

Categorical Exclusion Documentation Format When Using Categorical Exclusions Not Established by Statute

A. Background

BLM Office: Marys Peak Resource Area **Lease/Serial/Case File No:** _____

Categorical Exclusion Number: DOI-BLM-OR-S050-2012-0016-CX **Date:** 9/18/2012

Proposed Action Title/Type: Marys Peak Resource Area Road Maintenance

Location of Proposed Action: Marys Peak Resource Area Wide

Description of Proposed Action:

The purpose of the proposed work is to keep road surfaces, cuts, fills, and drainages in good condition and to control road-related runoff and sediment production. An estimated 750 miles of roads annually may be maintained by a variety of equipment types. Specific activities include, but are not limited to, surface repair and replacement, drainage repair and replacement, roadside vegetation management, road decommissioning/storm proofing, storm damage repair, and road work associated with maintaining the road prism and infrastructure as a whole. Activities will comply with project design features attached to this CX.

B. Land Use Plan Conformance

Land Use Plan Name: Salem District Record of Decision and Resource Management Plan (1995 RMP) **Date Approved** May 1995 **Date Amended:** The 1995 RMP was amended in January 2001 as documented in the *Record of Decision for Amendments to the Survey and Manage, Protection Buffer, and Other Mitigation Measures Standards and Guidelines*, dated January 2001 (SM/ROD) and modified by the 2011 Settlement Agreement.

This project conforms and is consistent with the Land Use Plan (LUP) because it is specifically provided for in the following LUP decision(s):

- Develop and maintain a transportation system that serves the needs of users in an environmentally sound manner (RMP p. 62).

C. Compliance with NEPA

The Proposed Action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with 43 CFR Part 46, Section 46.210 (f), which allows for “routine and continuing government business, including such things as supervision, administration, operations, maintenance, renovations, and replacement activities having limited context and intensity.”

Table 1. Categorical Exclusions: Extraordinary Circumstances Review

Will the Proposed Action documented in this Categorical Exclusion:	Yes	No
<p>a) Have significant impacts on public health or safety?</p> <p>Rationale: Road maintenance activities will have no impacts on public health or safety therefore will have no significant impacts on public health or safety. All activities associated with the proposed road maintenance activities will be conducted in a forested location outside of population centers and will conform to established Occupational Safety and Health Administration (OSHA) rules concerning health and safety. Project implementation will improve road safety for the public utilizing BLM roads.</p>		No
<p>b) Have significant impacts on such natural resources and unique geographic characteristics as: historic or cultural resources, park, recreation or refuge lands, wilderness areas, wild or scenic rivers, national natural landmarks, sole or principal drinking water aquifers, prime farmlands, wetlands, floodplains, national monuments, migratory birds, other ecologically significant or critical areas?</p> <p>Rationale: The project areas are not located in any park, recreation or refuge lands, wilderness areas, wild or scenic rivers, or national natural landmarks. Maintained and improved access roads to recreation sites are beneficial.</p> <p>Within floodplain and wetlands areas, slide and waste material will be placed in stable, non-floodplain sites approved by the area specialists. Use stable sites beyond floodplain within riparian areas only after the identified area has been determined to be stable and not susceptible to delivery to an adjacent stream. Waste sites shall be sloped to drain, grass seeded with seed approved by the area botanist, and otherwise stabilized as individual sites dictate.</p> <p>There are no prime farmlands, national monuments, or other ecologically significant or critical areas present in the project areas. Road maintenance activities will not alter the ability of stands to provide habitat for migratory birds, nor appreciably alter the function or abundance of forest habitat provided by BLM-administered lands in the watershed.</p> <p>Road maintenance activities are considered an exempt undertaking where they do not create new ground disturbance and would not have significant impacts on any cultural or historic resources.</p>		No
<p>c) Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA section 102(2) (E)]?</p> <p>Rationale: The effects of road maintenance activities are not controversial and there are no unresolved conflicts concerning alternative uses of available resources. Past experience has shown that the environmental effects of road maintenance activities are not highly controversial. The ROD/RMP established the land use allocations and goals for the affected lands. As such, there is no unresolved conflict regarding other uses of these resources.</p>		No
<p>d) Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?</p> <p>Rationale: Past experience from this type of activity has shown no highly uncertain, potentially significant, unique or unknown risks.</p>		No

