



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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Memorandum

July 20, 2023

TO: Forest Practices Board

FROM: Brandon Austin, Forest Policy Lead 

SUBJECT: Clean Water Act Milestone Update

The Washington State Department of Ecology (Ecology) committed to providing the Forest Practices Board (Board) with periodic updates on progress being made to meet corrective milestones established for retaining the Clean Water Act 303(d) Assurances (Assurances) for the Forest Practices Rules (Title 222 WAC) and Programmatic Habitat Conservation Plan (HCP, 2006). The last update to the Board was at the May 2022 Board meeting.

Ecology continues to support the adaptive management program (AMP) and track the progress of the corrective milestones. Nine research milestones remain representing five projects, with three projects currently underway and two project off-track or not progressing. Of the original program implementation milestones, one is currently underway with completion expected in 2024 and one is not progressing (awaiting development of the water typing rule and associated Board Manual).

Enclosed are two tables showing the milestones and their status. Points of note are highlighted in red and reflect changes since our last briefing in 2021:

- Table 1 shows the CMER Research Milestones. Scoping, study design, implement and complete (final report) are used to indicate the different steps of a Clean Water Act (CWA) project and occur in different calendar years. A CWA project may have completed scoping and study design but be delayed or off-track for implementation or completion.
- Table 2 shows the non-CMER project milestones. These milestones are implemented outside of the Cooperative Monitoring, Evaluation, and Research (CMER) program and are largely within the control of the Forest Practices Operations Section of the Department of Natural Resources (DNR) or the Timber Fish and Wildlife Policy Committee (Policy).

Please contact me if you have any questions or concerns (360) 890-5882.

Enclosures: Table 1. Summary CMER Research Milestones and their status  
Table 2. Summary Non-CMER Project Milestones and their status.

**Table 1. Summary CMER Research Milestones and their current status.**

<i>CMER Research Milestones</i>		
Description of Milestone		Status as of <b>March 2023</b>
2009	Complete: <u>Hardwood Conversion – Temperature Case Study</u> (Completed as data report)	<b>Completed</b> June 2010
	Study Design: <u>Wetland Mitigation Effectiveness</u>	<b>Completed</b> October 2010
2010	Study Design: <u>Type N Experimental in Incompetent Lithology</u>	<b>Completed</b> August 2011
	Complete: <u>Mass Wasting Prescription-Scale Monitoring</u>	<b>Completed</b> June 2012
	Scope: <u>Mass Wasting Landscape-Scale Effectiveness</u>	<b>Milestone Eliminated</b>
	Scope: <u>Eastside Type N Effectiveness</u>	<b>Completed</b> November 2013
2011	Complete: <u>Solar Radiation/Effective Shade</u>	<b>Completed</b> June 2012
	Complete: <u>Bull Trout Overlay Temperature</u>	<b>Completed</b> May 2014
	Implement: <u>Type N Experimental in Incompetent Lithology</u>	<b>Completed</b> October 2017
	Study Design: <u>Mass Wasting Landscape-Scale Effectiveness</u>	<b>Milestone Eliminated</b>
2012	Complete: <u>Buffer Integrity-Shade Effectiveness</u>	<b>Completed</b> November 2018
	Literature Synthesis: <u>Forested Wetlands Literature Synthesis</u>	<b>Completed</b> January 2015
	Scoping: <u>Examine the effectiveness of the RILs in representing slopes at risk of mass wasting.</u>	<b>Completed</b> April 2017
	Study Design: <u>Eastside Type N Effectiveness</u>	<b>Completed</b> March 2018

