



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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Memorandum

April 26, 2021

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 provide 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 in May 2019. Since that time the Director of the Department of Ecology sent the attached letter to the Forest Practices Board extending the assurances until December 2021. In addition to the expectation the rules are updated address completed science from the Cooperative Monitoring, Evaluation and Research Committee (CMER), the letter stated that continued progress on the milestones is critical, especially those research milestones that show whether the rules are achieving water quality.

Under state law (RCW 90.48.420(1)) the adoption of “forest practices rules pertaining to water quality by the forest practices board shall be accomplished after reaching agreement with the director of the department (*Ecology*) or the director's designee on the board... so that compliance with such forest practice[s] rules will achieve compliance with water pollution control laws”. This directive is integral to meeting legislative intent to use the Forest Practices Rules affecting water quality protection to satisfy requirements of section 208, 209, and 305 of the federal Clean Water Act, as regards silvicultural activities (RCW 90.48.425) and to achieve compliance with all applicable requirements of federal and state law with respect to nonpoint sources of water pollution from forest practices” (RCW 76.09.010(2)).

The Forests and Fish Report (FFR), adopted by the Board under direction of RCW 77.85, includes the goal to meet the requirements of the Clean Water Act for water quality on non-federal forest lands and using the Adaptive Management Program (AMP) to revise the rules as needed. The FFR, with this goal and the performance target of meeting the state standards, was subsequently incorporated into the HCP (Introduction and Implementation Agreement clause 10.1).

As part of the FFR, Ecology recognized the proposed rules would improve water quality protection and may meet water quality standards long term, reducing the urgency to develop TMDLs. Ecology provided assurances to landowners that the new regulations would be relied on to protect water quality for a 10-year period (until July 1, 2009) while the rules were tested. This was believed to provide adequate time to determine if the rules are effective in achieving water quality.

In 2009 Ecology completed our review of the implementation of the rules and concluded that we could not state that the rules were achieving water quality. Based on the belief the AMP was still capable of testing the rules we established these corrective milestones to serve as benchmarks that if met, would provide us with a level of confidence that the rules were working. Ecology decided to extend the Clean Water Act Assurance for an additional 10 year period, to 2019. The 2009 corrective milestones were established to create a framework for making steady progress in gathering information critical for assessing the effectiveness of the rules in protecting water quality as mandated by state law. Equally important was the intention to stimulate changes that would result in a more effective research program to test the rules consistent with adaptive management and adjust the rules in a timely fashion, through Policy and Board action.

The Assurances are based on the premise that given the mandates in state law (RCW 76.09.370(7)) Ecology and the EPA can rely on the AMP to use sound scientific principles to test the effectiveness of the FFR-based rules in meeting water quality standards, and “to make adjustments as quickly as possible to forest practices” if they are ineffective. It has been more than 20 years since the Assurances were first granted, but water quality aspects for many of the rules remain untested.

In 2019, based on the charter timeline and formation of the *Timber Fish and Wildlife Policy Technical Type N Prescriptions Workgroup*, Ecology granted an additional 2 year extension of the Assurances with the expectation a CR 101 be filed by this summer and a draft CR 102 would be available for public review by the end of the year. At the November 2020 Board meeting, DNR staff presented a work schedule that did not contain the CR 102. Ecology voted no on acceptance of this work schedule. A timeline for rule making has since been developed but does not meet the expectations stated in the 2019 Ecology memo to this Board. Ecology will need certainty the AMP can be relied on to meet the expectations previously stated, and the expectations of the legislature.

In addition this memo from the Ecology Director stated the following:

*Ecology believes that, in addition to committing to rulemaking to protect water temperature on Type N streams, improvements to the Adaptive Management Program Process are necessary to create a program that participants can rely on to test the effectiveness of the rules in protecting water quality and to finally modify those rules as science dictates. Therefore, we urge the Board and the Adaptive Management Program Cooperators to identify and implement system improvements, over this two year period, and to continue to prioritize the completion of the remaining uncompleted research milestones identified in the 2009 Assurances review.*

Enclosed are two tables showing the milestones and their current status. Points of note are highlighted in red and reflect changes since our last briefing in 2019:

- Table 1 shows the CMER Research Milestones. Scoping, study design, implement and complete (final report) are used to indicate the different steps of a 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.

