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Environmental Assessment

Winter Motorized Use Forest Plan Amendment and Travel Management

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SUMMARY

The Uinta National Forest proposes to amend the Uinta National Forest 2003 Land and Resource Management Plan (Forest Plan). The amendment is needed to comply with the 2005 Travel Management Rule (TMR) (Federal Register, Vol. 70, No. 216, p. 68264-68288, 11/09/2005).

The 2005 Travel Management Rule defines “*over-snow vehicle*” as “*a motor vehicle that is designed for use over snow and that runs on a track or tracks and/or a ski or skis while in use over snow.*” The Forest Plan uses the term “*over-the-snow vehicle*” which refers the definition of this to the definition for “*snowmobile*” which is defined as “*any motor vehicle designed for travel on snow or ice and steered and supported in whole or in part by skis, belts, cleats, runners, or low pressure tires.*”

This purpose of the amendment is to make the definition for “*snowmobile*” and direction relative to winter motorized vehicle use consistent with definitions and direction in the November 9, 2005, Travel Management Rule. Correction of the definition of “*snowmobile*” in the 2003 Forest Plan will change criteria for use of motorized vehicles steered and supported in whole or part by low pressure tires, and therefore, a Forest Plan amendment is needed.

The Forest is analyzing in detail three alternatives: the No Action, Proposed Action, and Alternative Three. The amendment would also address winter recreation issues raised regarding motorized vehicle user conflicts, expenditures on grooming snowmobile routes, and protection of sage grouse habitat.

INTRODUCTION

Background

The Uinta National Forest proposes to amend the Uinta National Forest 2003 Forest Plan. The amendment is needed to comply with the 2005 Travel Management Rule (TMR) (Federal Register, Vol. 70, No. 216, p. 68264-68288, 11/09/2005).

The 2005 Travel Management Rule defines an “*over-snow vehicle*” as “*a motor vehicle that is designed for use over snow and that runs on a track or tracks and/or a ski or skis while in use over snow.*” The Forest Plan (USFS 2003a) is inconsistent with the TMR in that the Forest Plan refers the definition for “*over-the-snow vehicle*” to the definition for “*snowmobile*” which is defined as “*any motor vehicle designed for travel on snow or ice and steered and supported in whole or in part by skis, belts, cleats, runners, or low pressure tires.*”

The Forest Plan allows for ATVs travel over the snow and does not limit over-snow use of ATVs to designated routes and trails, therefore, does not conform to the TMR. Changing the definition would also change the use on the Forest, so an Environmental Assessment and Forest Plan Amendment is required.

Purpose and Need for Action _____

This purpose of the amendment is to make the definitions and direction relative to winter motorized vehicle use in the Forest Plan consistent with definitions and direction in the November 9, 2005, Travel Management Rule. Correction of the definition of “*snowmobile*” to refer to the definition of “*over-snow vehicle*” in the Forest Plan will change criteria for use of motorized vehicles steered and supported in whole or part by low pressure tires, and therefore, a Forest Plan amendment is needed.

The amendment would also address winter recreation issues raised regarding motorized vehicle user conflicts on groomed snowmobile routes, and protection of sage grouse habitat.

Decision Framework _____

Given the purpose and need, the deciding official reviews the proposed action and the other alternatives in order to make the following decisions based on the best available science:

- Should the Forest Plan be amended to no longer allow cross-country over-snow travel of tired vehicles?
- What areas should remain open, if any, for this type of winter recreational activity?

Public Involvement _____

The proposal was listed in the *2007 Summer Edition of the Schedule of Proposed Actions*. The proposal was provided to the public and other agencies for comment. A legal notice was published in the *Daily Herald* on May 18, 2007, and a letter requesting comment on the proposed action was sent on May 16, 2007, to 66 individuals. In addition, as part of the public involvement process, the agency contacted the local motorized user groups, counties, and potentially affected/interested State agencies (TMR, 36 CFR 212.52 and 212.53). Wasatch County was given cooperating agency status; the County did not provide comments during the comment period. Wasatch County later provided comments that they are concerned with restrictions on vehicle use, including ATVs, on system roads and that the TMR did not comply with the Forest Plan and the County’s Plan, so the TMR and proposed changes should not be applied. National Forests are required to comply with the TMR; this issue was not carried forward in this document. One individual and one group provided comments during the comment period. One comment was in favor of the proposal; one comment was against the proposal; no additional issues or alternatives were identified.

Issues _____

Using the comments received, the interdisciplinary team developed a list of issues to address. The Forest Service separated the issues into two groups: significant and non-significant issues. Significant issues were defined as those directly or indirectly caused by implementing the proposed action. Non-significant issues were identified as those: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) irrelevant to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence. The Council on Environmental Quality (CEQ) NEPA regulations require this delineation in Sec. 1501.7, “...identify and eliminate from detailed study the issues which are not significant

or which have been covered by prior environmental review (Sec. 1506.3)...” The significant issues identified by the ID Team and/or during scoping are listed below:

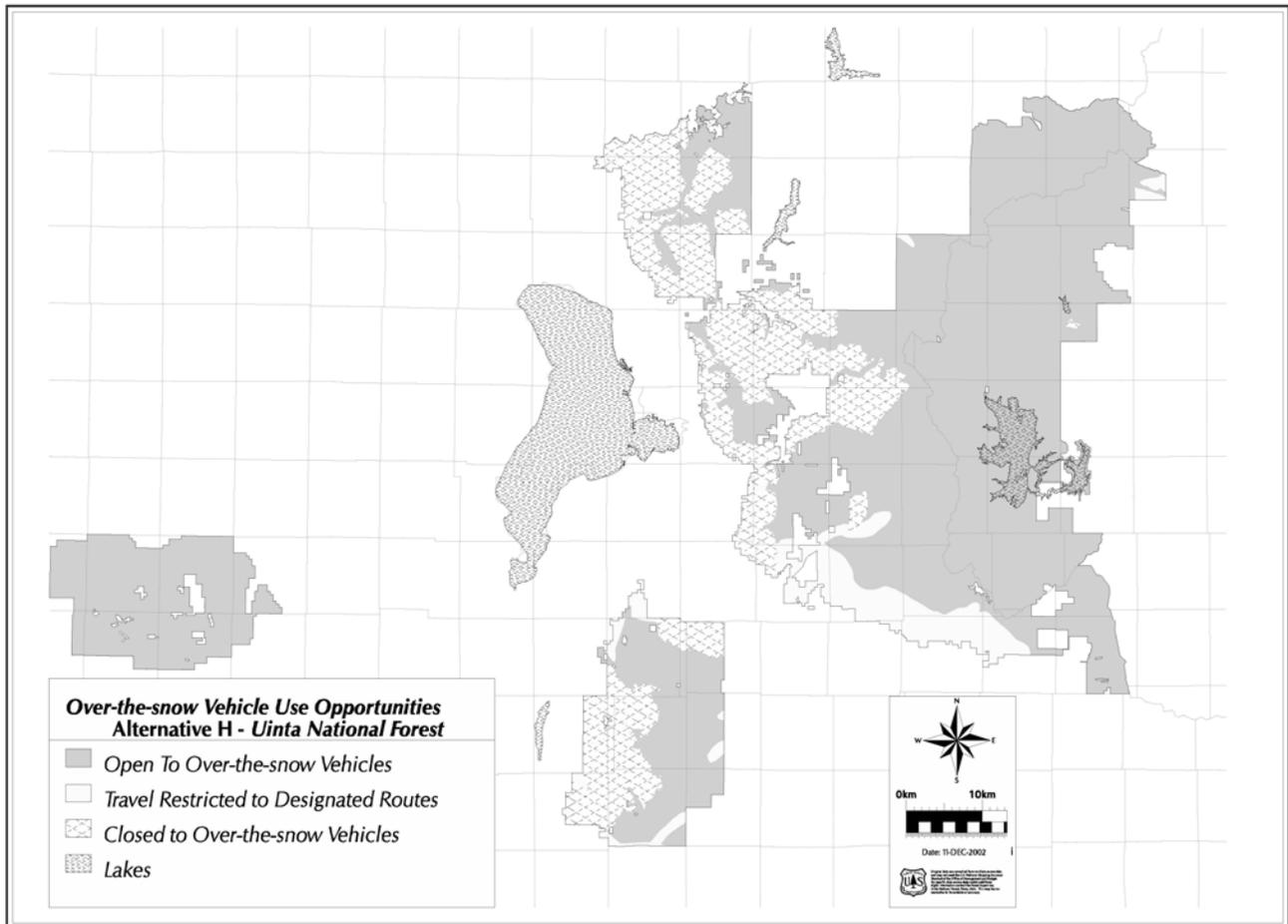
- winter motorized vehicle user conflicts
- winter recreation opportunities related to motorized access
- protection of sage grouse habitat

ALTERNATIVES, INCLUDING THE PROPOSED ACTION

Alternatives

No Action

This Alternative (referred to in scoping as Proposal A) would not change use on the ground from that currently approved. The Forest Plan would be corrected to be consistent with definitions in the TMR, but these corrections would not change application of the Forest Plan. This would involve rewording definitions in the glossary, and rewording some standards and guidelines to maintain current management direction while applying the corrected glossary definitions. The following map, from Appendix E (page 6) in the Forest Plan would continue to apply.



The Proposed Action

The Uinta National Forest is proposing to amend the 2003 Land and Resource Management Plan (Forest Plan) to change the definition of “snowmobile” to refer to “over-snow vehicle” which is defined as “A motor vehicle that is designed for use over snow and that runs on a track or tracks and/or a ski or skis.” The current Forest Plan’s definition of “snowmobile” (any by reference “over-the-snow vehicle”) includes vehicles operating on low pressure tires. Vehicles operating on low pressure tires and not retrofitted with tracks or skis would no longer be included. This would change the recreation opportunities for low-pressure-tired vehicle use in the winter on National Forest System (NFS) lands that are currently open to this use. These changes would bring our management direction into alignment with the Travel Management Rule (TMR).

- ◆ The proposed change would NOT preclude continued cross-country travel of “over-snow vehicles” (as defined in the TMR) where provided for in the Forest Plan (see Forest Plan Appendix E for a general map of these areas).
 - An exception would be that the Chicken Springs area at Strawberry Reservoir (see map) would be closed to all winter cross-country motorized vehicle use to protect sage grouse using this area. The TMR provides specific direction to consider harassment of wildlife and significant disruption of wildlife habitats.
- ◆ The proposed change would generally discontinue allowing cross-country over-snow travel by motorized vehicles other than “over-snow vehicles” (as defined by the TMR (i.e. snowmobiles)). This would eliminate cross-country over-snow travel by any motor vehicle not designed for travel on snow or ice and steered and supported in whole or in part by tires and low pressure tires.
 - An exception would be that designated areas encompassing Currant Creek Reservoir, Vernon Reservoir, and most of Strawberry Reservoir (except the Chicken Springs area (see the following maps)) would remain open from December 1st to March 31st. To facilitate access to Currant Creek Reservoir, the proposed action would designate FS0R70471 from the confluence of FSR70080 to the termini of FS0736 (see the following maps) as open to ATV travel. [Note: The scoping map correcting identified this segment; however, the scoping letter incorrectly listed the road section.] Use of motorized vehicles, other than “over-snow vehicles”, on this road and in designated areas would be restricted to motorized vehicles less than 50 inches in width from December 1st to March 31st [Note: The scoping document contained the dates December 15th to March 31st. This was changed to December 1st for consistency with other road closures.]

The TMR also contains direction to consider conflicts among different classes of motor vehicle use when designating routes and areas open for motorized vehicle use. The proposed action would seasonally close (December 1st to March 31st) the following designated routes to vehicles other than “over-snow vehicles” to avoid winter motorized vehicle user conflicts and maintain the investment expended on grooming snowmobile trails (see following maps).

Heber District

- 6.3 miles of FSR70046 north of Daniels Pass,
- 3.5 miles of FSR70134 west of Strawberry Reservoir, and

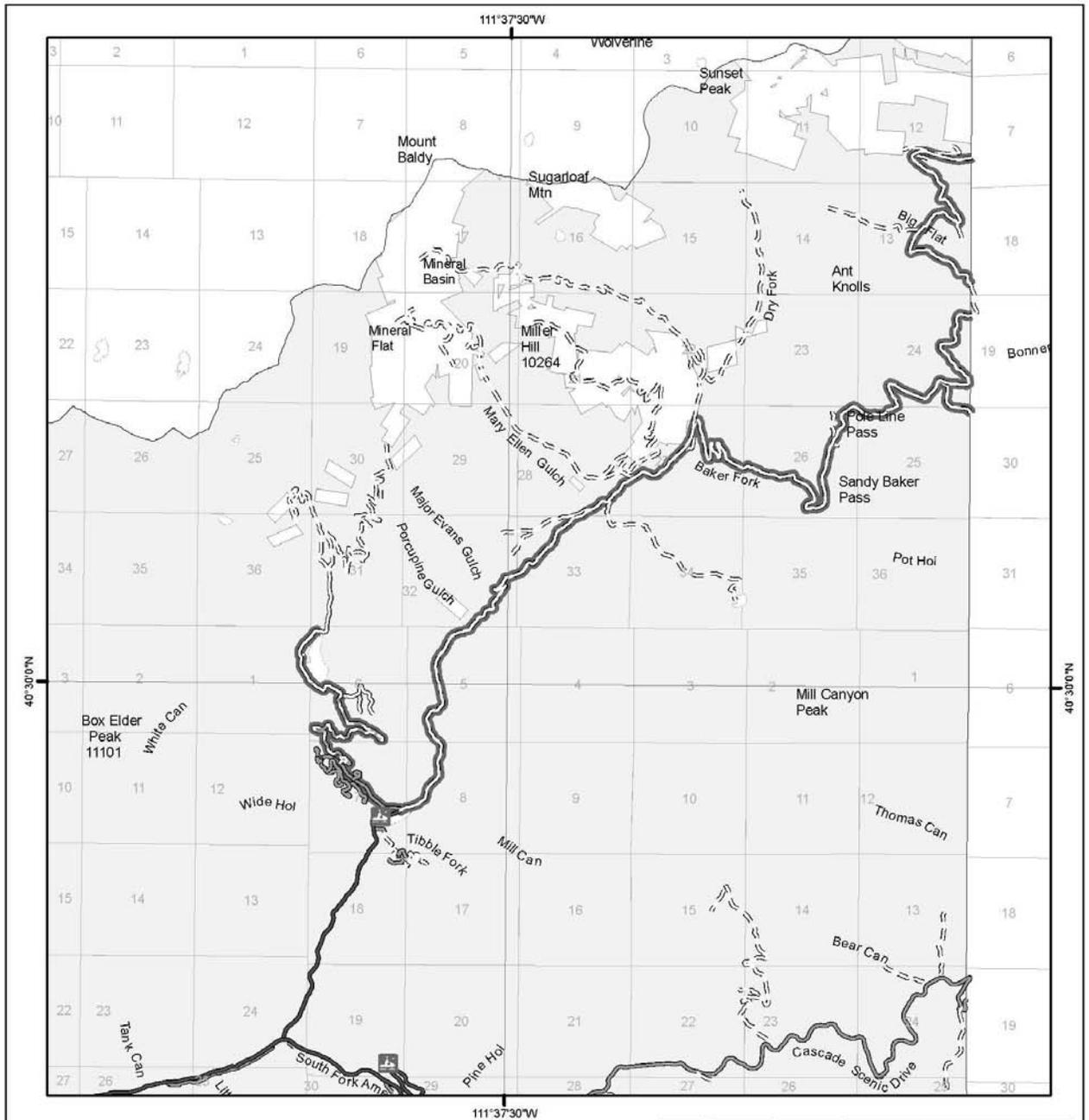
- 4.5 miles of FSR70150 west of Strawberry Reservoir.

