

4.20 SCENIC RESOURCES

4.20.1 Effects Analysis Indicators and Methodology of Analysis

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

Issue: The Stibnite Gold Project (SGP) may cause changes to scenic resources.

Indicators:

- Visual contrast.
- SGP component visibility.

Scenic resources were analyzed using geographic information system spatial analyses, scientific literature reviews, visual simulations, and information and analysis documented in reports prepared for the SGP.

Visual contrast and daytime/nighttime SGP visibility are the primary indicators used to evaluate potential impacts to scenic resources that could result from construction, operation, and closure and reclamation of the SGP, including:

- Change in landscape character and scenic quality of the analysis area.
- Change in distance zone.
- Change in nighttime lighting.
- Context of impacts, including that directed by forest plan standards and guidelines.
- Change in scenic integrity.

To evaluate the indicators and assess the potential consequences listed above, the scenic resources analysis included the following:

Visual Contrast Assessment. Visual contrast is defined as the degree of visual change that occurs in the characteristic landscape due to the introduction of SGP-related alterations. The assessment for visual contrast was performed by comparing visual elements (form, line, color, and texture) of the existing landscape with the alterations associated with the implementation of the proposed SGP. The visual contrast assessment informs change in landscape character and scenic quality. Visual contrast would primarily result from changes to landform from excavation and fill associated with mining activity; introduction of new or upgraded infrastructure; and removal of vegetation and grading activities for SGP components.

Viewshed Analysis. A viewshed analysis was completed using a geographic information system tool to identify locations where SGP components can theoretically be seen and areas where components would be obstructed by topography. This analysis was completed to help

determine component visibility based on the relationship between the viewer and SGP components. The resulting viewshed represents the geographic area where one or more SGP components would theoretically be seen; however, it does not represent any measure of detectability of the components, nor does it account for vegetation that could screen SGP components from view. Actual visibility of SGP components also would be informed by viewer characteristics, described below.

Viewshed models were generated for the mine site, transmission line, communication sites, and primary access roads. Where specific information on alternatives design was not available, conservative assumptions were made based on professional judgement. Viewshed models assumed a viewer eye-level of 5.5 feet. Models were run using a 30-meter (98 feet) digital elevation model assuming bare ground and were clipped to a 25-mile radius. The model assumed all open pits, development rock storage facilities (DRSFs), and tailings storage facility (TSF) to full extent or build-out. The upgraded 138-kilovolt (kV) transmission line assumed the location of the current right-of-way (ROW) would be expanded to a 100-foot total width, and the structures would be spanned at an average of 600 feet at a height of 80 feet. The new transmission line structures from Johnson Creek substation to the mine site would be 80 feet tall within a 100-foot ROW. Communications towers at the mine site were modeled based on the assumption the existing site would not exceed 199 feet in height. The height of the Stibnite Gold Logistics Facility (SGLF) was modeled based on Midas Gold Idaho, Inc.'s (Midas Gold's) estimated height of 260 feet needed to communicate to the mine site. Access road upgrades were modeled at 26 feet wide.

Viewer Characteristics and Position. Viewer characteristics and position can affect the perception of visual contrast and a viewer's ability to discern objects in the landscape (Bureau of Land Management 2013). Viewer characteristics pertain generally to one's visual acuity, engagement in the visual landscape, and viewer motion (moving or stationary). Viewer position includes consideration of viewer geometry and distance. Viewer geometry refers to the relative elevation of the viewing location as compared to landscape being viewed. A viewer's elevation to components of the SGP could range from superior, where the viewer is looking down at SGP component(s); to level views and inferior views, where the viewer is looking up. Distance affects the perception of visual contrast, because elements of form, line, color, and texture appear less detailed, as distance from a viewpoint increases. Distance zones were established to reflect visibility thresholds.

Key Observation Points. Key Observation Points (KOPs) were established at locations representing sensitive-use areas, such as travel routes, waterbodies, recreation areas (developed and dispersed), and residences. Data sources used to identify KOPs included viewshed analysis results, existing land use plans, recreation data, aerial photography, and Forest Plan Visual Quality Objective (VQO) data. These data were reviewed in conjunction with the alternatives to represent a comprehensive evaluation of the varied SGP components and their potential impacts to sensitive viewer locations in the analysis area, by alternative. Based on collected data sources, 17 viewpoints were identified (see **Figure 3.20-1** in Section 3.20).

Visualizations. Simulations (i.e., visualizations) were developed to characterize the anticipated level of visual change for the SGP. Simulations portray images of existing and proposed visual change to aid in visualizing the potential SGP effects for areas of high viewer sensitivity or concern. To generate the simulations, photographs were taken using a digital camera mounted on a tripod with a fixed 50-millimeter (equivalent) lens. At each KOP location, overlapping photographs were taken to allow for electronic conversion to a panoramic image representing the full human field of view. Global positioning system equipment was used to record the date, time, and location of each photographic series. Simulations were created using a scaled computer-generated model of proposed facilities that was developed in Autodesk Civil 3D. Geographic information system information from ESRI ArcMap software was imported into the 3D model. The model was then imported into Autodesk 3ds Max software where color and texture were added to resemble planned materials. The 3d model, the camera, and the lighting information was used to render a two-dimensional image of the proposed facility representing the view from the KOP for which simulations were developed. Simulations are used to evaluate the accuracy of predicted visual effects and are included in **Appendix O-1**.

VQO Classification Conformance. The results of the impact analysis were used to help determine SGP conformance with relevant VQO classifications for each alternative. As described in Section 3.20.3, Existing Conditions for Scenic Resources, VQOs establish minimum acceptable thresholds for landscape alterations from an otherwise natural-appearing forest landscape. The threshold of effects is exceeded when alterations do not meet the visual intensity and dominance criteria of the VQO.

4.20.2 Direct and Indirect Effects

The following analysis of effects associated with scenic resources is considered in the overall context of the Northern Rocky Mountain Province of the Rocky Mountain System in Idaho. The existing landscape in the analysis area is representative of the province, characterized as a continuous mountain landscape broken occasionally by wide valleys with flat or hilly floors. The Frank Church River of No Return Wilderness (FCRNRW) is renowned for its rugged and wild character. Its designation as a wilderness makes it, at a minimum, regionally significant. In addition, most of the analysis area is within the Preservation (P) and Partial Retention VQOs, indicating scenic integrity is generally high to moderate and that scenic resources in the analysis area are regionally important at a forest-wide scale.

Visual impacts from construction activities are short-term and typically arise from the presence, movement, and lighting associated with construction vehicles and equipment, dust plumes generated by grading, earthworks, or the movement of construction equipment and vehicles on unpaved surfaces. These types of visual impacts cease when the construction activities are finished.

Operational impacts are medium to long-term in duration and last at least through the operational phase of the SGP. These typically arise from the presence of new or larger buildings and built facilities, new or larger cleared ROWs for roads and utilities, lighting associated with

facilities, equipment, and vehicles, dust plumes generated by earthworks or vehicle traffic on unpaved roads, and increased movement associated with mobile equipment or vehicle traffic.

Permanent effects to visual scenic resources would result from closure and reclamation, which would exist indefinitely.

4.20.2.1 Alternative 1

Consistency with Scenery Management Designations

Elements of Alternative 1 may be inconsistent with current VQOs as designated by the Payette National Forest (PNF) and the Boise National Forest (BNF). These are discussed under specific SGP elements in the text below. More specific details on acreages associated with these potential inconsistencies are provided in **Appendix O-6**.

4.20.2.1.1 MINE SITE

Based on the viewshed analysis, the mine site could be visible from two KOPs, where a detailed analysis was performed: KOP 1 and KOP 4. Although the viewshed analysis indicates the mine site also may be visible from KOP 2, a more in-depth review of site-specific photos indicate views of the mine site would be obstructed by intervening topography (see **Appendix O-2**, Viewshed Analyses and Key Observation Points, Alternative 1).

KOP 1: Meadow Creek Lookout

KOP 1 represents views experienced from Meadow Creek Lookout, directed northeast towards the proposed Hangar Flats DRSF and Meadow Creek TSF. Meadow Creek Lookout is not frequently visited by the general public due to its remoteness; however, it is one of the few recreational use areas with unobstructed superior (viewed from above) views of the mine site, as shown in the viewshed analysis (**Appendix O-2**). This location represents a moderate-sensitivity viewpoint that U.S. Forest Service (Forest Service) staff and recreational users would see when accessing this lookout through Meadow Creek Lookout Road (National Forest System Road [FR] 51290) and/or nearby Meadow Creek/Summit Trailhead and National Forest System Trail (NFST) 073. These areas are identified in the Boise National Forest Land and Resource Management Plan (Forest Service 2010) as level 2 sensitive use areas, which are associated with a moderate level of visual sensitivity.

KOP 4: Stibnite Road (CR 50-412)

KOP 4 represents views experienced from the Stibnite Road portion of McCall-Stibnite Road (County Road [CR] 50-412) directed east-southeast toward the Yellow Pine pit and DRSF. Stibnite Road (CR 50-412) is a sensitivity level 1 travel route that provides access to the mine site through the village of Yellow Pine. This road also provides access to Thunder Mountain Road (FR 50375) through the proposed mine site, and this viewpoint represents typical views that travelers would see from Stibnite Road (CR 50-412). This road would be closed to the public between the North Gate (approximately located at the confluence of Sugar Creek and CR 50-412) and South Gate during portions of construction and all of operations until closure

and reclamation activities have been completed. Previous disturbance from historic mining activities is evident in the foreground, including light soil color contrasts from landform modifications. At this location, the road would be upgraded to accommodate mine traffic during construction, including a turnaround area at the North Gate.

4.20.2.1.1.1 Mine Site Construction

Effects to the Characteristic Landscape

Throughout construction and early mining, excavating pits and reprocessing the historic tailings would expose lighter-colored rock and some unweathered rock that would introduce strong visual contrast with existing rock, soils, and vegetation. Landform modifications associated with initial development during pre-production would result in a low level of visual contrast to the existing landscape, primarily due to historic mining disturbance and scale of construction activities during this timeframe. New disturbances in the footprint of existing modifications would introduce similar form, line, color, and textures.

As production moves into undisturbed areas, slope cuts and terraces associated with the open pits would remove vegetation, expose unweathered lighter-colored rock, and create unnatural horizontal lines in the landscape. At night, lighting from the mine facilities, including the communications tower to the east of the mine site, the pits, haul trucks, and traffic on access routes would change the character of the night sky by increasing sky glow or light pollution. However, these impacts would be reduced by implementing lighting mitigation measures, including directing lights downward, and shielding where appropriate. Overall, short-term visual contrast introduced to the characteristic landscape would be moderate, primarily due to the expansion of mining activities and introduction of nighttime lighting.

Effects by KOP

KOP 1: Meadow Creek Lookout

A portion of the mine site is visible from this viewpoint in the middle-ground distance zone, approximately 2.5 miles to the northeast. Short-term impacts visible from KOP 1 would be similar to those described above and would be seen from a superior vantage point. Visual impacts from construction would alter the experience for individuals at the lookout by transforming to a more industrial setting.

KOP 4: Stibnite Road (CR 50-412)

Short-term visual contrast from this viewpoint would result from construction activities at the mine site. Road widening and reconfiguration to accommodate a turnaround area at the North Gate would result in a low-moderate level of visual contrast, because similar form, line, and color would be introduced. Construction traffic, equipment, and staff would be evident from this travel route during construction/pre-production. The resulting level of short-term visual contrast would be perceived as moderate due to unobstructed views of vegetation removal and other construction activities in the foreground. Visual contrast of the mine site from Stibnite Road

(CR 50-412) would be localized to a small portion of the road near the mine site. Where visible near the North Gate, historic mining disturbances would remain visually dominant during construction at this isolated location. These impacts would alter the visual experience and setting for individuals traveling on the forest road by transforming the surrounding setting to a more industrial-like landscape.

4.20.2.1.1.2 Mine Site Operations

Effects to the Characteristic Landscape

Major landscape alterations associated with the mine site under Alternative 1 would expand on the existing mining landscape modifications through the operation of Yellow Pine pit, West End pit, Hangar Flats pit, DRSFs, and the TSF. Modifications that currently exist due to past mining activity include the introduction of monolithic landforms of an industrial scale that exhibit bold form, strong lines, contrasting color, and vegetation patterns and textures that do not blend into the natural landscape. Alternative 1 would introduce additional modifications to the landscape similar to those present, which would further reduce the scenic integrity of the area by introducing additional strong visual contrast and discordant elements. Other mine site support facilities, including ore-processing, storage areas, worker housing facility, and other administrative offices, also would modify the characteristic setting, but at a smaller scale.

Additionally, air quality modeling predicts visual impacts up to the distances modeled of 10 kilometers (approximately 6 miles). Actual visibility would depend on meteorological conditions. Visibility and associated impacts would lessen at distances greater than six miles from the mine site and visual contrast would appear strongest during times of low sun angle. See Section 4.3.2, Direct and Indirect Effects to Air Quality, for more information.

New disturbances in the footprint of existing modifications would introduce similar form, line, color, and textures. As production moves into undisturbed areas, slope cuts and terraces associated with the open pits would remove vegetation, expose unweathered lighter-colored rock, and create unnatural horizontal lines in the landscape. At night, lighting from the mine support facilities, including the communications tower, the pits, haul trucks, and traffic on access roads, would change the landscape character of the night sky by increasing sky glow or light pollution. Long-term visual contrast would be associated with the expansion of mining activities to full build-out and continued nighttime lighting. However, these impacts would be reduced by implementing lighting mitigation measures, including directing lights downward, and shielding where appropriate. The West End, Fiddle, and Hangar Flats DRSFs would be located in steep valleys between mountain ridges. The material would be placed on an active working base and expanded upward as the facilities are built out. As a result of storing development rock in valleys surrounded by mountainous terrain, the DRSFs would appear as wider valley basins, with terracing or sloping evident at the valley edges. As landform modifications proceed for all three open pits, the DRSFs, and the TSF, the visual contrast would be strong, and result in a high level of change to the existing characteristic landscape.

Under Alternative 1, the footprint of the mine site would be within areas managed as a VQO of Retention or Partial Retention. Where visible from viewing platforms, the mine site would not meet either of these VQOs as the mine site components would introduce form, line, color, and texture found infrequently or not at all in the characteristic landscape, and to a degree that would dominate the characteristic landscape. These effects could be visible from the Stibnite Road (CR 50-412) and the Meadow Creek Lookout viewing platforms.

Effects by KOP

KOP 1: Meadow Creek Lookout

Operational conditions at the end of mine operations were simulated from KOP 1, provided in **Appendix O-2**. Under Alternative 1, during operational conditions, the tailings from the mine site would appear as large, flat, smooth, and uniform at the bottom of the valley, which would result in strong visual contrast against the sloping, uneven texture of the surrounding mountains and valley. The flat top and monolithic form of the TSF would introduce strong contrast against the more complex, rough, rugged surrounding topography. The geometric formation and sharp escarpment created as a result of the Hangar Flats pit benches would strongly contrast with surrounding natural topography. Strong color contrast would result from the Hangar Flats pit wall face and unweathered tailings, which would appear as a lighter, more uniform color than the surrounding undisturbed landscape, with varied colors and textures. From this viewpoint, the TSF full build-out would consume most of the Meadow Creek valley, creating a wider basin between the mountain ranges, which is not typical for this landscape. The TSF would appear to be an artificially smooth, regular, and continuous form, contributing to a strong level of long-term visual contrast. Intervening terrain would obstruct views of the Yellow Pine pit, West End pit, and DRSFs. Only the TSF, Hangar Flats DRSF, and Hangar Flats pit would be visually dominant in the middle-ground distance zone. Due to their distance, mine support facilities may be visible but individual components would not be perceptible from KOP 1. A plume would be visible from KOP 1.

