

9. Road Maintenance and Abandonment Planning for Large Forest Landowners

9.1 Introduction

Forest practices rules include a road maintenance and abandonment program to prevent sediment and hydrology-related impacts to public resources such as fish and fish habitat. The rules require large forest landowners (as defined in WAC 222-16-010 under “Forest Landowner” and in Section 3 of the Board Manual) to develop and implement a Road Maintenance and Abandonment Plan (RMAP) for roads within their ownership. In an effort to minimize the economic hardship on small forest landowners, the 2003 Washington Legislature passed a RMAP bill (HB1095) that modified the definition of “small forest landowner” and clarified how the RMAP requirements applied to small forest landowners. Small forest landowners have the option to submit a “checklist” RMAP with each forest practices application or notification, rather than to provide a plan for their entire ownership. DNR, in consultation with WDFW and Ecology submitted a report to the legislature and the Forest Practices Board in December 2008 on the effectiveness of the checklist RMAP. The report can be found electronically at: www.dnr.wa.gov/Publications/fp_sflo_rmap_legreport_2008.pdf.

Large forest landowners were required by July 1, 2006, to have all roads within their ownership covered under a DNR-approved RMAP (WAC 222-24-051) and to bring all roads into compliance with forest practices standards by July 1, 2016. This includes all roads that were constructed or used for forest practices after 1974. An inventory and assessment of orphaned roads (i.e., forest roads and railroad grades not used for forest practices since 1974) must also be included in the RMAP. In areas where watershed analysis has been conducted and approved, large forest landowners may elect to follow the watershed administrative unit-road maintenance plan rather than developing an RMAP under WAC 222-24-051.

9.2 Approved Road Maintenance and Abandonment Plans

The following table, “2008-2009 Status of Large Landowner RMAPs” lists by DNR region the number of large landowners with RMAPs and the status of their RMAPs. Currently, there are a total of 107 large landowners statewide requiring RMAPs. In many cases, a single large landowner may have multiple RMAPs distributed over more than one DNR region.

2008-2009 Status of Large Landowner RMAPs

DNR Region	# of Large Landowners with RMAPs	RMAP Status
Northwest	20	All Plans Approved
Pacific Cascade	29	All Plans Approved
South Puget	15	All Plans Approved
Olympic	21	All Plans Approved
Northeast	8	All Plans Approved
Southeast	14	All Plans Approved, except as noted below*
Total	107	

*The 2007-2008 Forest Practices HCP Annual Report described four landowners working with DNR to achieve approval of their RMAPs. Since that time, one of the landowners has completed their road inventory and scheduling of work and has an approved RMAP.

Following is the status of the remaining three landowners:

1. Landowner has an incomplete RMAP (1500 acres out of 131,000 total acres are not completed). The landowner is currently working with DNR to complete and update the inventory of roads; and to identify fish passage barriers based on updated water type maps.
2. Landowner currently has one section of land (640 acres) under an approved RMAP and continues to acquire additional land needing approval.
3. Landowner has modified its harvest levels to exceed more than 2 million board feet of timber per year, and is continuing to work with DNR to complete their RMAP.

9.3 Road Maintenance and Abandonment Plan Implementation

The RMAP process is intended to bring all roads owned by large forest landowners into compliance with forest practices standards by July 1, 2016. The following tables, “RMAP Accomplishment Report From 2001-2008”, and “Yearly Cumulative Reports” details the progress that’s been made by both large and small landowners from July 2001 until December 2008.

RMAP Accomplishment Report From 2001-2008

DNR Region	Total # of Approved RMAPs by Large Landowners	Total # of Submitted Checklist By Small Landowners	Miles of Forest Road	Miles of Road Improvement	Miles of Road Abandoned	Miles of Orphaned Roads	Miles of Fish Passage Opened	# of Structures Fixed on Fish Habitat Streams
Northeast	8	2,319 / *290	7,625	4,268 / *344	295 / *22	96	258 / *27	515 / *52
Northwest	29	1,479 / *20	5,841	1,813 / *395	849 / *111	650	56 / *16	194 / *46
Olympic	22	677 / *60	7,648	997 / *328	101 / *11	353	226 / *37	354 / *84
Pacific Cascade	32	2,990 / *59	21,942	6,427 / *137	480 / *65	715	600 / *114	1,253 / *252
South Puget Sound	26	661 / *26	7,886	671 / *169	262 / *49	220	138 / *31	241 / *24
Southeast	13	502 / *52	6,500	843 / *507	444 / *20	271	170 / *7	314 / *165
Statewide Totals (as of 12/31/08)	119	8,628	57,442	15,019	2,431	2,305	1,448	2,871

