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Forest Service

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Proposed Action 2007 Clackamas Restoration Projects

Clackamas River Ranger District, Mt. Hood National Forest Clackamas County, Oregon

The projects are dispersed across Clackamas and parts of Marion Counties.

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CHAPTER 1 - PURPOSE AND NEED FOR ACTION

Introduction

This proposed action includes many wildlife, fish habitat and water quality restoration projects. In 1994, the Northwest Forest Plan (NFP) recognized the need for Watershed Restoration. "Watershed restoration will be an integral part of a program to aid in recovery of fish habitat, riparian habitat, and water quality. Restoration will be based on watershed analysis and planning." (NFP p. B-30) "The most important components of a watershed restoration program are control and prevention of road-related runoff and sediment production, restoration of the condition of riparian vegetation, and restoration of in-stream habitat complexity." (NFP p. B-31)

The Mt. Hood National Forest (Forest) has accomplished numerous restoration projects in the past few years including road decommissioning, culvert replacement for improved fish passage, in-stream projects to create pools, riparian planting, etc. The watershed analyses recommended these restoration actions and many others that have not yet been funded or implemented.

This assessment also includes off-Forest restoration projects because it is recognized that many

serious restoration needs occur off-Forest. There are now options for funding this type of work.

Desired Future Conditions - The following statements represent desired conditions derived from the Forest Plan as amended.

- **Watersheds** have hydrologic and sediment regimes that function within their ranges of natural variability. They contain a network of healthy riparian areas and streams.
- **Streams** provide a diversity of aquatic habitat for fish and other stream-dwelling organisms. They offer sufficient quantities of large woody debris; they have clean and abundant spawning gravel; and they have stable banks that are well vegetated and have cool water.
- **Riparian areas** contain plant communities that are diverse in species composition and structure. They provide summer and winter thermal regulation; nutrient filtering; and have appropriate rates of surface erosion, bank erosion, and channel migration. They also supply coarse woody debris sufficient to sustain physical complexity and stability. Riparian reserves provide mature forest connectivity.
- A **transportation** system allows safe access through the Forest where appropriate, and it is carefully designed and maintained to minimize impacts to aquatic and terrestrial forest resources.
- Landscapes contain a diversity of **habitats**.

Purpose and Need

The need for wildlife habitat, fish habitat and water quality restoration is evident when the above desired conditions are compared to existing conditions at site-specific locations:

- The Forest has streams and rivers that provide habitat for important stocks of fish, many of which are listed under the Endangered Species Act. Many of the streams and rivers also provide water for human uses. Certain watersheds are designated as Key Watersheds where restoration efforts are a high priority.
- Hydrologic regimes, riparian vegetation, aquatic habitats, and wildlife habitats have been altered by roads, timber harvest and off-highway vehicles.
- Some roads have culverts that block or impede fish passage.
- Some streams have low levels of in-stream large woody debris, inadequate recruitment of future woody debris, and poor aquatic habitat conditions.
- Some areas have high open-road density. Some roads have been closed but the closure structure has been vandalized or circumvented and vehicles are using roads that should

be closed. Some vehicles drive off of authorized roads causing damage to watersheds. High levels of open roads result in harassment to wildlife.

The **purpose** of this proposal is to repair specific problem areas that have been identified as the most urgent. The objective is to have healthy functioning watersheds that provide clean water, quality fisheries and wildlife habitats. Another objective is to provide a safe transportation system that meets resource objectives while providing access through the Forest. It is recognized that it may take many years of action and many years of "healing time" to totally restore these resources. The projects described below are one step in the process of moving toward the desired conditions.

Fish Passage/Culverts

Some roads have culverts or other structures that block or impede fish passage or are not large enough to accommodate a 100-year flood event and associated sediment and debris. These projects involve the design and installation of structures that allow passage of fish and other channel related material. There is an urgent need to upgrade these structures that would improve fish passage on many miles of streams. There are additional miscellaneous culverts that would be replaced during road repairs or removed during road decommissioning that would also help meet this need.

In-stream

In-stream conditions are sometimes not optimal for fish. Streams can be improved by replacing lacking elements or by repairing existing features. Projects include the installation of logs or boulders in stream and rivers and the creation of side channels.

Road Repair

Some roads have deteriorated, are causing resource damage, or are unsafe. Roads would be repaired where cost, level of use and resource considerations warrant. This includes heavy maintenance and deep patch repairs to stabilize cracked or sinking road surfaces. Projects may also include the placement of additional cross drain culverts, increasing existing culvert size and the stabilization of cut and fill slopes.