Will the Proposed Action documented in this Categorical Exclusion:	Yes	No
<p>e) Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?</p> <p>Rationale: Road maintenance activities are addressed and authorized under the existing ROD/RMP, and as such, this project will represent implementation of that land use plan decision, not a decision in principle on future actions. Conducting Routine road maintenance activities are a normal practice and have been widely used on BLM managed lands throughout Oregon. These activities have not been shown to have significant impacts.</p>		No
<p>f) Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects?</p> <p>Rationale: There are no cumulative effects associated with road maintenance activities, therefore there are no significant cumulative effects as a result of these actions. Road maintenance activities will not alter timing or magnitude of peak and base flows in the watersheds. There will be no increase in road density or flow routing by roads which will affect stream flows.</p>		No
<p>g) Have significant impacts on properties listed or eligible for listing, on the National Register of Historic Places (NRHP) as determined by either the bureau or office?</p> <p>Rationale: Road maintenance actions do not create new ground disturbance and generally do not have significant impacts. Any NRHP listed or eligible sites that may exist near road maintenance activities would not be significantly impacted.</p>		No
<p>h) Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened (T&E) Species, or have significant impacts on designated Critical Habitat for these species?</p> <p>Rationale:</p> <p>Fish: Threatened fish species are known to occur in proximity to the proposed activities. Design criteria incorporated in the project activities would reduce or prevent impacts to listed fish species. Proposed actions have been consulted on with NMFS and the resulting programmatic Biological Opinions would be adhered to protect listed species.</p> <p>Wildlife: There are no known T&E species sites within these right-of-ways and no habitat modification will occur as these sites are maintained as right-of-way corridors. Design criteria for the proposed action would ensure that the potential for noise disturbance to adjacent unsurveyed suitable habitat would not likely have any adverse affect to listed wildlife species.</p> <p>Botany: Existing BLM maintained roadways within Benton, Lincoln and Polk Counties provide little to no habitat for T&E species. There are no known T&E sites within these right-of-ways and no habitat modification will occur as these sites are maintained as right-of-ways.</p>		No
<p>i) Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment?</p>		No

Will the Proposed Action documented in this Categorical Exclusion:	Yes	No	
<p>Rationale: The proposed project is in conformance with direction given for the management of public lands in the Salem District ROD/RMP, which complies with all applicable laws such as the Federal Land Policy Management Act, Endangered Species Act, Historic Preservation Act, and others.</p> <p>Compliance with the Clean Water Act is directed through a MOU between the BLM and the State of Oregon – Department of Environmental Quality (BLM-OR932-1013). Compliance is required to meet State and Federal water quality rules and regulations, and is implemented through the use of BMPs. The BLM will also comply with the Total Maximum Daily Load (TMDL) Rule (OAR 340-042-0025 to -0080) on BLM administered lands. A list of updated road BMPs is located in IM No. OR-2011-074 and is incorporated by reference.</p>		<p>j) Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898)?</p> <p>Rationale: The project is not anticipated to have disproportionately high and adverse human health or environmental effects on minority populations and low-income populations.</p>	No
<p>k) Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007)?</p> <p>Rationale: Past actions of similar type and scope within this area have not resulted in tribal identification of concerns.</p>		<p>l) Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?</p> <p>Rationale: The risk rating for the long-term establishment of noxious weeds through the implementation of this project is low because: a) the project area is limited in size, b) the project area will be monitored for the establishment of noxious weed species, c) the resource area has a weed management plan in place which allows for control of non-native and noxious weed species and d) the Authorized Officer will require sowing grass seed on mineral soil areas which will reduce the amount of potential noxious weed habitat. All soil disrupting equipment will be required to be clean and free of dirt and vegetation prior to moving into the project areas.</p>	No

This categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects that may significantly affect the environment. The proposed action has been reviewed, and none of the 12 extraordinary circumstances described in 43 CFR Part 46, Section 46.215 (see Table 1, above) apply.

