Washington State

Cooperative Monitoring, Evaluation, and Research Committee

(CMER)

Protocols and Standards Manual

State of Washington Forest Practices Board's

Adaptive Management Program

February 22, 2005 (Original)

Revised October 23, 2012

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Revised July 25, 2017

Goals of the CMER PSM workshop

a. Emphasize that we all share common goal
b. Help Policy understand CMER process
c. Highlight the benefit of having clear guidance on process
d. Improve communication between CMER and Policy

Outline of Workshop

CMER Protocols and Standards Manual

"The CMER Protocols and Standards Manual (PSM) provides an organizational framework, guidance, and instructions for CMER participants."

The PSM is a tool, not a weapon!

1. Introduction

2. Overview, History, and Context
- Governing statutes
- CMER role and responsibilities

3. CMER Organization
- Roles and responsibilities
  a. Members and Participants
  b. CMER Co-chairs
  c. AMPA
  d. CMER Coordinator
  e. CMER Staff
  f. Project Managers
  g. SAGs
- Ground rules, Dispute Resolution

4. CMER Meetings and Meeting Management
- Meeting schedule and Management, Decision making, Documentation

5. Scientific Advisory Groups (SAGs)
- Roles and Responsibilities
- Meeting Management

6. CMER Work Plan Process
- Purpose, Proposal Initiation

7. **Project Development and Management**
   - Project Team
   - Charter
   - Communication Plan
   - Literature review/best available science
   - Scoping and alternatives analysis
   - Study design
   - Implementation – site selection and data collection
   - Risk management
   - Final reports
   - Documentation/data management

8. **Document Review and Approval**

9. **Support Services and Requirements**
   - Budget, Contract Services and Requirements

10. **Data Gathering, Documentation, and Information Management**

11. **Document Review and Approval**

Project Elements/Steps

CMER, AMPA and TFW Policy Roles and Responsibilities

"CMER conducts objective scientific inquiry into questions posed by the Board and Policy and to provide technical information and consensus-based recommendations to the Board.

To meet its responsibility, CMER will (PSM Chapter 2):

1. Maintain and update for Policy review and Board approval the Forests and Fish key questions, resource objectives and performance targets (Schedules L-1) (Board Manual, Section 22, Part 2.2).

2. Maintain and update for Policy review and Board approval the CMER work plan (including budget recommendations) (Board Manual, Section 22, Part 2.2).

3. Forward to Policy and the Board research proposals (Forest Practices Rules, WAC 222-12-045(2)(d)(ii)).

4. Conduct research and validation and effectiveness monitoring to facilitate achieving the resource objectives5 (WAC 222-12-045(2)(b)(i)).

5. Conduct periodic reviews of the design of the Forest Practices Program compliance monitoring program(s) to ensure that it will provide requisite information to support the effectiveness and validation monitoring components of the Adaptive Management Program (Board Manual Section 22, Part 2.2).

6. Produce credible, peer-reviewed technical reports6 based on best available science (Board Manual, Section 22, Part 2.2).

   a. Synthesize research results into coherent analysis of rule effectiveness.
   b. Use generally accepted scientific and statistical techniques.
   c. Include technical recommendations and a discussion of rule and/or guidance implications (Forest Practices Rule, WAC 222-12-045, (2)(d)(v)).

7. Develop a findings report that includes the CMER approved final study report, answers to the CMER/policy framework questions 1 through 6 and all technical implications generated through the CMER consensus process. (Board Manual, Section 22, Part 3.3).

