DEPARTMENT OF NATURAL RESOURCES

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MEMORANDUM

January 26, 2024

TO: Forest Practices Board (Board)

FROM: Lori Clark, Adaptive Management Program Administrator (AMPA)

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SUBJECT: Extensive Riparian Status and Trends Monitoring

The purpose of the Extensive Riparian Status and Trends Monitoring Program (Extensive Monitoring) is to provide data needed to evaluate landscape-scale effects and changes over time of implementing forest practice riparian prescriptions. The objective is to build and maintain a status and trends monitoring program that will evaluate how aquatic condition, riparian forest structure and functions, and the desired habitat conditions that support change on the landscape scale. This information will inform State and Federal regulatory agencies if the WA Forest Practices Rules meet resource objectives for key aquatic conditions and processes affected by forest practices and Clean Water Act requirements. The Extensive Monitoring Program will also help the Cooperative Monitoring, Evaluation, and Research committee (CMER) prioritize, plan, conduct, interpret, and assess scope of inference of other CMER studies and monitoring projects.

There have been efforts to incorporate Extensive Monitoring into the Adaptive Management Program (AMP) dating back to at least 2007. Since that time, there have been many attempts between CMER and Timber, Fish, and Wildlife (TFW) Policy to gain clarity on scope and critical questions to fully develop an Extensive Monitoring Program. A concentrated effort to reinvigorate this program began in earnest in 2022 and was prioritized for the Adaptive Management Program (AMP) by the Board at their November 09, 2022, meeting with unanimous support for the following motion:

> "Alex Smith moved that the Board direct TFW Policy Committee and CMER to prioritize and begin scoping both an effectiveness (prescription scale) study and an extensive (landscape) scale monitoring study, including a systematic literature review, as part of their Type N and Type F rule-group studies and to follow the Board manual guidance for the development and implementation of these studies."

This memo transmits an update to the Board on progress and status of the AMP Extensive Monitoring efforts.

Summary of activities since 2022:

2022

Apr.- TFW Policy requested CMER scope a landscape-scale Extensive Monitoring project to collect data to understand status/trends of key indicators and provide context for ongoing and future prescription-scale studies.

TFW Policy recommended to the Board an Extensive Monitoring project line item and associated budget in the Master Project Schedule (MPS). The Board approved.

The AMPA requested that CMER assign Extensive Monitoring project to a Science Advisory Group (SAG) and/or work with the AMPA to assemble a Project Team.

May- The Riparian Scientific Advisory Group (RSAG) was assigned by CMER to oversee the project and began to discuss what the Policy directive entailed, developed a series of questions and comments about said directive, and formed an interim subgroup that to addressed next steps over subsequent months.

Aug.- The first of two joint workshops between RSAG, CMER, and TFW Policy (the workshop was initiated by the RSAG ExMo working group) was convened. The goals of the workshop included defining what extensive monitoring is/is not and to clarify the April 2022 Policy request to CMER/RSAG. Actions assigned at the end of the meeting included both RSAG and Policy meeting again, RSAG with more specific questions and TFW Policy with more specific guidance.

Oct.- The Extensive Monitoring Policy Workgroup met to discuss the August workshop and worked to complete their actions items from said meeting, which included providing more specificity and guidance on the directive.

Nov.- The Board directs TFW Policy and CMER to prioritize Extensive Monitoring project.

Dec.- The AMPA transmitted Board direction to TFW Policy to prioritize attention and commitments to work with CMER in the development and implementation of these studies.

2023

Jan.- The second Joint Workshop (the workshop was initiated by the RSAG ExMo working group) was convened. The purpose of this workshop was to make further progress on the goals of the first workshop, with the expectation that RSAG had prepared more specific questions and Policy members had prepared more specific guidance so that common ground and understanding could be uncovered. End of meeting actions included a verbal agreement from Policy to provide more detailed written guidance on the scope/questions to be answered of the developing ExMo project.

Mar.- TFW Policy fulfilled their action items from the end of the second joint workshop by issuing a second directive to CMER stating, “Develop options for a monitoring program to help determine how stream temperature and riparian functions have changed or are changing in association with

the application of the forest practice rules." CMER approved the Extensive Monitoring Project Team.

Apr.- Watershed DCG was contracted to assess and report on the availability of both existing data needed, and future data to be collected, to inform an extensive monitoring program for riparian functions and stream temperature occurring within the millions of acres of lands where Forest Practices Rules apply to forest management. Watershed DCG delivered a final report and data appendix to the project team and RSAG in July 2023.

May - The Project Team approved a charter for RSAG review.

Oct.- RSAG approved the charter. CMER approved the charter.

Nov.- TFW Policy approved the charter.

Dec.- The Project Team began development of the scoping document, which included the ongoing use of GIS to identify and assess the spatial distribution of potential monitoring target population (e.g., basins containing lands subject to FP HCP harvest rules) and explored/tested remote sensing methods for assessing stream temperatures and riparian condition in conjunction with field survey data.

2024

Jan.- The Project Team developed core and supplemental questions, products, measurements, etc., to ensure the Project Team and RSAG are in sync on the fundamental study framework before moving further into scoping the project. RSAG completed their review and provided comments without major objections raised or changes requested.

