foot and Horse Travel:

Smeller Lake: Under both the proposed action alternative and the modified proposed action alternative, Parcel K containing Smeller Lake would be acquired. The 52 acre lake would be located in the South Crazy Mountain Recommended Wilderness Area. Smeller Lake is a scenic glacial lake that is stocked with Yellowstone cutthroat trout. The acquisition of Smeller Lake would provide the opportunity for recreational fishing, hunting, wildlife viewing, camping and more. The lake is a natural basecamp for recreationists seeking to summit the challenging Iddings Peak. Iddings Peak is the second tallest peak in the Crazies at 10,936 and is reached by off trail travel. Camping, fishing, and opportunities for challenging off trail travel create outstanding opportunities for primitive and unconfined recreation, consistent with the desired condition for recommended wilderness (*Land Management Plan, pg. 124 FW-DC-RWA 02*).

Sweet Grass Creek:

Proposed Action Alternative: If the proposed action alternative were implemented, the public would lose dispersed access to Sweet Grass Creek because all of Parcel 2 would be conveyed from federal ownership.

Alternative 1: In response to public comment and concern, the boundary of lands to be conveyed in Parcel 2 was modified to keep 200 acres in the federal estate. Access to Sweet Grass Creek and the surrounding 200 acres would be preserved. The Creek would be accessible via cross country travel from the Sweet Trunk Trail No. 274 in Parcel C.

Motorized and Mechanized Travel

East Crazy Area: Under both action alternatives, the non-federal lands acquired in the Crazy Mountains would be added to the Crazy Mountain Backcountry Area (parcels A through I) or the South Crazy Mountain Recommended Wilderness Area (parcel K) and would therefore not be suitable for motorized or mechanized (bicycle) travel.

Inspiration Divide Area: Under both action alternatives, the acquisition of Parcel J would result in 605 acres of new snowmobile terrain becoming available to the public.

Proposed Action Alternative: If lands in the Inspiration Divide area were exchanged as described in the proposed action alternative, then winter recreationists would be excluded from a portion of the popular Buck Ridge area. An easement would be secured for the portion of Trail No. 468 that would leave federal ownership, but dispersed use would be limited. Particularly in winter, the trail would be challenging to follow in the snow and motorized recreational opportunities would be reduced.

Alternative 1: In response to public comment and concern over the loss of winter motorized opportunity, this alternative 1 was developed. Alternative 1 preserves snowmobile recreational riding opportunity in the Buck Ridge area by reducing the land to be conveyed in Parcel 8 by 80 acres. This change will retain the Yellow Mule area and a bench below Eglise Ridge by shifting the boundary in Parcel 8. This change provides for a popular destination vista and a more logical turn around area for snowmobiles, reducing future potential management conflicts. Only the most northerly part of the Trail No. 468 would be conveyed to non-federal ownership; the trail would remain under easement for the public to use in both summer and winter. Though, as in the proposed action alternative, the portion of the trail conveyed to non-federal ownership would be challenging to follow in the snow and motorized recreational opportunities would be reduced.

Trails

Smeller Lake: Under both the proposed action alternative and the modified proposed action alternative, access to Smeller Lake would be guaranteed because Parcel K, would be acquired. The Lake would be located in the South Crazy Mountain Recommended Wilderness Area, so the trail would be open to foot and horse travel.

Sweet Trunk Trail: Under both action alternatives, East Trunk Trail No. 136 would not be reserved for administrative or public use, and the proposed 22 mile Sweet Trunk Trail would be created to replace the East Trunk Trail and a portion of the Sweet Grass Trail. This would create perpetual access for the recreating public and resolve the existing uncertainty regarding access. The new trail would be open to foot and horse travel due to its location in the Crazy Mountains Backcountry Area. Therefore, quiet non-motorized recreation opportunities would predominate consistent with desired conditions (*Land Management Plan pg. 165, BC-DC-CMBCA 01*). The new trail would become part of a larger East Crazy trail network making a 40-mile loop hiking, running, hunting or backpacking opportunity possible.

Inspiration Divide Trail No. 8: Under both action alternatives, the non-federal party would relocate a short segment of Inspiration Divide Trail No. 8 in the southeast corner of Section 9 to entirely within the Forest Service boundary. This would provide for efficient management of the trail and an equivalent recreation opportunity for the public because the route would be maintained.

Eglise Rock Overlook Trail No. 468: The Forest Service would reserve this motorized trail in both action alternatives. Motor vehicle use and over snow vehicle use would not be changed compared to the existing condition. **In Alternative 1**, boundary changes reduce the length of trail to be reserved by reducing the acres of Forest Service lands being conveyed.

Recreation Opportunity Spectrum

The land exchange project area contains three Recreation Opportunity Spectrum (ROS) designations: Roded Natural, Semi Primitive Motorized, and Semi Primitive Non-Motorized. The ROS classes can differ between the summer and winter seasons, see Appendix A for maps.

The proposed project does not include any management changes or changes in ROS designations established by the Land Management Plan. Under both action alternatives, the acquired non-federal lands would be assigned the dominant ROS designation for that parcel that provides maximum protection to the adjacent Inventoried Roadless Area, with historic recreational land uses being considered. There would be a minor reduction in mapped summer ROS of semi-primitive motorized in the Inspiration Divide area, but with the reservation of the Eglise Rock Overlook Trail, the current recreational trail use will not be impacted in summer.

The construction of the Sweet Trunk Trail is consistent with the summer and winter ROS designations (semi primitive non-motorized) because it would be non-motorized, and it is compatible with a naturally appearing landscape.

Special Uses

Outfitters and Guides operate in the federal parcels proposed for exchange under special use authorizations, as shown in Table 9. These permits do not have specific locations but use the general landscape in the east Crazy Mountains and Big Sky areas.

There are four authorized outfitter guide permits that have day-use and overnight service days in federal Parcels 1-7 proposed for exchange. Federal Parcel 8 has three outfitter guides that have day-use and overnight service. Ten other outfitter guides have authorized use areas that include large portions of the Bozeman Ranger District but would not be likely to use affected parcels due the parcels' remoteness.

One recreation event (an endurance running race) uses the Big Timber Canyon trailhead and other adjacent trails in the East Crazies.

The action alternatives would improve and secure access that could result in increased recreational

opportunities for permitted outfitter guides. The project would result in permit modifications for up to seven authorized outfitter guides. The project would not result in a change in the total days of operation or the types of services provided.

Permitted operating areas for day use horseback, hunting and fishing could expand to include the newly acquired lands, which could be a benefit to outfitter guide operations. Permitted activities that could be positively affected by acquiring the proposed private lands include horseback riding, fishing, and hunting. The consolidation of public lands for permittees that provide hunting, over intermingled public and private lands, can also create efficiencies in managing clients within the context of Montana Fish Wildlife and Parks game regulations.

3.4 Wildlife Resources

This section summarizes the direct, indirect, and cumulative effects for the No Action, Proposed Action Alternative, and Alternative 1. The Biological Assessment, submitted August 29, 2023, is incorporated by reference and is available in the project record. For a more detailed discussion project effects on wildlife, please see the Wildlife Specialist report which is available in the project record.

Affected Environment

The potential effects of the action alternatives on key wildlife species in the project area was analyzed in the Wildlife Report. Key species include threatened and endangered, Species of Conservation Concern, and those identified during the scoping and public comment period. Table 11 provides a list of species of interest and summarizes their potential to inhabit or use the lands included in the proposed exchange. The potential impacts of the alternatives to threatened and endangered species and their habitat were also addressed in a Biological Assessment which was submitted to the US Fish and Wildlife Service in accordance with Section 7 of the Endangered species act.

Table 11. Wildlife species of interest, including species proposed or listed in the Endangered Species Act and Species of Conservation Concern on the Custer Gallatin National Forest and summaries of their potential to inhabit or use the lands included in the proposed exchange.

Common Name	Status	Habitat/Range	Potential Presence
Canada lynx <i>Lynx Canadensis</i>	Threatened	Mesic mid- to high-elevation forests including Engelmann spruce, subalpine fir, lodgepole pine and possibly Douglas fir. Also uses aspen when mixed with or adjacent to suitable conifer forests. Dense understory cover for foraging and mature forests with large coarse woody debris for denning.	Crazy Mountains – Located in unoccupied habitat in the East Crazies and West Crazies Lynx analysis Units and outside of lynx linkage areas. Inspiration Divide – Located in occupied habitat in the North Madison Lynx Analysis Unit outside of lynx linkage areas.
Canada lynx Critical Habitat	Designated	Mesic mid- to high-elevation forests including Engelmann spruce, subalpine fir, lodgepole pine and possibly Douglas fir. Also uses aspen when mixed with or adjacent to suitable conifer forests. Dense understory cover for foraging and mature forests with large coarse woody debris for denning.	All parcels are located outside of designated critical habitat.

East Crazy Inspiration Divide Land Exchange, Custer Gallatin National Forest

Grizzly bear <i>Ursus arctos</i>	Threatened	Coniferous and aspen forests; grasslands, shrublands, open parklands, riparian areas and wet meadows.	Crazy Mountains – Located in unoccupied habitat in the Crazy Mountain Bear Analysis Unit. Part of Zone 3 in the Northern Continental Divide Ecosystem. Inspiration Divide – Located in occupied habitat in the Hilgard Bear Management Unit. Part of the Greater Yellowstone Ecosystem Recovery Zone.
North American wolverine <i>Gulo gulo lucus</i>	Proposed	High elevation alpine and cold boreal forests that receive enough winter precipitation to reliably maintain deep persistent snow late into the warm season.	Both parcel locations occur in potential wolverine habitat and wolverines have the potential to utilize the areas.
Northern long-eared bat <i>Myotis septentrionalis</i>	Threatened	Caves, abandoned mines, live trees and snags. May occur on the eastern portion of the Custer Gallatin National Forest.	Potential habitat may occur; however, the closest known occurrence is several hundred miles northeast of the project area.
Whooping crane <i>Grus americana</i>	Endangered	Wetlands; migrant in eastern Montana.	No habitat is in or near project area and the species is not known to occur in the vicinity.
White-tailed Prairie Dog <i>Cynomys leucurus</i>	Species of Conservation Concern	Open grassland and steppe habitats.	Potential habitat may occur; however, closest known occurrence is several hundred miles south of the project area.
Greater Sage Grouse <i>Centrocercus urophasianus</i>	Species of Conservation Concern	Sagebrush steppe.	No habitat is in or near project area and the species is not known to occur in the vicinity.
Rocky Mountain Elk <i>Cervus elaphus</i>	Montana Game Species	Forest and grassland and riparian habitats throughout the Custer Gallatin National Forest.	Populations and suitable habitat occur within the project boundaries.
Mule Deer <i>Odocoileus hemionus</i>	Montana Game Species	Forest and grassland and riparian habitats throughout the Custer Gallatin National Forest.	Populations and suitable habitat occur within the project boundaries.
Moose <i>Alces alces</i>	Montana Game Species	Forest and grassland and riparian habitats throughout the Custer Gallatin National Forest.	Populations and suitable habitat occur within the project boundaries.
Bighorn Sheep <i>Ovis canadensis</i>	Montana Game Species	Forest, grassland and high elevation meadow habitat throughout the montane portion of the Custer Gallatin National Forest.	Populations and suitable habitat occur within the project boundaries.