*Note: * Number represents the increase over the previous year.*

State Wide Yearly Cumulative Reports

	Total # of Approved RMAP's & Submitted Checklists	Total # of Submitted Checklist by Small Landowners	Miles of Forest Road	Miles of Road Improvement	Miles of Road Abandoned	Miles of Orphaned Roads	Miles of Fish Passage Opened	# of Structures Fixed on Fish Habitat Streams
2001-2002	4,066	---	15,484		645	502	52	46
2001-2003	5,530	---	27,072		1,007 / *362	1,246	175 / *123	355 / *309
2001-2004	7,401	---	48,051		1,587 / *580	1,944	647 / *472	1,217 / *908
2001-2005	8,419	---	58,843		1,856 / *269	2,107	775 / *128	1,363 / *146
2001-2006	9,950	---	59,220		2,068 / *212	2,313	982 / *207	1,819 / *456
**2001-2007	107	8,121	56,936	13,140	2,153 / *85	2,293	1,221 / *239	2,248 / *429
2001- 2008	119	8,628 / *506	57,442	15,019 / *1879	2,431 / *278	2,305	1,448 / *227	2,871 / *623

*Note: * Number represents the increase over the previous year.*

****2001-2007 - first year the number of submitted large landowner RMAPs and submitted small landowner RMAP Checklist is separated.**

Commitments were made in the 2006-2007 annual report to provide additional information in subsequent reports relating to the numbers of fish passage barriers for large forest landowners and a summary of those repaired or replaced; miles of forest road improved as a result of industrial RMAPs; and an update on the achievability of the scheduled RMAPs work by 2016.

Fish Passage Barriers

The following table, "Fish Passage Barrier Information for Large Landowners" displays the total number of presumed fish passage barriers identified in RMAPs by DNR region. It also shows how many have been repaired cumulatively since 2001; the total repaired in calendar year 2008, and the percent of total repaired as of December 31, 2008.

Fish Passage Barrier Information for Large Landowners

DNR Region	Total # of presumed fish passage barriers in RMAPs*	Cumulative repairs from 2001-2008	Total repaired in calendar year 2008	% of total repaired as of Dec. 31, 2008
Northeast	861	515	52	60%
Northwest	610	194	46	32%
Olympic Region	1,194	354	84	30%
Pacific Cascade	2,591	1,253	252	48%
South Puget Sound	676	241	24	36%
Southeast	573	314	165	55%
Totals	6,505	2,871	623	44%

*This number may fluctuate slightly when water types are confirmed and/or modified.

Road Improvements

In an effort to compile the number of forest road miles improved since the RMAP forest practices rule was effective, DNR sent a letter in March 2008 to all industrial forest landowners with Road Maintenance and Abandonment Plans, asking for the following information:

1. How many miles of forest road were originally identified for improvement to meet the requirements of Chapter 222-24 WAC, *Road Construction and Maintenance*?
2. Approximately how many of those forest road miles identified in question #1 have been improved to meet the requirement of Chapter 222-24 WAC, *Road Construction and Maintenance* as of December 31, 2007?

The letter also explained that beginning with the 2008 RMAP annual reporting cycle, industrial landowners will be asked to include the total number of miles of forest roads improved during the past calendar year (See “RMAP Accomplishment Report From 2001-2008” above). This is an addition to the usual annual RMAP reporting requirements.

Ninety-nine letters were sent and 77 responses were received; a 77 percent response rate. The responses represented 219 individual RMAPs. The majority of the 22 landowners who did not respond are mid-sized forest landowners with fewer miles of forest road overall on the landscape. Statewide, landowners responding reported approximately 22,900 miles of forest road identified as needing improvement—out of 57,442 total miles of forest road. As of December 2008, approximately 15,019 miles have been improved—a 66 percent accomplishment rate.

There was some initial confusion about what constituted road improvement as landowners responded to the March 2008 letter. As a result, DNR established a consistent working definition for road improvement in guidance to forest practices staff crafted in October 2008. Improvements are defined as “only those road related improvement structures which require fixes to bring the existing road built prior to 2000 up to the current (2001) forest practices rule standards.” (Guidance from Gary Graves, Assistant Division Manager, Forest Practices Division – October 13, 2008). As per the guidance, examples of road improvements include removing fish passage barriers, pulling back sidecast, adding cross drains, abandoning forest roads, etc. Improvements do not include normal maintenance activities such as routine road grading, adding surfacing, pulling ditches, etc.