U.S. Fish and Wildlife Service

In compliance with Section 7 of the Endangered Species Act (1973, as amended), the BLM completed consultation with the U.S. Fish and Wildlife Service (USFWS) on the FY 2010 to 2013 annual program of activities (including road maintenance and repair work), which have the potential to disturb listed wildlife species. All applicable Terms and Conditions (design standards) from the resulting Letter of Concurrence (ref #13420-2009-I- 0152, dated 08-05-2009) have been incorporated into this proposed action.

National Marine Fisheries Service

Formal consultation with NMFS on the annual program of activities (including road maintenance and repair work) which have the potential to disturb listed fish species was completed April 2011, *Endangered Species Act Programmatic Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Conservation Recommendations for the Programmatic Activities of USDA Forest Service, USDI Bureau of Land Management, and Coquille Indian Tribes in Western Oregon*. All applicable Terms and Conditions (design standards) from the Biological Opinion have been incorporated into these proposed actions.

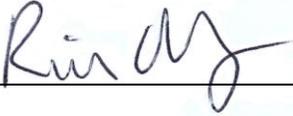
The BLM completed consultation with NMFS on habitat restoration activities (including fish passage culverts, road decommissioning and bridge projects) which have the potential to disturb listed fish species, June 27, 2008, *Reinitiation of the Endangered Species Act Section 7 Formal Programmatic Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Fish Habitat Restoration Activities in Oregon and Washington, CY2007-2012*. All applicable Terms and Conditions (design standards) in the Biological Opinion have been incorporated into these proposed actions.

Any changes to project design criteria resulting from subsequent NMFS biological opinions during the life of this document will be incorporated into the maintenance activities.

D. Interdisciplinary Review and Signature

Interdisciplinary Team Review

Name	Position	Initials
Steve Cyrus	Engineer	SBC
Mellissa Rutkowski	Engineer	MS
Ron Exeter	Botanist	RE
Scott Hopkins	Wildlife Biologist	<i>DSA</i>
Stefanie Larew	NEPA Coordinator	SNL
Scott Snedaker	Fisheries Biologist	<i>SMS</i>
Heather Ulrich	Archaeologist	HAU
Steve Wegner	Hydrologist and Soil Scientist	<i>SJW</i>

Authorized Official:  Date: 09/18/2012

Name: Rich Hatfield

Title: Marys Peak Field Manager

Contact Person

For additional information concerning this Categorical Exclusion, contact Steve Cyrus, Engineer, Salem District Office, 1717 Fabry Rd SE, Salem, Oregon, 97306, (503) 315-5988.

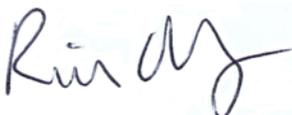
**U.S. DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT
SALEM DISTRICT, MARYS PEAK RESOURCE AREA**

Decision Record

Based on the attached Categorical Exclusion Review, DOI-BLM-OR-S050-2012-0016-CX, I have determined that the proposed action, road maintenance in the Marys Peak Resource Area, involves no significant impacts to the human environment and requires no further environmental analysis.

It is my decision to authorize the implementation of the proposed action as described in the attached Categorical Exclusion documentation.

Administrative Remedy: Notice of the decision to be made on the action described in this categorical exclusion will be posted on the Salem District internet website. The action is subject to appeal to the Interior Board of Land Appeals under 43 CFR Part 4.

Authorized Official:  _____ **Date:** 09/18/2012
Rich Hatfield
Marys Peak Field Manager

Appendix A: Best Management Practices and Project Design Features

Best Management Practices

The best management practices listed in IM No. OR-2011-074 provide direction regarding road maintenance practices and road related actions with the intention to minimize or prevent sediment delivery to waters of the United States in compliance with the Clean Water Act of 1972 and its revisions. The IM contains more than 100 unique, site specific practices to meet the goal of disconnecting road surfaces from streams to prevent delivery of sediment to waters of the United States.

