



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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Memorandum

April 21, 2022

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 2021 Board meeting. Since that time Ecology's Director sent the attached letter to the Board extending the Assurances until December 2022.

In 2009, Ecology reviewed the Forest Practice Rules and concluded the Adaptive Management Program (AMP) needed to provide more information on the effectiveness of the rules in protecting water quality. Corrective milestones were developed for both research development and program improvements within the AMP and a 10-year extension to the Assurances was granted. Ecology granted a second extension of the Assurances in 2019, to December 2021. The decision to extend was largely based on the completion of *Effectiveness of Experimental Riparian Buffers on Perennial Non-fish-bearing Streams on Competent Lithologies in Western Washington* (McIntyre et al, September 2018. CMER #18-100) and the charter timeline development and formation of the *Timber Fish and Wildlife Policy Technical Type N Prescriptions Workgroup*. A third extension, to December 2022, was granted based on the Boards direction to issue a CR101, TFW Policy's work towards recommending Type Np rule prescriptions, and the AMP's establishing a process to address the concerns raised in the State Auditor's review of the program.

Ecology continues to support the AMP and track the progress of the corrective milestones. Five research milestones remain, with four projects currently underway and one project off-track. Of the original program implementation milestones, one is currently underway with completion expected in 2022 and one is not progressing (awaiting development of the water typing rule and associated Board Manual).

In the last year CMER completed and delivered final reports to TFW Policy for the following projects:

- *Effectiveness of Experimental Riparian Buffers on Perennial Non-fish-bearing Streams on Competent Lithologies in Western Washington– Phase 2 (Nine Years after Harvest) – July 2021*
- *Effectiveness of Forest Practices Buffer Prescriptions on Perennial Non-fish-bearing Streams on Marine Sedimentary Lithologies in Western Washington – August 2021*
- *Identifying Distribution Boundaries at the Upper Extent of Fish in Streams Using Environmental DNA – May 19, 2021*
- *Wetland Intrinsic Potential (WIP) Tool – May 20, 2021*

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 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 current status
Table 2. Summary Non-CMER Project Milestones and their current status.
Director Watson letter to the Forest Practices Board – December 3, 2021

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

CMER Research Milestones		
Description of Milestone		Status as of March 2022
2009	Complete: <u>Hardwood Conversion – Temperature Case Study</u> (Completed as data report)	Completed June 2010
	Study Design: <u>Wetland Mitigation Effectiveness</u>	Completed October 2010
2010	Study Design: <u>Type N Experimental in Incompetent Lithology</u>	Completed August 2011
	Complete: <u>Mass Wasting Prescription-Scale Monitoring</u>	Completed June 2012
	Scope: <u>Mass Wasting Landscape-Scale Effectiveness</u>	Milestone Eliminated
	Scope: <u>Eastside Type N Effectiveness</u>	Completed November 2013
2011	Complete: <u>Solar Radiation/Effective Shade</u>	Completed June 2012
	Complete: <u>Bull Trout Overlay Temperature</u>	Completed May 2014
	Implement: <u>Type N Experimental in Incompetent Lithology</u>	Completed October 2017
	Study Design: <u>Mass Wasting Landscape-Scale Effectiveness</u>	Milestone Eliminated
2012	Complete: <u>Buffer Integrity-Shade Effectiveness</u>	Completed November 2018
	Literature Synthesis: <u>Forested Wetlands Literature Synthesis</u>	Completed January 2015
	Scoping: <u>Examine the effectiveness of the RILs in representing slopes at risk of mass wasting.</u>	Completed April 2017
	Study Design: <u>Eastside Type N Effectiveness</u>	Completed March 2018

CMER Research Milestones		
	Description of Milestone	Status as of March 2022
2013	Scoping: <u>Forested Wetlands Effectiveness Study</u>	Completed December 2016
	<u>Wetlands Program Research Strategy</u>	Completed January 2015
	Scope: <u>Road Prescription-Scale Effectiveness Monitoring</u>	Completed March 2016
	Study Design: <u>Examine the effectiveness of the RILs in representing slopes at risk of mass wasting.</u>	Underway Study is being designed and implemented in five separate projects.
	Implement: <u>Eastside Type N Effectiveness</u>	Underway Study is in implementation with harvests planned for summer/fall 2021. Implementation through 2027. Study should be complete by 2028.
2014	Complete: <u>Type N Experimental in Basalt Lithology</u>	Completed August 2017
	Study Design: <u>Road Prescription-Scale Effectiveness Monitoring</u>	Completed February 2017
	Scope: <u>Type F Experimental Buffer Treatment</u>	Completed December 2015 Projected completion of study 2028.
	Implementation: <u>Examine the effectiveness of the RILs in representing slopes at risk of mass wasting</u>	Underway Complete project 2 with final report in 2022. 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>	Complete Implementation expected to start spring 2022.
2015	Complete: <u>First Cycle of Extensive Temperature Monitoring</u>	Completed April 2019.
	Scope: <u>Watershed Scale Assess. of Cumulative Effects</u>	Off Track

