

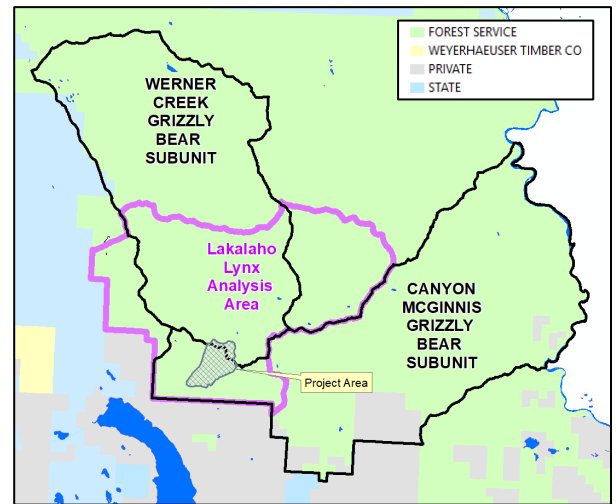
Grizzly Bear

Existing Condition, Effects Analysis, and Forest Plan Consistency

1. Habitat Analysis Methodology

A. Analysis Extent

The Hellroaring Basin Improvements Project is located in the Northern Continental Divide Ecosystem (NCDE) Grizzly Bear Recovery Area. The Canyon McGinnis and Werner Creek Grizzly Bear subunits were used to analyze direct, indirect, and cumulative effects to the grizzly bear and have been determined as the appropriate scale to analyze effects to grizzly bears by the Interagency Grizzly Bear Committee (IGBC). The effects of the Hellroaring Basin Improvements Project were considered to continue indefinitely based on the planned continuance of recreation activities and maintenance of vegetation removal.



B. Data Sources and Method

Data used for analysis included stand exams, VMAP data, National Agricultural Imagery Program (NAIP) imagery, grizzly bear telemetry data, Montana Natural Heritage Program MapViewer Observation data, past grizzly bear mortality information, grizzly bear denning habitat model, and review of the best available science. In addition, site-specific information on habitat characteristics was collected during on-site visits to proposed treatment areas. Road density, hiding cover, levels of displacement, and risk of mortality were used to evaluate the effects of project activities. National Agricultural Imagery Program (NAIP) imagery, stand data, and field visits were used to estimate hiding cover within the areas of proposed activities.

Denning habitat has been characterized by looking at combinations of elevation, aspect, slope, and vegetation that matched known grizzly bear dens.

Motorized access analyses applied the process described in Appendix 6 to the Grizzly Bear Conservation Strategy (Exhibit 12-21). Appendix 2 provides additional information about how special use permit and private roads are considered.

2. Existing Condition

A. Habitat

Habitat and other needs of grizzly bears in this area are detailed in the Conservation Strategy for the Grizzly Bear in the Northern Continental Divide Ecosystem (NCDE 2019) and in section 3.7.5 of the FEIS for the Flathead Land Management Plan (USDA Forest Service 2018a).

Table 1 displays the existing situation regarding motorized access in terms of Open and Total Motorized Route Densities and Secure Core (USDA Forest Service 2018b) in the project subunits. See Appendix 1 below for maps of the GIS analysis for these parameters for before, during, and after the Taylor Hellroaring Project, as well as maps that display the area of security habitat (not secure core) in the Hellroaring Basin. This project would result in the same numbers as the pre- and post-project situation for Taylor Hellroaring.

Table 1. Existing Situation Expressed in Motorized Access Parameters in affected grizzly bear subunits.

Grizzly Bear Subunit	Access Density Parameter		
	OMRD (> 1 mi/mi ²)	TMRD (> 2 mi/mi ²)	Secure Core
Canyon McGinnis	18%	31%	50%
Werner Creek	29%	20%	63%

The subunits, which are over 90% Forest land, provide abundant and diverse habitat for grizzly bears year-round. The area supports over 20,000 acres of modeled grizzly bear denning habitat and nearly 40,000 acres of hiding cover, and both are well distributed (Table 2). Denning season in this area is considered to be from December 1 to March 31 each year.

Table 2. Existing habitat conditions in affected grizzly bear subunits.

Grizzly Bear Subunit	Acres in Subunit	Potential Key Spring Habitat <4,900 ft. elevation Acres (%)	Potential Denning Habitat >5,900 ft. elevation Acres (%)	Hiding Cover Acres (%)
Canyon McGinnis	33,239	16,279 (49.0%)	8,567 (25.8%)	16,481 (49.6%)
Werner Creek	28,641	4,347 (15.2%)	13,245 (46.2%)	22,955 (80.1%)

B. Population

Grizzly bears and their sign have been recorded in and near the project area, and tracks, scat, and a den site were encountered during field surveys. NCDE Monitoring data confirm year-round use of the project area by both male and female grizzly bears, including females with cubs and a denning female. High densities of berry-producing shrubs attract grizzly bears to the project area from June through October.

Population considerations for grizzly bears in this area are detailed in the Conservation Strategy for the Grizzly Bear in the Northern Continental Divide Ecosystem (NCDE 2019) and in section 3.7.6 of the FEIS for the Flathead Land Management Plan (USDS Forest Service 2018a). Current information suggests that the grizzly bear population in the NCDE and on the Flathead National Forest, is expanding its range outside of the recovery zone.

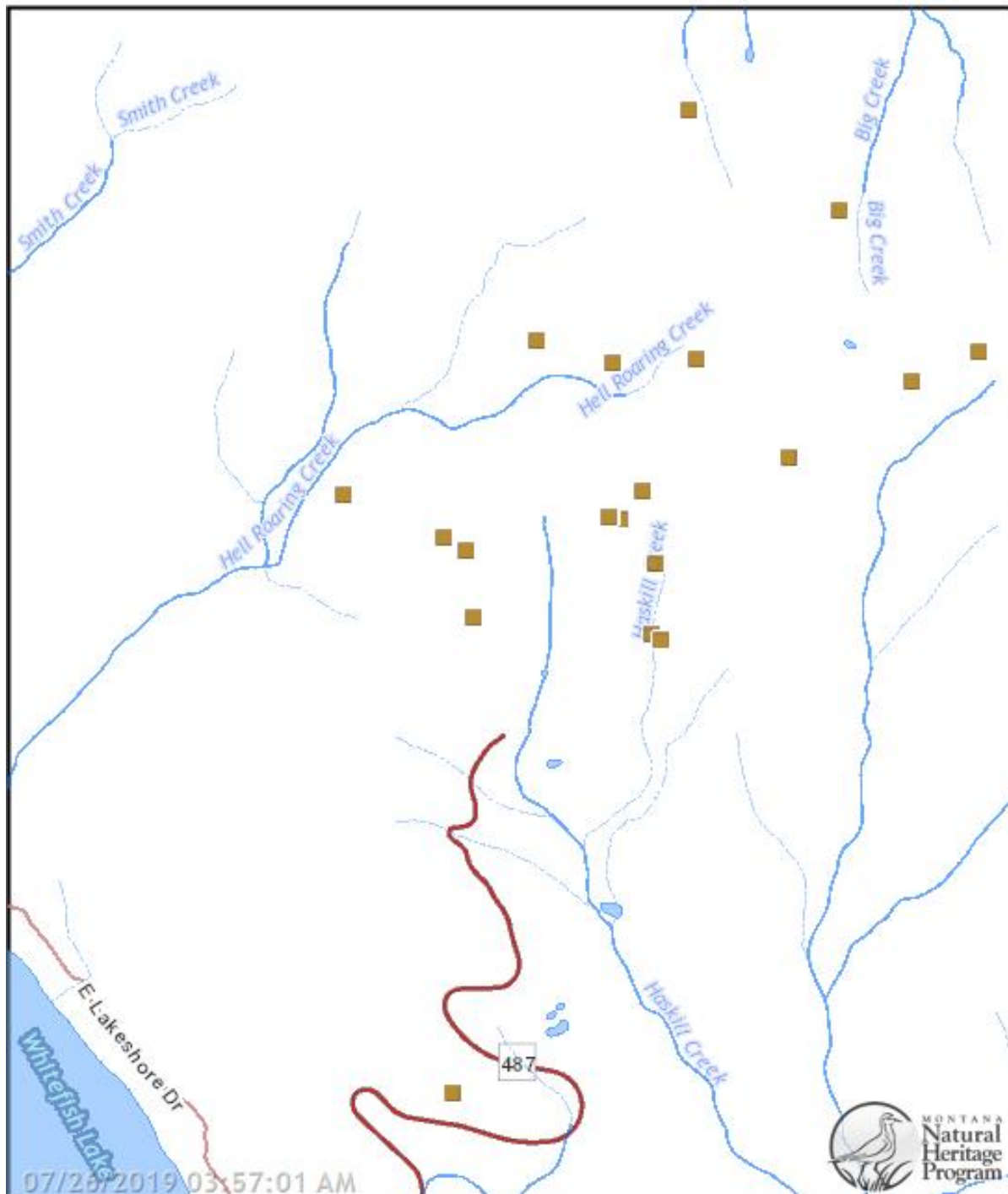
In the past 20 years, there have been 4 documented grizzly bear mortalities in the project subunits, not including dependent young. Three of these occurred in the Canyon McGinnis subunit, with only one occurring on NFS lands. This female had been killed by gunshot and was found along an NFS road. The

three yearling cubs found near the carcass appeared to be fine. The other two mortalities occurred on private land. The remaining mortality occurred in the Werner Creek subunit on NFS lands. This adult male mortality was also the result of a gunshot wound.

Grizzly Bear Observations in MTNHP Mapviewer as of 7/26/2019

Point Observations for Species
Species.Mammals = Grizzly Bear

Latitude	Longitude
48.46185	-114.32346
48.51973	-114.38827



Grizzly Bear Observations in MTNHP Mapviewer as of 7/26/2019		
OBS ID	OBSERVERS	OBS DATE
51441191	Unknown, Recreationist	14-Aug-06
County	Flathead, MT	
QQLL	02D1	
Location	1.5 km S of Big Mountain	
Precision	500 meters	
Species Notes	Activity: Unknown Group Type: Single Reproductive Status: Reproducing	
Counts	Unknown Sex: 1	
51441190	Unknown, Recreationist	10-Aug-06
County	Flathead, MT	
QQLL	02B3	
Location	0.5 km S of Big Mountain	
Precision	500 meters	
Species Notes	Activity: Unknown, Unknown Group Type: Family Type Reproductive Status: Reproducing	
Counts	Females: 1 Juveniles: 2	
51441156	Herger, Kristina	18-Sep-03
County	Flathead, MT	
QQLL	02B3	
Location	1.5 km E of Big Mountain	
Precision	100 meters	
Species Notes	Activity: Feeding Group Type: Single Reproductive Status: Unknown Observation Comments: View Scale at Data Entry 1:14643.648614; Bear was 60 feet above Danny On trail in huckleberry patch on ski run under T-bar. Very blonde with raccoon eyes and dark t	
Counts	Unknown Sex: 1	
51441098	Unknown, Unknown	18-Sep-01
County	Flathead, MT	
QQLL	02B3	
Location	1.8 km E of Big Mountain	
Precision	500 meters	
Species Notes	Activity: Feeding Group Type: Single Reproductive Status: Unknown Observation Comments: Species ID: uncertain "Seen feeding, early mornings, 3 or 4 days in a row, while excavator was running. Big Mtn employee equipment operator was the observer."	
Counts	Unknown Sex: 1	
51440970	Smith, Becky	18-Aug-97
County	Flathead, MT	
QQLL	02D1	
Location	1.9 km S of Big Mountain	
Precision	500 meters	

Grizzly Bear Observations in MTNHP Mapviewer as of 7/26/2019		
OBS ID	OBSERVERS	OBS DATE
Species Notes Counts	Activity: Feeding Group Type: Single Reproductive Status: Unknown Observation Comments: Species ID: probable "Eating berries, black with gold tips." Males: 1	
51440969 County QQLL Location Precision Species Notes Counts	Smith, Becky Flathead, MT 02D1 1.9 km S of Big Mountain 500 meters Activity: Feeding Group Type: Single Reproductive Status: Unknown Observation Comments: Species ID: Probable "Eating berries, black with gold tips." Males: 1	17-Aug-97
51440836 County QQLL Location Precision Species Notes Counts	Unknown, Unknown Flathead, MT 02D1 1.3 km S of Big Mountain 500 meters Activity: Unknown Group Type: Single Reproductive Status: Unknown Observation Comments: Habitat: AP Species ID: not certain "Griz seen here several times September 1995." Unknown Sex: 1	1-Sep-95
51440832 County QQLL Location Precision Species Notes Counts	Unknown, Hiker Flathead, MT 02B3 0.5 km SE of Big Mountain 500 meters Activity: Unknown Group Type: Single Reproductive Status: Unknown Observation Comments: Species ID: UK Unknown Sex: 1	22-Aug-95
51440830 County QQLL Location Precision Species Notes Counts	Unknown, Hiker Flathead, MT 02D1 1.1 km S of Big Mountain 500 meters Activity: Unknown Group Type: Single Reproductive Status: Unknown Observation Comments: Species ID: Uk Unknown Sex: 1	21-Aug-95
51440829 County QQLL	Unknown, Hiker Flathead, MT 02D1	20-Aug-95

Grizzly Bear Observations in MTNHP Mapviewer as of 7/26/2019		
OBS ID	OBSERVERS	OBS DATE
Location Precision Species Notes Counts	1.7 km SW of Big Mountain 500 meters Activity: Unknown Group Type: Single Reproductive Status: Unknown Observation Comments: Species ID: unknown Unknown Sex: 1	
51440818 County QQLL Location Precision Species Notes Counts	Unknown, Hiker Flathead, MT 02D1 1.2 km SE of Big Mountain 500 meters Activity: Unknown Group Type: Single Reproductive Status: Unknown Observation Comments: Species ID: not certain Unknown Sex: 1	1-Aug-95
51440819 County QQLL Location Precision Species Notes Counts	Unknown, Unknown Flathead, MT 02D1 1.3 km S of Big Mountain 500 meters Activity: Unknown Group Type: Single Reproductive Status: Unknown Observation Comments: Habitat: AP Species ID: Probable "Griz seen here several times August 1995." Unknown Sex: 1	1-Aug-95
51440811 County QQLL Location Precision Species Notes Counts	Hickle, Rod Flathead, MT 02B3 1.1 km E of Big Mountain 500 meters Activity: Unknown Group Type: Single Reproductive Status: Unknown Observation Comments: Habitat: SC Species ID: positive Distance to animal:100 yds Length of observation: 45 min Unknown Sex: 1	12-Jul-95
51440792 County QQLL Location Precision Species Notes Counts	Keith, David Flathead, MT 02B3 0.6 km SW of Big Mountain 500 meters Activity: Unknown Group Type: Single Reproductive Status: Unknown Observation Comments: Habitat: AL Species ID: probable Unknown Sex: 1	28-Feb-95
51440777 County QQLL	Inmee, Rick Flathead, MT 02B3	15-Aug-94

Grizzly Bear Observations in MTNHP Mapviewer as of 7/26/2019		
OBS ID	OBSERVERS	OBS DATE
Location	0.9 km N of Big Mountain	
Precision	500 meters	
Species Notes	Activity: Unknown, Unknown Group Type: Family Type Reproductive	
Counts	Status: Reproducing Observation Comments: Species ID: Probable	
	Females: 1 Juveniles: 1	
51440774	Smith, Becky	29-Jul-94
County	Flathead, MT	
QQLL	02D1	
Location	1.9 km SW of Big Mountain	
Precision	500 meters	
Species Notes	Activity: Feeding Group Type: Single Reproductive Status: Unknown	
Counts	Observation Comments: Habitat: UK Species ID: High "Feeding and acting aggressive, was second sighting there this week."	
	Unknown Sex: 1	
51440733	Beck, Steven	29-Jun-93
County	Flathead, MT	
QQLL	02D1	
Location	1.7 km SW of Big Mountain	
Precision	500 meters	
Species Notes	Activity: Feeding Group Type: Single Reproductive Status: Unknown	
Counts	Observation Comments: Habitat: AP Species ID: Probable "Cinnamon, not aggressive, 400-450 LBS, eating, scrambled to hellroaring basin."	
	Unknown Sex: 1	
51440696	Spencer, Steve	31-Jul-92
County	Flathead, MT	
QQLL	02D1	
Location	2 km SW of Big Mountain	
Precision	500 meters	
Species Notes	Activity: Moving, Moving Group Type: Family Type Reproductive Status:	
Counts	Unknown Observation Comments: Habitat: AP Species ID: Probable "Grizzled Blond, darker legs, cubs slightly smaller, went to Hellroaring Drainage."	
	Females: 1 Juveniles: 2	

3. Hellroaring Basin Improvements Project Effects

A. Relevant Design Features

5. No additional clearing for Run 1 would occur where it would be within the riparian management zone.
8. Existing and newly felled downed trees would be left onsite in riparian management zones in order to meet large wood desired conditions, where it would be safe and practical to do so.

16. Proposed action activities would be completed between June 1 and November 30 each year to limit impacts to wildlife and to minimize ground disturbance during wet time periods in the springtime (FW-GDL-TE&V-01).
23. Trees in gladed areas could be removed by hand or machine felling, unless in riparian management zones or where slopes are greater than 40% slope. Only hand felling would occur in these areas unless site-specific exceptions to the 40% slope rule is approved by the Forest soils scientist.
28. Ski runs and glades: Existing down wood greater than 9" diameter would be left intact and retained in glades and ski runs to maintain wildlife habitat, wherever not in conflict with grooming and/or skier safety. Where these pieces would be in conflict with grooming and/or skier safety, the pieces would be limbed, bucked and or placed in an area to reduce safety issue.
57. Helicopter flights for chairlift installation would be limited to five days for construction of each chairlift to minimize disturbance to wildlife. Additional days may be approved in writing by the Forest in extenuating circumstances.
58. No helicopter flights or landings would be allowed on the north side of the Whitefish Range divide nor to the west or northwest of the Hellroaring drainage, unless needed for safety or emergency situations.
59. All maintenance activities in the Hellroaring drainage, with or without heavy machinery, would be limited to a single three-week maintenance period each year between July 1 and November 30, unless an exemption is approved in writing by the Forest. This maintenance activity restriction would not include items such as routine inspections, monitoring, assessments, visual checks, or addressing minor safety items. (GA-SM-MA7-Big Mtn-DC-04, p. 135; FW-GDL-TE&V-01 pp. 42-43)
60. To minimize disturbance to wildlife security habitat, public motorized use of the Grand Junction and Hellroaring Peak service roads would not be allowed. The roads would be gated and signed. (GA-SM-MA7-Big Mtn-DC-04, p. 135; FW-GDL-TE&V-01 pp. 42-43).
61. To minimize disturbance to wildlife security habitat, bicycle use would also be prohibited on the service roads to minimize impacts to wildlife. The existing special order that restricts bicycle use to designated routes on the front side of the Resort would be updated to include Hellroaring Basin. To encourage compliance with this, signage would be posted and a gate would be put in place at the beginnings of the roads. (GA-SM-MA7-Big Mtn-DC-04 p. 135)
62. Public motorized use of the cat track would be prohibited year-round to protect wildlife security habitat. Although public use in summer is unlikely due to the steep grade and vegetation left in the cat track and the dense vegetation of the surrounding area. Education, such as signage, would also be used to discourage off-highway vehicle, bicycle, and hiker use.
63. To maintain wildlife habitat security, trees and slash would be felled into the cat track, as much as possible. However, trees and slash left in the cat track would not be left in a manner that would cause a safety hazard during winter use.
64. In order to protect non-denning grizzly bear habitat security, Hellroaring Basin would continue to be subject to the skier use closure that begins annually on April 1 (GA-SM-MA7-Big Mtn-DC-04, p. 135).
65. In order to reduce wildlife impacts, spring, summer, and fall recreation in the Hellroaring Basin, excluding the Road 9790 and the proposed Taylor Hellroaring Project trails, would not be promoted by the Resort (GA-SM-MA7-Big Mtn-DC-04, p. 135).
66. All individuals involved with implementation of this project would be required to comply with the Forest's food storage and sanitation order(s) (FW-STD-WL-02, p. 50).
67. Hunting and transportation of hunters and game by individuals involved in the implementation of this project would be prohibited.
68. In order to reduce the risk of grizzly bear-human conflicts (FW-GDL-REC-01, p. 61):

69. All individuals involved with implementation of this project would be informed of procedures for safely working and recreating in grizzly bear country and of food/wildlife attractant storage special order(s) prior to beginning work and annually thereafter (FW-STD-WL-02, p. 50; FW-GDL-WL-01, p. 50); and Overnight camping on Forest Service lands by individuals involved in the implementation of this project would require written approval from the Forest Service on a case by case basis (FW-GDL-WL-02, p. 50).
70. In order to resolve a grizzly bear-human conflict situation, project activities would be modified, cancelled, suspended, or temporarily ceased, as needed (FW-STD-REC-02, p. 61, and FW-GDL-TE&V-04, p. 43).
71. If any of the following are found within or close to any authorized activity, operations within that immediate area will cease until a Forest Service wildlife biologist is notified and, if necessary, activities are modified (FW-GDL-WL DIV-05, p. 49):
- Active denning sites used by grizzly bears, wolves, lynx, fishers, or wolverines;
 - Active nesting sites used by bald eagles, northern goshawks, or flammulated owls;
 - Active rendezvous (pup rearing) sites used by wolves; and/or
 - Indications of bat roosting.

B. Effects of the Hellroaring Basin Improvements Project

Proposed ski area development in the Hellroaring Drainage would remove 45 acres of cover for ski runs and lift lines and would make 57 acres of cover less effective through thinning glades and feathered areas. These changes would be considered permanent and include about 7 acres that overlap a fuel reduction unit and a prescribed fire unit in the proposed Taylor Hellroaring Project. This is a small amount at the scale of the Canyon McGinnis Subunit, where the amount of cover would decrease from 49.3% to 49.1%. As more sunlight and moisture would reach the forest floor, the openings and thinned areas would be expected to produce grass, forb, huckleberry, and shrub forage for grizzly bears. Limited vegetation removal would occur in riparian management zones, however, cover conditions in riparian management zones would continue to meet FW-GDL-TE&V-03. In the EA, see project design features #1, 5, 8, 23, 28, and 48 that would retain downed wood habitat, limit clearing in specific situations, and rehabilitate disturbed areas (FW-GDL-TE&V-02). Abandonment of the lower part of the Hellfire Run and the area kept cleared for the current Chair 8 location would allow cover to return to those linear areas in the future.