Nighttime lighting also would be perceptible during construction and operation, although implementation of Forest Service mitigation measures specific to lighting would reduce the magnitude of impacts from sky glow. Permanent contrast would be slightly reduced over time, because color contrasts of the TSF and Hangar Flats pit wall would gradually diminish through reclamation, revegetation, and rock weathering. The strong color contrast associated with the lighter-colored pit benches would be reduced through application of surface coloring treatments that are similar to the soil color of undisturbed areas. Unnatural linear landscape patterns may appear over time along the Hangar Flats pit benches where vegetation would likely grow denser; however, application of surface coloring treatments on vertical benches would reduce color contrast, resulting in a less-dominant line across the pit wall. The Hangar Flats pit would accumulate water, forming a lake over time that would have permanent visual contrast with the characteristic landscape. Strong line and color contrast would be created, which may be softened slightly as riparian vegetation establishes around the lake and becomes more diverse over time. Visual impacts from mine operation would alter the experience for individuals at the lookout by transforming to a more industrial setting.

KOP 4: Stibnite Road (CR 50-412)

The viewshed analysis results demonstrate that the mine site is completely obstructed by topography for most of this travel route between Yellow Pine and the mine site, and views of the mine site would be limited to a small portion of the road in the immediate vicinity of the mine site. Views experienced from KOP 4 under existing conditions are included in **Appendix O-1**.

During operations under Alternatives 1, 2, and 3, the Stibnite Road (CR 50-412) would no longer serve as the primary access road for the mine, and the portion of Stibnite Road (CR 50-412) between the mine gates would be closed to the public under Alternatives 1 and 3. Traffic past the North Gate would be limited to administrative access as needed. Near the North Gate, the mine site would be visually dominant to receptors due to the scale of landform modifications visible in the foreground. A portion of the Yellow Pine pit would be visible once it is fully built out, but adjacent terrain and vegetation would screen most of disturbances at Yellow Pine pit. Where visible, the geometric formation and sharp color contrasts as a result of the Yellow Pine pit would strongly contrast with surrounding natural topography; however, during and after operations, the pit would be filled with development rock, and reclaimed. Color contrast associated with untreated development rock is anticipated to be strong, and would appear light tan in color, which is more uniform in appearance than the surrounding undisturbed landscape, which is primarily dark green.

However, because the mine site would not be visible along most of the Stibnite Road (CR 50-412), overall long-term visual contrast associated with road improvements would be low to moderate and remain subordinate to viewers along this travel route. Although minimized through mitigation measures, nighttime lighting would be perceptible to travelers from both the mine site and mine-related traffic on the road. The impacts visible from KOP 4 would alter the experience of individuals traveling on the road by transforming the surrounding setting to a more industrial-like landscape. A plume would be visible from KOP 4.

4.20.2.1.1.3 Mine Site Closure and Reclamation

Effects to the Characteristic Landscape

Permanent visual contrast associated with structures (i.e., buildings, communication facilities, transmission line) would be minimal, because mine support facilities would be dismantled, removed from the site, and landform would be regraded, and reclaimed with native vegetation. Closure of the mine site facilities also would eliminate the primary source of nighttime lighting. Once reclamation is completed and mine-related vehicle travel to the mine site has ceased, nighttime lighting would be similar to existing conditions. At closure, major landform modifications at the mine site, including the Yellow Pine pit backfill, the DRSFs, the TSF, and haul roads, would be contoured and graded to blend into the surrounding topography and terrain. Strong visual contrast would be permanent for a portion of all three pits where lighter-colored exposed rock and horizontal benches would remain in unnatural, geometric landforms. These lighter-colored landforms would contrast sharply with adjacent scenery that has been unmodified. The geometric form of the horizontal benches would still appear unnatural in this setting. The DRSFs and TSF would have rounded crests and variably shaped angles to more

closely resemble natural landforms, which would help to reduce visual contrast. As mature vegetation establishes on reclaimed DRSFs and TSF landforms over time, visual contrast associated with lighter-colored soils would diminish for a large portion of these disturbed areas. Although reclamation and revegetation efforts may reduce color contrast over time, the TSF would require a substantial buttress to ensure long-term stability, which would introduce strong geometric lines and unnatural form into the landscape permanently.

The reconfiguration of the East Fork South Fork Salmon River (EFSFSR) through the reclaimed mine site would introduce curvilinear (i.e., winding) and more natural-appearing forms to the landscape; however, the modified landforms associated with the mine site would dominate the setting. The reclamation of the EFSFSR over time would soften the sharp contrasts in that area as vegetation matures. Unlike the Yellow Pine pit, which would be backfilled to accommodate reclamation of the EFSFSR, Hangar Flats and West End pits would not be backfilled and would have pit lakes that would introduce dark tones and reflectiveness from the water. Stibnite Road (CR 50-412) would not be reclaimed and a new connector with to Thunder Mountain Road (FR 50375) would be constructed over the backfilled Yellow Pine pit. The level of visual contrast associated with the road would be low, similar to existing conditions; and would not contribute substantially to permanent effects. The TSF area, angled buttress, and open-pit benches would contribute collectively to moderate-high permanent visual contrast to the characteristic landscape.

Effects by KOP

KOP 1: Meadow Creek Lookout

The strong visual contrast created by lines and colors of the mine site would be softened slightly over time as vegetation establishes around the lake and becomes more diverse. Overall with reclamation, the permanent level of visual contrast would be reduced to moderate-strong for viewers at this lookout indefinitely. Nighttime lighting would return to existing conditions.

KOP 4: Stibnite Road (CR 50-412)

At closure, Stibnite Road (CR 50-412) would be fully re-opened to the public and reclaimed close to existing conditions except for the new segment through the reclaimed Yellow Pine pit and mine site. Permanent contrast would be reduced to moderate-strong over time, as color contrasts of Yellow Pine pit would gradually diminish through reclamation, revegetation, and rock weathering. Night skies would appear as they did prior to mine development.

4.20.2.1.2 ACCESS ROADS

The viewshed analysis (**Appendix O-2**) indicates that the proposed Burntlog Route would be visible from seven KOPs, where detailed analyses were performed: KOP 1, 2, 4, 9, 10, 12, and 13. KOPs 1 and 4 are described above in Section 4.20.2.1.1. Visibility would generally extend up to around 2 to 3 miles to the east of Burntlog Route and less than 1 mile to the west. The route also could be visible from a ridgeline about 5 to 7 miles west, although due to distance, visual contrast would be weak. Upon further detailed review, the Burntlog Route would

not be visible from KOP 2 because of topographic and vegetation screening as evidenced by photographs, and visual simulations; therefore, KOP 2 is not discussed further in this section. The following paragraphs describe the representative KOPs for access roads under this alternative. Visual effects of the SGP on these KOPs are summarized in the Construction, Operations, and Closure and Reclamation sections following.

KOP 9: Frank Church-River of No Return Wilderness – Pistol Lake

Pistol Lake is located about 1 mile from the end of NFST 448C in the FCRNRW. KOP 9 is located approximately 3 miles east of the Burntlog Route) at its closest point. See **Figure 3.20-1**. This KOP represents what dispersed recreation users (hikers, horseback riders) might see from a location in the wilderness directly east of proposed new roadway segment for the Burntlog Route. It affords superior views across drainages and ridgelines, including a burned area of the Boise National Forest.

KOP 10: Burnt Log Road (FR 447)

KOP 10 represents foreground views from Burnt Log Road (FR 447) directed southwest. **Figure 3.20-1** shows its location. Burnt Log Road (FR 447) is currently a high-clearance vehicle route that provides access to Snowshoe Summit Trailhead at the edge of the FCRNRW and Burntlog Creek, and ends near Chilcoot Pass. This road is a sensitivity level 2 travel route and has overall moderate visual sensitivity. Burnt Log Road would be widened and graded to accommodate mine site traffic under Alternatives 1, 2, and 3.

KOP 12: Mud Lake Dispersed Camping Area

KOP 12 represents views from the Mud Lake dispersed camping area looking north-northwest (KOP 12a) and south-southeast (KOP 12b). Burnt Log Road (FR 447) is currently a high-clearance vehicle travel route with moderate visual sensitivity that provides access to Mud Lake dispersed camping area, just 2 miles east of Landmark. **Figure 3.20-1** shows its location.

KOP 13: Warm Lake Road (CR 10-579) at Landmark Maintenance Facility

KOP 13 represents views looking north from the Warm Lake Road (CR 10-579) at the proposed Landmark Maintenance Facility location. **Figure 3.20-1** shows its location. Warm Lake Road (CR 10-579) is a paved, passenger vehicle accessible, travel route that provides access to Landmark and Warm Lake. This is a sensitivity level 1 travel route used by summer and winter recreational visitors.

4.20.2.1.2.1 Access Road Construction

Effects to the Characteristic Landscape

Construction activity associated with the primary access road (Burntlog Route) would introduce short term visual contrast. Mine traffic would use existing roads (Warm Lake Road [CR 10-579], Johnson Creek Road [CR 10-413], and Stibnite Road [CR 50-412]) to access the mine year-round during construction of the Burntlog Route. Warm Lake Road (CR 10-579) does not

require improvements to accommodate mine traffic during construction and would continue to be used throughout operations; therefore, short-term visual impacts associated with those roads would be limited to increased construction traffic and associated dust. It would be plowed year-round rather than seasonally groomed for snow machines. Traffic counts would increase.

Johnson Creek Road (CR 10-413) and Stibnite Road (CR 50-412) would require improvements, including ditching, culvert repair, graveling, and winter snow removal, to support the increased road use during construction. No widening or changes to the Johnson Creek Road alignment are anticipated under Alternative 1; although a groomed winter route would be added which would add movement to the winter landscape and additional winter viewer platform in this area. Additional tree clearing may be needed to support temporary winter maintenance activities along these roads until Burntlog Route is open to use, although there is no detailed engineering information at this time. Similar changes to the characteristic landscape would occur due to construction of the off-highway vehicle (OHV) connector trail. Dust and movement along the corridor from construction equipment would be visible and introduce contrast to the more natural appearing surrounding environment. Short-term visual contrast associated with maintenance activities, vegetation removal, and winter plowing would be low because the level of visual change would be similar to existing conditions.

Effects by KOP

KOP 1: Meadow Creek Lookout

Short-term, construction-related impacts visible from KOP 1 would be associated with mine traffic on FR 50479 (Juggernaut Road) and construction activities along Burnt Log Road (FR 447), which would include increased movement from construction traffic and associated dust. These impacts would appear subordinate to viewers compared with the mine site.

KOP 9: Frank Church-River of No Return Wilderness – Pistol Lake

Visibility is primarily screened by existing vegetation and intervening topography. During construction activities, weak short-term visual contrast could be experienced from KOP 9. Construction equipment would be difficult to discern at this distance; however, dust and construction activities along the route may be visible. The impacts experienced from KOP 9 would have little to no impact on the overall user experience of the wilderness.

KOP 10: Burnt Log Road (FR 447)

Short-term visual contrast from this viewpoint would result from construction activities associated with improvements along Burnt Log Road (FR 447). Construction traffic, equipment, and staff would be evident from this travel route during pre-production. The resulting level of short-term visual contrast would be moderate for receptors due to unobstructed views of construction activities in the foreground. The impacts visible from KOP 10 would alter the experience of individuals traveling on the road by transforming the surrounding setting to a more industrial-like landscape.

KOP 12: Mud Lake Dispersed Camping Area

Short-term visual contrast from this viewpoint would result from construction activities associated with improvements along Burnt Log Road (FR 447) within 100 feet of this site. Construction traffic, equipment, and staff would be evident from this area during pre-production. The resulting level of short-term visual contrast would be moderate for receptors due to views of construction activities in the foreground. The presence of heavy machinery and construction workers, and associated movement, would change the mostly natural setting viewed from KOP 12 to a more industrial-type setting, which would change the experience for viewers using the Mud Lake Dispersed Camping Area at KOP 12; campers would likely not use the site during construction due to visual and noise disruptions.

KOP 13: Warm Lake Road (CR 10-579) at Landmark Maintenance Facility

Short-term visual contrast perceptible to travelers on Warm Lake Road (CR 10-579) would result from construction of the Burntlog Route. Construction traffic, equipment, and staff would be evident from this travel route during construction. The resulting level of short-term visual contrast would be moderate for receptors due to views of construction activities in the foreground. The impacts visible from KOP 13 would alter the experience of individuals traveling on the road by transforming the surrounding setting to a more industrial-like landscape.

4.20.2.1.2.2 Access Road Operations

Effects to the Characteristic Landscape

Access road improvements along the existing portion of Burnt Log Road (FR 447) from Landmark to Trapper Flat would require grading and removal of vegetation to accommodate a travel width of 20 feet and total width of up to 26 feet (but less in some locations), including shoulders. Road modifications such as side-ditching, culverts, guardrails, and bridges may be upgraded and added to accommodate the expanded road width and stream crossing considerations. Grading improvements and vegetation removal would result in similar form, line, color, and texture of the existing road and disturbed areas associated with dispersed recreation activities. Similar to the existing portion of Burnt Log Road (FR 447), upgrades required along the portion of Thunder Mountain Road (FR 50375) between the worker housing facility and the mine entrance gate would require upgrades to existing access, including grading, vegetation removal, and upgrade of road structures.

Vegetation along portions of Burnt Log Road (FR 447) has been affected by historic fires resulting in dead or felled pine trees across the landscape. Long-term visual contrast to the characteristic landscape in these conditions is anticipated to be low-moderate in areas historically affected by fire. Removal of felled trees and smaller understory vegetation would have a low-moderate level of visual change to the characteristic landscape. Portions of Burnt Log Road (FR 447) near Burntlog Creek and East Fork Burntlog Creek are occupied by dense pine trees and living vegetation that is more characteristic of the landscape. Moderate visual contrast would occur in these areas due to the removal of dense green vegetation. The new access road segment between the end of Burnt Log Road (FR 447) to Thunder Mountain Road

(FR 50375) (approximately 15 miles) would likely result in a moderate-strong level of visual change to form, line, color, and texture associated with grading and vegetation removal in steep, rugged terrain.

Portions of the Burntlog Route that require retaining walls or bridges, which would introduce new structural elements into the setting, would increase visual contrast to strong. Approximately 1.5 miles of soil nail walls would be constructed, with the longest section being approximately 2,100 linear feet. These walls would appear darker in color than the surroundings and would appear steeper (more vertical) than surrounding topography. Their shape and line would have a more geometrical, engineered appearance compared with the native soil and topography of their surroundings. Where new access is needed, long-term visual contrast to the characteristic landscape would be moderate-high because of linear landform modifications, changes in vegetation, and introduction of new structures in a landscape that is unmodified.

During operation of the mine, the Burntlog Route would be routinely maintained, including grading (as needed), spot graveling, dust control, and snow removal in the winter. Mine operation would create traffic to the mine site from buses, vans, trucks, and personal vehicles throughout mining operations. It is estimated that the annual average daily traffic along Burntlog Route would be 68 total vehicles; 49 of those would be classified as a heavy vehicle, and 19 would be classified as a light vehicle. The presence of up to 68 vehicles per day on this route would introduce movement into the characteristic landscape, which—for the new portion of the Burntlog Route—is primarily roadless. In addition, the presence of vehicles on the road at night would introduce new lighting into the landscape.

