UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Klamath Falls Resource Area

Finding of No Significant Impact
Spencer Creek Hook-up Road Culvert Replacement
EA #OR-014-03-05

The Interdisciplinary Team for the Klamath Falls Resource Area, Lakeview District, Bureau of Land Management has completed an Environmental Assessment (EA) and analyzed a proposal to replace an existing road culvert that poses a risk to aquatic species in the Spencer Creek watershed. Culvert replacement would improve aquatic species passage, debris conveyance, and reduce the risk of culvert failure during flood events. The Spencer Creek Pilot Watershed Analysis (BLM/USFS 1995, Page 5-43 recommends replacing this culvert with a bridge or open arch structure. The existing culvert is located along a BLM-right-of-way where it passes through private commercial forest land within the Klamath Falls Resource Area, in the Spencer Creek watershed about 10 miles west of Keno, Oregon. The legal description is Township 38 N, Range 6E, Section 34, NE ¼.

The issues addressed in the EA concern potential impacts to fish habitat, water quality, and other resources as they affect aquatic life and humans in the proposed project area. The design features of the Proposed Action and alternatives are described in the attached Spencer Creek Hook-up Road Culvert Replacement EA.

Determination:
The anticipated environmental effects contained in this EA are based on research, professional judgment, and experience of the Interdisciplinary (ID) team and Klamath Falls Resource Area staff. Based on the information within the Environmental Assessment, it is my determination that none of the alternatives analyzed constitute a significant impact affecting the quality of the human environment or would result in impacts greater than those addressed in the:

- Klamath Falls Resource Area Resource Management Plan and Final Environmental Impact Statement (RMP/FEIS, September 1994) and its Record of Decision (ROD, June 1995)

- Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl (April 1994), also known as the Northwest Forest Plan (NFP).

- Klamath Falls Resource Area Integrated Weed Control Plan EA (1993).

Therefore, an Environmental Impact Statement or a supplement to the existing RMP/EIS is not necessary and will not be prepared.

Jon Raby
Field Manager, Klamath Falls Resource Area

2/23/04
Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Klamath Falls Resource Area

ENVIRONMENTAL ASSESSMENT #OR-014-03-05

Spencer Creek Hook-up Road Culvert Replacement

I. INTRODUCTION

A. BACKGROUND

The Bureau of Land Management (BLM) proposes to replace an existing culvert to improve aquatic species passage and reduce the risk of culvert failure during flood events. The culvert is located along a BLM-right-of-way where it passes through private commercial forest land within the Klamath Falls Resource Area, in the Spencer Creek watershed about 10 miles west of Keno, Oregon. The legal description is Township 38 N, Range 6E, Section 34, NE ¼.

B. PURPOSE AND NEED FOR THE ACTION

The purpose of the action is to improve migration conditions for aquatic species including migratory redband trout and Klamath smallscale sucker and reduce the risk of stream channel damage that could result in the event of culvert failure. The need for the action is established in the Klamath Falls Resource Area Record of Decision and Resource Management Plan (RMP), June 1995, which directs that Aquatic Conservation Strategy (ACS) objectives (Page 7, Klamath Falls ROD and RMP) be met by closing and stabilizing, or obliterating and stabilizing roads based on the ongoing and potential effects to [ACS] objectives and considering short and long term transportation needs (Page 14, Klamath Falls ROD and RMP). Further, "…*new structures or improvements will be designed to accommodate the 100-year flood, including associated bedload and debris*". Finally, the BLM shall "*Provide and maintain fish passage at all road crossings of existing and potential fish bearing streams*." The Spencer Creek Pilot Watershed Analysis (BLM/USFS 1995) recommends replacing the culvert with a bridge or open arch structure to reduce the risk of sedimentation resulting from culvert failure, improve migration conditions for trout, and increase large wood debris conveyance capacity (Page 5-43).

An analysis of the culvert fish passage criteria using Fish X-ing, v. 2.2 software (USFS 1999) was used to determine fish passage adequacy. It was determined that the culvert is a "strict velocity barrier" during moderate and high flows for Klamath smallscale suckers and juvenile salmonids and a "burst speed exhaustion barrier" for adult redband trout, as well as other adult salmonids such as coho salmon, steelhead, and Chinook salmon. The proposed action would address fish passage problems for all adult and juvenile stages of sucker and salmonids, improve floodplain and riparian area functions, and increase the conveyance capacity for large woody debris and bedload sediment transport and reduce the risk of stream channel damage.

According to the Klamath Falls Resource Management Plan (RMP, Page 14-16), watershed analyses should be conducted to determine the influence each road crossing has on the Aquatic Conservation Strategy objectives. Further, the BLM shall "Meet Aquatic Conservation Strategy objectives by:

- Reconstructing roads and associated drainage features that pose a substantial risk.
- Prioritizing reconstruction based on current and potential impacts to riparian resources and the ecological value of the riparian resources affected.

Closing and stabilizing, or obliterating and stabilizing roads based on the ongoing and potential affects to Aquatic Conservation Strategy objectives and considering short-term and long-term transportation needs. Design and construct new culverts…and improve existing culverts, bridges, and other stream crossings determined to pose a substantial risk to riparian conditions. Minimize sediment delivery to streams from roads. Provide and maintain fish passage at all road crossings of existing and potential fish bearing streams. (USDI-BLM. 1994. Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl.)

According to the ACS, new projects should be designed to withstand a theoretical 100-year flood event (RMP page F-16). During a flood event on January 1, 1997, this culvert was partially blocked causing water to build up

approximately 6 ft over the top of the culvert creating a backwater effect with sediment deposition for a distance of approximately 1/2 mile upstream of the culvert. Logs had to be cut into pieces with a chainsaw to allow them to be transported downstream. This event provided evidence that the culvert is undersized and is a risk for failure or plugging during moderate or high flood events. This flood was estimated to be a 50-year return interval flood event based on an analysis of the USFWS Spencer Creek gage site.

C. CONFORMANCE WITH LAND USE PLAN

The Proposed Action and Alternatives are in conformance with the Klamath Falls Resource Area of Decision and Resource Management Plan, June 1995, Klamath Falls Resource Area Integrated Weed Control Plan EA (July 21, 1993). Additional information supporting this environmental assessment can be found in the Spencer Creek Pilot Watershed Analysis of August 1995 (Spencer Creek WA).

II. PROPOSED ACTION AND ALTERNATIVES

A. PROPOSED ACTION – Replace existing round culvert with an open-bottom arched culvert.

The existing nine foot diameter round culvert would be replaced with a new, 20-25 foot diameter open bottom arch style culvert with a natural stream gravel and cobble substrate designed to meet fish and aquatic species passage criteria. Haul weight and length capacity of the crossing would be comparable to the existing crossing. Geotechnical testing with a power auger would be required to finalize engineering design prior to construction. Estimated construction costs: $220,000

B. ALTERNATIVE 1 - Replace existing culvert with a full spanning bridge.

This alternative includes engineering and construction of a bridge across Spencer Creek. The existing culvert would be removed and a bridge would be constructed in its place. This alternative may require realignment of the road approach depending on outcome of the engineering studies. Haul weight and length capacity of the bridge would be comparable to the existing crossing. The stream channel under the bridge would be designed to meet fish and aquatic specie passage criteria. Geotechnical testing with a power auger would be required to finalize engineering design prior to construction. Estimated construction costs: $440,000

C. ALTERNATIVE 2 - No Action

The "no action" alternative would leave the culvert in its current condition.

