

Chapter 2 The Alternatives

2.1 Introduction

This chapter describes the formulation of the proposed action and alternatives and discusses alternatives considered but not analyzed in detail. It also summarizes the environmental impacts of the alternatives and associated mitigation measures.

2.2 Formulation of Alternatives

Subsection 1502.14 of the NEPA regulations require that agencies should “vigorously explore and objectively evaluate all reasonable alternatives” to the proposed action. The alternatives should achieve the same or similar purpose as the proposed action and should address issues raised and include appropriate mitigation measures not already included in the proposed action. Alternatives that would not be reasonable, either because they do not meet the purpose and need or because of other considerations, may be eliminated from detailed study. A brief discussion of the reasons for their having been eliminated is given. An EIS must also “address the alternative of no action”, disclosing the effects of not undertaking the actions comprising the proposed action or any of the action alternatives.

The Forest Service ID team evaluated the proposed action in consideration of the relevant issues. Alternatives to the proposed action addressing the relevant issues were developed. If alternatives were identified which were not reasonable, they were recorded but not analyzed in detail (see Section 2.3 below).

The resulting range of alternatives is consistent with the purpose and need for action and with the issues raised. Any of the elements included in the proposed action or any of the action alternatives could be implemented independently of each other, and therefore the Forest Service decision maker may ultimately choose and combine elements from any of the alternatives. This analysis fully discloses the effects of all activities considered, regardless of the alternative in which they are included.

2.3 Alternatives Considered and Eliminated from Detailed Analysis

- Original Proposed Action (as described in the April 7, 2006 Scoping Letter)

The original proposed action as described in the April 7, 2006 scoping letter would have relocated portions of the Millville Peak and Logan Peak Roads (Forest Road 20168 and 20042, respectively) along the alignment shown in the Scoping Letter (Appendix D). A portion of the Logan Peak road would have been relocated across the mid-section of the steep slope to the east of Logan Peak. Upon further field reconnaissance in the summer of 2006, it was determined the road could not be located here, due to excessively steep, rocky, and undulating terrain. The Forest Service engineering crew found a more

plausible location for the road and that is now described as the proposed action in Section 2.4 below.

- Repair and maintain the current Millville Peak and Logan Peak roads

This alternative was considered but dismissed because it is not fully possible and it does not meet the purpose and need. Portions of the road have been maintained and repaired where it was physically possible and safe. Regularly scheduled road maintenance protected the integrity of the power cable on the portion of the road between Cowley Canyon and White Bedground for 10 years following the installation of the cable. However, Forest engineers have determined that portions of the road beyond this point are too steep (road grades in excess of 20%) to hold enough gravel to safely cover the power cable for any length of time. In some places, seasonal erosion and vehicular use has eroded the road surface to the point where the cable has become exposed or is buried barely beneath the surface. Other portions of the roadway are too rocky and near bedrock so that the cable can not be buried any deeper. The deteriorating condition of the roadway and the increasing exposure of the high voltage cable necessitate relocation of the existing road.

- Consider an alternative source of power

This alternative was considered but dismissed because it is outside the scope of this decision. The communications facility is owned by the State of Utah and its administration is under their jurisdiction. However, the State of Utah has given consideration to other forms of power such as solar, wind, diesel, and propane. These forms of power were considered unreliable and presented safety and visual concerns and were dropped from further consideration (see project file for more information).

- Consider an alternate location for the cable; consider other access routes

These alternatives were considered but dismissed from further study. Other access routes such as Providence Canyon, Dry Canyon, and Mill Hollow were considered in the early 1980's during the initial environmental review and again given preliminary review in this analysis. Due to the steep, rocky terrain, greater distance, higher costs, and visual impacts, these routes were eliminated from further study (see Environmental Analysis Amendment, June 1986, available in the project record, for more information).

- Relocate the road to the SSE of Logan Peak

The area to the south-southeast of Logan Peak was thoroughly examined in the field for all possible new road locations; it was determined to be too steep and rocky, with too many cliff areas to construct a new road for access to Logan Peak.

2.4 Alternatives Considered in Detail

The interdisciplinary team recommended and the Forest Supervisor approved the following alternatives in addition to the required no action alternative. The action alternatives respond to public input and the issues while addressing the purpose and need.

Each alternative has specific impacts associated with how it achieves the purpose and need for the project. The impacts are discussed in Chapter 3. Management requirements and mitigation included in all of the alternatives are shown in Section 2.5.

