

Appendix B

Roadless Areas

Roadless Areas

Roadless Rule Explanation

The Millville Peak road forms part of the boundary between the Mount Logan North Roadless Area (19, 197 acres) and the Mount Logan South Roadless Area (17,001 acres). The section of road to be relocated would be constructed within and near the edges of these two 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 State Petitions for Inventoried Roadless Area Management Rule (2005 Rule) was set aside on September 20, 2006 when the United States District Court for the Northern District of California issued an order in the consolidated cases California v. USDA and Wilderness Society v. USFS. Plaintiffs in these cases alleged the Forest Service's adoption of the 2005 Rule violated the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA). The Court set aside the 2005 Rule and reinstated the 2001 Roadless Rule.

On September 22, 2006, a letter was issued by the Forest Service Chief, informing that all projects in inventoried roadless areas referred to by the 2001 Roadless Rule must immediately comply with the court's order. No approval of any further management activities in inventoried roadless areas prohibited in the 2001 Roadless Rule would be allowed.

On November 29, 2006, the United States District Court for the Northern District of California issued a clarifying order to its September 20, 2006 decision, defining the scope of the injunction. The Forest Service Chief directed the agency to comply with the Court's November 29, 2006 order, stating, "[The Forest Service] is enjoined from taking any further action contrary to the Roadless Rule without first remedying the legal violations identified in the Court's opinion of September 20, 2006. Such further actions by the Forest Service include, but are not limited to, approving or authorizing any management activities in inventoried roadless areas that would be prohibited by the 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" (§ 294.12(4) Prohibition on road construction and road reconstruction in inventoried roadless areas). Relocation of portions of the Millville Peak

and Logan Peak roads where needed to prevent irreparable resource damage is essential for public health and safety.

WCNF Revised Forest Plan, FEIS, and Appendices

A review was conducted of the revised WCNF Forest Plan and FEIS for direction that applies to this project. The results are presented below.

Revision Topic 6 – Roadless Areas/Wilderness Recommendations

“Roadless Areas” refer to areas that are without constructed and maintained roads, and that are substantially natural. Some types of improvements and past activities are acceptable to be included in roadless areas.

NFMA regulations direct that, “Unless otherwise provided by law, roadless areas within the National Forest System shall be evaluated and considered for recommendation as potential wilderness areas during the forest planning process.” The 1984 Utah Wilderness Act also requires that a roadless evaluation be completed during Forest Plan Revision.

In the past, roadless areas were only looked at for their potential for wilderness recommendation. It is now recognized that roadless areas have significant ecological, as well as social values. The values of roadless are of both local and national significance. Roadless areas are often aquatic strongholds for fish; provide critical habitat and migration routes for many wildlife species especially those requiring large home ranges and key watershed areas for communities and wildlife. The recognition of the values of roadless areas is increasing, as the population continues to grow and as the demand for outdoor recreation and other uses of the forests increases. These unroaded and undeveloped areas provide the Forest with opportunities for potential wilderness areas, non-motorized and limited motorized recreation, and other commodity and amenity uses. The 1985 Plan does not include any specific recognition of the values of roadless nor does it provide any management direction for roadless areas.

The Roadless Area Conservation Final Rule (RACR, January 12, 2001) established prohibitions on road construction, road reconstruction, and timber harvesting in inventoried roadless areas on National Forest System lands. Its intent is to provide lasting protection for inventoried roadless areas within the National Forest System in the context of multiple-use management. Long-term management and protection of roadless areas as directed by Forest Service Manual Interim Directives 1920-2001-1, 2400-2001-3, and 7710-2001-2,3 needs to be addressed in the Forest Plan revision while court and administrative proceedings regarding the RACR are completed.

Current Condition

The previous roadless inventory was completed in 1983 and identified 22 roadless areas totaling 746,431 acres. A portion of six of these areas (High Uintas, Mount Naomi,

Wellsville Mountains, Mount Olympus, Twin Peaks and Deseret Peak) became wilderness when in 1984 the Utah Wilderness Act was enacted. When this forest plan revision effort was begun a new and updated inventory was needed to address ongoing roadless area management issues and to meet the requirements of the NFMA regulations and the Utah Wilderness Act of 1984. Each undeveloped area on the Forest identified during the inventory contains 5,000 acres or more or was adjacent to an existing wilderness area.

Because different criteria were used for the 1999 inventory than those used in 1983, ten additional areas were identified as roadless, and other areas were combined or split apart.

Based on the 1999 inventory there are 34 roadless areas on the Wasatch-Cache National Forest, totaling approximately 606,400 acres. This represents almost half of Wasatch-Cache National Forest.

Issue 2 – Roadless Areas Management

How much and where should additional acreage be recommended for wilderness designation? How much, where, and how should inventoried roadless areas be protected from development? How much and where should inventoried roadless areas be available for which types of development and uses?

