DEPARTMENT OF NATURAL RESOURCES

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MEMORANDUM

July 25, 2022

TO: Forest Practices Board

FROM: Saboor Jawad, Adaptive Management Program Administrator (AMPA)

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SUBJECT: Minority and Majority Recommendations on the Small Forest Landowner Buffer Width Dispute

This memo delivers to the Board the minority and majority recommendations on a TFW Policy Committee dispute that did not result in a consensus recommendation. WAC 22-12-045(h)(ii)(D) states that "if stage two dispute resolution within the policy committee does not result in consensus, the program administrator will report the majority and minority recommendations to the board. The board will make the final determination regarding dispute resolution".

The Small Forest Landowner Buffer Width Dispute is one such case where the Board is requested to make the final determination on the following question: **are there elements of the proposal that may meet the alternate plan requirements**?

The proposal above refers to the Washington Farm Forestry Association (WFFA) proposal initiation (PI) request to the Board in February 2015. The Board accepted the PI and directed TFW Policy to bring forward a plan for how to evaluate the proposal. In May 2015, the Board accepted TFW Policy's strategy to address the proposal and further directed TFW Policy to determine whether the proposal meets the criteria outlined in WAC 222-12-0403 for an alternate plan template, and a plan on how to cooperatively develop guidelines for small forest landowner alternate plans.

In the ensuing years, TFW Policy formed the following three workgroups:

1- Alternate Plan Template Workgroup in October 2015 to provide recommendations to TFW Policy on whether the WFFA proposal as a whole or in part meets the criteria of a template. In December 2019, TFW Policy approved workgroup developed recommendations which, among others, included the formation of two technical workgroups on alternate harvest prescriptions and alternate plan buffer widths. Subsequently, the Board accepted TFW Policy's recommendations at the Board's August, 2020 meeting and passed the following

motion: "*Kelly McLain moved the Forest Practices Board accept the TFW Policy recommendation that the Small Forest Landowner Alternate Prescription Template proposal, in whole, does not meet the criteria of a template per the rule standards in WAC 222-12-0403(3).*"

2- Alternate Harvest Prescription Workgroup in February, 2020 to "*evaluate the site-specific conditions that are necessary to develop experimental alternative harvest prescriptions for Small Forest Landowners specific to conifer restoration and conifer thinning*". The workgroup delivered to TFW Policy draft alternative harvest prescriptions and a draft monitoring plan request for CMER. Action was delayed by TFW Policy on these recommendations until the Small Forest Landowner Buffer Width Dispute is completed.

3- Small Forest Landowner Prescription Technical Workgroup in February, 2020 to "*to evaluate under what, if any, site-specific conditions a 75 foot and 50 foot buffer, respectively, would be acceptable as a prescription for Type F streams; and under what, if any, site-specific conditions a 25 foot buffer would be acceptable as a prescription for Type Np streams"* . This workgroup delivered a product to TFW Policy and reported that the workgroup could not reach consensus on whether the proposal meets the requirement of a template.

It is the work product of the third workgroup that became the subject of a TFW Policy dispute referred to as the Small Forest Landowner Buffer Width Dispute. Citing lack of progress and recognizing that ordinary discussion and debate have been exhausted, the Small Forest Landowner caucus invoked the dispute resolution process on June 4, 2020. By July of that year, all TFW Policy caucuses had agreed on the following description of the dispute:

"***The SFL [Small Forest Landowner] Caucus invokes dispute resolution based upon the lack of progress on the core RMZ [Riparian Management Zone] width prescriptions of 25, 50, and 75 feet, despite some progress in the workgroups being made. Specifically, this dispute is limited to RMZ widths within WFF's "Alternate Harvest Prescriptions for SFL in Western Washington, January 21, 2015" proposal."***

Both stages of the dispute resolution – stages include a rule-prescribed informal stage as well as a mediated formal stage- were concluded by May, 2021. Fulcrum Institute Dispute Resolution Clinic mediated this dispute and produced a final report.

The Board is requested to use the following package of documents, or any other document or information as the Board deems necessary, to make its final determination on **whether there are elements of the proposal that may meet the alternate plan requirements:**

1- Stage 2 mediation final report by Fulcrum Institute Dispute Resolution Clinic
2- Joint Recommendations of the Small and Large Landowner Caucuses
3- Recommendations of the Counties Caucus (Washington State Association of Counties)
4- Joint Recommendations of the Conservation, State (Department of Natural Resources, Department of Ecology, Department of Fish and Wildlife), and Tribal (Eastern Washington Tribal Governments, Western Washington Tribes) Caucuses

All four documents are attached to this memo.

DEPARTMENT OF NATURAL RESOURCES MEDIATION REPORT

TIMBER, FISH, AND WILDLIFE POLICY COMMITTEE
RIPARIAN WIDTH DISPUTE – PHASE 2 MEDIATION

Fulcrum Institute Dispute Resolution Clinic

Gayle Cooper
Roger Crum
Jack Hebner

May 7, 2021

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ATTENDEES

Ken Miller – Small Forest Landowners

Steve Barnowe-Meyer

Elaine O'Neil

Darin Cramer – Industrial Landowners

Doug Hooks

Court Stanley – County Governments

Kendra Smith

Alec Brown – Conservation

Chris Mendoza

Jim Peters – Western Washington Tribes

Ash Roorbach

Ray Entz – Eastern Washington Tribes

John Sirois

Marc Engel – Washington Department of Natural Resources

Mary McDonald

Marc Ratcliff

Donald Nauer – Washington Department of Fish & Wildlife

George Wilhere

Brandon Austin – Washington Department of Ecology

Meghan Tuttle – Policy Co-Chair

Mark Hicks – Department of Natural Resources

DNR Ground Rules Agreed to at the First Session

All participants shall

1. Leave the past in the past
2. Respect the process
3. Speak with respect, kindness, and candor
4. Respect time constraints
5. Discuss issues or positions from the standpoint of the issue or position, not from the identity of the person or group stating the position or issue
6. Recognized the legitimacy of the goals of others and assume that their own goals will also be represented as well as the goals of their organization
7. Commitment to attempt to reach consensus on a plan, proposal or issue being considered
8. Commit to being an advocate for an agreed consensus
9. Acknowledge that if their caucus does not agree that they will offer reasons why and alternatives
10. Ensure all issues identified by any party must be addressed by the whole group
11. Provide the dispute resolution process with priority attention, staffing, and time commitments. This shall specifically include attending all dispute resolution meetings
12. Commit to listen carefully, ask questions to understand and make statements to explain or educate
13. Commit to reading all materials provided
14. Circulate all materials through the mediation firm
15. No single issue through the press without the agreement of the group

Background Documents Reviewed

Position Papers from each caucus: Western Washington Tribes; Conservation Caucus; Counties; Eastside Washington Tribes; Small Forest Landowners; Department of Ecology; Department of Fish & Wildlife; Department of Natural Resources; Washington Forest Protection Association

WFFA request for SFLO Template – Feb 10, 2015

Minutes of TFW Policy Meetings – various, 2015-2021

TFW Agreement – A Better Future in our Woods & Streams – Final Report – Feb 17, 1987

Washington State RCW – Section 222 – Riparian Management Zones

Forest Practices Board Manual, Section 22, Guidelines for Adaptive Management Program

Pat McElroy Report to Legislators – July 1, 2003

Exempt 20 Acre Parcel RMZ: An Assessment of Riparian Function - DNR, Dec 9, 2004

Draft Template Simplified – WFFA 2016

Lessons Learned following the FHAM/OCH Dispute Resolution Process – Triangle Associates, July 2017

Aquatic Restoration – US Dept of Agriculture, Aug 2017

SFL Alternate Plan Template Review - Teply – Apr 28, 2019

A Summary Comparison of Adaptive Management Program Science Findings – WFFA, July 1, 2019

The Case for the WFFA Westside Low Impact Template Proposal – WFFA – Aug 27, 2019

Hardwood Conversion Field Data & Assessment Spread Sheet - Galleher

Hardwood Conversion Field Assessment, Qualitative Score Frequencies - Galleher & ID Team

WFFA Letters to Forest Practices Board – Re: Update of WFFA Template Proposal, May, Feb & Nov 2020

Westside SFLO Harvest Options: Today, WFFA Proposed, State Proposed – TFW Work Group, May 2020

SFL Dispute Resolution – TFW Policy – July 14, 2020

Dispute Resolution Process – Aug 2020

Small Forest Landowner Demographic Report – DNR - March 2021

Washington's Small Forest Landowners in 2020 – University of Washington, Feb 2021

Internet Reviews

Forestry BMP – Riparian Management Zones – Indiana DNR

Michigan Riparian Management Zones

Oregon Field Guide for Riparian Management

British Columbia RMZ

Note: This document contains information that is confidential to the participants. The writers of this document have taken care not to break the confidentiality shared with any one member. However, there are certain themes and objections that were made clear and need to be provided in this report. The release of this information is designed to move this issue to the Forest Practices Board for final determination.

Background of Dispute

In 2015, the Washington Farm Forestry Association (WFFA) commissioned a report that used scientific literature to propose alternative harvest prescriptions for Western Washington Small Forest Landowners (SFL). This plan, known as the WFFA Western Washington Alternate Plan Template was proposed to the Forest Practices Board and referred to the Timber Fish and Wildlife Policy Committee (TFW Policy) for review and recommendation. After five years of work in a TFW Policy workgroup and within the full Policy Committee, there remained a lack of agreement on whether the proposal provided adequate scientific justification to change riparian stream protections for SFL's. Specifically, at issue was a proposed decrease in width dimensions to widths of 25, 50, and 75 feet with determination that the distances could be fixed or offered as an average determination. In the spring 2020, the SFL caucus initiated the formal dispute resolution process. The members engaged in two months of informal meetings to resolve the issue. Without a successful resolution, the next step was to complete up to 3 months of formal mediation. This is a report of that mediation.

The Contract with Fulcrum Institute Dispute Resolution Clinic, Mediators

State of Washington Department of Natural Resources (DNR) Contract No. 93-101893: "The purpose of this contract is to provide mediation services to the Timber Fish and Wildlife Policy Committee (TFW Policy), one of three decision-making bodies of the Forest Practice's Adaptive Management Program...The contractor will provide mediation in accordance with a formal dispute resolution process, in order to develop a consensus over whether of not less restrictive stream buffers should be allowed for small forest landowners (SFL) in Washington State."

Mediation Services under the contract were to be provided through a series of six defined areas of performance with time deadlines provided for each of the six steps. Specifically, the areas of performance were clarified as research of the issue, pre-mediation participant contact, preparation for six mediation sessions, facilitation of six mediation sessions, drafting a final report, and completion of the final report. The contract was signed on February 2, 2021 and the completion date was identified as May 8, 2021 for the final report.

The selection of the Fulcrum Institute Dispute Resolution Clinic was achieved through a Department of Natural Resources Open Bid process. The mediators identified with the mediation were Jack Hebner, Roger Crum, and Gayle Cooper. The cost of the Stage 2 mediation process was set at just under $44,000.00.

Executive Summary

The Fulcrum Institute Dispute Resolution Clinic entered contract with the Department of Natural Resources to facilitate a Stage 2 Dispute Resolution mediation arising from a disagreement within the TFW Policy Committee over a proposal to allow Small Forest Landowners to modify current Western Washington Riparian Management Zones. Specifically, the request was to allow timber harvesting closer to aquatic resources with proposals of 25, 50, and 75 feet under a fixed distance format, or as an average variable width. Prior discussion by the members of the Policy Committee had failed to produce an agreement to move forward with a recommendation to the Forest Practices Board. Stage 1 Dispute Resolution also failed to achieve a consensus agreement.

Mediation under this contract required a review of background materials, one-on-one conversations with each Committee member and six formal mediation sessions. These, along with additional conversations and research, were all accomplished within the timeline specified, with the last session occurring on April 7, 2021. Although many constructive ideas were discussed, no consensus for further action occurred. To formalize the completion of the process, the mediation team requested that the final discussions and vote occur in a committee setting with the TFW co-chair asking for a vote on consensus or non-consensus. The TFW Policy Committee voted unanimously that no consensus had been reached and that extension of the mediation under this contract would be unlikely to produce such a consensus. The Mediators concurred with this action and were instructed to proceed with a final report on the mediation. This is that report, and after review and corrections, serves as the termination of the contract.

As part of the executive summary, it is noted that there were two items that were not formally adopted by the committee however were met with general agreement. There first item was that the funding and operation of the Small Forest Landowner Office funded by the Legislature through the Department of Natural Resources was underfunded with limited personnel for assistance to small forest landowners. Secondarily, there was broad acceptance of the idea that members of the Western Tribes could be of benefit to small forest landowners in the formation of alternative plans through the Department of Natural Resources. There was no formal documentation on how such assistance would be provided, however, it was clear that initial steps for such assistance should come from small forest landowners.

Process Definition

The mediation process used for this dispute resolution is described as a combination general meeting of all members and a series of caucus (one on one) sessions with each of the members. All sessions were scheduled and conducted through Zoom, as Washington State is still in a phase of lockdown as detailed by Washington's governor. As detailed, the process called for a review of pertinent background materials, phone calls with each participant to explain the process and to set up times for subsequent confidential one-on-one interviews, six formal mediation sessions, and a final report. In addition to these required elements of the contract the mediators conducted several additional confidential discussions with members of the committee and performed a site visit to a small forest landowner's farm. Each of the meetings were conducted on time. The participating members appeared to be open and fully involved in the process.

Review of Background materials

Fulcrum was provided with complete background files from the Adaptive Management Program Office, received additional materials from various participants, reviewed the recently completed University of Washington study entitled Washington's Small Forest Landowners in 2020, and performed additional internet research on Riparian Management Zones from around the country. Included in the report is a listing of pertinent documents and background materials received. The initial 'Position Papers' completed by each caucus prior to entering into dispute resolution served as the foundational element for discussion of potential avenues of agreement. The "Position Paper" also documented acceptable ground rules as identified and accepted by the participants.

Preliminary Phone calls with each participant

Prior to the first mediation session, Fulcrum conducted confidential telephone interviews with each participant to clarify their thoughts, attitudes, and positions. Each participant was open and appeared to give an honest appraisal of what they thought might be the outcome of the process. In a broad sense the phone calls revealed three major thoughts which would permeate the entire discussion; a) this dispute had been ongoing for too long as the participants were into their seventh year of discussion, b) the science involved in the recommended change was to be heard and debated within a different committee (CMER), and c) individual rules of the Department are difficult to change as the Department and the Committee work to protect the state's natural resources while keeping the timber industry viable.

Six formal mediation sessions

Mediation Session 1 – Tuesday, March 16, 2021

This session, conducted on Zoom, was open to all committee members and all attended and participated. Back-up members of each caucus were also allowed to participate. The format used for the first session was to allow each caucus to give an overview of the issue from their perspective for a period of 20 to 25 minutes. In a mediation process this is known as allowing each participant to give 'an opening statement' without interruption or debate from other parties. By doing this all participants were made cognizant of the 'official' opening position of other caucuses. From the Mediators' viewpoint this was a very good session and all members participated in good faith. Specifically, the mediators found the following items to be of general
acceptance:

- participants were concerned as to the potential success of the mediation process
- information presented appeared to offer avenues for on-going discussion and potential consensus.
- there was a great deal of frustration that this dispute had been ongoing dispute for seven years

Mediation Session 2 – Wednesday, March 17, 2021

The second session opened with the full group receiving a brief status report and an outline of future sessions. The session also contained a brief analysis offered by the Department of Natural Resources as to what could be done by this committee and what could not be accomplished through mediation. The remaining portion of the day consisted of confidential Zoom caucus meetings with each Committee caucus. The purpose was to follow up on what they had heard during the opening session and to gain ideas and clarity as to what might be accomplished during the rest of the process. All members participated, several having additional members of their caucus involved. By the end of this session, it was apparent that consensus on reduced buffer widths would be difficult to achieve, but not an impossible task. Specifically, the mediators found the following items to be of general acceptance:

- while 25' and 50' buffer widths were described by several as 'non-starters' there was room for discussion on some variations of the 75-foot proposal
- further clarity was provided and accepted on the definitions of templates, rules, prescriptions and alternate plans

Mediation Session 3 – Wednesday, March 31, 2021

Having determined that discussion of the smaller buffer zones would not be beneficial to all members of the committee, Session 3 was devoted to additional individual caucus sessions to further explore a 75' option, and to discuss other areas of assistance that might be rendered to Small Forest Landowners. At the end of each individual session, each caucus was given a

'homework assignment' to come to the next session prepared to give a 20-25-minute informal presentation on their thoughts, at this point, on the potential for resolving the dispute. Specifically, the mediators found the following items to be of general acceptance:

- the caucus members were split on the potential for a variable 75-foot riparian width
- some members believe that the small forest landowners were already being assisted by other DNR programs and by opportunities existing within Departmental guidelines and rules
- the Small Forest Landowner Office was underfunded and without adequate personnel for tasks at hand

Mediation Session 4 – Friday, April 2, 2021

Session 4 was a full Committee Zoom meeting in which each caucus was given up to 15 minutes to give a report on the actual options available under discussion for potential consensus. This was an informative session in which it was clarified that there were areas of agreement among the caucus members on general assistance, but that a specific buffer width prescription was probably not open to consensus. It was also apparent that the Department's definition of terms was deeply ingrained in each of the caucuses and there was very little opportunity for interchanging those terms as it may have related to the opportunity to reach consensus. The inadvertent use of the wrong term was a red flag to various participants. From the discussions it appeared that any proposal must be an 'Alternate Management Plan' and not a rule change, a prescription, or new template. Specifically, the mediators found the following items to be of general acceptance:

- the alternate plan process would allow for the discussed riparian width change for specific landowner situations
- the Western Tribes could be a valuable partner for small owner landowner alternate plan development
- there was strong membership support for increased funding and increased personnel within the Small Forest Landowner Office.