2.4.1 Alternative A – Proposed Action

The proposed action (new) was developed by the interdisciplinary team (ID Team) in response to comments received from the scoping letter about road construction on steep, erosive slopes and in areas where snow stays on the road late into the summer. The proposed action also addresses concerns about access to existing motorized roads, trails, and points of interest such as “Inspiration Point”.

The new proposed action is similar to the original proposed action (dismissed above in Section 2.3) except that it would relocate the Logan Peak Road as shown on the Alternative A Map in Appendix E. The following actions are included in the proposed action:

- Millville Peak Road (20168) – Relocation of 2.7 miles and decommission of 2.7 miles of existing system road.
- Logan Peak Road (20042) - Relocation of 2.5 miles and decommission of 3.1 miles of existing system road.
- Logan Peak-A Road (20042A) - Decommission of .3 miles of existing system road.
- Upper Providence Canyon 4x4 Road (20022) - Relocation of .2 miles and decommission of .2 miles of existing 4x4 system road.
- Top Spring Hollow (20126) - Construction of about .25 miles of new system ATV trail to connect to the existing route (20126). This would change 20126 to an ATV trail. This new section is too steep for a system road; it is more conducive to an ATV trail.

The proposed action would reconstruct sections of the Millville Peak and Upper Providence Canyon 4x4 roads and the entire Logan Peak road within roadless areas.

Guidance for what actions are allowed or prohibited in roadless areas is provided in the recently reinstated 2001 Roadless Area Conservation Rule (2001 Roadless Rule). The 2001 Rule established prohibitions to road construction/reconstruction and timber harvest in areas identified in the 2000 Roadless Area Conservation Final Environmental Impact Statement. However, exceptions to these prohibitions (such as road construction/reconstruction) are allowed in certain situations, including “where needed to prevent irreparable resource damage that arises from the design, location, use, or deterioration of a classified road that cannot be mitigated by road maintenance...only if the road is deemed essential for public or private access, natural resource management, or public health and safety” (see Appendix B for more information on roadless areas).

As shown above, a total of about 5.6 miles of road would be constructed and about 6.3 miles of the existing roads would be decommissioned under the proposed action. Relocation of degraded portions of the Upper Providence Canyon 4x4 and Millville Peak roads, and decommissioning of the Logan Peak-A road, located south of where the cable lies beneath the road, is also included in the Proposed Action. These sections are being decommissioned and relocated upslope and out of the stream channel to the west of the current location, to improve degraded resource conditions resulting from existing, poor road locations and to facilitate connecting to relocated sections to the north.

Under this alternative, access to the existing motorized (motorcycle) Trail #017 would be maintained. A short ATV trail connecting to Top of Spring Hollow road (20126) would be constructed which would maintain motorized access to "Inspiration Point". However, access would change from "high clearance vehicle" to "ATV". The terrain between the new road and Road 20126 is steep and the distance short to provide a connecting road for high clearance vehicles. This short, steep pitch is better suited for an ATV trail.

The Travel Management Rule (November 2005), characterizes roads by their "managed use". Under the proposed action, Top of Spring Hollow road (20126) would change from a 4x4 vehicle road to an ATV trail, and would be displayed as such on the Motorized Vehicle Use Map at the time it is prepared.

Non-motorized access between the Dry Canyon Trail (#7017) and the Spring Hollow Trail (#7124) would be maintained on a trail along the old road (which would be closed to motorized traffic and revegetated).

A portion of the Millville Peak Road (20168) relocation is in timbered stands and would require the cutting and clearing of about 600 to 800 Douglas fir, sub-alpine fir, and Engelmann spruce trees. The average diameter of the trees to be cut is 19 inches, 13 inches, and 16 inches, respectively. It would be very difficult to remove (haul) the logs due to the curved nature of the access road. The portion of the road near White Bedground that was realigned in 2004 has some tight switchbacks that would be difficult to maneuver with a log truck or trailer. Therefore, the majority of the logs would be retained on site and would be used to help close the old road (providing barriers to travel) and to stabilize the cut and fill slopes. Some of the wood may be made available for firewood if the demand exists.

There are approximately 8 locations where the newly constructed Forest Roads 20042 and 20168 will intersect portions of existing system roads that are to be abandoned. The decommissioning work to be done at these locations would include effective barrier placement to preclude future use of the abandoned road segments. The road decommissioning work would also include ripping the road surface, seeding (with native seed), and scattering of large woody debris on the visible portions of the abandoned segments to facilitate more rapid restoration. Large amounts of woody debris, stumps, and rock would be placed over the segments where the new road and old roads intersect to make certain there is no future travel over the power cable.