Pleasant Grove District

- 13.8 miles of FSR70085,
- 0.7 mile of FSR70010,
- 3.1 miles of FSR70008, and
- 0.5 mile of FSR70317 in American Fork Canyon.

Spanish Fork District

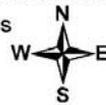
- 2.1 miles of FSR70131 north of Soldiers Summit, and
- 4.6 miles of FSR70042 west of Little Baldy Mountain.



Winter Motorized Use Forest Plan Amendment and Travel Management

- Proposed Changes to ATV Use**
- Restricted in Winter Season
 - Open in Winter Season
 - Closed To All Motorized Travel
 - Open To Vehicles <=50\"/> Wide

- Forest Service Ownership
- Fishing Access
- Snowpark

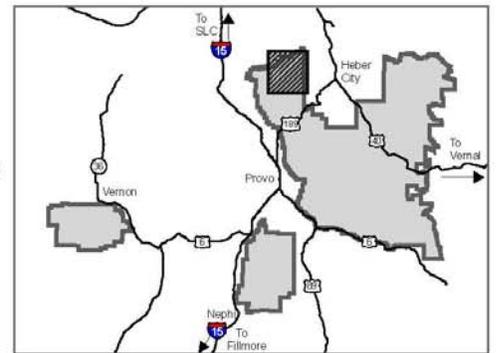


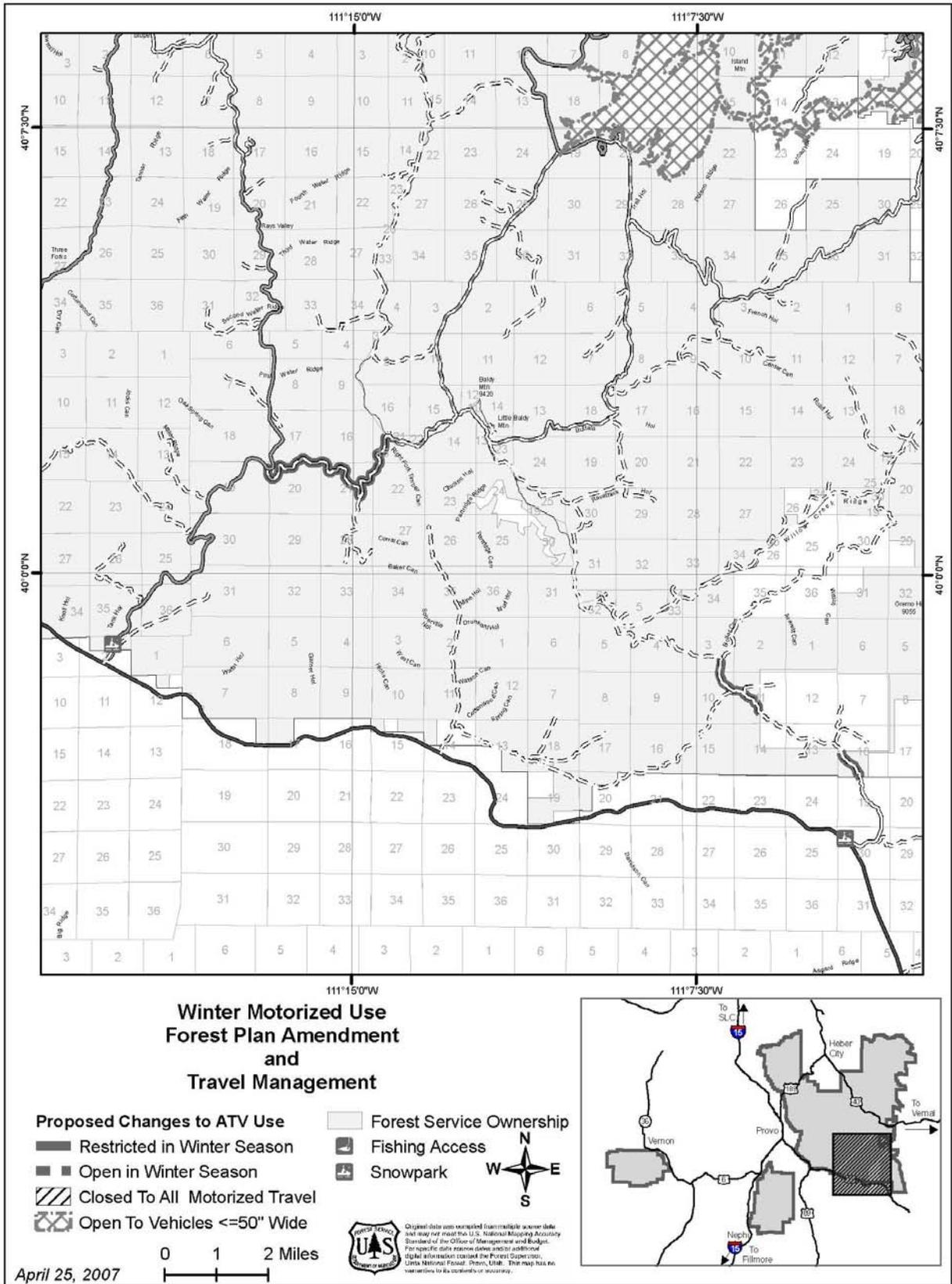
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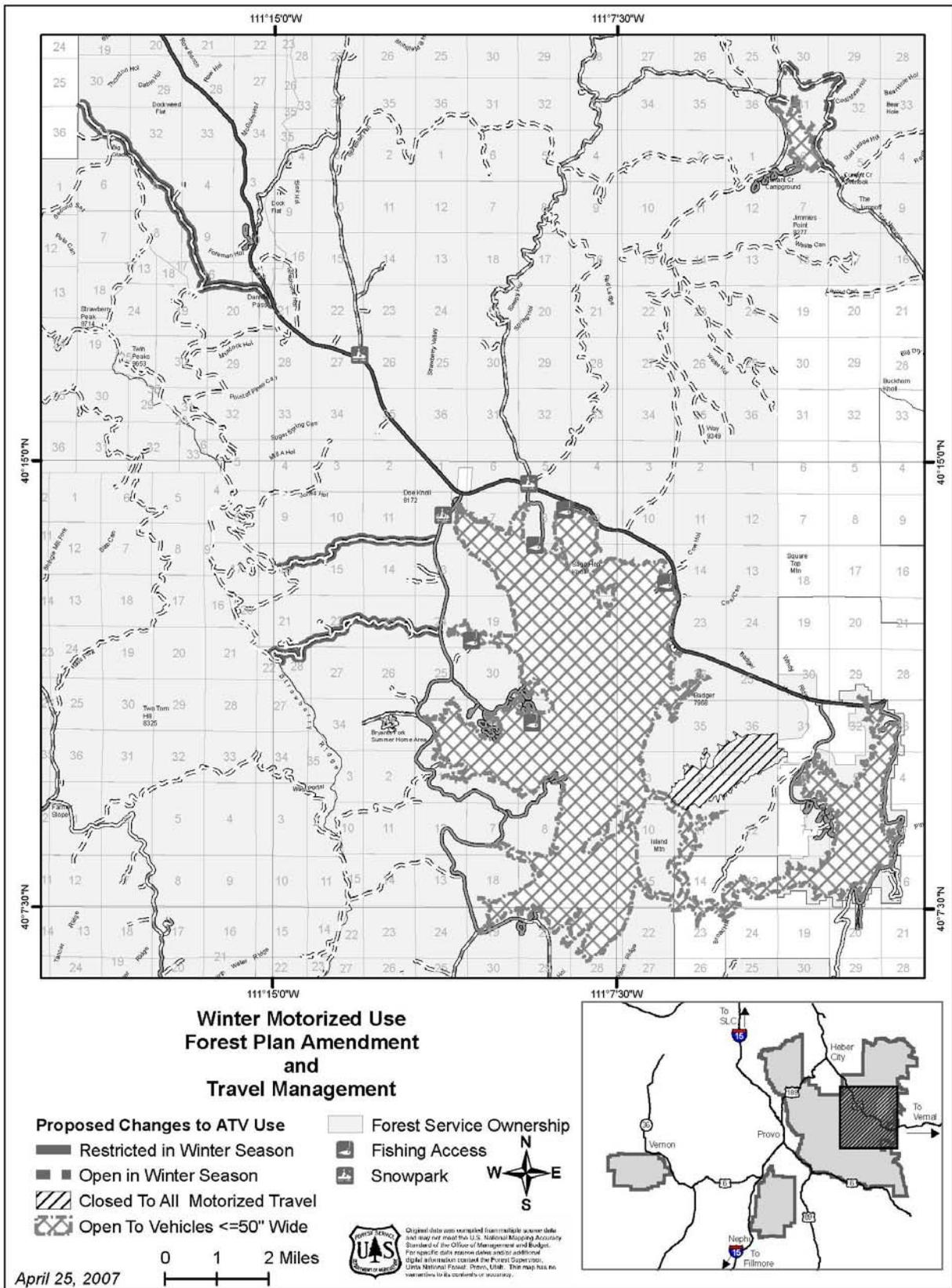
April 25, 2007



Original data was excerpted from multiple source data and may not meet the U.S. National Mapping Accuracy Standard of the Office of Management and Budget. For specific data source codes and/or additional digital information, contact the Forest Supervisor, Uinta National Forest, Provo, Utah. This map has no warranties as to its contents or accuracy.







Alternative Three

This alternative (referred to in Scoping as Proposal B) would change the definition in the Forest Plan to be consistent with the definition in the TMR, and would prohibit off-designated route (i.e., cross-country travel) winter (summer already prohibited) travel by ATVs on the Forest. This alternative would not affect snowmobile use on the Forest, and would not affect ATV use on routes previously designated as open for ATV use.

Alternatives Considered But Eliminated

Through the scoping process no other alternatives were brought forward for analysis.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES

The Affected Environment/Environmental Consequences are based on site-specific information and the best available science. (Specialist Reports – Project Record; Reference Section – EA) This section summarizes the physical, biological, social and economic environments of the affected project area and the potential changes to those environments due to implementation of the alternatives. It also presents the scientific and analytical basis for comparison of alternatives presented in the chart above. Additional documentation of project-area resources, may be found in the project planning record located at the Uinta National Forest Supervisor’s Office located at 88 West 100 North, Provo, UT 84601.

A. RECREATION

1. **Affected Environment:** Information on recreation uses and opportunities on the Uinta National Forest are described in the Forest Plan FEIS (USFS 2003b, pages 3-535 thru 3-541) with additional and/or updated information contained in the 2005 State of the Forest Report. (USFS 2006a, pages 77-85) The Uinta National Forest provides many opportunities for dispersed recreation. The information in the following table summarizes some of the dispersed recreation opportunities:

Existing Dispersed Recreation Opportunity	Amount
Miles of motorized trails ²	300
Miles of groomed snowmobile trails ¹	250
Miles of groomed cross-country ski/snowshoe trails ²	30
Acres closed to cross-country motorized/mechanized vehicle uses ¹	180,805
Acres open to cross-country motorized/mechanized vehicle uses ¹	661,360

Note: All mileages rounded to the nearest 5 miles. All acreages rounded to the nearest 10 acres.

¹ Data from GIS Analysis (K.Burton, 2007)

² From Uinta National Forest State of the Forest Report for Fiscal Year 2005 (USFS 2006a, page 78).

Dispersed recreation use on the Forest is growing rapidly. Part of this increase is due to population growth, technology developments in all forms (which has created more leisure time and improved recreational equipment), lifestyle changes and management restrictions on neighboring Forests and non-forest areas. (USFS 2003b, page 3-538)

Solely dedicated trail systems for ATVs, motorcycles, and mountain bikes have not been specifically identified; however, these opportunities are available on multi-use trails. There are about 915 miles of road or trail on the Forest open for ATV use. This includes about 301 miles of motorized trails and 614 miles of road open for ATV use. (USFS 2006a, page 78)

Winter recreation continues to grow in popularity. There are approximately 249 miles of groomed snowmobile trail (Burton, 2007) and 14 trailheads designed to accommodate snowmobile use on the Forest. (USFS 2006a, pages 78-79)

Construction of trailheads and most of the trail grooming has been partially funded

through a partnership with the Utah State Division of Parks and Recreation. This partnership enables the State of Utah to utilize snowmobile registration fees for development and maintenance of snowmobile trails and parking facilities. The program is designed to provide enhanced opportunities to those members of the public who pay snowmobile registration fees. Daniels Summit Lodge and Wasatch Mountain State Park also assist in grooming routes on the Forest.

Conflicts between user groups have been and will continue to be an issue that will need to be addressed by the Forest Service. Winter over-snow recreation user conflicts include conflicts between motorized (i.e., snowmobile and ATV) users and non-motorized (e.g., cross-country skier, snowshoe) users, and between snowmobile users and ATV users on trails groomed for snowmobile use. These conflicts have grown with the increase in use on the Forest, and with increases in motorized vehicle capability (i.e., ability of ATVs and snowmobiles to use terrain and trails they could not readily use in the past).

