

Appendix C

Reasonably Foreseeable Activities

Project Name	Unit	Description of the Project and Potential Effects
Cooperative Fisheries Enhancement Projects	D1, D2, D3, D4, & Dixie NF	<p>The Fishlake NF and Dixie NF, in cooperation with the UDWR, are re-establishing native trout populations in 10 streams, which will involve use of rotenone to remove nonnative trout. One marsh located on Utah Division of Wildlife Resources lands will also be treated. Fish migration barriers will be constructed where necessary to prevent reinvasion of streams by nonnative trout. The list of proposed streams on the Fishlake National Forest are North Creek, Pine Creek/Bullion Canyon, Fish Creek, Shingle Creek, Upper Clear Creek, Three Creek/Pole Creek, Willow Creek, and Tasha Creek. The Deer and Cottonwood Creek treatments on the Powell District of the Dixie National Forest are outside the project cumulative effects areas.</p> <p>The proposed activities will use existing access, and motorized cross-country travel is not needed. As such, the activities do not change the primary issue indicators assigned to track cumulative resource impacts for the route designation project.</p>
Fishlake Oil and Gas Leasing EIS	D1, D2, D3, D4	<p>The O&G leasing EIS process is in the preliminary stages, with a target decision date for December of 2007. Following appeals and litigation, the BLM would be able to offer available National Forest System lands for lease contingent on the stipulations identified in the EIS. Some areas would have "no surface occupancy" stipulations; others would be subject to seasonal timing limitations for O&G activities; some subject to "standard lease terms" only, and so on. The forest has drafted the Reasonably Foreseeable Development Scenario (RFDS) for future O&G exploration and development and it is under review by the BLM. The draft RFDS predicts approximately 24 exploration well drill pads, 22 production well pads, about 60 miles of new roads (for exploration and production), and about 100 miles of light to heavy road reconstruction associated with oil and gas lease activities. Total gross surface disturbance (before reclamation) from all these facilities would be about 1,000 acres. These figures could be refined as the RFDS is developed further. These activities would require O&G leases to be issued. The forest has no existing federal O&G leases at this time. The earliest that exploration and development could take place is at least 2 years away. Future proposed lease exploration and development activities would require a site-specific NEPA analysis, generally either an EIS or EA, less frequently a CE, particularly in the early stages.</p> <p>Future lease proposals do have the potential to impact resource issues tracked in the route designation EIS, although lease stipulations and Best Management Requirements would likely reduce the degree and extent of impacts. Considered cumulatively, the action alternatives still result in a substantial decrease in net motorized route densities and acres open to cross-country travel at the forest scale. The No Action alternative creates the opposite result and would result in greater negative impacts to the primary issues.</p>
Grazing Permit	D1,	The forest will continue to conduct NEPA assessments to

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Reissuance NEPA	D2, D3, D4	<p>reauthorize existing grazing permits. Currently 1000 Lake, UM, Solomon, and Daniels Allotments are being evaluated to determine if they can be categorically excluded based on Sect. 339, P.L. 108-447, of the 2005 Consolidated Appropriations Act. In SEC. 339 the act states, “For fiscal years 2005 through 2007, a decision made by the Secretary of agriculture to authorize grazing on an allotment shall be categorically excluded from documentation in an environmental assessment or an environmental impact statement under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) if: (1) the decision continues current grazing management; (2) monitoring indicates that current grazing management is meeting, or satisfactorily moving toward, objectives in the land and resource management plan, as determined by the Secretary; and (3) the decision is consistent with agency policy concerning extraordinary circumstances. An environmental assessment or EIS will be conducted for allotments that cannot be categorically excluded.</p> <p>No new motorized routes or exemptions permitting cross-country travel would be needed to reissue permits. Therefore, the activities do not change the primary issue indicators assigned to track cumulative resource impacts for the route designation project.</p>
OHV Events	D1, D2, D3, D4	<p>The Fillmore ATV Jamboree and the Rocky Mountain ATV Jamboree occur annually. Up to 300 organized riders are allowed on the Fillmore Jamboree and up to 800 organized riders are permitted during the Rocky Mountain ATV event although those numbers have not ever been reached. These multi-day events are under special use permit and have been monitored for several years. Monitoring done to date indicates that the events, which are guided, are being well managed and are providing important opportunities for engaging with and educating the public. A positive example is the “Weed Warrior” program initiated in 2006 that gave riders free tokens to wash their ATVs to prevent the spread of noxious weeds. Some of the monitoring such as that done on forded stream crossing impacts on water quality reveals potential improvements that can be made to the route infrastructure to reduce impacts, but do not indicate that changes are necessary in the management of the events themselves. The needed improvements such as hardening forded crossings and relocating routes that encroach on stream channels were anticipated in the original analysis that authorized the issuance of the special use permit. There is a possibility that additional events could be requested and authorized in the future.</p> <p>Monitoring has shown that the potential for impacts from jamboree events were adequately disclosed and analyzed in the OHV Event Environmental Assessment that was published in 2001. The jamboree events use existing routes that are designated and analyzed as open to motorized use in the action alternatives. The number of riders on any given ride of the event are limited and monitored. Travel off designated routes is not allowed in the special use permit. Future event permits would likely contain similar special use permit provisions as specified for the current events. Therefore, the jamborees do not change the primary issue indicators assigned to track cumulative resource impacts for the route designation project.</p>
Utah Forest Highway 39 Sevenmile-Gooseberry	D2, D4	This project involves reconstructing Forest Highway 39 from the intersection with the I-70 frontage road south to the junction with