This alternative would authorize the State to build a fence around the communications site if they deemed it necessary for security purposes

Management Requirements. Management requirements common to all of the alternatives are listed in Section 2.5. In addition, the following requirements are included under Alternative A:

- The Forest plan would be amended to approve a one-time waiver to the management prescription standard S2.7 and standard S3.1W to allow road construction associated with this project.

2.4.1.1 Alternative A.1 – Proposed Action with Top of Spring Hollow Road

Under this sub-alternative to the proposed action, all actions would be the same as listed above (in the proposed action), except the connecting route from the newly relocated road (20168) to the Top of Spring Hollow road (20126) would be constructed as a high clearance vehicle road (instead of an ATV trail). This alternative would maintain motorized access for high clearance vehicles to “Inspiration Point”. Several respondents to the DEIS voiced concern that this is a popular 4x4 high clearance vehicle route and that restricting it to ATV use would affect a substantial number of recreational visitors. Field visits during the summer and fall of 2007 confirmed that this route is used by both ATVs and high clearance vehicles.

The proposed action, above, described the terrain between the relocated road (20168) and Top of Spring Hollow road (20126) as very steep and the distance short, making it difficult to construct a road connecting to the Top of Spring Hollow Road. It was assumed the terrain was more appropriate for an ATV connector trail.

However, Forest engineers visited the site again in fall 2007 to ascertain if the terrain was indeed too steep for high clearance vehicle travel. The visit confirmed that the proposed connecting route has one relatively steep pitch; however, it is no steeper than the existing Top of Spring Hollow road, and therefore a route constructed along this alignment would be appropriate for high clearance vehicles.

The engineers determined a route suitable for high clearance vehicles could be constructed in approximately the same location as the proposed ATV trail. The steepest section of the roadway is no steeper than the Top of Spring Hollow road. The route connecting the old road and the Top of Spring Hollow road (approximately the same route as shown for the ATV trail on the Alternative A Map in Appendix E) would be about .25 miles in length.

The high clearance vehicle route would be 12 feet wide as compared to an ATV trail width of 50 inches (4.2 feet). For the purpose of the effects analysis, a clearing width of 10 feet is assumed for the 50-inch ATV trail and a 40-foot clearing width is assumed for the 12-foot high clearance vehicle road. The connecting route would be located in a sparsely vegetated area; approximately 1-2 trees would be cut to clear for either the 50-inch or 12-foot wide routes.

The Travel Management Rule (November 2005), characterizes roads by their “managed use”. Under this sub-alternative to the proposed action, Top of Spring Hollow road

(20126) would remain a high clearance vehicle road and would be displayed as such on the Motorized Vehicle Use Map at the time it is prepared.

2.4.2 Alternative B – Close Road (Administrative Use Only)

Under this alternative, the portion of the Millville Peak and Logan Peak roads under which the powerline lies would be closed to public traffic and open only for Administrative Use. The State of Utah would be allowed to travel the road for maintenance of the communication site on Logan Peak.

Under this alternative, it would be necessary to install three gates to close the administrative portion of the road. One gate would be located at the saddle about ¼ mile past White Bedground. A second gate would be installed just above the gravel pit in Providence Canyon. A third gate would be installed on the Millville Peak Road just where it enters the project area boundary. See Alternative B map in Appendix E for locations of the gates. These locations were selected because they would provide a narrow spot and dense vegetation necessary to effectively install a gate. These locations would also provide a place for vehicles to park or turn around.

Management Requirements. Management requirements common to all of the alternatives are listed in Section 2.5. In addition, the following requirements are included under Alternative B:

- The Forest Plan would not be amended.

2.4.3 Alternative C – No Action

The “no action” alternative is included to meet requirements of the National Environmental Policy Act [40 CFR 1502.14 (d)]. Under Alternative C, the no action alternative, there would be no change from current management. No road relocation would take place. The cable would remain in place under the existing road. This alternative serves as a baseline against which effects of other alternatives can be compared.

Management Requirements. Management requirements common to all of the alternatives are listed in Section 2.5. In addition, the following requirements are included under Alternative B:

- The Forest Plan would not be amended.

2.5 Mitigation, Monitoring, and Management Requirements

The following mitigation measures, Best Management Practices (BMPs), forest-wide standards and guidelines, and monitoring are included in all action alternatives. Research and information substantiating these requirements are found in the Revised Forest Plan and FEIS (USDA Forest Service 2003), and other resources as noted, available in the project file.

