

Timber, Fish, & Wildlife Policy Committee
 September 5, 2019 DRAFT Meeting Summary
 v.10.3.19

Action	Responsibility
Share with Policy a report regarding the genetics study on spring chinook and summer steelhead.	Mark Mobbs (complete)
Share CMER's updated Ground Rules and Code of Conduct document with the Policy Co-Chairs to inform a similar discussion at Policy.	Chris Mendoza
Circulate a scheduling poll to reschedule the November 7th Policy meeting.	Terra Rentz and Curt Veldhuisen (complete)
Notify the Policy Co-Chairs if any caucus would like to ask additional questions of Aimee McIntyre regarding the Amphibian Genetics Findings Report.	Policy representatives
Look into providing Policy representatives access to the web map section of the CMER Information Management System.	Mark Hicks
Draft language revisions to the Type N Workgroup charter based on updated timeline information for studies relevant to Type N and present these revisions to Policy at the October Policy meeting.	Mark Hicks and Terra Rentz

Decision	Notes
Approve the August meeting summary as amended.	The Eastside Tribal caucus and Federal caucus were absent; all other caucuses voted thumbs up.
Approve the Workgroup report on Extended Monitoring as presented.	The Eastside Tribal caucus and Federal caucus were absent; all other caucuses voted thumbs up.
Acknowledge receipt of the Amphibian Genetics Findings Report.	The Eastside Tribal caucus and Federal caucus were absent; the Conservation caucus voted thumbs sideways; all other caucuses voted thumbs up.
Approve changes to sections IV and VII of the Technical Type N Prescriptions Workgroup charter.	The Eastside Tribal caucus and Federal caucus were absent; all other caucuses voted thumbs up.

Welcome, Introductions, & Old Business – Policy Co-Chairs Curt Veldhuisen, Skagit River System Cooperative (SRSC), and Terra Rentz, Washington Department of Fish and Wildlife (WDFW), opened the meeting and reviewed the day’s agenda.

Annalise Ritter, Triangle Associates, introduced Thomas Christian, Triangle Associates, who will be assuming Annalise’s responsibilities in support of Policy in the coming months. Thomas has a background in natural resources management and previously worked for the U.S. Forest Service and the National Park Service.

Melissa Gildersleeve, Department of Ecology, shared that she will be sitting at the Policy table until she hires a replacement for Mark Hicks. Tom Laurie is retiring, Rich Doenges is the new Southwest Regional Director and Board representative, and Patrick Lizon will represent Ecology at CMER with Bill Ehinger.

Terra Rentz noted that she and Curt will be transitioning out of their Co-Chair roles in June 2020. She asked that Policy representatives ask around their caucuses for nominees for the next Co-Chairs. She also noted that Policy can decide whether it prefers Co-Chairs to be chosen from voting or non-voting members.

Scott Swanson, Washington Association of Counties (WSAC), shared that the Counties caucus has identified four candidates to serve as the Board representative, but no one has been chosen yet.

Mark Mobbs, Quinault Indian Nation, informed Policy of a genetics study which found that spring chinook and summer steelhead species are a result of a mutation on a single gene, and if this gene is lost then the populations will not rebound. Mark offered to share the study with Policy.

Chris Conklin, WDFW, shared that he is working on reviewing a list of findings reports and a consolidated list of the recommendations related to AMP improvements. He will then work with several Policy members to identify common themes and consider process improvements for the AMP to address the items in the list.

Terra Rentz shared that the financial audit of the AMP is on track to be completed by an external auditor. The performance audit will begin in spring 2020 and will be conducted by the Auditor’s Office.

Alec Brown, Washington Environmental Council (WEC), shared that he will be taking leave from January through March of 2020. He anticipates that Lisa Remlinger, WEC, will attend Policy as the Conservation caucus representative.

The group reviewed the August meeting summary. Some amendments were suggested, and the document was edited on screen.

Decision: Approve the August meeting summary as amended. The Eastside Tribal caucus and Federal caucus were absent; all other caucuses voted thumbs up.

Action: Mark Mobbs will send the report on spring chinook and summer steelhead genetics to Policy.

CMER Update – Chris Mendoza, Conservation caucus and CMER Co-Chair, provided Policy with an update from the August 2019 CMER meeting. Highlights are listed below.