Enclosure

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

<b>CMER Research Milestones</b>		
<b>Description of Milestone</b>		<b>Status as of <span style="color: red;">January 2021</span></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 <span style="color: red;">January 2021</span></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> <span style="color: red;">Study is being designed and implemented in five projects with the first project sent to ISPR 2018, project 2 completed ISPR in 2020.</span>
	Implement: <u>Eastside Type N Effectiveness</u>	<b>Underway</b> <span style="color: red;">Study is in implementation with harvests planned for summer/fall 2021. Implementation through 2027. Study should be complete by 2028.</span>
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>Underway</b> <b>February 2017</b> <span style="color: red;">Unexpected permit delayed the start of study to Spring 2019. Additional issues were encountered with monitoring equipment. Replacement/repairs have pushed the projected completion estimated to 2029.</span>
	Scope: <u>Type F Experimental Buffer Treatment</u>	<b>Scoping Completed</b> December 2015 <span style="color: red;">Study was originally expected to proceed to implementation without a pilot study phase. It was later determined that a pilot study was needed. Since, a pilot study has been completed. Scoping for the full study has been completed. Completion of study scheduled for 2028.</span>

<b>CMER Research Milestones</b>		
<b>Description of Milestone</b>		<b>Status as of January 2021</b>
	Implementation: <u>Examine the effectiveness of the RILs in representing slopes at risk of mass wasting</u>	<b>Earlier Stage Underway</b> Complete project 2 with final report in 2021. 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> Study design approved by CMER December 2019 and presented to Policy in August 2020. Implementation expected to start spring 2022.
2015	Complete: <u>First Cycle of Extensive Temperature Monitoring</u>	<b>Completed</b> April 2019.
	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 (Phase III - renamed: Water Temperature and Amphibian Use in Type Np Waters with Discontinuous Surface Flow Project)</u>	<b>Off Track</b> Project is being re-scoped, expected in 2021.
2017	Study design: <u>Watershed Scale Assess. of Cumulative Effects</u>	<b>Off Track</b> Discussed above for 2015 scoping. Study design expected 2029.
	Study Design: <u>Amphibians in Intermittent Streams (Phase III)</u>	<b>Off Track</b> Scoping scheduled for 2021. Study design expected in 2028.
2018	Complete: <u>Roads Sub-basin Effectiveness</u>	<b>Not Progressing</b> Project to be re-scoped in 2029 with completion in 2032.

<b>CMER Research Milestones</b>		
<b>Description of Milestone</b>		<b>Status as of <span style="color: red;">January 2021</span></b>
	Implement: <u>Watershed Scale Assess. of Cumulative Effects</u>	<p style="text-align: center;"><b>Off Track</b></p> <p>Discussed above for 2015 scoping.  <span style="color: red;">Implementation scheduled to start 2030.</span></p>
	Complete: <u>Type N Experimental in Incompetent Lithology</u>	<p style="text-align: center;"><b>On Track</b></p> <p><span style="color: red;">Report is currently in ISPR with an expected completion summer 2021.</span></p>
2019	Complete: <u>Eastside Type N Effectiveness</u>	<p style="text-align: center;"><b>Earlier Stage Underway</b></p> <p>Discussed for 2013 implementation.  <span style="color: red;">Projected completion in 2028.</span></p>

**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;">January 2021</span><sup>1</sup></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  <span style="color: red;">AMP funding was believed to be secured through the FFSA but came in under expectations for the 2019/21 biennium and additional cuts due to expected revenue shortfalls.</span>
	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  <span style="color: red;">Process not being used in Policy or CMER.</span>
	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



<b>Non-CMER Project Milestones</b>		
	<b>Summarized Description of Milestone</b>	<b>Status as of January 2021<sup>1</sup></b>
	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
	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>  Draft State Auditor Office report presented to the Board February 2021

<b>Non-CMER Project Milestones</b>		
	<b>Summarized Description of Milestone</b>	<b>Status as of January 2021<sup>1</sup></b>
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 potentially remove assurances or otherwise take corrective action.	<b>Completed</b> June 2012
	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>Off Track</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. Due to the Covid 19 Pandemic the field survey is about 50% complete. Completion expected in 2021.

**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.



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December 2, 2019

Forest Practices Board  
PO Box 47012  
Olympia, WA 98504

**Re: Forests and Fish Program – End of 10 year Clean Water Act Extension Period**

Dear Forest Practices Board Members:

Twenty years have passed since the adoption of the 1999 Forests and Fish Report. During the intervening years, the Department of Ecology (Ecology) with the support of the U.S. Environmental Protection Agency, has maintained the commitment to provide the Clean Water Act Assurances (Assurances) for forest practices in Washington State. The Assurances provided promised federal guarantees covering both the Clean Water Act, as well as the Endangered Species Act, to serve as a predictable and a consistent regulatory framework for the forest industry.