Aquatics

The following mitigation is recommended to reduce sedimentation, improve watershed conditions, and minimize impacts to aquatic resources.

- There should be no ground disturbance in wetlands or wet areas.
- Erosion control structures such as straw bails and sediment fence; or erosion control materials such as erosion matting or straw mulch should be installed to minimize erosion from areas of soil disturbance along water features.
- Equipment used in construction should be inspected for fluid leaks and fixed before being allowed to start construction. Fueling of equipment used in construction should occur outside of riparian habitat conservation areas (RHCAs).
- Include proper drainage into road design.
- Decommissioned roads and trails should be drained, scarified, and returned to contour. Where deemed necessary by the Forest Botanist, decommissioned roads will be seeded. If it is determined the decommissioned roads will seed in naturally, they will not need to be seeded. However, when seeding is done, it will be with native seed only.
- Designation of Riparian Habitat Conservation Areas (RHCAs) as described by the WCNF Revised Forest Plan (USDA Forest Service, 2003 p. GL-19) and by the Inland Native Fish Strategy (INFISH) is recommended for riparian areas within the analysis area. RCHAs include traditional riparian corridors, wetlands, intermittent streams, and other areas that help maintain the integrity of aquatic ecosystems by 1) influencing the delivery of coarse sediment, organic matter, and woody debris to streams, 2) providing root strength for channel stability, 3) shading the stream, and 4) protecting water quality. Definitions for RCHAs are provided in Section 3.2.3 of this document.

Rare Plants

The following mitigation is recommended to reduce the potential impacts to rare plants found within the project area.

- No ground disturbing activities should occur on or near the site of *Eriogonum brevicaulle* var. *loganum* located near the toe of the slope before the road climbs up the hill to Logan Peak (in the NE ¼, ¼ of the SW ¼ of Section 3, T11N, R2E).

Noxious Weeds

The following mitigation is recommended to reduce the potential introduction of noxious weeds associated with relocated and decommissioned roads in this project.

- Mud, vegetation, and debris should be thoroughly washed from all construction equipment prior to arrival on the worksite. If equipment leaves the Forest then it must be washed again prior to arrival back on the worksite.
- Inventory and treat any new weed infestations that may arise on the old road before it is closed out; treatment after the road is closed becomes more difficult because access must be on foot rather than by vehicle.

Recreation

The following mitigation is recommended to reduce the potential for unauthorized recreational use of decommissioned (closed) roads.

- Decommissioning work on the old roads would include effective barrier placement to preclude future use of the abandoned road segments. The road decommissioning work would also include ripping the road surface, seeding (with native seed), and scattering of large woody debris on the visible portions of the abandoned segments to facilitate more rapid restoration. Large amounts of woody debris, stumps, and rock would be placed over the segments where the new road and old roads intersect to make certain there is no future travel over the power cable.

Scenery

The following mitigation is recommended to minimize visual impacts and maintain the scenic integrity of the affected viewshed.

- In areas where slash is burned, construct a burn pit of sufficient size to hold slash. Remove the top 6 inches of soil and stock pile away from pit to protect it from heat sterilization during the burning operation. Once all slash has been burned, scarify pit bottom and mix in ash between 6 to 12 inches in depth and replace topsoil over the pit area and seed with native plants.
- Within fill slopes between the toe of a 1 ½:1 slope and a 1:1 projected slope toe flush cut tree stems and large woody plants and do not remove the root balls.
- Use root balls for tree well construction, landscape rehabilitation, road reclamation, closing unauthorized trails and roads, and creating a natural appearing landscape. Place root balls with tree stems in the landscape to mimic blow down or other similar events as directed by the Forest Landscape Architect.
- Conifer stems will be decked, used in construction for cribbing, tree wells, landscape rehabilitation, road reclamation, closing unauthorized trails and roads and creating a natural appearing landscape. Place the stems as directed by the Forest Landscape Architect.

Soil and Water

During construction of the new road and decommissioning of old roads, several mitigation measures will be practiced to improve watershed conditions by decreasing the effects of sedimentation from the road construction areas and road surfaces on water resources in the project area. The basic objective for mitigating sedimentation is to eliminate or minimize the direct connection between storm flow from the road and nearby streams, lakes, and springs.