- CMER approved the recommended changes to the Ground Rules and Code of Conduct. These will be incorporated into the Protocol and Standards Manual (PSM).
- CMER approved the TFW Policy/CMER memo, regarding Extended Monitoring, but did not approve the request form. There is a question regarding whether the form should be reworked by CMER.
- CMER approved the Post-Harvest Amphibian Genetics Findings Report and questions. Currently, there is no guideline for linking studies to other studies. CMER plans to address this in the PSM update.

- The Extended Hard Rock Report Phase II has not been approved by CMER. The Principal Investigators (PIs) and Project Managers are working with the commenters to resolve the remaining comments. If these are not resolved by the end of the month, dispute resolution may be invoked.
- CMER did not approve the Hardwood Conversions Findings Report and questions.
- CMER did not approve the Extensive Riparian Status and Trends Monitoring Project – Stream Temperature because of absences at the Scientific Advisory Group (SAG) meetings in which it was approved. Concerns will be addressed, and the report returned to CMER at their September meeting.
- CMER approved the Type F Riparian Prescription Monitoring Project team’s request for \$22,000 to complete the resurvey of certain plots to reduce variance in data collection.
- Regarding the Eastside Monitoring Effectiveness Project, CMER approved a \$6,899 request to hire a contractor to respond to the Independent Scientific Peer Review (ISPR) comments.
- CMER is looking for a Co-Chair to replace Doug Hooks. There was discussion regarding participation grants. The Adaptive Management Program Administrator (AMPA) will look into this topic and report back.
- CMER agreed to send the TFW Policy questions on the Eastside Type N Riparian Effectiveness Monitoring Project (ENREP) to the project team. The project team will focus on the technical aspects of the questions and return the response to the Scientific Advisory Group - Eastside (SAGE) and then to CMER in September. CMER will then forward them to Policy.

A Policy representative asked how the Ground Rules and Code of Conduct will be enforced. Chris responded that CMER will add a signature line to both documents to acknowledge understanding. Enforcement responsibility will be on the SAG co-chairs and CMER co-chairs, in addition to self-regulation by members. If inappropriate behavior repeats, then the issue could be brought to a higher level such as Policy. A Policy representative recommended having the Ground Rules printed out and hung up in the meeting room. Mark Hicks, AMPA, stated there is no formal process for accountability but he would address any formal complaints that could not be resolved within the group.

A representative asked whether there is a process for submitting comments on decisional items if a CMER member cannot attend a CMER meeting. Chris responded that CMER will discuss this. Typically, members are expected to communicate expected absences to the co-chairs, who will work to accommodate. Mark Hicks noted that it is important for voting members to have enough time to review materials and alert the group of any concerns that affect their ability to vote. He also recommended that the definition of quorum be reviewed in the context of the CMER Committee.

A Policy member requested that CMER provide its Code of Conduct document and suggested that Policy review this document and consider its own process. Other Policy representatives agreed that this would be helpful.

Action: Chris will share CMER’s updated Ground Rules and Code of Conduct document to the Policy Co-Chairs to inform a similar discussion at Policy.

Report Out from Board Meeting – Marc Engel, Department of Natural Resources (DNR), and Mark Hicks, AMPA, reported out from the August Board meeting. Highlights are listed below.

- Participants shared thoughts and observations on the TFW Principals’ workshop.
- The Board heard a presentation on the Small Forest Landowner Demographics study, which showed the status of small forest landowners in Washington. Data included frequency and types of harvest.
- There was a status report on the Water Typing Rule Committee. The Committee will meet next on September 24 from 1:00-4:00 p.m. at the Natural Resources Building (NRB) Room 175, and

again on October 2 from 1:00-4:00 p.m. at NRB Room 362. There will likely be two more Committee meetings.

- The Board asked the Potential Habitat Break (PHB) Sub-Committee for recommendations at the November Board meeting. The Sub-Committee still needs to address several of the issues identified by the Board but feels it is making good progress.
- The Board heard Policy priorities for the next year. At its next meeting, the Board will set its work plan for 2020 and determine its workload.
- The Board reviewed Policy's recommendations to the Board about changes to the Master Project Schedule. The Board approved the recommended changes.
- The Policy co-chairs then shared Policy's discussion and votes on the anadromous floor and water-crossing road structures topics.
- The Policy Co-Chairs presented the Type N Workgroup Charter to the Board. The Board emphasized that the CMER projects the Workgroup will use should be delivered as soon as possible so that the Workgroup can complete its work in time.

Legislative Updates – Policy discussed updates regarding the 2019 Legislative Session. Highlights are listed below.

