




March 23, 2009

MEMORANDUM

TO: Forest Practices Board

FROM: Darin Cramer, Adaptive Management Program Administrator 

SUBJECT: Board Manual Section 22 - Adaptive Management Proposal Process Stages

WAC 222-12-045 describes the purpose and elements of the Forest Practices Adaptive Management Program (AMP). Included under the elements section of the rule is a description of the Adaptive Management (AM) proposal process stages, with a reference to the Board Manual (BM) for more detail - a complete copy of BM 22 is attached. Part three of BM 22 further describes the proposal process stages. The intent of Part three is to provide *"...a stage-by-stage approach to take a proposal from initiation to implementation. It sets the minimum level of standards and protocols expected for successful participation in a multi-stakeholder, cooperative, and consensus-driven process... Flexibility is allowed where alternative processes provide information of the same or higher quality"* (page 22-6, BM 22). Adaptive Management proposals generally consist of new research or monitoring projects, policy interpretation and/or modification to improve forest practices management, review of completed technical reports originating outside the AMP and/or technical issue analysis.

Adaptive management proposals can be initiated by *"...the Board, including actions taken in response to public requests; or any Adaptive Management Program participant, through the Administrator"* (page 22-7, BM 22). The proposal process stages are as follows:

1. Initiation and Screening of Proposals
2. Proposal Review and Planning
3. Proposal Implementation
4. Policy Recommendation
5. Board Consideration of Action
6. Management Implementation

Stage 1

Once a proposal has been submitted, the Administrator assures the proposal is complete and includes the required proposal elements outlined on page 22-7 of BM 22. These elements include but are not limited to: the affected forest practices rule or guidance, the urgency, any relevant outstanding agreements and other information/data supporting the proposal.

Once the proposal is deemed complete the Administrator determines the proposal's applicability to the AMP by assessing for management and resource implications. Page 22-8 of BM 22 contains a list of eight questions the Administrator uses to determine the proposal's applicability



to the AMP. The information provided with the proposal and the answers to these questions are also used to determine a proposal development track - proposals are assigned to either a science or policy track.

The science track “...*evaluates currently available science, collects new information through research and monitoring, and synthesizes the best available information into a technical summary for Policy consideration*” (page 22-9, BM 22). The Policy track is for proposals “...*related to interpretation and implementation of the TFW Agreement or the FFR*” (page 22-9, BM 22).

Upon completion of the above steps the Administrator presents the proposal to Policy, which includes a summary of the proposal, a recommendation on the applicability and value to the AMP and which track the proposal should follow for further development. Policy considers the information and recommendations of the Administrator and either accepts the proposal and assigns it to a track in the CMER or Policy work plan, or recommends to the Board that the proposal be rejected. The Administrator is responsible for coordinating action/communication on the proposal between the Board, Policy and CMER. If the Board disagrees with the Policy recommendation the Administrator notifies Policy and “...*coordinates action as directed by the Board*” (page 22-10, BM 22).

Stage 2

Stage 2 includes proposal development, within the CMER work plan and budget if in the science track, and formation of a workgroup and charter if in the Policy track. BM 22 recommends this stage be completed within 90 days. If assigned to the science track CMER must refine the proposal for inclusion in the annual CMER work plan; if assigned to the Policy track Policy must create a workgroup and develop a charter to implement the proposal. If assigned to the science track, Stage 2 results in a Board-approved annual CMER work plan and budget which includes the proposal. If assigned to the Policy track, Stage 2 results in an approved Policy charter and work plan which includes the proposal.

Stage 3

Stage 3 includes proposal implementation, either by the science or Policy track, synthesis of the results into a findings report and transmittal to Policy for consideration. If the proposal is in the science track, CMER implements and completes work on the proposal following the guidelines in the CMER Protocol and Standards Manual, synthesizes the results into a findings report and transmits the report through the Administrator to Policy for consideration. If in the Policy track, the proposal is implemented based on the charter referenced in Stage 2; upon completion the Policy workgroup forwards a recommendation to full Policy for consideration.

Stage 4

Stage 4 is the development of a Policy recommendation to the Board, and is guided by the Framework for Successful Policy/CMER Interaction in Appendix B of BM 22. Policy has 180 days to complete this stage. The BM also suggests accompanying information to include with a

Forest Practices Board

March 23, 2009

Page 3

Policy recommendation to the Board, including final CMER reports, peer review documentation, Policy products, draft rule language and any other information relevant to the original proposal.

Stage 5 and 6

Stage 5 and 6 are Board consideration of the Policy recommendation and DNR implementation of Board action, respectively.

DC/

Attachment

Section 22 Guidelines for Adaptive Management Program

PART 1. OVERVIEW..... 1

PART 2. ADAPTIVE MANAGEMENT PROGRAM PARTICIPANTS 3

Figure 1. The structure of the Adaptive Management Program 3

2.1 Policy 4

2.2 The Cooperative Monitoring Evaluation and Research Committee (CMER)..... 4

2.3 Adaptive Management Program Administrator (Administrator) 5

PART 3. ADAPTIVE MANAGEMENT PROGRAM PROCESS STAGES 6

Figure 2. The AMP process is composed of six stages from initiation to management implementation. 6

3.1 Stage 1: Initiation and Screening of Proposals 7

3.2 Stage 2: Proposal Review and Planning 10

3.3 Stage 3: Proposal Implementation 12

3.4 Stage 4: Policy Recommendation 13

3.5 Stage 5: Board Consideration of Action 14

3.6 Stage 6: Management Implementation 14

PART 4. SCIENTIFIC PEER REVIEW PROCESS..... 14

4.1 Purpose 14

4.2 Administrative Structure..... 14

4.3 What Will Be Reviewed 15

Table 1 Overview of the requirements for the scientific peer review process 15

4.4 Procedure for Peer Review 15

4.5 Other Products that May be Reviewed 17

PART 5. DISPUTE RESOLUTION..... 17

5.1 Introduction..... 17

5.2 The Stages of Dispute Resolution..... 18

5.3 Mediation or Arbitration..... 18

5.4 Guidance 18

PART 6. RELATED PROGRAM ELEMENTS 22

6.1 Biennial Fiscal and Performance Audits 22

6.2 Biennial/Compliance Monitoring 22

Appendix A Adaptive Management Program Ground Rules 23

Appendix B Framework For Successful Policy/CMER Interaction 26

Appendix C Policy Work Group Charter Template 31

PART 1. OVERVIEW

Background

The Washington State Legislature found that the 1999 Salmon Recovery Act and the resulting Forests and Fish Rules "...taken as a whole, constitute a comprehensive and coordinated program to provide substantial and sufficient contributions to salmon recovery and water quality enhancement in areas impacted by forest practices..." (RCW 77.85.180(2)). It also recognized that federal and state agencies, tribes, county representatives, and private timberland owners have spent considerable effort and time to develop the Forests and Fish Report (RCW 76.09.055), and authorized the

development of forest practices rules based on the analyses and conclusions of the Forests and Fish Report (FFR). The rules include the development of an adaptive management program to:

. . . make adjustments as quickly as possible to forest practices that are not achieving the resource objectives . . . (and) shall incorporate the best available science and information, include protocols and standards, regular monitoring, a scientific and peer review process, and provide recommendations to the board on proposed changes to forest practices rules to meet timber industry viability and salmon recovery. (RCW 76.09.370(7))

These provisions for the forest practices Adaptive Management Program are designed to meet the goals and objectives for water quality and fish habitat within the jurisdiction of the Forest Practices Program. Four goals listed in the FFR are:

1. To provide compliance with the Endangered Species Act (ESA) for aquatic and riparian-dependent species on non-federal forest lands;
2. To restore and maintain riparian habitat on non-federal forest lands to support a harvestable supply of fish;
3. To meet the requirements of the Clean Water Act for water quality on non-federal forest lands; and
4. To keep the timber industry economically viable in the State of Washington.

The Forest Practices Board (Board) recognizes that current scientific knowledge lacks the certainty to answer all the pertinent questions associated with the forest practices rules. The Board manages a formal Adaptive Management Program to ensure that rules and guidance not meeting aquatic resource objectives will be modified in a streamlined and timely manner.

Introduction

This manual provides a technical advisory supplement to the Forest Practices Act to describe and provide guidance for the implementation and management of the Adaptive Management Program. The purpose of the program is to affect change when it is necessary or advisable to adjust rules and guidance for aquatic resources to achieve the goals of the Forest Practices Act or other goals identified by the Board. This is reflected in program resource objectives as described in WAC 222-12-045(2), which are aimed at ensuring that forest practices, either singly or cumulatively, will not significantly impair the capacity of aquatic habitat to:

- Support harvestable levels of salmonids;
- Support the long-term viability of other covered species; or
- Meet or exceed water quality standards (protection of designated uses, narrative and numeric criteria, and antidegradation).

The desired outcomes of the Adaptive Management Program include:

- Certainty of change as needed to protect covered resources;
- Predictability and stability in the process of change so that forest landowners, regulators and interested members of the public can anticipate and prepare for change; and
- Application of quality controls to scientific study design, project execution and interpretation of results.