Mountain Goat <i>Oreamnos americanus</i>	Montana Game Species	Forest, grassland and high elevation meadow habitat throughout the montane portion of the Custer Gallatin National Forest	Populations and suitable habitat occur within the project boundaries.
Bison <i>Bison bison</i>	Montana Game Species	Grassland and forest habitat on the montane portion of the Custer Gallatin adjacent to Yellowstone National Park	Project is located outside the designated State of Montana Bison Tolerance Zone. No bison currently occur within the project boundaries.

Environmental Effects

Effects of No Action Alternative on Wildlife and Habitat

If no action is taken, there would be no change in the current landownership patterns within the Crazy Mountain or Inspiration Divide areas. The distribution of habitat would stay the same, resulting in fewer acres of suitable habitat under federal management and associated protections compared to the action alternatives. Patterns of land ownership would not be consolidated, and the existing checkerboard or fragmented ownership patterns would remain. No potential benefits to wildlife species from the consolidation of larger more continuous blocks of habitat under federal ownership and management protections would occur.

No trail construction or reroute would occur resulting in no temporary disturbance to individuals or minor habitat modifications. Human use would be limited along the proposed trail location reducing the potential for disturbance by hikers, bikers, or people on horseback. No conservation easements or deed restrictions would be established thereby allowing private landowners to develop or use land without restriction or limit.

Effects to Canada Lynx

Effects common to the Proposed Action Alternative and Alternative 1

The direct, indirect, and cumulative effects analysis boundary for Canada lynx is at the Lynx Analysis Unit (LAU) scale (Interagency Lynx Biology Team 2013). Most federal and private lands proposed for exchange occur in the Crazy Mountain Range, largely in the Easy Crazies LAU with a small portion reaching into the West Crazies LAU. These LAUs are currently considered unoccupied habitat. The Inspiration Divide area is located within the North Madison LAU which is considered occupied habitat for Canada lynx. All parcel locations are outside of lynx linkage areas and designated critical habitat. There is no potential mapped lynx habitat in the West Crazies LAU portion of this project. Nearly all the habitat that would be added to federal management is currently modeled as mature multi-story or other.

The proposed 22 mile Sweet Trunk Trail would occur entirely within the East Crazies LAU. The 1,500 feet of the Inspiration Divide Trail to be relocated is in the North Madison LAU. Both LAUs are unoccupied habitat. As a result, impacts from trail construction and associated use on available suitable habitat would be insignificant and have no effect on the potential for lynx to occupy this portion of the range.

The two action alternatives would benefit lynx by improving the consolidation of federal lands in the Crazy Mountains, thereby reducing habitat fragmentation and increasing potential connectivity in the East Crazies LAU. Consolidated habitat would fall within the Crazy Mountain Inventory Roadless Area (IRA). This land use designation would limit potential habitat fragmentation through road construction and use. There is potential for private development on the parcels leaving federal ownership, which would result in the loss of suitable habitat in those parcels. However, if loss occurs it would be counter balanced by the overall gain in habitat through the exchange, and any difference would not result in a reduction below Northern Rockies Lynx Management Direction thresholds.

The standards and guidelines under the Northern Rockies Lynx Management Direction (U.S. Department of Agriculture 2007a;b) would be met on all acres coming into federal ownership.

Effects of the Proposed Action Alternative

In addition to the common effect described above, the Proposed Action Alternative would result in about 1,613 acres of potential lynx habitat on non-federal lands being exchanged with 1,262 acres of potential lynx habitat on federal lands. This would be a net gain of 679 acres into federal ownership across the North Madison and East Crazies LAUs, as shown in Table 12. Under this alternative there would be no mandatory commitment by the landowners to participate in conservation easements or deed restrictions to limit the type and intensity of potential development.

Table 12. Acres of the different structural habitat states within each LAU that would be part of the exchange under the Proposed Action Alternative.

LAU	Structural Stages Currently Providing Potential Lynx Habitat								Stem Exclusion	
	Early Stand Initiation		Stand Initiation		Mature Multi-story		Other		Private to FS	FS to Private
East Crazies	0	4	0	0	1560	1251	1568	1240	233	62
N. Madison	0	0	0	0	53	7	0	8	0	0
Total acres	0	4	0	0	1613	1258	1568	1240	233	62
Difference in Federal Ownership	-4		0		+355		+328		+171	

Effects of Alternative 1, Modified Proposed Action

About 2,886 acres of potential lynx habitat on non-federal lands would be exchanged with 2,391 acres of potential lynx habitat (early stand initiation, mature multi-story, and other) on federal lands, resulting in a total gain of 495 acres into federal ownership across the North Madison and East Crazies LAUs.

To limit the potential for loss and fragmentation of habitat, mandatory conservation easements and deed restrictions have been agreed upon for some of the parcels entering private ownership. The habitat within the North Madison LAU would be covered under a conservation easement that would limit development in perpetuity (parcels 8, 9, and 10). Habitat within the East Crazies LAU would receive some level of protection through county deed restrictions (parcels 1, 2, 3, 4, and 7) which would prevent subdivision to smaller than 160 acre lots and preclude mineral development. While these provisions would not eliminate the potential for negative impacts to existing habitat condition, they do establish sideboards to limit the extent of the impacts and retain habitat value.

Table 13. Acres of the different structural habitat states within each LAU that would be part of the exchange under Alternative 1.

	Structural Stages Currently Providing Potential Lynx Habitat								Stem Exclusion	
	Early Stand Initiation		Stand Initiation		Mature Multi-Story		Other			
LAU	Private to FS	FS to Private	Private to FS	FS to Private	Private to FS	FS to Private	Private to FS	FS to Private	Private to FS	FS to Private
East Crazyes	0	4	0	0	1337	1204	1496	1168	233	61
N. Madison	0	0	0	0	53	7	0	8	0	0
Total acres	0	4	0	0	1390	1211	1496	1176	233	61
<i>Difference in Federal Ownership</i>	-4		0		+179		+320		+172	

Cumulative Effects to Canada Lynx

Ongoing and reasonably foreseeable actions on both public and private lands include recreation, livestock grazing, timber management, wildfire management, and human infrastructure development. These activities either generally are expected to occur in areas that are already avoided by lynx or may temporarily displace lynx. Private landowners intend to maintain land as undeveloped rangeland or to continue similar use in the foreseeable future. Potential future Federal actions would be subject to applicable regulations and restrictions. The commitment to easements and deed restrictions limits the potential for development on lands exchanged out of the federal estate. The potential for cumulative effects to Canada lynx would be negligible.

Effects to Grizzly Bear

Effects of No Action Alternative

If no action is taken the distribution of grizzly bear habitat would remain the same, which would result in fewer acres of suitable habitat under federal management and associated protections compared to the Proposed Action Alternative and Alternative 1. There would be none of the potential benefits to grizzly bears and other wildlife species from the consolidation of larger more continuous blocks of habitat under federal ownership and management protections.

No trail construction or reroute would occur resulting in no temporary disturbance to individuals or minor habitat modifications. Human use would be limited along the proposed trail location reducing the potential for disturbance by hikers, bikers, or people on horseback. There would be no conservation easement or deed restrictions established thereby allowing private landowners to develop or use land without restriction or limit.

Effects Common to the Proposed Action Alternative and Alternative 1

The spatial boundary for analysis within the Recovery zone is the designated Bear Management subunit (BMU) and outside the recovery zone the designated Bear Analysis Unit (Unit). In the Crazy Mountains area, both action alternatives would result in consolidation of federal ownership and increase the overall acres of federally managed land by at least 2,190 acres. All of these acres be included in the Crazy Mountain Backcountry Area or South Crazy Mountains Recommended Wilderness Area. These areas would no longer be suitable for construction of permanent or temporary roads nor any type of motorized transport⁴. As a result, the project, including the proposed

⁴ See [Land Management Plan Components](#) BC-STD-CMBCA 01 and BC-SUIT-CMBCA 01 on page 165 of the Plan.

construction of the new trail, would not result in any reduction to the amount of secure habitat and the overall acquisition would likely result in an increase in secure habitat within the Crazy Mountain Bear Analysis Unit.

Parcels in the Big Sky area are located within the Greater Yellowstone Ecosystem (GYE) Recovery Zone, Hilgard Bear Management Subunit #1. The current level of secure habitat is currently estimated at 83.1% (van Manen et al. 2021). The acquired acres would be immediately adjacent to the Madison Inventory Roadless Area and Lee Metcalf Wilderness; the exchange would not result in any reduction in existing levels of secure habitat within the sub-unit as no roads are present on the parcels. There is potential for private development on the parcels leaving federal ownership resulting in the loss of secure habitat in those parcels. However, if loss occurs it would be counter balanced by the overall gain in habitat through the exchange and any difference would not result in a reduction below the 1998 baseline.

The Proposed Action is not expected to negatively impact the movement or connectivity of grizzly bear individuals or habitat. Rather, there is potential for increased potential connectivity between the Northern Continental Divide Ecosystem and Greater Yellowstone Ecosystem due to the increase and consolidation of acres under federal protection in the Crazy Mountain area.

Forage

There would be no effect to important forage sources such as army cutworm moth sites or cutthroat trout spawning streams since these features are not either not present within the project area or the proposed action would not have impacts on these resources. Effects to whitebark pine are discussed in section 3.11.

Grizzly bears are habitat generalists that employ an opportunistic, omnivorous foraging strategy by using a wide range of plant and animal food sources including ungulate biomass obtained from predation and scavenging (Gunther et al. 2014). Effects to grizzly forage availability cannot be assessed without considering the potential effects of the proposed action and alternatives on the prey species. Across all action alternatives, effects would be insignificant to ungulate species frequently used as prey for grizzly bears. If temporary disturbance and displacement of deer or elk in the vicinity of project activities occurs, those impacts are expected to be minimal and not result in long term displacement. Therefore effects from this proposed action to grizzly bear forage opportunities on ungulates are anticipated to be negligible. Additional detailed effects analysis on ungulate species are discussed independently within the wildlife analysis.

Secure Habitat

A number of studies addressed the effects of roads on grizzly bears and, to various degrees, universally showed negative impacts (Claar et al. 1999). Motorized access is one of the most influential factors affecting grizzly bear use of habitats (Yellowstone Ecosystem Subcommittee 2016). Secure grizzly bear habitat is defined as areas 10 acres or greater in size that are more than 500 meters from an open or gated motorized route (Yellowstone Ecosystem Subcommittee 2016). The proposed action would result in consolidation of federal ownership and increase the overall acres of federally managed land by about 2,190 acres in the Crazy Mountains area. All these acres would be added to the Crazy Mountain Backcountry Area or South Crazy Mountains Recommended Wilderness Area, and therefore would not be suitable for construction of permanent or temporary roads nor any type of motorized transport. Therefore, secure habitat in the Crazy Mountains area would not be reduced. Rather, the overall acquisition would likely result in an increase in secure habitat with the Crazy Mountain Bear Analysis Unit.

The presence of the proposed Sweet Trunk Trail is unlikely to fragment existing habitat or discourage use of the area long term. As a result, impacts from trail construction and associated use on available secure habitat would be insignificant and have no effect on the potential for grizzly bears to occupy and use this portion of the range.

