

## **APPENDIX C6**

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### **Compliance with the Standards and Guidelines in the *Revised Forest Plan for the Wasatch-Cache National Forest***



To: Project File		
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Date: 16 February 2011	Job No: 000000000142922	

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**RE: Compliance with the Standards and Guidelines in the *Revised Forest Plan for the Wasatch-Cache National Forest***

**Introduction**

The Environmental Impact Statement (EIS) for the Logan Northern Canal Reconstruction project contains two alternatives that would require construction on National Forest System land administered by the U.S. Forest Service (USFS) as part of the Uinta-Wasatch-Cache National Forest. If one of these alternatives is selected, USFS would need to issue two special-use permits for the project: one for construction activity and one for operating the part of the alternative that is located on National Forest System land. This memo summarizes how these two alternatives—the Purple and Orange Alternatives—comply with or would be likely to comply with the applicable standards (S) and guidelines (G) in Chapter 4, Section A4, of the *Revised Forest Plan for the Wasatch-Cache National Forest* (USDA 2003). Attached to the end of this memo is a copy of the standards and guidelines that USFS representatives have said would be likely to apply to one of these alternatives. Both the Purple and Orange Alternatives are referred to in this memo as *the project*.

Compliance with a number of the standards and guidelines would be determined once an alternative is selected and final construction plans are underway. As part of the final design phase, Cache County or its contractor would develop construction plans and a stormwater pollution prevention plan (SWPPP) that would be reviewed by USFS for activity on National Forest System land. The following discussions assume that a special-use permit for activity on National Forest System land would include specific conditions regarding when USFS would review plans and other project documents, would identify responsible parties for compliance with permit conditions, and would include specific, detailed standards for activity on such land. The following discussions also assume that Cache County and its contractor would obtain all required permits, authorizations, and approvals needed for project construction (such as authorization under Sections 401, 402, and 404 of the Clean Water Act). In some cases, complying with these other regulations and guidelines would also meet the USFS standards and guidelines.

The Natural Resources Conservation Service (NRCS) is the Federal lead agency for the project because the project would be partially funded using NRCS's Emergency Watershed Protection Program (EWPP). Cache County is the local sponsor. The following discussions assume that Cache County and its designers or construction contractors would be responsible to build the project and that the Logan & Northern Irrigation Company and the Logan, Hyde Park and Smithfield Canal Company (referred to as *canal companies* below) would be responsible for operating and maintaining the constructed project.

## Standards and Guidelines for Watershed, Riparian, and Aquatic Habitat Health

- (S2) Standard construction best management practices (BMPs) would be used during project construction to prevent pollutants from entering surface water and groundwater. These BMPs would be listed in the SWPPP required by Section 402 of the Clean Water Act (CWA). Staging areas would be identified during the final design phase and specified on construction plans, which would be provided to USFS for its review and approval before the start of construction activity on National Forest System land. If the contractor identifies a need to change the location or configuration of a staging area once construction has started, USFS would review and approve any changes that would affect National Forest System land before the change could be implemented. Because staging areas are typically used to store valuable equipment, the construction contractor would likely provide site security (such as a fence and locked gates) during non-work hours; this would prevent vandalism that could cause accidental pollution from spills in staging areas.

Cache County and its contractors would designate areas for vehicle fueling and maintenance and equipment storage in a manner that would prevent surface water or groundwater pollution from fuels and oils. Equipment would probably be staged in areas that are not on National Forest System land, but there could be some instances when National Forest System land is needed for short-term equipment and materials storage.

- (S4) As noted in item S2 above, construction staging and storage areas would be identified during the final design phase. All activity that would occur in staging areas would be managed using BMPs that would prevent polluted runoff from entering surface water or groundwater.

New sources of chemical pollution would be temporary and associated with construction vehicle fueling and maintenance only. Fueling and maintenance would occur offsite (such as at servicing locations not in the project construction area) or in areas designated on construction plans and in the SWPPP. These fueling and maintenance areas would be placed to prevent contact with surface water or groundwater.

