

## January 23<sup>rd</sup> CMER Meeting Summary for Policy

Dr. Nate Hough-See provided a presentation on the Study Design for the **Forest Wetland Effectiveness Program**. The FWEP will investigate if forest practice rules, as they apply to forested wetlands, are effective at maintaining and/or restoring key wetland ecosystem functions as well as meeting performance targets laid out in the Forests and Fish Report, within a half of a timber rotation cycle (20-25 years). The two objectives of the study are to: examine how well current forest practices rules meet the performance target of a no-net-loss of wetland functions by half of a timber rotation cycle (20-years) and develop study designs that, when implemented, will yield information on the changes in wetland functions and associated aquatic resources due to implementation of forest practices in the context of existing forest practices rules. FWEP addresses two critical questions: What are the magnitude and duration of the effects of forest practices on hydrologic regimes, water quality, and terrestrial and aquatic plant and animal habitats in forested wetlands and the downstream waters to which they are linked via surface or subsurface flow? And How well do current forest practice rules in forested wetlands meet the Forests and Fish Report's aquatic resource objectives and performance targets, and the goal of no-net-loss of functions of those wetlands by half of a timber rotation cycle? After reviewing and summarizing the current state of the science pertaining to forest wetlands, Dr. Hough-See described two ways to inform the purpose, objectives and critical questions. The first is through observational studies such as Chronosequence studies where different age classes of forest wetlands recovering from the same type of disturbance at the same moment in time are observed. The second is through Before After Control Impact Studies that implement harvest treatments and observe ecosystem recovery over time alongside undisturbed ecosystems. The chronosequence study intends to look at 4-6 ac stream adjacent forested wetlands that were harvested 5, 10, and 20 yrs ago under the FP rules with a harvest area of approximately 60-70 acres. The sites are to be matched based upon hydrologic Landscape Classifications (6) within 5 DNR regions (SE region contains very few forested wetlands). The response variables to be measured are related to hydrology, vegetation and habitat. For FWEP, the chronosequence study will help inform and refine the BACI approach and take a couple of years to complete. The study design will be distributed by January 26<sup>th</sup> for a 30-day review period. Depending on the extent of and the time needed to address comments, CMER may anticipate a decision to approve sending the study design to ISPR in March. Policy does not review/approve the final study design but does approve the Master Project Schedule that allocates the funding for implementation.

Mike Maudlin provided a presentation on the **Deep-Seated Landslide Research Strategy** prepared by UPSAG. Mike first reviewed the critical questions within the CMER workplan. These include: does the harvesting of the recharge area of glacial deep-seated landslides promote its instability; Can the levels of response to forest practices be predicted by key characteristics of GDSL and/or their groundwater recharge area; and are unstable landforms being correctly and uniformly identified? From the recent literature reviews, we know that

there are very few studies that were focused on forest practice impacts on DSLs. Although, conceptual linkages exist between timber harvest, groundwater recharge, and decreased landslide stability. Mike noted that the projects within the strategy have considerable uncertainty and inherit limitations. In the development of the strategy, UPSAG reevaluated the CMER work plan projects, incorporated TFW Policy Proposal Initiations Questions and the Unstable Slope Criteria TWIG recommendations. Dan Miller, who completed the literature reviews, also reviewed the draft strategy and provided recommendations. The strategy includes projects addressing the following topics: evapotranspiration models, literature review recommendations, board manual revision, DSL mapping, landslide classification, a GIS-based landslide toolkit, groundwater recharge modeling, physical modeling of landslides, landslide monitoring, and empirical evaluations of landslides. The research strategy will use a series of linked pilot projects from these to develop an initial scope of work. The budget estimate for the first year (FY 2019) is \$125k and approximately \$200k per year through FY 2029. The strategy was distributed for CMER review in early January and comments will be received through February 12<sup>th</sup>. CMER anticipates a decision to approve sending the strategy to Policy in March.