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Road [Note: this is not a Forest Service project]		<p>Forest Highway 42 by Johnson Reservoir. The reconstruction activities includes road realignments (and obliteration of the original road alignments), increasing the size of existing stream crossings and the amount of cross-drainage, armoring drainage ditches, adding sub-grade materials, installing sub-surface slope drains, and paving. The project is being implemented in 3 phases. Phase 1 is complete. Phase 2 is scheduled to start in 2007 and phase 3 is scheduled to begin in 2010.</p> <p>Much of the existing road alignment in Phases 1 and 2 are located on North Horn sediments, which are prone to mass failure and surface erosion. The road realignments, obliteration, slope drains, etc. are intended to increase the stability of the road and slopes that it traverses. There is give and take, but overall the completed road in combination with the obliteration of the relocated road segments should result in reduced potential for sedimentation relative to the original road. The road obliteration will reduce the mileage on sensitive soils and will remove a road segment that encroaches on Sevenmile Creek. The action alternatives for the route designation project should further reduce the potential for impacts to resources by reducing motorized route density and eliminating unregulated cross-country travel.</p>
Wolverine Oil and Gas Seismic Exploration DM	D1, D2	<p>This project was a reasonably foreseeable project at the time the DEIS was released. The project has since been completed.</p> <p>A Decision Memo was signed on July 6, 2005. The Forest Service found that no extraordinary circumstances or special conditions were identified in the environmental analysis. The Forest Service evaluated the effects of the proposed operations. Wolverine used helicopter portable drills and rubber-tired drill buggies to drill shot holes at 220' intervals along 9.7 miles of line on NFS land on the Beaver Ranger District. There were short-term impacts associated with the activity, noise and some surface disturbance. After one year, it is difficult to detect residual surface disturbance, and is usually hard to find where the seismic lines were located. Based on follow-up inspections, Wolverine's contracted seismic companies did a good job of "leaving no trace." The activities did not permanently change the primary issue indicators assigned to track cumulative resource impacts for the route designation project.</p>
Grant Geophysical Oil and Gas Seismic Exploration DM	D1, D3	<p>This project was a reasonably foreseeable project at the time the DEIS was released. The project has since been completed.</p> <p>The Grant geophysical project involved laying out geophones (receivers) on the forest by field personnel. Only foot-travel was used and no drilling was involved. No short- or long-term impacts occurred. The activities did not change the primary issue indicators assigned to track cumulative resource impacts for the route designation project.</p>
East Kanosh Fuels Reduction Project	D1	<p>This project would treat hazardous fuels east of the town of Kanosh. Only existing motorized access would be needed. About 576 acres are proposed for mechanical treatment using a Dixie harrow.</p> <p>Authorized motorized route densities would not change from existing conditions. Acres of motorized cross-country travel would increase only during the days that the harrow and seeding treatment is applied. The project does not permanently change the</p>

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		issue indicators. Considered cumulatively, there would still be a significant net reduction in areas open to motorized cross-country travel.
Elsinore Fuels Reduction Project	D1	<p>This project would treat hazardous fuels west of the town of Elsinore. Only existing motorized access would be needed. About 730 acres are proposed for mechanical treatment using a Dixie harrow.</p> <p>Authorized motorized route densities would not change from existing conditions. Acres of motorized cross-country travel would increase only during the days that the harrow and seeding treatment is applied. The project does not permanently change the issue indicators. Considered cumulatively, there would still be a significant net reduction in areas open to motorized cross-country travel.</p>
Horse Hollow Fuels Reduction Project DM	D1	<p>The project would apply prescribed fire to the following vegetation types: sagebrush, pinyon-juniper, mountain mahogany, non-commercial mixed conifer, and Gambel oak. Approximately 40-80 percent of the vegetation will be treated in the 1,234-acre project area. Burning will occur mainly during fall months, but could also occur during the spring or summer depending on weather and fuels conditions.</p> <p>This project will use existing access, and motorized cross-country travel will not needed. As such, the activities do not change the primary issue indicators assigned to track cumulative resource impacts for the route designation project.</p>
Pioneer Hazardous Fuels Reduction DM	D1	<p>The project will apply prescribed fire to the following vegetation types: sagebrush, pinyon-juniper, mountain mahogany, non-commercial mixed conifer, and Gambel oak. Approximately 40-80 percent of the vegetation will be treated in the 310-acre project area. Burning will occur mainly during fall months, but could also occur during the spring or summer depending on weather and fuels conditions.</p> <p>This project will use existing access, and motorized cross-country travel will not needed. As such, the activities do not change the primary issue indicators assigned to track cumulative resource impacts for the route designation project.</p>
Wild Goose Hazardous Fuels Reduction DM	D1	<p>The project would apply prescribed fire to the following vegetation types: sagebrush, pinyon-juniper, mountain mahogany, non-commercial mixed conifer, and Gambel oak. Approximately 40-80 percent of the vegetation would be removed in the 1,373-acre project area. Burning would occur mainly during fall months, but could also occur during the spring or summer depending on weather and fuels conditions.</p> <p>This project has been approved and qualified as a categorical exclusion. The proposed activities would use existing access, and motorized cross-country travel would not needed. As such, the activities do not change the primary issue indicators assigned to track cumulative resource impacts for the route designation project.</p>
Adelaide Campground Reconstruction DM	D1	This project was reasonably foreseeable during the DEIS, but has since been completed. It involved replacing and refurbishing existing developed campsites including tables, grills, fire circles, and restrooms. Trees were planted in some areas. All of the activity was within the existing campground development and did

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		<p>not increase existing user capacity.</p> <p>Existing access was used to implement this project and motorized cross-country travel was not needed. Thus, the proposed activities did not change the issue indicators and is now part of the existing condition.</p>
Bowery Haven Resort RV Park Expansion DM	D2	<p>The project would allow expansion of existing RV Park, within the permitted area, by adding an additional loop road with 9 parking spurs with water, power and sewer hookups. The project would also authorize the construction of a new laundry, shower and restroom building with an attached pavilion. The new loop road is proposed to be approximately 20 feet wide by 600 feet in length. The parking spurs are proposed to be approximately 30 feet wide and the pavilion approximately 20 feet by 25 feet. These new facilities would be tied into the existing sewer system, which presently services the Fish Lake basin. Water is provided by Bowery Spring.</p> <p>No part of the project is closer than 200 feet from Fish Lake and most is over 300 feet away. The new road construction adds to the miles of route within the riparian influence zone, but the net mileage under the action alternatives for the route designation project is still slightly less than current conditions. ATVs are not allowed in Fish Lake Basin. Therefore, no adverse cumulative impacts are anticipated.</p>
Castle Valley Ranch Water System Project EA	D2	<p>The project is currently in a state of flux and is currently on hold. One possibility would permit an applicant with existing water rights to maintain & operate 4 existing small reservoirs & approximately 20 miles of ditch and pipelines to provide irrigation livestock water to a ranch located on the east side of Thousand Lake Mountain. Another is that the Utah Division of Wildlife and the Forest Service may do varying degrees of maintenance or restoration, and the regulation dam would be built on the private ranch. Some action is necessary to bring the structures into compliance with State and federal regulations.</p> <p>Existing access would be used to maintain the dams, and motorized cross-country travel would not be needed outside of the reservoirs under either scenario. Thus, the activities do not change the primary issue indicators assigned to track cumulative resource impacts for the route designation project.</p>
Fishlake Basin Cabin Reconstruction Project	D2	<p>Four separate recreation residence special use permit holders have requested permission to replace their cabin with a new one. The existing structures are old and no longer meet their needs. The cabins are and will continue to be found on National Forest Land within areas set aside for recreation residences. The replacement structures would be required to meet current federal, state and county laws and regulations.</p> <p>Existing access would be used to reconstruct the residences and motorized route travel off-route would be limited to existing disturbed sites such as parking areas. As such, the activities do not change the primary issue indicators assigned to track cumulative resource impacts for the route designation project.</p>
Fish Lake Basin Water Systems Reconstruction Project	D2	<p>This project will combine the Twin Creek, Bowery Creek, and Fish Lake Lodge water systems under the Twin Creek spring source and is scheduled for completion by November of 2006. The current spring developments at Bowery Creek and Fish Lake</p>