PART 2. ADAPTIVE MANAGEMENT PROGRAM PARTICIPANTS

The forest practices rules in Title 222 WAC instruct the Board to manage three Adaptive Management Program participants: the TFW Policy Committee (Policy) or similar collaborative forum; the Cooperative Monitoring, Evaluation, and Research (CMER) Committee; and the Adaptive Management Program Administrator (Administrator). The Department of Natural Resources (DNR) operationally implements the Forest Practices Program (Figure 1).

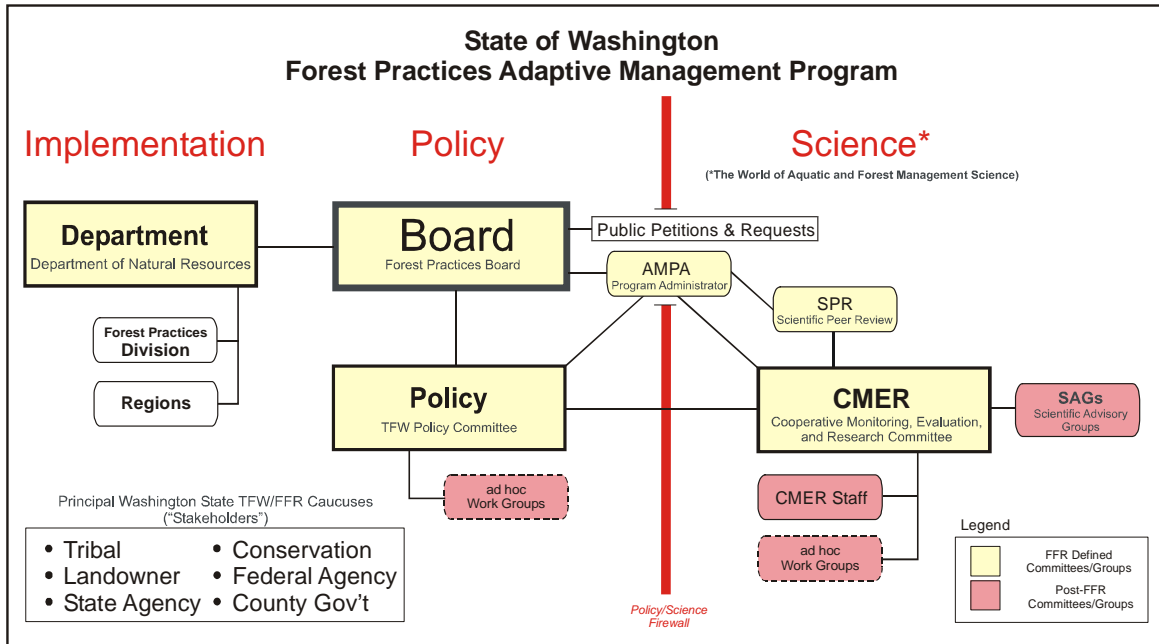


Figure 1. The structure of the Adaptive Management Program

The Adaptive Management Program is divided into three functions: Policy, Science, and Implementation. CMER reviews existing science and contributes original research to the program. Policy makes recommendations to the Board for decision. As shown on Figure 1, the “Policy/Science Firewall” illustrates the intent that the Science function produces unbiased technical information for consideration by Policy and the Board. The Administrator coordinates the flow of information between Policy and CMER according to the Board’s directives. DNR implements and regulates forest practices per WAC 222-08-010. Feedback can be achieved through compliance monitoring and implementation statistics and reports that are generated from operational experience such as Interdisciplinary (ID) Teams and alternate plans.

The Board has approval authority over proposed CMER projects, annual work plans, and expenditures. It establishes resource objectives to inform and guide the activities of the program and sets priorities for action. If consensus or an otherwise acceptable conclusion is not reached during the dispute resolution process, the Board makes the final determination. The Board also:

1. Approves nominations for CMER committee members;
2. Ensures that fiscal and performance audits of the Adaptive Management Program are conducted;
3. Forwards to the Adaptive Management Program all proposals affecting aquatic resources for new rules and board manual content; and

4. Approves proposed updates to Schedules L-1 and L-2, “Key Questions, Resource Objectives, and Performance Targets For Adaptive Management”(see Adaptive Management website at <http://www.dnr.wa.gov/forestpractices/adaptivemanagement/>).

2.1 Policy

The TFW Policy Committee (Policy), or similar collaborative forum, manages the consensus based policy forum to support the Adaptive Management Program. Policy consists of members selected by and representing the following State of Washington TFW caucuses:

1. Forest landowners
2. Environmental community
3. Tribal governments
4. County governments
5. State of Washington Departments (Fish and Wildlife, Ecology, and Natural Resources)
6. Federal agencies (National Oceanic & Atmospheric Administration - Fisheries, Fish & Wildlife Service, Forest Service, and Environmental Protection Agency)

The function of Policy is to develop solutions to issues that arise in the Forest Practices Program. These issues may be raised by science reports on rule or program effectiveness or policy questions on implementation of forest practices. Solutions may include the preparation of rule amendments and/or guidance recommendations. Policy also assists the Board by providing guidance to CMER and recommendations on adaptive management issues. Policy reviews and makes recommendations on the key questions, resource objectives, and performance targets (Schedules L1 and L2), and recommends CMER program priorities for CMER work plans containing specific research projects to the Board. Policy’s working relationships are described in the Adaptive Management Program Ground Rules (Appendix A).

For the purposes of implementing the Adaptive Management Program, Policy provides the forum for discussion and problem solving for the ongoing implementation of the Forest Practices Act and rules. This includes the development of board manual sections dealing with aquatic resources and matters relating to small landowner programs, adaptive management funding, and federal assurances of the DNR Forest Practices Habitat Conservation Plan (HCP).

2.2 The Cooperative Monitoring Evaluation and Research Committee (CMER)

The purpose of CMER is to advance the science needed to support adaptive management. For the Adaptive Management Program, best available science is considered to be relevant science from all credible sources including peer-reviewed government and university research, other published studies, and CMER research products. Applicable historic information, privately produced technical reports, and unpublished data may have value and are considered as long as they can be assessed for accuracy and credibility. CMER is responsible for understanding available scientific information that is applicable to the questions at hand, selecting the best and most relevant information and synthesizing it into reports for Policy and the Board.

CMER is composed of scientific representatives of TFW participating caucuses who are expected to maintain an objective scientific perspective. Participating representatives may be Board-approved members but participation is not limited to Board-approved members. To become a Board-approved member, a TFW caucus nominates a representative for Board approval (by contacting the Board's Rules Coordinator at 360-902-1400 or email at forestpracticesboard@wadnr.gov). CMER operates on the basis of consensus of all parties, but if consensus cannot be reached a decision is limited to the Board-approved membership. Because CMER is charged with producing credible, peer-reviewed technical reports based on best available science and guided by the Monitoring Design Team report, participating caucuses are encouraged to nominate research scientists with publication experience and technical scientists with experience in conducting and reviewing research work.

CMER maintains and updates for Policy review and Board approval the Forests and Fish key questions, resource objectives and performance targets (Schedules L-1 and L-2) and the CMER work plan. See Adaptive Management website at <http://www.dnr.wa.gov/forestpractices/adaptivemanagement/> for a listing of current key questions, resource objective and performance targets.

The CMER work plan provides the integrated strategy for how CMER supports the Adaptive Management Program. The work plan identifies six objectives towards this goal:

1. State critical research and monitoring questions that are pertinent to evaluating rule, guidance, and DNR products (i.e., rule tools) effectiveness;
2. Organize these questions into coherent program groupings;
3. Assess feasibility, resource risk, and scientific uncertainty addressed by each program;
4. Develop an integrated strategy for accomplishing the work;
5. Rank programs/projects for implementation; and
6. Develop budget estimates and timelines.

The CMER work plan will also provide for periodic review 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. Interpretation of the results of compliance monitoring will be conducted as part of each program/project that relies on it.

The details of CMER business are provided in the Protocols and Standards Manual, which is updated regularly and available at <http://www.dnr.wa.gov/forestpractices/adaptivemanagement/>. Adaptive Management Program ground rules for CMER are presented in Appendix A.

2.3 Adaptive Management Program Administrator (Administrator)

The Administrator ensures the operation of an efficient, clear and open Adaptive Management Program that serves the needs of the Board. The Administrator works directly with the Board, Policy, and CMER to:

1. Respond to requests for adaptive management review.
2. Manage Adaptive Management budgets and contracts.
3. Communicate CMER research results to Policy and the Board.
4. Facilitate a Policy or Board response to questions of Policy interpretation that may arise in the course of CMER scientific work.

5. Assist in conducting CMER business.
6. Manage the Adaptive Management Program to include the research and monitoring projects and budgets.
7. Coordinate with the Board to ensure that its guidance and priorities are implemented and that the information and results produced by the Adaptive Management Program are effectively communicated to the Board.
8. Administer a science-based operation and facilitate the appropriate involvement of the independent scientific peer review process.
9. Coordinate dispute resolution.