Mediation Session 5 – Tuesday, April 6, 2021

Mediation experience has shown that it is sometimes easier for a group to focus on a specific proposal for discussion rather than on generalities. Therefore, the mediation team drew up a 'straw man' Alternate Management Plan with a base buffer RMZ of 75'. This was sent to all participants prior to Session 5. The information also included support for the Small Forest Landowners Office and more involvement by the Western Tribes when asked by small forest landowners for assistance in alternate plan preparation. This session was devoted primarily to confidential sessions with each caucus and discussions of the three items identified above. During these sessions we asked for the thoughts on the 'straw man' AMP, and finally,

whether their caucus would vote in favor of such a concept if it were to be refined and brought forward for official review. This was not an official vote, and no official record was kept, and while membership votes were split, it was clear that there would not be a unanimous consensus from the Policy Committee to either favor or oppose any specific width plan. Specifically, the mediators found the following items to be of general acceptance:

- a consensus vote on a 75'-width riparian distance was not going to happen
- members voiced support for increasing funding for the Small Forest Landowner Office to help and to provide information, training and guidance when using current regulations and for a program whereby the Western Tribes would be of assistance to small forest landowners when landowners requested assistance on alternate plan preparation
- the process of making a change to a rule or prescription is not easily accomplished

Mediation Session 6 – Wednesday, April 7, 2021

This was the final required session of the Mediation process and was conducted as a full group Zoom meeting. To clarify some issues that had been mentioned during previous discussions, the mediators asked for two specific presentations before entering a group discussion. First Steve Barnowe-Meyer and Don Nauer explained their work-group results from the summer of 2020. This presentation helped to illustrate both the possibilities of the approach, and the difficulties in arriving at a mutually acceptable solution. This presentation shared compared several proposals for even-aged harvest buffer width (including several state-caucus buffer widths as narrow as 75- feet) and was a non-consensus product of the Technical SFL Prescription Work Group. A subsequent work group (SFL Experimental Alternate Harvest Prescription Work Group) produced two non-consensus prescriptions, (Conifer Thinning and Conifer Restoration) which did not incorporate the smaller (25-foot and 50-foot) riparian buffer widths. This was followed by a presentation by Ken Miller, representing the Small Forest Landowners on their approach to using Alternate Management Plans. The presentation was factual and provided documentation of the small forest landowner's current situation.

The mediators found the following items to be of general acceptance from this final session:

- there was an opportunity for change of riparian widths, but it would not happen in this session or setting
- further discussions could be held, but the current mediation dispute process would not bring about a unanimous consensus given the split vote on the core issue of reducing riparian buffer widths.
- while each of the members of the committee continued the process of working forward, many carried some resignation and hesitation to forget the past years of nonresolution for this question of change

Following the presentations, Fulcrum gave a short status report and reported that as of the previous day it did not appear that a consensus on any specific reduced buffer width would be possible. With that as an outcome, the mediators provided input that there were opportunities for agreement, but they were not acceptable at this time. Alternatives might be acceptable following the scientific review being conducted by the CMER Committee, or they might be acceptable with a further definition and understanding of relatively low impact in relationship to any width change recommendation. It was expressed by Fulcrum that there were individuals in this committee who should continue working with the Department of Natural Resources to find a solution, either in or outside of the alternative plan model, to this issue. Committee members agreed that they, collectively and individually, should not allow the progress made in riparian width discussions fall by the wayside.

The Mediation team then turned the meeting over to Co-Chair Meghan Tuttle to allow for discussion as a Policy Committee, followed by an official action. That action was to agree that no consensus was reached during the Stage 2 Dispute Resolution Process, and that continuation of the mediation under this contract would not produce consensus.

Outcome of Mediation

Officially, this Dispute Resolution Mediation ended without a unanimous consensus for a specific recommendation or an agreement for further action. There were, however, several significant points brought out which should be retained for possible future discussion.

1. Clarification of Issues
   This dispute was centered on the request of the Small Forest Landowners to modify Riparian Management Zones to allow for smaller buffer widths in Riparian Management Zones than are currently permitted. Under their proposal this would be done under Alternate Management Plan templates which allowed for greater harvesting and simplified application process by Small Forest Landowners as defined by RCW 84.33. Discussions during the mediation allowed for the introduction of related issues and possible modification of the original proposal, however none were carried forward as an official mediation outcome.

2. Summary of arguments in favor of adopting reduced buffer zone widths to assist the Small Forest Landowners
   a. The original 1999 adoption of the Forest and Fish Report Agreement promised additional management options for Small Forest Landowners. That regulatory deference promise has never been acted upon.
   b. The proposal on the table is reasonable, would have relatively low impact, and is scientifically sound.
   c. Current AMP application and processes are too complex for SFL to utilize without hiring consultants.
   d. The proposal would make application and approval simpler and would reduce the workload and cost to the State.
   e. The proposal would allow SFL more economic benefit for retaining their land for forestry purposes and would reduce the conversion of this land to urban uses.

3. Summary of arguments against adopting reduced buffer widths
   a. Washington aquatic and wildlife resources are in danger and anything that might further have an adverse impact should not be encouraged.
   b. The proposal is basically a ‘rule change’ and this body cannot change the rules
   c. The science used to support the proposal is out of date.
   d. The current AMP process already allows for individual SFL’s to make application for increased harvesting on their land.
   e. Any proposal must be site specific and allow for on-site inspections before approval
   f. If Westside SFL’s were given this option, others (Industrial and Eastside) would also ask for it
   g. If the proposal were adopted, it would become the ‘expected’ plan, and anyone denied would object.

4. Areas of general agreement
    a. The state Small Forest Landowners Office is seriously underfunded and is not fully able to meet its original intent of providing adequate technical assistance to its clientele.
    b. The Forestry Riparian Easement Program (FREP) is an excellent program but is seriously underfunded and has a multi-year backlog of applications.
    c. It can be difficult for non-professionals to complete the Alternate Management Plans available to Small Forest Landowners. Additional technical assistance and simplified procedures would help.
    d. The water and wildlife resources of the State of Washington are important and must be protected. Most parties agreed that degradation has been occurring, although primary causes are generally considered to be conversion to urban use, run-off, and climate change, rather than forestry.
    e. The current alternative RMZ's for exempt 20-acre parcels is an available program but is seldom used by SFL since most 20-acre parcel owners do not appear to be actively managing their forest land.
    f. Any agreement reached here should only apply to the Westside; Eastside conditions are different.

5. Areas of non-agreement
    a. Participants did not agree that reduction of buffer widths as a template or standardized alternate plan would have "a relatively low impact" on resources. However, as one party stated, "Any impact is too much of an impact."
    b. Parties could not agree on the various 'science' used to justify or oppose the proposal. This issue is a significant issue to be addressed by the CMER committee and was not further addressed in this mediation. After CMER completes its review, additional mediation of buffer withs may need to be addressed.

6. Ideas and suggestions brought forward during Mediation which might be areas for future action
    a. Additional technical assistance to the SFL's in making AMP applications might be provided by other caucuses with seats on the TFW Committee. Both the Westside Tribal Caucus and the Eastside Tribal Caucus introduced this idea and expressed support for this concept.
    b. Providing additional tax incentives for SFL's might be used as an incentive to maintain their land in forestry rather than conversion to urban purposes.
    c. There might be support for experimental programs with smaller buffer zones, but not below 75'.
    d. There might be support if acreage or harvesting acres were limited, and not available to the larger farms within the Small Forest Landowners definition.

Observations by the Mediators

Process Observations

Overall, the mediation process was in full accordance with the requirements of the Stage 2 Dispute Resolution Process as defined by the Guidelines for Adaptive Management Program. Again, it is noted that some of the material discussed in private one on one meetings is confidential and can't be attributed to one individual. This mediation report deals with general comments and ideas. No one should attempt to identify a single participant as to what he or she may have said.

From the mediators' perspective, the process differed from many mediations that Fulcrum has performed due to three factors:

1. Membership Role Analysis – In this case, successful mediation required the unanimous consensus of all eight stakeholders with seats on the TFW Policy Committee. Since the State Caucus has two members, this meant nine people were directly involved, along with several alternates and support personnel. Each of these individuals were given the opportunity to participate openly and creatively. Arriving at unanimous agreement when some participants rely on the definition of rules and rule enforcement, rather than by moving interpretations forward will always be a challenge

2. Mediating at-a-distance with no face-to-face interaction was necessary during the Covid-19 crisis but is obviously a less desirable form of mediation than working in-person and changes the group dynamics so that people are somewhat more likely to stick to their own positions. For future mediations of this type, a hybrid model would probably be more effective with some sessions done at-a-distance, but others done in an in-person setting. This specific mediation may not have had a different outcome even with in-person meeting; however, it is possible that there would have been more opportunity for creative ideas, or specifics identified for future actions involving problem solving.

3. The TFW Policy Committee members are not equal. Some are representatives of groups; some are state employees. Each has a constituency whose needs they represent. While each caucus did an excellent job of representing their own constituency, while treating others with respect, there appeared to be some hesitancy to acting together as a TFW Policy Committee.

The length of the process and the number of mediation sessions was pre-determined by contract. The timing of the group sessions was dictated by the participants' availability. It also occurred during a very busy time for those involved in State legislative processes. Fulcrum appreciated the assistance of Eszter Munes for helping put it all together, and Meghan Tuttle, Co-Chair for her guidance in working with the Committee. We would recommend that future mediations of this type allow for more flexibility in the type and number of sessions. We understand the difficulty in putting together meetings with nearly a dozen individuals. Flexibility may not have resulted in a different outcome; however, some flexibility may have helped the process.

We would be remiss if we did not address the length of time that this issue has been under discussion. We were not party to all the reasons for this, but to state the obvious, it has been going on too long. By the time the issue was brought to Dispute Resolution, it appears that all parties had long-before established their positions, and most had not seriously considered alternate approaches. While the

reasons for length of time may be many, no process should take seven years to resolve. A yes, no, or let's work on it should have happened a long time ago.

Issue Observations

The issue in this Stage 2 Mediation was directed to the question of whether Riparian Management Zone buffer widths should be reduced to give more harvesting options to Small Forest Landowners. A specific proposal had been placed before the TFW Policy Committee by the Small Forest Landowner representative in 2015 and had been discussed many times over the intervening years. Officially the original proposal of 25', 50' and 75' buffer widths was still on the table, but most parties agreed that nothing but variations of the 75' proposal would be seriously considered during this mediation.

The mediation team provided no expertise in evaluating the relative merits and impacts of varying buffer widths, and it took no position on the basic issue. We were also informed that the CMER Committee was specifically studying the science behind the options and that 'science' was not part of this mediation.

As an observation, the mediation team, who, individually, have considerable experience working with 'policy' bodies, found it somewhat unusual to have the TFW Policy Committee making decisions on specific buffer widths. Normally we would have expected a 'policy' group to be discussing things more like: "Should it be the policy of the State of Washington Department of Natural Resources to find ways to allow small forest landowners to harvest timber from a greater proportion of their land?" And then, if the answer is affirmative, "How best can we modify rules, taxes, grants, assistance or procedures to accomplish this?"

While this specific proposal for modifying buffer-widths did not achieve a consensus among the members of the group, at some future date the TFW Policy Committee may wish to engage in a facilitated brain-storming session on the broader question of how best to balance the interests of the Small Forest Landowners with those of the other members of the group. We particularly noted that in this mediation process that not all issues were answered. For example, it was not clear how many of the SFL's would use the smaller buffer zone alternative, and how many harvest acres might be affected. No one addressed the issues of potential benefits of increased harvesting that might come from less conversion, more tax revenue, more re-planting, etc. A major issue will also continue to be potential impact on water quality and wildlife habitat. Unfortunately, future debate over 'relatively low impact' will probably not produce a clear answer to this question.

Mediators Summary

Overall, this was a very interesting mediation. It was made more challenging by Covid-19, but we believe that all participants acted in good faith and honestly represented their respective constituencies. The opportunity for more group 'brainstorming', and the ability of individuals to work together in a six hour in-person setting would have been helpful, but maybe still not leading to a conclusion by consensus. There are additional items that can and should be accomplished. It is noted that the members of the TFW Policy Committee should not allow some of those items to suddenly stop. The mediators heard repeatedly, that too often good discussions have stopped and that ideas have been dropped only to resurface literally years later. Thank you for the opportunity to be of service.

SMALL FOREST LANDOWNER BUFFER WIDTH DISPUTE

Majority/Minority Report to the Forest Practices Board, County Government Perspective

July, 2022

The Washington State Association of Counties (WSAC) recommends an alternate plan template providing a 75-foot fixed width managed buffer (50' core and 25' managed) on all fish streams. On Np streams we recommend a 50-foot buffer with the outer 25 feet managed.

The majority of Counties in Washington State benefit from the environmental protection, jobs, and harvest tax revenue provided by small forest landowners (SFLO). To support SFLOs, our objective is to provide incentives and opportunities to diminish the pressure to convert small forest lands to other land uses and maintain the ability to manage small forest lands for sustainable commercial timber harvest.

When the Forest and Fish agreement was signed, small forest landowners were disproportionately impacted by the increased riparian protection. The legislature, recognizing the disparate impact, approved several actions to mitigate it. One was to allow alternate buffer templates that protect riparian function while lessening the financial impact to SFLO's. The current stream rules are complex and difficult to implement for a landowner not working with them daily. SFLOs should have simplified riparian rules that can be implemented without having to hire a forestry consultant.

The majority of SFLOs have minimal impact to streams due to their typically small harvest acreage and the long time span between harvests. Counties believe that an alternate plan template should be developed for SFLO's whose harvest has a low and short-term impact on riparian function.

Numerous studies have shown that a 75-foot fixed width buffer provides the functions necessary for a healthy riparian ecosystem. Management of the outer 25 feet accelerates the trajectory of the stand to the desired future condition and encourages understory development. A 50-foot managed buffer on Np streams also encourages understory development which is a key component of shade for small streams.

These proposed template prescriptions should only be available to SFLO's (harvests less than 2 million board feet per year) and on individual harvest areas of less than 20 acres and affect no more than 1,320 feet of stream reach (the length of a 40 acre parcel). This restriction is an attempt to limit the template to low impact harvests and satisfy the requirements set by the legislature.

The SFLO's have been working on alternate buffer designs for several years without success and the County caucus has been involved in the issue from the beginning. Recently, we were a participant in the dispute resolution process. Stage 1 of the process was productive, and progress was being made. However, momentum was lost in stage 2 as brainstorming and finding common ground stopped and reaching consensus became impossible. The County caucus believes that a template could be developed that protects the riparian functions, provides economic relief to the landowners, and is simple to implement.

The Washington State Association of Counties (WSAC) recommends the Board vote to approve this proposal and provide SFLO's an alternate plan template that simplifies the complex riparian

rules, provides the necessary functions to the stream, and lessens the economic impact to landowners that qualify.

SMALL FOREST LANDOWNER BUFFER WIDTH DISPUTE

Majority/Minority Report to the Forest Practices Board
Small and Large Forest Landowner Perspective

Dated: July 21, 2022

"Stewards of the land... for generations to come."

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EXECUTIVE SUMMARY

Washington Farm Forestry Association's (WFFA) Alternate Plan (AP) Template proposal initiation[1], (PI) for Western Washington was accepted by the Forest Practices Board (FPB) in February of 2015 for review and recommendations by the Adaptive Management Program (AMP) later that same year. However, after 7.5 years, Policy was unable to reach consensus on either the prescriptions or the four buffer width proposals in the PI. This report to the Forest Practices Board is to aid their decision on which, if any, of these proposed buffer widths are appropriate for Alternate Plan (AP) Templates available only to small forest landowners (SFLO) in accordance with both RCW and WAC requirements for ". . . *alternate harvest restrictions on smaller harvest units that may have a relatively low impact on aquatic resources*."

This document, including links to relevant scientific documents and four appendices developed as part of the multi-year process, summarizes the arduous effort involved in bringing forth this recommendation for your consideration. As such, it will serve as a full record of the process from the SFLO caucus perspective. Relevant details for your decision can be found in this executive summary, with full details included in the synthesis, additional template criteria, AMP process recommendations, and appendices attached herein.

Part of the challenge is that there is a lack of clarity regarding the Legislative and FPB intent in the RCW/WAC regarding the meaning of "relatively low impact" and the "equal in overall effectiveness" portion of the AP Approval Standard. The issue of 'relatively low impact' is the subject of another PI and recently resolved dispute resolution that is coming to the Board with a consensus recommendation. With respect to "equal in overall effectiveness", two scientific analyses and a review were conducted to determine the potential impact to the resource, including the scientific analysis undertaken by WFFA prior to submission of the AP Template proposal. In both cases, assessments of relative effectiveness relied on the scientific principle included in Section 21 of the Board Manual (BM) guidance for alternate plan development on cumulative effectiveness. *Figure 1*, excerpted from Section 21 of the Board Manual, shows the cumulative effectiveness of forest retention in meeting various riparian functions as a function of distance from the stream. For each function there is a characteristic sigmoidal curve, with each additional foot of forest cover at the outer edge of the buffer yielding less and less cumulative effectiveness in a classic example of the law of diminishing returns. Each function reaches its maximum value at different buffer width distances, with the furthest distances required for shade and large woody debris (LWD).

[1] see also the simplified version in Appendix A

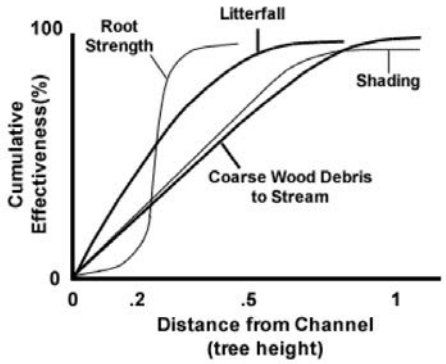


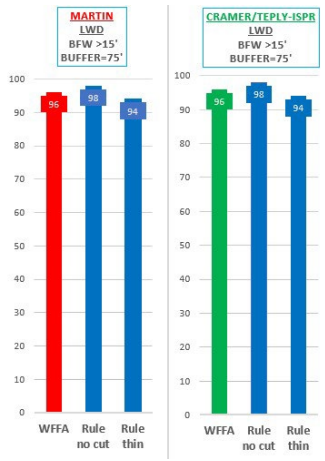
Figure 1: FEMAT curve from Section 21 of Board Manual.

For the scientific analyses conducted during this process, shade and LWD functions were analyzed under the assumption that if overall effectiveness was met for these criteria, then the other riparian functional needs would also be met. Detailed comparisons of these studies were reported in 2019 (Appendix B) and synthesized individually, along with SFLO policy recommendations, in the *Synthesis of Recommendations for Each Proposed Template Buffer Width* section of this report.