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		<p>Lodge Spring will be abandoned and the domestic use water rights will be transferred to Twin Creek Spring. The project includes upgrading the Twin Creek water system to current State and Forest Service standards and will include the replacement of all lines at existing locations (from spring to service) within Twin Creek Administrative Site, Twin Creek Picnic Area and amphitheater, Mackinaw Campground and Bowery Creek Campground. The project will upgrade the system to provide drinking water to the Fish Lake Lodge Resort, Twin Creek summer homes, and Bowery Haven Resort. The new system will follow existing line locations. The project will also combine the Doctor Creek and Lakeside Resort water systems under the Doctor Creek Spring Source. The Lakeside Resort spring will be abandoned and the domestic use water rights will be transferred to the Doctor Creek Spring Source. The project will upgrade the Doctor Creek water system to current State and Forest Service standards and will include the replacement of all lines at existing locations (from spring to service) to and within the Doctor Creek Campground, the Doctor Creek Group Sites, Mallard Bay Overflow Area, and the Trailer Dump Station. The project will upgrade the system to provide drinking water to Lakeside Resort and the Doctor Creek summer homes (18 total).</p> <p>The proposed activities only temporarily affect the cross-country travel indicator and add 1 stream crossing by a buried pipeline. Even so, the action alternatives for the Fishlake OHV Route Designation Project result in a net decrease in motorized route density and acres open to motorized cross-country travel and in the number of stream crossings. Therefore, no adverse cumulative impacts are anticipated.</p>
Fish Lake Cabins Fuels DM	D2	<p>This project would remove fuels hazards directly adjacent to summer homes and administrative facilities in the Fish Lake basin and is considered site maintenance. Most of the treatments around the summer homes involve hand felling. Slash would be hand piled or chipped, and burned. Dixie harrow treatments are also being considered. The project would use existing access.</p> <p>No new road would be needed to conduct the proposed work. The Dixie harrow treatments would involve temporary motorized cross-country travel. Even so, the action alternatives for the Fishlake OHV Route Designation Project result in a net decrease in motorized route density and acres open to motorized cross-country travel. Therefore, no adverse cumulative impacts are anticipated.</p>
Fish Lake – Lake Shore Toilets Installation EA	D2	<p>This project was reasonably foreseeable during the DEIS, but has since been completed. The project installed three single-unit, fully accessible, vault toilets in the Fishlake Basin primarily for ice fishermen, snowmobilers, and other recreationists visiting the Fish Lake basin during winter months. One toilet was located adjacent to the Lakeside Marina parking area, another was located just south of the entrance to Vale Drive, and the third was located at Mackinaw Point across from Bowery Creek Campground.</p> <p>Existing access was used to implement this project and motorized cross-country travel was not needed. Thus, the activities did not change the primary issue indicators assigned to track cumulative resource impacts for the route designation project.</p>
Fish Lake Resorts	D2	The Project would permit Fish Lake Resorts to replace a culinary

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Culinary Water Line Replacement DM		<p>water line. Current plans are to supply water to resort facilities by connecting about 2500 feet of pipe to an existing Forest Service line. The project would include 2 crossings of Twin Creeks.</p> <p>This project qualified as a categorical exclusion. The proposed activities temporarily affect the cross-country travel issue indicator and add 1 stream crossing by a buried pipeline. Even so, the action alternatives result in a net decrease in acres open to motorized cross-country travel and in the number of stream crossings. Therefore, no adverse cumulative impacts are anticipated.</p>
Garkane Power Special Use Permit Reauthorizations DM	D2	<p>The project would authorize the presence, repair and maintenance of electric power transmission lines, owned by Garkane Power Co, on National Forest System lands. Continued operation and maintenance of existing systems are being proposed with no change in current rules and regulations.</p> <p>Existing access would be used to implement the maintenance. Some temporary motorized cross-country travel within the existing corridor beneath the power line may be needed, but is restricted under the terms and conditions of the Special Use Permit. The action alternatives for the Fishlake OHV Route Designation Project result in a net decrease in acres open to motorized cross-country travel. Therefore, no adverse cumulative impacts are anticipated.</p>
Mytoge Mountain Vegetation Treatment DM	D2	<p>This project was a reasonably foreseeable activity in the DEIS and has since been implemented. The sale has been offered two times with no bids received. This project may not ever sell, but the proposal is to treat insect and disease infested forest stands with attention to the dwarf mistletoe in the Douglas fir trees. Project would also improve the health of aspen stands, and reduce the heavy fuels in the project area. The project would include the harvest of beetle-infested, diseased, mature, and dead trees, including trees susceptible to disease and insects on 245 acres located roughly 0.5 miles southeast of Fish Lake. Basal area would be reduced from 200 to less than 140 square feet per acre and the percentage of conifer species in aspen stands would be reduced to less than 15 percent. All slash would be piled and burned or lopped and scattered. This would be done in a manner that reduces fuel loadings while protecting visual quality. No new road would be constructed to complete the harvest.</p> <p>Motorized route density would not increase if this project were implemented. Acres of motorized cross-country travel would increase only as harvest and site-preparation activities are applied. The action alternatives for the Fishlake OHV Route Designation Project still create a net decrease in motorized route densities and acres open to motorized cross-country travel. Therefore, no adverse cumulative impacts are anticipated.</p>
Neff's Irrigation System Special Use Permit Reauthorization DM	D2	<p>The project would re-authorize a permit for the presence, repair and maintenance of an irrigation water reservoir and ditches on National Forest System lands. No changes in current use or permit requirements are proposed.</p> <p>The maintenance and repair occurs along existing ditches and from existing access. This use is restricted under the terms and conditions of the Special Use Permit. The action alternatives for the Fishlake OHV Route Designation Project result in a net</p>