PART 3. ADAPTIVE MANAGEMENT PROGRAM PROCESS STAGES

The Adaptive Management Program utilizes a six-stage process for managing program proposals (Figure 2). The six stages serve to “close the loop” when there is a need to adjust forest practices rules, guidance, or DNR products (i.e., rule tools). This system is used to guide participants in program expectations, provide standards to gauge where a proposal or product fits, and provide protocols to move proposals through the stages. The term “proposal” is used generically to identify any form of request, question, task, project, sub-program, etc., whose end product may affect changes in forest practices or otherwise meet one of the program’s goals and objectives.

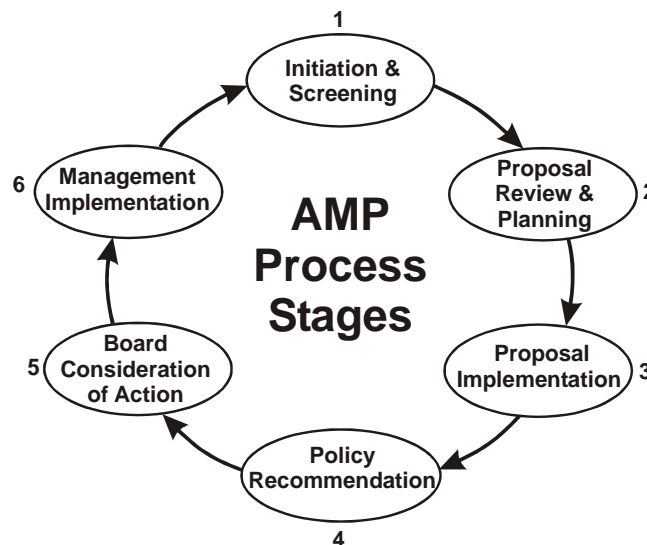


Figure 2. The AMP process is composed of six stages from initiation to management implementation.

This manual guides Adaptive Management Program participants toward conducting an efficient and effective process in a timely manner. It provides a stage-by-stage approach to take a proposal from initiation to implementation. It sets the minimum level of standards and protocols expected for successful participation in a multi-stakeholder, cooperative, and consensus-driven process. Guidance is also provided to identify the different Adaptive Management Program groups and committees available for addressing different proposals. Flexibility is allowed where alternative processes provide information of the same or higher quality. If participants cannot reach consensus at any stage, the issue may be addressed within the dispute resolution process as described in Part 5.

Proposals for the Adaptive Management Program process should be submitted prior to the first day of July to be considered for inclusion in the following year's fiscal work plan. This date is used to provide a systematic and consistent annual process, regardless of whether proposals require funding. Proposals submitted to the Administrator after the first day of July are at risk of not being considered in the subsequent fiscal year. All attempts will be made to ensure timely consideration of proposals.

It is expected that proposal funding will be structured in such a way that no interest can bias the scientific inquiry. Funding earmarked for a specific project or topic will be allowed if agreed to by Policy and the Board. External science studies may be brought to CMER:

- As part of the body of science reviewed by CMER in addressing work plan tasks; or
- Directly in the form of specific technical reports to be reviewed and reported on by CMER as directed by Policy or the Board.

3.1 Stage 1: Initiation and Screening of Proposals

The listed projects in Schedule L-2 and the annual CMER work plan contain a list of currently proposed projects. Initiation of additional projects is dependent upon screening and available funds.

Proposals are initiated as requests for investigation of potential changes to forest practices rules, guidance, or DNR products. In general, the types of proposals considered for the Adaptive Management Program are requests for:

- Research and monitoring of scientific uncertainty and resource risks;
- Policy interpretations and modifications to improve forest practices management and aquatic resource protection; and
- Review of completed technical studies or issue analyses for consideration in the adaptive management program.

Proposal Initiation

An Adaptive Management proposal can be initiated by:

- The Board, including actions taken in response to public requests; or
- Any Adaptive Management Program participant, through the Administrator.

The general public may present a proposal at a Forest Practices Board meeting. A schedule of the Forest Practices Board meetings is found at www.dnr.wa.gov/forestpractices/board/.

All proposals from the Board (including public requests) or an Adaptive Management Program participant are submitted to the Administrator who will assure that the proposal identifies:

1. The affected forest practices rule, guidance, or DNR product;
2. The urgency based on scientific uncertainty and resource risk;
3. Any outstanding TFW, FFR, or Policy agreements supporting the proposal;
4. How the results of the proposal could address Adaptive Management Program key questions and resource objectives or other rule, guidance, or DNR product; and
5. Available literature, data and other information supporting the proposal.

Proposals may also include:

6. The proposal's testing hypotheses and assumptions;
7. A description of affected public resources;
8. Potential cause and effect relationships with forest practices management;

9. A description of the proposal's study design; and
10. An estimated timeline with milestones and costs associated with implementation of the proposal.

Assess Adaptive Management Program applicability

The Administrator assesses a proposal for its applicability and relevance to the Adaptive Management Program, i.e., whether it would affect how forest practices are conducted with respect to aquatic resources, or whether it is a directive from the Board to include within the Adaptive Management Program.

The Administrator considers outstanding agreements (see note below) including any formal agreements from TFW (1987), FFR (1999), or current Policy agreements related to the issue, and determines if they are interpreted correctly in the proposal.

Note: Outstanding agreements are negotiated actions that have been approved and allowed within the adaptive management process prior to the start of a proposal or completion of a project. Documentation of agreements and authorities supporting a proposal are of high value in defining the context, expectations, and findings of an adaptive management project. This can range from specific language expected to become permanent rule to general language used to identify the framework for future actions.

Assess management and resource implications

The Administrator determines a proposal's applicability to the Adaptive Management Program by assessing for management and resource implications based on the Framework for Successful Policy/CMER Interaction (Appendix B). Using this process, the Administrator provides a coarse-level estimate of expected end results, including a range of possible results that may be associated with each proposal. This assessment of management implications may cover spatial and temporal scales, landowner costs, agency management costs, programmatic costs and potentially affected programs. The framework provides a standard process for assessing a project over its life in the Adaptive Management Program.

The Administrator considers the following questions:

1. Is the proposal intended to inform a key question, resource objective, or performance target from Schedule L-1?
2. Is the proposal intended to implement projects listed in Schedule L-2?
3. Is the proposal intended to inform the forest practices rules, guidance, or DNR product? Is the specific rule, board manual section, DNR product, or effectiveness of compliance monitoring cited and key language provided correctly? If the proposal is for a new forest practices rule, does it fill a gap? If so, would it fit within the current forest practices structure?
4. If the proposal includes a completed study, was the study carried out using protocols and standards similar to CMER (i.e., study design, peer review)?
5. What would/does the study tell us?
6. What would/does the study not tell us?
7. What is the relationship between this proposal and any other studies that may be planned, underway, or recently completed? Cite the information and provide a coarse assessment of the literature, data, or other scientific information provided and determine whether any of the literature or data has been peer reviewed. Identify whether the literature or data is applicable to

Washington State forest practices issues. Factors to consider in answering this question include, but are not limited to:

- Feasibility of obtaining more information (within or outside Adaptive Management Program) to better inform Policy about resource effects.
 - Whether other studies reduce uncertainty.
8. How much of an incremental gain in understanding would/do the proposal results represent? Explain how the proposal results might affect the current rules, numeric targets, performance targets, or resource objectives.

Note: The science underlying the current forest practices may be characterized based on a review of eleven best available science elements including: a) scientific information source; b) spatial scale; c) temporal scale; d) study design; e) methods; f) data; g) quantitative analysis; h) context; i) references; j) logical conclusions and reasonable inferences; and k) peer review.

In addition to the questions above, the Administrator identifies and describes any urgency for the proposal based on the scientific uncertainty, resource risk and other factors.

Assess proposal development track

For each proposal, the Administrator recommends a proposal development track to Policy based on the nature of the proposal and amount of information provided. Proposals will generally follow one of two tracks: scientific or policy. Proposals requiring scientific assessment or analysis are directed toward the science track. Proposals seeking to change or clarify policies or change the way existing science is implemented in the rules are directed toward the policy track.

Science track: The science track evaluates currently available science, collects new information through research and monitoring, and synthesizes the best available information into a technical summary for Policy consideration. In all cases CMER is responsible for conducting synthesis of research and monitoring information and for producing reports to Policy.

At this stage in the process, 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 Adaptive Management Program development following the policy track are those related to interpretation and implementation of the TFW Agreement or the FFR.

Assemble and present proposal review packet to Policy

The Administrator provides to Policy:

- Summary of proposal;
- Recommendation of applicability and value to the Adaptive Management Program including identifying those proposals that should not be included in the process;
- Recommendation of proposed track for Adaptive Management Program development.

Policy Screening and Recommendation

Evaluating proposals: During this stage, Policy has the opportunity to deliberate over proposals considering the information provided by the Administrator. Policy may engage in discussions with the Administrator regarding the designated tracks and quality of information provided for each proposal. Policy will consider budget implications and potential impacts of the proposal on the CMER work plan in the initial project screening.