New sources of pathogenic pollution would be temporary and would be associated with portable toilets for construction personnel during construction of the project. Cache County and its contractor would be responsible for placing and maintaining toilets in locations that would prevent chemical or pathogenic pollutants from reaching surface water or groundwater. Toilets would probably be placed in staging areas but would probably also be placed in active construction areas. Once construction in an area is complete, the toilets would be removed. If portable toilets are needed in Logan Canyon, they would be placed so that they are not obvious from U.S. Highway 89 (US 89) or from other public-access areas if possible. This would discourage vandalism (which could cause accidental spills) and would minimize potential viewshed impacts.

- (S5) The project would affect flows in the Logan River during the irrigation season (May through October). NRCS used information from two U.S. Geological Survey (USGS) gages located on diversions/rediversions from the river and one on the Logan River to analyze flow conditions in the affected reach of the river that is on land administered by USFS. The following paragraphs described the in-stream flow analysis that was conducted in support of this standard.

The affected reach of the Logan River that is on USFS-managed land is highly managed by the Logan River Water Commissioner and has two dams and several water diversions. The Second Dam impoundment, which is on the far eastern end of the project study area, diverts water to penstocks for Logan City Light and Power's Hydro 2 power plant, which is located at the mouth of Logan Canyon (water is carried in the penstocks to Hydro 2 upslope of the river). About 0.3 river miles below Second Dam, another structure diverts water to the Logan Hyde Park Smithfield (LHPS) Canal, which is operated by the Logan, Hyde Park and Smithfield Canal Company. Both of these diversions

have been in place for many years. The LHPS Canal diversion currently operates under a special-use permit from USFS.

Currently, these two water users own enough water rights that the Logan River is dewatered below the LHPS Canal point of diversion (POD) for about 6 to 8 weeks during the late summer. From this point to just above the Hydro 2 power plant, the Logan River gains flow from various sources, including seeps and springs. The LHPS Canal loses about 6.5 cubic feet per second (cfs) per mile to seepage within Logan Canyon (a distance of about 4,000 linear feet), and it is commonly accepted that this seepage accounts for about 5 cfs of the river flow gain by the mouth of the canyon. Much of this seepage loss is on National Forest System land.

This project proposes to move the Logan Northern (LN) Canal POD (which is operated by the Logan & Northern Irrigation Company) from its historic location below First Dam to the LHPS Canal POD below Second Dam, reconstruct the LHPS Canal to accommodate additional flow, and modify the diversion structure to allow remote control of the headgate and to allow base flows to pass. These three actions would have the following effects on flows in the Logan River:

- Moving the POD for the LN Canal upstream to the LHPS Canal POD would require releasing more water from Second Dam to accommodate the LN Canal's water right (the total amount of water released would be for both canals' water rights) and would increase flows in the Logan River below Second Dam above current conditions by a maximum of 65 cfs during the irrigation season.
- Reconstructing the LHPS Canal would reduce the seepage from the canal.
- Reconstructing the headgate and diversion structure would allow the canal companies to remotely control the headgate and take only the amount of water needed. This would be a benefit to the canal companies and shareholders because it would ensure that the amount of water diverted meets the irrigation needs and no more. Currently, the headgate is fully opened when irrigation season begins and shut when the season ends, thereby taking the maximum amount of water from the river regardless of the need. The modernized structure and headgate controls would likely result in much more water passing the canal diversion when irrigation needs are low. The modernized diversion structure would also be constructed to allow 5 cfs to pass the diversion. This would make up for the historic canal seepage that reached the river and would provide a better benefit in that the flows would be in the river for the entire reach instead of slowly gaining from the LHPS Canal POD to the mouth of the canyon (below the National Forest System boundary). NRCS and USFS estimate that 5 cfs would fill pools and would provide flow that allows fish to pass between the pools. Overall, this flow would contribute to more miles of fish habitat and higher-quality habitat than the existing conditions during the late irrigation season currently support.