- Avoid wet areas by moving segment of Forest Service Road 20168 from the saddle between Mill Hollow and Providence Canyon to the intersection of Forest Service Road 20042 out of the bottom of the drainage.
- Realigning Forest Service Road 20042 will remove the road sections and inherent road impacts of sedimentation in adjacent lakes.
- Put proper drainage into new road design, because existing road problems are mainly those of drainage and seasonal concentration of water in low areas.
- Provide for strips of vegetation (200') along the road to trap, filter, and infiltrate sediment laden runoff before it reaches the water feature. Apply BMPs 86, 87, 88 as presented in the General Technical Report INT-GTR-339, "Idaho forestry best management practices: compilation of research on their effectiveness" (Seyedbagheri, K. A. 1996).
- Forest Service Roads 20126, 20168, and 20042 should be properly drained and stabilized to prevent further erosion and sedimentation from closed roads by implementing road decommissioning work.
- There are approximately 8 specific locations where the newly constructed Forest Roads 20042 and 20168 will intersect portions of existing system roads that are to be abandoned. The decommissioning work to be done at these locations should include effective barrier placement to preclude future use of the abandoned road segments, and ripping/seeding/scattering of woody debris on the visible portions of the abandoned segments to facilitate more rapid restoration.

Vegetation

The following mitigation measures are designed to minimize the risk of a bark beetle infestation resulting from felling trees for road relocation.

- If trees are felled after the main flight period (July) for the beetles they will have time to dry out in the fall and winter and will be less attractive the following year. In this case the boles should be spread out in more sun exposed locations to promote drying of the bark. Removal of limbs will also promote drying of the boles. Use of the boles for closure of the existing road will help with this spreading. Close monitoring should occur for two years and if any indications of beetle activity are observed, then suppressive action should be taken.

- If trees are felled early in the spring, before the flight (or just before snowfall) then application of MCH to the boles can be effective at deterring attack. MCH is an anti aggregating pheromone which signals the beetles that the trees are fully occupied and they should move on. Capsules of MCH should be stapled at about 10 foot intervals on the shady sides of the downed trees. One application the first year should be adequate to prevent attack on these stems. Trees should be monitored for two years.

Wildlife

The following mitigation measures are designed to minimize the effects on wildlife habitat or populations.

- Where possible, minor adjustments to road location should be made to avoid snags with existing cavities, to provide protection for cavity-nesting birds.
- To minimize effects to neotropical birds, road construction activities should be planned, where possible, to occur in the late summer or fall, after the active nesting season. Since the potential season of operation is so short at this high elevation, this may not be entirely possible to achieve.

2.5.1 Monitoring Activities Common to all Action Alternatives

The following monitoring activities would be conducted by the Forest Service under each alternative to evaluate effectiveness of mitigation measures and to ensure compliance with management requirements listed in Sections 2.5.

1. Forest patrols

What: Patrol forest roads for compliance with the Travel Plan.

Why: To protect areas from unauthorized use to help achieve desired conditions.

How often: Generally occurs weekly, throughout the summer/fall use season

How the results will be used: Information is documented in District files; reports are generated as needed; violations notices are written.

2. Noxious weed monitoring

What: Inventory and treat weed infestations that may arise on the old road before it is closed out.

Why: Treatment after the road is closed becomes more difficult because access must be on foot rather than by vehicle.

How often: Soon after the new road is constructed and before old road is closed out; then periodically, as part of the District noxious weed program.

How the results will be used: The information will be used to determine what treatments are needed and for what length of time; District weed program will implement the Wasatch Cache Integrated Weed Management Strategy. .

2. Monitoring for scenic integrity

What: Review and monitor all stages of the project from the construction documents to 3 to 5 years after it is complete.

Why: To see that we are compliant with a High scenic integrity objective for a natural appearing landscape.

How often: During the new road construction and while the old road is being closed out; then periodically, following construction and decommissioning.

How the results will be used: The information will be used to determine if mitigation measures were effective and to make adjustments as needed.

3. Water quality monitoring

What: Monitor post project sediment delivery to Providence Lake, the unnamed lake east of Logan Peak, and Providence Road pond.

Why: To assess the effectiveness of mitigation efforts and to assure that surface waters within the project area are meeting their designated beneficial use. All surface waters located within the outer boundaries of National Forest system lands are designated as waters of high quality. These waters have been determined by the State of Utah to be of exceptional recreational or ecological significance or have been determined to be a State and National resource requiring protection. These waters shall be maintained at existing high quality through designation, by the Board after public hearing, as High Quality Waters - Category 1.