Screening decisions on proposals: Policy considers proposals for their relevance and suitability to the Adaptive Management Program as well as timing of implementation, including urgency and appropriate sequencing. Policy strives for consensus on a comprehensive annual Adaptive Management Program package and either:

- Recommends to the Board that the proposal be rejected; or
- Accepts the proposal and assigns it to a specific track in the CMER or Policy work plan.

Administrator Coordination: The Administrator coordinates action and communicates between the Board, Policy and CMER, and delivers the recommendation for rejection of proposals to the Board. Where the Board disagrees with a Policy recommendation, the Administrator notifies Policy and coordinates action as directed by the Board.

3.2 Stage 2: Proposal Review and Planning

If Policy accepts proposals in Stage 1, Stage 2 begins. Stage 2 includes: development by track; administrator assessment and synthesis; policy recommendation; administrator assessment and synthesis; Board consideration for action; and administrator coordination. The end product of Stage 2 is a Board-approved annual CMER work plan and budget from which proposals will be considered for implementation.

Development by Science Track

Each Adaptive Management Program proposal is developed according to the following guidelines and it is recommended that proposal development be accomplished within 90 days.

Science track proposal: development, review and planning

Proposals in the science track will follow the guidelines provided in the CMER Protocols and Standards Manual. At a minimum, for each proposal, CMER will review and, as necessary, revise the Administrator's initial screening and synthesis. Refinements will be provided in the CMER work plan.

Proposals that involve gathering new data or new analysis of existing data must include the following elements:

1. A description of the scientific basis of the current rule or guidance;
2. An estimate of the degree to which knowledge or understanding will be improved if the proposal is implemented;
3. A detailed description of the actions required to achieve the improved knowledge or understanding, including peer review;
4. An estimate of the human resources required to implement a proposal; and
5. A budget and timeline.

Those technical proposals that provide completed scientific reports and involve neither gathering new data nor original analysis of existing data (i.e., proposals that purport to require only Stage 4 action by Policy) will include the CMER review of the following elements:

- An assessment of the validity and applicability of the science;

- Whether peer review should be conducted; and
- A budget and timeline.

In addition, CMER will make a recommendation to Policy and the Board on all proposals regarding their relative importance in the annual CMER work plan.

Administrator assessment and synthesis

Package proposals and budget: The Administrator receives the developed science proposals, assesses the information for completeness, and synthesizes the information into a single annual CMER work plan proposal and budget. The Administrator has until the first working day of February to complete this package.

Present CMER Work Plan to Policy: The Administrator presents the draft annual CMER work plan to Policy two weeks prior to the regularly scheduled March meeting when Policy will deliberate the work plan.

Policy recommendation

Policy reviews the CMER work plan and may either approve or revise it. Policy documents the revisions and includes an explanation of the revisions. In preparation for May Board action, Policy has until the first working day of April to provide the recommended revised CMER work plan to the Administrator.

Administrator work plan presentation

The Administrator has until the second Wednesday of April to provide the recommended revised CMER work plan to the Board.

Board consideration for action

The Board, utilizing recommendations from Policy and the Administrator's evaluations, makes the final determination regarding the proposals and work plan, including approval and prioritization.

Administrator coordination

The Administrator coordinates the Board-approved proposals and prepares the completed Fiscal Year CMER work plan. All Board-approved proposals from Stage 2 will be forwarded to Stage 3 Implementation processes.

Development by Policy Track

For each proposal in the Policy track, Policy will create a workgroup composed of Policy participants and caucus staff to develop a charter (Appendix E). The charter will include the following elements:

1. A description of the current policy and a brief description of how it was developed;
2. A description of the benefits of the policy proposal;
3. Actions required to develop the policy proposal;
4. A schedule of dates for workgroup submission of progress reports to Policy;
5. An estimate of the human resources to develop the proposal; and
6. A budget and timeline.

The Policy-approved charter will be included in the proposal work plan. Policy will forward the charter to the Board for informational purposes.

3.3 Stage 3: Proposal Implementation

The proposal implementation stage includes the practical implementation of the work plan and the assessment and synthesis of the results into a findings report.

Implementation by CMER Track

Proposals in the Board-approved annual CMER work plan will be delegated as appropriate for implementation. The Administrator will coordinate the initiation of the implementation process with the various groups based upon Policy and Board direction and details provided in the work plan.

Funding will be made available for approved work plan projects through DNR contracting services following agency and state Office of Financial Management (OFM) requirements. This often requires development of a scope of work on which the contract is based. The Administrator is responsible for management of this process.

CMER implementation

Approved proposals will be implemented following the guidelines in the CMER Protocols and Standards Manual.

Assessment and synthesis

Upon approval of a final study report, CMER develops a findings report. The findings report includes the CMER-approved final study report, answers to the CMER/Policy framework questions 1 through 6 (Appendix B), and all technical implications generated through the CMER consensus process. Findings reports should be completed within 3 months of CMER approval of final study reports.

Administrator analysis and transmittal to Policy

The Administrator assesses the findings report for completeness and adds a discussion of the forest practices rule and/or guidance implications to the CMER findings report. The Administrator discusses questions regarding completeness with CMER prior to presenting the findings report to Policy. The Administrator then submits the completed findings report within one month to Policy for consideration of recommendations to the Board.

Implementation by Policy Track

Policy plans and implements approved proposals delegated to Policy based on the charter approved for each proposal and guided by the principles of the Adaptive Management Program.

Upon completion of a final product as defined by the charter, the Policy workgroup develops a recommendation for Policy. This should occur within one month of product completion.

3.4 Stage 4: Policy Recommendation

Upon receipt, Policy has 180 days to develop a decision whether consensus or not and then make a recommendation to the Board. Working with the Administrator, Policy recommendations to the Board will be accompanied by a formal petition for rulemaking in accordance with WAC 222-08-100 and RCW 34.05.330 or a non-rulemaking alternative action. Policy may also recommend that the Board take no action. Policy consideration of all products from Stage 3 will be based on the *Framework for Successful Policy/CMER Interaction* (Appendix B).

Policy Decision to Take Action

Policy determines by consensus whether any action should be taken in response to the information provided. Upon receipt of the findings report, Policy has 45 days to review the findings and to make a consensus decision as to whether the information merits taking action or not. A no action consensus skips the Policy Alternatives step and goes to the Final Policy Consensus step. Policy consensus for taking action will initiate the development of action alternatives.

Policy Alternatives

Policy analyzes the alternative courses of action and determines an appropriate management response. Alternatives will include information necessary to show whether the proposal is scientifically credible, operationally practical and administratively feasible. Policy has 60 days to develop appropriate alternative courses of action, and an additional 45 days to reach a consensus decision on an alternative to recommend to the Board.

Final Policy Consensus

Policy determines by consensus whether to make an adaptive management recommendation to the Board. In making a recommendation Policy will be mindful of factors that the Board will need to consider when making a decision. These factors include the FFR goals (listed in Part 1, Adaptive Management Program Overview) and statutory direction in chapter 76.09 RCW. If Policy has agreed upon an alternative, Policy finalizes its recommendations within 30 days and gives them to the Administrator for delivery to the Board. If Policy has not agreed upon an alternative, Policy either invokes Stage 2 of the Adaptive Management Program dispute resolution process or gives relevant materials listed below to the Administrator for delivery the Board. If dispute resolution is selected Policy has 90 days to attempt to reach a consensus. If dispute resolution is successful, Policy has selected an alternative and has 30 days to finalize the recommendations and gives them to the Administrator for delivery to the Board. If dispute resolution is unsuccessful, Policy has 30 days to assemble the materials described in WAC 222-12-045(2)(h)(ii)(C) and forward to the Administrator for delivery to the Board.

Recommendations to the Board should be accompanied by:

1. Specific recommendations and/or alternatives developed by Policy;
2. Any final CMER report, Policy product, or the Administrator discussion report of potential implications to the rules and guidance;
3. Any appropriate scientific peer review reports and documentation;
4. Any other information or reports as appropriate specifically generated as a result of the Adaptive Management Program process related to the original Board approved proposal of concern; and
5. Draft rule language when appropriate to the recommendation.

Administrator Coordination

The Administrator will provide coordination in the development and presentation of the Policy report to the Board.

3.5 Stage 5: Board Consideration of Action

The Board will consider recommendations presented by Policy and consider action to be taken. See Board meeting minutes at <http://www.dnr.wa.gov/forestpractices/board/> for a status of actions taken.

3.6 Stage 6: Management Implementation

DNR is responsible for implementing new rules and guidance. Performance audit protocols should be modified (see also Section 6.1) to reflect and report on new rules and guidance.

PART 4. SCIENTIFIC PEER REVIEW PROCESS

4.1 Purpose

WAC 222-12-045(2)(c) “establishes an independent scientific peer review process to determine if the scientific studies that address program issues are scientifically sound and technically reliable; and provide advice on the scientific basis or reliability of CMER’s reports.”