In summary, the project would increase Logan River flows during the irrigation season (May through October) for about 0.3 river miles below Second Dam. The project would also increase Logan River flows by a minimum of 5 cfs (and probably more when the headgate is not fully opened) immediately below the LHPS Canal POD. Overall, the project would have a net benefit (increase) to flows in all reaches of the Logan River within USFS management boundaries and, more importantly, would provide increased base flows in the most degraded reach of the river late in the irrigation season.

- (S6) The project would have no effect on CWA Section 303(d)-listed waters. The Logan River is not listed but is a tributary of the Little Bear River. The Little Bear River is listed on Utah's 303(d) list for impairment due to high temperatures. However, the project would have no effect on the temperature of the Little Bear River.

- (G2) The project's impacts to water quality and 303(d)-listed waters in the Middle Bear-Logan watershed (Hydrologic Unit Code [HUC] 16010202) have been analyzed at an appropriate level of detail in the project EIS. The project is not expected to affect the larger watershed context of the Middle Bear-Logan watershed.
- (G3) Section 313 of the CWA requires Federal agencies to comply with all Federal, State, interstate, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of water pollution in the same manner and to the same extent as any nongovernmental entity including the payment of reasonable service charges. As the Federal lead agency for the project EIS, NRCS is overseeing compliance with Section 313 through the National Environmental Policy Act (NEPA) process. Compliance includes the State's water-pollution-control guidance as articulated in its Nonpoint Source Pollution Management Plan (Utah Department of Environmental Quality 2000) and the State's integrated water quality program (Utah Division of Water Quality 2010).
- (G4) On National Forest System land, the project would disturb land at the LHPS Canal POD site and along the existing canal alignment (construction is not expected to affect any currently undisturbed areas). All areas that would be disturbed during construction and that would not be part of the new water delivery system would be restored to preconstruction conditions as nearly as possible. Cache County and its contractor would be responsible for ensuring that restored areas are properly drained. After construction, the POD and canal alignment would be periodically maintained. This maintenance would be consistent with the conditions of the special-use permit, which would be conducted in a manner that prevents detrimental soil displacement, puddling, or excessive compaction.
- (G5) On National Forest System land, the project would involve modifying the LHPS Canal POD and the LHPS Canal. POD modifications would not affect surface water runoff at the POD site. Changes to the LHPS Canal would involve placing the currently open canal into a box culvert. During storms, the canal currently intercepts runoff from areas upslope of the canal. After construction, the canal would be enclosed, but some stormwater would infiltrate the backfill soils surrounding the box culvert. Runoff from large storms could bypass the canal alignment, but, because the alignment would be revegetated to stabilize soils, this runoff would not cause an increase in water yield that would degrade water quality. Cache County and its contractor would develop detailed storm drainage plans with the SWPPP. USFS would review the SWPPP and would be able to work with the contractor to ensure that construction would not adversely affect water quality.
- (G6) The project would be implemented in the riparian habitat conservation area (RHCA) of the Logan River as defined by USFS. Some woody debris might need to be removed to accommodate the new structure, and regular maintenance of the LHPS Canal POD structure would require removing woody debris that blocks or might block the POD intake. These minor changes are not expected to affect the overall volumes of large woody debris in the river.
- (G8) The LHPS Canal POD structure would require regular maintenance to ensure that blockages do not cause flooding, which could damage US 89 or the recreation trail on the left side (looking downstream) of the river. Most woody debris removed would not be large, so this regular maintenance of the POD structure would not significantly affect the overall amount of large woody debris in the river.
- (G9) Construction activities would cause temporary soil disturbance at the LHPS Canal POD site and along the LHPS Canal. The areas affected would be limited to the minimum amount necessary to complete the work. Construction work areas would be identified on the construction plans and would be clearly delineated on the ground so that the construction effects are limited to the work area. USFS would review and approve the work area limits shown on construction plans before work begins on National Forest System land.