**See Section 4 below
for plan components,
identifier codes, and
project consistency**

Human activity during project implementation could negatively affect grizzly bears by causing disturbance or temporary displacement from preferred habitats. This would include survey work, timber hauling, helicopter operations for ski lift installation, blasting for avalanche control, and stream rehabilitation in the lower portion of the Hell Fire Run, and survey work. Disturbance during vegetation clearing and maintenance may also occur due to mechanical/motorized activity and crew activities. Project implementation would not exceed 5 years, consistent with FW-GDL-IFS-01.

Much of the proposed project activities would occur in potential spring habitat for grizzly bears. Project activities would not begin until June 1 each year, which would reduce the potential to displace bears foraging on spring foods (FW-GDL-TE&V-01). If active grizzly bear denning is discovered in or close to any activity authorized by this project, operations would be modified if needed, as stated in project design feature #70.

Roads permitted to the Resort are regarded as private roads when considering FW-STD-WL-03, FW-STD-IFS-02, and FW-STD-IFS-03 (NCDE 2019).

Grizzly bear secure core would not be affected by this proposal due to the location of the service roads to Grand Junction and to Hellroaring Peak relative to existing areas of secure core and nearby private lands. Even so, construction and permittee's motorized use of approximately 2 miles of new road could cause additional, but short-distance, displacement of individual bears.

Several project design features would contribute to decreasing the potential for human-bear conflict and associated grizzly bear mortality, consistent with FW-STD-WL-02, FW-STD-REC-02 and -04, FW-GDL-TE&V-04, FW-GDL-WL-01 and -03, and FW-GDL-IFS-01. This includes requiring compliance with food storage and sanitation orders, bear-country safety education requirements, requiring an approved seed mix, and the requirements for resolving any bear-human conflict situation that may arise. In addition, Hellroaring Basin would continue to be subject to the skier use closure that begins annually on April 1. For more information, refer to project design features #59, 60, 61, 62, 64, 65, 66, 68, and 69.

After construction is complete, the Hellroaring drainage below Road 9790 would continue to provide habitat security for grizzlies during the non-denning season (GA-SM-MA7-Big Mtn-DC-04), even though its effectiveness would be slightly reduced by the reduction of hiding cover, ski-area maintenance activities, and a possible increase in huckleberry picking and other human uses resulting indirectly from the reduction in conifer cover.

Project design features that contribute to security in and near this drainage include limiting maintenance activities in the Hellroaring drainage to a single three-week maintenance period each year between July 1 and November 30, prohibiting bicycles on service roads and gating these roads, and prohibiting public motorized use of the cat track yearlong (project design features #59, 60, 61, and 62). Abandonment of the Purgatory Run and the lower portion of Hell Fire Run would increase security in the lower part of the drainage, as these areas would no longer receive any ski-area use or maintenance during any time of the year. About 330 acres in the Hellroaring drainage would receive reduced levels of winter activity, but these would be unlikely to be used for denning due to additional avalanche control on approximately 30 acres on the upper slope of Hellroaring Peak.

Maintenance of habitat security for grizzly bears in the Hellroaring drainage through limitations on human activity was a mitigation measure of the 1995 Big Mountain Expansion decision. The LMP (USDA Forest Service 2018b) incorporated this as GA-SM-MA7-Big Mtn-DC-04. Because little other unroaded habitat exists in the southern end of the Whitefish Range, this drainage has added value as security habitat immediately adjacent to an area of relatively high levels of human use, despite the area not being large enough to be considered Secure Core. After ski-area development construction is complete, this part of the Hellroaring drainage would continue to provide habitat security for grizzlies during the non-denning season even though its effectiveness would be slightly reduced by the reduction of hiding cover, ski-area maintenance activities, and a possible increase in huckleberry picking and other human uses resulting indirectly from the reduction in conifer cover. See design features #59, 60, 61, 64, and 65.

See Exhibit 12-07 for cumulative effects.

C. Summary

- 1) The grizzly bear and its habitat are expected to occur in the project area.
- 2) Motorized access parameters would not be affected by project activities in the Canyon McGinnis or Werner Creek subunits, however these subunits do not currently meet research benchmarks (USDI FWS 2017 and 2018) and therefore the baseline condition is adverse.
- 3) Roads constructed for this special-use permit (ski lift service roads) would not be open to public motorized travel but motorized use for ski-area operations could displace bears.
- 4) The proposed action would permanently decrease hiding cover across the project subunits. Hiding cover would remain well distributed for grizzly bear travel and security during and after project implementation.
- 5) Spring timing restrictions would likely prevent displacement of grizzly bears when early season plant production is limited.
- 6) Vegetation removal for ski area development would increase forage for grizzly bears.
- 7) No project activities would occur in or near Secure Core, including low-elevation helicopter flights for ski lift installation.
- 8) Project design features #16 and 57 through 70 would contribute to decreasing the potential for human-bear conflict and associated grizzly bear mortality.

4. Hellroaring Basin Improvements Project Consistency with 2018 Flathead National Forest LMP – Grizzly Bears

- **Level of direction** (FW = forestwide, MA = management area = MA, GA = geographic area; note that with management area or geographic area direction, the management area number and the geographic area acronym are also included).
 - **Type of direction** (where DC = desired condition, OBJ = objective, STD = standard, GDL = guideline).
 - **Resource** (WTR = watersheds; RMZ = Riparian Management Zones; TE&V = Terrestrial Ecosystems and Vegetation; WL DIV = Wildlife Habitat Diversity; WL = Threatened, Endangered, Proposed, or Candidate Wildlife Species; FIRE = Fire and Fuels Management; REC = Recreation; IFS = Infrastructure; LSU = Lands and Special Uses; OFP = Other Forest products; E&M = Energy and Mineral Resources; GR = Livestock grazing; P&C = Partnerships and Coordination)
 - **Geographic Area** (NF = North Fork, SM = Salish Mountains)
- Terms and Conditions and Reasonable and Prudent Measures that came from the LRMP revision's Biological Opinion are in purple text.**

Identifier	Plan Components and Terms and Conditions Specific to GRIZZLY BEARS	Project Compliance
FW-STD-WL-01	Grizzly bear habitat on NFS lands in the NCDE shall be delineated and managed as the primary conservation area, zone 1 (including the Salish demographic connectivity area) (see figure B-10 or subsequent USFWS updates, if applicable).	Grizzly bear habitat would continue to be delineated and managed as PCA and Zone 1.
FW-STD-WL-02	BO T&C for FNF's Revised LMP -- The Forest Service shall continue to implement food/attractant storage and handling programs in the action area. This includes ensuring all Forest Service employees and contractors adhere to appropriate protocols, and providing educational material to the public on measures to avoid conflicts and/or food conditioning of grizzly bears. Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area; see figure B-10), food/wildlife attractant storage special order(s) shall apply to all NFS lands.	Food/wildlife attractant storage special order(s) would be followed. See design features #66 and 68.
FW-STD-WL-03	In each bear management subunit within the NCDE primary conservation area, temporary changes in the open motorized route density, total motorized route density, and secure core shall be calculated for roads used for projects (as defined by "project (in grizzly bear habitat in the NCDE)" during the non-denning season (see glossary). Calculations will include estimated changes for each year of the anticipated duration of the project and shall be incorporated into the 10-year running average required by standard FW-STD-IFS-03.	OMRD, TMRD, and secure are all the same as the pre- and post-project situation for the Taylor Hellroaring Project (See Appendix 1 below for maps of the GIS analysis for these parameters for before, during, and after the Taylor Hellroaring Project). Grizzly bear secure core would not be affected by this proposal due to the location of the service roads to Grand Junction and to Hellroaring Peak relative to existing areas of secure core and nearby private lands. The service roads would be special-use permit roads and thus are not included in calculations of OMRD and TMRD (NCDE 2019 Appendix 6).
FW-STD-REC-01	Within the NCDE primary conservation area, the number and capacity of developed recreation sites on NFS lands that are designed and managed for overnight use by the public during the non-denning season (e.g., campgrounds, cabin rentals, huts, guest lodges, recreation residences) shall be limited to one increase above the baseline (see glossary) in number or capacity per decade per bear management unit. The following conditions are not considered an increase from the baseline: • the agency obtains better information or updated information in its database(s); • the agency acquires land that contains developed recreation sites; • the agency increases the number or capacity of a developed recreation site in order to comply with Federal laws; • the agency maintains or modifies an existing overnight developed or dispersed recreation site in such a way that does not increase the number or capacity of the site (e.g., installing a pit toilet to avoid damage to water resources or installing a bear-resistant food storage structure to reduce grizzly bear-human conflicts); • the agency modifies an existing developed recreation site to enhance human safety (e.g., enlarging a road pull-out to allow trailers to turn around safely); • the agency operates a developed recreation site to allow overnight use only during the denning season (see glossary); or • the agency makes a corresponding reduction in the number or capacity of overnight developed recreation sites in the same bear management unit through any of the following means: (1) equal reduction in capacity at another site; (2)	This project does not include changes or additions to developed recreation sites designed for overnight use.

Hellroaring Basin Improvements

Identifier	Plan Components and Terms and Conditions Specific to GRIZZLY BEARS	Project Compliance
	closure of a developed site(s); or (3) consolidation and/or elimination of dispersed camping, when and where it can be enforced effectively and it is reasonably assured that new dispersed sites will not develop nearby. Note: If these measures are used to offset an increase in number or capacity, they must be in place before the initiation of the increase. If the agency reduces the number or capacity of developed sites below baseline levels, these reductions may be used at a future date to mitigate equivalent impacts of an increase, expansion, or change of use in developed sites within that bear management unit. Note: This standard does not apply to dispersed recreation sites or to developed recreation sites managed for day-use only (e.g., outfitter camps, roadside trail crossings or interpretive pull-outs; trailheads, picnic areas, or boat launches that are closed at night; ski areas that do not have overnight lodging).	
FW-STD-REC-02	Within the NCDE primary conservation area, new or reauthorized recreation permits shall include a clause providing for modification, cancellation, suspension, or temporary cessation of activities if needed to resolve a grizzly bear-human conflict situation.	See design features #66, 68, 69, and 70.
FW-STD-REC-04	Within the NCDE primary conservation area, new or reauthorized permits for ski areas on NFS lands that operate during the non-denning season shall include measures to limit the risk of grizzly bear-human conflicts (e.g., a requirement to store garbage in a bear-resistant manner).	See design features #69 and 70.
FW-STD-REC-05	BO T&C for FNF's Revised LMP -- The Forest Service shall comply with standards FW-STD-IFS-01, FW-STD-IFS-02, FW-STD-IFS-03, FW-STD-IFS-04 and FW-STD-REC-05 in the Flathead Forest Plan. Within grizzly bear denning habitat modeled by MFWP in the NCDE primary conservation area, there shall be no net increase in percentage of area or miles of routes designated for motorized over-snow vehicle use on NFS lands during the den emergence time period (see glossary).	This project would not cause a net increase in % of area or miles of routes designated for motorized over-snow vehicle use on NFS lands during den emergence.
FW-STD-IFS-01	BO T&C for FNF's Revised LMP -- The Forest Service shall comply with standards FW-STD-IFS-01, FW-STD-IFS-02, FW-STD-IFS-03, FW-STD-IFS-04 and FW-STD-REC-05 in the Flathead Forest Plan. Within the NCDE primary conservation area, motorized use of roads with public restrictions shall be permitted for administrative use (see glossary), as long as it does not exceed either six trips (three round trips) per week or one 30-day unlimited use period during the non-denning season (see glossary). The exception to this standard is: emergency situations as defined by 36 CFR § 218.21. Note: Administrative use is not included in baseline calculations and is not included in calculations of net increases or decreases. If the level of administrative use exceeds this standard, the use is counted as a project (see "project (in grizzly bear habitat in the NCDE)" in the glossary).	Administrative use levels would not be exceeded by this project.
FW-STD-IFS-02	BO T&C for FNF's Revised LMP -- The Forest Service shall comply with standards FW-STD-IFS-01, FW-STD-IFS-02, FW-STD-IFS-03, FW-STD-IFS-04, and FW-STD-REC-05 in the Flathead revised forest plan. In each bear management subunit within the NCDE primary conservation area, there shall be no net decrease to the baseline (see glossary) for secure core and no net increase to the baseline open motorized route density or total motorized route density on National Forest System lands during the non-denning season (see glossary). The following conditions are not considered a net increase/decrease from the baseline: - administrative use (see glossary); - temporary use of a motorized route for a project (see "project in grizzly bear habitat in the NCDE" definition in the glossary and FW-STD-IFS-03); - mining activities (as authorized under the Mining Law of 1872) and oil and gas activities (as authorized under the Federal Onshore Oil and Gas Leasing Reform Act of 1987) conducted in accordance with valid existing rights and applicable standards and guidelines; - updated/improved data on a motorized route without an actual change on the ground;	This project would not cause a net decrease to the baseline for secure core nor a net increase to the baseline OMRD or TMRD on National Forest System lands during the non-denning season.

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Identifier	Plan Components and Terms and Conditions Specific to GRIZZLY BEARS	Project Compliance
	- changes in technology or projections that result in changed open motorized route density, total motorized route density, or secure core values without actual change on the ground (e.g., a switch from the North American Datum of 1927 to the North American Datum of 1983 geodetic reference system); - a road closure location is moved a short distance (e.g., to the nearest intersection or turnout) to a better location to allow turn-arounds providing for public safety, to reduce vandalism, or to improve enforcement of the road closure; - the agency exchanges, acquires, buys, or sells lands; - a change in a motorized route is necessary to comply with Federal laws (e.g., Federal Rehabilitation Act); - a change in a motorized route is necessary to address grizzly bear-human conflicts, human safety concerns, or resource damage/concerns (e.g., a road paralleling a stream may be decommissioned and replaced by a new upslope road to reduce water quality impacts); - a change is made by an adjacent landowner that decreases secure core or increases motorized route densities on a particular national forest; - emergency situations as defined by 36 CFR § 215.2; and - temporary roads (see glossary).	
FW-STD-IFS-03	BO T&C for FNF's Revised LMP -- The Forest Service shall comply with standards FW-STD-IFS-01, FW-STD-IFS-02, FW-STD-IFS-03, FW-STD-IFS-04, and FW-STD-REC-05 in the Flathead revised forest plan. Concurrent, temporary increases in OMRD or TMRD, or concurrent temporary decreases in secure core for new projects (as described in the glossary) on NFS lands shall not occur in more than 3 adjacent bear management subunits on the FNF. In each bear management subunit within the NCDE primary conservation area, temporary changes in the open motorized route density, total motorized route density, and secure core shall be allowed for projects (as defined by "project (in grizzly bear habitat in the NCDE)" in the glossary). The 10-year running average for open motorized route density, total motorized route density, and secure core numbers shall not exceed the following limits per bear management subunit: 5 percent temporary increase in open motorized route density in each subunit (i.e., open motorized route density baseline plus 5 percent); 3 percent temporary increase in total motorized route density in each subunit (i.e., total motorized route density baseline plus 3 percent); 2 percent temporary decrease in secure core in each subunit (i.e., secure core baseline minus 2 percent). Exceptions to this standard include: - emergency situations as defined by 36 CFR 218.21 and - actions where valid existing rights preclude or constrain agency discretion (e.g., certain contracts, permits, leases, etc.). Refer to appendix C for an example of how to calculate and apply the running average and temporary increase/decrease.	Temporary changes to OMRD, TMRD, and secure core (if there were any) would fall within the maximum 10-year averages proscribed. These are all the same as the pre- and post-project situation for the Taylor Hellroaring Project (See Appendix 1 below for maps of the GIS analysis for these parameters for before, during, and after the Taylor Hellroaring Project). Grizzly bear secure core would not be affected by this proposal due to the location of the service roads to Grand Junction and to Hellroaring Peak relative to existing areas of secure core and nearby private lands. The service roads would be special-use permit roads and thus are treated as private roads and not included in calculations of OMRD and TMRD (NCDE 2019 Appendix 6).
FW-STD-IFS-04	BO T&C for FNF's Revised LMP -- The Forest Service shall comply with standards FW-STD-IFS-01, FW-STD-IFS-02, FW-STD-IFS-03, FW-STD-IFS-04, and FW-STD-REC-05 in the Flathead revised forest plan. Within the NCDE primary conservation area, a restricted road may be temporarily opened for public motorized use to allow authorized uses (such as firewood gathering), provided the period of use does not exceed 30 consecutive days during one non-denning season and occurs outside of spring and fall bear hunting seasons. However, temporary public use of a restricted road shall not be authorized in secure core (see glossary).	This project does not authorize public motorized access on any closed roads.
FW-STD-OPF-01	Special-use permits for apiaries (beehives) located on NFS lands shall incorporate measures including electric fencing to reduce the risk of grizzly bear-human conflicts, as specified in the food/wildlife attractant storage special order.	Not applicable to this project.

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Identifier	Plan Components and Terms and Conditions Specific to GRIZZLY BEARS	Project Compliance
FW-STD-E&M-01	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), mining activities (as authorized under the Mining Law of 1872) and oil and gas activities (as authorized under the Federal Onshore Oil and Gas Leasing Reform Act of 1987) occurring on NFS lands, where feasible, shall avoid, minimize, and/or mitigate environmental impacts to grizzly bears or their habitat, subject to existing rights. Stipulations or mitigation measures already included in existing leases, permits, or plans of operation on NFS lands shall not be changed, nor will additional stipulations or mitigation measures be added without the agreement of the holder of the lease, permit, or plan of operation.	Not applicable to this project.
FW-STD-E&M-02	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), new or reauthorized permits, leases, and/or plans of operation shall include a clause providing for modification or temporary cessation of activities, if needed, to resolve a grizzly bear-human conflict situation.	Not applicable to this project.
FW-STD-E&M-04	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), in addition to measures included in the food/wildlife attractant special order(s), new plans of operation, permits, and/or leases for mineral activities shall include the following measures regarding grizzly bear attractants: • bear-resistant food storage and garbage containers shall be used at development sites and at any campgrounds or dispersed sites where exploration or production-related human occupancy is anticipated; • garbage shall be removed in a timely manner; • road kills shall be removed daily during active operating periods to a designated location determined in close coordination with MFWP; • feeding of wildlife shall not be allowed; and • locations of work camps shall be approved in advance of operations. Food storage requirements shall be strictly adhered to in all work camps.	Not applicable to this project.
FW-STD-E&M-05	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), if minerals activities have the potential to adversely affect grizzly bears or their habitat as determined by a site-specific analysis, new plans of operation, permits, and/or leases for mineral activities shall include the following mitigation measures, stipulations, and surface use criteria regarding grizzly bear habitat: • ground-disturbing activities in identified grizzly bear spring habitat (as identified in a site-specific biological evaluation or other environmental document) shall be avoided between April 1 and June 30. If timing restrictions are not practicable, other measures shall be taken to reasonably mitigate negative impacts of mineral activity to grizzly bears. • seismic activity in identified grizzly bear denning habitat (as identified in a site-specific biological evaluation or other environmental document) shall be avoided during the denning season (see glossary). If timing restrictions are not practicable, other measures shall be taken to reasonably mitigate negative impacts of mineral activity to grizzly bears. • cumulative impacts of multiple, concurrent seismic and/or drilling operations shall be limited by timing restrictions. If timing restrictions are not practicable, reasonable and appropriate measures shall be taken to mitigate negative impacts to the grizzly bear. • reasonable and appropriate measures regarding the maintenance, rehabilitation, restoration or mitigation of functioning aquatic systems and riparian management zones shall identify how reclamation will occur, plant species to be used in reclamation, a time frame of when reclamation will be completed, and monitoring criteria, and • reclamation and revegetation of motorized routes, drilling pads, and other areas disturbed from mineral activities shall be completed as soon as practicable by the operator.	Not applicable to this project.
FW-STD-E&M-06	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), if mineral activities have the potential to adversely affect grizzly bears or their habitat as determined by a site-specific analysis, new plans of operation and permits shall include the following mitigation measures regarding motorized access: • public motorized use that is not associated with minerals activities shall be prohibited on motorized routes constructed for exploration and/or development; • a traffic management plan shall be developed as part of the proposed activity to identify when and how motorized routes will be used, maintained, and monitored (if required) and how motorized route standards and guidelines will be implemented after activities have ended;	Not applicable to this project.