The Proposed Action for this environmental analysis proposes changes in management in over-snow motorized recreation use management in several areas. Information related to these areas follows:

Strawberry Reservoir – Strawberry Reservoir and the surrounding area are open for cross-country over-snow travel by over-snow vehicles (i.e., snowmobiles) and ATVs under the existing Forest Plan. The Strawberry Reservoir area contains several groomed or plowed routes accessing the Reservoir and adjoining area. These include:

- ◆ Groomed snowmobile trails – FSR70131 (West Side Strawberry Road) and FSR70452 (Strawberry Bay Complex Road);
- ◆ Marked but ungroomed snowmobile routes – FSR70109 (Big Springs Road) and FSR70090 (Devils Notch/East Side Strawberry Road);
- ◆ Plowed (some regularly, some intermittently plowed) parking lots - at Strawberry Bay, Clyde Creek, Mud Creek, Coop Creek, Strawberry Visitor Center, Chicken Creek East, Chicken Creek West, Ladders, and Strawberry Cove;
- ◆ Plowed roads - U.S. Highway 40, FSR70573 (Mud Creek Day Use Road), and a segment of FSR70131 (West Side Strawberry Road).

Mud Creek, Ladders, and Strawberry Bay are the only access points with boat ramps that access that lake. The boat ramps provide a good ramp that ATVs and snowmobiles use in the winter to access the Reservoir surface. Clyde Creek, Coop Creek, Strawberry Visitor Center, Strawberry Cove, and Chicken Creek East and West are located some distance from the edge of the Reservoir and thus have a section of open area that must be crossed before the Reservoir is reached.

The Strawberry Reservoir area (as delineated in the Proposed Action – including Chicken Creek area) encompasses about 17,330 acres, about 1,020 acres are in the Chicken Springs portion of this area. There are no groomed or marked snowmobile trails passing thru the Chicken Springs area, but it is close to the Strawberry Cove developments, and receives regular over-snow motorized use by these homeowners and others. Winter motorized recreation use at Strawberry Reservoir is moderate to

high by ATVs and high for snowmobiles. Snowmobile use in the Chicken Springs area is moderate, and ATV use is low to moderate.

Currant Creek Reservoir – Currant Creek Reservoir and the surrounding area are open for cross-country over-snow travel by snowmobiles and ATVs under the existing Forest Plan; however, winter over-snow access by ATVs is very limited. The area delineated encompasses approximately 300 acres. The West Side Currant Creek Road (FSR70471) and Currant Creek Bay Fishing Access Road (FSR70736) are currently not designated as open for ATV use (either summer or winter). Illegal summer ATV use on these roads is a law enforcement/management issue for the Forest Service (Campbell 2007). In the winter, the West Side Currant Creek Road is plowed to a parking area at the Currant Creek Reservoir dam to provide access to private land and residences below the Forest boundary, and for dam operation and recreation user access on the Forest. Although FSR70471 and FSR70736 are not groomed or marked as a snowmobile route in the winter, snowmobile use on these routes is moderate to high. (Campbell 2007) The segment of the West Side Currant Creek Road identified in the Proposed Action to be opened to over-snow ATV use is approximately 4.25 miles in length, and FSR70736 is about 0.6 miles in length. Ice angler use of the Reservoir is moderate to light. Ice anglers access the Reservoir by foot from the dam, and/or by snowmobiles at the upper or west side of the Reservoir. Motorized vehicle access from the dam or east side of the Reservoir is generally not practicable due to steepness, presence of rock riprap, etc. Rarely, ice anglers access the upper reaches of the Reservoir by illegally driving up over snowmobile packed snow on the West Side Currant Creek Road (Campbell 2007; personal observations by Reese Pope).

FSR70046 (Circle-Main Canyon Road) – The Circle-Main Canyon Road is located near Daniels Summit on the Heber Ranger District. This road connects U.S. Highway 40 with several other roads and trails in the area. In the winter, this road is groomed by the State between about December 15th and March 31st for snowmobile use. The segment of this road identified in the Proposed Action to be closed to over-snow wheeled vehicle use is approximately 6.3 miles in length. Snowmobile use on this route is heavy; over-snow wheeled vehicle use is generally confined to the shoulder seasons because of route conditions and limited opportunity for over-snow wheeled vehicle access from Main Canyon. Snowmobiles access the route from Daniels Summit Lodge and other connecting snowmobile routes. Daniels Summit Lodge generally does not allow ATVs to leave their property in the winter on the marked trail. The route provides access to areas popular for dispersed camping, and ATV and other vehicle users push into the area as early as possible.

FSR70134 (Clyde Creek Road) – The Clyde Creek Road is located in the Clyde Creek drainage on the west side of Strawberry Reservoir on the Heber Ranger District. This road connects the West Side Strawberry Road (FSR70131) with several other roads and trails in the area. In the winter, this road is groomed by the State between about December 15th and March 31st for snowmobile use. The West Side Strawberry Road is plowed to provide access to the Strawberry Bay recreation complex. A groomed snowmobile trail follows the West Side Strawberry Road from plowed snowmobile parking lots at Strawberry Visitor Center, Clyde Creek, to Mud

Creek, Strawberry Bay and beyond. The plowed road, Clyde Creek Parking Lot, and groomed snowmobile trail provide opportunities during the winter for wheeled vehicles to access FSR70134. The segment of FSR70134 identified in the Proposed Action to be closed to over-snow wheeled vehicle use is approximately 3.5 miles in length. Snowmobile use on this route is heavy. Because of trail conditions over-snow wheeled vehicle use is generally in the shoulder seasons and light snow years, and lower reaches of this route. FSR70134 provides access to areas popular for dispersed camping, and ATV and other vehicle users push into the area as early as possible.

FSR70150 (Mud Creek Road) – The Mud Creek Road is located in the Mud Creek drainage on the west side of Strawberry Reservoir on the Heber Ranger District. This road connects the West Side Strawberry Road (FSR70131) with several other roads and trails in the area. In the winter, this road is groomed between about December 15th and March 31st for snowmobile use by the State. The West Side Strawberry Road is plowed to provide access to the Strawberry Bay recreation complex. A groomed snowmobile trail follows the West Side Strawberry Road from plowed snowmobile parking lots at Strawberry Visitor Center and Clyde Creek, to the plowed Mud Creek Day Use Road (FSR70573), and onto the Strawberry Bay recreation complex and beyond. The plowed West Side Strawberry and Mud Creek Day Use Roads, Mud Creek parking area, and groomed snowmobile route provide opportunities during the winter for wheeled vehicles to access FSR70134. In addition, a designated ATV trail (Strawberry Shore Trail - #7309) connects FSR70150 to the Strawberry Bay recreation complex. This trail is not groomed during the winter, but snowmobile use in, on and near the trail is very heavy. This heavy use packs the snow allowing ATVs to use Forest Trail #70309 for winter over-snow access to FSR70150. The segment of this road identified in the Proposed Action to be closed to over-snow wheeled vehicle use is approximately 4.5 miles in length. Snowmobile use on this trail is heavy. Because of trail conditions over-snow wheeled vehicle use on FSR70150 is generally confined to the shoulder seasons and light snow years, and lower reaches of this route. The road/trail provides access to areas popular for dispersed camping, and wheeled vehicle users push into the area as early as possible.

FSR70085 (American Fork-Snake Creek Road) – The American Fork – Snake Creek Road is located in American Fork Canyon on the Pleasant Grove Ranger District. The road extends northeast from State Highway 144 past Tibble Fork Reservoir, up American Fork Canyon, over Pole Line Pass, into the Snake Creek drainage. FSR70085 connects to snowmobile trails originating in the Snake Creek drainage in Wasatch Mountain State Park, and to the Cummings Parkway Road (FSR70317). Cummings Parkway Road is another groomed snowmobile route [see description of this route below]. The segment of this road identified in the Proposed Action to be closed to over-snow wheeled vehicle use is approximately 13.8 miles in length. The section of FSR70085 above Tibble Fork Reservoir parking lot is a designated ATV route. In the winter a gate on FSR70085 just above Tibble Fork parking lot restricts access above this point. The gate only allows passage of vehicles less than 50 inches in width. The sections of FSR70085 between the gate and the Narrows, and from the Narrows over Pole Line Pass into Snake Creek and Wasatch Mountain State Park are groomed by the

State between about December 15th and March 31st for snowmobile use. The section of FSR70085 thru the Narrows is not groomed due to safety concerns (narrow with very steep drop off). Snowmobile use is heavy. Over-snow ATV/motorcycle use is moderate, usually occurring in the shoulder season during minimal or no snow cover.

FSR70010 (Granite Flat Campground Road) – The Granite Flat Campground Road is located in American Fork Canyon on the Pleasant Grove Ranger District. FSR70010 is about 0.7 miles in length, and extends from the American Fork-Snake Creek Road (FSR70085) just above Tibble Fork Reservoir to Granite Flat Campground. FSR70010 is a designated ATV route. In the winter a gate is closed on FSR70085 just above Tibble Fork Reservoir parking lot and below FSR70085's junction with the Granite Flat Campground Road. This gate limits vehicle access to FSR70010 as well as FSR70085 as the gate only allows passage of vehicles less than 50 inches in width. Granite Flat Campground receives moderate levels of use by winter campers snowshoeing, skiing, snowmobiling, or using ATVs to access the campground. FSR70010 connects to the Silver Lake Flat Road (FSR70008). FSR70008 is another heavily used groomed snowmobile route [see description of this route below]. In the winter FSR70010 is groomed by the State between about December 15th and March 31st for snowmobile use. Snowmobile use on this route is heavy. Over-snow ATV use is moderate, usually occurring in the shoulder season during minimal or no snow cover.

FSR70008 (Silver Lake Flat Road) – The Silver Lake Flat Road is located in American Fork Canyon on the Pleasant Grove Ranger District. FSR70008 is about 3.1 miles in length, and extends from the Granite Flat Campground Road to above Silver Lake Flat Reservoir. This road is a designated ATV route. In the winter a gate is closed on FSR70085 just above Tibble Fork Reservoir parking lot. This gate limits vehicle access to FSR70008 as the gate only allows passage of vehicles less than 50 inches in width. The section of FSR70008 between the upper end of Silver Lake Flat Reservoir and the Granite Flat Campground Road is groomed by the State between about December 15th and March 31st for snowmobile use. Snowmobile use on this route is heavy. Over-snow ATV use is moderate, usually occurring in the shoulder season during minimal or no snow cover. Most over-snow vehicle use is for snow play. Though the road accesses Silver Lake Flat Reservoir, water levels in this lake are low during the winter and ice fishing use is light.

FSR70317 (Cummings Parkway Road) – The Cummings Parkway Road is located near Pole Line Pass on the Pleasant Grove Ranger District. This road connects the American Fork-Snake Creek Road (FSR70085) thru Wasatch Mountain State Park, eventually junctioning with the Cascade Scenic Drive Road (FSR70114) near Cascade Springs. The entire road is a designated ATV route. In the winter, this entire road is groomed by the State between about December 15th and March 31st for snowmobile use. In the winter a gate on FSR70085 just above Tibble Fork Reservoir parking lot restricts access to upper reaches of FSR70085, and access from the west to the Cummings Parkway Road. The gate only allows passage of vehicles less than 50 inches in width. The sections of FSR70085 between the gate and the Narrows, and from the Narrows over Pole Line Pass into Snake Creek and Wasatch Mountain State Park are groomed by the State between about December 15th and March 31st for

snowmobile use. The section of FSR70085 thru the Narrows is not groomed due to safety concerns (narrow with very steep drop off). This may limit access to Cummings Parkway Road at times. Vehicle (non snowmobile or ATV) access to FSR70317 from the Cascade Scenic Drive Road (FSR70114) is also restricted in the winter by gates. Over-snow ATV access from Snake Creek thru Wasatch Mountain State Park is generally restricted by deep snow. The segment of the Cummings Parkway Road on the Forest is identified in the Proposed Action to be closed to over-snow ATV use. This segment is about 0.5 miles in length. Snowmobile use on this route is heavy; ATV vehicle use is generally confined to the shoulder seasons because of route conditions and limited opportunity for over-snow wheeled vehicle access.

FSR70131 (West Side Strawberry Road) – The West Side Strawberry Road reaches from U.S. Highway 40 on the north, south along the west side of Strawberry Reservoir, Trail Hollow and the Left Fork White River to its southern termini at U.S. Highway 6 near Soldier Summit. The segment of FSR70131 identified in the Proposed Action to be seasonally closed to over-snow wheeled vehicle use is a 2.1 mile-long segment located in the Left Fork of White River between Boiler Canyon and the Forest boundary. This segment of FSR70131 is located on the Spanish Fork Ranger District. This segment of FSR70131 is not identified as a groomed snowmobile trail. However, north of Boiler Canyon where snow depths are usually greater, FSR70131 is groomed by the State between about December 15th and March 31st for snowmobile use. No changes in management of the northern (Boiler Canyon to U.S. 40) segment of FSR70131 are proposed thru this environmental analysis. Wheeled vehicles access the southern end of FSR70131 in the shoulder seasons (spring and fall) from U.S. Highway 6 and private land located at Soldier Summit. Snowmobile use on this segment is light, but use is heavier on the groomed route extending north of this segment. Because of trail conditions over-snow wheeled vehicle use is generally confined to the shoulder seasons and light snow years, and lower reaches of this route. FSR70131 provides access to areas popular for dispersed camping, and wheeled vehicle users push into the area as early as possible.

FSR70042 (Unicorn Ridge – Indian Creek Road) – The Unicorn Ridge-Indian Creek Road connects the Sheep Creek Road (FSR70051) with the West Side Strawberry Road (FSR70131). The segment of FSR70042 identified in the Proposed Action to be seasonally closed to non-snowmobile vehicle use is about 4.6 miles in length (NOTE: the scoping document incorrectly listed the segment as 7.3 miles in length). This segment is located west of Little Baldy Mountain and extends from the Sheep Creek Road east to its junction with the Tie Fork section of the Great Western Trail (#7023). This segment of FSR70042 is located on the Spanish Fork Ranger District. FSR70042 is groomed by the State between about December 15th and March 31st for snowmobile use. No changes in management of the remaining section of FSR70042 are proposed thru this environmental analysis. Wheeled vehicles access FSR70042 during the winter from the Sheep Creek Road which is sometimes plowed in the winter. Over-snow wheeled vehicle use on this road segment is generally very light to light. Over-snow wheeled vehicle use is generally confined to the shoulder seasons and light snow years. FSR70042 provides access to areas popular for dispersed camping, and wheeled vehicle users push into the area as early as possible.