Similar changes to the characteristic landscape would occur along the OHV connector trail that would provide recreational user access to Meadow Creek Lookout Road (FR 51290). This recreation travel route would be 15 feet wide to accommodate smaller OHVs and motorcycles between the new transmission line route and Meadow Creek Lookout Road. Overall, long-term visual contrast would be moderate for portions of these access roads requiring upgrades, and moderate-strong to strong for new improvements.

New segments of the Burntlog Route would introduce approximately 15 miles of new road that would be a viewing platform for areas of the forest, providing views to portions of the forest that are not afforded any viewing opportunity by an existing road or trail. Approximately 2 miles of new road would be situated within the viewshed of the mine site in the middle-ground distance zone, thereby increasing viewer exposure to mine-related visual impacts.

New construction associated with the Burntlog Route would cross areas managed as Retention, Partial Retention, and Modification VQOs. Except for the soil nail walls, access roads would generally conform to the Partial Retention and Modification VQO. Although new and upgraded portions of the Burntlog Route and Meadow Creek OHV Connector Trail could introduce strong visual contrast in some areas, it typically would be limited to the immediate foreground as viewed from the road/trail introducing the contrast, although it also may be visible from some trails and by individuals participating in dispersed recreation not associated with a viewer

platform, such as hunting. New access facilities would not be consistent with the Retention VQO as they would introduce new lines, colors, and textures that would be evident.

Effects by KOP

KOP 1: Meadow Creek Lookout

Portions of Burntlog Route would be visible from KOP 1 when looking south. The light-tan color and straight horizontal line introduced by the new roadway portion of the Burntlog Route would introduce strong visual contrast against the darker surrounding colors, undulating ridgelines, and variable textures of the vegetation covered terrain. **Appendix O-1** provides a visual simulation looking south from KOP 1 (KOP 1b) of the proposed Burntlog Route.

KOP 9: Frank Church-River of No Return Wilderness – Pistol Lake

Visibility is primarily screened by existing vegetation and intervening topography. The increased width of the existing road would increase visual contrast, primarily associated with the expanded width of light-colored ground exposed as a result of the road widening. Visual contrast would appear weak from KOP 9 as the landscape already appears lighter in color than other surrounding areas due to the effects of historic fires in the area. The improvements to Burnt Log Road (FR 447) would appear subordinate to the large-scale surrounding landscape that would absorb the visibility of these changes to the landscape. The new roadway would not be visible from KOP 9.

KOP 10: Burnt Log Road (FR 447)

Access road improvements along the existing portion of Burnt Log Road (FR 447) from Landmark to Trapper Flat would require grading and removal of vegetation to accommodate a total travel width of 20 feet and total width of up to 26 feet (but less in some locations), including shoulders. In some locations, vegetation is densely wooded with thick understory vegetation. Removal would result in moderate color and line contrasts at the road edges. These contrasts would be less strong for portions of Burnt Log Road (FR 447) that are affected by historic fires. Dead or felled trees would be removed, along with low-lying vegetation, resulting in a low to low-moderate level of visual contrast. Landform changes and color contrast associated with new disturbance where widening or cut/fill is necessary would contribute to a moderate level of visual change.

Introduction of structural components such as culverts, guardrails, and bridges that may be upgraded or added to accommodate the expanded road width. Improved access would introduce a moderate level of visual change to existing form, line, and color; however, Burnt Log Road improvements would remain visually co-dominant to sensitive viewers on the road. During operation of the mine, Burntlog Route would be routinely maintained, including grading (as needed), spot graveling, dust control, and snow removal in the winter. Mine operations would generate traffic to the mine site from buses, vans, trucks, and personal vehicles throughout mining operations. When traveling on the road at night, these vehicles would introduce new lighting into the landscape. The impacts visible from KOP 10 would alter the experience of

individuals traveling on the forest road by transforming the surrounding setting to a more industrial-like landscape. A simulation from KOP 10 showing these potential effects is included in **Appendix O-1**.

KOP 12: Mud Lake Dispersed Camping Area

Access road improvements along Burnt Log Road (FR 447) near Mud Lake would require grading and removal of vegetation to accommodate a total travel width of 20 feet and total width of up to 26 feet (but less in some locations), including shoulders. Grading improvements and vegetation removal would result in similar form, line, color, and texture as the existing road. Landform changes and color contrast associated with new disturbance where widening or cut/fill is necessary would contribute to a low-moderate level of visual change, because the site is relatively flat. Noticeable contrast would result from vegetation removal along the road. At this location, vegetation is densely wooded with thick understory vegetation. Removal would result in moderate color and line contrasts at the road edges.

Structural components such as culverts or guardrails may be upgraded or added to accommodate the expanded road width. Improved access would introduce a moderate level of visual contrast to existing form, line, and color; however, Burnt Log Road (FR 447) improvements would remain visually co-dominant to sensitive viewers at this dispersed camping area. During operation of the mine, Burntlog Route would be routinely maintained, including grading (as needed), spot graveling, dust control, and snow removal in the winter. Mine operation would create traffic to the mine site from buses, vans, trucks, and personal vehicles throughout mining operations. The presence of vehicles on this road at night would introduce new lighting into an area that has no permanent lighting sources. These impacts could result in some campers choosing to camp in other dispersed camping areas that have not been visually impacted, particularly night sky impacts.

KOP 13: Warm Lake Road (CR 10-579) at Landmark Maintenance Facility

Access road maintenance and use along the existing Burnt Log Road (FR 447) near KOP 13 would be similar to those described above for KOP 12; therefore, visual impacts also would be similar. However; visual contrast introduced by improvements to Burnt Log Road (FR 447) would be weak as viewed from KOP 13 and associated visual changes would appear subordinate in the landscape. The impacts visible from KOP 13 would alter the experience of individuals traveling on the road by transforming the surrounding setting to a more industrial-like landscape.

4.20.2.1.2.3 Access Road Closure and Reclamation

Effects to the Characteristic Landscape

Upon closure and reclamation of the SGP, upgraded portions of Burnt Log Road (FR 447) would be reclaimed to existing conditions, and new portions of the Burntlog Route would be removed from use and reclaimed. However; soil nail walls are proposed to remain in place after decommissioning and their appearance would continue to introduce strong contrast with the

surrounding landscape as described above. Post-mine closure, traffic would likely return to a pre-mining level of use. Permanent visual contrast to the characteristic landscape generally would be minimal to moderate, because the road would be returned to previous width although the flatter grades and smoother curves would be retained. Changes to the landscape from removal of mature vegetation would remain evident for several years after reclamation activities. The 1.5 miles of remaining soil nail walls would be an exception; these areas would introduce strong visual contrast; however, the geographic extent of these changes would be localized.

Effects by KOP

KOP 1: Meadow Creek Lookout

Permanent visual contrast would be non-visible to weakly visible as viewed from KOP 9, because the portion of Burntlog Route visible from the KOP would be reclaimed to existing conditions

KOP 9: Frank Church-River of No Return Wilderness

Permanent visual contrast would be non-visible to weakly visible as viewed from KOP 9 because the portion of improved Burnt Log Road (FR 447) visible from the KOP would be reclaimed to existing conditions. Due to screening from vegetation and intervening topography and location within a previously burned area, changes to the landscape from removal of mature vegetation would likely not be evident.

KOP 10: Burnt Log Road (FR 447)

Upon closure and reclamation of the mine site, upgraded portions (except segments abandoned at the beginning of construction, which would have been currently reclaimed with construction activities) of Burnt Log Road (FR 447) would be reclaimed to existing conditions. At mine closure, traffic would likely return to a pre-mining level of use. Permanent visual contrast would be minimal to low-moderate, because the road would be returned to existing conditions with an assumed low-traffic volume. Changes to the landscape from removal of mature vegetation would remain evident for several years after reclamation activities.

KOP 12: Mud Lake Dispersed Camping Area

Upon closure and reclamation of the mine site, upgraded portions of Burnt Log Road (FR 447) would be reclaimed to existing conditions (except segments abandoned at the beginning of construction, which would have been currently reclaimed with construction activities). At mine closure, traffic would likely return to a pre-mining level of use. Permanent visual contrast to the characteristic landscape would be minimal to low-moderate, because the road would be returned to existing conditions with an assumed low-traffic volume. Upon closure and reclamation of the mine site, upgraded portions of Burnt Log Road (FR 447) would eventually be reclaimed similar to existing conditions; although removal of mature vegetation would remain visually noticeable for many years after closure and reclamation activities are complete.

KOP 13: Warm Lake Road (CR 10-579) at Landmark Maintenance Facility

Due to limited visibility of Burnt Log Road (FR 447) from Warm Lake Road (CR 10-579), visual changes from access road improvements would not be evident from KOP 13 after mine closure and reclamation.

4.20.2.1.3 UTILITIES

The viewshed analysis (**Appendix O-2**) indicates that utilities would be visible from 12 KOPs, where detailed analyses were performed: KOP 1, 2, 3, 5, 6, 7, 8, 9, 14, 15, 16, and 17. KOP 1 and 9 are described in Sections 4.20.1.1 and 4.20.1.2. Visibility is generally limited to a couple of miles on either side of the transmission line but does extend to some ridgelines 5 miles or more to the west. Potential visibility of the transmission line in the valley extends to about 5 miles on either side, although visual contrast would be weak due to less vegetation removal required in these areas. Communications towers are not expected to be visible from the KOPs.

KOP 2: Frank Church-River of No Return Wilderness – Summit Trail (NFST 088)

Summit Trail offers panoramic views of the Salmon River Mountains and wilderness area for the entire length of the trail between Snowshoe Summit up to Meadow Ridge. This KOP represents what moderate sensitivity recreation users (hikers, horseback riders) would see from a non-motorized trail at the edge of the wilderness. Similar to Meadow Creek Lookout, this area is not frequented by many visitors because of its remoteness; and is associated with a moderate level of sensitivity which is consistent for similar trails in this area. This trail crosses areas designated as roadless and existing views of the characteristic landscape are typically limited to dispersed recreation such as hiking or horseback riding.

KOP 3: Frank Church-River of No Return Wilderness – Mule Hill Trail (NFST 219)

Mule Hill Trail is accessible from Meadow Creek Lookout Road (FR 51290) and provides access to the Indian Creek Trail. This viewpoint represents what high sensitivity recreation users (hikers, horseback riders) might see from a trail within the wilderness.

KOP 5: Hennessey Meadow Trailhead

KOP 5 represents views from Hennessey Meadow Trailhead looking east toward the proposed transmission line corridor. Hennessey Meadow Trailhead is at the end of Horse Heaven Road (FR 416W), which is a high-clearance vehicle travel route that follows Riordan Creek. This trailhead provides access to NFST 097 which leads to Riordan Lake, a popular fishing location in the area; and NFST 233, along the historic transmission route to the mine site. At this location, NFST 233 traverses extremely steep terrain that is primarily accessible by experienced OHV users and may receive limited use due this factor. This trailhead is associated with moderate sensitivity and is a typical viewpoint for motorized vehicle recreational users in the area. The past transmission line ROW corridor is evident, although structures are not present. A

new transmission line corridor would parallel FR 416W (Horse Heaven Road) and NFST 233 to the mine site.

KOP 6: Twin Bridges Dispersed Camping Area

KOP 6 represents views from Twin Bridges dispersed camping area looking south toward the proposed upgraded transmission line. Twin Bridges dispersed camping area is between Johnson Creek and the existing transmission line corridor, with Johnson Creek Road (CR 10-413) immediately west of the transmission line. This dispersed camping area is associated with moderate visual sensitivity. This viewing location is representative of dispersed recreational viewers in the area, with views of the existing transmission line. Screening is limited, and the modifications associated with the existing ROW are co-dominant in the landscape due to the enclosed landscape setting. Human development is limited to existing roads and the transmission line ROW, which would be upgraded.

KOP 7: Idaho Centennial Trail at Johnson Creek Road (CR 10-413) and Burntlog Creek Trail (NFST 075)

KOP 7 represents views from the Idaho Centennial Trail (ICT) directed west toward Burnt Log Road (FR 447). The ICT follows the Burntlog Creek Trail (NFST 075) heading north to the junction of Johnson Creek Road (CR 10-413). This trail is identified as a sensitive level 1 use area and is associated with high visual sensitivity. This KOP represents a typical ICT trail user in the analysis area with views of the transmission line upgrade. Recreational viewers associated with this viewpoint currently have unobstructed views of the transmission line, primarily due to ROW vegetation clearing. Modifications near the trail are limited to existing roads and the transmission line ROW.

KOP 8: Trout Creek Campground

KOP 8 represents the view from Trout Creek Campground looking west toward the upgraded transmission line. Trout Creek Campground is off Johnson Creek Road (CR 10-413) just southeast of the existing transmission line corridor. This campground is a sensitive level 1 use area, with developed amenities including fire pits, picnic benches, and restrooms. This viewing location is representative of campers in the analysis area that would have existing views of the transmission line corridor. The transmission line corridor is immediately adjacent to the campsite, and screening is limited to a few rows of trees at this site. Although the transmission line structures and conductors are visually subordinate from the campground due to vegetation screening, the ROW clearing is visible from many locations where understory vegetation has been thinned.

KOP 14: Cabin Creek Road (FR 467)

KOP 14 represents views from Cabin Creek Road (FR 467) looking north-northeast (KOP 14a) and south-southwest (KOP 14b) toward the upgraded transmission line. Cabin Creek Road (FR 467) is north of the Warm Lake area, and cuts across the Thunderbolt Mountains, terminating at Johnson Creek Road (CR 10-413) near Trout Creek Campground. This travel

route is a sensitive level 2 use area and is used frequently for OHV recreation. Recreational users have views of existing transmission line corridor vegetation clearing and pole structures. Based on the results of the viewshed analysis, visibility of the transmission line corridor along Cabin Creek Road (FR 467) would be localized due to steep terrain.

KOP 15: South Fork Salmon River Road (FR 474) and Warm Lake Road

KOP 15 represents views from South Fork Salmon River Road (FR 474) looking southwest (KOP 15a) and northeast (KOP 15b) toward the upgraded transmission line. South Fork Salmon River Road (FR 474) is a sensitive level 1 travel route near the Warm Lake recreation area. This viewpoint represents views that travelers would see from the South Fork Salmon River Road (FR 474) from Rice Creek coming into Warm Lake. The existing transmission line corridor is currently visible from this KOP; views of the existing switchgear, which would be upgraded to a substation, are in the foreground, which would be unobstructed. The existing conditions around the switchgear site appear to be previously disturbed, graded, and vegetation removed or thinned. This area has been historically altered by fires, and several dead and burned trees occupy the landscape, with isolated areas of mature trees and understory vegetation.

KOP 16: Stibnite Gold Logistics Facility

KOP 16 represents views from Warm Lake Road (CR 10-579) looking northeast (KOP 16a) and southwest (KOP 16b) toward the proposed SGLF. Warm Lake Road (CR 10-579) is a paved, passenger vehicle-accessible travel route that provides access to Warm Lake. This is a high-sensitivity travel route that provides access to Warm Lake from Cascade. The SGLF would be constructed in Scott Valley on an area of private land that is primarily undisturbed, in a landscape with minimal structures.