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Identifier	Plan Components and Terms and Conditions Specific to GRIZZLY BEARS	Project Compliance
	- helicopter use associated with seismic activity, exploration, drilling, or development must follow an approved plan or permit; and - speed limits shall be adopted on motorized routes if needed to prevent or reduce collisions with grizzly bears.	
FW-STD-E&M-07	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), minerals contractors or lessees shall require employees to attend training related to safely living near and working in grizzly bear habitat prior to starting work and on an annual basis thereafter.	Not applicable to this project.
FW-STD-E&M-08	Within the NCDE primary conservation area, new leases for leasable minerals shall include a no surface occupancy stipulation (see glossary).	Not applicable to this project.
FW-STD-GR-01	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), new or reauthorized livestock grazing permits and annual operating plans shall incorporate requirements to reduce the risk of grizzly bear-human conflicts (e.g., food/wildlife attractant storage special order). New or reauthorized permits shall include a clause providing for modification, cancellation, suspension, or temporary cessation of activities, if needed, to resolve a grizzly bear-human conflict situation.	Not applicable to this project.
FW-STD-GR-02	Within the NCDE primary conservation area and zone 1, a sheep grazing permit in non-use status shall not be allowed to increase allowable animal unit months beyond what was previously permitted prior to being in non-use when it is returned to use. Note: The Flathead National Forest does not have any sheep allotments.	Not applicable to this project.
FW-STD-GR-03	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), permits for livestock grazing shall include a provision that requires reporting livestock carcasses within 24 hours of discovery, which shall be followed by proper disposal of the carcass. Boneyards shall not be established on NFS lands.	Not applicable to this project.
FW-STD-GR-04	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), there shall be no net increase in the number of active sheep allotments on NFS lands. Note: The Flathead National Forest does not have any sheep allotments.	Not applicable to this project.
FW-STD-GR-05	Within the NCDE primary conservation area, there shall be no increase in the number of active cattle grazing allotments above the baseline (see glossary) on NFS lands. Note: Existing allotments may be combined or divided as long as that does not result in grazing allotments in currently unallotted lands.	Not applicable to this project.
FW-STD-GR-06	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), temporary permits for grazing by small livestock for purposes such as controlling invasive exotic weeds or reducing fire risk, or for trailing of small livestock across NFS lands, shall not result in an increase in bear-small livestock conflicts.	Not applicable to this project.
GA-SM-STD-01	Within the Flathead National Forest portion of NCDE zone 1 <i>outside</i> the Salish demographic connectivity area (see figure B-10), there shall be no net increase above the baseline (see glossary) in the density of roads open to public motorized use on NFS lands. <i>Inside</i> the Salish demographic connectivity area, there shall be no net increase above the baseline (see glossary) in the density of roads and trails open to public motorized use during the non-denning season on NFS lands. Density is calculated by dividing the total miles open to public motorized use on NFS lands during the non-denning season, by the total square miles of NFS lands in that same area. This standard does not apply to the following: - motorized use by agency personnel or others authorized by the appropriate agency personnel; - the temporary opening of a road for a short period of time to allow for public firewood gathering and other authorized uses (see also standard FW-STD-IFS-04); - updated/improved road data without an actual change on the ground; - changes in technology or projections that result in changed calculations without actual changes on the ground (e.g., a switch in geodetic systems from the North American Datum of 1927 to the North American Datum of 1983); - moving a road closure location a short distance (e.g., to the nearest intersection or turnout) to a better location to allow turn-arounds that provide for public safety, to reduce vandalism, or to improve enforcement of the road closure; - exchanging, acquiring, buying, or selling lands by the agency; - a change in an open road that is necessary to comply with Federal laws (e.g., the Architectural Barriers Act of 1968, as amended); - motorized use for mining activities (as authorized under the Mining Law of 1872) and oil and gas activities (as authorized under the Federal Onshore Oil and Gas Leasing Reform Act of 1987) because these types of permitted resource development are subject to existing rights and have a separate set of standards and guidelines;	Not applicable to this project.

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Identifier	Plan Components and Terms and Conditions Specific to GRIZZLY BEARS	Project Compliance
	- a change in an open road that is necessary to address grizzly bear-human conflicts, human safety concerns, or resource damage or concerns (e.g., a road paralleling a stream may be decommissioned and replaced by a new upslope road to reduce water quality impacts); - motorized use for emergency situations as defined by 36 CFR § 215.2; - temporary roads (see glossary).	
FW-GDL-TE&V-01	Within the NCDE primary conservation area, measures to reduce the risk of disturbance to the grizzly bear population should be incorporated into vegetation and fuels project design criteria, which vary on a site-specific basis (e.g., some activities should be restricted in spring habitat during the spring time period; areas with low levels of human activity should be provided adjacent to areas with high levels of disturbance). Note: Management activities such as pre-commercial thinning, burning, weed spraying, and implementation of road best management practices may need to be completed during the spring time period in order to meet resource objectives (especially if needed to prevent resource damage), in which case other measures should be used to reduce the risk of disturbance (e.g., limiting the duration of the activity or limiting the use of closed roads).	See design features #16 and 57 through 70.
FW-GDL-TE&V-02	Within the NCDE primary conservation area, vegetation management activities should be designed to avoid detrimental effects on the grizzly bear population and to include one or more measures to protect, maintain, increase, and/or improve grizzly habitat quantity or quality (e.g., promoting growth of berry-producing shrubs, forbs, or grasses known to be bear foods) in areas where it would not increase the risk of grizzly bear-human conflicts.	See design features #59 through 65.
FW-GDL-TE&V-03	Within the NCDE primary conservation area, measures to retain cover (where present) along a portion of grass/forb/shrub openings, riparian wildlife habitat, or wetlands should be incorporated in project design criteria (this varies on a site-specific basis).	Where present, cover would be retained along a portion of grass/forb/shrub openings, riparian wildlife habitat, and wetlands. Clearing for this ski area development is restricted to narrow strips.
FW-GDL-TE&V-04	Within the NCDE primary conservation area, vegetation management projects (including timber sales and other non-commercial vegetation management contracts) should include a provision providing for modification, cancellation, suspension, or temporary cessation of activities, if needed, to resolve grizzly bear-human conflict situations.	See design feature #70.
FW-GDL-TE&V-05	To reduce the risk of grizzly-bear human conflicts within the NCDE primary conservation area, vegetation management activities designed to enhance grizzly habitat (e.g., to increase huckleberry production) should not occur in or next to campgrounds, administrative facilities, or other developed recreation sites that operate during the non-denning season.	Vegetation removal was not designed to increase huckleberry production or otherwise enhance grizzly bear habitat values.
FW-GDL-WL-01	Within the NCDE primary conservation area, zone 1 (including the Salish demographic connectivity area), contractors, permittees, lessees, operators, and their employees should be informed of procedures for safely working and recreating in grizzly bear country and of food/wildlife attractant storage special order(s) prior to turn-out of livestock or beginning work and annually thereafter, in order to reduce the risk of grizzly bear-human conflicts.	See design features #68 and 69.
FW-GDL-WL-02	Within the NCDE primary conservation area, zone 1 (including the Salish demographic connectivity area), if a contractor, permittee, lessee, operator, or their employee elects to camp on NFS lands other than in a developed recreation site, the site should be evaluated and written authorization (i.e., a campsite agreement that includes the food/attractant storage special order) should be provided before the campsite is established. The purpose is to reduce the risk of grizzly bear-human conflicts.	See design feature #69.
FW-GDL-WL-03	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), clover should not be used in seed mixes on NFS lands. Native seed mixes or those that are less palatable to grizzly bears should be used so that seeded areas do not become an attractant.	See design features #48 and 49 in Appendix 3. The approved seed mix does not include attractants.
FW-GDL-REC-01	Within the NCDE primary conservation area, if the number or capacity of day use or overnight developed recreation sites is increased, the project should include one or more measures to reduce the risk of grizzly-bear human conflicts in that bear management unit. The measure(s) should be in place prior to completion of the project or be included as one of the project design criteria. Measures can include but are not limited to additional public information and education; providing backcountry food-hanging poles or bear-resistant food or garbage storage devices; project design criteria that would limit capacity increases to those needed for public health and safety; and increasing law enforcement and patrols.	See design features #16 and 57 through 70.

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Identifier	Plan Components and Terms and Conditions Specific to GRIZZLY BEARS	Project Compliance
FW-GDL-IFS-01	T&C: The Forest Service shall comply with guideline FW-GDL-IFS-01 and FW-GDL-IFS-02 in the Flathead Forest Plan. If projects will be unable to comply with the above guidelines, the Forest Service shall contact the Service immediately to determine further consultation needs. In each bear management subunit within the NCDE primary conservation area, each project (as defined by “project (in grizzly bear habitat in the NCDE)” in the glossary) should be designed so that on-the-ground implementation does not exceed 5 years to reduce the potential of grizzly bears being disturbed or displaced. Exceptions may be made where necessary to accommodate, for example, • actions where existing rights preclude or constrain agency discretion (e.g., certain contracts, permits, leases); • prescribed burning (including slash disposal), best management practices to protect water quality, or required reforestation activities; or • emergency situations as defined by 36 CFR § 218.21. If an extension to the five-year time limitation is required (e.g., to meet contractual obligations or to complete on-the-ground treatments), the reasons should be documented in writing prior to authorization of the extension.	On the ground implementation will not exceed 5 years. See design feature #17.
FW-GDL-IFS-02	BO T&C for FNF’s Revised LMP -- The Forest Service shall comply with guideline FW-GDL-IFS-01 and FW-GDL-IFS-02 in the Flathead Forest Plan. If projects will be unable to comply with the above guidelines, the Forest Service shall contact the Service immediately to determine further consultation needs. Within the NCDE primary conservation area, levels of secure core, open motorized route density, and total motorized route density should be restored to pre-project levels (as defined by “project (in grizzly bear habitat in the NCDE)” in the glossary) within one year after completion of the project in order to reduce the duration of grizzly bear displacement or disturbance due to project-related activities. Exceptions may be made where necessary to accommodate, for example, • actions where existing rights preclude or constrain agency discretion (e.g., certain contracts, permits, leases); • prescribed burning (including slash disposal), best management practices to protect water quality, and required reforestation activities; and • emergency situations as defined by 36 CFR § 215.2. If an extension to the one-year time limitation is made (e.g., to meet contractual obligations or to complete on-the-ground treatments), the reasons should be documented in writing prior to authorization of the extension.	OMRD, TMRD, and secure core values would not change and thus would be restored to pre-project levels within 1 year of project completion. These are all the same as the pre- and post-project situation for the Taylor Hellroaring Project (See Appendix 1 below for maps of the GIS analysis for these parameters for before, during, and after the Taylor Hellroaring Project). Grizzly bear secure core would not be affected by this proposal due to the location of the service roads to Grand Junction and to Hellroaring Peak relative to existing areas of secure core and nearby private lands. The service roads would be special-use permit roads and thus are treated as private roads and not included in calculations of OMRD and TMRD (NCDE 2019 Appendix 6).
FW-GDL-IFS-015	When designing, constructing, or reconstructing system trails, information on how to avoid and respond to bear-human encounters should be posted at trailheads. In addition, site-specific trail design should include one or more methods to limit the risk of bear-human conflicts such as, but not limited to, • locating trails outside of riparian management zones or avalanche chutes unless it is necessary to cross or to access an existing developed recreation site, and • designing and/or maintaining trails to increase sight distance and/or to address speed of travel consistent with site-specific conditions for the managed use of the trail.	Information on how to avoid and respond to bear-human encounters would be posted at trailheads and site-specific trail design would include methods to limit the risk of bear-human conflicts. This project does not include constructing system trails.
FW-GDL-LSU-01	Special use authorizations in the primary conservation area should have permit requirements to help reduce or limit the risk of grizzly bear-human conflicts.	See design features #16 and 57 through 70.
FW-GDL-E&M-01	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), in addition to forestwide guidelines, the following guidelines apply to new leasable minerals activities including leases, surface use plans for proposed wells or operations, or permits to conduct seismic exploration or drilling. To reduce potential grizzly bear disturbance or displacement, helicopter use plans should: • avoid establishing recurring helicopter use (see glossary), especially in spring habitats or other known important grizzly bear habitats or use areas; • avoid establishing landing zones, especially in spring habitats or other known important grizzly bear habitats or use areas. If a landing zone is deemed necessary for safe implementation of the seismic or surface use plan or permit to drill, the landing zone should be constructed only in an area that has had site-specific analysis and approval.	Not applicable to this project.

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Identifier	Plan Components and Terms and Conditions Specific to GRIZZLY BEARS	Project Compliance
FW-GDL-E&M-02	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), leasable energy activities should use the best available noise-reduction technology on equipment and motorized vehicles to reduce potential disturbance or displacement of grizzly bears, whenever possible.	Not applicable to this project.
FW-GDL-E&M-03	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), along motorized routes, seismic corridors, and pipelines constructed for leasable energy activities, wildlife cover should be maintained at regular intervals, where available (this varies on a site-specific basis) in order to provide habitat connectivity for grizzly bears.	Not applicable to this project.
FW-GDL-E&M-04	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), for locatable and non-energy leasable minerals activities with the potential to adversely affect the grizzly bear or its habitat, the following tiered measures should be used to mitigate impacts to grizzly bear habitat. Beginning at step 1, any subsequent steps would be implemented only if the prior steps are not possible or achievable. • Step 1: The operator should reclaim the affected area back to suitable bear habitat that has similar or improved characteristics and qualities compared to the original habitat (such as the same native vegetation). • Step 2: If step 1 is not attainable, operators should either acquire a perpetual conservation easement (or easements) or purchase comparable or better replacement grizzly bear habitat within the primary conservation area. Acquisition of habitat within connectivity corridors could also be considered for mitigation, when appropriate. Habitat acquired for mitigation may require a purchase rate of > 1:1 on an acreage basis, depending on the quality of habitat degraded and the habitat available for acquisition. • Step 3: If steps 1 or 2 are not achievable, the next option is to offset negative effects to bears and grizzly bear habitat with other appropriate types of actions.	Not applicable to this project.
FW-GDL-E&M-05	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), carrying bear spray should be recommended to mineral permittees, lessees, and operators to reduce the risk of grizzly bear-human conflicts.	Not applicable to this project.
FW-GDL-E&M-06	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), available resources at existing gravel pits should be used before constructing new pits to reduce the risk of grizzly bear disturbance or displacement associated with blasting of rock or crushing of gravel.	Not applicable to this project.
FW-GDL-E&M-07	To protect water quality and inland native fish habitat, wildlife and other riparian-associated resources, mineral operations should not be authorized in riparian management zones. If the riparian management zone cannot be avoided, the authorization should include measures to maintain, protect, and rehabilitate fish and wildlife habitat that may be affected by the operations.	Not applicable to this project.
FW-GDL-GR-02	Within the NCDE primary conservation area, an allotment management plan and plan of operations should specify any needed measures to protect key grizzly bear food production areas (e.g., wet meadows, stream bottoms, aspen groves, and other riparian wildlife habitats) from conflicting and competing use by livestock (this varies on a site-specific basis).	Not applicable to this project.
GA-SM-MA7-Big Mtn GDL-01	To reduce grizzly bear-human conflicts at the Whitefish Mountain Resort during the non-denning season, existing mitigation measures for grizzly bears regarding food and garbage handling, odor control, and grizzly bear education at the Summit House should be retained.	This project would not change existing mitigation measures for grizzly bears regarding food and garbage handling, odor control, and grizzly bear education at the Summit House.
FW-DC-TE&V-01	Within the NCDE primary conservation area, the amount, type, and distribution of vegetation provides for the ecological, social, and economic sustainability of NFS lands while also providing habitat components that contribute to sustaining the recovery of the grizzly bear population in the NCDE. See also FW-DC-WL-02.	NFS lands continue to contribute to grizzly bear recovery.
FW-DC-TE&V-02	Within the NCDE primary conservation area, there is a mosaic of successional stages to provide for grizzly bear habitat needs over the long term.	A mosaic of successional stages continues to provide for grizzly bear habitat needs.
FW-DC-WL-01	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area; see figure B-10), bear attractants on NFS lands are stored in a manner that reduces the risk of grizzly bear-human conflicts in the NCDE	Food/wildlife attractant storage special order(s) are in place and applicable to all users across the Flathead National Forest.
FW-DC-WL-02	Within the NCDE primary conservation area and zone 1 (including the Salish demographic connectivity area), grizzly bear habitat on NFS lands contributes to sustaining recovery of the grizzly bear population in the NCDE and contributes to connectivity with neighboring grizzly bear recovery zones.	Habitat on NFS lands contributes to sustaining recovery of the grizzly bear population and connectivity with neighboring recovery zones.
FW-DC-WL-03	The risk of bear-human conflicts is reduced by information, education, and design features or criteria for management activities.	See design features #16 and 57 through 70.
FW-DC-IFS-01	Within the NCDE primary conservation area, motorized access provides for multiple uses (such as harvesting of timber and non-timber forest products; hunting, fishing, and recreation opportunities) on NFS lands and also provides open motorized route density,	Motorized road access levels continue to contribute to grizzly bear recovery.

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Identifier	Plan Components and Terms and Conditions Specific to GRIZZLY BEARS	Project Compliance
	total motorized route density, and secure core levels that contribute to sustaining the recovery of the grizzly bear population in the NCDE.	
FW-DC-OFP-01	Provide a variety of public services and special forest products (such as mushrooms, huckleberries, firewood) from NFS lands while minimizing the risk of grizzly bear–human conflicts on NFS lands in the NCDE.	Not applicable to this project.
FW-DC-GR-01	Within the NCDE primary conservation area, the number, capacity of, and improvements on livestock grazing allotments support ecologically sustainable grazing, and temporary grazing permits are used effectively for management of noxious weeds, while minimizing the risk of bear-human conflicts on NFS lands.	Not applicable to this project.
FW-DC-REC-01	Within the NCDE primary conservation area, the number, capacity, and improvements of developed recreation sites (NCDE definition) provide for user comfort and safety while minimizing the risk of grizzly bear-human conflicts on NFS lands.	See design features #16 and 57 through 70.
FW-DC-REC-02	Within each bear management unit in the primary conservation area, increases in the number and capacity of developed recreation sites (NCDE definition) on NFS lands that are designed and managed for overnight use during the non-denning season are at levels that contribute to sustaining the recovery of the grizzly bear population in the NCDE.	This project does not include changes or additions to developed recreation sites designed for overnight use.
FW-DC-REC-06	Bear-human conflicts are minimized through proper food and garbage storage; food and garbage is unavailable to bears. Trailheads and Web-based information that reaches visitors prior to their arrival on the Forest provide education and information on recreating in bear country—especially activities that may cause sudden encounters with bears.	See design features #16 and 57 through 70.
FW-DC-REC-22	The amount and distribution of motorized over-snow vehicle use does not have demonstrated adverse effects to maternal denning of wolverines or female grizzly bears with cubs during the den emergence time period.	The amount of motorized oversnow use would not have adverse effects to maternal denning of female grizzly bears with cubs during den emergence.
GA-SM-DC-01	Within the Flathead National Forest portion of NCDE zone 1 (including the Salish demographic connectivity area) (see figure B-10), roads and trails provide for public and administrative access to NFS lands. Grizzly bear habitat in zone 1 contributes to sustaining recovery of the grizzly bear population in the NCDE. The demographic connectivity area provides habitat that can be used by female grizzly bears and allows for bear movement between grizzly bear ecosystems.	Not applicable to this project.
GA-SM-DC-02	Outside the NCDE primary conservation area and the Salish demographic connectivity area, motorized trails (single-track or off-highway vehicles) provide high-elevation loop opportunities.	Not applicable to this project.
GA-SM-DC-03	In areas between the primary conservation area and the Salish demographic connectivity area, NFS lands are consolidated and conservation easements with willing landowners are supported in a manner that provides habitat connectivity and facilitates movement of wildlife. National Forest System lands in the Swift Creek-Stillwater connectivity area (see figure B-30) provide habitat connectivity for wide-ranging wildlife species (e.g., grizzly bear, Canada lynx, elk) moving between the Whitefish and Salish Mountain Ranges.	Not applicable to this project.
GA-SM-MA7-Big Mtn-DC-04	Year-round recreational opportunities in an alpine setting exist at the Whitefish Mountain Resort on Big Mountain. Winter recreation opportunities occur in all portions of the Whitefish Mountain Resort permit area. During the grizzly bear non-denning season, developed recreation opportunities are provided on the south-facing slope in the Whitefish Mountain Resort permit area. The portion of the upper Hellroaring watershed below Taylor Creek Road (NFS Road 9790) provides higher levels of grizzly bear habitat security.	After construction is complete, this part of the Hellroaring drainage would continue to provide habitat security for grizzlies during the non-denning season even though its effectiveness would be slightly reduced by the reduction of hiding cover, ski-area maintenance activities, and a possible increase in huckleberry picking and other human uses resulting indirectly from the reduction in conifer cover. See design features #59, 60, 61, 64, and 65. In addition, the existing trails and roads that cross back and forth over the ridgeline along the southwestern edge of the Hellroaring drainage do not impact the security value of the drainage for grizzly bears. (See exhibit 12-07).
GA-SM-MA7-Big Mtn-DC-06	A connective nonmotorized trail system exists linking the Whitefish Legacy Trails to NFS lands near the summit of Big Mountain and the Whitefish Divide. New trails are designed and located to reduce the risk of grizzly bear-human conflicts.	Not applicable to this project.
FW-OBJ-REC-02	Provide bear-resistant food storage devices at developed campgrounds.	Not applicable to this project.

RELEVANT 2018 FNF LMP GLOSSARY ENTRIES

Cover The elements of the environment used by an animal for hiding. Cover varies on a site-specific basis and depends on the species or the time of year. Cover may include topography as well as a variety of vegetation types (e.g., shrubs, dead trees, and live trees). The amount and quality of cover needed depends on the animal's size, mobility, and reluctance or willingness to venture into relatively open areas.

Den emergence time period The time period in the spring when a grizzly bear emerges from its den and remains in the vicinity before moving to lower elevations. The den emergence time period occurs at the beginning of the non-denning season. Females with cubs usually emerge later and spend more time (a few days to a few weeks) near the den after emergence than do male bears. [NCDE]

Denning season The typical time period, within the Northern Continental Divide Ecosystem, during which most grizzly bears are hibernating in dens. There are no restrictions on motorized use related to grizzly bears during the denning season, which occurs

- West of the Continental Divide: from 1 December through 31 March.
- East of the Continental Divide: from 1 December through 15 April. [NCDE]

Maintain (ecological context) To keep in existence or continuance of the desired ecological condition in terms of its desired composition, structure, and processes. Depending upon the circumstances, ecological conditions may be maintained by active or passive management or both. Maintain does not mean to keep the status quo.

Non-denning season The time period when grizzly bears typically are not hibernating:

- West side of the Continental Divide: from 1 April through 30 November.
- East side of the Continental Divide: from 16 April through 30 November. [NCDE]

Primary conservation area An area identified in the Northern Continental Divide Ecosystem Grizzly Bear Conservation Strategy to be managed as a source area for the grizzly bear population where continuous occupancy by grizzly bears would be maintained. Habitat within the primary conservation area would receive the most stringent protection. The primary conservation area is the same area as the Northern Continental Divide Ecosystem's grizzly bear recovery zone identified in the draft Grizzly Bear Recovery Plan (USFWS, 1993).