To summarize those findings, we provide succinct comparisons between these studies and the current Forest Practices Rules (Rule) below for the four proposed buffer widths in the WFFA PI, for LWD only. We use LWD as it is the function that attains near maximum values furthest from the stream (per curves in *Figure 1*) therefore capturing the highest likely impact of AP proposals. In *Figure 2* we compare the effectiveness of the two scientific studies to the current rule for a 75' buffer on streams greater than 15' and a 50' buffer on streams between 5 and 15'. In *Figure 3* we compare the effectiveness of the two scientific studies to the current rule for a 25' buffer on fish bearing streams less than 5' and a 25' full length partially managed buffer on Np streams. In both *Figure 2* and *Figure 3* blue bars represent the relative effectiveness at meeting riparian functions under the current rule with and without thinning as allowed. Red bars represent relative effectiveness of the WFFA PI science assessment (Martin), and green bars represent relative effectiveness of an independent scientific analysis of the proposed widths commissioned by the AMP (Cramer/Teply), and completed consistent with TFW processes, including Independent Scientific Peer Review (ISPR).

For the 75' and 50' buffer proposals (*Figure 2*) the differences in relative effectiveness between the studies and the rule are well within the margin of error, so we are confident in asserting that for these conditions, the buffer widths are equal in overall effectiveness to the rule for the riparian function most likely to be impacted by the proposed prescriptions. For the 25' buffer on fish streams (*Figure 3*), the difference in relative effective between the studies and the rule suggest that the proposal would not be equal in overall effectiveness. For the 25' buffer on non-fish (Np) streams (*Figure 3*), the difference in relative effective between the studies and the rule suggest that the proposal would exceed the overall effectiveness of the current rule.

75' S/F



50' F

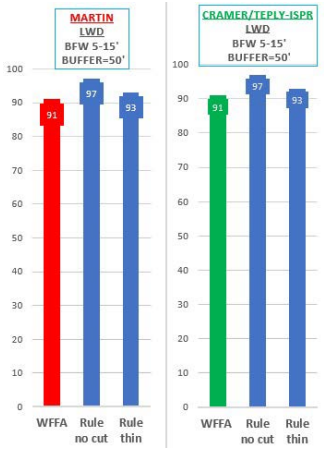
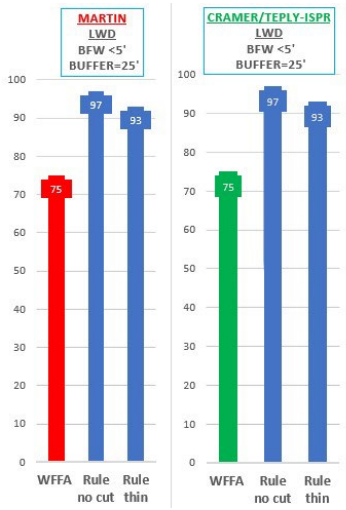


Figure 2: Relative Effectiveness of Prescriptions as Compared to the Forest and Fish Rules for maintaining LWD function with 75' and 50' buffers.

25' F



25' Np

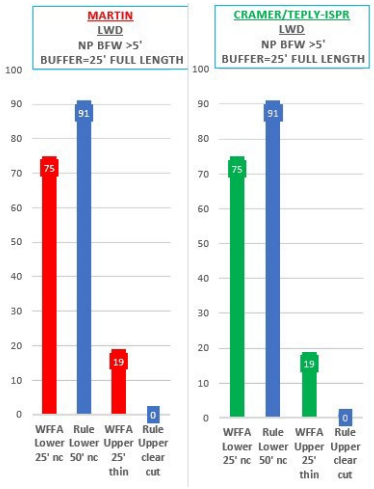


Figure 3: Relative Effectiveness of Prescriptions as Compared to the Forest and Fish Rules for maintaining LWD function with 25' buffers on Fish and Non-fish (Np) streams.

The Martin and Cramer/Teply scientific assessments utilized and referenced extensive peer reviewed science pertinent to the riparian conditions of the PNW (see *Appendix B: Science Comparison from July 31, 2019*) but applied different methods to arrive at their conclusions. Taken together these outcomes suggest that there is preponderance of proof that these relative effectiveness values are attainable should these template proposals be implemented. Neither the Martin study included in the 2015 WFFA proposal, nor the Cramer/Teply study considered the relatively "smaller harvest units" referenced within the RCW/WAC. Had the inherent smallness of typical SFLO harvests been considered we are confident the "relative effectiveness" tables would have shown even less risk than presumed in the relative effectiveness tables provided above. Regardless, SFLO are willing to support some harvest size/reach limits not in their original proposal to further insure "*smaller harvest units*" consistent with legislative intent, thereby ensuring little to no additional resource risks relative to current rule prescriptions.

Based on these scientific studies and discussions on 'relatively low impact' the SFLO Caucus recommends that the Forest Practices Board:

- Approve a template buffer width of 75' Variable for S/F Waters >15' BFW for Small Forest Landowners.
- Approve a template buffer width of 50' Variable for F Waters 5'- 15' BFW for Small Forest Landowners.
- Table (or Reject) the proposed template buffer width of 25' Fixed for F Waters <5' BFW for Small Forest Landowners.
- Approve a template buffer width of 30' fixed full length for all Np Waters for Small Forest Landowners. The change from 25'to 30' fixed full length buffer is explained in the *Synthesis of Recommendations for Each Proposed Template Buffer Width* section for 25' Np recommendations.
- Direct DNR to add the 75' F, the 50' F and the 30' Np template prescriptions to BM21 as quickly as possible so it can be used while further management options are under review, and
- Direct TFW Policy to return with their "variable width" sideboards, and additional management recommendations that focus on user friendly outcome-based low impact prescriptions intended to facilitate long term Desired Future Condition/Outcome for fish bearing streams by no later than a year after this approval.
- Direct Policy to make recommendations regarding a potential change to a 50' managed Np template prescription and/or other potential changes resulting from subsequent Np rule making decisions by no later than a year after this approval. Any such future Np management options should focus on user friendly outcome-based low impact prescriptions intended to facilitate long term Desired Future Condition/Outcome. User friendly options should consider simplification options such as eliminating (for SFLOs) "intermittent dry portions", and the potential of using the same buffer width prescription for smaller Fish stream and Np Waters.

Given the simplicity and relative agreement between the scientific analyses, the amount of time it has taken to bring this report back to the FPB reflects poorly on the adaptive management process. The inconsistent administration of the process by the three different Adaptive Management Program administrators (AMPA) over the past 7+ years resulted in a series of repeated processes, none of which effectively advanced the PI in any meaningful way. The PI process itself appears to require some clarification. It appears some caucuses understand the RCW/WAC to say that the PI process is available to present an idea for a CMER or Policy project, or to review independent study results or proposals relevant to the AMP. Others believe the PI process can only be used for an idea for a project to be evaluated, and if accepted, developed/implemented by the AMP. Our observations of the process suggest that some caucuses would prefer the PI process not be available to landowners, yet at other times an idea can be proposed for rulemaking without even entering the process (e.g., AFF). These issues need to be resolved or the PI process will never function effectively, and we will continue to have ongoing conflict such as we have experienced these past 7.5 years. Unfortunately, we have also observed a systemic bias in the program wherein it is presumed that the current rules are insufficient, and efforts to expand them should be the only focus of the AMP. These shortcomings also must be addressed as part of AMP improvement process, both in the program, as well as in conjunction with the broader Principal's conversation. Failure to do so will only result in continued conflict over minor changes to processes and board manual updates such as those proposed in the 2015 Western Washington Alternate Plan Template Proposal Initiation.

SYNTHESIS OF RECOMMENDATIONS FOR EACH PROPOSED TEMPLATE BUFFER WIDTH

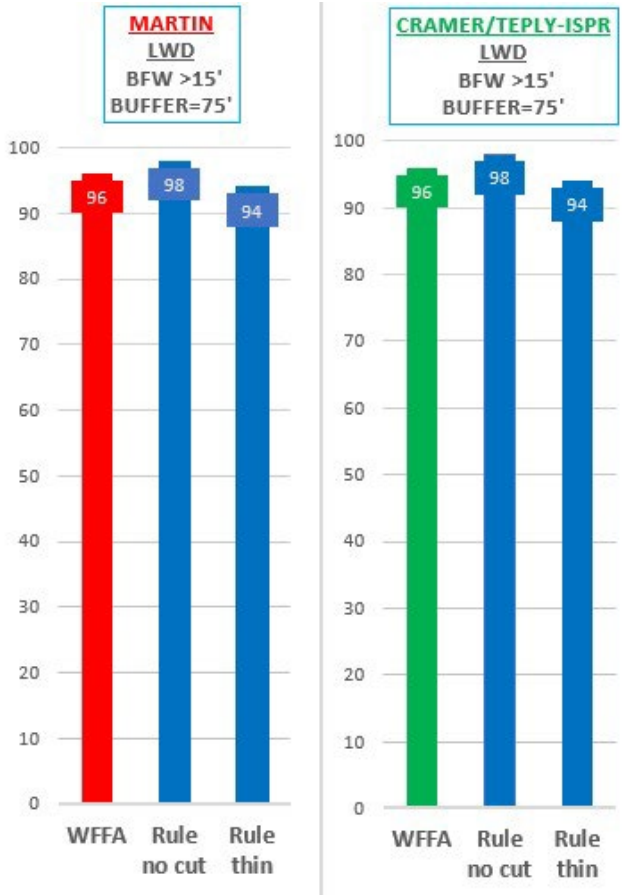
The Cramer/Teply science review was sponsored by/is the only AMP review product. It has been peer reviewed by the same ISPR process used for CMER studies. After several years of review process the WFFA (Martin) and the Cramer/Teply relative effectiveness conclusions were similar on most prescriptions and functions. The Martin and Cramer/Teply studies used different approaches (and studies in some instances) to reach the same or similar conclusions, particularly regarding shade, suggesting high scientific agreement and confidence regarding their findings. Their full reports and the ISPR review are available in these links:

- Alternate Plan (AP) Template proposal initiation,
- Cramer Fish Sciences /Teply Report,
- ISPR cover letter
- ISPR report

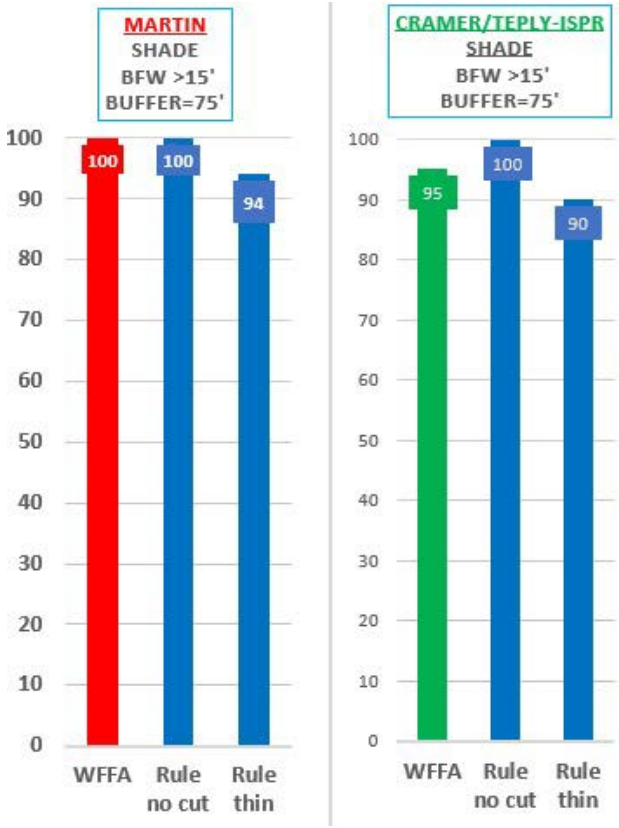
WFFA summarized the gist of these processes and findings in Appendix B. The following brief comments, table excerpts, and graphical representations are intended to help your understanding:

1. **75' Variable for S/F Waters >15' BFW**

- The 75' buffer width proposal for BFW > 15' is as effective protecting Large Woody Debris (LWD) as current Forest Practices Rule (Rule) prescriptions. LWD estimates are 2% less than Rule's "pack-n-whack", and 2% more than Rule's thinning option in both science reviews. Neither difference is statistically significant in view of the variability among the evaluated published reports.



- The 75’ proposed buffer width for BFW > 15’ is nearly as effective at protecting Shade as our current Forest Practices Rule (Rule) prescriptions. The scientists shade conclusions differed a little but still +6 to -5% than Rule’s “pack-n-whack” or FPR’s thinning option, consistent with the observation that the response curve is nearly flat at distances approaching one tree height from the stream bank (see *Figure 1*). Neither difference is statistically significant in view of the variability among evaluated published reports.



- The other functions are similarly equivalent to FPR when taking a deeper dive into the relative effectiveness tables created by the scientists for this buffer width.
- The LWD & Shade function differences are shown in table format in Appendix B.

Table 1: A comparison of “equal in overall effectiveness” from Martin (Westside Template Proposal) and Teply (Cramer Fish Sciences review of Westside template proposal) (**bold** are likely significant differences in overall effectiveness). As the original tables from Martin and Teply are ordered differently, LWD and Shade values for each table are highlighted with unique color codes. Differences are Alternate-FPR prescription.

		Relative Effectiveness of WFFA Proposal vs Forest Practice Rules						
		Proposal vs rule differences found by Martin (Table 3) and Cramer Fish/Teply (Table 8)						
Prescription	Stream	BFW	RMZ		Potential LWD **CHANGE**		Potential Shade **CHANGE**	
No. (Simplified)	Type				Martin	Teply	Martin	Teply
1 (A)	Fish	> 15'	75' no cut		+/- 2%	+/- 2%	0 to + 6%	+/- 5%
Footnote: Differences among riparian function estimates of less than 15% are within the range of measurement error of the various resource data. Further, when evaluating tradeoffs, consideration needs to be given to what can be estimated versus what is biologically meaningful.								

The Alternate Plan Guidance in Board Manual (BM) 21 indicates the following “Areas of Influence”: *Shade* up to 75’ from BFW; *Stream Bank Stability* up to ½ the average crown diameter of the dominant conifer closest to the BFW; *Sediment Filtering* are usually within 30’ of BFW; *Nutrients and Leaf Litter Fall* is the maximum distance that leaf litter could be expected to reach the stream. *Woody Debris*

Availability and Recruitment is the only function BM21 suggests might be affected with a 75' buffer. However, the above science reviews conclude a 75' buffer is functionally equivalent to both FPR rule prescriptions (packing or thinning). To the extent there is a site-specific LWD concern, our template proposal anticipates/welcomes a directional falling or tipping strategy, similar to what's in the Overstocked Stand Template (see Elements pages 13-16). The goal is to provide more user-friendly processes to encourage landowners to create the desired structure and pooling benefits sooner than what would occur with natural processes.

WAC 222-12-040 deals with Alternate Plans, with a focus on SFLOs. WAC 222-12-0403 (3) creates "Template" prescription options for SFLOs only based on several potential situations or strategies. Although the original primary intent was for ". . . *common situations that are repeatedly addressed in alternate plans* . . ." no templates have been created based on that particular situation, in large part because Full/Complex Alternate Plans are intimidating for SFLOs. Relatively few Complex Alternate Plans have been tried over the years except for hardwood conversion/conifer restoration efforts that could be considered "*repeatedly addressed in alternate plans*".

While waiting on the various science reviews, Policy (with substantial help from the SFL Office Administrator) conducted an exhaustive review of those SFLO Complex Alternate Plans. WFFA created a summary (Appendix D) of this data and included the findings of a previous multi-stakeholder field survey results of a large sample of these same SFLO Alternate Plans that found:

- On streams larger than 15' BFW the average "No Cut Buffers" was 50.7' on 54 data points - far narrower than this template proposal.
- The Qualitative Score from the Galleher 2008 Field Data and Assessment showed consistently high scores on the RMZ functions as well as identifying some correctable reforestation issues. The two critical functions driving our RMZ rule widths (Shade and LWD) all scored very high. Reviews were conducted by multi-caucus field professionals and their functional scoring was unanimous for each site/function.

This WFFA Template prescription included a request for some sort of variability on the buffer width that would still have to average 75'. There have been generally positive discussions on this variability concept to further provide tailored site-specific protections in the "experimental workgroup" and the precursor "elements" (Page 1 of "elements") meetings; in prior template efforts; and we find variable width options in rules (Eastern Washington Eastside 20-acre exempt, Wetland Management Zones, and Marble Murrelet rules). A variation of -25' or +50' has been discussed in Policy but no conclusive decisions made. The FPB could address/adopt variability limits in this buffer width process, or direct recommendations from the subsequent Policy discussions regarding proposed management options within approved buffer widths. It would help the subsequent management option discussions in Policy if the FPB at least indicated support for a "variable" concept to better match site-specific topographic and/or stand conditions.

Conclusion/Recommendation:

We find a 75' Buffer Width on S/F Waters >15' BFW to be equal in overall effectiveness to the current rules; effectively within the BM21 Areas of Influence; and far wider than prior approved SFLO Alternate Plan averages for >15' BFW streams. We don't see any justification for any harvest size/stream reach limits for this prescription in the science reviews. We also note that inherently smaller SFLO harvest

units/stream reaches provide additional protections not factored into the science reviews. Unusual potential higher risk sites can/will be identified via a checklist format in the template application, and/or by the additional ID Team review process required of all Alternate Plans.

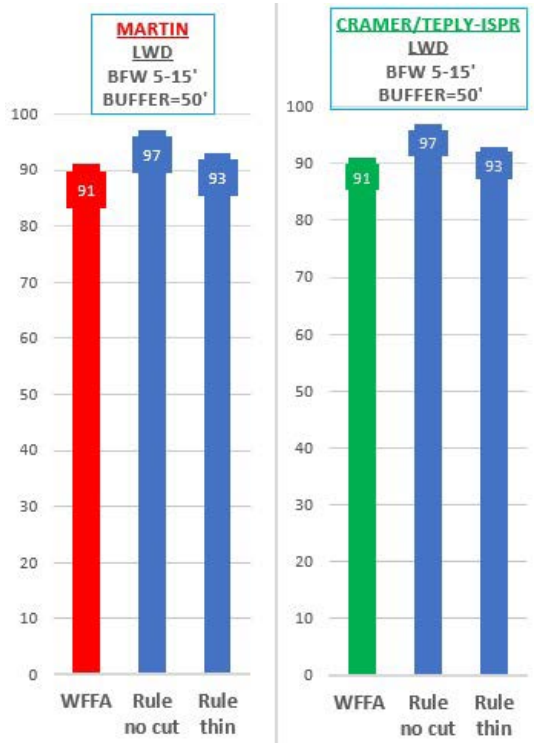
We recommend the FPB approve a template buffer width of 75' Variable for S/F Waters >15' BFW for Small Forest Landowners. We further recommend the FPB direct:

- DNR to add this template prescription to BM21 as quickly as possible so it can be used while further management options are under review, and
- Policy to return with their "variable width" sideboards, and additional management recommendations that focus on user friendly outcome-based low impact prescriptions intended to facilitate long term Desired Future Condition/Outcome by no later than a year after this approval.