KOP 17: Lake Cascade Residence

KOP 17 represents views of residents along State Highway 55 near Lake Cascade looking north toward the proposed upgraded transmission line. Residential viewers near the transmission line upgrade in Cascade are limited to a few locations near Lake Cascade and along State Highway 55. Views would be primarily unobstructed, because the upgraded transmission line corridor would be immediately adjacent to these residences or visible in the foreground. Existing modifications in this rural setting are associated with neighboring residences, agricultural or ranching facilities, distribution lines, and local roads.

4.20.2.1.3.1 Utilities Construction

Effects to the Characteristic Landscape

Visual contrast associated with short-term activities includes construction of the new transmission line and upgrading the existing transmission line during the pre-production phase. Construction vehicles, equipment, and staff would be present along this corridor. Short-term visual contrast during construction is anticipated to be low-moderate, because these activities would occur intermittently along the ROW over a short duration.

KOP 1: Meadow Creek Lookout

The new transmission line would be built approximately 2 miles north of KOP 1. Short-term effects to the landscape associated with the new transmission line, such as vehicle movement and dust, would not be evident to viewers from KOP 1.

KOP 2: Frank Church-River of No Return Wilderness – Summit Trail (NFST 088)

The new transmission line would be built approximately 5 miles north of KOP 2. Visibility would be limited due to distance and intervening topography. Distinct shapes and features are difficult to distinguish at distances of 5 miles and the scale of the landscape also would absorb modifications introduced by the construction of the transmission line. Short-term effects to the landscape associated with the new transmission line, such as vehicle movement and dust, would not be evident to viewers from KOP 2.

KOP 3: Frank Church-River of No Return Wilderness – Mule Hill Trail (NFST 219)

The new transmission line would be built approximately 5 miles northwest of KOP 3. Visibility would be limited due to distance and intervening topography. Distinct shapes and features are difficult to distinguish at distances of 5 miles and the scale of the landscape also would absorb modifications introduced by the construction of the transmission lines. Short-term effects to the landscape associated with the new transmission line, such as vehicle movement and dust, would not be evident to viewers from KOP 3.

KOP 5: Hennessey Meadow Trailhead

Construction vehicles, equipment, and staff associated with construction of the new transmission line would be visible to trailhead viewers in the foreground. Short-term visual contrast during construction is anticipated to be low-moderate, because these activities would occur intermittently along the ROW over a short duration. However, while they are occurring, these activities would disrupt the natural setting of the landscape, making it appear and feel more industrial due to construction equipment and activity in the foreground.

KOP 6: Twin Bridges Dispersed Camping Area

Short-term visual contrast from this viewpoint would result from construction activities for the transmission line upgrade. Construction traffic, equipment, and staff would be evident from this site during construction, resulting in short-term low-moderate visual contrast due to unobstructed views of construction activities in the foreground as viewed from KOP 6. It is likely that construction activities would discourage use of the camping area at least in the short term.

KOP 7: Idaho Centennial Trail at Johnson Creek Road (CR 10-413) and Burntlog Creek Trail (NFST 075)

Visual contrast associated with short-term activities includes construction of the transmission line during the construction phase. Construction vehicles, equipment, and staff would be present along this corridor, which would be visible to viewers in the foreground. Short-term visual contrast during construction is anticipated to be low-moderate, because these activities would occur intermittently over a short duration. The presence of heavy machinery and construction workers, and associated movement, would change the rural setting viewed from KOP 7 to a more industrial-type setting, which would change the experience for viewers using the ICT at KOP 7.

KOP 8: Trout Creek Campground

Short-term visual contrast from this viewpoint would result from construction activities for the transmission line upgrade. Construction traffic, equipment, and staff would be evident from this site during construction, resulting in short-term low-moderate visual contrast due to unobstructed views of construction activities in the foreground, as viewed from KOP 8. While construction activities are occurring, they would disrupt the natural setting of the landscape at the campground, appearing industrial due to construction equipment and activity in the foreground. It is likely that construction activities would discourage use of the campground at least in the short term.

KOP 9: Frank Church-River of No Return Wilderness – Pistol Lake

Viewshed modeling indicates that short-term visual contrast from this viewpoint could result from construction activities for the transmission line upgrade. However, due to distance and intervening terrain, visual contrast would be weak to none. Existing vegetation also would limit visibility as long as it is present.

KOP 14: Cabin Creek Road (FR 467)

Short-term visual contrast from this viewpoint would result from construction activities for the transmission line upgrade. Construction traffic, equipment, and staff would be evident from this site during construction, resulting in short-term low-moderate visual contrast due to unobstructed views of construction activities in the foreground, as viewed from KOP 14. While construction activities are occurring, they would disrupt the natural setting of the landscape by adding movement, dust, and construction equipment to the views.

KOP 15: South Fork Salmon River Road (FR 474) and Warm Lake Road (CR 10-579)

Short-term visual contrast would include construction activities at Warm Lake substation facilities and upgrades to the transmission line, including construction vehicles, equipment, and staff. These activities would result in short-term low-moderate visual contrast due to unobstructed views of construction activities in the foreground, as viewed from KOP 15. While construction activities are occurring, they would add movement, dust, and additional equipment

to the views from South Fork Salmon River Road (FR 474), which would make the setting appear more industrial compared to the existing rural setting.

KOP 16: Stibnite Gold Logistics Facility

Short-term visual contrast would include construction of the transmission line upgrade (and logistics facility described below), including construction vehicles, equipment, and staff. These activities would result in short-term low-moderate visual contrast due to unobstructed views of construction activities in the foreground, as viewed from KOP 16.

KOP 17: Lake Cascade Residence

Short-term visual contrast from this viewpoint would result from construction activities for the transmission line upgrade. Construction traffic, equipment, and staff would be evident from this site during pre-production, resulting in short-term low-moderate visual contrast due to unobstructed views of construction activities in the foreground, as viewed from KOP 14. Residents would experience these changes to the landscape as they come and go from their homes.

4.20.2.1.3.2 Utilities Operations

Effects to the Characteristic Landscape

The transmission line upgrade would traverse steep, rugged terrain and dense stands of tall pine trees in an existing corridor. Upgrading the transmission line to a 138-kV facility would require widening the existing ROW from 70 feet to a total width of 100 feet. The new upgraded structures would be approximately 30 feet taller, with an estimated maximum height of 80 feet and spans ranging between approximately 300 to 600 feet, depending on the type of structure. Long-term visual contrast would primarily result from line and color where the ROW would be expanded. Visual changes associated with widening the ROW would reinforce the existing linear form of the ROW edge, resulting in a bolder, geometric, man-made element in this rugged natural landscape. The level of visual change would be moderate to high where tree clearing would occur in densely wooded areas with steep terrain due to grading or exposing lighter-colored rock. The taller replacement structures would result in moderate structural contrast for the existing transmission line, and moderate-high when introducing new structures into an existing ROW. Access for construction and maintenance of the transmission line would occur in the existing ROW, including conductor-stringing vehicles, construction trucks, and equipment. Long-term visual contrast would range from low-moderate when replacing existing structures in less steep terrain with minimal vegetation removal, to moderate-high where a new transmission line would be introduced in steep terrain with dense vegetation.

The new 8.5-mile-long 138-kV transmission line, beginning at Johnson Creek substation to the west, crosses steep, rugged terrain including Antimony Ridge. The new transmission line and associated 100-foot-wide ROW would introduce a light-colored line clear of vegetation across the landscape. This linear feature would contrast with the surrounding rugged landscape composed of irregular lines and vegetated, mounded and triangular landforms carpeted with

dark colored mature evergreens and lighter understory. The consistent form, line, and color of the ROW would introduce strong long-term contrast with the variable natural surrounding landscape.

Substation facilities that would be upgraded or introduced into the characteristic landscape would result in long-term visual contrast. For most substations, upgrades would require grading or improvement of land, and clearing vegetation to accommodate switchers, transformers, circuit breakers, and maintenance vehicles in the site. A new switching station in Cascade would be required on flat terrain occupied by low-lying vegetation, including grasses and shrubs. The level of visual change at this site would primarily be associated with the structural features of the facility, as well as a small area of grading and vegetation removal. Grading activities and vegetation removal would create minimal color and form contrasts with the existing landscape. Long-term visual contrast to the characteristic landscape in Cascade would be low-moderate, primarily due to structural contrast.

A new substation, the Scott Valley substation, would be required to support the SGLF in Scott Valley, which is characterized by flat to slightly rolling terrain and low-lying vegetation. The Warm Lake substation would require an upgrade of switchgear facilities, but no additional ground disturbance or vegetation clearing would occur at this site. The existing location has already been modified by local access roads, vegetation clearing, or thinning near the facility; therefore, long-term visual contrast would be low due to additional structural contrasts associated with the upgrade. An upgrade to the existing tap site (Thunderbolt Tap) along Cabin Creek Road (FR 447) also would be necessary, although the extent of the modifications is not known at this time. This road currently serves as the access road for the existing transmission line corridor and has been modified by vegetation removal and grading at pole locations. Additional grading and vegetation clearing would likely occur, resulting in moderate visual contrast where lighter colored rocks and soil may be exposed, and dense vegetation removed. A new substation would be required along Johnson Creek Road (CR 10-413) near the new transmission line corridor that heads east to the mine site. Similar to Cabin Creek Road (FR 447), the terrain is rough, and occupied by dense vegetation. Grading and vegetation clearing would result in moderate visual contrast. The introduction of structures in this landscape setting would result in moderate long-term visual contrast due to existing modifications associated with the transmission line corridor.

New transmission lines would cross areas managed as Retention and Partial Retention and upgraded transmission lines would cross areas managed as Preservation, Retention, and Partial Retention. Generally, new and upgraded transmission lines would not meet the Preservation, Retention, or Partial Retention VQO but would meet the Modification VQO. The line, color, form, and texture of the ROW would visually dominate the landscape but would not be out of scale with the natural surroundings. These effects would be visible from the following viewer platforms in the foreground and middleground distance zones: Johnson Creek Road (CR 10-413), Burntlog Route (new roadway), and the Meadow Creek Lookout.

KOP 1: Meadow Creek Lookout

The cleared ROW for the new transmission line would appear as a light-colored, thin band following the ridgeline. The light-colored line would create a strong level of contrast against the rugged, vegetation-covered hillside. Although visually evident, it would appear subordinate to the TSF that would dominate the landscape in the valley floor, as discussed in Section 4.20.2.1. The proposed communication tower located at the mine site also would be visible from this location.

KOP 2: Frank Church-River of No Return Wilderness – Summit Trail (NFST 088)

The new transmission line would be built approximately 5 miles north of KOP 2. Visibility would be limited due to distance and intervening topography. Distinct shapes and features are difficult to distinguish at distances of 5 miles and the scale of the landscape also would absorb landscape modifications introduced by transmission line and associated ROW. Long-term visual effects from the linear, light-colored cleared ROW and transmission structures associated with the new transmission line would not be evident from KOP 2 and would not affect user experience of Summit Trail (NFST 088) in the FCRNRW. The viewshed indicates that the upgraded communication tower located at the mine site also would be visible from this location; however, due to distance it would likely not be visually evident.

KOP 3: Frank Church-River of No Return Wilderness – Mule Hill Trail (NFST 219)

The new transmission line would be built approximately 5 miles northwest of KOP 3. Visibility would be limited due to distance and intervening topography. Distinct shapes and features are difficult to distinguish at distances of 5 miles and the scale of the landscape would absorb landscape modifications introduced by transmission line and associated ROW. Long-term visual effects from the linear, light-colored cleared ROW and transmission towers associated with the new transmission line would not be evident from KOP 3 and would not affect user experience of Mule Hill Trail (NFST 219) in the FCRNRW. The viewshed indicates that the upgraded communication tower located at the mine site also would be visible from this location; however, due to distance it would likely not be visually evident.

KOP 4: Stibnite Road (CR 50-412)

KOP 4 is located outside of the transmission line viewshed and therefore views of the new or existing transmission line would not be visible from KOP 4. The viewshed indicates that the upgraded communication tower located at the mine site would be visible from this location; however, due to distance it would likely not be visually evident.

KOP 5: Hennessey Meadow Trailhead

The results of the viewshed analysis show that due to surrounding terrain, visibility of the new transmission line route would be limited locally. The characteristic landscape is highly constrained by steep mountainous terrain that creates an enclosed setting in which long-term

visual contrast would be visible. Long-term contrast would primarily result from line and color changes where the ROW would be expanded. Vegetation growth in the previous ROW would be removed, and additional vegetation would be cleared to a total width of 100 feet. Grading would be necessary at structure locations, as well as the ROW access road. Moderate-strong structure contrast would result from strong vertical lines, dark brown colors, and smooth texture of new transmission line structures. New structural contrast, landform grading, and vegetation removal would result in moderate-strong visual contrast due to steep terrain and dense vegetation. Visual changes associated with widening the ROW would reinforce the existing linear form of the ROW edge, resulting in a bolder, geometric, man-made element in this rugged natural landscape. Resulting long-term visual contrast is anticipated to be moderate-high, which would be minimally screened, and viewed in the immediate foreground. The transmission line and associated ROW would affect the naturalness of the landscape at the trailhead; however, because it would primarily only be visible locally at the trailhead, it is not expected to have a major effect to users' experience of the trail.

KOP 6: Twin Bridges Dispersed Camping Area

Long-term visual contrast would result from ROW grading, vegetation removal, and introduction of new transmission line structures. The results of the viewshed analysis show that due to surrounding terrain, visibility of the new transmission line route would be limited locally.

Expansion of the transmission line ROW at this location would be highly constrained due to the proximity of the dispersed camping area to Johnson Creek and Johnson Creek Road (CR 10-413). The widened ROW would appear co-dominant for viewers at this moderate-sensitivity dispersed camping area due to scale dominance. Similar form and line would be replicated along the existing transmission line corridor, resulting in a moderate level of visual change that would be evident to viewers in the foreground. Terrain in this area is relatively flat; therefore, landform changes associated with grading and creating improved access at the campsite would result in a moderate level of visual contrast. Visual contrast would primarily result from removal of tall vegetation; and for viewers at the camping area, may completely eliminate existing trees that partially screen the existing transmission line. Overall, the long-term level of visual change would be moderate as a result of the wider corridor and would affect user experience at the dispersed camping area.

KOP 7: Idaho Centennial Trail (NFST 075) at Johnson Creek Road (CR 10-413)

Long-term visual contrast would result from ROW grading, vegetation removal, and introduction of new transmission line structures. Expansion of the transmission line ROW at this location would cross very steep terrain above Johnson Creek Road (CR 10-413) at the junction of NFST 075 (ICT). The widened ROW would appear co-dominant for viewers due to scale dominance. Similar form and line would be replicated along the existing transmission line corridor, resulting in a moderate level of visual change that would be evident to viewers in the foreground. Visual contrast would primarily result from landform grading at the structure pad sites, additional removal of tall vegetation, and introduction of larger structures. The widened corridor ROW

would enhance the existing linear form of the ROW edge, resulting in a bolder, geometric, man-made element in this rugged natural landscape. Long-term contrast would be moderate for recreational users due to unobstructed inferior (viewed from below) views in the foreground. Despite these visual changes, user experience would be similar to existing conditions, because a transmission line is currently visible from KOP 7. A simulation from this KOP is provided in **Appendix O-1**.