Response to Issue 2

Alternative 7 addresses the issue of roadless area management by applying evaluation of individual roadless area values (FEIS Appendix C2) and resource capabilities/conditions to mapping of management prescriptions that either maintain or mostly maintain undeveloped character (75% of roadless acres) or allow varying types and degrees of development for specific purposes consistent with the prescription emphasis (25% of roadless acres). Road construction and reconstruction are not allowed in most roadless areas, nor is cutting, sale, and removal of timber. In most of these areas, prescribed and wildland fire use will be the primary approach to returning vegetation to properly functioning conditions. Timber harvest and road construction are allowed in portions of some roadless areas for purposes of improving habitat for terrestrial wildlife (prescription 3.2D) and to maintain or restore ecosystem composition and structure and/or reduce the risk of uncharacteristic wildfire effects (prescription 5.1), and for purposes of timber production (prescription 5.2). About 73,300 acres or 12% of inventoried roadless areas are recommended for Wilderness designation because of their high quality wilderness characteristics and minimal conflicts with other uses. In this Alternative, unlike the others, the recommended wilderness prescription (1.5) allows prescribed fire and continuation of existing snowmobiling.

Roadless Area Values

Desired Condition

Roadless areas are managed according to the management prescriptions applied. Most are protected and maintained to conserve and preserve important values and benefits of

them by prohibiting activities that have a likelihood of degrading desirable characteristics of inventoried roadless areas.

Roadless areas mapped with prescriptions 1.5, 2.4, 2.6, 2.7, 3.1A, 3.1W, 3.2U, 4.1 and 4.2 are maintained for values including soil, water, diversity of plant and animal communities, habitat for TES and species dependant on large undisturbed land, primitive and semi-primitive non-motorized and motorized (open in current travel plan) recreation, reference landscapes for research, study and interpretation, landscape character and scenic integrity, traditional cultural properties and sacred sites and other identified unique conditions.

With no or limited additional road construction and timber sales in these areas, the altering of natural landscapes, habitat fragmentation and changes in native plant and animal communities is minimized. Roadless areas function as biological strongholds and refuges for many species. Sedimentation and disruption of water flows is minimized and the roadless areas provide sources of clean public drinking water. Competition by nonnative invasive species is minimized in roadless areas. Roadless areas support healthy and diverse ecosystems. There is no long-term loss of roadless characteristics and values.

Roadless areas not mapped with prescription 1.5 provide for outstanding recreation opportunities both motorized and non-motorized, such as hiking, horseback riding, ATV riding, mountain biking, snowmobiling, camping, picnicking, wildlife viewing, hunting, fishing, snowshoeing, and cross-country skiing. In some areas, roadless backcountry will be managed for semi-primitive recreation opportunities, as an alternative to high use wilderness areas and to reduce the impacts on wilderness values and pristine areas. While the areas have many wilderness-like attributes, unlike wilderness, the use of mountain bikes and other mechanized travel is often allowed.

Where possible, roadless areas will be managed to minimize conflicts between motorized and non-motorized users through management prescription categories, recreation opportunity classes and travel management plans.

Excerpts from APPENDIX C – 1 WCNF Revised Forest Plan FEIS

Roadless Area Planning Processes and Evaluation of Roadless Areas for Wilderness

Roadless Area Planning Processes

Introduction

This appendix describes the some of the history and the process used to inventory and evaluate areas on the Wasatch–Cache National Forest for their potential as designated wilderness. Each of the roadless areas is summarized individually describing an area’s wilderness characteristics, current resource uses, and the need for the area to be included in the wilderness preservation system.

This appendix is followed by an evaluation of roadless areas based on values identified in the Final Roadless Area Conservation Rule and by the Wasatch-Cache forest plan interdisciplinary team (Appendix C-2). In the Forest Plan DEIS of May 2001 evaluation of roadless areas for Wilderness was combined with their consideration as roadless (undeveloped) areas. In this FEIS the analysis of Wilderness characteristics for roadless areas (Appendix C-1) and the analysis of roadless area values (Appendix C-2) have been separated.

In this analysis roadless areas are grouped within their management areas, and then in sequence generally from north to south starting at the Idaho state line and moving to the southern boundary of the Wasatch-Cache along the Wasatch Front, and then moving from west to east across the Uintas Mountains.

Inventory of Potential Wilderness

Table C1-1. Wasatch-Cache Roadless Areas: Changes in Numbers and Acreages since 1983

Name	Inventory # in 1983	Inventory # in 1999	1983 Inventory Acres	1983 Inventory GIS Acres	1984 Utah Wilderness Act Acres	1999 Inventory Acres* *rounded acres to the nearest hundred
Mount Logan (North)	19759	0419013	33161	37961		19200
Mount Logan (South)	19759	0419029	above	above		17000
Mount Logan (West)	19759	0419030	above	above		5300

Evaluation of Potential Wilderness

The inventory of roadless areas was evaluated in terms of three primary criteria:

- Capability – the degree to which it contains the basic characteristics that makes it suitable for wilderness designation without regard to its availability or need as wilderness. Characteristics such as naturalness of the environment, the presence of challenging and primitive recreation opportunities and feelings of solitude are determined to be important. Another important aspect is the ability to manage the area as wilderness. Factors such as size, shape, its relationship to external influences and boundary location are considered.
- Availability – other resource demands and uses of an area. Consideration of current constraints or encumbrances is important.
- Need – the degree to which it contributes to the local and national distribution of wilderness. This analysis considers the demand for additional wilderness recreation opportunities, as well as the need to give certain ecosystems and landforms protection that wilderness designation would afford.

