

Forest Practices Habitat Conservation Plan

July 1, 2013- June 30, 2014

Annual Report

Washington State Department of Natural Resources

Forest Practices Program, Forest Practices Division

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On behalf of Washington State, this report was prepared by the Washington State Department of Natural Resources, Peter Goldmark, Commissioner of Public Lands.
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Successful implementation of the Forest Practices Habitat Conservation Plan involves the efforts of all of our partners in resource protection.

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Executive Summary

In 2006, Washington State completed the [Forest Practices Habitat Conservation Plan](#) (Forest Practices HCP) (DNR 2005) with the goal of obtaining Incidental Take Permits from the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NOAA Fisheries) (collectively, “the Services”). The Forest Practices HCP addressed the habitat needs of all covered aquatic species, including certain fish species that are federally designated as “threatened” or “endangered”. The Forest Practices HCP is a programmatic HCP that reflects the State’s forest practices program and is the basis for federal permits to the State for implementing the State’s forest practices program. The Services accepted the Forest Practices HCP and issued Incidental Take Permits to Washington State under the authority of the Endangered Species Act. The Forest Practices HCP protects aquatic and riparian-dependent species on more than 9 million acres of state and private forestlands.

As a part of the Forest Practices HCP implementing agreement, the State submits to the Services an annual report describing implementation activities. This year’s annual report covers the period from July 1, 2013 to June 30, 2014.

July 2013 – June 2014 Activities and Accomplishments

General – Three efforts substantively impacted work load for the forest practices program during this reporting period.

- *Forest Practices Hydraulic Projects* - The Board adopted rules in accordance with Second Engrossed Substitute Senate Bill 6406, [Chapter 1, Laws of 2012](#). The rules integrated fish protection standards found in the WDFW hydraulic code rules, chapter 220-110 WAC, into the forest practices rules. The legislative purpose for this change in state agency jurisdiction was to simplify government application processes for the citizens of Washington State.

After an intensive rulemaking process, including much stakeholder and state agency involvement the Forest Practices Board (Board) adopted the rules on August 13, 2013. The Department of Natural Resources (DNR) and the Washington Department of Fish and Wildlife (WDFW) conducted joint Agency Forest Practice Hydraulic Permit (FPHP) training sessions in eastern and western Washington before the rule became effective on December 30, 2013. Now forest practices hydraulic project proposals are included in forest practices applications, and the projects are administered by DNR instead of WDFW. WDFW provides concurrence review of certain forest practices hydraulic projects that involve specific types of culvert, bridge, and fill projects. WDFW also continues to review and comment on forest practices hydraulic projects associated with Type S and F waters, and certain Type N waters.

Senate Bill 6406 also required the Board to approve technical guidance for inclusion in the Forest Practices Board Manual by December 31, 2013. Best management practices and standard techniques to ensure fish protection standards associated with forest practices hydraulic projects are addressed. On August 13, 2013, the Board approved the Board Manual Section 5, *Guidelines for Forest Practices Hydraulic Projects* as developed by DNR staff.

- Work continued on implementation of the 2012 Forest Practices HCP settlement agreement (see 2012 and 2013 Forest Practices HCP Annual Reports for description of past efforts). The Board adopted the rules proposed by the Timber Fish and Wildlife (TFW) Policy Committee at the August 2013 Forest Practices Board meeting. The new rules added three new caucuses from the original set of six caucuses in the TFW Policy Committee, decreased the timeframe for TFW Policy Committee and CMER decisions by reducing the dispute resolution process time lines, and required a CMER master project schedule of research and monitoring projects with periodic check-ins with the Forest Practices Board. During fiscal year 2014, (FY14) TFW Policy Committee worked on creating the CMER Master Project Schedule (MPS).
- *Unstable slopes* - Review of unstable slopes rules, forest practices board manual guidance, and the unstable slopes research strategies for the Cooperative Evaluation and Research Committee (CMER) (particularly the groundwater recharge area for glacial deep seated landslides) became a priority in 2014 as a result of a large landslide in Snohomish County that resulted in loss of life and property. The Forest Practices Board's consideration of this tragic event led the Board, in May 2014, to pass several motions that could help them determine if and/or how forest practices unstable slopes rules, board manual guidance, and the Adaptive Management Program's unstable slopes research strategies should be updated or changed. This work is continuing into FY15 to ensure the Board obtains necessary information and is able to make changes where needed. See section 2.6 for more information.

Forest Practices Board

The Board continued implementation of the 2012 Forest Practices HCP settlement agreement, focused on review of unstable slopes rules for public safety protection, adopted forest practices rules for forest practices hydraulic projects and definition of biomass, and approved changes to six chapters in the Forest Practices Board Manual.

Adaptive Management Program

The Adaptive Management Program implemented changes resulting from the 2012 Forest Practices HCP settlement agreement for Timber, Fish and Wildlife Policy Committee (Policy) group participation, program guidance and worked on development of the CMER Master Project Schedule. Substantial work on improving policies and processes include:

- Mass wasting effectiveness recommendations – As a result of the Post Mortem Effectiveness Monitoring Report findings, Policy created a charter and began work on

providing options and recommendations for improving unstable slopes review and the need for additional research.

- Type N guidance – Work continued through FY14 on reviewing the data for the development of a wet season methodology to identify the upper most point of perennial flow in Type Np Waters.
- Type F permanent rule – Significant time was devoted toward addressing concepts and fish habitat definitions for a permanent Type F rule. This work was interrupted to address unstable slopes (following the Oso landslide) at the latter part of the fiscal year. Work will continue through FY 15.

The Forest Practices Adaptive Management Program also completed one research project and three draft reports.

Compliance Monitoring Program

The Compliance Monitoring Program published the 2012-2013 biennial report in August 2014. Results from the report are summarized in chapter 9 – Compliance Monitoring Program.

Other

- The forest practices program processed 6007 new Forest Practices Applications and 11,701 previously approved applications were in active harvest status receiving on-the-ground compliance checks in 2013, continuing a trend of increasing number of applications being processed and complied.
- Small Forest Landowner Office continues outreach to assist small forest landowners by collaborating with WSU and others to reach approximately 300 landowners at two small forest landowner field days.
- The training program had two large training efforts regarding FPHP and alternate plans.
- Forest roads continue to improve through the Road Maintenance and Abandonment Planning (RMAP) process for large forest landowners and through landowner assistance for small forest landowners.
- Family Forest Fish Passage Program completed 52 fish barrier removal projects opening up 113 miles of upstream fish habitat.
- Twenty-acre exempt forest practices applications continue to be a small percentage (2.6%) of total applications.

1. Introduction to Forest Practices Habitat Conservation Plan 2014 Annual Report

1.1 Introduction

In 2006, Washington State submitted the Forest Practices Habitat Conservation Plan (Forest Practices HCP) with the goal of obtaining Incidental Take Permits from the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NOAA Fisheries) (collectively, the Services). Implementation of the Forest Practices HCP protects aquatic and riparian-dependent species on more than 9 million acres of non-federal forestlands. This multi-stakeholder effort addressed the habitat needs of all covered aquatic species, including certain fish species that are federally designated as ‘threatened’ or ‘endangered’. In 2006, the Services accepted Washington’s Forest Practices HCP and under the authority of the Endangered Species Act, the Services issued Incidental Take Permits to Washington State. The implementation of the Forest Practices HCP is a partnership between the Services and Washington State.

Three state agencies—the Washington State Department of Natural Resources (DNR), the Washington Department of Fish and Wildlife (WDFW), and the Washington Department of Ecology (Ecology)—work together to implement the Forest Practices HCP. DNR provides the majority of staff positions that oversee implementation of this HCP due to the authority given the department in the Forest Practices Act (chapter 76.09 Revised Code of Washington (RCW)) and Rules (Title 222 Washington Administrative Code (WAC)). However, both WDFW and Ecology have dedicated office and field staff time to support the various functions of the Forest Practices Program and the implementation of the Forest Practices HCP. Their support includes participation in the following:

- The Adaptive Management Program (AMP)
- The Compliance Monitoring Program (CMP)
- The Family Forest Fish Passage Program (FFFPP)
- The review of Road Maintenance and Abandonment Plans (RMAPs)
- Consultation on Forest Practices Hydraulic Project Approvals (FPHPs)
- The development of chapters in the Forest Practices Board Manual (Board Manual)
- The evaluation of water type change proposals
- The review of Forest Practices Applications
- Interdisciplinary Teams

Under the Forest Practices HCP, the state has a commitment to submit an annual report to the Services describing the implementation activities. This year’s annual report covers the period from July 1, 2013, to June 30, 2014. The report describes the efforts of the state Department of Natural Resources’ Forest Practices Program, and its partners to implement the Forest Practices HCP.

1.2 2014 Report Highlights

Highlights of the Forest Practices HCP implementation from July 1, 2013, through June 30, 2014, include:

Forest Practices Board

- **Landslide and Ground Water Recharge Areas** –Review of unstable slopes rules, forest practices board manual guidance, and the unstable slopes research strategies for the Cooperative Evaluation and Research Committee (CMER) (particularly the groundwater recharge area for glacial deep seated landslides) became a priority in 2014 as a result of a large landslide in Snohomish County that resulted in loss of life and property. The Forest Practices Board’s consideration of this tragic event led the Board, in May 2014, to pass several motions that could help them determine if and/or how forest practices unstable slopes rules, board manual guidance, and the Adaptive Management Program’s unstable slopes research strategies should be updated or changed. This work is continuing into FY15 to ensure the Board obtains necessary information and is able to make changes where needed. See section 2.6 for more information.
- **Forest Practices Hydraulic Projects** – The Board adopted the fish protection standards in chapter 77.55 RCW and chapter 220-110 WAC (commonly known as the Hydraulic Code Rules) into the forest practices rules in accordance with Second Engrossed Substitute Senate Bill 6406, [Chapter 1, Laws of 2012](#). The Board also approved, on August 13, 2013, Board Manual Section 5 – *Guidelines for Forest Practices Hydraulic Projects* which provides and explains best management practices and standard techniques to ensure fish protection is achieved through completed forest practices hydraulic projects.
- **Adaptive Management Program Reform** – The Forest Practices Board adopted forest practices rules regarding AMP reform as recommended to the Board by the Timber Fish and Wildlife Policy Committee (TFW Policy Committee), at their August 2013 Board meeting. The new rules added three new caucuses from the original set of six caucuses in the TFW Policy Committee, decreased the timeframe for decision making by the TFW Policy and the Cooperative Monitoring and Research (CMER) committees by reducing dispute resolution process time lines, and required the Forest Practices Board to approve a CMER master project schedule of research and monitoring projects with periodic check-ins with the Forest Practices Board. Corresponding revisions were made to Section 22 of the Forest Practices Board Manual– *Guidelines for Adaptive Management Program*.

Adaptive Management Program

- One project was completed and approved by CMER, and considered for action by the TFW Policy Committee in FY 2014 – *Effectiveness of Riparian Management Zone Prescriptions in Protecting and Maintaining Shade and Water Temperature in Forested Streams of Eastern Washington* (also known as the Bull Trout Overlay [BTO] Temperature and Solar Radiation/Effective Shade projects).
- Three draft reports were approved by CMER to go through Independent Scientific Peer Review (ISPR):
 - Stream-Associated Amphibian Response to Manipulation of Forest Canopy Shading (Buffer Integrity Shade Effectiveness Project),
 - Effectiveness of Riparian Management Zones in Providing Habitat for Wildlife: Resampling at the 10-year Post-treatment Interval, re-analysis of bird data, and,
 - Effects of Forest Roads and Tree Removal In or Near Wetlands of the Pacific Northwest: A Literature Synthesis.
- The TFW Policy Committee worked on the development of a CMER Master Project Schedule (MPS) for projects identified for completion in the Adaptive Management Program. The goal of this work is to create an MPS to be used as a planning and funding document to assist the AMP forecast when projects would be implemented, sequence projects for efficiencies, and keep the budget within projected revenue. The development of the MPS meets requirements of the 2012 Forest Practices HCP settlement agreement and will provide the AMP with a tool to evaluate its progress.
- TFW Policy Committee also engaged in substantial work on improving policies and processes to include:
 - Mass wasting effectiveness recommendations – As a result of the Post Mortem Effectiveness Monitoring Report findings, Policy created a charter and began work on providing options and recommendations for improving unstable slopes review and the need for additional research.
 - Type N guidance – Work continued through FY14 on reviewing the data for the development of a wet season methodology to identify the upper most point of perennial flow in Type Np Waters.
 - Type F permanent rule – Significant time was devoted toward addressing concepts and fish habitat definitions for a permanent Type F rule. This work was interrupted to address unstable slopes (following the Oso landslide) at the latter part of the fiscal year. Work will continue through FY 15.

Forest Practices Operations

- DNR assumed jurisdiction over “forest practices hydraulic projects” (FPHP) on December 30, 2013. In preparation for this change of jurisdiction from WDFW to DNR, the Forest Practices Application (FPA) and instructions were modified to collect information needed to assess forest practices hydraulic projects. Though implementation of the new forest practices hydraulic project rules have been challenging, the transition for DNR and WDFW has been a success.
- DNR and WDFW, in preparation for the FPHP rule integration, each signed a Memorandum of Agreement (MOA). The MOA established the framework for how the two agencies would work together to successfully implement the forest practices hydraulic projects. In addition, WDFW adopted a rule establishing the procedures for how WDFW will review and provide assistance and recommendations to DNR and landowners. From January 1, 2014, through June 30, 2014, WDFW regional biologists reviewed all FPHP applications for consistency with fish protection standards and provided assistance to forest landowners and DNR when needed.
- Forest Practices Operations has had twelve Clean Water Act milestones to complete. Eleven milestones have been completed, with milestone #12 - *Certification Framework* completed during this reporting period. The final milestone to be completed by Forest Practices Operations is #17 - *Alternate Plan Evaluation*. CWA milestone #17 is 95% complete and is expected to be completed during next year’s reporting period.
- The Forest Practices Program created several guidance documents for forest practices staff including one regarding the assessment of slope stability.

Small Forest Landowner Office

- Thirty new applications requesting financial compensation in exchange for a forestry riparian conservation easement were received under the Forestry Riparian Easement Program (FREP) and six conservation easements were acquired. As of June 30, 2014, the backlog of unfunded eligible applications totaled 107.
- The Family Forest Fish Passage Program (FFFPP) completed 52 fish barrier removal projects opening 113 miles of upstream fish habitat. Since the beginning of the program in 2003, 341 barriers to fish passage have been removed, opening up approximately 795 miles of fish habitat.
- Under the Forest Stewardship Program, approximately 1700 landowners have taken advantage of Forest Landowner Cost-Share Programs administered by DNR to improve forest health and reduce the threat of bark beetle and wildfire damage in Eastern Washington

20-acre Exempt Riparian Forestland

- Forest Practices Applications utilizing the small forest landowner twenty-acre exempt non-conversion rule along fish-bearing water comprised about 2.6 percent of all approved applications submitted during the 2013-2014 reporting period.
- Of the 846 Watershed Administrative Units (WAUs) in the state, 185 have possible reduction in the potential recruitment of large woody debris (LWD) resulting from the cumulative total of FPAs utilizing the twenty-acre exempt non-conversion rule. Of these, all but three, have the potential of less than one percent cumulative reduction in function as measured by LWD potential.
- There were no Forest Practices Applications associated with 20-Acre exempt parcels in the bull trout areas of concern.

Enforcement

- There were a total of 11,701 active (i.e. non-expired) Forest Practices applications during the reporting period. During this time, there were 100 Notices to Comply and 45 Stop Work Orders written. Of these enforcement actions, 120 were for violations to the Forest Practices Rules.
- There were five civil penalties and one Notice of Intent to disapprove that became a Final Order (all appeal processes have concluded) during the reporting period.

Compliance Monitoring

- The *2012-2013 Forest Practices Compliance Monitoring Report* will be published in August 2014. Findings from the report include:
 - 1) 2012-2013 haul routes showed a compliance rate of 94%.
 - 2) Riparian prescription compliance rates ranged from 52% to 91% for fish bearing waters and 86% to 96% for non-fish bearing waters.
 - 3) The riparian management zone (RMZ) exempt 20-acre parcel emphasis sample showed a compliance rate of 57% that was not significantly different from the 2008 rate of 62% compliance rate.
 - 4) Road construction and maintenance indicated a compliance rate of 97%.

Training, Information, Education

- Forest Practices Hydraulic Project training was provided to all field forest practices foresters, WDFW habitat biologists, and some office staff.

- Alternate Plan training was held in each region and covered a review of forest practices rules, Board Manual, and guidance memos that are related to alternate plans.
- Two Unstable Slopes and two Wetland Identification trainings were provided for Forest Practices Program staff, agency stakeholders, landowners, and consultants.
- Three Washington Contract Loggers Association trainings were conducted. DNR Forest Practices region and division staff provides presentations to landowners, consultants, operators and landowner professional staff.
- Forest Practices Division staff provided a presentation on the Forest Practices Application Review System at the Cultural Resources Protection Summit. This was a concerted effort to ensure that Tribal representatives have the opportunity to review and comment on Forest Practices Applications.
- DNR region staff completed or sponsored more than 31 training presentations and meetings reaching approximately 400 people. The topics varied widely and included compliance monitoring results, water type modification, road maintenance plans, and general forest practices rule topics.

Road Maintenance and Abandonment Planning (RMAP) for Large Forest Landowners

- Since 2001, 22,793 miles of forest road have been improved to meet state forest practices standards and 5,298 fish passage barriers – about 69% of those identified – have been corrected, opening up 3,130 miles of fish habitat.
- During the first half of the year, Washington State Department of Fish and Wildlife issued about 173 Hydraulic Project Application (HPA) permits. After forest hydraulic permits were transferred to DNR jurisdiction, WDFW reviewed FPAs associated with hydraulic permits and assisted where needed.

Tribal Relations

- During this reporting period there were 33 Forest Practices Applications requiring a landowner/Tribe meeting and all 33 fulfilled the meeting requirement.
- The video-taped cultural resources training session completed last year, titled *Video Presentation: Identifying and Protecting Cultural Resources on Forestlands*, is now available on the Board’s [Roundtable webpage](#) (look under “Related Links”).

Washington State Legislature

- Each year, DNR monitors laws being passed by the Legislature for those that could impact the Forest Practices Program. During the 2014 Legislative session, there were no

new laws passed that would result in a change in protection of habitat for the species covered in the Forest Practices HCP.

- DNR, in close partnership with TFW cooperators, introduced and advocated extensively on behalf of legislation that would have established a dedicated funding source for the Adaptive Management Program and small forest landowner programs. The bill would have redirected revenue from current state forest harvest excise tax to a dedicated account, providing resources to achieve the accelerated CMER master project schedule. Although the legislation passed unanimously from the state Senate, it did not receive a vote in the House of Representatives. DNR and TFW cooperators are continuing to pursue this and other potential funding sources for the program.

Information Technology

- 6007 FPAs were received or renewed and entered into Forest Practices Application Review System (FPARS). Currently there are 1,183 reviewers receiving email notification.
- Staff entered approximately 5,600 updates into the Hydrography data set based on 885 Water Type Modification Forms. As of the end of June 2014, the Water Type Modification Forms backlog was 214.
- FPARS data collection for FPHP began December 30, 2013. New data layers were created in the Forest Practices Risk Assessment Tool to assist region staff with review of FPHP Forest Practices Applications.
- The Road Maintenance and Abandonment Plan Points dataset is being changed in an effort to improve the data set. Staff has separated out only those points that are associated with a full Road Maintenance and Abandonment Plan (RMAP). Small forest landowner points and points outside of DNR Forest Practices' jurisdiction were removed from the RMAP Points dataset and moved to their own feature classes. The State is currently in the process of creating a Small Forest Landowner RMAP Checklist database.

2. Forest Practices Board

2.1 Introduction

The Forest Practices Board's (Board) activities during the July 2013 - June 2014 reporting period are explained in this section. They include:

- Adoption of rules regarding Adaptive Management Program reform, forest practices hydraulic projects, and forest biomass; and
- Approval of changes to the Forest Practices Board Manual in sections 3, 4, 5, 21, 22, and 26.

2.2 Forest Practices Board Overview

The Forest Practices Board (Board) sets the public resource protection standards that are the basis for the Forest Practices Program. The state's Forest Practices Act established the Board's authority in 1974 as an independent state agency responsible for the adoption of rules for forest practices on non-federal and non-tribal forestlands. The Legislature directed the Forest Practices Board to protect public resources while maintaining a viable forest products industry. "Public resources" are defined as water, fish and wildlife, and capital improvements of the state or its political subdivisions.

The Forest Practices Board consists of 13 members who include: the Commissioner of Public Lands, or the Commissioner's designee; four additional state agency directors or their designees; and eight members appointed by the governor. The represented agencies are the state DNR, Commerce, Ecology, Agriculture, and DFW. The governor-appointed members include a member representing a timber products union, a forest landowner who actively manages his or her land, an independent logging contractor, an elected county commissioner or council member, and four general public members whose affiliations are not specified in the Forest Practices Act. The membership of the Board as of June 30, 2014, was:

- Aaron Everett, Commissioner of Public Lands Designee, Chair
- Heather Ballash, Department of Commerce
- Tom Laurie, Department of Ecology
- Kirk Cook, Department of Agriculture
- Joe Stohr, Department of Fish and Wildlife
- Dave Somers, Snohomish County Commissioner
- Bill Little, timber products union representative
- Bob Guenther, general public member and small forest landowner
- Carmen Smith, general public member and independent logging contractor
- Paula Swedeen, general public member
- Court Stanley, general public member
- David Herrera, general public member
- Brent Davies, general public member

In addition to adopting rules, the Board provides guidance through the Forest Practices Board Manual (Board Manual), an advisory technical supplement to the rules. The Board Manual guides field practitioners and DNR regulatory staff when implementing certain rule provisions. The forest practices rules and Board Manual largely represents the state's protection measures for public resources related to forest lands.

The Board also directs and approves funding for the implementation of the Adaptive Management Program. This program is intended to provide science-based recommendations and technical information to assist the Board in determining if and when it is necessary or advisable to adjust rules and guidance in order to achieve established goals and objectives. The Board empowers four entities to participate in the Adaptive Management Program:

1. Cooperative Monitoring, Evaluation and Research Committee (CMER)
2. Timber/Fish/Wildlife Policy Committee (TFW Policy Committee)
3. Adaptive Management Program Administrator
4. Scientific Review Committee (SRC)

CMER represents the research component of the program. The Board approves CMER members.

The TFW Policy Committee considers scientific findings from CMER and makes recommendations to the Board related to Forest Practices Rule amendments and guidance changes. The committee consists of one caucus principal, or their designee, from environmental interests, industrial private timber landowners, nonindustrial private timber landowners, Western Washington tribal governments, Eastern Washington tribal governments, county governments, Department of Natural Resources, state departments of fish and wildlife and ecology, and federal agencies. CMER is open to forest landowners, environmentalists, state agencies, county governments, federal agencies, and tribal governments.

The Adaptive Management Program Administrator is a full-time employee of DNR and is responsible for overseeing the program, supporting CMER and reporting to The TFW Policy Committee and the Board.

The Scientific Review Committee performs independent peer review of some CMER work to ensure it is scientifically sound and technically reliable. The Scientific Review Committee may also review non-CMER work, though it does not do so frequently.

2.3 Forest Practices Board Rule Making Activity (July 1, 2013 – June 30, 2014)

Forest Practices Hydraulic Projects

The Board adopted rules in accordance with Second Engrossed Substitute Senate Bill 6406, [Chapter 1, Laws of 2012](#). The rules integrated the fish protection standards from chapter 220-110 WAC (the hydraulic code rules) into the forest practices rules. They established the standards under which forest practices hydraulic projects (FPHP) associated with water crossing structures

on forest roads and other projects typically associated with water crossings are to be designed to achieve the fish protection standards.

After an intensive rulemaking process, including much stakeholder and state agency involvement, the Forest Practices Board (Board) adopted the rules on August 13, 2013. DNR and WDFW conducted joint-Agency FPHP training sessions in eastern and western Washington before the rule, became effective on December 30, 2013. Now forest practices hydraulic projects are incorporated into forest practices applications, and the projects are administered by DNR. WDFW provides concurrence review of certain FPHPs involving specific types of culvert, bridge, and fill projects. WDFW also continues to review and comment on FPHPs associated with Type S, F, and Np waters.

Senate Bill 6406 also required the Board to approve technical guidance for inclusion in the Forest Practices Board Manual by December 31, 2013, on best management practices and standard techniques to ensure fish protection associated with forest practices hydraulic projects are addressed. The Board approved Board Manual Section 5, *Guidelines for Forest Practices Hydraulic Projects* on August 13, 2013. See section 2.4 for a description of the guidance.

Adaptive Management Program Reform

On August 13, 2013, the Board adopted changes to WAC 222-12-045 regarding reforms to the Adaptive Management Program. The origin of this rule making was the Forest Practices Habitat Conservation Plan Settlement Agreement (May 2012) between the Conservation Caucus, the State of Washington, and the Washington Forest Protection Association.

The settlement agreement established renewed commitments by all parties to practice effective collaboration, efficient decision making, establish a more rigorous schedule for scientific research to inform rule changes over time, and to promote a stronger plan for ensuring the program is adequately funded. The newly adopted rules consisted of:

- Reorganizing and clarifying The TFW Policy Committee membership;
- Recommitting The TFW Policy Committee to consensus decision making;
- Streamlining and expanding the dispute resolution process for The TFW Policy Committee and CMER; and
- Creating stronger accountability for the Adaptive Management Program.

In addition to rule adoption, changes were made to the HCP Implementing Agreement concerning agreed upon minimal biennial funding for the forest practices program, and the Board approved amendments to Board Manual Section 22 *Guidelines for Adaptive Management Program*.

Forest Biomass

On August 13, 2013, the Board adopted rules to make clarifications related to the removal of forest biomass. This was after a year-long effort by a Forest Practices Biomass Work Group convened by DNR. The clarifications consisted of:

- Adding a definition of “forest biomass” in WAC 222-16-010;
- Inserting a clarification within the existing definition of “forest practice” in WAC 222-16-010; and
- Inserting, “...including forest biomass removal operations...” into the logging system portion of WAC 222-30-020.