LWAG forwarded a proposal from the **Type N Hard Rock Extended Study** PI's for the format of the presentation of the report. The PI's unanimously agree on the value of developing a single report that contains all of the information from the entire study period. It will allow the PIs to review/discuss trends over time and compare/contrast any changes from the original report. The report would follow the format of the original report, but limit redundancy by referring to the original report for detailed ancillary information. CMER discussed the desire to limit unnecessary review of items that have been previously discussed and agreed upon during the approval of the original report. This format will preclude the need to review and approve multiple chapters. The PI's anticipate having the report available for CMER review by October of 2018. After considerable discussion of the pros and cons of the proposal and a recount of previous CMER discussions and decisions, CMER was largely in agreement with the proposal. However, the AMPA had provided some comments for the PIs to consider that had yet to be addressed. After concurring that postponing this decision for a month would not delay work on the report, CMER agreed to review the proposal again in February once the AMPA's comments had been considered.

CMER assigned reviewers for the **Fire Salvage Literature Review and Synthesis Findings Report and 6 Questions**. The deadline for comments is February 16<sup>th</sup>. Depending on the extent of and the time needed to address comments, CMER may anticipate a decision to approve sending the Findings report to Policy in March.

CMER approved sending the **Unstable Slopes Criteria TWIG** request to send the Study Designs for the Compare/Contrast Landslide Hazard Zonation Mapping Mass Wasting Map Units with Rule-Identified Landforms and Object Based Landform Mapping with High Resolution Topography to ISPR.

CMER approved the ISPR reviewed/approved **Type F Riparian Prescription Monitoring Pilot Project Study Design**. The LEAN process directs the TWIG to develop Prospective Answers to the 6 Questions from the CMER/Policy Interaction Framework Document for delivery to Policy. CMER discussed the value of this direction and concluded that it was largely redundant, but that 4 of the questions may be informative for Policy as they deliberate the MPS. The TWIG will submit the prospective answers to the 4 applicable questions for approval at the February meeting. Policy does not review/approve the final study design but does approve the MPS that allocates the funding for implementation. The TWIG is available to provide a presentation at the Feb 28<sup>th</sup> TFW Policy meeting to discuss the MPS.

The current board approved Master Project Schedule allocates up to \$60,000 in FY18 and \$20,000 in FY19 for an **eDNA literature synthesis**. Subsequent to the December meeting, ISAG revised their proposal to utilize this funding for a project to evaluate the effectiveness of using eDNA as a tool in identifying the upper extent of fish in a small headwater streams in lieu of a literature review. The project intends to address the following questions: What is the detection probability of fish using eDNA sampling and How does eDNA sampling compare to electrofishing for determining the upper extent of fish? This project is the first step prior to undertaking a larger scale effort to answer the remaining knowledge gaps surrounding eDNA sampling. CMER accepted this proposal and is beginning a review of the of the proof of method proposal. ISAG is available to provide a presentation on this project at the February 28<sup>th</sup> TFW policy meeting. CMER noted that this change in spending should be approved by Policy.

CMER reviewed the list of prospective studies or projects for the **2018 CMER Science session**. SAGs will prepare a brief description of the projects and biographies for the authors by February 15<sup>th</sup>. CMER will also finalize the list of **2017 CMER accomplishments** by February 15<sup>th</sup>.

CMER reviewed the Policy request for information on projects to facilitate their February 28<sup>th</sup> workshop to begin prioritization of the **FY2020-21 MPS**. SAGs are working to provide the requested materials by the February 27<sup>th</sup> CMER meeting.

The AMPA briefly described the status of the **Riparian Literature Synthesis**. There are a few options to complete this effort. RSAG may be asked to manage this project. Direction from Policy needed.

Study designs for the LEAN guided TWIG projects are nearing completion, CMER is preparing for their implementation. The delivery of the study design and completion of the Prospective Answers to the 6 Questions from the CMER/Policy Interaction Framework Document to CMER/Policy is the final task assigned to the TWIG. Last summer, CMER approved the revision to Chapter 7 of the Protocol and Standards Manual that describes the process for implementation. Several CMER members expressed the desire to ensure SAG interaction, with assignment of the studies to SAGs being the first step. The AMPA, CMER/SAG co-chairs will convene to review chapter 7 of the PSM and ensure smooth transition for implementation.