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		decrease in motorized route densities and acres open to motorized cross-country travel. Therefore, no adverse cumulative impacts are anticipated.
Sevenmile Dixie Harrow Treatment DM	D2	This project was reasonably foreseeable when the DEIS was prepared. It has since been dropped from consideration.
Sheep Valley Dixie Harrow Treatment DM	D2	<p>This project would treat approximately 600 acres of Big and Silver sage, with the Dixie Harrow, on NFS lands.</p> <p>Authorized motorized route densities would not change from existing conditions. Acres of motorized cross-country travel would increase only during the days that the harrow and seeding treatment is applied. The project does not permanently change the issue indicators. Considered cumulatively, there would still be a significant net reduction in areas open to motorized cross-country travel.</p>
Thousand Lakes Mountain East Dixie Harrow Treatment DM	D2	<p>This project is currently on hold. If pursued, this project would treat approximately 245 acres of Big sage, Silver sage, with the Dixie harrow, on NFS lands.</p> <p>Authorized motorized route densities would not change from existing conditions. Acres of motorized cross-country travel would increase only during the days that the harrow and seeding treatment is applied. The project does not permanently change the issue indicators. Considered cumulatively, there would still be a significant net reduction in areas open to motorized cross-country travel.</p>
Torrey Culinary Water Augmentation Project EA	D2	<p>This project was reasonably foreseeable during the DEIS, but has since been completed. The project developed Sulphur Spring for culinary water purposes. The spring development required removing deep-rooted vegetation, burying perforated pipe and installing a clay cutoff wall to capture available water, installing an overflow/drain pipe with a 3' by 3' concrete headwall, covering the development with a plastic liner, burying it with 2 feet of clean backfill material and installing an area protection fence. About 7400 feet of pipeline was installed to take the captured water to an existing water transmission pipeline. The pipeline was buried under two small creeks, Sand Creek and East Sand Creek. A borrow site less than ¾ of an acre in size was used for the fill dirt needed for the development of Sulphur Spring and to cross a boulder field near the existing water transmission pipeline. About 9.5 acres of land was involved with this part of the project in the short-term and 6.0 acres in the long-term. Ten gallons of water per minute is released below Sulphur Spring and the Sand Creek Irrigation ditch diversion, in order to ensure the long-term maintenance of the existing wetland below Sulphur Spring. This amount will be monitored and adjusted as needed to maintain the wetland. Water from undeveloped springs along the rest of the ditch continues to flow into and through the ditch. The project also installed roughly 3500 feet of new 12-inch diameter pipeline. This pipeline begins at some existing water storage tanks and is placed between an existing waterline and road to the National Forest Boundary near Torrey. About 4.0 acres of land was involved with this part of the project in the short-term and 2.4 acres in the long-term. All areas disturbed during implementation were reclaimed and reseeded with native vegetation.</p> <p>The project allowed temporary motorized cross-country travel and added crossings by buried pipe, but did not permanently change</p>

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		the issue indicators. Reclamation work has been completed and the disturbed sites are recovering. Cumulatively, net motorized route density and acres open to motorized cross-country travel is reduced under the action alternatives. Therefore, no adverse cumulative impacts are anticipated.
UM Creek Riparian Area Management DM	D2	<p>This project was reasonably foreseeable during the DEIS and is now half completed. The project is constructing 2 watering systems to provide alternate watering sources for livestock that currently water on UM Creek. The project is constructing two watering systems including pipelines and a series of watering troughs away from UM Creek in the Right Fork and Mables areas on the UM Creek allotment. This will provide alternate watering sources for livestock that currently water directly on UM Creek. This will also redistribute livestock use away from the riparian area to enhance the fishery by improving riparian vegetation and stream channel conditions.</p> <p>Existing access is being used although temporary motorized cross-country travel has been needed. The project does not permanently change any of the issue indicators. In actuality, there is still a net reduction in motorized route densities and areas open to motorized cross-country use.</p>
UM Pass Vegetation Management	D2	<p>This project was reasonably foreseeable in the DEIS and has recently been approved in a Decision Memo that has since been remanded under appeal. The project would treat stands being impacted by spruce bark beetle and is intended to reduce fuel loadings. The project consists of the commercial removal of dead and currently infested trees on 210 acres. In addition, commercial intermediate thinning would be implemented to move the stands towards properly functioning condition in terms of composition and density as well as to improve structural diversity. As part of the project, up to ½ mile of temporary road would be constructed. Following implementation, the temporary road would be completely obliterated, restored to a natural slope, covered with slash and debris, and revegetated.</p> <p>This project would result in a temporary increase in motorized route density and cross-country travel. However, motorized route density and acres open to cross-country travel decrease when considered cumulatively with the route designation project. Therefore, no adverse cumulative impacts would be anticipated.</p>
Big Flat Water System Reconstruction	D3	<p>This project would reconstruct the current culinary spring that serves the Big Flat Guard Station and replace a faucet that provides drinking water to the public adjacent to State Road 153. This is the only “tested” drinking water on the top of the mountain for several miles. Currently, the system does not meet State and Federal water quality standards due to the lack of pressure in the system. Since all of the water is not being collected in the spring source, there is currently no way for a chlorination procedure. The proposed project consists of installing a new spring collection box at the Big Flat Spring, solar pump, chlorination box, 2000-gallon fiberglass tank, 2200 feet of HDPE pipe, 2 new hydrants, and all associated valves. The new collection box would be a 4-foot diameter pre-cast concrete pipe with a steel man-way on top. A hypo-chlorinator will be added to the system for potential chlorination in case of poor bacteriological tests, if needed. Much of the work for the project will take place within the SR-153 corridor or within areas that have already been previously</p>

