

4.19 RECREATION

4.19.1 Effects Analysis Indicators and Methodology of Analysis

The analysis of effects to recreation includes the following issue and indicators:

Issue: The Stibnite Gold Project (SGP) may cause changes to recreation setting, access, facilities, and/or opportunities.

Indicators:

- Changes in motorized access (including restrictions and/or changes in maintenance) to recreation opportunities.
- Changes in recreation physical setting characteristics and related Recreation Opportunity Spectrum (ROS) class (by season) measured in acres.
- Changes in recreation facilities (trails, campgrounds, trailheads), including the level of development and setting.
- Changes in recreation use.
- Changes in recreation special use permits.
- Changes in recreation opportunities available.
- Changes in the ability to participate in recreation opportunities.

Recreation was analyzed using Geographic Information System (GIS) analyses, information, and analysis documented in reports prepared for the SGP, and existing studies and plans, including the Payette National Forest Land and Resource Management Plan (Payette Forest Plan) (U.S. Forest Service [Forest Service] 2003a) and Boise National Forest Land and Resource Management Plan (Boise Forest Plan) (Forest Service 2010), and the Valley County Comprehensive Plan (Valley County 2018). Recreation data managed by Payette National Forest (PNF) and Boise National Forest (BNF) include recreational use areas, such as roads and trails; developed recreational use areas, such as campgrounds and trailheads; groomed over-snow vehicle (OSV) trails; special management areas; special use permits; and ROS classifications. Data on existing ROS physical setting attributes were developed per the Recreation Opportunity Spectrum User Guide (Forest Service 1982) and National Recreation Opportunity Spectrum Mapping protocol (Forest Service 2003b).

For special use permits, the Idaho Outfitters and Guides Licensing Board (IOGLB) website provided information regarding permitted outfitters for each Idaho Department of Fish and Game, game management unit, in the area of analysis (the analysis area is defined in Section 3.19.1 and depicted on **Figure 3.19-1**). Although the number of outfitters permitted for each game management unit was available, as well as the activities and game species they are

permitted for, detailed use data (number of customers) for these private outfitting companies were not publicly available and were not included in the analysis. The Forest Service also provided information on recreation-related special use permits.

The following assumptions were made in the evaluation of the environmental consequences related to recreation:

- Increased access (in the form of new/improved roadways or off-highway vehicle (OHV)/OSV routes, or a change in maintenance) is assumed to lead to an increase in visitor use.
- Impacts to recreation experiences are assumed to result if changes to the recreation setting occur.
- Forest Service and county roads would not be closed during transmission line upgrades, but access may be delayed or detoured during upgrade activities.
- All winter use is considered dispersed recreation.
- Mine site construction, operation, or closure/reclamation would not be expected to change the origin of visitors to the analysis area and would not encourage visitors' use in new areas.
- Even after access is restored and sites are reclaimed, some visitors may choose to remain at their displacement location rather than return to the mine site area, due in part to the length of time visitors have been displaced and the comfort level acquired at the displaced location.
- Sound from SGP activities at recreation sites/areas is based on estimated noise that does not consider the effects of topography or vegetation. Therefore, the noise impacts presented in the analysis may be more extensive than may actually occur given the topography and vegetation present in the analysis area. See Section 4.6.1, Effects Analysis Indicators and Methodology of Analysis (Noise), for more information on noise calculations.
- Plume visibility was evaluated for a hypothetical observer at the Frank Church-River of No Return Wilderness (FCRNRW) as part of the air quality analysis in Section 4.3. Results of this analysis and the corresponding impacts to recreation are discussed under operation of the mine site. Specifically modeling details related to plume visibility can be found in Section 4.3.2, Direct and Indirect Effects (Air Quality).
- Mine site workers would not be expected to substantially contribute to recreational use outside of the Operations Area Boundary. During operations, workers would be primarily expected to stay on site in the Operations Area Boundary and use the recreation facilities provided in this area. During construction and closure/reclamation, it is assumed that most workers would be working in the analysis area but may recreate near the temporary construction worker housing areas.

- As described in Section 4.21.2, Direct and Indirect Effects to Social and Economic Conditions, while there would be an increase in local jobs due to the SGP, there would be limited in-migration of workers during construction, operations, and closure/reclamation. Most of the new in-migrating workers would be expected to relocate to Cascade and McCall given the existing distribution of population and housing within the communities closest to the mine site location, as well as the expected employee shuttle location. Only a minor portion of employees might be expected to relocate to Council or New Meadows and few, if any, new employees and their families would be expected to relocate to the small communities of Yellow Pine or Donnelly, or elsewhere within Valley County's or Adams County's unincorporated and more rural areas. Therefore, the SGP would not be expected to generate a large increase in the number of full-time residents within the analysis area. Therefore, only a small increase in recreational use would likely occur during SGP construction, operations, and closure/reclamation due to a small increase in the full-time residential population, and local residents may notice slightly more people participating in recreation activities locally.

Because there are no specific recreational use and demand estimates for the analysis area, the discussion of changes to recreational use is qualitative, and describes potential changes in recreational use due to displacement, increased access, reduced acreage for recreation, and changes in the recreation setting.

It was assumed that designated ROS classes contained in the Payette Forest Plan (Forest Service 2003a) and Boise Forest Plan (Forest Service 2010) for the relevant management areas are current, and match ROS GIS data available between April 20 and September 25, 2017. Designated ROS classes were determined for the analysis area through review of the Payette Forest Plan and the Boise Forest Plan. ROS GIS data from the PNF and BNF were overlaid on the analysis area to determine applicable ROS designations in the analysis area. Assumptions in the analysis of ROS and ROS physical settings include:

- Changes in access could result in change in physical setting criteria, thereby affecting overall ROS physical setting.
- "Better than Primitive Roads" was assumed to include roads with a maintenance level of "Passenger Car."
- A designation of "Primitive" was given to the portion of the FCRNRW in the analysis area in the PNF for which there was no ROS classification in GIS to match the adjacent Salmon-Challis National Forest designation.
- Roads with a maintenance level of "Basic Custodial Care – Closed" were not included in the ROS physical setting analysis or included as part of existing motorized road or trail facilities.

To address the issue and indicators listed in this section, the impacts to recreation have been structured into three topics: 1) recreation opportunities, facilities, access, and use, which are all

interdependent and therefore discussed together; 2) impacts to the ROS classes and physical setting; and 3) impacts to recreation special use permits.

To increase readability and avoid redundancy in the impact discussion for Alternatives 2 through 4, if the impacts on recreation (opportunities, facilities, access, and use) of an alternative component are the same as Alternative 1, this is stated and the impacts are not repeated. **Appendices N-2** through **N-5** (Chapter 4, Recreation Mapbooks and Figures, Alternatives 1 through 4) include maps of existing recreation facilities under operational conditions in both the summer and winter for each alternative and routes available in both the winter and summer under each alternative.

Effects on the physical ROS in the analysis area focus on two impacts: (1) identified inconsistencies with the existing designated ROS classes due primarily to changes in where motorized use would be allowed, or increased development/landscape modification with implementation of the action alternative; and (2) impacts to the estimated ROS physical setting. The estimated ROS physical setting class is not always the same as the designated ROS class of an area; therefore, there may be impacts to the physical setting that may not result in a change to the designated ROS class if the class allows more landscape modification than the physical setting currently includes. There also may be differences in impacts to both topics (designated ROS classes and estimated ROS physical setting) between winter and summer. These are noted in the discussion of impacts to designated ROS classes and impacts to the estimated ROS physical setting, where appropriate. Almost all impacts to designated ROS classes and the estimated ROS physical setting would occur from construction through closure and reclamation. Impacts after reclamation are described for those components that may have such impacts. Impacts that would only occur during construction are noted as well. Maps of estimated ROS physical settings are included in **Appendices N-2** through **N-5** for each alternative under both summer and winter conditions.

The impacts to recreation special use permits describe the impacts from construction, operations, and mine closure to the recreation–related special use permits approved for the analysis area.

4.19.2 Direct and Indirect Effects

The following analysis of effects associated with recreation is considered in the overall context of recreation within the analysis area. Elements of this context include:

- The analysis area includes over 170 miles of trails open to motorized use.
- In the winter, snowmobiling is popular on 96 miles of groomed OSV routes that branch off the plowed main routes through the analysis area.
- Recreation opportunities such as hunting, fishing, hiking, camping, and horseback riding also are popular throughout the analysis area, with opportunities available at developed facilities such as campgrounds and trails, and at dispersed locations such as dispersed

camping areas and specially designated areas such as inventoried roadless areas (IRAs), the FCRNRW, and Wild and Scenic Rivers.

- The Warm Lake area contains most of the developed recreation facilities (apart from trailheads) in the analysis area. Scattered campgrounds and other facilities also are located in the Big Creek and Landmark areas and along Johnson Creek Road (County Road [CR] 10-413) around and south of the village of Yellow Pine. Developed recreation facilities on the PNF and BNF primarily include campgrounds, cabins/lookouts, trailheads, and trails.
- Access to the analysis area is primarily from the west via paved roads that lead to unpaved county and Forest Service roads. The main access roads (from west to east) include State Highway 55 and Warm Lake Road (CR 10-579) to Landmark. From Landmark, the main access roads are county-maintained gravel roads that travel north to Yellow Pine and up to Big Creek. From these main roads, connecting unpaved Forest Service roads provide access to National Forest System (NFS) lands and facilities.
- The IOGLB issues state licenses to commercial outfitters and guides in the state of Idaho and is responsible for the administration of the Idaho Outfitters and Guides Act (Title 36, Chapter 21, Idaho Code), while the Forest Service authorizes outfitter/guide services and facilities on NFS lands. In 2019, special use permits issued by the Forest Service within the analysis area included three lodges, one bicycle event, four outfitters and guides, two organizational camps, and 62 recreation residences.
- Designated ROS classes in the analysis area vary by season, and include Rural, Roaded Natural, Roaded Modified, Semi-Primitive Motorized, Semi-Primitive Non-Motorized, and Primitive.

4.19.2.1 Alternative 1

This section discusses the impacts on recreation (opportunities, facilities, access, and use) from Alternative 1. A few facilities are not discussed for Alternative 1 because they would not impact recreation, including the Stibnite Gold Logistics Facility and modifications to existing substations and the new substation at the Stibnite Gold Logistics Facility (Scott Valley substation). The Stibnite Gold Logistics Facility would be entirely on private property and would not be visible or audible from any known developed recreation areas/sites in visual or audible distance of the facility.

The upgraded transmission line west of NFS lands would be on private property or Bureau of Reclamation lands at Lake Cascade. Although the transmission line would pass by Lake Cascade, the taller structures would not be visible from the lake or existing recreation sites around the lake, and therefore would not impact the recreation setting at the lake. Impacts to recreation related the transmission line outside of NFS lands are limited to temporary impacts to access roads used to reach recreation facilities and changes to the recreation setting near the transmission line.

4.19.2.1.1 RECREATION OPPORTUNITIES, FACILITIES, ACCESS, AND USE

4.19.2.1.1.1 Construction

Mine Site Facilities

In the mine site, public use would be restricted within the Operations Area Boundary during construction, operations, and closure and reclamation by fencing near the security-monitored gates, and signs warning the public against entry into the Operations Area Boundary. Therefore, beginning at construction, approximately 13,452 acres of NFS lands (and approximately 775 acres of private patented lands within the Operations Area Boundary) would be inaccessible to dispersed recreation (see maps in **Appendix N-2**). Existing dispersed recreational use and opportunities that occur in this area would be displaced to other locations in or adjacent to the analysis area. Construction at the mine site would result in moderate visual contrast primarily due to expansion of mining activities and introduction of nighttime lighting. Therefore, the recreation setting would be less-natural looking compared to the existing recreation setting, especially at night. Mine site construction noise could be heard up to 1.2 miles from the mine site based on noise modeling (AECOM 2019) of the distance at which noise levels could be above 40 decibels on the A-weighted scale (dBA) level (i.e., the lower end of the assumed baseline ambient level for wilderness areas; see Section 4.6, Noise). The distance of 1.2 miles would not extend beyond the Operations Area Boundary and, therefore, would be unlikely to reduce recreation opportunities outside the Operations Area Boundary. Wildlife in the analysis area would be affected by construction noise, traffic, and activities likely resulting in displacement of wildlife to areas away from the analysis area. Therefore, opportunities to participate in hunting, fishing, wildlife and bird watching would be displaced as well, relocating use related to these activities to locations away from the mine site within the analysis area, or possibly outside of the analysis area. Impacts on recreation opportunities at and around the mine site would begin during construction and continue until the mine was closed and reclaimed and the area reopened to dispersed recreation use, except for long-term water treatment facilities, which would not be removed and therefore would be permanently inaccessible to dispersed recreation use. Some visitors may choose to continue using their displacement locations rather than return to the mine site area due to permanent changes in the recreation setting within the Operations Area Boundary.

Burntlog Route

The Burntlog Route would include upgrades to 20 miles of the existing Burnt Log Road (National Forest System Road [FR] 447), including widening, resurfacing, and maintenance, and upgrades to Meadow Creek Lookout Road (FR 51290) and Thunder Mountain Road (FR 50375). These activities may require temporary road closures and/or detours along these roads, thereby temporarily reducing access along these roadways to both sites/areas along the roadway as well as trails/areas accessed from these roads and roads/trails that cross these roadways (see maps in **Appendix N-2**). This temporary reduction in access also may temporarily reduce recreation opportunities along Burnt Log Road, including at the Mud Lake

and Burntlog dispersed camping areas, as well as on roads/trails and in the areas accessed from Burnt Log Road, including the Pistol Lake Trailhead into the FCRNRW.

Activities related to construction of the new sections of Burntlog Route (approximately 14.9 miles) including noise, use of borrow and staging areas, temporary trailer camps, vegetation clearing, road building, and traffic, may affect the recreation setting for users within visual (2 to 3 miles east and less than 1 mile west) and audible (1 mile) distance of construction activities and facilities, including the Mud Lake dispersed camping area, Burntlog dispersed camping area, Thunder Mountain/Riordan Trailhead, Meadow Creek/Summit Trailhead, Meadow Creek Lookout, and Landmark. Noise from construction activities related to building the Burntlog Route, access road traffic (including individual heavy and light trucks) and borrow areas could be above ambient levels (40 dBA) into the FCRNRW, primarily from the Black Lake area north to the mine site area (AECOM 2019).

Changes in the recreation setting along the Burntlog Route construction corridor (road corridor and surrounding areas) could lead to displacement of dispersed recreational use, particularly related to non-motorized activities, wilderness activities, wildlife-related recreation activities (due to wildlife displacement), and dispersed recreation camping at the Mud Lake and Burnt Log dispersed camping areas, which currently typically occur in a quieter, less-developed setting. Camping at Mud Lake would be particularly affected as construction activity would be located within 100 feet of the camping area. Impacts would be localized to the Burntlog Route area and recreation facilities/areas currently accessed from the Burnt Log Road. Impacts would begin during construction and would continue through operations and closure/reclamation.

Yellow Pine Route

Summer

Use of Johnson Creek Road (CR 10-413) and the Stibnite Road portion of the McCall-Stibnite Road (CR 50-412) as the primary route to the mine site during the construction of the Burntlog Route could result in temporary impacts (1 to 2 years) to motorized recreation access due to potential delays, traffic, and safety-related issues from mine-related traffic (please see Section 4.18, Public Health and Safety, and Section 4.16, Access and Transportation, for more information on safety impacts). Access delays and traffic would affect recreation sites/areas along these roads, as well as sites and areas accessed from these roadways, including the Big Creek area. The increase in traffic and noise along these roadways also may affect the recreation setting for recreation sites and areas along these roadways, leading to a change in recreation experience for some visitors. Traffic on Johnson Creek would more than double (annual average daily traffic [AADT] would rise from 57 to 122), thereby increasing the noise and activity near campgrounds and trailheads adjacent to this road. Recreation facilities potentially impacted by increased traffic and related noise along the Yellow Pine Route would include Quartz Creek, and Burntlog Trailheads; Buck Mountain, Trout Creek, Ice Hole, Golden Gate, and Yellow Pine Campgrounds; Twin Bridges dispersed camping area; and Johnson Creek Cabin. Therefore, the recreation setting of these facilities may be altered to a more developed setting due to a large increase in the sights and sounds of humans. Recreationists

may be displaced to avoid noise associated with construction activities and/or construction traffic along Johnson Creek and Stibnite Roads, particularly recreationists participating in non-motorized activities, as the noise of a passing heavy truck could be heard up to 0.5 mile from the road (AECOM 2019). Wildlife-related recreation opportunities also may decrease along these roadways due to wildlife displacement from construction traffic and noise. Any displacement of dispersed recreation, reduction in recreation opportunities, or access delays would be temporary along Johnson Creek Road (CR 10-413) and Stibnite Road (CR 50-412) until Burntlog Route construction activities were completed (1 to 2 years).

Winter

Currently, Johnson Creek Road (CR 10-413) is plowed from Yellow Pine south to Wapiti Meadow Ranch (8.6 miles total). The remaining section of Johnson Creek Road to Landmark is a groomed OSV route (approximately 17 miles). During construction of the Burntlog Route, Johnson Creek Road would be plowed from Yellow Pine to Landmark; therefore, this road could not be used as a groomed OSV route from Wapiti Meadow Ranch south to Landmark. Plowing Johnson Creek Road would reduce the miles of groomed OSV facilities for 1 to 2 years and disrupt connections between OSV routes. To continue providing OSV access to Landmark during Burntlog Route construction, a groomed OSV route would be created adjacent to the western side of Johnson Creek Road between the proposed Cabin Creek Road groomed OSV route and Landmark (see maps in **Appendix N-2**).

Once the Burntlog Route was constructed, Johnson Creek Road would revert to a groomed OSV route from Wapiti Meadow Ranch to Landmark. The change in location of the groomed OSV route along Johnson Creek Road from the roadway to the western side of the road for approximately 7 miles would not be expected to alter recreational use of this route, although temporary use of Johnson Creek Road for mine access during construction of the Burntlog Route may alter recreation experiences for motorized users due to increased traffic along the roadway, leading to displacement of some users.

The plowing of Johnson Creek Road would provide additional motorized access and winter recreation opportunities along this road, thereby potentially increasing winter recreational use along this road. However, plowing and construction traffic on Johnson Creek Road and Warm Lake Road (described below) and the location of the temporary groomed OSV route along the western side of Johnson Creek Road may make it difficult and/or unsafe for OSV's to cross Johnson Creek Road or Warm Lake Road to reach other OSV routes in the Landmark area, including along Sand Creek Road (FR 437), Burnt Log Road (FR 447), Horn Creek Road (FR 414), Warm Lake Road, or North Fork Sulphur Creek Road (FR 442). Therefore, plowing and construction traffic on Johnson Creek Road and Warm Lake Road would limit OSV access to the Sand Creek Road, Burnt Log Road, Horn Creek Road, Warm Lake Road, and North Fork Sulphur Creek Road OSV routes, resulting in reduced OSV opportunities and use. Impacts would be focused on the Johnson Creek Road corridor and would cease when the Burntlog Route is completed and plowing of Johnson Creek Road ceased.

Ditch Creek Road (FR 410) is a groomed OSV route for 2 miles and is located off Johnson Creek Road (CR 10-413) just north of Trout Creek Campground. Due to the plowing of Johnson Creek Road during the construction of the Burntlog Route, OSV access to Ditch Creek Road would not be feasible on Johnson Creek Road from the south; OSV access on the new Cabin Creek Road would get close to Ditch Creek Road, however, overland travel or travel on the plowed Johnson Creek Road with mine traffic would be needed to reach the Johnson Creek Road junction with Ditch Creek Road. Therefore, access and use of the 2-mile Ditch Creek Road OSV route would be greatly reduced, because the route would be cut off from other OSV routes until construction of the Burntlog Route was completed, and Johnson Creek Road reverted to a groomed OSV route. Impacts would begin with construction and end when the Burntlog Route was complete and plowing of Johnson Creek Road ceased.

Warm Lake Road

Summer

Impacts to recreation access, opportunities, settings, experiences and use from SGP-related traffic use of Warm Lake Road (CR 10-579) would be similar to those described above for the Yellow Pine Route (Johnson Creek and Stibnite Roads); however, Warm Lake Road (CR 10-579) would have a less substantial increase in traffic compared to Johnson Creek Road (CR 10-413) increasing by 5.5 percent from 1,174 to 1,239 AADT. Recreation facilities potentially impacted by increased traffic and related noise along Warm Lake Road (CR 10-579) include Big Creek Summit and Bear Creek/Warm Lake trailheads, as well as Summit Lake, Warm Lake, and South Fork Salmon River campgrounds. Impacts to recreation access, opportunities, settings, experiences and use along Warm Lake Road (CR 10-579) would begin during construction and would continue due to increased traffic through operations and closure/reclamation.

Winter

Approximately 11 miles of existing groomed OSV route from Warm Lake to Landmark on Warm Lake Road (CR 10-579) would be closed during construction and operation due to plowing of Warm Lake Road as a mine site access road. To continue providing OSV access to Landmark, a 10.4-mile groomed OSV route between Warm Lake and Trout Creek Campground on Cabin Creek Road (FR 467) would be created as part of Alternative 1 along with a parking area, resulting in a new winter access facility that would be maintained by Valley County (see maps in **Appendix N-2**). From Trout Creek Campground, OSV users could continue down Johnson Creek Road (CR 10-413) to Landmark on a groomed OSV route. It is expected that although the new OSV route to Landmark would be longer (via the new Cabin Creek Road groomed OSV route), existing use of the OSV route on Warm Lake Road would transfer to the new Cabin Creek Road route. In addition, the new 10.4-mile groomed OSV route along Cabin Creek Road may lead to dispersed winter recreational use along this new route, because the route would provide winter recreation opportunities in an area that currently does not have many winter opportunities due to lack of access and would be the only available easterly OSV route to Landmark. Impacts to winter recreation access, opportunities, and use would be focused on

Warm Lake Road (existing OSV route portion); the new OSV route corridor along Cabin Creek Road; and the Landmark area. Impacts would begin during construction and continue through operations and closure/reclamation until the existing 11-mile OSV route portion of Warm Lake Road reverted to an OSV route and use of the Cabin Creek Road OSV route ceased.