Project (in grizzly bear habitat in the Northern Continental Divide Ecosystem) For purposes of the motorized access standards and guidelines in the primary conservation area of the Northern Continental Divide Ecosystem, refers to any temporary activity requiring construction of new roads, temporary roads, reconstruction or opening of restricted roads during the non-denning season, if such use exceeds administrative use levels (see administrative use). Activities involving recurring helicopter use (see recurring helicopter use) are also considered to be a project. [NCDE]

Recurring helicopter use A type of helicopter flight that involves multiple trips/passes each day consisting of low-altitude (< 500 meters above ground level) flights that continue for a duration longer than 48 consecutive hours. [NCDE]

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Appendix 1. Open Motorized Route Density (OMRD), Total Motorized Route Density (TMRD), secure core, and security habitat

The first map below displays the situation for security habitat for grizzly bears in the Hellroaring Basin below the Taylor Creek Road (#9790). This is relevant for the evaluation of project consistency with Desired condition GA-SM-MA7-Big Mtn-DC-04:

Year-round recreational opportunities in an alpine setting exist at the Whitefish Mountain Resort on Big Mountain. Winter recreation opportunities occur in all portions of the Whitefish Mountain Resort permit area. During the grizzly bear non-denning season, developed recreation opportunities are provided on the south-facing slope in the Whitefish Mountain Resort permit area. The portion of the upper Hellroaring watershed below Taylor Creek Road (NFS Road 9790) provides higher levels of grizzly bear habitat security.

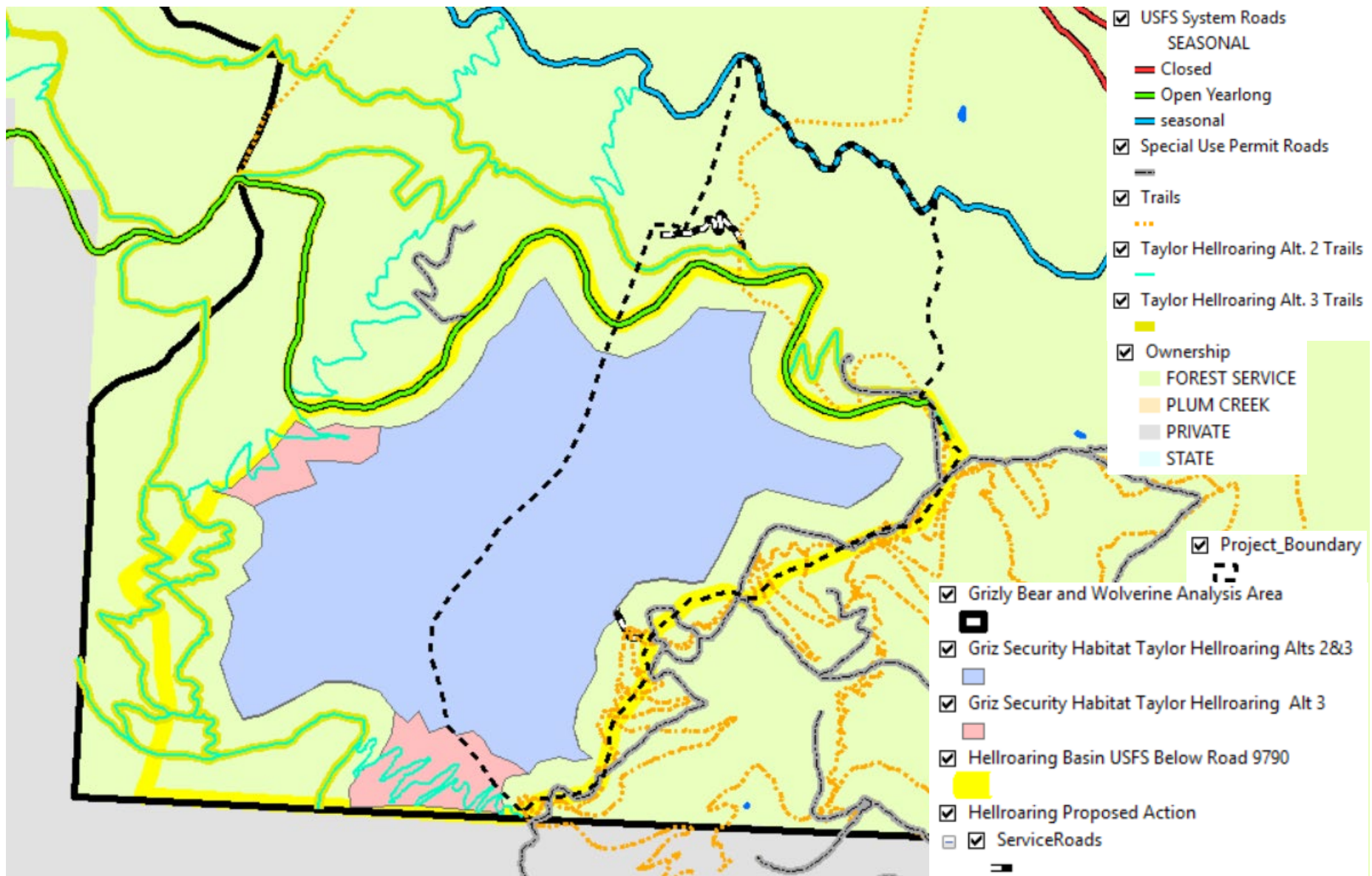
This was done for both action alternatives under the Taylor Hellroaring Project, buffering out approximately 500 feet from open roads and trails and unregulated special use permit roads. Note that secure core for grizzlies and security habitat are defined differently in the 2018 Forest Plan:

secure core (grizzly bear) An area of the Northern Continental Divide Ecosystem primary conservation area 500 meters or more from (1) a route open to public wheeled motorized use during the grizzly bear non-denning season, (2) a gated route, or (3) a route closed only with a sign that is greater than or equal to 2,500 acres in size. Roads restricted with physical barriers (not gates), decommissioned roads, impassable roads, temporary roads, over-the-snow motorized vehicle routes and areas, and nonmotorized trails are allowed within secure core, unless otherwise restricted (e.g., by other national forest plan direction).

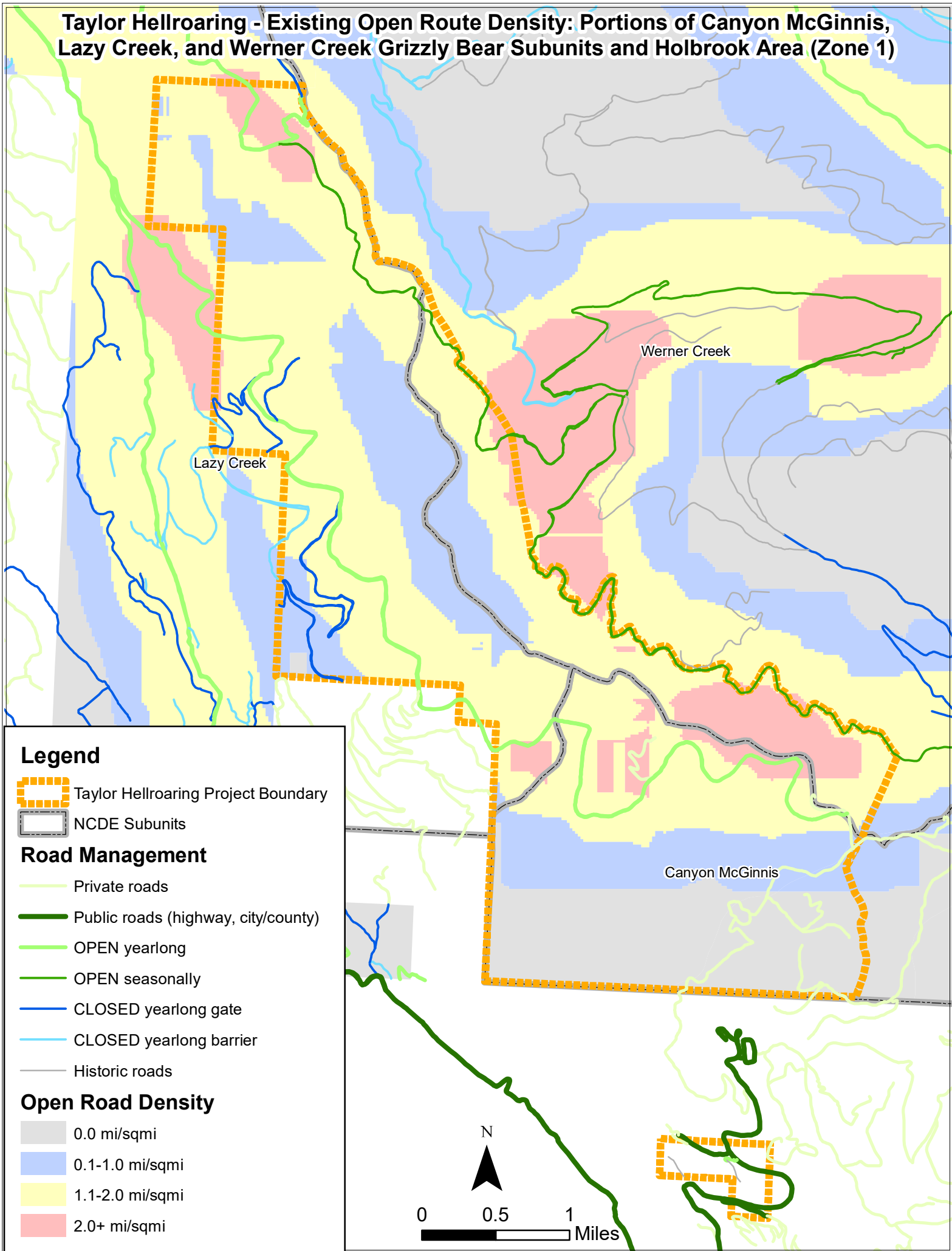
security habitat An area with low levels of human disturbance or habitat that allows a wildlife species to remain in a defined area despite an increase in stress or disturbance. The components of security habitat can include vegetation, topography, the size of the patches of vegetation, road density, distance from roads, intensity of the disturbance, and seasonal timing of the disturbance. This general definition covers most uses of the term security habitat, except for elk and grizzly bear, which have specific definitions.

Maps on the subsequent pages were prepared for the Taylor Hellroaring Project. The Hellroaring Basin Improvements Project would continue to result in the same numerical situation for the parameters as before and after implementation of Taylor Hellroaring. The mapped as “500m buffer from road” would get smaller due to construction of the special use permit road to Grand Junction, but this area is already too small to function as secure core. See Appendix 2 below for how private and special use permit roads are considered in GIS analysis of motorized access effects on grizzly bears.

Grizzly bear security habitat in the Hellroaring Drainage below Road 9790



Taylor Hellroaring - Existing Open Route Density: Portions of Canyon McGinnis, Lazy Creek, and Werner Creek Grizzly Bear Subunits and Holbrook Area (Zone 1)

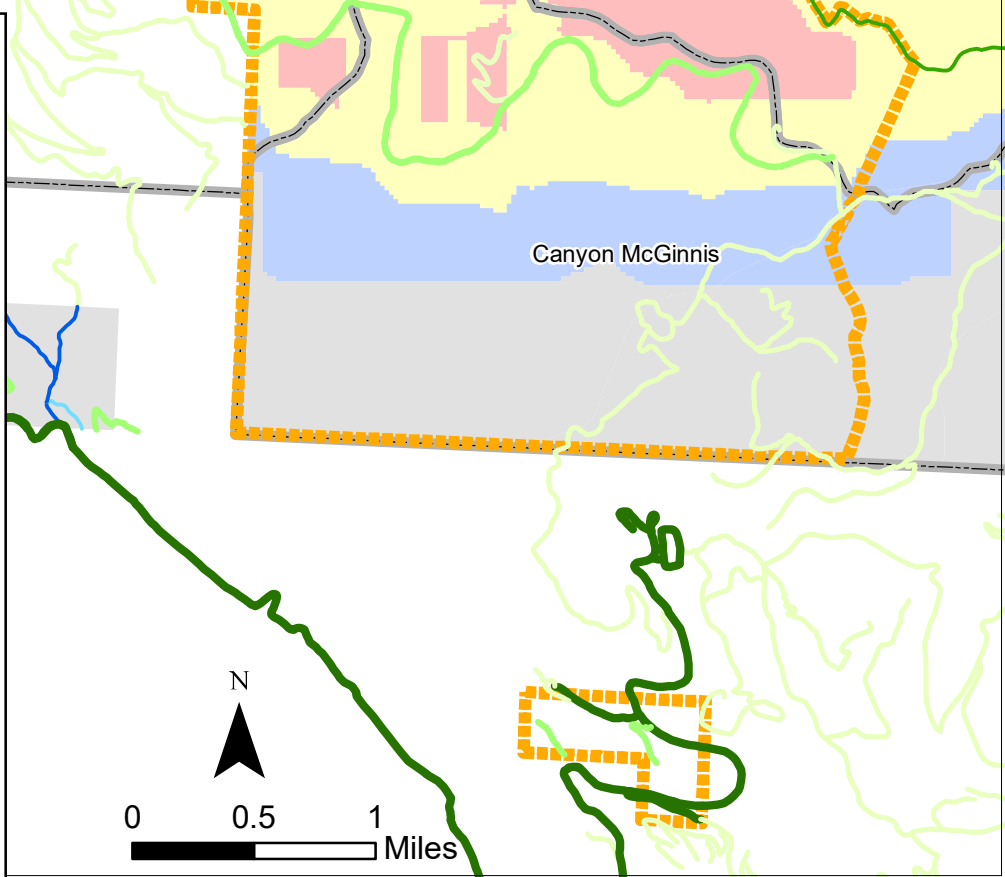


Taylor Hellroaring - Open Route Density During Alternatives: Portions of Canyon McGinnis, Lazy Creek, and Werner Creek Grizzly Bear Subunits and Holbrook Area (Zone 1)

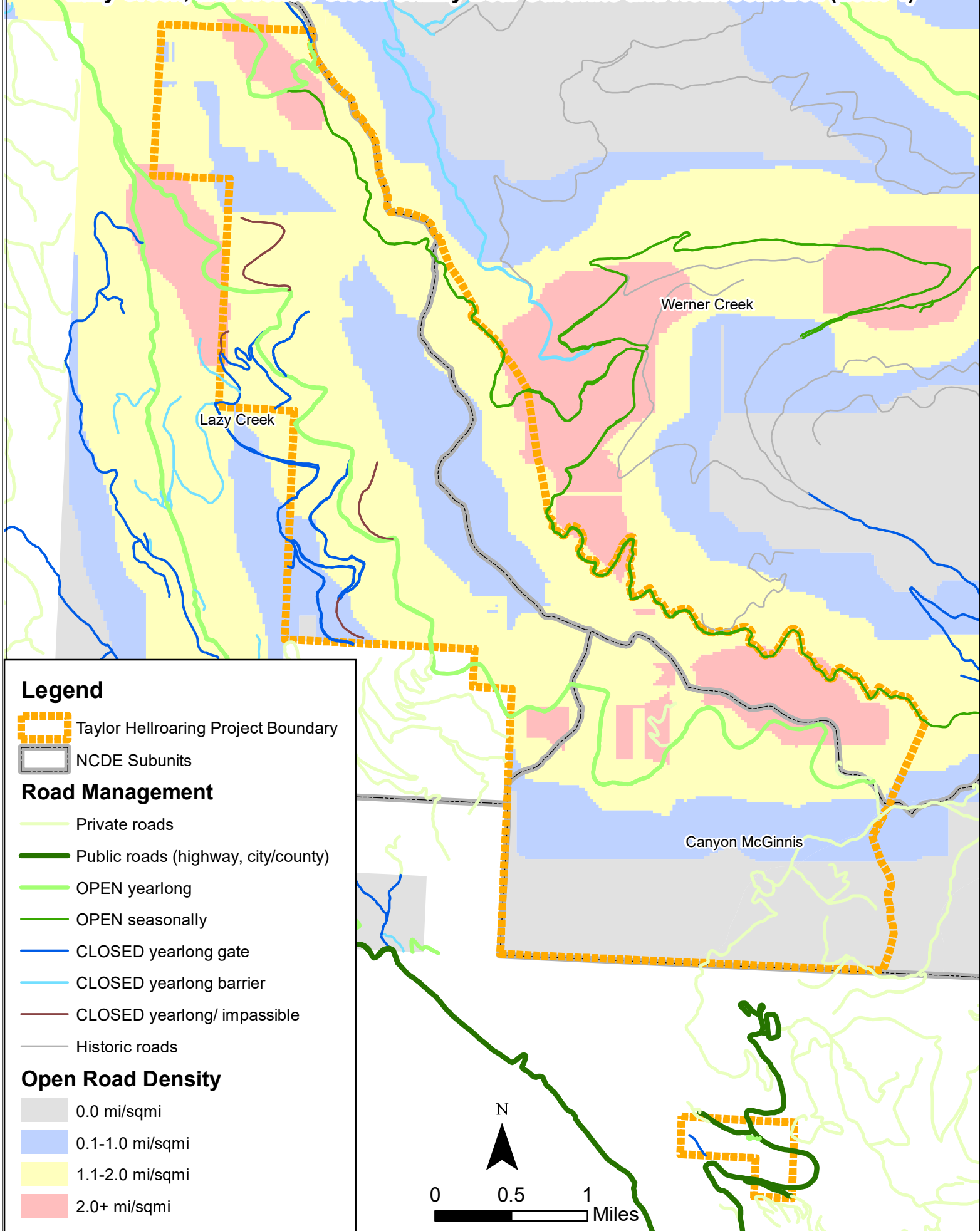
Legend
 Taylor Hellroaring Project Boundary
 NCDE Subunits

Road Management
 Private roads
 Public roads (highway, city/county)
 OPEN yearlong
 OPEN seasonally
 CLOSED yearlong gate
 CLOSED yearlong barrier
 Historic roads

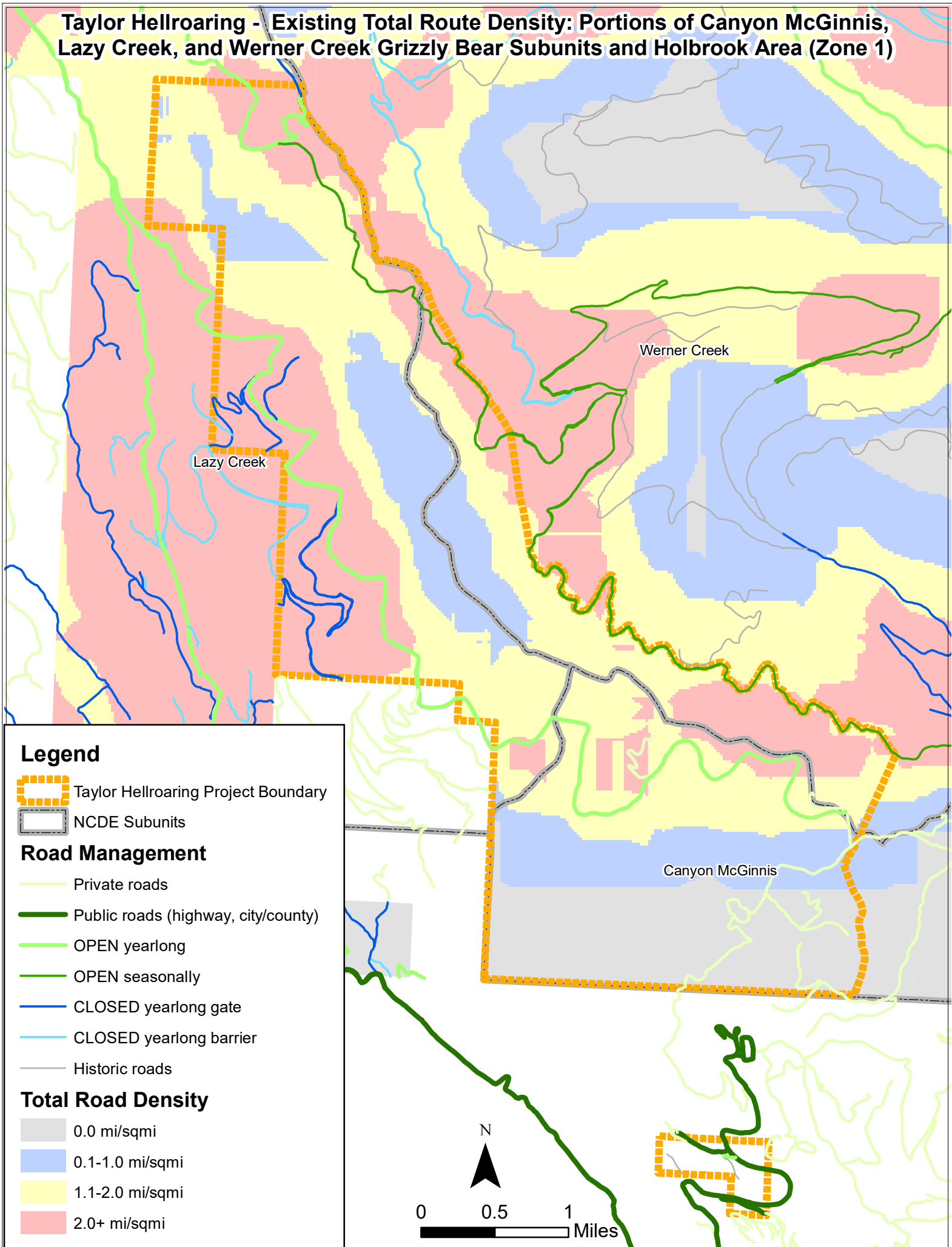
Open Road Density
 0.0 mi/sqmi
 0.1-1.0 mi/sqmi
 1.1-2.0 mi/sqmi
 2.0+ mi/sqmi