Vernon Reservoir – Vernon Reservoir and the surrounding area are open for cross-country over-snow travel by snowmobiles and ATVs under the existing Forest Plan. Over-snow access and use by wheeled vehicle users is usually light since there are no nearby plowed or groomed roads. This use is generally focused in the shoulder (spring and fall) seasons, and/or in light snowfall years. The Main Canyon Road (FSR80005) is currently designated open for ATV use. FSR80005 is not groomed or marked as a snowmobile route, and snowmobile use on this route is light. Vernon Reservoir and the surrounding area is popular for dispersed camping and fishing, particularly early in the spring when wheeled vehicle users push into the area as the high mountain country is not accessible. The area delineated encompasses approximately 40 acres. (Resare 2007)

2. **Environmental Consequences:**

- a. **No Action Alternative** – Under this alternative there would be no change in recreational access or opportunities from that described in the Affected Environment section above. There would be no change in snowmobile access on the Forest, including at Strawberry Reservoir. Over time, snowmobile use would likely continue to grow with population growth in the Heber Valley and along the Wasatch Front, and increasing popularity of snowmobile use.

There would be no change in cross-country over-snow ATV access on the Forest under this alternative. Over time, over-snow cross-country ATV use would likely continue to increase due to the growing population in Heber Valley and along the Wasatch Front, increasing popularity of ATV use, and increasing capabilities of ATVs.

Over-snow ATV users would continue to enjoy access to American Fork Canyon, Granite Flat Campground, and Silver Lake Flats Reservoir via the groomed snowmobile trails. Over time, over-snow ATV use on these routes would likely increase due to the growing population along the Wasatch Front and increasing popularity of ATVs.

Over-snow motorized wheeled vehicle (including 4x4s and ATVs) users would continue to enjoy access to ungated roads including FSR70046, FSR70134, FSR70150, FSR70131 (in the Left Fork White River area), and FSR70042. This access would primarily be confined to the shoulder seasons (fall or early winter, and early spring) and in low snow seasons. ATVs would not be permitted to use the West Side Currant Creek Road (FSR70471) and Currant Creek Fishing Access Road (FSR70736) to access Currant Creek Reservoir.

Snowmobile/motorized wheeled vehicle user conflicts would continue and likely increase over time due to the increases in use anticipated. Projected increases in ATV and other over-snow wheeled vehicle use will result in increased rutting of groomed snowmobile routes, and this will result in an increase in user conflicts. The ruts created by wheeled vehicles churning thru the snow, particularly when it is soft, also make safe control of snowmobiles more difficult. Based on discussions with the various users, these conflicts are generally not felt or

perceived by many wheeled vehicle users, but are felt by the snowmobile community, the State agency that grooms the trails, and the Forest Service.

- b. Proposed Action** – Under this alternative there would be no change in snowmobile access on the Forest, except that approximately 1,010 acres would be closed to snowmobile use in the Chicken Springs area at Strawberry Reservoir. This represents about 0.15% of the acreage on the Uinta National Forest currently open to snowmobile use. Over time, snowmobile use on the remaining portion (~660,350 acres) of the Forest open for snowmobile use would likely continue to grow with population growth in Heber Valley and along the Wasatch Front, and increasing popularity of snowmobile use.

This Alternative would eliminate cross-country over-snow ATV access on the Forest except at Vernon Reservoir, Currant Creek Reservoir, and most of Strawberry Reservoir. A substantial portion of the over-snow cross-country ATV use presently occurring on the Forest is centered at Strawberry Reservoir. Under this Alternative, about 16,310 acres at Strawberry Reservoir, 300 acres at Currant Creek Reservoir, and 40 acres at Vernon Reservoir would be left open to cross-country over-snow ATV use. Although cross-country over-snow ATV use in other areas of the Forest is generally limited due to snow, the closure of the remainder of the Forest to over-snow cross-country ATV use would likely reduce overall over-snow cross-country ATV use, and displace some users from other areas and concentrate more use in the open areas, or in areas off-Forest. Over time over-snow cross-country ATV use at Vernon, Currant Creek, and Strawberry Reservoir would likely continue to increase due to the growing population in Heber Valley and on the Wasatch Front, increasing popularity of ATV use, and increasing capabilities of ATVs.

ATV users would no longer be able to access American Fork Canyon, Granite Flat Campground, and Silver Lake Flat Reservoir during the winter (December 1st thru March 31st) season. This would eliminate ATV access to about 18 miles of groomed snowmobile routes. Although summer ATV use in American Fork Canyon is very heavy, winter over-snow ATV use is moderate. Closure of these routes to ATVs during the December 1st thru March 31st period would eliminate or displace many ATV users.

Over-snow motorized wheeled vehicle (including 4x4s and ATVs) users would no longer be able to access FSR70046, FSR70134, FSR70150, FSR70131 (in the Left Fork White River area), and FSR70042 between December 1st and March 31st. This would eliminate wheeled vehicle access to about 21 miles of groomed snowmobile routes. These roads access popular dispersed camping sites, and closure of these routes to wheeled motorized vehicle use until March 31st may affect some early-season camping opportunities when there is a low-snow year.

Authorizing ATV use of the West Side Currant Creek Road (FSR70471) and Currant Creek Fishing Access Road (FSR70736) December 1st thru March 31st will provide an opportunity currently not legally available for ATV users, and will increase ice angler access Currant Creek Reservoir. These road segments total about 4.9 miles in length. FSR70471 and FSR70736 are not open to ATVs

in the summer and is a major problem for illegal ATV use. Opening FSR70471 in the winter to ATVs could exacerbate this problem.

Snowmobile/motorized wheeled vehicle user conflicts would be substantially reduced under this alternative. Recreation quality for snowmobile users would likely increase as they no longer have to contend with rough rides and potential safety issues related to ruts created by wheeled vehicles churning thru the snow, particularly when it is soft. Snowmobile grooming costs will be reduced slightly due to reduction in the need to groom out ruts created by wheeled vehicles. Conversely, recreation quality for ATV and other wheeled vehicle users will decline somewhat as opportunities for their recreation are reduced.

- c. **Alternative Three** – The environmental consequences of this alternative on recreation would be identical to those described for the No Action Alternative except in relation to cross-country ATV use. This Alternative would eliminate cross-country over-snow ATV access on the Forest. Although cross-country over-snow ATV use of the Forest is generally limited due to snow, the closure of the Forest to over-snow cross-country ATV use would eliminate or displace users and concentrate more use in areas off-Forest. At Strawberry Reservoir, and to a much lesser extent at Vernon Reservoir and Currant Creek Reservoirs, this would reduce ice fishing use due to the elimination of access.

B. ROADS

1. **Affected Environment:** Information on roads on the Uinta National Forest are summarized in the Forest Plan FEIS (USFS 2003a, pages 3-455 thru 3-457), and in the 2005 State of the Forest Report (USFS 2006, pages 89-90). Based on 2005 inventory data there are about 1,218 miles of classified road on the Forest, about 1,128 of which are open for public use. (USFS 2006a, page 89) In addition, there are approximately 151 miles of roads under other jurisdiction that cross lands adjacent and within the proclaimed National Forest boundary that provide critical access to the Forest. (USFS 2003b, page 3-453) Detailed information on Uinta National Forest Roads is contained in the “Roads Analysis for the Uinta National Forest” (USFS 2002), and information relative to the roads proposed for change in travel management is summarized below (also refer to the Recreation section of this document for additional information on these roads):

FSR70471 (West Side Currant Creek Road) – The West Side Currant Creek Road is a Forest Service collector road located in Wasatch County on the Heber Ranger District. The Forest Road Management Objective (RMO) for the road is Service Level 3, Maintenance Level 3. The road is 9.1 miles in length (USFS 2002, page D-19 and E-18) though this includes sections above and below that being considered in this analysis for a change in travel management. The road is aggregate surfaced (USFS 2002, page D-19), and has one area that experiences frequent upslope and fill mass movement events (slumps onto the road, or road fill slumps). (Campbell, 2007)

FSR70736 (Currant Creek Bay Fishing Access Road) – This is a Forest Service local road located in Wasatch County on the Heber Ranger District. This road runs from the West Side Currant Creek Road and provides access to Currant Creek Reservoir. The RMO for the road is Service Level 2 Maintenance Level 2. The road is about 0.6 miles in length. The road is an aggregate surfaced. (USFS 2002, pages A-27 and E-11)

FSR70046 (Circle-Main Canyon Road) – The Circle-Main Canyon Road is a Forest Service collector road located in Wasatch County on the Heber Ranger District. The Forest RMO for most of the road considered in this analysis (5.6 of the 6.3 miles) is Service Level 3, Maintenance Level 3. The road is about 11 miles in length (USFS 2002, page D-8 and E-8) though this includes sections outside that being considered in this analysis for a change in travel management. The road is aggregate surfaced. (USFS 2002, pages A-12 and E-8)

FSR70134 (Clyde Creek Road) – The Clyde Creek Road is a Forest Service local road located in Wasatch County on the Heber Ranger District. The Forest RMO for the road is Service Level 2 Maintenance Level 2. The road is about 3.5 miles in length. The road is an improved native surfaced. (USFS 2002, pages A-15 and E-11)

FSR70150 (Mud Creek Road) – The Mud Creek Road is a Forest Service local road located in Wasatch County on the Heber Ranger District. The Forest RMO for the road is Service Level 2 Maintenance Level 2. The road is about 4.5 miles in length. The road is native surfaced. (USFS 2002, pages A-16 and E-12)

FSR70085 (American Fork-Snake Creek Road) – The American Fork – Snake Creek Road is a Forest Service collector road located in Utah County on the Pleasant Grove Ranger District. The Forest RMO for the road is Service Level 2 Maintenance Level 2. The road is about 14 miles in length. The road is a native surfaced. (USFS 2002, page A-14 and E-10)

FSR70010 (Granite Flat Campground Road) – The Granite Flat Campground Road is a Forest Service local road located in Utah County on the Pleasant Grove Ranger District. The Forest RMO is Service Level 4 Maintenance Level 4. The road is about 1 mile in length. The road is asphalt surfaced. (USFS 2002, page A-11 and E-7)

FSR70008 (Silver Lake Flat Road) – The Silver Lake Flat Road is a Forest Service local road located in Utah County on the Pleasant Grove Ranger District. The Forest RMO for the road is Service Level 3 Maintenance Level 3. The road is about 2 miles in length. The road is aggregate surfaced. (USFS 2002, page A-11 and E-7)

FSR70317 (Cummings Parkway Road) – The Cummings Parkway Road is located in Wasatch County on the Pleasant Grove Ranger District. The northern-most 0.5 miles of this road are on National Forest System lands. This segment of the Cummings Parkway Road is a Forest Service collector road. The Forest RMO is Service Level 2 Maintenance Level 2. The road is native surfaced. (USFS 2002, page A-19 and E-15) The road continues into Wasatch Mountain State Park and eventually connects with the Cascade Scenic Loop near Cascade Springs.

FSR70131 (West Side Strawberry Road) – The West Side Strawberry Road is a Forest Service arterial road located in Wasatch County on the Heber and Spanish Fork Ranger Districts. FSR70131 is about 36 miles in length. The segment of FSR70131 identified in the Proposed Action to be seasonally closed is about 2.1 miles long and is located in Left Fork White River drainage on the Spanish Fork Ranger District. The Forest RMO is Service Level 3 Maintenance Level 3. This segment of road is native surfaced. (USFS 2002, page A-15 and E-11)

FSR70042 (Unicorn Ridge – Indian Creek Road) – The Unicorn Ridge-Indian Creek Road is a Forest Service arterial road located in Utah County on the Spanish Fork Ranger District. FSR70042 is about 12.5 miles in length, but the section identified in the Proposed Action to be seasonally closed is about 4.6 miles long. The Forest RMO is Service Level 4 Maintenance Level 4. The road is aggregate surfaced. (USFS 2002, page A-12 and E-8)

2. **Environmental Consequences:** Impacts to these roads can occur due to spinning, churning tires and snow-plowing. Snow plowing is not proposed for change in this environmental analysis and effects of plowing snow are not evaluated. Discussion of impacts to the roads is confined to the effects of actions considered in this environmental analysis – i.e., winter over-snow vehicle travel management. The effects of spring, summer and fall non-over-snow vehicle use are not considered as these are constant across all alternatives.

- a. **No Action Alternative** – There would be no change in impacts to roads from over-snow use from that currently experienced. In general, over-snow use has little or no impact on roads. The exception is during shoulder seasons and periods of low snowfall when vehicle tires spinning on ice and snow, or churning thru snow impact the road surface. This is most noticeable when snow conditions are soft and on native-surfaced roads.

Asphalt-Surfaced Roads: The hardened surface protects the road and no impacts from winter vehicle use (assuming no plowing) occur.

- ◆ FSR70010 (Granite Flat Campground Road).

Aggregate-Surfaced Roads: Other than for snow plowing, the hardened road surface generally helps protect these roads from over-snow wheeled vehicle damage and impacts of this use are generally minor and localized.

- ◆ FSR 70471 (West Side Currant Creek Road) and FSR70736 (Currant Creek Bay Fishing Access Road) – Minimal impact. Snow depths usually preclude wheeled vehicle use other than ATVs, and ATV use is not authorized.
- ◆ FSR70046 (Circle-Main Creek Canyon Road) – Minor impacts. Access onto the road is limited during the winter due to snow depths and lack of a plowed turnoff from U.S. Highway 40. Therefore over-snow wheeled vehicle use is light, except during the shoulder seasons and in years with low snowfall.

- ◆ FSR70008 (Silver Lake Flat Reservoir Road) – Minor impacts. The gate on FSR70085 limits access onto the road during the winter to ATVs and snowmobiles. Use is moderate and the road is steep in places, which results in some tire spinning and sliding during icy and spring road conditions.
- ◆ FSR70042 (Unicorn Ridge – Indian Creek Road) – Minor impacts. Access onto the road is limited during the winter due to snow depths. Use is relatively light during the winter, except in the shoulder seasons.

Native-Surfaced Roads: Depending on the amount and timing of use, and on the native material comprising the road surface, impacts to these roads can occur due to spinning tires. Snow cover generally helps protect the road surface, but spinning tires can churn through this and disturb and rut the underlying road surface. This is most prevalent in the shoulder seasons when snow depths are less, and temperatures are often higher (i.e., resulting in more moisture on the road surface and softer snow conditions).