The State of Utah has established standards for the designated beneficial uses of water. Water quality is required by state regulation to be maintained at this level. The beneficial uses of streams within the project area, as designated by the Utah Department of Environmental Quality, Division of Water Quality, are:

- Class 2B – protected for recreation
- Class 3A – protected for cold water species of game fish and other cold water aquatic species
- Class 3D – protected for waterfowl, shore birds and other water-related wildlife, and the necessary aquatic organisms in their food chain
- Class 4 – protected for agricultural uses

How often: During construction to ensure proper implementation of mitigation measures, and again, following project completion. All lakes to be monitored are

ephemeral and have seasonal water in them only during spring snow melt. Monitoring of sediment delivery should be done annually, immediately following spring snowmelt, beginning the summer following completion of road relocation/closures. Monitoring should continue until revegetation has established effective ground cover upon the closed sections of road in the vicinity of the lakes being monitored. At this time, this is anticipated to take about 3 growing seasons to occur.

How the results will be used: The results of monitoring will be used to establish the effectiveness of road closure and restoration work associated with this project. Additional watershed improvement work may be needed if beneficial uses in the target lakes are still found to be impaired at the end of the monitoring period.

4. Wildlife Monitoring

Forest Plan monitoring for Management Indicator Species (MIS) will be conducted according to Forest protocols.

2.6 Forest Plan Consistency

All uses of the National Forest must be consistent with the Forest Plan. Alternatives in this analysis have been evaluated for forest plan consistency. The proposed forest plan amendment and evaluation of its significance is shown below.

The management prescriptions within which a portion of the roads would be relocated, Management Prescription Categories 3.1w (Watershed Emphasis) and 2.7 (Special Interest Areas), allow no road construction. Re-alignment of the road within the 3.1w or 2.7 management prescriptions would necessitate an amendment of the Forest Plan.

Alternatives A and A.1 are not consistent with the 2003 Revised Forest Plan. If either of these alternatives were selected as the decision, the Revised Forest Plan would need to be amended, allowing road construction within management prescriptions 3.1w and 2.7, for this project area only.

2.6.1 Forest Plan Amendment Significance Evaluation

Significance of Forest Plan Amendment

The “significance” of the amendment must be determined. It is important to note that there is a difference between “significance” of the change to a forest plan and “significance” of the environmental impacts of the Proposed Action as defined by the Council on Environmental Quality (CEQ). Determination of “significance” for a forest plan amendment is based on the following criteria defined in the Forest Service Manual 1926.5 (Regional Forester letter dated August 9, 2007).

Changes to the land management plan that are not significant can result from:

1. Actions that do not significantly alter the multiple-use goals and objectives for long-term land and resource management.
2. Adjustments of management area boundaries or management prescriptions resulting from further on-site analysis when the adjustments do not cause significant changes in the multiple-use goals and objectives for long-term land and resource management.
3. Minor changes in standards and guidelines.
4. Opportunities for additional projects or activities that will contribute to achievement of the management prescription.

Goals and Objectives

This amendment will not alter the multiple-use goals and objectives for long-term land and resource management established during the planning process (See the Final Environmental Impact Statement accompanying the Revised Forest Plan, 2003).

Management Prescription

Allowing this one-time waiver for road construction in this specific location within management prescriptions 3.1w and 2.7 (for the purpose of public safety) does not change or affect the management prescription for the rest of the Forest or for future projects in this same area. It does not alter management area boundaries.

Minor changes in Standards and Guidelines

This change is limited to only this project and is a waiver of standards S2.7 (Revised Forest Plan page 4-67) and S3.1W (Revised Forest Plan page 4-69). Because the waiver is limited in this way it is considered a minor change.

Opportunities for additional projects or activities that contribute to the achievement of the management prescription

This change will neither preclude nor necessitate additional projects. This change does not alter the ability to achieve the management prescriptions 2.7 or 3.1W. The area mapped as 2.7 will continue to be managed with a focus on its unique botanical qualities. The area mapped as 3.1W will continue to be managed with a watershed health emphasis

After reviewing the Forest Service manual direction the proposed amendment for Alternative A.1 was found to be not significant in accordance with the requirements of sections 1926.51 and 1926.52.

2.7 Comparison of Alternatives

Table 2.1 Comparison of differences among Alternatives A and A.1 (Proposed Action), B (Close Road), and C (No Action).