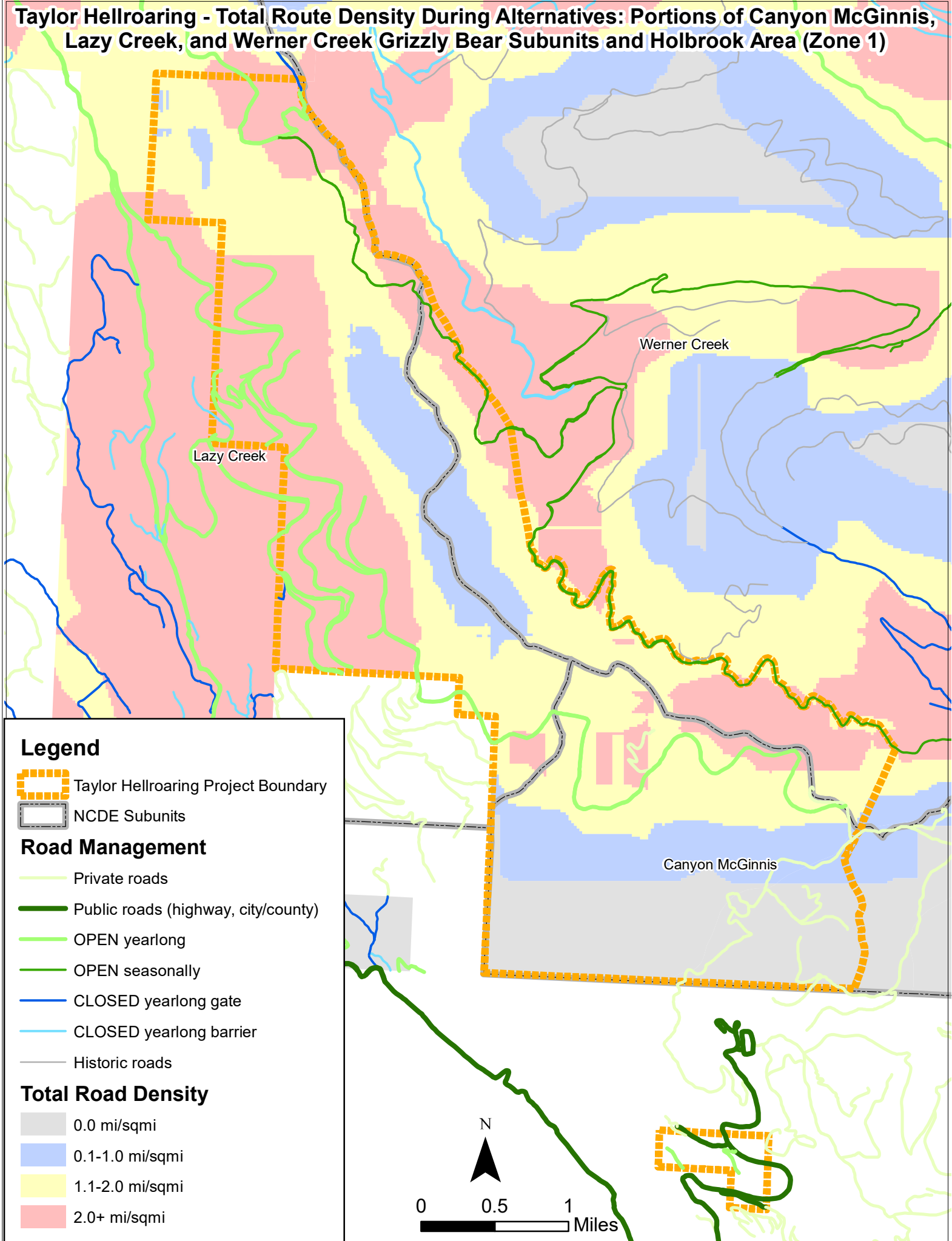
Taylor Hellroaring - Open Route Density After Alternatives: Portions of Canyon McGinnis, Lazy Creek, and Werner Creek Grizzly Bear Subunits and Holbrook Area (Zone 1)



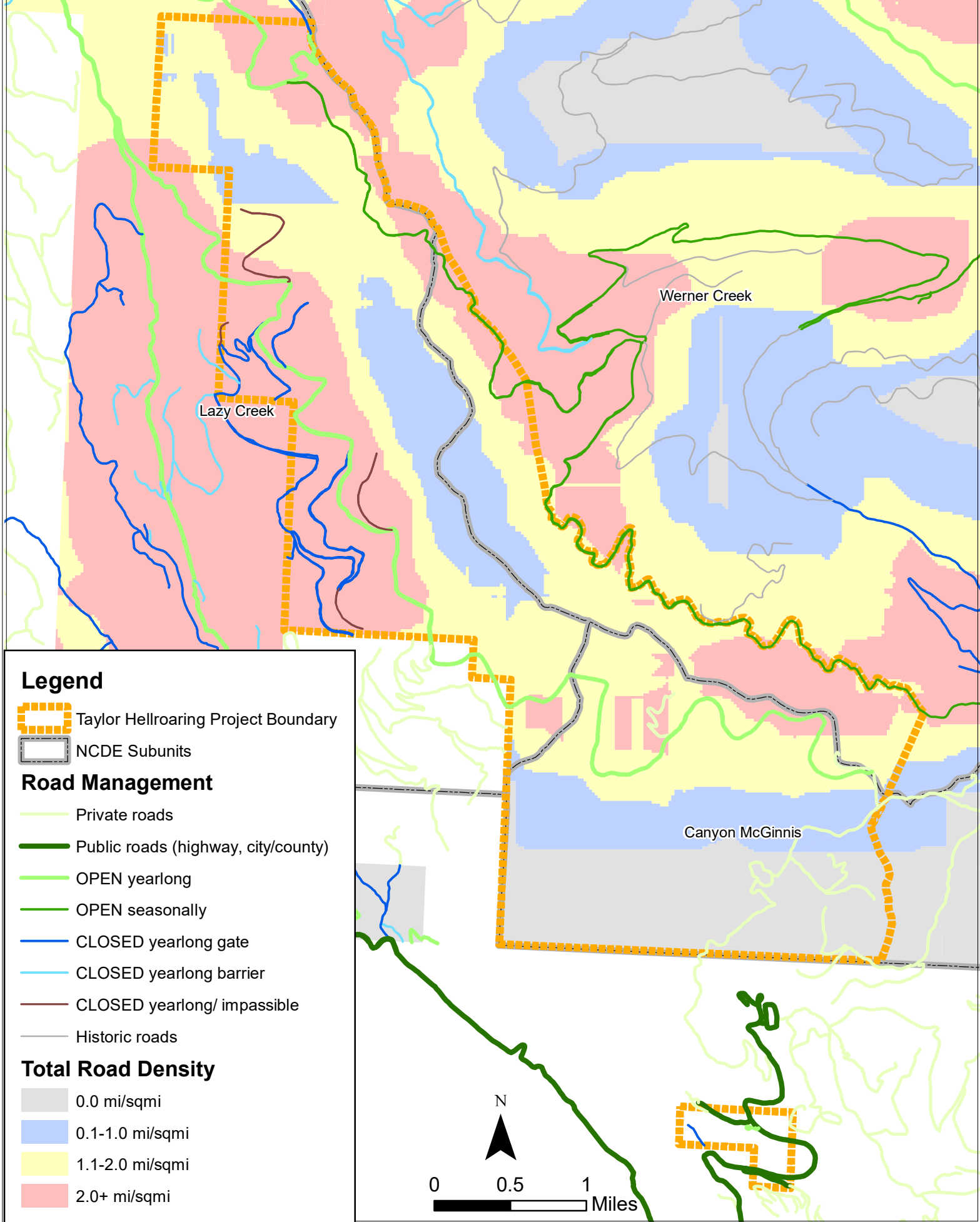
Taylor Hellroaring - Existing Total Route Density: Portions of Canyon McGinnis, Lazy Creek, and Werner Creek Grizzly Bear Subunits and Holbrook Area (Zone 1)



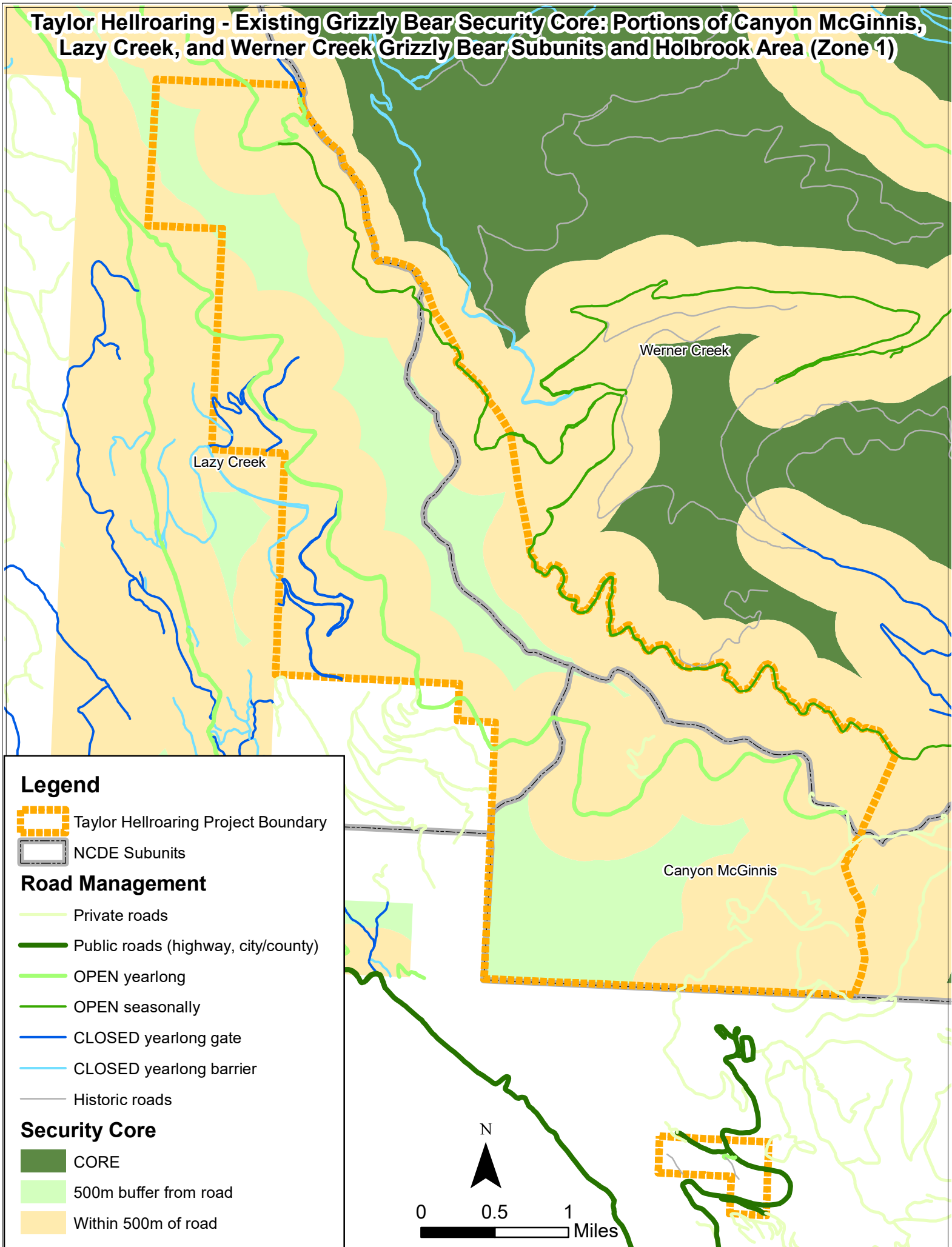
Taylor Hellroaring - Total Route Density During Alternatives: Portions of Canyon McGinnis, Lazy Creek, and Werner Creek Grizzly Bear Subunits and Holbrook Area (Zone 1)



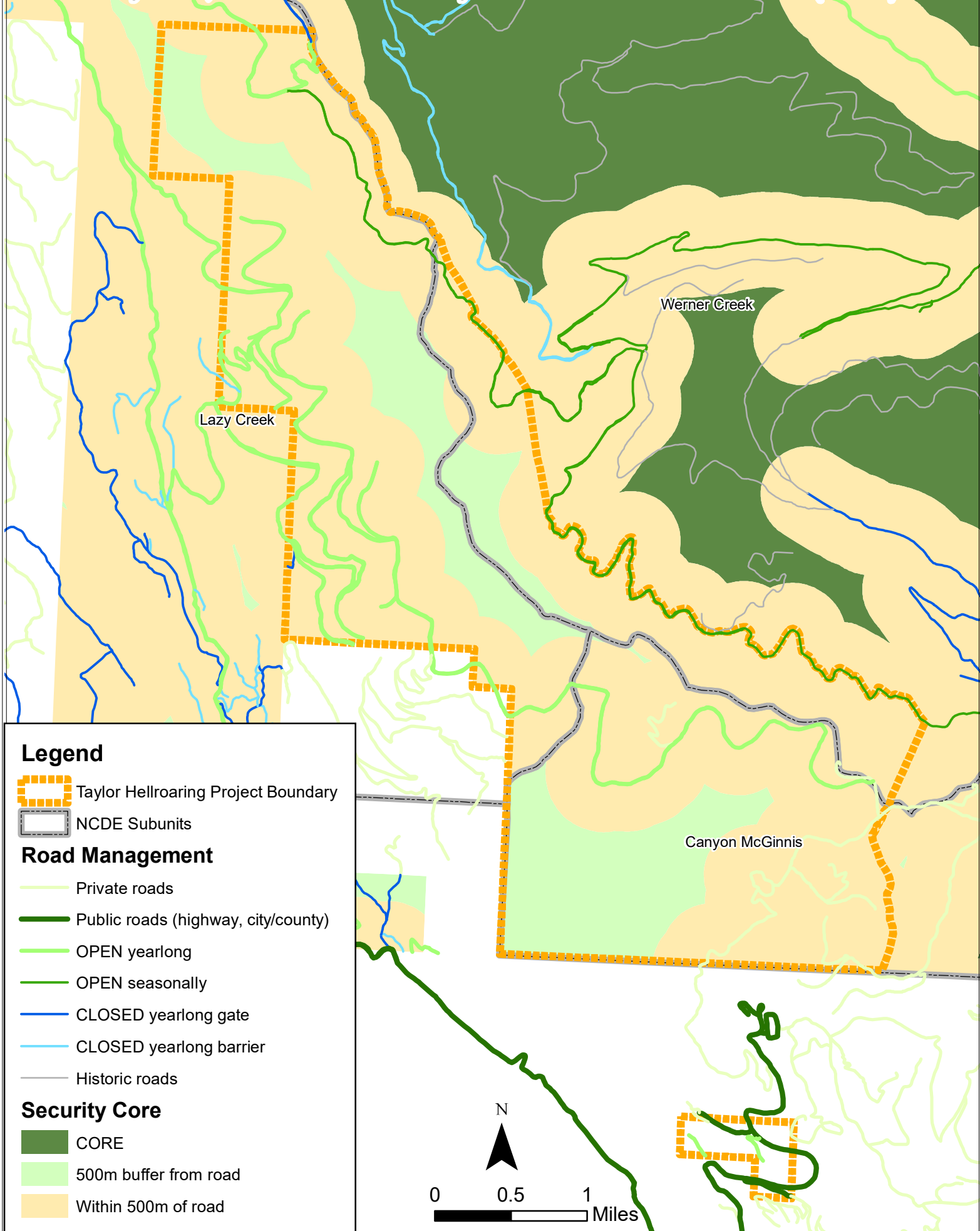
Taylor Hellroaring - Total Route Density After Alternatives: Portions of Canyon McGinnis, Lazy Creek, and Werner Creek Grizzly Bear Subunits and Holbrook Area (Zone 1)



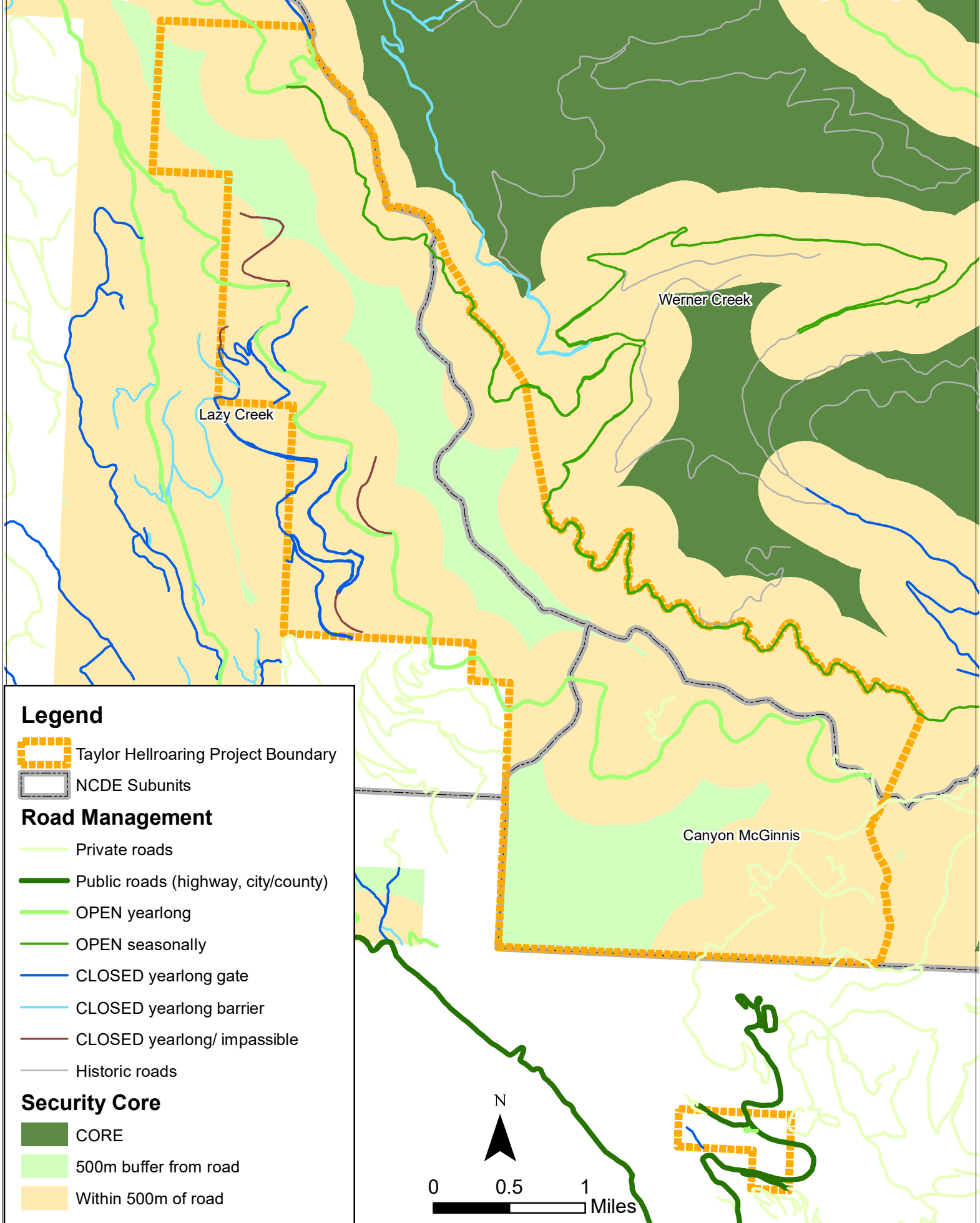
Taylor Hellroaring - Existing Grizzly Bear Security Core: Portions of Canyon McGinnis, Lazy Creek, and Werner Creek Grizzly Bear Subunits and Holbrook Area (Zone 1)



Taylor Hellroaring - Grizzly Bear Security Core During Alternatives: Portions of Canyon McGinnis, Lazy Creek, and Werner Creek Grizzly Bear Subunits and Holbrook Area (Zone 1)



Taylor Hellroaring - Grizzly Bear Security Core After Alternatives: Portions of Canyon McGinnis, Lazy Creek, and Werner Creek Grizzly Bear Subunits and Holbrook Area (Zone 1)



Appendix 2. Consideration of Special Use Permit Roads in Motorized Access Analyses for Grizzly Bears

From **Appendix 6 of the Grizzly Bear Conservation Strategy (Exhibit 12-21), “Protocol Paper for Motorized Access Analyses Application Rule”**, page 273, Application Rules in the Primary Conservation Area (PCA):

The following provides the specifics for calculating open and total motorized route density as well as secure core.

- Open Motorized Route Density (OMRD) includes: all Federal, State, and Tribal roads and motorized trails that are open to public wheeled use for any part of the non-denning season, along with motorized routes that are only closed by signage or map. Signs or maps are not considered an effective closure device by the Interagency Grizzly Bear Committee (IGBC, 1998) and therefore roads that are only signed as closed are included in OMRD calculations. While highways, county, city, or private roads are open to public wheeled use, these routes are not included in calculations of OMRD.
- Total Motorized Route Density (TMRD) includes: all Federal, State, and Tribal roads and motorized trails, whether they are open or closed to wheeled public access. Highways, county, city, or private roads are not included in calculations of TMRD.

From **Appendix 6 of the Grizzly Bear Conservation Strategy, “Protocol Paper for Motorized Access Analyses Application Rule”**, page 276, Application Rules in the Primary Conservation Area (PCA):

Table 3. Road management descriptions and attribute values used in OMRD and TMRD.

Road Management Description	Specific Value in Attribute for Script	Road Used in Analysis		
		OMRD	TMRD	CORE
Open yearlong roads, no restriction	OPEN yearlong	X	X	X
Open seasonally roads, has seasonal restriction	OPEN seasonally	X	X	X
Closed yearlong by sign closure	CLOSED yrln g sign	X	X	X
Closed yearlong by gate closure, but with high administrative use ¹	CLOSED yrln g ADH	X	X	X
Closed yearlong by gate closure	CLOSED yrln g gate		X	X
Closed yearlong by physical barrier, but should be closed by gate ²	CLOSED yrln g BNC		X	X
Closed yearlong by physical barrier ³	CLOSED yrln g barrier		X	
Closed yearlong and naturally revegetated, but should be closed by gate ⁴	CLOSED yrln g VEGNC		X	X
Primary or secondary Federal/State highways	hwys, cnty/city road			X
County or city roads	hwys, cnty/city road			X
Small-tract private roads or Federal special use permitted roads ⁵	small PVT roads			X

⁵ small PVT roads – typically the permittee of a Special Use permitted road does not have road management restrictions. As a result, the road could be open or closed according to the permittee, therefore the road is classified as “small PVT roads” for the analyses.