Ecology's original Assurances provided a Schedule M-2 of the 1999 Forests and Fish Report. The Assurances established a conditional, ten-year agreement to treat the development of traditional Clean Water Act water cleanup plans (Total Maximum Daily Loads) on Washington's forest lands as a low priority, while relying on the state's forestry rules to ensure water quality standards would be met on forest lands. Maintaining an effective Adaptive Management Program to test the forestry rules and revise them if found inadequate, was a critical condition for maintaining these Assurances.

The original 1999 Assurances established a 2009 milestone to verify that the state's forestry rules were on-track for bringing waterbodies into compliance with water quality standards. In 2009, Ecology's review of the Adaptive Management Program found that it could not demonstrate success in meeting water quality objectives. With commitments from key stakeholder groups, Ecology extended the Assurances for another ten years until 2019, in order to provide more time to verify the effectiveness of the rules or revise them as needed. The extension included key milestones to demonstrate steady incremental improvement in the program.



Key Adaptive Management Program achievements to date include:

- The establishment of long term funding for the Adaptive Management Program.
- The Type F (fish-bearing streams) buffers the effectiveness of monitoring studies conducted in eastern Washington and provides a measure of confidence that the riparian rules are meeting performance targets for thermal water quality protection for these fish-bearing waters.
- The priority Westside Type N (non-fish-bearing streams) hard rock study is complete and a package of Westside Type N studies are due for completion in 2020.

Establishing long term funding for the Adaptive Management Program and completing the above referenced studies is a major achievement since 2009. The challenge we now face is implementing the required adaptive management.

The first two years of the 2009 extension showed good progress in meeting key milestones identified, but the momentum was not sustained through the ten-year extension of the Assurances. A number of milestones established to ensure progress of the Adaptive Management Program to support certainty of meeting water quality objectives remain incomplete. Milestones associated with priority research projects delayed the completion dates for some of the milestones projected to be complete five years beyond their original target dates. Ecology has consistently raised concerns about these missed milestones to the Forest Practices Board during routine updates.

Looking specifically at the science, we have found that the Type N studies clearly show Type N riparian rules need strengthening to protect water quality. Revising the rules to meet water quality objectives was the precursor for the establishment of the Adaptive Management Program. The Timber Fish and Wildlife Policy Committee and the Forest Practices Board have recently agreed to a workgroup process aimed at developing new rule prescriptions. Ecology views this as a positive step and looks forward to the establishment of a clear timeline for such rulemaking.

With the Assurances expiring at the end of this calendar year, I have conducted an in-depth review of the Adaptive Management Program, weighed the many positive features of the program with the ongoing performance concerns and delayed progress. Based on my review, I have decided to extend the Assurances to December 31, 2021. This will provide ample time for Board Members to reach an agreement on the revision of the Type N rules, to protect temperature better.

This extension aligns with the existing Timber Fish and Wildlife Policy Technical Type N Prescriptions Workgroup charter (dated March 7, 2019). Evidence of adaptive management success would be the Board issuing a draft rule available for public comment before the end of 2021. This will require a CR101 filing in the summer of 2021, a draft CR102 developed, and distributed for public review by the end of November 2021.

The Forests Practices Boards

December 2, 2019

Page 3

At the end of 2021, I will consider another extension to the Assurances. If the Type N rules are effectively improved, we will be able to conclude that the Forests and Fish Report and the Adaptive Management Program are working to achieve water quality standards, in which case Ecology will be supportive of extending the Assurances for a longer period.

Ecology believes that, in addition to committing to rulemaking to protect water temperature on Type N streams, improvements to the Adaptive Management Program process are necessary to create a program that participants can rely on to test the effectiveness of the rules in protecting water quality and to timely modify those rules as the science dictates. Therefore, we urge the Board and the Adaptive Management Program Cooperators to identify and implement system improvements, over this two-year period, and to continue to prioritize the completion of the remaining uncompleted research milestones identified in the 2009 Assurances review.

Thank you very much for working with Ecology on protecting Washington State's waters.

Sincerely



Maia D. Bellon  
Director

Enclosure

cc: Environmental Protection Agency  
National Marine Fisheries Service  
United States Fish and Wildlife Service  
Forest Practices Board Liaisons  
Timber Fish and Wildlife Policy