Forest Service Manual 1909.12 was used as a tool to aid the evaluation process. The Forest planning interdisciplinary team and District resource staffs then analyzed the roadless areas based on that evaluation criteria, internal comments and public comments received at public meetings or in written formats.

Recommendation for Wilderness

The Record of Decision signed by the Regional Forester will document the areas recommended as wilderness with the rationale for the decision. The Regional Forester then submits a statewide wilderness proposal to the Chief when all the Forest Plans within a state are finalized. After Department and interagency review, the Secretary of Agriculture submits the proposal to Congress. Congress then makes the final decision on wilderness designation. Areas recommended for wilderness will be protected until Congress decides whether to officially designate them as wilderness.

Rounding of Acreages for Roadless Areas

Acreage figures for each roadless area are rounded off to the nearest 100 acres. In the DEIS acreage figures were shown to the nearest acre, however, the GIS mapping accuracy for these areas was not accurate to that degree. It is thought that rounding provides a more realistic approximation of the acreage for these roadless areas. Areas may be said to be within 100 acres of the area presented in the tables.

Rationale for applying Management Prescriptions other than recommended Wilderness

Across the range of alternatives presented in the FEIS the application of management prescriptions to roadless areas other than for recommended Wilderness is based on the inherent value of the characteristics of the area (availability, capability and need are described for each area), public values and demands expressed during the planning process, alternative themes, and legal sideboards.

Table C1 - 2. Acres recommended as wilderness by alternative

Roadless Area Name	Roadless Acres	Acres Recommended as Wilderness						
		Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
CACHE-BOX ELDER								
Mount Logan North	19,200							
Mount Logan South	17,000							
Mount Logan West	5,300							

Evaluation of Roadless Areas for Wilderness

Cache-Box Elder Management Area

Name: Mount Logan North #0419013
Mount Logan South #0419029
Mount Logan West #0419030

Acres: Gross: North Unit: 19,200
South Unit: 17,000
West Unit: 5,300

Location and Access: Mt. Logan Roadless Area is just east of the communities of Logan, Providence and Millville. Because of developments since the last inventory the area is now split into three distinct units. Logan Canyon Highway 89 forms the northern boundary of the north unit. Private and state land borders the western edge. Roads in Providence Canyon and Millville Canyon split the units. Blacksmith Highway 101 forms the southern boundary of the south unit. Forest Service road 047 in Cowley Canyon/Herd Canyon forms the eastern edge.

Availability: Vegetation: The north unit has about 4,900 acres, the south unit 6,100 acres and the west unit 1,200 acres of capable and available timber. There is potential for future fuelwood gathering and prescribed fire in this area. **Recreation:** Use includes hiking, horseback riding, fishing, hunting, dispersed camping, mountain biking, motorized trail use and snowmobiling. The area receives very heavy use for snowmobiling and summer motorized use. Mountain biking is takes place on several trails including Card Canyon, Richards Hollow, Richards Elbow, Leatham Hollow and the Great Western. Motorized recreation use takes place on South Fork Millville, Richards Hollow, Richards Elbow, Cart Hollow, Welches Flat, Card Canyon and some other trails. **Minerals:** Minerals are mostly federally owned except for 765 acres in the entire north unit and 252 acres in the south unit. Minerals in the west unit are all federally owned. There are no oil and gas leases. **Range:** The areas include grazing allotments for both cattle and sheep. There are several range improvements present. **Water:** Water is used for Cache Valley communities including Logan City's municipal and irrigation needs. **Land Uses:** A 1985 Forest plan utility corridor follows the southern edge of the south unit. **Roads, and Trails:** There are several non-constructed roads in the units, as well as motorized and non-motorized trails. A few of these short road segments in the north and south units are designated open in the District travel plan. The Great Western Trail traverses the south unit.