D. ALTERNATIVE 3 - Decommission the road crossing by removing the culvert and block transportation access at the crest of the Spencer Creek inner gorge (Map X).

This alternative involves removing the existing culvert as well as most of the fill material used to build the road crossing. It would include grading the side slopes and the streambed to near historic contours and stream channel morphology. The site would be rehabilitated and stabilized with natural material such as rock, gravel, logs, and native vegetation. The stream channel in the culvert area would be designed to meet fish and aquatic species passage criteria juvenile and adult trout and sucker species. The Spencer Hookup Road would be decommissioned within the inner gorge of Spencer Creek and additional visitor parking in vicinity of culvert would be built to accommodate some recreational parking and turn-around space. This alternative would require decommissioning approximately ¼ mile of the Spencer Hookup road; however the road would remain open at both ends. There would still be access for fire suppression and existing tributary road systems. The majority of the construction costs under this alternative would be associated with removal and disposal of the over culvert fill material This alternative would also require stabilization and rehabilitation of the sideslopes and channel banks after fill removal. Estimated construction costs: $155,000

E. ALTERNATIVE CONSIDERED BUT ELIMINATED – Retrofit existing culvert with baffles to reduce culvert and approach velocities and increase fish passage capability.

This alternative would involve placing material such as baffles inside the existing culvert to break up high velocity areas with the culvert and improve fish passage capacity. This alternative was eliminated from consideration because the culvert is already below the 100-year flood capacity and retrofitting the culvert would further reduce culvert conveyance capacity and increase the likelihood of plugging and catastrophic failure. Therefore, this alternative did not meet the purpose and need of reducing risks to aquatic resources.

III. EXISTING CONDITIONS

A. GENERAL SETTING

The plants and animals in the project area are discussed in the "Klamath Falls Resource Area Resource Management Plan\Environmental Impact Statement (RMP/EIS 1995)" The Spencer Creek Pilot Watershed Analysis (BLM/USFS 1995) discusses the general life history requirements and habitat conditions for aquatic and riparian species in Spencer Creek.

B. SPECIFIC RESOURCE DESCRIPTIONS

Hydrology

Peak flows in the middle portion of the Spencer Creek watershed are driven by snowmelt and rain-on-snow events. Snowmelt events occur during spring, while rain-on-snow events typically occur in mid-winter. A stream gage located at the USFS campground downstream from Buck Lake recorded average daily flows from 1992 to 1998. The drainage area of this gage is approximately 36.5 square miles and has an average elevation of about 5400 feet. During the period or record, annual peak flows were on the order of 150 to 200 cfs (instantaneous peak flows were likely higher). During the flood of December 1996, average daily flows reached approximately 350 cfs at the USFS gauging station (again, instantaneous peak flows were likely higher). The culvert has a drainage area of approximately 42 square miles (with an average elevation of about 5300 feet). Given the larger drainage area and approximately equivalent average elevation, it is likely that peak flows are 10 to 15 percent higher at the culvert than at the USFS gage. The calculated instantaneous flow for a 100-year flood event for Spencer Creek at the culvert is on the order of 490 cfs (based on Winema National Forest regression equations).

Summer baseflows at the USFS gage are typically on the order of 20 cfs, although flows on the order of 5 cfs occur following dry winters (such as 1993/1994). Baseflows at the culvert are likely about the same as those at the gage, since no major springs or tributary inflows occur along the stream between the two points.

Water Quality

Spencer Creek is included on the 2002 Oregon DEQ 303(d) list of water quality impaired streams. Listed parameters included "sedimentation" and "biological criteria". The principal causes of stream sedimentation (i.e., excessive fine sediment) are bank erosion and delivery of sediment from roads and stream crossings. Because the culvert is not large enough to convey the 100-year flood and is associated with a large volume of fill, it presents a risk of failure and future stream sedimentation. In addition, fine and coarse sediment has been deposited upstream from the culvert during periods when peak flows are "backed up" by the inadequate diameter of the culvert.

Although Spencer Creek is not included on the 2002 303(d) list for temperature concerns, monitoring data indicates that summer water temperatures in portions of the stream consistently exceed the Oregon 64 degree F standard. Water temperatures in stream reaches above the culvert are generally cooler, and exceedances of the 64 degree F are less frequent and of shorter duration.

Transportation and Roads

The Spencer Creek Hook-up road is a paved road and connects the county road Clover Creek Road with the Keno Access road. It is classified by the BLM Western Oregon transportation system (Citation) as a "tie road" meaning that it is a road which the primary purpose is to transport tributary timber volume to different marketing areas.

There are several road systems that serve as access routes from the Keno access road to Clover Creek road:

- The Burton Flat Road connects the Keno Access Road to Dead Indian Memorial Road 1.2 miles west of the Clover Creek Road intersection. (See Map "Transportation system in the Spencer Creek Area").

- The Buck Lake Road, a gravel road (BLM road # 38-5E-15.0), starts five miles west of the Spencer Hook-up Road intersection. It connects to private roads which connect to Clover Creek Road. Only the BLM portion of this road currently has public access.

- The Keno Access Road connects to State HWY 66 near J.C. Boyle Reservoir. Travel time from the intersection of Keno Access Road to Keno, Oregon is similar to the travel time required using the Spencer

Hookup road to Clover Creek Road. There are certain restrictions to the types of tractor trailers and busses allowed on HWY 66.

- A network of gravel roads controlled by commercial timber companies connects Keno access road to Clover Creek road via a bridge that crosses Spencer Creek approximately 2 miles south of the Spencer Hook-up road (see map 1). BLM does not currently have road use agreements for use of these roads

The alternatives routes connecting Keno Access to Clover Creek Road to the west and north of the Spencer Hook-up road generally remain snow covered for two to three weeks later than the Spencer Hook-up Road and other connecting roads to the south and east.

Wildlife
The Spencer Creek area has a diversity of birds and mammals that inhabit the area. A description of the wildlife and its habitat can be found in the Spencer Creek Watershed Analysis, 1995 (pp 4-93 – 4-125).

Special Status Species
The proposed project is adjacent to the Spencer District Designated Reserve (DDR). This reserve was designated because of a bald eagle territory along Spencer Creek. There is one known nest within the DDR it is approximately 0.4 miles from the proposed project. Other late successional associated species such as the northern goshawk and northern spotted owl are in the general area. The spotted owl nest site is greater than 0.7 mile away and has not been occupied since 1997. The goshawk nest site was occupied this year and produced one young. This nest site is approximately 0.7 mile away from the project.

Botany
Vascular plant surveys have been completed. No special status plant species were found.

Noxious Weeds
Original vascular plant surveys did not find any populations of noxious weeds within the project area. However, a site visit in 2003 found scattered individuals of Dalmatian toadflax (*Linaria dalmatica*) and St. John's wart (*Hypericum perforatum*).

Survey and Manage
The project area is not high priority habitat for any Survey and Manage mollusk species. Surveys for aquatic mollusks were done in 2000 in Spencer Creek upstream from the project area. No sites were found and the stream conditions do not currently provide habitat for the Survey and Manage aquatic mollusk (*Fluminicola* sp.).