8. Develop and manage a set of protocols and standards to define and guide the CMER process (Forest Practices Rule, WAC 222-12-045(2)(b)(i)(C)).
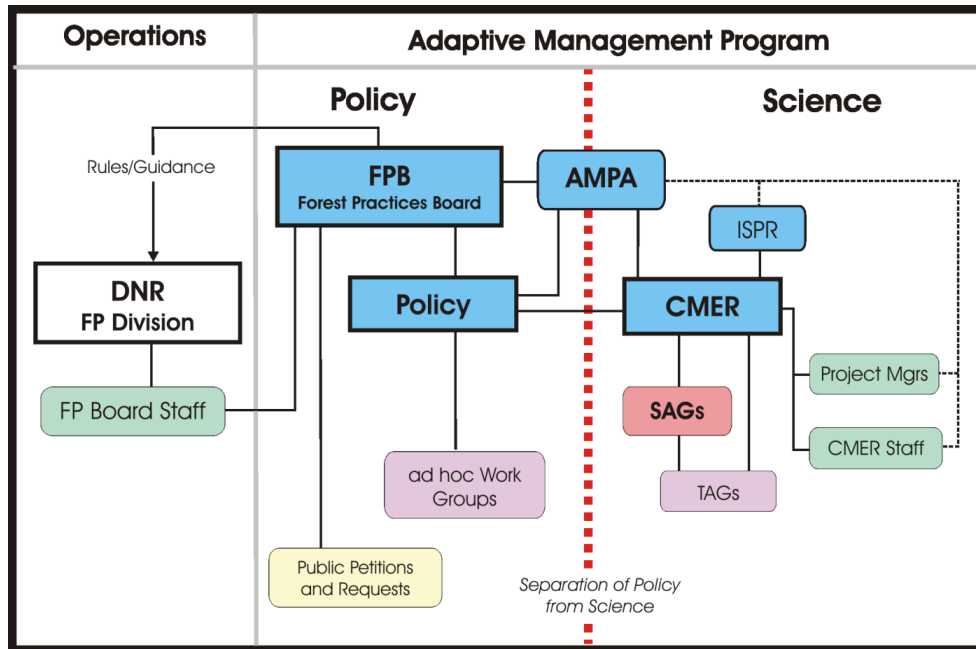
AMPA (BM 22, PSM chapter 3)

- Facilitates communication between CMER, Policy and Board
- Oversees project Proposal Initiation
- Drafts cover letters and transmits findings report to TFW Policy
- Presents biennial budgets for the AMP for TFW Policy and Board approval
- Determines if any CMER-approved revisions to project elements (e.g., problem/purpose statement, study objectives, or critical questions) of a project require additional approval by TFW Policy
- Oversee AMP Project Managers
- Facilitate the ISPR and ensure the scientific integrity of the program
- Manages dispute resolution process

TFW Policy (BM 22)

- Prioritizes Projects
- Reviews Schedule L-1 Forests and Fish key questions, resource objectives and performance targets
- Makes budget recommendations to the FP Board/MPS
- Reviews and approves CMER's workplan
- Makes adaptive management recommendations to the FP Board based on CMER findings

Adaptive Management Program Structure

Project Initiation

(BM 22, section 3.1)

 a. Board initiated (i.e. Oso landslide research prioritization, SFLO
    Type F template)
 b. Caucus initiated – through AMPA to the Policy to the Board

After vetting the proposal, the Administrator <u>forwards all proposals
to Policy</u> with a recommendation to place the proposal on a Science
Track or Policy Track.

Policy evaluates proposal and recommends to the proposal be either
(1) rejected or (2) accepts proposal and assigns it to a 'specific track'
in the CMER or Policy workplan.

Science track
   Policy will direct CMER to respond to one of three questions:
   • What would it require to develop and implement this study?

- What would it require to approve the study design?
- What would it require to analyze and synthesize the study results?

Policy track

Proposals recommended for the policy track are those related to interpretation and implementation of the TFW Agreement or the FFR.

CMER Work Plan

"The purpose of the work plan is to outline an integrated strategy for research and monitoring of the effectiveness of Washington State forest practices rules, guidance, and department policies as prioritized by Policy and the FP Board."

The program prioritization strategy is as follows:

1. Rank at the program level (as opposed to the project level).
2. Provide a separate ranking of effectiveness/validation monitoring programs on the basis of scientific uncertainty and risk to aquatic resources.
3. Provide a separate ranking of extensive trend monitoring programs on the basis of scientific uncertainty and risk to aquatic resources.
2. Determine the importance or priority of individual projects within a program on a case-by-case basis.
3. Consult with DNR on ranking of rule tool programs, with DNR taking the lead.
4. Proceed with scoping of the intensive monitoring program.