- Terra Rentz shared that WDFW is working to resolve a large budget shortfall and is preparing a supplemental budget request. The agency is keeping its legislative support packet small and is working to keep its budget and staff whole.
- DNR has not formally put together a legislative request as of September 5, 2019. DNR has a new division called Forest Health and Resiliency, which is to provide stewardship and technical assistance to small forest landowners. Technical assistance will be administered through the Small Forest Landowner Office. DNR intends to request an additional four full-time employees (FTEs) to restore part of the field staffing to provide technical assistance to landowners.
- Jim Peters, Northwest Indian Fisheries Commission (NWIFC), reminded Policy that the tribes need substantial time to get approval for the Commission to work on legislative issues. Approval consists of consensus from all NWIFC member tribes.
- Steve Barnowe-Meyer, Washington Farm Forestry Association (WFFA), noted that at the Principal's meeting, the group discussed the opportunity to work together to address legislative and budget needs within the TFW community. Steve suggested that this budget season is an opportunity for Policy to model mutual support among caucuses.
- Policy representatives expressed interest in inviting government relations staff and legislative directors of agencies to a Policy meeting.

Policy discussed rescheduling the November 7th meeting due to conflicting events. The Co-Chairs offered to look for new possible dates and circulate to Policy.

Action: Curt and Terra will circulate a scheduling poll to reschedule the November 7th Policy meeting.

Review Framework from Extended Monitoring Workgroup – Policy Co-Chair Curt Veldhuisen, SRSC, and other members of the Extended Monitoring Workgroup presented the Extended Monitoring Framework produced by the Workgroup. The Workgroup included members of CMER and Policy and was tasked with creating a framework for determining when projects should be approved for extended monitoring. The workgroup sought to provide structure and predictability to the determination process but acknowledged that not every situation can be accounted for in the framework. It was noted that any decision to extend monitoring on a project would involve budget trade-offs that should be considered in context of the MPS.

Scott Swanson moved to approve the extended monitoring framework as presented. The motion was seconded. It was clarified that the decision item is the entire report document.

Decision: Approve the Workgroup report on Extended Monitoring as presented. The Eastside Tribal caucus and Federal caucus were absent; all other caucuses voted thumbs up.

It was suggested that, for recordkeeping, the recommendations and the framework be condensed into a guidance document.

Business and Occupation (B&O) Surcharge Update – Jim Peters, NWIFC, presented to Policy on the Business and Operations (B&O) Surcharge legislation. Highlights are listed below.

- The B&O Surcharge was instated around 2005 when the federal government abdicated its responsibility to provide funding for the tribes to participate in the Forest and Fish Agreement. Through negotiations with WFPA and Industrial Landowner caucus members, it was agreed that the B&O Surcharge would be set up to fund tribal participation. This was approved with a sunset date of 2024. The tribes have been working to get this date moved to match the end date of the Habitat Conservation Plan (HCP).
- The original surcharge language had a clause (referred to as the “poison pill”) stating that if the federal government provided any money to the tribes for participation in the Forest and Fish Agreement, then the tribes would no longer receive funding from the surcharge. Currently, different tribes receive different amounts of funding for participation. The tribes have advocated for the poison pill language to be removed because the tribes need multiple funding sources to participate in the Forest and Fish Agreement. The tribes have reached out to the Governor’s office to request changes to the wording on the participation grant.
- Darin Cramer, WFPA, clarified that the statute has been revised as requested, but the budget still includes the old language and the “poison pill.” The next step is to push for the budget to be revised to match the statute.
- The Small Forest Landowner caucus asked if there was a discussion of participation grants for all caucuses. Jim responded that he is talking with his contacts to determine the best way to secure such funding. Policy members expressed interest in a collaborative approach among the caucuses to ensure funding for all caucuses that need it to participate.

Amphibian Genetics Presentation – Policy heard a presentation on the Type N Experimental Buffer Treatment Study by Steve Spear, The Wilds, and Aimee McIntyre, WDFW. Highlights are listed below. See the attached slides for details.