KOP 8: Trout Creek Campground

Long-term visual contrast would result from ROW grading, vegetation removal, and introduction of new transmission line structures. The widened ROW would appear co-dominant for viewers at this high-sensitivity campground due to scale dominance. Similar form and line would be replicated along the existing transmission line corridor, resulting in a moderate level of visual change that would be evident to viewers in the foreground. Terrain in this area is moderate to steep, and upgrades along the ROW may include changes to landform due to grading and exposure of lighter-colored rock. The potential expansion of the ROW at this location could partially or completely eliminate existing trees that screen the current transmission line for sensitive viewers. The widened ROW would enhance the existing linear form of the ROW edge, resulting in a bolder, geometric, man-made element in this rugged natural landscape. Overall, the level of visual change would be moderate due to form and line created by the wider corridor. ROW clearing would remove vegetation screening, resulting in moderate long-term visual contrast to campground viewers in the immediate foreground. These long-term changes would affect user experience at the campground and may deter some recreationists from using it.

KOP 9: Frank Church-River of No Return Wilderness – Pistol Lake

Long-term visual contrast would result from ROW grading, vegetation removal, and introduction of new transmission line structures. The widened ROW and new transmission structures would appear subordinate in the background due to distance as well as partial screening from intervening topography and vegetation. User experience is expected to be similar to existing conditions, since visual change would be low.

KOP 14: Cabin Creek Road (FR 467)

Long-term visual contrast would result from ROW grading, vegetation removal, and introduction of new transmission line structures. The widened ROW would appear co-dominant for viewers along this travel route due to scale dominance. Similar form and line would be replicated along the existing transmission line corridor, although color contrast may be more evident where rocky outcrops are disturbed, introducing lighter colors. Recreational users would have immediate foreground views of the upgraded transmission line with minimal screening. Removal of existing vegetation and additional clearing along the ROW edge would introduce a moderate level of contrast with existing vegetation. In addition, grading would be necessary at new structure locations and where access improvements are needed for construction and operation equipment. The widened corridor ROW would enhance the existing linear form of the ROW edge, resulting in a bolder, geometric, man-made element in this rugged natural landscape. Structural contrast would be reduced by adjacent terrain, which would backdrop the structures

for viewers traveling along this road while parallel to the transmission line. These conditions would result in an overall long-term moderate level of visual contrast that would be visible to travel route viewers in the foreground. Despite these visual changes, user experience is expected to be similar to existing conditions, because transmission lines already exist and are visible from KOP 14.

KOP 15: South Fork Salmon River Road (FR 474) and Warm Lake Road (CR 10-579)

Long-term visual contrast would result from landform modifications such as grading and vegetation clearing. The substation upgrade at this site would require no landform modifications or vegetation removal to accommodate additional equipment. The substation would introduce new structures similar in form, line, and color to the existing transmission line and switchgear but would be larger in size. Facilities would be primarily geometric in form and complex and introduce colors that are more industrial in appearance over a large area. These facilities would contrast with the surrounding landscape, which is primarily rural; however, industrial modifications are evident, resulting in a low-moderate level of structural contrast. Contrast would be minimized by implementing mitigation measures requiring design features that mimic characteristics of the existing landscape, such as the color palette. The site would be large enough to accommodate maintenance vehicles, and these may be visible to sensitive viewers during operation. The perimeter of the substation would be fenced, and nighttime lighting would be required for maintenance activities, introducing sky glow that would impact the integrity of the night sky. Impacts to night sky would be reduced by implementation of mitigation measures such as using minimal lighting, directing lights downward, and shielding lights where appropriate.

KOP 16: Stibnite Gold Logistics Facility

Long-term visual contrast would result from ROW grading, vegetation removal, and introduction of new transmission line structures and a substation. The widened ROW would appear co-dominant for viewers along Warm Lake Road due to scale dominance. Removal of existing vegetation and additional clearing along the transmission line ROW edge would introduce a moderate level of contrast with existing vegetation. Visual contrast from the building would be minimized by implementing mitigation measures requiring design features that mimic characteristics of the existing landscape, as the color palette. The new SGLF (discussed in more detail in Section 4.20.2.1.4) would result in greater changes to the characteristic landscape; therefore, the changes introduced by the upgraded transmission line and new substation would appear less noticeable to viewers.

KOP 17: Lake Cascade Residence

Long-term visual contrast would result from ROW grading, vegetation removal, and introduction of new transmission line structures. Expansion of the transmission line ROW at this location would be highly constrained due to the proximity of the residences to the existing structures. Terrain in this area is very flat; therefore, landform changes associated with grading and creating improved access along the ROW would result in a low level of visual contrast. Visual

contrast would result from removal of some vegetation; and for residential viewers, may completely eliminate existing trees that currently screen transmission line structures. Vegetation is less dense at the bottom of flat valleys, which is characteristic of the Cascade area. Vegetation clearing along the expanded ROW would not result in strong line or form contrasts, as seen in densely wooded areas. The introduction of taller structures would increase structural contrast; however, the footprint location may change to accommodate a wider span. Visibility of the facility to residences would depend on the locations of the new transmission line structures. However; residents would likely see the transmission line as they come and go from their homes. A simulation was performed from KOP 17, provided in **Appendix O-1**.

4.20.2.1.3.3 Utilities Closure and Reclamation

The upgraded transmission line would remain in service after mine closure; all new and upgraded substation sites with the exception of the new substation constructed within the mine site would remain indefinitely. Therefore; long-term effects described above would remain until Idaho Power Company decommissions the line. The new 8.5-mile transmission line to the mine site and substation constructed within the mine site would be reclaimed. The ROW associated with the new 8.5-mile transmission line would continue to be visible and appear discordant with the surrounding landscape. Over time, as vegetation matures, the contrasting linear form of the ROW footprint would blend and fade into the surrounding landscape. The mine site substation would be removed and reclaimed and would generally blend in with the surroundings.

4.20.2.1.4 OFF-SITE FACILITIES

Based on the viewshed analysis (**Appendix O-2**), off-site facilities would be visible from two KOPs where detailed analyses were performed: KOP 13 and 16, which are described in the sections above.

4.20.2.1.4.1 Off-site Facilities Construction

KOP 13: Landmark Maintenance Facility

Short-term visual contrast perceptible to travelers on Warm Lake Road (CR 10-579) would result from construction of the maintenance facility, including grading, new buildings, and other facilities. Construction traffic, equipment, and staff would be evident from this travel route during pre-production, resulting in moderate short-term visual contrast perceived by receptors due to views of construction activities in the foreground.

KOP 16: Stibnite Gold Logistics Facility

The SGLF in Scott Valley would be constructed on an area of private land that is primarily undisturbed in a landscape with minimal structures. The 25-acre site footprint would extend along Warm Lake Road (CR 10-579) in flat to slightly rolling terrain with low-lying vegetation. Short-term visual contrast perceptible to travelers on Warm Lake Road (CR 10-579) would result from construction of the facility, including grading and introduction of buildings and other facilities. Construction traffic, equipment, and staff would be evident from this travel route during

pre-production. The resulting level of short-term visual contrast would be moderate for receptors due to views of construction activities in the foreground.

4.20.2.1.4.2 Off-site Facilities Operations

KOP 13: Landmark Maintenance Facility

The maintenance facility at Landmark would result in moderate visual contrast where grading, vegetation removal, and construction of facilities would occur. The site is immediately adjacent to the historic Landmark ranger station, where there are existing cabins, picnic areas, and other structures currently managed by the PNF. Terrain at Landmark is primarily flat, with patchy clusters of trees and other low-lying vegetation. Existing disturbances are evident in the proposed maintenance facility footprint, and storage facilities would be co-located in these areas, which would help minimize visual contrast. Vegetation removal and some grading would be necessary to accommodate parking, outdoor storage areas, and covered structures for storage. The maintenance facility would be visually co-dominant to receptors when viewed in the context of adjacent facilities at Landmark. The proposed layout of the maintenance facility would preserve existing tall vegetation along Warm Lake Road (CR 10-579), which would help screen the maintenance facility from sensitive viewers. Long-term visual contrast is anticipated to be moderate, and the facility would be viewed in the foreground with vegetation partially screening the site. Additional nighttime lighting would be introduced at this facility, which would contribute to sky glow in an area where existing night lighting is minimal.

The Landmark Maintenance Facility would be located in an area managed as Partial Retention. It would meet the Partial Retention VQO as buildings would be constructed using materials and colors that appear in the characteristic landscape. Additionally, due to surrounding vegetation, these facilities would typically not be visible past the foreground distance zone.

KOP 16: Stibnite Gold Logistics Facility

Long-term visual contrast would primarily result from size and scale of the structural facilities at this site. Slight modifications to landform may be evident, and vegetation would be cleared in the majority of the site footprint. The SGLF would require approximately 25 acres of disturbance to accommodate employee parking, an assay laboratory building, a core sampling logging storage facility, warehouses, laydown yards, equipment inspection areas, a truck scale, and an administration building for Midas Gold personnel. The majority of the site would be improved to accommodate vehicle parking (approximately 250 light vehicles) for employees and laydown yard areas for materials. In addition, a 199-foot communications tower would be constructed at or near the facility to provide telephone, internet, and radio communications. It would introduce strong visual contrast due to its tall, vertical, linear form and smooth texture. However, impacts would be limited to within approximately 1 mile as surrounding topography would block it from view any distance further than 1 mile.

Collectively, these structural contrasts would introduce a moderate-high level of visual change that would appear dominant to viewers on Warm Lake Road. Trucks, buses, and cars related to operations at this facility also would be evident to Warm Lake Road viewers, which would

contribute to the dominance of this facility. Views of the facility would not be screened by vegetation and would be viewed in the immediate foreground for high-sensitivity travel route viewers on Warm Lake Road. Long-term visual contrast would be moderate-high. Additional nighttime lighting would be introduced at this facility, which would contribute to sky glow in an area where existing nighttime lighting is minimal; limited to the few residences in Scott Valley.

The SGLF is not within the PNF or BNF and therefore there is no VQO associated with the facility.

4.20.2.1.4.3 Off-site Facilities Closure and Reclamation

KOP 13: Landmark Maintenance Facility

After reclamation activities have concluded at the mine site, the maintenance facility would be decommissioned and reclaimed to existing conditions. Buildings would be removed, and parking areas would be ripped, recontoured, and reclaimed. Over time, color contrast would be reduced to a low level of visual contrast once native vegetation becomes established. Permanent visual contrast would be low, and nighttime lighting would return to existing conditions, resulting in minimal permanent visual contrast.

KOP 16: Stibnite Gold Logistics Facility

The Stibnite Gold Logistics Facility (approximately 25 acres) would be located on private land outside of NFS lands, and therefore it does not have a VQO. After closure of the mine the Logistics Facility would not be reclaimed (a permanent commitment of land) and it would be made available for other light industrial uses. Permanent visual contrast would be high, and nighttime lighting would likely remain, resulting in permanent visual impacts.

4.20.2.2 Alternative 2

Consistency with Scenery Management Designations

Elements of Alternative 2 may be inconsistent with current VQOs as designated by the PNF and BNF. More specific detail on acreages associated with these potential inconsistencies are provided in **Appendix O-6**.

4.20.2.2.1 MINE SITE

Under Alternative 2, infrastructure and operations at the mine site would be the same as Alternative 1, except:

West End DRSF – The West End DRSF and associated haul roads would not be present under Alternative 2.

Midnight DRSF – The Midnight DRSF would be present under Alternative 2.

Water Treatment Plant – The water treatment plant and transmission line necessary for it to operate would remain in perpetuity.

Limestone Processing – Lime and crushed limestone would be produced on site from mining in the West End pit under Alternative 2. Alternative 2 also would include a haul road from the West End pit to the limestone processing facilities.

This would result in minor differences to the characteristic landscape as viewed from KOP 4. Under Alternative 2, views from KOP 1 would appear the same as described under Alternative 1 (see Section 4.20.1.1.1). **Appendix O-3**, Alternatives Viewshed Analyses and Key Observation Points, Alternative 2, shows the viewshed of the Mine Site under Alternative 2.

4.20.2.2.1.1 Mine Site Construction

Effects to the Characteristic Landscape

Short-term visual effects associated with construction activities under Alternative 2 would appear similar to those described above under Alternative 1. Construction of the limestone crushing plant would generate additional construction traffic, requiring the delivery and construction of large equipment to the plant such as crushers and conveyers, kilns, large propane storage tanks, and large storage bins. Construction of the limestone crushing plant would generate additional dust and introduce additional industrial equipment to the landscape that would appear geometrical and smooth and introduce colors different than those of the natural surrounding landscape. Overall short-term visual contrast introduced to the characteristic landscape would be moderate, primarily due to the expansion of mining activities and introduction of nighttime lighting.

Effects by KOP

KOP 1: Meadow Creek Lookout

The limestone crushing plant would not be visible from KOP 1; therefore, short-term visual effects from mine site construction activities would appear the same as under Alternative 1.

KOP 4: Stibnite Road (CR 50-412)

The limestone crushing plant could be visible from KOP 4 in the middleground once vegetation present in the foreground is cleared. Construction activity associated with the Yellow Pine pit and DRSF would be present in the foreground between KOP 4 and the limestone crushing plant; therefore, construction activities associated with Yellow Pine pit and DRSF would dominate the views from KOP 4 so that activity and short-term effects associated with the limestone-crushing plant would be subordinate; and overall short-term effects would appear similar to those described above for Alternative 1 from KOP 4.

4.20.2.2.1.2 Mine Site Operations

Effects to the Characteristic Landscape

Long-term visual effects associated with mine operations under Alternative 2 would appear similar to those described above under Alternative 1. Under Alternative 2, the West End DRSF would not be present. The limestone crushing plant would introduce additional industrial infrastructure to the landscape and could introduce additional dust into the air. There would be no permanent Midnight Pit Lake. Overall the disturbances in the entire mine site would introduce strong contrast as a whole, and the general appearance of the mine site would be the same as described for Alternative 1 (Section 4.20.2.1.1.2).

Under Alternative 2, the mine site would be within areas managed as a VQO of Retention or Partial Retention. Where visible from viewing platforms, the mine site would not meet either of these VQOs as the mine site components would introduce form, line, color, and texture found infrequently or not at all in the characteristic landscape, and to a degree that would dominate the characteristic landscape. These effects could be visible from the Stibnite Road (CR 50-412) and the Meadow Creek Lookout viewing platforms.

Effects by KOP

KOP 1: Meadow Creek Lookout

Views from KOP 1 would continue to be dominated by the TSF, as described in Section 4.20.2.1.1.2. The West End DRSF would not be present and, therefore, not visible in the middle-ground distance zone from KOP 1. The absence of the West End DRSF from Alternative 2 and addition of the limestone crushing plant (in the West End pit) would not affect views from KOP 1.

KOP 4: Stibnite Road (CR 50-412)

The limestone crushing plant could be visible from KOP 4 in the middleground once vegetation present in the foreground is cleared. Mine activity associated with the Yellow Pine pit and DRSF would be present in the foreground between KOP 4 and the limestone crushing plant; therefore, activities associated with Yellow Pine pit and DRSF would dominate the views from KOP 4 so that activity and long-term effects associated with the limestone crushing plant would be subordinate; and overall long-term effects would appear similar to those described for Alternative 1.

4.20.2.2.1.3 Mine Site Closure and Reclamation

Effects to the Characteristic Landscape

Permanent effects to the characteristic landscape from the mine site after closure and reclamation under Alternative 2 would appear similar to Alternative 1, except the characteristic landscape would remain the same as existing conditions in the area of the West End DRSF,

and the water treatment plant and transmission line necessary for it to operate would remain after closure and reclamation.