From the May 2017 Biological Assessment for Terrestrial Wildlife Species for the **Summit Road Realignment Project**, page 22:

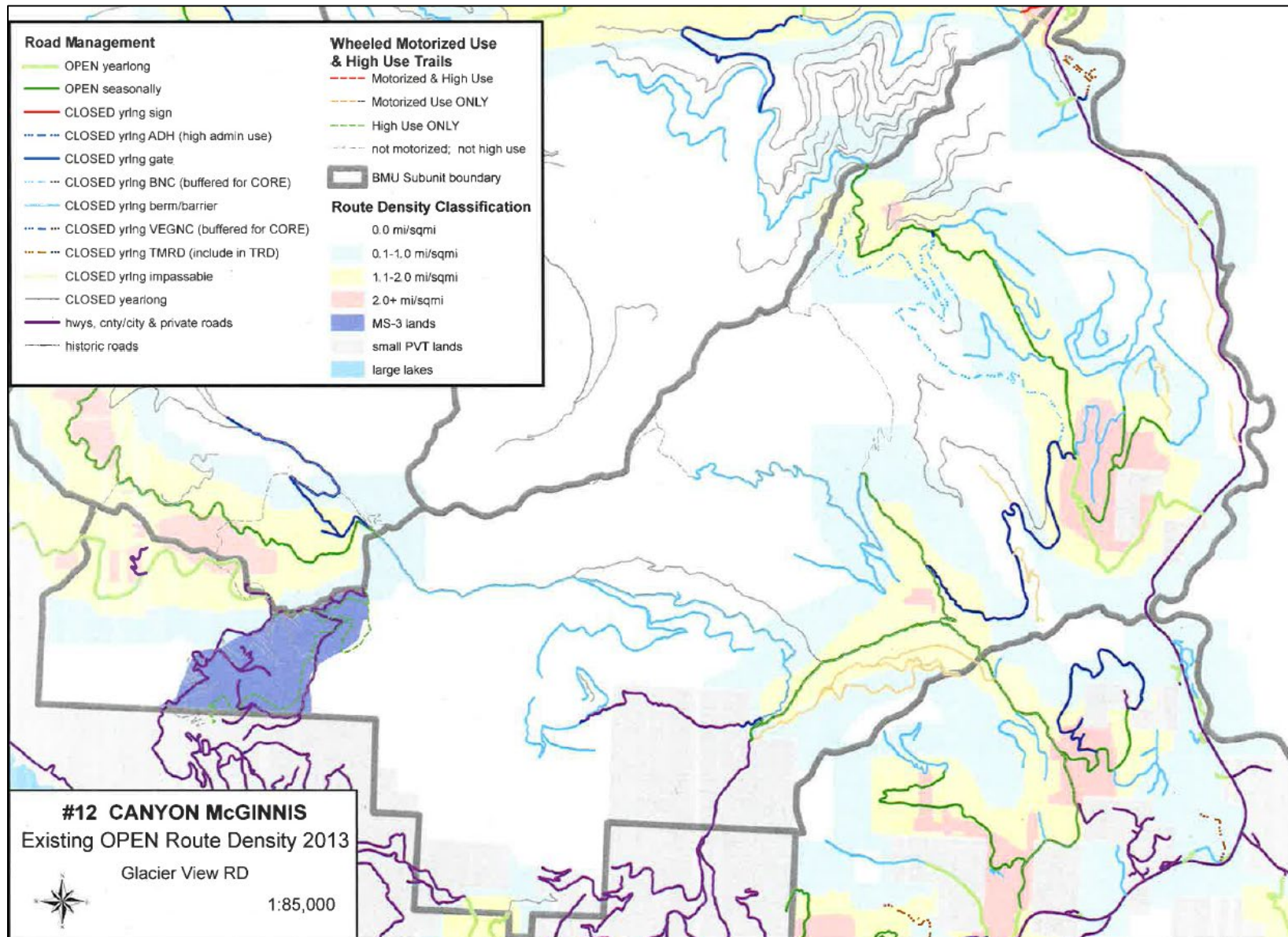
Security / Displacement / Mortality Risk: Due to the location of the proposed road construction, there would be no effect on grizzly bear Security Core in the Canyon McGinnis subunit nor in the adjacent Werner Creek subunit. **Total and Open Road Management Densities would not change because the proposed road construction and rehabilitation are both private roads that are not considered in Amendment 19 road density calculations**, even though the new road will mostly be in Management Situation 2.

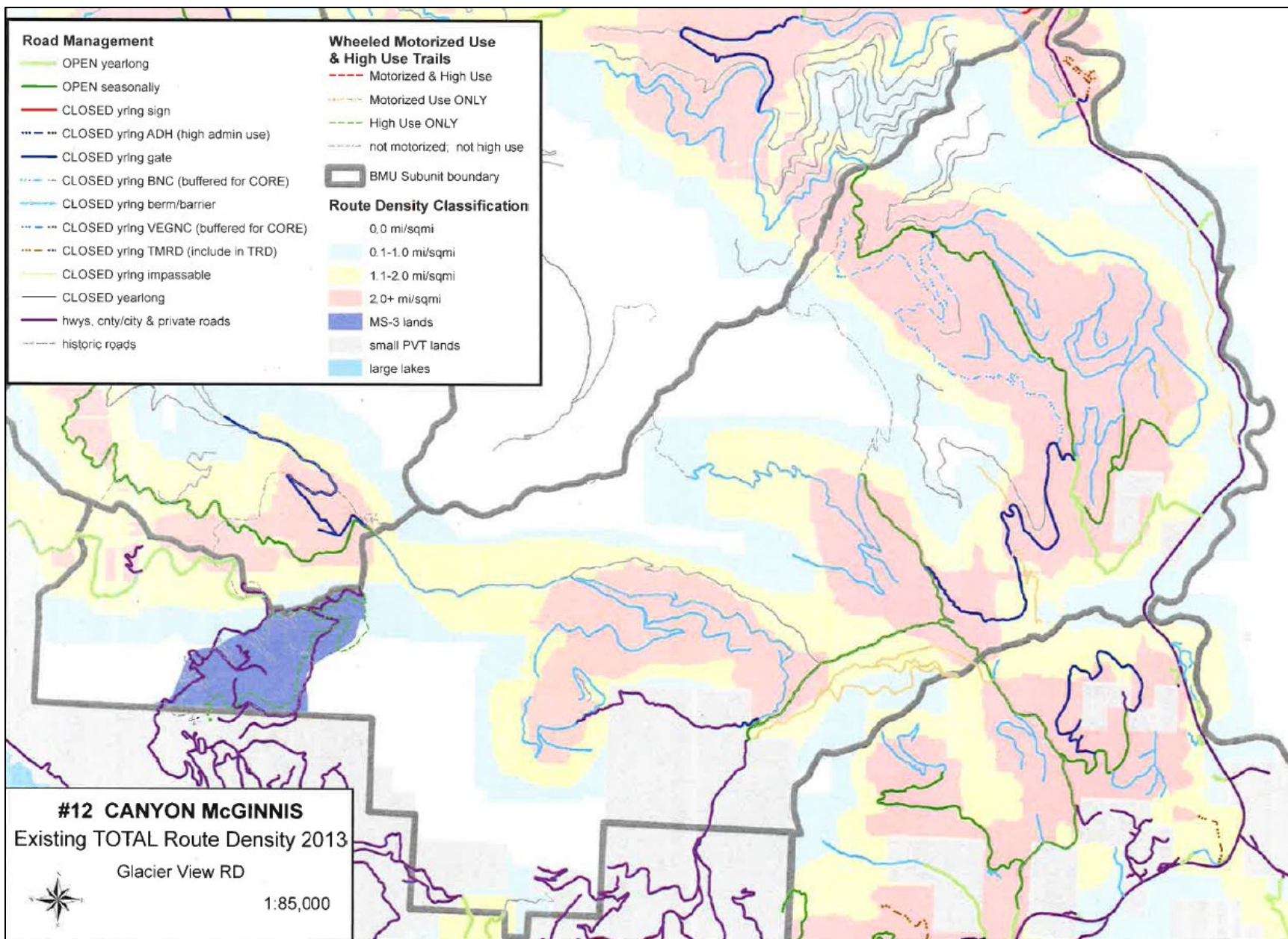
From the February 2013 Biological Assessment for Terrestrial Wildlife Species for **Whitefish Mountain Resort Chair 8 Project**, pages 26-27:

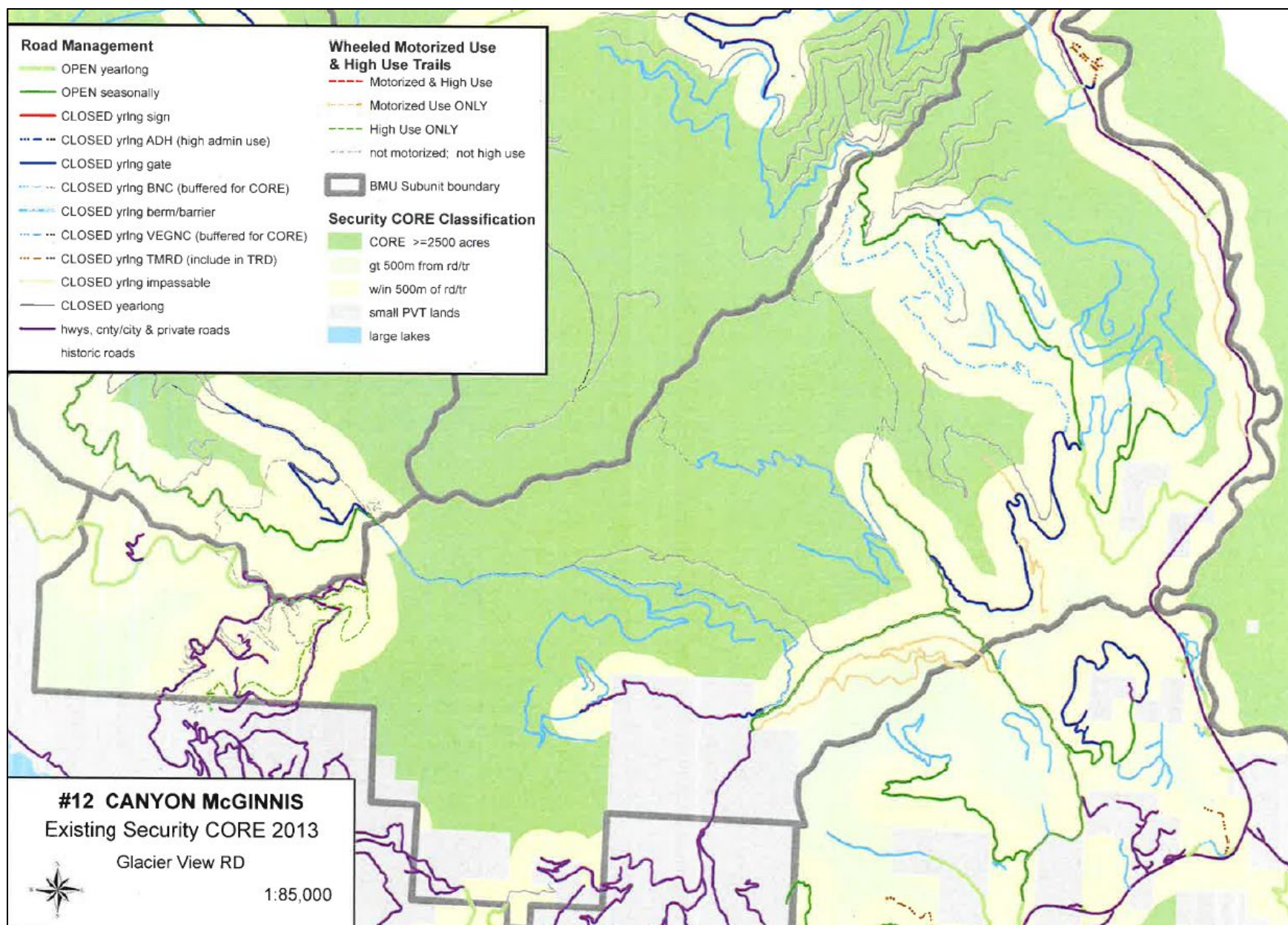
Habitat Security

There is a high level of existing human use at and near the top of Chair 8 during the non-denning season (particularly on and along the Danny On Trail), so grizzlies using habitat in this area are generally accustomed to human disturbance. There would be a potential for short-term displacement of grizzly bears during project implementation due to increased human activity in the mid-slope portions of the Chair 8 area and in areas affected by helicopters needed to carry the lift terminal and towers into position. Existing open roads and service roads would be used during construction and road building would be avoided. All existing roads currently closed to public motorized use would remain closed to the public during implementation of proposed activities. **Because the "service roads" used by Resort employees and contractors are modeled as private roads for A19 analysis, A19 parameters would not change.** Potential displacement would be in various short spurts of activity (i.e. reconnaissance, tree felling, equipment delivery, tower pad and terminal clearing/construction, and slash burning) restricted to the July 1-September 15 time period of two years. Use of existing open roads and service roads, as well as timing restrictions included in the project, favor the needs of the grizzly bear. The proposed project does not affect grizzly bear Security Core and timing measures for the Chair 8 project are adequate to maintain a high level of habitat security. There will be no net loss in OMAD or TMAD as a result of the project.

From the 2013 A19 Monitoring Report, showing that special use permit roads in the Whitefish Mountain Permit Area and elsewhere across the Canyon McGinnis Subunit are treated as private roads and not included in OMRD or TMRD, although they are buffered for Security Core.









FOREST SERVICE MANUAL NATIONAL HEADQUARTERS (WO) WASHINGTON, DC

FSM 7700 – TRAVEL MANAGEMENT

CHAPTER 7700 – ZERO CODE

Amendment No.: 7700-2016-1

Effective Date: July 7, 2016

Duration: This amendment is effective until superseded or removed.

Approved: GLENN P. CASAMASSA
Associate Deputy Chief, NFS

Date Approved: 07/06/2016

Posting Instructions: Amendments are numbered consecutively by title and calendar year. Post by document; remove the entire document and replace it with this amendment. Retain this transmittal as the first page of this document. The last amendment to this title was 7700-2010-1 to FSM 7700_zero_code.

New Document	7700_zero_code	25 Pages
Superseded Document(s) by Issuance Number and Effective Date	7700_zero_code (Amendment 7700-2010-1, 8/30/2010)	29 Pages

Digest:

Zero Code - Incorporates new regulations to require designation of roads, trails, and areas on NFS lands to provide for over-snow vehicle (OSV) use. The direction is amended to require the Responsible Official to designate NFS roads, NFS trails, and areas on NFS lands where OSV use is allowed in administrative units or Ranger Districts, or parts of administrative units or Ranger Districts, where snowfall is adequate for OSV use to occur at Title 36, Code of Federal Regulations, part 212, Subpart C Notice of final rule was published in the Federal Register on January 28, 2015 (80 FR 4500).

**FSM 7700 – TRAVEL MANAGEMENT
CHAPTER 7700 – ZERO CODE**

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FSM 7700 – TRAVEL MANAGEMENT CHAPTER 7700 – ZERO CODE

This chapter enumerates the authority, objectives, policy, responsibility, and definitions for planning, construction, reconstruction, operation, and maintenance of Forest transportation facilities and for management of motor vehicle use on National Forest System (NFS) lands.

7701 - AUTHORITY

7701.1 - Revegetation

National Forest Management Act of 1976 (16 U.S.C. 1608). Directs that roads be designed to standards appropriate for their intended uses and requires revegetation of temporary roads authorized under a contract, permit, lease, or other written authorization within 10 years of termination of the written authorization.

7701.2 - Travel Management

7701.2a - Laws

1. National Forest Roads and Trails Act of October 13, 1964, as amended (16 U.S.C. 532-538). Authorizes road and trail systems for the National Forests. Authorizes granting of easements across NFS lands, construction and financing of maximum economy roads (FSM 7705), and imposition of requirements on road users for maintaining and reconstructing roads, including cooperative deposits for that work.
2. Highway Safety Act of 1966 (23 U.S.C. 402). Authorizes State and local governments and participating Federal agencies to identify and survey accident locations; to design, construct, and maintain roads in accordance with safety standards; to apply sound traffic control principles and standards; and to promote pedestrian safety.
3. National Trails System Act of October 2, 1968 (16 U.S.C. 1241-1249). Establishes the National Trails System and authorizes planning, right-of-way acquisition, and construction of trails established by Congress or the Secretary of Agriculture.
4. Federal Aid Highway Act of 1968, as amended (23 U.S.C. 109(a) and (h), 144, 151, 319, and 351). Establishes the National Bridge Inspection Standards (23 CFR Part 650, Subpart C) and the requirement that each State have a current inventory of bridges on all public roads, including NFS roads open to public travel (FSM 1535.11).
5. Surface Transportation Assistance Act of 1978, as amended (23 U.S.C. 101a, 201-205). Supersedes the Forest Highway Act of 1958. Authorizes appropriations for Forest highways and public lands highways. Establishes criteria for Forest highways; defines Forest roads, Forest development roads and Forest development trails (referred to as “NFS roads” and “NFS trails” in Forest Service regulations and directives); and limits the size of projects performed by Forest Service employees on Forest roads. Establishes the Federal Lands Highway Program.

**FSM 7700 – TRAVEL MANAGEMENT
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6. Annual Department of the Interior, Environment, and Related Agencies Appropriations Act. Appropriates funds for the Forest Service's road and trail programs.
7. Organic Administration Act of 1897 (16 U.S.C. 551). This act authorizes the regulation of National Forests.
8. Bankhead-Jones Farm Tenant Act (16 U.S.C. 7 U.S.C. 1011(f)). This act authorizes the regulation of National Grasslands.

7701.2b - Regulations

1. Travel Management (36 CFR Part 212, Subparts A, B, and C). Subpart A of these regulations establishes requirements for administration of the Forest transportation system, including roads, trails, and airfields, and contains provisions for acquisition of rights-of-way. Subpart A also requires identification of the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of NFS lands and use of a science-based roads analysis at the appropriate scale in determining the minimum road system. Subpart B describes the requirements for designating roads, trails, and areas for motor vehicle use and for identifying designated roads, trails, and areas on a motor vehicle use map (MVUM). Subpart C describes the requirements for designating roads, trails, and areas for over-snow vehicle (OSV) use and for identifying designated roads, trails, and areas on an OSV use map (OSVUM).
2. Prohibitions (36 CFR Part 261, Subpart A). These regulations establish prohibitions on use of NFS lands, including prohibitions on possession and operation of motor vehicles on NFS roads, on NFS trails, and in areas on NFS lands.
3. Sale and Disposal of National Forest System Timber (36 CFR Part 223). These regulations govern road construction related to Forest Service timber sale appraisals and contracts.
4. Minerals (36 CFR Part 228). These regulations establish access requirements for mining claims.
5. National Bridge Inspection Standards (23 CFR Part 650, Subpart C). These regulations promulgated by the Federal Highway Administration establish national bridge design specifications and guidance and bridge inspection standards and apply to bridges on NFS roads per FSM 7722 and 7736 and FSH 7709.56.
6. Procedures for Federal Agencies for Federal Roads (23 CFR Part 668, Subpart B). These regulations promulgated by the Federal Highway Administration set forth procedures for the Emergency Relief for Federally Owned Roads (ERFO) Program that apply to transportation facilities (FSM 7705) under the jurisdiction of Federal agencies.

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7. Value Engineering (48 CFR Part 48). These regulations promulgated by the Office of Federal Procurement Policy enumerate the requirements for value engineering clauses in construction contracts (FSH 6309.32, Part 4G48).

7701.2c - Other Authorities

1. Executive Order 11644 (“Use of Off-Road Vehicles on the Public Lands”), dated February 8, 1972, as amended by Executive Order 11989, dated May 24, 1977. Provides for developing regulations governing use of off-road vehicles on Federal lands to protect natural resources, promote public safety, and minimize conflicts among uses.
2. Forest Service Directives. Direction on travel analysis, travel management, and designation of roads, trails, and areas for motor vehicle use resides in this chapter, FSM 7710 and FSH 7709.55. Direction on management and maintenance of NFS trails resides in FSM 2350 and FSH 2309.18, and direction on management and maintenance of roads resides in FSM 7730 and FSH 7709.59. Direction on law enforcement activities resides in FSM 5300 and FSH 5309.11.
3. Memorandum of Understanding on Administration of the ERFO Program for Federal Roads Off the Federal Aid System. Establishes procedures for the Federal Highway Administration and the Forest Service to administer funding for emergency relief for federally owned roads under the jurisdiction of the Forest Service (FSM 1535.12).
4. Memorandum of Understanding Between the Forest Service and the Bureau of Land Management on Rights-of-Way and Road Use. Includes provisions for granting temporary and long-term rights-of-way between the agencies. Provides for a license agreement to be issued to timber and mineral purchasers of one agency using roads under the jurisdiction of another agency (FSM 1531.12f and 5465.1).
5. Memorandum of Understanding Between the Forest Service and the Federal Highway Administration. Provides guidance on the applicability of 49 U.S.C. 303 and 23 U.S.C. 138 to National Forest Scenic Byways (FSM 1535.14).
6. Memorandum of Understanding Between the Forest Service and the Federal Highway Administration. Pursuant to section 1309 of the Transportation Equity Act for the 21st Century, provides guidance for a coordinated environmental review process between the two agencies to expedite Federal highway and transit projects.

7701.3 - Cooperation and Coordination

1. The Economy Act of 1932 (31 U.S.C. 1535). Allows the Forest Service to use the employees of other Federal agencies, including the Federal Highway Administration, to develop cost estimates, conduct surveys, prepare designs, and perform construction.

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2. Section 5 of the Granger-Thye Act of April 24, 1950 (16 U.S.C. 572). Authorizes cooperation with public and private agencies, organizations, and persons in performing work on land situated within or near National Forests, including activities related to the Forest transportation system (FSH 7709.59, sec. 20.11).
3. National Flood Insurance Act of 1968, as amended by the National Flood Insurance Reform Act of 1994 (42 U.S.C. 4001 *et seq.*). Establishes a unified program for national floodplain management.
4. Executive Order 11988 (“Floodplain Management”), dated May 24, 1977, as amended by Executive Order 12148, July 20, 1979. Provides for a unified national program for floodplain management, including coverage by the Federal Flood Insurance Program.
5. Executive Order 11990 (“Protection of Wetlands”), dated May 24, 1977. Provides national guidance on protection of wetlands.