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		<p>disturbed.</p> <p>This project does not increase existing motorized route density and only temporarily impacts acres used for cross-country travel. Considered cumulatively, net motorized route density would decrease and acres of cross-country travel would decrease slightly. Therefore, no adverse cumulative impacts are anticipated.</p>
Cove Fort-Sulphurdale Geothermal Leasing EA	D3	<p>This project was reasonably foreseeable at the time the DEIS was released. The Utah State Office of the Bureau of Land Management is proposing to lease three parcels of National Forest System land in the Cove Fort-Sulphurdale area for geothermal resources. The analysis for this project, including consideration of cumulative impacts, concluded that there would be no significant impacts. The proposed lease parcels, total 6,097 acres, lying north and south of the existing geothermal lease area and power plant facilities at Sulphurdale. A Reasonably Foreseeable Development Scenario was prepared for this project. Existing roads would be used wherever possible, but it is expected that some of the existing roads would be upgraded and that new, temporary, and permanent access roads would be constructed in all parcels. Roughly 8 production wells and 4 injection wells with a 2 to 3 acre footprint would likely be needed. One to two miles of geothermal pipeline may also be installed. The power plant would be expected to cover 5 to 10 acres and 1 to 2 miles of transmission lines with 40-foot wide rights-of-way would be needed for each parcel. The Forest Supervisor specified leasing stipulations as mitigation measures in the environmental analysis process. If the parcels are offered and sold, the new leaseholder(s) would have the exclusive right to drill for, extract, produce, use, and dispose of all geothermal resources in the leased lands. The leaseholder(s) would also have the right to build and maintain necessary improvements on the leased lands for a primary term of 10 years, subject to renewal or extension in accordance with the appropriate leasing authority.</p> <p>This action will likely add mileage the motorized route network and result in temporary increases in cross-country travel. The actions from the route designation project reduce the potential for cumulative impacts by eliminating motorized cross-country travel by the public and by removing ATV use off routes that are intended to have non-motorized use only. Thus, no adverse cumulative impacts are anticipated provided an action alternative is implemented.</p>
Elk Meadows Fuel Reduction and Aspen Restoration Project EA	D3	<p>This project was reasonably foreseeable when the DEIS was released, but is no longer a reasonably foreseeable action due to unresolved resource and private property issues. There is no estimate for when or if these issues can be resolved.</p>
Interstate-70 Wireless Communications Site Project EA	D3	<p>This project was reasonably foreseeable when the DEIS was released, but has since been approved for implementation. The analysis for this project, including consideration of cumulative impacts, concluded that there would be no significant impacts. This project designated two wireless telecommunications sites, along I-70 between Cove Fort and Fremont Indian State Park, with primary purpose of serving cellular, personal communications services and enhanced specialized mobile radio. The proposed communications sites will consist of land allocations of about 100 by 100 feet on which equipment building(s) and communication tower(s) will be located. The tower height at each proposed site</p>

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		<p>will not exceed 199 feet. The proposed wireless system will be designed to meet the technical requirements of all licensed wireless carriers through co-location. Less than ½ of a mile of new road will permanently be needed to access the sites.</p> <p>The project would result in a slight increase in motorized route density that would be more than offset by route obliteration associated with the action alternatives for the route designation project. Cross-country travel may be needed during site construction, and occasionally for powerline maintenance, but this impact will be temporary and will be controlled under the terms of the Special Use Permit. Therefore, no adverse cumulative impacts are anticipated.</p>
Kents Lake Road Reconstruction Project	D3	<p>This project consists of approximately 5.2 miles of road reconstruction on Forest Road 137. Work elements include roadway excavation, placing embankments, disposing of excess and unsuitable excavated materials, removal and installations of metal culverts, constructing rock buttresses, installation of underdrains, placing aggregate base and hot asphalt concrete pavement, installing guardrail systems, resetting signs, pavement markings, installation of gates, and related work.</p> <p>The project will be completed this year. The activities do not change the primary issue indicators assigned to track cumulative resource impacts for the route designation project.</p>
Little Reservoir Vegetation Management Project DM	D3	<p>The project will mechanically treat fuels within a 400 feet wide buffer on portions of the west, north, and east boundary of the private land subdivisions adjacent to Little Reservoir. The total amount of area treated will be about 144 acres. The treatment will be limited to hand felling and chipping of trees, brush, logs, and downed woody material within the 400-foot wide area surrounding the private land. The chipper will be used adjacent to properties where the landowner allows access across the private property and it is reasonable to drive a rubber-tired vehicle without construction of roads. In terrain inaccessible to the chipper, thinned vegetation will be hand piled and burned. Leftover slash will also be hand piled and burned in areas where the chipper is used. Trees larger than 12 inches diameter at breast height will not be removed.</p> <p>No new roads or motorized trails would be constructed. Temporary motorized cross-country travel would be permitted for the chipper vehicle. Even so, the action alternatives for the Fishlake OHV Route Designation Project result in a net decrease in motorized route densities and acres open to motorized cross-country travel.</p>
South Fork Vegetation Treatment Project EA	D3	<p>This project would use commercial salvage and thinning to reduce fuels, stand density, and susceptibility to spruce beetle. Roughly 1,824 to 2,040 acres of Engelmann spruce and sub-alpine fir forest currently infested with, or at high-risk of spruce beetle infestation would be treated. About 1.7 to 2.3 miles of temporary road would need to be constructed and 9.0 to 10.1 miles of existing temporary road would need to be reopened. Treatments would occur in five to six units ranging from 207 to 570 acres in size.</p> <p>The temporary roads result in a short-term increase in the stream crossing frequency and riparian route mileage, although the net effect would be only slightly greater if an action alternative is chosen for the route designation project.</p>