Aquatic Species Habitat
Spencer Creek is an important fish bearing tributary of the Klamath River. Spencer Creek provides the majority of spawning habitat for Klamath redband trout residing in Klamath River between Keno Dam and the State Line. Spencer Creek is also an important rearing and migratory habitat for redband trout. There is approximately 5 miles of salmonid habitat upstream of the culvert. See section **B. PURPOSE AND NEED FOR THE ACTION** above for description of redband trout passage issues inherent to the existing culvert design.

Klamath smallscale suckers use Spencer Creek for spawning, rearing, and migratory habitat. Klamath largescale suckers, a bureau sensitive species (BLM Manual 6840), may use the lower portion of the Spencer Creek for spawning and rearing. ESA listed Endangered (FR 53:27130-27134) Lost River and shortnose sucker may also use the lowest mile of Spencer Creek for spawning and rearing. Native species including lamprey sp., Klamath Speckled dace, and marbled sculpin are known to reside within the project area stream channel.

Pacific giant salamanders are known to reside in Spencer Creek. Spencer Creek is one of the eastern most streams occupied by this species. Pacific giant salamander largely exhibits the aquatic form, maintaining gills into adulthood. The high velocities present in the Spencer Creek culvert may inhibit upstream movement of this species

Cultural Resources
Native American use of the area spans many millennia. The project area was used by the Takelma, Klamath, and Modoc tribes, though activity was limited to seasonal hunting and gathering. Permanent occupation sites, such as

villages, were generally established at lower elevations. In 1864, the area fell within the territory ceded to the United States by the Klamath Tribes consisting of the Klamath, Modoc, and Yahooskin people. Although treaty rights are no longer federally recognized in the project area, the Klamath Tribes remain concerned about potential disturbance to cultural sites in this region.

Historically (post-1846), after the establishment of the Applegate Trail, the project area was used for cattle ranching and logging. Logging began in the1860s with a few small enterprising sawmills. The industry boomed in the early twentieth century both in and around the project area after the introduction of railroads nearby. Weyerhaeuser arrived in 1923 and began constructing logging roads. Today logging and ranching continue to be significant in the area.

The majority of the area to be affected during replacement of the culvert is within previously disturbed areas containing road fill. Prior to the initiation of project activities the remaining areas will be inspected and any discovered cultural resource sites will be avoided.

Recreation

The Spencer Creek Hookup road is one of three major routes for access the Surveyor Mountain Area as well as Howard Prairie Reservoir, a BLM Recreation site in the Medford District. Additionally, it is an access road to a network of designated snowmobile routes in the Spencer Creek and Surveyor Mountain area. It provides direct access to the undeveloped area of Spencer Creek near the Spencer Hookup Road crossing and is used for access to fishing, hiking, and swimming in and along Spencer Creek.

Primitive, user-created hiking trails access this area of Spencer Creek. The area along Spencer Creek, north of the Hook-up road, offers good opportunities for solitude. Excellent botanical/old growth forest and wildlife viewing opportunities, along with primitive camping sites are available. Visual resources within ¼ mile of Spencer Creek are managed as VRM class II. Space for parking and vehicle turn-around is extremely limited at the stream crossing.

IV. DIRECT AND INDIRECT EFFECTS

The Proposed Action and alternatives would have environmental effects. However, none of the alternatives would have effects beyond those described in the RMP EIS. Impacts based upon site specific analysis of the alternatives are described below. This limited space, in addition to limited sight distances, creates a safety concern for persons driving and recreating.

A. UNAFFECTED RESOURCES

The following resources are either not present or would not be affected by the proposed action or any of the alternatives:

> Areas of Critical Environmental Concern, prime or unique farm lands, Native American religious or cultural concerns, Native American traditional uses, grazing, special status plant species, wetlands, Survey and Manage species, solid or hazardous wastes, Wild and Scenic Rivers, air quality, Wilderness/WSA's, visual resources, paleontology, minority populations and low income populations (environmental justice). There would be no adverse impact to exploration and development of energy resources under the proposed action or any of the alternatives.

B. PROPOSED ACTION and ALTERNATIVES

Hydrology

None of the alternatives would have a substantial effect on the processes that generate peak flows and baseflows. The Proposed Action and Alternative 1 would reduce the effects of the culvert on the conveyance of large floods and watershed products (large woody debris and sediment). Alternative 2 would do nothing to address current problems with the culvert, while Alternative 3 would eliminate the impacts of the culvert on channel processes.

Water Quality

No alternative would be expected to have substantial long-term effects on stream shading and water temperature. The Proposed Action and Alternatives 1 and 3 would likely have locally beneficial impacts on channel form (i.e.,

reduced width-to-depth ratios) that would reduce the rate at which water warms. These effects would be very limited in spatial scope and would not be likely to result in measurable reductions in water temperature. Implementing any of the alternatives would potentially affect sediment delivery to the stream channel. The potential effects on water quality are summarized in the following table:

	Short-Term Impacts	Long-Term Impacts
Proposed Action	Introduction of fine and coarse sediment during project implementation and geotechnical testing	Greatly reduce risk of catastrophic culvert failure
Alternative 1	Introduction of fine and coarse sediment during project implementation and geotechnical testing Increased fine sediment production from roadside ditch adjacent to realigned road Mobilization of sediment stored upstream from the existing culvert following project implementation	Eliminate risk of catastrophic culvert failure
Alternative 2	None	Risk of catastrophic culvert failure
Alternative 3	Introduction of fine and coarse sediment during project implementation Mobilization of sediment stored upstream from the existing culvert following project implementation	Eliminate risk of catastrophic culvert failure Eliminate sediment delivery from roadside ditches

Potential short-term impacts associated with project implementation include introduction of fine sediment during instream work, fill removal and placement, and runoff from disturbed areas. These impacts would be mitigated with appropriate Project Design Features and BMPs. Due to increased hydraulic capacity of the open-bottom arch, water would no longer pond upstream from the culvert and local stream energy would increase. Mobilization of sediment deposited upstream from the culvert would likely occur in the first peak flow following project implementation (and may continue during the next few subsequent peak flows). The pulse of fine sediment caused by channel adjustment would disperse and move progressively downstream. Some of this material would be deposited on floodplain areas.

There would be potential minor affects due to accessing and drilling for geotechnical investigation in the Proposed Action and Alternative 1. These impacts would also be mitigated (i.e. reduced or eliminated) with appropriate Project Design Features and BMPs.

From the perspective of water quality, the most important impact of implementing the Proposed Action, Alternative 1, or Alternative 3 would be the reduction or elimination of the risk of culvert failure. Alternative 2 does not reduce the risk of catastrophic culvert failure. Were the culvert to fail, a large proportion of the associated fill material would enter Spencer Creek. Engineering surveys suggest that about 15,000 cubic yards of fine and coarse sediment overlie the culvert (the volume of sediment delivered would vary depending on the degree to which lateral erosion entrains fill material). A sediment delivery event of this magnitude would likely negatively affect water quality and aquatic habitat integrity for many years. Potential risk to human safety from culvert failure is negligible. There are no residences or facilities downstream that would be affected.

