



## MEMORANDUM

July 24, 2018

**TO:** Forest Practices Board

**FROM:** Hans Berge, Adaptive Management Program Administrator 

**SUBJECT:** Adaptive Management Program Quarterly Staff Report

This memo highlights work completed and progress made on projects and issues from both TFW Policy and CMER since May 2018.

### TFW POLICY

#### Budget

Policy's budget subcommittee met on May 17<sup>th</sup> and 31<sup>st</sup> to develop recommendations for the full committee's meeting on 7 June 2018 in Spokane. The recommendations from the subcommittee were discussed at the meeting, but consensus could not be reached. The subcommittee met again in June and refined the 19/21 budget further. Policy recommended by consensus (Eastside Tribes and Federal caucuses absent) the recommendations proposed by the budget subcommittee. The proposed budget will be discussed at your August meeting.

#### Proposed Alternate Plan Template

The contractor working on behalf of Policy to evaluate the scientific merit of the proposed alternate plan template in review has prepared a draft for review by the subcommittee of Policy. The expected timeline is to complete the scientific merit review this fall (through ISPR) and provide Policy a recommendation at the end of the year or first part of 2019.

#### Type N Hard Rock Report

Policy officially received all CMER and ISPR approved chapters and findings reports of the Type N Hard Rock study at their 12 July meeting. The first step is to determine if there are any actions to be taken, and they have 45 days to make that determination (no later than 27 August 2018).

### CMER

#### RSAG

The Extensive Riparian Vegetation Monitoring Pilot Project scoping document was approved by CMER at its June 2018 meeting. RSAG is drafting a prescriptive findings reports for CMER

review and approval prior to sending the both documents to Policy. The purpose of this scoping report is to provide recommendations on where the next stage of the project could take place, and on how to modify the fieldwork and modeling efforts based on what was learned in the Pilot Study.

The Buffer Characteristics, Integrity and Function Post-Harvest Report (BCIF) was approved by CMER at their June 2018 meeting to be sent to ISPR. The purpose of the BCIF study was to reduce scientific uncertainty about the magnitude and duration of changes in stand structure, tree mortality and tree fall, shade, wood recruitment, and soil disturbance following application of the westside Np riparian prescriptions under operational conditions.

At Policy's July 2018 meeting, RSAG (Mark Hicks) gave a presentation on the Riparian Characteristics and Shade Response Study Scoping/Alternatives document. Policy will review the information provided and make a decision regarding preferred alternative and next step at their August meeting. This study is intended to strengthen knowledge on the effectiveness of riparian buffers in protecting aquatic resources by providing a strong analysis of the how changing riparian management prescriptions affect stream shading across the state.

#### LWAG

CMER approved the Type N Experimental Buffer Treatment Study on Hard Rock Substrates – Findings Reports for chapters 5 (Stand Structure and Tree Mortality Rates in Riparian Buffers), 6 (Wood Recruitment and Loading), 7 (Stream Temperature and Cover), and 15 (Stream-Associated Amphibians) at their June 2018 meeting and the findings reports were transmitted to Policy at their July 2018 meeting. The full report and overall findings report were previously approved by CMER. The Type N Experimental Buffer Project – Hard Rock Study was undertaken to evaluate the relative effectiveness of alternative riparian buffer prescriptions along non-fish-bearing (Type N) streams in meeting Forest Practices resource goals, which includes evaluating the response of large woody debris loads, riparian vegetation, instream channel characteristics, instream sediment, and stream-associated amphibians to differing buffer strategies.

Van Dyke's Salamander Literature Review – was approved by CMER at its June 2018 meeting. A findings report was requested by CMER to accompany the literature synthesis when it is transferred to Policy. CMER approved the Findings Report at its July 2018 meeting. Both documents will be transferred to Policy at a future date. The Van Dyke's Salamander Literature document is a review of published literature, including a synthesis of information on geographical region distribution, moisture requirements and temperature utilization patterns, life history considerations, habitat utilization patterns, interspecific species interactions, and effects of forest management. Besides review of existing publications, this review diverges from many standard literature reviews in incorporating considerable unpublished data, such as reports and theses, and presents new data summaries and analyses. The resulting product is useful for identifying knowledge gaps and informing CMER if additional studies could help determine if Forest Practices Rules maintain conditions that support this species.

### SAGE

The Eastside Type N Riparian Effectiveness Project (ENREP) has begun the implementation phase of the project. The study, intended to be a companion to Type N studies in western Washington, is focused on water quality. The design allows for additional questions to be addressed where doing so will provide scientifically defensible information relevant to adaptive management. This study incorporates a Multiple, Before-After/Control Impact (MBACI) experimental design. Spatially blocked sets of treatment and reference sites have been and are being identified and data collection will be conducted for at least two years pre-harvest and two years post-harvest, with a one-year harvest window.

The project team is continuing to locate basins along the east slope of the Cascades for inclusion in study. CMER staff has conducted recon of several possible locations with several basins being identified for further review. AMP has reached out to State Lands Southeast and Northeast regions to discuss the possible use of basins in their region as well. AMP also planning on reaching out to Yakama Tribe to see if they may be interested in partnering on study. PM continues to work on development of contracts, interagency agreements, access agreements, permits, equipment purchases, charter, implementation plan, management plan, and communication plan.

### ISAG

The Fish/Habitat Detection Using eDNA Project is currently underway. The study uses an eDNA analytical approach to test for the presence of genetic material of focal species in water samples taken at various points in streams. The Pacific Northwest Research Station will compare these results to data gathered from spatially continuous, single-pass electrofishing and physical stream habitat surveys conducted using methodology similar to that described by Torgerson et al. (2004) and validated by Bateman et al. (2005). Electrofishing assessments are being performed by interested private landowners during spring of 2018. Electrofishing and location data will be shared to compare to eDNA detection results.

All west side sites have been electrofished and have eDNA samples collected. Weyerhaeuser, Hancock and Port Blakely are participating in the project. The project Principle Investigator (from the Pacific Northwest Research Station, Corvallis) is continuing her conversations with Port Blakely and Hancock to determine if they can provide another crew to collect habitat data. The project team still working with Kalispel Tribes to identify possible sites to include in the study.

### FWEP TWIG

Forested Wetlands Effectives Project Chronosequence Study Plan was approved by CMER at its July 2018 meeting to go to ISPR for review. The chronosequence study will identify post-harvest patterns in forested wetland ecology and hydrology within and around forested wetlands of

different ages. By comparing ecological and hydrological conditions in groups of forested wetlands that were harvested at different times in the past (e.g., five, 10, 20 years), the development of wetland functions can be estimated over half of a timber rotation cycle (at minimum, 20-years). This observational study design, also known as space-for-time substitution, will identify common developmental trajectories within forested wetlands following disturbances associated with forest practices. Identifying patterns in these trajectories will directly inform the design and implementation of a subsequent forested wetland harvest BACI study.