

RECREATION

Seven issues were identified that pertain to the effects of travel management on outdoor recreation within portions of the project area.

OPPORTUNITIES FOR SOLITUDE / QUIET TRAILS.

One attraction on the Rocky Mountain Ranger District is the opportunity to get away from the sounds of civilization. Some people value the chance to visit an environment where wind, forests, streams, birds, and animals create the preponderance of sounds heard, with minimal intrusions of man-made sounds. Some people felt that travel management should assure there are readily available opportunities to find solitude and to hear the sounds of nature without disturbance from motorized vehicles and equipment during all seasons. The opportunity for providing quiet trails and areas of solitude was a factor in developing Alternatives 3, 4 and 5.

1. EXISTING CONDITION

a. Natural Characteristics

Several variables affect the distance that man-made sounds travel. Wind is a major factor in decreasing or increasing the distance that sound carries, depending on the wind direction and speed. Steep terrain and dense forests enhance the sense of solitude and being apart from the sounds of civilization. Quiet trails and opportunities for solitude can be found within ¼-mile of some trailheads and road access points, not just in designated Wilderness. On the other hand, the sound of trains along the north boundary of the analysis area can be heard many miles inside the Bob Marshall Wilderness.

Recreation Opportunity Spectrum (ROS) is one method of classifying the evidence of human sights and sounds in the natural environment on a continuum ranging from highly developed “Urban” settings, to remote “Primitive” settings. ROS was developed in 1986 by the Forest Service, and continues to evolve as a way of describing a variety of recreation opportunities (USDA, Forest Service 1986). ROS is a suitable method to compare opportunities to find solitude on quiet trails under various alternatives.

b. Past Events and Conditions

The 1986 Forest Plan did not establish ROS objectives for management areas. In 1986, ROS settings were merely used to describe the predominant type of recreational opportunity that each management area could provide. Semi-Primitive was not subdivided into motorized and non-motorized settings in the Forest Plan. Consequently, ROS classifications will only be used in this analysis to compare effects between alternatives.

NOTE:

ROS classifications do not display Forest Plan management objectives to be achieved. ROS classifications display the type of recreation opportunities available based on: 1) absence or presence of human sights and sounds, 2) size of the area, 3) the amount of environmental modification caused by human activity, 4) the potential for contact between individuals or groups, and 5) the amount and kind of restrictions placed on users by administering agencies.

c. ROS classifications by Alternative

ROS classifications are intended to reflect the recreation setting during the spring, summer, and fall months. For this analysis, the Forest Service began by assigning ROS classifications based on type of travel (motorized wheeled vehicle versus non-motorized horse/hike/bike travel) allowed on each road and trail. Other criteria such as distance from motorized trails, size of area, intervening ridges, and vegetative screening were used to adjust boundaries and derive an ROS classification for summer recreation activities as shown on Maps 16 and 17.

“Urban” settings are characterized by a large number of human structures dominating the landscape. Green-space would only be an intermittent feature. Facilities would accommodate parking for large numbers of automobiles and use by large numbers of people. Quiet trails and opportunities for solitude would be rare. There are no “urban” settings in the project area.

“Rural” settings are characterized by a highly modified natural environment where the sights and sounds of humans are readily evident. Quiet trails and opportunities for solitude would be hard to find during much of the year. Developed areas such as Teton Ski Area, Gibson Dam, and Sun Canyon resorts and recreation residences fit the definition of a rural setting.

“Roaded Natural” settings extend about one-half mile on each side of a road used by standard highway-type vehicles. All roads used by the public or permittees, and all roads used by private landowners outside the Forest boundary were considered as affecting the recreation setting. Quiet trails and opportunities for solitude would be hard to find during the summer and fall. Primary access roads for passenger cars and trailer-towing vehicles include Elk Creek, Benchmark, Beaver-Willow, Sun Canyon, Hannah Gulch, Teton, Blackleaf, Mowitch, Palookaville, Lubec Lake and Pike Creek. These are examples of roaded-natural corridors.