Best Management Practices will maintain and/or improve water quality and stream bank and channel conditions. With regard to the proposed action, one of the most important BMPs is: “Provide the basic custodial maintenance required to protect the road investment and to ensure that erosion damage to adjacent land and resources is held to a minimum. Give high priority to identifying and correcting road drainage problems which are occurring, that contribute to degrading riparian resources” (ROD/RMP), Appendix C-6.

The BMP process for this CX on Marys Peak Resource Area will include a review of all contracts and task orders issued under this document by the Resource Area hydrologist to ensure compliance with the intent of the RMP and IM No. OR-2011-074. Monitoring of compliance with BMPs is an ongoing program on the Salem District and would include activities completed under this CX.

Project Design Features by Activity

Road closure, storage, and decommissioning

Road closure, storage and decommissioning could include: culvert removal and associated channel restoration, draindip and waterbar installation, ripping/outsloping roadbed, sidecast pullback, and revegetation (native grass and/or forage seed, tree planting). Each road closure/decommissioning shall be accomplished in a manner that will encourage restoration of the pre-road drainage patterns. Embankment material recovered during stream crossing restoration will be placed outside the floodplain and within the adjacent road template to approximate the original contour. Only those roads meeting the following criteria shall be authorized for decommissioning:

- the road does not access lands with anticipated management needs, special landscape or recreational features of value to the public,
- the roadbed is located on stable terrain posing little risk of mass movement or water quality degradation,
- the activity will not harm the habitat of endangered or special status wildlife or botanical species,
- any potential third party encumbrance (through Rights-of-Way, leases, etc.) shall agree to the proposed action,
- there are no adjacent landowners who are currently using, or will likely use the road to access their property.

Treatments generally within the road prism:

The following design criteria are to be applied to trees located adjacent to BLM-controlled rights-of-way that may impede normal road maintenance operations (often leaning or wind thrown trees) or pose a safety risk. Merchantable trees may be cut and removed for sale. Otherwise, trees and associated slash shall be disposed of near their site of origination or used for other resource restoration activities.

Specific activities may include a combination of cutting, scattering, moving, loading, and hauling of logs/trees as conditions warrant. Hazardous trees are generally defined as all dead or dying trees over 6 inches diameter (at 12 inches above the ground) tall enough to reach the roadbed, root sprung or excessively leaning trees directed toward the roadbed, or trees that drop excessive litter (e.g. tops, limbs, or leaves) that accumulate on roads and affect the running surface and the public who utilize the road. The distance from roads where such trees may be felled is highly variable, but will typically be less than 200 feet.

- When outside of Riparian Reserves, trees encroaching into the road prism and recently fallen trees may be removed as per district policies. The road prism is defined as that area of the road from the top of the cut slope to the toe of the fill.
- When in Riparian Reserves:
 - i) To maintain stream shade and bank stability, limit cutting of trees to the extent practical within 150 feet of streams with Listed Fish Habitat (LFH), or of tributary streams within one mile of streams with LFH.
 - ii) Fall, but do not remove, from the stream site down trees within the following distances: (1) 100 feet from streams with LFH; (2) 50 feet from perennial and intermittent streams within one mile of streams with LFH.
 - iii) Outside of the no-removal distances listed above, down trees may be removed when fisheries personnel determine aquatic resource management objectives in the proposed project area are met. Leave downed logs on-site where Large Woody Debris (LWD) is deficient.
 - iv) Where it is safe and feasible, down trees (or portions of down trees) within the road prism may be placed off to the downstream side of the road or used for instream restoration projects. Maximize the length of the bucked portion of logs that may then be placed into riparian areas or streams.
 - v) Where it is safe and feasible, take actions to deter theft of downed trees, such as moving tree portions away from the immediate road prism area in a manner that will make the downed tree less visible or accessible.