- ◆ FSR70134 (Clyde Creek Road) - Minor impacts. Access onto the road is limited during the winter due to snow depths. Use is relatively light during the winter, except in the shoulder seasons. However, the road surface becomes soft and slick when wet and is easily rutted and damaged.
- ◆ FSR70150 (Mud Creek Road) – Same as Clyde Creek Road.
- ◆ FSR70085 (American Fork-Snake Creek Road) – Minimal impacts. The gate at Tibble Fork limits access onto the road during the winter to ATVs and snowmobiles. Use is moderate, but confined to ATVs and not heavier, potentially more impacting vehicles. Due to the underlying soil/geology, the road does not become extremely soft and slick when wet, and thus is relatively resistant to rutting and damage.
- ◆ FSR70317 (Cummings Parkway Road) - Minimal impacts. The gate at Tibble Fork limits access onto the road during the winter to ATVs and snowmobiles. Over-snow ATV use is light due to the distance from trailheads and snow depths. Due to the elevation snow depths are usually adequate to protect the road surface.
- ◆ FSR70131 (West Side Strawberry Road in Left Fork of White River drainage) - Minor impacts. Access onto the road is limited during the winter due to snow depths and lack of plowed parking area. Use is relatively light during the winter, except in the shoulder seasons. However, the road surface becomes very soft and slick when wet and is easily rutted and damaged.

- b. **Proposed Action** – Other than as described below, there would be no change in impacts to roads from over-snow use from that currently experienced. Overall, impacts to roads from winter motorized wheeled vehicle use would decline as fewer roads are open for this use.

Asphalt-Surfaced Roads: Same as described for the No Action Alternative.

Aggregate Surfaced Roads: General effects area as described for the No Action Alternative. Where winter wheeled vehicle use is restricted (FSR70046, FSR70008, FSR70042) under this alternative, no impacts to roads are anticipated. Impacts to FSR70471 and FSR70736 would increase, due to their being opened under this alternative to winter ATV use. However, overall the mileage of aggregate-surfaced road open to winter motorized wheeled vehicle use would decline and consequently, so would the amount of impact incurred.

Native-Surfaced Roads: General effects area as described for the No Action Alternative. Where winter wheeled vehicle use is restricted (FSR70134, FSR70150, FSR70085, FSR70317, and FSR70131) under this alternative, no impacts to roads are anticipated. Since the overall the mileage of native-surfaced road open to winter motorized wheeled vehicle use would decline, so would the amount of impact incurred.

- c. **Alternative Three** – Impacts on roads would be as described for the No Action Alternative.

C. SOIL AND WATER RESOURCES

1. **Affected Environment**: Soil and water resources on the Uinta National Forest are described in the Forest Plan FEIS. (USFS 2003a, pages 3-4 thru 3-9 and 3-39 thru 3-41 respectively) Water quality conditions on the Forest are also summarized in the Forest Plan FEIS (pages 3-41 thru 3-45), and in the 2005 State of the Forest Report (USFS 2006a, pages 44-53).
2. **Environmental Consequences**: Water resource/quality impacts by over-snow motorized vehicle use are primarily related to soil, ground cover, and stream course disturbance caused by the vehicle tires or treads. Soil quality impacts are also related to soil and ground cover disturbance, and/or soil compaction caused by vehicle tires. Oil and/or fuel leaking from snowmobiles and/or ATVs can and likely does occur during winter over-snow use, and this can also impact water quality. However, these incidents are relatively rare, isolated, and localized, and in fact no water quality pollution incidents have been identified on the Uinta National Forest attributable to this. Under all alternatives, over-snow ATV and snowmobile use only has very minor impacts on soil and water resources because existing Forest Plan direction mitigates most potential effects. Current management direction restricts over-snow ATV use to times when at least 12 inches of snow is present. Twelve inches of snow cover generally protects the soil resource, and thus water quality, from damage by ATVs. The exception is when spinning or skidding (i.e., vehicles turning or stopping) tires penetrate the protective snow cover and disturb the soil and/or protective ground cover. This generally occurs during the shoulder seasons (spring/fall) when snow depths are low and temperatures may create soft snow conditions. This could also occur at lower elevations throughout the winter, except that existing Forest Plan direction already restricts ATV use to designated routes in areas where mid-winter snow depths are likely to be light and/or mid-winter snow melt is likely.

- a. **No Action Alternative** – As noted above, continued management of over-snow ATV and snowmobile use under current Forest Plan direction would result in minimal impacts to water resources. Although summer, late spring and fall rutting, road bed disturbance and consequential water quality impacts are issues with some of the roads, only minor rutting and disturbance of road surfaces during the winter (December 1st thru March 31st) would occur under this alternative. (See the Roads section of this document) This would be confined to facilities generally designed to accommodate some runoff and surface disturbance (i.e., from periodic summer maintenance, vehicle ruts/tracks made following summer rainstorms, etc), and the amount of this from winter vehicle use is limited. Consequently, minimal impacts on water quality are anticipated.
- b. **Proposed Action** – Although opportunities for over-snow ATV use would be reduced under this alternative, this would have negligible impacts on water resources because current management direction (as described previously) already mostly mitigates potential impacts of over-snow ATV use on water resources. For the same reason, there would be little or no impact on water resources due to restricting snowmobile use in the Chicken Springs area and designating a segment of FS0471 open for winter ATV use. Restricting wheeled motorized vehicle use on the routes identified would reduce sediment production from these roads. The amount of winter over-snow rutting/road surface impacts that would be eliminated are already minor, and as noted in the No Action Alternative discussion above, little of this winter season road generated sediment would find its way to water bodies and impair water quality. Consequently, little or no effects on water quality would result.
- c. **Alternative Three** - Although opportunities for over-snow ATV use would be reduced under this alternative, this would have negligible impacts on water resources because current management direction (as described previously) already mostly mitigates potential impacts of over-snow ATV use on water resources. Impacts from road-based winter motorized wheeled vehicle use on water quality would be as described for the No Action Alternative.

D. HERITAGE RESOURCES

1. **Affected Environment**: Heritage resources on the Uinta National Forest are briefly summarized in the Forest Plan FEIS. (USFS 2003a, page 3-421)
2. **Environmental Consequences**: Although no incidents of impacts to heritage resources due to over-snow motorized vehicle use have been documented on the Uinta National Forest, direct and indirect impacts are possible. Direct impacts of from over-snow motorized vehicle use could occur from vehicle disturbance of artifacts located in or on the soil, and damage to archaeological sites by over-snow vehicles running over or into snow covered or standing cultural artifacts or structures (e.g., cabin remains). Any direct impacts would be restricted to cross-country travel (i.e., off designated routes), as no heritage resources occur directly on the designated travel routes under analysis in this document. As described in the Soil/Water Resources section of this

document, soil disturbance from over-snow motorized use is expected to be very limited and localized. Furthermore, the likelihood of any disturbance occurring where a heritage resource is located is extremely unlikely. Therefore, no direct impacts to heritage resources from any of the alternatives are anticipated.

Over-snow motorized use could indirectly affect heritage resources through motorized user impacts such as recreationist use of wooden structures for firewood, and/or illegally collecting, defacing, or destroying artifacts. It is likely that in the past a few artifacts have been collected, defaced, and/or destroyed by winter motorized recreation users; however, these indirect impacts are likely extremely limited due to the presence of the protective blanket of snow.

No known traditional American Indian activities occur on the Forest using over-snow vehicles. The primary known traditional activity is plant gathering, and this occurs during the plants growing seasons. Some plants (such as willow) might be gathered with some snow on the ground, but such plants are not exclusively available along the travel routes described in this analysis. Other potential traditional use materials (such as minerals) are not likely to be collected during the winter months. Snowmobiles can provide access for any current or future wintertime ceremonial activities in the areas affected by this analysis.

- a. **No Action Alternative** – As noted above, although over-snow motorized vehicle use potentially could impact heritage resources, no impacts from this have been documented. Continued management of over-snow vehicle use under current Forest Plan direction would result in little or no impacts to heritage resources.
- b. **Proposed Action** – Although opportunities for over-snow ATV use would be reduced under this alternative, this would have negligible impacts on heritage resources. The segment of FS0471 that would be designated open to over-snow ATV use was inventoried for cultural resources when it was constructed, and no sites of any kind occur under or adjacent to that road. The trail segments identified for closure are designated ATV routes and groomed snowmobile trails, and as such receive heavy motorized recreation use and any heritage resources along these routes have long since been impacted. Closure of the Chicken Springs area would protect any cultural resources in this area from direct and indirect impacts from motorized recreation. In general, impacts to cultural resources from this alternative would be similar to those described for the No Action Alternative. However, the use of over-snow ATV use on frozen reservoirs is an activity that does not have the potential to affect cultural resources under 36 CFR Part 800.3.a.1.
- c. **Alternative Three** - Although opportunities for over-snow ATV use would be restricted to designated routes under this alternative, this would have little or no impact on heritage resources because: cross-country over-snow ATV use is very light and generally limited in aerial extent to more gentle terrain near roads and trails; there are no heritage resources on designated routes; heritage resources near designated routes have already been impacted by snowmobile or summer recreation users; and/or heritage resources in the winter are protected by snow.

E. VEGETATION, INCLUDING SENSITIVE SPECIES AND INVASIVE PLANTS

1. **Affected Environment:** Vegetation on the Uinta National Forest is described in the Forest Plan FEIS. (USFS 2003a, pages 3-128 thru 3-138, and 3-161 thru 3-176) The actions considered in this environmental assessment would be confined to the portion of the Forest open for motorized vehicle use and outside of big game winter range. (See the following table)

Vegetation Group/Travel Management Group	Closed to Motorized Use	Winter Range (No Over-snow Cross-Country Motorized Use – Designated Routes Only)	Open to Over-snow Cross-Country Motorized Use	Vegetation Group Total
Aspen	37,126	1,697	208,716	247,539
Conifer	29,566	19,083	94,834	143,483
Grass/Forb	9,246	1,621	23,339	34,206
Lake	28	0	16,969	16,997
Rock/Barren	15,504	831	3,431	19,767
Mountain Brush	82,667	22,252	138,963	243,882
Riparian Shrub	94	187	3,938	4,219
Riparian Forest	590	547	3,394	4,530
Sage	5,941	9,554	166,397	181,892
Other	43	383	459	875
Area Total	180,805	56,155	660,440	897,400

One threatened plant species, Ute ladies'-tresses (*Spiranthes diluvialis*), is found in one area (Diamond Fork drainage) of riparian meadows on Uinta National Forest. (USFS 2003b, pages 3-292 and E-11) The endangered clay phacelia (*Phacelia argillacea*) is found close to the Forest boundary in Spanish Fork Canyon, and suitable habitat comprised of steep shale slopes occurs on the Forest. However, this species has not been found growing on the Forest. (USFS 2003b, pages 3-292, and E-8 thru E-9) Another listed plant species, the Desert milkvetch (*Astragalus deserticus*), is known from a single location approximately two miles outside the Forest boundary but habitat for this species is not believed to occur on the Forest. (USFS 2003b, pages 3-292, and E-16) Additional information on these species is also found in the Biological Evaluation and Assessment for this environmental analysis. Five Forest Service listed Sensitive (S) plant species occur on the Forest. The Sensitive Garrett's bladderpod (*Lesquerella garrettii*) and rockcress draba (*Draba globosa*) generally occur at high elevations in the Wasatch Range, often in wilderness areas. The Wasatch jamesia (*Jamesia americana* var. *macrocalyx*) occurs over a wide elevation range in cliff and talus habitats along the Wasatch Range. Barneby woody aster (*Aster kingii* var. *barnebyana*) occurs in alpine areas on the Forest. The dainty moonwort (*Botrychium crenulatum*) is only known to occur in a

subalpine bog meadow on the Heber Ranger District. (USFS 2003b, page 3-292) Additional information on these TES species is in the Biological Evaluation and Assessment for this environmental analysis. (VanKeuren, 2007) Slender Moonwort (*Botrychium lineare*), also a candidate species, has been documented in Wasatch and Duchesne County, but not on the Uinta National Forest. This species occurs in a variety of habitats at higher elevations (about 4500-9000 ft). (VanKeuren 2007, page 4)

2. **Environmental Consequences:** None of the alternatives considered would affect threatened or endangered plant species. Ute ladies'-tresses would not be affected because protective snow cover is usually present and if not the orchids are dormant one to several inches underground with the winter soil above them usually frozen hard enough to prevent disturbance even if the snow pack was less than 12 inches. (VanKeuren 2007, page 5) In addition part of the area these species inhabits lies on winter range where cross-country snowmobile and ATV travel are not permitted. Desert milkvetch and clay phacelia would not be affected because no proposed activities would take place in the suitable habitat for either of these species. (VanKeuren 2007, page 4)

Implementation of any alternative will have no impact on Barneby woody aster, Garrett bladderpod, and Wasatch jamesia, because no habitat for these species occurs in the area affected by any of the actions considered. None of the alternatives would impact dainty moonwort or slender moonwort because the plants and their habitat are protected by frozen soil and protective snow cover. (VanKeuren 2007, page 7)

Rockcress draba inhabits alpine meadows, spruce-fir krummholz, alpine talus, and moist alpine soils. Although draba in these areas are generally protected by snow cover, draba also inhabits alpine tundra occurring on ridge tops. These ridge tops are sometimes windswept and blown clean of protective snow cover. Plants in these areas are susceptible to damage by vehicles otherwise operating over snow. ATVs and snowmobiles can physically operate in areas with no snow, at least for short distances, so cross country over-snow travel can still disturb drabas and their habitat, particularly early or late in the season when snow levels are lowest. Direct effects would be physical damage to draba plants. Indirect effects would be damage to suitable habitat such as yearly soil disturbance or gullying. The proposal would likely act to reduce current levels of such direct and indirect effects, by eliminating authorization for cross country travel by any vehicle other than a snowmobile. Cumulatively, the very high elevations and often very steep terrain drabas inhabit receive relatively low human impact. (VanKeuren 2007, page 6)

Over-snow motorized recreation use on roads has no affect on vegetation as there is no vegetation on these to disturb. All but 26 miles of groomed snowmobile trails on the Forest are located on roads. Over-snow motorized vehicle use on these 26 miles of groomed trail has little or no affect on vegetation because before the trails are groomed sufficient snow depths are ensured, and the trails generally avoid areas with brush that would extend thru the snow and potentially be damaged by vehicles. Cross-country motorized vehicle use has potential to trample and break vegetation in exposed areas, and vegetation extending through the snow. Most cross-country

motorized vehicle use is concentrated in areas with low (e.g., grass-forb and sagebrush communities) or no vegetation (e.g., lakes, roads, barren areas). Snowmobiles generally have higher floatation than ATVs and therefore, do not need as much protective cover over the tops of vegetation to avoid impacting them. With the snow depths normal to most areas of the Forest open to cross-country snowmobile use, vegetation damage by this use is usually very localized and minor. The following table (derived from UNF GIS) shows the approximate acreage by vegetation susceptibility by travel management group on the Forest:

Vegetation Group/Travel Management Group	Closed to Motorized Use	Winter Range (No Over-snow Cross-Country Use)	Open to Over-snow Cross-Country Use	Vegetation Group Total
Large Less Susceptible Vegetation ^{1/}	149,949	43,579	445,907	639,434
Small Less Susceptible Vegetation ^{2/}	9,246	1,621	23,339	34,206
Susceptible Vegetation ^{3/}	5,941	9,554	166,397	181,892
Little or No Vegetation ^{4/}	15,669	1,401	24,797	41,867
Area Total	180,805	56,155	660,440	897,400

** NOTE: Data presented in this table does not account for spatial distribution other than travel management group, and does not account for slope and other factors that affect actual accessibility.