Forest Road Maintenance

The Board published a Pre-proposal Statement of Inquiry (CR-101) in the Washington State Register on April 2, 2014, indicating it was considering rulemaking to amend chapter 222-24 WAC, Road Construction and Maintenance. The Board is considering adding language to make it clear that DNR may combine the enforcement procedures under chapter 222-46 WAC with cooperative agreements authorizing landowners to schedule road maintenance according to a site’s relative potential for public resource damage. This could apply to situations where landowners are suddenly faced with a large amount of road maintenance responsibility in a given drainage or road system due to, for example, an unusual storm event or acquisition of forest land with extensive road maintenance problems. It could apply to roads with completed road work under existing road maintenance and abandonment plans (RMAPs), or to roads that were never covered under an RMAP.

Such a rule would be in keeping with the policy stated in WAC 222-46-010 to encourage practical, result-oriented resolution of actions needed to prevent damage to public resources, and clarify that DNR may work with landowners to ensure feasible means to accomplish road maintenance necessary to protect public resources.

The Board may initiate rulemaking on this subject in 2015.

Geotechnical Information on Forest Practices Applications

The Board is considering rulemaking to clarify that DNR may require additional geologic information to classify forest practices applications where a potentially unstable slope or landform is in or around the area of the application. On May 13, 2014, the Board passed a motion to file Pre-proposal Statement of Inquiry (CR-101) to notify the public that it is considering rulemaking on this subject. This notice was published in the Washington State Register on May 21, 2014. The Board will likely consider draft rule language in November 2014 and adopt a rule in February 2015.

2.4 Forest Practices Board Manual

The Board Manual is an advisory technical supplement to the forest practices rules that provides technical background and guidance for DNR staff, forest landowners, and cooperating agencies and organizations when they implement certain rules.

The forest practices rules direct DNR to develop Board Manual sections which provide guidance for implementing a specific rule or set of rules. Often modifications are made in consultation with the Washington State Departments of Fish and Wildlife, Agriculture, Ecology and other affected agencies, affected tribes, and interested parties as appropriate. This process typically begins with a working group that identifies key elements to be addressed, followed by drafting language with DNR in the lead. For sections that provide guidance for rules protecting aquatic resources, a final draft is presented to The TFW Policy Committee for review and approval, after which the Board considers the final approval. At times it may be necessary for DNR to present the Board with a final product that represents agreement by a majority of the TFW Policy Committee, rather than by consensus. In these cases, DNR staff informs the Board of the lack of consensus and provides a briefing on the outstanding issues prior to the Board taking action.

Forest Practices Board Manual Activity (July 1, 2013 – June 30, 2014)

On August 13, 2013, the Board approved a new Board Manual Section 5 entitled *Guidelines for Forest Practices Hydraulic Projects* and revisions to five additional sections. Minor revisions to sections 3, 4, 21, and 26 were needed because of the change in regulatory jurisdiction from WDFW to DNR over forest practices associated hydraulic projects; and Section 22 revisions were needed for consistency with the amended adaptive management program rules resulting from the Forest Practices Habitat Conservation Plan Settlement Agreement (May 2012) as explained below.

Board Manual Section 5 *Guidelines for Forest Practices Hydraulic Projects* (new section)

As described in section 2.3, the legislation directing the Board to incorporate fish protection standards from the hydraulic code rules into the forest practices rules, also directed the Board to develop technical guidance (in the Forest Practices Board Manual) on best management practices and standard techniques to ensure fish protection.

From October 2013 through July 2014, Department of Natural Resources staff worked with WDFW and representatives from the large industrial landowners, conservation, tribal, state and federal caucuses to develop technical guidance. The guidance was informed by existing WDFW guidelines for the design of water crossing structures, stream bank protection, and stream habitat restoration, as well as by the forest management and scientific expertise gained from the participating representatives.

Board Manual Section 3 *Guidelines for Forest Roads*

The water crossing portion of this section was moved to the new Board Manual Section 5 so that water crossing guidelines for both fish bearing and non-fish bearing waters would be under the *Guidelines for Forest Practices Hydraulic Projects* section title.

Board Manual Section 4 *Guidelines for Clearing Slash and Debris from Type Np and Ns Waters*

References to the issuance of Hydraulic Permit Applications by WDFW were removed and replaced by guidance to landowners to include the information for FPHPs as part of an FPA, and clarifying FPHPs are under the jurisdiction of DNR.

Board Manual Section 21 *Guidelines for Alternate Plans*

Guidance in alternate plan Template 1 (overstocked conifer-dominated riparian management zones) regarding HPA approvals was deleted and direction to acquire an FPHP was added to make accurate the change in jurisdiction of hydraulic projects from WDFW to DNR.

Board Manual Section 26 *Guidelines for Large Woody Debris Placement Strategies*

References to the issuance of HPAs by WDFW were removed and replaced by guidance to landowners to submit FPHPs as part of an FPA, and clarifying FPHPs are under the jurisdiction of DNR.

Board Manual Section 22 *Adaptive Management Program*

This Board Manual section was revised to correspond to the Adaptive Management Program rule changes explained in section 2.3. The revisions included redefining the principal TFW Policy Committee caucuses, amending the dispute resolution process, and adding provisions outlining the development and maintenance of the CMER Committee master project schedule.

2.5 Anticipated Forest Practices Board Direction

DNR, as staff to the Board, are planning to include in the Board's 2015 Work Plan several rule makings, Board Manual amendments, as well as several Adaptive Management Program priorities that may result in TFW Policy recommendations to the Board.

Rule Making Activity

Forest Road Maintenance Clarification

As mentioned in 2.3, the Board may continue rule making related to forest road maintenance in the 2014-2015 reporting period. The purpose of the rule would be to make it clear that DNR may combine the enforcement procedures under chapter 222-46 WAC with cooperative agreements, authorizing landowners to schedule maintenance according to the relative potential for damage to public resources. It could apply to roads with completed road work under existing road maintenance and abandonment plans (RMAPs) or to roads that were never covered under an RMAP.

Geotechnical Information on Forest Practices Applications

As mentioned in 2.3, the Board is considering rulemaking to clarify that DNR may require additional geologic information to classify forest practices applications where a potentially unstable slope or landform is in or around the area of the application and timber harvest or operations could potentially impact public resources or threaten public safety. On May 13, 2014, the Board passed a motion to notify the public pursuant to RCW 34.05.310 that it is considering rulemaking on this subject. It is likely that the Board will consider draft rule language in November 2014 and adopt a rule in February 2015.

Riparian Management Zones (RMZs)

The Board may consider riparian management zone rules to:

- Clarify outer zone leave tree clumping and dispersal options; and

- Clarify methods and processes for collecting stand data for determining stand requirements to meet desired future conditions.

SEPA Requirements for Landscape Management Plans

The Board may determine a rule revision in WAC 222-16-080(6) is necessary to clarify whether SEPA analysis is required for state-approved landscape management plans for threatened and endangered species conservation.

Board Manual Revision Activity

Board Manual Section 7 Guidelines for Riparian Management Zones (RMZ)

Along with the RMZ rule making activity, guidance may be necessary regarding clumping and dispersing outer zone leave trees, collecting and evaluating stand information, and marking RMZ boundaries and outer zone leave trees so that they are easily identified and retained.

Board Manual Section 16 Guidelines for Evaluating Potentially Unstable Slopes and Landforms

DNR will assemble a group of qualified experts on glacial deep seated landslides and begin work in the summer of 2014 to amend guidance on identification and delineation of glacial deep-seated landslides and associated ground water recharge areas. In the fall of 2014, DNR will convene a stakeholder group to develop guidance for the determination of run-out of glacial deep seated landslides.

Board Manual Section 22 Guidelines for Adaptive Management Program

General amendments including to Part 3 regarding how TFW Policy receives proposals are needed for clarification.

Board Manual Section 23 Guidelines for Field Protocol to Locate Mapped Divisions between Stream Types and Perennial Stream Identification

When the Board receives and approves a recommendation from the TFW Policy Committee on a wet season method to locate the uppermost point of perennial flow in Type N Waters, DNR will complete this new section of the forest practices board manual.

Adaptive Management Program Priorities

The Adaptive Management Program's work in several subject areas could result in recommendations to the Board during the 2014-2015 reporting period:

- Defining a wet season default method for locating the uppermost point of perennial flow in Type N Waters;
- Determining how to locate the Type F/Np Water break (water typing); and
- Establishing an unstable slopes research strategy, including glacial deep-seated landslides and groundwater recharge areas.

2.6 Landslide hazards and unstable slopes

Unstable slopes rules and their implementation processes had already been a focus for CMER, DNR, and the Board prior to the March 2014 Oso landslide. In 2012, CMER completed the Mass Wasting Effectiveness Monitoring Project, and in January 2013, DNR completed the Southern Willapa Hills Retrospective Study. During the February 2014 Board meeting, the TFW Policy Committee provided recommendations to the Board based on results from the Mass Wasting Effectiveness Monitoring Project. TFW Policy recognized DNR's ongoing effort of process improvement related to the review of forest practices applications with respect to mass-wasting potential. TFW Policy requested DNR identify the cost and availability to acquire Light Detection and Ranging (LiDAR) coverage and supported DNR's recommendation to develop a documentation form for landowners to complete and attach to a forest practices application (FPA) for DNR review. This form is to be included for all FPAs involving potentially unstable slopes or landforms. In terms of further research, Policy recommended that CMER prioritize the development and implementation of the unstable slope criteria project and conduct a comprehensive review of the mass-wasting research strategy to see if there should be any changes to the strategy. Work was proceeding on these recommendations when the landslide occurred on March 22, 2014.

On March 22, 2014, a very large deep-seated landslide covering an area approximately 1 square mile occurred in Snohomish County across the Stillaguamish River and State Route 530 (SR 530) near the community of Oso that resulted in loss of life and property damage. The tragic incident elicited an immediate response of assistance from local and state governments, including the Department of Natural Resources as well as many other emergency response organizations. Department of Natural Resources geologists and Incident Management Team personnel assisted in the search and rescue efforts. Forestland is one of the land use types found in the area.

In light of the SR 530 landslide, the Board wanted to review the forest practices rules addressing unstable slopes and their nexus with public safety, how unstable slopes are located, how the unstable slope forest practices rules are implemented. To that end, the Board devoted a two-day meeting in May 2014 to the review, presentations and discussion, as well as any action items that may be warranted.

On May 12 and 13 2014, the Board heard presentations on:

- Current status of landslide inventory and detection tools;
- Oso landslide overview;
- Current scientific knowledge about groundwater recharge in glacial deep-seated landslides;
- Unstable slopes resource objectives and rule development, forest practices (FP) rules and Board Manual requirements;
- The Mass Wasting Effectiveness Monitoring Project;
- The Southern Willapa Hills Retrospective study;

- TFW Policy Committee Mass Wasting Recommendations;
- Adaptive Management Program mass-wasting strategy and unstable slopes rule group projects; and
- FP application review process for unstable slopes.

The above presentations led Board members to make and approve several Board motions on May 13, including motions on:

- DNR preparing a notice initiating the rulemaking process that would allow the Board to modify forest practices rules regarding DNR's authority to require information needed to appropriately classify a forest practices application where the presence of a potentially unstable slope may threaten public safety.
- DNR Board staff assembling a group of qualified experts with expertise in ground water recharge on glacial deep seated landslides to review and amend guidance specific to the ID and delineation of ground water recharge areas in the Board Manual. Also to amend guidance specific to assessing delivery potential.
- Directing staff to convene forest landowner representatives and Puget Sound LiDAR Consortium members to determine willingness to provide existing bare earth coverage data.
- The Adaptive Management Program completing the process review related recommendations given to the Board in the February 2014 Board meeting and beginning the review of the existing mass-wasting research strategy.
- The Board approving the 2014 work plan that reflects changes to the rule making and Board manual development schedule to allow work associated with unstable slopes and landforms and water typing to be completed.
- Directing the TFW Policy Committee, in cooperation with CMER, to complete the prioritization and scheduling of projects on the CMER Master Project Schedule and presenting the revised schedule to the Board at the November 2014 meeting.

Response to the motions made at the May Board meeting.

Rule Making –

- As directed at the May 2014 Board meeting, DNR has filed a CR 101 for rule making.
- Rule language is being drafted to clarify that DNR may ask for additional geotechnical information to properly classify FPAs that are proximate to potential public safety concerns, and that the information conforms to appropriate technological standards.
- DNR plans to share draft language with stakeholders late July and early August.
- There will be a request for approval to file a CR 102 in August and likely rule adoption by the Board in February 2015.

Board Manual –

- DNR has assembled an expert panel to begin work on Board Manual Section 16, *Guidelines for Unstable Slopes* (first meeting is July 9th).

- The purpose is to add additional information regarding the definition and identification of glacial deep seated landslides (GDSLs) and ground water resource areas (GWRAs) and specifically address the delineation of associated GWRAs and the run-out paths.
- The Board Manual group will be working through July and August; the amended manual will be reviewed by TFW Policy Committee stakeholders and forest practices staff in September and presented to the Board in November 2014.

TFW Policy Committee –

- A special meeting was held June 20 to discuss progress and next steps from the requests by the Board in May.
- The TFW Policy Committee will form a technical committee to evaluate gaps in the science and information regarding GDSLs and GWRAs and an evaluation of mitigation measures under current rule.
- A technical group will track progress of the Board Manual group and identify needs that will be addressed by TFW Policy at a later time.
- TFW Policy will review current GWRA research strategy (Upland Processes Scientific Advisory Group (UPSAG) recommendations and critical questions from the CMER work plan).

3. Adaptive Management Program

3.1 Introduction

This chapter provides a brief background on the Forest Practices Adaptive Management Program (AMP) and accomplishments to date. In large part, those accomplishments occur through the Cooperative Monitoring, Evaluation and Research Committee (CMER) projects. The CMER Work Plan presents an integrated strategy for conducting research and monitoring to provide scientific information to support the Adaptive Management Program. Section 3.6 lists websites that give detailed information on the work plan and projects.

Section 3.7 contains information on electro-fishing activities associated with Adaptive Management Program projects. The Services specifically requested this information through the conditions that govern the Incidental Take Permits.

3.2 Adaptive Management Program

In response to water quality and aquatic endangered species issues, the Washington State Forest Practices Board adopted emergency water typing rules in 1996 and salmonid emergency rules in 1998. In addition, in 1997 the governor formed a Joint Natural Resources Cabinet and charged it with creating a salmon recovery plan for Washington State by June of 1998. A “Salmon Recovery Strategy” developed by the state called for the protection of salmon habitat through forest, agriculture and urban modules.

The Joint Natural Resources Cabinet turned to the Timber, Fish, and Wildlife (TFW) organization to develop recommendations for the forestry module. The module would result in a set of recommendations to the Forest Practices Board and the Governor’s Salmon Recovery Office to respond to fish listings and water quality problems in Washington State covering about 9.3 million acres of private and state-owned forestland. This module later became the 1999 [*Forests and Fish Report*](#).

The authors of the *Forests and Fish Report* agreed to use all reasonable efforts to support the expeditious implementation of the recommendations contained in it. The authors’ commitments, however, were subject to the:

- Washington State Legislature’s adoption of a statutory package providing for implementation of the report prior to July 1, 1999;
- Forest Practices Board’s adoption of permanent rules implementing the recommendations of the report;
- Provision of adequate funding for the implementation of the recommendations contained in the *Forests and Fish Report*;
- Receipt of federal assurances relating to the Endangered Species Act and the Clean Water Act; and

- Continued support from the authors for the completion of the tasks and implementation of the provisions specified in the report.

The *Forests and Fish Report* recommended an Adaptive Management Program to address the effectiveness of the forest practices prescriptions in meeting resource objectives, the validity of the resource objectives for achieving the overall goals, and basic scientific uncertainties in the ecological interactions among managed forests, in-stream functions, and fish habitat. The 1999 Washington Legislature referenced the 1999 *Forests and Fish Report* in the Salmon Recovery Bill (Engrossed Substitute House Bill 2091), in which it directed the Forest Practices Board to adopt rules that were consistent with the recommendations of the report. Following that direction, the Forest Practices Board adopted the Adaptive Management Program, a formal science-based program.

The purpose of the [Forest Practices Adaptive Management Program](#) is to provide science-based recommendations and technical information to assist the Forest Practices Board in determining if and when it is necessary or advisable to adjust forest practices rules and guidance for protecting aquatic resources. The program was created to ensure that programmatic changes will occur as needed to protect resources; to ensure that there is predictability and stability in the process; and to ensure that there are quality controls applied to scientific study designs, project execution and the interpreted results.

From 2000-2011, more than \$25 million in federal funding through the Pacific Coastal Salmon Recovery Fund was spent to help implement the 1999 *Forests and Fish Report*, including funding for development of an Adaptive Management Program, a multi-landowner Forest Practices Habitat Conservation Plan (Forest Practices HCP), and information systems; for designing and implementing research and monitoring projects, workshops, and science conferences; and for field implementation of forest practices rules related to aquatic resources.

A significant outcome of the federal funding was the establishment and implementation of the Forest Practices Adaptive Management Program covering aquatic species on state and private forestlands in Washington State. The Adaptive Management Program is governed by an official state rule making body (the Forest Practices Board), and includes a policy committee and a science committee. The unique model of collaborative decision-making used in developing the program was as significant as the program itself. In addition, an independent scientific peer review process was established to ensure the rigor and integrity of the adaptive management research and monitoring projects and reports.

Another significant outcome of the federal funding was the early emphasis on developing ‘rule tools’—projects designed to develop, refine or validate tools (e.g., models, methods and protocols) used to implement the Forest Practices Rules that support the 1999 *Forests and Fish Report*. These projects have helped define, test, or refine protocols, models, and guides that allow the identification and location of rule-specified management features, such as the Last Fish/Habitat Model (a method for evaluating streams for typing), landslide screens, or the

achievement of specified stand conditions, such as the ‘desired future riparian condition’ (DFC) basal area target. Target verification projects were designed to confirm riparian function performance targets developed during Forests and Fish Report negotiations that authors identified as having a weak scientific foundation, such as the desired future condition basal area targets for Type F streams.

A report entitled *Monitoring Design for the Forestry Module* of the Governor’s Salmon Recovery Plan, July 2002, was commissioned by the TFW Policy Committee to “develop a comprehensive framework for collection, analysis and interpretation of data related to effectiveness monitoring” for rules derived from the 1999 *Forests and Fish Report*. The report is a conceptual framework for a coordinated monitoring plan with examples of how specific types of monitoring could be conducted and how an effective monitoring program could be structured. Development of the 1999 *Forests and Fish Report* and subsequent Washington State laws and Forest Practices Rules were based on the best available science at the time. Both the report and the rules were developed in a collaborative, transparent process, with many stakeholders involved. Another outcome of providing funding for establishment and support for the Forest Practices Adaptive Management Program is the continued participation by many stakeholders, including tribes and tribal organizations, state agencies, landowner groups, counties, and the conservation caucus. The open, transparent, collaborative process continues to be used in the Adaptive Management Program to review and suggest revisions to Forest Practices Rules and guidance on state and private forest lands based on findings from research and monitoring and other information.

The Forest Practices Adaptive Management Program research and monitoring efforts that were funded have led to revisions in the Washington State Forest Practices Rules, to guidance in the Board Manual, and in guidance for small forest landowners. For example, in past years, the rules containing the target threshold for the riparian Desired Future Condition basal area have been revised; and a small landowner fixed-width buffer template has been developed in cooperation with small landowner representatives and added to the Forest Practices Board Manual.

3.3 Cooperative Monitoring, Evaluation and Research Committee History

The Cooperative Monitoring Evaluation and Research Committee (CMER) represents the science component of the Adaptive Management Program and oversees research and monitoring. The CMER Work Plan describes the various research and monitoring programs, associated projects and work schedule. Schedule L-1 from the [Forests and Fish Report](#) (U.S. Fish and Wildlife Service, 1999) was revised, Board-approved, and Schedule L-1 (2001) was incorporated into the HCP to serve as the structure of the adaptive management program, and to specifically guide the development of projects described in the [2014 CMER Work Plan](#).

It is likely that research and monitoring priorities will change over time as adaptive management proceeds, new information becomes available, and improvements are made to forest practices based on these scientific findings. It’s at the discretion of the Board that changes to resource objectives, performance targets and research and monitoring priorities are reviewed and agreed

to by the TFW Policy Committee. Major research priorities presented in the CMER Work Plan have not changed substantially at the program level since a prioritization process was completed in 2002. However, at the project level some reprioritization took place in 2010 to answer questions related to Clean Water Act (CWA) assurances and again in 2014 with the completion of the Settlement Agreement and a Master Schedule. These processes essentially prioritized projects when the TFW Policy Committee agreed on a schedule and a long-term budget.

While the first few years of the Adaptive Management Program focused on rule tools, in the last few years, the program has focused much of its effort on effectiveness monitoring. The effort to more-fully integrate research and monitoring across spatial and temporal scales is ongoing in Fiscal Year (FY) 2014 (July 1, 2013, to June 30, 2014). See Section 3.4 which discusses CMERs activities.

3.4 CMER Work Plan and Activities

The [2015 CMER Work Plan](#) contains more than 90 projects. Approximately 36 projects have been completed and multiple projects are ongoing (i.e., undergoing study design development, or being implemented or reviewed). The CMER Work Plan is updated annually.

The projects in the work plan originally were prioritized based on the level of scientific uncertainty and resource risk as related to the priorities of Schedule L-1 in the *Forests and Fish Report* (U.S. Fish and Wildlife Service, et.al., 1999) and incorporated into the Forest Practices HCP (Washington DNR, 2005). CMER projects address the needs of higher priority subjects first to ensure that the most important questions about resource protection are answered before the questions with lower scientific uncertainty or lower resource risk. Projects were re-prioritized in 2010 to focus on Clean Water Act assurances; re-prioritized in the Master Schedule proposed in the 2012 HCP settlement agreement; and again in bringing the settlement before the TFW Policy Committee for adoption in the 2014 CMER Work Plan. The work plan is a dynamic document that is revised annually in response to research findings, changes in the Forest Practices Board and the TFW Policy Committee objectives, and available funding.

In FY14, Policy worked on the development of a Master Project Schedule (MPS) for projects identified in the Adaptive Management Program. The goal of this work is to create a MPS that can be used as a planning document that will help the AMP forecast when projects would be implemented, sequence projects for efficiencies, and keep the budget within projected revenue. In addition, development of the MPS will provide the AMP with a tool to evaluate its progress which meets requirements of the 2012 settlement agreement.

CMER takes on many other ad hoc projects in addition to their normal course of business.

One project was completed, approved by CMER and considered for action by the Policy Committee in FY 2014. The project was the Effectiveness of Riparian Management Zone Prescriptions in Protecting and Maintaining Shade and Water Temperature in Forested Streams

of Eastern Washington (Bull Trout Overlay (BTO) Temperature and Solar Radiation/Effective Shade projects).

The BTO Temperature and Solar Radiation/Effective Shade project compares the two shade prescriptions in eastern Washington against a non-harvested reference reach (the standard forest practices shade rule using the nomographs versus the all available shade Bull Trout Overlay rule) to measure each rule's effectiveness in protection of stream temperature through shade management.

The TFW Policy Committee has not yet recommended changes to rules or guidance based on the results contained in this report. Policy agreed to delay discussion on the results of this report until the fall of FY 2015 due to other prioritized projects they are working on.

Three other draft reports were approved by CMER to go through Independent Scientific Peer Review (ISPR) in FY 2014:

- Stream-Associated Amphibian Response to Manipulation of Forest Canopy Shading (Buffer Integrity Shade Effectiveness Project)

The Buffer Integrity-Shade Effectiveness project examines the effects of four levels of shade retention on tailed frog and torrent salamander density, body condition, and spatial distribution; water temperature; primary productivity; and macro-invertebrates in western Washington. This is a cooperative project between Longview Timber Corporation (which recently was purchased by Weyerhaeuser Company) and WDFW. Longview Timber completed a pilot study in 2003, and initiated a broader study in 2004. The CMER funded segment of this project includes seven sites on the Olympic Peninsula. CMER contracted with WDFW to complete the CMER-funded portion of the study. The first and second years of pre-harvest sampling occurred in summer/fall 2006 and 2007. Treatments were implemented fall/winter 2007/2008, and the first and second years of post-harvest sampling occurred summer/fall 2008 and 2009.

- Effectiveness of Riparian Management Zones in Providing Habitat for Wildlife: Resampling at the 10-year Post-treatment Interval, re-analysis of bird data.

In this study, scientist revisited study sites (10-year post-harvest) to examine longer-term effects on bird community of riparian buffer arrangements. Using the Before-After-Control-Impact (BACI) experimental approach and temporally replicated point counts, they estimated population-and community-level avian responses while incorporating variation in the detection process across treatments and years.

- Effects of Forest Roads and Tree Removal In or Near Wetlands of the Pacific Northwest: A Literature Synthesis.

In the context of wetlands, the report addresses the physical, chemical, and biological effects of a host of forest practices. These effects may be the direct or indirect result of tree removal (i.e., logging, timber harvest), roads and other infrastructure created in support of logging operations, or use of silvicultural chemicals. This report addresses not only the effects of cutting trees within forested wetlands (i.e., the effects of on-site harvests), but also the effects on wetlands -- of any type -- where timber is harvested in nearby uplands (i.e., the effect of off-site harvests). In many cases the effects of both on-site and off-site harvests depend on wetland type, so distinctions among effects based on wetland type are noted when supported by available science.

CMER implemented one new field project during FY 2014:

- The Eastside Type N Riparian Effectiveness project.

The issue which the project aims to answer is the following question: To what extent are the prescriptions found in the Type N Riparian Prescriptions Rule Group effective in achieving performance targets and water quality standards, particularly as they apply to sediment and stream temperature in eastern Washington?

In addition to the projects listed above, the following CMER projects completed field work milestones in FY2014:

- The Type N Experimental Buffer Treatment Project in Soft Rock Lithologies has completed two years of pre-harvest data collection. Harvesting of the study sites began in 2014 and data collection continues to occur during harvest activities.
- The Eastside Type F riparian effectiveness monitoring (BTO add on) five-year post-harvest survey was completed and the data has gone through QA/QC. An appendix to the original report is under development and will likely be completed in 2015.
- The Westside Type N Buffer Characteristics, Integrity, and Function (BCIF) project completed fieldwork of a 10-year post harvest re-sampling. QA/QC of data set has been started by NWIFC staff and an appendix to the original report will likely be completed in 2015.
- The Type N Experimental Buffer Treatment Project on Hard Rock Lithologies five-year post-harvest surveys was completed and the data have gone through QA/QC. The seven- and eight-year post-harvest surveys will commence in 2015 with sampling continuing through 2016. This data will be presented in an appendix to the Original Report which will likely be completed in 2016.