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Utah Forest Highway 29 / Beaver to Junction Road Reconstruction EA [Note: this is not a Forest Service project.]	D3	<p>This project would provide improvements to Segment 3 (mileposts 12.3 to 14.2), Segment 5 (mileposts 21.4 to 31.3), and Segment 6 (mileposts 31.3 to 35.0) of Federal Highway 29. Currently this project is not scheduled to begin until 2010. An existing waste disposal area located adjacent to Segment 2 will be used for disposal of excess fill material from roadway improvements. The proposed action includes reconstructing the road and shoulders in Segment 3, Segment 5, and Segment 6 to a width of 26 feet paved surface, 24 feet of graveled surface, and 24 feet of paved surface, respectively. Segment 3 would consist of two travel lanes, each with a paved width of 11 feet and two paved 2 feet wide shoulders. Segment 5 would consist of a 24 feet wide gravel-base roadway that would accommodate vehicles passing in opposite directions, with each of two lanes having a width of 10 feet and two 2 feet wide shoulders. Segment 6 would consist of two travel lanes, each with a paved width of 10 feet and two paved 2 feet wide shoulders. An estimated total of 0.235 acres of Waters of the U.S. and jurisdictional wetlands would be impacted thereby requiring compensatory mitigation.</p> <p>The route obliteration and closure to unrestricted cross-country travel associated with the route designation project would reduce the potential for adverse cumulative effects relative to No Action.</p>
Tushar Grazing Environmental Impact Statement	D3	<p>The project is evaluating the environmental effects of reissuing 10-year term grazing permits to continue to authorize grazing on eight grazing allotments on the Beaver Ranger District in central Utah.</p> <p>The project does not affect the issue indicators, except on locations where the Forest Service allows permittees administrative motorized access that involves cross-country travel. Even when exemptions are permitted, there would still be a net reduction in potential for motorized cross-country travel under the action alternatives for the route designation project. Annual Operating Plans and Allotment Management Plans are monitored and can be modified to reduce or avoid adverse resource impacts. Therefore, no adverse cumulative impacts are anticipated.</p>
Box Creek Hazardous Fuels Reduction Project DM	D4	<p>The project would implement fuels reduction treatments using up to 1,000 acres mechanical treatments and up to 4,500 acres of prescribed fire. Treatment areas are located in the Dairies and Brindley Flats units on Monroe Mountain. The proposal would reduce the fuel loading and the risk of high-intensity, high severity wildland fire in the project area, reduce the susceptibility of spruce fir stands to insects and diseases, and improve aspen stand health. Roughly 2.1 miles of temporary road is proposed for the Dairies unit and 2.2 miles of temporary road are proposed in the Brindley Flat unit.</p> <p>The action alternatives for the Fishlake OHV Route Designation Project result in a net decrease in acres open to motorized cross-country travel. The proposed temporary roads do not permanently change the issue indicators. Therefore, no adverse cumulative impacts are anticipated.</p>
Flat Top Dixie Harrow Treatment DM	D4	<p>This project would reduce hazardous fuels and improve wildlife habitat on approximately 1,131 acres in four separate project areas: Horse Pasture (527 acres), Browns Hole North (128 acres), Browns Hole South (294 acres), and Flat Top (182 acres).</p> <p>Authorized motorized route densities would not change from</p>

Project Name	Unit	Description of the Project and Potential Effects
		existing conditions. Acres of motorized cross-country travel would increase only during the days that the harrow and seeding treatment is applied. The project does not permanently change the issue indicators. Considered cumulatively, there would still be a significant net reduction in areas open to motorized cross-country travel.
Henries Hollow Geophysical	D4	<p>The Fishlake National Forest has received a Notice of Intent to conduct oil and gas geophysical exploration operations from Wolverine Gas and Oil Company. The project, Henries Hollow 2D, would involve operations on National Forest System (NFS), Bureau of Land Management, private, and state lands. The survey lines would total about 56 miles on NFS land on the Richfield Ranger District. If approved, the District Ranger would authorize only that portion of the project on NFS land. The survey would be completed using rubber-tired buggy mounted and helicopter-portable drilling equipment to excavate 3½ inch by 40 foot-deep shot holes to carry small explosive charges. The shot holes would be drilled on approximately 330-foot intervals along the lengths of each seismic line. Receivers (geophones) would be temporarily placed on the ground and used to record seismic waves as the charges were detonated. No road construction or road improvements would be required. About 40-60 days would be required to complete the drilling and recording on portions of the lines on NFS land.</p> <p>This project would result in temporary increases in motorized cross-country travel. However, the project would specify standard and site-specific management practices that help assure that negative resource impacts are avoided. The project would not permanently change the primary issue indicators assigned to track cumulative resource impacts for the route designation project, and based on past performance on recent similar projects, would not result in adverse impacts.</p>
Mt. Terrill Dixie Harrow Treatment DM	D4	<p>This project would treat approximately 850 acres of big sage and silver sage, with the Dixie Harrow, on NFS lands west of Mt. Terrill.</p> <p>Authorized motorized route densities would not change from existing conditions. Acres of motorized cross-country travel would increase only during the days that the harrow and seeding treatment is applied. The project does not permanently change the issue indicators. Considered cumulatively, there would still be a significant net reduction in areas open to motorized cross-country travel.</p>
North Clover Vegetation Treatment DM	D4	<p>The project will treat stands infested with spruce beetles and those susceptible of to further attack in the project area as well as improving the aspen stand health, while reducing the heavy fuels. Harvest will occur on roughly 248 acres. Roughly 0.4 miles of temporary road would be needed to facilitate the mechanical treatments.</p> <p>Some motorized cross-country travel would be permitted for logging skid trails, but this use is restricted by Best Management Practices and Forest Plan standards and guidelines that are incorporated into the timber sale contract. Even so, the action alternatives for the Fishlake OHV Route Designation Project still result in a net decrease in acres open to motorized cross-country travel. Net motorized route density would also decrease under the</p>