^{1/} Includes conifer, aspen, mountain brush, and riparian forest vegetation cover types.

^{2/} Includes grass and grass-forb vegetation cover types.

^{3/} Includes riparian shrub and sagebrush vegetation cover types.

^{4/} Includes barren, rock, scree, feldfield, and lake cover types.

- a. **No Action Alternative** – About 660,440 acres of the Forest is open for cross-country over-snow motorized vehicle use. Cross-country snowmobile use would result in localized trampling and breakage of exposed vegetation. (see discussion in the preceding paragraph) About 166,400 acres (see table above) are occupied with vegetation types more susceptible to minor localized damage from over-snow cross-country snowmobile and ATV use. Cross-country ATV use is much more limited by terrain and snow conditions than snowmobile use; and consequently is less intensive. Impacts to vegetation from cross-country ATV use would be similar to that described for snowmobiles in the preceding paragraph, but likely even more localized (i.e., limited to individual plants or small groups of plants) and limited. Overall impacts of cross-country over-snow ATV and snowmobile use minor.

This alternative would not affect threatened or endangered species. (VanKeuren 2007) This alternative would not affect the Sensitive Garrett’s bladderpod, rockcress draba, Wasatch jamesia, Barneby woody aster, or dainty moonwort. Cross-country snowmobile or ATV users could potentially affect individual rockcress draba plants inhabiting exposed ridge tops. This would affect

individual plants, but would not affect the viability of this species. (VanKeuren 2007, page 6)

- b. Proposed Action** – Under this alternative over-snow cross-country ATV use would be prohibited except at Currant Creek Reservoir, Vernon Reservoir, and the portion of Strawberry Reservoir excluding the Chicken Springs area. Snowmobile use would also be prohibited in the Chicken Springs area. These changes would slightly reduce impacts of cross-country over-snow motorized vehicle use on vegetation.

TABLE E3: Acres (from UNF GIS) by Vegetation Susceptibility and Winter Travel Management Group Under the Proposed Action**

Vegetation Group/Travel Management Group	Closed to Motorized Use	Winter Range (No Over-snow Cross-Country Use)	Open to Over-snow Cross-Country Snowmobile Use	Open to Over-Snow Cross-Country ATV Use
Large Less Susceptible Vegetation ^{1/}	149,949	43,579	445,907	5
Small Less Susceptible Vegetation ^{2/}	9,255	1,621	23,330	19
Susceptible Vegetation ^{3/}	6,353	9,554	165,985	144
Little or No Vegetation ^{4/}	16,265	1,401	24,202	16,482
Area Total	181,822	56,155	659,423	16,649

** NOTE: Data presented in this table does not account for spatial distribution other than travel management group, and does not account for slope and other factors that affect actual accessibility.

^{1/} Includes conifer, aspen, mountain brush, and riparian forest vegetation cover types.

^{2/} Includes grass and grass-forb vegetation cover types.

^{3/} Includes riparian shrub and sagebrush vegetation cover types.

^{4/} Includes barren, rock, scree, feldfield, and lake cover types.

About 659,420 acres would be open for cross-country over-snow snowmobile use. About 165,990 acres (see table above) are occupied with vegetation types more susceptible to minor localized damage from over-snow cross-country snowmobile use. The effects of this would be similar to as described for the No Action Alternative.

About 16,650 acres would be open for cross-country over-snow ATV use. About 140 acres (see table above) of this are occupied with vegetation types more susceptible to minor localized damage from over-snow cross-country ATV use. Cross-country ATV use is much more limited by terrain and snow conditions than snowmobile use; and consequently is less intensive. Impacts to vegetation from cross-country ATV use would be similar to that previously described for snowmobiles, but likely even more localized (i.e., limited to individual plants or small groups of plants) and limited. Overall impacts of cross-country over-snow ATV and snowmobile use minor.

Vegetation Group/ Area	Chicken Springs Area at Strawberry Reservoir	Currant Creek Reservoir	Strawberry Reservoir (minus Chicken Springs)	Vernon Reservoir	Vegetation Group Total
Aspen	0	0	4	0	4
Grass	9	0	19	0	28
Conifer	0	0	0	0	0
Sage	412	51	76	1	539
Riparian	0	16	0	0	17
Lake	595	230	15,806	37	16,669
Other	0	0	408	0	408
Area Total	1,017	298	16,313	38	17,666

The proposed action would lessen the number of over-snow vehicles that can access suitable draba habitat. Snowmobiles can physically operate in areas with no snow, at least for short distances, so cross country over-snow travel can still disturb drabas and their habitat, particularly early or late in the season when snow levels are lowest. This Alternative would reduce the potential of direct and indirect effects to rockcross draba. Overall, implementation of this alternative may impact individuals but is unlikely to cause a trend to federal listing or a loss of viability for the species.

- c. **Alternative Three** – Implementation of this alternative would result in impacts on vegetation similar to that described for the Proposed Action, except that an additional 420 acres of vegetation at Strawberry Reservoir would be susceptible to damage from cross-country snowmobile use (see Table E4), and all cross-country ATV impacts would be eliminated. Impacts on TES species would be as described for the Proposed Action.

F. AQUATIC FAUNA RESOURCES

1. **Affected Environment** - Aquatic fauna on the Uinta National Forest are described in the Forest Plan FEIS. (USFS 2003a, pages 3-214 thru 3-224) No threatened or endangered (TE) aquatic fauna are found on Uinta National Forest, though several listed fish species are found downstream of the Forest. (USFS 2003b, pages E-18 thru E-20) Since affects on water resources from any of the alternatives will be little to none, no downstream effects on these species will occur and they will not be further

discussed in this assessment. Additional information on these species is found in the Biological Evaluation and Assessment for this environmental analysis. (Smith, 2007)

Forest Service listed Sensitive (S) fish species on the Forest include Bonneville cutthroat trout, Colorado River cutthroat trout, and Columbia spotted frog.

Information on the habitats and populations of these species is found in the previously referenced section of the Forest Plan FEIS, and in the Viability Assessment (USFS 2003b, pages F-15 thru F-56) and Biological Evaluation and Biological Assessment for the Forest Plan (USFS 2003b, pages E-79 thru E-81 and E-83 thru E-85), *Capability And Suitability Analysis, Management Indicator Species – Bonneville Cutthroat Trout, Uinta National Forest* (USFS 2006b), *Capability And Suitability Analysis, Management Indicator Species – Colorado River Cutthroat Trout, Uinta National Forest* (USFS 2006c), and *2005 State of the Forest Report, Uinta National Forest* (USFS 2006a, pages 7-17). Additional more detailed information on aquatic resources in specific areas is in: *Fisheries and Aquatic Resources of the North Fork American Fork River* (Smith 2005b), *Fisheries and Aquatic Resources of Jones Cabin Creek Utah* (Smith 2006f), *Fisheries and Aquatic Resources of Left Fork Currant Creek Utah* (Smith 2006g), *Fisheries and Aquatic Resources of Low Pass Creek Utah* (Smith 2006h); *Fisheries and Aquatic Resources of Pass Creek Utah* (Smith 2006i); *Fisheries and Aquatic Resources of Racetrack Creek Utah* (Smith 2006j); *Fisheries and Aquatic Resources of Right Fork Currant Creek Utah* (Smith 2006k); *Fisheries and Aquatic Resources of South Fork Currant Creek Utah* (Smith 2006l); *Fisheries and Aquatic Resources of Tut Creek Utah* (Smith 2006m); *Fisheries and Aquatic Resources of the Main Canyon Creek Drainage, Utah* (Smith 2005e); and *Fisheries and Aquatic Resources of Daniels Creek, Utah* (Smith 2007b); *Fisheries and Aquatic Resources of Bryants Fork, Utah* (Smith 2005a); *Fisheries and Aquatic Resources of the Clyde Creek Drainage, Utah* (Smith 2005g); *Fisheries and Aquatic Resources of the Little hobble Creek Drainage, Utah* (Smith 2005h); *Fisheries and Aquatic Resources of Tie Fork, Utah* (Smith 2007d); and *Fisheries and Aquatic Resources of Soldier Creek, Utah* (Smith 2007e); and *Fisheries and Aquatic Resources of Little Valley Creek, Utah* (Smith 2007f).

The Forest Plan identified two aquatic Management Indicator Species: Bonneville (BCT) and Colorado River cutthroat trout (CRCT). These are identified as MIS species in drainages they inhabit and where they were native. BCT now inhabit Strawberry Reservoir and its tributaries, an area where CRCT were native. (Smith 2005d, 2007a) Non-native German brown trout and rainbow trout inhabit Vernon Reservoir. (Smith 2005d, 2007f) Though CRCT inhabit many of the tributaries draining into Currant Creek Reservoir, rainbow and non-native Bonneville cutthroat trout inhabit the Reservoir. (Smith 2005d, 2007g)

2. **Environmental Consequences:** The actions and direct and indirect affects of the actions contemplated in this environmental analysis would occur over snow or ice. With the presence of protective ice and snow cover, minimal ground or water course disturbance would occur and no measurable direct or indirect impacts to aquatic habitats would result from implementation of any of the alternatives. (Also see discussion in the Soil/Water Resources section of this document) The actions considered in this environmental analysis would affect access for ice anglers to the

reservoirs. Winter (December 1st thru March 31st) fishing in streams is generally confined to larger rivers/streams located at lower elevations (e.g., Lower Provo River, Diamond Fork Creek). Winter stream fishing use is extremely limited in the portion of the Forest where actions considered in this environmental analysis may occur, and access to these streams would still be available to snowmobile users under all alternatives. Therefore, no impacts on stream/river fisheries would result from implementation of any of the alternatives. Since there would be no impact on stream/river fisheries, and since Currant Creek, Strawberry and Vernon Reservoirs do not contain MIS populations, none of the alternatives would have any affect on TES (Smith 2007) or MIS habitat suitability or populations.

- a. **No Action Alternative** – Impacts would be generally as described above. Minor motorized wheeled vehicle impacts to some roads would occur under this alternative. (See the Roads section of this document), but this would have little impact on water quality and fisheries habitat. (See the Soil/Water section of this document) Minor impacts to upland and riparian vegetation from cross-country over-snow snowmobile and ATV use would also occur under this alternative. These impacts would generally be localized, and/or confined to the upper branches of these plants and would not result in measurable impacts to aquatic habitats. (See the Vegetation section of this document). Minimal (likely undetectable through population monitoring) indirect impacts on fish populations may occur due to anglers obtaining access to reservoirs via over-snow motorized vehicles. Use is light to very light relative to summer use, and has negligible impacts on fish populations.
- b. **Proposed Action** – See discussion of general impacts above. This alternative would not differ from the No Action Alternative in potential impacts to the fisheries in the Strawberry Reservoir watershed. Closure of the Chicken Springs area to over-snow motorized vehicle access will theoretically reduce fishing opportunity; however, this portion of Strawberry Reservoir receives only limited amounts of fishing use and there remains vast areas (about 15,800 acres or about 95 percent) of the Reservoir still open for angler use. Some anglers may be displaced, but little or no decline in fishing use is anticipated. No impacts on fish habitat or population in Strawberry Reservoir would occur.

Currently, anglers access Currant Creek Reservoir from vehicles parked near the dam and/or by snowmobiles accessing Currant Creek Reservoir from FS0471. Designation of FS0471 and FSR70736 as open for ATV use during the winter would likely result in a very little if any increase in fishing on Currant Creek Reservoir. This access may allow anglers to more readily access portions of the reservoir more remote from the dam, and as such, may attract a few more anglers. Given the population size in Currant Creek Reservoir, any increase in ice fishing use and take his will have a negligible and undetectable impact on fish populations in this Reservoir.

No impacts to the Vernon Reservoir fishery would occur. Angler access would remain unchanged and no impacts on fisheries there would result.

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- c. **Alternative Three** - See discussion of general impacts above. Closure of the Forest to cross-country over-snow ATV use would have negligible impacts on fish populations and fish habitats, but would likely result in a noticeable impact on ice-fishing use, primarily at Strawberry Reservoir due to the long hikes from other access that ATV-based anglers would be left with. This reduction is important in terms of recreation impact; but would have negligible impacts on fish populations. Vernon Reservoir and portions of Currant Creek Reservoir could still be reasonably accessed by anglers using motorized wheeled vehicles.

G. WILDLIFE RESOURCES

1. **Affected Environment:** Terrestrial wildlife on the Uinta National Forest is described in the Forest Plan FEIS. (USFS 2003a, pages 3-242 thru 3-259) The U.S. Fish and Wildlife Service have determined that the following wildlife species classified under the Endangered Species Act potentially occur in within the UNF: western yellow-billed cuckoo (Candidate), and Canada lynx (Threatened). Bald eagle is also a protected species found on the Forest. Information on the status of these species on the Uinta National Forest is Forest Plan FEIS (USDA Forest Service 2003b: pages 3-291 thru 3-293, and F-67 to F-86), and the Biological Assessment for this environmental analysis (Bornstein, 2007).

