Appendix G: Section 7 Wild and Scenic Rivers Act Evaluation Procedure under "Direct and Adverse Effect" Standard Worksheet

Description of the Clackamas Road Decommissioning for Habitat Restoration Project

In an effort to aid the recovery of fish habitat, riparian habitat and water quality, the Mt. Hood National Forest (Forest) has accomplished numerous restoration projects over the past decade. The focus of several of these watershed restoration projects has included decommissioning over a hundred miles of road. As recognized by the Northwest Forest Plan, "the most important components of a watershed restoration program are control and prevention of road-related runoff and sediment production" (NWFP p. B-31). Also, the Forestwide *Roads Analysis* recommended decommissioning roads that have low access needs and considerable environmental risk (USDA Forest Service 2003). Therefore, in order to continue the Forest's long-standing efforts to improve watershed health, this project focuses on road decommissioning – the stabilization and restoration of unneeded roads to a more natural state – on the Clackamas River Ranger District.

This project analyzes the environmental effects for decommissioning approximately 255 miles of roads in Alternative 2; decommissioning about 130 miles in Alternative 3, and decommissioning about 170 miles in Alternative 4. All of the road decommissioning activities would improve hydrologic function and aquatic and terrestrial habitat in the following eight, sixth-field subwatersheds: Pot Creek – Clackamas River, Farm Creek – Collawash River, Lower Hot Springs Fork Collawash River, Nohorn Creek, Upper Hot Springs Fork Collawash River, Elk Lake Creek, Happy Creek – Collawash River, and East Fork Collawash River. Approximately nine miles of roads proposed for decommissioning are within the Wild and Scenic River corridors for the Collawash and Clackamas Rivers.

The duration of the project would be over the next ten years. Road decommissioning would be implemented once funding is secured and once plantation management activities have been completed. All road decommissioning activities will follow the Project Design Criteria described in the Environmental Assessment, including complying with Oregon Department of Fish and Wildlife's in-stream work guidelines.

Magnitude and extent of the proposed project work would be limited to the road prism and area immediately adjacent to the road prism.

Collawash Wild and Scenic River

Of the roads being proposed for decommissioning, approximately five miles are within the newly designated Collawash Wild and Scenic River corridor. One of the outstandingly remarkable values (ORV) for Segment 1 (from the headwaters to Buckeye Creek) and Segment 2 (from Buckeye Creek to the Clackamas River) of the river is "fisheries" because of its excellent spawning and rearing habitat for anadromous fish. An ORV for Segment 2 also includes "geologic" because there is one area which could be considered a "textbook" example of a very active earthflow. The following table displays which roads and associated mileage falls within the Collawash Wild and Scenic River corridor.

W&S River Corridor	Road	Mileage
Collawash	6300-170	0.14
Collawash	6300-173	0.05
Collawash	6300-185	0.04
Collawash	6310-018	0.15
Collawash	6321-000	0.09
Collawash	6321-119	0.26
Collawash	6330-000	0.71
Collawash	6340-120	0.08
Collawash	6370-000	0.28
Collawash	6370-150	0.83
Collawash	6370-218	0.51
Collawash	6370-253	0.30
Collawash	6380-120	0.76
Collawash	6380-125	0.25
Collawash	6380-130	0.97
		Total Miles: 5.42

Table 1. Roads proposed for decommissioning within the Collawash River Wild and Scenic River Corridor.

Restoration is a key component to recovering and preserving the outstandingly remarkable values for which the Collawash River was designated. For example, the Forest Plan standard B1-048 states, "Water quality shall be maintained or enhanced" (p. Four-215). Also, Forest Plan standard B1-029 states, "Habitat improvement practices should be...for the protection, conservation, rehabilitation, or enhancement of river area resources" (p. Four-214). This road decommissioning project seeks to enhance water quality and habitat to aquatic species by reducing adverse impacts derived from poorly maintained roads. The project would enhance the excellent habitat quality throughout the Collawash River and protect its free-flowing characteristics.

Clackamas Wild and Scenic River

Of the roads being proposed for decommissioning, approximately four miles are within the Clackamas Wild and Scenic River corridor. The road segments proposed for decommissioning are in the Upper Clackamas 5th field watershed, which is between and includes the Big Bottom Key Site Riparian (Forest Plan A9 Land Allocation) continuing downstream to the confluence with the Collawash River. Road segments 4600-285, 043 and 044 are very short, unpaved spur roads that are partially blocked and nearby to but greater than 300 feet from anadromous fish habitat in the mainstem of the Upper Clackamas River. Portions of the 4600-285 may already be obliterated and decompacted. Forest spur roads 6310-130 and 6310-150 are short roads (only about 1.06 miles and 0.17 miles long, respectively) that slope down into the valley bottom. The 4650 and 4650-111 segments begin directly adjacent to anadromous fish habitat in this section of the Clackamas River. The 4650 road in particular is in great need of maintenance and is sagging and slumping where it is within the Wild and Scenic River corridor and is a logical candidate for decommissioning. The 4651 is a fairly long unpaved road (about 2.88 miles) on the westside of Big Bottom and adjacent to newly designated wilderness. According to the Wild and Scenic River Management Plan, to qualify as an ORV the river-related value, in this case fish, it must be unique, rare, or exemplary feature that is significant at a regional or national level. In this

situation the Clackamas River contains the last significant run of native, wild late run coho salmon in the Columbia Basin. It also contains one of two remaining historic runs of spring Chinook in the Willamette Basin. Lesser numbers of steelhead trout also spawn and rear in this area. This portion of the Clackamas Wild and Scenic River corridor is especially important for spawning and early rearing of spring Chinook and coho salmon. The Big Bottom area has some of the finest spawning gravels for anadromous fish and complex, braided river habitat on the entire Mt. Hood National Forest and is the reason this area was designated as Key Site Riparian.