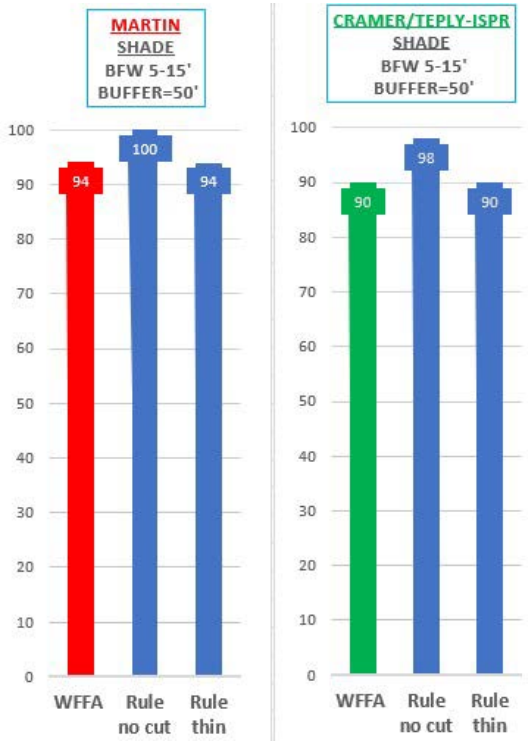
2. <u>50' Variable for F Waters 5'-15' BFW</u>

The WFFA proposal and the science reviews recognized the importance of different site-specific stream widths on functionality – confirming SFLO beliefs that smaller streams can function equally with smaller buffers. This basic understanding is further confirmed by: a) the Departments functional analysis document "DNR assessment of Exempt 20-acre RMZs 2004" report to the Federal Services supporting 58' and 29' aggressively managed buffers for the smaller streams on typical SFLO harvest unit sizes; and b) current FPR rules that additionally recognize functional differences for <10' streams. Stream width is a key "*site-specific physical feature*" that invites tailored prescriptions protecting functions far better than one-size-fits-all. The following brief comments, table excerpts, and graphical representations are intended to help your understanding:

- This proposed buffer width for BFW 5-15' streams is shown to be very nearly the same effectiveness (2 to 6% loss) at protecting Large Woody Debris (LWD) as our current Forest Practices Rule (Rule) prescriptions. This small <u>potential</u> loss is not deemed statistically significant. Our confidence in the results of the Martin and Cramer/Teply reports derives from the fact that they are based on dozens of independently reviewed and published studies, covering a wide range of climate conditions and landscapes.



- This buffer width for BFW 5-15' is also shown to be very nearly the same effectiveness (up to 8% loss) protecting Shade relative to current rules. We posit that this science review finding is not significant for two reasons. First, typical SFLO harvests are small and occur across dispersed/disconnected ownerships. Second, to the extent temperature impacts occur on smaller harvests, temperature studies, including the Type N CMER studies, show that stream temperatures recover at short distances downstream from timber harvest units. We anticipate that the FPB could include harvest unit sizes/stream reach limits in the template buffer width determinations to attain equal in overall effectiveness.



- The other functions are similarly equivalent to FPR when taking a deeper dive into the relative effectiveness tables created by the scientists for this buffer width.
- The LWD & Shade function differences are shown in table format in Appendix B.

Table 1: A comparison of "equal in overall effectiveness" from Martin (Westside Template Proposal) and Teply (Cramer Fish Sciences review of Westside template proposal) (**bold** are likely significant differences in overall effectiveness). As the original tables from Martin and Teply are ordered differently, LWD and Shade values for each table are highlighted with unique color codes. Differences are Alternate-FPR prescription.

		Relative Effectiveness of WFFA Proposal vs Forest Practice Rules					
		Proposal vs rule differences found by Martin (Table 3) and Cramer Fish/Teply (Table 8)					
Prescription	Stream	BFW	RMZ	Potential LWD **CHANGE**		Potential Shade **CHANGE**	
No. (Simplified)	Type			Martin	Teply	Martin	Teply
2 (B)	Fish	5-15'	50' no cut	up to -6%	-2 to 6%	up to -6%	up to -8%
Footnote: Differences among riparian function estimates of less than 15% are within the range of measurement error of the various resource data. Further, when evaluating tradeoffs, consideration needs to be given to what can be estimated versus what is biologically meaningful.							

The Alternate Plan Guidance in Board Manual (BM) 21 "Areas of Influence" were referenced in the 75' buffer width discussion. *Shade,* and *Woody Debris Availability and Recruitment* are the only functions BM21 suggests might be affected with a 50' buffer. Shade is mitigated by the lesser needs of a smaller stream and the smallness of typical (or limited) harvest sizes and/or stream reach limits. To the extent there is a site-specific LWD concern our template proposal anticipates/welcomes a directional falling or tipping strategy as indicated above in the 75' buffer width discussion.

The WAC on Templates are for situations, strategies, and/or common situations that are repeatedly addressed in alternate plans. Based on an exhaustive review of those SFLO Complex Alternate Plans (Appendix D) and the findings of a previous multi-stakeholder field survey results of a large sample of these same SFLO Alternate Plans that found:

- On streams 5-15' BFW the average "No Cut Buffers" was 41.8' on 92 data points - narrower than this template proposal.
- The Qualitative Score from the Galleher 2008 Field Data and Assessment showed consistently high scores on the RMZ functions as well as identifying some correctable reforestation issues. The two critical functions driving our RMZ rule widths (Shade and LWD) all scored very high. Reviews were conducted by multi-caucus field professionals and their functional scoring was unanimous for each site/function.

This WFFA Template prescription included a request for some sort of variability on the buffer width that would still have to average 50'. See also the variable width discussion above on 75' buffer width. It would help the subsequent management option discussions in Policy if the FPB indicated support for a "variable" concept to better match site-specific topographic or stand conditions.

SFLOs consistently struggle with the idea that they need to provide wide buffers on short stretches of seasonally dry Fish streams since shade is to keep water cool and there is no water during the part of the year when it matters. While not science reviewed, the SFLO Caucus would appreciate FPB members asking TFW Policy to consider including all Seasonal Fish Waters in this 50' buffer intended for smaller streams.

Conclusion/Recommendation:

We find a 50' Buffer Width on F Waters 5'>15' BFW to be equal in overall effectiveness to the current rules especially when considering the smallness of SFLO harvests, and additional limitations not considered in the science reviews. These added stream reach and/or harvest size limitations would ensure effectively being within BM21 Areas of Influence; and wider than prior approved SFLO Alternate Plan averages for 5'-15' BFW streams. We believe a LWD placement option, and a harvest unit limitation of 20 acres and/or a stream reach limit the length of the long side of a 20-acre parcel would ensure meeting the Alternate Plan Approval Standard. WFFA strongly believes the breakpoint between large and smaller streams should be 15' but could reluctantly live with a break at 10' and smaller as is done in current rules. Unusual potential higher risk sites can/will be identified via a checklist format in the template application, and/or by the additional ID Team review process required of all Alternate Plans.

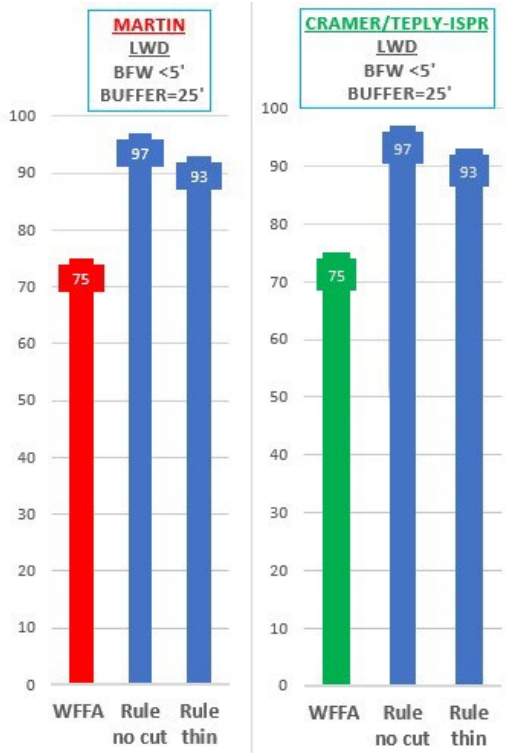
We recommend the FPB approve a template buffer width of 50' Variable for F Waters 5'- 15' BFW for Small Forest Landowners. We further recommend the FPB direct:

- DNR to add this template prescription to BM21 as quickly as possible so it can be used while further management options are under review, and
- Policy to return with their "variable width" sideboards, and additional management recommendations (including for Seasonal Fish Streams) that focus on user friendly outcome-based low impact prescriptions intended to facilitate long term Desired Future Condition/Outcome by no later than a year after this approval.

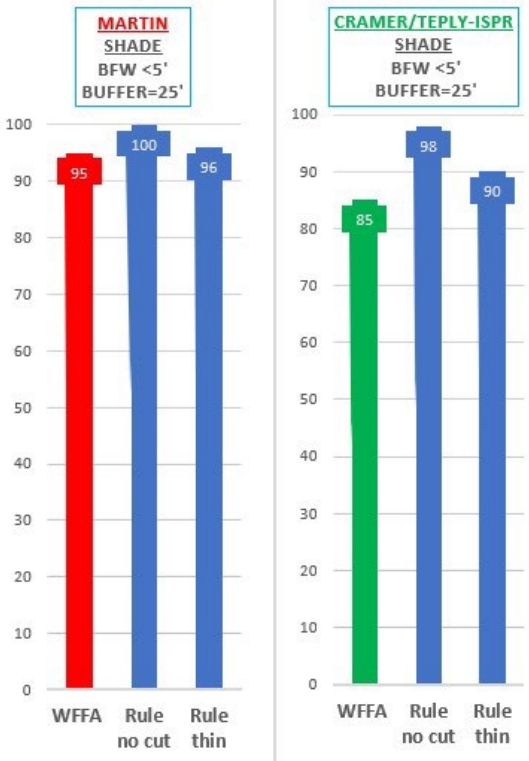
3. 25' Fixed on F Waters <5' BFW

The efficacy of the Cramer/Teply science reviews was discussed, linked, and summarized (Appendix B) above. The following brief comments, table excerpts, and graphical representations are intended to help your understanding:

- The Martin and Cramer/Teply reviews indicate Large Woody Debris (LWD) functional effectiveness could/would be negatively impacted by this buffer width when compared to current Rules.



- This buffer width results in a moderate risk of functional loss of Shade compared to current Rules.



These functional losses are quantified in this excerpt from Appendix B

Table 1: A comparison of "equal in overall effectiveness" from Martin (Westside Template Proposal) and Teply (Cramer Fish Sciences review of Westside template proposal) (**bold** are likely significant differences in overall effectiveness). As the original tables from Martin and Teply are ordered differently, LWD and Shade values for each table are highlighted with unique color codes. Differences are Alternate-FPR prescription.

		Relative Effectiveness of WFFA Proposal vs Forest Practice Rules						
		Proposal vs rule differences found by Martin (Table 3) and Cramer Fish/Teply (Table 8)						
Prescription	Stream	BFW	RMZ		Potential LWD **CHANGE**		Potential Shade **CHANGE**	
No. (Simplified)	Type				Martin	Teply	Martin	Teply
3 (C)	Fish	< 5'	25' no cut		**up to -22%**	**up to -18 to 22%**	up to -5%	up to -5 to 13%
Footnote: Differences among riparian function estimates of less than 15% are within the range of measurement error of the various resource data. Further, when evaluating tradeoffs, consideration needs to be given to what can be estimated versus what is biologically meaningful.								

Conclusion/Recommendation:

- There are few studies that provide the science confidence levels of the 75' and 50' template proposals.
- The Exempt 20-acre rules have similar buffer widths, but are deemed "relatively low impact" based on this 2004 DNR report to the Federal Services.
- SFLOs intuitively believe their own eyes when looking at these very small streams where the brush, banks, and a few trees make the stream hard to even see. Therefore, they are skeptical that the indiscriminately wide buffers are necessary to maintain full function.
- There are a few SFLO alternate plans approved for 25' buffers but we suspect those are for special site-specific rehabilitation reasons, and/or for landowners who have achieved high levels of confidence and trust with DNR Foresters and ID Team members – likely further suggesting this prescription is not yet ready for the presumptive approval inferred with a template.

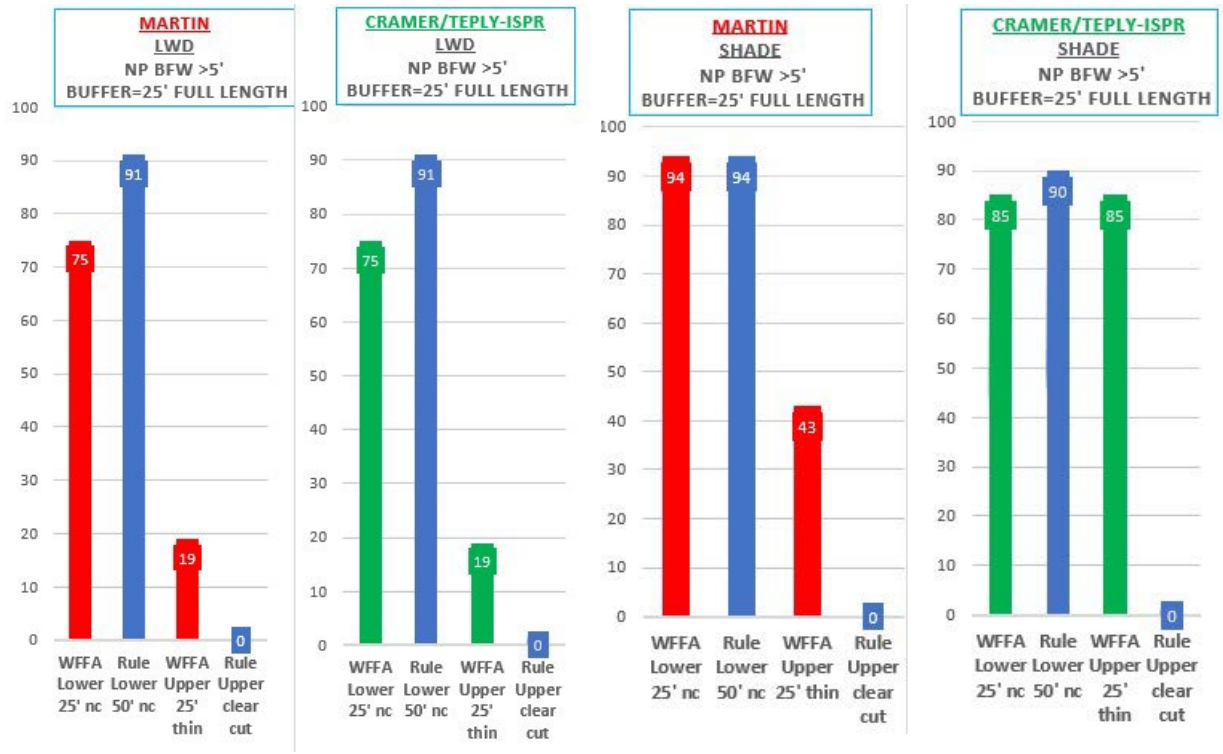
Given the scientific uncertainty associated with this prescription we recommend the FPB (Table or Reject) the proposed template buffer width of 25' Fixed for F Waters <5' BFW for Small Forest Landowners.

3. 25' Fixed Full Length on all Np Waters

The efficacy of the Cramer/Teply science reviews was discussed, linked, and summarized (Appendix B) in the opening of the 75' Buffer width discussion. This Rule buffer prescription is very complex for SFLOs to understand and implement. It is also difficult to evaluate from a scientific perspective as it is necessary to compare no touch buffers for 50% of the stream reach (Rule) to smaller, partially managed buffers on two different groups of stream widths for the full length of the stream reach.

- Although complex from a science review standpoint, the WFFA PI proposal is simple from a landowner application standpoint. In terms of the number of trees retained, a 25' buffer for 100% of the stream length would be equivalent to the current rule that requires a 50' buffer for essentially 50% of the stream length.

- The science reviews did reveal a significant "**net gain**" (not loss) in functionality (particularly shade) where the lost functionality of going from 50' to 25' in parts of the stream was more than offset by huge gains in functionality in the parts of the stream where the buffer went from 0' to 25', even with significant overstory management of these smaller 25' Np buffers.



- This 25' full length template proposal clearly meets, and in fact exceeds the equal in *overall effectiveness* portions of the AP Approval Standard.

Excerpt from Appendix B

Table 1: A comparison of "equal in overall effectiveness" from Martin (Westside Template Proposal) and Teply (Cramer Fish Sciences review of Westside template proposal) (**bold** are likely significant differences in overall effectiveness). As the original tables from Martin and Teply are ordered differently, LWD and Shade values for each table are highlighted with unique color codes. Differences are Alternate-FPR prescription.

		Relative Effectiveness of WFFA Proposal vs Forest Practice Rules					
		Proposal vs rule differences found by Martin (Table 3) and Cramer Fish/Teply (Table 8)					
Prescription	Stream	BFW	RMZ	Potential LWD **CHANGE**		Potential Shade **CHANGE**	
No. (Simplified)	Type			Martin	Teply	Martin	Teply
4 (D 1st bullet)	Np	> 5'	25' full length				
			1st 300' NC:	**up to -16%**	**up to -16%**	No change	-5%
			Above 300' thin:	**more than +19%**	**up to +19%**	**+43%**	**+85%**

Footnote: Differences among riparian function estimates of less than 15% are within the range of measurement error of the various resource data. Further, when evaluating tradeoffs, consideration needs to be given to what can be estimated versus what is biologically meaningful.