CMER Research Milestones		
Description of Milestone		Status as of March 2022
		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)	Underway Expected April 2022
2017	Study design: <u>Watershed Scale Assess. of Cumulative Effects</u>	Off Track 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)	Underway Expected in 2025.
2018	Complete: <u>Roads Sub-basin Effectiveness</u>	Not Progressing Project to be re-scoped in 2029 with completion in 2032.
	Implement: <u>Watershed Scale Assess. of Cumulative Effects</u>	Off Track Implementation in 2030.
	Complete: <u>Type N Experimental in Incompetent Lithology</u>	Complete August 2021
2019	Complete: <u>Eastside Type N Effectiveness</u>	Earlier Stage Underway Projected completion in 2028.

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

<i>Non-CMER Project Milestones</i>		
	Summarized Description of Milestone	Status as of March 2022
2009	July 2009: CMER budget and work plan will reflect CWA priorities.	Completed October 2010
	September 2009: Identify a strategy to secure stable, adequate, long-term funding for the AMP.	Completed October 2010
	October 2009: Complete Charter for the Compliance Monitoring Stakeholder Guidance Committee.	Completed December 2009
	December 2009: Initiate a process for flagging CMER projects that are having trouble with their design or implementation.	Completed 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.	Completed 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.	Completed 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.	Completed May 2016
2010	January 2010: Ensure opportunities during regional RMAP annual reviews to obtain input from Ecology, WDFW, and tribes on road work priorities.	Completed September 2011
	February 2010: Develop a prioritization strategy for water type modification review.	Completed March 2013
	March 2010: Establish online guidance that clarifies existing policies and procedures pertaining to water typing.	Completed March 2013
	June 2010: Review existing procedures and recommended any improvements needed to effectively track compliance at the individual landowner level.	Completed November 2010

Non-CMER Project Milestones		
	Summarized Description of Milestone	Status as of March 2022
	June 2010: Establish a framework for certification and refresher courses for all participants responsible for regulatory or CMP assessments.	Completed 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.	Completed 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.	Completed 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.	Not Progressing 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.	Completed November 2010
	October 2010: Design a sampling plan to gather baseline information sufficient to reasonably assess the success of alternate plan process.	Completed December 2014
	December 2010: Initiate process of obtaining an independent review of the Adaptive Management Program.	Completed February 2021
2011	December 2011: Complete an evaluation of the relative success of the water type change review strategy.	Completed March 2013
	December 2011: Provide more complete summary information on progress of industrial landowner RMAPs.	Completed 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	Completed June 2012

Non-CMER Project Milestones		
	Summarized Description of Milestone	Status as of March 2022
	potentially remove assurances or otherwise take corrective action.	
	Initiate a program to assess compliance with the Unstable Slopes rules.	Completed 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.	Underway 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 83% complete. Completion expected in 2022.

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 3, 2021

Forest Practices Board Members

Sent by email only: patricia.anderson@dnr.wa.gov

Dear Forest Practices Board Members:

Twenty-two 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 (EPA), has maintained the commitment to provide the Clean Water Act Assurances (Assurances) for forest practices in Washington State. The Assurances provided promised state and 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.

The Assurances require Ecology's considered determination that the Adaptive Management Program (AMP) established under the Timber, Fish, and Wildlife (TFW) agreement is effective at improving water quality in the short term and meeting water quality standards in the longer term. For Ecology to continue to uphold the assurances, we must determine that the AMP is functioning as originally envisioned in order to meet these objectives.

As a result of Forests and Fish, we have seen improvements across lands covered by the Forest Practices Act. Through the Road Maintenance and Abandonment Planning (RMAP) requirement, nearly all RMAP plans were completed by the October 31, 2021, deadline, resulting in more than 8,300¹ fish passage barriers corrected, opening more than 5,100 miles of fish habitat. The Washington Department of Natural Resources (DNR) is working with landowners to make sure the few remaining obligations are completed. The Cooperative Monitoring, Evaluation, and Research Committee has completed many studies. The Policy Committee and the Board have implemented and refined the Desired Future Conditions as well as provided two template alternate plans for small forest landowners.