The Forest Practices Board directed CMER to implement a “piloted” Lean process for a limited number of new projects with the intent of increasing efficiency in the scoping and study design phase of new CMER projects. The premise of the Lean process was that smaller teams (referred

to as TWIGs) of qualified scientists and technical personnel in the area of expertise specified would be assembled. The TWIGs would be in lieu of a general, larger group of technical personnel referred to as a scientific advisory group. The premise would be that this smaller team would be more effective and efficient developing scoping documents and study designs. Four projects are currently in various stages of the process. They have completed the following work in 2014:

- The Eastside Type N Riparian Buffer Effectiveness Project: Policy approved TWIG developed Problem Statement, Objectives and Critical questions. The TWIG is conducting supplemental field work over the summer on a subset of sites used in the Forest Hydrology Study in preparation for commencing development of study designs in fall 2014.
- The Unstable Slopes Criteria Project: the Initial Writing Team (IWT) is in the process of completing a memo to the Adaptive Management Program Administrator (AMPA)/CMER that includes the qualifications (i.e. experience, technical expertise) necessary for the identification and selection of TWIG participants and a list of potential candidates. Individuals selected will begin work in the fall of 2014 on development for a testable problem statement, objectives, and critical questions to guide the development of a study design.
- Roads Prescription-Scale Effectiveness Monitoring Project: Initial meeting of TWIG occurred in 2014 and draft objectives, problem statement and critical questions provided to CMER for review and Policy for approval. The team will be working on identifying relevant literature and appropriate study design alternatives in the fall 2014.
- The Westside Type F Riparian Prescription Effectiveness Project: Policy approved the TWIG developed Problem Statement, Objectives and Critical questions. The TWIG has completed their initial selection of relevant literature (Best Available Science literature review) and has identified study design alternatives for further evaluation.

The brief description and status of “[Active CMER Projects](#)” can be found on the Forest Practices Adaptive Management Program web-page under “related links” (See section 3.6). There also is a link to final reports for completed projects under this same header. Agendas of CMER and TFW Policy Committee meetings can be found under “related links” on the [CMER webpage](#).

3.5 TFW Policy Committee Activity (July 1, 2013 – June 30, 2014)

General Policy Activity

The TFW Policy Committee held a budget meeting in April 2014 and reviewed the FY 2015 CMER Work Plan and budget. The Forest Practices Board approved the work plan and budget at its May 2014 quarterly meeting. With the exception of the new projects that will be developed through the piloted Lean process, most of the FY 2014 research and monitoring projects have been in the work plan and are ongoing projects. Although completion of projects was delayed in FY 2014 due to slow review processes in CMER and independent scientific peer review (ISPR), it is reasonable to anticipate that CMER will complete six projects by the end of FY 2015. The CMER Work Plan proposes executing the scoping and study design phases for four projects during the 2015 fiscal year.

CMER completed one project report during FY 2014, described in section 3.4. The TFW Policy Committee has not recommended changes to rules or guidance based on the result contained in this report.

In the beginning of FY 2013, the TFW Policy Committee initiated discussions on two priority items: development of a Type N water strategy (how to tackle the issue) and development of a strategy for transitioning from the interim water typing rule (Type F/N Water break) to a permanent rule to ensure protection of fish habitat. The TFW Policy Committee approved a type N water strategy in FY 2013. The purpose of the strategy was to examine the effectiveness of the Type N forest practices rules in protecting water quality including:

- Ranking and funding type N water studies as highest priorities for research;
- Resolving issues associated with identifying the uppermost point of perennial flow; and
- Completing a comprehensive literature review examining the effects of buffering headwater streams.

In 2014, the TFW Policy Committee is currently in discussion about implementation issues associated with the strategy.

During FY 2013, the TFW Policy Committee agreed on draft changes in WAC 222-12-045 Adaptive Management Program rule language and to Board Manual Section 22 Guidelines for Adaptive Management Program. The Board agreed with the draft rule language and approved and adopted the final rule during FY 2014. The proposed rules will add three new caucuses from the original set of six, decrease the time for the TFW Policy Committee and CMER decisions by reducing the dispute resolution process time lines, and require a CMER master project schedule of research and monitoring projects with periodic check-ins with the Forest Practices Board.

Policy is currently working on the CMER Master Project Schedule. During this period, the priority of Policy was changed by the Board to conduct a comprehensive review of the mass-wasting rules and guidelines. Policy has also been engaged in re-examining and discussing

potential revisions to the CMER Master Project Schedule established under the 2012 FPHCP settlement agreement.

The capacity of Policy and CMER participants remains limited. Although many projects were launched in 2014 and significant milestones were met on others, scarce human resources limit progress on projects, at least in the short term until solutions are found. Policy recognizes this and efforts have been made to look at the Mass Wasting rules and guidance and development of the Master Schedule for AMP projects. In addition, the Board based on Policy recommendations, approved funding for an Additional CMER Scientist. Following an extensive recruitment, NWIFC was successful in hiring a skilled scientist. The position will be occupied in October 2014.

Clean Water Act Assurances

Upon the completion of the *Forests and Fish Report* in 1999, the Washington State Department of Ecology (Ecology) and the Environmental Protection Agency agreed to provide Clean Water Act assurances to the State of Washington for a period of ten years. It was assumed ten years would be sufficient time to determine if implementation of the revised rules and Forest Practices program—including adaptive management—were effective in meeting water quality standards, or putting impaired waters on a trajectory to meeting standards. Ecology reviewed the Forest Practices Program to determine if the Clean Water Act assurances should be retained and produced a report of their findings in July 2009. On Ecology’s webpage [Non-point pollution from Forestry](#), click on: [2009 Clean Water Act Assurances Review of Washington’s Forest Practices Program](#) (Ecology 2009). This report was transmitted to the Forest Practices Board in October 2009. Ecology has committed to provide the Board with periodic updates on the progress being made to meet milestones established for retaining the CWA Assurances for the forest practices rules and associated programs. This current update covered the period through June 2014.

No CWA milestones were completed during this reporting period; however, work has occurred to move many of the CMER research milestones forward. All caucuses are involved with the landslide review and CMER Master Schedule and the capacity of Policy and CMER participants is limited. Both of these efforts have been noted to be responsible for slowing down work towards meeting the CWA milestones, at least in the short term. Ecology noted in a report to the Board that changes in priorities or project planning made in response to new science-based insights or overwhelming events can be accommodated in the milestones when these changes are an expression of adaptive management and they are not in conflict with the underlying purpose of the CWA milestones.

TFW Policy Committee Priorities for Fiscal Year 2015

To meet directives by the Forest Practices Board, several 2014 priorities were postponed and, therefore, work will continued into 2015; these include:

- 1) Conducting a comprehensive review of the mass-wasting research strategy and making any recommended changes so that they can be incorporated into the CMER work plan and budget in March and April 2015;
- 2) Initial steps toward achieving a permanent Type F water rule includes the Policy Committee addressing electrofishing and off-channel habitat, and scoping and initiating a pilot project using LIDAR for hydrologic modeling;
- 3) The Type N subgroup will work on options for a wet-season default method for identifying the uppermost point of perennial flow in Type N waters in the future; and
- 4) TFW Policy Committee decisions on whether or not to take action, including recommendations on changes to rules or board guidance as CMER reports are completed.

The work list that TFW Policy will forward to the Board for FY 2015 will likely include all work items listed above. An additional priority in FY 2015 will likely be reviewing proposed changes to hydraulic project rules administered by the Washington Department of Fish and Wildlife, and incorporating any subsequent changes to fish protection standards into forest practices hydraulic project rules.

3.6 Adaptive Management Program Websites

Refer to the following websites (underlined) for more information about the Adaptive Management Program.

Adaptive Management Program:

http://www.dnr.wa.gov/BusinessPermits/Topics/FPAdaptiveManagementProgram/Pages/fp_am_program.aspx

CMER:

<http://www.dnr.wa.gov/AboutDNR/BoardsCouncils/CMER/Pages/Home.aspx>

- Active CMER Projects:

http://www.dnr.wa.gov/BusinessPermits/Topics/FPAdaptiveManagementProgram/Pages/fp_cmer_active_projects.aspx

- Completed CMER Projects:

http://www.dnr.wa.gov/BusinessPermits/Topics/FPAdaptiveManagementProgram/Pages/fp_cmer_completed_projects.aspx

3.7 Electrofishing Report

One of the conditions of the Incidental Take Permits relates to electrofishing. United State Fish and Wildlife Service and NOAA Fisheries asked for an accounting of any electrofishing related to Adaptive Management Program research.

Electro-fishing Activity

Research:

Electrofishing conducted for research by the Adaptive Management Program is covered by the Services' incidental take permits. Only two studies have incorporated electro-fishing as part of a research project. One is the Type N Experimental Buffer Study – Hard Rock project and the other the Westside Type N Buffer Effectiveness Study – Soft Rock. Neither project conducted electrofishing in FY 2014 (July 1, 2013, through June 30, 2014).

4. Forest Practices Operations

4.1 Introduction

Forest Practices Operations is responsible for administering and enforcing the Forest Practices Rules on approximately 9.3 million acres of private, state, and other non-federal public forestlands. These rules provide protection for public resources defined as: water, fish, wildlife, and capital improvements of the state or its political subdivisions. These rules provide some of the highest standards for resource protection on forestlands in the nation. The rules cover practices such as timber harvest, pre-commercial and commercial thinning, road construction, reforestation, forest fertilization, and forest chemical application. They give direction on how to implement Washington's Forest Practices Act as well as the HCP.

4.2 Forest Practices Activities

Forest Practices Operations section consists of both office and field staff. Statewide there are about 94 full-time positions. Of the 94 positions, 64 are assigned in the field and are directly responsible for reviewing, complying, and enforcing the Forest Practices Act and Rules. Field Full Time Equivalent (FTEs) increased by 5 as a result of new funding that came along with forest practices' new forest practices hydraulic project (FPHP) responsibilities and a change to the forest practices application (FPA) fee structure.

For the reporting period of July 1, 2013, through June 30, 2014, Forest Practices Operations staff processed 6007 applications/notifications. The table below provides a breakdown of this information, by DNR region.

Decisions for Applications Received/Renewed During Fiscal Year 2014

Region	Approved	Closed	Disapproved	Renewed	Total by Region
Northeast	859	24	27	103	1013
Northwest	648	52	22	79	801
Olympic	602	55	7	132	796
Pacific Cascade	1708	67	16	175	1966
South Puget Sound	943	37	28	131	1139
Southeast	235	14	9	34	292
Total by Decision	4995	249	109	654	6007

Closed means the application/notification was withdrawn by the applicant.

During this same reporting period there were a total of 11,701 applications/notifications statewide that were active (not yet expired).

4.3 Priorities

Forest Practices Operations has three primary functional areas: processing applications, compliance, and enforcement of forest practices activities. Focus area priorities are based upon ensuring that these three objectives are met. This chapter will concentrate on the priorities that have had the greatest impact on Operations during this reporting period.

Forest Practices Hydraulic Projects

As summarized in the Forest Practices Board section, DNR assumed authority over FPHP December 30, 2013. In preparation for this change, the FPA and instructions were modified to collect information needed to assess hydraulic projects. Consequently, the Forest Practices Application Review System (FPARS) was also changed to accommodate queries in response to FPHP questions. One part of the modification was a series of questions to determine whether or not concurrence review by WDFW is required. Concurrence review is required for three specific types of projects as defined in WAC 222-20-017(4)(b). Although concurrence projects are the most complex to design and review, they are only a small percentage of all hydraulic projects submitted. From December 30, 2013, to June 30, 2014, 1,300 FPAs that included activities in or over any typed water (FHPs) were processed. Of the 1,300 FPAs that included activities in or over water, 93 required concurrence review by WDFW.

The DNR and WDFW have new roles as a result of this new rule. There is an increased workload for DNR foresters and office staff as well as a learning curve for all parties involved. The first six months of this new process has been focused on implementing the program with consistent interpretation of fish protection standards, ensuring effectiveness of program operation, and working with partners to achieve common understandings of the information needs and procedures. . The FPA and instructions were modified again in May 2014 as a result of feedback from stakeholders. As we enter the first construction season, the focus will include construction compliance.

DNR's Strategic Plan 2010 – 2014: *The Goldmark Agenda* (DNR 2010) - Goal II *Improve Forest Practices Rules and Strengthen Implementation and Compliance*

The Strategic Plan has identified two major initiatives to be achieved by Operations:

- Ensure the Forest Practices Rules are fully, fairly, and consistently implemented and enforced by DNR staff.
- Improve landowner compliance with the Forest Practices Rules. One component of this initiative is to provide training. Operation's goal is to develop and implement additional forest practices training for private landowners and operators.

The DNR strategic plan was revised and published in June 2014. However, the 2010-2014 DNR Strategic Plan covered the reporting period of this report. The 2015 FPHCP Annual Report will address forest practices operations in light of the revised Strategic Plan.

Each of the 2010-2014 Strategic Plan initiatives is associated with numerous action strategies that will need to be achieved in order to be successful. The following action strategies must be completed:

- Complete the Clean Water Act (CWA) assurances milestones to develop a plan and timeline for improving compliance with the Forest Practices Rules. See Appendix 1 milestone #12 and milestone #17 for a full description.
- Continue developing new curriculum for the training program for DNR staff and external stakeholders. To this end, this year, DNR provided training on FPHP and Alternate Plans. See appendix 1 - CWA milestone #17 and Chapter 10 Training/Education/Information for more information.

Department of Ecology's 2009 Clean Water Act Assurances Review

WAC 222-12-010 states: 'Promulgation of all forest practices rules shall be accomplished so that compliance with such forest practices rules will achieve compliance with the water quality laws.' All Forest Practices Rules that are marked with an asterisk (*) pertain to water quality and can only be adopted or amended with agreement by the Department of Ecology. Ecology granted Clean Water Act assurances in 1999 as part of the Forests and Fish Report. The assurances established that the state's forest practices rules and programs, as updated through a formal adaptive management program, would ensure compliance with the state's water quality standards. These assurances were reviewed after a ten-year period in 2009 to determine whether the rules are providing the required level of protection.

Ecology's report is at this link, <http://www.ecy.wa.gov/programs/wq/nonpoint/ForestRules.html>. Click on: [2009 Clean Water Act Assurances Review of Washington's Forest Practices Program](#), (Washington State Department of Ecology, 2009). Based upon the reviews' findings, the assurances were conditionally extended provided specific actions—identified as milestones—are achieved by specific dates. In all, there are twenty-two milestones identified for completion by Forest Practices participants. Progress is being made on the milestones. Forest Practices Operations, including the Compliance Monitoring Program, have twelve Clean Water Act milestones to address. Eleven milestones have been completed, including one during this reporting period (#12 Certification Framework). See Appendix 1 for a description and current status of all of CWA Milestones.

Forest Practices Program Guidance

Forest practices guidance supplements the Forest Practices Rules and Board Manual. The complexity of the rules, details of program administration and variability in the forested environment pose unique challenges for landowners and DNR staff in implementing the rules across the landscape. Situations arise in which neither the rules nor the Board Manual provide enough specificity to resolve a particular implementation issue. Therefore, DNR develops internal guidance that provides direction consistent with established program goals, resource protection objectives and performance targets. New guidance or changes to existing guidance are communicated to region forest practices staff in writing. Any guidance that affects cooperating agencies, organizations, and landowners is shared outside of the agency.

DNR created several guidance documents between July 1, 2013, and June 30, 2014. The following is a summary description of the written guidance that has been shared with the forest practices staff:

Summary of Written Guidance Issued to DNR Staff July 1, 2012 – June 30, 2013

Date	Reason for guidance	Accomplishment
08/09/2013	Mass-wasting prescriptions rescinded	A memo that describes the requirement for landowners to reanalyze mass-wasting prescriptions for effectiveness or defer to standard forest practices rules. A list is provided for all mass-wasting prescriptions that were rescinded based on landowners opting out of reanalysis.
08/09/2013	Mass-wasting prescriptions maintained	Informed the regions that three landowners with Habitat Conservation Plans chose to maintain mass-wasting prescriptions through reanalysis.
08/14/2013	Revised Water Type Classification Worksheet (WTCW)	Guidance for landowners and forest practices staff regarding the 2013 revision of the WTCW.
08/14/2013	Revised Water Type Modification Form (WTMF)	Guidance for landowners and forest practices staff regarding the 2013 revision of the WTMF.
3/10/2014	Precipitation and forecast stream flow for 2014 fish survey season	Predicted drought may be a factor in accurately determining fish presence or absence in some parts of Washington State, particularly the northern Olympic Peninsula and north-central Washington.
6/13/2014	Review of FPAs with Potential to Affect Unstable Slopes	Guidance for staff regarding assessing slope stability, specifically related to public safety.

WDFW contribution to Forest Practices Operations

WDFW provides a crucial role in forest practices operational issues. Section 4.3 above discusses the changes due to the legislative amendment to the Forest Practices Act and the Hydraulic Code Rules (under WDFW jurisdiction) to integrate fish protection standards contained within the current hydraulic code rules (under WDFW jurisdiction) into forest practices rules (under DNR jurisdiction). The integrated rules became effective as of December 30, 2013. From that point forward, all hydraulic projects associated with forest practices on forest land became a part of the forest practices application (FPA) and fall under DNR’s jurisdiction and approval authority. WDFW biologists, however, still play an important role reviewing these hydraulic projects and providing assistance to DNR and the applicant.

A lot was accomplished by WDFW and DNR staff in preparation for this rule integration. A memorandum of agreement (MOA) was developed, establishing the framework for how the two agencies would work together to successfully implement FPA/HPA integration. DNR's rules were developed and adopted, establishing procedures for how WDFW will review and provide assistance and recommendations to DNR and applicants. A forest practices board manual was developed which provides guidance on designing successful FPHPs; and WDFW's fish protection standards were integrated into the forest practices rules. During December 2013, WDFW and DNR staff developed and participated in 2-day training sessions to prepare for working together as a team to implement this new process. Training and staff support will continue to be a priority in the future. There will be challenges along the way as this new process moves forward; however, the MOA includes strategies for making improvements as necessary as time goes by.

From July 1, 2013, through December 30, 2013, prior to HPA/FPA integration, WDFW regional biologists reviewed FPAs and issued 362 HPAs associated with those FPAs. Many HPAs include multiple projects or locations that need to be specifically reviewed and conditioned; for the HPAs issued during this time period, there were 511 hydraulic projects or locations.

From January 1, 2014, through June 30, 2014, WDFW regional biologists reviewed all FPHP applications for consistency with fish protection standards. WDFW biologists also provided assistance to forest landowners and DNR to help assure that project plans and designs would be successful for the landowner, while meeting fish protection standards.

Other forest practices operational work conducted by WDFW biologists included: review of over 3,000 Water Type Modification Forms and participation in field reviews to validate those proposed water types; road maintenance and abandonment plan (RMAP) review; review and technical assistance on alternate plans for both large and small forest landowners; review and assistance on small forest landowner long-term plans; and technical assistance on aquatic resource protection and road issues.

5. Small Forest Landowner Office

5.1 Introduction

The Small Forest Landowner Office (SFLO) serves as a resource and focal point for small forest landowner concerns and policies. Its mission is to promote the economic and ecological viability of small forest landowners while protecting public resources. The office was created as a result of the 1999 Salmon Recovery Act, when the Forests and Fish Rules were passed. These new Forest Practices Rules resulted in increased size of riparian buffers and created further measures to protect water quality and restore salmon habitat in the forests of Washington State. The State Legislature recognized that the Forests and Fish Rules would have a disproportionate economic effect on small, family-owned forests. To help small landowners retain their forestland and not convert the land to other land uses, the legislature authorized the creation of a Small Forest Landowner Office within DNR.

It is estimated that more than 215,000 small forest landowners manage 3.2 million acres of forests in Washington—more than half of the private forest and woodland acreage in the state. Their forests tend to be concentrated in the lower elevation habitats along lakes and streams, which are key locations for providing ecosystem functions. Their forests also tend to be subject to development pressures, making it especially important to support them in their efforts to maintain their land in forestry. Due to population growth and a shrinking commercial forest land base, these landowners are absorbing heavy impacts on their forests from increasing demands for timber; fish, wildlife, and water protection; recreational uses; and aesthetics.

This chapter describes the accomplishments, opportunities and challenges of the Small Forest Landowner Office's landowner assistance programs: the Forestry Riparian Easement Program (FREP); the Family Forest Fish Passage Program (FFFPP), and the Forest Stewardship Program. Another program now administered by the office, which assists both small and large forest landowners, is the Rivers and Habitat Open Space Program, which is described in chapter 7 of this report.

5.2 Forestry Riparian Easement Program

Provisions included in the 1999 Salmon Recovery Act established the Forestry Riparian Easement Program (FREP). This easement program acknowledges the importance of small forest landowners and the potential for a disproportionate effect of Forest Practices rules on them.

The Forestry Riparian Easement Program compensates eligible small forest landowners for "Qualifying timber" in exchange for a 50-year easement. "Qualifying timber" includes those trees that the landowner is required to leave unharvested as a result of Forest Practices Rules protecting Washington's aquatic resources. Landowners cannot cut or remove any Qualifying timber during the life of the easement. The landowner still owns the property and retains full access, but has "leased" the trees and their associated riparian function to the state. Funding for the program has been allocated by the Washington State Legislature since 2002.

Applications and Acquisitions

Since FREP began, funding has not kept up with demand. There remains a backlog of applications waiting funding for the cost of acquiring the easements. During the 2014 fiscal year, 30 new applications were received and 6 easements were acquired. As a result, the backlog of unfunded applications now totals 131.

In the 2013 legislative session, DNR requested \$13 million to complete the acquisition of the entire FREP backlog. The legislature funded FREP at \$2 million for FY14-15, doubling from FY13 levels. The 2013 Forest Practices HCP Annual Report incorrectly identified the funding amount for FREP at \$3 million instead of the actual amount of \$2 million. With the \$2 million allotted to the program, it is estimated that FREP will purchase 20 easements during the FY 14-15 biennium.

The Table on the following page summarizes the Forestry Riparian Easement Program's capital budget.

**Department of Natural Resources
Small Forest Landowner Office
Forestry Riparian Easement Program
Capital Budget Summary**

	FY 2002-2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Totals
	7/1/01-6/30/05	7/1/05-6/30/06	7/1/06-6/30/07	7/1/07-6/30/08	7/1/08-6/30/09	7/1/09-6/30/10	7/1/10-6/30/11	7/1/11-6/30/12	7/1/12-6/30/13	7/1/13-6/30/14	7/1/14-6/30/15	
Holdovers from Waiting List *	-	56	91	110	112	65	75	79	96	107		
Applications during the FY(s)*	143	69	59	44	28	10	16	17	25	30		441
Total Applicants on List at end of FY*	143	125	150	154	140	75	91	96	121	137		
Number of Easements Purchased	87	34	40	42	75	0	12	0	13	6		309
Queue*	56	91	110	112	65	75	79	96	108	131		
Amount Appropriated	\$7,750,000	\$8,000,000		\$10,300,000		\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$2,000,000		\$30,050,000
Amount used for Administration of Program		\$300,000		\$560,000		\$0	\$0	\$0	\$0	\$0		\$860,000
Amount Spent	\$7,097,350	\$2,892,000	\$4,808,000	\$4,079,000	\$5,500,000	\$0	\$929,000	\$0	\$1,000,000	\$600,000		\$26,905,350
Acres Purchased	1,481	602	857	804	1,049	0	148	0	109	105		5,155
Amount Remaining	\$652,650	\$0		\$161,000		\$0	\$71,000	\$0				
Average Value of Easement per FY	\$81,579	\$85,059	\$120,200	\$97,119	\$73,333	\$0	\$77,417	\$0	\$76,923	\$100,000		
Cumulative Average Value of Easement	\$81,579	\$82,557	\$91,909	\$92,987	\$87,685	\$87,685	\$87,260		\$86,816	\$87,072		
Amount Requested from Legislature	\$10,000,000	\$13,050,000		\$13,800,000		\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$13,000,000		

Dollar values include all costs associated with the easement acquisition process.

*Number of FREP applications

FREPSummary07 08 14.docx

working document

5.3 Family Forest Fish Passage Program

The Washington State Legislature established the Family Forest Fish Passage Program (FFFPP) in 2003 (RCW 76.13.150). Eliminating fish passage barriers can be costly. The program was developed to provide regulatory and monetary relief for small forest landowners to comply with the Forests and Fish Rule requirement for the removal of fish passage barriers. The voluntary program allows these landowners to sign up for assistance to correct fish passage barriers on their forest road stream crossings. The program is a continuing success, recognized as a model for interagency cooperation and for assisting landowners.

In general, the 2003 law required:

- Washington State to create a cost-share program that would provide from 75-to-100 percent of the cost of removing fish barriers on small forest landowner lands.
- Annual prioritization of barriers and repairs conducted on a “worst-first” basis.
- Relieving landowners who sign up for the program of any forest practices obligations to fix a fish passage barrier until funding is made available to complete the project.

Three state agencies and a stakeholder group cooperate to manage and fund the program:

- Washington State Department of Natural Resources (DNR) Small Forest Landowner Office is the main point of contact for program information, assisting landowners, providing outreach, and coordinating additional funding sources.
- Washington State Department of Fish and Wildlife (WDFW) is responsible for evaluating the barrier, assessing habitat quality of the stream, and ranking barriers for correction.
- The Washington State Recreation and Conservation Office (RCO) administers program funding and provides information on program contracts, billing, and reimbursement.
- Washington Farm Forestry Association (WFFA) represents the small forest landowner community on the steering committee; providing program oversight and assisting with project approval.

WDFW Ranking of Fish Passage Barriers for the Family Forest Fish Passage Program

Program legislation (RCW 77.12.755) directs the repair of worst barriers first starting with barriers lowest in the watersheds. To identify and prioritize the worst barriers, WDFW rates the barriers enrolled in the Family FFFPP on the following criteria:

- Number of fish species that benefit;
- Amount and quality of habitat opened;
- Degree of fish barrier—degree to which fish are prevented from moving up- and down-stream;
- Number and location of other barriers and the degree of those barriers;
- Concurrence from Lead Entity Watershed groups (groups that take the lead on salmon habitat recovery plans in the watershed); and
- Cost effectiveness.

Projects are scored to provide an initial list that is evaluated by the three state agencies; DNR, RCO, and WDFW. This information, along with project cost estimates, is provided to the FFFPP Steering Committee for final funding decisions.