During the AMP review of our 2015 Proposal, CMER released findings from the Hardrock studies. These findings were considered in the ISPR review of the Cramer/Teply relative effectiveness tables here and in the Fish proposals above. Policy has been unable to agree on the **net gain** in functionality when following the AP Approval Standards requirement to consider *overall effectiveness* relative to the current rules because of the Hardrock findings. While these rules may change in the future after exhaustive CR101 and CR102 processes, we submit that there is an opportunity for a net gain in resource protection now by implementing this change as part of an Alternate Plan Template in Board Manual guidance. Board Manual updates can be updated simply once additional data and final decisions on Np buffers are determined.

There is immense confusion pertaining to "Non-Fish/**Perennial**" (Np Waters) definitions that include parts of the stream reach that aren't year round flowing water. Even if there is some technical/functional logic requiring protections of "Perennial" streams that don't have summer water ("intermittent dry portions") our WFFA proposal intended to simplify these prescriptions to year around surface flowing waters to match the common person's understanding of "perennial". SFLOs are willing to protect all the perennial (year around) surface flowing water, including water not currently protected by rule, so respectfully ask the FPB for this simplification within a Template format. We submit that it will increase the credibility and SFLO buy-in important to long term support for understandable protections within our community.

During Stage I of this dispute, there were some real glimpses of the collaborative spirit that founded Forests and Fish, and the Adaptive Management Program – particularly, but not exclusively from the Eastside Tribal caucus, and the County Caucus. In view of the current Np rule making process and a genuine desire to find meaningful compromise, two alternate Np proposals for SFLOs were discussed: a 30' fixed full-length buffer, and a 50' manageable full-length Np buffer. Neither are needed to meet the AP Approval Standard relative to current rules, but in view of likely changes ahead WFFA could support either of these brainstorming proposals. The possibility that the Np buffer prescription and the Fish buffer on smaller streams are the same widths presents some attractive simplification benefits to SFLOs. It's conceivable that we would only have to look at the BFW of surface flowing water to establish our buffer widths – a situation where the break points between Fish and Non-fish become moot for SFLOs utilizing templates for these specific site conditions.

Conclusion/Recommendation:

We find the 25' full length Np proposal **exceeds** the AP Approval Standard requirements, and additionally meets the "net gains" recommendations from the State Auditor's Office that the FPB is in the process of adopting. We don't find a credible reason relative to current rules to limit the harvest unit acres, or the stream reach based on today's rules and AP Approval Standard. We do recognize future Np rule changes could quickly affect a template prescription made now. We don't find a credible reason to delay deciding on a Np Template prescription for SFLOs. We do find credible reasons to expedite this decision, including tangible benefits sooner to public resources, and intangible benefits to SFLO stakeholders who have felt ignored/unimportant.

We recommend the FPB approve a template buffer width of 30' fixed full length for all Np Waters for Small Forest Landowners. We further recommend the FPB direct:

- DNR to add this template prescription to BM21 as quickly as possible so it can be used while further management options are under review, and
- Policy to make recommendations regarding a potential change to a 50' **managed** Np template prescription and/or other potential changes resulting from subsequent Np rule making decisions by no later than a year after this approval. Any such future Np management options should focus on user friendly outcome-based low impact prescriptions intended to facilitate long term Desired Future Condition/Outcome. User friendly options should consider simplification options such as eliminating (for SFLOs) "intermittent dry portions", and the potential of using the same buffer width prescription for smaller Fish stream and Np Waters.

ADDITIONAL TEMPLATE CRITERIA

Size, Impact, and Eligibility

1. As developed, the WFFA Alternate Plan Template prescription proposal was viewed as a more user-friendly approach to alternate plans for SFLO. The scientific analysis was included with the understanding that we must protect public resources consistent with the AP Approval Standard that ensures ". . . equal in overall effectiveness to the protection provided in the act (RCWs) and rules (WACs)".
2. SFLO harvest units are typically small and dispersed, which is a site-specific condition with inherently lower impact.
3. It's also important to acknowledge the consensus findings of all those signatories to the 1987 TFW Agreement that lead to the 1999 Forests and Fish legislation – most of whom are still represented in Policy, and on this FPB. Their **consensus findings** at that time on the current question about potential impacts were: "*In the area of timber harvesting impacts, the small landowners by definition are not a significant factor because their ownerships are dispersed and their cutting patterns are largely random*." (page 33) These findings led to our SFLOs trusting that our "alternate management plans or alternate harvest restrictions" would be easily forthcoming after Forests and Fish passage without the torturous path to this point, especially the last 7.5 years. SFLO harvests are still "smaller" and "relatively low impact"; or "not a significant factor" regarding "harvesting impacts" as stated in founding documents that led to Forests and Fish. Only the people within the AMP have changed. SFLOs are still small, low impact harvesters whose continued presence and desire to maintain lowland forests is important to the future of our state's forest lands.
4. The 1987 TFW Agreement participants weren't concerned about cumulative effects of SFLO harvests. Another prior template effort (see pages 11-12 of elements) includes a lengthy statistical discussion of "Potential Cumulative Effects" that would fit today's buffer width discussions. Most importantly the science reviews plus stream reach limits now recommended preclude any cumulative impacts at all.
5. Neither the Scientific Justification included in the 2015 WFFA proposal, nor the Cramer Fish Sciences/Teply outside review considered the relatively "smaller harvest units" referenced within the RCW/WAC. Failure to consider the small size and dispersed nature of typical SFLO harvests was pointed out by the Independent Science Peer Review (ISPR) processes administered by the University of Washington. The ISPR review concluded that the review by Cramer Fish Sciences *". . .*

was technically sound and unbiased." A summary of all three review findings and references are attached as Appendix B. Had the inherent smallness of typical SFLO harvests been considered we are confident the "relative effectiveness" tables would have shown even less risk than presumed in the relative effectiveness tables provided by the scientists. Regardless, WFFA supports some harvest size/reach limits not in their original proposal to further insure "*smaller harvest units*" consistent with legislative intent, thereby ensuring little to no additional resource risks relative to current rule prescriptions.

6. "Template" forms of Alternate Plans are not available to industry. Templates for SFLOs only are intended (WAC 222-12-0403 (3)) to "simplify" and include "low impact situations" and "site-specific physical features" (such as stream width). Managed and unmanaged buffer widths ultimately accepted in a template are presumed to be approvable on most individual Forest Practices Applications (FPA) while still meeting the AP review/approval standard of "equal in overall effectiveness to the protection provided in the act and rules".
7. Consistent with the RCW, all SFLOs are eligible to apply to use a template. However, some site conditions may not be as suitable for these template prescriptions, therefore user-friendly/simple screening processes to manage SFLO expectations and reduce ID Team workload would need to be developed.
8. Although "RMZ" and "Buffer Widths" terms are/have been used interchangeably, changes to rule defined RMZs are not contemplated by these proposals.
9. During this extended process, the FPB informally asked Policy to review past template efforts in hopes of finding alternate/interim pathways. These meetings developed a partial list of background information or key "elements" that should be considered for any eventual template. A subsequent "experimental" work group reached general agreement on tentative Desired Future Condition (DFC) management options but failed to agree on the buffer widths. Once Template buffer widths for SFLOs are determined by the FPB, it is the SFLO Caucus expectation that TFW Policy will revisit the Proposal Initiation and the "experimental" workgroup draft prescriptions with an eye towards finalizing simple, outcome-based recommendations to the FPB. These recommendations will focus on enhancing/expediting/protecting long term Desired Future "Outcomes".
10. The full Alternate Plan Approval Standard from WAC 222-12-040(2) states: "*Approval standard. An alternate plan must provide protection for public resources at least equal in overall effectiveness to the protection provided in the act and rules*." This AP Approval Standard does not say equal protection to the existing rule prescriptions. It's words and intent allow/require some consideration for "overall effectiveness" where smaller buffers combined with smaller harvest units can still provide similar/same effectiveness. The inclusion of "act and rules" (RCW and WACs) clearly conveys some special regulatory intent for SFLOs, along with protection of public resources. We believe the RCW/WAC intent, including within this Approval Standard, was to consider/allow some sort of special regulatory consideration for SFLOs "smaller harvest units" where they can be determined to be "relatively low impact", but to do so with minimal impact on RMZ functionality. In fact, we are reminded in another dispute that the original intent behind Board Manual 21 was exclusively for SFLOs. The RCW/WAC regulatory intentions regarding SFLO can be found in the AC handbook , Mark Hicks memo , additional citations within the 2015 WFFA proposal, and Appendix C.

AMP Process Recommendations

11. Adaptive Management Program issues (i.e. why it took so long). Though **All** stakeholders in Policy and the FPB were involved in the consensus decision to review the science behind these buffer proposals by independent outside scientists rather than using CMER and **all** stakeholders had significant input managing this independent review process and the ISPR review process, when results were finalized, some claimed there was a process foul by not involving CMER. In the spirit of TFW collaboration WFFA sponsored a consensus effort to have CMER review the results using the standard questions approach for outside science. This process took a year longer than expected and still ended in failure, therefore it is not includable as part of the AMP science review process record. If FPB members do open these files they will find: a "Notice to Discontinue . . ."; one report that responded to the Policy questions; one report focusing on science confidence issues primarily on the original science review rather than the AMP sanctioned and ISPR reviewed Cramer/Teply report; and one stakeholder group's complaint about being denied an opportunity for required Stage 2 Dispute Resolution processes. Again, to be collaborative, WFFA offered a motion to clarify/fix issues apparent in Policy's direction to CMER. We ultimately abandoned the resulting Policy dispute because most caucuses felt it was futile and that CMER would still not be able to resolve their issues objectively.
12. Recommendations for improving the Dispute Resolution Process: We see a need to use the Dispute Resolution process more frequently to resolve issues before they become entrenched. Several elements of note include ensuring there are no delays between Stage I and 2, ensuring there are no extensions without consensus, acceptance of outcomes if you do not participate, and developing a better way to incorporate/review outside science.
13. The 7-8 year process it's taken to get only a portion of the WFFA proposal back to the FPB reflects poorly on the AMP. The inconsistent administration of the process by the three different Adaptive Management Program administrators (AMPA) over the past 7+ years resulted in a series of repeated processes, none of which effectively advanced the PI in any meaningful way. The Dispute Resolution process has either not been followed (#11 above) or used too infrequently where stalemate seems the preferred option. The PI process itself appears to require some clarification. Some understand the RCW/WAC to say that the PI process is available for everything from an idea for a CMER or Policy project, to review of an independent study proposal or a completed independent study relevant to the AMP. Others believe it can only be used for an idea for a project to be evaluated, and if accepted, developed/implemented by the AMP. It would appear that some would prefer the PI process not be available to landowners, and at other times an idea can be proposed for rulemaking without even entering the process (e.g. current Anadromous Fish Floor (AFF) discussions).

Commitments to Core TFW Principles

14. The AMP intends to adapt based on objective science within our existing legal framework. It depends in large part on collaborative processes. WFFA and our constituents were buoyed by the FPBs very encouraging 2003 report to the legislature that contains commitments for a list of template prescriptions that never materialized. Many SFLO feel betrayed by two decades of processes that seem to only stymy the legislative intent of Forests and Fish. Seven plus years and

counting for the AMP to review what was described in 2015 as the "most complete Proposal Initiation ever submitted to the FPB" seems disrespectful to landowners. This process has led many SFLO to believe this process is a one-way street where taking more trees from landowners is the goal, not objectively following the science in even handed ways. While many SFLOs believe this is a futile effort, WFFA leadership still believes in the promises/goals of Forests and Fish, and despite such an arduous path believes the FPB will ultimately make decisions that will restore lost trust by our constituents.

15. All the SFLO's WFFA represents truly believe in the need to protect public resources (especially salmon) on lands in their care. Simplicity equals greater SFLO buy-in and compliance. Adopting these template buffer widths will reduce the applications for the Forest Riparian Easement Program (FREP) and likely make more funding available for the Family Forest Fish Passage Program. Many of the FREP payments could have been avoided with an approved Alternate Plan (a process helped with a more user-friendly template). SFLOs expect to do our part, and likewise expect the FPB to honor the 1999 legislative regulatory promises made to us. We want our heirs to continue our passion of tree farming. Feeling respected, appreciated, and considered a full partner in the long-term environmental solutions we face together will have an impact on the choices our heirs make.
16. Finally, we have observed a systematic bias in the program wherein it is presumed that the current rules are insufficient, and efforts to expand the rules should be the only focus of the AMP. These issues need to get resolved or the PI process will never function effectively, and we will continue to have ongoing conflict such as we have experienced these past 7.5 years over a relatively simple request to change the board manual to incorporate template prescriptions that are both equal in overall effectiveness and relatively low impact.

CONCLUSIONS

In 2015 the WFFA presented a solid science and RCW/WAC based proposal. Our final recommendations are science based and site-specific, with equivalent (or better) functional effectiveness than the rules. The Fish buffer widths we recommend to the FPB are additionally supported by prior approved SFLO Alternate Plans and multi-caucus field reviews of similar SFLO AP buffer widths. The recommendations clearly fit within the intentions of TFW Agreement, Forests and Fish, and the WAC intentions for SFLO Alternate Plans/Templates. We are confident that potential impacts, if any, will be small and/or temporary. Higher risk situations can be adjusted for within the AP/ID Team approval processes.

We truly believe it's in the best interests of Forests and Fish and the AMP to approve the WFFA recommendations for SFLO Template buffer widths of: 75' for large streams: 50' for smaller streams; and 30' fixed full length for Np streams (with summer water). An affirmative decision will resolve a multi-year deadlock within TFW Policy. We also think the guidance offered in draft motions for subsequent management options is needed and will finalize that part of the 2015 WFFA Low Impact Template Proposal. The FPB has all the information needed to say Yes. We feel it is well past time for the Forest Practice Board to resolve 22 years of conflict and embrace the legislative intent that granted small forest landowners "…alternate harvest restrictions on smaller harvest units that may have a relatively low impact on aquatic resources." consistent with RCW and WAC requirements.

Appendix A: Draft Template Simplified

First determine Bank Full Width and Stream Type (S/F or Np), then select the stream appropriate prescription A, B, C, **or** D below.

A. **If "Fish" and BFW 15'+: flag line at 75' BFW and treat outside as "upland" and inside as "no-cut"**.
More complex/aggressive options:
- Thin to 57 best TPA in the area between 50-75' of BFW - save biggest conifer every 28' of stream reach – no stream reach limit
- If hardwoods dominant and conifer site, can clear-cut all non-conifer to within 50' BFW (500' max segments or 40% limit if multiple segments).
- Subject to special DNR approval, may get ok to harvest few single tree/group selection anywhere within the 75' line.
- Redraw this 75' line to a variable width line that averages 75' (min/max? TBA)

B. **If "Fish" and BFW 5' or more and less than 15': flag line at 50' BFW and treat outside as "upland" and inside as "no-cut"**. More complex/aggressive options:
- Thin to 100 best TPA in area between 25-50' BFW - save biggest conifer every 21' of stream reach
- If hardwoods dominant and conifer site, can clear-cut all non-conifer to within 25' BFW (500' max segments or 50% limit if multiple segments)
- If believe stream deficient in nutrients/too much shade and want to improve fish "productivity", can thin (to best 57 TPA) to BFW in stream segments not to exceed 150', multiple segments separated by 150' forested areas, not more than 50% of stream reach if more than one segment.
- Subject to special DNR approval, may get ok to harvest few single tree/group selection anywhere within the 50' line.
- Redraw this 50' line to a variable width line that averages 50' (min/max? TBA)

C. **If "Fish" and BFW less than 5': flag line at 25' BFW and treat outside as "upland" and inside as "no-cut".**
More complex/aggressive option:
- Subject to special DNR approval, may get ok to harvest few single tree/group selection anywhere within the 25' line.

D. **If Non-Fish/Perennial Water (Np) for all BFWs: flag line at 25' BFW and treat outside as "upland" and inside as "no-cut".** More complex/aggressive option:
- Remove larger trees (thin from above), **EXCEPT** cannot thin first 300' above TYPE F junction if BFW >5'.
- Clear-cut all timber to BFW along the intermittent dry portions of the Np channel and where there is no defined channel connecting to TYPE F

Appendix B: Science Comparison from July 31, 2019

The Washington Farm Forestry Association Western Washington Alternate Plan Template

A Summary Comparison of adaptive management program science findings

Prepared by:
Washington Farm Forestry Association

- Ken Miller, Co-representative, TFW Policy
- Steve Barnowe-Meyer, Co-representative, TFW Policy
- Dr. Elaine Oneil, Executive Director

Date: July 31, 2019

The Washington Farm Forestry Association (WFFA) Alternate Plan Template (hereafter *Westside template*) proposal initiation document and supporting scientific justification was submitted to the Forest Practices Board on February 10, 2015. At that meeting, the Forest Practices Board recommended acceptance of the proposal as submitted with explicit instruction that it be evaluated by the Adaptive Management Program (AMP). That evaluation was to include both an evaluation of the science and an evaluation by the AMP Policy Committee. After significant delays, we are happy to report that the scientific review has been completed. That evaluation included an external scientific assessment of the WFFA scientific justification, and an additional independent scientific review by external scientists at the University of Washington using the Independent Scientific Panel Review (ISPR). The external scientific assessment was awarded to Cramer Fish Sciences with Mark Teply, M.S., completing the work for that consulting firm. That assessment was conducted through a contract from the Department of Natural Resources. The additional ISPR process evaluated the work conducted by Mark Teply, M.S., at Cramer Fish Sciences, thus completing a review of a review of the WFFA 'best available science' justification. In total, 7 PhD's and a Riparian Scientist (MS) (see **page 26** for a full listing), have developed and/or evaluated the best available science included in the WFFA Westside template using 117 unique scientific papers (see **page 27** for a full listing) that span the breadth of available science on the subject . With this level of scrutiny, we can be confident that the likely impact to public resources when implementing prescriptions from the Westside template would fall within the values as shown in the summary tables included in this document.

The WFFA Template Proposal - Scientific Justification used Washington Department of Ecology Models to compare the relative effectiveness of the Westside template proposal to the Forest Practice Rules with summary results shown in **Table 2**. The Cramer Fish Sciences/Mark Teply Consulting's ISPR-reviewed "Small Forest Landowner Alternate Plan Template Review, April 28, 2019" used different approaches to conduct the same analysis and came up with relative effectiveness parameters as shown in **Table 3**. With relatively minor differences, both science reviews reached essentially the same conclusions regarding the relative effectiveness of the proposal as shown in **Table 1**. We assert that details provided herein provide a solid basis for discussing a key element of the *Alternate Plan Approval Standard:* namely the degree to which the Westside template proposal is **"equal in overall effectiveness"** from the perspective of best available science.