Transportation and Roads

The proposed action and Alternatives 1 (bridge) and 2 (no action) would have no effect on existing transportation systems except for temporary closure during construction. Under Alternative 3, (permanent closure) existing road use agreements with US Timberlands would need to be changed or amended under mutually agreeable circumstances.

Blocking transportation access under Alternative 3 would require use of alternative routes. This would alter traffic patterns for BLM administrative use, access to and from nearby and adjacent private lands, and recreational travel

routes. Closing the road at the culvert could potentially affect travel time and ease of access for fire suppression activities. Alternate routes for transportation to and from the Klamath Falls area include the Keno Access to Highway 66 at JC Boyle Reservoir and Road, and the Buck Lake Road connecting Keno Access Road to Clover Creek. In order to maintain an equivalent level of public access to and from the Surveyor Mountain area, changes would be required to road use agreements and possibly transportation system infrastructure. Because of a lack of public access on some of these roads and certain restrictions for hauling on Hwy 66, it would be necessary to develop new road use agreements and/or upgrade some roads to accommodate certain types of hauling. Closing the Spencer Hookup road at the Spencer Creek crossing would likely change traffic patterns and increase use of these alternate routes, potentially increasing road maintenance requirements on these roads.

Wildlife

There would be some short-term disturbance to any local wildlife species in the area caused by construction and geotechnical investigations from the Proposed Action, Alternative 1 and construction from Alternative 3. Alternative 3 would be beneficial to wildlife by reducing road related disturbance.

Special Status Species

The proposed project will have no long-term adverse affects to Threatened and Endangered Species or their habitats. The proposed action, Alternatives 1 and 3 have potential for disturbance to bald eagles, spotted owls or Northern goshawks but because of the proposed timing (Aug./Sept.) and the distance to closest known nest sites is greater than 2 miles, there would be no effect on any special status species. If special status species were discovered in the area affected by construction activity, seasonal restrictions on heavy equipment operations would be applied.

Noxious Weeds Risk Assessment

Alternatives that result in the most ground disturbance could create conditions that favor the invasion or spread of noxious weeds. The removal of the culvert and fill material in alternative 1 and 3 may create the disturbed conditions under which many noxious weeds have a competitive advantage. Replacing the culvert under the proposed action would create some disturbed conditions, but less than in alternative 3. Alternative 2 (No Action) would not create any additional disturbed conditions under which many noxious weeds have a competitive advantage.

Project design features (Appendix 1) for the prevention of the introduction and spread of noxious weed seeds and plant parts would reduce the potential for the establishment or increase of these species within the project area.

Aquatic Species Habitat

The proposed action and alternatives 1 and 3 would increase the distribution and migration range of aquatic species, macro-invertebrates, and herptiles. Simulating the natural channel and sediment within the culvert streambed would be expected to provide unobstructed routes of migration for most aquatic species. For redband trout, approximately 5 miles of additional spawning and rearing habitat may become accessible.

Replacing the culvert and restoring the channel to near natural conditions would substantially reduce the chance of culvert failure and subsequent downstream impacts on channel form and water quality. Some sedimentation may occur during construction from fill and removal activity, but would be of short duration and minimized due to adherence to Project Design Features and BLM instream work guidelines.

The Proposed Action and alternatives should provide improved channel stability in adjacent upstream and downstream reaches. Over the long term, aquatic species distribution would increase, sediment transport would be minimally affected by the culvert stream crossing, and improved wood debris conveyance to downstream reaches.

The Proposed Action and alternatives would not likely cause negative impacts to water resources. Short term effects of construction are not expected to reach downstream areas in the Klamath River occupied by endangered fish species (shortnose and Lost River suckers).

The Proposed Action and all alternatives except the “No Action” would improve the existing fish passage conditions to a near natural state at all flows. Restoring the channel to a natural condition and reducing the velocity to acceptable limits for upstream passage would likely increase fish bearing habitat occupancy upstream of the culvert.

The replacement of the existing culvert with an open bottom arch culvert or bridge maintains a substantially lower risk of catastrophic failure due to flood flows (refer to water quality discussion). Catastrophic failure of the site may result in sediments from the fill area reaching far downstream of the crossing affecting critical spawning and rearing areas for resident redband trout, and potentially reaching spawning habitat for listed sucker species. However, design capacity to meet stream simulation criteria will exceed the 100 year flood potential and thus minimize the risk of failure.

Bridge design (Alternative 1) would have slightly higher habitat value for fish because of the greater potential for channel and riparian vegetation establishment. A bridge design would provide slightly higher potential for channel and riparian area recovery because a bridge would allow for more development of riparian vegetation and channel bank development under the span of the bridge. Conveyance of wood debris, flood flows and sediment through a bridge crossing would have the fewest risks and greatest benefit compared to the Proposed Action and the No Action Alternative.

Under Alternative 2, "No Action", culvert stream velocities would continue to impair juvenile and adult redband trout movement upstream. Risk of catastrophic failure with substantial downstream sediment deposition during flood events would continue to threaten downstream populations of fish species. Access and migration of aquatic species, invertebrates and herptiles, including Pacific Giant Salamander would remain impaired. Risk of culvert blockages would continue to occur requiring additional maintenance, and causing continued safety concerns. Poor LWD conveyance condition would persist.

Road obliteration and restoration of pre-disturbance channel conditions (Alternative 3) would provide fish passage and fully functional stream habitat. This would result in no potential degrading conditions due culvert or bridge piers and no risk associated with structure failure.

Cultural Resources

A review of existing inventory files revealed that a historic site consisting of a cabin foundation is known to exist in the area, though it is well outside the proposed construction area. Prior to project implementation, including geotechnical testing, a cultural resources survey will be conducted. If sites are discovered during that survey, they will be marked in the field and avoided during project construction activities. If subsurface cultural resources are encountered during culvert replacement activities, then work shall be halted and the resource area archaeologist shall be called in for further evaluation.

Under all action alternatives, the potential to encounter, or disturb, subsurface archaeological deposits appears limited based on regional survey results and the nature of disturbances anticipated.

Recreation

Recreational access and experience would not change under the proposed action or alternatives 1 and 2. Recreational traffic and use at the culvert area would be displaced during the construction work. Under Alternative 3 the existing snowmobile trail along Spencer Creek Hookup road would have to be relocated or decommissioned. If the trail were decommissioned it would entail moving the existing parking area at the junction of Clover Creek road and Spencer Creek Hook-up road to a parking area on the Keno Access road. The Spencer Creek Hook-up road is used for motorized access to the Spencer Creek and Surveyor Mountain areas. Closing or decommissioning this road would impact motorized recreation access to the Surveyor Mountain area by requiring that alternative access routes be used. Access to Spencer Creek, at the culvert area, would not be prevented under alternative 3. The walking distance from Spencer Creek to the end of the Spencer Hook-up road where decommissioning would begin, would be several hundred yards. Currently, it is common for motorists to park on the shoulder next to the culvert and walk to Spencer Creek. Consideration should be given toward improving sight distance to reduce or alleviate safety concerns if the proposed action or Alternative 1 is implemented.