Information on the fish passage barriers obtained during site visits is placed in the WDFW Fish Passage Barrier Inventory. The inventory includes those stream crossings that have been identified through Washington State Department of Transportation inventories, local government inventories, barriers identified in FFFPP stream surveys, and local inventories funded by the Salmon Recovery Funding Board.

Program Challenges and Opportunities

In addition to providing adequate funding, the two greatest challenges for the FFFPP are filling data gaps in the fish passage barrier inventory information and getting the word out to landowners who would benefit from the program. DNR and cooperating partners continue to pursue funding for inventory related work. The office continues to be successful at obtaining grants to help offset state Capital Fund allocations for the program. Last year, the Small Forest Landowner Office and the Northwest Natural Resources Group submitted a grant proposal and received funding approval for \$82,585.26 by the National Fish and Wildlife Foundation. This grant is to conduct road inventories on small forest landowner properties, fix fish passage barriers, address any road surface erosion and/or sediment delivery issues, as well as promote ecologically sound forestry options to landowners. The grant funding period is from January 2014 through December 2015.

In the 2014 field season, the FFFPP completed 52 fish barrier removal projects opening 113 miles of upstream fish habitat.

Family Forest Fish Passage Program Accomplishments Since 2003

Numbers and Costs	FY 2014	Cumulative Since 2003
Eligible Small Forest Landowner Applications	94	758
Eligible Sites	132	1,050
Projects Completed	52	341
Stream Miles Opened Up	113	795.33
Cost of Completed Projects	\$4.9 million	\$25.75 million

5.4 Forest Stewardship Program

DNR's Forest Stewardship Program provides professional natural resource advice and assistance to help family forest landowners manage their lands. In addition to a staff of Landowner Assistance Foresters, the program also employs a full-time statewide Landowner Assistance Wildlife Biologist. The biologist advises landowners directly and also provides professional consultation to the program's foresters.

- Technical Assistance – Over 1,000 on-site consultations are provided by foresters and the

wildlife biologist each year.

- Education – DNR supports Washington State University Extension education programs for family forest owners which are attended by over 3,000 landowners annually, including:
 - Regional Forest Owners Field Day events in both eastern and western Washington. These out-in-the woods educational events cover all aspects of forest management including fish and wildlife habitat protection and enhancement.
 - Forest Stewardship Coached Planning Short courses. These courses help landowners develop an integrated, multi-resource Forest Stewardship Plan for their property. Plans address all forest resources on the site including fish and riparian habitat, water quality, wildlife habitat, and threatened and endangered species.

Supported by grant funds from the USDA Forest Service, DNR administers the Eastern Washington Forest Landowner Cost-Share Program to improve forest health and reduce the threat of bark beetle and wildfire damage in Eastern Washington. Non-federal owners of forestland in Eastern Washington, who own a total of no more than 5,000 forested acres within the state of Washington, are eligible to participate. Approximately 1,700 landowners have taken advantage of this important cost share program since its inception.

DNR's Forest Stewardship Program is part of the USDA Forest Service's nationwide Forest Stewardship Program and is supported primarily by federal funds from that agency.

5.5 Small Forest Landowner Office Outreach

The Small Forest Landowner Office communicates with agencies and the public to foster a mutual understanding, promote public involvement, and influence actions with the goal of serving as a resource and focal point for small forest landowners concerns and policies.

One of the challenges of the Small Forest Landowner Office is reaching small forest landowners to make them aware of technical, educational, and cost-share assistance programs to protect water quality, fish and wildlife habitat, improve forest health, reduce the risk of wildfire, and help small forest landowners retain their forestland.

To guide the SFLO work, staff relies on demographic data gathered through a voluntary on-line survey. Information gathered includes size of ownership, length of tenure, primary management objectives, whether water is present on the property, and organizations in which the landowner is involved. To date, the survey indicates that:

- Almost half of the respondents (45%) manage parcels smaller than 20 acres in size.
- Fifty-five percent have land ownership tenure of less than 20 years, with intergenerational ownerships (51+ years) comprising less than a fifth of the respondents.
- Over half of the ownerships (57%) have streams, with 17% having more than one type of water body (stream, wetland, lake, or pond). Twenty-six percent of landowners reported no water body present.

- Over half (57%) of the respondents manage the land for non-timber uses, with wildlife habitat (22%), aesthetics (13%) and recreation (12%) chosen most often. Length of ownership also seems to be a factor in the respondent's primary management objective. Ownerships of 11 to 20 years are the least likely to be used for timber harvest, perhaps reflecting harvest rotation cycles and the age of the timber when the parcels were purchased.
- Responses to the open ended question for organizational involvement indicate that only 19% of landowners are involved in forestry groups, with 60% reporting no organization affiliation.

Staff is broadening their demographic understanding of small forest landowners through the use of the Sustaining Family Forests Initiative [Tools for Engaging Landowners Effectively](#) (TELE) outreach methodology. The methodology relies on data from the National Woodland Owner Survey for targeted marketing based on landowner type (woodland retreat, working the land, supplemental income, and uninvolved landowners) and attitudes. The Small Forest Landowner Office is in the process of developing a targeted marketing campaign for the Family Forest Fish Passage Program and will be using the plan as a model for improving outreach efforts for the Landowner Assistance and Forestry Riparian Easement Programs.

To improve accountability and responsiveness, a common data entry form and a customer satisfaction postcard have been developed. The common data form will allow managers to more accurately track and easily document numbers and types of contacts across all Small Forest Landowner Office programs. The SFLO is awaiting final approval of the customer satisfaction postcard.

The Small Forest Landowner office published and distributed the July, September, January, March, and May editions of the Small Forest Landowner News to over 3,000 subscribers. The newsletter is bimonthly and can be subscribed to via the [Small Forest Landowner web site](#) or requested by email at sflo@dnr.wa.gov. Readers can also catch up on [Archived Small Forest Landowner News editions](#).

Forestry Riparian Easement Program Outreach

- The Forestry Riparian Easement Program continues to maintain a current webpage, distribute educational materials, and increase interactions with stakeholders at Timber Fish and Wildlife (TFW) and Region District Meetings to inform interested people about the changes and updates of the program.

Family Forest Fish Passage Program Outreach

- The FFFPP has continued to be a visible presence at TFW meetings, Region District meetings, Society of American Foresters meetings, and Washington Farm Forestry Association meetings. The outreach is to help the program continually look for the best projects to ensure that the worst projects are fixed first. The program also continues its collaboration with fish enhancement groups to act as sponsors to the program.

Forest Stewardship Program Outreach

In cooperation with Washington State University Extension, the program conducted extensive promotional mailings in conjunction with three regional Forest Owners Field Day landowner education events in 2013. More than 11,000 family forest owners have now participated in these events at over 30 different locations across the state.

The Forest Stewardship Program promotes many of its events and classes through the Small Forest Landowner News.

Long-term Applications Outreach

The Small Forest Landowner Office has increased its presence at TFW meetings, Region District meetings, Society of American Foresters meetings, and Washington Farm Forestry Association meetings. The outreach is to inform staff members that work directly with landowners about the benefits of long-term applications to small forest landowners to encourage their use statewide. There are a total of 168 long-term applications that have been approved through the Forest Practices application process.

Small Forest Landowner Office Grant Proposals

The Small Forest Landowner Office is continuing to seek grant opportunities to support all of the small forest landowner programs.

Grant Applications

Grant Proposal	Status
2013 National Fish and Wildlife Foundation's Conservation Partners Grant in partnership with Northwest Natural Resources Group – Grant proposal for \$82,585.26	Full proposal submitted in June 2013 and funded in January 2014. This grant will conduct road inventories on small forest properties in Skagit County, fix fish passage barriers, fix road surface erosion and sediment delivery where it exists, as well as promote ecological forestry options to landowners.
Salmon Recovery Fund	Proposal for a comprehensive fish blockage assessment of the Tahuya watershed was submitted in April of 2014. The project is a cooperative venture with the Mason County Conservation District and includes ranking of the barriers, as well as 30% engineering designs for the five worst sites. Final ranking of the grant proposals is anticipated in July of 2014, with funds awarded in January of 2015.

The Small Forest Landowner Office goal is to continue to provide the highest quality of outreach to the small forest landowners. The SFLO will continue to pursue the use of media and social media to inform the public on the program and the resources offered. The office continues to search for external funding and grants as they become available to provide more assistance to

small forest landowners. An important component of this outreach is to solicit feedback from users and track SFLO outreach activities to ensure effectiveness.

6. 20-Acre Exempt Riparian Forestland

6.1 Introduction

The 1999 Washington State Legislature exempted certain forestland parcels from some riparian protection measures in the Forest Practices Rules that resulted from the 1999 Forests and Fish Report. Exempt parcels include those that are 20 contiguous acres or less and are owned by individuals whose total ownership is less than 80 forested acres statewide. These parcels are commonly referred to as “exempt 20-acre parcels.” While not subject to some forest practices riparian protection rules, exempt 20-acre parcels must still provide protection for public resources in accordance with the Forest Practices Act.

In arriving at their permitting decisions, the federal Services concluded that they would condition the Incidental Take Permits regarding 20-acre exempt forest practices. Conditions include:

- Requiring leave trees be left along Type Np (non-fish-bearing, perennial) waters for riparian function;
- Providing eligibility criteria for coverage of 20-acre exempt parcels under the Incidental Take Permits;
- Defining coverage thresholds for 20-acre exempt parcels in each watershed administrative unit and water resource inventory area; and
- Identifying certain spawning and rearing habitat of bull trout (also known as “Bull Trout Areas of Concern”) where Incidental Take Permit coverage may not apply.

6.2 Type Np Water Leave Tree Requirement

[By Washington State Regulation](#), DNR requires trees to be left on Np (non-fish-bearing, perennial) waters on 20-acre exempt parcels where needed to protect public resources, defined as water, fish, and wildlife. The Services concluded that leaving trees along Np waters is necessary in most situations. The Forest Practices HCP Incidental Take Permits say that “permittee (Washington State) shall require trees to be left along Type Np waters under the 20-acre exemption unless such leave trees are not necessary to protect covered species and their habitats.” In order to implement this permit condition, a guidance memo was written September 26, 2006 and delivered to DNR region forest practices staff clarifying that “henceforth Forest Practices Applications (FPA/s) should be conditioned to require leave trees along Type Np waters within exempt 20-acre parcels unless DNR determines this is not necessary”. See the 2007 Forest Practices HCP Annual Report for a copy of the guidance memo. Leave tree requirements are detailed in WAC 222-30-023(3): “...leave at least 29 conifer or deciduous trees, 6 inches in diameter or larger, on each side of every 1000 feet of stream length within 29 feet of the stream. The leave trees may be arranged to accommodate the operation.”

There were eleven Forest Practices Applications associated with 20-acre exempt parcels that had Type Np waters during FY 2013 (July 1, 2013, to June 30, 2014). Ten of the applications were either conditioned according to the Np guidance memo (which reflects WAC 222-30-023(3)) or

did not propose harvest within 29 feet of the Np water. One did not have the statement on the FPA.

6.3 Watershed Administrative Unit and Water Resource Inventory Area Thresholds

In the Incidental Take Permits, the Services defined permit coverage thresholds for watershed administrative units (WAU) and water resource inventory areas (WRIA). The Services placed a 10 percent threshold on cumulative reduction in riparian function (as measured by the amount of recruitable large woody debris such as snags and tall trees that could fall across a stream or other water body) within a watershed administrative unit for 20-acre exempt parcels. Additionally, the Services placed a 15 percent stream length threshold within water resource inventory areas. The 15 percent threshold is based on the cumulative stream length of the affected streams within each WAU in the WRIA that has reached the 10 percent threshold. When a threshold within a watershed administrative unit or water resource inventory area is reached, subsequent FPAs on 20-acre exempt parcels within those units or inventory areas will not be covered by the Incidental Take Permits unless the landowner chooses to follow standard Riparian Management Zone (RMZ) rules. Washington State has adopted a method, approved by the Services, to estimate cumulative percent reduction of potential large woody debris recruitment function, by watershed administrative unit, and percent cumulative stream length affected, by water resource inventory area.

6.4 Cumulative Reduction in Function Calculation Methodology

A formula called the Equivalent Area Buffer Index (Buffer Index) is used to estimate the percent reduction in function, as measured by potential large woody debris that could be recruited along fish-bearing streams. The Buffer Index was developed for the Forest Practices HCP [Environmental Impact Statement](#) (EIS) (USFWS et. al 2006) as a tool for comparing management alternatives in terms of the level of ecological function conserved through various management practices. The Buffer Index for large woody debris recruitment potential is a quantitative measure that evaluates the potential of a riparian forest to provide trees and other woody debris across and into streams originating from tree mortality, windthrow and bank undercutting. The Buffer Index is expressed as a function of slope distance from the stream channel in relationship to tree height. The methodology takes into account management activities within the buffer zone. The Buffer Index value is determined based upon the ‘mature conifer curve of large woody debris recruitment potential’ by McDade et al (1990). It relates the cumulative percent of large woody debris recruitment with the distance from the stream bank in terms of tree height. The Environmental Impact Statement (EIS) for the Forest Practices HCP provides average Buffer Indexes for western and eastern Washington. These averages are used each year to estimate the potential cumulative reduction in large woody debris recruitment function from 20-acre exempt Forest Practices Applications submitted to DNR during the fiscal year.

Example explaining Buffer Index formula for fish-bearing stream in Western Washington

- **Step 1 — Consider a fish-bearing stream (Type F).**

The assumptions for this stream's Riparian Management Zone include a Channel Migration Zone (CMZ) that is 10-foot wide, followed by a 50-foot core zone of forest along the stream, followed by a 60-foot inner forest zone in which a light selection harvest is assumed (30 percent volume removal), followed by a 45-foot outer zone in which a moderately heavy selection harvest is assumed (70 percent volume removal). This gives a total RMZ width of 155 feet including the 10-foot CMZ. The total RMZ width of 155 feet is based on an average of Site Class II and III areas $[(140+170)/2]$, which represent the most common site classes on forestland covered by the Incidental Take Permits.

- **Step 2 — Refer to the McDade (1990) mature conifer curve.**

The McDade curve has been standardized for 155 feet, as the buffer distance that assumes full protection for the 100-year Site Potential Tree Height. This curve shows the cumulative percentage of large woody debris contribution in relation to the distance from the stream. In our example, we need to determine the percent of the total large woody debris contributed by the different RMZ zones (e.g., 0-10 feet, 10-60 feet, 60-120 feet and 120-165 feet). The values from McDade are 17 percent for the 0-10 foot zone, 62 percent for the 10-60 foot zone, 18 percent for the 60-120 foot zone, and 3 percent for the 120-165 foot zone.

- **Step 3 — Multiply the contribution percentage by the tree retention percentage for each RMZ zone, and sum them up.**

$$(0.17 \times 1.0) + (0.62 \times 1.0) + (0.18 \times 0.7) + (0.03 \times 0.3) = 0.925$$

- **Step 4 — Results**

Therefore, the RMZ on Type F streams in Western Washington would provide for an estimated 92.5 percent of large woody debris recruitment potential, given the assumption that full recruitment potential is achieved at a buffer width equal to the 100-year Site Potential Tree Height.

Annual in-office calculations of reduction in function based on proposed harvests

An estimate of potential reduction in function by watershed administrative unit is calculated annually and reported in the Forest Practices HCP annual report. The impact is "potential" because the calculations are based on "proposed" harvests, not "completed" harvests and estimates of stream impact are made in-office from information supplied on the FPA, not on-the-ground measurements. Average Buffer Index values are used to calculate the overall possible reduction in function by WAU. The average Buffer Index values used for the annual report calculations are taken from the Final EIS (Appendix B page B-28) for the Forest Practices HCP. These average Buffer Index values were obtained through modeling harvests based on both Forests and Fish Rules, and pre-Forests and Fish Rules. Many assumptions went into the modeling effort including degree of harvest, width of riparian area, stream width, etc. An end result of the harvest modeling was the development of average values for an overall Buffer Index for eastern and western Washington for harvests complying with Forests and Fish Rules, as well as with pre-Forests and Fish Rules.

The EIS average Buffer Index values for Forests and Fish Rules are used in our calculations without modification; however, an additional 15 percent was added to the EIS average Buffer Index values for pre-Forests and Fish Rules because the 1999 Salmon Recovery Act required 20-acre exempt landowners to protect an additional 15 percent of riparian trees above pre-Forests and Fish Rules. The average reduction in function value was calculated by subtracting the pre-Forests and Fish Rules Buffer Index values from the Forests and Fish Rules Buffer Index values for a percent reduction in function.

Below are the Buffer Index values and reduction in function factors used for the Forest Practices HCP Annual Report.

Buffer Indexes for Western Washington:

Buffer Index average for Forests and Fish Rules = 0.93

Buffer Index average for Rules prior to Forests and Fish = 0.60

Buffer Index average for 20-acre exempt rules = $0.60 \times 1.15 = 0.69$

Average Reduction in function factor = $0.93 - 0.69 = 0.24$

Buffer Indexes for Eastern Washington:

Buffer Index average for Forests and Fish Rules = 0.91

Buffer Index average for Rules prior to Forests and Fish = 0.67

Buffer Index average for 20-acre exempt rules = $0.67 \times 1.15 = 0.77$

Average Reduction in function factor = $0.91 - 0.77 = 0.14$

The estimated number of feet of fish bearing stream potentially affected by harvests through Forest Practices Applications is tracked throughout the year. The total number of feet of stream length in each watershed administrative unit is calculated for the fiscal year and then multiplied by 0.24 in Western Washington and 0.14 in Eastern Washington to derive the total stream distance over which large woody debris recruitment functions are reduced in function. These numbers are summed over the years and then divided by the GIS calculated total fish bearing stream length on lands regulated by forest practices in the watershed administrative unit to determine potential percent cumulative reduction in function

The following table contains the cumulative in-office estimates of reduction in function by watershed administrative unit for the time period of June 5, 2006, to June 30, 2014. A visual representation of the 20-acre Exempt Forest Practices Applications accounted for in the following table can be found in Appendices #2a and #2b. The two maps in these appendices show the location of the 20-acre exempt applications for FY 2014 and the location of all 20-acre exempt applications since June 2006. Maps showing 20-acre exempt Forest Practices Applications in previous fiscal years can be found in previous Forest Practices HCP annual reports.

Estimated Potential Percent Loss of Large Woody Debris Recruitment Potential, by Watershed Administrative Unit	
Watershed Administrative Unit	Percent (%) Reduction in LWD Function in WAU
Abernathy	0.044
Acme	0.052
Antonie Creek	0.019
Bangor-Port Gamble	0.151
Bellingham Bay	0.131
Black River	0.017
Bogachiel	0.051
Blanchard Creek	0.040
Bunker Creek	0.119
Camano Island	0.200
Carbon	0.073
Carpenter	0.124
Cathlapotl	0.163
Cedar Creek/Chelatchie Creek	0.401
Chehalis Headwaters	0.006
Chehalis Slough	0.191
Chimakum	0.098
Chinook	0.021
Church Creek	0.363
Cloquallum	0.163
Coal Creek	0.120
Colvos Passage/Carr Inlet	0.138
Conboy	0.028
Connelly	0.166
Copper Creek	3.059
Corkindale	0.097
Cottonwood Creek	0.017
Cowlitz River/Mill Creek	0.118
Damfino	0.306
Davis Creek	0.114
Day Creek	0.247
Deadman Creek/Peone Creek	0.126
Delameter	0.046
Delezene Creek	0.099
Diobsud Creek	2.307

Discovery Bay	0.033
Dragoon Creek	0.031
Drayton	0.284
Dyes Inlet	0.131
East Creek	0.031
East Fork Hoquiam	0.147
East Fork Humptulips	0.099
EF Satsop	0.005
Electron	0.030
Elk River	0.025
Everett	0.056
Ferndale	0.179
French-Boulder	0.037
Friday Creek	0.729
Gibson Ck.	0.047
Gilligan	0.095
Grays Bay	0.034
Great Bend	0.039
Haller Creek	0.049
Hamilton Creek	0.045
Hansen Creek	0.320
Harstine Island	0.106
Hoko	0.004
Hope Creek	0.042
Horseshoe Falls	0.468
Huckleberry Creek	0.019
Hutchinson Creek	0.131
Independence Creek	0.152
Jim Creek	0.033
Johns River	0.062
Jordan	0.080
Key Peninsula	0.062
Kiona Creek	0.131
L. Pilchuck Creek	0.134
L.Snoqualmie River/Cherry Creek	0.005
Lacamas	0.106
Lacamas Lake	0.254
Lake Merwin	0.239
Lake Whatcom	0.070

Liberty Miller - Appletree	0.263
Lilliwaup	0.004
Lincoln Creek	0.036
Little Deep Creek	0.046
Little Spokane/Deer Creek	0.053
Little Washougal	0.172
Little White Salmon River	0.036
Long Beach	0.085
Lost Creek	0.905
Lower Chehalis/Elizabeth Creek	0.013
Lower Coweeman	0.154
Lower Cowlitz	0.084
Lower Deschutes	0.047
Lower Dosewllips	0.172
Lower Humptulips River	0.039
Lower Kalama	0.070
Lower Naselle	0.023
Lower NF Stillaquamish	0.095
Lower Newaukum	0.418
Lower Pilchuck Creek	0.216
Lower Pilchuck River	0.266
Lower Quinault	0.665
Lower Riffe Lake	0.066
Lower Skokomish	0.066
Lower Snoqualmie River/Cherry Crk.	0.088
Lower Willapa	0.166
Lower Wind	0.093
Lynch Cove	0.183
Mashel	0.039
Mason	0.112
McLane Creek	0.044
MF Satsop	0.034
Middle Humptulips	0.043
Middle Sauk	0.021
Mill Creek	0.019
Mill Creek/Clugton Creek	0.032
Mitchel	0.038
Moran Creek	0.115
Mox Chehalis	0.107

Mt Zion	0.032
Muck Creek	0.112
Naselle Headwaters	0.008
Nemah	0.038
NF Granite Creek	0.034
Nineteen Creek	0.190
Nookachamps	0.014
North Headwaters	0.049
North-Middle Forks Deer Creek	0.059
Olequa	0.253
Ostrander	0.216
Otter Creek	0.041
Packwood Lake	0.245
Patit Creek	0.052
Pend Oreille/Cedar Creek	0.040
Pilchuck Mtn.	0.013
Port Angeles	0.103
Porter Canyon	0.031
Possession Sound-N. Elliot Creek	0.139
Quilceda Creek	0.182
Quillisascut Creek	0.126
Quinault Lake	0.114
Reese Creek	0.037
Rock Creek	0.159
S. Sinclair Inlet	0.032
Salmon Creek	0.046
Salt Creek	0.251
Samish Bay	0.090
Samish River	0.112
Sammamish River	0.076
Satsop	0.114
Scatter Creek	0.011
Sekiu	0.022
Siebert McDonald	0.063
SF Skokomish	0.061
SF Skykomish River	0.020
SF Willapa	0.017
Silver Lake	0.163
Smith Creek	0.036

Smith Point	0.602
Sol Duc Valley	0.014
Squalicum Creek	0.071
St. Peter-Lambert	0.025
Stillaguamish Flats	0.037
Sultan River	0.042
Sumas River	0.121
Sutherland Aldwell	0.168
Tacoma Creek	0.103
Tanwax Creek	0.224
Toandos Peninsula	0.059
Toutle River	0.127
Upper Chehalis/Rock Creek	0.088
Upper Coweeman	0.033
Upper Little Pend Oreille River	2.966
Upper NF Stilly	0.071
Vancouver	0.508
Vashon Island	0.050
Vedder	0.761
Verlot	0.053
Vesta Little N.	0.005
Whidbey Island	0.125
White Salmon/Buck Creek	0.045
Wilkeson	0.032
Willapa Headwaters	0.016
Winston Creek	0.024
W. Kitsap	0.023
Wishkah Headwaters	0.081
Woodland Creek	0.412
Woods Creek	0.066
Wynochee River System	0.010
Yacolt	0.280
Yelm Creek	0.172

The table above shows estimated percent of loss of potential large woody debris recruitment in each watershed administrative unit containing one or more 20-acre exempt FPAs over the elapsed eight year period of the Incidental Take Permits. There are a total of 846 watershed administrative units in the state, of which 185 have had 20-acre exempt FPAs approved.

Currently, in-office calculations indicate that each watershed administrative unit affected by 20-Acre Exempt applications, except for three, has less than one percent cumulative reduction in function relative to standard Forest Practices prescriptions. The largest possible impact is in the Copper Creek WAU in the Lewis WRIA, which has a total of only 17,464 feet of fish-bearing stream in the entire watershed unit. In-office calculations of proposed applications show a possible 3.2 percent potential reduction of large woody debris recruitment function in the Copper Creek unit. The Diobsud Creek unit in the Upper Skagit WRIA, with 36,394 feet of fish-bearing stream, shows a possibility of 2.3 percent potential reduction of large woody debris recruitment function. And the Upper Little Pend Oreille River unit in the Colville WRIA, with 8,978 feet of fish-bearing stream, shows a possibility of 2.9% potential reduction of large woody debris recruitment function. Seventy-three watershed administrative units indicate a potential of reduction in function between 0.1 and 0.9 percent: one at 0.9 percent reduction in function; two at 0.7 percent; two at 0.6 percent; one at 0.5 percent; four at 0.4 percent; three at 0.3 percent; fourteen at 0.2 percent; and forty-six at 0.1 percent. The remaining 109 watershed administrative units listed in the above table show the possibility of less than 0.1 percent reduction in function since the 2006 issuance of the Incidental Take Permits.

6.5 Data Collection for Watershed Administrative Unit Threshold Cumulative Stream Length for Water Resource Inventory Areas

A fish-bearing stream baseline length was calculated for all WRIsAs. As in-office calculations indicate that the 10 percent threshold may be approaching in watershed administrative area, DNR will compare the total stream length in each watershed administrative unit to determine when the 15 percent threshold might be reached for the water resource inventory area. DNR will then inform landowners that subsequent Forest Practices Applications associated with 20-Acre Exempt parcels within the area will no longer be covered by the Incidental Take Permits, unless individual landowners choose to apply standard Riparian Management Zone rules on their 20-Acre Exempt forest practice. Currently, there are no watershed administrative units approaching the 10 percent threshold for reduction in function; therefore, no areas currently are at risk for reaching the 15 percent stream threshold.