The bald eagle is primarily a winter resident in Utah. In Utah, bald eagles often congregate near unfrozen, open water and in desert valleys. On the Forest, wintering bald eagles are known to occur in American Fork Canyon, Provo Canyon, Diamond Fork Canyon, Salt Creek, and the Vernon Management Area. (USFS 2003b, page E-22)

The western yellow-billed cuckoo in Utah is primarily found in dense riparian forest habitat below about 5,500 feet elevation (Parrish et al. 2002: page 183). Cuckoos historically inhabited areas around American Fork, Lehi, and Provo, and more recently have been captured along the Provo River below Jordanelle Reservoir (UDNR 2002). (USFS 2003b, pages E-25 thru E-26)

The western yellow-billed cuckoo in Utah is primarily found in dense riparian forest habitat below about 5,500 feet elevation (Parrish et al. 2002: page 183). Cuckoos historically inhabited areas around American Fork, Lehi, and Provo, and more recently have been captured along the Provo River below Jordanelle Reservoir. (UDNR 2007) (USFS 2003b, pages E-25 thru E-26) Yellow-billed cuckoos are one of the latest migrants to arrive and breed in Utah. They arrive in extremely late May or early June and breed in late June through July. Cuckoos typically start their southerly migration by late August or early September. (UDNR 2007)

Canada lynx inhabit high-elevation conifer forests in the Rocky Mountain region. There are currently no known breeding populations of Canada lynx in Utah, although historically they inhabited the Uinta Mountains. Lynx that were transplanted to Colorado have been found in Utah in recent years, and at least two of these individuals crossed the Uinta National Forest in 2004. The Uinta National Forest has two Lynx Analysis Units (LAUs). Areas outside of Lynx Analysis Units in Utah and Wasatch Counties that contain potential lynx habitat are considered lynx travel corridors.

Forest Service sensitive species evaluated in this document are those listed for the Uinta National Forest in *Intermountain Region Proposed, Endangered, Threatened, and Sensitive Species* (USDA Forest Service 2003a). These species are the northern goshawk, American three-toed woodpecker, greater sage-grouse, peregrine falcon, flammulated owl, spotted bat, Townsend's big-eared bat, and fisher. Information on the status of these species on the Uinta National Forest is found in the Forest Plan FEIS. (USFS 2003b, pages F-67 to F-86)

The northern goshawk (*Accipiter gentilis*) is MIS species for the Uinta National Forest (USFS 2003a, page B-1), as well as a Sensitive species. Northern goshawks primarily occur in conifer, aspen, and mixed aspen/conifer on the Forest. They prey on a wide variety of birds and small mammals in and adjacent to forests. More information on goshawks on the Forest can be found in the Forest Plan FEIS (USFS 2003b, pages E-74 and F-77 to F-78), *Capability and Suitability Analysis- Management Indicator Species - Northern Goshawk* (USFS 2007a), and *Goshawk Monitoring Report, Uinta National Forest* (USFS 2006e).

The American three-toed woodpecker (*Picoides dorsalis*) is MIS species for the Uinta National Forest (USFS 2003a, page B-1), as well as a Sensitive species. Three-toed woodpeckers occur in conifer forest types. Surveys indicate that three-toed woodpeckers are currently relatively common in mature to old conifer forest stands on the Forest, especially in areas with beetle activity. Information on the status of this MIS species is found in the Forest Plan FEIS (2003b: pages E77 thru E-79, and F-80 thru F-81), *Capability and Suitability Analysis- Management Indicator Species – American Three-Toed Woodpecker* (USFS 2007b), and *Three-Toed Woodpecker Monitoring Report, 2006, Uinta National Forest* (USFS 2007c).

Sage-grouse occur at Vernon and in the Strawberry Reservoir areas in sagebrush habitats. The Strawberry sage-grouse population has declined from approximately 3,700 birds in the late 1930s to approximately 450-500 birds currently. Birds from this population typically stay in Strawberry Valley during early winter until snow levels get too deep for the birds to effectively forage. These birds then usually migrate to lower elevations off the Forest in the Currant Creek and Red Creek drainages to the east. The primary lek for this population is located in the Chicken Springs area. A total of 40,193 acres of mapped sage-grouse range occurs within the Strawberry Reservoir Management Area. (USFS 2006e)

The peregrine falcon (*Falco peregrinus*) was removed from the Endangered Species List in 1999. Peregrine falcons nest on cliffs and other protected sites near large concentrations of avian prey, typically below 6,000 feet elevation. (Bornstein 2007; USDA Forest Service 2003b, page F-78) Neither concentrations of prey nor cliff nesting habitat occurs in the project area, and there are no known records of peregrine falcons in or near the project area.

Information on flammulated owls on the Uinta National Forest can be found in the Forest Plan FEIS. (USDA 2003b, pages F-74 thru F-75) The flammulated owl is a neo-tropical migrant that primarily preys on flying insects. Nesting habitat in Utah is primarily mature and old growth ponderosa pine and Douglas-fir. Flammulated owls select open forest structure for foraging (McCallum 1994:p. 40). Little is known

about the distribution and abundance of flammulated owls on the Forest, but it has been detected in forest stands on the Forest.

Information on the spotted and Townsend's big-eared bats on the Forest can be found in the Forest Plan FEIS (USDA 2003b, pages F-84 thru F-85). These species feed on flying insects, often above streams, ponds, wet meadows, and other riparian habitats. The spotted bat typically roosts in rock crevices or under loose rocks or boulders. It occupies a wide variety of habitats from low-elevation deserts to ponderosa pine forests. The spotted bat hibernates in caves, and in southwestern Utah is known to be active during the winter. (Oliver 2000, page 91) Townsend's big-eared bats in Utah are typically found below about 9,000 feet elevation. They roost in rock crevices, tree hollows, buildings and other man-made structures, caves, and mines. Townsend's big-eared bat is well known as a hibernator in Utah, utilizing caves and mines as hibernacula. (Oliver 2000, page 98) Distribution of these and other bat species on the Uinta National Forest is poorly understood.

Information on fishers on the Uinta National Forest can be found in the Forest Plan FEIS (USFS 2003b, page F-84). Fishers are generalized predators that occur in landscapes dominated by mature forests throughout their range. Although the project area contains potential fisher habitat, the fisher is thought to be extirpated from the State (<http://www.wildlife.utah.gov/pdf/utsoclist.pdf>; NatureServe 2006a).

A wide variety of bird species occurs within the project area because of the wide variety forested and non-forested habitats present. Utah Partners in Flight Priority species that are known to occur or potentially occur within the project area are greater sage-grouse (discussed above), American three-toed woodpecker (discussed above), Brewer's sparrow, and broad-tailed hummingbird (Parrish et al. 2002:page 52). Brewer's sparrows occur in sagebrush habitats, and broad-tailed hummingbirds occur in a wider variety of habitats but are commonly found in riparian habitats. Brewer's sparrows and broad-tailed hummingbirds are regularly detected on the 3 Breeding Bird Survey routes located on the Forest. Brewer's sparrows and broad-tailed hummingbirds are migratory birds not present in the project area during the winter.

The American beaver (*Castor canadensis*) is MIS species for the Uinta National Forest (USFS 2003a, page B-1). Beavers are widely distributed across the Uinta National Forest in riparian habitats where there is sufficient stream flow and adequate food resources. It is found in perennial slow-moving streams, ponds, small lakes, and reservoirs, and uses a variety of riparian habitats. (USFS 2003b, page B-40; NatureServe 2006) On the Uinta National Forest, beavers primarily feed on riparian and aquatic herbaceous vegetation and deciduous woody plants. More detailed information on American beavers is found in the Forest Plan FEIS (USDA 2003b, pages B-40 thru B-41, and F-77 thru F-78), *Capability and Suitability Analysis - Management Indicator Species – American Beaver* (USFS 2007d), and *Beaver Monitoring Report, 2006, Uinta National Forest* (USFS 2007e).

Big game hunting is a significant recreational activity on the Uinta National Forest. Elk, mule deer, bighorn sheep, Rocky Mountain goat, and moose occur within the project area. Because of its high elevation, the analysis area provides only summer range and no winter range.

2. **Environmental Consequences:** Implementation of any of the three alternatives will have little or no affect on many species/species groups of wildlife. As summarized below, there will be no affect from any of the alternatives on federally listed (T and E) species. More detailed information is in the Biological Assessment. (Bornstein 2007)

Although bald eagles winter on the Forest, they are concentrated in areas where food is available such as around open water and in the desert valleys. These areas are generally outside the project area where use is limited to designated routes for all alternatives. Nesting occurs off the Forest and outside of the winter season, thus there will be no affect to nesting eagles from any alternative. Implementation of any alternatives will have no effect to bald eagles.

Since the yellow-billed cuckoo is a late spring/early fall migrant, and the proposed action involves winter over-snow travel, no cuckoos will be present. Cuckoo habitat is low-elevation riparian forest, which is outside the project area and/or will not be affected by over-snow use. Therefore, there will be no effect from any of the alternatives on this species.

Though two lynx are known to have moved through the Forest in recent years, none reside on the Forest. Over-snow motorized vehicle use has little or no affect on the down woody material and conifer vegetation habitat needed by lynx, and none of the routes considered for change in travel management lie within a lynx analysis unit. Though lynx can potentially be affected by predators using paths/routes compacted by over-snow vehicles and some of the alternatives evaluated in this analysis would eliminate or reduce cross-country over-snow use of ATVs, use of these machines is generally confined to routes where the snow has already been compacted. Consequently, the alternatives would differ little if any in areas of lynx habitat experiencing compacted snow by over-snow machines (snowmobiles or ATVs). Consequently, there would be no affect to lynx or lynx habitat by any alternatives.

As summarized below, none of the alternatives would affect the following sensitive species: northern goshawk, American three-toed woodpecker, flammulated owl, peregrine falcon, spotted bat, Townsend's big-eared bat, and fisher. More detailed information is in the Biological Assessment in the project record.

Northern goshawk (also a MIS species), American 3-toed woodpeckers (also a MIS species), and flammulated owls are known to inhabit the project area, the aspen and conifer forests that these species inhabit would be little or no impact by over-snow motorized vehicle use, either on or off designated routes. Thus, there would be no affect the population or habitat for these species. There are no known peregrine falcons inhabiting the project area, little or no suitable falcon habitat in the project area, and any of the steep peregrine habitat present would be unaffected by over-snow motorized vehicle use. Thus, there would be no affect on this species.

During the winter Townsend's big-eared bat is a known hibernator in caves and abandoned mines. Spotted bats hibernate in caves. There would be no direct affect to either of these species or their cave/abandoned mine hibernacula habitat from over-snow motorized vehicle use. Over-snow motorized vehicle users could use their vehicles to access mines and caves, but few of these occur in the project area and

those that do are generally located in areas inaccessible to motorized vehicles or their entrances obscured or blocked by snow. There will be no impact on spotted bats and Townsend's big-eared bats.

Since fishers are not known to occur in Utah (NatureServe 2006a), the actions evaluated in this analysis will have no affect on this species.

None of the alternatives would affect beaver populations or habitats. During the winter, beaver winter in dens under ice and snow, and over-snow motorized vehicle use will have minor impacts on riparian vegetation and aspen important to this species. There would be negligible difference in impacts on this vegetation between the alternatives. (Bornstein 2007)

There would be little or no impacts from any alternatives on elk and deer because the project area contains a limited amount of winter range (most critical winter range is below the project area) and the Forest Plan contains direction (USFS 2003a, page 3-43 and 3-45) limiting motorized use to designated routes in winter range.

There would be little or no impact on predators. Black bears are normally in dens during the winter and would not be affected by over-snow motorized vehicle use. There would be little or no difference in impacts on predators such as bobcat, fox, coyote, mountain lion that would be out during the winter because snowmobile use would still be occurring over most of the area, and other types of over-snow motorized vehicle use is largely confined to groomed routes or areas already impacted/disturbed by snowmobiles.

- a. **No Action Alternative** – There would be no change in impacts to sage grouse. Snowmobiles and ATVs would continue to utilize the Chicken Springs breeding area and disturb sage grouse breeding there. About 3.1 miles of FSR70042 and 0.2 miles of FSR70131 considered in this analysis are within critical deer (FSR70042) or elk (FSR70131) winter range and would be remain unclosed to winter wheeled vehicle use. These designated routes would remain open for wheeled vehicle use. These road segments would still be groomed for snowmobile use. Both wheeled vehicle and snowmobile traffic would continue to disturb game wintering in these areas.
- b. **Proposed Action** – This alternative would benefit the Strawberry sage grouse population by closing the area around the Chicken Springs lek to all winterized cross – country motorized vehicle travel. Because this is the only sage-grouse lek in Strawberry Valley and disturbance from over-snow motorized vehicles occurs at a time sage grouse are susceptible to such, it is expected the proposed action may have a small beneficial effect on individuals but is not expected to affect population viability. In addition, this would further implementation of the Forest Plan and Sage Grouse Conservation Strategy in regards to minimizing disturbance of greater sage grouse breeding sites. About 3.1 miles of FSR70042 and 0.2 miles of FSR70131 within critical deer (FSR70042) or elk (FSR70131) winter range and would be closed to winter wheeled vehicle use. Although this would reduce wildlife disturbance in these areas, these routes

would still be groomed for snowmobiles. Consequently, these closures would result in only slightly less disturbance to wintering game.

- c. **Alternative Three** – Effects of implementing this alternative on wildlife would be very similar to those described for the No Action Alternative. In regards to disturbance of sage grouse at Chicken Springs, closure of the Forest to cross-country over-snow wheeled vehicle use would slightly reduce disturbance to breeding grouse. Because most cross-country over-snow motorized use is by snowmobiles, the reduction in disturbance would be minimal. This would have a very small beneficial effect on individuals but would not affect population viability.

H. OTHER RESOURCES (Range, Timber, Visual Quality, Planning)

1. **Affected Environment:** Range, timber, and visual quality resources on the Uinta National Forest are described in the Forest Plan FEIS. (USFS 2003a, pages 3-477 thru 3-482, 3-195 thru 3-198, and 3-595 thru 3-598 respectively)
2. **Environmental Consequences:**

Planning: All alternatives would be consistent with the National Forest Management Act and Forest Plan direction. This includes direction regarding limiting disturbance around sage grouse leks is a guideline (WL&F-6, page 3-11) and not a standard. Alternative 2 would; however, fully implement the intent of this guideline for the Chicken Springs lek.