Road Decommissioning

Some roads would be decommissioned where they pose resource risks and are no longer needed. This may involve the removal of gravel surfacing and culverts if present, and the deep scarification of road surfaces. It may also include pulling back unstable fill slopes to prevent future landsliding. Berms would be constructed to block vehicular access and disturbed soils would be revegetated.

Road Closure

Some roads would be closed to public access by the placement of berms or other devices. Also

included is the repair of existing closure devices that have proven to be ineffective.

Unauthorized Vehicle Damage

Sometimes vehicles drive where they shouldn't. Areas that are being damaged by unauthorized vehicles including Off Highway Vehicles (OHV) would be blocked with boulders and disturbed areas would be revegetated where appropriate.

Proposed Action

The following restoration projects would be implemented. Individual projects are displayed in tables below organized by general restoration project type.

Project Type: Fish Passage/Culverts

Some road crossings or other structures block or impede fish passage. These projects involve the design and installation of a better structure. Refer to text after these tables for explanation of seasonal restrictions.

Project Name	Notes
Road/Creek	
Rd. 45/South Fork Clackamas River	
Rd. 6350/South Fork Happy Creek	
Rd. 6360/Happy Creek	
Rd. 4611/Winslow Creek	
Rd. 4672/Lowe Creek	
Orient Road/Tickle Creek Trib.	DP079 – Off Forest
Redland Road/Little Clear Creek	CL088 – Off Forest
Mosier Creek	CL068 – Off Forest, BLM trail

Project Type: In-stream/Riparian

Streams would be improved by replacing lacking elements or repairing problem areas.

Project Name	Notes
Concordia Cedars	Side channel – Off Forest
Shoe Island	Side channel – Off Forest
Fisherman's Bend	Side channel – Off Forest
Deep Creek	Dam/fish ladder – Off Forest, DPD05
Middle Clear Creek	Ford rehab. – Off Forest, CL069A
Clackamas/North Fork Reservoir	Logs and Boulders. Part on Forest and part on BLM and PGE.
Upper Clackamas	Logs and boulders, Two rivers to 4650 bridge
Tar Creek	Side channel along Clackamas near Tar Creek
Two Rivers	Side channel along Clackamas below confluence with Collawash
	River
Road 4650	Side channel along Clackamas near road 4650
Hot Springs RM 3.2	Side channel along Hot Springs Fork, control structure at entrance

Hot Springs RM 2.7	Side channel along Hot Springs Fork, control structure at entrance
	of existing side channel
Hot Springs RM 3.0	Construct side channel
Hot Springs RM 2.5	Side channel along Hot Springs Fork, control structure at entrance
	of existing side channel
Big Creek Channel Restoration	Add wood, stabilize banks

Project Type: Road Repair

This includes heavy maintenance and deep patch repairs to stabilize cracked or sinking road surfaces. Projects would also include the placement of additional cross drain culverts, upgrading existing culverts and the stabilization of cut and fill slopes.

Project Name (Road Number)	Notes
Rd. 46	Shoulder degradation from OHV use parallel to road. Place boulders parallel to road, rebuild shoulder with pit run rock and revegetate disturbed area.
Rd. 63	MP 0 - 3.6, Deep patch repairs
Rd. 63	MP 8.9 - 12.6, Deep patch repairs, convert portions to aggregate.
Rd. 70	MP 0 - 6.02, Deep patch repairs and poly fabric overlays
Rd. 7010	MP 0 - 1.64, Deep patch repairs, convert portions to aggregate.
Rd. 6350	MP $0 - 3.25$, Deep patch repairs, convert portions to aggregate.
Rd. 42	MP 23.8 – 26.66, Deep patch repairs.
Rd. 4671	MP 1.24 – 5.55, Deep patch repairs, convert portions to aggregate.

Project Type: Road Closures and Decommissioning

The 2003 Forest-wide Roads Analysis discusses recommendations for road closure and decommissioning on pages 40 and 41. The Roads analysis presented a table of Roads with Low Access Needs and High Environmental Risk on page 44. These roads are to be considered for decommissioning during project planning.

The Roads Analysis results provide a good broad perspective of the physical setting and potential resource impacts of any road segment. Although the data used was the best available, it is not a substitute for a field examination (Roads Analysis p. 40). Roads need to be examined at a site-specific scale before deciding what to do with them. Some roads that score high because they are in a high risk landscape may not actually have any problems. Also the list of roads with "low access needs" does not imply that there are no needs. If a road is needed for a future thinning project, it may be appropriate to delay decommissioning until the areas that need thinning have been thinned.