Repair of Storm-Damaged Roads

Real-time storm damage repair to roads is necessary for protection of human health and safety, preserve the integrity of the road structure, or to prevent imminent natural resource damage. This category also includes immediate stabilization of storm-damaged roads to prevent or minimize adverse hydrologic effects or transmission of sediment into streams and other water bodies. Projects involve actions such as:

- the removal of large slides
- reconstruction, repair, or relocation of roads damaged by surface erosion, fill failure, culvert failure, and landslides

- stabilization of slopes
- culvert repair or replacement
- removal of downed trees and other vegetation that is blocking vehicular passage

Work is generally accomplished using a variety of heavy equipment that can perform an array of tasks in order to achieve immediate stabilization. These tasks cannot always be delayed until the appropriate Oregon Department of Fish and Wildlife (ODFW) in-water work window for that watershed. In addition to applicable Project Design Features (PDFs) as outlined under General Road Maintenance the following PDFs will be applied during those circumstances:

- Stabilize channels by filling localized fill slope scour with rock to prevent damage to a culvert, road, or bridge foundation. Limit the amount of rock to the minimum necessary to protect the integrity of the structure.
- For actions occurring within drainages with listed species notify, by e-mail, National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service (USFWS) within one working day following discovery of site after the storm event (or as soon as feasible in case of power outages, etc.).
- The following stream bank stabilization methods may be used individually or in combination where needed to prevent scouring or down cutting of an existing culvert, road foundation, or bridge support due to storm damage:
 - log or roughened rock toe
 - vegetated riprap with large wood
 - partially spanning porous weir
 - woody plantings
 - herbaceous cover, in areas where the native vegetation does not include trees or shrubs
 - bank reshaping and slope grading
 - coir matting and/or logs
 - deformable soil reinforcement
 - engineered log jams
 - floodplain flow spreaders
 - floodplain roughness

See additional guidance within Biological Assessment for Programmatic USDA Forest Service, USDI Bureau of Land Management and Coquille Indian Tribe Activities in Western Oregon (April 2011) for use of vegetated rip rap and slope stabilization with rock.

General Road Maintenance

Typical road maintenance activities include:

- heavy equipment use for surface maintenance (grading, leveling)
- drainage maintenance, installation, replacement, or repair (e.g., ditch-lines, water dips, cross-drain culverts, and water bars)
- vegetation management (e.g., brushing, limbing, seeding, mowing, and mulching)
- road cut and fill repair/stabilization
- surface repair/replacement (e.g., asphalt repair, repaving, chip-sealing, and rocking)

- small slide removal (i.e., routinely, quickly, and easily handled with typical maintenance equipment)
- snow-plowing and use of calcium chloride and or magnesium chloride for deicing
- dust abatement using water or lignin sulfate (no oil use)
- maintenance, repair, and replacement of structures (e.g., guardrails, retaining walls, signs, relief and stream crossing culverts, and bridges).

To minimize effects to fish and water quality:

- Dispose of slide and waste material in stable, non-floodplain sites approved by an authorized officer. Use stable sites beyond floodplain within riparian areas only if an interdisciplinary process has identified the area as stable and not susceptible to delivery to the adjacent stream. Provide erosion control to minimize sediment delivery to streams.
- Minimize disturbance of existing vegetation in ditches and at stream crossings. Leave grass in the ditch when or where the ditch is properly functioning to minimize exposed soil and transport to fish-bearing streams. Regardless of the vegetation within, the ditch should be moving water without being overtopped. There may be times when vegetated ditches are at capacity with trapped fines and are no longer functioning properly. In these situations, ditch cleaning may be needed to regain functionality.
- Vegetation will not be removed in drainage ditches that discharge within one-quarter mile of listed fish-bearing streams unless an effective sediment trap is installed and maintained until the vegetation is reestablished.
- Sediment removed from drainage ditches will not be placed onto the surface of any road that is hydrologically connected to a stream or wetland. This material would be placed in a stable site which is not hydrologically connected to any stream or wetland.
- Minimize soil disturbance and displacement, but where sediment risks warrant, prevent off-site soil movement through use of filter materials (such as straw waddles, straw bales, jute/coir matting, placing slash on the disturbed slopes, or silt fencing) if vegetated areas between the road and fish-bearing streams are not present.
- Exposed soils that may deliver sediment to streams shall be treated prior to fall rains with grass seed, straw, slash, water bars or other appropriate methods that will minimize or eliminate sediment delivery.
- Prepare and carry out an erosion and pollution control plan, commensurate with the scope of the action, that includes the following information:
 - the name, phone number, and address of responsible official
 - best management practices to confine vegetation and soil disturbance to the minimum area, and minimum length of time, as necessary to complete the action, and otherwise prevent or minimize erosion and sedimentation associated with the action; including procedures to ensure that erosion control features are functioning properly
 - best management practices to confine, remove, and dispose of construction waste, including every type of debris, discharge water, concrete, cement, grout, washout materials, welding slag, petroleum products, or other hazardous materials generated, used, or stored at the work site
 - procedures to contain and control a spill of any hazardous material generated, used or stored at the work site, including notification of proper authorities
 - procedures to cease in-stream work during high flows, such as from summer thunderstorms, except for efforts to avoid or minimize damage to aquatic and riparian habitat

- Soil-disturbing maintenance activities (such as road blading, ditch cleaning) will be implemented during dry conditions to the greatest extent practicable, except for emergency road maintenance where road access is needed or the potential for greater damage to water quality and fish habitat exists if the emergency road maintenance is not performed as soon as possible.
- Culverts on fish-bearing streams that are located in watersheds with ESA-listed fish will be designed using approved stream-simulation methods (e.g. ODFW 2004, NMFS 2008, or similar), with exception of culverts above natural anadromous barriers (stream simulation or hydraulic method can be used).
- After replacing an existing culvert, move any excess overburden material (road fill material) to a stable site away from riparian areas and floodplains.
- Place cross-drain culverts where they will drain onto stable, vegetated slopes with porous soils, allowing for water infiltration, and with low probabilities of erosion and formation of new channels that connect to existing streams.
- All maintenance vehicle and mechanized equipment will be maintained, operated, and stored to minimize the risk of spills and leaks of all fluids, including the following:
 - - i) Refuel mechanized equipment, store mechanized equipment overnight, and perform maintenance and repairs activities at least 150 feet from streams and wetlands.
 - ii) Do not enter wetted stream channels with mechanized equipment except where no practicable alternative exists.
 - iii) Develop and implement a spill containment plan that includes having a spill containment kit on-site and a previously identified containment location.
- Chip sealing will be confined to those surfaces with existing asphalt. Apply chip seal during instream work period on those surfaces that may deliver application material to streams.
- Asphalt patching and sealing on roads that may deliver application materials or leachates to streams, or to bridges over streams, will be completed during the instream work period. Asphalt patching or sealing of road surfaces that drain directly to streams without filtration, or to bridges over streams, would not occur outside of the dry season (generally May 15 to October 15), or within 48 hours of predicted rain.
- Do not apply dust-abatement materials (for example, ligninsulfonate or magnesium chloride) within 24 hours of predicted rain. Do not apply at stream crossings or other locations that could result in direct delivery to a water body (e.g., do not apply within 25 feet of a water body or stream channel). All applications of magnesium chloride must meet the state of Oregon's water quality Criterion for chloride (<http://www.deq.state.or.us/wq/rules/div041/table20.pdf>).
- Where possible, corrective actions will be taken to repair chronic problem areas involving sediment delivery or slope stability that have the potential to cause a take of ESA-listed fish.
- Where possible, ensure that all functional-sized instream or floodplain wood is retained within the stream channel, or as close to it as possible, during culvert cleaning. Typically this will entail repositioning wood from upstream of a culvert to a downstream of the culvert. Where this is not possible, consider relocating the wood to a nearby stream or floodplain area in the same watershed.
- Concrete would be prepared at least 150 feet (or as far as possible where site conditions do not allow a 150 foot setback) from water bodies and wetlands.
- Ensure that fresh concrete (cured less than 72 hours), concrete-contaminated wastewater, welding slag and grindings, concrete saw cutting by-products, and sandblasting abrasives are contained and do not come in contact with water bodies or wetlands.