6.6 Bull Trout Areas of Concern

The USFWS placed conditions on its Incidental Take Permit regarding specific, identified spawning and rearing habitat areas for bull trout. These areas are of concern because of extremely low populations of bull trout. The condition states that a forest practice that qualifies for and uses the 20-Acre Exempt riparian rules and falls within these bull trout areas of concern will not be covered by the Incidental Take Permits unless the forest practice is shown to not measurably diminish the level of riparian function. The function is measured by potential large woody debris recruitment and is compared to the level of function that would have been provided by the standard Forest Practices Rules. The State and USFWS together developed a process to track forest practices in these bull trout areas of concern. The process was described in the [2009 Forest Practices HCP Annual Report](#) (DNR 2009). There were no Forest Practices Applications associated with 20-Acre Exempt parcels in the bull trout areas of concern during the reporting period from July 1, 2013, through June 30, 2014.

6.7 20-Acre Exempt Forest Practices Application Data

Of the 6,007 Forest Practices Applications processed throughout the reporting period, 4,995 were approved, and of those, 135 were new, approved 20-Acre Exempt applications adjacent to fish-bearing streams.

Number of 20-Acre Exempt Forest Practices Applications (July 2013 – June 2014)

20-Acre Exempt Forest Practices Applications with Specific Characteristics	Number
Number of 20-Acre Exempt applications with fish-bearing water	135
Number of 20-acre Exempt applications that were conversions with fish-bearing water	6
Number of 20-Acre Exempt applications with fish-bearing water that were not conversions	129
Number of 20-Acre exempt applications that were in Bull Trout Areas of Concern	0

Twenty-acre exempt non-conversion applications along fish-bearing water comprised about 2.6 percent of all approved applications submitted during the 2013-2014 reporting period. This percent was calculated for non-conversion 20-acre Forest Practices Applications because the Incidental Take Permits do not cover Forest Practices Applications that are conversions.

7. Alternate Plans, Rivers and Habitat Open Space Program

7.1 Introduction

This chapter provides information about two areas of interest to the Services – Alternate Plans, and the Rivers and Habitat Open Space Program. Alternate Plans are forest practices plans that deviate from standard Forest Practices Rules but provide public resource protection equal in overall effectiveness as the standard rules. The Rivers and Habitat Open Space Program acquire permanent forestland conservation easements between landowners and the State. The lands eligible for this program include islands of timber along rivers or streams that tend to migrate or abruptly change channels, also called channel migration zones. It also acquires forestland easements to conserve upland habitat of threatened and endangered species.

7.2 Alternate Plans

An Alternate Plan is a tool forest landowners can use to develop site-specific management plans for forest activities regulated under the Forest Practices Act. An Alternate Plan may deviate from the standard Forest Practices Rules, as long as the plan provides protection to public resources at least equal in overall effectiveness to that provided by the Forest Practices Act and rules. WAC 222-12-0401 describes the Alternate Plan process, including the review by interdisciplinary teams.

The following table shows the number and status of Forest Practices Applications submitted that included an Alternate Plan during the period from July 1, 2013, to June 30, 2014:

Forest Practices Applications with Alternate Plans during FY 2014

Landowner Type	Status of Forest Practices Applications with Alternate Plans				Total
	Approved	Disapproved	In Review	Closed Out*	
Small	110	5	14	5	134
Large	78	3	4	3	88
Total	188	8	18	8	222

*Closed Out means that the applicant has withdrawn the Forest Practices Application.

7.3 Rivers and Habitat Open Space Program

Like the Forestry Riparian Easement Program (see chapter 5), the original Riparian Open Space Program was a product of the 1999 Forests and Fish Law. It was codified in the Forest Practices Act and adopted by the Board as a forest practices rule. The 2009 Legislature amended the Riparian Open Space Program to be broader in scope. The Forest Practices Board then amended the forest practices rules to include the revisions in statute made by the legislature and changed the name of the Program to the Rivers and Habitat Open Space Program. The effective date of the revised rules was June 19, 2011.

The Rivers and Habitat Open Space Program is available to all forest landowners, not just small forest landowners. The Program promotes long-term conservation of aquatic resources and upland habitats through the purchase of conservation easements. The program acquires conservation easements on lands and timber within a specific type of channel migration zone known as an “unconfined channel migration zone.” It also acquires easements to conserve habitat of threatened and endangered species.

A channel migration zone is the area where the active channel of a stream is prone to move in the near term. Unconfined channel migration zones are generally larger water bodies, have less than 2 percent gradient and are found in a valley more than four times wider than the bank-full width of the channel. These areas typically have very high ecological value as spawning and rearing habitat for salmon and other fish species. Under the Forest Practices Rules, no timber harvesting or road construction may occur within channel migration zones due to their ecological importance and sensitivity.

The Forest Practices Rules protect critical habitat of ten upland species, two of which are the northern spotted owl and the marbled murrelet. ‘Critical habitat’ is a designation that makes a special effort to protect the important characteristics that will assist in the recovery of the threatened or endangered species. Landowners of forests determined to be critical habitat for these species are eligible to grant to the State a perpetual conservation easement under the Rivers and Habitat Open Space Program.

The Northern Spotted Owl Implementation Team (NSOIT), established by the Forest Practices Board in 2010, consists of stakeholders representing conservation, state government, industry, land trusts, and small forest landowner interests. Among other things, the Forest Practices Board tasked the NSOIT in 2010 to develop strategic voluntary incentive mechanisms on nonfederal lands in Washington to contribute to northern spotted owl conservation. In 2010, the Forest Practices Board also directed the NSOIT to form a Technical Team to “assess the spatial and temporal allocation of conservation efforts on nonfederal lands using best available science.” On November 8, 2013, the NSOIT sent a memo to the Washington Forest Practices Board which included current consensus recommendations on habitat incentives priorities for voluntary northern spotted owl conservation on nonfederal lands in Washington, which was informed by the technical team analysis. The NSOIT finds that strategic additions of NSO habitat can make meaningful contributions to the species’ conservation and have recommended an initial set of conservation incentive priority areas.

For this cycle of funding for the Rivers and Habitat Open Space Program, additional consideration will be made to state critical habitat applications that are responsive to the NSOIT Habitat Incentives Priorities for the spotted owl.

DNR screens applications, prioritizes qualifying applications, and acquires conservation easements based on available funding. There is \$500,000 allocated for the Rivers and Habitat Open Space Program for the FY13-15 funding period. Applications for conservation easements

for channel migration zones will be prioritized separately from applications for habitat of threatened and endangered species. Applications will be prioritized based on conservation benefits and landowner management options.

The following chart shows the budget allocated by the Washington State Legislature for the Rivers and Habitat Open Space Program, and the acres purchased since program's inception.

Budget, and Acres Purchased under Rivers and Habitat Open Space Program

Fiscal Year	Budget Allocated	Amount Spent	Number of Transactions	Acres Purchased
01-03	\$1,000,000	\$1,000,000	3	387
03-05	\$1,000,000	\$500,000	5	197
05-07	\$2,000,000	\$0	0	0
07-09	\$2,200,000	\$2,200,000	4	339
09-11	\$500,000	\$460,000	4	119
11-13	\$0	\$0	0	0
13-15	\$500,000	\$0	0	0

The \$500,000 left over from FY03-05 was reallocated for FY05-07. All of the \$2 million from FY05-07 was reallocated for FY07-09. There were no transactions for FY05-07 because applicants withdrew due to values lower than anticipated, or the lands were not eligible. There were 11 applications for FY09-11, of which eight were eligible. DNR assembled a Technical Selection Committee that determined the priority of funding of the eligible applications for the \$500,000 allocated for the FY09-11 funding period. There were no funds allocated for fiscal years 2011 to 2013. Of the \$500,000 allocated in the 2013-15 biennium none of the funds were spent during fiscal 2014.

8. Enforcement

8.1 Introduction

Working in conjunction with forest landowners, timber owners, and operators, the Forest Practices Program staff is responsible for ensuring forest practices activities are conducted according to the Forest Practices Act and Rules, as well as the conditions of the approved Forest Practices Application/Notification. Region Forest Practices Program staff prioritize compliance inspections relative to the potential risk to public resources posed by the proposed activity. For example, landowners that propose substantial road construction in steep terrain—where there is potential for sediment delivery to a stream—will receive a higher level of compliance inspections, than a proposal that has limited road construction on gentle slopes that have no associated risk of sediment delivery to a stream.

A classification system for forest practices applications helps rank the level of risk of the forest practices proposed in the application to a public resource and is, therefore, used as a tool for program foresters to determine the level of compliance inspections that will be conducted for a particular proposed activity. This targeted approach helps ensure the most effective and efficient use of a Forest Practices foresters' time.

Four classes of forest practices

- **Class I** – determined to have no direct potential for damaging a public resource.
- **Class II** – determined to have a less than ordinary potential to damage a public resource.
- **Class III** – determined to have an average potential to damage a public resource.
- **Class IV** – determined to have potential for a substantial impact on the environment – this is further evaluated dependent upon whether the proposal is **Class IV-General**, or **Class IV-Special** classification. Applications classified as IV-General are applications that are being converted from forestry to a different land use such as housing or agriculture.

Regardless of the classification, all forest practices activities must be performed in compliance with the Forest Practices Act and Rules. More detailed information on [forest practices classifications](#) can be found in WAC 222-16-050.

Compliance visits are an important part of the Forest Practices forester's job. The information gathered during compliance visits and through the Compliance Monitoring Program (Chapter 9) is used to improve delivery of the Forest Practices Program. Improvement may include clarifying or modifying rule language, improving forms and processes, providing guidance documents or modifying board manuals, improving the administration of the rules, and preparing specific education and training opportunities. Field compliance visits will continually inform all these efforts aimed at improving compliance with the Forest Practices Rules.

When an activity has been found to be out of compliance with a forest practices rule, program staff has several enforcement options available: informal conference notes (ICN), Notices to Comply (NTC), Stop Work Orders (SWO), civil penalties, Notice of Intent to Disapprove (NOID), and criminal penalties. The Forest Practices Act and the Board encourage informal, practical, result-oriented resolution of alleged violations and actions needed to prevent damage to public resources. It is also the Board’s policy to use a progressive approach to enforcement that begins with consultation and voluntary efforts to achieve compliance while reserving civil penalties (monetary fines) for more serious infractions.

8.2 Enforcement Activity

Enforcement documents can be used for either violations or non-violations. Violations are forest practices activities that have damaged a public resource or violate a law or rule. Non-violations are situations where damage to a public resource has not occurred but the Forest Practices forester has determined that damage is imminent if the activity or condition is not altered. An example would be an operator who does not have adequate road surface drainage on a haul road for use in the rainy season. The operator could be issued a non-violation Notice to Comply requiring the road be improved and maintained so it does not pose a threat to public resources during heavy rains. The following table shows enforcement activity between July 1, 2013, and June 30, 2014.

Stop Work Orders and Notices to Comply Issued in Fiscal Year 2014

DNR Region	Stop Work Orders		Notices to Comply		Total
	Non-Violation	Violation	Non-Violation	Violation	
Southeast	0	2	1	5	8
Northwest	0	10	5	10	25
South Puget Sound	1	7	1	14	23
Northeast	0	6	7	14	27
Pacific Cascade	2	9	2	17	30
Olympic	0	8	6	18	32
Total	3	42	22	78	145

Fiscal Year 2014 Enforcement Data Summary

*Approved Forest Practices Applications

Number of active Forest Practices Application/Notifications (FPA/Ns) through June 30, 2014 (See chapter 4 for information about FPAs received or renewed during Fiscal Year 2014.)	11,701*
Number of Notice To Comply / Stop Work Orders issued for violations	120
Ratio of Notice To Comply / Stop Work Orders violations to total number of active FPA/Ns (120/11,701)	1.0%
Number of Notice To Comply / Stop Work Orders issued for non-violations	26

Ratio of Notice To Comply / Stop Work Orders non-violations to total number of active FPA/Ns (26/11,701)	0.2%
Total number of documents issued (violation & non-violation)	145
Ratio of all documents issued to total active FPA/Ns (145/11,701)	1.2%

*Approved Forest Practices Applications

The table above compares the number of Notice to Comply and Stop Work Order documents issued in FY2014 to the number of active (i.e. not yet expired) Forest Practices Applications through June 30, 2014. The program is evaluating approaches to more fully utilize enforcement data to explain patterns and relationships, as well as inform compliance improvement efforts, training, as well as rule and board manual updates. Overall, the intent is to help aid landowners in successfully implementing the rules to protect public resources.

The program has about 64 Forest Practices Program field staff statewide that enforces the Forest Practices Act and Rules and helps ensure compliance.

The majority of violations do not require additional enforcement action, such as issuance of a civil penalty or Notice of Intent to Disapprove. The majority of initial enforcement actions have proven to bring landowners back into compliance with the rules without higher levels of enforcement action needing to be taken. When determining the appropriate level of enforcement a number of factors are taken into consideration, such as:

- Failure to comply with the terms or conditions of a Forest Practices Application /Notification or Stop Work Order,
- The probability of more than minor harm to the environment,
- The extent of damage to the public resource, and
- Multiple violations of the same rule or law by the same landowner or operator.

The table below shows the number of Civil Penalties and Notices of Intent to Disapprove that became a Final Order (all appeal processes have concluded) during FY2014.

Fiscal Year 2014 Civil Penalties and Notices of Intent to Disapprove

Region	Civil Penalties	Notice of Intent to Disapprove
Southeast	0	0
Northwest	0	0
South Puget Sound	1	1
Northeast	2	0
Pacific Cascade	2	0
Olympic	0	0
Total	5	1

9. Compliance Monitoring Program

9.1 Introduction

DNR is mandated by law to conduct compliance monitoring. WAC 222-08-160(4) states “DNR shall conduct compliance monitoring that addresses the following key question: ‘Are forest practices being conducted in compliance with the rules?’ DNR shall provide statistically sound, biennial compliance audits and monitoring reports to the Board for consideration and support of rule and guidance analysis. Compliance monitoring shall determine whether Forest Practices Rules are being implemented on the ground. An infrastructure to support compliance will include adequate compliance monitoring, enforcement, training, education and budget.”

The Compliance Monitoring Program (CMP) that was developed in response to WAC 222-08-160(4), is a key component of the Forest Practices Program. DNR’s compliance monitoring program uses detailed field protocols to produce reliable compliance determinations. Compliance monitoring provides feedback on how well operators and landowners are complying with the Forest Practices Rules when conducting forest practices activities. The information gained through the CMP (as well as from the daily efforts of on-site Forest Practices Foresters) provides critical feedback to the Forest Practices Program about rule implementation—where improvements may be needed in forest practices application review, compliance, or enforcement, and where to focus training efforts.

When initial funding for the CMP was allocated by the legislature in 2006, DNR, with input from other stakeholders, developed a compliance monitoring program design and implemented a pilot sampling effort. The Compliance Monitoring Program has completed annual compliance monitoring sampling every year since the 2006 pilot. The program has also produced biennial reports that provide and explain results of the field reviews. The first report was the http://www.dnr.wa.gov/Publications/fp_cm_biennial_report_06-07.pdf

All completed reports can be found on the compliance monitoring program website: http://www.dnr.wa.gov/BusinessPermits/Topics/ComplianceandEnforcement/Pages/fp_cm_program.aspx.

The CMP is administered within DNR by a compliance monitoring program manager and is staffed by a manager and a program specialist. The monitoring is conducted by professional foresters, geologists and biologists from DNR, Ecology, WDFW, and several tribes and tribal organizations in survey teams of four or five members. Landowners are invited to attend the field assessments.

Additional input is provided by the Compliance Monitoring Stakeholder Committee, which includes representatives of the DNR, Washington Department of Fish and Wildlife, Department of Ecology, Tribes and tribal organizations, the Services, Washington Farm Forestry

Association, Washington Forest Protection Association, industrial landowner representatives and the conservation caucus. This forum meets regularly and provides advice on:

- Clarification of rule elements when questions arise,
- Consistent implementation of program protocols, and
- Recommendations from the committee for Compliance Monitoring Program improvement.

Compliance monitoring is limited by mandate, budget, and staffing which results in a focused program with a well-defined, yet limited, scope. Compliance monitoring does not:

- Focus on individual landowners and compliance specific to those landowners, but rather focuses on the two overall groups of small and large forest landowners.
- Focus on region results. All data collected informs the overall population sample for a particular activity.
- Enforce forest practices rule violations – when field reviewers encounter rule violations, the appropriate DNR regional staff is notified for further action, or
- Modify water types – field reviewers do, however, record observed differences between water type documentation on forest practices applications and on-the-ground physical features.

The Compliance Monitoring Program evaluates compliance with prioritized forest practices rules considered to have the greatest impact on the protection of aquatic and riparian species and their habitat (riparian, wetland, road construction and maintenance, and haul route rules).

The Compliance Monitoring Program monitors by “rule prescription type”. Prescription types are groupings of similar FP rules that apply to a forest practices activity. Forest practices activities are operations such as timber harvest and forest road construction that are subject to FP rules. For example, forest practices activity types such as road construction and timber harvest are evaluated based on options available for implementing a particular activity – such as the many options available for harvest in the riparian management zone (RMZ) (desired future condition (DFC) Option 1, DFC Option 2, etc.); and by function/feature being protected such as water quality and wetlands. In compliance monitoring reports, for example, DFC Option 1 is called a prescription type. The compliance monitoring program monitors and reports compliance monitoring findings by each of the prescription types.

The prescription type rule groupings allow for statistical estimation of compliance by those specific rule groups rather than an overall forest practices compliance rate. This enhances the ability to determine where additional training or education or forest practices compliance efforts might be needed to increase compliance with forest practices rules. The compliance monitoring program, with stakeholder input, determines which forest practices rule prescription types will be sampled each year and then estimates the number of samples required for statistical precision. This number of samples is then visited by the compliance monitoring field team for each of the forest practices rule prescription types.

Some forest practices rules are monitored annually and are referred to as the *standard sample*. In addition, certain rule groups (or prescription types) are monitored periodically and these are known as an *emphasis sample*. The standard sample monitors the following rules:

- Riparian protection ([WAC 222-30-021](#) and [WAC 222-30-022](#))
- Wetland protection ([WAC 222-30-020\(7\)](#) and [WAC 222-24-015](#))
- Road construction, maintenance, and abandonment ([WAC 222-24](#))
- Haul routes for sediment delivery ([WAC 222-24](#))

In addition, the physical criteria of waters (i.e. stream width, stream gradient, etc.) are observed to estimate the number of occurrences where water types recorded on forest practices applications are different than what is observed on-the-ground.

9.2 History of Compliance Monitoring Program Design

2006 – A statewide working group led by DNR completed a compliance monitoring program design focusing on RMZ Forest Practices rules for all typed waters and road activities. The program design also included a detailed protocol for field assessments, field form revisions, and data collection templates. A pilot sampling effort was completed.

2008 – The Board recommended technical review of the program design. Five reviewers were selected that had operational monitoring experience and the report results were presented to the Board in February of 2008.

2008 – In response to the 2008 review, four significant changes to sampling were implemented for 2008-2009.

1. A protocol was added to capture observed differences between water type classification at the time of application approval and at the time of the compliance review.
2. Compliance with the rules as they are applied on the ground is assessed in addition to compliance with what was stated on the approved application.
3. The Forest Practices Application selection strategy was modified to sample each DNR region proportional to their representation in the entire population of applications statewide. This was to assure representation of each region in the sample.
4. DNR contracted with a professional statistician to review and approve the program design.

2012 – The Compliance Monitoring Program made significant changes in the sample design to increase confidence in statistical estimates for each prescription type observed. Previously, the design was based on a random selection of forest practices applications stratified by the proportion of the population found in each DNR region. The sample size for each prescription type was dependent on what prescription types were observed on the selected forest practices applications. Beginning in 2012, the sample design randomly selects instances of each sampled prescription type occurring in the population. An estimated sample size is calculated for each prescription type which meets a desired confidence interval for a biennium sample. This change in selection design allowed for some control in the level of statistical confidence in results and

provides a larger information set to help determine causes of deviation from the rules. It also added flexibility in the future to add or remove different prescription types from the sample as needed while still providing the desired confidence intervals for each prescription type.

This change instituted in 2012 was designed to improve the confidence of the compliance estimates for the less frequently occurring prescription types. The design included using a finite population correction factor to estimate the sample size needed to provide a 12% confidence interval (CI) for all prescription types assessed. The 12% CI was selected because it was perceived to be the best precision achievable within the program budget. As a result, the 2012-2013 biennium sample saw a modest improvement in confidence but the cost was too high to sustain.

9.3 Compliance Monitoring Program Reports and Findings

In addition to the biennial reports produced by the Compliance Monitoring Program, in 2011, the Commissioner of Public Lands requested an annual report in the intervening years. The [2012 Interim Forest Practices Compliance Monitoring Report](#) was published in July 2013. While previous [biennial reports](#) summarized results for two-year periods in which randomly selected and approved forest practices applications were assessed for compliance with the forest practices rules, the 2012 interim report describes compliance patterns detected during the first year of the biennial sample cycle (2012 field season). Because interim reports only represent one year of the required two years of data needed for precise estimates, conclusions cannot be made based on the data presented in these interim reports.

Beginning with the [2012 Interim Forest Practices Compliance Monitoring Report](#), the Compliance Monitoring Program changed the terminology used to describe compliance (see Section 2.3 of the interim report – *Compliance Assessment and Ratings*). In past compliance monitoring reports, prescriptions (rule groups) have been assessed as either “Compliant” or “Non-compliant”. Now prescriptions are assessed as “Compliant” or a “Deviation”. How the compliance rates are calculated has not changed, nor the methodology supporting the collection of the data. How compliance assessment is labeled has been changed to reflect a more accurate description and to acknowledge that while a prescription as a whole may be assessed as a deviation, many of the forest practices rules that comprise the prescriptions are often compliant.

2012 - 2013 Report

During the 2012 - 2013 field seasons, data was collected for the standard sample prescriptions as well as for one emphasis sample prescription. The emphasis sample described compliance patterns associated with harvest in riparian management zones (RMZs) for exempt 20-acre parcels ([WAC 222-30-023](#)). Sampling of RMZ exempt 20-acre parcels was included in the 2008-2009 biennial report, and was an emphasis sample in 2012 to help determine if there has been improvement in the compliance rates. The Compliance Monitoring Program conducted a census of the 2012 population of RMZ exempt 20-acre parcel forest practices applications because the total population size was very small. The RMZ exempt 20-acre parcel emphasis sample was designed as a one year sample and is compared in the interim report to the RMZ exempt 20-acre

parcel emphasis sample that was completed in 2008. There was no statistical difference in the compliance rates between those samples.

Riparian Prescription Standard Sample Findings

2012-2013 Riparian Prescription Standard Sample Findings

Riparian Prescription type	Percent (%)Compliant	Number Observed
Western WA Type F or S No Inner Zone Harvest	67	58
Western WA Type F or S No Outer Zone Harvest	91	32
Western WA Type F or S Desired Future Condition (DFC) Option 1	52	33
Western WA Type F or S DFC Option 2	58	48
Western WA Type Np Activities	76	25
Eastern WA Type F or S No Inner Zone Harvest	82	34
Eastern WA Type F or S No Outer Zone Harvest	79	14
Eastern WA Type Np Activities	86	7
Statewide Type Ns Activities	96	25
Statewide Type A Wetlands	80	20
Statewide Type B Wetlands	94	17
Statewide Forested Wetlands	94	17

The results for the riparian prescriptions show no statistical difference for any riparian prescription type between the 2010 - 2011 and 2012 - 2013 biennia.

Statewide Water Typing Findings

In the initial years of compliance monitoring, compliance monitoring field team observations indicated that at times water types observed on-the-ground did not match water type classifications provided on submitted and approved forest practices applications. This led to a concern regarding consistency and accuracy of water type information on forest practices applications because the width and length of riparian buffers required under forest practices rules are directly linked to water type. Stream and wetland type classification is a fundamental aspect of determining which forest practices rules apply to forest management activities taking place adjacent to typed water.

During 2012 -2013, the Compliance Monitoring Program evaluated 288 riparian related prescriptions involving typed water or wetlands. The number of typed waters and wetlands that were accurately typed or over-classified was 276 or 96% of the total observed. The number of

typed waters or wetlands where the compliance monitoring field team found discrepancies was 37 or 12.8% of the total observed. The inconsistencies occurred when typed water was under-classified on the forest practices application (i.e. the forest practices application depicts a Type Np water that is found to actually be a Type F stream); or over-classified (i.e. the forest practices application depicts a Type F water that after observation is actually a Type Np stream).

The number of waters under-classified was 12, or 4.2% of the 288 observed waters or wetlands. This means that 4.2% of the observed waters or wetlands received less protection than provided by rule due to the misclassification error. The number of waters or wetlands over-classified was 14, or 4.9% of the 288 observed waters or wetlands. This means that 4.9 % of the observed waters or wetlands received more protection than required by rule.

RMZ Exempt 20-Acre Parcel (Emphasis Sample) Findings

The compliance monitoring team sampled RMZ exempt 20-Acre parcel RMZs. Non-conversion Forest practices applications associated with RMZs for exempt 20-acre parcels with fish bearing streams comprised 2.6% of total approved forest practices applications submitted to DNR during this reporting period. Findings showed a compliance rate of 57% was not significantly different from the 2008 findings in which 62% of the samples were assessed as compliant.

In 2011, a compliance action plan was written which included actions to that were designed to help increase compliance for 20-acre FPAs. Actions included adding a condition to the approved forest practices application for the landowner to notify DNR 48-hours prior to beginning harvest operations, as well as a minimum of two on-site forest practices forester evaluations during the active period of the forest practices application. Compliance with the notification condition was not successful. Foresters successfully inspected some of the active exempt 20-acre parcel forest practices applications twice. The Forest Practices Program will continue to pursue options to help improve compliance for this prescription type.

Roads and Haul Routes Findings

In 2012, road construction and abandonment activities were assessed as compliant on 97% of the 36 FPAs where the road construction or abandonment was sampled.

The rate of compliance for haul routes was 94%. Comparison between 2011 (96%) and 2012 - 2013 haul route rates shows that the rates are not significantly different statistically, which means they are considered the same.

9.4 Forest Practices Program Changes Based on CMP Feedback

One of the primary goals of the Compliance Monitoring Program is to provide feedback from compliance monitoring for the purposes of improving compliance with the forest practices rules. Following are some of the changes made in 2011-2012 to address issues identified as a result of compliance monitoring:

Water Typing

- The Water Type Classification Worksheet and the Water Type Modification Forms have been revised to provide better detail about the location of water type breaks and stream physical characteristics.
- Water Type and Bankfull Width Training was presented to all region Forest Practices Staff to help provide consistent statewide interpretation and understanding about how water types and bankfull widths are determined. The staff that were trained, in turn, trained Regional TFW stakeholders.