“Semi-Primitive Motorized” settings extend about one-half mile on each side of a trail where motorized OHVs are legal to be used. The lack of vegetative screening, or the influence of intervening ridges may allow the zone to be wider or narrower than one-half mile. By definition, quiet trails and the opportunity for solitude would not occur in this setting during the time of year the trail was open to motorized travel.

“Semi-Primitive Non-Motorized” settings denote areas where stock, hiking, and/or bicycling are the predominant modes of travel. (OHVs would not be legal to operate and motorized travel corridors would be at least ½-mile distant). The lack of terrain screening or vegetative screening may occasionally allow the sights and sounds of humans within three miles to influence the setting. The area does not meet the size, distance, or lack of human disturbance criteria established for “primitive” settings. By definition, this would be a primary area for quiet trails and an appropriate setting to provide opportunities for solitude.

“Primitive” settings denote large areas (generally greater than 5,000 acres in size) that are over 3 miles from trails or roads open to motorized use, and where there is little evidence of human disturbance. By definition, this would be the best area for quiet trails and the best setting to provide opportunities for solitude.

Table III-15. Summer ROS Acreage by Alternative - Outside Wilderness

SUMMER ROS CLASSIFICATION	Map* Zone	ALT. 1	ALT. 2	ALT. 3	ALT. 4	ALT. 5
RURAL	BTM	30	30	30	30	30
	BCS	1,820	1,820	1,820	1,820	1,820
ROADED NATURAL	BTM	13,530	11,590	10,780	11,590	10,780
	BCS	48,060	46,720	45,990	46,410	46,410
SEMI-PRIMITIVE MOTORIZED	BTM	69,720	60,730	90	21,900	90
	BCS	80,260	60,580	4,760	27,920	27,920
SEMI-PRIMITIVE NON-MOTORIZED	BTM	46,240	49,660	45,320	62,080	45,320
	BCS	130,770	129,840	174,040	150,470	150,470
PRIMITIVE	BTM	0	7,510	73,300	33,920	73,300
	BCS	1,270	23,220	35,570	35,560	35,560
Total Acreage	BTM	129,520	129,520	129,520	129,520	129,520
	BCS	<u>262,180</u>	<u>262,180</u>	<u>262,180</u>	<u>262,180</u>	<u>262,180</u>
		391,700	391,700	391,700	391,700	391,700

* BTM is the Badger-Two Medicine area. BCS is the remainder of the Ranger District (south of Birch Creek).

For the winter months, the recreation classification was based on whether or not the area was open or restricted to cross-country snowmobile use. **The 415 acre “rural” classification covers the developed Teton Ski Area to account for grooming of ski runs and other activities.**

Table III-16. Winter Recreation Acreage by Alternative - Outside Wilderness

WINTER RECREATION CLASSIFICATION	Map* Zone	ALT. 1	ALT. 2	ALT. 3	ALT. 4	ALT. 5
RURAL	BTM	0	0	0	0	0
	BCS	415	415	415	415	415
SEMI-PRIMITIVE MOTORIZED	BTM	65,910	43,580	0	30,550	0
	BCS	246,720	159,680	0	98,440	98,440
SEMI-PRIMITIVE NON-MOTORIZED	BTM	63,610	85,940	129,520	98,970	129,520
	BCS	15,045	102,085	261,765	163,325	163,325
Total Acreage	BTM	129,520	129,520	129,520	129,520	129,520
	BCS	<u>262,180</u>	<u>262,180</u>	<u>262,180</u>	<u>262,180</u>	<u>262,180</u>
		391,700	391,700	391,700	391,700	391,700

* BTM is the Badger-Two Medicine area. BCS is the remainder of the Ranger District (south of Birch Creek).

d. Trailhead Access to “Quiet Trails”

Another method of assessing opportunities for solitude is to compare the number of trailheads providing immediate access to quiet trails. In addition, a comparison can be made of the miles of trails and low-standard 4x4 roads open to OHV use during the summer and winter versus miles of trails and roads closed to all types of motorized vehicle travel. The following tables show both mileage of roads and trails open to motorized and non-motorized travel, and trailheads providing access to different types of trails. (Map 18 displays access points.)