- The study objective was to evaluate the effectiveness of alternative riparian buffers on Type N streams using genetics tools.
- The study began in 2006 with a pre-treatment genetic baseline. Application of harvest treatments was completed in 2008 and 2009. Post-treatment data collection occurred in 2015 and 2016.
- The amphibian species studied were the coastal tailed frog, Cope’s giant salamander, and the coastal giant salamander.
- Genetic erosion simulations predict that longer studies have more power to detect genetic decline across generations.
- Study sites represent first, second, and third-order forests on perennial and non-fish bearing streams, on private and public land. There was a total of 17 sites among the Olympics, Willapa Hills, and South Cascades.
- Data analysis was conducted using a Before-After Control-Impact (BACI) study. The analysis included a pre- and post-treatment comparison, utilized linear mixed models to include random effects, and excluded variables with normality violations.

- Field sampling included light-touch surveys and rubble-rouse sampling
- Genetic metrics included species identification/hybridization, full sibling groups, allelic diversity, observed heterozygosity, inbreeding coefficient, genetic bottleneck, and population clustering.
- Findings:
 - Coastal tailed frogs showed no significant difference by treatment.
 - Cope's giant salamanders showed some evidence for an inbreeding coefficient effect. There was increased migration in the 100% buffer.
 - Little change in genetic diversity.
 - Lack of consistent bottlenecks by treatment
 - Coastal giant salamanders showed decreased inbreeding coefficient in 100% and 0% buffers.
 - Indicates increased migration
 - No bottlenecks
 - Focus on inbreeding coefficient: representative of increased population mixing?
 - Exclude instant severe damage. Additional monitoring is needed to assess continuous decline.
- Caveats:
 - The study was limited to one generation, thus the study's power to detect differences is likely low, with highly variable, neutral markers. It was not controlled at the drainage level.
 - This study presents a long-term monitoring opportunity for multiple generations. It could also present a possibility of genome-wide genotyping and testing for change in adaptive loci.

Policy representatives presented the following questions and comments:

- Why did the study wait 7-8 years post-harvest?
 - These species are long-lived and do not reproduce for several years, so the team chose to wait to ensure that sampled individuals were born in the post-harvest period.
- Was the genetic composition a surrogate for the level of population impact?
 - There are some changes to a population that can be detected more readily with genetics than with demographics. However, due to movement and gene flow, the results are often representative of a broader spatial scale than the scale at which treatments are applied.
 - Overall, the team detected limited genetic loss associated with the treatment of forest sites. This suggests there is a good deal of landscape connectivity for these species.
 - Much of the information presented in the study was unknown when the study was designed and approved in 2005.
- What is the importance of the surrounding landscape?
 - There are hypotheses that the bottlenecks that have been identified are related to forest management history.
- Why did we study two species that are not covered in the HCP?
 - The study included the two non-HCP-listed species to ensure it did not miss an opportunity to gather data, which can be used to make inferences about other species.
 - The Cope's giant salamander has a larger sample size than other salamander species because their habitat extends across all 17 study sites.
- Will there be mention of the inferences made about species covered by the HCP?
 - While this was not a mechanistic study, it measured enough variables to make some hypotheses about what mechanisms might be.

Policy discussed whether to accept the findings report. Steve Barnowe-Meyer, WFFA, moved that Policy accept the amphibian genetics report. The motion was seconded. The group discussed the motion. There

was some discussion over the 180-day timeline that begins when Policy receives project findings reports and whether Policy can receive, accept, and determine warranted action on a findings report in one meeting.

Heather Gibbs, DNR, stated that Project Managers view the findings report as consisting of the following items: The report that was accepted by CMER, the 6 questions and answers, and the memo to Policy. She explained that the Project Managers expect to give a study presentation to Policy at the same meeting that Policy receives the study findings report in the meeting packet. Mark Hicks clarified that this is not a requirement for the review timeline to start, but generally, it is best for the process if Policy receives a presentation as soon as possible.

The motion was amended to specify that that Policy acknowledges receipt of the amphibian genetics findings report. The amendment was accepted by the representative who seconded it.

Decision: Acknowledge receipt of the Amphibian Genetics Findings Report. The Eastside Tribal caucus and Federal caucus were absent; the Conservation caucus voted thumbs sideways; all other caucuses voted thumbs up.

Action: Policy representatives will notify the Policy Co-Chairs if any caucus would like to ask additional questions of Aimee McIntyre regarding the Amphibian Genetics Findings Report.

Information Management System Presentation – Bruce Jones, NWIFC, provided Policy with a presentation on the CMER Information Management System (IMS). Highlights are listed below. The IMS can be accessed on a public website at <https://geo.nwifc.org/CMER>.