V. CUMULATIVE EFFECTS

This analysis incorporates by reference the analysis of cumulative effects in the USDA Forest Service and USDI Bureau of Land Management Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl, February 1994, (Chapter 3 &4) and in the Klamath Falls RMP). These documents analyze most cumulative effects of timber

harvest and other related management activities. None of the alternatives in the Proposed Action or alternatives would have cumulative effects on resources beyond those effects analyzed in the above documents. The following analysis of impacts to the Aquatic Conservation Strategy Objectives supplements those analyses.

A. Impacts to Aquatic Conservation Strategy Objectives

1. The Proposed Action and Alternatives 1 and 3 would have a neutral effect and would maintain the distribution, diversity, and complexity of watershed and landscape-scale features to ensure protection of the aquatic systems to which species, populations, and communities are uniquely adapted.

2. The Proposed Action and Alternatives 1 and 3 would maintain and restore the existing spatial and temporal connectivity within and between Spencer Creek and middle Upper Klamath River watersheds. The "no action" alternative would keep a known aquatic animal migration barrier in place.

3. The Proposed Action and Alternatives 1 and 3 would maintain and restore the physical integrity of the aquatic system. The "no action" alternative would prevent attainment of fully functional aquatic habitat integrity.

4. The Proposed Action and Alternative 1 and 3 would maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems. The "no action" alternative would keep in place a culvert that poses substantial risk to aquatic resources.

5. The Proposed Action and Alternatives 1 and 3 would maintain and restore the sediment regime under which this aquatic ecosystem evolved. Risk of sedimentation under the Proposed Action and Alternative 1 are low compared to the "no action" alternative which has a risk of culvert failure during flood events. The short-term risk of sedimentation from the Proposed Action and Alternative 1 would be expected to be low because the project would occur during periods of low flow.

6. The Proposed Action and alternatives would have no affect on in-stream flows.

7. Under the Proposed action and Alternatives 1 and 3, improved floodplain function should occur in the immediate upstream and downstream reaches due to increased channel capacity of the road crossing. Alternative 3 would restore the floodplain function to its original form and function prior to road construction. Altered floodplain function has been observed under the existing condition during floods and would likely continue to affect the floodplain upstream of the culverts during high water events under the "no action" alternative.

8. The Proposed Action and all alternatives would have a neutral effect on and would maintain the species composition and structural diversity of plant communities in riparian areas and wetlands sufficient to sustain the present physical complexity and stability of the riparian areas.

9. The Proposed Action and Alternatives 1 and 3 would have a neutral effect on and would maintain habitat to support well-distributed populations of native plant, invertebrate, and vertebrate riparian dependent species. Aquatic species distribution may be negatively impacted under the current condition of inadequate fish passage criteria. Aquatic species passage would remain deficient under the "no action" alternative.

Based on the above analysis of the effect on attainment of the ACS objectives, the Proposed Action and alternatives are consistent with the ACS and the objectives for Riparian Reserves and would not prevent or retard attainment of any of the ACS objectives.

VI. CONSULTATION AND COORDINATION

A. LIST OF PREPARERS

The Proposed Action and alternatives were developed and analyzed by the following interdisciplinary team of BLM specialists:

Andy Hamilton	Scott Snedaker	Mike Turaski	Robert Roninger
Steve Hayner	Brian McCarty	Molly Juillerat	Lou Whiteaker
Linda Younger	Tom Cottingham	Scott Senter	Mike Bechdolt
Tim Canaday	Kathy Lindsey		

B. ESA CONSULTATION
This project would have no affect on Lost River and shortnose suckers, bald eagles, or Northern spotted owls.

C. PUBLIC PARTICIPATION
This environmental assessment will be sent to the following list of groups, agencies, and individuals.

PacifiCorp
Oregon Department of Fish and Wildlife
Boise Cascade Corp
U. S. Timberlands
Klamath Watershed Council, Klamath River Working Group.
Spencer Creek CRMP group
Klamath 4-Runners 4-wheel drive club
Oregon Natural Resources Council
Hugh Charley, permittee, affected landowner
Lester Hinton, permittee

Attachments:
Appendix 1 -- Project Design Features
Appendix 2 – BLM instream Work Guidelines
Appendix 3 – Hazardous Materials Spill Contingency Plan

VII. REFERENCES

USDA Forest Service and USDI Bureau of Land Management. February 1994. Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl. Portland, Oregon.

USDA Forest Service and USDI Bureau of Land Management. April 1994. Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl.

USDA Forest Service, 1999. FishXing, version 2.2 software program. Six River National Forest watershed interaction team.

USDI-BLM. 1994. Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl.

USDI-BLM. 2001. Final Supplemental Environmental Impact Statement to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines. Portland, Oregon

USDI-BLM. June 1996. Oregon State Office: Western Oregon transportation management plan.

USDI- BLM. Jan. 2001 Record of Decision and Standards and Guidelines Aquatic Mollusk Survey Protocol, Version 2.0 (October 29, 1997)

BLM/USFS. Spencer Creek Pilot Watershed Analysis. 1995. Bureau of Land Management, Klamath Falls Resource Area, and US Forest Service Klamath Ranger District.

Spencer Creek Coordinated Resource Management Plan. 1994. USDA Natural Resource Conservation Service

Appendix 1:

DESIGN FEATURES OF PROPOSED ACTION AND ALTERNATIVES

Under the Proposed Action and alternatives, construction work would occur during August and September. Environmental resources would be protected under all alternatives by adherence project design features, BLM instream work guidelines, and hazardous spill contingency plan (appendices 1-3).

Weed Mitigating Measures

- All vehicles and equipment will be cleaned off prior to operating on BLM lands. Removal of all dirt, grease, and plant parts that may carry noxious weed seeds or vegetative parts is required and may be accomplished with a pressure hose.

- Noxious weeds in the immediate area of operations shall be mowed to ground level prior to the start of project activities.

- All equipment and vehicles operating off of main roads shall be cleaned off prior to leaving the job site when the job site includes noxious weed populations. Removal of all dirt, grease, and plant parts that may carry noxious weed seeds or vegetative parts is required and may be accomplished with a pressure hose.

- To preclude the establishment of invasive, nonnative plant species, areas of newly disturbed mineral soil would be mulched with native grass straw and sown with native plant seed.

Riparian and Stream Channel Area Mitigating Measures

- All instream work would occur during the recommended Oregon Department of Fish and Wildlife instream work period (July 1 - September 15).

- Road crossing removal on all fish-bearing streams would be designed to maintain natural streambed composition and site gradient such that the streambed and riparian area would be stable and sustainable over . This would ensure that the area would remain stable and resilient during flood events or other natural disturbance events

- The width of stream channel available for high flows would exceed bankfull width by approximately 25%.

-Oregon Department of Environmental Quality (ODEQ) turbidity standards shall be met by following turbidity prevention measures outlined in BLM instream work guidelines (Appendix 2).

-Work would be temporarily suspended if rain saturates soils to the extent that there is potential for environmental damage, including movement of sediment from the road to the stream.

-All staging areas and temporary fill storage areas will be on the existing roadway and would not include additional impacts to undisturbed areas.

-During construction, fill material would be placed on the existing roadway such that it would be stable and not enter the waterway during moderate rain events.

-Silt fence and or other suitable sediment traps would be used to control runoff from the construction site.

Work area would be temporarily dewatered during culvert removal and or installation of new structures. Pumps and flexible pipe would be used to bypass the stream flow around the work area.