Effects by KOP

KOP 1: Meadow Creek Lookout

Permanent effects to the characteristic landscape from the mine site after closure and reclamation under Alternative 2 would appear similar Alternative 1, with the following exceptions. The characteristic landscape would remain the same as existing conditions in the area of the West End DRSF. While views of the permanent water treatment plant would be blocked by a ridge from KOP 1, the new section of transmission line would remain under this alternative and would be visible in the middleground from the lookout.

KOP 4: Stibnite Road (CR 50-412)

Under Alternative 2, permanent visual effects from the mine site as viewed from KOP 4 would appear the same as described for as Alternative 1.

4.20.2.2.2 ACCESS ROADS

The primary features relevant to scenic resources for access road infrastructure and operations specific to Alternative 2 include:

Burntlog Route, Riordan Creek Segment – An approximately 5.3-mile segment of the Burntlog Route would be re-routed to the south, higher up in the Riordan Creek drainage, where it would cross Riordan Creek north of Black Lake.

Public Access via Stibnite Road to Thunder Mountain Road Link – Public access through the mine site from Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) during mining operations would be provided by constructing a 12-foot-wide gravel road to connect Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375). The route would be open to all vehicles year-round.

Soil Nail Walls – There would be approximately 0.66 mile of soil nail walls constructed.

Alternative 2 components described above would result in very similar visual changes to the characteristic landscape as viewed from KOP 4 as described above for Alternative 1. These components would not be visible from KOPs 1, 2, 9, 10, 12, and 13; and effects would appear the same as described for Alternative 1 (see Section 4.20.1.1.1). **Appendix O-3** shows the viewshed of the access roads under Alternative 2.

4.20.2.2.2.1 Access Roads Construction

Effects to the Characteristic Landscape

Short-term visual effects associated with construction activities under Alternative 2 would appear similar to those described above for Alternative 1. Mine traffic would use existing roads (Warm Lake Road [CR-10-579], Johnson Creek Road [CR 10-413], and Stibnite Road [CR 50-412]) to access the mine all year long until construction of the Burntlog Route and the linkage between Stibnite Road (FR 50412) and Thunder Mountain Road (FR 50375) are complete. Construction activity on the Riordan Creek segment of the Burntlog Route and the Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 502375) link would have the same type of impacts to the landscape as described under Alternative 1; and would include increased construction traffic, dust, grading, ditching, and vegetation removal.

Effects by KOP

KOP 4: Stibnite Road (CR 50-412)

Under Alternative 2, the Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) link would begin at KOP 4. From KOP 4, construction activity associated with road construction would be visible in the foreground, including construction traffic, equipment, dust, and movement of equipment and construction workers.

4.20.2.2.2.2 Access Roads Operations

Effects to the Characteristic Landscape

Long-term visual effects associated with operations under Alternative 2 would be similar to those described above under Alternative 1. Improvements to Burnt Log Road (FR 447) would still occur from Landmark to Trapper Flat, and impacts would be the same as Alternative 1 (Section 4.20.2.1.2.2). The Riordan Creek segment of Burntlog Route and the Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) link would result in changes to the characteristic landscape similar to the other upgraded section of Burnt Log Road, and appear as flat to sloping, smooth, light-brown linear forms through the landscape; and appear consistent with other existing roads in the area and visible from KOP 4. The presence of vehicles on these routes would introduce movement to the landscape, and also provide access in an area with no current road access.

The Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) link would provide access to and through the mine site and provide a viewer platform from which the mine site can be viewed. Viewers traveling along the public access road through the mine site would experience close-up, transient, head-on, and peripheral views of large machinery, movement, exposed soil and rock, and other mine-related equipment and infrastructure that would appear as an industrial landscape within the greater forested setting of the PNF and BNF. Soil nail walls would result in strong visual contrast. A 140-foot-tall road cut near the mine site would introduce

a large, smooth light-colored surface above the road that would sharply contrast with the natural, variable lines and forms of the surrounding landscape.

New segments of the Burntlog Route would introduce approximately 15 miles of new road that would be a viewing platform for areas of the forest, providing views to portions of the forest that are not currently afforded any viewing opportunity by a road or trail. Approximately 2 miles of new road would be situated within the viewshed of the mine site in the middleground distance zone.

New construction associated with the Burntlog Route would cross areas managed as Retention, Partial Retention, and Modification VQOs. With the exception of the soil nail walls, access roads would generally conform to the Partial Retention and Modification VQO. Although new and upgraded portions of the access roads could introduce strong visual contrast in some areas, it typically would be limited to the immediate foreground as viewed from the road introducing the contrast and would appear subordinate from other viewing platforms. New access roads would not be consistent with the Retention VQO as they would introduce new lines, colors, and textures that would be evident.

Effects by KOP

KOP 4: Stibnite Road (CR 50-412)

From KOP 4, the Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) link would travel north through the mine site and appear as a flat to sloping, smooth, light brown linear form traversing the landscape. Although the linear form and light color would contrast with the natural surroundings, it would appear consistent with other existing roads in the area that are visible from KOP 4.

4.20.2.2.2.3 Access Roads Closure and Reclamation

Effects to the Characteristic Landscape

Permanent visual effects associated with closure and reclamation activities under Alternative 2 would be similar to those described above under Alternative 1. Soil nail walls and the 140-foot-tall road cut near the mine site are proposed to remain in place and would continue to introduce strong visual contrast during and after closure and reclamation. The Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) link would be reclaimed, and those areas would appear similar to the reclaimed areas of Burnt Log Road (FR 447) as described under Alternative 1.

4.20.2.2.3 UTILITIES

Under Alternative 2, new construction and upgrades to transmission lines and substations would be similar to those described above for Alternative 1. The primary differences between utilities infrastructure and operations under Alternative 2 include:

Transmission line Re-route around Thunder Mountain Estates – Approximately 5.4 miles of upgraded transmission line would be routed to avoid the Thunder Mountain Estates Subdivision.

Transmission line Re-route to use an old railroad grade – Approximately 0.9 mile of upgraded transmission line would be routed to use an old railroad grade.

Cascade switching station – As a result of the transmission line route around Thunder Mountain Estates, the Cascade switching station would be located on Warm Lake Road (CR 10-579).

The differences described above would result in minor differences to the characteristic landscape but would not be visible from any KOPs. Visual changes associated with utilities experienced from KOPs 1, 2, 3, 5, 6, 7, 8, 9, 14, 15, 16, and 17 would be the same as described for Alternative 1. **Appendix O-3** shows the viewshed of the utilities under Alternative 2.

4.20.2.2.3.1 Utilities Construction

Effects to the Characteristic Landscape

Visual impacts associated with short-term activities include increased contrast during construction of the transmission line. Construction vehicles, equipment, and staff would be present along this corridor, which would be visible to viewers in the foreground. Short-term visual contrast during construction is anticipated to be low-moderate, because these activities would occur intermittently along the ROW over a short duration of time. Construction-related changes to the landscape would not be visible from the Thunder Mountain Estates subdivision under Alternative 2.

4.20.2.2.3.2 Utilities Operations

Effects to the Characteristic Landscape

Under Alternative 2, long-term visual changes associated with utilities would be similar to those described under Alternative 1. Changes to the landscape and introduced visual contrast associated with the transmission line upgrade would be the same except that residents of the Thunder Mountain Estates subdivision would not have foreground views of the upgraded transmission line. New transmission line construction effects would be the same as Alternative 1. Visual change associated with the Cascade switching station would be similar to Alternative 1 and involve grading and removal of vegetation in similar terrain, but approximately 1 mile farther south. The visual contrast introduced by the switching station would not be visible from the Thunder Mountain Estates subdivision.

A new transmission line would cross areas managed as Retention and Partial Retention and upgraded transmission lines would cross areas managed as Preservation, Retention, and Partial Retention. Generally, new and upgraded transmission lines would not meet the Preservation, Retention, or Partial Retention VQO but would meet the Modification VQO. The line, color, form, and texture of the ROW would visually dominate the landscape but would not

be out of scale with the natural surroundings. These effects would be visible from the following viewer platforms in the foreground and middleground distance zones: Johnson Creek Road (CR 10-413), Burntlog Route (new segment), and the Meadow Creek Lookout.

4.20.2.2.3.3 Utilities Closure and Reclamation

The upgraded transmission line would remain in service after mine closure; all new and upgraded substation sites would remain indefinitely. Therefore, long-term effects described above in Section 4.20.2.2.3.2 would remain until Idaho Power Company decommissions the line. In addition, the new transmission line would remain in service after mine closure in order to provide power to the permanent water treatment plant located at the mine site. The new section of transmission line would be visible from KOP 1 and would introduce a linear feature that would present contrast against an otherwise natural appearing wooded hillside. **Appendix O** includes a simulation of this view from KOP 1.

4.20.2.2.4 OFF-SITE FACILITIES

Under Alternative 2, off-site facilities would be similar to those described for Alternative 1 and would include a maintenance facility and logistics facility (SGLF). The primary difference is that the maintenance facility would be located along Burnt Log Road (FR 447), 4.4 miles east of the junction of the Johnson Creek Road (CR 10-413) and Warm Lake Road (CR 10-579) along the proposed Burntlog Route. The buildings and parking areas would be the same as proposed for the Landmark Maintenance Facility under Alternative 1 and resulting visual effects would be similar, although visual contrast and change to landscape character would be less, because the maintenance facility would be constructed in an existing borrow source area. Although the viewshed indicates the proposed maintenance facility would be visible from KOP 12, a closer look at site photographs from KOP 12A indicates that existing vegetation would entirely screen the proposed Burntlog Maintenance Facility from view. **Appendix O-3** shows the viewshed of the off-site facilities under Alternative 2 and includes site specific photographs from KOP 12.

4.20.2.2.4.1 Off-site Facilities Construction

Effects to the Characteristic Landscape

Short-term visual contrast perceptible to travelers on Burnt Log Road (FR 447) would result from construction of the maintenance facility, including grading, new buildings, and other facilities. As the maintenance facility would be constructed within an existing borrow source area, new ground disturbance would be limited. Construction traffic, equipment, and staff would be evident from this travel route during pre-production, resulting in moderate short-term visual contrast perceived by receptors due to views of construction activities associated with the maintenance facility.

4.20.2.2.4.2 Off-site Facilities Operations

Effects to the Characteristic Landscape

The maintenance facility would result in low to moderate visual contrast where grading, vegetation removal, and construction of facilities would occur. Contrast would be low- moderate, because the facility would be at a borrow source location, so that disturbances from road construction would already be present. Grading and vegetation removal would be minimal, and consistent with the changes to the landscape that occurred as a result of Burntlog Route construction. The night sky would be impacted by lighting associated with the maintenance facility, which would contribute to sky glow. Visual impacts to the Landmark Ranger Station would be avoided under Alternative 2 as the maintenance facility would not be located near the Landmark Ranger Station (also see Section 4.17.2.2.1.3).

The maintenance facility would be located in an area managed as Partial Retention. It would meet the Partial Retention VQO as buildings would be constructed using materials and colors that appear in the characteristic landscape. Additionally, due to surrounding vegetation these facilities would typically not be visible past the foreground distance zone.

The SGLF is not within the PNF or BNF, and, therefore, there is no VQO associated with the facility.

4.20.2.2.4.3 Off-Site Facilities Closure and Reclamation

Effects to the Characteristic Landscape

After reclamation activities have concluded at the mine site, the maintenance facility would be decommissioned and reclaimed to existing conditions. Buildings would be removed, and parking areas would be ripped, recontoured, and reclaimed. Over time, color contrast would be reduced to a low level of visual contrast once native vegetation becomes established. Permanent visual contrast would be low, and nighttime lighting would return to existing conditions, resulting in minimal permanent visual contrast.

4.20.2.3 Alternative 3

4.20.2.3.1 MINE SITE

Under Alternative 3, infrastructure and operations at the mine site would be similar to those described above under Alternative 1. However, the Meadow Creek TSF and Hangar Flats DRSF would be constructed in the EFSFSR drainage, and the worker housing facility would be in the Blowout Creek drainage. The overall changes to the characteristic landscape would be the same as described under Alternative 1; however, views from KOP 1 would differ. The Hangar Flats area is not visible from KOP 4; therefore, views experienced from KOP 4 would be the same for Alternative 1 and Alternative 3. Views of the mine site would be visible from KOP 3, which would not be the case for Alternatives 1 and 2. **Appendix O-4**, Alternatives Viewshed Analyses and Key Observation Points, shows the viewshed of the mine site under

Alternative 3. The effects from a visible plume originating from the mine site would be the same as described for Alternative 1.

4.20.2.3.1.1 Mine Site Construction

Effects to the Characteristic Landscape

Short-term effects to the characteristic landscape from mine site construction would be the same as described for Alternative 1.

KOP 1: Meadow Creek Lookout

The worker housing facility would be visible from KOP 1 in the middleground; therefore, construction traffic and activity, including dust generation, would result in weak to moderate visual contrast from KOP 1. Other visual impacts associated with mine construction activity would be the same as described for Alternative 1 (see Section 4.20.2.1.1.1).

KOP 3: Frank Church-River of No Return Wilderness –Mule Hill Trail (NFST 219)

Construction activity associated with preparation of the EFSFSR TSF would be visible from KOP 3. Some movement and dust from construction vehicles may be visible, but the level of visual contrast would be weak.

4.20.2.3.1.2 Mine Site Operations

Effects to the Characteristic Landscape

Overall, the long-term effects to the characteristic landscape from mine site operations would be the same as described for Alternative 1. The Meadow Creek TSF and the worker housing facility would introduce the same contrast and visual changes to the landscape, although the changes would occur in different drainages, as discussed in more detail under effects seen from KOP 1.

Under Alternative 3, the mine site would be within areas managed as a VQO of Retention or Partial Retention. Where visible from viewing platforms, the mine site would not meet either of these VQOs, as the mine site components would introduce form, line, color, and texture found infrequently or not at all in the characteristic landscape, and to a degree that would dominate the characteristic landscape. These effects could be visible from the Stibnite Road (CR 50-412) and the Meadow Creek Lookout viewing platforms.

Effects by KOP

KOP 1: Meadow Creek Lookout

Under Alternative 3, the TSF would not be in the Meadow Creek drainage and would not be visible from KOP 1. The valley floor would appear curved and concave, with moderately coarse texture and variable vegetation appearing dark green, gray, and brown. The Hangar Flats pit

would appear the same as described for Alternative 1, although it would dominate the view more under Alternative 3, because the Meadow Creek TSF and Hangar Flats DRSF would not dominate the foreground to middleground views. The worker housing facility would introduce geometric shapes, linear forms, and smooth textures; and introduce sky glow from nighttime lighting. The graded area and access to the worker housing facility would expose light-colored soil, which would introduce some contrast to the landscape.