**Table III-17. Miles of Roads and Trails by Alternative
On Rocky Mountain Ranger District**

ROADS & TRAILS ON ROCKY MTN. RANGER DISTRICT	Map* Zone	ALT. 1	ALT. 2	ALT. 3	ALT. 4	ALT. 5
Roads (open yearlong or seasonally to motorized travel).	BTM	17 mi. rd.	12 mi. rd.	5 mi. rd.	12 mi. rd.	1 mi. rd.
	BCS	<u>105 mi. rd.</u>	<u>94 mi. rd.</u>	<u>83 mi. rd.</u>	<u>97 mi. rd.</u>	<u>98 mi. rd.</u>
		122 mi. total	106 mi. total	88 mi. total	109 mi. total	99 mi. total
Trails (open seasonally to ATV travel).	BTM	90 mi. tr.	59 mi. tr.	0 mi. tr.	43 mi. tr.	0 mi. tr.
		<u>6 mi. rd.</u>	<u>6 mi. rd.</u>	<u>0 mi. rd.</u>	<u>6 mi. rd.</u>	<u>0 mi. rd.</u>
		96 mi BTM	65 mi BTM	0 mi BTM	49 mi BTM	0 mi BTM
	BCS	55 mi. tr.	25 mi. tr.	0 mi. tr.	23 mi. tr.	22 mi. tr.
		<u>10 mi. rd.</u>	<u>9 mi. rd.</u>	<u>0 mi. rd.</u>	<u>6 mi. rd.</u>	<u>6 mi. rd.</u>
		65 mi BCS	34 mi BCS	0 mi BCS	29 mi BCS	28 mi BCS
			161 mi total	99 mi total	0 mi total	78 mi total
Trails (open seasonally to motorcycle travel).	BTM	90 mi. tr.	68 mi. tr.	0 mi. tr.	7 mi. tr.	0 mi. tr.
		<u>0 mi. rd.</u>	<u>0 mi. rd.</u>	<u>0 mi. rd.</u>	<u>0 mi. rd.</u>	<u>0 mi. rd.</u>
		90 mi. BTM	68 mi. BTM	0 mi. BTM	7 mi. BTM	0 mi. BTM
	BCS	143 mi. tr.	118 mi. tr.	0 mi. tr.	44 mi. tr.	43 mi. tr.
		<u>1 mi. rd.</u>	<u>1 mi. rd.</u>	<u>0 mi. rd.</u>	<u>1 mi. rd.</u>	<u>1 mi. rd.</u>
		144 mi.BCS	119 mi.BCS	0 mi.BCS	45 mi.BCS	44 mi.BCS
			234 mi total	187 mi total	0 mi total	52 mi total
Subtotal -- motorized	BTM	203 mi.	145 mi.	5 mi.	68 mi.	1 mi.
	BCS	<u>314 mi.</u>	<u>247 mi.</u>	<u>83 mi.</u>	<u>171 mi.</u>	<u>170 mi.</u>
		517 mi.	392 mi.	88 mi.	239 mi.	171 mi.
Roads (closed yearlong to motorized travel).	BTM	0 mi. rd.	1 mi. rd.	12 mi. rd.	1 mi. rd.	16 mi. rd.
	BCS	<u>2 mi. rd.</u>	<u>0 mi. rd.</u>	<u>20 mi. rd.</u>	<u>1 mi. rd.</u>	<u>1 mi. rd.</u>
		2 mi. total	1 mi. total	32 mi. total	2 mi. total	17 mi. total
Trails (closed yearlong to motorized travel).	BTM	17 mi. tr.	47 mi. tr.	174 mi. tr.	124 mi. tr.	174 mi. tr.
	BCS	<u>136 mi. tr.</u>	<u>182 mi. tr.</u>	<u>320 mi. tr.</u>	<u>255 mi. tr.</u>	<u>257 mi. tr.</u>
		153 mi total	229 mi total	494 mi total	379 mi total	431 mi total
Subtotal -- non-motorized	BTM	17 mi.	48 mi.	186 mi.	125 mi.	190 mi.
	BCS	<u>138 mi.</u>	<u>182 mi.</u>	<u>340 mi.</u>	<u>256 mi.</u>	<u>258 mi.</u>
		155 mi.	230 mi.	526 mi.	381 mi.	448 mi.
Wilderness Trails		463 mi.	463 mi.	463 mi.	463 mi.	463 mi.
Grand Total		1,135 mi.	1,085 mi.	1,077 mi.	1,083 mi.	1,082 mi.