- The IMS currently includes 98 projects. NWIFC staff can upload documents for Policy members.
- The “TFW Public Documents” section lists include links to publicly available project files.
- Bruce demonstrated how to view the project web map and shared how Policy representatives can access it. Bruce emphasized that these documents have not all been finalized.
- Bruce showed the different layers that can be viewed, including county lines, tribal lands, and other spatial data. He demonstrated how to choose different base maps, including the option to choose two base maps and adjust the transparency ratio.
- There are tools available to draw and write on the map, which can then be printed as a PDF.
- The “links” tab includes CMER documents, the CMER work plan, a text search by rule group, and TFW documents.

A Policy member asked why Policy representatives do not have universal access to the web map. It was clarified that there are some confidential and unfinished documents and information in this resource.

It was noted that a previous AMPA made a discretionary decision to remove funding for management of the IMS. The current AMPA recommended that Policy include such funding in the next iteration of the budget.

Action: Mark Hicks will look into providing Policy representatives access to the web map section of the CMER Information Management System.

Technical Type Np Prescriptions Workgroup Membership Selection – Heather Gibbs, DNR, updated Policy on the Type Np Workgroup coordination progress. Heather and the AMPA revised the compensation plan for the Workgroup members, which included hours for meetings and reviewing documents. They also presented some suggested changes to the charter in order to accommodate the revised compensation plan.

Mark Hicks, AMPA, shared that all six of Policy's selected candidates agreed to participate in the Workgroup and are asking for a start date. Several members are not available to begin work on this Workgroup until early October.

Policy discussed the Workgroup timeline. Terra clarified the Workgroup product, which is to provide final buffer prescription recommendations to Policy, is anticipated within three months after the receipt of the Soft Rock study. Policy also discussed the products the Workgroup will use to provide recommendations, such as whether they will use study addenda or final approved reports. It was noted that the hiring of outside experts to provide recommendations to Policy is a new process for the AMP, which means that there are a number of questions to be answered.

Policy reviewed proposed changes to the Type N Workgroup charter and discussed when the Workgroup will receive various studies for its consideration—i.e., at what stage of completion—and how these dates affect the timeline. The Westside Tribal caucus and Conservation caucuses expressed concern with the length of the timeline, specifically because of the expiration date of the Clean Water Act Assurances. Though it was noted the charter was developed and approved to accommodate uncertain dates for study deliverables, some caucuses expressed concern with how far the Workgroup timeline has been extended. It was suggested that Policy assign responsibility to the Workgroup Co-Chairs to manage the timely progress of the Workgroup.

Alec Brown, WEC, moved to approve changes to sections IV and VII of the Technical Type Np Prescriptions Workgroup charter. The motion was seconded.

Decision: Approve changes to sections IV and VII of the Technical Type Np Prescriptions Workgroup charter. The Eastside Tribal caucus, Small Forest Landowner caucus, and Federal caucus were absent; all other caucuses voted thumbs up.

See Attachment 2 for the updated charter.

Action: Terra Rentz and Mark Hicks will draft language revisions to the Type Np charter based on updated timeline information for studies relevant to Type Np and present these revisions to Policy at the October Policy meeting.

Next Steps – Policy reviewed the monthly workload document and the meeting schedule for 2019. Timing for other items will be updated in the monthly workload document.

Next meeting date: The next Policy meeting will occur on Thursday, October 3, 2019.

The meeting was adjourned at 4:24 p.m.

Attachment 1 – Participants by Caucus at 9/5 Meeting*

Conservation Caucus

*Alec Brown, WEC

Chris Mendoza, Conservation Caucus and CMER Co-Chair

County Caucus

Kendra Smith, Skagit County

*Scott Swanson, WSAC

Industrial Timber Landowner Caucus

*Darin Cramer, WFPA

Doug Hooks, WFPA and CMER Co-chair

Martha Wehling, WFPA

Small Forest Landowner Caucus

*Steve Barnowe-Meyer, WFFA

Ken Miller, WFFA

State Caucus – DNR

*Marc Engel, DNR

Heather Gibbs, DNR

State Caucus – Ecology & WDFW

*Melissa Gildersleeve, Ecology

*Chris Conklin, WDFW

Terra Rentz, WDFW and Co-Chair

Tribal Caucus – Westside

*Jim Peters, Northwest Indian Fisheries Commission

Ash Roorbach, Northwest Indian Fisheries Commission

Curt Veldhuisen, Skagit River System Cooperative and Co-Chair

Mark Mobbs, Quinault Indian Nation

*caucus representative

Others

Mark Hicks, Adaptive Management Program Administrator

Annalise Ritter, Triangle Associates

Thomas Christian, Triangle Associates

CHARTER: TECHNICAL TYPE NP PRESCRIPTIONS WORKGROUP

- I. **Date:** March 7, 2019
Updated version (v.2) approved by Policy 06-08-2019
- II. **Project Duration:** March 7, 2019 through completion.
Completion is to occur six months after receipt of final affiliated report, estimated June 19, 2020