KOP 3: Frank Church-River of No Return Wilderness –Mule Hill Trail (NFST 219)

Under Alternative 3, the EFSFSR TSF and DRSF would be visible in the middleground from KOP 3. Other components of the mine site and support facilities would not be evident from KOP 3. The EFSFSR TSF would appear as large, flat, smooth, and uniform at the bottom of the valley, which would result in strong visual contrast against the sloping, uneven texture of the surrounding mountains and valley. The flat top and monolithic form of the TSF would introduce strong contrast against the more complex, rough, rugged surrounding topography. Strong color contrast would result from unweathered tailings, which would appear as a lighter, more uniform color than the surrounding undisturbed landscape, with varied colors and textures. From this viewpoint, the TSF at full build-out would consume most of the EFSFSR valley, creating a wider basin between the mountain ranges, which is not typical for this landscape. The TSF would appear to be an artificially smooth, regular, and continuous form, contributing to a strong level of long-term visual contrast. Existing modifications from past mining activity are not visible from KOP 3, so the visual changes introduced by the mine site would appear new and inconsistent with the existing landscape and reduce the scenic integrity of the landscape as viewed from KOP 3. User experience of Mule Hill Trail (NFST 219) would be affected by the mine site, because the surrounding visible landscape, particularly from KOP 3 would change from a natural, wilderness-type setting to a more industrial setting. However; these effects would be screened by vegetation and topography in many locations along the trail and would not be consistently visible to trail users.

4.20.2.3.1.3 Mine Site Closure and Reclamation

Effects to the Characteristic Landscape

Overall, the permanent effects to the characteristic landscape from mine operations would be the same as described for Alternative 1. Permanent changes from the TSF and Hangar Flats DRSF would occur in a different drainage, as discussed in more detail under effects seen from KOP 1 and 3.

Effects by KOP

KOP 1: Meadow Creek Lookout

Under Alternative 3, the TSF would not be in the Meadow Creek drainage and would not be visible from KOP 1. The valley floor would appear curved and concave, with moderately coarse texture and variable vegetation appearing dark green, gray, and brown; and would not have

permanent modifications from the TSF. The worker housing facility area would be regraded and revegetated so that permanent visual changes would not be evident from KOP 1. Nighttime lighting would return to existing conditions.

KOP 3: Frank Church-River of No Return Wilderness –Mule Hill Trail (NFST 219)

The EFSFSR TSF and DRSF would have rounded crests and variably shaped angles to more closely resemble natural landforms, which would help to reduce visual contrast. As mature vegetation establishes on reclaimed DRSFs and TSF landforms over time, visual contrast associated with lighter-colored soils would diminish for a large portion of these disturbed areas as viewed from KOP 3. Although reclamation and revegetation efforts may reduce color contrast over time, the TSF would require a substantial buttress to ensure long-term stability, which would introduce strong geometric lines and unnatural form into the landscape permanently. Overall, permanent visual contrast viewed from KOP 3 would be moderate to high.

4.20.2.3.2 ACCESS ROADS

Under Alternative 3, access to and around the mine site would be similar to that described for Alternative 1. The primary differences for access road infrastructure and operations include:

Burntlog Route near EFSFSR TSF – Burntlog Route in the vicinity of the EFSFSR TSF would be rerouted, entering the site on a new road adjacent to Blowout Creek.

Public Access to the Mine Site – There would be no public access to the mine site during operations. On closure and reclamation, public access would either be provided by converting the temporary TSF access road along the TSF pipeline to a permanent access road connecting to the existing road at both ends or retaining the mine access route for public access.

OHV Trail from Horse Heaven/Transmission line Route to Meadow Creek Lookout Road – This OHV trail would not exist.

These differences would not be visible from KOPs 1, 2, 9, 10, 12, and 13; and effects would be the same as those described above for Alternative 1 (see Section 4.20.1.1.1) from those KOPs and are not discussed in the following subsections. **Appendix O-4** shows the viewshed of the access roads under Alternative 3.

4.20.2.3.2.1 Access Roads Construction

Effects to the Characteristic Landscape

Short-term visual effects associated with construction activities under Alternative 3 would be similar to those described for Alternative 1. Mine traffic would use existing roads (Warm Lake Road [CR 10-579], Johnson Creek Road [CR 10412], and Stibnite Road [CR 50-412]) to access the mine year-round until construction of the Burntlog Route is complete. Constructing the

Burntlog Route would include short-term visual impacts such as increased construction traffic, dust, grading, ditching, and vegetation removal.

4.20.2.3.2.2 Access Roads Operations

Effects to the Characteristic Landscape

Improvements to Burnt Log Road (FR 447) would occur from Landmark to Trapper Flat, and impacts would be the same as described for Alternative 1 (Section 4.20.2.1.2.2). The new portion of the Burntlog Route in the vicinity of the EFSFSR would result in similar changes to the characteristic landscape as the other new sections of Burntlog Route; and appear as a flat to sloping, smooth, light-brown linear form through the landscape, and appear consistent with other existing roads in the area. The presence of vehicles on these routes would introduce movement to the landscape, and also provide access in a previously primarily roadless area. The OHV Trail from Horse Heaven/Transmission line Route to Meadow Creek Lookout Road (FR 51290) would not be constructed, so the landscape in that area would remain the same as existing conditions.

New segments of the Burntlog Route would introduce approximately 15 miles of new road that would be a viewing platform for areas of the forest, providing views to portions of the forest that are not currently afforded any viewing opportunity by a road or trail. Approximately 2 miles of new road would be situated within the viewshed of the mine site in the middleground distance zone.

New roads associated with the Burntlog Route would cross areas managed as Retention, Partial Retention, and Modification VQOs. With the exception of the soil nail walls, access roads would generally conform to the Partial Retention and Modification VQO. Although new and upgraded portions of the access roads could introduce strong visual contrast in some areas, it typically would be limited to the immediate foreground as viewed from the road and would appear subordinate from other viewing areas. New access roads would not be consistent with the Retention VQO as they introduce new lines, colors, and textures that are evident to viewers.

4.20.2.3.2.3 Access Roads Closure and Reclamation

Effects to the Characteristic Landscape

Permanent visual effects associated with access roads under Alternative 3 would be similar to those described above under Alternative 1. Because there would be no public access to the mine site during operations, new public access to the area would be created during closure and reclamation; either by converting the temporary TSF access road along the TSF pipeline to a permanent access road connecting to the existing road at both ends, or retaining a portion of the mine access route for public access through and beyond the mine site. Either road would appear as a flat to sloping, smooth, light-brown linear form through the landscape, and provide a viewer platform from which to view the reclaimed mine area, as described above in Section 4.20.2.3.2.1.

4.20.2.3.3 UTILITIES

Under Alternative 3, new construction and upgrades to transmission lines and substations would be similar to that described above under Alternative 1. The primary differences include:

New Transmission line Re-route – Approximately 2.5 miles of the new transmission line would be aligned to coincide with a minimally developed access road in the Meadow Creek drainage.

Re-route of 24.9-kV lines – The new 24.9-kV lines in the mine site would be realigned to accommodate the TSF and DRSF locations in the EFSFSR drainage, and the worker housing facility.

The utilities components described above would result in minor differences to the characteristic landscape that would be visible from KOP 1. Visual changes associated with utilities experienced from KOPs 2, 5, 6, 7, 8, 9, 10, 14, 15, 16, and 17 would be the same as described above for Alternative 1. **Appendix O-4** shows the viewshed of the utilities under Alternative 3.

4.20.2.3.3.1 Utilities Construction

Effects to the Characteristic Landscape

Short-term visual impacts associated with construction of the transmission line would generally be the same as described for Alternative 1 (see Section 4.20.2.1.3.1). Construction vehicles, equipment, and staff would be present along this corridor, which would be visible to viewers in the foreground. Short-term visual contrast during construction is anticipated to be low-moderate, because these activities would occur intermittently along the ROW and over a short duration.

Effects by KOP

KOP 1: Meadow Creek Lookout

The new transmission line would be built approximately 1 mile north of KOP 1. Short-term effects to the viewshed, such as vehicle movement and dust, would be less evident from KOP 1 under this alternative. Construction of the transmission line along an existing access road in the Meadow Creek drainage would introduce a moderate level of contrast, because clearing and grading would be minimized by following an existing road. Additionally, some construction activity would be screened from KOP 1 by vegetation and topography by siting the new activity in the Meadow Creek drainage.

4.20.2.3.3.2 Utilities Operations

Effects to the Characteristic Landscape

Long-term visual contrast associated with utilities would generally be the same as described for Alternative 1 (see Section 4.20.2.1.3.1). The primary difference would be that 2.5 miles of new transmission line would be located on an existing road in the Meadow Creek drainage, which would result in moderate long-term visual contrast and overall change in visual character.

Because the stretch of transmission line would be located in the valley rather than prominently on a ridgeline, it would be partially screened by vegetation and topography.

Under Alternative 3, new transmission lines would cross areas managed as Retention and Partial Retention and upgraded transmission lines would cross areas managed as Preservation, Retention, and Partial Retention. Generally, new and upgraded transmission lines would not meet the Preservation, Retention, or Partial Retention VQO but would meet the Modification VQO. The line, color, form, and texture of the ROW would visually dominate the landscape but would not be out of scale with the natural surroundings. These effects would be visible from the following viewer platforms in the foreground and middleground distance zones: Johnson Creek Road [CR 10-413], Burntlog Route (new segment), and the Meadow Creek Lookout.

Effects by KOP

KOP 1: Meadow Creek Lookout

Meadow Creek Lookout (KOP 1) provides a superior vantage point of the new transmission line. As discussed above, the new transmission line would introduce a low level of long-term visual contrast and overall change in visual character, as viewed from KOP 1, because 2.5 miles of the line would be located in a partially screened valley rather than along a ridge top.

4.20.2.3.3 Utilities Closure and Reclamation

The upgraded transmission line would remain in service after mine closure; all new and upgraded substation sites would remain indefinitely; therefore, permanent effects would be the same as long-term.

4.20.2.3.4 OFF-SITE FACILITIES

Under Alternative 3, off-site facilities would be the same as described for Alternative 1; therefore, associated visual effects from construction, operation, and closure and reclamation would be the same (see Section 4.20.2.1.4). **Appendix O-4** shows the viewshed of the off-site facilities under Alternative 3.

4.20.2.4 Alternative 4

4.20.2.4.1 MINE SITE

At the mine site, Alternative 4 components are substantially similar to those described for Alternative 1. There are no differences in the mine site that would result in perceivable differences to the characteristic landscape or views from identified KOPs. Therefore, under Alternative 4, impacts to scenic resources would be the same as described for Alternative 1 (see Section 4.20.2.1.1) for construction, operations, and closure and reclamation.

Appendix O-5 shows the viewshed of the mine site under Alternative 4.

Under Alternative 4, the mine site would be within areas managed as a VQO of Retention or Partial Retention. Where visible from viewing platforms, the mine site would not meet either of

these VQOs as the mine site components would introduce form, line, color, and texture found infrequently or not at all in the characteristic landscape, and to a degree that would dominate the characteristic landscape. These effects could be visible from the Stibnite Road (CR 50-412) the Meadow Creek Lookout viewing platforms. The effects from a visible plume originating from the mine site would be the same as Alternative 1.

4.20.2.4.2 ACCESS ROADS

Under Alternative 4, the Burntlog Route would not be used for mine access; therefore, no road upgrades or new road segments would be constructed for that route. Therefore, the visual impacts associated with Burntlog Route would not occur under Alternative 4. However, visual impacts would occur as a result of the upgrades to, and year-round mine use of, Yellow Pine Route.

A new road linking Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375), providing public access through the mine site, would occur under Alternative 4. The location of impacts would vary, as described under the KOP-specific analysis below. The visual impacts would be the same as those described for Alternative 2 (see Section 4.20.2.2.2).

4.20.2.4.2.1 Access Roads Construction

Effects to the Characteristic Landscape

Short-term visual effects associated with construction activities under Alternative 4 would occur as a result of upgrades to the Yellow Pine Route. No major road widening or straightening of curves would be required for the Johnson Creek Road (CR 10-413) portion of the Yellow Pine Route; therefore, there would be no visual impacts from such activities. Traffic along the road from construction vehicles and equipment for widening the Stibnite Road portion of the route would introduce additional movement and dust from vehicle traffic along this portion of the route compared to existing conditions.

Short-term impacts associated with the road linking Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) would be similar to those described for Alternative 2 (see Section 4.20.2.2.2.1). The Stibnite Road portion of the route would be improved by widening curves to accommodate 55-foot semi-truck trailers. Construction of retaining walls and culverts would require vegetation removal and would expose large areas of native soil and rock that would contrast with surrounding vegetation and rugged, varied topography. During road construction and improvement activities, there would be an increase in construction traffic, equipment, and associated movement, and generation of dust.

Effects by KOP

KOP 1: Meadow Creek Lookout

Construction activity and traffic associated with the Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) link would be visible from KOP 1 but would largely be absorbed by

the larger, more visually evident activity associated with the mine site that would appear dominant.

KOP 4: Stibnite Road (CR 50-412)

Under Alternative 4, the Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) link would begin at KOP 4. From KOP 4, this construction activity would be visible in the foreground to the south, and construction activity associated with the Stibnite Road improvements for Yellow Pine Route would be visible to the north. Short-term visual changes evident from KOP 4 would include construction traffic, equipment, dust, and movement of equipment and construction workers.

KOP 7: Idaho Centennial Trail at Johnson Creek Road (CR 10-413) and NFST 075

KOP 7 represents views from the ICT directed west. This trail is identified as a sensitive level 1 use area and is associated with high visual sensitivity. Short term construction activity may include road grading and vegetation clearing on Yellow Pine Route near the trailhead to accommodate heavy vehicle mine traffic. Grading and construction equipment used for these activities would generate dust during dry weather that would be visible during the daytime.

KOP 8: Trout Creek Campground

This campground is a sensitive level 1 use area, with developed amenities including fire pits, picnic benches, and restrooms. It is located immediately west of Johnson Creek Road (CR 10-413). Construction activity associated with road improvements for Yellow Pine Route would be visible, particularly when entering and exiting the campground. Construction traffic, equipment, dust, and movement of equipment and construction workers would contrast against the natural, and rustic environment of the campground.

4.20.2.4.2.2 Access Roads Operations

Effects to the Characteristic Landscape

There would low magnitude long-term visual impacts to the characteristic landscape associated with access roads from Alternative 4, because construction of the Burntlog Route would not occur. New access road construction through the mine site would be limited to the road connecting Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375). This new road would appear as flat to sloping, smooth, light-brown linear forms through the landscape, and appear consistent with other existing roads in the area and would be visible from KOP 4. The presence of vehicles on these routes would introduce movement to the landscape, and also provide access in a previously primarily roadless area.

The Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) link would provide a new viewer platform from which the mine site can be viewed (see Section 4.20.2.2.2.2). The Yellow Pine Route would consist of all existing roads; therefore, the level of visual change introduced to

the landscape would be lower than that experienced as a result of the Burntlog Route under Alternatives 1, 2, or 3. Upgrades to the Stibnite Road portion of Yellow Pine Route would increase the level of visual contrast from the road due to road widening, as well as 9-foot-high retaining walls that would transform the existing line and form along the road from a natural, vegetated slope to smooth, lighter-colored man-made walls.

The new road would cross an area managed as Partial Retention and road upgrades would cross areas managed as Retention and Partial Retention. With the exception of the retaining walls, access roads would generally conform to the Partial Retention VQO. Although new and upgraded portions of the access roads could introduce strong visual contrast in some areas, it typically would be limited to the immediate foreground as viewed from the road and would appear subordinate from other viewing platforms.

KOP 1: Meadow Creek Lookout

The Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) link would be visible from KOP 1 but would largely be absorbed by the larger, more visually evident mine site operations.