- (G10) Current diversions from the river are permitted and regulated through the Utah Division of Water Rights. Flow in the reach of the Logan River that is in the project area and that passes through National Forest System land is regulated through releases of water from Second Dam, Logan City Light and Power's diversion at Second Dam, and the LHPS Canal POD. The Logan River Water Commissioner oversees diversions to ensure that all of these water rights are met.
- Constructing the project could change Logan River flows as described in item S5 above. The minor increase in late-season river flow would not cause damage to downstream properties.
- (G11) The required SWPPP and construction plans would include BMPs that would ensure protection of beneficial water uses during construction. Applying these measures would prevent or minimize sediment discharge to the Logan River.
- (G12) The new LHPS Canal POD structure would be in the same location as the existing POD structure in the Logan River RHCA. To maintain gravity flow, the new structure must be placed on the river in the RHCA, so an alternate location outside the RHCA is not feasible. By placing the new structure in the same location as the existing structure, impacts would be limited to previously disturbed areas and would not require removing large areas of riparian vegetation.
- (G13) Because no long-term stream crossings are proposed on National Forest System land as part of any of the alternatives, this item does not apply.

### **Guidelines for Biodiversity and Viability**

- (G15) Because there is no goshawk habitat along the project alternative alignments in Logan Canyon, this item does not apply.
- (G21) Local populations of Maguire's primrose (*Primula maguirei*) are near the LHPS Canal POD south of the Logan River. However, because these populations are on the opposite side of the river from the POD and are in a location that would not be affected during construction, the project would not affect this threatened species.

Logan buckwheat (*Eriogonum loganum*), an Intermountain Region management indicator species, is present in the project area, but, according to the Utah Natural History Program database, this population is not on National Forest System land. The plant is not listed as threatened or endangered under the Endangered Species Act, nor is it considered a sensitive species by the State of Utah. The known population in the project vicinity is downslope of the LHPS Canal near the mouth of Logan Canyon. Even though this is a USFS management indicator species and is not identified as sensitive by any other entity, the EIS suggests a measure to prevent damaging this species by verifying the extent of the population and by using environmental fences or other barriers to prevent the population from being disturbed by construction. Because construction would be limited to the existing canal structure and easement, Logan buckwheat habitat and population viability would not be affected. Because this plant is adapted to the arid canyon slopes of northern Utah, it does not depend on any existing, unrepaired canal leaks, and it would not be directly or indirectly affected if those leaks are stopped by installing the box culvert.

- (G22) The project would require reconstructing the LHPS Canal POD structure on the north bank of the Logan River. Construction could require removing a minor amount of vegetation. Cache County and its contractor would be responsible for revegetating cleared areas that are not incorporated into the construction using native plants or native seed mixes if they are available. If native plants or native seeds are not available, then Cache County and its contractor would use weed-free seed mixes approved by USFS.
- (G23) See the response to item G21 above.

- (G24) Construction activity would not require prescribed burning or herbicide application. The special-use permit conditions would probably address how and when the canal companies could use herbicides to control weeds along the canal alignment once construction is complete. Routine maintenance of the LHPS Canal easement could include limited herbicide application to control weedy plant species. Herbicide application would probably occur only once a year and would be focused on areas that show weed infestations.
- (G25) As noted in item G24, the special-use permit conditions would address using herbicides to control weeds along the canal alignment. If noxious weeds are present in areas to be treated, the canal companies would be responsible for treating the area in compliance with the guidelines in Forest Service Manual 2080, Supplement R4 2000-2001-1.
- (G29) Since no elk calving, elk spring use, or bighorn sheep lambing areas overlap with any of the alternatives' footprints, this item does not apply.
- (G30) Since no mountain goat or bighorn sheep winter range has been designated in the study area, this item does not apply for those species. Regarding deer and elk, the project would not include disruptive management activities anywhere, including on National Forest System land. If construction occurs during the winter, local wildlife such as deer and elk that might travel through the construction area would experience some temporary, minor sound or visual disturbance. Such effects would be very localized and temporary, and deer and elk would likely avoid those areas during construction. Deer and elk would be able to use the project area during all times of the year after construction.