Policy Committee recommendation

The Policy Committee reviews the CMER work plan and may either approve or revise it. The Policy Committee documents the revisions and includes an explanation of the revisions. In preparation for May Board action, the Policy Committee has until

the first working day of April to provide the recommended revised CMER work plan to the Administrator. **(BM 22, section 3.2)**

Although CMER limits its focus to scientific uncertainty and technical issues during ranking, Policy and the Forest Practices Board may apply economic, legal, or other criteria before approving the final work plan and associated project list. **(Chapter 6)**

Chapter 7 Sections

<u>Project Charters</u>

Policy reviewed and approved

- Authorization from sponsor to proceed
- 2 pages maximum length
- Summarizes project
- Updated as needed as the project is implemented

Problem Statement

"If the project being launched is in response to TFW Policy guidance for CMER to answer specific questions or address/inform a general topic or issue, either use the problem statement provided by TFW Policy or other available policy guidance to help generate a draft problem statement.

"An effective problem statement for a CMER research project should concisely incorporate the following:

- State the issue/problem the project addresses.
- Provide background on the issue; explain why the issue/problem is important such as by describing the potential risk(s) to specific resources the project is intended to inform/address.

- Identify the spatial and/or temporal scope (e.g. regional/statewide, near/long term, etc.) the project will address, if known.
- Describe the scientific uncertainty about the issue.
- Describe how the problem can be solved."

Purpose Statement

"Define the specific purpose of the project and how the project will help resolve the issues identified in the problem statement."

Project Objectives

"Study objectives are clear, concise declarative statements that describe the pathway to addressing the problem statement. Study Objective(s) should summarize what the project will achieve. Project objectives may be revised during the scoping phase of the project."

Critical Questions

The CMER Work Plan contains critical questions at both program and project levels. Critical questions are the pivotal Adaptive Management Program questions that a project should answer, either in part or in full.

CMER Rule Group and Program

Project Deliverables and Project Timeline

Budget

Current total budget allocated for the project (MPS).

May include projected costs of potential future phases as a separate budget estimate.

Project Team

Provide names, titles, affiliations, and roles (i.e. PM, PI, Other Team Members) of the Project Team members, if available. If not available, identify specific expertise that will be necessary for successful completion of the project. The charter will note the level of time commitment expected from Project Team members.

Project Teams

"SAGs and CMER work with the AMPA to assemble and maintain Project Teams to implement CMER research and monitoring projects."

Project Teams report to SAGs (or to CMER if created by CMER directly).

Should include members with appropriate technical expertise about the project topic.

Can include a mixture of Project Managers, outside cooperators and contractors, CMER staff, SAG and CMER members.

SAG or CMER members are encouraged to be Project Team members as long as they have a designated role and can meet minimum time commitments.

Scoping Paper and Alternatives Analysis

Policy reviewed and approved

Alternative analysis helps facilitate the process of designing a CMER project by communicating to the SAG, CMER and TFW Policy on how the Project Team would like to proceed, and why.

Context

Rule Group, Forest Practice Rules; Links to Adaptive Management; Timeline; Resource Objectives, Issues and Performance Targets

Problem Statement

Should be the same as in Charter but can be updated during scoping with consensus at and TFW Policy approval.

Purpose Statement

Should be the same as in Charter but can be updated during scoping with consensus at and TFW Policy approval.

Study Objectives and Critical Questions

Should be the same as in Charter but can be updated during scoping with consensus at and TFW Policy approval.

Testable Research Hypotheses

Data Requirements

Alternatives Analysis

Based on best available science

Includes summary of the relevant literature

Includes description of the advantages and disadvantages of a range of different options and

Recommended Approach

Project Team's recommended approach based on the alternatives analysis.

Budget(s)

Communication Plan

The Communication Plan provides a framework to manage and coordinate the communications needed for all phases of a project.

Describes communication within a Project Team, and communication between Project Team and overseeing committees – SAG, CMER and TFW Policy.