AMP Project Manager, Alexander Prescott, and the Extensive Monitoring Project Team have worked diligently over the past year and have been committed to advancing the Extensive Monitoring Project per the Board's direction. The scoping phase is currently underway and is expected to be completed in the spring of 2025. Study design development and AMP review and approval processes are estimated to be completed 18-months thereafter, contingent upon AMP participants collective good faith efforts to honor review timelines and participate in inter-caucus collaboration.

Please let me know if you have any questions or need more information.

Attachment:

- Extensive Riparian Status and Trends Monitoring – Riparian Vegetation and Stream Temperature 2023 Project Summary Sheet

Project Name	Extensive Riparian Status and Trends Monitoring – Riparian Vegetation and Stream Temperature
Work Plan Critical Questions Addressed (2023-2025 CMER Workplan 5.2.8)	<u>Rule Group Critical Questions:</u> What is the current status of riparian conditions and the HCP-specified functions in and along Type F/N streams on a statewide scale, and how are conditions changing over time? <u>Program Research Critical Questions*:</u> What is the distribution of maximum summer stream temperature and 7-day mean maximum daily water temperature on FP HCP lands, and how is the distribution changing over time as the forest practices prescriptions are implemented? What proportion of stream length, at the landscape scale, on FP HCP lands meets specific benchmarks for water temperature, and is this proportion changing over time as the forest practices prescriptions are implemented? What are current riparian stand attributes on FP HCP lands, and how are stand conditions changing over time as the forest practices prescriptions are implemented? ***** *The above critical questions are provided as they currently exist in the CMER Workplan. Project Research Critical Questions will be revised as part of the project scoping phase.*
Project Elements	Type F and N riparian forest structure/functions and stream temperatures. (*TFW Policy directed CMER to consider cost efficient add-ons, specifically such as amphibian presence/eDNA in their April 2022 memo which the project team describes here as 'desired habitat conditions'.)*
Responsible SAG and Project Manager	RSAG Project Manager – Alexander Prescott
Principal Investigator(s) and Project Team	Principal Investigator TBD CMER Scientist: Jenelle Black Project Team: Jenelle Black, Hans Berge, Mark Meleason, Aimee McIntyre, Douglas Martin, Ash Roorbach
Status	Following a series of memos and joint workshops in 2022, TFW Policy gave a summary directive to CMER in the March 2023 meeting, "Develop options for a monitoring program to help determine how stream temperature and riparian functions have changed or are changing in association with the application of the forest practice rules". In March 2023 CMER approved the project team formed by RSAG. In April 2023 Watershed DCG was contracted to assess and report on the availability of both existing data needed, and future data to be collected, in order to inform an extensive monitoring program for riparian functions and stream temperature occurring within the millions of acres of lands where Forest Practices Rules apply to forest management. Watershed DCG delivered a final report and data appendix to the project team and RSAG in July 2023.

	In May 2023 the project team approved a charter for RSAG review. RSAG completed their review and provided feedback to the project team in September 2023. In October 2023 RSAG and CMER approved the project charter in October 2023. TFW Policy approved the project charter in November 2023.
Project Timeline	FY22: Conducted joint workshops between RSAG/CMER/TFW Policy. FY22: Policy transmitted two directives to CMER to initiate this project. FY23: Project team was formed, data assessment contract initiated and completed, project charter drafted and approved by RSAG, CMER, and TFW Policy. FY24: Project team will initiate Scoping Document Development. FY24-26: RSAG, CMER, and Policy Approval of Scoping Documents.
Expenditures	FY22-23: $54,220
Complementary Projects and Project Sequencing	Extensive Riparian Status and Trends – Temperature, Type F/N Westside and Eastside; Riparian Characteristics and Shade Response Study; Mass Wasting Landscape Scale Extensive Monitoring; Remote Sensing for Assessing Riparian Stand Conditions Literature Synthesis Review; Extensive Riparian Vegetation Monitoring Remote Sensing Pilot; Extensive Riparian Vegetation Monitoring Implementation Pilot; Extensive Riparian Vegetation Monitoring, Model Transferability Testing Draft Report

Project Summary and Purpose

The purpose of the Extensive Riparian Status and Trends Monitoring Program is to provide data needed to evaluate landscape-scale effects and changes over time of implementing forest practice riparian prescriptions. This information will inform State and Federal regulatory agencies if the Forest Practices Rules meet resource objectives for key aquatic conditions and processes affected by forest practices and Clean Water Act requirements. This program will also help CMER prioritize, plan, conduct, interpret, and assess scope of inference of other CMER studies and monitoring work.

Project Objectives

The Timber Fish and Wildlife Policy Committee has directed CMER to, "develop options for a monitoring program to help determine how stream temperature and riparian functions have changed or are changing in association with the application of forest practices rules." The objective is to build and maintain a status and trends monitoring program that will evaluate how aquatic condition, riparian forest structure and functions, and the desired habitat conditions they support change on the landscape scale.

Budget*

FY24	FY25	FY26	FY27	FY28	Total Estimated Future Budget**
$50,000	*$50,000*	*$300,000*	*$300,000*	*$250,000*	*$950,000*

* Approved May 10, 2023. Board approved budget. Funding approved for FY24-FY25. Budget beyond FY24 are estimates only.

** Estimated budget does not reflect estimated need, due to undetermined project scope. Preliminary budget estimates will be determined in the Scoping Document.