Washington's AMP serves as a model for others. Stakeholders in Oregon have recently committed to a similar process to address regulatory practices within the forestry industry. The Board's motion to direct staff to file a CR-101, to notify the public of their intent to amend existing rules related to non-fish bearing perennial steams (Type Np riparian buffers) in Western Washington, is an encouraging signal to me that the TFW stakeholders are committed to water quality, TFW, and the AMP.

However, there is still much work that remains to be done. The TFW parties must consider process improvements to ensure that the AMP functions effectively and efficiently into the future. It is also imperative that the parties move expeditiously to develop a proposal for Type Np buffer prescriptions. Because I believe the parties are committed to accomplishing both things, Ecology has concluded that it

¹ 2020 Forest Practices Habitat Conservation Plan Annual Report, Chapter 11

is appropriate to allow time for the adaptive management process to demonstrate measurable progress over the next year.

Documented Problems with the Adaptive Management Program

On October 9, 2009, Ecology conditionally extended the Clean Water Act Assurances for a ten-year period. The extension was conditioned on the AMP meeting a scheduled set of milestones for program improvements and research development.

A detailed set of findings accompanied the 2009 extension decision. Those findings identified a number of existing problems with the adaptive management process:

The CWA assurances were established on the condition that an effective adaptive management process (AMP) would be established and maintained. A healthy and effective AMP is central to the ability of Ecology to offer the CWA assurances. The AMP needs to provide a scientific framework for testing whether the forest practices rules are effective in protecting water quality, and for identifying any changes needed to rules not found effective. Substantial progress has been made through establishing the structure and formal operational procedures of the AMP. An AMP board manual was developed to further outline how the program should operate, and significant funding and effort has occurred to get scientific studies underway to test various portions of the rules and guidelines governing forest practices.

In spite of these substantial efforts, the AMP has not completed any studies that directly test the effectiveness of the rules in protecting water quality. The science arm of the AMP has also been largely unsuccessful in providing research findings the Forest and Fish Policy Committee (Policy) and the Forest Practices Board (Board) will reliably use to validate or to revise the forest practices regulations and guidance. There are significant problems with the ability of the policy and science arms of the AMP to work together to test and revise the rules in a timely and effective manner. Part of the problem is simply inherent in a program that seeks to develop consensus among stakeholders with competing interests. But the problems also seem rooted in the foundation of the AMP itself. AMP participants frequently disagree about the appropriate roles of science and policy, as well as what role the initial negotiated forests and fish rules should play in evaluating the acceptability of future changes. These disagreements appear in part to stem from a lack of clarity in the underlying rules and guidance. Combined with poor communication between the science and policy arms of the program, this is compromising the AMP's effectiveness. To the credit of its participants, strategic planning efforts are underway with the intention of identifying and correcting the shortcomings of the program. The Policy committee has developed a strategic plan...with five broad goals supported by multiple objectives and specific tasks designed to revitalize the adaptive management program. There is also general understanding that testing the effectiveness of the rules for protecting water quality must be a top priority if Ecology is to continue the assurances.

The state legislature (RCW 76.09.370) directed that forest practices rules covering aquatic resources only be adopted or changed by the Board where those changes are consistent with recommendations resulting from a scientifically based adaptive management process. The stated purpose of having the adaptive management process is to make adjustments as quickly as possible to portions of the forest practices rules that are not achieving resource objectives. Both as a participant and a reviewer, Ecology has concluded that fundamental improvements are needed to ensure the rules and associated programs will be tested and revised in a timely

manner based on scientific inquiry, as intended by the legislature and consistent with CWA assurances.

On February 23, 2021, the State Auditor issued a performance audit report describing the significant issues that continue to plague the AMP. The Auditor's Office concluded that the program is not "operating as intended" and that, without needed changes, the "program would continue to languish." The Auditor's Office recognized that, while the program was "designed to allow nimble changes to forest practices rules," the program has in fact only resulted in two science-based rule revisions since 2006. The Audit Report contains a number of recommendations designed to get the program on track so that it can perform its functions as intended.