### **Standards and Guidelines for Roads, Trails, and Access Management**

- (S20) Construction BMPs would be used to minimize sediment discharge to surface waters. These BMPs would be described in the project SWPPP and/or shown on project construction plans, both of which would be reviewed by USFS.
- (G44) See the response to item G21 regarding sensitive plant species and items G29 and G30 regarding winter range for deer and elk. The *Revised Forest Plan for the Wasatch-Cache National Forest* does not identify any deer or elk winter or spring range in the study area.
- (G45) Access routes for canal reconstruction would not cross streams or riparian areas. A small amount of work would be conducted at the LHPS Canal POD structure on the north bank of the Logan River, but this work would not require any permanent stream-crossing structures. All large equipment needed during construction of the POD structure would be operated from the road (US 89) or existing trail bed (Riverside Trail) to the extent possible.
- (G46) Water supply points, service areas, and other staging areas would be identified during the final design phase of the project. All staging areas would be shown on construction plans, which would be reviewed by USFS. If the contractor identifies a need to change the location or configuration of a staging area after construction has started, USFS would review and approve any changes that would affect National Forest System land before the change could be implemented.
- (G47) Waste material generated during work near the Logan River would include temporarily removed topsoil and vegetation removed as part of site clearing and demolishing the LHPS Canal POD. Cache County and its contractor would be responsible for ensuring that this waste material is not placed where it could enter the river. Cache County and its contractor would also probably apply construction BMPs described in the SWPPP and/or shown on the construction plans to further ensure that waste material would not enter the river.
- (G48) Following construction, only the canal companies and USFS would be allowed motorized access to the canal easement. This canal maintenance road would be placed on top of the installed box

culvert. Cache County, its contractor, and the canal companies would need to work with USFS during the final design phase to identify measures needed to prevent unauthorized vehicle access. These measures would likely include a gate and a short section of fence.

## Guidelines for Scenery Management

(G59) USFS considers the Landscape Character Theme of the part of the project area on National Forest System land to be *Developed Natural Appearing* and the Scenic Integrity Objective to be *high*. Enclosing the LHPS Canal through Logan Canyon would affect scenic beauty for only a short distance of the canal where it can be seen just downstream of the LHPS Canal POD on the north side of US 89. The box culvert would be placed within the current canal alignment, which is above the road, so the change would not be apparent to the casual observer on US 89 or on the Riverside Trail that follows the Logan River on the south side of the canyon. According to the *Revised Forest Plan for the Wasatch-Cache National Forest*, mechanical treatments such as canal easement maintenance in developed natural-appearing areas with a high Scenic Integrity Objective should mimic natural-appearing lines, forms, and edges found in the landscape. Because the LHPS Canal would be on a rocky hillside above the road, would follow the hillside contour, and would be visible at only few points to people using US 89, regular maintenance of the easement is not expected to affect the scenic integrity of this part of the canyon and would be consistent with the landscape character. Routine maintenance would be temporary and would be most visible during and immediately after the maintenance activity.

The special-use permit conditions would probably specify how Cache County and its contractor should treat the landscape effects of construction activity during the construction phase. For example, the permit would probably prescribe an acceptable duration of post-construction visual impacts based on the landscape's ability to recover. Because construction activity would be on a hillside above the road, would follow the hillside contour, would be visible at only few points to people using US 89, and would be temporary, it is not expected to affect the scenic integrity of this part of the canyon. The effects of construction activity would be temporary and would be most visible during and immediately after construction, and the post-construction visual condition would not be substantially different from the current condition.

(G60) The Management Prescription Categories for this area are 2.5, *Forest Service Scenic Byways*, and 4.5, *Developed Recreation Areas*. Regular maintenance of the canal easement would not cause the scenic integrity to degrade below that allowed for these categories. The post-construction condition would not be substantially different from the current condition.