KOP 4: Stibnite Road (CR 50-412)

Under Alternative 4, the Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) link would begin at KOP 4. Looking south from KOP 4, the Stibnite Road to Thunder Mountain Road (FR 50375) link would travel through the mine site, and appear as a flat to sloping, smooth, light-brown linear form traversing the landscape. Although the linear form and light color would contrast with the natural surroundings, it would appear consistent with other existing roads in the area that are visible from KOP 4. Looking north from KOP 4, the upgraded Stibnite Road would be visible. The road improvements would slightly alter landscape character, because the road would transform from a low-traffic, narrow forest road to a wider, well-maintained and -graded access road with frequent mine traffic. This portion of the Yellow Pine Route would exhibit strong contrast with the surrounding terrain compared to existing conditions.

KOP 7: Idaho Centennial Trail at Johnson Creek Road (CR 10-413) and NFST 075

Johnson Creek Road (CR 10-413) would be plowed for year-round use under Alternative 4, and vegetation clearance along the road may increase in order to accommodate heavy vehicle mine traffic. These activities would increase the visual contrast of the road compared to existing conditions. Increased road use would generate dust during dry weather that would be visible during the daytime and headlights from mine traffic would be visible at night. Plowing the road during the winter would introduce a smooth, linear feature to the winter landscape that, under existing winter conditions appears similar to the surrounding natural, winter forest landscape. Additionally, large vehicles traveling the road during winter months would introduce movement and audible disruptions to the winter forest environment.

KOP 8: Trout Creek Campground

During operation of the mine, Johnson Creek Road (CR 10-413) would be routinely maintained, including grading (as needed), spot graveling, dust control, and snow removal in the winter. Due to road widening and frequent maintenance, the road would introduce a higher level of visual contrast to its surroundings due to its wider, smoother, and straighter appearance. Mine operation would create traffic to the mine site from buses, vans, trucks, and personal vehicles throughout mining operations. Nighttime traffic on this road would introduce new lighting into an area that has no permanent lighting sources. These impacts would primarily be experienced as individuals enter and exit the campground, although nighttime lighting could be visible from inside the interior of the campground.

4.20.2.4.2.3 Access Roads Closure and Reclamation

Effects to the Characteristic Landscape

The types of permanent visual effects associated with access roads under Alternative 4 would appear similar to those described under Alternative 1, although these effects would be in different locations. However, the Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) link would not be reclaimed, and those areas would have permanent increased visual contrast on the landscape due to the presence of the new road link. This also would provide a permanent viewing platform along the route.

Stibnite Road would not be returned to the pre-mine width, and the 9-foot-high retaining walls, approximately 182 18-inch culverts, and two 60-inch culverts would remain after mine closure and reclamation activities have ceased. Therefore, the long-term impacts associated with Stibnite Road would remain as permanent impacts.

4.20.2.4.3 UTILITIES

Under Alternative 4, the proposed new and upgraded transmission lines would be the same as those described under Alternative 1.

Under Alternative 4, helicopters would be used during construction of communications sites, and would periodically enter into view from the majority of the KOPs during construction and maintenance activities. Because the activity would be periodic and only for a short duration, visual changes would be low during all phases: construction, operations, and closure and reclamation. **Appendix O-5** shows the viewshed of utilities under Alternative 4.

New transmission lines would cross areas managed as Retention and Partial Retention and upgraded transmission lines would cross areas managed as Preservation, Retention, and Partial Retention. Generally, new and upgraded transmission lines would not meet the Preservation, Retention, or Partial Retention VQO but would meet the Modification VQO. The line, color, form, and texture of the ROW would visually dominate the landscape but would not be out of scale with the natural surroundings. These effects would be visible in the foreground or middleground from the following viewer platforms: Johnson Creek Road (CR 10-413), the

Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) link, and the Meadow Creek Lookout.

4.20.2.4.4 OFF-SITE FACILITIES

Under Alternative 4, proposed off-site facilities would be the same as described for Alternative 1, except the Landmark Maintenance Facility would be on the southern side of Warm Lake Road (CR 10-579). Associated visual change from construction, operations, and closure and reclamation of off-site facilities would be the same as described for Alternative 1 (see Section 4.20.2.1.4). **Appendix O-5** shows the viewshed of the off-site facilities under Alternative 4.

4.20.2.5 Alternative 5

Under Alternative 5, none of the action alternatives would be implemented, and no development of the mine site or supporting facilities would occur or be introduced. The landscape environment described in Section 3.20 would remain as it currently exists in the analysis area. Existing disturbances associated with historic mining activities at the mine site would still be visible to sensitive use areas, but there would be no changes to PNF and BNF characteristic landscape. Unlike Alternatives 1 through 4, reclamation activities would not be performed and permanent changes to the landscape in the area of the historic mine activities would dominate the landscape. Existing VQO classifications would remain the same under this alternative. Therefore, there would be no direct or indirect effects to scenic resources as a result of the No Action Alternative although the permanent scenic integrity of the area would be less than under any of the action alternatives. Additionally, the existing disturbances associated with historic mining activities do not meet the Partial Retention VQO. This would continue under Alternative 5.

4.20.3 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 Project 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 EIS.

4.20.4 Cumulative Effects

Past, present, and reasonably foreseeable future actions include activities, developments, or events that have the potential to change the physical, social, economic, and/or biological nature

of a specified area. Existing and projected activities directly associated with an alternative, and other reasonably foreseeable future actions, provide the basis for defining and analyzing cumulative impacts. A cumulative effect must overlap in space and time with the direct and indirect effects of the action. For scenic resources, the analysis area for cumulative effects is broader than the analysis area for direct and indirect effects; and in this case, includes areas on National Forest System lands in Valley and Adams counties, including several projects in the PNF and BNF.

Several of the present and reasonably foreseeable future actions summarized in Section 4.1.5, including mineral development, wildfire management, access road maintenance, reclamation and rehabilitation plans, recreation, and infrastructure development, contribute to cumulative effects on scenic resources (see **Table 4.1-2** for brief descriptions of reasonably foreseeable future actions).

4.20.4.1 Alternatives 1 through 3

Historically, mining activities have impacted visual resources, including surface disturbances along roads, mining pits, and facilities; however, due to rugged terrain, visual impacts of these activities are highly localized. Activities associated with mineral exploration would locally increase the amount of vegetation removed to accommodate drill pad sites and improvement of access roads. Timber harvest activities also would contribute incrementally to landscape modification through the removal of vegetation over time. Forest management–related plans for noxious weed management, rehabilitation, and reclamation would result in a positive cumulative effect for the landscape by enhancing the natural, rugged setting that is characteristic of this area. There would be no new major utility corridors introduced through infrastructure development projects. Some mineral development projects have been put on hold in the cumulative analysis area; but overall, mining activity has not significantly modified these backcountry landscapes. The characteristic backcountry landscape setting would continue to be modified locally by these activities, but collectively, they would not trend toward a more highly developed or industrial-type setting. Disturbance associated with the SGP components would be reclaimed. Most disturbance areas would be reclaimed concurrently or at mine closure, and the visual effects of the disturbance would gradually decrease as vegetation matures and color contrasts are reduced by rock weathering. Permanent visual contrast would range from low to moderate-strong, and would contribute to the cumulative effects from past, present, and reasonably foreseeable actions.

4.20.4.2 Alternative 4

The contribution to cumulative effects under Alternative 4 would be similar to but slightly less than Alternative 1. This is because the new road for Burntlog Route would not be constructed under Alternative 4, and the associated long-term and permanent effects to the scenic character and integrity of the forest would not occur.

4.20.4.3 Alternative 5

Under Alternative 5, none of the action alternatives would be implemented, and no development of the mine site or supporting facilities would occur or be introduced. However; unlike Alternatives 1 through 4, mine site reclamation activities would not be performed and the changes to the landscape in the area of the historic mine activities would persist and continue to contribute to the cumulative visual changes to the landscape in the forest.

4.20.5 Irreversible and Irretrievable Commitments of Public Resources

4.20.5.1 Alternatives 1 through 4

All action alternatives would result in an irreversible loss of the characteristic landscape caused by the high walls of the open pits, where cut-slope color contrasts would persist until permanent rock weathering would reduce these contrasts. Due to the size and extent of the DRSFs and the TSF, an irreversible loss of the characteristic landscape would persist for a long period of time, until rock weathering and slope revegetation reduce visual contrast for color, form, line, and texture. Viewsheds for sensitive use areas near the mine site would be irretrievably changed due to the scale of topographic changes associated with the pits, DRSF, and TSF. Even with reclamation and revegetation, the viewshed would be dominated by these unnaturallandforms.

4.20.5.2 Alternative 5

Under Alternative 5, the proposed mine activities and construction and operation of associated infrastructure would not occur. Consequently, there would be no irretrievable and irreversible commitment of scenic resources.

4.20.6 Short-term Uses versus Long-term Productivity

4.20.6.1 Alternatives 1 through 4

Short-term refers to uses with a duration of a few years or less. There would be no short-term uses that would affect long term-productivity of scenic resources.

4.20.6.2 Alternative 5

Under Alternative 5, the proposed mine activities and construction and operation of associated infrastructure would not occur, and there would be no additional short-term uses of the SGP area.

4.20.7 Summary

4.20.7.1 Change in Landscape Character and Scenic Quality of the Analysis Area

At the mine site, all action alternatives would cause similar changes to local landscape character scenic qualities over the construction, operation, and closure and reclamation timeframes. Alternative 5 would result in no change to landscape character and scenic quality. Of the action alternatives, Alternatives 1 and 3 would result in the greatest change in landscape character and scenic quality, primarily due to construction of approximately 15 miles of new roadway for the Burntlog Route, and the associated year-round vehicle movement and headlight activities during construction and operation phases. Alternative 2 would entail slightly less change as only approximately 13.5 miles of new roadway would be constructed. Of the action alternatives, Alternative 4 would entail the least change to landscape character and scenic quality of the analysis, as the mine access route would not require construction of the Burntlog Route, although it would require improvements to Yellow Pine Route, which would result in some changes to scenic quality, but to a lesser magnitude than a new road. After operations new portions of the Burntlog Route would be decommissioned and visual impacts would lessen over time.

4.20.7.2 Change in Distance Zone

Alternative 1, 2, and 3 would result in the greatest change to distance zones, because they would require construction of a new roadway in the forest. Individuals traveling through the forest on the new roadway would be able to see areas of the forest either not seen from viewing platforms under existing conditions or see them from a closer distance. Alternatives 1 and 3 would add the largest amount of new access roads (approximately 13.5 miles), with Alternative 2 providing slightly less mileage of new roads. Under Alternatives 1, 2, and 3, the mine site would be in the middleground distance zone of the new roadway for approximately 2 miles. Alternative 4 would involve construction of the new Thunder Mountain Road link that would traverse through the mine site providing immediate foreground views of the mine site. Alternative 5 would not involve construction of new access roadways and so would not provide new distance zones in the SGP area.

4.20.7.3 Change in Nighttime Lighting

Nighttime lighting at the mine site would be similar among all action alternatives. Similarly, there would be nighttime lighting effects from vehicles traveling on roads (new or improved) under all action alternatives. Alternatives 1 and 3 would include the greatest mileage of new roadway (approximately 15 miles) where this change would occur. Alternative 2 would include fewer new roadway miles (13.5), but some of these would occur at higher elevations, potentially increasing distant visibility. Alternative 4 would not include construction of Burntlog Route, but nighttime lighting effects would increase along the Yellow Pine Route, which potentially has more viewers to experience them as there are residences in the village of Yellow Pine and ranches along

Johnson Creek Road (CR 10-413). Alternative 5 would involve no change in nighttime lighting at the mine site or due to access road traffic.

4.20.7.4 Context of Impacts per Forest Guideline Visual Quality Objectives

Under all action alternatives, the mine site, access routes, new and upgraded transmission lines, and off-site facilities would introduce moderate to strong levels of visual contrast to areas with local and regional scenic importance as indicated by Preservation, Retention, and Partial Retention VQOs. Alternative 5 would not involve scenery impacts in accord with or conflicting with established forest VQOs.

4.20.7.5 Changes to Scenic Integrity

The analysis area generally has moderate scenic integrity, because the landscape is slightly altered by existing roads and transmission lines. Scenic integrity is very low where existing disturbances are present from historic mining activities, such as the mine site, because the landscape is heavily altered. Alternative 5 would result in no change to area scenic integrity. Under all action alternatives, additional alternations would occur to the already impacted mine site during construction and operations. After closure and reclamation, the scenic integrity at the mine site would likely slowly improve under all action alternatives. Access roads under Alternatives 1, 2, and 3 would cause similar degradations to scenic integrity caused by the construction of and activities on the Burntlog Route. Under Alternative 4, the change to scenic integrity would be less evident, because existing roadways would be improved rather than new roadway segments built. However, as there are residences along the existing Yellow Pine Route, there may be more viewers to experience these changes.

Table 4.20-1 provides a summary comparison of scenic resource impacts by issue and indicators for each alternative.

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Table 4.20-1 Comparison of Scenic Resource Impacts by Alternative

Issue	Indicator	Baseline Conditions	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
The SGP may cause changes to scenic resources.	Visual contrast.	Landscape is characterized by valley floors surrounded by mountains with steep terrain broken up by narrow gorges and streams. Vegetation includes grass and evergreens. Existing modifications include the existing mine site, forest roads, transmission lines, and residences in the western portion of the analysis area.	New disturbances within the footprint of existing modifications would appear similar to existing modifications but at a larger scale. Visual contrast would increase due to larger road width, more vegetation removal, and new retaining walls. New ROW for a new transmission line and wider ROW of the upgraded transmission line would introduce high visual contrast. SGP components would result in a high level of change to the characteristic landscape during operations; permanent changes, although less than during operations, would result.	Similar to Alternative 1, except there would be slightly less visual contrast from the mine site due to absence of West End DRSF, and residents of the Thunder Mountain Estates development would experience fewer changes due to location of the transmission line away from the development.	Similar to Alternative 1 except visibility of changes from the mine site would differ as the Hangar Flats TSF would be located in the EFSFSR drainage and not visible from the Meadow Creek Lookout. There would be no public access through the mine site and, therefore, no new viewing platform providing foreground views of the mine site. The new transmission line would result in a lower level of visual change than Alternative 1 where it would follow an existing access road.	Changes associated with the mine site would be the same as Alternative 1. There would be no visual changes from Burntlog Route, because that would not be constructed. Landscape changes would result from the upgrades to Yellow Pine Route. Visual change from utilities would be the same except for additional periodic impacts from helicopters during construction and maintenance activity for communications sites.	The landscape character would not be changed by mine site activity or new or improved access roads, transmission lines, or offsite facilities associated with the mine.
	SGP component visibility.	Nighttime lighting in the analysis area is minimal and generally limited to residential areas in the western portion of the analysis area.	Nighttime lighting would increase substantially in the mine site. Additional nighttime light sources would include the maintenance facilities and vehicle headlights as they travel on mine access roads.	Similar to Alternative 1, except lighting from vehicles would occur to a slightly different area as a result of the 5.3-mile re-route of Burntlog Route. Lighting from the maintenance facility would be further east due to the different location of the maintenance facility.	Similar to Alternative 1, except lighting from worker housing would be located further west in the East Fork Meadow Creek drainage. Effects to skyglow would be the same.	Similar to Alternative 1, except SGP vehicle lights from vehicles traveling to and from the mine site would occur along the Yellow Pine Route, north and west of the Burntlog Route.	Nighttime lighting in the analysis area would not change as a result of the mine site or associated traffic or maintenance buildings.

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