-Equipment operating within the riparian zone or active stream channel would adhere to the following procedures:

- Hydraulic fluid and fuel lines on heavy mechanized equipment must be in proper working condition in order to minimize leakage into streams.
- Waste diesel, oil, hydraulic fluid and other hazardous materials and contaminated soil near the stream will be removed from the site and disposed of in accordance with DEQ regulations.
- Equipment refueling will be conducted within a confined area outside the stream channel such that there is minimal chance that toxic materials could enter a stream.

- Equipment containing toxic fluids would not be stored within 100 feet of a stream channel anytime.
- Work would be temporarily suspended if monitoring indicates that rainstorms have saturated soils to the extent that there is potential for damage and for excessive stream sedimentation.
- Side casting of excavated material will be avoided where it would adversely affect water quality or weaken stabilized slopes.
- If project activities result in the discovery of new cultural resource sites, all ground disturbing activity shall cease and the Resource area Archeologist shall be notified. Resumption of activities in that area will be allowed only after all necessary mitigation fieldwork has been conducted.
- Stipulations provided in Appendix 3 "Hazardous Materials Containment/Cleanup" would be included in all contracts.
- The "Spill Contingency Plan for the Release of Oil and Hazardous Substances", (Appendix 2) would be included in all contracts.
- Work would not commence until appropriate state and Federal instream work permits are secured.

Appendix 2:

Bureau of Land Management
Lakeview District
Klamath Falls Resource Area

SPILL CONTINGENCY PLAN
for the Release of Oil and Hazardous Substances

In-Stream Projects

Reference: Oregon Administrative Rule (OAR),
Chapter 340, Division 108

Spill Contingency Plan

Table of Contents

Page

Introduction

The Purpose of this Spill Contingency Plan is to provide the procedures to meet all regulatory requirements while protecting human health and the environment.

Reference: Oregon Administrative Rule (OAR), Chapter 340, Division 108

The Klamath Falls Resource Area of the Lakeview District is currently engaged in a series of ongoing projects designed to improve the stream habitat for fish by placing and constructing in-stream structures, replacing bridges and culverts and by creating pools and channels using excavation equipment. The work generally includes moving logs, boulders, root wads, and gravel; excavating the stream channel and banks; and construction of bridge abutments and placement of logs, boulders, root wads, and gravel as directed by the Government.

These projects require the operation of heavy equipment in or near streams to improve the stream habitat. The work may be accomplished by BLM equipment and personnel or by contractor equipment and personnel.

The release of petroleum products into the soil or stream is the major concern related to these types of projects. Oregon law requires reporting to the Oregon Emergency Response System (OERS) whenever a release of a petroleum product:

1. Produces a visible sheen on water.
2. Exceeds 42 gallons if released into the soil.

The law further requires appropriate response, clean up, and production of spill response reports.

General Requirements

1. This Spill Containment Plan is to be used in conjunction with the District Hazardous Materials Contingency Plan.
2. All personnel involved with this project will review this plan and become familiar with the contents.
3. A Spill Containment Kit (SCK) will be located at the project site whenever equipment is working in-streams at the project site. Personnel at the site will be trained in the use, deployment, and disposal of the components of the SCK.
4. The SCK must be designed for use with petroleum products, and must contain, as a minimum, the following items:
    a. Two bales (100 pads/bale, of (oil only) absorbent pads, minimum of 17"x19"x1/4")
    b. Gloves (PVC and Latex), goggles, and garbage bags.
5. If there will be sufficient stream flow when the instream work will occur to support use of the following booms and sweeps, they must also be included in the SCK:
    a. Two packages (four booms/package, of 8"x 10' (oil only) absorbent booms)
    b. One absorbent sweep (minimum of 18"x 100').

Response Priorities

Priorities during an incident response will be:

1. Protection of employee and public health and safety.
2. Protection of natural and environmental resources.
3. Compliance with Federal and State regulations, BLM Policy, and District Spill Contingency Plan requirements.

Emergency Response Procedures

If a spill or release occurs, the COR/PI, or BLM project leader will assume the role of Incident Commander (IC). The IC will take immediate action to accomplish the following:

1. Protect employee health and safety.
2. If the spill or release occurs in the waterway, remove the machine from the waterway. If this action is not feasible, immediately shut down the equipment. The operator will take immediate action to stop the flow of the material being released. Other personnel will begin placing the booms, pads, and sweep downstream from the spill.
3. If the spill or release occurs into the soil, take action to prevent the spilled material from reaching the waterway by constructing dike or a berm around the spill, using absorbent pads to contain and mop up the spill as needed. Extreme care must be taken to prevent excessive damage to the environment as a result of the spill containment measures.

The IC will contact the Klamath Falls Office Hazardous Materials Specialist (HMS) or the Lakeview District HMS as soon as practical and provide the following information:

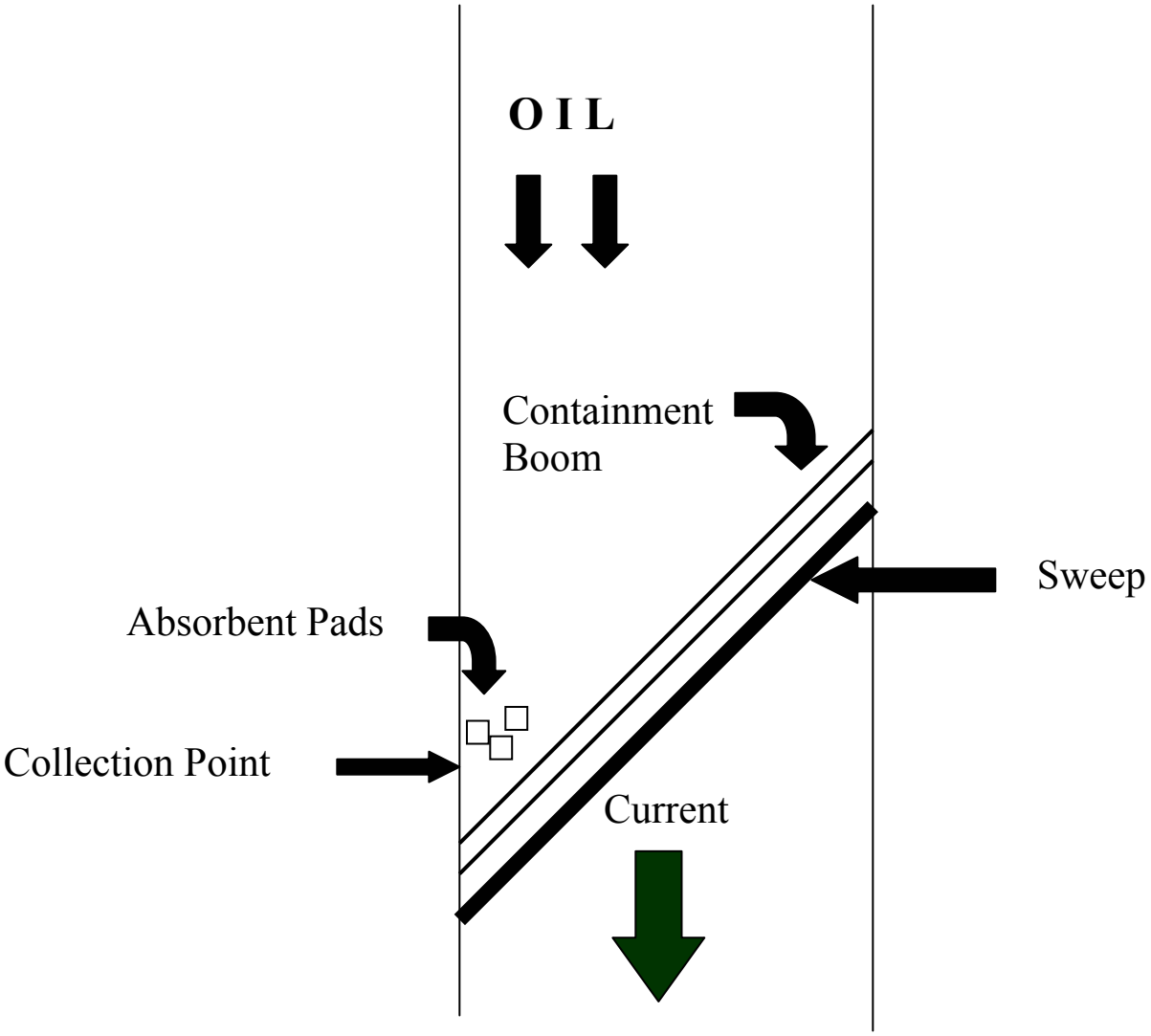
1. Location by site name provided on the project site map.
2. Medical assistance if required. If none, so state.
3. Brief description of the spill and affect on the environment.
4. Request for additional assistance if needed.
5. Other information that may be critical.