Table 1: A comparison of "equal in overall effectiveness" from Martin (Westside Template Proposal) and Teply (Cramer Fish Sciences review of Westside template proposal) (**bold** are likely significant differences in overall effectiveness). As the original tables from Martin and Teply are ordered differently, LWD and Shade values for each table are highlighted with unique color codes. Differences are Alternate-FPR prescription.

		Relative Effectiveness of WFFA Proposal vs Forest Practice Rules						
		Proposal vs rule differences found by Martin (Table 3) and Cramer Fish/Teply (Table 8)						
Prescription	Stream	BFW	RMZ	Potential LWD **CHANGE**		Potential Shade **CHANGE**	
No. (Simplified)	Type			Martin	Teply	Martin	Teply
1 (A)	Fish	> 15'	75' no cut	+/- 2%	+/- 2%	0 to + 6%	+/- 5%
7 (A part thin)	Fish	> 15'	75' Thin outer 25'	-1%	-1%	No change	-5% to 0%
2 (B)	Fish	5-15'	50' no cut	up to -6%	-2 to 6%	up to -6%	up to -8%
8 (B part thin)	Fish	5-15'	50' thin outer 25'	up to -6%	up to -6%	+1%	up to -5 to 8%
3 (C)	Fish	< 5'	25' no cut	**up to -22%**	**up to -18 to 22%**	up to -5%	up to -5 to 13%
4 (D 1st bullet)	Np	> 5'	25' full length				
			1st 300' NC:	**up to -16%**	**up to -16%**	No change	-5%
			Above 300' thin:	**more than +19%**	**up to +19%**	**+43%**	**+85%**
5 (D 1st bullet)	Np	< 5'	25' full length				
			Thin 1st 300':	**up to -72%**	**up to -72%**	**-53%**	-5%
			Thin above 300':	**more than +19%**	**up to +19%**	**up to -16%**	**+85%**
Footnote: Differences among riparian function estimates of less than 15% are within the range of measurement error of the various resource data. Further, when evaluating tradeoffs, consideration needs to be given to what can be estimated versus what is biologically meaningful.							

WFFA Alternate Plan Template Proposal – Science Justification for Equal in Overall Effectiveness (Martin - Table 3)

Table 2: Comparison of riparian function potential between proposed and Forest Practices Rule (FPR) prescriptions. In FPR type F streams, function effectiveness is evaluated for both the "no inner zone" and "thin from below" options for Site Class 3, respectively. See Table 2 caption for description of prescription codes. (Martin).

		Riparian function potential									Riparian function potential							
Prescription No.	**Stream Type**	**BFW (ft)**	**RMZ (ft)**	**Prescript.**	**Shade**	**LW**	**Sed.**	**Litter**	**Invert**	**Long. Cont.**	**BFW (ft)**	**Prescript.**	**Shade**	**LW**	**Sed.**	**Litter**	**Invert**	**Long. Cont.**
		Standard Prescription									**FPR Prescriptions**							
1	F	>15	75	75/nc	max	> 96%	H	H	L	Y	>10	105/nc[c]	max	> 98%	H	H	L	Y
											>10	50/nc, 105/hth	> 94%	> 94%	H	H	L	Y
2	F	5-15	50	50/nc	> 94%	> 91%	H	H	L	Y	<10	93/nc	max	> 97%	H	H	L	Y
											<10	50/nc, 93/hth	> 94%	> 93%	H	H	L	Y
3	F	<5	25	25/nc	> 95%	> 75%	H	H	L	Y	<10	93/nc	max	> 97%	H	H	L	Y
											<10	50/nc, 93/hth	> 96%	> 93%	H	H	L	Y
4	Np	>5 ft	25	25x300/nc 25/tha	> 94% 43%[a]	> 75% > 19%[b]	H H	H H	L H	Y Y	NA	50x50%/nc 50%/cc	> 94% >0	> 91% slash	H M	H L	L M	Y N
5	Np	<5 ft	25	25/tha	43%[a]	> 19%	H	H	H	Y	NA	50x50%/nc 50%/cc	> 96% 59%[d]	> 91% slash	H M	H L	L M	Y N
6	Ns	NA	0	30/elz	>0	slash	M	L	M	N	NA	30/elz	>0	slash	M	L	M	N
		Thinning Prescription									**FPR Prescriptions**							
7	F	>15	75	50/nc, 75/hth	> 94%	> 93%	H	H	L	Y	>10	50/nc, 105/hth	> 94%	> 94%	H	H	L	Y
8	F	5-15	50	25/nc, 50/mth	> 95%	> 87%	H	H	L	Y	<10	50/nc, 93/hth	> 94%	> 93%	H	H	L	Y

[a]Shade in upper portion of Np reach based on cms stands (i.e., 25% density)

[b]Assume 75% supply potential for a 25-ft buffer which is reduced by 25% stand density (i.e., 0.25 x 0.75 = 0.19)

[c]Top and bottom cell Rx's are no-inner-zone-harvest and thin-from-below, respectively

[d]Base on mean canopy cover for headwater streams with slash (see Appendix A).

Results from ISPR reviewed Small Forest Landowner Alternate Plan Template Review April 28, 2019 (Teply/Cramer Fish Sciences) (Teply - Table 8)

Table 3: Comparison of riparian function potential predicted from WFFA template prescriptions to Forest Practices rule prescriptions based on findings of the independent function evaluations in the Review section. See "WFFA Template Proposal – Scientific Justification" for a complete explanation of WFFA and Forest Practices rules prescriptions.

Rx No.	Stream Type	WFFA Riparian Function					FPR Riparian Function				
		LWD	SHD	LIT[1]	SED[2]	SB[3]	LWD	SHD	LIT[1]	SED[2]	SB[3]
1	F	<96%	95%	a	b	a	<94% - <98%	90% - 100%	a	a - a/c	a
2	F	<91%	90%	a	c	a	<93% - <97%	90% -98%	a	b - b/c	a
3	F	<75%	85%	b	d	b	<93% - <97%	90% -98%	a	b - b/c	a
4	Np	<75% /<19%	85% / 85%	b	d	b	<91% / 0%	90% / 0%	a/c	c/e	a/c
5	Np	<19%	85%	b	d	b	<91% / 0%	90% / 0%	a/c	c/e	a/c
6	Ns	>0%	>0%	c	e	c	>0%	>0%	c	e	c
7	F	<93%	90% / 95%	a	b/c	a	<94%	90% / 100%	a	a/c	a
8	F	<87%	85% / 90%	a/b	c/d	a/b	<93%	90% / 98%	a	b/c	a

Notes:

1- Leaf and litterfall:
   a. would likely be greater than or equal to that from unharvested stands
   b. has not been observed for buffers smaller than 10 m
   c. would be measurable, but less than that from 10 m buffers
2- Sediment:
   a. filtration would generally be 80 percent and delivery would likely be zero
   b. filtration would generally be less than 80 percent and delivery would likely be zero
   c. filtration would be less than that from a 75-ft buffer and the buffer would likely have very low soil disturbance
   d. filtration or delivery effectiveness has not been observed for 25-ft buffers
   e. filtration would be less than that provided by a 25-ft buffer and delivery would be significantly greater than that from buffered treatments
3- Streambank stability:
   a. is likely protected with fixed-width buffers 50 feet and wider
   b. has not been observed with use of 25-ft fixed-width buffers
   c. would likely have no protection as deep-penetrating roots decay

Authors, participants, and references used in the science review process

Template Authors:

1. Richard Miller, PhD, retired USFS soil scientist and small forest landowner.
2. Elaine Oneil, PhD, Executive Director, Washington Farm Forestry Association.

Template Supporting Scientific Assessment:

3. Douglas Martin, PhD

Dr. Martin is the Principal of Martin Environmental as well as an Affiliate Professor at the School of Environmental and Forest Sciences, University of Washington and a graduate student advisor at both Portland State and Michigan State Universities. As well as working in various capacities within Washington's Adaptive Management Program over the past 2 decades, Dr. Martin also serves as a co-principal investigator of a science-based, landscape scale, community forest approach to watershed planning for rural communities of Southeast Alaska with the overall goal to achieve a measurable and sustainable balance of timber, salmon and deer production, local economic diversification and improved watershed health. In this role Dr Martin works in collaboration with Sealaska Corporation, Hoonah Indian Association, Tongass National Forest, Alaska Department Fish and Game, and The Nature Conservancy.

DNR Contracted Reviewer of the Template for the TFW Policy Adaptive Management Program:

4. Cramer Fish Sciences with review led by Mark Teply, M.S.

Mr. Teply has extensive experience in modeling forest riparian conditions including serving as the riparian Scientist, for the Upper Klamath River Basin Riparian Flow Assessment, as a TWIG member for the Eastside Type N Riparian Effectiveness Monitoring Project, and as lead scientist for a number of DNR projects including the Hardwood Conversion Study Report and the Eastside Modeling Effectiveness Project, the Idaho streamside management rule revision, the Oregon riparian forest practices rule revision, and the I-5 Corridor

Reinforcement Project for the Bonneville Power Administration. Prior to working with Cramer Fish Sciences Mr. Teply was the research manager for DNR's Olympic Experimental State Forest. Mr. Teply worked at Cramer Fish Sciences while doing this review for the Dept. of Natural Resources, however the post ISPR review final document was published by Mark Teply Consulting.

Independent Science Peer Review Associate Editor and Reviewers:

5. Dr. Derek Booth - Associate Editor for Independent Scientific Peer Review Committee and Affiliate Professor, Dept. of Earth and Space Science, University of Washington
6. Through the Independent Scientific Peer Review Committee (ISPR) of the University of Washington, a peer review was conducted of the Cramer Fish Sciences' *Small Forest Landowner Alternate Plan Template Review* (dated September 30, 2018). Three peer reviewers were chosen by ISPR to conduct the peer review. This was a 'blind' peer review where only Dr. Derek Booth knows the reviewer's identity. Dr Booth shared in the ISPR report:

   "The **three** reviewers bring a diversity of technical and professional backgrounds, with all having extensive experience in Pacific Northwest forestry issues. Both **R1** and **R2** are or have been university professors; **R2** and **R3** both have served in public or tribal resource agencies; and all have extensive private consulting experience. **R1** has a particular focus on statistical methods and analyses; **R2** is an extensively published forest hydrologist with long-standing research interests in stream buffers and stream temperature; **R3** is an aquatic ecologist with many decades of Pacific Northwest experience in forest management issues from both technical and policy perspectives."

References

References used to develop WFFA template proposal (66 total)

Adam, T. N. and K. Sullivan. 1989. The physics of forest stream heating: a simple model. Washington Department of Natural Resources, Olympia, WA.

Allan, J. D., M. S. Wipfli, J. P. Caouette, A. Prussian, and J. Rodgers. 2003. Influence of streamside vegetation on inputs of terrestrial invertebrates to salmonid food webs. Canadian Journal of Fisheries and Aquatic Sciences 60(3):309-320.

Allan, J.D. 1995. Nutrient dynamic. Pp 283-303 in: Allan, JD. Stream ecology, structure and function of running waters. Chapman & Hall, New York, NY 388p.

Beechie, T. J., and T. H. Sibley. 1997. Relationships between Channel Characteristics, Woody Debris, and Fish Habitat in Northwestern Washington Streams. Transactions of the American Fisheries Society 126:217-229.

Benda, L. 2005. Geomorphology of Steepland Headwaters: The transition From Hillslopes to Channels. Journal of the American Water Resources Association 41(4):835-851.

Benda, L., and P. Bigelow. 2014. On the patterns and processes of wood in northern California streams. Geomorphology 209(0):79-97.

Beschta, R. L., R. Bilby, G. Brown, L. Hoitby, and T. Hofstra. 1987. Stream temperature and aquatic habitat: fisheries and forestry interactions. Pages 191-232 in E. O. Salo, and T. W. Cundy, editors.

Streamside Management: Forestry and Fisheries Interactions. University of Washington, Institute of Forest Resources, Seattle, WA.

Bilby, R. E., and J. W. Ward. 1989. Changes in Characteristics and Function of Woody Debris with Increasing Size of Streams in Western Washington. Transactions of the American Fisheries Society 118(4):368-378.

Castelle, A.J. and A.W. Johnson. 2000. Riparian vegetation effectiveness. NCASI Technical Bulletin No. 799 pg. 32.

Cummins, K. W. 2002. Riparian-stream linkage paradigm. Verh. Internat. Verein. Limnol. 28:49-58.

Danehy, R. J., S. Chan, G. Lester, R. Langshaw, and T. Turner. 2007. Periphyton and Macroinvertebrate Assemblage Structure in Headwaters Bordered by Mature, Thinned, and Clearcut Douglas-Fir Stands. Forest Science 53(2):294-307.

Dent, L., D. Vick, K. Abraham, S. Schoenholtz, and S. Johnson. 2008. Summer Temperature Patterns in Headwater Streams of the Oregon Coast Range1. JAWRA Journal of the American Water Resources Association 44:803-813.

DeWalle, D. R. 2010. Modeling Stream Shade: Riparian Buffer Height and Density as Important as Buffer Width1. JAWRA Journal of the American Water Resources Association 46(2):323-333.

Ehinger, W. 2013. Extensive riparian status and trends monitoring program-stream temperature, Phase I: Eastside Type F/S Monitoring Project. CMER 10-1001, Washington Department of Natural Resources, Olympia, WA.

Erhinger, W. et al. unpublished. Chapter 7– Stream Temperature, in: CMER report "The Type N Experimental Buffer Treatment Study" Unpublished draft report. Washington Department of Natural Resources, Olympia, WA.

FEMAT (Forest Ecosystem Management Assessment Team). 1993. Forest ecosystem management: an ecological, economic, and social assessment. Report of the Forest Ecosystem Management Assessment Team. U.S. Government Printing Office 1993-793-071.

Gregory, S. V. 1980. Effects of light, nutrients, and grazers on periphyton communities in streams. Doctoral dissertation. Oregon State University, Corvallis.

Grizzel, J.D., and Wolff, N. 1998. Occurrence of windthrow in forest buffer strips and its effect on small steams in Northwest Washington. Northwest Sci. 72: 214–223.

Hoover, S. E. R., L. G. W. Shannon, and J. D. Ackerman. 2007. The effect of riparian condition on invertebrate drift in mountain streams. Aquatic Sciences 69(4):544-553.

Jackson, C. R., and C. A. Sturm. 2002. Woody debris and channel morphology in first- and second-order forested channels in Washington's Coast Ranges. Water Resources Research 38(9).

Jackson, C. R., C. A. Sturm, and J. M. Ward. 2001. Timber harvest impacts on small headwater stream channels in the coast ranges of Washington. JAWRA Journal of the American Water Resources Association 37(6):1533-1549.

Johnson, S. L. 2004. Factors influencing stream temperatures in small streams: substrate effects and a shading experiment. Canadian Journal of Fisheries & Aquatic Sciences 61:913-923

Johnston, N. T., S. A. Bird, D. L. Hogan, and E. A. MacIsaac. 2011. Mechanisms and source distances for the input of large woody debris to forested streams in British Columbia, Canada. Canadian Journal of Forest Research 41(11):2231-2246.

Kibler, K. M., A. Skaugset, L. M. Ganio, and M. M. Huso. 2013. Effect of contemporary forest harvesting practices on headwater stream temperatures: Initial response of the Hinkle Creek catchment, Pacific Northwest, USA. Forest Ecology and Management 310(0):680-691.

Kiffney, P, and P. Roni. 2007. Relationships between Productivity, Physical Habitat, and Aquatic invertebrate and Vertebrate Populations of Forest Streams: An Information-Theoretic Approach. Transactions of the American Fisheries Society 136:1088–1103.

Kiffney, P. M., J. S. Richardson, and J. P. Bull. 2004. Establishing light as a causal mechanism structuring stream communities in response to experimental manipulation of riparian buffer width. Journal of the North American Benthological Society 54:542–555.

Kramer, M., Hansen, A., Taper, M., and Kissinger, E. 2001. Abiotic controls on long-term windthrow disturbance and temperate rain forest dynamics in Southeast Alaska. Ecology, 82: 2749–2768.

Kreutzweiser, D. P., P. K. Sibley, J. S. Richardson, and A. M. Gordon. 2012. Introduction and a theoretical basis for using disturbance by forest management activities to sustain aquatic ecosystems. Freshwater Science 31(1):224-231.

Liquori, M. K. 2006. Post-harvest riparian buffer response: implication for wood recruitment modeling and buffer design. JAWRA Journal of the American Water Resources Association 42(1):177-189.

Liquori, M., D. Martin, L. Benda, R. Coats, and D. Ganz. 2008. Scientific literature review of forest management effects on riparian functions for anadromous salmonids. Report of Sound Watershed Consulting to the California State Board of Forestry and Fire Protection Sacramento, CA.

Litschert, S. E., and L. H. MacDonald. 2009. Frequency and characteristics of sediment delivery pathways from forest harvest units to streams. Forest Ecology and Management 259(2):143-150.

MacCracken et al. (Unpublished). Stream-associated amphibian response to manipulation of forest canopy shading. Cooperative Monitoring Evaluation and Research, Final Report, 11/07/13, Washington Department of Natural Resources, Olympia, WA.

Martin, D. J. 2001. The Influence of Geomorphic Factors and Geographic Region on Large Woody Debris Loading and Fish Habitat in Alaska Coastal Streams. North American Journal of Fisheries Management 21(3):429-440.

Martin, D. J., and L. E. Benda. 2001. Patterns of Instream Wood Recruitment and Transport at the Watershed Scale. Transactions of the American Fisheries Society 130(5):940-958.

Martin, D. J., and R. A. Grotefendt. 2007. Stand mortality in buffer strips and the supply of woody debris to streams in Southeast Alaska. Canadian Journal of Forest Research 37(1):36-49.

May, C. L., and R. E. Gresswell. 2003. Large wood recruitment and redistribution in headwater streams in the southern Oregon Coast Range, U.S.A. Canadian Journal of Forest Research 33(8):1352-1362.

McDade, M. H., F. J. Swanson, W. A. McKee, J. F. Franklin, and J. V. Sickle. 1990. Source distances for coarse woody debris entering small streams in western Oregon and Washington. Canadian Journal of Forest Research 20(3):326-330.

McKinley, M. 1997. Large woody debris source distances for western Washington cascade streams. , Unpublished report, University of Washington, College of Forest Resources, Seattle, WA.