(G61) USFS has designated this corridor as *Concern Level 1 (Scenic Byways)* with a viewshed corridor of 1 to 4 miles. Because of canyon topography, most of the area that would be regularly maintained would not be visible from points far in the distance. The canyon topography also limits close views of the canyon from US 89. Because management activity on the canal easement would be limited (probably only annual maintenance and emergency travel on the easement), it is not expected to affect the scenic integrity of this part of the canyon. The post-construction condition would not be substantially different from the current condition.

(G62) Because the study area does not include any land identified as *Concern Level 2*, this item does not apply.

(G63) Routine maintenance would be temporary and would be most visible during and immediately after the activity. However, since most of the easement area that would be maintained would not be visible from publicly accessed areas and since most of the vegetation that would be affected is herbaceous and would quickly recover, this type of temporary impact is not expected to significantly affect the scenic quality of the area.

- (G64) As part of construction, Cache County and its contractor would probably reseed disturbed areas as needed to stabilize imported soils. As currently proposed, Cache County and its contractor would use native seed mixes or plants if they are available. If they are not available, then Cache County and its contractor would probably work with the USFS to identify an acceptable weed-free seed mix used. Restored areas should be fully revegetated within 3 years of the completion of construction, if not sooner.

### **Guidelines for Special Uses**

- (G81) As part of its special-use permit process, USFS would need to determine whether the proposed action clearly demonstrates why use of National Forest System land is necessary and why land under other ownership could not be used.

The project relies on an existing POD and includes reconstructing an existing POD structure and canal on National Forest System land. The existing water rights for the LHPS Canal are connected to this POD. Using National Forest System land is necessary because the LHPS Canal could not be moved to non-Forest System lands downstream (off of National Forest System land) because it relies on the elevation of the permitted POD to provide water using gravity flow. All land upstream and upslope is also National Forest System land, so moving the canal upstream would also require a special-use permit.

As described in the EIS, NRCS considered options to reconstruct the LN Canal along its existing alignment. However, because the area is unstable and because EWPP funds cannot be used to stabilize the entire Logan Bluff hillside, some risks to life and property would remain if the LN Canal were reconstructed within its historic alignment. NRCS feels that the risks are unacceptable, and alternatives that move the water to the LHPS Canal POD are preferred.

NRCS also considered an option to pump water from the Logan River up to the LHPS Canal downstream of National Forest System land (see Appendix C2 of the EIS). NRCS and Cache County determined that the impacts of the pump option were not economically or environmentally acceptable. NRCS's review found that the cost associated with ongoing maintenance would be excessive. Furthermore, operating the pumping station would increase noise levels in an established residential area. Finally, NRCS and Cache County believe that using an existing canal alignment and reconstructing an existing POD would have less environmental impact than constructing a new alignment and POD in another location. Re-establishing irrigation water delivery in an efficient and economically reasonable manner is in the interest of all Cache County residents.

### **Standard and Guideline for Heritage Resource Management**

- (S32 and G88) Because the proposed action would need to comply with Section 106 of the National Historic Preservation Act and because USFS is participating in the Section 106 consultation as a cooperating agency, NRCS assumes that the consultation process and outcome would comply with the standard and guideline.

## REFERENCES

[USDA] U.S. Department of Agriculture

- 2003 Revised Forest Plan, Wasatch-Cache National Forest. USDA Forest Service. Intermountain Region. February. Available online at [www.fs.fed.us/r4/uwc/projects/wcnf/planning/feis/revised\\_forest\\_plan.pdf](http://www.fs.fed.us/r4/uwc/projects/wcnf/planning/feis/revised_forest_plan.pdf).

Utah Department of Environmental Quality

- 2000 Utah nonpoint source pollution management plan. October.

Utah Division of Water Quality

- 2010 Draft Utah's 2010 Integrated Report. October.

## **Revised Forest Plan for the Wasatch-Cache National Forest Standards and Guidelines Identified by USFS as Potentially Applying to the Project**

On February 10, 2011, Brian Ferebee, Forest Supervisor, supplied the following list of standards and guidelines that could apply to the project.