* BTM is the Badger-Two Medicine area. BCS is the remainder of the Ranger District (south of Birch Creek).

NOTE: differences in grand totals between alternatives due to the differences in mileage of road and trail abandoned (decommissioned) and not managed as a designated system route.

Table III-18.

Number and Type of Trails Immediately Accessed from a Trailhead or Access Point

TRAILHEAD OR ACCESS POINT	ALT. 1		ALT. 2		ALT. 3		ALT. 4		ALT. 5	
	Quiet Trails		Quiet Trails		Quiet Trails		Quiet Trails		Quiet Trails	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Highway 2		5 atv 2 m/c	2 horse	3 atv	6 horse 1 hike		3 horse 1 hike	3 atv	6 horse 1 hike	
Palookaville (no public access)		2 atv 2 m/c		1 atv 1 m/c	4 horse		2 horse	2 atv	4 horse	
Mowitch Basin Road (no public access)		2 m/c	1 horse	1 m/c	2 horse		2 horse		2 horse	
Swift Reservoir Road	2 horse		2 horse		2 horse		2 horse		2 horse	
Blackleaf Road		1 atv 1 m/c		1 atv 1 m/c	2 horse			1 atv 1 m/c		1 atv 1 m/c
North Fork Teton Rd	3 horse	1 4x4 3 m/c	3 horse	1 atv 3 m/c	7 horse		6 horse	1 atv	6 horse	1 atv
South Fork Teton Rd	1 horse	1 atv 3 m/c	2 horse	3 m/c	5 horse		5 horse		5 horse	
S. Fk. Sun River Road	3 horse	2 4x4 1 atv 4 m/c	2 stock	1 4x4 3 atv 4 m/c	9 horse	1 4x4	5 horse	1 4x4 2 atv 2 m/c	5 horse	1 4x4 2 atv 2 m/c
Beaver-Willow Road		1 atv 4 m/c		1 atv 4 m/c	5 horse		2 horse	1 atv 2 m/c	2 horse	1 atv 2 m/c
Benchmark Road	4 horse 1 hike	2 atv 4 m/c	6 horse 1 hike	2 atv 2 m/c	10 horse 1 hike		6 horse 1 hike	2 atv 2 m/c	6 horse 1 hike	2 atv 2 m/c
Smith Creek Road	1 horse		1 horse		1 horse		1 horse		1 horse	
Elk Creek Road	2 horse	2 atv	2 horse	1 atv 1 m/c	4 horse		2 horse	1 atv 1 m/c	2 horse	1 atv 1 m/c
Dearborn Road	2 horse		2 horse		2 horse		2 horse		2 horse	

NOTE: horse = trail designed for stock and open to horses, hiking, and bicycles.
hike = trail designed for and open to hiking only. 4x4 = road open to high-clearance vehicles.
atv = trails designed for and open to ATVs. m/c = trails designed for and open to motorcycles.
Highway 2, Palookaville, Mowitch Basin Road, and Swift Reservoir road are primary trailheads for accessing the Badger-Two Medicine area. The other trailheads access the southern two-thirds of the non-Wilderness portion of the Rocky Mountain Ranger District.