III. Introduction

This charter is intended to guide the formation and efforts of a Technical Type Np Prescriptions Workgroup (hereafter: Workgroup), which is a sub-group of the Timber, Fish and Wildlife (TFW) Policy Committee (hereafter: Policy). The Workgroup will be formed as an outcome of alternative actions proposed by Policy in response to the study entitled *Effectiveness of Experimental Riparian Buffers on Perennial Non-fish-bearing Streams on Competent Lithologies in Western Washington* (hereafter: Hard Rock Study; Attachment 1). The purpose of the workgroup is to develop proposed Riparian Management Zone (RMZ) buffer prescriptions for Type Np streams in western Washington for Policy's consideration. Based on the scope of the Hard Rock Study, the initial focus is on western Washington streams in areas of hard rock lithology, to achieve temperature protection objectives. However, this scope may be expanded per the direction of Policy as more information becomes available.

Policy affirmed, through consensus, that the Hard Rock Study indicated there was a temperature increase associated with the buffer treatments tested. Therefore, Policy agreed the findings warrant action and proposed the following process components:

1. Formation of a technical workgroup, governed by a charter, to develop and deliver a set of proposed RMZ buffer prescriptions for Type Np streams that meet a suite of resource protection, feasibility, and economic objectives.
2. The workgroup will utilize all relevant information to inform proposed RMZ buffer prescriptions for Np streams, including available literature and data while adhering to the timeline.
3. Inclusion of additional Type N related projects currently in the CMER process including the *Buffer Integrity – Shade Effectiveness (Amphibian)* project, *Westside Type N Buffer Characteristics, Integrity and Function* (BCIF) study, *Type N Experimental Buffer Treatment in Hard Rock Lithology - Phase II Extended Monitoring* study, and the *Type N Experimental Buffer Treatment in Soft Rock Lithologies* study. These products would be available for the workgroup upon delivery to Policy from CMER.
4. Expedited funding and implementation of the *Buffer Characteristics and Shade* study to both inform, and be informed by, the workgroup
5. Adherence to a timeline that is expected to run concurrently with the CMER process associated with remaining Type N projects and conclude within 6 months of receipt of the final study. At the time of drafting, the *Type N Soft Rock* study is anticipated to be the final study delivered by CMER in this series.

Policy anticipates that rulemaking will be needed to implement RMZ buffer prescriptions for Type Np streams that result from recommended actions.

IV. Workgroup Purpose

The purpose of the Workgroup is to develop proposed RMZ buffer prescriptions for perennial, non-fish bearing (Type Np) streams in western Washington that meet the following objectives:

- i. Protect water temperatures to meet the rule (WAC 173-201A-200, -300-320);
- ii. Are repeatable and enforceable;
- iii. Are operationally feasible;
- iv. Provide wood to the stream over time;
- v. Account for windthrow;
- vi. Consider options that allow for management (e.g. selective harvest) in the RMZ; and
- vii. Minimize additional economic impact.

Although the site specificity of the *Hard Rock Study* applies to above ground stream components in basalt (hard rock) lithology, Policy may expand the objectives and/or geologic/geographic applicability of proposed prescriptions if findings from subsequent Type N projects warrant action.

The workgroup shall understand results of the *Hard Rock Study* and utilize all available information to inform the development of proposed RMZ buffer prescriptions for Np streams as described above, including best available science and related documents from within the Adaptive Management Program (AMP), and additional final CMER-approved findings reports from Type N projects. These studies include:

- A. Buffer Integrity – Shade Effectiveness (Amphibian) Project
- B. Westside Type N Buffer Characteristics, Integrity and Function (BCIF)
- C. Type N Experimental Buffer Treatment in Hard Rock Lithology - Phase II Extended Monitoring
- D. Type N Experimental Buffer Treatment in Soft Rock Lithologies

As each CMER-approved study report becomes available, the Workgroup will assess its implications and incorporate the new results into the Workgroup’s ongoing work, per Policy’s direction. These studies and their associated findings are the products of an agreed upon process within WAC 222-12-045. It is not the role of the Workgroup to reanalyze the *Hard Rock Study*, or the additional Type N projects listed above, to refute the findings produced through the CMER process.