Parcels associated with the Inspiration Divide area are located within the Greater Yellowstone Ecosystem Recovery Zone Hilgard bear Management Subunit #1. Within this subunit the current level of secure habitat is currently estimated at 83.1% (van Manen et al 2023). Both action alternatives would increase the total acres of habitat under habitat protections outlined in the 2016 Grizzly Bear Conservation Strategy and the Land Management Plan. This includes Plan component FW-STD-WLGB 01 which requires that management action not reduce the percent secure habitat below the established 1998 baseline level. The sub-unit is currently 13.4% above the 1998 baseline of 69.8%. The acquired acres would be immediately adjacent to the Madison Inventory Roadless Area and Lee Metcalf Wilderness and would not result in any reduction in existing levels of secure habitat within the sub-unit because no roads are present on the parcels. There is potential for private development on the parcels leaving Federal ownership resulting in the loss of secure habitat in those parcels.

Habitat Connectivity

The majority of the exchange acres (East Crazy) would occur within an area considered to be unoccupied habitat for grizzly bears at this time. However, with the long-term patterns of expansion, it is reasonable to assume that in the future individuals will be present either as resident or transitory. In 2023, confirmed grizzly bear sightings occurred a short distance to the west in the Shields Valley. The action alternatives are not expected to negatively impact the movement or connectivity of grizzly bear individuals or habitat. The increased number of acres and consolidation of area under federal protection in the Crazy Mountain Area is likely to increase connectivity between the Northern Continental Divide Ecosystem and Greater Yellowstone Ecosystem. The Inspiration Divide portion of the exchange would occur within occupied grizzly bear habitat, but the result is unlikely to negatively impact movement or connectivity given the small size and overall increase in acres under federal management.

Effects of the Proposed Action Alternative

The Proposed Action Alternative would result in an additional 105 acres consolidated under federal management compared to the No Action. All of these acres would be located within the Recovery Zone thereby resulting in a small increase in available habitat under protections associated with federal management. In this alternative, there would be no mandatory commitment by the landowners to participate in a conservation easement or deed restriction to limit development type and intensity.

Effects of Alternative 1 Modified Proposed Action

Within the Recovery Zone, Alternative 1 would result in an additional 185 acres consolidated under federal management compared to the No Action, resulting in a small increase in available habitat under protections associated with federal management.

To limit the potential for loss and fragmentation of habitat, mandatory conservation easements and deed restrictions have been agreed upon for some of the parcels entering private ownership. The habitat within the Hilgard # 1 bear management subunit (parcels 8, 9, and 10) would be subject to a conservation easement that would limit development in perpetuity.

Habitat within the Crazy Mountain Bear Analysis Unit would receive some level of protection through county deed restrictions which would prevent mineral development and dividing parcels to smaller than 160 acres (parcels 1, 2, 3, 4, and 7). While these provisions would not eliminate the potential for negative impacts to the existing habitat condition, they do establish sideboards to limit the extent of the impacts and retain some habitat value. In addition, if habitat loss occurs it would be counter balanced by the overall gain in habitat through the exchange. Any difference would not result in a reduction below the 1998 baseline.

Cumulative Effects to Grizzly Bears

Ongoing and reasonably foreseeable actions on both public and private lands include recreation,

livestock grazing, timber management, wildfire management, and human infrastructure development. Generally, these activities are expected to occur in areas that are already avoided by grizzly bears, or they may temporarily displace grizzly bears. Private landowners intend to maintain land as undeveloped rangeland or to continue similar use for the foreseeable future. Potential future federal actions would be subject to applicable regulations and restrictions. The commitment to easements and deed restrictions limits the potential for development. Accordingly, cumulative effects to grizzly bear would be negligible.

Effects to North American Wolverine

Effects Common to Proposed Action and Alternative 1

Wolverine represent a wide ranging species that operate at a scale that could be hundreds of square miles. The spatial boundary for analysis is therefore correspondingly large. There are currently no designated home ranges for wolverine in the project area so for the purpose of this analysis Bear Management/Bear Analysis Units (BMU/BAU) were used as a proxy spatial analysis boundary.

Prey and Prey Distribution

Additional disturbance in the action area associated with increased human presence along the new trail may result in a temporary effect on prey distribution. Ungulates and other wildlife may avoid areas where humans are present reducing the potential foraging opportunities for wolverine in the short-term. While the distribution of potential prey may temporarily change, these movements would be relatively short in distance and duration due to the levels of activity already occurring in and around the project area. It is unlikely that available prey resources would change appreciably at the scale of a wolverine home range.

Because wolverines operate at a large scale (averaging a minimum of 128 square miles) they would be able to adjust to temporary changes in ungulate distribution. There would be no effect on potential prey (carrion) population levels under the action alternatives. Security areas, hiding cover, and foraging habitat would not be affected by the project. As such, effects would be insignificant at the scale of the action area and the population level. Disturbance to prey resources is not considered a potential threat to the wolverine in the 2013 proposed listing rule (U.S. Department of the Interior 2013).

Disturbance

Wolverines may temporarily avoid areas while human disturbance occurs. Noise associated with human presence, project implementation, and disturbance could displace individuals from habitat temporarily if they occur in the area. These effects would be temporary in nature. The trail construction may result in the modification of a small number of habitat acres, including primary and a small amount of maternal. This modification is likely insignificant at the distinct population segment scale and would not result in a reduction in connectivity or capability of individuals to disperse. Non-motorized use of the new trail would likely result in an increase in human presence within suitable habitats. This has the remote potential to cause temporary displacement of individuals. While wolverine dispersal could be affected to some degree, these habitats are not suitable for the establishment of home ranges and reproduction and are generally not used for foraging (U.S. Department of the Interior 2013). Any disruption of dispersal or other exploratory movements would be temporary and would occur at a small scale when compared to the large home range size of wolverines.

Wolverines have been documented to persist and reproduce in areas with high levels of human use and disturbance, including in developed alpine ski areas and areas with motorized use of snowmobiles (Heinemeyer 2012, U.S. Department of the Interior 2013, Heinemeyer et al. 2019). This suggests that wolverines are able to adjust their use within their home ranges to avoid disturbance (Heinemeyer 2012). Human use, including recreation, was not identified as a primary threat in the US Fish and Wildlife Service analysis (U.S. Department of the Interior 2013).

Habitat

Neither the land exchange nor the trail construction are considered primary threats to wolverine (U.S. Department of the Interior 2013). The land exchange would result in a net increase in wolverine primary, maternal, and dispersal habitats across the entire area. While there is potential for habitat modification occurring within parcels moving into non-federal ownership, the acres of habitat consolidated under federal management would no longer be suitable for construction of permanent or temporary roads nor any type of motorized transport⁵. Therefore, both action alternatives are likely to reduce the potential for permanent habitat modification or removal and increase the potential for dispersal and connectivity.

Effects of the Proposed Action Alternative

The proposed action alternative would result in thousands of additional acres (relative to the no action alternative) of modeled wolverine habitat being consolidated under federal management as shown in Table 14. There would be no mandatory commitment by the landowners to participate in conservation easements or deed restrictions to limit development type and intensity.

Table 14. Changes in modeled wolverine habitat ownership under the proposed action alternative.

Land Exchange Area	Wolverine Maternal Habitat		Wolverine Primary Habitat		Wolverine Female Dispersal Habitat		Wolverine Male Dispersal Habitat	
	Private to FS	FS to Private	Private to FS	FS to Private	Private to FS	FS to Private	Private to FS	FS to Private
Crazy Mountains Area	572	0	3376	84	5816	2446	5816	3624
Inspiration Divide Area	560	498	605	500	605	500	605	500
Total acres	1132	498	3982	585	6422	2946	6422	4124
<i>Difference in Federal Ownership</i>	+634		+3,397		+3,476		+2,298	

Effects of Alternative 1- Modified Proposed Action

Alternative 1 would also result in thousands of additional acres of modeled wolverine habitat being consolidated under federal management compared to the current condition. This alternative would conserve 80 additional acres of maternal and 35 additional acres of primary habitat relative to the proposed action alternative.

To limit the potential for loss and fragmentation of habitat, mandatory conservation easements and deed restrictions have been agreed upon for some of the parcels entering private ownership. The habitat within the Inspiration Divide area (parcels 8, 9, and 10) would be subject to a conservation easement that would limit development in perpetuity. Habitat in the East Crazy area would receive some protection through county deed restrictions which would prevent mineral development and dividing parcels to smaller than 160 acre lots (parcels 1, 2, 3, 4, and 7). While these provisions would not eliminate the potential for negative impacts to existing habitat condition, they do establish sideboards to limit the extent of the impacts and retain some habitat value. In addition, if habitat loss occurs, it would be counter balanced by the overall gain in habitat through the exchange.

⁵ See [Land Management Plan Components](#) BC-STD-CMBCA 01 and BC-SUIT-CMBCA 01 on page 165 of the Plan.

Table 15. Existing maternal, primary, and dispersal habitat in the action area and changes in ownership under Alternative 1, the modified proposed action.

Land Exchange Area	Wolverine Maternal Habitat		Wolverine Primary Habitat		Wolverine Female Dispersal Habitat		Wolverine Male Dispersal Habitat	
	Private to FS	FS to Private	Private to FS	FS to Private	Private to FS	FS to Private	Private to FS	FS to Private
Crazy Mountains Area	572	0	3331	84	5497	2270	5497	3425
Inspiration Divide Area	560	418	605	420	605	420	605	420
Total acres	1132	418	3937	505	6103	2690	6103	3845
<i>Difference in Federal Ownership</i>	+714		+3432		+3413		+2258	

Cumulative Effects to Wolverine

Ongoing and reasonably foreseeable actions on both public and private lands include recreation, livestock grazing, timber management, wildfire management, and human infrastructure development. These activities either generally are expected to occur in areas that are already avoided by wolverine or may temporarily displace wolverine. Private landowners intend to maintain land as undeveloped rangeland or to continue similar use for the foreseeable future. Potential future federal actions would be subject to applicable regulations and restrictions. The commitment to easements and deed restrictions limits the potential for development. When added to the effects outlined in this analysis, cumulative effects to wolverine would be negligible.

Big Game (Elk, Mule Deer, Moose, Mountain Goat, Bighorn Sheep)

Effects Common to Proposed Action and Alternative 1

Elk habitat was analyzed at the elk analysis unit scale and will be used as a proxy for effects to other big game species. Overall, there would be an increase in big game habitat under federal ownership and subject to the increased protections outlined in the Land Management Plan compared to the current condition, with the exception of lower elevation elk winter habitat. While currently there is no crucial winter range delineated for big game within the project area, general winter habitat does exist and there would be a decrease under federal management given the lower elevations of federal lands exchanged. General habitat consisting of riparian habitat for white-tailed deer and moose would also be reduced. Despite these potential reductions, the overall increase in elk and other big game habitat into federal ownership will help to maintain the functionality of key big game habitats such as hiding cover and thermal regulation. Consolidation of habitat would provide better connectivity for big game as they disperse and shift between seasonal habitats. In addition, security habitat would be consolidated and protected through Inventory Roadless and Backcountry Area restrictions on new and temporary motorized roads.