Indicators	Alternative A and A.1 (Proposed Action)	Alternative B (Close Road-Admin Use Only)	Alternative C (No Action)
<p>Aquatics</p> <p>Miles of road within RHCA's</p>	0.96 miles of open road within 50' of an ephemeral stream; .05 miles open road within 150' of a pond	1.61 miles of road within 50' of an ephemeral stream; .14 miles of road within 150' of a pond	Same as Alt B
<p>Recreation</p> <p>Changes in recreation and access opportunities</p>	Alt A would change Road 20126 from "high clearance vehicle" to ATV trail; some loss of "challenging terrain" for 4x4s with realignment of the steep, rocky pitches of roads 20168 and 20042. Alt A.1 would maintain road 20126 as a "high clearance vehicle" road.	Portions of 20168 and 20042 would be gated closed to the public motorized use; public motorized access to Logan Peak would be eliminated	Public access along roads 20168 and 20042 would continue; cable beneath the road would become increasingly exposed
<p>Roadless Areas</p> <p>Miles of road constructed or decommissioned in each roadless area</p>	Miles of road constructed: 5.2 miles in Mount Logan North and .2 miles in Mount Logan South; Miles of road decommissioned: 3.6 miles in Mount Logan North, 2.6 miles in Mount Logan South, and .2 miles in Mount Logan West. Alt A.1 would add .25 miles of high clearance road.	No roads constructed or decommissioned; roads gated closed to public motorized use	No roads constructed or decommissioned
<p>Scenery</p> <p>Miles of road constructed within the viewsheds</p>	Alt A would construct 5.4 miles and decommission 6.3 miles of road; Alt A.1 would add .25 miles of high clearance road.	No roads constructed or decommissioned	Same as Alt B

Indicators	Alternative A and A.1 (Proposed Action)	Alternative B (Close Road-Admin Use Only)	Alternative C (No Action)
<p align="center">Soils</p> <p>Miles of road constructed and decommissioned and affected acres</p>	<p>5.4 miles of road construction (12-foot width); 6.3 miles of road decommissioned (12-foot width); and, .25 miles 50-inch motorized trail. Alt A.1 would add .25 miles of high clearance road (12-foot width).</p>	<p>No roads constructed or decommissioned; gates installed for road closure</p>	<p>No roads constructed or decommissioned</p>
<p align="center">Water</p> <p>Proximity of roads to water resources (related to potential sediment delivery)</p>	<p>Relocated roads would range from 270 feet to 4300 feet from water resources</p>	<p>Existing roads range from 30 feet to 535 feet from water resources</p>	<p>Same as Alt B</p>
<p align="center">Vegetation</p> <p>Conifer acres cleared for road construction</p>	<p>Cutting/removal of 7 acres of conifer trees for road construction (2% of 374-acre stand); Alt A.1 would not cut any conifer acres (just 1-2 trees).</p>	<p>No cutting or removal of trees</p>	<p>Same as Alt B</p>
<p align="center">Wildlife</p> <p>Miles of road construction within habitat types and changes in road density</p>	<p>4.5 miles (21 acres) within shrub/grass type; 1.48 miles (7.15 acres) within conifer type; road density of 1.86 miles per square mile and 1.01 for Little Logan River and Card Canyon watersheds, respectively</p>	<p>4.6 miles (22 acres) within shrub/grass type; 1.5 miles (8 acres) within conifer type; road density of 1.15 miles per square mile and 0.80 for Little Logan River and Card Canyon watersheds, respectively (because roads would be gated closed)</p>	<p>Vegetation changes same as Alt B; road density is 1.90 miles per square mile and 1.02 for Little Logan River and Card Canyon watersheds, respectively</p>

2.8 Comparison of Effects

Table 2.2 Comparison of the effects of Alternatives A and A.1 (Proposed Action), B (Close Road), and C (No Action).

Issue	Alternative A and A.1 (Proposed Action)	Alternative B (Close Road- Admin Use Only)	Alternative C (No Action)
Issue #1 – Aquatic Resources a. Effect on aquatic resources	Least amount of roads open within RHCAs; old roads would continue to contribute some sediment in the short-term until they are revegetated; relocating roads away from ponds would reduce sediment and reduce existing impact to amphibians at these sites	Same amount and location of roads open within RHCAs as Alt C (although less traffic); roads would continue to contribute sediment; in the long-term, Providence Lake would no longer be able to support amphibians	Same as Alt B
Issue #2 – Recreation a. Effect on recreation experience and access	Short-term loss of recreation opportunities during road construction; no loss of 4x4 high clearance vehicle experience in Alt A.1	Greatest short-term and long-term loss of recreation opportunities	Safety concerns would be greatest and road would eventually become impassible; eventual loss of recreation opportunities
Issue #3 – Roadless areas a. Effect on roadless area values	Road relocation would result in a net loss of 12 acres within the 19,200-acre Mount Logan North roadless area (less than 1 percent); a net gain of 17 acres within the 17,000-acre Mount Logan South roadless area; and a net gain of 2 acres in the 5,300-acre Mount Logan West roadless area. These negligible changes would have “no effect” on roadless area values	There would be no change to acres in any of the roadless areas; recreation opportunity (one of the roadless values) would be impacted by closure of the roads to motorized public use	There would be no change to roadless areas or roadless values from current