Temporary Road Closures of Stibnite and Thunder Mountain Roads Through the Mine Site

During construction (prior to the completion of the Burntlog Route) access through the mine site would continue, but there may be half-day to multiple day road closures of Stibnite Road (CR 50-412) and Thunder Mountain Road (FR 50375). During the summer, temporary closure of these roads could increase travel time to access to recreation areas and sites further east on Thunder Mountain Road (FR 50375). Lack of access to Thunder Mountain Road (FR 50375) would preclude recreationists from reaching recreation facilities, including Monumental Summit Interpretive Site, Monumental Trailhead, Lookout Mountain/Thunder Mountain Trailhead, the Idaho Centennial Trail, other dispersed recreation areas in the FCRNRW, and portions of the Meadow Creek, Sugar Mountain, and Horse Heaven IRAs via Stibnite Road (CR 50-412). Therefore, recreational use and opportunities in these areas/sites would be reduced in the summer due to reduced access during road closures. Impacts would be localized to Stibnite Road, Thunder Mountain Road, and areas/sites accessed from these roads. Closure of Stibnite and Thunder Mountain roads would affect recreationists that typically access areas/sites via Yellow Pine, and recreationists that use these roads/areas in the winter. Impacts to recreation access, use, and opportunities along Thunder Mountain Road (FR 50375) would begin during construction, and continue until the Burntlog Route was complete and open to public use when no other access is available to the Thunder Mountain area.

OHV Trail

The OHV Trail from a new transmission line access road to Meadow Creek Lookout Road (OHV Trail) would be constructed (approximately 3 miles of new trail) in an area that does not have existing motorized use trails. This OHV Trail would connect Meadow Creek Lookout Road (FR 51290) to a new transmission line access road on the PNF (see **Appendix N-2**, Operations Routes Summer East End map). The new transmission line access road would connect to the end of Forest Trail (FT) 233 (approximately 2 miles to the west) near the boundary between the BNF and PNF. FT 233 ends at the PNF and BNF boundary, and there would be an approximately 2-mile gap in public motorized use on roads and trails from the end of FT 233 to the OHV Trail.

Construction activities may affect the recreation setting for users within visual and audible distance of construction activities and facilities. Changes in the recreation setting along the trail corridor could lead to displacement of dispersed recreational use, particularly related to non-motorized activities, and wildlife-related recreation activities (due to wildlife displacement), which currently typically occur in a quieter, less-developed, and non-motorized setting. Impacts would be localized to the trail corridor. Impacts would begin during construction and would continue through operations.

Landmark Maintenance Facility

The Landmark Maintenance Facility would be located approximately 0.1 mile south of Landmark and the historic cabins in Landmark. Access to the maintenance facility would be off Warm Lake Road (CR 10-579). Construction activities may require temporary closure or delays on Warm Lake Road, which could adversely affect the recreation experience for some recreationists. It is assumed that construction equipment would travel east on Warm Lake Road. Therefore, delays would likely affect access to Horn Creek Road (FR 414), Rec Spur 579U2 (FR 579U2), 450 South (FR 450), and Burnt Log Road (FR 447), which are east of the maintenance facility site. If the maintenance facility was constructed in conjunction with the Burntlog Route and improvements on Burnt Log Road, there may be lengthier delays and additional traffic along Warm Lake Road in this area.

Noise associated with construction activities could reduce opportunities for noise-sensitive recreation activities at and around the maintenance facility location (up to 1.1 miles away) (AECOM 2019), including wildlife-related recreation activities, because wildlife may be displaced. Construction activities would not affect use of the historic cabins; however, construction noise at the site may affect the recreation setting of the cabins, because it may be audible from the cabin sites. Therefore, some recreationists may choose to visit other areas or sites to avoid delays or noise from construction activities. Any reduction in recreation opportunities, displacement of dispersed recreational use, or changes in access would be temporary until maintenance facility construction was completed. These impacts would be localized to the area surrounding the maintenance facility, and the roads/trails accessed east of the facility off Warm Lake Road.

Communications Facilities

There are three potential cell tower sites where a 60-foot-tall tower would be constructed. The two sites within the Operations Area Boundary would not result in additional recreation-related impacts besides those discussed above for construction of mine site facilities. The third site is on Meadow Creek Lookout Road (FR 51290) at the old Meadow Creek Lookout. Construction activities for this cell tower option could interfere with hiking use in the lookout area and construction activities may affect the recreation setting for users within visual and audible distance of construction activities and facilities. Impacts would begin during construction and would conclude with construction of the cell tower.

In addition, a series of 10-foot-tall repeaters would be constructed on 3-foot by 3-foot concrete pads. Sites within the Operations Area Boundary would not result in additional construction impacts besides those discussed above for construction of mine site facilities. Construction of repeaters at the Landmark Maintenance Facility would not result in additional construction impacts besides those discussed above for the Landmark Maintenance Facility. Construction of the repeaters at the Meadow Creek and Thunderbolt Lookouts would result in the same impacts described above for construction of the cell tower at the Meadow Creek Lookout. Construction of a repeater site at a high point near Trapper Creek/Burnt Log Road intersection may affect the recreation setting for users within visual and audible distance of construction activities and facilities. The repeater site would be located in an area that does not have existing road access.

Changes in the recreation setting along access route and repeater site could lead to displacement of dispersed recreational use, particularly related to non-motorized activities, and wildlife-related recreation activities (due to wildlife displacement), which currently typically occur in a quieter, less-developed, and non-motorized setting. Impacts would be localized to the access route and repeater site. Impacts would begin during construction and would conclude with construction of the repeater site.

Transmission Line Upgrades

Transmission line upgrades along Warm Lake Road (CR 10-579), Johnson Creek Road (CR 10-413), and Cabin Creek Road (FR 467) could result in temporary road detours or delays as a result of construction activities and traffic along these roads. There could be temporary delays in accessing other roads, trails, and facilities along these roadways, including the Big Creek Summit, Cabin Creek/Thunderbolt, and Trout Creek/Thunderbolt Trailheads; Burnt Log Trail (FT 075); South Fork Salmon River, Trout Creek, Ice Hole, Golden Gate, and Yellow Pine Campgrounds; Twin Bridges dispersed camping area; and Johnson Creek Cabin. Such delays could adversely affect the recreation experience for some recreationists.

Noise associated with construction activities could reduce opportunities for more noise-sensitive recreation activities along the corridor (for a distance of 0.6 to 1 mile) (AECOM 2019), including wildlife-related recreation activities, because wildlife may be displaced. Noise from transmission line upgrade construction activities and/or utility access spur road construction activities may be above ambient levels (above 40 dBA) at the Big Creek Summit Trailhead, Cabin Creek/Thunderbolt Trailhead, Trout Creek/Thunderbolt Trailhead, Trout Creek Campground, Twin Bridges dispersed camping area, Ice Hole Campground, and South Fork Salmon River Campground (AECOM 2019). The Ice Hole and Trout Creek Campgrounds in particular would have more construction noise impacts due to their close proximity to the transmission line.

Construction activities would not occur at night, and therefore would not affect overnight camping, but may affect the setting of campgrounds during the day, particularly at the Ice Hole and Trout Creek campgrounds, and Twin Bridges dispersed camping area where construction activities would be evident (visually or audibly). Therefore, some recreationists may choose to visit other areas or roads, or access facilities/trailheads from other roads to avoid delays or noise from construction activities. Any reduction in recreation opportunities, displacement of dispersed recreational use, or changes in access would be temporary until transmission line upgrades were completed (2 to 3 years). These impacts would be localized to portions of Warm Lake Road (CR 10-579), Johnson Creek Road (CR 10-413), and Cabin Creek Road (FR 467), as well as facilities and roads accessed from these roads. Impacts would be temporary and would conclude when the transmission line upgrades were completed.

Transmission line upgrades between Cascade and Donnelly also may lead to temporary road detours or delays at Stonebreaker Lane and Loomis Lane (see maps in **Appendix N-2**). These streets provide access to recreation sites at Lake Cascade, specifically Sugarloaf Campground and Boulder Creek Day Use Area, respectively. Such delays could adversely affect the recreation experience for some recreationists. Both recreation sites are over 0.5 mile from the

transmission line and, therefore, would likely not be affected by construction noise or visibility of construction activities. However, road delays or detours may result in some recreationists choosing to visit other recreation sites at the lake. Any displacement of recreational use or changes in access would be temporary until transmission line upgrades were completed (2 to 3 years). These impacts would be localized to portions of Stonebreaker Lane and Loomis Lane, as well as facilities accessed from these roads. Impacts would be temporary and would conclude when the transmission line upgrades were completed. Recreation sites accessed from roads in Cascade and Donnelly would not be affected, as the transmission line is located on the east side of State Highway 55 and, therefore, would not result in traffic delays on the west side of the highway in these towns where the recreation site access roads are located.

New Transmission Line to Mine Site

A new transmission line and associated access road to the mine site would be located along Horse Heaven Road (FR 416W) and Trail FT 233, and then continue from FT 233 east to the mine site. Transmission line construction activities may result in temporary road detours or delays in accessing other trails/areas from Horse Heaven Road (Riordan Lake Trail FT 097 primarily and trails accessed from this trail). Such delays could adversely affect the recreation experience for some recreationists. Specifically, construction activities could temporarily affect access to and use of the Riordan Trailhead on Horse Heaven Road (FR 416W) that provides access to FT 097, which leads to Riordan Lake, a popular fishing location. Impacts to this trailhead could result in a temporary reduction in recreation opportunities from this trailhead and temporary decrease in use of this trailhead. Noise associated with construction activities could reduce opportunities for noise-sensitive recreation activities along the transmission line corridor (for a distance of 0.6 to 1 mile) (AECOM 2019), including wildlife-related recreation activities, because wildlife may be displaced. Noise from transmission line construction activities may be above ambient levels (above 40 dBA) at the Meadow Creek Lookout and Riordan Trailhead (AECOM 2019). Therefore, some recreationists may choose to visit other areas or trails to avoid delays or noise from construction activities. Displacement of dispersed recreational use, reduction in recreation opportunities, or changes in access would be temporary until the transmission line was constructed. These impacts would be localized to the transmission line corridor, including Horse Heaven Road (FR 416W) and trail FT 233, as well as trails and areas accessed from Horse Heaven Road (FR 416W), including the Riordan Trailhead.

Johnson Creek Substation

The Johnson Creek substation would be located along Johnson Creek Road (CR 10-413) approximately 0.8 mile south of the Johnson Creek airstrip. Construction of the substation would result in impacts similar to those described for transmission line upgrades, including potential temporary delays accessing Johnson Creek Road (CR 10-413) and the areas and sites along this road, which could affect the recreation experience for some users. Noise associated with construction of the substation could reduce opportunities for noise-sensitive recreation activities, including wildlife-related activities, because wildlife may be displaced from the area around the substation. Construction activities at the substation would not be expected to affect physical use (landing/taking off) at the airstrip; however, construction noise may affect the recreation

experience for some users. Any reduction in recreation opportunities or changes in access would be temporary until construction of the substation was completed. These impacts would be localized to the substation area.

4.19.2.1.1.2 Operations

Mine Site Facilities

Helicopters used during drilling may be visible and/or audible from nearby recreation areas, including the FCRNRW, which would impact the recreation setting, particularly for wilderness users. The presence of helicopters nearby would reduce feelings of remoteness and solitude in the wilderness, potentially impacting the recreation experience of wilderness visitors. Impacts would be temporary, because helicopters would only be used during drilling exploration.

Impacts related to reduction in acreage for recreation, described under Construction for mine site facilities, also would apply to operations of the mine site, because land within the Operations Area Boundary would remain inaccessible to the public during mine site operations.

Operation of the mine also would likely reduce recreation opportunities from the area adjacent to the Operations Area Boundary due to a change in recreation setting from increased development and noise. Operation of the mine site would result in a less-natural looking and sounding recreation setting compared to the existing recreation setting and would have substantially more man-made development and activity within the Operations Area Boundary. The mine site would introduce additional modifications to the landscape similar to those present, which would further reduce the scenic integrity of the area. The mine site also would change the landscape character of the night sky by increasing sky glow or light pollution. Activities at the mine site would be visible from several recreation areas, roads, and trails including: Thunder Mountain Road (FR 50375), Meadow Creek Lookout Road (FR 51290), the Meadow Creek/Summit Trailhead, and Meadow Creek Lookout. Given the closeness of the mine site to the FCRNRW boundary, portions of the FCRNRW would have unobstructed views of the mine site, including nighttime lighting, at superior viewing locations such as mountain tops or ridgelines. Based on modeling results (see Section 4.3.2, Direct and Indirect Effect to Air Quality), an emissions plume would be visible within the FCRNRW for up to 30 percent of annual daytime hours, with greater potential for plume visibility at times of low sun angle and with terrain as the viewing background, compared to sky as the background. The plume also would be visible for 63 to 73 percent of post-sunset nighttime hours. Presumably, if the plume would be visible within the FCRNRW, it also would be visible from other nearby NFS lands outside the Operations Area Boundary, thus affecting the recreation setting for both wilderness and non-wilderness users.

Operational noise would be audible up to 1.7 miles 24 hours a day (blasting up to 2.1 miles) (AECOM 2019), which would slightly extend past the Operations Area Boundary mainly on the east side of the mine site, reducing recreation opportunities in these areas for activities that depend on a quiet, natural environment. Wildlife in the analysis area also would be affected by

operational noise, traffic, and activities, likely resulting in displacement of wildlife away from the analysis area.

Due to the changes in the recreation setting from mine site operations, some visitors may choose to participate in recreation opportunities elsewhere in the analysis area or the surrounding management areas where mine site operations would not be visible or audible. Impacts on recreation opportunities at and around the mine site would begin during construction and continue until the mine was decommissioned and the area reopened to dispersed recreation use. Some visitors may choose to remain at their displacement location rather than return to the mine site area due to permanent changes in the recreation setting within the Operations Area Boundary. Implementation of Midas Gold Idaho, Inc. (Midas Gold) and Forest Service mitigation measures specific to lighting could reduce sky glow.

Burntlog Route

Year-Round

Use of the Burntlog Route as the primary route to the mine site during operations could result in potential displacement of motorized recreational use in the summer and winter from the existing Burnt Log Road (FR 447) to other roads due to the increased traffic on Burnt Log Road, and potential traffic delays and safety-related issues from mine-related traffic along the Burntlog Route. Traffic on the Burntlog Route would be over 3.5 times the existing traffic, with AADT rising from 27 to 95 during mining operations.

Use of the Burntlog Route from mine-related traffic and borrow source areas would result in increased noise and development along this route. Traffic and development would reduce opportunities for some recreation activities, particularly wildlife-based recreation activities, because wildlife would likely be displaced from the roadway area. In addition, the presence of a roadway in a previously roadless area would reduce opportunities for non-motorized activities for users that specifically prefer a roadless and/or quiet and undeveloped environment. Due to the potential increase in dispersed recreational use along the route and/or use of the Burntlog Route for mine traffic, as well as the less-natural looking and sounding recreation setting along the Burntlog Route (including nighttime lighting), some dispersed recreational users, particularly non-motorized users, may be displaced to other locations that are less noisy, used, accessible, and modified visually. Operational traffic noise on the roadway would be above background ambient levels (40 dBA) at the Mud Lake and Burntlog dispersed camping areas and Thunder Mountain/Riordan Trailhead, and within portions of the FCRNRW as noise from passing heavy trucks may be heard up to 0.5 mile away (AECOM 2019). Road maintenance noise would be above background ambient levels up to 0.8 mile from the road in the summer, and up to 1 mile in the winter with the additional road maintenance equipment used for snow removal, which would include at the Mud Lake and Burntlog dispersed camping areas and Thunder Mountain/Riordan and Meadow Creek/Summit Trailheads, as well as portions of the FCRNRW and Landmark (AECOM 2019). The Burntlog Route would generally be visible 2 to 3 miles east of the route, including some areas within the FCRNRW, and less than one mile west of the route and would introduce nighttime lighting to areas that currently do not have such lighting. The

route would result in a moderate to strong level of visual changes, particularly for the Mud Lake and Burntlog dispersed camping areas, which would be located very close to the roadway. Wilderness users may be particularly affected by the Burntlog Route, because the recreation setting (including the nighttime setting) is of great importance for wilderness experiences and the primitive recreation opportunities provided by the FCRNRW. The miles of roads adjacent to the FCRNRW would increase, the setting would be altered, requiring users to penetrate further into the wilderness to achieve a primitive setting.

Fish adjacent to the Burntlog Route may be affected by increased sediment and could be affected if a spill were to occur. While there may be injury or mortality to individual fish, population-level effects are not expected. Therefore, there may be decreased fishing success immediately along the Burntlog Route, but there would continue to be opportunities for fishing within the creeks crossed by the Burntlog Route.

Burntlog Route also would convert 350 acres to use as a road, road slopes or borrow sources. The 14.9 miles of Burntlog Route would increase the area with a semi-primitive motorized recreation setting. This could increase dispersed recreation use in some areas along Burntlog Route. However, mine-related traffic could displace recreation to other locations in or adjacent to the analysis area. Impacts would generally be along the Burntlog Route corridor; would begin once the route was constructed; and continue until closure and reclamation activities are completed. Impacts during closure and reclamation are described in Section 4.19.2.1.1.3.

Summer

The Burntlog Route would result in direct impacts to recreation access due to the use of a new access facility. The Burntlog Route, including 20 miles of improved Burnt Log Road (FR 447) and 14.9 miles of new Burntlog Route roadway (see maps in **Appendix N-2**), would be open to the public when other public access routes are closed. Direct impacts to recreation would include a new access route; improved access to the existing Burnt Log Road (FR 447) and adjacent recreation areas/facilities (including the FCRNRW and Burnt Log IRA) for a wider variety of vehicle types, particularly low-clearance passenger vehicles; and access to areas that were previously not accessible to motorized vehicles. Therefore, this new route may increase recreational use in these newly accessible areas (e.g., Black Lake), and may lead to increased use of existing recreation facilities (roads, trails, trailheads, Meadow Creek Lookout, Riordan Lake, Mud Lake dispersed camping area, Burntlog dispersed camping area, etc.) and adjacent recreation areas such as IRAs. Therefore, the Burntlog Route would increase recreation opportunities for both motorized and non-motorized uses in areas where recreation opportunities were limited due to limited access. The Burntlog Route also would alter recreational use in the analysis area by offering substitute locations for visitors who are displaced from the mine site and areas accessed off Stibnite and Thunder Mountain Roads. These impacts would primarily affect recreationists originating from Yellow Pine, and recreationists using the FCRNRW and recreation areas along the existing Burnt Log Road (FR 447) and new Burntlog Route.

Winter

Burntlog Route would be plowed in the winter, potentially providing additional opportunities and access for winter motorized recreation, which may result in increased winter recreational use along the Burntlog Route corridor (see maps in **Appendix N-2**). However, the extent of potential increased winter use of the Burntlog Route may be limited by OSV mileage ranges.

Plowing of the approximately 38-mile Burntlog Route, which includes the existing Burnt Log Road, would result in the loss of 9.8 miles of infrequently groomed OSV route along the existing Burnt Log Road. Horn Creek Road (FR 414) is a groomed OSV route for 4 miles and is accessed from Johnson Creek Road (CR 10-413) and Burnt Log Road (FR 447). Sand Creek Road (FR 437) is a groomed OSV route for 2 miles and is accessed from Burnt Log Road (FR 447). Warm Lake Road east and south of the junction with Johnson Creek Road is a groomed snowmobile route for several miles and provides access to the North Fork Sulphur Creek Road (FR 442) 3.2-mile groomed route. Plowing of the Burntlog Route and Warm Lake Road would cutoff direct OSV access to the Horn Creek Road, Sand Creek Road, and Warm Lake Road (east/south of Landmark) OSV routes from Johnson Creek Road (CR 10-413), which would be the only publicly available winter route to the Landmark area as Warm Lake Road would be closed to public winter use. Direct OSV access to other OSV routes could be cutoff because any overland travel or OSV travel across or on the plowed Warm Lake Road and Burntlog Route would have to share the roadway with mine operation traffic also using this roadway. Therefore, it would be difficult for OSVs to connect to these OSV routes, which would limit access for OSVs, and therefore reduce OSV opportunities and use. Lack of access to the Warm Lake Road OSV route south of Landmark also would affect access to the North Fork Sulphur Creek Road OSV route.

Impacts to winter recreation opportunities, facilities, use, and access from use of the Burntlog Route during operations would focus on the Burntlog Route corridor and connecting OSV routes, and would continue until the Burntlog Route was decommissioned (and therefore no longer plowed); Burnt Log Road (FR 447) returned to a groomed OSV route; and public access to Stibnite Road (CR 50-412) was reopened.

Closure of Stibnite and Thunder Mountain Roads Through the Mine Site

After construction of Burntlog Route and as part of public access control within the mine site and Operations Area Boundary, about 4.7 miles of Stibnite Road (CR 50-412) and 5.4 miles of Thunder Mountain Road (FR 50375) would be closed to public use. Therefore, the public would not be able to reach the Stibnite Mining District Interpretive Site, effectively closing this site to the public throughout operations. Impacts would be localized to just the interpretive site and would begin with the completion of Burntlog Route and conclude when access through the mine site was returned. The combined 10.1 miles of Stibnite and Thunder Mountain roads would not be closed until the Burntlog Route was constructed and available for public use.