Policy expects the Workgroup to understand the findings and full reports of the *Hard Rock Study*, and subsequent projects and, if needed, solicit additional input from project Principal Investigators (PIs) or outside experts to identify knowledge gaps and gain a better understanding of the CMER research. The Workgroup may employ any necessary information gathering, synthesis, and/or understand cause and effects to inform prescription development. However, Policy expects the Workgroup to adhere to the timeline established in Section VI of the Charter.

V. Deliverables

1. Development of one or more forest practice RMZ prescriptions for perennial, non-fish bearing (Type Np) streams in western Washington that meet the objectives in Section IV.
2. Estimate the level of effectiveness of proposed Type Np water RMZ buffer prescriptions at meeting resource objectives identified in The Forest Practices Board approved Schedule L1 of the Forest and

Fish Report and affirmed in the Forest Practices Habitat Conservation Plan using literature, modelling or other methods.

3. Submission of final report no later than 6 months post-receipt of final Type Np study (estimated June 19, 2020) to Policy that articulates Deliverables 1 and 2, any major process findings, and any areas of non-consensus.

VI. Timeline and Milestones

Task	Anticipated Timeline*
Board acceptance of Policy Proposal	May 7, 2019
Receipt of Buffer-Shade Amphibian Response study	June 2019
Workgroup is convened	July 2019
Workgroup members become familiar with Type N Hard Rock study results and Washington State water quality standards.	August 2019
Receipt of Buffer Characteristics, Integrity & Function study	Fall 2019
Written update for Policy and Board (I)	October 25, 2019
Written update for Policy and Board (II)	January 24, 2020
Written update for Policy and Board (III)	April 24, 2020
Receipt of Hard Rock Phase II Extended study	September 2020
Workgroup drafts new Type Np prescriptions for initial Policy review	December 2021
Receipt of type N Soft Rock study and findings	March 2021
Workgroup update, if necessary, proposed Type Np water RMZ buffer prescriptions based on review of Type Np Soft Rock study findings	3 months post Soft Rock (<i>June 2021</i>)
Written update for Policy and Board (IV)	July 19, 2021
Final submission of deliverables to policy	6 months post final Type Np study (estimated September 2021)

*The dates in this timeline are subject to change based on the dates of receipt of the Type Np studies and will be updated as new information becomes available. The Workgroup will adjust as necessary to accomplish its deliverables within the allotted overall schedule.

Process and Milestones

The following process steps are recommended to complete the deliverables:

1. Review the completed Hard Rock report and associated findings;
2. Review and understand Forest Practice rules associated with Type Np streams and how Washington's water quality standards apply to forest practices;
3. Identify information gaps and assess available information to assist Workgroup in deriving proposed RMZ buffer prescription for Type Np streams;
4. On an ongoing basis, review newly completed Type N related studies and their associated findings; integrate relevant information into decision making process; consider field visits/practical field application time as needed;
5. Develop a suite of possible alternatives and assess on-the-ground feasibility;

6. Through consensus, select final prescription(s) for recommendation to Policy;
7. Develop associated language that articulates how/where to implement a given prescription;
8. Aggregate proposed prescriptions and a description of the process pursued, additional resources utilized, and any other relevant information into a final proposal for Policy’s consideration.

VII. Membership & Composition

Workgroup Name	Focal Area	Role
Darin Cramer	Policy Liaison	Chair (non-voting)
Jim Peters	Policy Liaison	Vice Chair (non-voting)
Jeremy Groom	physical stream processes	Voting Member
John Stednick	physical stream processes	Voting Member
John Richardson	biological	Voting Member
Steve Barnowe-Meyer	silviculture/field forestry	Voting Member
Chris Lunde	silviculture/field forestry	Voting Member
Bob Bilby	biological	Voting Member
Heather Gibbs	AMP	Project Manager (non-voting)

Expectations

The anticipated time commitment for workgroup members is approximately three days per month, on average, for the full duration of the workgroup, approximately 2 years.

Composition

The workgroup consists of two representatives of Policy, one of whom will serve as Chair and six experts with the following areas of expertise: biological and physical stream processes, and silviculture/field forestry.

