

ADAPTIVE MANAGEMENT PROGRAM 2023 ACCOMPLISHMENTS

In 2023, the Cooperative Monitoring, Evaluation, and Research Committee (CMER) and TFW Policy Committee (TFW) engaged in a wide range of administrative and research projects and tasks. This document highlights some of the more substantive accomplishments that occurred during the year. These accomplishments demonstrate a comprehensive approach to research, training, personnel management, and collaboration within the CMER and its related committees. The focus on structured decision-making and adherence to best available science indicates a commitment to informed and effective resource management.

Adaptive Management Program (AMP) Administration:

Personnel Changes:

- Restabilized the AMP staff team amidst significant turnover and built a cohesive AMP team:
 - Promoted Natalie Church to an Environmental Planner.
 - Lori Clark was promoted to the AMPA position.
 - Hired Dr. Theryn Henkel as the new Supervisory Project Manager.
 - NWIFC hired a new Geomorphologist, Elise Freeman, and a CMER Natural Resource Science Technician, Rob Pavlik.

2023-2025 CMER Work Plan and FY23-25 Master Project Schedule approved

Technology and Training:

- Completed transition for all AMP participants to utilize the SharePoint Online platform which ensures that the participants have access to all AMP documents, templates, studies, and meeting materials.
- Trained all AMP participants on SharePoint Online (6 trainings).
- Trained all AMP participants on Open Public Meeting Act (OPMA) requirements.

CMER Conference:

- AMP staff hosted the Forest Practices Adaptive Management Science Conference on Thursday, May 11, 2023. Eleven presenters highlighted CMER studies covering a variety of research topics.

Dispute Resolution:

- Resolved a dispute resolution process for the Study Design of the Shallow Landslide Susceptibility and Frequency by Landform and Runout Project.

AMP Participants Site Visits:

- Adaptive Management Program (AMP) participants attended an in-person meeting and a site visit in Eastern Washington in September to tour two sites that are part of the Eastside Type N Riparian Effectiveness Project (ENREP) to observe the riparian area within the harvested basins at each site, including one segment at Blue Grouse which was

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approved by the Forest Practices Board under Pilot Rule to test the effect of complete clearcutting along a seasonally dry stream. Participants also saw examples of data collection equipment and discussed the parameters measured in this study.

- The Uplands Process Science Advisory Group (UPSAG) attended a site visit in Whatcom County in October to visit a deep-seated landslide complex within the Mapping and Classification project area to define classes of deep-seated landslides based on variables that control the occurrence and type of failure.
- Adaptive Management Program participants attended site visits in Forks over two days in July to tour Forested Wetlands Effectiveness Project (FWEP) Chronosequence sites and the Olympic Experimental State Forest (OESF).

State Auditor's Office Recommendations Advancements:

- CMER Protocols and Standards Manual (PSM) was revised to improve process, transparency, and accountability.
- Creation of a public-facing dashboard.
- Development and approval of a TFW Policy Manual.
- Decision Criteria and Structured Decision-Making:
 - Conducted Interest-Based Negotiation training for the (TFW) Policy Committee to discuss their interests, resolving differences of opinion, collaboration versus competition, how each caucus interests are being served, and the challenges they face in the Adaptive Management Program (AMP).
 - Got AMP participant approval (CMER, Policy and FPB) to revise the Schedule L-1 which serves as the foundation for the AMP and guides the development of the CMER research and monitoring projects. This revision process will be key for adopting a multi-criteria decision-making framework for the AMP.

CMER Science Sessions:

- Fire Histories in Forests West of the Cascade Crest
- 20-Year Forest Health Strategic Plan
- Statewide Hydrography
- LiDAR Differencing
- Reflections on Forest Management: Can Fish & Fiber Coexist? American Fisheries Society

Other:

- 2023 Project Summary Sheets were completed by SAGs and approved by CMER.
- 2023 SAG Project Verification was completed by SAGs and approved by CMER.
- Collaborated with the US Forest Service on LiDAR analysis methods development.
- Completed the solicitation and contracting process for the CMER on-call statistician contract.
- Forest Practices Board approved the pilot rule request for RCS implementation.
- Supported the FPB by providing Type Np materials after they decided to rescind the November 9, 2022, decision and take a revote regarding the Type Np Buffer decision.

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Research Projects Highlights:

- **Roads Prescription Scale Effectiveness Monitoring Project**
 - 2 papers published by lead author and project team member Amanda Alvis:
 - *How does traffic affect erosion of unpaved forest roads?* in Environmental Reviews.
 - *Using Additional Roughness to Characterize Erosion Control Treatment Effectiveness in Roadside Ditch Lines* in Earth Surface Process and Landforms.
 - Significant round of roads maintenance (with the assistance of the DNR Pacific Cascade Region Heavy Equipment Crew) and BMP treatment changes, such as repairing degraded traffic counters, installed and calibrated numerous flow splitters at high flow sites, rocking/grading road segments, and conducting parameterization experiment fieldwork to inform the empirical model in development.
 - Implemented the fourth year of the main experiment and parametrization experiments.