The list of Roads with Low Access Needs and High Environmental Risk on page 44 of the Roads Analysis is reproduced in the Appendix with an explanation of the status of each. The roads were visited in the field to determine if there were any problems and the ages of the plantations were assessed for thinning opportunities. Some have been decommissioned already, some will be included in this document, and others will be deferred for future thinning and some will be allowed to overgrow naturally. The table below lists only the roads covered

by this assessment. It should also be noted that many proposed decommissions are not on the high risk list but are proposed for other reasons.

In this document, the term decommission, is used for Forest Service system roads to describe the process of removing them from the system. Decommissioning would mean different things for each road depending on site-specific conditions. Decommissioning could occur naturally as vegetation grows on the road and therefore no field work would be needed. In this case decommissioning would be a data-keeping exercise to remove the road from the Forest's road system data base. However, most roads would require some action. Decommissioning may involve the removal of gravel surfacing and culverts if present, and the deep scarification of road surfaces. It may also include pulling back unstable fill slopes where needed to prevent future landsliding. Berms would likely be needed to block vehicular access and disturbed soils would be revegetated. Some roads proposed for decommissioning are already closed with berms or other devices.

Road Closure may involve the installation of berms, gates or other barriers to block most motor vehicle access. It may also involve piling debris such as boulders and root wads to discourage vehicles from going around the closure.

Road #	Existing	Proposed	Total	Tributary	Notes
			Length	Roads	
4200520	Damaged	Berm	2.29		
	GR				
4500130	Open gate		0.55		
4500310	Non-func.	Berm	2.24	316	
	gate				
4500320	Non-func.		1.17		Level 2
	gate				
4500340	Non-func.	Berm	3.89	055,	
	gate			350,360	
4510130	Non-func.	Berm	2.62		
	gate				
4600031	over grown	Natural	0.14		already naturally deocm
		Decom. No			
		action			
4600065	Open	Berm	0.6		
4600067	Open	Berm	0.65		
4600203	Open	Decom.	0.52		
4600230	GR over	Natural			already naturally deocm
	grown	Decom. No			
	-	Action			
4600242	Berm over	Natural	0.18		already naturally deocm
	grown	Decom. No			
		action			
4600265	Over grown	Natural	0.07		already naturally decom
		Decom, No			
		action			
4600267		Decom	0.14		
4600333	Non-func.	Berm	1.56	334	
	GR				

Road #	Existing	Proposed	Total Length	Tributary Roads	Notes
4600350	Open	Decom	1.14	068,069	past 370 jct.
4600360	Non-func. GR	Berm	0.63	063	
4610113	Open	Berm	3.53	016,017	OHV Plan, also 014
4610115	Non-func. GR				Cold will reinstall rail, OHV
4610180		Berm	2.1		
4614167	Non-func. GR	Berm	0.44		
4614190	Non-func. GR	Berm	1.06		
4620019	Open	Decom.	0.16		Used for 2007 thin, wet, spring in road
4620022		Decom	0.22		culvert
4621		Decom	0.17		mp 0.2 to end, culvert
4621011	Berm	Decom	0.22		
4621013	Berm	Decom	0.1		
4621125	Berm	Decom	0.24		
4621170	Gate	Decom	0.11		-
4621220	Gate	Decom	0.39		culvert
4630031	Berm,	Natural Decom No	0.44		
	overgrown	action			
4630170	Non-func.	Berm	1.21	016,017	
4631017	over grown	Natural Decom, No action	0.1		already naturally deocm
4645	Non-func. GR	Berm	2.42	135	past 130 jct. could close 4645 & 130 with one berm.
4645130	Non-func. GR	Berm	1.18		
4650130	Non-func. GR	Berm	1.19	135	place berm after last powerline access
4651	2 Gates Non-func. gates at each end	2 Gates	4.98	014, 115	
4651120	Non-func. GR w/berm	Reinforce Berm	1.18	130	parts access proposed wilderness
4651120	Non-func. GR w/berm	Decom	0.6		Decom end section, proposed wilderness
4651140		Decom	0.35		proposed wilderness
4651150	Non-func.	Reinforce	0.24		
	gate w/berm	Berm			
4651150	Non-func. gate w/berm	Decom	0.31		Decom end section,
4660140	Non-func. GR	Berm	4.95	150,160	
4660170	Non-func. GR	Berm	1.37	172	Move closure up the road to steeper side slope.
4660180	Non-func. GR	Berm	1.73	020	