Ecology is aware that the Forest Practices Board has submitted a budget request to address some of the recommendations contained in the Audit Report, and Ecology commends the Board's clear commitment to doing so. In addition, Ecology is grateful that the Public Lands Commissioner is convening a meeting of TFW principals so that we can address these issues at the highest levels of accountability within our respective organizations. Of course, the TFW stakeholders themselves must also commit to program improvement. This will necessarily entail an openness to changing current aspects of the program, such as revisiting the unanimous voting requirement and/or streamlining the dispute resolution process. Because fixing problems with the AMP is so integrally tied to the Clean Water Act Assurances, making clear and measurable progress toward addressing the Auditor's recommendations is necessary to provide Assurances that the forest industry is making progress towards protecting water quality.

Rulemaking for Type Np Streams

The maintenance of forested buffers is critical to protect water quality. Under current rules, non-fish bearing perennial streams (Type Np) receive less forested buffers than fish bearing streams. As a result, the 2009 findings recognized that "the prescriptions associated with the Type Np rules have the greatest potential risk of violating the water quality standards."

On December 2, 2019, Ecology issued another conditional extension of the Clean Water Act Assurances. In doing so, Ecology concluded that the Type Np Hard Rock study² clearly demonstrates the need to strengthen the Type Np riparian rules to protect water quality. Ecology noted that the TFW Policy Committee and the Forest Practices Board "recently agreed to a workgroup process aimed at developing new rule prescriptions."³ In light of this commitment to rulemaking by TFW stakeholders, Ecology extended the Assurances for an additional two years so that the Board would have ample time "to reach an agreement on the Type N rules." As evidence that the Adaptive Management Program was working, Ecology noted that there would need to be a CR101 filing in the summer of 2021 and a draft CR102 distributed for public review by the end of November 2021.

While we are pleased that the Board directed staff to issue a CR101 at its November 2021 meeting, Washington Department of Natural Resources (DNR) staff have not distributed a draft CR102, and there is no feasible pathway for them to distribute a draft by the end of this year. It is clear that the Board did not meet the conditions included in Ecology's 2019 extension of the Assurances insofar as DNR has not issued a draft CR102. Nevertheless, I have spoken with representatives of the TFW stakeholders and perceive a genuine commitment to moving this rulemaking forward. Despite this commitment, it is

² *"Effectiveness of Experimental Riparian Buffers on Perennial Non-fish-bearing Streams on Competent Lithologies in Western Washington", McIntyre et al, September 2018, CMER #18-100*

³ Timber Fish and Wildlife Policy Technical Type N Prescriptions Charter – March 7, 2019

evident that we cannot make progress without meaningfully addressing the issues identified in the 2021 Audit Report. Achievement of our objectives will require a concerted effort by all TFW stakeholders in the TFW process over the next several months.

Clean Water Act Assurances

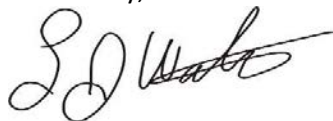
Ecology has determined that it is appropriate to allow time for the AMP to make measurable progress implementing the 2021 Audit Report recommendations and for Policy to make a final recommendation on Type Np buffer prescriptions to the Board, with the Board directing Board staff and DNR to develop a rule package and prepare the CR102. Achievement of these objectives during this extension of the assurances for an additional year will help all of us continue to meet the obligations we committed to when we signed onto the groundbreaking Forests and Fish Agreement.

By December 31, 2022, Ecology must submit to EPA and the National Marine Fisheries Service/United States Fish and Wildlife Service (Services) an updated statewide non-point source pollution management plan under Section 319 of the Clean Water Act. EPA and the Services will review the non-point plan under both the Clean Water Act and Endangered Species Act following its submittal at the end of 2022.

The performance of the Forests and Fish Agreement and associated Forest Practices Rules are key components of the non-point plan regarding the protection of water quality on forest lands. Therefore, the achievements over the next year will help us evaluate the effectiveness of the AMP as we complete the plan. In the plan, Ecology must document whether the rules are effective in protecting Washington's waters, and this determination is key to the Clean Water Act Assurances. If the rules are not achieving the resource objectives, Ecology must document the steps it will take instead to address the protection of water quality.

My sincere hope is that the TFW stakeholders will use the next year to demonstrate that we can work together to improve the Adaptive Management Program so that forest lands are managed in a way that protects water quality now and into the future. I look forward to working with all TFW stakeholders to accomplish our important shared mission of providing regulatory certainty for the industry while protecting our cherished natural resources.

Yours truly,



Laura Watson
Director

cc: Hilary Franz, Commissioner of Public Lands, DNR
Michelle Pirzadeh, Acting Regional Administrator/Deputy Regional Administrator, EPA Region 10