Shade Documentation

- Review of the shade procedures by the CMP showed that there was no requirement for applicants to include a shade assessment with their FPA when harvesting within 75 feet of a Type S or F water (with the exception of RMZ exempt 20-acre parcels). As a result, the Forest Practices Program has revised the FPA form (July 2012) that directs all applicants to include the stream shade analysis (as per Board Manual Section 1) with the FPA.

9.5 Future Plans for the Compliance Monitoring Program

Since the 2012-2013 CMP design proved to be unsustainable, a more extensive redesign was undertaken in 2014 using a different analysis metric. The analysis switched from the binomial analysis (pass /fail for each prescription) to a cluster analysis including all the individual rules assessed on each prescription.

The design change to cluster analysis assesses all the rules directed at a particular prescription individually, with each rule contributing to the average compliance rate of the prescription. The previous design was a binomial ratio, where any one rule deviation caused the entire prescription to be non-compliant without effectively detecting the reason for non-compliance. The field observations and measurements are the same as used in previous biennia. The difference is in the analysis technique applied. The cluster analysis method has distinct advantages:

- The method will require a smaller sample of FPAs which lowers program costs and allows more flexibility for possible emphasis samples or sampling upland prescriptions.
- The revised method observes the same prescriptions assessed in the 2012 - 2013 report, which will not require substantial changes in field procedures.
- The program will be able to use the data from previous biennia and produce results using the cluster sampling ratio method which will allow a comprehensive comparison.
- This method will aid the program in detecting the specific rules or guidance that will require additional clarification. This could also inform the adaptive management program in regard to effectiveness monitoring studies that could be engaged by the Cooperative Research and Evaluation Committee.

Each analysis method provides a different metric which are not directly comparable with each other. However, the change from binomial ratio analysis will still allow for analysis of past data

using the cluster sampling ratio method because past data was collected with the same method. It is the intention of the Compliance Monitoring Program to analyze previous biennia using the cluster analysis method and present the results in the 2014 compliance monitoring report.

Other program changes include combining the no outer zone harvest and no inner zone harvest prescriptions since both prescriptions are regulated by the same set of rules.

9.6 Funding

On an ongoing basis, the Forest Practices Program actively seeks state funding from the legislature and support from the program's partners to effectively implement the Compliance Monitoring Program. DNR has received funds from the Legislature since 2005 that allows one full-time staff each from the Department of Ecology and the Department of Fish and Wildlife to work with DNR in the CMP. This funding was continued in the 2013-2015 legislative appropriation.

10. Training/Information/Education

10.1 Introduction

Training is a key element to successful implementation of, and compliance with the Forest Practices Rules – some of the most comprehensive and function-based rules in the nation. Forest Practices Rules require DNR to “conduct a continuing program of orientation and training, relating to forest practices and rules thereof, pursuant to RCW 76.09.250” (WAC 222-08-140). DNR conducts ongoing training to educate internal agency staff, forest landowners, and staff from cooperating agencies and organizations on implementation of forest practices rules.

There are four major venues in which the Forest Practices Program provides training:

- Forest Practices Program training;
- Subject-based training;
- Region staff provided training; and
- Washington Contract Loggers Association (WCLA) training.

The forest practices program and cooperating agencies provided over 250 hours of training to more than 2000 participants in fiscal year 2014.

10.2 Status of Forest Practices Training Programs

A new training manager was hired early FY 2013 to provide oversight for forest practices specific training for staff, stakeholders, and landowners. Training has continued at a limited scale due to budget constraints. Training included such subjects as unstable slopes, wetlands, alternate plans, and rule implementation on an as-needed basis. A new program, hydraulic projects, officially came to DNR on January 1, 2014. Subject based training for hydraulic projects was provided by DNR and Washington Department of Fish and Wildlife staff December 2013 and was directed toward DNR and Washington Department of Fish and Wildlife field staff. Region training has been provided to Timber, Fish and Wildlife (TFW) stakeholders. Training is on-going with DNR staff.

The training manager is working on developing a strategy for future trainings in the coming years. The training program places a heavy emphasis on developing training regarding new rule implementation and continuing education on current forest practices rules and field knowledge. Results from both field compliance and enforcement visits as part of the daily work of Forest Practices Foresters, and from the Compliance Monitoring Program help direct a comprehensive training program for DNR staff, landowners, and other stakeholders.

Forest Practices Program Training

Budget constraints and staff constraints have limited the magnitude of programmatic training over the past year. However, new training programs (see description below) were developed this year regarding Forest Practices Hydraulic Projects and alternate plans. The new hydraulic project training was provided to all field forest practices foresters, WDFW habitat biologists, and some

office staff that review and process forest practices applications. The alternate plan training held in each Region covered a review of forest practices rules, Board Manual and guidance memos. The alternate plan training involved all Region forest practices staff.

Subject based training sessions are provided for complex subjects that require larger blocks of time such as this year's hydraulic project training. Region staff that are trained during subject based training sessions share the information they learn in the class with landowners and other stakeholders at region TFW meetings.

Forest Practices' staff continues to receive short, focused training sessions (forest practices program training) during scheduled program meetings. These short duration trainings typically take place during regularly scheduled forest practices Operations meetings. The meetings are held three times a year with the purpose of division and region staff sharing information and addressing program concerns. Training topics this year included documentation, enforcement, and state environmental policy act (SEPA) information. After these short duration training opportunities, the participants share the information they learn with other program staff and stakeholders as appropriate.

Subject Based Training

Enforcement Training

Training was provided by Forest Practices Division to DNR region staff regarding a combination of situations that may lead to complex enforcement and appeal concerns.

– 32 people attended the training.

Hydraulic Project

Two Hydraulic Project trainings were provided to DNR and WDFW staff that review and process Forest Practices Applications. The teaching objectives included identifying a hydraulic project, describing fish protection standards, roles and responsibilities, best management practices, evaluating project design, and determining a complete forest practices application.

– 160 people attended the training.

Compliance Monitoring

The Compliance Monitoring Program provides annual training for staff from DNR, Department of Ecology, WDFW and tribal field staff that participate in on-site review of completed forest practices applications. A one-day classroom session specifically focuses on the protocols used to collect compliance monitoring data. Protocols, which are updated periodically to reflect design changes, are reviewed to ensure understanding of procedures and their purpose. Additional field coaching/on-the-job training is done using experienced staff to promote consistency in observations by new program participants.

– 41 people attended the training.

Information Technology

Training for Forest Practices Program staff on information technology applications and web-based tools was provided on an as-needed basis during the 2013 fiscal year. Training included Forest Practices Risk Assessment Tool and hydrography GIS database editing.

– 27 people attended the training.

Unstable Slope

Two Unstable Slopes trainings were provided this year. The target audience for the class is DNR program staff, agency stakeholders, landowners, and consultants. The objectives of unstable slopes training is to improve the ability to recognize unstable slopes and landforms, improve consistency in recognition of these features, and identify when a specialist is needed for further consultation.

– 40 people attended the training.

Wetland Identification

Two Wetland Identification trainings were provided this year for program staff, landowners and staff from cooperating agencies. Classes consist of identifying wetland vegetation for the specific region in which the training is conducted. Subjects covered in the classroom include wetland hydrology, soils, vegetation, and mitigation. Labs are conducted to teach how to identify soil properties and plant associations. Field exercises cover wetland identification and delineation.

– 37 people attended the training.

Small Forest Landowner Training

Small forest landowner office provided a variety of information outreach opportunities to small forest landowners around the state. Topics included Family Forest Fish Passage Program, Riparian Easement Program, wildlife habitat, forest excise tax, and forest management information.

Training by Region Staff

DNR forest practices region staff generally delivers both statewide and region-specific training. In addition, each region office holds regular TFW “cooperator” meetings for program participants to communicate changes in forest practices rules, rule implementation or application processing. Participants are invited and encouraged to share information and presentations relevant to the natural resource environment. Cooperator meetings are an important mechanism to assure fair and uniform application of requirements for forest practices within DNR’s six regions. Region staff also organizes informal meetings where technical or scientific information is presented to keep field practitioners informed about recent research findings.

Regions completed or sponsored more than 31 training presentations and meetings during fiscal year 2014, reaching about 400 people. The topics varied widely and included, but were not limited to: compliance monitoring results, water type modifications, road maintenance plans and general forest practices rule topics.

Washington Contract Logger Association Training

DNR forest practices staff taught select classes offered by the Washington Contract Logger Association (WCLA) with two sessions being held in Western Washington and one session in eastern Washington. WCLA offers a five-day training course, which includes one day of Forest Practices Rules training for operators seeking WCLA certification. Program staff and staff from other agencies (e.g., WDFW and Ecology) cover water typing, riparian and wetland management zones, cultural resources, road maintenance, hydraulic projects, and general information regarding the Forest Practices Application/Notification process. Two training sessions are held each year.

– 176 WCLA members attended the sessions.

11. Road Maintenance and Abandonment Planning for Large Forest Landowners

11.1 Introduction

Forest Practices Rules include a Road Maintenance and Abandonment Program to help prevent sediment and hydrology-related impacts to public resources such as fish and water quality and to fix fish passage barriers. The Road Maintenance and Abandonment Plan (RMAP) rules require large forest landowners to plan and schedule all of the work needed on their lands necessary to improve and maintain their forest roads to meet standards specified in chapter 222-24 WAC. In an effort to minimize the economic hardship on small forest landowners, the 2003 Washington State Legislature passed an RMAP bill (HB1095) that modified the definition of “small forest landowner” and clarified how the RMAP requirements applied to them. Small forest landowners have the option to submit a “checklist” RMAP with each Forest Practices Application or Notification, rather than providing a plan for their entire ownership.

Large forest landowners were required to have all roads within their ownership covered under a DNR approved RMAP (WAC 222-24-051) by July 1, 2006 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 plan. Forest Practices Rules require large forest landowners to prioritize road maintenance and abandonment work based on a “worst first” principle — starting with road systems where improvements would produce the greatest benefit for public resources and schedule their RMAP work to be metered throughout the time period on an “even-flow” basis so as not to wait until the last few years to complete all the work. Within each plan, maintenance and abandonment work is prioritized as follows:

- Remove blockages to fish passage;
- Prevent or limit sediment delivery;
- Correct drainage or unstable side-cast in areas with evidence of instability that could adversely affect public resources or threaten public safety;
- Disconnect the road drainage from typed waters;
- Repair or maintain roads that run adjacent to streams; and
- Minimize road interception of surface and ground water.

11.2 Extension of RMAP Deadline

The Forest Practices Board (Board) amended WACs 222-24-050 and 222-24-051 to allow forest landowners to extend the deadline for completing the road work scheduled in their RMAPs to October 31, 2016. The rule change allows for an extension of the deadline for up to five years, or until October 31, 2021. While landowners have made substantial progress in meeting their RMAP commitments, the Board adopted this rule amendment because of the impact of the 2008 economic downturn on forest landowners.

Landowners depend on the revenue from timber harvests to accomplish road improvements. On August 9, 2011, the Board adopted the RMAP extension process. During this reporting period, thirty RMAP extensions have been requested by forest landowners and received approval. Many landowners waited to file for an extension that was closer to the RMAP extension request deadline (September 3, 2014) in order to have the most accurate accounting of remaining work. This brought the total to thirty-nine RMAPs that have approved extensions since rule adoption. RMAP extension requests will no longer be accepted after September 3, 2014.

Beginning with the 2011 RMAP reporting cycle, the Forest Practices Program implemented standardized RMAP data collection and evaluation, and improved the reporting process. Particular attention remains focused on implementation consistency and standardization including even-flow and worst-first assessment and tracking. The program has made the following improvements:

- Applying consistent interpretation of accomplishment reporting elements,
- Standardizing data collection methods;
- Creating a statewide corporate Geographic Information System (GIS) database for RMAP information, tracking, and reporting purposes for fish passage barriers;
- Improving data sharing and transparency; and
- Adding two accomplishment reporting elements in order to provide a baseline for improving evaluation of even-flow:
 - Total number of fish passage barriers identified, and
 - Total number of forest road miles identified needing improvement.

The Board has amended Board Manual Section 3 *Guidelines for Forest Roads*, which explains requirements and processes in the RMAPs program.

11.3 Road Maintenance and Abandonment Plan Implementation

Following are three tables:

- *Statewide Road Maintenance and Abandonment Plan Accomplishment Report 2001-2013*;
- *Statewide Cumulative Road Maintenance and Abandonment Plan Accomplishment Report*; and
- *Fish Passage Barrier Information for Large Landowners*

These tables detail the progress that has been made by forest landowners from July 2001 until December 2013. The information provided is derived from data supplied by landowners as part of their annual accomplishment review. Following the *Statewide Road Maintenance and Abandonment Plan Accomplishment Report 2001-2013* is a description of each reporting element. In addition, several of the descriptions include reasons why some reporting element numbers fluctuate as well as providing more in-depth information on why earlier accomplishment reports differ from this report.

Statewide Road Maintenance and Abandonment Plan Accomplishment Report 2001-2013

DNR Region	Number of approved RMAPs	Miles of forest road assessed	Miles of forest road identified needing improvement*	Miles of road improved	Miles of road abandonment	Miles of orphaned roads	Number of fish passage barriers identified	Number of fish passage barriers corrected	Miles of fish habitat opened	Total of RMAP checklists from small forest landowners
Northeast	89	7,625	631	5,632	303	96	834	737	369	3,228
Northwest	27	5,514	1,155	3,040	1,158	817	538	405	136	1,700
Olympic	32	8,046	2,046	1,065	137	279	1,323	841	395	944
Pacific Cascade	75	22,452	4,266	10,753	701	502	3,445	2,392	1,737	3,536
South Puget Sound	25	5,345	558	1,258	506	165	847	494	233	837
Southeast	15	6,500	230	1,045	612	497	689	429	260	726
Statewide Totals	263	55,482	8,886	22,793	3,417	2,356	7,676	5,298	3,130	10,971

The content of this table is based upon data provided by landowners who are responsible for the facts and accuracy of the information presented herein.

Note:*Beginning with the 2011 RMAP reporting cycle (January 1, 2011, to December 31, 2011), landowners provided a new data element — “miles of forest road identified needing improvement” — based on the definition below. The data was first incorporated in the 2012 *Forest Practices HCP Annual Report*.

Reporting Elements

Number of Approved RMAPs

The number of approved RMAPs represents those plans submitted mostly by large forest landowners. Many large landowners have more than one plan. There currently are 18 small forest landowners that could have opted to submit a “checklist” RMAP, but have chosen (in writing) to continue to follow their pre-2003 submitted RMAP, or have decided to submit a plan as described in 222-24-0511(2). This does not include land previously owned by a large landowner covered under an approved RMAP, which has been sold to a small forest landowner that chooses not to continue/implement the plan.

Previously, this number was reported as either:

- 1) *Number of landowners* having an approved RMAP (i.e., 11 landowners within one region would equal 11 RMAPs), or
- 2) *Number of approved RMAPs* (i.e., 11 landowners within one region, each having 3 separate RMAPs, would equal 33 RMAPs).

Beginning with the 2010 RMAP reporting cycle (compiled and reported the next spring), and thereafter, this number is reported as ‘*Number of approved RMAPs*’. The program chose this reporting strategy due to the importance of monitoring and tracking the number of approved plans rather than the number of landowners.

The number of approved RMAPs is dynamic in nature and can change over time. Large landowners may have one RMAP for large holdings or multiple RMAPs covering several blocks within the large holding. A landowner may choose to change their strategy on the number of RMAPs they manage. Property transactions can lead to an increase or decrease in the number of approved RMAPs. Small landowners that decide to discontinue their plan and obtain a checklist would result in a decrease of RMAPs reported. Another reduction in the number may be due to a large forest landowner’s decision to discontinue or reduce the amount of harvest, and submit a request to be released from the program due to qualifying as a small forest landowner (WAC 222-16-010).

Miles of Forest Roads Assessed

Landowners arrived at this number by conducting an inventory and assessment of all forest roads contained within a specific RMAP. This number includes roads that meet Forest Practices Rule standards as well as those that need to be improved.

Large landowners have completed a full year reporting cycle using the new RMAP annual accomplishment reporting form. This data is not expected to fluctuate significantly over time. An exception occurred during this year’s reporting cycle in SPS Region. An industrial landowner obtained a Habitat Conservation Plan that addresses their road improvement plans. As a result, they withdrew their RMAP and the number of miles of forest road assessed decreased.

Miles of Forest Road Identified Needing Improvement

Implementing the definition as described below, *Miles of Road Improvement*, the data was partially completed (dependent upon each landowners RMAP accomplishment reporting date) and first reported in the 2012 Forest Practices HCP Annual Report. All landowners have now completed a full reporting cycle for the annual RMAP accomplishment report.

Miles of Road Improvement

For Road Maintenance and Abandonment Plan purposes, an improved road or road segment is defined as locations where actions have been taken to address issues associated with:

- Fish passage;
- Delivery of sediment to Typed waters;
- Existing or potential slope instability that could adversely affect public resources;
- Roads or ditch lines that intercept ground water; and
- Roads or ditches that deliver surface water to any Typed waters.

The improvements are to meet the current Forest Practices Rule requirements and are identified in the landowner plan, or problematic road conditions are subsequently discovered and actions are identified for inclusion within the time period associated with an approved RMAP.

Once a landowner identifies that a road or road segment is brought up to current rule standards, it is captured in that year's accomplishment report. Provided the DNR RMAP specialist concurs, the road no longer will be identified as an RMAP obligation; therefore, the road or road segment would not be included in subsequent reporting years for miles of road needing improvement. Over time, the "miles of forest road identified needing improvement" will decrease as the "miles of road improved" increases. All roads not under an RMAP obligation are subject to standard Forest Practices Rules found in Chapter 222-24 WAC.

Miles of Road Abandonment

The number of road abandonment miles includes those that have been reported under an approved Road Maintenance and Abandonment Plan as abandoned per WAC 222-24-052(3). Roads are not considered 'officially abandoned' until the DNR RMAP specialist or Forest Practices forester reviews the on-the-ground abandonment to ensure it meets the requirements. Reported road abandonment miles reflect some road miles that may not have been officially abandoned at the time this report was distributed.

Miles of Orphaned Roads

The number of miles of orphaned roads includes those that have been reported under an approved RMAP as orphaned. Inventory and assessment of orphaned roads will be used to help in the evaluation of the hazard-reduction statute and to determine the need for cost-share funding (RCW 76-09-300).

This information is challenging to track precisely due to the difficulty in locating orphaned roads on the landscape; they often are obscured by brush and forest cover and do not appear on any

map. Some orphaned roads have been converted to active forest roads, some abandoned, and some may be scattered throughout the landscape with present status unknown.

Number of Fish Passage Barriers Identified

The total number of fish passage barriers includes those identified as part of an approved RMAP inventory.

In 2006, the revised water-type map was used as an additional tool to identify potential fish passage barriers. The total number of fish passage barriers will fluctuate over time, depending on when landowners verify on-the-ground physical characteristics and/or perform a protocol survey or other approved methodology for verifying fish presence or absence. In cases in which a stream type has been changed from ‘Type F’ to ‘Type N’—therefore negating the landowners’ obligation to remove fish passage barriers—sizing of the culvert will be assessed to ensure that it is able to pass a 100-year flood level event. Due to limited habitat gained, barriers also may be removed from the total number, if the structure was determined by Washington Department of Fish and Wildlife to be sufficient to remain until the end of its functional life. Also, a barrier may be removed from the list if the structure was determined to play an important role in maintaining pond or wetland habitats; these decisions are made with stakeholder consultation.

Number of Fish Passage Barriers Corrected

The corrected number of fish passage barriers includes the total number that have been permanently removed or fixed with a fish-passable structure. Previously, this number included some streams that had been downgraded from a ‘Type F’ to a ‘Type N’, which did not meet the intent of this reporting element. Beginning in the 2010 RMAP reporting cycle, and thereafter, this number is reported as the number of actual fish passage barriers corrected.

Miles of Fish Habitat Opened

The ‘miles of fish habitat opened’ refers to stream habitat opened for fish use after the fish passage barrier has been removed or replaced. This number is an estimate, due to the inability to always measure stream length on the ground. The measurement often is based upon aerial photos or maps.

This number of miles of fish habitat opened may fluctuate depending on when, or whether or not, a stream type verification survey occurs. If there are no protocol surveys to pinpoint exact breakpoints, this number is reflected by large forest landowner data or topographical information. It also is difficult for landowners to determine this number if the stream enters another ownership.

Number of Checklists Submitted by Small Landowners

The ‘number of checklists’ is the total submitted to the DNR regions by small forest landowners since the 2003 rule change. Small forest landowners may submit more than one RMAP Checklist.

Beginning in the 2007 RMAP reporting cycle and thereafter, checklists have been separated from the ‘Number of Approved RMAPs’ and tracked separately.

The following table, *Statewide Cumulative Road Maintenance and Abandonment Plan Accomplishment Report* displays the data cumulatively by year, rather than by DNR region.

Statewide Cumulative Road Maintenance and Abandonment Plan Accomplishment Report

Year	Number of Approved RMAPs & Submitted Checklists	**Total # of RMAP Checklists from Small Forest Land-owners	***Miles of Forest Road Identified Needing Improvement	Miles of Road Improved	Miles of Road Abandoned	Miles of Orphaned Roads	Miles of Habitat Opened	# of Fish Passage Barriers Corrected
2001-2002	4,066	---	---		645	502	52	46
2001-2003	5,530	---	---		1,007 / *362	1,246	175 / *123	355 / *309
2001-2004	7,401	---	---		1,587 / *580	1,944	647 / *472	1,217 / *908
2001-2005	8,419	---	---		1,856 / *269	2,107	775 / *128	1,363 / *146
2001-2006	9,950	---	---		2,068 / *212	2,313	982 / *207	1,819 / *456
**2001-2007	107	8,121	---	13,140	2,153 / *85	2,293	1,221 / *239	2,248 / *429
2001- 2008	130	8,628 / *506	---	15,019 / *1,879	2,431 / *278	2,305	1,448 / *227	2,871 / *623
2001-2009	126	8,804 / *176	---	16,195 / *1,176	2,621 / *190	2,305	1,569 / *121	3,141 / *270
2001-2010	262	9,187 / *383	---	18,475 / *2,280	2,915 / *294	2,333	1,772 / *203	3,769 / *628
2001-2011	247	9,696 / *509	7,413	18,738 / *263	3,090 / *175	2,393	2,189 / *417	4,258 / *489
2001-2012	254	10,268 / *572	7,568	20,026 / *1,288	3,275 / *185	2162	2659 / *470	4,846 / *588
2001-2013	263	10,971 / *703	8,886	22,793 / *2,767	3,417 / *142	2,356	3,130 / *471	5,298 / *452

* Number represents the increase from the previous year’s report.

** Beginning in reporting year 2007 and thereafter, checklists have been separated from the ‘Number of Approved RMAPs’ and tracked separately.

*** This was a new reporting element beginning with the 2011 RMAP reporting cycle.

Note: Miles of Road Abandoned for 2001-2012 was changed to 3,275 miles (from 5,002 miles previously reported in the 2013 FPHCP Annual Report) due to an error in the 2012 data for NW Region. The number of miles of road abandoned in NW Region for 2001-2012 was 1,075 miles (not 2,801 miles as previously reported in the 2013 FPHCP Annual Report).

Fish Passage Barriers

In addition to the fish barrier information in the above tables, the following table, “*Fish Passage Barrier Information for Large Landowners*” displays how many barriers have been repaired cumulatively since 2001; the total repaired in calendar year 2013, and the percent of total repaired as of December 31, 2013.

Fish Passage Barrier Information for Large Forest Landowners

DNR Region	Number of fish passage barriers identified*	Number of fish passage barriers corrected from 2001-2013	Number of fish passage barriers corrected in 2013	% of total fish passage barriers corrected as of 12/31/2013
Northeast	834	737	54	88%
Northwest	538	405	24	75%
Olympic	1,323	841	122	64%
Pacific Cascade	3,445	2,392	182	69%
South Puget Sound	847	494	53	58%
Southeast	689	429	17	62%
Totals	7,676	5,298	452	69%

*This number may fluctuate annually as water types are confirmed and/or modified.

11.4 Washington Department of Fish and Wildlife Efforts

Biologists from the Washington State Department of Fish and Wildlife (WDFW) provide an essential role in the review and implementation of RMAPs. From July 1, 2013, through December 30 2013, prior to Hydraulic Project Approval/Forest Practices Application integration, WDFW biologists reviewed RMAPs statewide and issued 173 Hydraulic Project Application (HPA) permits associated with those plans. As many HPAs include multiple projects or locations, these HPAs equated to 281 projects or locations associated with RMAPs.

From January 1, 2014, through June 30, 2014, WDFW biologists reviewed RMAPs and the associated forest practices hydraulic projects, and provided assistance to landowners and DNR to assure that project plans and designs would be successful and meet fish protection standards.

WDFW biologists reviewed RMAPs as landowners made annual changes pertaining to fish passage structures, fish habitat, stream typing, and sediment delivery. Ownership changes require additional RMAP revisions and review. The complexity of technical assistance and forest practices hydraulic projects needing review and assistance from WDFW biologists has increased as work is shifting from the easier barrier fixes to the more challenging crossing structures, especially those higher in the watersheds.

12. Tribal Relations

12.1 Introduction

Under the authority of the Forest Practices Act, chapter 76.09 RCW, the Forest Practices Board (Board) adopts rules that foster cooperative relationships and agreements with Indian tribes and direct DNR Forest Practices staff to notify and consult with affected Indian tribes when developing and implementing many parts of the Forest Practices Program ([RCW 76.09.010](#), [WAC 222-12-010](#)). These rules define “*affected Indian tribe*” as “*any federally recognized Indian tribe that requests in writing information from the department on forest practices applications and notification filed on specified areas*” ([WAC 222-16-010](#)).

The federally recognized Indian tribes in Washington State are key cooperators in the Forest Practices Program. Because of the sovereign status of these tribal governments, the relationship between DNR and the tribes is government-to-government. The [Commissioner’s Order on Tribal Relations](#) serves as the department’s policy on tribal relations. DNR’s Tribal Relations Manager assists the department in maintaining good communications and collaborative relationships, and building stronger working relationships, with the Tribes.