Project Name	Unit	Description of the Project and Potential Effects
		action alternatives for the route designation project. Therefore, no adverse cumulative impacts would be anticipated.
Quitcupah Creek Road EIS	D4	<p>This project will upgrade and add on to existing roads to provide a shorter and alternate access route from SUFCO Mine to Highway 10. The project will construct 11.25 miles of 28 foot wide paved road and would install numerous pipe and box culverts and possibly one bridge. The proposed road crosses public and private lands. Roughly 2.52 miles of paved road will be constructed on National Forest System lands, with 7.94 miles built on BLM, 0.26 miles on SITLA, and 0.53 miles built on private lands. The project includes a mitigation package to offset impacts to riparian areas and wetlands, wildlife, and range management. The Water Hollow road will use the Quitcupah Creek road Alignment for 2.0 miles of the westernmost portion of its alignment. At that point, it crosses Quitcupah Creek and follows to the south of this drainage for approximately 0.5 mile to the forest boundary. The route continues in an easterly direction along an existing jeep trail to Water Hollow Benches where it then turns south to Saleratus Benches. From Saleratus Benches, the road will then turn north and east to connect with SR-10. The acreage of impact is estimated at 146.3 acres. The crossing of Water Hollow will require large cuts up to 65 feet deep on both approaches and a large fill 90 feet high and 350 feet wide. This alignment also crosses several other large perennial and ephemeral tributary drainages, for 20 primary crossings.</p> <p>The Draft and Final Environmental Impact Statement (EIS) for the Quitcupah project are incorporated by reference. Only the draft EIS was available to the public at the time the route designation EIS was released. The final EIS and Record of Decision have subsequently been released to the public. Net area open to motorized cross-country travel would decrease under the action alternatives from the route designation project. Proposed route obliteration would offset some of the impacts from the Quitcupah road on forest, but not totally due to the differences in size and use. Applicant committed environmental protection measures are also specified to mitigate negative resource impacts from the Quitcupah road. The action alternatives for the route designation project should reduce the potential for cumulative impacts relative to No Action.</p>
Rueben Hazardous Fuels Reduction & Wildlife Improvement Project DM	D4	<p>This was a reasonably foreseeable project when the DEIS was released. This project has now been completed.</p> <p>Post-implementation monitoring indicated that desired resource outcomes and benefits were achieved without adverse negative consequences. The project did not change the primary issue indicators assigned to track cumulative resource impacts for the route designation project.</p>
Salina Creek Dispersed Recreation	D4	<p>This project will construct less than ½ mile of road to create a dispersed recreation loop to replace the existing dispersed camp sites located at the second crossing of Salina Creek, which are causing damage to riparian vegetation and Salina Creek, and is impacting water quality. The existing dispersed sites will be rehabilitated. A vault restroom facility will be added for the roughly 30 replacement sites. A trailhead will also be constructed at Beaver Creek and at Second Crossing to serve trail use parking.</p> <p>The purpose of and design for this project is to reduce riparian and</p>

Project Name	Unit	Description of the Project and Potential Effects
		water quality impacts. The relocated road is further away from the stream than the existing access and has specified Best Management Practices to reduce erosion potential. The project causes a slight increase in route density that is more than offset by proposed route obliterations from the route designation project. Unrestricted motorized cross-country travel will also be substantially reduced. Therefore, no adverse cumulative impacts are anticipated.
Seven Mile Spruce Beetle Infestation Project DM	D4	<p>The project will use commercial thinning to reduce stand density of Engelmann spruce within 123 acres of beetle-infested, diseased, mature and dead timber stands. About ½ mile of temporary road would be needed to facilitate logging.</p> <p>Some motorized cross-country travel is permitted for logging skid trails, but this use is restricted by Best Management Practices and Forest Plan standards and guidelines that are incorporated into the timber sale contract. The action alternatives for the Fishlake OHV Route Designation Project still result in a net decrease in motorized route density and acres open to motorized cross-country travel. Therefore, no adverse cumulative impacts are anticipated.</p>
Wolverine Geophysical Survey II DM	D4	<p>The survey would be completed using tractor-mounted and helicopter-portable drilling equipment to excavate shot holes for explosives. Geophone receivers would be spaced at 220-foot intervals for approximately 18 miles across National Forest System lands. No new road construction would be necessary.</p> <p>This project would result in temporary increases in motorized cross-country travel. However, the project would specify standard and site-specific management practices that help assure that negative resource impacts are avoided. The project would not permanently change the primary issue indicators assigned to track cumulative resource impacts for the route designation project.</p>
<p>Transportation projects that do not yet have specific proposed actions or that are not being analyzed currently, but that <u>may</u> be developed some time during the implementation period for the Fishlake OHV Route Designation Project – See the 2006 Fishlake Roads Analysis Supplement located in the project file for further details.</p>		<p>Forestwide – Motorized Over-snow Use Travel Plan Forestwide – Dispersed Recreation Strategy D1 – Chalk Creek Trail 326 Realignment / Relocation D2 - Great Western Trail (GWT) Reroutes D2 - Black Flat Crossing (may or may not be part of the GWT reroutes) D2 - Danish Meadows Private Land Access D2 - Sevenmile Creek Trail Reroute D2 – Daniels Canyon Trail 129 Reroute D3 - Forest Access to Junction, Utah D3 - Kents Lake Road cutoff / loop D4 - Accord Lakes Private Lands Through-route D4 - Barney Lake Dispersed Camping and Road Relocation</p> <p>The revision of the winter motorized travel plan will complement the travel planning done for summer motorized use and would be designed to reduce the potential for adverse resource impacts. Similarly, the restoration and management recommendations that result from the dispersed recreation assessment will be designed to reduce existing and future resource impacts. The primary purpose of the Chalk Creek trail realignment would be to reduce the number of stream crossings and the miles of motorized trail directly within the stream and riparian corridor. The two Great Western Trail reroutes offer the potential to reduce riparian and wetland impacts and to protect a Threatened and Endangered plant. Addressing the Black Flat crossing would mitigate the</p>