Capability: The north unit was rated as moderate in the **naturalness** of its environment with some geological and ecological values present. It is considered quite biologically diverse. Steep and rugged slope areas provide **challenging experiences**. **Remoteness** and **solitude** values are affected by the surrounding development and the popularity of the area. The south and west units are viewed as being less natural than the north unit. **Special Features or Attractions:** Logan Peak is a popular destination. Segments of streams found eligible in the wild and scenic river inventory included Logan River and Left Hand Fork Blacksmith. Plant species at risk present in the northern unit include Maquires primrose, Maquires draba, Frank Smith violet, Cache beardtongue, Hopkins tower-mustard, and Rydberg musineon. The southern unit has a plant species of concern present, Kings woody-aster. The western unit has no known plants species of concern. Scenery throughout the area is typical of similar landscapes with colorful autumn colors. Views of Cache Valley are visible from much of the area. There is important summer and winter habitat for deer, elk, and moose. Other wildlife present includes bobcats, black bear, badger, and raptors including the bald eagle. All 3 units are lynx linkage habitat. The northern unit has Bonneville cutthroat and cutthroat, rainbow and

brown trout. The western unit has brown trout while the southern unit has brown trout, cutthroat trout, and whitefish. There are no known heritage resources sites, but Shoshone petroglyph sites exist near the area. Potential is low to moderate for historic and American Indian sites. **Manageability:** There are several intrusions such as an electronic site and rock quarry. The south unit has a significant road and private land exclusions in the White Bedground area on the north side. The west unit is small in size for wilderness. Private and state land and many roads surround nearly all the units. This may limit access to the area and encourage trespass of non-conforming uses.

Need: The area is six miles from Logan and 90 miles north of Salt Lake City. The nearest wilderness areas are Mount Naomi, one mile to the north and Wellsville Mountains, ten miles to the west. The majority of the public input received was strongly against any wilderness designation for these areas. Many of the motorized routes and snowmobile areas are very important to the local public.

Alternatives and Potential Environmental Effects to Wilderness Character Roadless Area: Mount Logan North Management Area: Cache-Box Elder							
Alternative:	1	2	3	4	5	6	7
Recommended Wilderness (acres)	0	0	0	0	0	0	0
Wilderness Character Protected (acres) ¹	6,500	900	0	0	0	0	0
Trails Closed to Motorized Use From Wilderness Recommendation (miles)	0	0	0	0	0	0	0
Motorized Travel Plan Trails Open (miles)	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Motorized Travel Plan Roads Open (miles)	4.8	4.8	4.8	4.8	4.8	4.8	4.8

1. Prescriptions 1.5 + 2.4 + 2.6.

Alternatives and Potential Environmental Effects to Wilderness Character Roadless Area: Mount Logan South Management Area: Cache-Box Elder							
Alternative:	1	2	3	4	5	6	7
Recommended Wilderness (acres)	0	0	0	0	0	0	0
Wilderness Character Protected (acres) ¹	15,900	0	0	0	0	0	0
Trails Closed to Motorized Use From Wilderness Recommendation (miles)	0	0	0	0	0	0	0
Motorized Travel Plan Trails Open (miles)	10.2	10.2	10.2	10.2	10.2	10.2	10.2
Motorized Travel Plan Roads Open (miles)	3.3	3.3	3.3	3.3	3.3	3.3	3.3

1. Prescriptions 1.5 + 2.4 + 2.6.

Alternatives and Potential Environmental Effects to Wilderness Character Roadless Area: Mount Logan West Management Area: Cache-Box Elder							
Alternative:	1	2	3	4	5	6	7
Recommended Wilderness (acres)	0	0	0	0	0	0	0
Wilderness Character Protected (acres) ¹	4,500	0	0	0	0	0	0
Trails Closed to Motorized Use From Wilderness Recommendation (miles)	0	0	0	0	0	0	0
Motorized Travel Plan Trails Open (miles)	0	0	0	0	0	0	0
Motorized Travel Plan Roads Open (miles)	0	0	0	0	0	0	0

1. Prescriptions 1.5 + 2.4 + 2.6.

Excerpts from APPENDIX C-2 WCNF Revised Forest Plan FEIS

Evaluation of Roadless Area Values and Analysis of Effects on Individual Roadless Areas

Roadless Area Values and Criteria

1. Soils and Water. The value of roadless areas regarding the soil and water resource is based on the presence of extensive areas of wetlands. A high value (5) is assigned for roadless areas that have extensive amount of wetland area. A low value (1) is assigned for roadless having small amounts of wetland.

2. Sources for Public Drinking Water. The Wasatch-Cache supplies drinking water for many communities. The value of roadless areas regarding sources of public drinking water is its location within watersheds that have public water sources that take water directly from a surface source (i.e. stream) downstream of the roadless area. A high value (5) is assigned to roadless areas that have public water sources that take water directly from a surface source (i.e. stream) downstream of the roadless area and a low value (1) is assigned to watersheds that do not.

3. Diversity of Plant and Animal Communities. This value is composed of a number of sub-categories: Properly Functioning Condition (PFC), Plant Species, Terrestrial Species, and Fish Species.

Subcategory 1: Properly Functioning Condition/Evidence of Weeds

A roadless area has higher values for protection if it is closer to properly functioning condition (pfc). Ecosystems are at properly functioning condition when they function within their historic range of variability. For medium-high or high values a consideration of Nature Conservancy identified types in need of protection are made.