The proposed trail work would not reduce elk secure habitat because the trail is non-motorized. During trail construction individual elk may be temporarily displaced. Increased human presence after the trail has been completed may result in some displacement from suitable habitat to individuals. These effects would not represent a continuous long-term impact on elk using the area. Given that motorized use would not be allowed along the new trail there will be no reduction in secure habitat (one half mile from motorized routes). This is important for reducing big game vulnerability during hunting seasons and providing animals the opportunity to meet their biological needs throughout the year without being displaced to potentially lower-quality habitats. Therefore, effects at the population level from trail construction and use would be insignificant.

It is expected that elk will continue to use the lower elevation private lands during the hunting season and would likely face associated pressures from recreational hunting and other human disturbance. The effects to potential key habitats such as hiding cover, thermal cover, and foraging would be insignificant at the elk analysis unit scale due to the anticipated continued use of lower elevation lands.

Under the action alternatives, mountain goats would see an increase in both general and winter habitat under federal management protections, as shown in Tables 16 and 17. The benefits of consolidation include increased connectivity of habitat and protections associated with land use designations. The construction of the trails and associated infrastructure may result in the temporary displacement of individuals.

Effects of the Proposed Action Alternative

The Proposed Action Alternative would result in an increase in the amount of secure habitat by nearly 5,000 acres compared to the current level, which would benefit elk and other big game species. Mountain goats are a higher elevation species and would see significant increase in the amount of both general and winter habitat into federal management as shown in Table 15.

Table 16. Mapped big game habitats associated with the Proposed Action Alternative.

	Elk Security	Elk General Winter	Elk General	Mountain Goat General	Mountain Goat General Winter
USFS to Private	1,058	2,216	1,908	152	1,197
Private to USFS	6,047	962	5,460	3,709	2,629
Total to USFS	4,989	-1,254	3,552	3,557	1,432

Effects of Alternative 1

Alternative 1 would also result in a nearly 5,000 acre increase in secure habitat under federal management compared to the no action alternative, as shown in Table 16. This alternative would result in the retention of lower elevation riparian habitat under federal protection located in the southern portion of parcel 2. However, there would be a larger reduction in lower elevation winter habitat under federal management compared with the Proposed Action Alternative (a difference of 593 acres). Alternative 1 would result in an increase in mountain goat general and winter habitat into federal ownership, though fewer acres than the proposed action alternative.

Table 17. Mapped big game habitats associated with proposed exchange under Alternative 1

	Elk Security	Elk General Winter	Elk General	Mountain Goat General	Mountain Goat General Winter
USFS to Private	868	2,215	1,627	153	1,197
Private to USFS	5,797	368	5,137	3,396	2,618
Total to USFS	4,929	-1,847	3,510	3,243	1,421

To limit the potential for habitat loss and fragmentation, mandatory conservation easements and deed restrictions have been agreed upon for some of the parcels entering private ownership. The habitat within the Inspiration Divide area (parcels 8, 9, and 10) would be subject to a conservation easement that would limit development in perpetuity. Habitat in the East Crazy area would receive some protection through county deed restrictions which would prevent mineral development and dividing parcels to smaller than 160 acres (parcels 1, 2, 3, 4, and 7). While these provisions would not eliminate the potential for negative impacts to existing habitat condition, they do establish sideboards to limit the extent of the impacts and retain some habitat value. In addition, if habitat loss occurs it would be counter balanced by the overall gain in habitat through the exchange.

Cumulative Effects for Big Game

Ongoing and reasonably foreseeable actions on both public and private lands include recreation, livestock grazing, timber management, wildfire management, and human infrastructure development. These activities either generally are expected to occur in areas that are already avoided by big game species or may temporarily displace individuals or herds. It is, however, the intent of private landowners to maintain land as undeveloped rangeland or to continue use in a manner similar what is current. Potential future federal actions would be subject to applicable regulations and restrictions. The commitment to easements and deed restrictions limits the potential for development. When added to the effects outlined in this analysis cumulative effects to big game species would be negligible.

Effects to Species of Conservation Concern

There are no terrestrial wildlife Species of Conservation Concern or suitable habitat as defined by the 2022 Land Management Plan present in any of the federal and non-federal parcels proposed for exchange.

Effects to Migratory Birds

Effects Common to the Proposed Action Alternative and Alternative 1

The action alternatives do not involve the removal or modification of large habitat patches. The only modification would be related to trail construction and associated infrastructure. This would not result in a measurable or significant impact on species abundance and habitat conditions. Trees that could potentially be removed along the trail route would be surveyed for the presence of active nests. If active nests are detected, the trail route would be modified to avoid removal of the nest tree. Increased human presence associated with non-motorized trail use may result in the disturbance to nearby nest locations. Disturbance would be temporary and short term, and is not likely to result in long term negative impact to species. The integrity of habitat values would not be affected. Overall, there would be an increase in potential habitat acres under federal management protections from both action alternatives. This is especially true within higher elevation and timbered habitats.

Effects of Alternative 1

Alternative 1 would result in the retention of more acres of potential riparian habitat under federal management protections. This is related to retaining more of parcel 2 in the East Crazy exchange area. To limit the potential for loss and fragmentation of habitat, mandatory conservation measures and deed restrictions have been agreed upon for some of the parcels entering private ownership. The habitat within the Inspiration Divide area (parcels 8, 9, and 10) would be covered under a conservation easement that would limit development in perpetuity. Habitat within the East Crazy area (parcels 1, 2, 3, 4, and 7) would receive some level of protection through county deed restrictions which prevent mineral development and subdivision to smaller than 160 acre lots. While these provisions would not eliminate the potential for negative impacts to existing habitat condition, they do establish sideboards to limit the extent of the impacts and retain some habitat value. In addition, if habitat loss occurs it would be counter balanced by the overall gain in habitat through the exchange.

Cumulative Effects for Migratory Birds

Ongoing and reasonably foreseeable actions on both public and private lands include recreation, livestock grazing, timber management, wildfire management, and human infrastructure development. These activities may temporarily displace individuals. However, private landowners intend to maintain land as undeveloped rangeland or to continue use in a manner similar what is current. Potential future federal actions would be subject to applicable regulations and restrictions. The commitment to easements and deed restrictions limits the potential for development. When added to the effects outlined in this analysis cumulative effects to migratory bird species would be negligible.

3.5 Aquatic Resources

Existing Condition

Cutthroat trout

The westslope cutthroat trout (*Oncorhynchus clarki lewisi*) is a native trout found on the Custer Gallatin National Forest in the Gallatin and Madison River drainages. The westslope cutthroat trout is a Species of Conservation Concern designated by the Regional Forester⁶; Montana Fish, Wildlife and Parks considers them a Species of Concern in Montana. A westslope cutthroat trout population occurs in the South Fork West Fork Gallatin River upstream from Ousel Falls, and Parcels 8, 9, 10 and J are located in the headwaters of this drainage. No known westslope cutthroat trout occupy federal or non-federal parcels in either action alternative.

The Yellowstone cutthroat trout (*Onchorynchus clarkii bouvieri*) is a native trout found on the Custer Gallatin National Forest in the Yellowstone River drainage. The Yellowstone cutthroat trout is considered a Species of Concern in Montana by Montana Fish, Wildlife and Parks, but does not have any special designation under the 2022 Land Management Plan. Yellowstone cutthroat trout occur only as an introduced population in Smeller Lake (parcel K) within the project area and are sustained by Fish, Wildlife and Parks stocking 1,100 fingerlings every four years.

Federal Parcels

In the Proposed Action Alternative there are 6.19 miles of perennial stream on the federal parcels. About 35% of those (2.17 stream miles) are trout bearing.

In Alternative 1 there are 5.34 miles of perennial stream on the federal parcels proposed for exchange, a 0.85 mile decrease compared to the proposed action alternative. About 35% of perennial streams (2.17 stream miles) are trout bearing. The stream mile differences between the Proposed and Alternative 1 are specific to federal Parcel 2, where there is a 200 acre decrease in lands to be conveyed in Alternative 1 compared to the Proposed Action Alternative.

Otter Creek in Parcel 5 supports a diverse fish assemblage comprised of introduced brown and rainbow trout as well as native mountain whitefish, lake chub, longnose dace, longnose sucker, mountain sucker, and white sucker. Sweetgrass Creek in Parcels 1 and 2 also supports a relatively diverse fish assemblage comprised of rainbow trout, longnose dace, longnose sucker, mountain sucker, and white sucker. Big Timber Creek in Parcel 7 provides habitat for introduced brook trout, brown trout, and rainbow trout and native mountain whitefish.

Non-Federal Parcels

For the non-federal parcels, there is not a difference in stream miles or lake acres between the Proposed Action Alternative and Alternative 1.

There are a total of 8.41 perennial stream miles on non-federal lands proposed to be acquired. These include 2.32 miles of fish bearing stream (28% of perennial stream miles on non-federal lands) on Otter Creek, Sweetgrass Creek, and South Fork West Fork Gallatin River. Geospatial data indicate that Otter Creek in Parcel F supports the same diverse fish assemblage as in Parcel 5. However, given the headwater location of the parcel, stream gradient and discharge are assumed to be suboptimal for fish and further data collection would be needed to assess fish habitat suitability and fish species presence. Sweetgrass Creek in Parcel I provides habitat for rainbow trout, longnose dace, longnose sucker, mountain sucker, and white sucker.

Smeller Lake is a 52 acre cirque lake located just below Iddings Peak at an elevation of 9,090 feet. The lake provides a put-and-take fishery for native Yellowstone cutthroat trout. Smeller Lake is

⁶ The letter designating species of conservation concern is available in the project record and can be accessed here: <https://www.fs.usda.gov/detail/r1/landmanagement/planning/?cid=fseprd500402>.

stocked on a four-to-8-year rotation with 1,100 Yellowstone cutthroat trout from the Yellowstone River Trout Hatchery in Big Timber. Montana Fish Wildlife and Parks geospatial data indicate that Smeller Creek does not support fish. However, fish distribution sampling would be needed to confirm fish absence in Smeller Creek below Smeller Lake.

According to Montana Fish Wildlife and Parks geospatial data, the South Fork West Fork Gallatin River in Sections 4 and 9 of Parcel J provide habitat for native rocky mountain sculpin. Given the headwater location of these parcels, fish presence is questionable, and sampling is needed to confirm sculpin presence.

Environmental Effects

The potential environmental effects of the project on the aquatics resource was measured in terms of the amount of aquatic habitat gained or lost (stream miles or lake acres), effects to cutthroat trout, and effects to recreational fishing. The spatial boundary for effects analysis is the lands for exchange because the project includes little ground disturbing activity. Geospatial data was analyzed for cutthroat presence, stream miles/lake acres lost or gained, and fish presence for angling opportunities. Fish presence data from Montana Fish Wildlife and Parks was also used.

The temporal boundary for analysis is the implementation of the exchange because effects to the resource measures (ownership of cutthroat trout presence, ownership of stream miles/lake acres, and recreational angling opportunities) would occur upon implementation.

No Action Alternative

There would be no change from the existing condition to the amount of stream miles, floodplains, or wetland acres given management protections by the Forest Service, and therefore no changes in aquatic habitat. Nor would there be a change to the stream or riverbank access. There would be no change in westslope or Yellowstone cutthroat habitat. Under the no action alternative, Parcel K and thereby access to Smeller lakes would remain private. Public access could be denied in the future, and as a result Montana Fish Wildlife and Parks could cease stocking the lake with Yellowstone cutthroat trout.