Achievability by 2016

The following tools are used to ensure that landowners meet the obligations of their approved RMAPs in an even-flow manner by July 1, 2016:

- **Annual Report**
Landowners are required (WAC 222-24-051 (8)) to annually report on work accomplished for the previous year and to submit a detailed description of the upcoming year’s work. Any modifications to the upcoming work schedule are included in the annual report and reviewed in consultation with Ecology, WDFW, affected tribes and other interested parties.
- **Annual meetings**
Annual meetings are held between DNR RMAPs staff, industrial forest landowners, and others to discuss accomplishments; upcoming plans; project priorities; and landowner’s ability to meet the scheduled work required by 2016. Further meetings may be necessary to refine the current work schedule or to request a new work schedule for evaluation and acceptance by DNR in order to meet the target deadline.

The same October 13, 2008 guidance referred to above outlined the forest practices program's expectations regarding the term "even-flow" when evaluating RMAPs. The guidance states the following:

***Even flow:** First, review the list of identified work that each landowner submitted during the planning phase including stream crossing cmp removal, stream crossing culvert replacement, ditching, grading, side cast pullback, adding cross drain cmps and road abandonment. Next, compare the original list of work to the list of accomplishments submitted with the annual reports. Evaluate the progress that has been made against what originally needed to be done and determine – based on your best professional judgment and knowledge of the situation - whether or not it is likely the remaining work can be completed in the next 7 or 8 operating seasons. If the RMAP Specialist in consultation with the FP District Manager and RP&S Assistant concludes that the individual landowner is making sufficient annual progress that it is likely all the necessary work will be finished by July 1, 2016 then the landowner is achieving even flow.*

However, if you conclude that the landowner is only doing the minimal work necessary and will not likely accomplish all of the identified and necessary work by July 1, 2016 then they are not meeting the even flow concept. Should you determine that a landowner is not meeting the even flow concept then you need to meet with the landowner and discuss your concerns and expectations for future accomplishments. One of the enforcement documents would be used to set dates for future checks. At the end of the meeting the landowner needs to know what action(s) DNR will take if they do not comply. Documentation of the discussion is recommended either by letter or ICN.

(Guidance from Gary Graves, Assistant Division Manager, Forest Practices Division – October 13, 2008).

9.4 Washington Department of Fish and Wildlife Efforts

RMAPs are one of the major activities for WDFW's Forests and Fish biologists who provide an essential role in the review and implementation of RMAPs. The following is a description summary of the RMAPs duties performed by the WDFW staff.

- Review of new and ongoing RMAP proposals.
- Issue Hydraulic Project Approvals for RMAP work. Approximately 526 RMAP related Hydraulic Project Approvals were reviewed in Fiscal Year 2009.

The 2016 deadline for completing RMAP work will continue to create a large demand for Hydraulic Project Approvals. The number of applications associated with large landowners RMAPs has grown significantly over the past few years, from 230 in 2002, to 2963 in 2006. In FY 2009 approximately 2,600 forest practice applications were reviewed for Hydraulic Project Approval requirements. The complexity of technical assistance and Hydraulic Project Approvals needed from WDFW biologists has increased as work is shifting from the easier fixes to the more challenging crossing structures as well as structures located higher in the watershed.

- Review forest practices applications for Hydraulic Project Approval requirements, provide site reviews, issue Hydraulic Project Approval permits, and provide other technical assistance as needed.

- Develop, review, and consult with small forest landowners addressing stream typing, aquatic resource protection and road issues. Provide technical assistance, pre-site reviews, review of completed long-term plans, and issue Hydraulic Project Approvals for small forested landowners.
- Review revised RMAPs as landowners make annual changes pertaining to fish passage structures, fish habitat, stream typing, and sediment delivery.
- Review revised RMAPs as land ownership changes. Ownership changes have been occurring at a relatively high rate.
- Provide technical assistance and review for alternate plans for both small and large industrial landowners.
- Validate stream typing, including identifying the breaks between fish and non-fish streams, as part of the RMAPs process, as well as implementation of the forest practices rules for riparian zones.

With the development of the new DNR hydro-layer, state and private landowners have increased their efforts in identifying breaks between fish and non-fish streams. Additionally, as a result of the stream type surveys, landowners are submitting hundreds of water type change forms to DNR requesting changes to water type maps. Many of these water type modifications require more than one site review and have substantially increased Forest and Fish biologist's workload.

- Participate in the review and development of Forests and Fish Report-related research through CMER committee participation.
- Provide technical assistance as needed to forest landowners for aquatic related mitigation and restoration and to identify specific habitat needs for species of concern.