Under the No Action Alternative, the definitions of “snowmobile” in the glossary would be corrected. To maintain the same “on-the-ground” management, standards and guidelines throughout the Forest Plan also would be corrected (i.e., reworded) to replace the term “snowmobile”, with terminology incorporating both ski/track (i.e., snowmobiles as defined in the TMR) vehicles, and wheeled over-snow vehicles (e.g., ATVs and other vehicles using low-pressure tires).

The corrections incorporated in all alternatives would make terminology in the forest plan consistent with the TMR. However, under the no action alternative direction in the forest plan regarding cross-country wheeled vehicle use would not be consistent with the intent of the TMR. While the TMR allows cross-country ATV use in designated areas, it clearly notes that the intent is that these are relatively small discrete portions of the forest. The 660,440 acres of the forest open for cross-country (over-snow only) travel by ATVs clearly does not constitute a small discrete area. The proposed action, which provides for small discrete play areas at strawberry reservoir, currant creek reservoir, and Vernon reservoir, is consistent with both the language and intent of the TMR. Alternative three does not provide for play areas, but is also consistent with both the language and intent of the TMR.

Range Management - Little or no effect in general for any alternative. No livestock grazing occurs on the Forest during the winter. The only potential impact is damage to livestock infrastructure (e.g., fences, corrals) by cross-country snowmobile or ATV

collisions. These potential impacts are minimal because most fences in areas open for cross-country ATV use are either lay-down type fences designed to minimize snow impacts, buried in snow, or in areas not accessible by ATVs. No livestock grazing occurs in the Chicken Springs area, and thus this would not affect range resources.

Timber Management – Little or no effect for any alternative. Other than regeneration, trees not affected by use on existing roads/trails or cross-country snowmobile or ATV use. The only potential impact is damage to regeneration from cross-country snowmobile or ATV use. On the Uinta National Forest, the vast majority of regeneration harvest is done using a selection system. This leaves large trees and results in deep uncompacted snow. These areas are generally undesirable or unusable for cross-country over-snow ATV use. Under the no action alternative impacts would be minimal because most susceptible regeneration is buried in the snow, regeneration is in areas not accessible by ATVs or snowmobiles, and any damage inflicted is usually not extensive enough to affect overall stand stocking. No timber stands are present in the areas at Strawberry, Currant Creek and Vernon Reservoirs which would be open for cross-country over-snow ATV use in the Proposed Action. Thus impacts from cross-country over-snow ATV use would not occur. Under Alternative Three, no cross-country over-snow ATV use would be permitted, and consequently, no impacts on regeneration would result.

Visual Quality - No affect for any alternative. Minimal ground disturbance is anticipated (see Soil/Water Resources sections), and minimal vegetation disturbance (see timber discussion above and also Vegetation section of this document). Consequently only impacts on visual quality are from short duration tracks in the snow.

CUMULATIVE EFFECTS/COMPARISON OF ALTERNATIVES

Little or no direct or indirect impacts to roads, range, vegetation, timber, visual quality, heritage, fisheries, soil and water, and most wildlife resources are anticipated, and thus there would be little or no incremental cumulative effect from implementation of any of the alternatives.

CRITERIA \ ALTERNATIVE	No Action	Proposed Action	Alternative Three
Acres Open to Snowmobile Use	661,360	660,340	661,360
Acres Open to Cross-Country Over-Snow Low-Pressure-Tired Vehicle Use	661,360	1,020	0
Miles of Snowmobile Trail Groomed for Snowmobile Use	249	249	249
Reservoir Acres Accessible by Snowmobile	16,670	16,670	16,670
Reservoir Acres Accessible by Cross-Country Over-Snow Low Pressure Tired Vehicles	16,670	16,670	0
Miles of Designated Route (Road) Closed in Winter to Wheeled Motorized Vehicles < 50" Wide	0	18	0
Miles of Designated Route (Road) Closed in Winter to Wheeled Motorized Vehicles	0	39	0
Miles of Designated Routes (Trail) Closed to Motorized Wheeled Vehicle Use in Winter	0	0	0
Miles of Designated Route (Road) Designated Open in Winter to Wheeled Motorized Vehicles < 50" Wide	0	5	0
Miles of in Winter Range Closed to Wheeled Motorized Vehicle Use in Winter	0	3.3	0
Acres Sage Grouse Breeding Habitat Protected from Cross Country	0	420	0
Affects on Non-Over-Snow (e.g., summer) Motorized Vehicle Use	None	None	None

CONSULTATION AND COORDINATION

The Forest Service consulted the following individuals, Federal, State, and local agencies, tribes and non-Forest Service persons during the development of this environmental assessment:

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Division of State Parks and Recreation

Wasatch Mountain State Park
USDI
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Utah Wildlife Federation
Utah Farm Bureau Federation
Wasatch County
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Utah ATV Association
Pathfinderzz ATV Club of Utah
Star Trails ATV Rides Association
Castle Country Off-Highway Vehicle Association
Outback Riders
Lone Peak 4 Wheelers
Utah Deaf Riders
Sugarloafers
Northern Utah OHV MT
Utah Sports Riders Association/Buzzards
USA Promotions
Drift Busters
Sand Seekers
Sage Riders
North Bail Out
Dinaland Snowmobile Club
Powder Bound Snowmobile Club
Salt Lake Valley Snowmobile Club
Skyline Sno-Riders Snowmobile Club
Summit Seekers

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Wild Bunch ATV Club
Utah Trail Machine Association
Trout Unlimited

REFERENCES

- Bornstein, Michael. 2007. Biological Evaluation/Specialist Report, Winter Motorized Use Forest Plan Amendment and Travel Management, Uinta National Forest. Unpublished report dated August 2007. Uinta National Forest. Provo, UT.
- Burton, Kenneth. 2007. Communication with GIS specialist for the Uinta National Forest.
- Campbell, John. 2007. Communication with Heber Ranger District recreation specialist.
- Council on Environmental Quality. 2005. Memorandum. Guidance on the Consideration of Past Actions in Cumulative Effects Analysis.
- Federal Register, Vol. 70, No. 216, p. 68265-68291. November 5, 2005. 36 CFR Parts 212, 251, 261, and 295 Travel Management; Designated Routes and Areas for Motor Vehicle Use; Final Rule.
- NatureServe. 2006. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.6. NatureServe, Arlington, Virginia. <http://www.natureserve.org/explorer>. Summary Report for Fisher; accessed March 1, 2006.
- Oliver, George V. 2000. The Bats of Utah, A Literature Review. Publication Number 00-04. Utah Division of Wildlife Resources. Salt Lake City. UT.
- Parrish, J. R., F. Howe, and R. Norvell. 2002. Utah Partners in Flight Avian Conservation Strategy Version 2.0. Utah Partners in Flight Program, Utah Division of Wildlife Resources, Salt Lake City, Utah, UDWR Publication Number 02-27.
- Pope, Reese. 2007. Personal observations by Reese Pope, Uinta NF Ecosystem Staff Officer.
- Resare, Duane. 2007. Communication with Spanish Fork Ranger District recreation specialist.
- Smith, R. W. 2005a. Fisheries and aquatic resources of Bryant's Fork, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 05-20. August 16, 2005. 8 pp.
- Smith, R. W. 2005b. Fisheries and aquatic resources of the North Fork American Fork River, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 05-26. August 4, 2005. 7 pp.
- Smith, R. W. 2005c. Fisheries and aquatic resources of the South Fork American Fork River, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 05-27. August 4, 2005. 7 pp.
- Smith, R.W. 2005d. Fishes of the Uinta National Forest. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 05-40. November 9, 2005. 80 pp.
- Smith, R. W. 2005e. Fisheries and aquatic resources of the Main Canyon Creek drainage, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 05-43. November 16, 2005. 6 pp.

-
- Smith, R. W. 2005f. Fisheries and aquatic resources of the Murdock Hollow drainage, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 05-46. November 17, 2005. 7 pp.
- Smith, R. W. 2005g. Fisheries and aquatic resources of the Clyde Creek drainage, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 05-47. November 17, 2005. 7 pp.
- Smith, R. W. 2005h. Fisheries and aquatic resources of the Little Hobbble Creek drainage, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 05-48. November 17, 2005. 7 pp.
- Smith, R. W. 2006a. Fisheries and aquatic resources of the Daniels Creek drainage, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 06-10. July 14, 2006. 6 pp.
- Smith, R. W. 2006b. Fisheries and aquatic resources of the American Fork River, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 06-15. July 14, 2006. 6 pp.
- Smith, R. W. 2006c. Fisheries and aquatic resources of Trout Creek, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 06-21. September 12, 2006. 13 pp.
- Smith, R. W. 2006d. Bonneville cutthroat trout populations of the Uinta National Forest – annual monitoring report 2006. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 06-28. [DRAFT: December 6, 2006]. 47 pp.
- Smith, R. W. 2006e. Colorado River cutthroat trout populations of the Uinta National Forest – annual monitoring report 2006. Uinta National Forest, Provo, UT. UNF/FAR Report 06-29. [DRAFT: December 8, 2006]. 103 pp.
- Smith, R. W. 2006f. Fisheries and aquatic resources of Jones Cabin Creek, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 06-30. December 11, 2006. 12 pp.
- Smith, R. W. 2006g. Fisheries and aquatic resources of Left Fork Currant Creek, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 06-31. December 11, 2006. 12 pp.
- Smith, R. W. 2006h. Fisheries and aquatic resources of Low Pass Creek, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 06-32. December 12, 2006. 12 pp.
- Smith, R. W. 2006i. Fisheries and aquatic resources of Pass Creek, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 06-33. December 12, 2006. 12 pp.
- Smith, R. W. 2006j. Fisheries and aquatic resources of Racetrack Creek, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 06-34. December 13, 2006. 12 pp.

- Smith, R. W. 2006k. Fisheries and aquatic resources of Right Fork Currant Creek, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 06-35. December 13, 2006. 12 pp.
- Smith, R. W. 2006l. Fisheries and aquatic resources of South Fork Currant Creek, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 06-36. December 13, 2006. 12 pp.
- Smith, R. W. 2006m. Fisheries and aquatic resources of Tut Creek, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 06-37. December 13, 2006. 12 pp.
- Smith, R. W. 2007a. Fisheries and aquatic resources of Strawberry River, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 07-01. March 14, 2007. 13 pp.
- Smith, R. W. 2007b. Fisheries and aquatic resources of Daniels Creek, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 07-02. March 16, 2007. 13 pp.
- Smith, R. W. 2007c. Fisheries and aquatic resources of Indian Creek, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 07-08. July 3, 2007. 14 pp.
- Smith, R. W. 2007d. Fisheries and aquatic resources of Tie Fork, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 07-14. [DRAFT: August 7, 2007]. 14 pp.
- Smith, R. W. 2007e. Fisheries and aquatic resources of Soldier Creek, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 07-15. [DRAFT: August 7, 2007]. 14 pp.
- Smith, R. W. 2007f. Fisheries and aquatic resources of Little Valley Creek, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 07-16. [DRAFT: August 7, 2007]. 14 pp.
- Smith, R. W. 2007g. Fisheries and aquatic resources of Currant Creek, Utah. United States Forest Service, Uinta National Forest, Provo, UT. UNF/FAR Report 07-17. [DRAFT: August 7, 2007]. 14 pp.
- Smith, Ronald. 2007. *Biological Assessment and Evaluation, Fisheries and Aquatic Resources, Winter Motorized Use Forest Plan Amendment and Travel Management, Uinta National Forest. Report Number: UNF/FAR 07-13.* August 7, 2007. Uinta National Forest. Provo, UT.
- USDA Forest Service. 2002. Roads Analysis for the Uinta National Forest. Uinta National Forest. Provo, UT.
- USDA Forest Service. 2003a. 2003 Land and Resource Management Plan, Uinta National Forest. Provo, UT.
- USDA Forest Service. 2003b. *Final Environmental Impact Statement for the 2003 Land and Resource Management Plan.* Provo, UT.

-
- USDA Forest Service. 2003c. Intermountain Region Proposed, Endangered, and Sensitive Species Known/suspected Distribution by forest. Available from any Forest Service Office within the Intermountain Region.
- USDA Forest Service. 2006a. *Uinta National Forest State of the Forest Report for Fiscal Year 2005*. Uinta National Forest. Provo, UT.
- USDA Forest Service. 2006b. *Capability and Suitability Analysis, Management Indicator Species – Bonneville Cutthroat Trout, Uinta National Forest, Report No. UNF/FAR 06-26*. Unpublished report dated 9/21/2006. Uinta National Forest. Provo, UT.
- USDA Forest Service. 2006c. *Capability and Suitability Analysis, Management Indicator Species – Colorado River Cutthroat Trout, Uinta National Forest, Report No. UNF/FAR 06-26*. Unpublished report dated 9/21/2006. Uinta National Forest. Provo, UT.
- USDA Forest Service. 2006d. Goshawk Monitoring Report, Uinta National Forest. Unpublished report. Uinta National Forest. Provo, UT.
- USDA Forest Service. 2006e. *Wildlife Biologist Report and Biological Evaluation, Upper Strawberry Allotments Grazing NEPA*. Uinta National Forest, Heber Ranger District. Heber City, UT.
- USDA. Forest Service. 2007a. *Capability and Suitability Analysis, Management Indicator Species - Northern Goshawk*, Uinta National Forest. Provo, UT.
- USDA. Forest Service. 2007b. *Capability and Suitability Analysis, Management Indicator Species – Three-toed Woodpecker*. Uinta National Forest. Provo, UT.
- USDA. Forest Service. 2007c. *Three-Toed Woodpecker Monitoring Report, 2006, Uinta National Forest*. Uinta National Forest. Provo, UT.
- USDA. Forest Service. 2007d. *Capability and Suitability Analysis, Management Indicator Species – American Beaver, Uinta National Forest*. Uinta National Forest. Provo, UT.
- USDA. Forest Service. 2007e. *Beaver Monitoring Report, 2006, Uinta National Forest*. Uinta National Forest. Provo, UT. 7 pages.
- Utah Department of Natural Resources, Division of Wildlife Resources. 2007. Utah Conservation Data Center.
<http://dwrcdc.nr.utah.gov/rsgis2/Search/Display.asp?FINm=coccamer>. Accessed August 8, 2007.
- VanKeuren, Denise. 2007. *Biological Assessment and Evaluation -- Plans, Winter Motorized Use Forest Plan Amendment and Travel Management, Uinta National Forest. Report Number: UNF/FAR 07-13*. Unpublished report dated August 7, 2007. Uinta National Forest. Provo, UT.
- Velarde, Larry. 2007. Communication with Pleasant Grove Ranger District recreation specialist.