PFC Value:

1. Low. - High variance from pfc; high impacts to composition, structure, and/or function (e.g. through livestock grazing and fire control); high amount of noxious weeds.
2. Low-Medium. - Moderate to high variance from pfc; moderate to high impacts to composition, structure, and/or function (e.g. through livestock grazing and fire control); moderate to high amount of noxious weeds.
3. Medium. - Moderate variance from pfc; moderate impacts to composition, structure, and/or function (e.g. through livestock grazing and fire control); low to moderate amount of diversity of plant communities and/or age class diversity; low to moderate amount of noxious weeds.
4. Medium-High. - Low variance from pfc; low impacts to composition, structure, and/or function (e.g. through livestock grazing and fire control); one or more reference landscape communities identified by The Nature Conservancy needs for protection are present; moderate amount of diversity of plant communities and/or age class diversity; low amount of noxious weeds.
5. High. - Area at pfc - area has demonstrative features of composition, structure, and function; and/or several reference landscape communities identified by The Nature Conservancy needs for protection are present; high diversity of communities; and/or communities that represent high age class diversity; and/or communities that are uncommon; no or low noxious weeds and low potential for invasion.

Subcategory 2: Species at Risk (SAR) (includes TECPS – Threatened, Endangered, Candidate, Federally listed and proposed, and State rankings) is identified elsewhere in this analysis. This is not based on numbers alone, but also on rarity.

A roadless area has a higher value for species that are very rare and/or higher numbers of species at risk.

Plant Species Value:

1. Low. - No SAR present.
2. Low-Medium. - SAR present, but relatively low rarity (S2-S3) or no to low threats for disturbance; or habitat that is likely to support SAR plants is present.
3. Medium. - SAR present, and typically S2 rarity with some S3 plants and no to low threats for disturbance; or habitat that is likely to support S1-S2 SAR plants is present.
4. Medium-High. - More than one S2 SAR or one or more S1T1 plants with no known threats.
5. High. - High number of SAR or one or more S1T1 plants with known threats.

Terrestrial Species Value:

1. Low. - No habitat for species at risk.
2. Low-Medium. - Habitat present for species at risk.
3. Medium. - Habitat present. Unconfirmed sightings for species at risk.
4. Medium-High. - Sensitive, proposed or candidate species present.
5. High. - Endangered or threatened species present.

Based on the species at risk vertebrates listed in Appendix B-2. Species listed in the evaluation criteria above are the minimum known for a roadless area; other species may be present as well as habitat for more. See Appendix B-2 to see species possibilities if habitat is available.

Fish Species Value:

1. Low. - No native cutthroat trout meta-populations or streams containing cutthroat trout, no potential for expanding native populations of cutthroat trout.
2. Low-Medium. - No native cutthroat trout meta-populations or streams containing cutthroat trout, potential for expanding native populations of cutthroat trout with treatment.
3. Medium. - No native cutthroat trout meta-populations or streams containing cutthroat trout, potential for expanding native populations of cutthroat trout without treatment.
4. (not used)
5. High. - Native cutthroat trout meta-populations or isolated streams containing cutthroat trout

4. Recreation – Recreation Opportunities Spectrum (ROS). The value is based on relative amount of semi-primitive motorized (SPM) and semi-primitive non-motorized (SPNM) recreation opportunities present. Areas with more semi-primitive recreation would have more value for preservation. The Wasatch-Cache ROS map (2000) for existing opportunities in inventoried roadless areas was used to calculate a percentage of total acres per area composed of SPM and SPNM. While a Primitive (P) experience would also be considered of high value, mapping of the existing recreation opportunities in inventoried roadless areas identified no Primitive ROS acres.

SPM and SPNM ROS Value:

1. Low. - 49%-0% of the area of inventoried roadless area is semi-primitive non-motorized and/or semi-primitive motorized.
2. Low-Medium. – (not used)
3. Medium. - 74%-50% of the area of inventoried roadless area is semi-primitive non-motorized and/or semi-primitive motorized.
4. Medium-High. – (not used)
5. High. - 100%-75% of the area of inventoried roadless area is semi-primitive non-motorized and/or semi-primitive motorized.

5. Landscape Character and Scenic Integrity. The landscape character value is based on how intact the inventoried roadless area is as compared to the descriptions of the landscape character theme for natural appearing landscape and existing scenic integrity levels. The inventoried roadless area was considered as a whole. If one part of the area did not meet the description of a scenic integrity level of 5 the area was

valued lower as a 4. Scenic Integrity is a measure of the degree to which a landscape is visually perceived to be “complete”. The highest scenic integrity ratings of 5 are given to those inventoried roadless area landscapes which have little or no deviation from the character described in Wasatch-Cache National Forest Natural Appearing Landscape description scenic integrity objective of Very High.

Landscape Character and Scenic Integrity Value:

1. Low. – (not used)
2. Low-Medium. - Low scenic integrity level.
3. Medium. - Moderate scenic integrity level.
4. Medium-High – High scenic integrity level.
5. High. - Very high scenic integrity level.