The purpose is to:

1. Clarify which adaptive management products and recommendations require independent scientific peer review;
2. Identify products or situations where peer review or other technical consulting services are suggested;
3. Outline the basic review procedures for each type of product; and
4. Help define responsibilities for CMER and other adaptive management participants throughout this process.

The scientific review process should not be used as a substitute for dispute resolution.

4.2 Administrative Structure

Scientific review is conducted in a manner similar to the peer review process used by many scientific journals. Peer review is conducted in an independent scientific peer review process established by the Board. This manual uses the functional names and nomenclature common to the peer reviewed journal process.

The Administrator coordinates the peer review process between the report authors, CMER, and an appointed Managing Editor. The Managing Editor initially reviews CMER reports and assigns them to an Associate Editor having expertise in the appropriate scientific field. The Associate Editor then selects 2-3 individual reviewers to perform the actual review of the document.

The Managing Editor is also responsible for maintaining a database of reviewers by area of expertise, and evaluating the Associate Editors and reviewers’ performance. CMER, Policy, and the Board may determine other duties of the Managing Editor.

4.3 What Will Be Reviewed

Final reports of CMER funded studies, certain CMER recommendations, and pertinent studies not published in a CMER-approved, peer-reviewed journal are reviewed in the scientific peer review process. Other products that may require review include, but are not limited to, external information, work plans, requests for proposal, subsequent study proposals, a final study plan, and progress reports as described in WAC 222-12-045(2)(c). Table 1 provides a summary of what will be reviewed as part of the scientific peer review process.

Table 1
Overview of the requirements for the scientific peer review process

Review Process (will include expert panels or as otherwise approved by the Administrator)	Must be Reviewed	May be Reviewed
Double-blind Review	<ul style="list-style-type: none"> ▪ CMER final reports ▪ Pertinent studies in non-approved journals ▪ Certain CMER recommendations ▪ unpublished reports 	<ul style="list-style-type: none"> ▪ External information ▪ Work plans ▪ RFPs ▪ Progress reports ▪ Literature reviews
Interactive Review		<ul style="list-style-type: none"> ▪ Study plans ▪ Literature reviews

4.4 Procedure for Peer Review

Approach

Products requiring formal peer review should undergo the double-blind approach where both the authors and the reviewers remain anonymous. This approach is a generally accepted method used by most scientific journals.

Background Information and Review Questions

After CMER approves a final project report, CMER may prepare additional background information and a list of specific questions for the peer reviewers to address. These questions may outline known problems or areas of uncertainty that reviewers should pay particular attention to. Questions submitted for peer review must be approved by CMER and should only address technical issues. Questions related to Policy issues should be referred to Policy. If CMER cannot gain consensus on these additional materials, the issue is forwarded to Policy for dispute resolution.

Administrator Initiates the Peer Review

CMER sends the final CMER project report and any review questions to the Administrator. The Administrator reviews all materials to ensure that the submittal is consistent with CMER protocol. The Administrator prepares a transmittal letter that may incorporate additional background information or review questions, and forwards all materials to the Managing Editor of the scientific peer review process.

Scientific Peer Review

The Managing Editor receives materials from the Administrator, evaluates their readiness for review, and then transfers them to the appropriate Associate Editor. The Associate Editor selects a panel of two or three reviewers from a list developed by the Managing Editors, with nominations from Associate Editors and CMER.

A final CMER project report undergoes double-blind peer review in which both the authors and the reviewers remain anonymous. Each reviewer independently reviews the material, responds to any specific review questions, and provides comments and recommendations to the Associate Editor. The Associate Editor then summarizes all reviewer comments into a separate synthesis report that identifies the key observations, provides general suggestions, outlines any contradictions in comments, and includes a recommendation for addressing contradictions. If the individual reviews are inconsistent, the Managing Editor, the appropriate Associate Editor and an outside Associate Editor(s) address and resolve the inconsistencies. It should be noted that while synthesis reports are disclosable under public disclosure law, confidentiality of the reviewers and their individual comments is maintained.

The Associate Editor forwards the synthesis report, together with the individual reviewer comments, to the Managing Editor. The Managing Editor then returns the document to the Administrator who forwards it to the authors and CMER.

Review Response Action Plan

CMER prepares a “Review Response Action Plan” in response to the peer review comments by working with the report authors to evaluate all peer review comments and defining the appropriate actions (if any). CMER is not obligated to incorporate all the changes suggested by the peer review, but must acknowledge the comments received, indicate how it will respond, and provide rationale for its response. CMER identifies any suggested document revisions and/or actions that stem from the peer review by a consensus process. If CMER cannot reach consensus, it will forward the Action Plan to Policy for review and resolution.

Special Considerations for Literature Reviews

Literature reviews should be peer reviewed since they can strongly influence the direction of subsequent research and monitoring programs. Peer review of a literature review will follow a similar process as final reports. However, these peer reviews will typically focus on whether the literature review overlooked relevant literature, and whether conclusions or synthesis recommendations are supported by the literature reviewed.

Special Considerations for Certain CMER Recommendations

CMER may respond to Policy issues in various ways that may include workshops, literature reviews, white papers, recommendations for additional research, etc. The products of these efforts are subject to peer review. When sufficient and credible data are available for any given issue or question, CMER prepares a recommendation package that is based on the best available science (e.g., this may include the results of CMER research as well as other research). After Policy reviews the CMER recommendations, it has the option of requesting peer review to evaluate the scientific content of the report. The review of CMER recommendations to Policy is similar to other peer review except the review is initiated by Policy.

4.5 Other Products that May be Reviewed

- Reports and articles from journals not approved by CMER and unpublished reports must be peer reviewed prior to their use in adaptive management decisions.
- Reports and CMER products that have a science question within them may be reviewed. The decision to peer review these products is based on whether additional scientific expertise is needed.
- Review of study plans/designs is recommended to help identify potential problems prior to releasing funds or collecting any actual data. This early project phase can benefit from open and iterative interaction between the authors, reviewers, and others. Unlike the double-blind peer review process, this approach provides more of a consulting service where all parties agree to face-to-face meetings or other interactions where the identity of the authors and reviewers may be revealed.

The Administrator and the Associate Editor coordinate the open review process. They identify specific questions or issues to be addressed during interactive sessions and communicate them to study plan authors and CMER-appointed reviewers. CMER-appointed reviewers may interact directly with the study plan authors and other CMER-appointed reviewers. Interactive sessions will generally be conducted by phone conference or, in special cases, in face-to-face meetings.

In some cases, the reviewers may be asked to participate in development or refinement of the study plan by addressing unresolved questions in the study plan development process, or by bringing their expertise to bear on specific technical questions. In other cases, the authors may only want the opportunity to discuss specific comments with reviewers for clarification. The products of an open review may be similar to those of a blind review, i.e., reviewers comment and an Associate Editor synthesizes, or the products may be specifically tailored to the particular project.

PART 5. DISPUTE RESOLUTION

5.1 Introduction

CMER and Policy operate most effectively in the collaborative consensus-based approach of the TFW process. However, an important feature of the Adaptive Management Program is time certainty of decision-making at critical junctures and Policy consideration related to the effectiveness of forest practices rules. Time certainty ensures that management will respond to scientific information in an appropriate and timely manner to close the adaptive management loop.

Adaptive management under the forest practices rules is a process that contains many decision points. CMER and Policy are charged with conducting scientific and policy review of specific forest practices rules and forwarding recommendations to the Board as to effectiveness of those rules. Decisions must be reached at CMER and at Policy at each step along the way in order for the program to function. For the most part, consensus decisions are routine and non-controversial. However, in an arena where aquatic resource protection necessitates some level of restriction of forest practices activities and where changes to established rules could have a significant economic impact on forest owners or pose a significant risk to the aquatic resources, disputes can arise at many decision junctures. Left unresolved, disputes could slow or stop the adaptive management process by delaying recommendation or preventing them from reaching the Board altogether. Since, other than legislative action or court order, the Board cannot act to change aquatic resource related forest

practices rules without a functioning adaptive management process, unwarranted economic loss and/or unacceptable risk to public resources could occur if disputes are not resolved.

Part 5 provides guidance for Adaptive Management dispute resolution under forest practices rules WAC 222-12-045(2)(h). The purpose of dispute resolution is to provide a time sensitive structure to the decision making process where routine methods for reaching consensus are not successful. The primary objective of the process outlined here is to achieve consensus. The rules establish dispute resolution as a staged process that provides two structured opportunities for the participants to reach agreement before a dispute is taken to the Board for resolution in the form of a petition as outlined in WAC 222-08-100.

5.2 The Stages of Dispute Resolution

Adaptive management dispute resolution can involve up to three stages, but stops at any point before entering the third stage if consensus is reached.

Stage 1: Resolve issues within six months or twelve months where a technical dispute must be addressed by CMER and Policy.

Stage 2: Implement mediation to facilitate consensus or agree to arbitration within three months following initiation of Stage 2.

Stage 3: Submit the dispute to the Board for action.

Stage 1 and 2 time limits may be modified by a Policy consensus agreement.