Proposed Action Alternative

Direct and Indirect Effects

There is one known Yellowstone cutthroat trout population in the Smeller Lake Parcel K. Acquiring Parcel K would provide public access to a recreational fishery in perpetuity.

Near Big Sky, a westslope cutthroat trout population occurs in the South Fork West Fork Gallatin River upstream from Ousel Falls. Westslope cutthroat are a species of conservation concern under the Land Management Plan. Conveyance of Parcel J from private to federal ownership would further protect this population because it would be subject to the Plan⁷ and receive protections beyond the existing terms of the existing Montana Land Reliance conservation easement.

Action Alternative 1- Modified Proposed Action

Most effects are the same as those described for the proposed action alternative.

Changes in Alternative 1:

- An additional 0.85 miles of perennial stream will remain in federal ownership as compared to the proposed action (the proposed action alternative would result in 6.19 miles of perennial stream being conveyed, while Alternative 1 would result in 5.34 miles of perennial stream being conveyed).

⁷ See pages 23-31 of the [Land Management Plan](#) for direction relevant to aquatics.

- In parcel 2 in the Crazy mountains, 50 acres of wetlands and stream access would remain in federal ownership, compared to the proposed action alternative. In Parcel 8 near Big Sky, MT, 5 acres of wetlands will be retained in federal ownership as compared to the proposed action alternative. This would result in more aquatic habitat being conserved or protected compared to the proposed action alternative because they would remain in federal ownership and be subject to the Riparian Management Zone and watershed plan components in the Land Management Plan.
- Federal Deed restrictions will be placed on Parcels 8, 9 and 10 which would protect 17 acres of wetlands in the Inspiration Divide area. In the Crazies, deed restrictions will be placed on 22.37 acres in Parcel 7. These Federal deed restrictions will be managed by the Forest Service and would result in potentially more aquatic habitat being conserved or protected than both the no action and proposed action alternatives because newly acquired lands would be protected by federal ownership and conveyed lands would also be protected through deed restriction.

Collectively these modifications to the proposed action would benefit fish and aquatic habitat compared to the proposed action alternative.

Table 18. Alternative 1 quantity (stream miles and lake acres) of perennial stream miles, fish and trout bearing stream miles, and lake acres on lands proposed for exchange. “Trout” indicates non-native species (rainbow, brown, and brook trout).

Parcel	Perennial Stream Miles	Fish Bearing Stream Miles	Trout Bearing Stream Miles	Lake Acres (stocked trout)
NFS to private in Crazy Mountains	5.34	2.58	2.17	0
Private to NFS in Crazy Mountains	6.74	2.32	1.17	51.8
NFS to private near Big Sky, MT	0	0	0	0
Private to NFS near Big Sky, MT	1.67	1.15	0	0
Net Change to NFS	+3.07	+0.89	-1	+51.8

Cumulative Effects Common to Both Action Alternatives

Effects to stream channels, aquatic habitat, and riparian areas from development, timber harvest, and livestock grazing on conveyed federal parcels may be possible in the Crazy Mountain portion of the project. In contrast, acquiring non-federal lands will protect those parcels stream channels, aquatic habitat and riparian areas from development, timber harvest and livestock grazing due to protections set forth in the Land Management Plan.

Parcels 8-10 are located in the headwaters of Muddy Creek which is a tributary to the West Fork Gallatin River upstream from Ousel Falls. Although ski run development in these parcels is not part of the proposed action, it is reasonably foreseeable. If enacted the construction, maintenance, and changing of landscape would have a high likelihood of becoming a chronic sediment source to Muddy Creek. No data exists for fisheries or sediment dynamics for Muddy Creek.

Executive Order 12962- Recreational Fishing Opportunity

Executive order 12962 requires effects to recreational fisheries and recreational fishing opportunities to be documented.

Under both proposed action alternatives, there would be a relatively minor negative impact on fishing opportunity because stream access would be lost if Parcel 7 is conveyed to non-federal

ownership. Big Timber Creek in Parcel 7 provides habitat for introduced brook trout, brown trout, and rainbow trout and native mountain whitefish. The public would gain perpetual public access to the nearly 52 acre Smeller Lake and the Yellowstone cutthroat fishery therein.

Under the Proposed Action Alternative, the public would also lose access to Sweetgrass Creek in Parcels 1 and 2, but legal access to these parcels is currently limited and poor aquatic habitat conditions limit suitability for fishing. Under Alternative 1, access to Sweetgrass Creek would be retained in Parcel 2.

3.6 Floodplains and Wetlands

Existing Condition

A floodplain is an alluvial plain caused by the overbank deposition of alluvial material, typically appearing as flat expanses of land bordering a stream or river. FSM 2527.05 defines the base floodplain as “the lowland and relatively flat areas joining inland and coastal water including the debris cones and flood-prone areas of offshore islands and, at a minimum, that area subject to a 1 percent (100-year occurrence) or greater chance of flooding in a given year.” None of the examined Flood Insurance Rate Maps define or delineate the base 100-yr floodplain in the vicinity of the parcels included in this land exchange.

Wetlands are defined as “those areas that are inundated or saturated by surface or ground water at a frequency and duration to support and that, under normal circumstances, do or would support a prevalence of vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds” (FSM 2527 and Executive Order 11990).

Preliminary wetland extent, type, and assigned value factor were evaluated and identified within all parcels that were not included in the September 2022 field delineation.

The following data sources were also used for this assessment:

- Wetland and riparian mapping information obtained from the Montana Natural Heritage Program
- Google Earth aerial imagery
- ESRI basemap aerial imagery
- US Geological Survey National Hydrography Dataset
- US Fish and Wildlife Service National Wetlands Inventory

Desired Condition

The Protection of Wetlands Executive Order 11990, directs federal agencies involved in acquiring, managing, or exchanging federal lands to minimize destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands.

To meet this direction, the project must ensure that the wetland values present on the lands acquired by the Forest Service meet or exceed those present on the lands conveyed to private ownership. This is achieved by reducing the federal lands to be conveyed to retain high value wetlands in federal ownership, and through federal deed restrictions on those lands conveyed with wetland values. .

Environmental Effects

No Action

Under the No Action Alternative, wetland acres and floodplains would remain as they are under current ownership and management.

Proposed Action Alternative

For the Proposed Action Alternative, the refined preliminary wetland assessment estimates total wetland value within the federal parcels as 143.15 acres, and 58.08 acres within the non-federal Parcels. This alternative would rely on 85.07 acres of deed restrictions to protect high value wetlands and comply with Executive Order 11990.

Alternative 1- Modified Proposed Action

For Alternative 1, the refined preliminary wetland assessment estimated total wetland value within the Federal Parcels as 91.01 acres. The sum of wetland value within the non-federal parcels combined with the wetlands protected by deed restrictions is 97.87 acres, which would comply with Executive Order 11990.

3.7 Cultural Resources

Existing Condition

The Crazy Mountains and the Inspiration Divide area generally include cultural resources with evidence of Archaic Period (7,000 to 1,650 years before present (YBP)), Late Prehistoric Period (1,650 to 200 YBP), and Historic Period (200 YBP to Recent) occupations. The Archaic Period is marked by dynamic climate changes as well as temporally diverse changes in cultural trends. During this time, peoples in southcentral Montana began exploiting a broader range of resources (Hope et al 2023). The Late Prehistoric Period is characterized by two main changes in technology. These being the bow and arrow replacing the atlatl and dart, and the rising use of ceramics (Hope et al 2023).

The Historic Period (200 YBP to Recent) started with government expeditions and early fur traders that travelled through this area. The early part of the Historic Period involved military engagements and treaties between the United States government and the native peoples. The treaty land boundaries changed as the federal government modified the reservations when the territories received an influx of Euro-Americans along the Bozeman Trail. There continued to be skirmishes that led to the establishment of more military forts in the general area. The Crazy Mountains and the Madison Range were both opened to settlement with logging, mining, and ranching (Hope et al 2023). The land exchange area was part of the Gallatin Forest Reserve, established in 1899, and the Crazy Mountain Forest Reserve, established in 1906. The Crazy Mountain Forest Reserve went through several combinations and name changes and was eventually merged with the Gallatin National Forest in 1945. The historic Forest Service administration of these lands involved logging, livestock grazing, and recreation opportunities (Hope et al 2023).

Within the land exchange federal parcels, there are six known historic and cultural resources, which consist of a rock cairn of unknown age and several historic site types. The historic resources include cabins, milled lumber structures, a sawmill, a ditch, a dump, and a wagon axle with wheel. Five of the six historic and cultural resources, are recommended not eligible to the National Register of Historic Places. The rock cairn site was visited on September 12, 2023, by Aaron Brien, Crow Tribal Historic Preservation Officer, with Forest Service line officers and an archaeologist. Aaron Brien observed that it is at least 50 years old and therefore should be protected, but did not clearly identify it as a Crow cultural site. This cultural resource will remain unevaluated with respect to eligibility to the National Register of Historic Places.

Desired Condition

The Forest Service Manual directs us to “protect cultural resources from the effects of Forest Service

or Forest Service-authorized undertakings, unauthorized use, and environmental damage” (FSM 2360.3). The potential to affect those properties becomes the measure of the effects of the proposed treatment activities. An effect, according to 36 CFR 800.16(i), may include an alteration to the property’s characteristics of location, setting, or use. Adverse effects or significant impacts are defined (36 CFR 800.5(a)) as those which may diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling or association.

Environmental Effects

No Action Alternative

Under this alternative no land exchange would occur. There would be no direct, indirect, or cumulative effects to historic or cultural resources, under the no action alternative.

Proposed Action Alternative and Alternative 1

The purposes of the East Crazy Mountains and Inspiration Divide Land Exchange that are most pertinent to historic and cultural resources are the creation of large areas of contiguous and clearly identifiable National Forest System lands in the Crazy Mountains to facilitate efficient land and resource management and to increase protection of high elevation lands in the Crazy Mountain Range, an important traditional cultural area identified by the Crow Tribe.

Design Features and Mitigation Measures

To protect the identified rock cairn cultural resource on the federal lands to be exchanged, mitigations are being prepared as a deed restriction allowing the Forest Service access to the rock cairn cultural resource for monitoring. With these mitigations in place adverse effects to the rock cairn would be diminished.

Direct, Indirect, and Cumulative Effects

Any potential effects to cultural resources would be indirect because the current federal lands would be losing the protections of federal laws, such as the National Historic Preservation Act. However, the current non-federal lands would be given those protections once they are conveyed to the United States.

Because direct effects would be diminished by mitigation there are no anticipated cumulative effects to identified cultural or archeological resources within the proposed land exchange area.

Compliance with Relevant Laws, Regulations, Policies and Plans

The East Crazy Mountains and Inspiration Divide Land Exchange will be implemented under the 2022 Land Management Plan (U.S. Department of Agriculture 2022a). The Plan has five elements that broadly apply to historic and cultural resources:

- Identified traditional cultural properties, cultural landscapes, and other culturally significant areas provide tangible links to historically rooted beliefs, customs, and practices.
- Interpretation and adaptive use of cultural resources provide public benefits and education, and enhance understanding and appreciation of Custer Gallatin National Forest precontact, contact, and indigenous presence.
- Historic Forest Service administrative buildings and sites reflect agency history, identity, and function. Historic buildings are adaptable to other innovative proposed uses.
- Annually conduct ten or more public outreach or interpretive projects that enhances public understanding and awareness of cultural resources and history of the Custer Gallatin.