Upon notification of a spill or release, the HMS will take the following actions:

1. Contact the IC to obtain additional information to assess the situation.
2. Based on the assessment, contact the Emergency Response Contractor (ERC) and request an immediate response.
3. If, based on the information provided, it cannot be determined that the ERC is needed, immediately go to the site and make a determination.
4. After arrival at the site, assume the role of IC and determine if men, equipment, and supplies at the site can handle the response. If so, the ERC will not be required. If additional assistance is required, contact the ERC and request an immediate response.
5. Make arrangements to have the ERC met by a BLM employee and led to the site.
6. If the spill or release is into the soil and exceeds 42 gallons or results in a visible sheen on the water, REPORT the incident to the Oregon Emergency Response System (OERS) and the National Response Center (NRC)
7. Document all actions taken in response to the incident.

SPILL RESPONSE DIAGRAM

Deploy boom across river at an angle similar to the diagram. The deflection angle will vary depending on the speed of the current. The faster the current, the steeper the angle. Try to place the collection point in an area accessible by vehicles to speed up the clean up effort.
Place the absorbent pads at the collection point to pick up the spilled material.
Place sweep below the containment boom.
The Emergency Response contractor will complete additional cleanup if required. The Incident Commander may require additional actions.



Sample Contract Specifications

Oil and Hazardous Materials Spills and Releases

The contractor shall develop a modified Spill Prevention, Control, and Countermeasure (SPCC) Plan. The SPCC Plan will be reviewed and accepted by the Contracting Officer prior to initiating project work. The SPCC Plan shall as a minimum, contain the following:

- Response priorities
- Contractor representative in charge
- Duties of contractor personnel
- Contractor emergency response procedures
- Contents of Spill Containment Kit (SCK)
- Spill response diagram

Upon request, an example of a SPCC may be obtained from the Klamath Falls Hazardous Materials Specialist.

The contractor shall have a Spill Containment Kit (SCK), as described in the SPCC on-site during any operation and provide training to employees on how components of the SCK are used. The SCK must be designed for use with petroleum products, and must contain, as a minimum, the following items:

- Two bales (100 pads/bale, of absorbent pads, minimum of 17'x19"x1/4")
- Gloves (PVC and latex), goggles, and garbage bags

If there will be sufficient stream flow when the instream work will occur to support use of the following booms and sweeps, they must also be included in the SCK:

- One absorbent sweep (minimum of 18"x100'x3/8")
- Two bales (4 booms/bale, of 8"x10' absorbent booms)

During contractor operations on lands managed by the BLM, in the event of a release as defined in Oregon Administrative Rules (OAR), CHAPTER 340, DIVISION 108, HAZARDOUS WASTE MANAGEMENT, the contractor shall immediately implement the SPCC Plan and notify the on-site Government Representative. The contractor shall implement the emergency response actions described in the SPCC Plan. Those actions include, but are not limited to, immediate action to protect employee health and safety, immediate action to stop the flow of product from the equipment, removal of equipment from the waterways if required and/or possible, deployment of the absorbent booms and pads downstream from the equipment, and any other actions directed by the on-site Government Representative. The contractor shall be responsible for cleanup/removal and proper disposal of contaminated materials from the site.

If the Klamath Falls Hazardous Materials Specialist (HMS) or the Lakeview District HMS determines that additional resources are needed, the HMS will implement the District's Hazardous Materials Contingency Plan and the District Spill Containment Plan.
The contractor shall not be responsible for any costs associated with this level of effort. The Government Representative will function as Incident Commander until relieved by the HMS or his/her representative.
In addition to any other legal remedy available to the Government, if it is determined by the Contracting Officer that the Contractor was negligent at the time of the release, all costs associated with the release that are incurred by the Government will be the responsibility of the Contractor. The amount of actual damage will be deducted by the Government from the amount due the Contractor prior to final payment.

Appendix 3:

HAZARDOUS MATERIAL CONTAINMENT/CLEANUP

The contractor shall develop a modified Spill Prevention, Control, and Countermeasure (SPCC) Plan. The SPCC Plan will be reviewed and accepted by the Contracting Officer prior to initiating project work. The SPCC Plan shall as a minimum, contain the following:

- Response priorities
- Contractor representative in charge
- Duties of contractor personnel
- Contractor emergency response procedures
- Contents of Spill Containment Kit (SCK)
- Spill response diagram

Upon request, an example of a modified SPCC may be obtained from the BLM Eugene District Environmental Protection Specialist.

The contractor shall have a Spill Containment Kit (SCK), as described in the modified SPCC on-site during any operation and provide training to employees on how components of the SCK are used. The SCK must be designed for use with petroleum products, and must contain, as a minimum, the following items:

- Two bales (4 booms/bale, of 8"x10' absorbent booms)
- Two bales (100 pads/bale, of absorbent pads, minimum of 17'x19"x1/4")
- One absorbent sweep (minimum of 18"x100'x3/8")
- Gloves (PVC and latex), goggles, and garbage bags