2. ENVIRONMENTAL CONSEQUENCES

a. Alternative 1 - No Action Alternative

1. Direct and Indirect Effects

Solitude during the summer months would be available in about 177,010 acres classified as semi-primitive non-motorized, and another 1,270 acres classified as primitive. During the winter, about 78,655 acres closed to snowmobiling would provide solitude. All together, lands providing opportunities for solitude and natural quiet in the Rocky Mountain Division account for about 46% of the non-Wilderness acreage during the summer, and 20% during the winter.

Of the 11 public access routes and 2 Blackfeet Nation access routes to National Forest System lands in the Rocky Mountain Division, 8 routes provide direct access to non-motorized “quiet” trails during the summer. About 23% of the non-Wilderness transportation system (153 miles of trail and 2 miles of closed roads) provide opportunities for solitude during the summer.

2. Cumulative Effects

The proposed oil and gas drilling in the Badger-Two Medicine area would utilize some existing roads and also develop some additional road. This project could affect solitude in areas currently not open to motorized travel. Management of travel on existing roads and trails would not make the drilling project more or less viable. Motorized access to the drill site would not have a significant effect on solitude, because the proposed drilling is in a location already influenced by motorized traffic during the summer and winter.

Any proposed prescribed burns and fuel treatments are expected to have short-term effects on the solitude of the area during burning and patrol operations. Alternative 1 does not have any known cumulative effects with other proposed or foreseeable activities as listed in Appendix M that may affect solitude.

b. Action Alternatives 2-5

1. Direct and Indirect Effects

All action alternatives increase the opportunity for solitude and quiet trails during the summer and winter months. Alternative 3 provides the greatest increase in opportunities by designating 84% of the non-Wilderness lands for non-motorized summer recreation, and 100% of the non-Wilderness lands for non-motorized winter recreation. Alternative 2 provides a slight increase in opportunities for solitude during the summer, but more than doubles the opportunity for solitude during the winter by restricting snowmobiling on 48% of the area. Alternatives 4 and 5 provide greater increases in opportunities for solitude during both summer and winter, but not as much as Alternative 3.

All action alternatives increase the proportion of roads and trails designated for non-motorized use during the summer months. Alternative 3 designates the greatest proportion of the summer road and trail transportation system (85%) for non-motorized travel. Alternative 5 more than triples the proportion of the summer road and trail transportation system designated for non-motorized travel from the existing condition. Under Alternative 4 about 62% of the non-Wilderness transportation system (379 miles of trail and 2 miles of closed roads) would provide opportunities for solitude during the summer.

Of the 11 public access routes and 2 Blackfeet Nation access routes to National Forest System lands in the Rocky Mountain Division, all action alternatives increase the number of trailheads providing immediate access to non-motorized “quiet” trails. Alternative 3 provides the greatest increase in quiet trail access by designating all trails for non-motorized use, thereby making all 13 trailheads as immediate access points to quiet trails. Alternative 2 eliminates access to the trail system from Summit Campground, but retains the other access routes from Highway 2. Overall, Alternative 2 has 10 portals with immediate access to non-motorized “quiet” trails. Alternatives 2, 4 and 5 retain from 5 to 7 trailheads where there are opportunities to choose either a non-motorized or motorized trail.

Table III-19. Opportunities for Solitude by Alternative - Outside Wilderness

SUMMER ROS CLASSIFICATION	Map* Zone	ALT. 1	ALT. 2	ALT. 3	ALT. 4	ALT. 5
% of Area for: non-motorized summer recreation.	BTM	35%	44%	92%	74%	92%
	BCS	<u>50%</u>	<u>58%</u>	<u>80%</u>	<u>71%</u>	<u>71%</u>
	Wgt.Avg.	avg. 46%	avg. 54%	avg. 84%	avg. 72%	avg. 78%
non-motorized winter recreation.	BTM	49%	66%	100%	76%	100%
	BCS	<u>6%</u>	<u>39%</u>	<u>100%</u>	<u>62%</u>	<u>62%</u>
	Wgt.Avg.	avg. 20%	avg. 48%	avg. 100%	avg. 67%	avg. 75%
% of Road/Trail system (non-Wilderness) for: non-motorized summer recreation.	BTM	8%	25%	97%	65%	99%
	BCS	<u>31%</u>	<u>42%</u>	<u>80%</u>	<u>60%</u>	<u>60%</u>
	Wgt.Avg.	avg. 23%	avg. 37%	avg. 86%	avg. 62%	avg. 73%
Trailheads providing: immediate access to “quiet” trails only.	BTM	1	1	4	2	4
	BCS	2	2	9	3	3
no immediate access to “quiet” trails.	BTM	3	1	0	0	0
	BCS	2	2	0	1	1
choice of motorized or non-motorized.	BTM	0	2	0	2	0
	BCS	5	5	0	5	5