- Annually manage to standard 20 percent of the priority assets, based on available budgets, so that every five years all priority assets will have updated condition assessments.

None of these plan components are in conflict with this proposed project with a deed restriction mitigation for the rock cairn cultural resource in place.

Federal laws and executive orders have been enacted to protect historic and cultural resources by requiring that federal agencies consider the effects of their actions on these sites. These laws include the National Historic Preservation Act of 1966 (NHPA), the Archeological Resources Protection Act (ARPA), the American Indian Religious Freedom Act (AIRFA), and the Native American Graves Protection and Repatriation Act (NAGPRA). Sacred and traditional cultural sites are accounted for in the NHPA, AIRFA, and the Indian Sacred Sites Executive Order (EO 13007). Native American graves on federal land are protected under NAGPRA.

The regulations at 36 CFR Part 800-Protection of Historic Properties (incorporating amendments effective August 5, 2004) form the guidance and procedures for meeting Section 106 of the National Historic Preservation Act. These regulations outline the process to be used to implement NHPA and form the basis for guidance for making determinations regarding effects to historic and cultural resources.

The proposed action alternative and alternative 1 will comply with the NHPA and its implementing regulations (36 CFR Part 800) through the Programmatic Agreement between the Forest Service Northern Region and the Montana State Historic Preservation Officer (U.S. Department of Agriculture 2015b). The Proposed Action and Alternate 1 are also consistent with Land Management Plan direction related to cultural resources.

Consultation with the Montana State Historic Preservation Office is in process for this project. The Memorandum of Agreement with respect to the rock cairn cultural resource has been initially drafted.

3.8 Tribal Relations

Existing Conditions

Tribes are sovereign nations with whom the Forest Service maintains government-to-government relationships. The Forest Service administers lands that were used by tribes in the past and present. Some tribes have reserved treaty rights while others have rights established by executive order or statute. The Forest Service has trustee responsibilities on these lands. Because the governments and cultures of native peoples are different, the Custer Gallatin National Forest works with each tribe individually. The Crazy Mountains are a known traditional use area and are considered a tribal cultural landscape (U.S. Department of Agriculture 2022d).

Indian tribes, particularly the Crow Tribe, have a connection to the Crazy Mountains and consider them sacred, especially the high peaks. The Crazy Mountains are considered a tribal cultural landscape and have been proposed as a traditional cultural property. The higher elevations, above 2,600 meters (8,530 feet), are the locations of special importance and cultural use for the Crow Tribe. For the South Crazy Mountains land exchange, consultation with the Crow Cultural Commission and the Crow Tribal Historic Preservation Officer found that the tribe supported the exchange because it was bringing high elevation areas into federal ownership. In the past, Forest Service and Crow Tribe consultation about the Crazy Mountains have centered on the request for tribal involvement at the early stages of projects, however there were specific concerns about the original Gallatin Forest Plan and the Gallatin Travel Plan in the Crazy Mountains. These concerns were discussed at length in the 1990s and reflect the Forest Service recognition of the importance of the Crazy Mountains to the Crow Tribe. This has extended to the inclusion in the current Custer Gallatin Land Management Plan of a component stating, “the Custer Gallatin National Forest protects and honors Crow treaty obligations, sacred land and traditional use in the Crazy Mountains

through continued consultation with the Crow Tribe” (U.S. Department of Agriculture 2022a).

Tribal consultation with the Crow about the Crazy Mountains has been ongoing for decades. For this land exchange, the Crow Tribe submitted a letter of support with the proposal package, which listed many benefits from the proposed exchange but foremost the creation of a large block of clearly identifiable consolidated National Forest System land for public access, use, and benefit in the Crazy Mountains⁸. Other tribes consulted for this project include the Confederated Salish and Kootenai Tribes, Nez Perce, Northern Cheyenne, and Shoshone-Bannock. Further tribal consultation is ongoing.

Desired Conditions

The importance of consultation and coordination with tribes is affirmed through Presidential Memoranda and Executive Orders along with statutes and policies. Desired conditions connected with tribal relations on the Custer Gallatin National Forest are the ability to support reserved treaty rights and traditional cultural practices. This includes tribal access to sacred sites, sacred places, and traditional cultural properties. Tribal practices should be able to be conducted in privacy and without disruption (U.S. Department of Agriculture 2022a).

Environmental Consequences

No Action Alternative

Under this alternative no land exchange would occur. There would be potential direct or indirect effects related to access to area of tribal importance with the no action alternative, however the tribes have not identified these locations specifically. The locations are referred to in general as high elevation areas within the Crazy Mountains. No general or specific locations of tribal importance have been identified in the Inspiration Divide area. There are no anticipated cumulative effects.

Proposed Action Alternative and Alternative 1- Modified Proposed Action

This section discloses the environmental impacts of the proposed action alternative and alternative 1 (the direct, indirect, and cumulative effects are the same). The purpose of the East Crazy Mountains and Inspiration Divide Land Exchange that are most pertinent to tribal relations are the increased protection of high elevation lands in the Crazy Mountain Range, which has been identified as an important traditional cultural area by the Crow Tribe.

Direct, Indirect, and Cumulative Effects

The direct effects are beneficial to tribes as there will be more access to high elevation locations in the Crazy Mountains. There are no clear direct effects to tribes associated with the Inspiration Divide portion of the proposed land exchange. There could be indirect effects with respect to tribal access to Crazy Peak. However, the location of Crazy Peak is currently on private land in Section 7, T3N, R12E and is not part of the exchange. The access agreement is outside the federal purview. There are no anticipated cumulative effects.

Compliance with Relevant Laws, Regulations, Policies and Plans

The East Crazy Mountains and Inspiration Divide Land Exchange will be implemented under the 2022 Land Management Plan. The Plan has ten components that apply to tribal relations connected to this proposed land exchange:

⁸ Not Afraid, Alvin (Jr.). 2020. Letter concerning the proposed East Crazy Mountains and Eglise Peak Public Access, Recreational and Resource Improvement Land Exchange. Crow Tribe Executive Branch. Crow Agency, MT.

East Crazy Inspiration Divide Land Exchange, Custer Gallatin National Forest

- In recognition of Federal trust responsibilities, healthy and sustainable plant and animal habitats support the availability of reserved treaty rights resources for traditional cultural practices.
- Tribal members have access to sacred sites, sacred places and tribal cultural landscapes within the Custer Gallatin for the exercise of reserved treaty rights and traditional cultural practices.
- Rituals and ceremonies at sites identified as sacred by Tribes and practitioners of native traditional religions can be conducted in privacy and without disruption.
- Tribal cultural landscapes, sacred sites, sacred places, traditional cultural properties and other culturally significant areas identified by Tribes are maintained and managed through government-to-government consultation and coordination with the appropriate Tribes.
- When conducting management activities, the Forest Service shall accommodate, to the extent that the use is practicable and is consistent with the Forest Service essential functions, access to and ceremonial use of Indian sacred sites by native religious practitioners and shall maintain the confidentiality of sacred sites.
- All new land management activities shall avoid, minimize, or mitigate potential conflict with forest resources used in the exercise of reserved treaty rights, and for traditional and cultural practices.
- To protect sacred sites, management activities should avoid adversely affecting the physical integrity of these sites.
- The Crazy Mountains embody a tribal cultural landscape significant to ongoing traditional cultural practices of the Crow Tribe.
- Research, education, and interpretation of the Crazy Mountain tribal cultural landscape provides public benefits and enhances the understanding and appreciation of Crazy Mountain's natural environment, precontact, contact, and Crow traditional cultural values.
- The Custer Gallatin National Forest protects and honors Crow treaty obligations, sacred land and traditional use in the Crazy Mountains through continued consultation with the Crow Tribe.

None of these plan components are in conflict with this proposed project.

Federal laws and executive orders have been enacted with respect to tribal relations and require that federal agencies consider the effects of their actions on tribes. These laws include the Federal Land Policy and Management Act (FLPMA), National Environmental Policy Act (NEPA), American Indian Religious Freedom Act (AIRFA), Archaeological Resources Protection Act of 1979 (ARPA), National Historic Preservation Act of 1966 (NHPA), and Native American Graves Protection and Repatriation Act of 1990 (NAGPRA). Executive Orders include EO 12898 (Environmental Justice in Minority Populations and Low-Income Populations), EO 13175 (Consultation and Coordination with Indian Tribes), and EO 13007 (Indian Sacred Sites).

Tribal consultation has provided input that supports compliance with these federal laws and executive orders. See also the specialist report for cultural resources.

3.9 Geology and Minerals

Existing Conditions

The Bureau of Land Management Manual 3060.11 requires that all non-federal and federal lands identified for acquisition or conveyance by the United States have a mineral assessment documented in a mineral report. The mineral report documents the estimated value of the mineral potential of the federal land, evaluates surface uses that would interfere with potential development of the mineral estate, and recommend action that should be taken toward disposal or retention of the federal mineral estate. The Minerals Report can be found in the project record. The Forest Service must receive concurrence from the Bureau of Land Management before the federal mineral estate can be conveyed. The land exchange will not be completed until Bureau of Land Management concurrence is received.

Federal Lands

A review of federal mineral and land status records found no reference to active mining claims, leases, reservations, or other mineral related encumbrances on the federal parcels. The mineral estate of the federal parcels are intact and carry public domain status.

The federal lands proposed for transfer to the landowners are predicated to have minimal (*low*) potential for the discovery of an economically viable mineral deposit of any kind. The assessment of mineral potential is based on a review of the federal minerals database, historical records, and applicable geologic literature. Lack of past mineral interest and unfavorable geology are the principal determinants for this *Low* potential rating. Accordingly, there is also a *Low* potential for occurrence for all locatable, leasable, and saleable resources. The level of certainty for all resource evaluations can be assigned a Certainty Level of “C”, corresponding to there being a minimum of quantitative direct evidence such as past mining or exploration activity to support such a designation.

Non-Federal Lands

A review of the non-federal mineral and land status records identified eight land parcels with outstanding mineral rights, with ownership that is fractionalized among many owners. Those parcels are B, E, F, G, H, I, J and K. On the remaining parcels, 100 percent of the mineral estate would be conveyed into federal ownership without reservations.

The non-federal lands proposed for conveyance to the federal government have a minimal (*low to moderate*) potential for the discovery of an economically viable mineral deposit for all commodities other than for a geothermal resource. The assessment of mineral potential is based on a review of the federal minerals database, historical records, and applicable geologic literature. Lack of past mineral interest and unfavorable geology are the principal determinants for this *Low* potential rating. Accordingly, there is also a *Low to Moderate* potential for occurrence for all locatable, leasable, and saleable resources. The level of certainty for all resource evaluations can be assigned a Certainty Level of “C”, corresponding to there being a minimum of quantitative direct evidence such as past mining or exploration activity to support such a designation.

Environmental Effects

No Action

The landowners and outstanding mineral owners would continue to own all locatable (hardrock), leasable (coal, oil, and gas, etc.), and mineral materials (sand and gravel) associated with the non-federal lands and the United States would continue to hold all minerals associated with the federal lands. There would be no new direct, indirect, or cumulative effects to mineral resources under the no action alternative.