<b>CMER Research Milestones</b>		
	<b>Description of Milestone</b>	<b>Status as of March 2023</b>
2013	Scoping: <u>Forested Wetlands Effectiveness Study</u>	<b>Completed</b> December 2016
	<u>Wetlands Program Research Strategy</u>	<b>Completed</b> January 2015
	Scope: <u>Road Prescription-Scale Effectiveness Monitoring</u>	<b>Completed</b> March 2016
	Study Design: <u>Examine the effectiveness of the RILs in representing slopes at risk of mass wasting.</u>	<b>Underway</b> Study is being designed and implemented in five separate projects.
	Implement: <u>Eastside Type N Effectiveness</u>	<b>Underway</b> Study is in implementation with some harvests completed and one unit planned for summer 2023 . Implementation through 2025. Study should be complete by 2028.
2014	Complete: <u>Type N Experimental in Basalt Lithology</u>	<b>Completed</b> August 2017
	Study Design: <u>Road Prescription-Scale Effectiveness Monitoring</u>	<b>Completed</b> February 2017
	Scope: <u>Type F Experimental Buffer Treatment</u>	<b>Completed</b> December 2015 Projected completion of study 2028.
	Implementation: <u>Examine the effectiveness of the RILs in representing slopes at risk of mass wasting</u>	<b>Underway</b> Complete project 2 with final report in 2023. Complete work projects 3 & 4 with final reports in 2025. Complete project 5 in 2026 with final report in 2027.
	Study Design: <u>Forested Wetlands Effectiveness Study</u>	<b>Complete</b> Implementation expected to start spring 2022.
2015	Complete: <u>First Cycle of Extensive Temperature Monitoring</u>	<b>Completed</b> April 2019.

<b>CMER Research Milestones</b>		
<b>Description of Milestone</b>		<b>Status as of March 2023</b>
	Scope: <u>Watershed Scale Assess. of Cumulative Effects</u>	<b>Off Track</b> Project intended to follow other effectiveness monitoring studies which are behind schedule. Funding to begin in 2029.
	Scope: <u>Amphibians in Intermittent Streams</u> (Phase III - renamed: Water Temperature and Amphibian Use in Type Np Waters with Discontinuous Surface Flow Project)	<b>Underway</b> Expected April 2023
2017	Study design: <u>Watershed Scale Assess. of Cumulative Effects</u>	<b>Off Track</b> Expected 2029.
	Study Design: <u>Amphibians in Intermittent Streams</u> (Phase III - renamed: Water Temperature and Amphibian Use in Type Np Waters with Discontinuous Surface Flow Project)	<b>Underway</b> Expected in 2025.
2018	Complete: <u>Roads Sub-basin Effectiveness</u>	<b>Not Progressing</b> Project to be re-scoped in 2029 with completion in 2032.
	Implement: <u>Watershed Scale Assess. of Cumulative Effects</u>	<b>Off Track</b> Implementation in 2030.
	Complete: <u>Type N Experimental in Incompetent Lithology</u>	Complete August 2021
2019	Complete: <u>Eastside Type N Effectiveness</u>	<b>Underway</b> Projected completion in 2028.

**Table 2. Summary Non-CMER Project Milestones and their current status.**

<i>Non-CMER Project Milestones</i>		
	<b>Summarized Description of Milestone</b>	<b>Status as of <span style="color: red;">March 2023</span></b>
2009	July 2009: CMER budget and work plan will reflect CWA priorities.	<b>Completed</b> October 2010
	September 2009: Identify a strategy to secure stable, adequate, long-term funding for the AMP.	<b>Completed</b> October 2010
	October 2009: Complete Charter for the Compliance Monitoring Stakeholder Guidance Committee.	<b>Completed</b> December 2009
	December 2009: Initiate a process for flagging CMER projects that are having trouble with their design or implementation.	<b>Completed</b> November 2010 Process not being used in Policy or CMER.
	December 2009: Compliance Monitoring Program to develop plans and timelines for assessing compliance with rule elements such as water typing, shade, wetlands, haul roads and channel migration zones.	<b>Completed</b> March 2010
	December 2009: Evaluate the existing process for resolving field disputes and identify improvements that can be made within existing statutory authorities and review times.	<b>Completed</b> November 2010
	December 2009: Complete training sessions on the AMP protocols and standards for CMER, and Policy and offer to provide this training to the Board. Identify and implement changes to improve performance or clarity at the soonest practical time.	<b>Completed</b> May 2016
2010	January 2010: Ensure opportunities during regional RMAP annual reviews to obtain input from Ecology, WDFW, and tribes on road work priorities.	<b>Completed</b> September 2011
	February 2010: Develop a prioritization strategy for water type modification review.	<b>Completed</b> March 2013
	March 2010: Establish online guidance that clarifies existing policies and procedures pertaining to water typing.	<b>Completed</b> March 2013
	June 2010: Review existing procedures and recommended any improvements needed to effectively track compliance at the individual landowner level.	<b>Completed</b> November 2010