Tribes in Washington—as well as some tribes in Oregon and Idaho—participate in the Forest Practices Program to varying degrees. Tribes are members of the Adaptive Management Program’s Timber/Fish/Wildlife Policy Committee and Cooperative Monitoring, Evaluation, and Research Committee, as well as the Board’s Timber/Fish/Wildlife Cultural Resources Roundtable (see 12.3 below) and DNR’s Small Forest Landowner Advisory Committee. Additionally, Tribal members and their representatives work with staff from DNR’s Forest Practices Program and other agencies and organizations to draft Forest Practices Rules and Board Manuals, review Forest Practices Applications, Notifications, and Alternate Plans, and provide technical expertise in DNR’s interdisciplinary team reviews and water and wetland typing.

This chapter provides information on two areas of forest practices work specific to tribal relations. First, section 12.2 provides an update on the rule required forest landowner-Tribe meetings and process improvements regarding implementing and tracking. Second, section 12.3 provides an update on the work being conducted by the Board’s Timber/Fish/Wildlife Cultural Resources Roundtable.

12.2 Landowner/Tribal Meetings and WAC 222-20-120 Updates

One of the reporting elements in the *Forest Practices HCP* is the landowner-Tribe meetings required by WAC 222-20-120 *Notice of forest practices that may contain cultural resources to affected Indian tribes* when a forest practice activity involves a cultural resource, and the process improvements being made by the Forest Practices Program to more consistently implement this rule. See the Final FPHCP Administrative and Regulatory Program Updates in [Table 1.1 FPHCP Reporting Elements](#) (open the link, scroll to page 9). The Forest Practices rule definition of

cultural resources is “archaeological and historic sites and artifacts, and traditional religious, ceremonial and social uses and activities of affected Indian tribes.” ([WAC 222-16-010](#))

This is the second full reporting period of implementing the Board’s 2012 amendments to [WAC 222-20-120](#). These rule amendments, a consensus recommendation from the Board’s Timber/Fish/Wildlife Cultural Resources Roundtable, provide for clearer understanding of the required processes for implementing and complying with this rule and address tribal sovereignty issues in the following ways:

- The words “cultural resources” are in the rule title to call attention to the rule’s requirements for applications that involve cultural resources.
- DNR notice to affected Indian Tribes is based on the tribe’s designated geographic areas of interest, rather than only those applications that a tribe might have a concern with.
- The required landowner-Tribe meeting is at the Tribe(s) discretion, so the meeting is not required if the Tribe(s) has no cultural resources concern with the application.
- Complying with the meeting requirement includes options for Tribal verification they declined the meeting and landowner verification of good faith but unsuccessful attempts to meet with the Tribe(s). See new subsections (3) (b) and (c).
- The rule no longer directs Tribe(s) to determine whether the landowner-Tribe agreed to plan will or will not be sent to the Department of Archaeology and Historic Preservation.

Starting in August 2013, the Board will receive annual reviews specific to the effectiveness of its amended rule process.

Currently, all but one of the federally recognized Tribes in Washington has chosen to review Forest Practices Applications and Notifications.

The Forest Practices Program’s expanded cultural resources related information in its Forest Practices Risk Assessment Tool used by Forest Practices staff to review and classify proposed forest practices. The Forest Practices Risk Assessment Tool is the GIS-based interactive mapping and reporting tool that allows staff to see the geographic relationships between environmental features and the location of proposed forest practices. Additional to the cultural resources site data from the Department of Archaeology and Historic Preservation, the expanded cultural resources related information is:

- The historical Map Index 1893-1950 (historical US Geological Service and Army Mapping Service maps for Washington State);
- The Bureau of Land Management’s Government Land Office Maps (historical maps); and
- The Tribal Cultural Resources Contacts (each Tribe’s/Tribal organization’s designated geographic area of interest for cultural resources and their cultural resources contact).

During this reporting period (July 1, 2013, to June 30, 2014) there were 33 Forest Practices Applications that required a landowner-Tribe meeting and all 33 fulfilled the meeting requirement. In 3 cases a meeting did not actually occur because the Tribe did not want a

meeting or the landowner did not receive a response to their requests to meet with the Tribe. However, in all three cases, the required documentation/notification was obtained. When a meeting does not happen, WAC 222-20-120 (3) requires that DNR receive the following in order to continue processing the application:

- Written notice from the Tribe that the Tribe is declining the meeting with the landowner, or
- The landowner's written documentation of attempts to meet with the Tribe's designated cultural resources contact for forest practices along with a copy of the landowner's certified letter to the tribal contact requesting a meeting with the Tribe.

A new issue arose in March 2014 regarding WAC 222-20-120 (4), conditioning applications in accordance with landowner-Tribe agreed upon plans. This issue is further discussed below under the Roundtable's work priorities.

12.3 Update on Timber/Fish/Wildlife Cultural Resources Roundtable

Background

The Timber/Fish/Wildlife Cultural Resources Roundtable (Roundtable) originated as the Timber/Fish/Wildlife Committee of the 1987 Timber/Fish/Wildlife collaboration, and has since been active in various cultural resources endeavors. In May 2011, the Forest Practices Board formally accepted the [Roundtable's charter](#), which formally changed the committee's name to Timber/Fish/Wildlife Cultural Resources Roundtable.

The Roundtable serves the Board by providing insight on cultural resources issues affecting forest practices, providing consensus rule making recommendations for the Board's consideration, and as required by [WAC 222-08-160](#), annually reporting on behalf of the department on how implementation of the Cultural Resources Protection and Management Plan is working. Accordingly, the Board's website includes a [Roundtable webpage](#). Webpage materials include the charter, meeting agendas and meeting notes, the Cultural Resources Protection and Management Plan, and various links to related information.

The current Roundtable membership includes active participation by tribal representatives, especially Puyallup Tribe of Indians, Confederated Tribes and Bands of the Yakama Nation, Quinault Indian Tribe, Cowlitz Indian Tribe, Jamestown S'Klallam Tribe, and Spokane Tribe of Indians, forest landowners representing and members of Washington Forest Protection Association, and state agency representatives from DNR Forest Practices Division, DNR Forest Resources Division, and the Department of Archaeology and Historic Preservation (DAHP). Other interested Tribes and organizations, including the Washington Farm Forestry Association, are kept informed of the Roundtable's work through meeting agendas and meeting notes sent via e-mail. Currently a total of 28 tribal representatives, 10 landowner representatives, and 12 state agency representatives have requested these ongoing mailings.

Cultural Resources Protection and Management Plan

In 2001, the Forest Practices Board asked the Roundtable (then Committee) to collaboratively develop a multi-caucus proposal to address the two cultural resources commitments in the [Forests and Fish Report](#). Appendix G and Appendix O of the report specifically made the commitment to 1) cooperatively develop a watershed analysis cultural resources module and 2) complete a cultural resources plan to enhance cooperative relationships between landowners and Tribes.

In 2003, the Board accepted the Roundtable's (then Committee's) consensus [Cultural Resources Protection and Management Plan](#) as fulfillment of both these *Forests and Fish Report* commitments. This is because its appendices include a watershed analysis cultural resources module and rules to implement the module. In May 2005, after completing the rule making process, the Board formally approved the watershed analysis cultural resources module for inclusion in Board Manual Section 11, *Standard Methodology for Conducting Watershed Analysis* as [Appendix J](#), and adopted the rules in [chapter 222-22 WAC](#) implementing the module.

The Forest Practices HCP (Washington DNR, 2005) incorporates the *Cultural Resources Protection and Management Plan* as [Appendix I](#).

The *Cultural Resources Protection and Management Plan* is a living document, that is, open to updates and changes to reflect progress, completion of tasks, and changes in priorities and direction of the plan. Therefore, updates are added occasionally by the Roundtable. The last update was October 2008.

Ongoing and Current Work

The Roundtable and the Forest Practices Program continue to implement commitments in the *Cultural Resources Protection and Management Plan*. Resolving other cultural resources issues related to forest practices also is ongoing work by the Roundtable and the program.

The three implementation commitments in this plan specific to the Forest Practices Program relate to:

- Notice to Tribes of proposed applications and notifications;
- Landowner-Tribe meetings required by WAC 222-20-120; and
- Classification of applications and notifications involving cultural resources.

As discussed in section 12.2, the Forest Practices Program provides automatic and ongoing notice to tribes of applications and notifications via the Forest Practices Application Review System (FPARS), and has provided updated program guidance on implementing amended WAC 222-20-120. Regarding classifying applications and notifications involving cultural resources, the Forest Practices program has added new links to historical maps and Tribe's/Tribal organization's contact information in its FPRAT. The Program also continues to assist DAHP in updating their archaeological and historic sites database. This cultural resources data is used by

the Forest Practices Program to appropriately classify Forest Practices Applications and Notifications involving cultural resources. Specific funding is provided to the Department of Archaeology and Historic Preservation through an interagency agreement with DNR. Funding for fiscal year 2014 was \$35,000, which provides a half time position at DAHP. The Roundtable continues to advocate for a full time position at the Department of Archaeology and Historic Preservation.

For fiscal year 2013-2014, the Roundtable's work priorities were as follows:

- On behalf of DNR, the Roundtable reported to the Forest Practices Board on implementation of the *Cultural Resources Protection and Management Plan*. This annual report provides the Board with continued evaluation of how this plan's voluntary processes are working, per WAC 222-08-160 (1), including the results of annual surveys distributed to Tribes, forest landowners, and state agency staff involved in forest practices. These annual reports are in August so the Board can utilize this information for their November planning meetings. See the 2013 report at [August 13, 2013 Board Meeting Materials](#) (open Meeting Packet Part 1, scroll to "TFW CCR Annual Report").
- As a part of the staff reports the Board receives at its regular quarterly meetings, the Roundtable provided its four quarterly reports in the form of its work plan, titled "*T/F/W Cultural Resources Roundtable Action Items*".
- In unanimously adopting the Roundtable's consensus amendments to WAC 222-20-120 on February 14, 2012, the Board requested annual reviews on implementation of the amended rule. To fulfill this request, the Roundtable developed questions specific to the rule's new amendments and added those questions to its annual survey on the Cultural Resources Protection and Management Plan. Annual survey results specific to WAC 222-20-120 will be reported by the Roundtable as part of its ongoing August annual reports to the Board.
- The Roundtable continued its work on developing cultural resources guidance documents and tools—as agreed to in the *Cultural Resources Protection and Management Plan*. A number of guidance documents on implementing this plan as well as other helpful cultural resources information are mostly completed. The video-taped cultural resources training session completed last year, titled *Video Presentation: Identifying and Protecting Cultural Resources on Forestlands*, is now available on the Board's [Roundtable webpage](#) (under Related Links).
- DNR's Forest Practices Program accepted the Roundtable's recommended improvements to the instructions for the cultural resources question on the Forest Practices Application/Notification forms. These new instructions are designed to better educate applicants on the types of cultural resources found in the forests and provide more website links to additional helpful information.
- The Roundtable's cultural resources educational efforts for the state's small forest landowners—also a commitment in the *Cultural Resources Protection and Management Plan*—continues through the assistance of the Washington State University Extension Service. Numerous workshops were conducted around the state, some drawing a hundred or more attendees.

- DAHP continued to provide ongoing updates to the Roundtable on the Department of Ecology's rulemaking to add exemptions to the State Environmental Policy Act for certain types of projects, as directed by recent legislation. Roundtable interest lies in the effects of excluding these projects from assessing the potential of the proposal to affect cultural resources. This rule became effective in early 2014.
- Work continues on a Roundtable logo based on the existing Timber Fish and Wildlife logo. A Puyallup Tribe artist created a spectacular design. After Roundtable discussion and permission from the artist, the Cowlitz Tribe is graciously working on the final touch.
- Incentivizing cultural resources site discovery and reporting is a continuing Roundtable work project. Initial ideas have been discussed by DNR's State lands representative with the Squaxin Island Tribe and the Confederated Tribes and Bands of the Yakama Nation.
- The WAC 222-20-120(4) conditioning issue has become the Roundtable's number one priority. The Yakama Nation brought their concerns to the Roundtable's March 2014 meeting stating they believe DNR has reinterpreted this rule. Upon request from the department, the Roundtable provided its conditioning authority questions to the Forest Practices Division Manager, along with an invitation to the Roundtable's July meeting to discuss the answers.

13. Washington State Legislature

In 1974, the Washington State Legislature passed the Forest Practices Act declaring that:

“forest land resources are among the most valuable of all resources in the state; that a viable forest products industry is of prime importance to the state's economy; that it is in the public interest for public and private commercial forestlands to be managed consistent with sound policies of natural resource protection; that coincident with maintenance of a viable forest products industry, it is important to afford protection to forest soils, fisheries, wildlife, water quantity and quality, air quality, recreation, and scenic beauty” (RCW 76.09.010).

The Act was the State’s first comprehensive law addressing the impacts of forest practices on the environment. The Act also created the Forest Practices Board, which sets the specific standards that are the basis for the Forest Practices Program.

Each year, DNR monitors laws being passed by the Legislature for those that could impact the Forest Practices Program. There were no new laws that would result in a change in protection of habitat for the species covered in the Forest Practices HCP. There were two bills passed into law that had an effect (although somewhat small) on the Forest Practices Program. Those were:

1. ESSB 6041- *Relating to fish and wildlife law enforcement*

This law includes additional authority added in two statutes and will enhance the Washington Department of Fish & Wildlife (and the Forest Practices Board endorsed) voluntary protection measures for state listed Threatened & Endangered species. Specifically, these statutes addressing the unlawful taking of fish and wildlife designated as endangered or protected by the Washington Fish and Wildlife Commission are expanded to:

- Include "active" and "perennial" nests, and
- Recognize "a permit issued by a state or federal agency".

None of the provisions in this law directly affect the authorities of the Forest Practices Act or rules. DNR and the Forest Practices Board fully support this law.

2. 2SHB 2251 – *Concerning fish barrier removals*

This law requires a DNR representative to be a member of the Fish Barrier Removal Board whose duties are to:

- Make recommendations to expand the fish passage barrier removal program;
- Identify and expedite the removal of human-made or caused impediments to anadromous fish passage in the most efficient manner practical;

- Propose funding mechanisms and methodologies to coordinate state, tribal, local, and volunteer barrier removal efforts within each Water Resource Inventory Area; and
- To the degree practicable, utilize the centralized database directory of all fish passage barrier information. This database directory includes existing fish passage inventories, fish passage projects, grant program applications, and other databases.

This law improves coordination between entities conducting fish barrier removal work, and helps the work to be conducted in a broader watershed scale.

The DNR representative on the Fish Barrier Removal Board is the Forest Practices Division Manager. The Board meets monthly.

DNR, in close partnership with TFW cooperators, introduced and advocated extensively on behalf of legislation that would have established a dedicated funding source for the Adaptive Management Program and small forest landowner programs. The bill would have redirected revenue from current state forest harvest excise tax to a dedicated account, providing resources to achieve the accelerated CMER master project schedule. Although the legislation passed unanimously from the state Senate, it did not receive a vote in the House of Representatives. DNR and TFW cooperators are continuing to pursue this and other potential funding sources for the program. This bill would have fulfilled an obligation to seek dedicated funding for the Forest Practices Adaptive Management Program's (AMP) research and monitoring program and to fund performance reviews and audits of the AMP. It would also have provided additional funding opportunities to the Forestry Riparian Easement Program, the Family Forest Fish Passage Program, and the Rivers and Habitat Open Space Program.

14. Information Technology

Information Technology-Based Tools Update

Information technology-based tools provide significant support for the administration of the Forest Practices Program. These tools include information systems, such as the Forest Practices Application Review System (FPARS), Forest Practices Enforcement Tracking System (FPETS) and the Forest Practices Risk Assessment Tool (FPRAT), as well as discrete data sets, such as the DNR Hydrography Geographic Information System (GIS) data layer that forms the basis of the water typing system. Within DNR, the Forest Practices Division works closely with the Information Technology Division to develop and maintain these information technology tools.

Forest Practices Application Review System

The Forest Practices Application Review System streamlines the processing of Forest Practice Applications and provides the public with the ability to review proposed forest practices activities. It makes use of the internet, document imaging and management technology, interactive geographic information system (GIS) technology, and the Oracle database system to collect Forest Practices Application/Notification information, and distribute them for regulatory and public review. FPARS also supports risk assessments of proposed forest practices activities, and archiving Forest Practices Applications/Notifications.

Between July 1, 2013, and June 30, 2014, there were 6,007 FPAs received or renewed and entered into FPARS. Currently there are 1,183 reviewers receiving email notification.

Fish protection standards from the hydraulic code rules were incorporated into the forest practices rules and implemented in the second half of fiscal year 2014. Data items relevant to the new rules were incorporated into the Forest Practices Application and FPARS. Forest Practices Hydraulic Project (FPHP) data collection began December 30, 2013.

There were no formal training events this fiscal year on the FPARS system. As part of Forest Practices Division and DNR outreach efforts, a presentation of the FPARS notification system was delivered on May 22, 2014, at the Seventh Annual Cultural Resource Protection Summit hosted by the Suquamish Tribe. These outreach efforts will continue throughout fiscal year 2015, which ends June 30, 2015.

Forest Practices Enforcement Tracking System

The Forest Practices Enforcement Tracking System provides the ability for Region Forest Practices staff and Forest Practices Division staff to enter and report on data related to enforcement actions, civil penalties and appeals. It makes use of the internet, document imaging and management technology, and the Oracle database system to collect Forest Practices enforcement information.

By capturing enforcement data in a common database, FPETS streamlines data input by removing redundancies and enables automating reports in the enforcement tracking process. FPETS also includes a robust search tool that allows users to query on and search the FPETS database for information related to enforcement actions, civil penalties and appeals.

Between July 1, 2013, and June 30, 2014, there were 592 enforcement actions issued and entered into FPETS.

Forest Practices Risk Assessment Tool

The Forest Practices Program continues to support the Forest Practices Risk Assessment Tool. This interactive mapping and reporting tool is available on DNR's web pages. It gives DNR Forest Practices Program staff, in both the division and the region offices, access to GIS data related to the implementation of the Forest Practices Rules. It allows staff to see and review the geographic relationships between environmental features, including streams with fish habitat, potential landslide areas, archaeological sites, northern spotted owl habitat, and the locations of proposed forest practice activities. There currently are more than 70 map layers that can be displayed or queried. We continually work to improve the Risk Assessment Tool, adding map layers and functionality to better serve Forest Practice staff.

During this reporting period, we developed new data layers to assist region office staff with review of forest practice hydraulic projects. Starting on December 30, 2013, we began collecting point locations of all water crossing structures on Type F or S waters as reported on new FPAs. These points are captured as a GIS data layer with information about structure type, crossing activity, and the presence of a Family Forest Fish Passage Program and/or Road Maintenance and Abandonment Plan (RMAP) project.

We also created a statewide Forest Practices Forester Units boundary data layer. In addition, several regions created Washington Department of Fish and Wildlife Biologists Areas maps. These layers help DNR region staff quickly identify the forester and biologist responsible for FPHP review.

In order to facilitate review of forest practices involving pesticide uses that have the potential for a substantial impact on the environment, we added the Washington Department of Health drinking water intake points to FPRAT. This data layer includes Group A & B surface water intakes and Group A & B spring water systems.

The DNR Hydrography Data Layer and Water Type Updates

The Forest Practices GIS section updates DNR's hydrography data layer with water typing information received on Water Type Modification Forms (WTMF). These updates are based on direct observation in the field by DNR personnel, forest landowners, fish survey contractors, and others.

During the reporting year, DNR GIS staff entered approximately 5,600 updates into the Hydrography data set based on 885 Water Type Modification Forms. As of the end of June 2014, the WTMF backlog was 214.

In June 2014, we completed a three-year project to convert the DNR Hydrography data editing from outdated software to the current department standard. In the process, we greatly improved the editing tools and the quality control process. We anticipate that these changes will decrease the data entry time for each WTMF and increase the overall data integrity of the database.

Road Maintenance and Abandonment Plan Point Data Set

The Road Maintenance and Abandonment Plan Points dataset is compiled from individual RMAP Annual Accomplishment and Planning Reports and other sources into a statewide data system. This dataset is a work in progress. Not all points have been entered or updated. They represent the information that we have compiled to date. We continue to work to make the dataset as complete as possible. Revised datasets are posted periodically to the Forest Practices (FP) RMAP Program Stakeholder Review Site.

During this reporting period, we made a change to the FP RMAP Points data set. The original database included not only points associated with large forest landowner RMAPs, but also road maintenance points associated with small forest land owners, counties and federal agencies. In an effort to improve our data set, we have separated out only those points that are associated with a full RMAP. Small forest landowner points and points outside of DNR Forest Practices' jurisdiction were removed from the RMAP Points dataset and moved to their own feature classes.

We are currently in the process of creating a Small Forest Landowner RMAP Checklist database. It is still under development at this time.

We published the revised version of the FP RMAP Points data set in September 2013. This dataset was updated again in June 2014. The forest practices RMAPs specialists in DNR region offices worked diligently to update this version of the data set, filling in many barrier replacement dates that were previously missing. It is the most complete dataset to date.

15. Forest Practices Program Budget

15.1 Introduction

In 2012 the Washington State Legislature passed 2ESSB 6406 to enact the Forest Practices Application Account (FPAA). This account was created to fund the implementation of hydraulic project integration, which shifted the responsibility for approving hydraulic projects on forestland to the Department of Natural Resources (DNR), established a new fee structure for Forest Practices Applications (FPAs), and streamlined the permitting process. Initially, revenue to this account under-performed fiscal note expectations by 65%, and it was not until this fiscal year the account generated sufficient revenue to fund the work at sustainable levels.

In 2013, the Governor and Washington State Legislature passed the 2013-2015 biennial operating budget bill which mandated fund shifts for the Forest Practices programs. One-time funding from the Aquatics Land Enhancement Account (ALEA) and Environment Legacy Stewardship Account (ELSA) replaced 26 percent of the General Fund-State (GF-S) appropriation for the Forest Practices programs.

Stakeholder-driven and supported strategic reinvestment funding from the fund balance in the Forests and Fish Support Account (FFSA) continued to support core programs in Operations and Small Forest Landowner assistance, while maintaining participation grants in the Adaptive Management Program.

The above mentioned five operating funds subsidize the Forest Practices core programs and support the scientific research to sustain the state's Forest Practices Habitat Conservation Plan (FP HCP) and Clean Water Act (CWA) assurances.

15.2 2013-2015 Biennial Allocation by Activity

The Forest Practices Program is organized into four functional activities. The following lists what is funded within each functional activity.

Forest Practices Act & Rules (Operations)	Adaptive Management Program	Small Forest Landowner Office	Program Development
Application Processing	Adaptive Management Staff	SFLO Program and Operations	Forest Practices Board
Compliance Monitoring	Adaptive Management Projects	Forest Stewardship and Landowner Assistance	Rule Making/ Board Manual
Enforcement	Forest and Fish Support Account: Participation grants to tribes /tribal organizations Participation grants to non-profits Participation grants to Ecology & Fish and Wildlife Departments	Forest and Fish Support Account: One-time funding for the inventory of forest roads on small forest landowner properties	
RMAPs			
IT/GIS Development & Support			
Stakeholder Assistance Training			
Forest and Fish Support Account: One time funding for Forest Practices Application Review System (FPARs) GIS database update & RMAP field specialist			
Forest Practices Application Account: Forest Practices Applications with activities carried out in water, such as the construction, removal, or replacement of a culvert or bridge			
Department of Fish & Wildlife Interagency agreement for concurrent consultation on forest practices hydraulic projects			

The 2013-2015 biennial allocation for the Forest Practices Program exceeds the \$22.7 million funding level minimum measured in 2005 dollars as identified in the 2012 Settlement Agreement. The Forest Practices base biennial allocation by funding source is reflected below (Table 1).

Table 1: 2013-2015 Biennium Operating Allocation

2013-2015 Base Allocation by Activity	FTEs	Total GF-S	Total FFSA	Total FPAA	Total ALEA	Total ELSA	TOTAL FUNDS
Forest Practices Act & Rules	106.80	\$14,782,300	\$333,100	\$1,271,300	\$755,400	\$1,613,900	\$18,756,000
Forest Practices Manage Adaptively	4.24		\$10,923,700		\$459,600		\$11,383,300
Small Forest Landowner	3.00		\$179,800		\$372,300		\$552,100
Program Development	4.99				\$826,000		\$826,000
TOTALS	119.03	\$14,782,300	\$11,436,600	\$1,271,300	\$2,413,300	\$1,613,900	\$31,517,400

15.3 2011-2013 Biennium Operating Expenditures by Activity

The Forest Practices Program expended a total of \$13.8 million in fiscal year 2014. Approximately \$1 million of the Forest Practices Application Account financed an interagency agreement with Washington Department of Fish & Wildlife (WDFW) for concurrent consultation on forest practices hydraulic projects; two statewide forest practices hydraulic projects trainings; and additional foresters in five regions. To date \$71,570 of the FFSA reinvestment funded a region field specialist in Road Maintenance and Abandonment Plans (RMAP) implementation; a project GIS staff to update data allowing field staff to be more proactive and efficient when reviewing and complying FPAs; and a region small forest landowner assistance forester to assist in the CWA milestone associated with a small forest landowner road/water crossing inventory and risk evaluation. Roughly \$2.9 million of the FFSA continued to support participation grants to tribal, non-profit public interest organizations and two sister state agencies in the Adaptive Management Program (AMP). The AMP research projects expended \$1.3 million and the rest was spent in AMP project support of the FFSA. The AMP administration spent \$271,766 of ALEA funds. The expenditures for this fiscal year are reflected in the table below (Table 2). These expenditures do not include the FTEs and budget for the federally funded portion of the stewardship grants or state capitol funding.

Table 2: FY 14 Expenditures (July 1, 2013 – June 30, 2014)

FY 2014 Expenditures by Activity	FTEs	Total GF-S	Total FFSA	Total FPAA	Total ALEA	Total ELSA	TOTAL FUNDS
Forest Practices Act & Rules	97.04	6,354,595	71,570	1,013,357	343,291	707,940	8,490,753
Forest Practices Manage Adaptively	4.38		4,342,432		251,766		4,594,198
Small Forest Landowner	3.00		87,389		177,809		265,198
Program Development	4.91				435,427		435,427
TOTALS	109.33	\$6,354,595	\$4,501,391	\$1,013,357	\$1,208,293	\$707,940	\$13,785,576

15.4 Full Time Employees

The Forest Practices Program utilized 92% of the statewide allotted full time equivalent (FTEs) positions. Overall the program experienced a position vacancy rate of 3 percent during fiscal year 2014. The reasons for this are primarily due to promotions, retirements, transfers, and recruitment challenges. An example of recruitment challenges include replacing a retired licensed engineering geologist position. Forest Practices Program staff also participated in the statewide fire program which contributed to the differences in charging to the base program. Fire staffing difference accounts for approximately 5 percent of staff time during fiscal year 2014.