Wetlands Scientific Advisory Group (WetSAG)

- **Forested Wetlands Effectiveness Project (FWEP)**
 - Project Management Plan approved.
 - Instrumentation and data collection for 4 pilot sites to inform the study.
 - Site Selection and landowner permissions secured for 24 sites.
 - Completed the instrumentation of all 24 project sites over the 2023 field season.
 - Water Quality data collection, hemispherical photography, forest and vegetation surveys began in October and will continue through 2025.
- **Wetland Management Zone Effectiveness Monitoring Project (WMZ)**
 - CMER and TFW Policy approved the charter.
 - Scoping process began.

In-Stream Scientific Advisory Group (ISAG)

- **Anadromous Fish Floor (AFF) Validation Study**
 - TFW Policy approved the Proposal Initiation (PI) to develop an Anadromous Fish Floor (AFF) Validation Study through the Adaptive Management Program (AMP).
 - CMER assigned the project to ISAG for project development.
- **Potential Habitat Breaks (PHB)**
 - Study Design was approved by ISAG, ISPR and CMER.
 - Charter was approved by ISAG, CMER and TFW Policy.
 - Prospective 6 Questions Document was approved by ISAG and CMER.
- **Default Physical Criteria (DPC)**
 - Charter was approved by ISAG, CMER and TFW Policy.
 - Study Design is in development at ISAG.

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Upslope Processes Scientific Advisory Group (UPSAG)

- **Unstable Slopes Criteria project**
 - Object-Based Landform Mapping with High Resolution Topography Study final report is under development by the Criteria Project Team.
 - The Study Designs for the Empirical Evaluation of Shallow Landslide Susceptibility and Frequency by Landform and Empirical Evaluation of Shallow Landslide Runout Projects (called Susceptibility and Runout for short) were combined. The combined Study Design was approved by ISPR and CMER.
 - Prospective 6 Questions Document for the Susceptibility and Runout Study was approved by UPSAG and CMER.
- **Deep-Seated Landslide Research Strategy**
 - Study Designs for the Deep-Seated Landslide Mapping and Landslide Classification projects were combined and approved by UPSAG, CMER for ISPR review.
 - Charter (revisions) was approved by UPSAG and CMER.

Scientific Advisory Group-Eastside (SAGE)

- **Eastside Timber Habitat Evaluation Project (ETHEP)**
 - Study Design was approved by SAGE, ISPR, and CMER.
 - Landscape assessment conducted to help prepare the field manual and protocols.
- **Eastside Forest Health Strategy**
 - TFW Policy approved the Eastside Forest Health Strategy document to be further developed by CMER.
 - SAGE is working on the strategy.
- **Eastside Type N Riparian Effectiveness Project (ENREP)**
 - QA/QC on 2022 data.
 - Pilot rule approved by the Forest Practices Board for a small segment of Type F stream in one of the harvest basins be treated as Type Np for the purposes for the study.
 - 2023 field season implementation.

Riparian Scientific Advisory Group (RSAG)

- **Riparian Characteristics and Shade (RCS)**
 - Site selection and preparation for the 2024 field season.
 - A pilot rule request was approved by the Forest Practices Board to authorize the implementation of experimental harvest treatments on five sites in western Washington.
 - Prospective 6 Questions Document was approved by RSAG and CMER.
- **Extensive Riparian Status and Trends Monitoring- Riparian Vegetation and Stream Temperature (ExMo) Project**
 - TFW Policy and RSAG/CMER had a joint workshop to discuss the development of the ExMo Project in January, which culminated in a final revised directive from Policy in March.

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- Watershed DCG was contracted in April to conduct a data assessment on relevant extensive monitoring programs- to support the scoping of the project.
- The first Project Charter was approved by RSAG, CMER, and TFW Policy from September to November.
- 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 exploring/testing remote sensing methods for assessing stream temperatures and riparian condition in conjunction with field
- **Riparian Function Literature Synthesis**
 - TFW Policy approved a list of focal questions to be addressed in the literature synthesis.
 - RSAG initiated review of the literature synthesis.
- **Westside Type F Riparian Prescription Effectiveness- Exploratory Field Study**
 - Following approval of the exploratory final report by CMER, the Independent Scientific Peer Review (ISPR) team completed their preliminary review and provided feedback in January 2023. The report author and project team have been revising the report accordingly since that time.

Landscape and Wildlife Scientific Advisory Group (LWAG)

- **Type N Experimental Buffer Treatment Project in Hard Rock Lithologies Amphibian Monitoring Phase III Project**
 - Data collection for stream-associated amphibian demographics and relevant covariates (e.g., stream temperature) for post-harvest years 14 and 15 was completed July-September 2022 and 2023 to allow for the evaluation of continued trends in amphibian densities at long-term study sites.
 - The team is conducting QA/QC on data collected through 2023, which will be followed by data analysis and report development through the end of the current biennium (June 2025).
- **Discontinuous Np Surface Flows**
 - The project team is beginning the scoping process.