Recreation areas and sites beyond the mine site accessed from Stibnite and Thunder Mountain roads would be available via the new Burntlog Route. Using the Burntlog Route would result in a long detour for recreationists traveling from Yellow Pine to Monumental Summit, Thunder

Mountain Road, and Meadow Creek lookout. The distance from Yellow Pine to Thunder Mountain Road under existing conditions is 13.7 miles and would be approximately 61.3 miles via the Burntlog Route. Therefore, there could be a decrease in summer and winter use of the impacted sites/areas, even with the Burntlog Route, if displaced recreationists decide to forego visiting these destinations due to added travel time. Recreational use would likely be displaced to other locations in or adjacent to the analysis area that would be more accessible from Yellow Pine in the summer and winter. These could include other portions of the FCRNRW with more accessible wilderness trailheads (such as the Big Creek area), and areas with a similar recreation setting and opportunities such as the South Fork Salmon River area. Impacted areas would include facilities and areas accessed from Thunder Mountain Road (FR 50375) and would occur from operations until Stibnite Road (CR 50-412) was reopened to public use.

OHV Trail

The OHV Trail (approximately 3 miles of new trail) would be open to all vehicles and would provide a new facility for motorized recreation. This OHV Trail would connect Meadow Creek Lookout Road (FR 51290) to a new transmission line access road on the PNF. The new transmission line access road would connect to the end of FT 233 (approximately 2 miles to the west) near the boundary between the BNF and PNF (see maps in **Appendix N-2**). FT 233 ends at the PNF and BNF boundary, and there would be an approximately 2-mile gap in public motorized use on roads and trails from the end of FT 233 to the OHV Trail. The OHV Trail would introduce new opportunities for motorized recreation use in areas that currently do not have motorized trails. Therefore, this new trail may increase recreation use in these newly accessible areas and could increase use of existing recreation facilities (e.g. roads, trails, trailheads, Meadow Creek Lookout, Riordan Lake). The new OHV Trail also would alter recreational use in the analysis area by offering a substitute motorized trail for forest visitors who are displaced from the mine site and areas accessed from either Stibnite or Thunder Mountain roads. Although the OHV Trail would provide more motorized recreation opportunities, motorized use on the trail would reduce non-motorized recreation opportunities due to changes in the recreation setting from motorized vehicle noise and presence. Changes in the recreation setting along the trail corridor could lead to displacement of dispersed recreational use, particularly related to non-motorized activities, wilderness activities, and wildlife-related recreation activities (due to wildlife displacement), which currently typically occur in a quieter, less-developed, and non-motorized setting. Impacts to recreation access, opportunities, and use would begin once the trail was open to the public and continue until the trail was decommissioned. There would be an approximately 2-mile gap in public motor use facilities between the end of FT 233 and the beginning of the OHV Trail. Because of this, the new OHV trail would not provide additional public motor use trail connections or loop opportunities (see maps in **Appendix N-2**).

Landmark Maintenance Facility

Development of the Landmark Maintenance Facility would reduce recreation opportunities due to physical removal of acreage for the facility (3.5 acres). Traffic due to maintenance activities and vehicles would not be expected to result in frequent traffic delays on Warm Lake Road (CR 10-579), but may result in occasional delays due to road plowing, grading, repairs, etc.

Traffic and other operational noise from the maintenance facility would generally not be audible from the facility. However, road maintenance activities would result in noise levels above background ambient noise levels of 40 dBA for up to 0.8 to 1 mile from the road (AECOM 2019). This would likely reduce opportunities for some recreational activities in this area, particularly wildlife-related recreation activities, because wildlife may be displaced from the general maintenance facility area. Operation activity noise from the maintenance facility would not be heard at the historic cabins at Landmark, although the large buildings and solar panels at the facility may be visible from the historic cabins and from nearby roads. The maintenance facility would increase man-made development in the Landmark area, including nighttime lighting, resulting in a moderate, long-term visual contrast. Such changes may affect the recreation setting of the general Landmark area, including the historic cabins and roads in the area, by decreasing the feeling of remoteness and thus affect the recreation experience for visitors to Landmark. Impacts would generally be limited to the area within visual and audible distance of the maintenance facility, and would begin once the facility was operational, and conclude once the facility was decommissioned.

Communications Facilities

Of the three potential cell tower sites, two of the sites would be within the Operations Area Boundary. Therefore, at 60 feet tall, either of these towers would not be visible to recreationists in the FCRNRW. However, both cell tower locations would be visible from portions of Thunder Mountain Road (FR 50375). The third site is on Meadow Creek Lookout Road (FR 51290) and, given its location adjacent to the lookout, would be visible to visitors to the old lookout and the area surrounding the lookout, including at the Meadow Creek/Summit Trailhead. For dispersed area visitors in the area surrounding the lookout, presence of the cell tower would have an adverse effect on the recreation setting due to the addition of modern man-made development adjacent to a historic building, thereby impacting visitor's recreation experiences. In addition, new cellular coverage along the Burntlog Route and on other NFS lands in the analysis area would increase visitor safety; however, additional cellular coverage would detract from primitive recreation experiences. Impacts would begin once the cell tower was constructed and would conclude with closure and reclamation of the site.

Due to the small size of the repeater sites, locations within the Operations Area Boundary would not be visible to recreation areas outside the boundary, including the FCRNRW, and therefore would not affect the recreation setting. Repeaters at the Landmark Maintenance Facility would be included in the general recreation setting impacts described above for the maintenance facility. Repeater sites at the Meadow Creek and Thunderbolt Lookouts would result in the same impacts described above for the cell tower at the Meadow Creek Lookout. A repeater site at Trapper Creek/Burnt Log Road intersection would have an adverse effect on the recreation setting due to the addition of man-made development in a semi-primitive area, thereby impacting visitor's recreation experiences. Repeater facilities could assist with reducing the risk of vehicle collisions on the Burntlog Route, and may accelerate accident response, which would provide benefits to recreation visitors along the Burntlog Route. Impacts would begin once the repeaters were constructed and would conclude with closure and reclamation of these sites.

Upgraded Transmission Line

The upgraded transmission line would be a wider and taller (by 30 feet) facility with an expanded right-of-way (ROW) (by 50 feet, for a total ROW of up to 150 feet), and therefore may become more noticeable in the recreation setting, particularly for recreationists at campgrounds along Johnson Creek Road (CR 10-413) and at the South Fork Salmon River Campground near Warm Lake Road (CR 10-579), due to the static views of recreationists from these locations. The recreation setting of the South Fork Salmon River, Trout Creek, and Ice Hole Campgrounds, and Twin Bridges dispersed camping area could be affected by the upgraded transmission line. The upgraded transmission line may result in a more developed recreation setting for these facilities, particularly the Trout Creek Campground and Twin Bridges dispersed camping area, from which the existing transmission line is already visible and ROW expansion may affect existing tree screening. This change in recreation setting would affect recreation experiences and may result in some recreationists choosing to visit other campgrounds or dispersed camping areas with a less-developed setting either within the analysis area or adjacent to the analysis area, such as in the South Fork Salmon River area. The larger transmission line facilities also would affect the recreation setting for dispersed recreation areas along Warm Lake Road (CR 10-579), Johnson Creek Road (CR 10-413), and Cabin Creek Road (FR 467). Trail and trailhead facilities from which the upgraded transmission line would be visible would include Burnt Log Trail (FT 075), Cabin/Thunderbolt Trail (FT 086), Trout/Thunderbolt Trail (FT 091), Big Creek Summit Trail (FT 150), Trout/Thunderbolt Trailhead, Cabin Creek/Thunderbolt Trailhead, and the Thunderbolt Lookout. Dispersed recreation users would be able to move away from the transmission line; therefore, this change in the recreation setting may not influence their recreation experience to the same extent. Impacts would be permanent, because the transmission line would remain after closure and reclamation.

New Transmission Line to Mine Site

The new transmission line to the mine site would reduce recreation opportunities due to physical removal of acreage for transmission line facilities (approximately 115 acres). Although recreation could still occur underneath the transmission line, the recreation setting would change due to the increased presence of man-made development and the clearing of existing vegetation along the ROW, including within view of Thunder Mountain Road (FR 50375), Meadow Creek Lookout Road (FR 51290), Riordan Lake Trail (FT 097), Riordan Trailhead, Meadow Creek/Summit Trailhead, and the Meadow Creek Lookout. Trail FT 233 would be upgraded for use as a transmission line access road, which would make the trail passable for a wider range of vehicles, resulting in impacts to recreation access, and potentially new recreation opportunities and use, due to increased access. The upgraded FT 233 would connect to trail FT 097 and Horse Heaven Road (FR 416W). However, there would be a 2-mile gap in public motor use facilities between the end of FT 233 and the beginning of the OHV Trail and thus the upgraded FT 233 would not provide additional trail connections or loop opportunities (see maps in **Appendix N-2**). The remainder of the transmission line access road from the end of FT 233 would be available for administrative use and would not be available for public motorized recreation. Unauthorized public motorized use of the transmission line access road may occur to reach the OHV Trail. Impacts from the transmission line and associated access roads would

begin when the portion of the transmission line road on FT 233 was open to the public, and end with closure and reclamation of the transmission line and access road, and FT 233 improvements were removed.

Johnson Creek Substation

Development of the Johnson Creek substation would reduce recreation opportunities due to physical removal of acreage for the substation (0.4 acre). Therefore, dispersed recreational use that may occur at this location would be displaced to other locations in the analysis area. The substation also would increase man-made development in this area of Johnson Creek Road (CR 10-413) and may affect the recreation setting of the nearby Johnson Creek airstrip, because flyers could see the substation as they approach the airstrip. This may decrease the feeling of remoteness when flying into the airstrip, thereby affecting the recreation experience for airstrip visitors. Impacts would be limited to the area within visual distance of the substation and would begin once the substation was constructed.

4.19.2.1.1.3 Closure and Reclamation

Mine Site Facilities

Impacts during closure and reclamation of the mine would be the same as those described for construction: no recreation uses within the Operations Area Boundary and corresponding displacement of dispersed recreation, noise, and setting-related reduction in recreation opportunities, including wildlife-related recreation activities around the mine site. Closure and reclamation noise would be audible up to 1.2 miles (AECOM 2019), therefore reducing recreation opportunities in these areas for activities that depend on a quiet, natural environment, such as wilderness or primitive recreation activities.

If wildlife does not re-populate the mine site after reclamation, there would be a reduction in wildlife-related recreation opportunities. Fish species composition and/or relative populations within the creeks in the mine site area may change after reclamation, as anticipated habitat may favor steelhead over Chinook salmon, and there would be a decrease in habitat for bull trout and westslope cutthroat trout and Chinook salmon. Therefore, fishing opportunities may be altered after reclamation as well.

Though nighttime lighting would cease, post-mine reclamation, the mine site would have a less natural looking recreation setting compared to the existing recreation setting. The mine site would have substantially more man-made development present that would be noticeable to visitors because the mine site access road would require visitors to pass over and next to former mine site facilities that would dominate the setting. Reclaimed facilities from the mine site would be visible from portions of the FCRNRW at superior viewing locations, such as mountain tops or ridgelines, as well as from the Meadow Creek/Summit Trailhead and Meadow Creek Lookout. It would take a long time for the mine site area to fully revegetate and vegetation that grows may not resemble the structure and density of existing vegetation (e.g., timber), and the landscape for humans may never return to existing levels. Therefore, the recreation setting of the mine site would likely be permanently altered. Although some dispersed recreation use may

return to the mine site area after reclamation, due to the changes in the recreation setting, some visitors may choose to participate in recreation opportunities elsewhere in the analysis area or the surrounding management areas where the recreation setting is more natural. Overall, impacts to recreation would occur during closure/reclamation, and would continue after reclamation was completed.

Burntlog Route

As part of decommissioning the Burntlog Route, 20 miles of Burnt Log Road (FR 447) would be reduced in width to the pre-mining width, along with 0.7 mile of Meadow Creek Lookout Road (FR 51290), and 1.9 miles of Thunder Mountain Road (FR 50375). However, these roads would retain flatter grades and gentler curves. In addition, the 14.9 miles of new roadway would be recontoured; with culverts and bridges removed, and 6 inches of growth media placed on the roadway and seeded.

Impacts during the 2-year decommissioning of the roadway would be the same as those described for construction: temporary access reductions along Burnt Log Road (FR 447), Meadow Creek Lookout Road (FR 51290), and Thunder Mountain Road (FR 50375) and trails/areas accessed from these roadways; related temporary reduction in recreation opportunities along Burnt Log Road (FR 447) and areas accessed from this road; impacts to the recreation setting along the Burntlog Route corridor due to reclamation activity noise and related potential displacement of dispersed recreation use (particularly related to non-motorized activities), wilderness activities, wildlife-related recreation activities (due to wildlife displacement); and camping at the Mud Lake and Burnt Log dispersed camping areas. In addition, there could be substantial traffic on the Burntlog Route (52 AADT, a 93 percent increase from existing traffic) until it was decommissioned, resulting in traffic-related impacts to recreation described under Operations. Noise from decommissioning of the Burntlog Route would be above ambient levels (40 dBA) within portions of the FCRNRW and at Mud Lake and Burntlog dispersed camping areas, Thunder Mountain/Riordan Trailhead, Meadow Creek/Summit Trailhead, Meadow Creek Lookout and Landmark (AECOM 2019).

Once decommissioned, year-round operational impacts from the route would cease, including displacement of motorized recreational use in the summer and winter due to increased traffic, reduced recreation opportunities due to increased noise and development along the route, reduced opportunities for non-motorized use due to presence of a roadway, and physical reduction in area for recreation and related displacement of dispersed recreational use. Operational summer impacts also would cease, including new motorized access facility, access to recreation areas adjacent to the new roadway portion of the route, and increased recreational use of previously inaccessible areas. Winter-related operational impacts would cease as well, including additional opportunities and access for winter motorized recreation; related potential increased winter use of the route area; loss of 6 miles of groomed OSV route; and lack of OSV route connectivity to the OSV routes east and south of Landmark.

Although the width of 20 miles of Burnt Log Road (FR 447) would be reduced, the retention of flatter grades and gentler curves may allow continued access on this road by a wider variety of

vehicle types. Therefore, impacts to access on Burnt Log Road may continue after decommissioning. Related increased recreational use of existing recreation facilities and areas along this road (e.g. trails, trailheads, Mud Lake dispersed camping area, Burntlog dispersed camping area) also may continue past decommissioning. Although the new roadway would be recontoured and seeded, it would take many years for trees (20+ years) for recontoured and seeded areas to appear as natural vegetation. In addition, 1.5 miles of soil nail walls would remain along the roadway after decommissioning. Therefore, the recreation setting in this area would likely appear disturbed for a long time. Due to the closeness of the FCRNRW to the Burntlog Route new roadway, this modified recreation setting could detract from the recreation setting for some forest visitors and require users to go further to achieve semi-primitive non-motorized or primitive recreation setting.

As stated above, it may take many years for the Burntlog Route roadway to completely revegetate. Therefore, evidence of a roadway would remain for some time, potentially receiving unauthorized use after decommissioning.

Public Access After Reclamation

Under Alternative 1, public access through the mine site after reclamation/closure would be on a reopened Stibnite Road (CR 50-412), which would include a permanent road through the backfilled Yellow Pine pit (see maps in **Appendix N-2**). Access to recreation sites/areas off Stibnite Road (CR 50-412) and Thunder Mountain Road would no longer be via the Burntlog Route (because this would be decommissioned) but would be via a reopened and reclaimed Stibnite Road. Reopening Stibnite Road would reverse impacts described under operations: closure (due to inaccessibility) of the Stibnite Mining District Interpretive Site; elimination of access to Thunder Mountain Road (FR 50375) and the sites/areas accessed from this road; and related reduction in recreational use and opportunities at these sites/areas. Displaced visitors that avoided the Thunder Mountain Road (FR 50375) sites/areas due to the long Burntlog Route detour during mine site operations could now visit these sites from Yellow Pine on a much shorter route (via Stibnite Road). The availability of access on Stibnite Road (CR 50-412) after closure and reclamation would likely transfer some recreational use that was previously displaced during construction and operations back to the analysis area; specifically, the Stibnite and Thunder Mountain Road areas. Impacts to recreation access, opportunities, and use from public access through the mine site via a reopened Stibnite Road would continue beyond closure and reclamation.

OHV Trail

The OHV Trail would be closed, recontoured, and seeded. Impacts during closure and reclamation of the trail would be the same as those described for construction: impacts to the recreation setting for users within visual and audible distance of reclamation activities; and potential related displacement of dispersed recreational use, particularly non-motorized activities, wilderness activities, and wildlife-related recreation activities. Closure and reclamation of the trail would cease operational impacts of the trail, including new opportunities for motorized recreation; increased dispersed recreational areas accessible from Meadow Creek Lookout Road (FR 51290) and the larger Burntlog Route, and related potential increased

recreation use within these newly accessible areas and increased use of existing recreation facilities; and reduced non-motorized recreation opportunities due to changes in the recreation setting from motorized vehicle noise and presence, and related displacement of dispersed recreational use, particularly related to non-motorized activities, wilderness activities, and wildlife-related recreation activities. Reduced motorized access, reduced opportunities for motorized recreation, reduced recreational use of existing sites and sites along the Burntlog Route, and return of non-motorized recreation opportunities to the area would continue after decommissioning of the trail. Although the trail would be recontoured and seeded, unauthorized use of this facility may continue after reclamation.

Landmark Maintenance Facility

As part of closure and reclamation, the Landmark Maintenance Facility would be removed, the site graded, and drainage would be reclaimed. It is assumed that the approximately 3.5-acre site also would be seeded and become available for public recreational use following decommissioning. Impacts to recreation during closure and reclamation would be the same as those described for construction: potential temporary closure or delays on Warm Lake Road (CR 10-579) resulting in impacts to recreation experiences; reduction in some recreation opportunities due to noise; and potential recreation setting impacts to historic cabins in Landmark due to noise. Any reduction in recreation opportunities, displacement of dispersed recreational use, or changes in access would be temporary until the maintenance facility was closed and reclaimed. Once the facility was closed and the site reclaimed, impacts related to loss of acreage for recreation, and changes to the recreation setting of the historic cabins and roads in the area, would cease. These impacts would be localized to the area surrounding the maintenance facility and the roads/trails accessed east of the facility off Warm Lake Road (CR 10-579).

Communications Facilities

For the two cell tower sites within the Operations Area Boundary, impacts from closure and reclamation would not result in additional impacts besides those discussed above for closure and reclamation of mine site facilities. The third site is on Meadow Creek Lookout Road (FR 51290) at the old lookout. Closure and reclamation activities for this cell tower would result in the same impacts as those described for construction. The reduction in cellular coverage in portions of the analysis area near the mine site area and along the Burntlog Route would be the same as existing conditions after the cell towers are removed. Although areas that were previously inaccessible to vehicles would generally return to being inaccessible as the Burntlog Route was decommissioned, there may be some unauthorized use of the route that may persist after decommissioning. The loss of cellular coverage also would aid in returning primitive recreation experiences to the FCRNRW areas adjacent to the Burntlog Route and mine site.

Reclamation of repeater sites within the Operations Area Boundary would not result in additional impacts besides those discussed above for closure and reclamation of mine site facilities. Reclamation of repeaters at the Landmark Maintenance Facility would not result in additional impacts besides those discussed above for the Landmark Maintenance Facility. Reclamation of

repeater sites at the Meadow Creek and Thunderbolt Lookouts and Trapper Creek/Burnt Log Road intersection would result in the same impacts as those described for construction.

Upgraded Transmission Line

The upgraded transmission line from Lake Fork to Johnson Creek substation would be retained and used by Idaho Power Company. Therefore, impacts described under Operations for the upgraded transmission line would be permanent, which includes impacts to the recreation setting and recreation experiences.

New Transmission Line to Mine Site

The new transmission line to the mine site would be disassembled, and the ROW would be recontoured and seeded. The improvements made to FT 233 and Horse Heaven Road (FR 416W) also would be removed. Impacts during decommissioning of the transmission line, transmission line road, and road/trail improvements would be the same as those described for construction: potential temporary closure or delays on Horse Heaven Road (FR 416W) and FT 233 resulting in impacts to recreation experiences; and reduction in some recreation opportunities due to noise. Once the mine is closed, operational impacts from the new transmission line would cease, including loss of physical acreage for recreation, and trail access, use, and opportunities for a wider range of vehicles due to road improvements. Although the transmission line access road would be recontoured and seeded, unauthorized use of this facility may continue after closure. Displacement of recreation access, use, and opportunities from the improved FT 233 would continue beyond closure, and unauthorized use of the transmission line road may continue beyond closure.

Johnson Creek Substation

The upgraded transmission line from Lake Fork to Johnson Creek substation would be retained and used by Idaho Power Company, and the Johnson Creek substation would remain in place and would not be decommissioned. Therefore, impacts described under Operations for the Johnson Creek substation would remain after mine closure, which include loss of acreage for recreation, and impacts to the recreation setting and recreation experiences.

4.19.2.1.2 ROS CLASSES AND PHYSICAL SETTING

4.19.2.1.2.1 Designated ROS Classes

Mine Site Facilities

During construction, operations, and closure/reclamation, public recreation would not be allowed within the Operations Area Boundary surrounding the mine site facilities. Public closure of this area would not result in inconsistencies with the existing ROS designation classes (Roaded Modified, Roaded Natural, and Semi-Primitive Non-Motorized) within the Operations Area Boundary during construction, operations, and reclamation/closure. Due to setting alterations during construction, operation and mine closure and reclamation as described in

Section 4.19.2.1.1.3 above, the mine site post-reclamation may be inconsistent with Roaded Natural and Semi-Primitive Non-Motorized designations and could be more consistent with a Roaded Modified designation.

Public Access After Reclamation

Public access through the mine site would be located in an area currently designated as Roaded Natural, which allows for some landscape modification from roads. Therefore, public access through the mine site after reclamation would not result in inconsistencies with the existing ROS designation.

Burntlog Route

Summer

Burntlog Route would be in areas designated currently as Roaded Modified, Roaded Natural, and Semi-Primitive Non-Motorized. The Burntlog Route in areas designated as Roaded Modified and Roaded Natural would not result in inconsistencies with the existing ROS designation classes because they already account for landscape modification from roads. The Burntlog Route within the area currently designated as Semi-Primitive Non-Motorized (approximately 86 acres) would not be consistent with this designation and would be more consistent with a designation of Roaded Natural. This impact would occur from construction and would continue after closure and reclamation of the road due to the length of time it would take for the road to return to a natural-appearing condition.