Project Name	Unit	Description of the Project and Potential Effects
		<p>potential for introducing whirling disease into a currently uninfected stream segment and would improve water quality. The Barney Lake project would reduce the potential for motorized use and dispersed recreation to impact Boreal toads. The Daniels Canyon project is needed to eliminate stream and wetland impacts from the current trail location. Given the purpose and need for the above projects, the potential for cumulative impacts with the route designation project would be less than what exists currently under No Action. The remaining projects are needed to reduce user conflicts by improving and restoring route connections. The projects would be designed to avoid or reduce existing negative impacts to biological and physical resources. The Fishlake OHV Route Designation Project will either be an existing condition or ongoing/foreseeable action for all of these projects. As such, the design for these projects would be modified if necessary to avoid adverse cumulative impacts. This need is not expected given that the route designation project will reduce the potential for cumulative impacts across the forest. Each of the above projects would have some level of NEPA analysis and project file that would document the project design and analyses findings.</p>
<p>Miscellaneous projects that do not yet have specific proposed actions or that are not being analyzed currently, but that <u>may</u> be developed some time during the implementation period for the Fishlake OHV Route Designation Project</p>		<p>D1 – Oak Creek Plantation Thinning & Dispersed Recreation EA D1 – Watts Mountain Fuels and Dixie Harrow Project EA D1 – Pozzolan Volcanic Ash Mine D2 – Fishlake Plateau Grazing Environmental Impact Statement (13 allotments) D2 – Fishlake Basin summer home/recreation residence consistency/continuance review D1 – Dog Valley Water Development D1 – Watts Mountain/Elsinore/Grass Creek Bench Fuels, Wildlife, Range Project (~ 4,000 acres) D2 – Hondoo Trails Special Use Permit D2 – Last Chance Dixie Harrow Treatment DM (~ 605 acres) D2 – Lost Creek Timber Sale D2 – North Creek, Cedarless Flat, West Tidwell Livestock Waterlines D2 – Paradise Valley Dixie Harrow Treatment DM (~ 312 acres) D2 – Wide Hollow Fuels Project D2 – Zedds Bench Timber Sale (~ 250 acres) D3 – Big Flat / Timid Springs Water System D3 – Big Flat Roads and Trails D3 – Blue Lake Dam and Road Reconstruction D3 – Bouillion Pasture Toilet EA D3 – Circleville Dixie Harrow Treatment DM (~ 300 acres) D3 – Merchant Valley summer home/recreation residence consistency/continuance review D3 – South Beaver Range, Fuels, Wildlife Project D4 – Cove Mountain Fuels Project D4 – Gooseberry Fuels Project D4 – Old Woman Dixie Harrow Treatment DM (~ 258 acres) D4 – Old Woman Fuels Project DM</p> <p>Potential impacts from these projects would be similar to those described above for like project types and in the accompanying specialist reports. The Fishlake OHV Route Designation Project will either be an existing condition or ongoing/foreseeable action for these projects. As such, the design for these projects would be modified if necessary to avoid adverse cumulative impacts. This need is not expected given that the route designation project will</p>

Project Name	Unit	Description of the Project and Potential Effects
		reduce the potential for cumulative impacts across the forest. Each of the above projects would have some level of NEPA analysis and project file that would document the project design and analyses findings.

Cumulative Effects Summary for Foreseeable Actions

Relevant impacts from past management projects are incorporated and described in the Affected Environment descriptions for the primary issues. Current and historic livestock grazing, invasive plant treatments, water development, collection of forest products, timber sales, mechanical and prescribed fire and fuels treatments, road and trail construction, reconstruction and maintenance, underground mining for coal, oil and gas exploration and development, geothermal development, and recreational use on federal and private lands considered as part of the existing condition are ongoing and will continue. These activities are factored into the descriptions of the Affected Environment in Chapter 3. Wildfires will occur somewhere on the forest every year under all alternatives.

Livestock management will continue to be monitored and adjusted when additional resource protection is needed through implementation of the Annual Operating Plans and the Allotment Management Plans. Herbicides are the primary pesticide used on the forest and use will continue under all alternatives. Rotenone piscicide will be used in reasonably foreseeable fisheries reintroduction projects. Pesticides will not cause direct, indirect, or cumulative effects provided the implementation requirements from the Fishlake Noxious Weed EA and the Cooperative Fisheries Enhancement Project assessment are followed. The noxious weed EA concluded that there would be no significant direct, indirect, or indirect impacts to biological and physical resources. An assessment for the rotenone treatments is nearly complete and indicates that no adverse impacts will occur. Water developments will continue to be monitored and modified as necessary to protect resource values. The collection of forest products will continue to require a permit with District Ranger approval. Effects from foreseeable timber sales, mechanical and prescribed fire and fuels treatments, road and trail construction, reconstruction and maintenance, underground mining for coal, oil and gas exploration and development, geothermal development are described in the tables above. The primary issues cover the effects from recreational impacts. With wildfire, there is no planning for the time or place of ignition so potential impacts can vary greatly. Wildland Fire Use may also be used when deemed appropriate through the process outlined in the Utah Fire Amendment. Burned Area Emergency Response (BAER) assessments and rehabilitation are done if post fire conditions threaten life, property, or important natural resources. BAER assessments are required if the wildfire is 300 acres or larger, but can be conducted on smaller fires if warranted by the risks. In burned watersheds, the potential for impacts to biophysical and possibly social resources will be greater than what is displayed for the proposed actions.

Some projects in Appendix C are currently in the process of being implemented and are accounted for in the FEIS for project design and analysis. However, projects to which the Fishlake OHV Route Designation project will either be an existing condition or foreseeable action can modify proposed treatments if necessary to assure that the future proposals avoid undesirable cumulative impacts. Foreseeable projects must comply with Forest Plan standards and guidelines and the forest will continue annual project and forest monitoring. This increases the likelihood that future adverse cumulative impacts can be avoided or mitigated if they occur. **It is important to note that most of the foreseeable activities take place off routes. Therefore, reducing off-route motorized cross-country travel directly reduces the potential for direct and indirect interactions and cumulative impacts with other land uses that occur under No Action.** In fact, even if a given foreseeable action or unforeseen event for some reason has significant adverse impacts to social, biological, or physical resources, the nature and magnitude of the cumulative impacts will in almost every case be some degree less as long as an

action alternative from the route designation project is chosen. This results from reducing motorized impacts by obliterating unneeded and impactful routes and by limiting motorized travel to designated routes and areas. This benefit will also result from removing motorized use from non-motorized trails.

As outlined above, reasonably foreseeable activities are generally not creating the types and magnitudes of direct or indirect impacts that will be significant, even when considered cumulatively with the Fishlake OHV Route Designation Project, provided an action alternative is chosen. Since incremental impacts from foreseeable projects will be minimal and temporary, or non-existent, significant cumulative impacts will not occur. The transportation projects are the exceptions to this rule, but these projects are designed to maintain the protection of biophysical resources through avoidance or mitigation, or improve conditions through route redesign, relocation and obliteration. Therefore, significant adverse cumulative impacts are not anticipated. In fact, fewer cumulative impacts should result, which will improve existing compliance with Forest Service requirements for environmental protection.