6. Traditional Cultural Properties. This value recognizes archeological and historic sites and sites sacred to indigenous people. Recorded field data for this value for many roadless areas is scanty on the Wasatch-Cache as little survey work has been done in roadless areas. Professional judgment of the forest heritage specialist is used in estimating the potential value of roadless areas in this respect when field data is absent.

Traditional Cultural Properties Value:

1. Low. – No sites known or very little potential for presence of sites.
2. Low-Medium. – A few sites known or some potential for presence of sites.
3. Medium. – Medium number of known sites or medium potential for presence of sites.
4. Medium-High. – Medium-high number of sites known or medium-high potential for presence of sites.
5. High. - Important sites known or high potential for important sites.

7. Locally Identified Unique Characteristics. The value of local unique characteristics based on the presence of unique geologic, hydrologic, vegetative or other distinctive features. Presence of eligible Wild and Scenic Rivers is noted here. If the feature is noted in other values it is not considered here again. For example, cultural and historical features are discussed above. Areas with a greater number of unique features present have a higher value.

Unique Characteristics Value:

1. Low. – None noted.
2. Low-Medium. – (not used)
3. Medium. – A few unique characteristics present.
4. Medium-High. – (not used)
5. High. – Several to many unique characteristics present.

8. Size and Context. This value was designed to evaluate how important a roadless area is in regard to where it is and how it fits into the landscape it occupies. Size (in Acres) has been determined to be an important factor in protecting wild ecosystems. Some areas are not heavily intruded into by Cherry Stems, others are. Evaluations of cherry stemming were done by looking at GIS projections of each area and counting, measuring, and scrutinizing how much the cherry stems intruded. Some roadless areas are more remote from urban areas or existing developed highways and roads (i.e. have less chance of disruption from visitors, less overall disturbance, and higher potential for ecological integrity without human disruption through use or recreation demand) than others.

An overall score for the value is presented first followed in parentheses by scores for each of the sub-variables. Sub-variables are not of equal importance. Of the listed sub-variables, Size and Acres is most important; Integrity is next most important, then Adjacency and Context. An average score is not calculated for the sub-variables; rather a judgment is made to assign an overall value of Size and Context.

Size and Acres: Larger roadless areas have higher values. For Wasatch-Cache scope only. Based on comparison to other roadless areas on the forest, and considered with proclaimed Wilderness or roadless, if immediately adjacent. Acreages are provided. (Must score 5 in adjacency below).

1. Low. Small (<10,000 acres.)
2. Low-Medium. – Small-Medium (10-15,000 acres)
3. Medium. - Medium (15-20,000 acres)
4. Medium-High. - Medium-Large (20-35,000 acres)
5. High. - Large (>35,000 acres)

Adjacency: Closeness to larger numbers of people may negatively affect roadless character.

1. Low. - Isolated near urban.
2. Low-Medium. – Isolated near rural or within general national forest context.
3. Medium. - Surrounded or adjacent to major paved highways or roads that separate the area from other undeveloped areas.
4. Medium-High. - Surrounded or adjacent to minor roads that separate the area from other undeveloped areas.
5. High. - Immediately adjacent to designated Wilderness.

Context: Relative amount of undeveloped area in a subarea of the Forest, based on looking within four subareas: Bear River Range, Stansbury Range, Wasatch Range, Uinta Mountains.

1. Low. - Much other roadless or Wilderness in section.
2. Low-Medium. - Some other roadless or Wilderness in section.
3. Medium. - Only roadless no Wilderness but RNA in section.
4. Medium-High. - Only roadless but Wilderness and RNAs in section.
5. High. - Only roadless and no Wilderness or RNAs in section.

Integrity: Cherry Stems into an area negatively affect its roadless integrity.

1. Low. - More than 5 and/or very long and intrudes deeply.
2. Low-Medium. - 5 and/or long and moderately intrusive.
3. Medium. - 3 or 4 and/or short and short intrusions.
4. Medium-High. - 1 or 2 and/or very short intrudes almost unnoticeably.
5. None.

Summary Statement. *After the individual values of each roadless area are stated, a summary statement is presented for the area that was developed by the forest plan interdisciplinary team. This summary statement is intended to be a general state regarding the value of the roadless area compared with other settings on the Forest.*

Cache-Box Elder Management Area

Mount Logan North

Inventory of Values

- Soil and Water – 1- Few small wetlands along small narrow streams.
- Sources of Public Drinking Water – 1- No surface sources of public drinking water are downstream of roadless area.