Winter

The Burntlog Route would be plowed, and the area surrounding plowed roads is typically designated as Roaded Natural or Rural in the winter. The Burntlog Route alignment including the existing Burnt Log Road and unroaded areas is currently designated as Semi-Primitive Motorized in the winter. Therefore, plowing Burntlog Route including the 9.8 miles of infrequently groomed OSV route would not be consistent with the existing winter ROS designation class surrounding Burntlog Route, and would be more consistent with a designation of Roaded Natural. This impact would occur from construction through closure and reclamation. After closure and reclamation of the route, plowing would end; therefore, the route would not continue to be inconsistent with the existing ROS designation of Semi-Primitive Motorized.

Yellow Pine Route

Summer

The areas surrounding roads that would be used as part of the Yellow Pine Route are currently designated as Roaded Natural; therefore, increased traffic on these roads as part of construction would not result in inconsistencies with the existing ROS designation surrounding the roads.

Winter

During construction of the Burntlog Route, Johnson Creek Road (CR 10-413) from Wapiti Meadow Ranch to Landmark would be plowed and, as currently occurs, Stibnite Road (CR 50-412) from Yellow Pine to the mine site would be plowed. The area surrounding plowed roads is typically designated as Roded Natural or Rural in the winter. The area along Johnson Creek Road (CR 10-413) south of Wapiti Meadow Ranch is currently designated as Semi-Primitive Motorized in the winter. In the winter, the area along Stibnite Road is designated as Semi-Primitive Non-Motorized, Semi-Primitive Motorized, Roded Modified and Roded Natural. Therefore, plowing 6.7 miles of Johnson Creek Road (CR 10-413) and existing and continued plowing of Stibnite Road would not be consistent with the existing winter ROS designation classes of Semi-Primitive Motorized and Semi-Primitive Non-Motorized along these roadways, and would be more consistent with a designation of Roded Natural. This impact would end once the Burntlog Route was operational. Creating a temporary groomed OSV route just west of Johnson Creek Road (CR 10-413) (due to the plowing of the road) would not be inconsistent with the existing winter ROS designation of Semi-Primitive Motorized surrounding Johnson Creek Road (CR 10-413).

Warm Lake Road

Summer

The area surrounding Warm Lake Road (CR 10-579) is currently designated as Roded Natural and Rural; therefore, increased traffic on this road would not result in inconsistencies with the existing ROS designations.

Winter

Warm Lake Road (CR 10-579) from Warm Lake to Landmark also would be plowed under Alternative 1. However, this section of road is currently a groomed OSV route and is in an area designated as Semi-Primitive Motorized in the winter. Therefore, plowing Warm Lake Road (CR 10-579) from Warm Lake to Landmark would not be consistent with the existing winter ROS designation class for the area surrounding the roadway, and would be more consistent with a designation of Roded Natural. This impact would occur from construction through closure and reclamation.

As part of Alternative 1, a new groomed OSV route along Cabin Creek Road from Warm Lake to Trout Creek Campground would be created along with a parking area in the Warm Lake area. This groomed OSV route would be in an area currently designated as Semi-Primitive Motorized in the winter, which is typically what the area around a groomed OSV trails is designated. Therefore, a new groomed OSV route along Cabin Creek Road would not result in inconsistencies with the existing ROS designation class. The parking area would be located in an area currently designated as Roded Natural and therefore would not result in inconsistencies with the existing ROS designation class.

Closure of Stibnite and Thunder Mountain Roads Through the Mine Site

Closure of these road portions during construction, operations, and reclamation/closure would not result in inconsistencies with the existing ROS designation class of the area surrounding either road.

Meadow Creek OHV Connector Trail

The Meadow Creek OHV Connector Trail would be in an area currently designated as Semi-Primitive Non-Motorized. Allowing motorized use along the trail (approximately 5.4 acres) would be inconsistent with this ROS designation and would be more consistent with a designation of Semi-Primitive Motorized. This impact would occur from construction through closure and reclamation. After closing the trail, the area would presumably return to being non-motorized; and therefore, would again be consistent with the existing ROS designation.

Landmark Maintenance Facility

The Landmark Maintenance Facility would be in an area currently designated as Roaded Natural, which can have limited modifications that are visually subordinate to viewers. Therefore, the maintenance facility in this area would not result in inconsistencies with the existing ROS designation class.

Communications Facilities

Two of the three proposed cell tower locations and several of the repeater sites would be within the mine site Operations Area Boundary. Impacts to existing ROS designations at the mine site are discussed above. The third cell tower site would be along Meadow Creek Lookout Road (FR 51290). The lookout area is currently designated as Roaded Natural. Therefore, a cell tower would be consistent with the existing ROS designation class. One of the repeater site locations would be at the Landmark Maintenance Facility. Impacts to the existing ROS designation at this facility location are described above and would apply to adding a repeater at this location. A repeater site at the existing Meadow Creek Lookout or the old Thunderbolt Lookout would not result in inconsistencies with the existing ROS designation classes for these areas as they both allow modifications (Roaded Natural and Roaded Modified, respectively). A repeater site at the Trapper Creek/Burnt Log Road intersection would not result in inconsistency with the existing ROS designation class as it is currently designated as Roaded Modified, which allows for some landscape modification.

Upgraded Transmission Line

The transmission lines to be upgraded along Warm Lake Road, Cabin Creek Road, and Johnson Creek Road (CR 10-413) are in areas currently designated as Roaded Modified and Roaded Natural. Therefore, upgrades to these transmission lines would not result in inconsistencies with the existing ROS designation classes in the transmission line ROWs because these classifications allow moderate evidences of the sights and sounds of man.

New Transmission Line to Mine Site

The new transmission line and access road in PNF Management Area (MA) 13 would be in an area designated as Semi-Primitive Non-Motorized. Allowing motorized use for transmission line construction and maintenance along the new access roads would be inconsistent with the existing ROS designation and would be more consistent with a designation of Semi-Primitive Motorized or Roded Natural. This impact would occur from construction through closure and reclamation. After decommissioning of the transmission line and closure of the associated road, the area would presumably return to being non-motorized, and therefore would again be consistent with the existing ROS designation.

The new transmission line and access road in BNF MA 21 would be in areas currently designated as Roded Modified, which is a subclassification of Roded Natural, where there is more landscape modification (roads, management activities) than under Roded Natural, but not enough modification to qualify as Rural. Therefore, creation of the transmission line and associated road in this classification would not result in inconsistencies with the existing ROS designation class for the transmission line ROW in BNF MA 21.

Johnson Creek Substation

The new substation would be located in an area currently designated as Roded Modified (along Johnson Creek Road [CR 10-413]) and, therefore, would not result in inconsistencies with the existing ROS designation class as this class allows for moderate evidences of the sights and sounds of man.

4.19.2.1.2.2 Estimated ROS Physical Setting

Mine Site Facilities

During construction, operations, and closure/reclamation, public recreation would not be allowed within the Operations Area Boundary surrounding the mine site facilities. Public closure of this area would not result in changes to the existing estimated ROS physical settings within the Operations Area Boundary (Rural, Roded Natural and Semi-Primitive Non-Motorized). However, the recreation setting would be changed from construction, mining operations, and closure/reclamation. Due to setting alterations and the increased evidence of humans as described in Section 4.19.2.1.1.3 above, the existing estimated ROS physical setting class of Semi-Primitive Non-Motorized within the mine site area would be altered to Roded Natural. Changes to the recreation setting within the mine site area would be consistent with the existing estimated ROS physical settings of Rural and Roded Natural. Graphical representations of the estimated ROS physical settings are shown in **Appendix N-2**, Chapter 4, Recreation Mapbooks and Figures, Alternative 1.

Public Access After Reclamation

Public access through the mine site would be located in an area with an existing estimated ROS physical setting of Rural, which allows for strong evidence of designed roads. Therefore, public

access through the mine site after closure and reclamation would not result in a change to the existing estimated ROS physical setting.

Burntlog Route

Summer

The Burntlog Route would decrease remoteness and increase the evidence of humans along the roadway; in particular, along the new roadway segments. Therefore, the existing estimated ROS physical settings of Semi-Primitive Motorized and Semi-Primitive Non-Motorized along the Burntlog Route would be altered to Roded Natural, because Roded Natural has a remoteness criteria of within 0.5 mile from “better than primitive” roads, and the Burntlog Route would be considered a “better than primitive” road (see **Table 4.19-1**). In addition, the Burntlog Route would increase the evidence of humans along the route due to the large amount of mine traffic that would be present on the road. There are a few areas where presence of the new roadway would alter an area near the roadway from an existing estimated ROS physical setting of Semi-Primitive Non-Motorized to Semi-Primitive Motorized or Primitive to Semi-Primitive Non-Motorized due to a decrease in remoteness. The Burntlog Route in areas with an existing estimated ROS physical setting of Roded Natural would not result in inconsistencies with this setting.

Table 4.19-1 Comparison of Existing and Alternative 1 Estimated ROS Physical Setting Classes in the Analysis Area – Summer

Estimated ROS Physical Setting Class	Existing Acreage – Summer	Operational Acreage – Summer	Total Change in Acreage	Locations of Changes
Primitive	17,278	16,838	-440	Burntlog Route
Semi-Primitive Non-Motorized	218,512	207,209	-11,303	Mine Site, Burntlog Route, area west of Mine Site, OHV Trail, new transmission line to Mine Site
Semi-Primitive Motorized	83,497	86,324	2,827	Lost acreage: Burntlog Route, Mine Site Gained acreage: OHV Trail, area west of Mine Site, new transmission line to Mine Site
Roded Natural	140,594	138,136	-2,458	Lost acreage: Mine Site Gain acreage: Burntlog Route
Rural	81,450	79,379	-2,071	Mine Site
Mine Site	0	13,446	13,446	Mine Site (acreage removed from other classes for the Mine Site)

Table Source: AECOM 2020

Winter

In the winter, the Burntlog Route area has an existing estimated ROS physical setting of Semi-Primitive Motorized, because a portion of the route is currently a groomed OSV route. However, the plowing of Burntlog Route would alter the physical setting of this roadway area to Roded Natural in the winter (see **Table 4.19-2**), because the area surrounding plowed routes is considered Rural or Roded Natural. Although the setting of the route would become less remote and the evidence of humans would be more noticeable, the road would still be in a fairly remote area away from other plowed routes or groomed snowmobile routes. Therefore, the setting would not change enough to be considered Rural.

Table 4.19-2 Comparison of Existing and Alternative 1 Estimated ROS Physical Setting Classes in the Analysis Area – Winter

Estimated ROS Physical Setting Class	Existing Acreage – Winter	Operational Acreage – Winter	Total Change in Acreage	Locations of Changes
Primitive	21,370	20,930	-440	Burntlog Route
Semi-Primitive Non-Motorized	245,210	233,645	-11,565	Mine Site
Semi-Primitive Motorized	240,387	219,254	-21,133	Burntlog Route, Mine Site, Cabin Creek Road
Semi-Primitive Motorized Groomed	50,436*	46,135	-4,301	Lost acreage: Warm Lake Road, Burnt Log Road Gained acreage: Cabin Creek Road
Roded Natural	7,511	23,244	15,733	Lost acreage: Mine Site Gained acreage: Burntlog Route
Rural	26,853	30,813	3,960	Warm Lake Road from Warm Lake to Landmark, Burntlog Route
Mine Site	0	13,446	13,446	Mine Site (acreage removed from other classes for the Mine Site)

Table Source: AECOM 2020

Table Notes:

*This acreage overlaps other features.

Yellow Pine Route

Summer

The areas surrounding roads that would be used as part of the Yellow Pine Route have an existing estimated ROS physical setting of Roded Natural and Rural. Therefore, increased

traffic on these roads as part of construction would not alter the existing estimated ROS physical setting for the areas surrounding these roads.

Winter

During construction of the Burntlog Route, Johnson Creek Road (CR 10-413) from Wapiti Meadow Ranch to Landmark and, and as currently occurs, Stibnite Road (CR 50-412) from Yellow Pine to the mine site would be plowed. Currently, the estimated ROS physical setting of the area surrounding this portion of Johnson Creek Road (CR 10-413) is Semi-Primitive Motorized. Stibnite Road currently is within an area with an estimated ROS physical setting of Roded Natural in the winter. Continued plowing of Stibnite Road would not alter this estimated ROS physical setting. However, plowing of Johnson Creek Road (CR 10-413) from Wapiti Meadow Ranch to Landmark would alter the physical setting of the area surrounding this road to Rural (due to the closeness to other plowed routes), but only temporarily; therefore, acreage related to this change is not reflected in **Table 4.19-2**.

Warm Lake Road

Summer

The area surrounding Warm Lake Road (CR 10-579) has an existing estimated ROS physical setting of Rural. Therefore, increased traffic on this road would not alter the existing estimated ROS physical setting for the area surrounding this road.

Winter

Under Alternative 1, Warm Lake Road (CR 10-579) would be plowed from construction through mine closure and reclamation. Currently, the portion of Warm Lake Road that is not plowed (from Warm Lake to Landmark), but is a groomed OSV route, is within an area with an estimated ROS physical setting of Semi-Primitive Motorized. Plowing this portion of Warm Lake Road would alter the estimated ROS physical setting of the area surrounding this portion of the roadway to Rural in the winter (see **Table 4.19-2**), because it would be adjacent to other plowed routes.

As part of Alternative 1, a new groomed OSV route along Cabin Creek Road (FR 467) from Warm Lake to Trout Creek Campground would be created along with a parking area in the Warm Lake area. This OSV route would be in an area with an estimated ROS physical setting of Semi-Primitive Motorized, which is typical for areas surrounding groomed OSV routes. Therefore, the addition of a groomed OSV route along Cabin Creek Road would not alter the estimated ROS physical setting of the roadway area in the winter. The parking area would be located in an area with an estimated ROS physical setting of Rural and therefore would not alter the estimated ROS physical setting of the parking area.

Closure of Stibnite and Thunder Mountain Roads Through the Mine Site

Closure of Stibnite and Thunder Mountain roads through the mine site during construction, operations, and closure/reclamation would not result in changes to the estimated physical ROS setting of the area surrounding either road (Rural and Roaded Natural).

OHV Trail

The OHV Trail would be a motorized trail in an area with an existing estimated ROS physical setting of Semi-Primitive Non-Motorized. Therefore, the trail would alter the estimated ROS physical setting of Semi-Primitive Non-Motorized to a Semi-Primitive Motorized physical setting (see **Table 4.19-1**).

Landmark Maintenance Facility

The new Landmark Maintenance Facility would be in an area with an existing estimated ROS physical setting of Roaded Natural, and therefore would not result in any alterations to the existing estimated ROS physical setting.

Communications Facilities

Two of the three proposed cell tower locations and several of the repeater sites would be within the mine site Operations Area Boundary. Impacts to existing estimated ROS physical settings in the mine site are discussed above. The third cell tower site, and a repeater site, would be along Meadow Creek Lookout Road at the old lookout. This cell tower and repeater site would be in an area with an existing estimated ROS physical setting of Roaded Natural, and therefore would not result in any alterations to the existing estimated ROS physical setting. One of the repeater site locations would be at the Landmark Maintenance Facility. Impacts to the existing estimated ROS physical setting at this facility location are described above and would apply to adding a repeater at this location. A repeater site at the old Thunderbolt Lookout would be in an area with an existing estimated ROS physical setting of Semi-Primitive Motorized. Due to the small size of the repeater site, the repeater would not result in any alterations to the existing estimated ROS physical setting. A repeater site at the intersection of Trapper Creek and Burnt Log Road (FR 447) would be in an area with an existing physical setting of Roaded Natural and therefore would not result in any alterations to the existing estimated ROS physical setting.

Upgraded Transmission Line

The transmission lines to be upgraded along Warm Lake Road (CR 10-579), Cabin Creek Road, and Johnson Creek Road (CR 10-413) would be in areas with an estimated ROS physical setting of Rural, Semi-Primitive Motorized, and Roaded Natural, respectively. Therefore, upgrades to transmission lines along Warm Lake, Cabin Creek, and Johnson Creek Roads would not alter the estimated ROS physical setting surrounding these roadways.

New Transmission Line to Mine Site

The new transmission line and associated access road to the mine site would be in areas with an estimated ROS physical setting of Semi-Primitive Motorized and Semi-Primitive Non-Motorized. The creation of a new road and transmission line facility would alter the Semi-Primitive Non-Motorized setting to Semi-Primitive Motorized (see **Table 4.19-1**).

Johnson Creek Substation

The new substation would be in an area with an existing estimated ROS physical setting of Roaded Natural (along Johnson Creek Road [CR 10-413]), and therefore would not result in any alterations to the existing estimated ROS physical setting.

4.19.2.1.3 RECREATION SPECIAL USE PERMITS

4.19.2.1.3.1 Construction

As shown in **Table N-13** in **Appendix N**, there are several current recreation-related special use permits in the analysis area. Recreation-related special use permits within the PNF include Big Creek Lodge, Elk Springs Outfitters, Flying Resort Ranches, Idaho Wilderness Company, and 4 Summit Challenge bike event. In the BNF, recreation-related special use permits include Juniper Mountain Outfitters, North Shore Lodge, Warm Lake Lodge and Resort, Warm Lake Camp, Youth with a Mission (YWAM), and recreation residences.

There are no Alternative 1 components that would directly impact the Big Creek Lodge during construction. However, Alternative 1 components may affect recreation opportunities, access, and experiences in areas south of the lodge in the analysis area, as described in Section 4.19.2.1.1 above. For instance, there may be more traffic or delays on Stibnite Road (CR 50-412) due to the use of the Yellow Pine Route for mine access, which could result in temporary impacts to motorized recreation access and recreation experiences. Impacts to lodge customers would depend on their recreation location away from the lodge.

Alternative 1 components that would affect the Elk Springs Outfitters operating area during construction include the new transmission line to the mine site, Burntlog Route (Thunder Mountain Road and Meadow Creek Lookout Road improvements), closure of Stibnite and Thunder Mountain roads through the mine site, OHV Trail, communication facilities, and mine site facilities. Construction of these components would affect the ability of Elk Springs Outfitters to access approximately half of their operating area, provide IOGLB licensed activities, and may degrade recreation experiences for customers participating in guided activities near construction of these components due to construction noise and activity. Impacts to recreation from construction of Alternative 1 components are described in Section 4.19.2.1.1 above. The portion of the Elk Springs Outfitters operating area north and west of Yellow Pine would be accessible, and free of Alternative 1 construction activities; therefore, permitted use may be displaced to this area, as well as recreational use from the analysis area.

There are no Alternative 1 components that would impact the Flying Resort Ranches operating area during construction; there are no planned activities in or adjacent to their route through the FCRNRW to Big Creek.

Alternative 1 components that would affect the Idaho Wilderness Company operating area during construction include Burntlog Route (Thunder Mountain Road improvements), closure of Stibnite and Thunder Mountain roads through the mine site, and mine site facilities. Construction of these components would affect the ability of the Idaho Wilderness Company to access approximately 25 percent of the southern portion of their operating area, provide IOGLB licensed activities, and may degrade recreation experiences for customers participating in guided activities near construction of these components due to construction noise and activity. Impacts to recreation from construction of these Alternative 1 components are described in Section 4.19.2.1.1 above. The portion of the Idaho Wilderness Company operating area in the FCRNRW northeast of the mine site would be available for any displaced permitted use. However, access to this portion of the operating area may need to be relocated to be out of Big Creek, rather than Thunder Mountain Road, due to the closures and improvements on this road.

Construction activities to upgrade the transmission line crossing at South Fork Salmon River Road and upgrade the transmission line along Warm Lake Road (CR 10-579) could impact 4 Summit bike event activities if construction occurred on the bike event day, including potentially interfering (stopping or rerouting) the event if bikers could not use either roadway on event day. Additional visitors also could be present along South Fork Salmon River Road due to displacement of recreational use from the analysis area.

Construction of all Alternative 1 components would affect the Juniper Mountain Outfitters operating area either directly or indirectly due to recreation displacement from other areas. Construction of Alternative 1 components would affect the ability of Juniper Mountain Outfitters to access approximately 50 percent of their operating area; provide IOGLB licensed activities; and may degrade recreation experiences for customers participating in guided activities near construction of Alternative 1 components due to construction noise, traffic, and activity. Impacts to recreation from construction of Alternative 1 components are described in Section 4.19.2.1.1 above. The portion of the Juniper Mountain Outfitters operating area north and south of Warm Lake surrounding the South Fork Salmon River would be accessible and free of Alternative 1 construction activities; therefore, permitted use may be displaced to this area, as well as other recreational use from the analysis area.

Alternative 1 components that would affect the North Shore and Warm Lake Lodges, Warm Lake Camp, YWAM, and Warm Lake recreation residence tract during construction include transmission line upgrades and summer use of Warm Lake Road (CR 10-579). Construction of these components would affect traffic, noise, and vehicular access and thus could adversely affect the recreation experience for some recreationists as well as the recreation setting, particularly for Warm Lake Lodge, Warm Lake Camp, and YWAM as these facilities are located close to Warm Lake Road, which would have an increase in traffic and traffic noise due to use of this road for the SGP. Impacts to recreation from construction of these Alternative 1 components are described in Section 4.19.2.1.1 above. It is not anticipated that transmission

line upgrade activities, including work at the Warm Lake substation, would be visible or audible from the lodges or camps or from the Warm Lake recreation residence tract as this area is over 0.5 mile away from the transmission line and substation with intervening vegetation. There would be no winter access changes on Warm Lake Road in the area near the lodges, Warm Lake Camp, or Warm Lake recreation residence tract. Changes to plowing and public use of Warm Lake Road would occur just west of YWAM; however, there is no winter use of the YWAM facility and thus changes to winter use and maintenance of Warm Lake Road west of the facility would not affect use of the facility.