5.3 Mediation or Arbitration

Mediation involves a professional mediator to organize and manage discussions between or among the parties with the clear purpose of reaching consensus on an issue. Arbitration is normally a binding process similar in many ways to the judicial system.

Within the Policy process the results of arbitration could be binding only as long as parties agreed to be bound. Arbitration in this context is a method for employing a third party to provide an informed and reasoned assessment of disputed issues(s). With arbitration, it is the arbitrator's responsibility to transmit his or her discussion to the appropriate party. In the case of a Policy dispute on a rule recommendation, this means that the arbitrator would transmit his or her decision to the Board.

5.4 Guidance

The following guidance for conducting dispute resolution is divided into three sections. The first covers initiation of dispute resolution. The second section provides guidance for CMER and Policy on conducting Stage 1 dispute resolution and the third section contains guidelines for conducting Stage 2. Stage 3 is Board decision making and is not covered in this manual.

Initiating Dispute Resolution

1. Dispute resolution is a defined process that has an initiation and an end point.
2. Dispute resolution may be initiated within Policy or CMER, or the Board may invoke dispute resolution and impose the process on Policy or CMER.
3. The dispute resolution process can be initiated when Policy or CMER fails to reach consensus on an issue and that failure of agreement prevents a project or a recommendation from moving forward to the next step. When a Policy or CMER member feels that ordinary discussion and

debate of an issue has been exhausted without satisfactory resolution they may initiate dispute resolution.

4. A Policy or CMER member can initiate dispute resolution by making a formal request to the co-chairs of these respective committees. If the request for dispute resolution is on the advance agenda of a meeting and is requested at the meeting with a written or verbal statement sufficient to clarify the nature of the dispute, this meeting will constitute initiation of dispute resolution. If there is disagreement over the framing of the issue by the member initiating dispute resolution or other members, the decision of the chair/co-chairs of the responsible committee, in consultation with the Administrator, will be final. If not, initiation of formal dispute resolution can occur at the next regularly scheduled or special meeting of the respective committee. The initiation of dispute resolution should be recorded in the committee meeting minutes.
5. The Policy or CMER co-chairs should immediately inform all committee members that formal dispute resolution has been initiated.

Guidance for Dispute Resolution Stage 1

CMER

1. As a body, CMER may have to conduct dispute resolution on issues presented by a Scientific Advisory Group or on issues originating in CMER.
2. CMER has a maximum of six months following formal initiation of dispute resolution to resolve the dispute. If CMER cannot resolve the dispute, CMER must frame the issue for presentation to Policy within that six month period. Therefore, if the CMER co-chairs determine that CMER will not be able reach consensus on the issue(s) they should conclude discussion early enough so that there is time within the six month period to frame and present the issue(s) to Policy.
3. CMER co-chairs should get disputes on the agenda as soon as possible after they are informed that a member wishes to initiate dispute resolution.
4. The CMER role in dispute resolution is to attempt to reach consensus on technical issues. CMER must decide quickly whether the issue brought forward for dispute resolution is a technical issue that CMER can resolve or a Policy issue that should be forwarded to Policy.
If the Administrator, in consultation with the CMER co-chairs, determines that the dispute cannot be resolved through technical review and discussion, but is in fact a question of policy, they should immediately turn the issue over to the Administrator to work with the initiating party to frame the issue for Policy consideration. This should be completed within one month of the initiation of dispute resolution so long as that month includes a regular CMER meeting at which the members have an opportunity to discuss the issue as it has been framed. This last discussion before CMER is intended to determine if resolution can be reached without the need to take it to Policy. The language for framing the issue for Policy is the responsibility of the disputing parties and the Administrator and does not require CMER consensus.
5. The CMER co-chairs, with the guidance and assistance of the Administrator, are responsible for setting up a dispute resolution discussion and can employ a variety or combination of methods to attempt to resolve the dispute. The method selected and the time period available for resolution should be announced to CMER via e-mail before the first meeting that the issue is scheduled to be discussed. The following are suggested methods for CMER co-chairs to seek resolution. Other methods not listed may be equally effective.
 - a. Place the dispute on the agenda where it will be aired and the group will attempt to come to consensus through a normal chair-facilitated discussion.

- b. Ask for and distribute written discussions of the disputed issues and potential solutions from the party or parties requesting dispute resolution and response from those with opposing views. This exchange would have to be scheduled so that discussion leading to potential consensus could occur on time.
 - c. Ask an impartial volunteer from the group to mediate the dispute and facilitate an attempt to reach consensus.
 - d. Add a fact-finding or research step to any one of the above methods to insure that the decisions of CMER are properly informed on the issues of the dispute. Fact-finding would have to be scheduled so that discussion leading to potential consensus could occur on time.
 - e. Arrange for discussion outside of formal CMER meetings to facilitate agreement among disputing parties.
 - f. Reach consensus on a customized method of addressing the dispute as long as it can be accomplished within the allotted time period.
6. If consensus is reached, dispute resolution is terminated. The consensus agreement should be recorded in CMER meeting minutes and reported to the Policy co-chairs.
 7. If consensus is not reached the dispute is elevated to Policy. CMER co-chairs or the parties to the dispute may be expected to make a written or oral presentation to Policy detailing the dispute so the Policy has enough information to begin considering the issue(s).

Policy

1. As a body, Policy may have to conduct dispute resolution on policy questions originating in CMER, technical issues that have been through Stage 1 in CMER without resolution, or policy issues that originate in Policy.
2. If a policy dispute comes to Policy from CMER, Policy has up to six months following receipt of the issue to complete Stage 1 dispute resolution.
3. If an unresolved technical dispute comes to Policy after being considered by CMER, Policy has up to an additional six months to complete Stage 1. This may be up to a total of 12 months from formal initiation of dispute resolution in CMER.
4. If a dispute originates in Policy, Policy has up to six- months following formal initiation of dispute resolution to complete Stage 1.
5. Policy co-chairs should get disputes on the agenda as soon as possible after being informed that a member wishes to initiate dispute resolution.
6. Policy disputes originating in CMER will be framed and forwarded to Policy by the Administrator.
7. Policy co-chairs should seek additional clarification from the CMER co-chairs when they are unclear of the nature of a policy dispute or the technical issues involved.
8. Technical disputes from CMER will also be framed and forwarded to Policy by the Administrator. Handoff to Policy may include written or oral presentations by the parties to the dispute or the CMER co-chairs detailing the issues so that Policy has enough information to begin considering the dispute.
9. The initiation of dispute resolution should be recorded in the formal meeting minutes and the Board should be notified through the Administrator.

10. The Policy co-chairs are responsible for setting up a dispute resolution discussion and can employ a variety or combination of methods to attempt to resolve the dispute. The method selected and the time period available for resolution should be announced to the Policy committee via e-mail before the first meeting that the dispute is scheduled to be discussed. The following are suggested methods for seeking resolution. Other methods not listed may be equally effective.
 - a. Placing the dispute on the agenda where it will be aired and the group will attempt to come to consensus through a normal chair facilitated discussion.
 - b. Asking for and distributing written discussions of the disputed issues and potential solutions from the party or parties requesting dispute resolution and response from those with opposing views. This exchange would have to be scheduled so that discussion leading to potential consensus could occur on time.
 - c. Asking an impartial volunteer from the group to mediate the dispute and facilitate an attempt to reach consensus.
 - d. Adding a fact-finding step to any one of the above methods to insure that the decision is properly informed on the issues of the dispute. Fact-finding would have to be scheduled so that discussion leading to potential consensus could occur on time.
 - e. Seeking outside technical advice.
 - f. Arranging for discussion outside of formal Policy meetings to facilitate agreement among disputing parties.
 - g. Reaching consensus on a customized method of addressing the dispute as long as it can be accomplished within the allotted time period.
11. If consensus is reached at Policy, dispute resolution is terminated. The consensus agreement should be recorded in the formal summary of the Policy meeting.
12. If consensus is not reached the party initiating dispute resolution may elevate the dispute to Stage 2.

Guidance for Dispute Resolution Stage 2

1. The Board may impose Stage 2 of dispute resolution.
2. Since Stage 1 disputes arising at CMER are not complete until they have been considered at Policy, Stage 2 is not requested at CMER. However, where disputes are fundamentally technical in nature, Stage 2 dispute resolution should be conducted with CMER participation (see # 4 below).
3. Issues not resolved in Stage 1 are elevated to Stage 2 by a request from a Policy member to the Policy co-chairs. The time period is initiated at the next regularly scheduled Policy meeting or 30 days following the request which ever is shorter. The initiation of Stage 2 dispute resolution must be recorded in the formal summary of the next Policy meeting.
4. Policy, in consultation with CMER, must decide whether the primary disputed issue(s) are technical in nature or fundamentally policy related so that Stage 2 can be conducted with the appropriate involvement of Policy and/or CMER. This decision can be made concurrently with the decision on the Stage 2 process (see #5 below) and selection of a mediator or arbitrator (see #6 below).
5. Within one month of the initiation of Stage 2, Policy must agree on whether to employ mediation or arbitration.
6. Policy, in consultation with CMER where appropriate, must select a mediator or arbitrator to conduct the Stage 2 process. This should be completed concurrently with making a decision on the Stage 2 process.