7702 - OBJECTIVES

The objectives of managing the Forest transportation system and motor vehicle use on NFS roads, on NFS trails, and in areas on NFS lands are:

1. To provide sustainable access in a fiscally responsible manner to NFS lands for administration, protection, utilization, and enjoyment of NFS lands and resources consistent with the applicable land management plan.
2. To manage the Forest transportation system, including motor vehicle use and OSV use on NFS roads and NFS trails and in areas on NFS lands, within the environmental capabilities of the land.
3. To provide an appropriate range of recreation opportunities on NFS lands and to minimize conflicts among uses of NFS lands.
4. To manage the Forest transportation system to address user safety and convenience and efficiency of operations in an environmentally responsible manner and, where needed, to restore ecosystems along NFS roads and NFS trails designated for motor vehicle use or OSV use under 36 CFR Part 212, Subpart B or C, within the limits of current and anticipated funding levels.
5. To coordinate travel planning and analysis on NFS lands with Federal, State, county, and other local governmental entities and tribal governments and to allow the public to participate in the designation of NFS roads, NFS trails, and areas on NFS lands for motor vehicle use or OSV use.

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6. To designate those NFS roads, NFS trails, and areas on NFS lands that are open to motor vehicle use or OSV use.
7. To make appropriate use of transit and intermodal transportation systems when they best meet the need for transportation to NFS destinations in a sustainable and environmentally acceptable manner.

7703 - POLICY

1. Responsible Officials shall provide a Forest transportation system that best achieves the desired conditions identified in the applicable land management plan (FSM 1920).
2. In managing the Forest transportation system, Responsible Officials shall coordinate with other Federal, State, county, and local public road authorities and Tribal governments to:
 - a. Integrate transportation information.
 - b. Balance Forest transportation facility investments and maintenance costs with current and future budgets to maintain the health of the land and water quality; provide for user safety; and provide public and administrative access.
3. The NFS road system should be the minimum necessary to achieve the above purposes.
4. Responsible Officials shall allow the public to participate in the designation of NFS roads, NFS trails, and areas on NFS lands for motor vehicle use or OSV use.

7703.1 - Travel Management

7703.11 - General Considerations In Designating Roads, Trails, and Areas

See FSM 7715.2 for guidance on the scope and scale of travel management decisions. In accordance with 36 CFR Part 212, Subpart B or C, when designating NFS roads, NFS trails, and areas on NFS lands for motor vehicle use or OSV use, Responsible Officials shall:

1. Use travel analysis (FSM 7712; FSH 7709.55, ch. 20) to consider and document application of the criteria in 36 CFR 212.55 in making the designation decision. Travel management decisions involving the designation of NFS roads, NFS trails, and areas on NFS lands for motor vehicle use or OSV use must be informed by travel analysis conducted at an appropriate scale, as well as appropriate site-specific environmental analysis and public involvement.

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2. Provide for public involvement in the designation process to minimize conflicts among uses, enhance public enjoyment, and address other important values and uses of NFS lands.
3. Clearly identify on a Motor Vehicle Use Map (MVUM) or Over-snow Vehicle Use Map (OSVUM), as appropriate, those roads, trails, and areas that are designated for motor vehicle use or OSV use by vehicle class and, if appropriate, by time of year (FSM 7711.3).
4. Designation of roads and trails for motor vehicle use under 36 CFR Part 212, Subpart B, may include the limited use of motor vehicles within a specified distance of certain Forest roads and trails solely for the purposes of big game retrieval or dispersed camping (36 CFR 212.51(b)). Apply the provision for big game retrieval and dispersed camping sparingly, after conducting travel analysis and appropriate site-specific environmental analysis and public involvement.

7703.12 - Road Management

See FSM 7730 for additional guidance on road management.

1. Use travel analysis (FSM 7712; FSH 7709.55, ch. 20) to identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of NFS lands per 36 CFR 212.5(b)(1).
2. To identify the minimum road system, all administrative units must complete a travel analysis that addresses appropriate broad-scale concerns, as identified by the unit manager. A roads analysis that was completed in accordance with Publication FS-643, "Informing Decisions About Managing the National Forest Transportation System," satisfies the requirement to use travel analysis to identify the minimum road system.
3. Specifically, use travel analysis to inform travel management decisions that:
 - a. Determine the need for access to NFS lands;
 - b. Identify the infrastructure required to provide that access;
 - c. Consider and minimize effects of construction, reconstruction, maintenance, and decommissioning of Forest roads on natural and cultural resources; and
 - d. Provide a road system that facilitates management of the NFS and provides a wide range of motorized and non-motorized recreation opportunities.

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4. Identify the benefits of public access to NFS lands and the environmental costs of road-associated effects, taking into account public safety, affordability, and management efficiency.
5. Give priority to reconstructing and maintaining needed roads and decommissioning unneeded roads, or, where appropriate, converting them to less costly and more environmentally beneficial uses.
6. Use travel analysis (FSM 7712; FSH 7709.55, ch. 20) to ensure that road management decisions are based on consideration of environmental, social, and economic impacts.
7. Construct new roads only where resource management objectives and benefits are clearly demonstrated and where long-term funding obligations have been carefully considered.

7703.13 - Considerations in Designating Trails for Motor Vehicle Use or OSV Use

1. Manage trails designated for motor vehicle use or OSV use consistent with direction in FSM 2350.
2. Use travel analysis (FSM 7712; FSH 7709.55, ch. 14 and 20), conducted at an appropriate scale, to ensure that decisions to designate trails for motor vehicle use or OSV use consider environmental, social, and economic impacts and to preserve areas of opportunity on each administrative unit for non-motorized recreational experiences.

7703.14 - Considerations in Designating Areas for Motor Vehicle Use or OSV Use

1. Use travel analysis (FSM 7712; FSH 7709.55, ch. 14 and 20), conducted at an appropriate scale, to ensure that decisions to designate areas for motor vehicle use or OSV use are based on consideration of environmental, social, and economic impacts.
2. Use restraint in designating areas on NFS lands for motor vehicle use under 36 CFR Part 212, Subpart B. Areas designated for motor vehicle use are not intended to be large or numerous. Not all administrative units will find it necessary or desirable to designate areas for motor vehicle use.
3. Designate areas on NFS lands for motor vehicle use under Subpart B only when they have natural resource characteristics that are suitable for motor vehicle use or are so altered by past actions that motor vehicle use off designated roads and trails is appropriate.
4. In contrast to areas on NFS lands designated for motor vehicle use under Subpart B, areas on NFS lands designated for OSV use under Subpart C do not have to be much smaller than a ranger district (36 CFR 212.1).

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7703.15 - Intermodal Transportation

1. Utilize transit and other intermodal methods of transportation when they best meet desired conditions in the applicable land management plan for transporting large numbers of people to NFS destinations within identified economic, resource, and environmental constraints.
2. Encourage public transit authorities to provide services on NFS lands.

7703.2 - Management Opportunities

Management opportunities may include roads, trails, and areas designated for motor vehicle use, as well as trails managed for a variety of non-motorized uses (such as hiking, horseback riding, and bicycling). The Forest transportation system should provide access to NFS lands for both motorized and non-motorized uses in a manner that is socially, environmentally, and economically sustainable over the long term, enhances public enjoyment of NFS lands, and maintains other important values and uses.

7703.21 - Management Opportunity Considerations

1. Unauthorized Routes. Repeated cross-country motor vehicle use of NFS lands has resulted in unplanned, unauthorized roads and trails (FSM 7715.78). Unauthorized routes develop without agency authorization, environmental analysis, or public involvement and do not have the same status as NFS roads and NFS trails included in the Forest transportation system. Nevertheless, some unauthorized routes are well-sited, provide excellent opportunities for outdoor recreation by motorized and non-motorized users, and would enhance the system of designated routes and areas. Other unauthorized routes are poorly located and cause unacceptable impacts. Responsible Officials should work with user groups and others to identify those unauthorized routes that should be considered for designation based on the criteria in 36 CFR 212.55.
2. Appropriate Mix of Recreational Activities. Opportunities to enhance the full spectrum of motorized and non-motorized recreation should be considered when designating roads, trails, and areas for motor vehicle use. Designation of a road, a trail, or an area does not establish motor vehicle use as dominant or exclusive of other uses. Rather, designation should result in an appropriate mix of recreational activities that minimizes conflicts among uses.

7703.22 - Motor Vehicle Use or OSV Use Off Designated Roads and Trails and Outside Designated Areas

1. Once designation of motor vehicle use or OSV use is complete on an administrative unit or Ranger District and designated routes and areas are identified on an MVUM or OSVUM, motor vehicle use off the designated system or inconsistent with the

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designations is prohibited by 36 CFR 261.13 or 261.14. See 36 CFR 261.13 or 261.14 and FSM 7716.2 for vehicles and uses exempted from this prohibition.

2. Motor vehicle use off designated roads, trails, and areas may be authorized by a contract, easement, special use permit, or other written authorization issued under Federal law or regulation (36 CFR 212.51(a)(8); FSM 7716.2). This option may be particularly desirable when motor vehicle use off the designated system is associated with a single event or other authorized uses, such as grazing, vegetation management, and hazardous fuels reduction.

7703.23 - Use By Over-Snow Vehicles

1. Once designation is complete on an administrative unit or Ranger District and designated routes and areas are identified on an OSVUM, over-snow vehicle use off the designated system or inconsistent with the designations is prohibited by 36 CFR 261.14. See 36 CFR 261.14, 36 CFR 212.51(a) or FSM 7716.2 for vehicles and uses exempted from this prohibition.

2. Over-snow vehicle use off designated roads, trails, and areas may be authorized by a contract, easement, special use permit, or other written authorization issued under Federal law or regulation (36 CFR 212.81(a)(5); FSM 7716.2(8)). This option may be particularly desirable when over-snow vehicle use off the designated system is associated with a single event or other authorized uses, such as grazing, vegetation management, and hazardous fuels reduction.

7703.24 - Maintaining and Reconstructing Roads

1. Emphasize maintenance and reconstruction of NFS roads to meet road management objectives (FSM 7714).

2. Give priority to maintaining and reconstructing the most heavily used roads to provide safe and efficient travel and to reduce adverse environmental impacts. Do not maintain unauthorized roads. After an administrative unit or Ranger District has completed route and area designation, motor vehicle use is prohibited on unauthorized roads, and those roads may be decommissioned as funding permits. Temporary roads are maintained as provided in the contract, permit, lease, or other written authorization for those roads and must be decommissioned at the conclusion of the authorized activity.

3. Access needs for utilization and administration of NFS lands and resources may sometimes result in establishment of NFS roads that are part of the Forest transportation system but are not designated for motor vehicle use by the general public, and therefore are not shown on an MVUM or an OSVUM.

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4. Intermittent-service roads may provide access for Forest Service administration of NFS lands or for motor vehicles authorized by contract, permit, or other written authorization issued under Federal law or regulation (36 CFR 212.51(a)(8)). These roads should continue to be managed, maintained, and operated consistent with the applicable land management plan and applicable road management objectives.

5. Access needed to private property or developments on or near NFS lands also may result in establishment of public or private roads that cross NFS lands but are not necessary for the protection, administration, and utilization of the NFS and therefore are not Forest roads or NFS roads. Like Forest roads authorized by a legally documented right-of-way held by a State, county, or local public road authority, these roads should be maintained by the holder of the right-of-way.

7703.25 - Decommissioning Roads

1. Use travel analysis (FSM 7712; FSH 7709.55, ch. 20) to identify roads that may not be needed for the use and management of NFS lands; to identify roads that could be converted to trails; to identify restoration needs; and to establish decommissioning priorities. Unauthorized roads, temporary roads, and any NFS roads no longer needed for the use and management of NFS lands should be decommissioned. Do not designate temporary roads or unneeded roads for motor vehicle use, and do not show unneeded roads on an MVUM.

2. See FSM 7734 for further direction regarding decommissioning roads.

7703.26 - Adding Roads to the Forest Transportation System

1. Consistent with FSM 7703.12, paragraph 7, before adding roads to the Forest transportation system, carefully consider and document the road management objectives (see FSM 7714), environmental impacts, and social and economic benefits associated with the proposed additions.

2. Decisions to add roads to the Forest transportation system must be informed by travel analysis (FSM 7712 and FSH 7709.55, ch. 20) conducted at an appropriate scale, as well as appropriate site-specific environmental analysis and public involvement. Desired conditions are described in the applicable land management plan (FSM 1920). Consider values affected by new NFS roads, including access to, utilization, protection, and administration of NFS lands; public health and safety; and valid existing rights. Consideration must be given to long-term road funding opportunities and obligations. In examining the environmental effects of new roads, consider:

- a. Effects on associated ecosystems;
- b. Introduction of invasive species;

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- c. Effects on threatened and endangered species and areas with significant biodiversity, cultural resources, fish and wildlife habitat, water quality, and visual quality;
 - d. Effects on recreation opportunities; and
 - e. Effects on access to NFS lands.
3. Decisions to add roads to the Forest transportation system may involve constructing NFS roads, acquiring NFS roads through land purchases or exchanges, and adding unauthorized roads to the Forest transportation system.

7703.27 - Converting NFS Roads to NFS Trails and Managing Coincidental Routes

Before converting unneeded NFS roads to NFS trails or establishing coincidental NFS roads and NFS trails, consider:

- 1. Whether the route would provide a recreation experience consistent with desired Trail Management Objectives (FSM 2353.12);
- 2. Environmental effects of the continued existence of the route;
- 3. The need for mitigation, removal, repair, or alteration of structures along the route; and
- 4. Long-term trail maintenance and available funding.

See FSM 2309.18, section 21.2, for additional direction on converting unneeded NFS roads to NFS trails. See FSM 7731.11, on traffic management strategies, for further direction that may assist in deciding whether to convert NFS roads to NFS trails or establish coincidental routes.

7703.3 - Jurisdiction Over Forest Transportation Facilities

- 1. Documentation of Jurisdiction Over Forest Transportation Facilities. Determine jurisdiction over all Forest transportation facilities. Maintain current Forest Service jurisdictional records in the landownership records (FSM 5490) and the Forest transportation atlas (FSM 7711.2).
- 2. Transfer of Jurisdiction Over a Forest Transportation Facility. Wherever possible, transfer jurisdiction over an NFS road and associated Forest transportation facilities (FSM 7705) to the appropriate public road authority when the road meets any of the following criteria:
 - a. More than half the traffic on the road is not related to administration and use of NFS lands.

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- b. The road is necessary for mail, school, or other essential local governmental purposes.
- c. The road serves yearlong residents within or adjacent to NFS lands.
- 3. Obtaining Jurisdiction. Obtain jurisdiction over roads and trails where Forest Service control is necessary for adequate management of the Forest transportation system.
- 4. Roads and Trails Under Forest Service Jurisdiction. The Forest Service has jurisdiction over the following:
 - a. Roads and trails constructed on NFS lands or on acquired or reserved rights-of-way that are needed for National Forest purposes.
 - b. Roads and trails obtained through construction and use agreements (FSM 2732 and 5467).
 - c. Roads and trails constructed under a special use authorization (FSM 2733 and FSH 2709.12).
 - d. Roads and trails existing or constructed prior to the reservation of lands from the public domain that have never been managed as part of the transportation system of a State, county, or local public road authority.
 - e. Roads and trails constructed prior to the reservation of lands from the public domain that have been managed as part of the transportation system of a State, county, or local public road authority, but for which the rights of the public road authority have terminated or been transferred to the United States.
 - f. Unauthorized roads and trails constructed or created on NFS lands.
- 5. Roads and Trails Under the Jurisdiction of Other Parties. The following roads and trails are under the jurisdiction of other parties. Depending on the circumstances, the Forest Service may also share some level of jurisdiction. However, the following roads and trails are not subject to designation under 36 CFR Part 212, Subpart B and C:
 - a. Roads existing or constructed prior to the reservation of lands from the public domain that are authorized by a legally documented right-of-way held by a Federal, State, county, or local public road authority.
 - b. Roads and trails for which legally documented rights-of-way were reserved or outstanding on acquired lands before title passed to the United States, except to the extent that the Forest Service has acquired the right to regulate uses on these rights-of-way.

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- c. Roads and trails for which the Forest Service has granted a legally documented right-of-way to a Federal, State, county, or local public road authority (FSM 2732).

7703.4 - Common Transportation Interests With Local Public Road Authorities and Other Landowners

1. Establish priorities, based on land management planning and travel analysis, for acquiring easements or other property interests and rights-of-way over non-Federal transportation facilities.
2. Cooperate with intermingled and adjacent landowners to plan, develop, and operate transit and transportation facilities serving the interests of all affected parties.
3. Encourage local public road authorities to bear a proportionate share of reconstruction and maintenance costs of transportation facilities over which the Forest Service does not exercise jurisdiction when the local public road authorities are unable or lack the authority to accept full responsibility. Use Forest road agreements (FSH 1509.11, sec. 31.2) to implement these cost-sharing arrangements. Forest road agreements do not change jurisdiction over a Forest transportation facility.

7703.5 - Agreements for Road Operation and Maintenance

Recover costs of road reconstruction and maintenance from commercial haulers commensurate with their use. Establish priorities for acquiring and exchanging rights-of-way and provide for sharing road construction and maintenance costs with cooperating parties. See FSM 2353.18, 7731.3, and 7732.2 for additional direction on agreements for operation and maintenance of the Forest transportation system.

7704 - RESPONSIBILITY

See FSM 2350 and FSM 7710 for additional responsibility related to Travel management.

7704.1 - Deputy Chief for the National Forest System

The Deputy Chief for the National Forest System is responsible for:

1. Developing and establishing priorities for transportation programs.
2. Recommending laws and regulations relating to the Forest transportation system and travel management.
3. Establishing national information requirements relating to the Forest transportation system.

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7704.2 - Washington Office, Director of Engineering

The Washington Office, Director of Engineering is responsible for:

1. Developing, issuing, reviewing, and monitoring policy, functional standards, technical guidelines, specifications, and other requirements for planning, developing, operating, and maintaining transit systems and transportation facilities and coordinating with the Washington Office, Director of Recreation, Heritage, and Volunteer Resources regarding trails.
2. Directing, coordinating, and approving Servicewide transportation studies.
3. Maintaining liaisons with other agencies and organizations in transportation matters.
4. Identifying and transferring appropriate transportation technology.

7704.3 - Washington Office, Director of Recreation, Heritage, and Volunteer Resources

See FSM 2350 for trail responsibilities of the Washington Office, Director of Recreation, Heritage, and Volunteer Resources.

7704.4 - Washington Office, Director of Law Enforcement and Investigations

The Washington Office, Director of Law Enforcement and Investigations is responsible for coordinating with NFS Line Officers to ensure that law enforcement responsibilities are met (FSM 5304).

7704.5 - Regional Foresters

Regional Foresters are responsible for:

1. Providing direction, consultation, assistance, technology transfer, and training to administrative units in their region for all phases of travel management, travel analysis, and route and area designation.
2. Providing direction, consultation, assistance, technology transfer, and training to administrative units in their region for all phases of planning, development, operation, and maintenance of transit and transportation facilities in their region.
3. Developing and maintaining effective working relationships regarding transportation matters with organizations, tribal governments, and public road authorities, and coordinating regional transportation programs and activities.

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4. Entering into cooperative agreements and memoranda of understanding with other Federal agencies, States, counties, other local governmental entities, and Tribal governments for cooperative planning, development, maintenance, and operation of Forest transportation facilities.
5. Ensuring that the staff of the administrative units in their region have adequate levels of engineering, recreation, and trail management skills (FSM 7702).
6. Developing and implementing cost-effective programs for travel analysis and planning, development, operation, and maintenance of Forest transportation facilities.
7. Monitoring and evaluating motor vehicle use to ensure adherence to applicable laws, regulations, and policies (FSM 7702).

Regional Foresters may delegate the responsibilities enumerated in FSM 7704.5, paragraphs 6 and 7, to the Regional Office, Director of Engineering.

7704.6 - Regional Office, Director of Engineering

The Regional Office, Director of Engineering is responsible for designating qualified engineers for the purpose of exercising engineering judgment and preparing engineering reports for motorized mixed use analysis (FSM 7715.77; FSH 7709.55, ch. 30).

7704.7 - Forest Supervisors

Forest Supervisors are responsible for:

1. Planning and coordinating transportation activities to achieve applicable land management plan objectives and to ensure interdisciplinary, cost-effective input into the travel analysis process.
2. Planning, developing, operating, maintaining, and monitoring all elements of the Forest transportation system in their administrative unit.
3. Developing and maintaining an adequate level of engineering, recreation, and trail management skills on their staff.
4. Maintaining current transportation system data to meet national information requirements MVUM and OSVUM standards.
5. Entering into cooperative agreements with States, counties, other local governmental entities, and Tribal governments as appropriate for cooperative planning, development, maintenance, and operation of Forest transportation facilities.

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6. Entering into cooperative agreements with non-governmental organizations for maintenance and operation of NFS roads and NFS trails.
7. Monitoring motor vehicle use, including off-highway and over-snow vehicles use, as appropriate and feasible to ensure adherence to applicable laws, regulations, and policies and revising designations of roads, trails, and areas for motor vehicle use, including off-highway and over-snow vehicles use, as needed to meet changing conditions (36 CFR 212.54 and 212.57; FSM 7717.2 and 7718.2).

7705 - DEFINITIONS

Administrative Unit. A National Forest, a National Grassland, a purchase unit, a land utilization project, Columbia River Gorge National Scenic Area, Land Between the Lakes, Lake Tahoe Basin Management Unit, Midewin National Tallgrass Prairie, or other comparable unit of the NFS (36 CFR 212.1).

All-Terrain Vehicle (ATV). A type of off-highway vehicle that travels on three or more low-pressure tires; has handle-bar steering; is less than or equal to 50 inches in width; and has a seat designed to be straddled by the operator.

Area. A discrete, specifically delineated space that is smaller, and, except for over-snow vehicle use, in most cases much smaller, than a Ranger District. (36 CFR 212.1)

Arterial Road. An NFS road that provides service to large land areas and usually connects with other arterial roads or public highways.

Bridge. A road or trail structure, including supports, erected over a depression or obstruction such as water, a road, trail or railway and having a deck for carrying traffic or other loads.