The Cabin Creek OSV route may result in more winter motorized use north of the lodges, camps and Warm Lake recreation residence tract. Alternative 1 components that would affect the Paradise Valley recreation residence tract include transmission line upgrades, summer use of Warm Lake Road (CR 10-579), and development and use of the Cabin Creek Road OSV route. Construction of these components would affect traffic, noise, and vehicular access and thus could adversely affect the recreation experience for some recreationists as well as the recreation setting. Impacts to recreation from construction of Alternative 1 components are described in Section 4.19.2.1.1 above.

Noise from transmission line upgrade construction activities and/or utility access spur road construction activities may be above ambient levels (above 40 dBA) at the Paradise Valley recreation residence tract (AECOM 2019). The Cabin Creek OSV route would be located near the Paradise Valley recreation residence tract. The new 10.4-mile groomed OSV route along Cabin Creek Road may lead to dispersed winter recreational use along this new route, because the route would provide winter recreation opportunities in an area that currently does not have many winter opportunities due to lack of access and would be the only available easterly OSV route to Landmark. Therefore, there may be more traffic, noise, and recreation use within the area around the Paradise Valley recreation residence tract in the winter, potentially resulting in a change to a more developed recreation setting at the residence tract in the winter. The parking area for the new Cabin Creek OSV route would be located west of the Paradise Valley recreation residence tract near South Fork Salmon River Road (FS 474) and would therefore not affect the recreation residence tract.

4.19.2.1.3.2 Operations

There are no Alternative 1 components that would directly impact the Big Creek Lodge during operations. However, Alternative 1 components may affect recreation opportunities, access, and experiences in areas south of the lodge in the analysis area, as described in Section 4.19.2.1.1 above. Impacts to lodge customers would depend on their recreation location away from the lodge.

Alternative 1 components that would affect the Elk Springs Outfitters operating area during mining operations include the new transmission line to the mine site, Burntlog Route, closure of Stibnite and Thunder Mountain roads through the mine site, OHV Trail, communication facilities, and mine site facilities. Operation of these components would affect the ability of Elk Springs Outfitters to access their operating area, provide IOGLB licensed activities, and may degrade

recreation experiences for customers participating in guided activities near these components due to noise and activity (mining activity, mine traffic, new motorized use, reduction of acreage available for recreation, etc.). There may be some beneficial impacts to Elk Springs Outfitters from increased cell coverage in their operating area and resulting customer safety improvements. Impacts to recreation from operation of these Alternative 1 components are described in Section 4.19.2.1.1 above. The portion of the Elk Springs Outfitters operating area north and west of Yellow Pine would be accessible and free of Alternative 1 activities; therefore, permitted use may be displaced to this area, as well as other recreational use from the analysis area.

There are no Alternative 1 components that would impact the Flying Resort Ranches operating area during mine operations; there are no activities in or adjacent to their route through the FCRNRW to Big Creek.

Alternative 1 components that would affect the Idaho Wilderness Company operating area during mining operations include Burntlog Route, closure of Stibnite and Thunder Mountain roads through the mine site, communication facilities, and mine site facilities. Operation of these components would affect the ability of the Idaho Wilderness Company to access their operating area; provide IOGLB licensed activities; and may degrade recreation experiences for customers participating in guided activities near these components due to noise and activity (mining activity, mine traffic, reduction of acreage available for recreation, etc.). There may be some beneficial impacts to the Idaho Wilderness Company from increased cell coverage in their operating area and resulting customer safety improvements. Impacts to recreation from operation of these Alternative 1 components are described in Section 4.19.2.1.1. The portion of the Idaho Wilderness Company operating area in the FCRNRW northeast of the mine site would be available for any displaced permitted use. However, access to this portion of the operating area may need to be relocated to be out of Big Creek, rather than Thunder Mountain Road, due to the closure of a portion of the road and detour needed to get to sites/areas along Thunder Mountain Road (FR 50375).

There are no Alternative 1 components that would directly impact the 4 Summit bike event permit during mine operations; there are no activities planned that would use South Fork Salmon River Road. However, additional visitors could be present along this roadway due to displacement of recreational use from the analysis area.

Operation of all Alternative 1 components would affect the Juniper Mountain Outfitters operating area either directly or indirectly due to recreation displacement from other areas. Operation of Alternative 1 components would affect the ability of Juniper Mountain Outfitters to access their operating area; provide IOGLB licensed activities; and may degrade recreation experiences for customers participating in guided activities near Alternative 1 components due to noise and activity (mining activity, mine traffic, new motorized use, reduction of acreage available for recreation, etc.). Impacts to recreation from operation of Alternative 1 components are described in Section 4.19.2.1.1 above. The portion of the Juniper Mountain Outfitters operating area north and south of Warm Lake surrounding the South Fork Salmon River would be

accessible and free of Alternative 1 facilities and activities; therefore, permitted use may be displaced to this area, as well as recreational use from the analysis area.

There are no Alternative 1 components that would impact the North Shore or Warm Lake Lodges, Warm Lake Camp, YWAM, or Warm Lake recreation residence tract during operations. The Warm Lake recreation residence tract is over 0.5 mile from the upgraded transmission lines and substation with intervening vegetation. Therefore, it is unlikely that the modified transmission line and substation facilities would be visible from the recreation residence tract.

Winter use of the Cabin Creek Road OSV route during operations would continue to impact the Paradise Valley recreation residence tract as described in Section 4.19.2.1.3.1 above. The upgraded transmission lines also may be visible from the residence tract, though there would be some intervening vegetation. Impacts to recreation from operation of Alternative 1 components are described in Section 4.19.2.1.1 above.

4.19.2.1.3.3 Closure and Reclamation

There are no Alternative 1 components that would directly impact the Big Creek Lodge during or after closure and reclamation. However, Alternative 1 components may affect recreation opportunities, access, and experiences in areas south of the lodge in the analysis area as described in Section 4.19.2.1.1. Impacts to lodge customers would depend on their recreation location away from the lodge.

Alternative 1 components that would affect the Elk Springs Outfitters operating area during closure and reclamation include the new transmission line to the mine site, Burntlog Route, public access after reclamation, OHV Trail, communication facilities, and mine site facilities. The ability of Elk Springs Outfitters to access their operating area, provide IOGLB licensed activities, and the quality of recreation experiences for customers participating in guided activities near these components may be impacted during decommissioning of these components due to noise and reclamation activity. Impacts to recreation from reclamation/closure of these Alternative 1 components are described in Section 4.19.2.1.1 above. The loss of cellular coverage on portions of the analysis area may impact customer safety in the mine site area. The loss of cellular coverage also would aid in returning primitive recreation experiences to the FCRNRW areas in the Elk Springs Outfitters operating area. Providing public access through the mine site after closure and reclamation would restore the ability for Elk Springs Outfitters to reach portions of their operating area without a detour. The portion of the Elk Springs Outfitters operating area north and west of Yellow Pine would be accessible and free of Alternative 1 activities; therefore, permitted use may be displaced to this area, as well as recreational use from the analysis area. Displacement of permitted use may continue past reclamation due to permanent changes in the recreation setting within the Operations Area Boundary (see Section 4.19.2.1.1.3) and potential changes to wildlife present in the area, as some species sensitive to human presence may not return to the area for years after the mine is closed.

There are no Alternative 1 components that would impact the Flying Resort Ranches operating area during or after closure and reclamation; there are no activities in or adjacent to their route through the FCRNRW to Big Creek.

Alternative 1 components that would affect the Idaho Wilderness Company operating area during closure and reclamation include Burntlog Route, public access after reclamation, communication facilities, and mine site facilities. The ability of the Idaho Wilderness Company to access their operating area, provide IOGLB licensed activities, and the quality of recreation experiences for customers participating in guided activities near these components may be impacted during closure and reclamation due to noise and reclamation activity. Impacts to recreation from reclamation/closure of these Alternative 1 components are described in Section 4.19.2.1.1 above. The loss of cellular coverage on portions of the analysis area may impact customer safety in the mine site. The loss of cellular coverage also would aid in returning primitive recreation experiences to the FCRNRW areas in the Idaho Wilderness Company operating area. Providing public access through the mine site after closure and reclamation would restore the ability for the Idaho Wilderness Company to reach portions of their operating area without a detour. The portion of the Idaho Wilderness Company operating area in the FCRNRW northeast of the mine site would be available for any displaced permitted use. Displacement of permitted use may continue past reclamation due to permanent changes in the recreation setting within the Operations Area Boundary (see Section 4.19.2.1.1.3) and potential changes to wildlife present in the area, as some species sensitive to human presence may not return to the area for years after the mine is closed.

There are no Alternative 1 components that would directly impact the 4 Summit bike event permit during closure and reclamation; there are no activities planned that would use South Fork Salmon River Road. However, additional visitors could be present along this roadway due to displacement of recreational use from the analysis area.

Closure and reclamation of all Alternative 1 components would affect the Juniper Mountain Outfitters operating area either directly or indirectly due to recreation displacement from other areas. The ability of Juniper Mountain Outfitters to access their operating area, provide IOGLB licensed activities, and the quality of recreation experiences for customers participating in guided activities near these components may be impacted during closure and reclamation due to noise and reclamation activity. Impacts to recreation from closure and reclamation of these Alternative 1 components are described in Section 4.19.2.1.1 above. The portion of the Juniper Mountain Outfitters operating area north and south of Warm Lake surrounding the South Fork Salmon River would be accessible and free of Alternative 1 facilities and activities; therefore, permitted use may be displaced to this area, as well as recreational use from the analysis area. Displacement of permitted use may continue past reclamation due to the changes in the recreation setting in the mine operations area, and potential changes to wildlife present in the area, as some species sensitive to human presence may not return to the area for years after the mine is closed.

There are no Alternative 1 components that would impact the North Shore or Warm Lake Lodges, Warm Lake Camp, YWAM, or Warm Lake recreation residence tract during closure and reclamation.

Winter use of the Cabin Creek Road OSV route during closure and reclamation would continue to impact the Paradise Valley recreation residence tract as described in Section 4.19.2.1.3.1.

4.19.2.2 Alternative 2

Alternative 2 is very similar to Alternative 1, with the main differences that affect recreation consisting of re-routing a segment of the Burntlog Route, new public access road through the mine site during operations, a change in the location of the maintenance facility, and re-routing a portion of the upgraded transmission line. Additionally, Alternative 2 would permanently retain the new transmission line to the mine site to power the Centralized Water Treatment Plant at the mine site in perpetuity as part of the Water Quality Management Plan. These changes would result in different impacts than Alternative 1, and in different locations.

4.19.2.2.1 RECREATION OPPORTUNITIES, FACILITIES, ACCESS, AND USE

4.19.2.2.1.1 Construction

Impacts of Alternative 2 during construction would be the same as those described under Alternative 1 for the mine site facilities, Yellow Pine Route, Warm Lake Road, OHV Trail, communication facilities, new transmission line, and Johnson Creek substation. Impacts would be different for the Burntlog Route, closure of Stibnite and Thunder Mountain roads through the mine site, public access roads through the mine site, the maintenance facility, and transmission line upgrades.

Burntlog Route

Impacts would be similar to those described under Alternative 1. The re-routed segment of Burntlog Route near Riordan Creek and Black Lake could provide more extensive changes in the recreation setting for wilderness activities compared to existing conditions and Alternative 1. The re-routed segment would be closer and increase the miles of roads within 0.5-mile of the FCRNRW border (see maps in **Appendix N-3**).

Closure of Stibnite and Thunder Mountain Roads Through the Mine Site

Direct impacts would be the same as those described under Alternative 1, except impacts would have a different duration. Impacts to recreation area and site access, use, and opportunities along Thunder Mountain Road (FR 50375) would begin during construction and continue until a new public access road through the mine site was constructed.

Impacts to recreation along Stibnite Road (CR 50-412) and Thunder Mountain Road through the mine site would be the same as Alternative 1 during construction and conclude when a public access road is constructed, and public use would be allowed in the Operations Area Boundary after closure/reclamation.

Burntlog Maintenance Facility

Under Alternative 2, the maintenance facility would be 4.4 miles east of the Johnson Creek Road (CR 10-413) and Warm Lake Road (CR 10-579) intersection in a borrow area created for the Burntlog Route. Construction of the maintenance facility may require temporary road closures and/or detours along Burnt Log Road (FR 447), thereby temporarily reducing access to recreation sites and areas along this roadway and trails/areas accessed from this road (see maps in **Appendix N-3**).

Noise associated with construction activities could reduce opportunities for noise-sensitive recreation activities at and around the maintenance facility location, including wildlife-related recreation activities, because wildlife may be displaced. Noise from construction activities related to the Burntlog Maintenance Facility would be above ambient levels (40 dBA) at the Mud Lake dispersed camping area (AECOM 2019). Therefore, some recreationists may choose to visit other areas or sites to avoid delays or noise from construction activities. Any reduction in recreation opportunities, displacement of dispersed recreational use, or changes in access would be temporary until maintenance facility construction was completed. These impacts would be localized to the area surrounding the maintenance facility, and the roads/trails accessed from Burnt Log Road (FR 447).

Transmission Line Upgrades

Impacts would be similar to those described under Alternative 1. In addition, a portion of the transmission line would be re-routed near Thunder Mountain Estates to be along the Warm Lake Road ROW and the edge of NFS and State lands. The re-routed portion along the road would not be in a recreation area. Noise associated with construction of the portion along the NFS and State lands could reduce opportunities for more noise-sensitive recreation activities along the corridor, including wildlife-related recreation activities, because wildlife may be displaced.

There is a motorcycle trail (Eagle Nest) on the NFS lands that intersects the re-routed location of the upgraded transmission line. Construction of the upgraded transmission line in this location may result in delays or detours accessing this trail. The re-routed segment of the transmission line could adversely affect the recreation experience for users of this trail compared to existing conditions (see maps in **Appendix N-3**). Therefore, some recreationists may choose to visit other areas or trails to avoid delays or noise from construction activities. Any reduction in recreation opportunities, displacement of dispersed recreation use, or changes in access would be temporary until the transmission line was completed. These impacts would be localized to the Thunder Mountain Estates re-route section of the transmission line. Impacts would be temporary and conclude when the re-routed portion of the transmission line was completed.

4.19.2.2.1.2 Operations

Impacts of Alternative 2 during operations would be the same as those described under Alternative 1, except for the Burntlog Route, public access through the mine site, Burntlog Maintenance Facility, and upgraded transmission line.

Burntlog Route

Impacts would be similar to Alternative 1; however, motorized public use (not including special use permit holders) of the Burntlog Route would only be allowed when the public access route through the mine site was closed, which would occur during some mining activities that would be considered public safety hazards (e.g., high wall scaling, blasting). Therefore, there could be less potential increase in dispersed recreational use along the Burntlog Route under Alternative 2 than under Alternative 1.

Under Alternative 2, the re-routed portion of Burntlog Route near Riordan Creek could provide more extensive changes in the recreation setting for wilderness activities compared to existing conditions as the re-routed segment would be much closer to the FCRNRW border (see maps in **Appendix N-3**). Recreation setting changes would require wilderness users to penetrate further into the wilderness to achieve a primitive setting. The re-routed section also could induce increased recreation use in the Black Lake area compared to existing conditions, because the roadway would be very close to this lake. Similarly, the new segment of the Burntlog Route passes very close to the FCRNRW border and may induce increased use of the wilderness area, and potentially unauthorized motorized use due to the very close proximity of the roadway to the wilderness boundary.

Unlike Alternative 1, operational traffic noise and road maintenance noise in the winter would not be above ambient levels at the Thunder Mountain/Riordan Trailhead (AECOM 2019) because the new segment of the Burntlog Route would be further east adjacent to the wilderness boundary. Operation of the lime kiln at the mine site under Alternative 2 would reduce the number of trucks on the Burntlog Route from 65 to 50 per day and therefore slightly reduce operational traffic and noise impacts.

Public Access through the Mine Site

During mining operations, public access would be allowed through the mine site under Alternative 2 via a 12-foot gravel road that connects Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) (see maps in **Appendix N-3**). This road would be open to all vehicles year-round but would not be plowed during the winter. Because the road would be within the Operations Area Boundary, there would be no public use allowed off the road; the road would only be for public access to the recreation sites/areas accessed via Thunder Mountain Road (FR 50375). The public access road through the mine site would return access to these recreation sites/areas after Stibnite Road (CR 50-412) is no longer available. In addition, the public access road would allow visitors from Yellow Pine to reach the Thunder Mountain Road sites/areas substantially faster than taking the Burntlog Route, which may result in less displacement of use at these sites/areas during operations. For visitors that pass through the mine site on the public access road, the recreation setting would be very developed and substantially modified; however, this would likely be expected, because the road would be passing through an active mine site. Although the public access road would return access to recreation sites/areas accessed via Thunder Mountain Road (FR 50375), there would be temporary closures of this route during some mining activities that would be considered public safety hazards (e.g., high wall scaling, blasting). When such road closures would occur, the

closures would result in reduced access to recreation sites/areas off Thunder Mountain Road (FR 50375); reduced recreation opportunities and use due to a lack of access; and impacts to recreation experiences due to visitor expectations regarding site/area availability. Impacts from road closures would affect recreation sites/areas off Thunder Mountain Road (FR 50375) and may ultimately lead to continued displacement of visitors from the Thunder Mountain Road sites/areas. Impacts would persist throughout operations and closure and reclamation until a relocated Stibnite Road (CR 50-412) was available to the public, and the mine access road was decommissioned.

Burntlog Maintenance Facility

Development of the Burntlog Maintenance Facility would reduce recreation opportunities due to physical removal of acreage for the facility (3.8 acres). Impacts from operational traffic and road maintenance activities (and associated noise) are included in the impacts from the Burntlog Route, which would occur immediately adjacent to this facility. Operational noise at the maintenance facility by itself would be substantially less than the immediately adjacent traffic and/or road maintenance noise. Noise could reduce opportunities for some recreation activities in this area; particularly wildlife-related recreation activities, because wildlife may be displaced from the general maintenance facility area. The maintenance facility would increase man-made development in the area surrounding the facility, including nighttime lighting. These changes may affect the recreation setting of this general area by decreasing the feeling of remoteness, thereby affecting the recreation experience for visitors to the area. Impacts would generally be limited to the area within visual and audible distance of the maintenance facility; and would begin once the facility was operational and conclude once the facility was closed and reclaimed.

Upgraded Transmission Line

Impacts would be similar to those described under Alternative 1. In addition, the re-routed portion of the transmission line along the NFS and State lands around the Thunder Mountain Estates, would alter the recreation setting of these lands, and the motorcycle trail that leaves from Warm Lake Road on the NFS lands in this area. The new transmission line in this area would result in a more developed recreation setting for these lands and the trail; however, dispersed users and motorcyclists would generally be able to move away from the transmission line; therefore, this change in the recreation setting may not greatly influence their recreation experience. Impacts would be permanent, because the transmission line would remain after closure/reclamation.

4.19.2.2.1.3 Closure and Reclamation

Impacts of Alternative 2 during closure and reclamation would be the same as those described under Alternative 1, except for mine site facilities, the Burntlog Maintenance Facility, upgraded transmission line, and new transmission line to the mine site.

Mine Site Facilities

Impacts to recreation would be the same as Alternative 1, except the recreation setting also would be permanently altered by the Centralized Water Treatment Plant, which would remain on

site after mine reclamation activities occurred. A small amount of mine-related truck trips would continue to occur to operate the Centralized Water Treatment Plant. Although there would be an increase in traffic on Stibnite Road (CR 50-412) compared to existing conditions, the number of truck trips would be very low per month and would not affect recreation access through the mine site after reclamation.

Burntlog Maintenance Facility

As part of closure and reclamation, the Burntlog Maintenance Facility would be removed, the site graded, and drainage would be reestablished. The approximately 4.6-acre site would be seeded and become available for public recreational use following reclamation. Impacts to recreation during decommissioning would be the same as those described for construction: potential temporary closure or delays on Burnt Log Road (FR 447) resulting in impacts to recreation experiences, and reduction in some recreation opportunities due to noise. Any reduction in recreation opportunities, displacement of dispersed recreational use, or changes in access would be temporary until the maintenance facility was closed and reclaimed. Once the facility was closed and the site was reclaimed by vegetation, operational impacts related to loss of acreage for recreation and changes to the recreation setting of the general area surrounding the facility would cease. These impacts would be localized to the area surrounding the maintenance facility, and the roads/trails accessed from Burnt Log Road (FR 447).

Upgraded Transmission Line

The upgraded transmission line from Lake Fork to Johnson Creek substation would be retained and used by Idaho Power Company. Therefore, impacts described under Operations for the upgraded transmission line would remain after mine closure, which include impacts to the recreation setting and recreation experiences.

New Transmission Line to Mine Site

Impacts described under Operations of Alternative 1 would continue to occur indefinitely as the power would be needed at the mine site for operation of the Centralized Water Treatment Plant in perpetuity. The new transmission line and transmission line access roads would not be decommissioned under Alternative 2. Thus, the physical removal of 115 acres for recreation for transmission line facilities, changes to the recreation setting due to the increased presence of man-made development and the clearing of existing vegetation along the ROW, and impacts to recreation access, opportunities and use due to the improvements to FT 233 would become permanent. In addition, unauthorized use of the portion of the transmission line road that does not overlap with FT 233 could continue.

4.19.2.2.2 ROS CLASSES AND PHYSICAL SETTING

4.19.2.2.2.1 Designated ROS Classes

Impacts of Alternative 2 on designated ROS classes would be the same as those described under Alternative 1, except for the closure of Stibnite and Thunder Mountain roads through the

mine site, the road through the mine site, the Burntlog Maintenance Facility, and the new transmission line to the mine site.

Closure of Stibnite and Thunder Mountain Roads Through the Mine Site

Impacts would be similar to those described under Alternative 1, although under Alternative 2, the roads would only be closed during construction.

Road Through Mine Site

Public access through the mine site would be located in an area currently designated as Roded Natural. This designation allows for some landscape modification from roads and therefore public access through the mine site would not result in inconsistencies with the existing ROS designation.