Because the forest practices rules require that a mediator or arbitrator be selected within one month of the date that Stage 2 is initiated and that Stage 2 must be completed within three months, the Administrator should be familiar with a list of qualified individuals with experience in natural resources dispute resolution and mediation and/or arbitration. This familiarity will facilitate selection of a qualified person that is acceptable to all parties and is available for the task on short notice.

7. The Administrator should assist the mediator or arbitrator as needed to:
 - a. Identify the disputed issue(s);
 - b. Introduce the parties; and
 - c. Set up meeting dates, times and location.
8. If consensus is reached at Policy or reached at CMER and affirmed at Policy, dispute resolution is terminated. The consensus agreement must be recorded and distributed to TFW stakeholders.
9. In the case of mediation, if consensus is not reached the Administrator reports the issue(s) and results to the Board.
10. Results of Step 2 should be recorded in the official Policy meeting summary.

PART 6. RELATED PROGRAM ELEMENTS

6.1 Biennial Fiscal and Performance Audits

Biennial fiscal and performance audits of the Adaptive Management Program are required by the forest practices rule, WAC 222-12-045(2)(e). The audits may be performed by DNR or other independent state agencies. However, the Administrator is responsible for ensuring the coordination of the development of these audits and reports. Both fiscal and performance audits will generally follow U.S. General Accounting Office auditing standards (GAO-03-673G), or other superceding standards issued by the Office of Financial Management (OFM), DNR, or other specific audit needs conveyed to the Administrator by the Board.

Biennial performance audits will evaluate the goals, objectives, and key questions of the Adaptive Management Program.

6.2 Biennial/Compliance Monitoring

Compliance monitoring is a necessary component of a scientifically credible adaptive management program. DNR through WAC 222-08-160(4) is directed to “provide statistically sound, biennial compliance audits and monitoring reports to the Board.” DNR designs and conducts compliance monitoring to determine how well the forest practice rules are being implemented on the ground. Compliance monitoring results will be reported to the Forest Practices Board, to CMER through the Adaptive Management Program Administrator, and to others as directed by the Board.

Together with the products and recommendations of the Adaptive Management Program, compliance monitoring and reports will assist the Board in assessing if the goals of the Forest Practices Act and rules are being achieved.

APPENDIX A ADAPTIVE MANAGEMENT PROGRAM GROUND RULES**I. Policy (WAC 222-12-045(2)(b)(ii))**

Policy members are self-selected by participating caucuses. Each caucus selects representatives to Policy and the Adaptive Management Program. Caucuses should be mindful of how their appointed representatives are perceived by other caucuses in light of the fact that the Adaptive Management Program is a collaborative effort. Each representative should demonstrate a genuine commitment to problem solving and mutual respect among all the caucuses.

A. Ground rules concerning expectations upon appointment as an Adaptive Management Program participant.

1. Participants in the Adaptive Management Program bring with them the legitimate purposes and goals of their organizations.
2. Participants recognize the legitimacy of the goals of others and assume that their own goals will also be respected.
3. Participants agree that the purpose of the Adaptive Management Program is the effective implementation of the Forest Practices Act and rules in order to meet its four goal (see Part 1, Overview).
4. Participants provide sufficient attention, staffing and other resources.
5. Participants commit to address all aquatic resource management issues raised in the adaptive management process.

B. Ground rules concerning participation in the Adaptive Management Program.

1. Participants commit to search for opportunities to solve problems collaboratively. Participants acknowledge that solving problems or issues of other caucuses is more likely to lead to solutions for ones own problems and issues.
2. Participants commit to listen carefully, ask questions to understand, and make statements to explain or educate.
3. Participants state needs, problems and opportunities first and positions last, and avoid hidden agendas.
4. If a caucus does not agree with statements or positions by other caucuses, participants offer reasons why and alternatives.
5. Participants attempt to reach consensus on a proposal or other issue being considered in the Adaptive Management Program. Consensus means that each caucus can live with all parts of that proposal, and that all caucuses will accept implementation of all parts of that proposal. At a minimum, each participant allows its name being subscribed on consensus proposals being sent to the Board, and to refrain from taking actions opposing adoption of consensus proposals by the Board.
6. Caucuses are polled on each proposal. Caucus positions on proposals reside with the governing bodies of each caucus's representatives. Each caucus decides how it will govern itself in reaching caucus decisions.
7. If the dispute resolution process concludes without consensus or a resolution satisfactory to each caucus, the issue or matter is released for consideration in other forums. If a participant chooses to resort to such other processes, it notifies the other participants before taking such action.

C. Ground rules concerning relationships to outside parties and processes

1. Participants avoid use of other processes such as legislation or litigation to resolve issues being considered in the Adaptive Management Program. If a participant

believes it must resort to such other processes, it notifies the other participants before taking such action.

2. A participant may leave the Adaptive Management Program after telling the other caucuses why.
3. At the conclusion of an issue, participants attempt to agree on the message that will be given, and respect the resolution and implementing actions of the other participants.
4. No participant attributes suggestions, comments or ideas of another participant in communications with the news media or other non-participants.
5. Each participant accepts the responsibility to keep friends and associates informed of the progress of the Adaptive Management Program.
6. Caucuses are free to talk to the press, but they should not negotiate their positions in the press. Everyone is mindful of the effects their public and private statements will have on the climate of this effort.

II. Cooperative Monitoring Evaluation and Research Committee (CMER) (WAC 222-12-045(2)(b)(i))

A. General CMER Ground Rules

1. Each of the participants affirmed by the Board to CMER agree to these ground rules, which were developed collectively by CMER to ensure that CMER produces credible scientific results that have a broad base of support. These ground rules are specific to CMER and do not apply to any other portion of the Adaptive Management Program.
2. CMER core values are predicated upon the agreement of each CMER participant that adaptive management is based upon sound science. It is the responsibility of every participant to follow sound scientific principles and procedures.
3. Participants will also adhere to the purpose of the Adaptive Management Program:

. . . to provide science-based recommendations and technical information to assist the board in determining if and when it is necessary or advisable to adjust rules and guidance for aquatic resources to achieve resource goals and objectives. The goal of the program is to affect change when it is necessary or advisable to adjust rules and guidance to achieve the goals of the forests and fish report or other goals identified by the board. (WAC 222-12-045(1))
4. Individual Policy positions are not the basis for CMER decisions, otherwise the credibility of CMER research can be questioned, resulting in CMER having failed in its function of providing accountable results to the Adaptive Management Program.

B. Specific CMER Ground Rules

1. CMER participants will engage in actions that promote productive meetings and will encourage the active participation of each individual member. Examples of these actions are:
 - a. Speak to educate, listen to understand.
 - b. Pursue win/win solutions.
 - c. State motivations and justifications clearly. Discuss issues openly with all concerns on the table. Avoid hidden agendas.
 - d. Ensure that each individual has a chance to be heard.

- e. Help others move tangent issues to appropriate venues by scheduling a time to discuss these issues later.
 - f. Start and stop meetings on time.
 - g. Take side conversations outside—listen respectfully.
 - h. Define clear outcomes for each conversation and appoint a conversation manager.
 - i. Be trusting and trustworthy.
 - j. Acknowledge and appreciate the contributions of others, even when you disagree.
2. CMER participants agree to spend the time in preparation for meetings so that their participation is both meaningful and relevant and to refrain from participation when they are unprepared.
 3. CMER participants agree to participate in the Adaptive Management Program’s scientific dispute resolution process when consensus cannot be reached and to make a good faith effort to resolve the dispute.
 4. CMER participants recognize that information and results are preliminary until the final report is approved by CMER. Products must be clearly labeled and presented as DRAFT until approved by CMER as a final product.
 5. At no time shall any potential contractor¹ for a project be involved in the drafting of an RFP, RFQ or SOW or in the selection of a contractor for that specific project.²

¹ For the purposes of this ground rule, “contractor” is defined as owner or employee of a private business and is restricted to those contracts identified as open to public bid. This is different from those tasks and contracts directed to CMER Staff, inter-agency agreements, and cooperative participation where availability, specialized knowledge and skills, timeliness, and advantage of in-kind contributions are deemed important to project success.

² *The intent of this ground rule is to comply with state law and DNR contracting procedures.* Chapter 19.36 RCW – Statute of Frauds; Chapter 39.19 RCW (see also Title 326 WAC)– Office of Minority and Women’s Business Enterprises; Chapter 39.29 RCW – Personal Services Contracts; Chapter 39.34 RCW– Interlocal Cooperation Act (Interagency Agreements); Chapter 40.14 RCW (WAC 434-635-010) – Destruction, Disposition of Official Public Records or Office files and Memoranda; Chapter 1.06 RCW – State Civil Service Law; Chapter 42.17 RCW (WAC 32-10-020 – 170) – Public Records; Chapter 42.53 RCW – State Ethics Law; OFM Regulation (chapter 3, Part 4, Section 1) – State of Washington Policies, Regulations, and Procedures; OFM Guide to Personal Service Contracting; DNR Policy Number P004-001 – Interagency Agreements and Memoranda of Understanding; and the DNR Contract Manual.