* BTM is the Badger-Two Medicine area. BCS is the remainder of the Ranger District (south of Birch Creek). Percentages are shown for each area, and then a weighted average calculated and shown for the entire Ranger District. For example: Alt. 1 shows 35% of the Badger-Two Medicine area available for non-motorized summer recreation, 50% of the southern two-thirds available for summer recreation, and a weighted average of 46% of the entire non-Wilderness portion of the Ranger District for non-motorized summer recreation.

2. Cumulative Effects

Alternatives 2 and 4 would have the same cumulative effects as described for Alternative 1.

The proposed oil and gas drilling in the Badger-Two Medicine area would utilize some existing roads that would be closed to motorized travel under Alternatives 3 and 5.

Management of travel on existing roads and trails would not make the drilling project more or less viable. Implementation of the drilling project would not have a significant effect on solitude, because the number of roads expected to be utilized by motorized vehicles is small in comparison to the mileage of roads and trails closed to motorized travel.

Any proposed prescribed burns and fuel treatments are expected to have short-term effects on the solitude of the area during burning and patrol operations. Alternatives 3 and 5 do not have any known cumulative effects with other proposed or foreseeable activities as listed in Appendix M that may affect solitude.

c. Effects Common To All Alternatives

1. Direct, Indirect, and Cumulative Effects

There are no effects on opportunities for solitude/quiet trails that are common to all alternatives.

Potential mitigation common to all alternatives could include educational signing at bulletin boards and trailheads about types of uses that one may encounter on multiple-use trails; and providing recreational maps of opportunities and specific activity maps encouraging use in designated areas.

d. Effects Common To All Action Alternatives

1. Direct, Indirect, and Cumulative Effects

Motorized travel on roads and lakes near the Bob Marshall Wilderness complex boundary has an effect on ROS classifications within Congressionally designated Wilderness. For example, road access to the West Fork Teton trailhead causes a small (5-acre) area to be classified as “roaded natural” within the Wilderness. Similarly, wheeled vehicle travel on designated trails near the Wilderness boundary and use of motorboats on Swift Reservoir and Gibson Reservoir causes some acreage within the Wilderness to be classified as “semi-primitive motorized”. Because some areas of the Wilderness are less than 3 miles from the nearest motorized road, they are classified as “semi-primitive non-motorized”. ROS classifications within designated Wilderness are shown in the following table for summer recreation. It appears that none of the action alternatives propose changes that would significantly affect ROS within the Wilderness.

Table III-20. Summer ROS Acreage by Alternative - Within Wilderness*

SUMMER ROS CLASSIFICATION	ALT. 1	ALT. 2	ALT. 3	ALT. 4	ALT. 5
RURAL	0	0	0	0	0
ROADED NATURAL	5	5	5	5	5
SEMI-PRIMITIVE MOTORIZED	1,665	1,155	1,155	1,155	1,155
SEMI-PRIMITIVE NON-MOTORIZED	18,780	17,080	16,020	17,080	17,080
PRIMITIVE	365,450	367,660	368,720	367,660	367,660
Total Acreage	385,900	385,900	385,900	385,900	385,900

*These motorized ROS classifications do not mean that motorized activity is authorized within the Wilderness. Instead, they show how motorized activity occurring outside the Wilderness causes an effect within the wilderness.