- Properly Functioning Condition – 4 - This roadless area includes all of the proposed Logan Canyon Special Interest Area (SIA) which includes representative stands of the Douglas-fir/Ninebark habitat type, which has been identified by The Nature Conservancy as a type in need of protection in the Intermountain Region. Dyers woad is a common noxious weed in this area.
- Vegetation Species at Risk - 5 - This roadless area includes several plant species at risk (SAR) including *Arabis glabra* var. *furcatipilis*, *Maguires draba*, *Rydberg's musineon*, *Cache beardtongue*, *Maguires primrose*, and *Frank Smith violet*. In addition, habitat for the nearby occurring *Beckwith violet* is present.
- Terrestrial Species at Risk – 2 - Lynx linkage habitat present.
- Fish Species at Risk -5 - This area has an isolated population of cutthroat trout in Spring Creek
- ROS – 5 – 23% SPM, 62% SPNM.
- Landscape Character and Scenic Integrity – 4 - Old timber harvest in southwest portion of this roadless area. Utility corridors on north, east and west sides. Scenic Attractiveness Level: Distinct
- Heritage Resources – 2 to 3 - Little data - low to moderate potential primarily depending on steep slopes. River valleys have greater potential for sites.
- Unique Characteristics – 1 - None identified.
- Size and Context - Overall Score for Size and Context - 2 – (Acres and Size: 3. Medium (19,197 acres) Adjacency: 1. Isolated near urban. Context: Bear River Range. 1. Much other roadless or Wilderness in section. Integrity: Cherry Stems, 3. 3 or 4 and/or short and short intrusions.)

Summary Statement

- Some high values especially fish SAR, PFC, vegetation SAR, semi-primitive experience, scenic integrity.

Effects on Individual Roadless Area

Mount Logan – North – Management Prescriptions (Acres)

	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
2.5	900	900	900	1000	1000	900	900
2.6	6,500	0	0	0	0	0	0
2.7	11,300	11,300	0	0	0	11,300	11,300
3.1	200	200	200	0	0	6,700	0
3.1A	0	0	0	0	0	0	200
3.1W	0	0	0	0	0	0	6,500
3.2	0	6,400	17,800	0	0	0	0
4.3	300	300	300	0	400	300	300
5.2	0	0	0	0	5,800	0	0
6.1	0	0	0	6,700	0	0	0
6.2	0	0	0	11,500	12,100	0	0

Mount Logan – North – ROS (Acres)

ROS	Alt 1	Alt 2	Alt 3	1985 Plan Alt 4	Alt 5	Alt 6	Alt 7	Existing Condition
NA	0	0	0	300	0	0	0	0
Rural	3,000	3,000	3,000	500	3,000	3,000	0	0
RN	300	300	300	5,900	800	300	3,000	3,000
SPM	4,300	4,300	4,300	12,500	3,800	4,300	4,300	4,300
SPNM	11,600	11,600	11,600	0	11,600	11,600	11,900	11,900

Mount Logan – North – Winter Recreation (Acres)

	Alt 1	Alt 2	Alt 3	Alt 4 1985	Alt 5	Alt 6	Alt 7	Existing Condition

				Plan				
Snowmobile Allowed	0	0	14,000	18,900	19,200	11,800	9,200	18,500
Snowmobile Not Allowed	19,200	18,900	5,200	0	0	7,400	10,000	700

Mount Logan – North – MPCs that Maintain Values, Mostly Maintain Values, or Allow Development (Acres)

	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Maintains Roadless Values	19,200	18,900	18,000			12,200	
Mostly Maintains Roadless Values		300				7,000	18,000
Allows Development			1,200	19,200	19,200		1,200
Sum	19,200	19,200	19,200	19,200	19,200	19,200	19,200

Mount Logan South

Inventory of Values

- Soil and Water – 1 - Few small wetlands along small narrow streams.
- Sources of Public Drinking Water – 1- No surface sources of public drinking water are downstream of roadless area.
- Properly Functioning Condition – 3 - Juniper interspersed with sagebrush is a common component of the west- and south-facing slopes in this roadless area. Douglas-fir is common on the north-facing slopes. Aspen communities are common at upper elevations. Dyers woad is a common component of the lower, drier sites in this area.
- Vegetation Species at Risk – 2 – This roadless area includes one plant species at risk, Kings woodyaster, which is of moderate rarity.
- Terrestrial Species at Risk – 2 - Lynx linkage habitat present.
- Fish Species at Risk -5 - This area has an isolated population of cutthroat trout in the Left Hand Fork of the Blacksmith Fork.
- ROS – 5 – 41% SPM, 48% SPNM.
- Landscape Character and Scenic Integrity – 4 – Cherry stems into roadless area along several roads. Utility corridors on north, and south. Scenic Attractiveness Level: Common
- Heritage Resources – 2 to 3 - Little data available, but low to moderate potential primarily depending on steepness of slopes.
- Unique Characteristics – 1 - None identified.
- Size and Context - Overall Score for Size and Context – 2 – (Acres and Size: 3. Medium (17,001 acres) Adjacency: 2. Isolated near rural or within general national forest context. Context: Bear River Range, 1. Much other roadless or Wilderness in section. Integrity: Cherry Stems, 1. 5 and/or long and moderately intrusive.)

Summary Statement

- Most values are medium. Fish, scenic integrity and semi-primitive experience values are high.