APPENDIX B FRAMEWORK FOR SUCCESSFUL POLICY/CMER INTERACTION

The framework for the Adaptive Management Program rests in the four goals articulated in the Forests and Fish Report (FFR). These goals are:

1. To provide compliance with the Endangered Species Act for aquatic and riparian-dependent species on non-federal forest lands;
2. To restore and maintain riparian habitat on non-federal forest lands to support a harvestable supply of fish;
3. To meet the requirements of the Clean Water Act for water quality on non-federal forest lands; and
4. To keep the timber industry economically viable in the State of Washington.

These four goals provide the balance necessary for sustaining the FFR. Each goal must be considered when considering how to act on results of CMER studies.

The Forests and Fish Report, while based on science, also recognized there is still scientific uncertainty concerning how forested ecosystems function within the framework of managed forests and how various ecosystem components relate to one another. Scientists and policy-makers agree that because ecosystems are complicated, we can increase our scientific knowledge over time, but we may never fully understand the complex relationships that occur within ecosystems. Though stakeholders recognize uncertainty, it is important that overall performance goals are met by the forest practices rules and that adaptive management research helps to inform policy makers as to whether these goals are being met or not. The overall performance goal agreed to in FFR is that forest practices, either singly or cumulatively, will not significantly impact the capacity of aquatic habitat to: a) support harvestable levels of salmonids; b) support the long term viability of other covered species; or c) meet or exceed water quality standards (protection of designated uses, narrative and numeric criteria, and antidegradation). The Adaptive Management Program is designed to develop additional scientific knowledge and to better inform policy makers about the relationship of managed forests and ecosystem and riparian functions and specifically regarding how well the rules are meeting performance goals.

Since Adaptive Management will provide science-based and technical information for policy-makers, it is critical for Forest Practices Board members and Policy to understand the implications of research being conducted within the Adaptive Management Program and overall policy framework and goals.¹ One important aspect of this is to understand the purpose of the study and the types of results that may emerge. Policy makers must also understand that study results can be significant or insignificant and/or may be stand-alone or linked to completion of other studies.

¹ WAC *222-12-045 defines the purpose of adaptive management as follows:

(1) **Purpose:** The purpose of the program is to provide science-based recommendations and technical information to assist the Board in determining if and when it is necessary or advisable to adjust rules and guidance for aquatic resources to achieve resource goals and objectives. The Board may also use this program to adjust other rules and guidance. The goal of the program is to affect change when it is necessary or advisable to adjust rules and guidance to achieve the goals of the forests and fish report or other goals identified by the Board. There are three desired outcomes: Certainty of change as needed to protect targeted resources; predictability and stability of the process of change; and application of quality controls to study design and execution and to the interpreted results. FFR stakeholders agreed to resource objectives and performance targets for the following functions: heat/water temperature, LWD/organic inputs, sediment, hydrology, and chemical inputs.

It is important for the success of the adaptive management program that policy makers are able to make timely and informed decisions based on CMER research and within the clear policy framework and goals established by FFR and codified in rules. The framework below is designed to assist policy makers in keeping informed about ongoing CMER research and will provide a basis for decision-making when studies are completed.

First, there is a series of questions leading to a Policy adaptive management recommendation to the Forest Practices Board (Table 1). These questions should be answered for all CMER studies and for any other study that any organization advances to Policy as the basis for an adaptive management recommendation. These questions may be broken into two groups. There are six questions that should be answered about each study as it is initiated (preferably) or when it is presented for use in decision making (if the questions were not answered when the study was initiated). These are scientific questions that should be answered by CMER. Detailed guidance on how these questions are answered are available in the Adaptive Management Program Manual. Then, there are four questions that should be answered after CMER has delivered the study report and the answers to the first six questions to Policy. These are management questions that should be answered by Policy.

The answers to these questions will help policy makers with decision making when studies are completed. For example, if the study is part of a larger program, policy makers may decide to wait until all results are in before making decisions about proposing rule changes or seeking other alternative strategies to address management objectives.

Timeliness is an important consideration in Policy's decision making. The forest practices rules state "Upon receipt of the CMER report, policy will prepare program rule amendments and/or guidance recommendations in the form of petitions for amendment. When completed, the Administrator will forward the petitions and the original CMER report and/or other information as applicable, to the Board for review and action. Policy recommendations to the board will be accompanied by formal petitions for rule making" (WAC 222-12-045(2)(d)(vi)). Stage two of the Adaptive Management dispute resolution process (mediation/arbitration) can be invoked six months after CMER has delivered its report to Policy, if Policy has not made its recommendations to the Forest Practices Board (Board). To promote timely decision making, Table 2 outlines a timeline for Policy to answer questions #7, #8, #9, and #10 (see Table 1) and submit its recommendations to the Board.

Table 1. Questions leading to a Policy adaptive management recommendation to the Forest Practices Board

CMER	relevance	1. Does the study inform a rule, numeric target, performance target, or resource objective? ²
		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: <ul style="list-style-type: none"> 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?

² FFR stakeholders agreed to resource objectives and performance targets for the following functions: heat/water temperature, LWD/organic inputs, sediment, hydrology, and chemical inputs.

Table 2. Timeline for Policy to answer key adaptive management questions and submit its recommendations to the Forest Practices Board

Day	Action
0	Adaptive Management Administrator delivers CMER’s report to Policy including the answers to questions #1, #2, #3, #4, #5, and #6 (see Table 1).
45	Policy answers question #7.
105	Policy answers question #8 and #9.
150	Policy answers question #10. If Policy has agreed upon an alternative, Policy begins to draft its recommendations to the Board. If Policy has not agreed upon an alternative, Policy decides whether to invoke Stage Two of the adaptive management dispute resolution process or forward relevant materials directly to the Board.
180	If Policy has agreed upon an alternative, Policy finalizes its recommendations and gives them to the Adaptive Management Administrator for delivery to the Board. If Policy has not agreed upon an alternative, Policy either invokes Stage Two of the adaptive management dispute resolution process or gives relevant materials to the Adaptive Management Administrator for delivery to the Board.
270	(if Policy has invoked Stage Two of the dispute resolution process) If dispute resolution is successful, Policy has selected an alternative and begins to draft its recommendations to the Board. If Stage Two is unsuccessful, Policy begins to assemble the materials described in WAC 222-12-045(2)(h)(ii)(C).
300	Policy submits either its recommendations (dispute resolution successful) or other materials (dispute resolution unsuccessful) to the Board.

Adaptive management alternatives and recommendations considered by Policy may work at two different levels (Table 3). “Rule tool” studies and effectiveness monitoring normally influence prescriptions. However, in order to meet all four goals of the forest practices rules, it may sometimes be necessary to consider changes to performance targets in response to these types of studies. Changing performance targets in response to rule tool studies will be considered only if it can be shown that the resource objectives will still be met.

Table 3. Hierarchical relationship of prescriptions and performance targets with respect to forest practices adaptive management decisions.

adaptive management decision space			management hierarchy
“rule tool” studies	effectiveness monitoring	validation studies	
normal	normal	n/a	prescription (e.g., 50 foot no-harvest core zone)
			↑
only if it can be shown that the resource objectives will still be met	possible	normal	performance target (e.g., shade available within 50 feet for at least 50% of stream length)

The second element of this framework recognizes that ongoing Policy interaction with CMER is critical to making adaptive management a successful program. Policy makers should be informed early about potential study results, especially if these results are likely to be scientifically significant and/or lead to significant changes in policy. To facilitate this communication, Policy will devote at least one hour at each of its monthly meetings to discuss ongoing studies and the potential implications of these studies, particularly within the context of overall policy goals and framework of the FFR and the Forest Practices Act. At these monthly meetings, Policy may create ad hoc groups, as needed, to consider various adaptive management topics and/or assist the Adaptive Management Administrator.

APPENDIX C POLICY WORK GROUP CHARTER TEMPLATE

The following template is provided as a standard for developing Policy work group charters. Once the charter elements have been prepared, the charter must be agreed to by the work group participants and endorsed by Policy.

Title
Project Name
Date

I. Introduction

Provide a brief project overview, the need for this charter, and the function of the Policy work group in meeting that need.

II. Define the Policy Work Group

- Membership – Identify the participants on the group by name and affiliation. As necessary, identify the different roles and responsibilities such as co-chairs, recorders, observers, etc.
- Purpose – Define the scope and objectives of the work group. Define any boundaries or limitation of participation by the work group.
- Tasks & Responsibilities – Identify the tasks and duties the work group will need to accomplish to meet the project objectives
- Deliverables - Identify the specific deliverables the work group will need to provide to meet the project objectives
- Group Process, Reporting, and Support – Describe how the group will function, its reporting structure back to Policy, and what support is needed to accomplish project objectives.
- Adaptive Management Program Ground Rules – Attach for each work group member to have and to follow.

III. Timeline

Provide an estimated timeline by deliverables and/or process milestones for review.