Collector Road. An NFS road that serves smaller areas than an arterial road and that usually connects arterial roads to local roads or terminal facilities.

Designated road, trail or area. A NFS Road, a NFS Trail, or an area on NFS lands that is designated for motor vehicle use pursuant to 36 CFR 212.51 and placed on a motor vehicle use map.

Designation of over-snow vehicle use. Designation of a NFS Road, a NFS Trail or an area on NFS lands where over-snow vehicle use is allowed (36 CFR 212.81).

Engineering Analysis. An analysis and evaluation conducted by a qualified engineer or under the supervision of a qualified engineer of an NFS road, road segment, or road system being considered for motorized mixed use. The analysis and evaluation may

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include recommended mitigation measures. The analysis may be simply documentation of engineering judgment or may be a more complex engineering report that includes many factors related to motorized mixed use.

Engineering Judgment. The evaluation of available information and the application of engineering principles, standards, guidance, and practices for the purpose of considering motorized mixed use of a road. Engineering judgment must be exercised by a qualified engineer or by an individual who is working under the supervision of a qualified engineer and who is applying procedures and criteria established by the qualified engineer.

Engineering Report. A report that analyzes risk factors pertaining to a proposed designation of a road for motorized mixed use that is signed by a qualified engineer, and that is presented to the Responsible Official. The report may identify alternatives, as well as risks associated with those alternatives, for mitigation of factors contributing to the probability and severity of crashes.

Forest Road or Trail. A road or trail wholly or partly within or adjacent to and serving the NFS that the Forest Service determines is necessary for the protection, administration, and utilization of the NFS and the use and development of its resources (36 CFR 212.1).

Forest Transportation Atlas. A display of the system of roads, trails, and airfields of an administrative unit (36 CFR 212.1).

Forest Transportation Facility. A Forest road or trail or an airfield that is displayed in a Forest transportation atlas, including bridges, culverts, parking lots, marine access facilities, safety devices, and other improvements appurtenant to the Forest transportation system (36 CFR 212.1).

Forest Transportation System. The system of NFS roads, NFS trails, and airfields on NFS lands (36 CFR 212.1).

Forest Transportation System Management. Travel planning, analysis, designation of roads, trails and areas for motor vehicle use, recordkeeping, scheduling, construction, reconstruction, maintenance, decommissioning, and other operations undertaken to achieve environmentally sound, safe, and cost-effective access for the use, enjoyment, protection, administration, and management of NFS lands.

Highway-Legal Vehicle. Any motor vehicle that is licensed or certified under State law for general operation on all public roads in the State. Operators of highway-legal vehicles are subject to state traffic law, including requirements for operator licensing.

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Jurisdiction Over a Forest Transportation Facility. The legal right to control or regulate use of a Forest transportation facility derived from title, an easement, an agreement, or other similar source.

Local Road. An NFS road that connects a terminal facility with collector roads, arterial roads, or public highways and that usually serves a single purpose involving intermittent use.

Motor Vehicle. Any vehicle which is self-propelled, other than:

- a. A vehicle operated on rails; and
- b. Any wheelchair or mobility device, including one that is battery-powered, that is designed solely for use by a mobility-impaired person for locomotion and that is suitable for use in an indoor pedestrian area (36 CFR 212.1).

Motor Vehicle Use Map (MVUM). A map reflecting designated roads, trails, and areas on an administrative unit or a Ranger District of the NFS (36 CFR 212.56 and FSM 7711.3).

Motorcycle. A two-wheeled motor vehicle on which the two wheels are not side-by-side but in line.

Motorized Mixed Use. Designation of an NFS road for use by both highway-legal and non-highway-legal motor vehicles.

National Forest System Road. A Forest road other than a road which has been authorized by a legally documented right-of-way held by a State, county, or local public road authority (36 CFR 212.1).

National Forest System Trail. A Forest trail other than a trail which has been authorized by a legally documented right-of-way held by a State, county, or local public road authority (36 CFR 212.1).

Non-Highway-Legal Vehicle. Any motor vehicle that is not licensed or certified under State law for general operation on all public roads within the State. Operators of non-highway-legal vehicles are subject to State requirements, if any, for licensing and operation of the vehicle in question.

Off-Highway Vehicle. Any motor vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain (36 CFR 212.1).

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Over-Snow Vehicle. A motor vehicle that is designed for use over snow and that runs on a track or tracks and/or a ski or skis, while in use over snow (36 CFR 212.1).

Over- Snow Vehicle Use Map. A map reflecting roads, trails and areas designated for over-snow vehicle use on an administrative unit or a Ranger District of the NFS (36 CFR 212.81 and FSM 7711.4).

Primitive Area. An area within the NFS classified as primitive on the effective date of the Wilderness Act, September 3, 1964 (36 CFR 261.2).

Private Road. A road under private ownership authorized by an easement granted to a private party or a road that provides access pursuant to a reserved or outstanding right.

Public Road. A road under the jurisdiction of and maintained by a public road authority and open to public travel (23 U.S.C. 101(a)).

Qualified Engineer. An engineer who by experience, certification, education, or license is technically trained and experienced to perform the engineering tasks specified and who is designated by the Regional Office Director of Engineering.

Road. A motor vehicle route over 50 inches wide, unless identified and managed as a trail (36 CFR 212.1).

Road Construction or Reconstruction. Supervising, inspecting, actual building, and incurrence of all costs incidental to the construction or reconstruction of a road (36 CFR 212.1).

Road Decommissioning. Activities that result in restoration of unneeded roads to a more natural state (FSM 7734).

Road Maintenance. Ongoing upkeep of a road necessary to maintain or restore the road in accordance with its road management objectives (FSM 7714).

Road Subject to the Highway Safety Act. An NFS road that is open to public use in a standard passenger car, including a road with access restricted on a seasonal basis and a road closed during extreme weather conditions or for emergencies, but which is otherwise open to public travel.

Route. A road or trail.

Temporary Road or Trail. A road or trail necessary for emergency operations or authorized by contract, permit, lease, or other written authorization that is not a Forest road or a Forest trail and that is not included in a Forest transportation atlas (36 CFR 212.1).

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Terminal Facility. A transfer point between the Forest transportation system and Forest resources served by the system, or between different transportation modes, including parking areas, turnouts, boat ramps and docks, trailheads, marine access facilities, airfields, and heliports.

Trail. A route 50 inches or less in width or a route over 50 inches wide that is identified and managed as a trail (36 CFR 212.1).

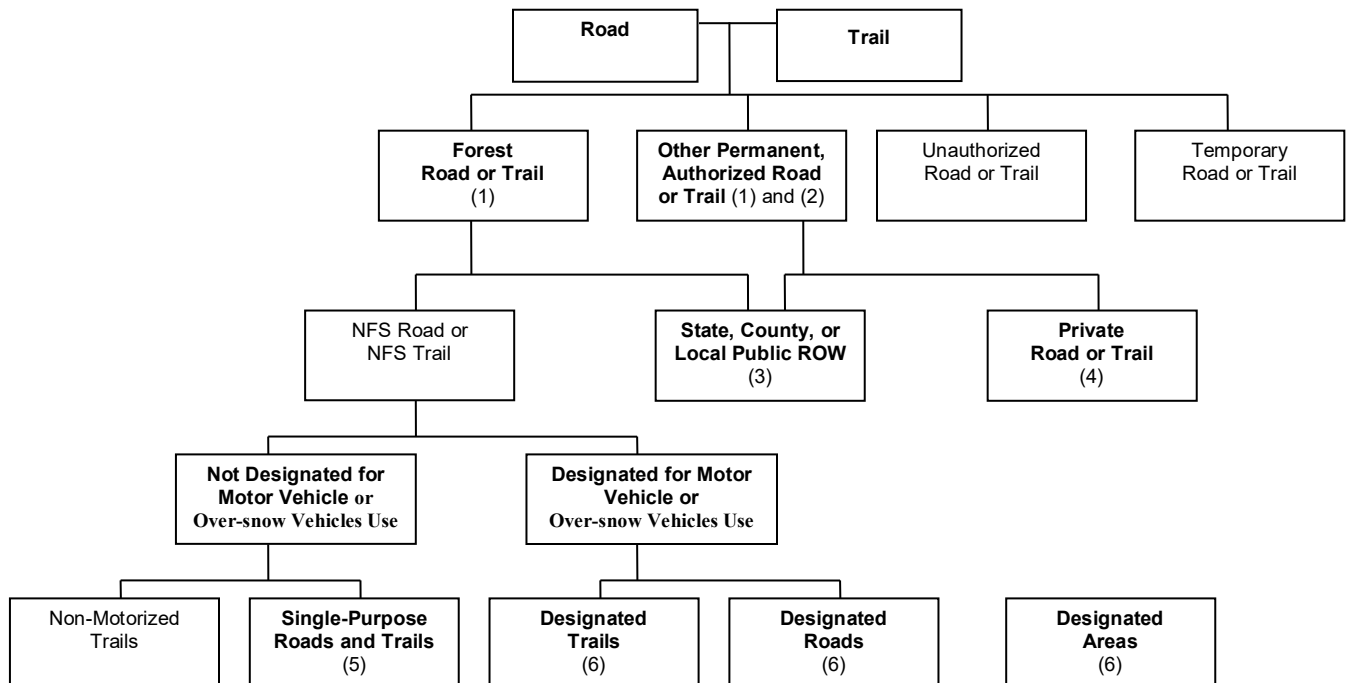
Travel Management Atlas. An atlas that consists of a Forest transportation atlas and an MVUM or MVUMs (36 CFR 212.1).

Unauthorized Road or Trail. A road or trail that is not a Forest road or trail or a temporary road or trail and that is not included in a Forest transportation atlas (36 CFR 212.1).

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7705 – Exhibit 01

TRAVEL MANAGEMENT TERMINOLOGY



- (1) Included in a Forest transportation atlas.
- (2) Includes permanent public and private roads authorized by a written instrument that are not necessary for use of the NFS.
- (3) Includes Forest highways, as well as other public roads authorized by a legally documented right-of-way. Should be shown on an MVUM as “other public roads.”
- (4) Includes permanent, private authorized roads that are not necessary for use of the NFS (e.g., roads that provide access to private land within the NFS).
- (5) Includes Maintenance Level 1 roads and other Forest roads not designated for motor vehicle use (e.g., a road that provides access for summer maintenance and repair of a ski area chair lift or a road that provides access to a mining claim on NFS lands).
- (6) Included on an MVUM.

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7709 - HANDBOOKS

7709.5 - Servicewide Handbooks

7709.55 - Travel Planning Handbook

This handbook provides guidance on travel planning and project planning activities associated with designation of roads, trails, and areas for motor vehicle use.

7709.56 - Road Preconstruction Handbook

This handbook provides guidance on the location, survey, design, and preparation of cost estimates for NFS roads.

7709.56b - Transportation Structures Handbook

This handbook provides guidance on the planning, location, survey, design, and operation of culverts, bridges, and other road and trail transportation structures.

7709.57 - Road Construction Handbook

This handbook provides guidance on engineering for road construction.

7709.59 - Road System Operations and Maintenance Handbook

This handbook contains direction on conducting traffic management, investment sharing and cost recovery for roads, highway safety, traffic studies, and other aspects of road operations.

Road closure effectiveness monitoring

Gate and road monitoring has been done on the Tally Lake Ranger District every hunting season since at least 1995, in cooperation with law enforcement and road engineering personnel. Funds used included "KV Other" (access management devices installed with KV project funds) and appropriated wildlife/habitat monitoring dollars. See attached summaries.

Additional instructions and monitoring records are on file in the TLRD Wildlife Biologist's office.

A. Jacobs, November 1, 2019

Effectiveness of Road Closures on the Flathead National Forest

By Reed Kuennen (October 24, 2019)

The FNF has monitored and annually reported on effectiveness of road closures since 1993. Some road closures have a history of vandalism or noncompliance. Inspection and evaluation of the effectiveness of road restrictions and barrier devices was reported in the FNF's annual A19 monitoring reports. Data was collected and reported thru 2016, with the exception of no data in 1999 and 2001. Sampling efforts varied from year to year. The amount noted as ineffective were tallied differently for the period prior to 2005 and the period from 2005 forward. Prior to 2005, if the device was ineffective but fixed before the inspector left, the device was noted as effective. From 2005 forward, if the device was ineffective upon inspection, the device was noted as ineffective whether or not it was fixed on site. Generally, ineffective closure devices were fixed immediately, if possible. If not, devices were repaired as soon as possible, in compliance with The USFWS term and condition #5 in the 2013 BO on Amendment 19:

T & C #5. The first restriction device on any road shall be inspected annually and kept in good repair. Effectiveness of the barrier to prevent unauthorized access shall be determined and recorded. In the case of an ineffective device, an alternative device, technique, or repair shall be implemented, and implementation of the appropriate remedy shall be considered a priority in the Forest's work scheduling. Human health and safety takes priority over this term and condition.

Monitoring has shown that from 2005 through 2010, 4 to 13 percent of the barrier devices were found to be ineffective in preventing unauthorized use depending on the year with an average of 9.5 percent per year. The grizzly bear population was growing and expanding in distribution during the time period when this level of road closure ineffectiveness was occurring. There is no evidence that road closure ineffectiveness is having a negative effect on the grizzly bear population on the FNF.

The 2016 A19 report, Table 8b, shows the results of closure device monitoring on the Flathead National Forest from 2006 through 2015. This table shows from 3-13% of the barrier devices were found to be ineffective in preventing unauthorized use, depending on the year, with an average of 6.9 percent per year from 2006-2015. Since 2011, the average road closure effectiveness has improved, not declined. Since 2011, the average percentage of ineffective closures improved to 5 %. There is no evidence that ineffective road closures are resulting in effects to grizzly bears that were not previously considered. The incidental take statement for the revised forest plan recognizes that negative effects to individual grizzly bears are occurring in sub-units which do not meet 19-19-68 for OMRD, TMRD, and core. If 3-13% of the road closures in these subunits are ineffective, it would not result in levels of take that exceed that which has already been accounted for, so re-initiation of consultation would not be required.

Road closure effectiveness will continue to be monitored in the future (See Revised Forest Plan Monitoring Infrastructure Table 60):

MON-IFS-01: Number and percentage of road closure devices effective at restricting closure devices checked and percentage public motorized use

IND-IFS-01: Number and percentage of road closure devices checked and percentage determined to be effective at restricting public motorized use

As stated in the Revised Forest Plan ROD, "Implementation of the land management plan will comply with the above requirements of the incidental take statement. We also will adhere to the monitoring and reporting requirements referenced in the biological opinion. As required by the ESA, if the level of take exempted under the biological opinion for the land management plan would be exceeded, re-initiation of consultation or project-specific consultation would be required (as appropriate)".

Wildlife KV Hunting Season Road Closure Monitoring
 2007 SEASON SUMMARY–Tally Lake Ranger District
Laura Holmquist, Wildlife Technician 26 November 2007

People Days	30	Miles Traveled	3015
# people talked with	215	# license/ descriptions recorded	575
# waves given	554		
# directions/info./ help given	26	# reminder postcards not to block gate	10+ (didn't start keeping track until half way through season)
# closure devices inspected	469	# disabled hunter permits checked	1
# gates closed that had been broken ("ineffective to effective")	19*	# hunting permits checked (not required)	2
# cases referred to Engineering (Rod) (need maintenance)	135	# firewood permits checked	9
# fires put out	4	# cases referred to Law Enforcement (Dianna)	35
Comments	*Gates closed does not count locks that were fixed that were locked incorrectly but still did not provide access to the public. We fixed locks with that type of problem every day out. Grizzly tracks at headwaters of Alder Creek.		
2008 Suggestions	Need all 4WD available. Consider snow tires with studs if want to go into bad weather for safety.		

Hunting Season Road Closure Monitoring 2008 SEASON SUMMARY-Tally Lake Ranger District

Prepared by Laura Holmquist, Wildlife Technician

People Days	22	Miles Traveled	2696
# people talked with	106	# license/ descriptions recorded	425
# waves given	369		
# directions/info./ help given	15	# reminder postcards not to block gate	20
# closure devices inspected	305	# disabled hunter permits checked	1
# gates closed that had been broken ("ineffective to effective")	4	# hunting permits checked (not required)	0
# cases referred to Engineering (Rod) (need maintenance)	9	# firewood permits checked	18
# fires put out	4	# cases referred to Law Enforcement (Dianna)	17
Comments	*Gates closed does not count locks that were fixed that were locked incorrectly but still did not provide access to the public. There seemed to generally more negative tone to the public according to the monitors out there.		

Hunting Season Road Closure Monitoring 2009 SEASON SUMMARY-Tally Lake Ranger District

Prepared by Laura Holmquist, Wildlife Technician

People Days	22 (11 days x2 people/day)	Miles Traveled	2357
# people talked with	129	# license/ descriptions recorded	160
# waves given	408		
# directions/info./ help given	15	# reminder postcards not to block gate	6
# closure devices inspected	407	# disabled hunter permits checked	3
# gates closed that had been broken ("ineffective to effective")	10	# hunting permits checked (not required)	1
# cases referred to Engineering (Rod) (need maintenance)	13	# firewood permits checked	1
# fires put out	1	# cases referred to Law Enforcement (Dianna)	4
Comments	"Gates closed" does not count locks that were fixed that were locked incorrectly but still did not provide access to the public.		

Hunting Season 'Patrols'

2010 SEASON SUMMARY-Tally Lake Ranger District

Prepared by Laura Holmquist

People Days	18 (9 days x2 people/day) 3 days were cancelled due to unsafe road conditions	Miles Traveled	2162
# people talked with	79	# license/ descriptions recorded	159
# waves given	307		
# directions/info./ help given	7	# reminder postcards not to block gate	1
# closure devices inspected	370	# disabled hunter permits checked	0
# gates closed that had been broken ("ineffective to effective")	6	# hunting permits checked (not required)	0
# cases referred to Engineering (Rod) (need maintenance)	13	# firewood permits checked	11
# fires put out	0	# cases referred to Law Enforcement (Dianna)	7
Comments	• "Gates closed" does not count locks that were fixed which were locked incorrectly but still did not provide access to the public. • LOTS of litter picked up. • Worked with FWP on 3 poaching investigations & coordinated to provide consistent information		

Hunting Season 'Patrols'

2011 SEASON SUMMARY–Tally Lake Ranger District

Prepared by Laura Holmquist

People Days	22 (11 days x2 people/day) 1 day was cancelled due to unavailability	Miles Traveled	2700
# people talked with	72	# license/ descriptions recorded	156
# waves given	233		
# directions/info./ help given	9	# reminder postcards not to block gate	8
# closure devices inspected	410	# disabled hunter permits checked	0
# gates closed that had been broken ("ineffective to effective")	7	# hunting permits checked (not required)	1
# cases referred to Engineering (Rod) (need maintenance)	2	# firewood permits checked	8
# fires put out	1	# cases referred to Law Enforcement (Dianna)	8
Comments	• "Gates closed" does not count locks that were fixed which were locked incorrectly but still did not provide access to the public. • LOTS of litter picked up. • Worked with FWP on a poaching investigation, coordinated to provide consistent information • Provided info. to Search & Rescue on a lost hunter		

Gate Patrols for Hunting Season

2012 SEASON SUMMARY–Tally Lake Ranger District

Prepared by Laura Holmquist

People Days	20 (10 days x2 people/day) 1 day was cancelled due to unavailability, 1 for unsafe road conditions	Miles Traveled	2463
# people talked with	73	# license/ descriptions recorded	134
# directions/info./ help given	10	# reminder postcards not to block gate/thank-yous for not blocking gate	13
# closure devices inspected	327	# disabled hunter permits checked	2
# gates closed that had been unlocked or broken ("ineffective to effective")	4	# hunting permits checked (not required)	0
# cases referred to Engineering (Chris) (need maintenance)	0	# firewood permits checked	1
# fires put out	0	# cases referred to Law Enforcement (Dianna)	0
Comments	• "Gates closed" does not count locks that were fixed which were locked incorrectly but still did not provide access to the public. • Road Conditions deteriorated rapidly this season • Worked with FWP and a resident of Good Creek regarding residential shooting • Hwy 2 check-station said had lots of gate issues they reported to their wardens... Need to follow up.		

Gate Patrols for Hunting Season
2013 SEASON SUMMARY–Tally Lake Ranger District

Prepared by Laura Holmquist

People Days	14 (7 days x2 people/day) 4 days cancelled due to funding, 1 for unsafe road conditions	Miles Traveled	1495
# people talked with	40	# license/ descriptions recorded	66
# directions/info./ help given	5	# reminder postcards not to block gate/thank-yous for not blocking gate	4
# closure devices inspected	170	# disabled hunter permits checked	0
# gates closed that had been unlocked or broken ("ineffective to effective")	2	# hunting permits checked (not required)	0
# cases referred to Engineering (Chris) (need maintenance)	0	# firewood permits checked	1
# fires put out	0	# cases referred to Law Enforcement (Dianna)	7
Comments	• "Gates closed" does not count locks that were fixed which were locked incorrectly but still did not provide access to the public. • Road Conditions deteriorated rapidly this season • Hwy 2 check-station said had lots of gate issues they reported to their wardens, but we don't get this info.		

Gate Patrols for Hunting Season

2014 SEASON SUMMARY–Tally Lake Ranger District

Prepared by Laura Holmquist

People Days	7 (3 days x2 people/day plus 1 during the week due to lack of a weekend field partner)	Miles Traveled	unk
# people talked with		# license/ descriptions recorded	24
# directions/info./ help given	5	# reminder postcards not to block gate/thank-yous for not blocking gate	0
# closure devices inspected	177	# disabled hunter permits checked	0
# gates closed that had been unlocked or broken ("ineffective to effective")		# hunting permits checked (not required)	0
# cases referred to Engineering (Chris) (need maintenance)	0	# firewood permits checked	0
# fires put out	0	# cases referred to Law Enforcement (Dianna)	1
Comments	• "Gates closed" does not count locks that were fixed which were locked incorrectly but still did not provide access to the public. • Road Conditions deteriorated rapidly this season • Hwy 2 check-station said had lots of gate issues they reported to their wardens, but we don't get this info.		