### **Standards and Guidelines for Watershed, Riparian, and Aquatic Habitat Health**

- (S2) Apply runoff controls during project implementation to prevent pollutants including fuels, sediment, oils, from reaching surface and groundwater.
- (S4) Place new sources of chemical and pathogenic pollutants where such pollutants will not reach surface or ground water.
- (S5) Prior to issuance of a permit or license for activities such as mining, hydropower development, snowmaking, or water transmission facilities, instream flow determinations will be required of all future permitted and licensed activities. For existing authorized uses and activities, minimum instream flows will be established to meet the beneficial use of the stream, and will be a condition of any licensing and permit renewal.
- (S6) Within legal authorities, ensure that new proposed management activities in watersheds containing 303d listed water bodies improve or maintain overall progress toward beneficial use attainment for pollutants which led to listing; and do not allow additions of pollutants in quantities that result in unacceptable adverse effects (Appendix II provides clarification of terms used in this Standard).
- (G2) Projects in watersheds with 303(d) listed waterbodies should be supported by scale and level of analysis sufficient to permit an understanding of the implications of the project within the larger watershed context.
- (G3) Proposed actions analyzed under NEPA should adhere to the State Nonpoint Source Management Plan to best achieve consistency with both Sections 313 and 319 of the Federal Water Pollution Control Act.
- (G4) At the end of an activity, allow no more than 15% of an activity area (defined in Glossary) to have detrimental soil displacement, puddling, compaction and/or to be severely burned.
- (G5) Do not allow activities that could result in water yield increases that would degrade water quality and impact beneficial uses.
- (G6) In Riparian Habitat Conservation Areas (defined in Glossary) when projects are implemented, retain natural and beneficial volumes of large woody debris.
- (G8) In stream channels naturally occurring debris shall not be removed unless it is a threat to life, property, important resource values, or is otherwise covered by legal agreement.
- (G9) Avoid soil disturbing activities (those that remove surface organic matter exposing mineral soil) on steep, erosive, and unstable slopes, and in riparian, wetlands, floodplains, wet meadows, and alpine areas.
- (G10) Encourage water users that divert, augment, or operate reservoirs to regulate discharges to prevent or reduce damage to downstream properties.
- (G11) Use Best Management Practices and Soil and Water Conservation Practices during project level assessment and implementation to ensure maintenance of soil productivity, minimization of sediment discharge into streams, lakes and wetlands to protect of designated beneficial uses.

- (G12) Locate new actions (such as incident bases, fire suppression camps, staging areas, livestock handling facilities, recreation facilities, roads and improvements including trails) outside of Riparian Habitat Conservation Areas. If the only suitable location for such actions is within Riparian Habitat Conservation Areas, sites will be located to minimize resource impacts.
- (G13) Any long-term crossing of stream channels containing fish habitat will provide for desirable aquatic passage.

### **Guidelines for Biodiversity and Viability**

- (G15) In goshawk habitat design all management activities to maintain, restore, or protect desired goshawk and goshawk prey habitats including foraging, nesting and movement.
- (G21) For projects that may affect Forest Service Sensitive species, develop conservation measures and strategies to maintain, improve and/or minimize impacts to species and their habitats. Short-term deviations may be allowed as long as the action maintains or improves the habitat in the long term.
- (G22) Use native plant species, preferably from genetically local sources (harvesting seed from a project area's native species prior to project implementation), in revegetation efforts to the extent practicable. If no native seed of suitable origin is available, then certified weed free non-persistent non-natives may be used.
- (G23) Avoid actions on the Forest that reduce the viability of any population of plant species classified as Threatened, Endangered, Sensitive or recommended sensitive. Use management actions to protect habitats of plant species at risk from adverse modification or destruction. For species that naturally occur in sites with some disturbance, maintain the appropriate level of disturbance.
- (G24) Management activities that negatively affect pollinators (e.g. insecticide, herbicide application and prescribed burns) should not be conducted during the flowering period of any known Threatened, Endangered, and Sensitive plant populations in the application area. An exception to this guideline is the application of *Bacillus thuringiensis*.
- (G25) Integrated weed management should be used to maintain or restore habitats for threatened, endangered, proposed and sensitive plants and other native species of concern where they are threatened by noxious weeds or non-native plants. When treating noxious weeds comply with policy in Intermountain Region's Forest Service Manual 2080, Supplement #R4 2000-2001-1 (Appendix III).
- (G29) Avoid disruptive management activities in elk calving areas, elk spring use areas, and bighorn sheep lambing areas from May 1 through June 30.
- (G30) Avoid disruptive management activities (not public recreation activities) on deer, elk, mountain goat and bighorn sheep winter range from November 15 through April 30.