The following table (Table 3) reflects where the vacancies/fire participation occurred in the first fiscal year of this biennium. The FTE overage in the Adaptive Management Program reflects overtime for classified staff.

Table 3: Full-Time Equivalent (FTEs)

2013-2015 Allocation by Activity	13-15 BN* FTEs	Actual FY 14 FTEs	Difference
Forest Practices Act & Rules	106.80	97.04	9.76
Forest Practices Manage Adaptively	4.24	4.38	(0.14)
Small Forest Landowner	3.00	3.00	0
Program Development	4.99	4.91	0.08
TOTALS	119.03	109.33	9.70

- BN = biennium

16. Washington Timber Harvest Report

16.1 Introduction

The following Washington State Timber Harvest Report summary, *Timber Harvest by Owner Class and Region*, provides a historical record of timber harvest activities, by landowner class from 1990 to 2014. It includes harvest data for eastern and western Washington.

Timber Harvest by Ownership and Region

Source: Washington State Department of Natural Resources
Internet Homepage: <http://www.dnr.wa.gov/>

<i>Million Board Feet¹</i>							
Calendar Year	State Total	Owner Class				State Region ²	
		Private ³	DNR ⁴	Other State ⁵	Federal	Western	Eastern
1990	5,849	4,330	657	30	832	4,674	1,175
1991	5,104	3,822	535	33	714	4,014	1,090
1992	5,018	4,030	476	43	469	3,955	1,063
1993	4,329	3,513	461	17	338	3,307	1,022
1994	4,086	3,552	323	7	204	3,178	908
1995	4,392	3,720	496	20	156	3,417	975
1996	4,249	3,529	600	33	87	3,273	976
1997	4,245	3,390	645	31	179	3,258	989
1998	4,022	3,319	546	36	121	3,129	892
1999	4,383	3,580	662	15	126	3,375	1,008
2000	4,177	3,507	559	17	94	3,224	953
2001	3,716	3,116	496	26	79	2,842	874
2002	3,582	3,000	457	40	85	2,704	878
2003	4,234	3,413	651	35	136	3,538	696
2004	3,946	3,212	588	51	96	3,175	770
2005	3,730	3,024	594	32	81	2,958	771
2006	3,483	2,946	404	59	75	2,720	763
2007	3,264	2,685	448	36	95	2,613	651
2008	2,758	2,067	515	71	104	2,328	430
2009	2,217	1,423	641	52	101	1,914	303
2010	2,739	1,828	764	27	118	2,387	352
2011	2,984	2,206	637	33	108	2,562	422
2012	2,833	2,193	515	36	328	2,358	475
2013	3,179	2,525	513	50	90	2,712	467

¹Scribner log scale.

²Boundary between the two regions is the county lines along the crest of the Cascade Range.

³ Private includes large forest landowners, small forest landowners, industrial timber owners, and Native American forests.

⁴Harvests from lands managed by the Washington State Department of Natural Resources (DNR).

⁵Includes public lands owned by cities, counties, public utilities, and state agencies other than Department of Natural Resources.

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18. List of Acronyms

Agencies and Organizations

the Board	Washington Forest Practices Board
DAHP	Department of Archaeology and Historic Preservation
DNR	Washington State Department of Natural Resources
RCO	Recreation and Conservation Office
SFLO	Small Forest Landowner Office
SRFB	Salmon Recovery Funding Board
USFWS	United States Fish and Wildlife Service
WCLA	Washington Contract Loggers Association
WDFW	Washington Department of Fish and Wildlife
WDOT	Washington Department of Transportation
WFFA	Washington Farm Forestry Association
WFPA	Washington Forest Protection Association
Ecology	Washington State Department of Ecology

Technical Terms

CMZ	Channel Migration Zone
DFC	Desired Future Condition
EBAI	Equivalent Area Buffer Index
GF-State	General Fund - State
GIS	Geographic Information System
FTE	Full Time Equivalent
FY	Fiscal Year
FPA/N	Forest Practices Application/Notification
FPRAT	Forest Practices Risk Assessment Tool
ICN	Informal Conference Note
LGE	Local Government Entity
LHZ	Landslide Hazard Zonation
LWD	Large Woody Debris
NTC	Notice to Comply
RMZ	Riparian Management Zone
SWO	Stop Work Order
Type F	Fish-bearing stream
Type Np	Non fish-bearing, perennial stream
Type Ns	Non fish-bearing, seasonal stream
WAU	Watershed Administrative Unit
WRIA	Water Resource Inventory Area

Personnel, Programs, Plans and Reports

AMP	Adaptive Management Program
AMPA	Adaptive Management Program Administrator
CMER	Cooperative Monitoring, Evaluation, and Research Committee
CMP	Compliance Monitoring Program
FFFP	Family Forest Fish Passage Program
FFSA	Forests and Fish Support Account
FPARS	Forest Practices Application Review System
FPETS	Forest Practices Enforcement Tracking System
FPF	Forest Practices Forester
FPHCP	Forest Practices Habitat Conservation Plan
FREP	Forestry Riparian Easement Program
FFR	Forests and Fish Report
HCP	Habitat Conservation Plan
IDT	Interdisciplinary Team
ISPR	Independent Scientific Peer Review
RMAP	Road Maintenance and Abandonment Plan
ROSP	Riparian Open Space Program
RP&S	Resource Protection and Services
SRC	Scientific Review Committee
TFW	Timber/Fish /Wildlife

Regulations, Acts and Permits

CWA	Clean Water Act
EIS	Environmental Impact Statement
ESA	Endangered Species Act
ITP	Incidental Take Permit
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
WAC	Washington Administrative Code

19. Appendix



Appendix #1

Summary of Clean Water Act Projects						
Project # /Name	Project Lead	Project Description	Percent (%) Complete	Completed on Time	Original Due Date	Comments
1 - Revised CMER Work Plan	Hotvedt	By July 2009, and in subsequent budget and planning years, the AMP Administrator with the assistance from the Policy and CMER committees will send to the Forest Practices Board a revised CMER work plan and budget that places key water quality studies as high priorities as described in section II(c) regarding the adaptive management program.	100% - for current FY	Yes	July 09	This is an annual task that has been completed successfully twice and signed off on by Ecology through 2010. (See DOE letter dated 10/4/10).

2 – Table 1 Projects	Hotvedt	By July 2009, and in subsequent planning years, the projects identified by Ecology in Table 1 will be reflected in the CMER budget and work plan in a manner that establishes a priority schedule for study development. Failure to meet any of the milestones identified without prior consent by Ecology may be viewed as a basis to revoke the CWA assurances at that point in time.	100%- for current FY	Yes	July 09	This is annual task that has been completed successfully twice and signed off on by Ecology through 2010. (See DOE letter dated 10/4/10).
Project # /Name	Project Lead	Project Description	Percent (%) Complete	Completed on Time	Original Due Date	Comments
3 – AMP Funding Strategy	Hotvedt	The Forest and Fish Policy Budget Committee will identify a strategy that will be implemented with caucus principal support to secure stable, adequate, long-term funding for the AMP.	100%	Yes	September 09	Project is complete. The Forests and Fish Policy Committee developed the strategy they would use to seek out sufficient long term stable funding for the Adaptive Management Program. That strategy, while thus far unsuccessful in finding long term funds, satisfies milestone number 3 according to Ecology. (See DOE letter dated 10/4/10).

4 - Compliance Monitoring Stakeholder Charter	Obermeyer	DNR will complete the Charter for the Compliance Monitoring Stakeholder Guidance Committee and determine which issues identified herein related to compliance monitoring will be dealt with by the committee. This is intended to help move these issues forward on schedule as well as to flag the items for which an alternative process for resolution is needed.	100%	Yes	October 09	Project is complete. Ecology provided final project sign-off on 12/10/09 (see email).
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Project # /Name	Project Lead	Project Description	Percent (%) Complete	Completed on Time	Original Due Date	Comments
5 - Protocols and Standards Training	Hotvedt	The AMP program administrator, with the assistance of CMER and Policy, will complete the ongoing training sessions on the AMP protocols and standards for CMER, and Policy. This is intended to remind participants of the agreed upon protocols. Opportunity should also be provided to identify portions of the protocols and associated rules that need revision to improve performance or clarity. Any identified improvements to the Board Manual or regulations should be implemented at the soonest practical time. Subsequent to this effort, the administrator will offer to provide this training to the Board.	75%	No	December 09	Six new members were appointed to the Forest Practices Board at the beginning of 2012 and all six were given training on the Adaptive Management Program after their first Forest Practices Board meeting on February 14. New members have been and will continue to be trained as they are appointed to the Board. Efforts to identify portions of the protocols and associated rules that need revision to improve performance and clarity have been undertaken by the AMPA and Policy and CMER co-chairs. Policy and CMER co-chairs and the AMPA have itemized and prioritized issues resulting from AMP training and from the Stillwater Report. CMER is currently revising its Protocols and Standards Manual, taking into consideration comments and recommendations from the Stillman Report and others.

Project # /Name	Project Lead	Project Description	Percent (%) Complete	Completed on Time	Original Due Date	Comments
6 - CMER Project Flagging Process	Hotvedt	The AMP Manager with the assistance of the co-chairs of Policy and CMER will initiate a process for flagging projects for the attention of Policy that are having trouble with their design or implementation. This process should identify projects not proceeding on a schedule reflecting a realistic but expedient pace (i.e., a normal amount of time to complete scoping, study design, site selection, etc.).	100%	No	December 09	Project is completed. A briefing on the product was provided to CMER at the August 24, 2010. The milestone was completed with a briefing to Forests and Fish Policy at their October 2010 monthly meeting. The process was accepted by Mark Hicks, Department of Ecology on Nov. 3, 2010.
7 - Rule Element Sampling	Obermeyer	DNR in partnership with Ecology and with the aid of the CMP stakeholder guidance committee will develop general plans and timelines for exploring options and data collection methods for assessing compliance with rule elements such as water typing, shade, wetlands, haul roads and channel migration zones. The goal is to initiate these programs by December 2011.	100%	No	December 09	Project is completed. Final plan delivered to Ecology on March 31, 2010. Ecology sent an e-mail accepting the plan on March 31, 2010.

Project # /Name	Project Lead	Project Description	Percent (%) Complete	Completed on Time	Original Due Date	Comments
8 - Field Dispute Resolution	Obermeyer	DNR with assistance of Ecology and WDFW will evaluate the existing process for resolving field disputes and identify improvements that can be made within existing statutory authorities and review times. Although resolution of the specific issue at hand should be a goal, the overarching purpose of this milestone is to establish a process that will identify the basis for the dispute and to put in place revised guidance, training, reporting pathways, other measures that will minimize the reoccurrence of similar disputes in the future. This process should consider how to best involve the appropriate mix of both policy and technical participants to thoroughly resolve the issue at hand.	100%	No	January 10	Project complete. Final document sent to Mark Hicks at Ecology. Mark Hicks approved the completion of the milestone. See email dated 11/3/10.
9 - Stakeholder RMAP Participation	Mahan	As part of the RMAP annual meeting process, DNR should ensure opportunities are being provided in all the regions to obtain input from Ecology, WDFW, and tribes formally participating in the forest and fish process regarding road work priorities.	100%	No	January 10	Project completed on 8/9/11 when the forest practices board agreed to process changes and board manual changes in the RMAP process. Mark Hicks signed off on completion on 9/2/11.

Project # /Name	Project Lead	Project Description	Percent (%) Complete	Completed on Time	Original Due Date	Comments
10 - Water Type Modification Review Process	Tasker	DNR in consultation with WDFW, Ecology, and the tribes will develop a prioritization strategy for water type modification. The intent of this strategy will be to manage the number of change requests sent to cooperating agencies for 30-days review so it is within the capacity of those cooperators to respond to effectively. The strategy should consider standardizing the current ad hoc process of holding monthly coordination meetings with agency and tribal staff in all the DNR regions. This should allow group knowledge and resources to be more efficiently used to evaluate change requests.	100%	Yes	February 10	Project is complete. The Regions have been conducting their WTR Team meetings and implementing the process. See Hicks email dated 11/24/10 for final Ecology approval.
11 - Water Typing On-Line Guidance	Mahan	DNR Forest Practices will establish online guidance that clarifies existing policies and procedures pertaining to water typing. The intention is to ensure regional staff and cooperators remain fully aware of the most current requirements and review processes for changing water type and coordinating the review of multidisciplinary teams.	100%	No	May 10	Project complete. See Mark Hick's email dated 9/24/12 for final Ecology approval.

Project # /Name	Project Lead	Project Description	Percent (%) Complete	Completed on Time	Original Due Date	Comments
12 - Certification Framework	Casey	DNR with consultation with Ecology and WDFW (or with the CMP stakeholder guidance committee), will establish a framework for certification and refresher courses for all participants responsible for regulatory or CMP assessments. This will be focused on aiding in the application of rules regarding bankfull width, CMZ boundaries, application of road rules, and wetlands. Consideration should be given to including a curriculum of refresher courses on assessing difficult situations.	100%	No	June 10	Forest Practices Training Manager was hired in May 2012. Framework development will continue in 2013. Compliance Monitoring, Wetland, and Unstable Slopes training continues to be offered to Forest Practices staff and stakeholders. Milestone was signed off as complete by Mark Hicks on 9/10/13.
13a, b, c - Individual Landowner Tracking	Casey	By June 2010, DNR, Ecology, and WDFW will meet to review existing procedures and recommend improvement needed to more effectively track compliance at the individual landowner level. The goal will be to ensure the compliance pattern of individual landowners can be effectively examined. This should consider the types and qualities of enforcement actions that occur (e.g., conference notes, notices of correction, stop work orders, penalties.)	13a - 100% 13b - 100% 13c - 100%	Yes Yes Yes	Jun-2010 Oct-2010 May-2012	The project was broken into three separate milestones with individual due dates: 13a - By June 2010: This project is completed - the group evaluated the current data base that is used to track compliance and determined that it is acceptable. See DOE acceptance in 11/3/10 email. 13b - By October 2010: This project is completed. DNR, Ecology, and WDFW conducted an initial assessment of trends in compliance and enforcement actions taken at the individual landowner level. The process to review compliance and enforcement trends for individual landowners was established and

Project # /Name	Project Lead	Project Description	Percent (%) Complete	Completed on Time	Original Due Date	Comments
						<p>Accepted by Mark Hicks, Department of Ecology on Nov. 3, 2010.</p> <p>13c - By May 2012: This project is completed and accepted by Mark Hicks, Department of Ecology via email on June 8, 2012. Ecology accepted a spreadsheet that "documents an effective format for tracking and communicating patterns of compliance at the individual landowner level. Maintaining compliance data in this straightforward format will readily allow the information to be examined at both annual and longer time scales."</p>

Project # /Name	Project Lead	Project Description	Percent (%) Complete	Completed on Time	Original Due Date	Comments
14 - Riparian Non-Compliance	Obermeyer/Jackson	DNR with the assistance of Ecology, will assess the primary issues associated with riparian noncompliance (using the CMP data) and formulate a program of training, guidance, and enforcement believed capable of substantially increasing the compliance rate - with a goal of getting greater than ninety percent compliance by 2013. Ecology will consider the rating of noncompliance since not all infractions have the same effect on public resources (e.g., is it predominately at levels within reasonable field method limits or likely to occur even with due diligence) when determining if this compliance target rate milestone has been satisfied.	100%	No	Jul-10	Project is complete. Ecology accepted the final document, <i>Improving Riparian Management one Compliance – A strategy to meet the Clean Water Assurances, Washington State Department of Natural Resources, Forest Practices Division, 8/1/12</i> . The milestone was accepted as completed via an email from Mark Hicks dated 8-10-12.
15 - SFL Road Risk Evaluation Strategy	Hicks/Engel	Ecology will develop a plan for evaluating the risk posed by SFL roads for delivery of sediments to waters of the state. DNR has developed a SFL roads inventory form and conducted a pilot roads inventory project using the form. DNR is actively developing a plan to implement a voluntary SFL roads inventory statewide. The SFL roads	95%	No	Jul-10	DNR continues to develop a statewide strategy to implement the voluntary SFL roads inventory. This effort includes promoting voluntary participation by SFL's by DNR stewardship foresters, forest practices foresters, FFFPP foresters and conservation easement foresters, and by

		inventory form and the draft SFL roads report, including results from the pilot roads inventory project, have been sent to Ecology				partnering with Washington Farm Forestry Association. DNR received a small grant from the Northwest Fish and Wildlife Foundation to work in partnership with Northwest Natural Resources Group foresters to promote voluntary SFL roads inventory participation in NW Washington.
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Project # /Name	Project Lead	Project Description	Percent (%) Complete	Completed on Time	Original Due Date	Comments
16 - Type N Rules Evaluation Strategy	Engel	Policy, in consultation with CMER, developed and the Board approved a strategy to examine the effectiveness of the Type N rules in protecting water quality. This strategy includes: 1. Ranking and funding of the Type N studies as highest priorities for CMER research. 2. Completing a comprehensive literature review examining the effects of buffers on streams physically similar to the Type Np waters in the forest practices rules prior to completion of the Type N basalt effectiveness study. One element of the strategy has not been completed: The development for inclusion in the forest practices board manual of a protocol for identifying with reasonable accuracy the uppermost point of perennial flow, or develop documentation demonstrating the spatial and temporal accuracy of the existing practice used to identify this point.	95%	No	Jul-10	The TFW Policy Committee has agreed to the dry season protocol for identifying the uppermost point of perennial flow (UMPPF) for Type N Waters. It is hoped to reinvigorate the process to develop a wet season protocol to identify the UMPPF during calendar year 2015.

Project # /Name	Project Lead	Project Description	Percent (%) Complete	Completed on Time	Original Due Date	Comments
17 - Alternate Plan Evaluation	Anderson/Barnes	DNR, in partnership with Ecology, and in consultation with WDFW, the Tribes, and the SFL advisory committee, will design a sampling plan to gather baseline information sufficient to reasonably assess the success of the alternate plan process. This sampling plan should include how to select sample sites, how to best document the content and assumptions contained in the alternate plan, what to monitor and how frequently to do so, and responsibilities for who will conduct the sampling. The goal of this effort is to initiate data collection in the 2011 field season.	95%		Oct-10	Field work is completed as of September 2012, with suggested monitoring concepts for complex alternate plans. The Forest Practices Division is developing program guidance to further refine these concepts and require they be incorporated into the process statewide.
18- Independent AMP Review	Hotvedt	The AMP Program administrator shall initiate the process of obtaining an independent review of the AMP. This review shall be done by representatives of an independent, third party research organization.	20%	No	Dec-10	A LEAN event was completed in May 2012 that recommended a streamlined approach to developing CMER study designs. The approach would continue to require CMER approval of final study designs, but excluded multiple intermediate decision points associated with the current review and approval processes. The recommended process will be tested using a pilot on a CMER project, yet to be determined. In addition, Policy has recommended

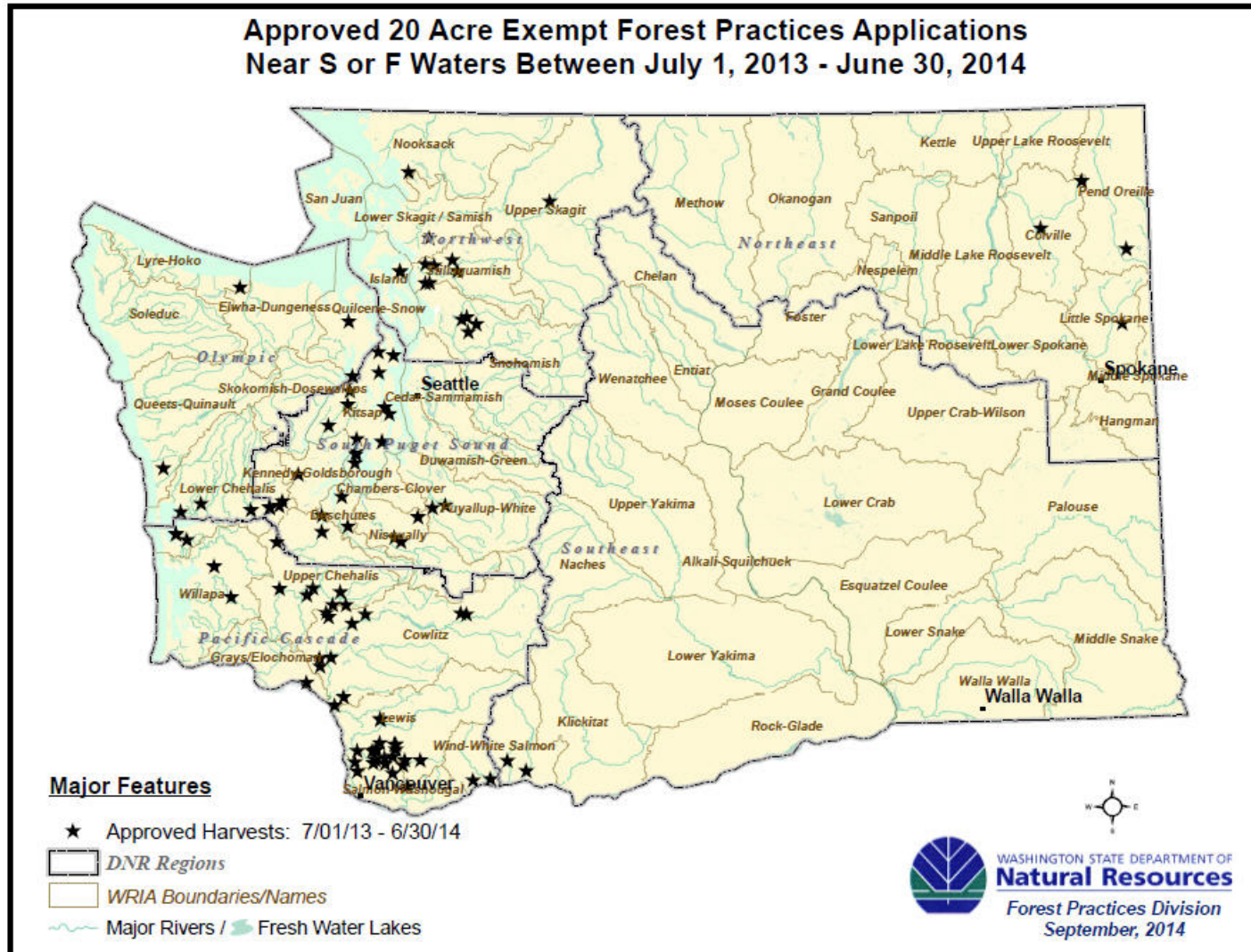
Project # /Name	Project Lead	Project Description	Percent (%) Complete	Completed on Time	Original Due Date	Comments
						AMP rule changes and is currently revising the AMP Board Manual 22 to reform the AMP. Changes include an addition of three caucuses, shortening the dispute resolution process timeline, allowing CMER to invoke Stage 2 dispute resolution, and creation of a CMER project master schedule that lines out projects over the next 15+ years.
19 - Water Type Modification Strategy Review	Mahan	DNR in consultation with WDFW, Ecology, and the Tribes will complete an evaluation of the relative success of the water type change review strategy. Results of this review would be used to further refine the strategy.	100%	Yes	Dec-11	Ecology accepted the milestone as complete as stated in a memo (email) from Mark Hicks on 3-18-13 - "The purpose of this memo is to provide a formal record of completion of the CWA Assurances' milestone for identifying and making any improvements to the recently adopted water typing review strategy."

Project # /Name	Project Lead	Project Description	Percent (%) Complete	Completed on Time	Original Due Date	Comments
20 -RMAP Summary	Potter	DNR with the assistance of large landowners, will provide summary information for all industrial landowners having RMAPs. The summary information will include at a minimum: Date RMAP completed, total miles of road covered under the RMAP, total miles describing the strategy for bringing all roads into compliance by 2016 that demonstrates evenflow or otherwise provides confidence that compliance will be	100%			Project complete on 8/9/11. The Forest Practices Board agreed to process changes, and Board Manual changes that completed this Milestone. Mark Hicks signed off as complete on 9/2/11.

Project # /Name	Project Lead	Project Description	Percent (%) Complete	Completed on Time	Original Due Date	Comments
		attained by 2016. If reasonable and feasible, the summary will show the annual progress on road and barrier improvement that has occurred since the inception of the RMAP, and DNR will provide a master summary for all industrial landowners combined.				
21-SFL Roads Report	Hicks/ Engel/	Ecology will prepare a summary report assessing the progress of SFLs in bringing their roads into compliance with road best management practices, and any general risk to water quality posed by relying on the checklist RMAP process for SFLs. If a significant portion of SFL roads are estimated to pose a risk of damage to public resources, then a report will be prepared in time to brief the Legislature in December 2013. Ecology will work with DNR and the SFL advisory committee to develop a plan for evaluating the risk posed by SFL roads for delivery of sediments to waters of the state. DNR has developed a SFL roads inventory form, conducted a pilot roads inventory project using the form, and is actively developing a plan to implement a voluntary SFL roads inventory statewide.	50%		13-Nov	This report is due to the legislature in 2013. DNR is developing a statewide strategy to implement their voluntary SFL roads inventory. This efforts includes promoting voluntary participation by SFL's by DNR stewardship foresters, forest practices foresters, FFFPP foresters and conservation easement foresters, and by partnering with WFFA. DNR received a small grant from the Northwest Fish and Wildlife Foundation to work in partnership with Northwest Natural Resources Group foresters to promote voluntary SFL roads inventory participation in NW Washington.

22-Unstable Slopes Rules Compliance	Engel/ Lingley	Initiate a program to assess compliance with the unstable slopes rules. The DNR Forest Practices Science Team (FPST) initiated a spreadsheet beginning 1/1/2012 to track landowner development of geological information needed address potentially unstable slopes and landforms associated with FPAs. This spreadsheet can be modified to assess landowner compliance to the unstable slopes forest practices rules including: 1. adequacy of geologic information for DNR to classify FPA; 2. Thoroughness of geotechnical reports associated with SEPA and Class IV-Special FPAs; 3. Landowner accuracy and compliance to field delineated boundaries of unstable slopes.	40%		2012	This new "forest practices program" milestone was transferred to the program milestone list in July 2011. It was originally listed by Ecology under CMER milestones.
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Appendix #2a: Approved 20 Acre Exempt FPAs Near S or F Waters 7/1/13 – 6/30/14



Appendix #2b: Approved 20 Acre Exempt FPAs Near S or F Waters 6/5/06 – 6/30/14