Road #	Existing	Proposed	Total Length	Tributary Roads	Notes
4661160	Non-func. GR	Berm	3.01	018, 162, 164	
4661170	Non-func. GR w/berm	Reinforce Berm	1.11	019, 020	
4670130	Non-func. GR	Berm	1.96	140	Move closure up the road to steeper side slope.
4670170	Non-func. GR	Berm	1.14	180	
4670190	Non-func. GR	Berm	0.94	200	
4670216	Non-func. berm	Reinforce Berm	0.22		
4670218	Non-func. GR	Berm	0.41		
4671120		Decom	0.97		
4671130		Decom	0.79		
4671150		Decom	0.75		first part need for UpClack thin, decommission past plantation
4671153	Non-func. GR	Berm	1.0	155	
4671220		Berm	2.3	230	
4672147	Non-func. GR w/berm	Reinforce Berm	0.92		
4672162	Non-func. GR	Berm	0.96		berm 600 feet from junction
4672164	Non-func. GR	Berm	0.57		
4672180	Open	Berm	0.34		
4672182	open gate	Berm	0.13		
4672190	Non-func.	Reinforce	2.08		
	GR w/berm	Berm			
5700017		Berm			
5700120	Non-func. Gate	Gate			
5700120	Non-func. Gate	Berm	1.1		at 160 jct.
5700130	open	berm	0.23		
5700150	Non-func. Gate 120	Berm	0.65		See 5700120
5710120	Non-func. GR	Berm	0.91		
5710130	Non-func. GR	Gate	3.4	140, 148, 150, 023, 030, 029	140 is Level 2, administrative access
5710144	Non-func. GR	Berm	0.61	021	
5710180	Bypassed berm; old GR is down	Berm	0.99	183, 184	
5720120	Non-func. GR	Berm	2.89	011, <u>123</u> , 125	

Road #	Existing	Proposed	Total	Tributary	Notes
			Length	Roads	
5810180	Open	Berm	2.79	182, 185	
5810203	Non-func. GR	Berm	0.75		
5830150	Non-func.	Reinforce	1.92	174, 180	mp .55
	GR with	Berm			
	breached				
	berm				
5830200	Non-func. GR	Berm	0.82		
5830230	Non-func. GR	Berm	0.36		
5830240	Non-func. GR	Berm	1.04		
5830260	Non-func. GR	Berm	1.24	265, 270	
6300015		Decom	0.16		need for thin
6300120	Open	Decom	0.22		dispersed camp
6300170	Breached	Reinforce	3.28	171, 173,	need for thin, level 2
	berm	berm		175, 176	
6300183		Decom	0.81		need for thin
6300185		Decom	0.22		access plt. ridgetop
6310011	overgrown	Natural Decom			already naturally deocm
6310115	open	Decom			
6310120	Open	Decom			very close to river
6310125	Breached berm	Reinforce Berm	0.25		
6310162	Bermed	Reinforce Berm	0.62		Berm is at MP 0.2. Where a culvert was pulled. Could be breached with hi- clearance vehicle.
6310210	Open	Berm	3.86	224, 230, 235	past 220
6310211	Open	Berm	1.66	212	
6310220	Non-func.	Berm	0.75		past 031
	gate				
6310260		Berm	0.32		
6311012	Open	Decom			
6311120	Non-func. GR	Berm	0.7		
6311130	Guard Rail,	Natural			already natural decom
	overgrown	Decom, No action			
6311140	Non-func. GR	Decom	1.08		
6311150	Non-func. GR	Berm	1.21	162	
6311160	Open	Decom	0.89	1	need for thin, trib of 150
6311170	Non-func. GR	Berm	0.94		
6321	Gate	Berm	0.9	1	Berm at MP 2.9
6330011		Decom	0.16	1	
6340120	Open	Decom			

Road #	Existing	Proposed	Total	Tributary	Notes
			Length	Roads	
6350029	Non-func.	Berm	0.52		
	GR				
6350240	Non-func.	Reinforce	1.51		
	gate w/berm	Berm			
6350370	Non-func.	Berm	0.75		
	GR				
6360	Non-func.	Gate	3.91	120, 130,	
	Gate			140, 150	
7020120	Non-func.	Berm	3.88	130	
	gate				
7040120	Non-func.	Berm	2.19	121	past Nohorn Cr.
	gate				

Project Type: Unauthorized Vehicle Damage

Boulders placed to block access, revegetation of damaged areas.

Project Name
La Dee
Bagby
Clear Creek
Huxley Lake
Eagle Creek
Fanton
Sun Strip
Farm Creek
Two Rivers