- Employ measures to ensure that concrete falling from over-water structures being constructed or repaired will fall into a tarp or other device to prevent its water bodies or wetlands.
- Riprap use would be limited to scour protection of existing bridge or culvert structures and the replacement of pre-existing rock riprap. Riprap use will be minimized to the greatest extent possible and designed in consultation with a fish biologist or hydrologist. Methods for streambank stabilization shall be limited to bioengineered solutions (e.g., root wads, log toes, coir logs, woody and herbaceous plantings). A minimum amount of rock may be used for infrastructure (e.g., road) protection when no alternative (e.g., road realignment) exists, but bioengineered components shall be used when feasible.
- Lead-based paint or structures containing lead paints would not be removed over water bodies or wetlands.
- Monitoring: those activities that may result in direct sediment and or chemical inputs to streams shall be monitored by the appropriate specialist to ensure PDFs are met and impact to the aquatic environment are minimized. In addition, such activities shall be visited after winter rains to determine if remedial actions are necessary.
- If circumstances (e.g., emergency road repair) require rock quarry use outside of the dry season, require all necessary BMPs and other mitigation measures to prevent sediment movement into streams.

The following management actions/direction will be followed within Riparian Reserves:

- Transportation objectives have been developed for road segments to be maintained and were incorporated in the Western Oregon Transportation Management Plan (revised 10/04). Where roads are found to be unnecessary for future land management activities, they shall be stabilized and closed, or decommissioned in order to minimize disturbance to resident species, as well as to avoid the risk of road related failures and associated sediment discharge into streams. This includes not only roads adjacent to streams, but also upland roads.
- Undersized, damaged, and worn culverts will be replaced whenever funding and labor is available. This may be accomplished on any sized culvert where the stream channel will not be altered or embankment limits extended beyond what originally existed. Dredging the streambed to the depth necessary to countersink the culvert for fish passage is acceptable, except when the excavated quantities exceed the Division of State Lands exempted amounts.
- Each new culvert will be designed to accommodate a 100-year flood.
- Road maintenance activities will be accomplished with the intent of minimizing sediment delivery to streams. This may include sediment control devices, reduction of ditchline flow distances, and replacement of culverts improperly installed or with worn-through bottoms.

The following management actions/direction will be followed within Late Successional Reserves:

- A minor amount of vegetation may be removed within project areas; this is considered neutral since the affected vegetation is typically brush and small diameter trees pruned or removed to improve driving site distance or cleared for culvert replacement.
- Roads determined to be unnecessary for future management will be stabilized and closed or decommissioned as practicable.

The following management actions/direction will be followed within Key Watersheds:

- Road maintenance will, when needed, upgrade roads and culverts that remain in the system and remove nonessential roads. Where a road is determined to be redundant or otherwise unnecessary for future management, decommissioning may occur. Decommissioning will vary as funding become available.

To minimize the spread of noxious weeds

- All soil disturbing equipment moved into the project area will be required to be clean and free of dirt and vegetation as directed by the Authorized Officer. Any disrupted soil will be sown with weed free red fescue or a native species mix if available.
- Any use of straw for erosion control or noxious weed control will be certified weed free or from a certified weed free crop.

To protect Cultural Resources

- If any cultural and/or paleontological resource (historic or prehistoric site or object) is discovered during project activities all operations in the immediate area of such discovery shall be suspended until an evaluation of the discovery can be made by a professional archaeologist to determine appropriate actions to prevent the loss of significant cultural or scientific values.