Burntlog Maintenance Facility

The Burntlog Maintenance Facility would be in an area currently designated as Roded Modified, which can have modifications that are visually subordinate to viewers. Therefore, the maintenance facility in this area would not result in inconsistencies with the existing ROS designation class.

New Transmission Line to Mine Site

Impacts would be similar to those described under Alternative 1, however, the inconsistency of the new transmission line and access road in an area designated as Semi-Primitive Non-Motorized in PNF MA 13 would be permanent as the transmission line would be needed in perpetuity to operate the Centralized Water Treatment Plant and therefore would not be decommissioned.

4.19.2.2.2 Estimated ROS Physical Setting

Impacts of Alternative 2 on estimated ROS physical settings would be the same as those described under Alternative 1, except for the closure of Stibnite and Thunder Mountain roads through the mine site, the road through the mine site, the Burntlog Maintenance Facility, and the new transmission line to the mine site. **Tables 4.19-3** and **4.19-4** show the acreage changes to estimated ROS physical settings under Alternative 2 from existing conditions; graphical representations of the estimated ROS physical settings are shown in **Appendix N-3**, Chapter 4 Recreation Mapbooks and Figures, Alternative 2.

Closure of Stibnite and Thunder Mountain Roads Through the Mine Site

Impacts would be similar to those described under Alternative 1, although under Alternative 2, the roads would only be closed during construction.

Road Through Mine Site

Public access through the mine site would be located in an area with an existing estimated ROS physical setting of Rural, which allows for strong evidence of designed roads. Therefore, public access through the mine site would not result in inconsistencies with the existing estimated ROS physical setting.

Burntlog Maintenance Facility

The new Burntlog Maintenance Facility would be in an area with an existing estimated ROS physical setting of Rural, and therefore would not result in any alterations to the existing estimated ROS physical setting.

New Transmission Line to Mine Site

Impacts would be similar to those described under Alternative 1, however, the creation of a new road and transmission line facility would alter the Semi-Primitive Non-Motorized setting to Semi-Primitive Motorized, would be permanent as the transmission line would not be decommissioned.

Table 4.19-3 Comparison of Existing and Alternative 2 Estimated ROS Physical Setting Classes in the Analysis Area – Summer

Estimated ROS Physical Setting Class	Existing Acreage – Summer	Operational Acreage – Summer	Total Change in Acreage	Locations of Changes
Primitive	17,278	16,124	-1,154	Burntlog Route
Semi-Primitive Non-Motorized	218,512	207,140	-11,372	Mine site, Burntlog Route, area west of Mine Site, OHV Trail, new transmission line to Mine Site
Semi-Primitive Motorized	83,497	86,189	2,692	Lost acreage: Burntlog Route, Mine Site Gained acreage: Area west of the Mine Site, OHV Trail, new transmission line to Mine Site
Roaded Natural	140,594	139,031	-1,563	Lost acreage: Mine Site Gain acreage: Burntlog Route
Rural	81,450	79,401	-2,049	Mine Site
Mine Site	0	13,446	13,446	Mine Site (acreage removed from other classes for the Mine Site)

Table Source: AECOM 2020

Table 4.19-4 Comparison of Existing and Alternative 2 Estimated ROS Physical Setting Classes in the Analysis Area – Winter

Estimated ROS Physical Setting Class	Existing Acreage – Winter	Operational Acreage – Winter	Total Change in Acreage	Locations of Changes
Primitive	21,370	20,216	-1,154	Burntlog Route
Semi-Primitive Non-Motorized	245,210	233,581	-11,629	Mine Site
Semi-Primitive Motorized	240,387	220,712	-19,675	Burntlog Route, Mine Site, Cabin Creek Road
Semi-Primitive Motorized Groomed	50,436*	46,135	-4,301	Lost acreage: Warm Lake Road, Burnt Log Road Gained acreage: Cabin Creek Road
Roaded Natural	7,511	22,563	15,052	Lost acreage: Mine Site Gained acreage: Burntlog Route
Rural	26,853	30,813	3,960	Warm Lake Road from Warm Lake to Landmark, Burntlog Route
Mine Site	0	13,446	13,446	Mine Site (acreage removed from other classes for the Mine Site)

Table Source: AECOM 2020

Table Note:

*This acreage overlaps other features.

4.19.2.2.3 RECREATION SPECIAL USE PERMITS

4.19.2.2.3.1 Construction

Impacts from construction of Alternative 2 on the recreation-related special use permits currently approved in the analysis area would be similar to those described under Alternative 1, except for the impacts from closure of Stibnite and Thunder Mountain roads on the Elk Springs Outfitters, Idaho Wilderness Company, and Juniper Mountain Outfitters would be as described in Section 4.19.2.2.2.1, and the Burntlog Maintenance Facility would impact the Juniper Mountain Outfitters (rather than the Landmark Maintenance Facility).

4.19.2.2.3.2 Operations

Impacts from mine operations under Alternative 2 on the recreation-related special use permits currently approved in the analysis area would be similar to those described under Alternative 1, except the impacts from the closure of Stibnite and Thunder Mountain roads on the Elk Springs

Outfitters, Idaho Wilderness Company, and Juniper Mountain Outfitters would not occur, because a road through the mine site would provide access to Thunder Mountain Road, as described in Section 4.19.2.2.2.1 above, and the Burntlog Maintenance Facility would impact the Juniper Mountain Outfitters, rather than the Landmark Maintenance Facility. Impacts from the Burntlog Route under Alternative 2 may have an increased impact on the ability of the Elk Springs Outfitters and Juniper Mountain Outfitters to provide IOGLB licensed activities due to impacts on wilderness activities. However, special use permit holders would be allowed to use the Burntlog Route under Alternative 2 when the public could not and; therefore, may have vehicular access to areas when the public does not.

4.19.2.2.3.3 Closure and Reclamation

Impacts from closure/reclamation of Alternative 2 on the recreation-related special use permits currently approved in the analysis area would be similar to those described under Alternative 1, except the Burntlog Maintenance Facility would impact the Juniper Mountain Outfitters, rather than the Landmark Maintenance Facility. In addition, the permanent retention of the new transmission line to the mine site would permanently impact the recreation setting of the operating area for Elk Springs Outfitters and Juniper Mountain Outfitters. In addition, the Centralized Water Treatment Plant would provide additional man-made development impacts to the recreation setting for the Elk Springs Outfitters operating area and would be visible when accessing the Idaho Wilderness Company's operating area off Thunder Mountain Road.

4.19.2.3 Alternative 3

Alternative 3 is similar to Alternative 1, with the main differences that affect recreation being no construction of the OHV Trail, some mine facilities and the new transmission line would be in a different location, improvements to Meadow Creek Lookout Road, and a different public access road through the mine site after closure/reclamation. The Operations Area Boundary also would be larger under Alternative 3 due to the change in location of the TSF.

4.19.2.3.1 RECREATION OPPORTUNITIES, FACILITIES, ACCESS, AND USE

4.19.2.3.1.1 Construction

Impacts of Alternative 3 during construction would be the same as those described under Alternative 1, except for the mine site facilities and widening Meadow Creek Lookout Road. Widening 7.6 miles of Meadow Creek Lookout Road (FR 51290) adjacent to the FCRNRW could result in additional changes to the recreation setting for wilderness activities. Widening Meadow Creek Lookout Road could induce an increase in recreation use in the Monumental Summit area.

Mine Site Facilities

Impacts to recreation would be similar to those described under Alternative 1 although the Operations Area Boundary would be 17,034 acres and would therefore incur more extensive impacts to recreation opportunities due to a larger area removed from recreational use.

4.19.2.3.1.2 Operations

Impacts of Alternative 3 during operations would be the same as those described under Alternative 1, except for the location of mine site facilities, segment of Burntlog Route in Blowout Creek valley, and new transmission line to the mine site. Similar to Alternative 1, during mine operations there would be no public use road through the mine site. The OHV Trail would not be constructed under Alternative 3; therefore, there would be no operational impacts related to use of this trail. Visitors to recreation sites off Thunder Mountain and Meadow Creek Lookout roads would have to use the entire Burntlog Route to reach these sites.

Mine Site Facilities

Impacts would be the same as those described under Alternative 1. In addition, the East Fork South Fork Salmon River Development Rock Storage Facility and Tailings Storage Facility (TSF) would be visible from the Mule Hill Trail (FT 4219) within the FCRNRW under Alternative 3 (see Section 4.20.2.3.1.1). Thus, Alternative 3 may have additional impacts on recreation setting within the FCRNRW due to changes in the recreation setting compared to existing conditions and Alternative 1.

Burntlog Route

Impacts on recreation during mine operation would be similar to Alternative 1 except there would be no traffic related to mine operations on Meadow Creek Lookout Road (FR 51290) east of the new Blowout Creek Valley road segment. This would result in fewer impacts to the recreation setting along Meadow Creek Lookout Road and Thunder Mountain Road, and therefore fewer impacts to recreation experiences for visitors to these roads and the sites/areas accessed from these roads. Visitors to Monumental Summit would use Burntlog Route including the improved 7.6-mile section of Meadow Creek Lookout Road. In addition, the OHV Trail, which would not be built under Alternative 3, therefore would not contribute to potential new increases in recreation use in this area.

New Transmission Line to Mine Site

Impacts would be similar to those described under Alternative 1; however, the 10.8 miles long new transmission line would in a different location under Alternative 3. The new transmission line and associated access road to the mine site would be located along Horse Heaven Road (FR 416W) and Trail FT 233, and then continue from FT 233 east to the mine site between two IRAs. The new transmission line to the mine site would reduce recreation opportunities due to physical removal of acreage for transmission line facilities (approximately 124 acres).

4.19.2.3.1.3 Closure and Reclamation

Impacts of Alternative 3 during closure and reclamation would be the same as those described under Alternative 1, except for the location of public access after reclamation.

Public Access After Reclamation

Under Alternative 3, there would be two options for public access through the mine site after closure and reclamation of the mine (see maps in **Appendix N-4**). One option would be to connect the existing Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) over a portion of the TSF and East Fork South Fork Salmon River Development Rock Storage Facility. Reopening Stibnite Road (CR 50-412) and its connection to Thunder Mountain Road (FR 50375) would result in the same reclamation/closure impacts as described under Alternative 1. The second public access option is to retain a segment of Burntlog Route through Blowout Creek Valley and convert it to a road available for public use connecting to Meadow Creek Lookout Road (FR 51290). This option would be a slightly longer way to reach Thunder Mountain Road (FR 50375) and the recreation sites/areas accessed from this road, because visitors would have to travel south through the entire mining area, and then east on Meadow Creek Lookout Road (FR 51290) until the junction with Thunder Mountain Road (FR 50375). This option would result in impacts similar to Alternative 1, except it may encourage less return of displaced recreation use due to the slightly longer distance to reach Thunder Mountain Road compared to the first option. The Blowout Creek Valley road option may encourage more use of the mine site, because it would require visitors to pass through the entire mine site from north to south and would bring visitors closer to the Hangar Flats pit and decommissioned transmission line access road. Impacts to recreation access, opportunities, and use from public access through the mine site would continue beyond closure and reclamation.

New Transmission Line to Mine Site

Impacts would be similar to those described under Alternative 1; however, the new transmission line to the mine site would be 10.8 miles long.

4.19.2.3.2 ROS CLASSES AND PHYSICAL SETTING

4.19.2.3.2.1 Designated ROS Classes

Impacts of Alternative 3 on designated ROS classes would be the same as those described under Alternative 1, except for the OHV Trail and public access after reclamation. The OHV Trail would not be constructed under Alternative 3, and therefore, there would be no impacts related to inconsistency with the existing ROS designation.

Public Access After Reclamation

Public access through the mine site would be located in areas currently designated as Roded Natural and Semi-Primitive Non-Motorized. The road through the mine site after reclamation within the Roded Natural area, which allows for some landscape modification from roads, would not result in inconsistencies with this existing ROS designation. However, the road would be inconsistent with the Semi-Primitive Non-Motorized designation and would be more consistent with a Roded Natural designation.

4.19.2.3.2.2 Estimated ROS Physical Setting

Impacts of Alternative 3 on estimated ROS physical settings would be the same as those described under Alternative 1, except for the OHV Trail and public access after reclamation. The OHV Trail would not be constructed under Alternative 3; therefore, there would be no impacts related to existing estimated ROS physical settings. **Tables 4.19-5** and **4.19-6** show the acreage changes to estimated ROS physical settings under Alternative 3 from existing conditions; graphical representations of the estimated ROS physical settings are shown in **Appendix N-4**, Chapter 4 Recreation Mapbooks and Figures, Alternative 3.

Public Access After Reclamation

Public access through the mine site would be located in areas with existing estimated ROS physical settings of Rural, Roaded Natural, and Semi-Primitive Non-Motorized. The road through the mine site after reclamation in areas with estimated ROS physical settings of Rural and Roaded Natural, both of which allow for strong evidence of designed roads, would not result in inconsistencies with these existing estimated ROS physical settings. However, the road would be inconsistent with the existing estimated ROS physical setting of Semi-Primitive Non-Motorized and alter this setting to Roaded Natural, as the road would likely be considered a “better than primitive” road.

Table 4.19-5 Comparison of Existing and Alternative 3 Estimated ROS Physical Setting Classes in the Analysis Area – Summer

Estimated ROS Physical Setting Class	Existing Acreage – Summer	Operational Acreage – Summer	Total Change in Acreage	Locations of Changes
Primitive	17,278	16,838	-440	Burntlog Route
Semi-Primitive Non-Motorized	218,512	207,182	-11,330	Mine Site, Burntlog Route, area west of the Mine Site, new transmission line to Mine Site
Semi-Primitive Motorized	83,497	86,197	2,700	Lost acreage: Burntlog Route, Mine Site Gained acreage: Area west of the Mine Site, new transmission line to Mine Site
Roaded Natural	140,594	134,664	-5,930	Lost acreage: Mine Site Gain acreage: Burntlog Route
Rural	81,450	79,418	-2,032	Mine Site
Mine Site	0	17,034	17,034	Mine Site (acreage removed from other classes for the Mine Site)

Table Source: AECOM 2020

Table 4.19-6 Comparison of Existing and Alternative 3 Estimated ROS Physical Setting Classes in the Analysis Area – Winter

Estimated ROS Physical Setting Class	Existing Acreage – Winter	Operational Acreage – Winter	Total Change in Acreage	Locations of Changes
Primitive	21,370	20,930	-440	Burntlog Route
Semi-Primitive Non-Motorized	245,210	233,621	-11,589	Mine Site
Semi-Primitive Motorized	240,387	217,008	-23,379	Burntlog Route, Mine Site, Cabin Creek Road
Semi-Primitive Motorized Groomed	50,436*	46,135	-4,301	Lost acreage: Warm Lake Road (CR 10-579), Burnt Log Road Gained acreage: Cabin Creek Road
Roaded Natural	7,511	21,926	14,415	Lost acreage: Mine Site Gained acreage: Burntlog Route
Rural	26,853	30,813	3,960	Warm Lake Road (CR 10-579) from Warm Lake to Landmark, Burntlog Route
Mine Site	0	17,034	17,034	Mine Site (acreage removed from other classes for the Mine Site)

Table Source: AECOM 2020

Table Note:

*This acreage overlaps other features.

4.19.2.3.3 RECREATION SPECIAL USE PERMITS

4.19.2.3.3.1 Construction

Impacts from construction of Alternative 3 on the recreation-related special use permits currently approved in the analysis area would be similar to those described under Alternative 1, except the OHV Trail would not be constructed under Alternative 3; therefore, construction activities associated with this component would not impact the Elk Springs and Juniper Mountain Outfitters.

4.19.2.3.3.2 Operations

Impacts from mine operations under Alternative 3 on the recreation-related special use permits currently approved in the analysis area would be similar to those described under Alternative 1, except the OHV Trail would not be constructed under Alternative 3; therefore, this component would not impact access and recreation experiences for clients of the Elk Springs and Juniper Mountain Outfitters.

4.19.2.3.3.3 Closure and Reclamation

Impacts from closure and reclamation under Alternative 3 on the recreation-related special use permits currently approved in the analysis area would be similar to those described under Alternative 1, except the OHV Trail would not be constructed under Alternative 3; therefore, closure and reclamation activities associated with this component would not impact the Elk Springs and Juniper Mountain Outfitters. In addition, impacts related to the new transmission line and public access after reclamation would be slightly different, as discussed in Section 4.19.2.3.1.3, and therefore may have slightly different impacts on recreation opportunities, settings, and experiences for Elk Springs Outfitters clients.

4.19.2.4 Alternative 4

Alternative 4 is similar to Alternative 1, with the main differences that affect recreation consisting of use of the Yellow Pine Route for access to the mine for all phases (and therefore, no construction or use of the Burntlog Route); slight change in the location of the Landmark Maintenance Facility; public road access through the mine during operations (similar to Alternative 2); and use of helicopters for construction and maintenance of cell towers and repeater sites in IRAs managed for backcountry/restoration. These changes would result in different impacts than Alternative 1, particularly the use of the Yellow Pine Route.

4.19.2.4.1 RECREATION OPPORTUNITIES, FACILITIES, ACCESS, AND USE

4.19.2.4.1.1 Construction

Impacts of Alternative 4 during construction would be the same as those described under Alternative 1, except for the Burntlog Route, Yellow Pine Route, OHV Trail, Landmark Maintenance Facility, and communication facilities. The Burntlog Route and OHV Trail would not be constructed under Alternative 4; therefore, there would be no construction impacts related to these facilities.

Yellow Pine Route

Year-Round

Use of Johnson Creek (CR 10-413) and Stibnite Roads (CR 50-412) as the route to the mine site during construction, operations, and reclamation/closure would result in impacts to the recreation setting of the existing recreation sites/areas along these roads due to increased noise, traffic, and safety-related issues from mine-related traffic (please see Section 4.18, Public Health and Safety; and Section 4.16, Access and Transportation, for more information on increased traffic-related safety impacts under Alternative 4), leading to a change in recreation experiences for some visitors. Traffic on Johnson Creek and Stibnite Roads (CR 50-412) would substantially increase (more than 2 times the traffic on Johnson Creek Road (CR 10-413), and 2.5 times the traffic on Stibnite Road), thereby increasing the noise and activity near campgrounds and trailheads adjacent to these roads. AADT would rise from 57 to 122 during

construction on Johnson Creek Road (CR 10-413) and go from 39 on Stibnite Road (CR 50-412) to 104 during construction.

Recreation facilities affected by the increase in traffic and traffic noise would include Burntlog and Quartz Creek Trailheads; Buck Mountain, Trout Creek, Ice Hole, Golden Gate, and Yellow Pine Campgrounds; Twin Bridges dispersed camping area; and Johnson Creek Cabin. Therefore, the recreation setting of these facilities would be altered to a more developed setting due to an increase in the sights and sounds of humans. Therefore, recreationists may be displaced to avoid noise associated with activities and traffic along Stibnite and Johnson Creek roads, particularly recreationists participating in non-motorized activities. Motorized users who use Johnson Creek and Stibnite Roads for recreation also may be displaced due to the increased traffic along the roadways. Wildlife-related recreation opportunities also would decrease along these roadways due to wildlife displacement from traffic and noise. Changes to the recreation setting, displacement of dispersed recreation, and reduction in recreation opportunities would begin during construction, and would continue through operations and closure/reclamation.

During construction, there would be periodic temporary road closures on Johnson Creek Road (CR 10-413). Such road closures would result in reduced access to recreation sites/areas, reduced recreation opportunities, and reduced use due to a lack of access, and impacts to recreation experiences due to visitor expectations regarding site/area availability. Impacts from road closures would affect recreation sites/areas along Johnson Creek Road (CR 10-413), as well as sites, trails, and areas accessed from this main route. Impacts would persist throughout construction.

There also would be daily closure of Stibnite Road (CR 50-412) for most of the middle of the day during mine construction. These daily closures would result in reduced access to recreation sites/areas off Stibnite Road (CR 50-412) and Thunder Mountain Road (FR 50375); reduced recreation opportunities and use due to temporary reductions in access; and impacts to recreation experiences due to delays in reaching destinations. Impacts from road closures would affect recreation sites/areas along Stibnite Road (CR 50-412), as well as sites, trails, and areas accessed from this main route, particularly sites off Thunder Mountain Road (FR 50375). Depending on where the closure started on Stibnite Road (CR 50-412), access to the Big Creek area north of the mine also may be affected. Impacts would persist throughout the 2- to 3-year mine construction period.

Although Stibnite Road (CR 50-412) would be open for public access as part of the Yellow Pine Route, the Stibnite Mining District Interpretive Site would not be available for public use, because it would be within the Operations Area Boundary where no public use would be allowed. Impacts to this facility would begin during construction and conclude when public use was allowed in the mine area after closure/reclamation.

Winter

Impacts from the plowing of Johnson Creek Road would be similar as those described for Alternative 1. However, the groomed OSV route along the western side of Johnson Creek Road would run from Wapiti Meadow Ranch to Landmark (approximately 17 miles) under Alternative 4 (see maps in **Appendix N-5**). Under allowing continued use of the Ditch Creek Road (FR 410) groomed OSV route. Also, the new groomed OSV route along Johnson Creek Road would remain through operations and closure/reclamation under Alternative 4 as the Yellow Pine Route would be used throughout the SGP. Therefore, impacts from the plowing of Johnson Creek Road under Alternative 4 would begin during construction, and would cease after mine reclamation/closure.

Landmark Maintenance Facility

Impacts from the construction of the Landmark Maintenance Facility would be similar to those described under Alternative 1; however, there would be no delays or additional traffic along Warm Lake Road (CR 10-579) in this area related to the construction of the Burntlog Route, but rather from all construction-related traffic using Warm Lake Road (CR 10-579) to Johnson Creek Road (CR 10-413). Noise-related construction impacts also would be similar to Alternative 1. Impacts would be localized to the area surrounding the maintenance facility, and the roads/trails accessed east of the facility off Warm Lake Road (CR 10-579).