Proposed Action Alternative and Alternative 1

Mineral Authorities

Under the General Exchange Act of March 20, 1922, when the United States conveys reserved public domain status land, then the land the United States acquires, in that same transaction, would also have reserved public domain status and are therefore subject to entry under the general mining laws. These lands would also be subject to the Mineral Leasing Act of February 25, 1920, as amended.

For those lands where all or part of the minerals estate does not transfer to federal ownership, the Forest Service has no authority over the disposition of the mineral estate or the authority to deny the exercise of an outstanding mineral right. The Forest Service's approach in managing a federal surface estate with outstanding minerals rights is to allow as much surface use as is reasonably necessary to explore, develop, and transport materials in the pursuit of mineral exploration and development.

Management of Lands with Mineral Estate Intact

The non-federal parcels A, C, D and J (except oil and gas), have intact mineral estates and would transfer with the land, to the United States, as lands with reserved public domain status. These lands would be open to mineral entry under the general mining laws and the Mineral Leasing Act of February 25, 1920, as amended.

The preferred uses for the land management areas surrounding the subject lands as described in the Land Management Plan, emphasize dispersed recreation and livestock grazing. These uses do not conflict with mineral activities. For lands with the mineral estate intact, the Forest Service would manage the subject lands with these end uses in mind. The scale and scope of any future mineral related activities or other surface use for the non-federal lands would be reviewed and acted on in a manner that would accommodate the stated management objectives of the surrounding areas as described in the Land Management Plan. The lands coming into federal ownership would have reserved public domain status and would be open to mineral entry.

Management of Lands with Outstanding Mineral Rights

For those parcels with outstanding mineral rights, the Forest Service would manage the surface estate consistent with the management goals and objectives outlined in the Land Management Plan for adjacent federal lands. There is potential for conflict between the Forest Service and its and the holders of the mineral rights should rights holders choose to exercise their right to explore and develop a mineral resource. Accommodation of mineral activity on lands with outstanding rights would be managed by allowing only as much surface disturbance as is reasonably necessary and incidental to the execution of the activities described in a minerals plan of operations (FSM 2832). This is very similar to how the Forest Service manages mineral activities on public domain lands. The lands with outstanding mineral rights pose a potential surface management challenge. However, the likelihood is low for mineral development or even mineral exploration on these lands. It is unlikely the acquisition of the subject lands with outstanding mineral rights would present future conflict with current federal land management objectives.

Conclusions Regarding Minerals

The following conclusions have been based on the Mineral Report: Mineral Potential of the Lands Involved in the East Crazy Inspiration Divide Land Exchange (project record):

1. The federal parcels proposed for exchange have limited potential for an economic mineral deposit of locatable, leasable or salable value.
2. The non-federal parcels proposed for exchange have limited potential for an economic mineral deposit of locatable, leasable or salable value.
3. With the exception of non-Federal parcels B, I, and K, the subject lands have equal likelihood of a mineral discovery and mineral potential. Non-Federal parcels B, I, and K, have a slightly raised (low to moderate) mineral occurrence potential for locatable metallic

minerals given a more favorable geologic unit, however, there is no evidence that any mineralized areas exist within those parcels.

4. The subject lands have equal mineral potential.
5. The subject lands have equal mineral value.
6. The Forest Service and landowners should make every effort to secure the outstanding mineral rights prior to completion of this land exchange.
7. If the mineral rights on the lands transferred to the federal government remain outstanding, there is minimal risk of there being surface management conflicts between the federal government and the mineral owners due to a low likelihood of mineral occurrence.

3.10 Botanical Resources

The Biological Assessment, submitted August 29, 2023, is incorporated by reference and is included in the project record.

Existing Conditions

Federally Listed At-Risk Plant Species

Species federally listed as threatened or endangered, proposed, and candidate are designated by the U.S. Department of the Interior, Fish and Wildlife Service (USFWS). Under provisions of the Endangered Species Act of 1973, Federal agencies are directed to conserve endangered and threatened species and to ensure that actions authorized, funded, or carried out by these agencies are not likely to jeopardize the continued existence of threatened or endangered species, or result in the destruction or adverse modification of their critical habitats. These species are automatically considered “at-risk” species under the 2012 Planning Rule.

On December 15, 2022, the Service listed the Whitebark Pine (WBP) (*Pinus albicaulis*) as threatened under the Endangered Species Act (ESA) (U.S. Department of the Interior 2022). This listing rule went into effect on January 17, 2023. About 70 percent of the whitebark pine present on the Custer Gallatin National Forest occurs on the cold broad potential vegetation group, and to a lesser extent on cool moist and alpine sites. Whitebark pine commonly occurs on exposed ridgetops on harsh sites, generally above 7000 feet in west central Montana (Arno and Hoff 1989).

At-Risk Plant Species of Conservation Concern

Under the 2012 Planning Rule, in addition to federally listed species, plant species at-risk on the Custer Gallatin includes Species of Conservation Concern (SCC) designated by the Regional Forester of the Northern Region where best available scientific information indicates “substantial concern about the species’ capability to persist over the long term in the plan area” (36 CFR 219.9; FSH 1909.12 chapter 10, part 12.52).

Environmental Effects

Effects of No Action

There are no direct or indirect effects for at-risk plants of choosing the no action alternative and therefore no cumulative effects.

Proposed Action and Alternative 1

The differences between the two action alternatives are confined to the difference in numbers of acres gained or lost due to the exchange. These differences are generally small (Table 3, 6 and 7) and proportionally similar regardless of alternative. The effects of both the alternatives will therefore be discussed together.

Design Features Common to all Action Alternatives

- Trail design would avoid whitebark pine to the extent possible.
- Existing whitebark pine shall not be unnecessarily damaged by project activities. For example, felling of trees will be directional, away from any existing whitebark pine when possible.
- Machinery will be cleaned before entering and leaving work sites to prevent the spread of invasive species, pathogens, and pests.
- Do not use live whitebark trees as trail markers and do not freshen existing blazes on live whitebark pine trees during trail maintenance operations.
- Minimize ground disturbance from machinery in areas of whitebark pine regeneration when possible.
- Pruning of whitebark pine would maintain cone bearing branches unless they pose a safety issue. Botanical surveys would be conducted prior to trail construction in areas of potential habitat with specific protection measures implemented to protect population viability.

Summary of Effects

There will be losses and gains in various habitats capable of supporting at-risk plants in both action alternatives. Because more land would be exchanged in the Proposed Action Alternative, the losses and gains are sometimes larger than those in Alternative 1, but these differences are small. However, it is unlikely for most of the at-risk species with potential to occur in those guilds to be present due to low likelihood of presence, poor habitat quality, or being outside of known ranges. For the three Species of Conservation Concern species that have a higher likelihood of being present (whitestem goldenbush, Frenchman's Bluff moonwort, and rockyscree false goldenaster), overall risk is not expected to meaningfully change pre- and post-exchange. The Forest Service would have fewer acres of some guilds after the exchange, but they will not lose representation completely for any guild. Past and present activities in the exchange area are dominated by grazing and recreation and are expected to continue into the future.

The Forest Service will gain whitebark pine habitat overall including climate refugia and potential areas for restoration in both action alternatives. Trail construction would occur in whitebark pine potential habitat and may result in individual whitebark pine being damaged or destroyed. No effects are expected from the improvements to the Big Timber Trailhead as the area is outside of whitebark pine habitat. The Endangered Species Act determination is *may affect, likely to adversely affect* because individual trees have the potential to be damaged or destroyed. However, design features would minimize potential losses and the overall effect of individual tree losses to the larger population would be small and does not represent a significant adverse effect on this species under the NEPA. Project activities will not increase the presence of white pine blister rust which is the primary threat to whitebark pine's existence (87 FR 76882).

Note: please see pages 27-40 of the Biological Assessment for more on whitebark pine.

Compliance with Forest Plan and Other Relevant Laws, Regulations, Policies and Plans

The East Crazy Inspiration Divide Land Exchange has been reviewed and is determined to be in compliance with the management framework applicable to at-risk plants. The evaluation of habitat, the institution of design features, the survey of high potential habitat if necessary and subsequent application of mitigations should at-risk plants be found are considered effective strategies for their preservation on the landscape. Additionally, consultation with the U.S. Fish and Wildlife Service has been initiated for whitebark pine.

3.11 Climate and Carbon

Climate

In the project area, climatic variability is strongly influenced by interactions with topography, elevation and aspect (Halofsky et al. 2018). The existing average temperature varies greatly with elevation, topography, and aspect in the project area. Estimates forecast between a 5 to 12 °F increase in average temperatures⁹ by 2100 (Halofsky et al. 2018, Hostetler et al. 2021) in the project area and across the Greater Yellowstone Ecosystem. Annual mean monthly precipitation is projected to increase slightly by 2100, although projections for precipitation have high uncertainty compared to temperature projections (Halofsky et al. 2018).

The pace and magnitude of climate change is determined at a global scale. Predicted changes are likely to occur with or without implementation of this project. To determine what role the implementation of this project would play in this global phenomenon, climate change was addressed in two ways: the effects of climate change as a potential stressor on individual resources, and the effects of the project on potential carbon storage and sequestration.

On January 9, 2023, the Council on Environmental Quality (CEQ) published interim “National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change” in the Federal Register (88 FR 1196). CEQ grants agencies the discretion to decide whether to apply the guidance to NEPA analyses that were in progress when the guidance was issued. The interim CEQ guidance was published late in the development process for this project, and therefore this EA analysis will primarily rely on earlier CEQ guidance on considering climate change in NEPA (81 FR 51866). For example, this analysis does not include all new recommendations such as applying social cost of GHG estimates to the incremental metric tons of each individual type of GHG emissions expected from the proposed action and its alternatives. However, this project does analyze the two fundamental considerations required by current and former iterations of CEQ climate change guidance: (1) the potential effects of a proposed action on climate change, including both carbon emissions and reductions from the proposed action, and (2) the effects of climate change on the proposed action and its environmental impacts (see resource specialist reports).

Carbon

Carbon analysis for this project is tiered to the programmatic analysis of carbon sequestration in the Land Management Plan EIS (U.S. Department of Agriculture 2022c). Potential carbon effects are discussed qualitatively, with supporting estimates where possible based on the quantitative analysis of the impacts of past management activities on forest carbon stocks and fluxes, as well as through future-looking analysis where available. Please see the Carbon Section of the EIS and supporting Carbon Assessment Whitepaper, as well as the project specific Carbon Summary, all of which are available on the project webpage.

Forests are dynamic systems that naturally undergo ebbs and flows in carbon storage and emissions as trees establish and grow, die with age or disturbances, and re-establish and regrow. Generally, forests sequester and store carbon because trees use photosynthesis to sequester carbon from the atmosphere. According to the best available data available for the Gallatin National Forest, carbon stocks increased from 83.9 ±6.9 teragrams of carbon in 1990 to 105.1 ±10.2 teragrams of carbon in 2013, a 20 percent increase on the Gallatin National Forest (U.S. Department of Agriculture 2015a). Both action alternatives would result in a net increase of less than 1% to the forested lands of the Custer Gallatin National Forest. Therefore, the project is expected to result in a minor increase in carbon storage potential.