Mitchell, S.J., Hailemariam, T., and Kulis, Y. 2001. Empirical modeling of cutblock edge windthrow risk on Vancouver Island, Canada, using stand level information. For. Ecol. Manage. 154: 117–130.

Moldenke, A. R., and C. Ver Linden. 2007. Effects of Clearcutting and Riparian Buffers on the Yield of Adult Aquatic Macroinvertebrates from Headwater Streams. Forest Science 53(2):308-319.

Montgomery, D. R., J. M. Buffington, R. D. Smith, K. M. Schmidt, and G. Pess. 1995. Pool Spacing in Forest Channels. Water Resour. Res. 31(4):1097-1105.

Moore, R. D., and J. S. Richardson. 2012. Natural disturbance and forest management in riparian zones: comparison of effects at reach, catchment, and landscape scales. Freshwater Science 31(1):239-247.

Moore, R. D., and S. M. Wondzell. 2005. Physical hydrology and the effects of forest harvesting in the Pacific Northwest: a review. JAWRA Journal of the American Water Resources Association

Newbold, J. D., Erman D. and Roby K. 1980. Effects of logging on macroinvetebrates in streams with and without buffer strips. Can. J. Fish. Aquat. Sci. 37:1076-1085. 41(4):763-784.

Peter, M., and B. Engeness. 2014. Extensive Riparian Status and Trends Monitoring Program-Stream Temperature: Phase I, westside Type F/S and Np Monitoring Project. Prepared for the Washington State Department of Natural Resources. CMER report #XX-XXX.

Pollock, M. M., and T. J. Beechie. 2014. Does Riparian Forest Restoration Thinning Enhance Biodiversity? The Ecological Importance of Large Wood. . Journal of the American Water Resources Association 50(3):543-559.

Rashin, E. B., C. J. Clishe, A. T. Loch, and J. M. Bell. 2006. Effectiveness of timber harvest practices for controlling sediment related water quality impacts. JAWRA Journal of the American Water Resources Association 42(5):1307-1327.

Reeves, G. H., K. M. Burnett, and E. V. McGarry. 2003. Sources of large wood in the main stem of a fourth-order watershed in coastal Oregon. Canadian Journal of Forest Research 33:1363-1370.

Richardson, J. S., R. J. Naiman, F. J. Swanson, and D. E. Hibbs. 2005. Riparian communities associated with Pacific Northwest headwater streams: assemblages, processes, and uniqueness. JAWRA Journal of the American Water Resources Association 41:935-947.

Richardson, J. S., T. M. Hoover, and A. Lecerf. 2009. Coarse particulate organic matter dynamics in small streams: towards linking function to physical structure. Freshwater Biology 54(10):2116-2126.

Rollerson, T. P., C. M. Peters, and W. J. Beese. 2009. Variable retention windthrow monitoring project: 2001-2009. Western Forest Products Inc., Final Report, Campbell River, B.C.

Romero, N., R. E. Gresswell, and J. L. Li. 2005. Changing patterns in coastal cutthroat trout (Oncorhynchus clarki clarki) diet and prey in a gradient of deciduous canopies. Canadian Journal of Fisheries and Aquatic Sciences 62(8):1797-1807.

Roorbach, Ash, Richard Miller, and Frank Brown. Unpublished. Hardwood Conversion Summary Report. Cooperative Monitoring Evaluation and Research Draft Report, June 17, 2014, Washington Department of Natural Resources, Olympia, WA.

Schuett-Hames, D., A. Roorbach, and R. Conrad. 2011. Results of the Westside Type N Buffer Characteristics, Integrity and Function Study Final Report. Cooperative Monitoring Evaluation and Research Report, CMER 12-1201, Washington Department of Natural Resources, Olympia, WA.

Scott, R. E. 2005. Modeling windthrow risk in coastal variable retention using tree, neighborhood, and stand attributes. M.S. Thesis. University of British Columbia, Vancouver.

Sobota, D. J., S. V. Gregory, and J. V. Sickle. 2006. Riparian tree fall directionality and modeling large wood recruitment to streams. Canadian Journal of Forest Research 36(5):1243-1254.

Sridhar, V., A. L. Sansone, J. LaMarche, T. Dubin, and D. P. Lettenmaier. 2004. Prediction of stream temperature in forested watersheds. Journal of the American Water Resources Association 40(1):197-213.

Stewart G. et al. unpublished. Chapter 10 – Sediment Processes, in: CMER report "The Type N Experimental Buffer Treatment Study" Unpublished draft report. Washington Department of Natural Resources, Olympia, WA.

Stovall, J. P., W. S. Keeton, and C. E. Kraft. 2009. Late-successional riparian forest structure results in heterogeneous periphyton distributions in low-order streams. Canadian Journal of Forest Research 39(12):2343-2354.

Sweeney, B. W., and J. D. Newbold. 2014. Streamside Forest Buffer Width Needed to Protect Stream Water Quality, Habitat, and Organisms. Journal of the American Water Resources Association 50(3):560-584.

Teply, M., and D. McGreer. 2013. Simulating the Effects of Forest Management on Stream Shade in Central Idaho. Western Journal of Applied Forestry 28(1):37-45.

VTAC. 2012. Site-specific riparian zone management: Section V guidance. California Department of Forestry and Fire Protection, Final report prepared by the Anadromous Salmonid Protection Rule Section V Technical Advisory Committee (VTAC), Sacramento, CA.

WFPB. 1997. Standard methodology for conducting watershed analysis. W. F. P. Board, editor. Washington Department of Natural Resources, Olympia, WA.

White, J. L., and B. C. Harvey. 2007. Winter Feeding Success of Stream Trout under Different Streamflow and Turbidity Conditions. Transactions of the American Fisheries Society 136(5):1187-1192.

Wilzbach, M. A., B. C. Harvey, J. L. White, and R. J. Nakamoto. 2005. Effects of riparian canopy opening and salmon carcass addition on the abundance and growth of resident salmonids. Canadian Journal of Fisheries and Aquatic Sciences 62(1):58-67.

Wipfli, M. S., and J. Musslewhite. 2004. Density of red alder (Alnus rubra) in headwaters influences invertebrate and detritus subsidies to downstream fish habitats in Alaska.

References used in Cramer Fish Sciences/Mark Teply Consulting review of WFFA template proposal

Note: 22/73 references in common with WFFA analysis (in **bold**)

Allen, M., and L. Dent. 2001. Shade conditions over forested streams In the Blue Mountain and Coast Range geo-regions of Oregon. ODF Technical Report #13. Salem, Oregon.

Anderson, P., D. Larson, and S. Chan. 2007. Riparian buffer and density management influences on microclimate of young headwater forests of western Oregon. Forest Science 53:254-269.

Bahuguna, D., S. Mitchell, and Y. Miquelajauregui. 2010. Windthrow and recruitment of large woody debris in riparian stands. Forest Ecology and Management 259:2048–2055.

Barden, C. J. 2001. Establishing riparian buffers. Forestry Report MF-2489. Kansas State University. 4pp.

Benda, L., and P. Bigelow. 2014. On the patterns and processes of wood in northern California streams. Geomorphology 209:79–97.

Benda, L., P. Bigelow, and T. Worsley. 2002. Recruitment of wood to streams in old-growth and second-growth redwood forests, northern California, USA. Canadian Journal of Forest Research 32: 1460–1477.

Benda, L., S. Litschert, G. Reeves, and R. Pabst. 2016. Thinning and in-stream wood recruitment in riparian second growth forests in coastal Oregon and the use of buffers and tree tipping as mitigation. Journal of Forestry Research 27(4):821–836.

Bilby, R., and J. T. Heffner. 2016. Factors influencing litter delivery to streams. Forest Ecology and Management 369:29-37.

Bisson, P. A., S. M. Claeson, S. M. Wondzell, A. D. Foster, and A. Steel. 2013. Evaluating headwater stream buffers: lessons learned from watershed-scale experiments in southwestern Washington. Pages 169–188 in P. D. Anderson and K. L. Ronnenberg, editors. Density management for the 21st century: westside story. Pacific Northwest Research Station, USDA Forest Service, General Technical Report PNW-GRT-880, Portland, Oregon.

Brazier, J. R., and G. W. Brown, 1973. Buffer strips for stream temperature control. Forest Research Laboratory, School of Forestry, Oregon State University, Research Paper No. 15, Corvallis, Oregon.

Castelle, A. J., and A. W. Johnson. 2000. Riparian vegetation effectiveness. National Council for Air and Stream Improvement, Inc., Technical Bulletin No. 799., Research Triangle Park, North Carolina.

Castelle, A., A. Johnson, and C. Conolly. 1994. Wetland and stream buffer size requirements-a review. Journal of Environmental Quality 23:878-882.

CH2MHill and Western Watershed Analysts. 1999. FEMAT riparian process effectiveness curves: what is science-based and what is subjective judgment? Oregon Forest Industries Council, Salem, Oregon.

CMER. 2018a. Chapter 6 - Wood Recruitment and loading. The Type N Experimental Buffer Treatment Study. Washington Department of Natural Resources, Cooperative Monitoring Evaluation and Research Unpublished draft report, Olympia, WA.

CMER. 2018b. Chapter 7 - Stream Temperature and cover. The Type N Experimental Buffer Treatment Study. Washington Department of Natural Resources, Cooperative Monitoring Evaluation and Research Unpublished draft report, Olympia, WA.

Decker, R. 2003. Current regulations, guidelines and best management practices concerning forest harvesting and riparian zone management. Fisheries and Oceans Canada, Buffer Zone Working Group Report, St. Johns, Newfoundland, Canada.

Estrella, S., W. Ehinger, and C. Milling. 2018. Chapter 12 – Litterfall input and detritus export. The Type N Experimental Buffer Treatment Study. Washington Department of Natural Resources, Cooperative Monitoring Evaluation and Research Unpublished draft report, Olympia, WA.

Gomi, T., R. Moore, and M. Hassan. 2005. Suspended sediment dynamics in small forest streams of the Pacific Northwest. Journal of American Water Resources Association 41:877-898.

Grizzel, J. D., and N. Wolff. 1998. Occurrence of windthrow in forest buffer strips and its effect on small steams in northwest Washington. Northwest Science 72(3): 214–223.

Grizzel, J., M. McGowan, D. Smith, and T. Beechie. 2000. Streamside buffers and large woody debris recruitment: evaluating the effectiveness of watershed analysis prescriptions in the Northern Cascades region. Report to the Washington Department of Natural Resources, Northwest Indian Fisheries Council, TFW-MAGI-00-003, Olympia, Washington.

Groom, J. D., L. Dent, L. Madsen, and J. Fleuret. 2011. Response of western Oregon (USA) stream temperatures to contemporary forest management. Forest Ecology and Management 262:1618–1629.

Heifetz, J., M. L. Murphy, and K. V. Koski. 1986. Effects of logging on winter habitat of juvenile salmonids in Alaskan streams. North American Journal of Fisheries Management 6(1):52-58.

Hetrick, N. J., M. A. Brusven, W. R. Meehan, and T. C. Bjornn. 1998. Changes in solar input, water temperature, periphyton accumulation, and allochthonous input and storage after canopy removal along two small salmon streams in Southeast Alaska. Transactions of the American Fisheries Society 127(6):859-875.

Jackson, C. R., D. P. Batzer, S. S. Cross, S. M. Haggerty, and C. A. Sturm. 2007. Headwater streams and timber harvest: channel, macroinvertebrate, and amphibian response and recovery. Forest Science 53(2):356-370.

Jackson, C.R., C.A. Sturm, and J.M. Ward. 2001. Timber harvest impacts on small headwater stream channels in the coast ranges of Washington. JAWRA 37(6):1533-1550.

Janisch, J., S. Wondzell, and W. Ehinger. 2012. Headwater stream temperature: interpreting response after logging, with and without riparian buffers, Washington, USA. Forest Ecology and Management 270:302-313.

Johnston, N. T., S. A. Bird, D. L. Hogan, and E. A. MacIsaac. 2011. Mechanisms and source distances for the input of large woody debris to forested streams in British Columbia, Canada. Canadian Journal of Forest Research 41(11):2231-2246.

Kiffney, P., and J. Richardson. 2010. Organic matter inputs into headwater streams of southwestern British Columbia as a function of riparian reserves and time since harvesting. Forest Ecology and Management 260:1931-1942.

Kramer, M., A. Hansen, M. Taper, and E. Kissinger. 2001. Abiotic controls on long-term windthrow disturbance and temperate rain forest dynamics in southeast Alaska. Ecology 82:2749-2768.

Lewis, J. 1998. Evaluating the impacts of logging activities on erosion and sediment transport in the Caspar Creek watersheds. In: Ziemer, R.R., technical coordinator. Proceedings of the conference on coastal watersheds: the Caspar Creek story, 1998 May 6; Ukiah, CA. Gen. Tech Rep. PSW GTR-168. Albany CA. Pacific Southwest Research Station Forest Service, US Department of Agriculture; pp. 55-69.

Lewis, J., S. R. Mori, E. T. Keppeler, and R. R. Ziemer. 2001. Impacts of logging on storm peak flows, flow volumes and suspended sediment loads in Caspar Creek, California. Pages 85-125 in M. S. Wigmosta and S. J. Burges, editors. Land Use and Watersheds: Human Influence on Hydrology and Geomorphology in Urban and Forest Areas. Water Science and Application Volume 2, American Geophysical Union, Washington D.C.

Lienkaemper, G. W., and F. J. Swanson. 1987. Dynamics of large woody debris in streams in old-growth Douglas-fir forests. Canadian Journal of Forest Research 17(2): 150-156.

Liquori, M. K. 2006. Post-harvest riparian buffer response: implication for wood recruitment modeling and buffer design. Journal of the American Water Resources Association 42(1):177-189.

Liquori, M., D. Martin, L. Benda, R. Coats, and D. Ganz. 2008. Scientific literature review of forest management effects on riparian functions for anadromous salmonids. California State Board of Forestry and Fire Protection, Sacramento, California.

Lisle, T. E., and M. B. Napolitano. 1998. Effects of recent logging on the main channel of North Fork Caspar Creek. Pages 81-85 in R.R. Ziemer, editor. Proceedings of the Conference on Coastal Watersheds: the Caspar Creek Story. Pacific Southwest Research Station Forest Service, USDA Forest Service, General Technical Report PSW GTR-168, Ukiah, California.

Litschert, S. E., and L. H. MacDonald. 2009. Frequency and characteristics of sediment delivery pathways from forest harvest units to streams. Forest Ecology and Management 259(2):143-150.

Martin, D. J., and L. E. Benda. 2001. Patterns of instream wood recruitment and transport at the watershed scale. Transactions of the American Fisheries Society 130(5):940-958.

Martin, D. J., and R. A. Grotefendt. 2007. Stand mortality in buffer strips and the supply of woody debris to streams in southeast Alaska. Canadian Journal of Forest Research 37(1):36-49.

Martin, D. J., M. E. Robinson, and R. A. Grotefendt. 1998. The effectiveness of riparian buffer zones for protection of salmonid habitat in Alaska coastal streams. Report to Sealaska Corporation, Alaska Forest Association, Ketchikan, Alaska.

May, C. L., and R. E. Gresswell. 2003. Large wood recruitment and redistribution in headwater streams in the southern Oregon Coast Range, U.S.A. Canadian Journal of Forest Research 33(8):1352-1362.

McDade, M. H., F. J. Swanson, W. A. McKee, J. F. Franklin, and J. V. Sickle. 1990. Source distances for coarse woody debris entering small streams in western Oregon and Washington. Canadian Journal of Forest Research 20(3):326-330.

McKinley, M. 1997. Large woody debris source distances for western Washington cascade streams. Undergraduate thesis. University of Washington, Seattle, Washington.

Mitchell, S.J., Hailemariam, T., and Kulis, Y. 2001. Empirical modeling of cutblock edge windthrow risk on Vancouver Island, Canada, using stand level information. For. Ecol. Manage. 154: 117–130.

Morman D. 1993. Riparian rule effectiveness study report . Forest Practices Program, Oregon Department of Forestry, Salem, Oregon.

Murphy, M. L., J. Heifetz, S. W. Johnson, K. V. Koski, and J. F. Thedinga. 1986. Effects of clear-cut logging with and without buffer strips on juvenile salmonids in Alaskan streams. Canadian Journal of Fisheries and Aquatic Sciences 43: 1521-1533.

Murphy, M., and K. Koski. 1989. Input and depletion of woody debris in Alaska streams and implications for streamside management. North American Journal of Fisheries Management 9(4):427-436.

Newton, M. 1993. Silvicultural alternatives in riparian zones: A management proposal, with technical background, for riparian forest management in the Douglas-fir region. Oregon Forest Industries Council, Salem, OR. 78 pp.

Newton, M., R. Willis, J. Walsh, E. Cole, and S. Chan. 1996. Enhancing riparian habitat for fish, wildlife, and timber in managed forests. Weed Technology 10:429-438.

Pollock, M. M., and T. J. Beechie. 2014. Does riparian forest restoration thinning enhance biodiversity? The ecological importance of large wood. Journal of the American Water Resources Association 50(3):543-559.

Rashin, E. B., C. J. Clishe, A. T. Loch, and J. M. Bell. 2006. Effectiveness of timber harvest practices for controlling sediment related water quality impacts. Journal of the American Water Resources Association 42(5):1307-1327.

Reid, L. M., and S. Hilton. 1998. Buffering the Buffer. Pacific Southwest Research Station, USDA Forest Service, General Technical Report, PSW-GTR-168.

Robison, E. G., and R. L. Beschta. 1990. Identifying trees in riparian areas that can provide coarse woody debris to streams. Forest Science 36(3):790-801.

Rollerson, T. P., C. M. Peters, and W. J. Beese. 2009. Variable retention windthrow monitoring project: 2001-2009. Western Forest Products Inc., Final Report, Campbell River, British Columbia.

Schlosser, F., and Long, N.T. 1974. Recent results in French research on reinforced earth. Journal of the Construction Division. American Society of Civil Engineers. 100:223-237.

Schuett-Hames, D., A. Roorbach, and R. Conrad. 2012. Results of the westside type N buffer characteristics, integrity and function study final report. Cooperative Monitoring Evaluation and Research Report, Washington Department of Natural Resources, CMER 12-1201, Olympia, WA.

Schuett-Hames, D., D. Martin, C. Mendoza, R. Flitcroft, and H. Haemmerle. 2015. Westside type F riparian prescription monitoring project: best available science and study alternatives document. Washington Department of Natural Resources, Olympia, WA.