Communications Facilities

Construction of repeater sites and cell tower sites not in an IRA managed for backcountry/restoration would result in the same impacts as those described under Alternative 1. Constructing repeater sites and the cell tower site in an IRA managed for backcountry/restoration, noise and disruption from the use of helicopters for construction may temporarily affect the recreation setting for users within visual and audible distance of the helicopters. Impacts would be localized to the cell tower and repeater sites in IRAs managed for backcountry/restoration. Changes in the recreation setting around these repeater and cell tower sites could lead to a temporary displacement of dispersed recreational use, particularly related to non-motorized activities, wilderness activities, and wildlife-related recreation activities (due to wildlife displacement), which currently typically occur in a quieter, non-motorized setting in these areas compared to existing conditions. Additionally, use of helicopters would eliminate the impacts of new access roads to the tower/repeater sites (e.g., changes in the recreation setting along access route that could lead to displacement of dispersed recreational use, particularly related to non-motorized activities, and wildlife-related recreation activities) as described under Alternative 1.

4.19.2.4.1.2 Operations

Impacts of Alternative 4 during operations would be the same as those described under Alternative 1, except for the Burntlog Route, Yellow Pine Route, public access through the mine site, OHV Trail, Landmark Maintenance Facility, and communication facilities. The Burntlog Route and OHV Trail would not be constructed under Alternative 4; therefore, there would be no

operations impacts related to these facilities. Existing access and recreation opportunities and settings along the Burnt Log Road (FR 447) would remain as is. Because visitor road access would be allowed through the mine site under Alternative 4, the OHV Trail would not be necessary to provide alternative access to recreation sites off Thunder Mountain Road. Impacts from the new transmission line to the mine site would be the same as those described for Alternative 3.

Yellow Pine Route

Year-Round

Impacts described under construction for the Yellow Pine Route also would occur during operations, because Johnson Creek and Stibnite roads would continue to be used as the main access roads into the mine site and also would require periodic road maintenance activities. AADT for these roads would be slightly higher during operations than described under construction, but within 5 vehicles, thus resulting in the same impacts described under construction. However, impacts due to temporary closure of Johnson Creek and Stibnite Roads (CR 50-412) would not occur during operations. Impacts to recreation from use of the road through the mine site are described below.

Winter

Impacts described under construction for the Yellow Pine Route also would occur during operations, because Johnson Creek Road (CR 10-413) would continue to be plowed during operations.

Public Access Through the Mine Site

Impacts would be similar to those described under Alternative 2, but instead of restoring access that was closed during construction, the mine access road would provide access to recreation sites/areas via Thunder Mountain Road (FR 50375) (see maps in **Appendix N-5**). Therefore, the mine access road would allow continuous access to the Thunder Mountain Road sites/areas. However, as described under Alternative 2, there would be temporary closures of this route during some mining activities that would result in impacts to recreation.

Landmark Maintenance Facility

Impacts related to operation of the Landmark Maintenance Facility would be similar to Alternative 1, except traffic due to maintenance activities would be included under Yellow Pine Route operational impacts because the site would be accessed via the Yellow Pine Route.

Communications Facilities

Impacts from operation of cell tower and repeater sites not in an IRA managed for backcountry/restoration would be the same as those described in Alternative 1.

Noise and disruption from the use of helicopters for maintenance of cell tower and repeater sites in an IRA managed for backcountry/restoration may temporarily affect the recreation setting for users within visual and audible distance of the helicopters. Impacts would be localized to the cell tower and repeater sites in IRAs managed for backcountry/restoration. Impacts would be temporary during operations, and only occur when maintenance activities were conducted.

New cellular coverage in the analysis area would increase visitor safety on NFS lands; however, additional cellular coverage would detract from primitive recreation experiences. Impacts would begin once the cell tower was constructed and would conclude with decommissioning of the site.

4.19.2.4.1.3 Closure and Reclamation

Impacts of Alternative 4 during closure and reclamation would be the same as those described under Alternative 1, except for the Burntlog Route, Yellow Pine Route, public access after reclamation, OHV Trail, and communication facilities. The Burntlog Route and OHV Trail would not be constructed under Alternative 4; therefore, there would be no closure/reclamation impacts related to these facilities. Impacts from the new transmission line to the mine site would be the same as those described for Alternative 3.

Yellow Pine Route

Year-Round

Impacts described under construction for the Yellow Pine Route also would occur during closure/reclamation, because Johnson Creek and Stibnite roads would continue to be used as the main access roads into the mine during closure and reclamation. However, impacts due to temporary closure of Johnson Creek and Stibnite roads would not occur during closure/reclamation. Impacts to recreation from use of the road through the mine site following closure/reclamation are described below. Following closure/reclamation, impacts to Johnson Creek and Stibnite Roads would cease.

Winter

Impacts described under construction for the Yellow Pine Route also would occur during closure/reclamation, because Johnson Creek Road (CR 10-413) would continue to be plowed during closure and reclamation. Following closure/reclamation, impacts to Johnson Creek Road would cease as plowing of this road would cease.

Public Access After Reclamation

Under Alternative 4, public access through the mine site after closure/reclamation would be on a reopened Stibnite Road (CR 50-412), which would include a permanent road through the backfilled Yellow Pine pit like Alternative 1 (see maps in **Appendix N-5**). However, under Alternative 4, Stibnite Road (CR 50-412) would not be returned to its pre-mining width, and the 9-foot-high retaining walls and various culverts would remain after mine closure and reclamation. After closure and reclamation, traffic on Stibnite Road (CR 50-412) would be

greatly reduced, which would benefit recreation experiences for visitors to the areas/sites east of the mine site off ThunderMountain Road (FR 50375), and encourage the return of recreational use at these sites/areas that was displaced during mining operations due to increased road traffic and road closures. Retaining the increased width of the road would continue to allow a wider range of vehicles to use this road, potentially increasing access. The alterations to the road, including the large retaining walls, would continue to affect the recreation setting. Impacts to the recreation setting of the entire mine site area are described above. Impacts to recreation access, experiences, and use from public access through the mine site would continue beyond closure/reclamation.

Communications Facilities

Impacts from closure and reclamation of cell tower and repeater sites not in an IRA managed for backcountry/restoration would be the same as those described in Alternative 1.

Noise and disruption from the use of helicopters for closure and reclamation of cell tower and repeater sites in an IRA managed for backcountry/restoration may temporarily affect the recreation setting for users within visual and audible distance of the helicopters. Changes in the recreation setting around these repeater and cell tower sites could lead to displacement of dispersed recreational use, particularly related to non-motorized activities, wilderness activities, and wildlife-related recreation activities (due to wildlife displacement), which currently typically occur in a quieter, non-motorized setting in these areas. Impacts would be localized to the cell tower and repeater sites in IRAs managed for backcountry/restoration. Impacts would be temporary and conclude once the sites were closed and reclaimed.

The loss of cellular coverage on portions of the analysis area may impact visitor safety in the mine site area. The loss of cellular coverage also would aid in returning primitive recreation experiences to the FCRNRW areas adjacent to the mine site.

4.19.2.4.2 ROS CLASSES AND PHYSICAL SETTING

4.19.2.4.2.1 Designated ROS Classes

Impacts of Alternative 4 on designated ROS classes would be the same as those described under Alternative 1, except for the Burntlog Route, Yellow Pine Route, and OHV Trail. The Burntlog Route and OHV Trail would not be constructed under Alternative 4; therefore, there would be no impacts related to inconsistency with the existing ROS designation for these facilities. Impacts from public access through the mine site would be the same as those described for Alternative 2.

Yellow Pine Route

Impacts would be the same as those described under Alternative 1 for summer ROS designations. Impacts would be similar to those described under Alternative 1 for winter ROS designations; however, plowing of Johnson Creek Road (CR 10-413) and Stibnite Road would occur through closure/reclamation. Therefore, plowing 21 miles of Johnson Creek Road

(CR 10-413) and 10.8 miles of Stibnite Road would not be consistent with the existing winter ROS designation classes for the area surrounding these roads, and would be more consistent with a designation of Roded Natural. This impact would continue through closure and reclamation.

4.19.2.4.2.2 Estimated ROS Physical Setting

Impacts of Alternative 4 on estimated ROS physical settings would be the same as those described under Alternative 1, except for the Burntlog Route, Yellow Pine Route, and OHV Trail. The Burntlog Route and OHV Trail would not be constructed under Alternative 4; therefore, there would be no impacts related to alterations of the existing estimated ROS physical setting for these facilities. Impacts from public access through the mine site would be the same as those described for Alternative 2. **Tables 4.19-7** and **4.19-8** show the acreage changes to estimated ROS physical settings under Alternative 4 from existing conditions; graphical representations of the estimated ROS physical settings are shown in **Appendix N-5** Chapter 4 Recreation Mapbooks and Figures, Alternative 4.

Yellow Pine Route

Impacts would be the same as those described under Alternative 1 for summer estimated ROS physical settings (Roded Natural and Rural). Impacts would be similar to those described under Alternative 1 for winter estimated ROS physical settings; however, plowing of Johnson Creek Road (CR 10-413) would occur through closure/reclamation. Therefore, plowing of Johnson Creek Road would alter the existing estimated winter ROS physical setting of the area around this road to Rural. This impact would continue through closure and reclamation.

Table 4.19-7 Comparison of Existing and Alternative 4 Estimated ROS Physical Setting Classes in the Analysis Area – Summer

Estimated ROS Physical Setting Class	Existing Acreage – Summer	Operational Acreage – Summer	Total Change in Acreage	Locations of Changes
Primitive	17,278	17,278	0	None
Semi-Primitive Non-Motorized	218,512	208,434	-10,078	Mine Site, area west of the Mine Site, new transmission line to Mine Site
Semi-Primitive Motorized	83,497	86,549	3,052	Lost acreage: Mine Site Gained acreage: Area west of the Mine Site, new transmission line to Mine Site
Roded Natural	140,594	136,251	-4,343	Mine Site
Rural	81,450	79,373	-2,077	Mine Site
Mine Site	0	13,446	13,446	Mine Site (acreage removed from other classes for the Mine Site)

Table Source: AECOM 2020

Table 4.19-8 Comparison of Existing and Alternative 4 Estimated ROS Physical Setting Classes in the Analysis Area – Winter

Estimated ROS Physical Setting Class	Existing Acreage – Winter	Operational Acreage – Winter	Total Change in Acreage	Locations of Changes
Primitive	21,370	21,370	0	None
Semi-Primitive Non-Motorized	245,210	234,849	-10,361	Mine Site
Semi-Primitive Motorized	240,387	235,610	-4,777	Mine Site, Cabin Creek Road
Semi-Primitive Motorized Groomed	50,436*	42,324	-8,112	Lost acreage: Warm Lake Road (CR 10-579), Johnson Creek Road Gained acreage: Cabin Creek Road
Roaded Natural	7,511	5,224	-2,287	Mine Site
Rural	26,853	40,284	13,431	Warm Lake Road (CR 10-579) from Warm Lake to Landmark, Johnson Creek Road
Mine Site	0	13,446	13,446	Mine Site (acreage removed from other classes for the Mine Site)

Table Source: AECOM 2020

Table Note:

*This acreage overlaps other features.

4.19.2.4.3 RECREATION SPECIAL USE PERMITS

4.19.2.4.3.1 Construction

Impacts from construction of Alternative 4 on the recreation-related special use permits currently approved in the analysis area would be similar to those described under Alternative 1, except there would be no impacts from the closure of Stibnite and Thunder Mountain roads on the Elk Springs Outfitters, Idaho Wilderness Company and Juniper Mountain Outfitters. Rather, under Alternative 4, alternate impacts would occur to recreation (access, use, opportunities, experiences) from use of, and temporary closures on, the Yellow Pine Route as described in Section 4.19.2.4.1.1 above. There also would be no impacts to the Elk Springs Outfitters, Idaho Wilderness Company, and Juniper Mountain Outfitters from the Burntlog Route. The OHV Trail would not be constructed under Alternative 4; therefore, this component would not impact the Elk Springs and Juniper Mountain Outfitters.

4.19.2.4.3.2 Operations

Impacts from operations under Alternative 4 on the recreation-related special use permits currently approved in the analysis area would be similar to those described under Alternative 1,

except the impacts from the closure of Stibnite and Thunder Mountain roads on the Elk Springs Outfitters, Idaho Wilderness Company, and Juniper Mountain Outfitters would not occur, because a road through the mine site would provide continuous access to Thunder Mountain Road, as described in Section 4.19.2.4.1.2.

There would be no impacts to the Elk Springs Outfitters, Idaho Wilderness Company, and Juniper Mountain Outfitters from the Burntlog Route. The OHV Trail would not be constructed under Alternative 4; therefore, this component would not impact the Elk Springs and Juniper Mountain Outfitters.

4.19.2.4.3.3 Closure and Reclamation

Impacts from closure and reclamation under Alternative 4 on the recreation-related special use permits currently approved in the analysis area would be similar to those described under Alternative 1, except the Elk Springs Outfitters, Idaho Wilderness Company, and Juniper Mountain Outfitters would be impacted from reclamation activities along the Yellow Pine Route instead of the Burntlog Route. The OHV Trail would not be constructed under Alternative 4; therefore, this component would not impact the Elk Springs and Juniper Mountain Outfitters. In addition, impacts related to the new transmission line and public access after reclamation would be slightly different, as discussed in Section 4.19.2.4.1.3, and therefore may have slightly different impacts on recreation opportunities, settings, and experiences for Elk Springs Outfitters clients.

4.19.2.5 Alternative 5

Under Alternative 5, the No Action Alternative, no construction, operation, or reclamation of the SGP components would occur. Previously approved surface exploration and associated activities on NFS lands would continue. There would be no surface (open-pit) mining or ore processing to extract gold, silver, or antimony; and no underground exploration, sampling, or related operations and facilities on NFS lands. Current uses on Midas Gold patented mine/mill site claims would continue, which include mineral exploration and dispersed recreation.

4.19.2.5.1 RECREATION OPPORTUNITIES, FACILITIES, ACCESS, AND USE

Current access to the area via Johnson Creek Road (CR 10-413) and Stibnite Road (CR 50-412) would remain unimpeded. Apart from the mine site area, existing recreation opportunities, access, and use would continue in the existing recreation setting. In the mine site, continued exploration may alter the recreation setting in limited areas to have a more elevated level of the sights and sounds of humans. Some unauthorized motorized use may continue to occur off existing roads and motorized trails but would likely continue to be fairly limited in extent. In general, areas that are inaccessible to motorized vehicles would continue to be inaccessible to vehicles or certain vehicle types in summer, both limiting the motorized recreation opportunities available in some areas and preserving the setting for non-motorized recreation opportunities in these areas. Motorized winter use has expanded in recent years, and may continue to expand in the future, resulting in additional OSV routes, winter recreation opportunities, and additional areas receiving winter motorized use.

4.19.2.5.2 ROS CLASSES AND PHYSICAL SETTING

Overall, impacts to recreation under Alternative 5 would include modifications to the recreation setting in the mine site area from continued surface exploration, continued low level of unauthorized motorized use, and increased winter motorized access and use. These impacts could lead to changes in the designated ROS class and/or ROS physical setting (towards Semi-Primitive Motorized or Roded Natural from Semi-Primitive Non-Motorized) of some areas due to additional motorized use both in the summer and winter.

4.19.2.5.3 RECREATION SPECIAL USE PERMITS

Activities, facilities, and uses allowed under current recreation-related special use permits would continue until the end of the permit term. Changes to the recreation setting due to additional motorized use may result in shifts in the use areas for permittees, particularly for non-motorized uses such as trail rides, fishing, hunting, etc.

4.19.3 Mitigation Measures

Mitigation measures required by the Forest Service and measures committed to by Midas Gold as part of design features of the SGP are described in **Appendix D**, Mitigation Measures and Environmental Commitments; see **Table D-1**, Preliminary Mitigation Measures Required by the Forest Service; and **Table D-2**, Mitigation Measures Proposed by Midas Gold as SGP Design Features, respectively. The preceding impact analysis has taken these mitigation measures into consideration, as well as measures routinely required through federal, state, or local laws, regulations or permitting, such that the identified potential impacts of the SGP are those that remain after their consideration.

Mitigation measures may be added, revised, or refined based on public comment, agency comment, or continued discussions with Midas Gold and will be finalized in the Final Environmental Impact Statement.

4.19.4 Cumulative Effects

The cumulative effects analysis area for recreation is the same as the analysis area for direct and indirect effects to recreation and includes PNF MA 13 (Big Creek/Stibnite) and BNF MAs BNF MA 21 (Lower Johnson Creek), BNF MA 20 (Upper Johnson Creek), BNF MA 19 (Warm Lake), and a portion of BNF MA 17 (North Fork Payette River), as well as a 5-mile radius from the major SGP components to account for where the SGP could be visible within foreground or middle ground distances (see Section 3.20) and noise from SGP activities could be audible (see Section 3.6) and thus potentially affect recreation opportunities and settings. The 5-mile radius generally falls within the management areas listed above; however, it does extend outside the management area boundaries in some locations, particularly into adjacent wilderness where recreation could be affected. Other past, present, and reasonably foreseeable actions occurring on federal and non-federal lands, with similar effects that overlap in time and space include forest management, mining and mine reclamation, road maintenance, campground upgrades, and winter motorized use of forest roads.

Past and present mining and mining-related activities have occurred around the Stibnite Mining District for over 100 years. These activities have led to the existing recreation setting, which includes previous development and reclamation within the analysis area.

4.19.4.1 Alternatives 1, 2, and 3

4.19.4.1.1 RECREATION OPPORTUNITIES, FACILITIES, USE, AND RECREATION SPECIAL USE PERMITS

Reasonably foreseeable projects near Big Creek, including restoration and transportation improvements, could affect recreation access through additional route closures or re-routing of access. However, because these projects would be located north of the analysis area, cumulative effects to recreation access within the analysis area may be minimal.

In general, cumulative development conducted during construction of Alternatives 1, 2, or 3, could result in cumulative effects to the recreation setting due to additional noise and activity, cumulative effects to recreation experiences due to access delays, and further reduced recreation opportunities due to noise and wildlife displacement, but cumulative construction-related effects would be temporary and conclude when the Alternative 1, 2, or 3 construction activities concluded.

Other mining-related activities in the cumulative effects area would decrease the area for dispersed recreation due to physical development and wildlife displacement and also would decrease the overall area available for any recreation and permitted use displaced from the analysis area due to impacts to recreation from Alternative 1, 2, or 3. Development in the Big Creek area also may result in displacement of recreation and permitted use to other areas, possibly to campgrounds and wilderness trailheads south of Stibnite Road (CR 50-412). This displacement could increase recreation and permitted use within the analysis area, which may already see an increase in recreation use due to new motorized access, in addition to

displacement of some recreation use to other areas. The South Fork Restoration and Access Management Plan, and the East Fork Salmon River Restoration and Access Management Plan, if approved, may in the short-term also reduce the area available for displaced recreation use from Alternative 1, 2, or 3 and could result in displaced recreation use during restoration and development activities. Therefore, the reasonably foreseeable projects in combination with Alternative 1, 2, or 3 may result in cumulative effects to recreation use, recreation opportunities, and recreation special use permits.

4.19.4.1.2 ROS CLASSES AND PHYSICAL SETTING

Planned restoration projects of forest and roads would enhance the natural appearance of the greater cumulative area. However, mining and other development projects would likely decrease the natural appearance of the area and may lead to a decrease in non-motorized areas due to mining operations and new access roads, particularly north of Stibnite Road (CR 50-412) towards Big Creek. Overall, the reasonably foreseeable projects in combination with Alternative 1, 2 or 3 could result in cumulative effects to the designated ROS classes and the estimated ROS physical setting by increasing development, resulting in an overall increase in more developed ROS settings and a decrease in less developed settings within the cumulative effects area.

4.19.4.2 Alternative 4

Cumulative effects would be similar to those described for Alternative 1; however, cumulative effects to recreation use, opportunities, and the recreation setting related to displaced use would be less due to use of the Yellow Pine Route instead of the creation of the Burntlog Route, which would both displace recreation use and increase recreation use in the analysis area. However, any cumulative effects along Johnson Creek Road would be increased due to use of this road as part of the Yellow Pine Route.

4.19.4.3 Alternative 5

Cumulative effects would be minimal as there would be no displaced recreation use or changes to recreation opportunities from the SGP. In the long term there would be some modifications to the recreation setting in the mine site area from continued surface exploration, continued low level of unauthorized motorized use, and increased winter motorized access and use. The reasonably foreseeable projects in combination with Alternative 5 could result in cumulative effects to the designated ROS classes and the estimated ROS physical setting by increasing development, resulting in an overall increase in more developed ROS settings and a decrease in less developed settings within the cumulative effects area. However, the extent of this change under Alternative 5 would be much less than under the action alternatives, and the SGP would not contribute to the cumulative effects.

4.19.5 Irreversible and Irretrievable Commitments of Public Resources

4.19.5.1 Alternatives 1, 2, 3, and 4

All action alternatives would affect recreation access in the analysis area from construction through closure and reclamation. This change in access, however, would not be irreversible or irretrievable, because existing access to Stibnite Road (CR 50-412) and Thunder Mountain Road sites/areas would be re-established (either through the mine site or on a portion of the Burntlog Route through the mine site), and winter OSV access would be re-established after reclamation. In terms of facilities, the only facility that would be closed (until mine site access was reclaimed) would be the Stibnite Mining District Interpretive Site. This would represent an irretrievable commitment of this resource. In addition, under Alternative 2 only, Centralized Water Treatment Plant would remain onsite after mine closure and would not be closed and reclaimed. This would represent an irretrievable commitment of this area as it would no longer be usable for recreation. Under Alternative 2, the new transmission line to the mine site also would remain onsite and not be reclaimed. However, recreation could still occur underneath the transmission line.