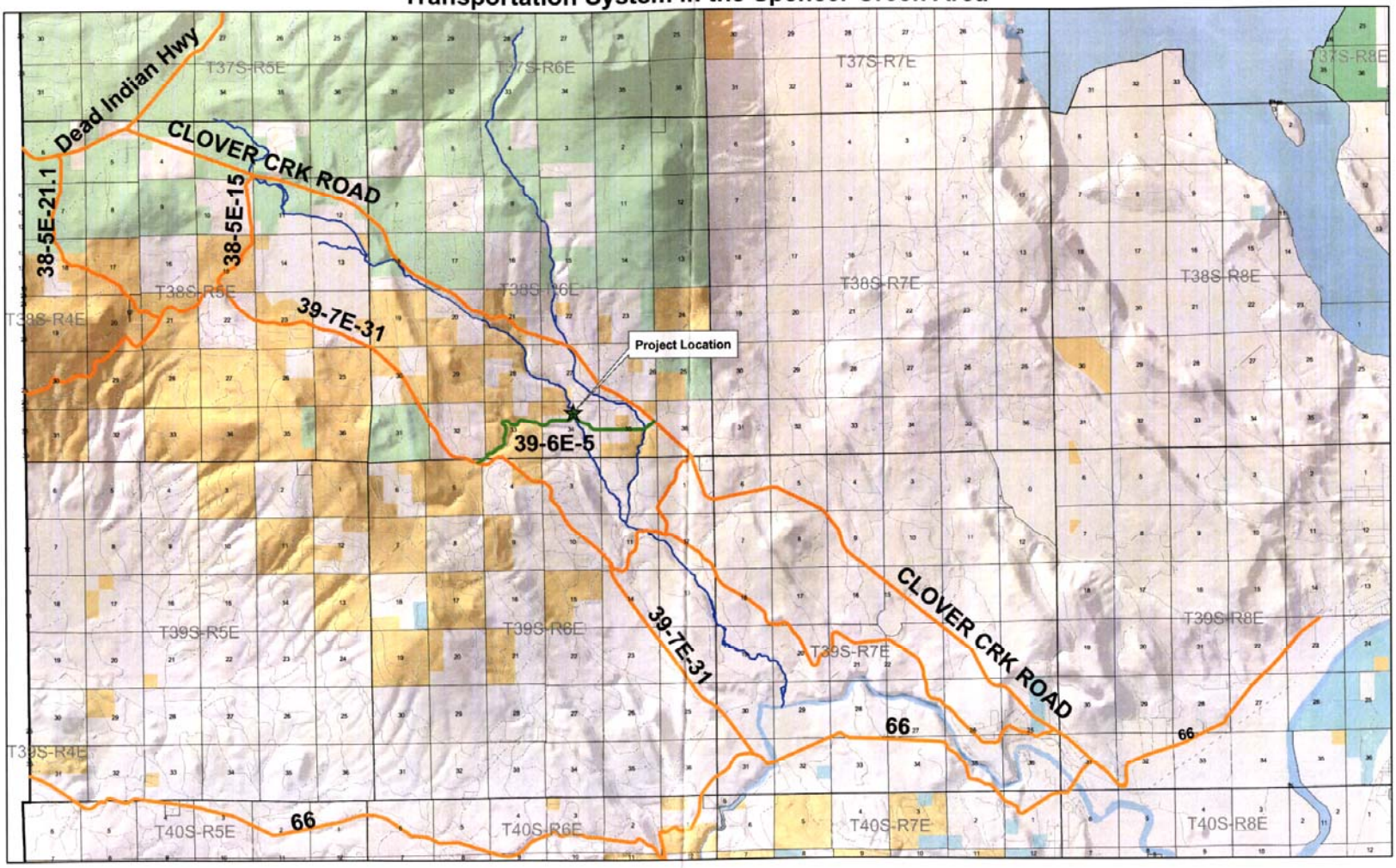
During contractor operations on lands managed by the BLM, in the event of a release as defined in Oregon Administrative Rules (OAR), PART 340, DIVISION 108, HAZARDOUS WASTE MANAGEMENT, the contractor shall immediately implement the modified SPCC Plan and notify the on-site Government Representative. The Government Representative will assume control and initiate the District's Hazardous Materials Contingency Plan and Spill Containment Plan. The Government Representative will function as Incident Commander until relieved by the District Hazardous materials Management Coordinator (HMMC) or his/her representative.

The contractor shall implement the emergency response actions described in the modified SPCC Plan. Those actions include, but are not limited to, immediate action to protect employee health and safety, immediate action to stop the flow of product from the equipment, removal of equipment from the waterways if required and/or possible, deployment of the absorbent booms and pads downstream from the equipment, and any other actions directed by the on-site Government Representative. The contractor shall be responsible for cleanup/removal and proper disposal of contaminated materials from the site.

If the HMMC determines that additional resources are needed, the HMMC will implement the District's Hazardous Materials Contingency Plan and the District Spill Containment Plan. The contractor shall not be responsible for any costs associated with this level of effort.

In addition to any other legal remedy available to the Government, if it is determined by the Contracting Officer that the Contractor was negligent at the time of the release, all costs associated with the release that are incurred by the Government will be the responsibility of the Contractor. The amount of actual damage will be deducted by the Government from the amount due the Contractor prior to final payment.

Transportation System in the Spencer Creek Area



Klamath Falls Resource Area NEPA Document Routing Slip for Internal Review

Project Name: Spencer Creek Hook-up Road Culvert Replacement
Date Initiated: 8/20/03

Resource or Staff Responsible	Review Priority	Preliminary Review Date/Initials	Comments Attached/Incorporated	Final Review Date/Initials
Manager: Jon Raby	Last			12/23/04
Branch Chief: Barbara Ditman	Second to Last			
Branch Chief: Larry Frazier	Second to Last	LF		12/18/04
Branch Chief: Rod Johnson	Second to Last			
Planner/EC: (Don Hoffheins) Kathy Lindsey	Third from Last	10/3/03 DKH	Handwritten	KL 2/17/04
Range: Bill Lindsey, Dana Eckard		8/27	NONE	
Wild Horses: Tonya Pinckney				
Fire/Air Quality: Joe Foran		[illegible]	None	
Silviculture: Bill Johnson, Gabi Sommerauer		9/16/03	—	BJ 12/18/03
Timber: Mike Bechdolt		MB 9/29/03	MB – some minor	MB 12/18/03
Botany/ACEC//Noxious Weeds: Lou Whiteaker		JW 8/29/03	Incorporated	JW 12/17/03
Soils:				
Cultural: Tim Canaday		TC 9/2/03	Incorporated	TC 12/12/03
Minerals/HazMat: Tom Cottingham		done 8/21/03	attached	done 12/12/03
Lands/Realty: Linda Younger		LY 8/25/03		12/16/03
Recreation/Visual/Wilderness: Scott Senter		VSS 9/15/03	added	12/22/03 VSS
Hydrology/Riparian: Mike Turaski, Andy Hamilton		9/23 MRT 8/21/03	ATTACHED IN TEXT	12/10/03
Wildlife/T&E: Steve Hayner		SWH 5/25/03	Input Comments sent	SWH 12/15/03
Fisheries/T&E: Scott Snedaker		SS 9/5/03		SS 12/15/03
W/S Rivers: Grant Weidenbach		GCW 10/2/03	none	GCW 12/22/03
Engineering: Brian McCarty		BAC 10/1/03	yes	12-17-03
Survey/Manage: Molly Juillerat		MJS 10/2/03	Comment in text	MJ 12/12/2003

Clearances/Surveys	Needed	Done/Attached
Cultural	Yes TC 9/2/03	
Botanical		JW
T&E, BA & or Consultation	No SWH 8/25/03	
R-O-W Permits		

***This document will not sit on your desk for more than 8 hours. Please check on calendar to make sure that the next person will be available to review the document.**

****Some resource areas may not apply for all projects. If so, just mark "N/A" in "Review Priority" column.**