The following table displays which roads and associated mileage falls within the Clackamas Wild and Scenic River corridor.

W&S River Corridor	Road	Mileage	
Clackamas	4600-043	0.38	
Clackamas	4600-044	0.12	
Clackamas	4600-285	0.79	
Clackamas	4650-000	0.89	
Clackamas	4650-111	0.10	
Clackamas	4651-000	1.30	
Clackamas	6310-130	0.09	
Clackamas	6310-150	0.17	
Total Miles: 3.84			

Table 2. Roads proposed for decommissioning within the Clackamas River Wild and Scenic River Corridor.

One of the "driving issues" identified in the Wild and Scenic River Plan was the opportunity to restore and reestablish larger populations of native fish, reflective of historic levels and productive capacity of the river. Implementation of this road decommissioning project will especially improve riparian conditions for federally listed coho salmon and spring Chinook salmon within the Clackamas River Wild and Scenic River corridor. Road impacts in the Wild and Scenic River corridor to riparian habitat have been especially great in the past since much of the higher-use road building took place in the valley bottoms directly adjacent to the Clackamas River. The two-lane, paved highway built directly next to and sometimes in the Clackamas River in the 1950s has filled in and obliterated many areas of riparian habitat and aquatic margin habitat. Any opportunity for restoration of valley bottom spur roads to native forest vegetation is a benefit to maintaining and restoring ORV anadromous salmon and steelhead and their habitat. Also, removing roads will help make the watershed more resilient to large scale disturbance (e.g., high flow events, catastrophic fire, etc.).

A. Describe any changes to within-channel conditions. Are there any discernable changes to channel location, geometry, slope, form, water quality, or navigation of the river? Also consider how likely within-channel changes affect ORVs.

Road decommissioning activities are not expected to effect within-channel conditions. Therefore, no effects to ORVs are anticipated.

B. Describe any alteration to riparian or floodplain conditions. Are there any meaningful changes to vegetation, soil compaction, exposure of bare ground, or bank stability or susceptibility to erosion?

There could be short-term disturbance to vegetation in the area immediately adjacent to the road prisms. However, the disturbed locations would be seeded and mulched and over time these areas would re-vegetate and benefit from removing the road.

C. Describe any alteration of upland conditions. Are there any meaningful changes to vegetation, soil compaction, exposure of bare ground, drainage patterns, surface and sub-surface flows, or identified ORVs?

Roads have the potential to transport water quickly to streams, which can increase flow routing efficiency and may result in increased magnitude of peak stream flows. Road decommissioning however would result in a reduction in the stream drainage network. This reduction in the stream drainage network would allow for the natural drainage patterns to the rivers be re-established; thereby enhancing the rivers' ORVs and their free-flowing characteristics.

D. Describe any on-site changes that will alter hydrologic or biological processes. Are there any meaningful changes to the ability of the channel to change course, re-occupy former segments; inundate the floodplain; change the amount, timing, or pattern of channel flow; affect flood storage; affect biological processes such as fish spawning, amphibian/mollusk needs, and streamside vegetation?

There would be no meaningful changes to the hydrologic or biological processes. Over time, road decommissioning should improve water quality and habitat for aquatic species.

E. Describe any magnitude and spatial extent of any off-site change. Are there specific processes involved (such as water and sediment) that might be meaningfully influenced in other parts of the river system, what these changes might be, and the likelihood they would occur?

Road decommissioning activities could result in sediment being transported to the rivers during implementation. However, in the long term, road decommissioning activities should improve water quality. As such, there would be no affect to ORVs.

F. Describe effects to management goals. Are there any meaningful effects to management goals relative to free flow, water quality, riparian area and floodplain conditions, ORVs and river classification?

Road decommissioning would allow the Forest to meet management goals of long-term health of the Collawash and Clackamas Rivers. No long-term adverse impacts to water quality or riparian area and floodplain conditions will be caused by this project. The project will positively affect water quality over time. The biological community will benefit from improved habitat.

Section 7 Determination

Based upon the above analysis, two possible decisions can be reached: (1) an in-depth Section 7 evaluation is required; or (2) there is enough information to determine that the proposed project will not have a "direct and adverse effect" to the values for which the rivers were added to the National System. If the available information on project design mitigates any potential "direct and adverse effect" that has surfaced from the information above, there is no need for an in-depth Section 7 evaluation.

The signature block below needs to be completed with the accompanying worksheets and sent to the Regional Office for finalization. Any proposed project that has the likelihood to have a "direct and adverse effect" requires an in-depth Section 7 evaluation.

	Signature	Name	Date
Prepared by:	/s/ Tom Horning	Tom Horning	3/14/11
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Forest Supervisor Review:	/s/ Chrístíne Arredondo (for KJ Silverman)	Christine Arredondo	3/16/11