An irretrievable commitment of resources also would occur from the removal of SGP facility areas from recreational use from construction through closure and reclamation. In addition, the creation of motorized access to areas with no existing motorized access under Alternatives 1, 2, and 3 would be an irretrievable commitment of resources due to displacement of non-motorized recreation opportunities in these areas. Both irretrievable commitments also would affect the ability of recreation-related special use permittees to provide IOGLB licensed activities, and/or may change recreation experiences for customers.

Changes to the recreation setting due to construction, operation, and closure/reclamation, and the resulting potential displacement of recreational use to other locations, would be an irretrievable commitment of resources, particularly for FCRNRW areas where the recreation setting was affected. Changes to the recreation setting at the mine site and Burntlog Route (Alternatives 1 through 3), transmission line upgrade areas, and new transmission line to the mine site under Alternative 2 would be an irreversible commitment because the transmission line would be a permanent modification to the recreation setting of many areas and existing recreation facilities, and the mine site and Burntlog Route would be large reclaimed areas (except for the Centralized Water Treatment Plant under Alternative 2) that would take a long period of time to fully revegetate to the point where the sights and sounds of humans would return to existing levels (if ever). Therefore, the recreation setting of these areas would experience long-term alterations. Wildlife displaced from the affected habitat may relocate throughout the region, changing the availability of game for hunters and predators. The change could increase or decrease hunting success, but any reduction in game availability would represent an irretrievable loss of opportunity. Although wildlife species are expected to return following reclamation, some species sensitive to human presence may not return to the area for years after the mine is closed. If wildlife does not re-populate affected areas, there would be an

irreversible commitment of resources in affected areas due to a reduction in wildlife-related recreation opportunities. Long-term impacts to the recreation setting and wildlife populations may affect the ability of recreation-related special use permittees to provide IOGLB-licensed activities and would affect the recreation experiences of customers.

4.19.5.2 Alternative 5

Under Alternative 5, no action would be undertaken. Consequently, no change would occur in the status of recreation resources in the analysis area.

4.19.6 Short-term Uses versus Long-term Productivity

4.19.6.1 Alternatives 1, 2, 3, and 4

All action alternatives would result in short-term use of the mine site area and construction of new roads in an IRA; however, the mine site and new roads would be closed and reclaimed at mine closure, except for the soil nail walls. Short-term use of the mine site and other facility locations on NFS lands would reduce acreage available for non-motorized recreation, and would result in displacement of recreational use, modified recreation access, motorized access to areas not currently accessible by motorized vehicles (Alternatives 1 through 3), and changes in recreation opportunities in several management areas. All these short-term impacts to recreation would affect the ability of recreation-related special use permittees to access their operating areas; provide IOGLB-licensed activities; and would affect the recreation experiences of customers.

Because areas would be open for recreation once reclamation was completed, there would not be impacts to long-term use of the mine site, access roads, and other facility locations for recreation after mine closure, although there would be long-term impacts to the recreation setting and recreation experiences. The exception would be the Centralized Water Treatment Plant and new transmission line to the mine site under Alternative 2, which would not be reclaimed and therefore would result in a long-term use of this area. Although wildlife species are expected to return following reclamation, some species sensitive to human presence may not return to the area for years after the mine is closed. If wildlife does not re-populate the area, there may be long-term impacts to recreation due to a reduction in wildlife-related recreation opportunities. Because Alternative 4 would have less new access road development, this alternative would have fewer long-term impacts to the recreation setting and recreation experiences; and less potential for a reduction in wildlife-related opportunities. Long-term impacts to the recreation setting and wildlife populations may affect the ability of recreation-related special use permittees to provide IOGLB-licensed activities and would affect the recreation experiences of customers.

4.19.6.2 Alternative 5

Under Alternative 5, no action would be undertaken. Consequently, there would be no short-term use that would affect recreation resources, and no effect on long-term productivity.

4.19.7 Summary

All action alternatives would result in impacts to recreation access, settings, opportunities, use, facilities, and recreation-related special use permits. Use of the mine site for the SGP would remove this area from recreation use and alter the recreation setting surrounding the mine site due to visual changes and noise. Use of Warm Lake Road (CR 10-579) and the Yellow Pine Route during construction would affect access and the recreation setting for facilities along Johnson Creek and Warm Lake Roads. Winter plowing of Johnson Creek Road (CR 10-413) during construction would affect access to other OSV routes. New winter motorized access would be provided on the Cabin Creek Road OSV route. Construction of many SGP facilities may have temporary impacts to recreation (access, opportunities, use) and may temporarily or permanently alter the recreation setting of the areas within and adjacent to these facilities. The SGP also would affect access to operating areas of three outfitters and guides, affect their ability to provide activities, and may degrade customer's recreation experiences.

Under Alternative 1, temporary closure of Stibnite and Thunder Mountain roads through the mine site would affect access and use of sites off these roads until the Burntlog Route was constructed. The OHV Trail and Burntlog Route under Alternative 1 would offer new motorized access where such access does not currently exist and could increase recreation use in areas surrounding these facilities. These facilities also may displace wildlife-based and non-motorized recreation opportunities and would alter the recreation setting for the FCRNRW and two dispersed camping areas. In Alternative 1, new winter motorized access would be provided on the Burntlog Route; however, plowing of the Burntlog Route may result in loss of direct access to some OSV routes.

Impacts from Alternative 2 would be very similar to Alternative 1 with the main differences between the alternatives being a re-route of the Burntlog Route, road access through the mine site during operations, and a change in the maintenance facility location. Due to its closeness to the FCRNRW border, the re-routed portion of the Burntlog Route would result in additional change to the recreation setting for wilderness activities, potentially induce increased use of the Black Lake area and FCRNRW, and potentially result in unauthorized motorized use of the FCRNRW compared to Alternatives 1 and 3 when the Burntlog Route was available to public use (when the road through the mine site was not available). The re-routed Burntlog Route may have an increased impact on the ability of the two permitted outfitters to provide permitted activities due to the impacts on wilderness activities compared to Alternatives 1 and 3. Alternative 2 also would result in permanent impacts to the recreation setting due to permanent retention of the Centralized Water Treatment Plant and new transmission line to the mine site.

Providing road access through the mine site during operations under Alternative 2 could shorten the duration impacts to recreation access, use and opportunities along Thunder Mountain Road and potentially lessen displacement of recreation use in the Thunder Mountain Road area compared to Alternatives 1 and 3, though temporary road closures may lead to continued displacement. Road access through the mine site under Alternative 2 also would provide access to the Thunder Mountain Road area for the public and permitted outfitters in a much shorter amount of time compare to the Burntlog Route in Alternatives 1 and 3. The maintenance facility

under Alternative 2 would be located further east, thus reducing recreation impacts to the Landmark area compared to Alternatives 1 and 3, but construction noise may affect the Mud Lake dispersed camping area, which also would be affected by construction of the Burntlog Route.

Unlike Alternatives 1 and 2, Meadow Creek Lookout road would be improved and the OHV Trail would not be constructed under Alternative 3. This would eliminate both adverse and beneficial impacts to recreation from this trail compared to Alternatives 1 and 2, including impacts on access, recreation use, recreation settings, motorized and non-motorized recreation opportunities, and impacts on recreation-related special use permits. The mine site Operations Area Boundary would be larger under Alternative 3 compared to the other action alternatives and would have the largest area removed from recreation use during the SGP. Compared to Alternatives 1 and 2, the Burntlog Route access to the mine site would be located further west (through Blowout Creek) under Alternative 3 and this could reduce impacts to the recreation impacts along Meadow Creek Lookout and Thunder Mountain Roads. However, improvements to Meadow Creek Lookout road could increase recreation use to sites and areas along or access from this road. Like Alternative 1 (and unlike Alternatives 2 and 4), there would be no public access through the mine site during the SGP under Alternative 3. Compared to Alternatives 1 and 2, after reclamation there would be a second option for access through the mine site through Blowout Creek Valley under Alternative 3. Impacts from this road option would be similar to the road option under Alternative 1, but this option would take longer to reach Thunder Mountain Road and may encourage more use of the mine site as visitors would pass through the entire mine site and closer to a pit lake and transmission line road.

The Burntlog Route would not be developed under Alternative 4. Therefore, there would be no adverse or beneficial impacts to recreation from this route compared to Alternatives 1, 2, and 3. Instead the Yellow Pine Route would be used. Construction impacts of using the Yellow Pine Route under Alternative 4 would be similar to Alternatives 1 through-3, except periodic temporary closures on Johnson Creek Road and daily closures on Stibnite Road would result in reduced access and recreation opportunities and impact to visitor experiences along Johnson Creek, Stibnite, and Thunder Mountain Roads and locations accessed from these roads, potentially including the Big Creek area depending on where the closure would be located along Stibnite Road. Unlike the other action alternatives, impacts from use of the Yellow Pine Route under Alternative 4 would continue through operations and closure/reclamation instead of ending once the Burntlog Route was completed (except for impacts from road closures as these would not occur during operations or closure/reclamation). Under Alternative 4, impacts to recreation in the winter from the Yellow Pine Route would be similar to Alternatives 1-3, except plowing of Johnson Creek Road and grooming of the OSV route along Johnson Creek Road would continue through closure and reclamation. In addition, under Alternative 4 the Johnson Creek OSV route would be longer (up to Wapiti Meadow Ranch). Similar to Alternative 3, the OHV Trail would not be constructed under Alternative 4 and therefore would not result in adverse or beneficial impacts to recreation like in Alternatives 1 and 2. After reclamation under Alternative 4, Stibnite Road alterations would remain and could increase access for more vehicles and affect the recreation setting.

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Under Alternative 5, current recreation opportunities, access, and use would continue in the existing recreation setting. In general, areas that are inaccessible to motorized vehicles would continue to be inaccessible to vehicles or certain vehicle types in summer.

Table 4.19-9 provides a summary comparison of recreational impacts by issues and indicators for each alternative.

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Table 4.19-9 Comparison of Recreational Impacts by Alternative

Issue	Indicator	Baseline Conditions	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
The SGP may cause changes to recreation setting, access, facilities, and/or opportunities.	Changes in motorized access (including restrictions and/or changes in maintenance) to recreation opportunities.	State and County roads provide access to connecting unpaved Forest Service roads, which provide access to NFS lands and facilities.	<p>Access to the areas/facilities accessed from Thunder Mountain Road (FR 50375) east of the mine site would be modified due to closure of Stibnite Road (CR 50-412) and creation of the Burntlog Route, which would provide motorized access (year-round) to areas that currently do not have motorized access. Winter access would be increased along Cabin Creek Road due to new OSV route.</p> <p>Access to several OSV routes would be affected by plowing of Johnson Creek Road, Warm Lake Road and the Burntlog Route.</p> <p>Construction activities for transmission lines and the maintenance facility may result in delays or detoured access. The OHV Trail also would offer motorized access to areas that currently do not have motorized access. After mine reclamation, direct public access through the mine to Thunder Mountain Road would be restored.</p>	Similar to Alternative 1, except there would be direct access to Thunder Mountain Road through the mine site during operations, in addition to access via the Burntlog Route (only available for public use when the public access road through the mine site was closed). The re-routed segment of the Burntlog Route would provide increased motorized access to areas without such access currently.	Similar to Alternative 1, except there would be OHV Trail and resulting new motorized access to areas from this route. There also would be different access thru the mine site to Thunder Mountain Road after mine reclamation.	<p>Similar to Alternative 1, except there would be no OHV Trail or Burntlog Route and resulting new motorized access to areas from these facilities.</p> <p>There would be direct access to Thunder Mountain Road through the mine site during operations, similar to Alternative 2.</p> <p>Access to several OSV routes would be affected by plowing of Johnson Creek Road and Warm Lake Road.</p>	Current access to the area via Johnson Creek Road and Stibnite Road would remain unimpeded. In general, areas that are inaccessible to motorized vehicles would continue to be inaccessible to vehicles or certain vehicle types in summer.
	Changes in recreation physical setting characteristics and related ROS class (by season) measured in acres.	Designated ROS classes in the analysis area vary by season, and include Rural, Roded Natural, Roded Modified, Semi-Primitive Motorized, Semi-Primitive Non-Motorized, and Primitive. Estimated existing ROS physical settings are similar.	<p>Several components would result in inconsistencies with existing designated ROS classes including: Burntlog Route, plowing of the Burntlog Route, temporary plowing of the Johnson Creek Road and Stibnite Road, plowing of Warm Lake Road (CR 10-579), OHV Trail, new transmission line. Table 4.19-1 and Table 4.19-2 show acreages of changes to the estimated ROS physical setting, which are similar to the changes in ROS classes.</p> <p>Acreage of Estimated ROS Physical Setting Classes During Operations – Summer/Winter:</p> <p>Primitive: 16,838/20,930 acres Semi Primitive Non-Motorized: 207,209/233,645 acres Semi-Primitive Motorized:</p>	<p>Similar to Alternative 1. Table 4.19-3 and Table 4.19-4 show acreages of changes to the estimated ROS physical setting.</p> <p>Acreage of Estimated ROS Physical Setting Classes During Operations – Summer/Winter:</p> <p>Primitive: 16,124/20,216 acres Semi Primitive Non-Motorized: 207,140/233,581 acres Semi-Primitive Motorized: 86,189/220,712 acres Semi-Primitive Motorized Groomed (winter only): 46,135 acres Roded Natural: 139,031/22,563 acres Rural: 79,401/30,813 acres Mine Site: 13,446/13,446 acres</p>	<p>Similar to Alternative 1, except there would be no inconsistencies with existing designated ROS classes related to the OHV Trail as this trail would not be built. Table 4.19-5 and Table 4.19-6 show acreages of changes to the estimated ROS physical setting.</p> <p>Acreage of Estimated ROS Physical Setting Classes During Operations – Summer/Winter:</p> <p>Primitive: 16,838/20,930 acres Semi Primitive Non-Motorized: 207,182/233,621 acres Semi-Primitive Motorized: 86,197/217,008 acres Semi-Primitive Motorized Groomed (winter only): 46,135 acres Roded Natural:</p>	<p>Similar to Alternative 1, except there would be no inconsistencies with existing designated ROS classes related to the Burntlog Route, plowing of the Burntlog Route, or OHV Trail.</p> <p>Inconsistency with the existing designated ROS class for Johnson Creek and Stibnite Roads in the winter would not be temporary during construction (as in Alternative 1) but would continue through reclamation because the roads would be plowed as part of the Yellow Pine Route. Table 4.19-7 and Table 4.19-8 show acreages of changes to the estimated ROS physical setting.</p> <p>Acreage of Estimated ROS Physical Setting Classes During Operations – Summer/Winter:</p>	<p>Generally, existing designated ROS classes and physical recreation setting characteristics would remain as is. Modifications to the recreation setting in the mine site area from continued surface exploration, continued low level of unauthorized motorized use, and increased winter motorized access and use could lead to changes in the designated ROS class and/or ROS physical setting of some areas due to additional motorized use both in the summer and winter.</p> <p>Acreage of Estimated ROS Physical Setting Classes – Summer/Winter:</p> <p>Primitive: 17,278/21,370 acres Semi Primitive Non-Motorized: 218,512/245,210 acres Semi-Primitive Motorized:</p>

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Issue	Indicator	Baseline Conditions	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
			86,324/219,254 acres Semi-Primitive Motorized Groomed (winter only): 46,135 acres Roaded Natural: 138,136/23,244 acres Rural: 79,379/30,813 acres Mine Site: 13,446/13,446 acres		134,664/21,926 acres Rural: 79,418/30,813 acres Mine Site: 17,034/17,034 acres	Primitive: 17,278/21,370 acres Semi Primitive Non-Motorized: 208,434/234,849 acres Semi-Primitive Motorized: 86,549/235,610 acres Semi-Primitive Motorized Groomed (winter only): 42,324 acres Roaded Natural: 136,251/5,224 acres Rural: 79,373/40,284 acres Mine Site: 13,446/13,446 acres	83,497/240,387 acres Semi-Primitive Motorized Groomed (winter only): 50,436 acres (this acreage overlaps other features) Roaded Natural: 140,594/7,511 acres Rural: 81,450/26,853 acres
	Changes in recreation facilities (trails, campgrounds, trailheads), including the level of development and setting.	The Warm Lake area contains most of the developed recreation facilities (apart from trailheads). Scattered campgrounds and other facilities also are located in the Big Creek and Landmark areas and along Johnson Creek Road around and south of Yellow Pine. Developed recreation facilities primarily include campgrounds, cabins/lookouts, trailheads, and trails.	The Stibnite Mining District Interpretive Site would be closed until after mine reclamation. Many components would alter the setting of recreation facilities adjacent to them to a more developed setting due to increased man-made development, noise, traffic, etc. These components include the Burntlog Route, upgraded transmission lines, new transmission line to the mine site, Johnson Creek substation, mine site, cell tower on Meadow Creek Lookout Road, use of Warm Lake Road, and temporary use of the Yellow Pine Route. The OHV Trail would provide a new motorized trail facility.	Similar to Alternative 1, except the upgraded transmission line rerouted portion would affect the setting of an additional trail.	Similar to Alternative 1, except there would be no new motorized trail facility as the OHV Trail would not be built.	Similar to Alternative 1, except the Burntlog Route would not be built and therefore would not affect the setting of existing recreation facilities. There also would be no new motorized trail facility as the OHV Trail would not be built. In addition, changes to the setting of recreation facilities along the Yellow Pine Route would be affected through reclamation and not just temporarily during construction (as would be the case under Alternative 1).	Existing recreation facilities would continue in the existing recreation setting at their existing level of development.
	Changes in recreation use, potentially due to changes in recreation facilities, opportunities, access, and setting.	Developed recreation use is limited to the developed recreation sites (i.e., overnight facilities) located primarily in the Warm Lake, Landmark and Johnson Creek Road areas. Most recreation in the analysis area is dispersed use, which occurs outside of developed recreation sites.	Recreation use within the Operations Area Boundary would be displaced until after reclamation and may be displaced from around the mine site too during all SGP phases. Displacement of recreation use may result from construction, operation and reclamation of all components due to changes in access, and recreation opportunities and settings. The Burntlog Route and OHV Trail may increase recreation use along these routes. Some recreation use may return to the mine site area after reclamation; however, due to the changes in the recreation setting, some	Similar to Alternative 1, except there would be public access through the mine site, which may result in less displacement of use to areas/facilities accessed from Thunder Mountain Road (FR 50375). In addition, there would be less likelihood for increased dispersed recreation use along the Burntlog Route as this route would only be available for public use when the route through the mine site was closed.	Similar to Alternative 1, except the OHV Trail would not be built and therefore there would be no resulting displacement or increase in recreation use from this trail.	Similar to Alternative 1, except the OHV Trail and Burntlog Route would not be built and therefore there would be no resulting displacement or increase in recreation use from these routes. In addition, there would be public access through the mine site, which may result in less displacement of use to areas/facilities accessed from Thunder Mountain Road (FR 50375).	Existing recreation use would continue. Some unauthorized motorized use may continue to occur off of existing roads and motorized trails. Motorized winter use has expanded in recent years, and may continue to expand in the future, resulting in additional OSV routes and additional areas receiving winter motorized use.

4 ENVIRONMENTAL CONSEQUENCES
4.19 RECREATION

Issue	Indicator	Baseline Conditions	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
			use may be displaced to areas where the recreation setting is more natural.				
	Recreation special use permit use changes due to SGP construction, operation, or reclamation.	There are several current recreation-related special use permits in the analysis area for lodges, four outfitters and guides, one bike event, two organizational camps, and 62 recreation residences.	Construction, operations and reclamation activities would affect access to operating areas of three of the outfitters and guides, affect their ability to provide licensed activities, and may degrade customer's recreation experiences. Construction activities may interfere with the bike event. Permits in the Warm Lake area may be affected by traffic, noise and access changes from transmission line upgrades and use of Warm Lake Road. The recreation setting of the Paradise Valley recreation residence tract also may be affected by the Cabin Creek Road OSV route in the winter.	Similar to Alternative 1, except impacts to outfitters and guides from closure of Stibnite Road (CR 50-412) would not occur.	Similar to Alternative 1, except the OHV Trail would not impact access and recreation experiences for customers of two outfitters and guides.	Similar to Alternative 1, except impacts to outfitters and guides from closure of Stibnite Road (CR 50-412) would not occur, but there would be alternate impacts due to closure and use of the Yellow Pine Route. There would be no impacts to outfitters and guides from the Burntlog Route or the OHV Trail.	Activities, facilities, and uses allowed under current recreation-related special use permits would continue until the end of the permit term. Changes to the recreation setting due to additional motorized use may result in shifts in the use areas for permittees, particularly for non-motorized uses such as trail rides, fishing, hunting, etc.
	Changes in recreation opportunities available and/or the ability to participate in recreation opportunities.	Recreation opportunities such as hunting, fishing, hiking, camping, and horseback riding also are popular throughout the analysis area, with opportunities available at developed facilities, and at dispersed locations.	Recreation opportunities within the Operations Area Boundary would be eliminated until after reclamation and may be reduced from around the mine site too during all SGP phases. Construction, operation and reclamation of all components may affect wildlife-related opportunities due to displacement of wildlife. Non-motorized and wilderness-related opportunities could be reduced by the OHV Trail, mine site, new transmission line to the mine site, and the Burntlog Route. New access available from the OHV Trail and Burntlog Route may provide additional recreation opportunities.	Similar to Alternative 1, except the re-routed portion of the Burntlog Route would have additional impacts on wilderness-related opportunities as it would pass closer to the wilderness boundary.	Similar to Alternative 1, except there would be no impacts to recreation opportunities from the OHV Connector as this trail would not be built.	Similar to Alternative 1, except there would be no impacts to recreation opportunities from the OHV Trail and Burntlog Route as these facilities would not be built.	Existing recreation opportunities would continue to be available. In general, areas that are inaccessible to motorized vehicles would continue to be inaccessible to vehicles or certain vehicle types in summer, both limiting the motorized recreation opportunities available in some areas, and preserving the setting for non-motorized recreation opportunities in these areas. Motorized winter use has expanded in recent years, and may continue to expand in the future, resulting in additional winter recreation opportunities.

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