Issue	Alternative A and A.1 (Proposed Action)	Alternative B (Close Road- Admin Use Only)	Alternative C (No Action)
Issue #4 – Scenery a. Effect on the scenery of the area	Would maintain a “natural appearing landscape”; scenic integrity of “high” maintained on 1/3 of the proposed realignment; scenic integrity of “moderate” would result from construction on steeper slopes with sparse vegetation	Would maintain a “natural-appearing landscape” and a “high” scenic integrity	Same as Alt B
Issue #5 – Soil and Water a. Effect on soil productivity	Long-term loss in soil productivity on 8 acres due to road construction; long-term restoration of soil productivity on 9 acres due to road decommissioning; Alt A.1 would add .94 acres to area disturbed.	No improvement of any existing soil erosion and sediment delivery conditions; potential of people trying to drive around gates, causing isolated vegetation and soil damage	No loss of soil productivity; no improvement of any existing soil erosion and sediment delivery conditions;
b. Effect on water resources	Negligible erosion and sedimentation of water sources due vegetation buffers (greater than 200 feet) and mitigation measures; large improvement to water quality in Providence Lake and Providence Creek due to decommission of degraded roads; Alt A.1 same as Alt A.	No improvement of any existing erosion or sediment delivery conditions	No improvement of any existing erosion or sediment delivery conditions
Issue #6 - Vegetation a. Effect on relative mix of age classes across the ecological section	Negligible effect (1/100 th of 1 percent) on the mix of age classes within the Overthrust Mountains Ecological Section; Alt A.1 same as Alt A.	No effect	No effect

Issue	Alternative A and A.1 (Proposed Action)	Alternative B (Close Road- Admin Use Only)	Alternative C (No Action)
Issue #7 – Wildlife a. Effect on threatened and endangered wildlife species and their habitat	No T,E wildlife habitat except lynx, as follows: project located within linkage habitat (not LAU); insignificant amount of habitat affected; lynx have successfully moved through District; road density would not increase; therefore, no effect on Canada lynx or any T,E wildlife species. Alt A.1 same as Alt A.	Would reduce road density slightly; no effect on Canada lynx or any other T,E wildlife species	No changes in location or miles or roads and trails from current; no effect on Canada lynx or any other T,E wildlife species
b. Effect on sensitive wildlife species and their habitat	Because the amount of conifer habitat is insignificant (7.15 acres) and road density would slightly reduce, there would be no effect on any sensitive species habitat or populations. Alt A.1 same as Alt A.	No conifer habitat affected and roads would be gated closed; there would be no effect on any sensitive species habitat or populations	No conifer habitat affected; roads would remain open; there would be no effect on any sensitive species habitat or populations
c. Effect on Management Indicator Species (MIS)	Because the amount of conifer habitat is insignificant (7.15 acres) there would be no effect on the northern goshawk, beaver, or snowshoe hare, and thus no effect on population trends. Alt A.1 same as Alt A.	There would be no effect on the northern goshawk, beaver, or snowshoe hare, and consequently no effect on population trends	There would be no effect on the northern goshawk, beaver, or snowshoe hare, and consequently no effect on population trends
d. Effect on migratory birds	Total acres of habitat affected insignificant (30 acres) relative to total habitat and construction activities mitigated; therefore negligible effect on migratory birds. Alt A.1 same as Alt A.	No effect on migratory birds	No effect on migratory birds

2.9 Identification of the Preferred Alternative

The Forest Service identifies Alternative A.1, (the proposed action sub-alternative with Top of Spring Hollow road (20126) to remain as a high clearance vehicle road), as the preferred alternative because it best meets the purpose and need for the project. The proposed action will provide for public safety while maintaining ground based access to the vital, State-owned communications site on Logan Peak. It will improve degraded road conditions that are causing impacts to watershed health, and still provide access to traditional public access points of interest (without causing resource degradation).