Table 7.1. Project management/oversight documents and the primary authors

	Primary author	Collaborators	Final approval[1]	Primary audience
Project management documents				
Project charter	PM	PI/Project Team (if identified)	CMER, **TFW Policy**	Project Team, **TFW Policy**, CMER/SAG
Project management plan	PM	PI	CMER	Project Team, CMER/SAG
Communication plan	PM	SAG/Project Team	NA	Project Team, CMER/SAG
Risk Management	PM	SAG/Project Team	NA	Project Team, CMER/SAG
Document management and closure plan	PM	PI	NA	Project Team, CMER/SAG
Project tracking and guidance documents				
Project updates	PM	PI	NA	Project Team, CMER/SAG, TFW Policy, AMPA
CMER quarterly and annual project progress reports	PM	PI	NA	SAG/CMER
CMER Requests	PM	Project Team	CMER[2]	CMER
TFW Policy Requests/Check-ins	AMPA	Project Team	CMER	**TFW Policy**
Public presentations	PM	Project Team	NA	Public

[1] Committees that review and approve the document.

[2] CMER ultimately 'approves' CMER requests, but the actual wording of the request does not require CMER approval.

Table 7.2. The different types of communication and documentation required when a Project Team communicates with the oversight committee.

Type of Communication	SAG	CMER	TFW Policy
Project Updates	Verbal (written may be appropriate)	Verbal/meeting minutes	Brief written report/ presentation
Progress Reports	Brief written report	Brief written report	NA
CMER & TFW Policy Requests	Agenda Item	CMER Request form	**TFW Policy Request form**
Decision	Meeting minutes	Meeting minutes	**TFW Policy Response form**

Findings Report

Includes cover letter from AMPA, Final CMER/ISPR approved report, and answers to the six questions:

(BM 22, Appendix B)

CMER	relevance	1. Does the study inform a rule, numeric target, performance target, or resource objective?
		2. Does the study inform the forest practices rules, the Forest Practices Board Manual guidelines, or Schedules L-1 or L-2?
	quality	3. Was the study carried out pursuant to CMER scientific protocols (i.e., study design, peer review)?
		4. What does the study tell us? What does the study not tell us?

	completeness	5. What is the relationship between this study and any others that may be planned, underway, or recently completed? Factors to consider in answering this question include, but are not limited to:
		  a. Feasibility of obtaining more information to better inform Policy about resource effects.
		  b. Are other relevant studies planned, underway, or recently completed?
		  c. What are the costs associated with additional studies?
		  d. What will additional studies help us learn?
		  e. When will these additional studies be completed (i.e., when will we learn the information?
		  f. Will additional information from these other studies reduce uncertainty?

		6. What is the scientific basis that underlies the rule, numeric target, performance target, or resource objective that the study informs?

		How much of an incremental gain in understanding do the study results represent?
Policy	options	7. Should any action be taken at this time, in response to the information that CMER has provided?
		8. What are the alternative courses of action, each of which would be an appropriate management response to the information that CMER has provided?
		9. How feasible is each alternative from operational and regulatory perspectives?
	decision	10. Will Policy make a consensus, adaptive management recommendation to the board? If so, which alternative will Policy recommend?

Other sections in Chapter 7

- Project Management Plan

- Implementation plan - site selection and data collection

- Risk Management Plan

- Final Project Reports

- Document/Data Management and Closure Plan

Additional Topics/Ideas

Project prioritization – joint CMER/Policy subcommittee?

Schedule a regular work session – workplan and MPS update?

How to make the CMER workplan more user-friendly (CMER/Policy subcommittee?)

Final Point

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Project Management Plan

The Project Management Plan breaks down project work into logical steps to provide a framework to efficiently allocate resources, reliably estimate project costs, and help guide schedule, budget development and project scope.

- Project Milestones and Tasks
- Project Deliverables
- Project Team Members
- Project Constraints and Assumptions

    Describe known project constraints and assumptions that will impact the project.

Schedule constraints

Budget constraints

Human resource constraints

Resource constraints

Much of this information will be used to inform the Risk Management Plan

- Decision-Making Authority

    Describes how decisions are made for the project.

- Project Resource Needs

    Infrastructure or specialized equipment.

- Project Budget
- Project Sites

    To the extent known.

Companion CMER Documents