Effects on Individual Roadless Area

Mount Logan – South – Management Prescriptions (Acres)

	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
2.6	15,900	0	0	0	0	0	0
2.7	200	200	0	0	0	200	200
3.1	0	15,900	0	0	0	15,900	0
3.1W	0	0	0	0	0	0	15,900
3.2	100	200	16,200	0	0	100	0
3.2U	0	0	0	0	0	0	100
4.3	500	500	500	0	500	500	500
4.4	300	100	300	0	300	300	300
6.1	0	0	0	1,700	0	0	0
6.2	0	0	0	15,300	16,200	0	0

Mount Logan – South – ROS (Acres)

ROS	Alt 1	Alt 2	Alt 3	1985 Plan Alt 4	Alt 5	Alt 6	Alt 7	Existing Condition
NA	0	0	0	600	0	0	0	0
RN	1,900	1,900	1,900	9,400	2,300	1,900	1,900	1,900
SPM	5,300	5,300	7,000	7,000	6,600	7,000	7,000	7,000
SPNM	9,800	9,800	8,100	0	8,100	8,100	8,100	8,100

Mount Logan – South – Winter Recreation (Acres)

	Alt 1	Alt 2	Alt 3	Alt 4 1985 Plan	Alt 5	Alt 6	Alt 7	Existing Condition
Snowmobile Allowed	0	0	17,000	16,400	17,000	17,000	11,100	17,000
Snowmobile Not Allowed	17,000	17,000	0	0	0	0	5,900	0

Mount Logan – South – MPCs that Maintain Values, Mostly Maintain Values, or Allow Development (Acres)

	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Maintains Roadless Values	17,000	16,300	16,200			200	
Mostly Maintains Roadless Values		500				16,500	16,200
Allows Development		100	800	17,000	17,000	300	800
Sum	17,000	17,000	17,000	17,000	17,000	17,000	17,000

Mount Logan West

Inventory of Values

- Soil and Water – 1 - Few small wetlands along small narrow streams.
- Sources of Public Drinking Water – 1- No surface sources of public drinking water are downstream of roadless area.
- Properly Functioning Condition – 3 - Juniper interspersed with sagebrush is a common component of the west- and south-facing slopes in this roadless area. Douglas-fir is common on the north-

facing slopes. At upper elevations, subalpine fir dominates with scattered inclusions of aspen. Dyers woad is a common noxious weed in this area.

- Vegetation Species at Risk - 2 - No known SAR plants occur within this roadless area, however, habitat for the nearby occurring Beckwith violet is present at the lower elevations, while habitat for King's woodyaster occurs at the upper elevations.
- Terrestrial Species at Risk – Score for Criteria – 2 - Lynx linkage habitat present.
- Fish Species at Risk - 2 - Habitat is available in Spring Creek. The stream would have to be treated to remove brown trout
- ROS – 5 – 16% SPM, 84% SPNM.
- Landscape Character and Scenic Integrity – 4 - Has gravel pit in the middle of area, some ghost roads. Scenic Attractiveness Level: Common.
- Heritage Resources – 2 to 3 - Little data - low to moderate potential primarily depending on steep slopes.
- Unique Characteristics – 1 - None identified.
- Overall Score for Size and Context – 2 – (Acres and Size: 1. Small (5,281 acres). Adjacency: 3. Isolated near rural or within general national forest context. Context: Bear River Range. 1. Much other roadless or Wilderness in section

Summary Statement

- Most values are low to medium, except semi-primitive experience that is high.

Effects on Individual Roadless Area

Mount Logan – West – Management Prescriptions (Acres)

	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
2.6	4500	0	0	0	0	0	0
3.2	0	4500	4500	0	0	4500	0
3.2U	0	0	0	0	0	0	4500
4.3	700	700	700	0	700	700	700
6.1	0	0	0	4300	0	0	0
6.2	0	0	0	900	4500	0	0

Mount Logan – West – ROS (Acres)

ROS	Alt 1	Alt 2	Alt 3	1985 Plan Alt 4	Alt 5	Alt 6	Alt 7	Existing Condition
NA	0	0	0	4,300	0	0	0	0
Rural	500	500	500	0	500	500	0	0
RN	0	0	0	300	0	0	0	0
SPM	800	800	800	700	800	800	800	800
SPNM	4,000	4,000	4,000	0	4,000	4,000	4,400	4,400

Mount Logan – West – Winter Recreation (Acres)

	Alt 1	Alt 2	Alt 3	Alt 4 1985 Plan	Alt 5	Alt 6	Alt 7	Existing Condition
Snowmobile Allowed	100	100	5,300	1,000	5,300	5,300	3,500	5,300
Snowmobile Not Allowed	5,200	5,200	0	0	0	0	1,800	0

Mount Logan – West – MPCs that Maintain Values, Mostly Maintain Values, or Allow Development (Acres)

	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
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Maintains Roadless Values	5,300	4,500	4,500				
Mostly Maintains Roadless Values		700				5,300	4,500
Allows Development			700	5,300	5,300		700
Sum	5,300	5,300	5,300	5,300	5,300	5,300	5,300