An Adaptive Management Program Project Manager, Heather Gibbs (Heather.Gibbs@dnr.wa.gov; 360-902-2897), will serve as staff support for the workgroup. Specifically, the Project Manager will be responsible for assisting with meeting logistics, providing necessary materials related to the AMP process, and securing resources, as necessary, to achieve the workgroup’s objective.

Compensation

Workgroup members will be selected using the Collaborative Research Approach to contracting. Specifically, all members of the Workgroup have been selected through the consensus process by Policy at the August 1, 2019 meeting.

All workgroup members, excluding Policy co-chairs will be compensated within the total budget of \$200,000 for their active participation and adherence to the Charter. Compensation is intended to cover any expenses incurred during the duration of the project and to compensate members for professional contributions and time. As with all other contracts through the Adaptive Management Program, the Department of Natural Resources will award and manage these Collaborative Research Contracts..

Co-chairs will be compensated via reimbursement requests to DNR for expenses associated with travel, lodging, and/or per diem if necessary.

Expectations

The anticipated time commitment for workgroup members is unlikely to exceed three days per month, for the full duration of the workgroup, approximately 15-24 months.

All workgroup members shall operate as technical experts and will not serve as representatives for any specific caucus. However, an understanding of the field and policy context will be valuable. Because familiarity and continuity among members are crucial to timely completion, meetings will require participation by all members. With Workgroup approval, members may invite associates to provide additional information. Associates' role will be technical, short-term, and specific.

Workgroup members agree to:

- Acquire a deep understanding of past and incoming CMER studies on Type N streams;
- Familiarize themselves with other related materials in preparation of the meeting;
- Assist in the identification and evaluation of relevant non-CMER studies;
- Read and understand Forest Practices WACs relevant to Type Np prescriptions;
- Meet on a regular and timely schedule;
- Attend all meetings (in-person or by phone);
- Adhere to the timeline; and
- Assist in reporting regularly to policy.

VIII. Group Process and Governance

Norms

The Workgroup will follow standard Policy norms and ground rules. However, the small size and technical nature of the work may allow for a more informal approach than occurs at Policy meetings. Members of the Workgroup agree to collectively provide a collaborative space to foster the development and presentation of proposed RMZ buffer prescriptions for Type Np streams that achieve the aforementioned objectives.

Meetings will be open to the public, but with no public comment.

Governance

The Workgroup will actively work toward consensus. If there is a lack of consensus, a simple majority vote can occur to move a decision forward. Majority-minority reports will be catalogued for all non-consensus decisions.

It is the role of Workgroup co-chairs to inform Policy of non-consensus issues and to elevate those issues, if needed, for Policy resolution.

Roles and Responsibilities

Chair & Alternate

- **Run workgroup meetings that maintain open and productive discussion and decision making;**
- **Work with Project Manager (PM) to set up meeting schedule in advance;**
- **Work with PM and Workgroup members to develop a work plan that meets deliverables, expectations, and timelines as articulated in the Charter;**
- **Work with PM to ensure that meeting announcements and meeting summaries are prepared and distributed;**
- Provide written and oral updates to TFW Policy on Workgroup progress, issues, and decisions according to the timeline;
- Provide updates to the Workgroup on status of affiliated CMER studies and/or pertinent decisions or discussions made by Policy; and
- Identify if the workgroup is at an impasse and notify Policy immediately with a recommended course of action.

Project Manager

- Serves as staff support to the Workgroup;
- Assist Chair with meeting logistics and providing necessary materials related to the AMP process;
- Post on the TFW Policy Website Workgroup meetings, agendas, and relevant materials for the public; and
- Work with AMP Administrator (AMPA) to identify and secure any necessary resources to achieve the Workgroup's objectives – if funding is needed, work with the AMPA and Policy to determine availability of funds.

Workgroup Technical Members

- Provide expertise that helps solve technical problems related to developing new Type Np prescriptions that meet the objectives articulated in the Charter;
- Along with the Hard Rock Study results, become familiar with the other CMER Type N study results when available;
- Attend in person or via conference line/video link all regularly scheduled workgroup meetings;
- Participate in organized field trips;
- Be prepared for regularly scheduled workgroup meetings and complete assigned tasks within agreed upon deadlines;
- As requested by Workgroup Chair, attend Policy meetings and provide updates to Policy members;
- Follow guidelines established by the workgroup Charter; and
- Adhere to Workgroup ground rules.