⁹ The forecast range depends on the climate models used and exact parameter of temperature (annual average, annual mean monthly minimum or annual mean monthly maximum) examined.

The trail construction (Sweet Trunk) and relocation (Inspiration Divide) would result in about 22.3 miles of trail constructed to Class 3 guidelines. So, we assume that trees would be removed in a five foot corridor to accommodate a tread width of three to four feet, which is likely an overestimate. This would result in about 13.5 acres of tree removal in both action alternatives. For context, this represents about 0.0005% of the roughly 2.5 million acres of forested land on the Custer Gallatin National Forest¹⁰.

Land Management Plan components are designed to provide for ecological integrity and resiliency to disturbances. The proposed project actions are consistent with Land Management Plan direction and one or more desired conditions and are therefore consistent with the Plan. No new circumstances or science have arisen that will change Land Management Plan EIS carbon analysis. Over the long term, management activities that are consistent with Land Management Plan desired conditions are likely to increase carbon storage.

4.0 Agencies and Persons Consulted

Invitations to comment on the preliminary environmental assessment were extended to permit holders, mineral claimants, and local landowners. Organizations notified about the comment period included officials of county governments within or adjacent to the project area, state agencies concerned with land and natural resource management, other federal agencies, industry groups, and environmental groups known to have an interest in federal lands management within the project area.

Additionally, public news releases regarding the opportunity to comment were distributed to local media outlets for the 45-day combined scoping and comment period. A complete list of agencies and individuals contacted or consulted is available within the project record. The comment period for the preliminary environmental assessment and the notice of exchange proposal were combined and met the requirements of 36 CFR 218.25(a)(i) and 254.8.

4.1 Tribal Partners

Tribal consultation with the Crow about the Crazy Mountains has been ongoing for decades. For this land exchange, the Crow Tribe submitted a letter of support with the proposal package, which listed many benefits from the proposed exchange but foremost the creation of a large block of clearly identifiable consolidate National Forest System land for public access, use, and benefit in the Crazy Mountains (Not Afraid 2020). Other tribes consulted for this project include the Confederated Salish and Kootenai Tribes, Nez Perce, Northern Cheyenne, and Shoshone-Bannock. Further tribal consultation is ongoing.

4.2 Endangered Species Act Consultation

The Endangered Species Act directs federal agencies to ensure that any actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened and endangered species, or result in the destruction or adverse modification of their critical habitats (ESA Section 7(a)(2)).

On August 30th, 2023, the Forest Service submitted a Biological Assessment to the United States Fish and Wildlife Services Field Supervisor requesting concurrence on the determined effects to federally listed and proposed species. The Forest Service has determined that project activities *may affect, not likely to adversely affect* grizzly bear and Canada lynx and *may affect, likely to adversely*

¹⁰ The 0.0005% figure is intended for context. The existing data is not accurate enough to be reliable at the ten-thousandths scale.

affect whitebark pine. The Forest is also requesting conferencing for a determination of *will not jeopardize the continued existence* of wolverine.

A final decision will not be signed until consultation is complete and any terms and conditions are incorporated into the project. Consultation is expected to conclude in or near March 2024.

4.3 Interdisciplinary Team

Erickson, Mary	Forest Supervisor, Responsible Official
Oswald, Lauren	Services Staff Officer, <i>Roads, Trails and Access</i>
Barker, Kathryn	District Recreation Program Manager, <i>Recreation- Developed and Dispersed</i>
Chaffin, Jake	Watershed Program Manager, <i>Aquatic Resources, Floodplains and Wetlands</i>
Constan, Connie	Archaeologist, <i>Cultural Resources and Tribal Relations</i>
Crootof, Kamille	GIS Specialist
DiGiacomo, Suzanne	Botanist, <i>Botanical Resources</i>
Fryer, Erin	Forest Environmental Coordinator
Gundersen, Melissa	Geologist, <i>Geology and Minerals</i>
Hammargren, Rebecca	District Recreation Program Manager, <i>Recreation Special Designations</i>
Hemenway, Josh	Forest Biologist, <i>Wildlife Resources</i>
Hill, Sarah	Natural Resource Specialist, <i>Geology and Minerals</i>
Nash, Kathryn	Lands Team Lead, <i>Roads, Trails and Access</i>
Rock, Chauntelle	Rangeland Management Specialist
Ulrich, Donald	Interdisciplinary Team Leader
Williams, Amanda	Interdisciplinary Team Leader, <i>Carbon and Climate</i>

5.0 References

- Arno, S. F., and R. J. Hoff. 1989. Silvics of whitebark pine (*Pinus albicaulis*). Gen. Tech. Rep. INT-GTR-253, U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Ogden, UT.
- Claar, J. J., N. Anderson, D. Boyd, M. Cherry, B. Conard, R. Hompesch, S. Miller, G. Olson, H. Ihsle Pac, J. Waller, T. Wittinger, and H. Youmans. 1999. Carnivores. Pages 7.1-7.63 in G. Joslin, and H. Youmans, Coordinators, editors. Effects of recreation on Rocky Mountain wildlife: A review for Montana. Committee on Effects of Recreation on Wildlife, Montana Chapter of The Wildlife Society, Bethesda, MD.
- Gunther, K. A., R. R. Shoemaker, K. L. Frey, M. A. Haroldson, S. L. Cain, F. T. van Manen, and J. K. Fortin. 2014. Dietary breadth of grizzly bears in the Greater Yellowstone Ecosystem. *Ursus* 25:60-72.
- Halofsky, J. E., D. L. Peterson, S. K. Dante-Wood, L. Hoang, J. J. Ho, and L. A. Joyce. 2018. Climate change vulnerability and adaptation in the Northern Rocky Mountains: Part 1. Gen. Tech. Rep. RMRS-GTR-374, U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fort Collins, CO.
- Heinemeyer, K. 2012. Central Idaho wolverine and winter recreation research study, February, 2012, project update.
- Heinemeyer, K., J. Squires, M. Hebblewhite, J. O'Keefe, J. D. Holbrook, and J. Copeland. 2019. Wolverines in winter: Indirect habitat loss and functional responses to backcountry recreation. *Ecosphere* 10:1-23.
- Hostetler, S., C. Whitlock, B. Shuman, D. Liefert, C. W. Drimal, and S. Bischke. 2021. Greater Yellowstone climate assessment: past, present, and future climate change in greater Yellowstone watersheds. Montana State University, Institute on Ecosystems. Bozeman MT.
- Interagency Lynx Biology Team. 2013. Canada lynx conservation assessment and strategy (3rd ed.). 3rd edition. Forest Service Publication R1-13-19, U.S. Department of Agriculture, Forest Service and U.S. Department of the Interior, Fish and Wildlife Service, Bureau of Land Management, and National Park Service, Missoula, MT.
- U.S. Department of Agriculture, Forest Service. 2006. Gallatin National Forest travel management plan, final environmental impact statement, and record of decision.
- _____. 2007a. Northern Rockies lynx management direction record of decision, national forests in Montana, and parts of Idaho, Wyoming, and Utah.
- _____. 2007b. Northern Rockies lynx management direction: Final environmental impact statement (vols. 1 and 2).
- _____. 2015a. Baseline estimates of carbon stocks in forests and harvested wood products for National Forest System units. (Two baselines: 1990-2013, 2005-2013). Northern Region. U.S. Department of Agriculture, Forest Service, Office of the Chief, Climate Change Advisor's Office, Washington, DC.
- _____. 2015b. Programmatic agreement between the USDA Forest Service Northern Region (Region 1) and the Montana State Historic Preservation Officer regarding negative inventory and no historic properties affected undertakings in the state of Montana by the USDA Forest Service. U.S. Department of Agriculture, Forest Service, Northern Region, Missoula, MT.
- _____. 2022a. Land management plan, Custer Gallatin National Forest. Publication No. R1-22-03f, U.S. Department of Agriculture, Forest Service, Custer Gallatin National Forest, Bozeman, MT.
- _____. 2022b. Record of Decision, Custer Gallatin National Forest, Land Management Plan. Publication No. R1-22-03h, U.S. Department of Agriculture, Forest Service, Custer Gallatin

East Crazy Inspiration Divide Land Exchange, Custer Gallatin National Forest

National Forest, Bozeman, MT.

- _____. 2022c. Volume 1-Final Environmental Impact Statement for the Land Management Plan, Custer Gallatin National Forest, Chapters 1, 2, and 3 (Part 1). Publication No. R1-22-03a, U.S. Department of Agriculture, Forest Service, Custer Gallatin National Forest, Bozeman, MT.
- _____. 2022d. Volume 2-Final Environmental Impact Statement for the Land Management Plan, Custer Gallatin National Forest, Chapter 3 (part 2), Chapter 4, and Glossary. Publication No. R1-22-03b, U.S. Department of Agriculture, Forest Service, Custer Gallatin National Forest, Bozeman, MT.
- _____. 2022e. Volume 3-Final Environmental Impact Statement for the Land Management Plan, Custer Gallatin National Forest, Appendix A (maps) through Appendix F. Publication No. R1-22-03c, U.S. Department of Agriculture, Forest Service, Custer Gallatin National Forest, Bozeman, MT.
- _____. 2022f. Volume 4-Final Environmental Impact Statement for the Land Management Plan, Custer Gallatin National Forest, Appendix G—Response to Comments on the Draft Environmental Impact Statement and Draft Revised Forest Plan. U.S. Department of Agriculture, Forest Service, Custer Gallatin National Forest, Bozeman, MT.
- U.S. Department of Agriculture, Forest Service,. 2022g. Appendices for the Land management plan, Custer Gallatin National Forest,. Publication No. R1-22-03g, U.S. Department of Agriculture,, Forest Service, Custer Gallatin National Forest,, Bozeman, MT.
- U.S. Department of the Interior, Fish and Wildlife Service. 2013. Endangered and Threatened Wildlife and Plants; Establishment of a Nonessential Experimental Population of the North American Wolverine in Colorado, Wyoming, and New Mexico; Proposed rule. Federal Register 78:7890-7905.
- _____. 2022. Endangered and threatened wildlife and plants; threatened species status with section 4(d) rule for whitebarkpine (*Pinus albicaulis*). Final Rule. Federal Register 87:76882-76917.
- van Manen, F. T., M. A. Haroldson, and B. E. Karabensh, (eds.). 2021. Yellowstone grizzly bear investigations: Annual report of the Interagency Grizzly Bear Study Team, 2020. U.S. Department of the Interior, U.S. Geological Survey, Reston, VA.
- Yellowstone Ecosystem Subcommittee. 2016. 2016 conservation strategy for the grizzly bear in the Greater Yellowstone Ecosystem. Interagency Grizzly Bear Committee, Yellowstone Ecosystem Subcommittee, Missoula, MT.
- van Manen, F. T., M. A. Haroldson and B. E. Karabensh, (eds.) 2020. Yellowstone grizzly bear investigations: Annual report of the Interagency Grizzly Bear Study Team, 2020 Reston, VA: U.S. Department of the Interior, U.S. Geological Survey
- van Manen, F. T., M. A. Haroldson and B. E. Karabensh, (eds.) 2023. Yellowstone grizzly bear investigations 2022: Annual report of the Interagency Grizzly Bear Study Team. Reston, VA: U.S. Department of the Interior, U.S. Geological Survey