### **Standards and Guidelines for Roads, Trails, and Access Management**

- (S20) When constructing or maintaining roads, trails and facilities, use Best Management Practices to minimize sediment discharge into streams, lakes and wetlands.
- (G44) When constructing and reconstructing roads, trails, and facilities minimize potential effects on habitat of plant species at risk and key big game winter and spring ranges.
- (G45) Access routes for heavy equipment should be selected to limit disturbance to riparian vegetation and to limit the number of stream crossings.
- (G46) Specify and control locations for water supply points, service areas, and any other needs for road and facility construction projects.

- (G47) Waste material should be handled in a manner to avoid sidecasting materials to areas where they may enter a stream.
- (G48) Include motorized access in authorizations such as term grazing permits, communication sites, transmission lines, permits to drill, reservoirs and weather stations when needed for management consistent with management prescription and coordinated to mitigate impacts. In Lynx Analysis Units in winter, motorized use in these authorizations will be authorized only on designated routes.

### **Guidelines for Scenery Management**

- (G59) Manage Forest landscapes according to Landscape Character Themes, and Scenic Integrity Objectives as mapped. (See Chapter 4, A.7. Scenery Management for definitions).
- (G60) Resource management activities should not be permitted to reduce Scenic Integrity below Objectives stated for Management Prescription Categories.
- (G61) For management activities viewable from Concern Level 1: (defined site-specifically) Scenic Byways (viewshed corridors 0-4 miles) and use areas, travelways, and Scenic Backways (viewshed corridors <1/2 mile) apply the Landscape Character Theme in which the management activity occurs and apply a Scenic Integrity Objective of high.
- (G62) For management activities viewable from Concern Level 2: (defined site-specifically) use areas and travelways (viewshed corridors <1/2 mile) apply the Landscape Character Theme in which the management activity occurs and apply a Scenic Integrity Objective of at least moderate.
- (G63) Duration of visual impacts to allow for herbaceous and woody plants are established will be determined during project planning by the following criteria:
- Capability of the landscape to recover
  - The relationship of management activity to the seen area of sensitive, use areas and travel ways.
- (G64) Establishment of herbaceous vegetation may extend to 3 years after project completion for foreground and middleground in Concern levels 1 and 2 use areas and travel ways. Consider immediate initiation of reseeded in these areas where natural recovery is questionable.

### **Guidelines for Special Uses**

- (G81) Before issuing recreation or non-recreation special use authorizations, ensure that each proposal clearly demonstrates why use of National Forest System lands is necessary and why lands under other ownership cannot be used. Deny proposals for use when the request is based solely on affording the proponent a lower cost or less restrictive location than can be obtained on non-Federal lands, or when reasonable options exist on non-National Forest System lands. Use the process identified in FSH 2709.11 to determine whether special use proposals will be accepted for detailed review under NEPA. Provide only for authorizations that meet the tests of prudent, reasonable, and absolutely in the public interest.

### **Standards and Guidelines for Heritage Resource Management**

- (S32) Review undertakings that may affect cultural resources to identify potential impacts. Compliance with Sections 106 and 110 of the National Historic Preservation Act shall be completed before the responsible agency official signs the project decision document.
- (G88) Design any mitigation measures necessary to resolve adverse affects to sites in such a way that they provide the maximum public benefit that the sites (or the information derived from them) can offer.