<b>Non-CMER Project Milestones</b>		
	<b>Summarized Description of Milestone</b>	<b>Status as of March 2023</b>
	June 2010: Establish a framework for certification and refresher courses for all participants responsible for regulatory or CMP assessments.	<b>Completed</b> September 2013
	July 2010: Assess 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.	<b>Completed</b> August 2012
	July 2010: Ecology in Partnership with DNR and in Consultation with the SFL advisory committee will develop a plan for evaluating the risk posed by SFL roads for the delivery of sediment to waters of the state.	<b>Completed</b> December 2018
	July 2010: Develop a strategy to examine the effectiveness of the Type N rules in protecting water quality at the soonest possible time that includes: a) Rank and fund Type N studies as highest priorities for research, <u>b) Resolve issue with identifying the uppermost point of perennial flow by July 2012</u> , and c) Complete a comprehensive literature review examining effect of buffering headwater streams by September 2012.	<b>Not Progressing</b>  Part 'b' to be addressed after water typing system rule and Board Manual work is completed.
	October 2010: Conduct an initial assessment of trends in compliance and enforcement actions taken at the individual landowner level.	<b>Completed</b> November 2010
	October 2010: Design a sampling plan to gather baseline information sufficient to reasonably assess the success of alternate plan process.	<b>Completed</b> December 2014
	December 2010: Initiate process of obtaining an independent review of the Adaptive Management Program.	<b>Completed</b> February 2021
2011	December 2011: Complete an evaluation of the relative success of the water type change review strategy.	<b>Completed</b> March 2013
	December 2011: Provide more complete summary information on progress of industrial landowner RMAPs.	<b>Completed</b> September 2011
2012	October 2012: Reassess if the procedures being used to track enforcement actions at the individual land owner level provides sufficient information to	<b>Completed</b> June 2012

<b>Non-CMER Project Milestones</b>		
	<b>Summarized Description of Milestone</b>	<b>Status as of March 2023</b>
	potentially remove assurances or otherwise take corrective action.	
	Initiate a program to assess compliance with the Unstable Slopes rules.	<b>Completed</b> October 2017
2013	November 2013: Prepare a summary report that assesses 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.	<b>Underway</b> State, Tribal, and Small Landowner caucus staff cooperatively developed a plan to conduct online and field surveys to inform the condition of SFL roads. Implementation began in 2019. According to DNR the field survey is about 80% complete based on the goal of 200 surveys. Additional responses from landowners have been slow.

**Status terminology:**

- “Completed”** - milestone has been satisfied (includes those both on schedule and late).
- “On Track”** - work is occurring that appears likely to satisfy milestone on schedule.
- “Underway”** - work towards milestone is actively proceeding, but likely off schedule.
- “Earlier Stage Underway”** – project initiated, but is at an earlier stage (off schedule) than the listed milestone.
- “Not Progressing”** - no work has begun, or work initiated has effectively stopped.
- “Off Track”** - 1) No work has begun and inadequate time remains, 2) key stakeholders are not interested in completing the milestone, or 3) attempt at solution was inadequate and no further effort at developing an acceptable solution is planned.