Scott, R. E. 2005. Modeling windthrow risk in coastal variable retention using tree, neighborhood, and stand attributes. Masters' thesis. University of British Columbia, Vancouver, British Columbia.

Sobota, D. J., S. V. Gregory, and J. V. Sickle. 2006. Riparian tree fall directionality and modeling large wood recruitment to streams. Canadian Journal of Forest Research 36(5):1243-1254.

Spence, B.C., G.A. Lomnicky, R.M. Hughes, and R.P. Novitski. 1996. An ecosystem approach to salmon conservation. TR-4501-96-6057. ManTech Environmental Services Corp., Corvallis, OR. 356 pp.

Spies, T. and J. Franklin. 1991. The structure of natural young, mature, and old-growth Douglas-fir forests in Oregon and Washington. Pages 91-110 in: Wildlife and Vegetation of Unmanaged Douglas-fir Forests. Pacific Northwest Research Station Forest Service, USDA Forest Service, General Technical Report PNW-GTR-285, Portland, Oregon.

Spies, T., M. Pollock, G. Reeves, and T. Beechie. 2013. Effects of riparian thinning on wood recruitment: a scientific synthesis. Science Review Team Wood Recruitment Subgroup, USDA Forest Service, Portland, Oregon.

Steinblums, I. J., H. A. Froehlich, and J. K. Lyons. 1984. Designing stable buffer strips for stream protection. Journal of Forestry 82(1):49-52.

Stewart, G., W. Ehinger, A. McIntyre, E. Lund, D. Schuett-Hames, S. Estrella, F. T. Waterstrat, and R. Ojala-Barbour. 2018. Chapter 10 – Sediment Processes. The Type N Experimental Buffer Treatment Study. Washington Department of Natural Resources, Cooperative Monitoring Evaluation and Research Unpublished draft report, Olympia, WA.

Sweeney, B. W., and J. D. Newbold. 2014. Streamside forest buffer width needed to protect stream water quality, habitat, and organisms. Journal of the American Water Resources Association 50(3):560-584.

Teply, M., and K. Ceder. 2012. Validation of shade prediction models used to evaluate forest practices regulations in Idaho and the Idaho Forestry Program. Cramer Fish Sciences, Lacey, Washington.

Teply, M., D. McGreer, and K. Ceder. 2014. Using simulation models to develop riparian buffer strip prescriptions. Journal of Forestry 112(3):302-311.

Teply, M., D. McGreer, D. Schult, and P. Seymour. 2007. Simulating the effects of forest management on large woody debris instreams in northern Idaho. Western Journal of Applied Forestry 22(2):81-87.

Waldron, L.J., and Dakessian, S. 1982. Effect of grass, legume, and tree roots on soil shearing resistance. Soil Science Society of America Journal. 46:894-899.

Welty, J., T. Beechie, K. Sullivan, D. Hyink, R. Bilby, C. Andrus, and G. Pess. 2002. Riparian aquatic interaction simulator (RAIS): a model of riparian forest dynamics for the generation of large woody debris and shade. Forest Ecology and Management 162:299-318.

White, J. B. and H. H. Krause. 1993. The impact of forest management practices on water quality and the establishment and management of protective buffer zones; a review of literature. Department of Forest Resources, University of New Brunswick, Fredericton, N.B. v+47pp.

Wu, T.H. 1986. Root geometry model and simulation. Unpublished Final Report. National Science Foundation Grant CEE-811253. USDA Forest Service Grant PNW-83-317. Department of Civil Engineering, Ohio State University. 62 pp.

Zimmerman, R.C., Goodlett, J.C., and Comer, G.H. 1967. The influence of vegetation on channel form of small streams. In: Symposium on river morphology. International Association of Hydrologic Science. 75:255-275.

Zweiniecki, M., and M. Newton. 1999. Influence of streamside cover and stream features on temperature trends in forested streams of western Oregon. Western Journal of Applied Forestry 14(2):106-113.

Appendix C: Relevant Resource Protection Board Rules in WAC for Alternate Plans Related to Special Consideration to SFLOs

WAC 222-12-040 Alternate plans – Policy

- ". . . used as a tool to deal with a variety of situations, including where the **cumulative impacts of regulations disproportionately impact a landowner**." (i.e. SBEIS finding of disproportionate impact on SFLOs of Forests and Fish)
- "The legislature has found in RCW 76.13.100(2) that small forest landowners should also have the option of alternate management plans or **alternate harvest restrictions on smaller harvest units that may have a relatively low impact on aquatic resources.**"
- "These **alternate plans are intended to provide flexibility to small forest landowners** that will still provide protection of riparian functions based on specific field conditions or stream conditions on the landowner's property." (i.e. size of harvest, stream reach length, stream size)

WAC 222-12-0401 Alternate plans – Process

- "Small forest landowners may wish to seek the assistance of the small forest landowner office."
- "The interdisciplinary team may submit a recommendation without a site visit **if a small forest landowner submitted the alternate plan using a template contained in board manual section 21 and is a low impact alternate plan** and the team determines a visit is not necessary to evaluate the site specific application of a template **or a low impact alternate plan**." (I.e. clear Board intent to allow "low impact", not "no" impact)
- "Approval standard: An alternate plan must provide protection for public resources at least **equal in overall effectiveness to the protection provided in the act** (RCWs) **and rules** (WACs)." (i.e. these Board approved WAC excerpts ("rules") in this paper related to SFLOs are necessarily allowed/required in this AP Approval Standard's resource protections – ditto for the referenced RCWs ("act")).

WAC 222-12-0402 Assistance available for small forest landowners

- "The legislature has directed that office (small forest landowner office) to **assist small forest landowners in preparing alternate plans appropriate to small forest landowners**. See RCW 76.13.100 and 76.13.110(3)"
- "The office may provide . . . . . **facilitation of small forest landowner interactions with the department, other state agencies, federal agencies, affected Indian tribes and the interdisciplinary team** that may **review the small forest landowner's alternate plan**." (In other words SFL Office is supposed to advocate for SFLO APs, even within DNR.)

WAC 222-12-0403 – Cooperative development of guidelines for alternate plans. (Note: this entire WAC seems intended to benefit mostly/entirely SFLOs)

- "The manual (BM 21) should include: (1) As required by RCW 76.13.110 (3), the small forest landowner office recommendation for alternate plans or alternate harvest

restrictions that meet riparian functions while **generally requiring less costly regulatory prescriptions**;"

- "**Template prescriptions** . . ."
- "Appropriate **recognition or credit for improving the condition of public resources**;"
- "**Criteria to assist the department in determining whether a small forest landowner alternate plan qualifies as a low impact alternate plan**." (this WAC ("rule") was the focus of the SFLO Advisory Committee's July 2020 consensus recommendation to DNR)

WAC 222-12-0404 – Cooperation for effective alternate planning.

- "the department will **consider: (1) Successful alternate plans, and small forest landowner alternate management strategies that can be used by other small forest landowners** . . . ."

(bold, underlining, or highlighting text added to WAC language for emphasis)

Appendix D: Eligibility Criteria – August 18, 2018

Small Forest Landowner Westside Template Proposal Policy track eligibility pursuant to the requirements of WAC 222-12-0403 and the Legislative intent of RCW 76.09.368

Submitted August 18, 2018 by Ken Miller and Steve Barnowe-Meyer, Small Forest Landowner Co-representatives, TFW Policy

The Small Forest Land Owner (SFLO) Template Proposal (hereafter SFLO Template) is intended to meet the 1999 Legislative intent of RCW 76.09.368 which in part reads:

"*The legislature intends that small forest landowners have access to alternate plan processes or alternate harvest restrictions, or both if necessary, that meet the public resource protection standard set forth in RCW 76.09.370(3), but which also lowers the overall cost of regulation to small forest landowners including, but not limited to, timber value forgone, layout costs, and operating costs."*

In support of the Legislative intent we provide herein multiple eligibility assessments of our SFLO Template relative to the pertinent language of WAC 222-12-0403 (3):

"Template prescriptions designed to meet resource objectives to address common situations that are repeatedly addressed in alternate plans or strategies to simplify the development of future plans or strategies, including low impact situations and site-specific physical features;"

Although the SFLO Template was initiated for the Science track, we posit that it also meets the Policy track requirements based on DNR data on Alternate Plans (AP) which were used as received – i.e. without correcting apparent errors on a few of the data points:

Data supplied by DNR for previously approved SFLO alternate plans indicate:

There have been well over 200 approved AP with a wide range of RMZ management prescriptions, activity in close proximity to BFW, and often along relatively long stream reaches with potential impacts on RMZ functions.

Summarizing these AP Forest Practices Applications (FPA) generates the following metrics:

"No Cut Buffers" averaged 44.7' with a range of 0' to 146' (likely error?) on 221 data points - somewhat comparable to the likely average SFLO Template metrics.

Length of RMZ affected (one or both sides) averaged 899.5' with a range of 50' (likely error?) to 6,000' on 218 data points.

Regardless of the specific reason for these individual alternate plans, the RMZ functions associated with the prescriptions met the Alternate Plan Approval Standard in either the short or long term and were approved by DNR. In most, if not all, cases they included the concurrence of Inter-Disciplinary (ID) team members.

Data collected for this assessment cover all SFLO western Washington AP that were not templates. Some AP had missing data, but all AP with data for BFW, no cut buffers, and length of RMZ were included in our summary statistics below. There are additional data in the comments that can be used for more exploratory analysis. It appears there are some errors in the data (e.g. conflicting information in comments vs data columns) but our review suggests that they are not likely significant to averages due to compensating errors. Parsing these data by BFW (TYPE F and Np combined) show that for:

Less than 5' BFW:

"No Cut Buffers" averaged 43.6' with a range of 0' to 113' with 71 data points.

Length of RMZ affected (one or both sides) averaged 718' with a range of 85' to 2640' with 67 data points.

5' to 15' BFW:

"No Cut Buffers" averaged 41.8' with a range of 0' to 146' (likely an error as the activity column indicates this data point is actually 30'). We found 92 data points.

Length of RMZ affected (one or both sides) averaged 946' with a range of 50' (error??) to 3,400'. We found 93 data points.

Greater than 15' BFW:

"No Cut Buffers" averaged 50.7' with a range of 0' to 145' (likely an error as the activity column indicates this data point is actually 25'). We found 54 data points.

Length of RMZ affected (one or both sides) averaged 1,033' with a range of 200' to 6,000'. We found 58 data points.

Np Streams (12 data points pulled out of above data)

"No Cut Buffers" averaged 28.3'.

Length of Stream Reach affected (one or both sides) averaged 605'.

Weighted "No Cut Buffers" averaged 25.5'

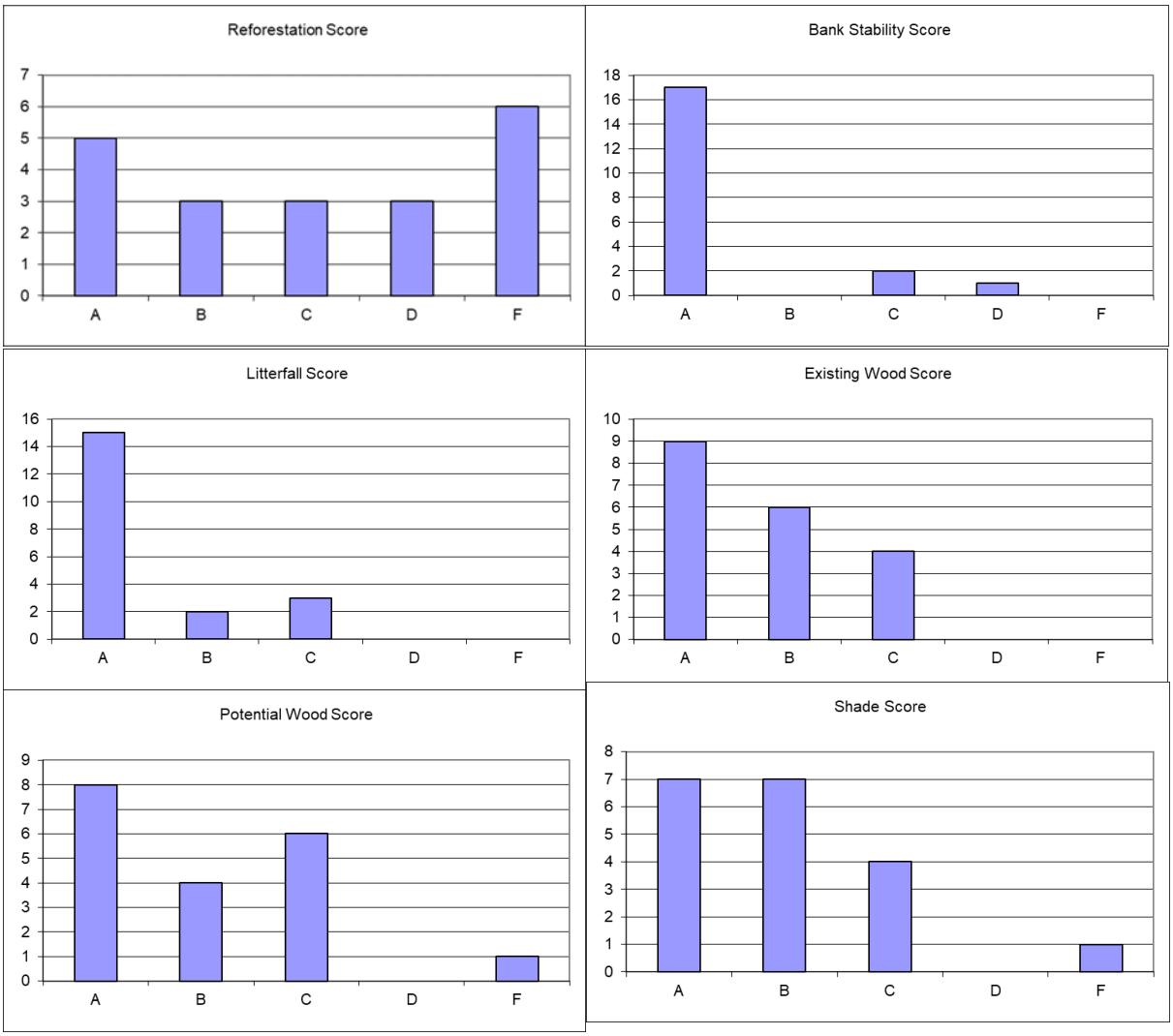
The primary purpose/goal of the Forest and Fish regulations and Alternate Plan Guidance is to maintain RMZ functions consistent with the four goals of Forest and Fish. The only known review of prior approved SFLO AP was Galleher (2008) (submitted with this supporting document). This after harvest review was conducted by an ID Team that provided very detailed metrics (again similar in many ways to the SFLO Template) along with a consensus report card on how well the Functions were being protected after harvest:

The average Bank Full Width “no cut” buffer on 21 stream segments was 50’, which is similar to all SFLO APs of 44.7’ (above).

Average Stream Reach (including several 2-sided harvests) approved was 1,128’, although the actual harvested average reach was 947’ which is similar to the average for all 218 stream segments of 899’ when looking at all SFLO AP.

Most importantly, are the ID Team consensus score summaries regarding how well the Functions were actually protected as required in Board Manual Guidance for Alternate Plans (Figure 1: Panels 1-6)

Figure 1: Hardwood Conversion Field Assessment Qualitative Score Frequencies
(from Galleher 2008)



This field study did uncover some significant reforestation follow-up issues (Figure 1, Panel 1 (upper left)) that can/will be addressed in the SFLO Template. Note the two functions most related to buffer width requirements (shade and LWD [existing and potential]) scored very well confirming "relatively low impact" as required in RCW and WAC for SFLOs.

The WAC language for template eligibility on the Policy track is not limited to why or what was in prior approved Alternate Plans. This WAC also includes "or strategies to simplify the development of future plans or strategies, including low impact situations and site-specific physical features;"

Eliminating the requirement for Site Class and multiple zones within the various Site Classes is intended to "simplify the development of future plans or strategies" as intended by RCW 76.09.368 which in part says: " . . .*(3), but which also lowers the overall cost of regulation to small forest landowners including, but not limited to, timber value forgone, layout costs, and operating costs*."

SFLOs are presumed to have lower impacts due to SFLOs generally "smaller harvests" and SFLOs relatively low percentage ownership of Type F stream reaches (18% according to the Washington State Forestland Database). From a Policy track standpoint the Legislative intent of RCW 76.09.368 (cited above) reaffirmed their clearly intended deference to SFLOs in RCW 76.13.100 (2) partial: *The legislature further finds that small forest landowners should have the option of alternate management plans or alternate harvest restrictions on smaller harvest units that may have a relatively low impact on aquatic resources*." Additionally:

In the absence of actual "criteria" for "low impact" determinations as required in WAC 222-12-0403 (5) we are left to use our collective best professional judgement regarding the legislative intent of "relatively low impact" – a balance that WFFA feels they have achieved with a template proposal utilizing a blend of science and policy.

It's also intuitive that the Legislature believed the harvest restrictions in the Exempt 20-Acre (WAC 222-30-023) were "relatively low impact" otherwise they wouldn't have exempted them from the full Forest and Fish requirements. The SFLO Template was not modeled after the Exempt 20-Acre rules but coincidentally has prescriptions that are similar in many ways. It is also pertinent to the low impact criteria that:

DNR provided the Federal Services a 5/13/2004 supportive report: "Exempt 20-Acre Parcel Riparian Management Zones: An assessment of Riparian Function" that was to be "incorporated into an Environmental Impact Statement currently being developed to support the Forests and Fish Habitat Conservation Plan" that was ultimately adopted.

The Federal Services acknowledged/accepted the Exempt 20-Acre prescriptions conditionally with the caveat that these harvests may not necessarily meet the Clean Water Act, and required DNR to monitor the use of this prescription by stream names to help monitor potential impacts.

The WFFA Template Proposal also meets this WAC eligibility requirement because it has very "site-specific physical features" tying all prescriptions to three different categories of Bank Full Width measurements, consistent with the RMZ function science as presented in our proposal [and supported by common sense].

The Adaptive Management Program and the Forest Practice Board approval of the only other two templates confirm, and set precedent, that the WAC language for template eligibility was not intended to restrict its use to only when there is a specific pattern of prior approved SFLO Alternate Plans. Neither of these previously approved template options had a history of substantive similar prior approved SFLO Alternate Plans.

The eligibility standards of WAC 222-12-0403 (3) are, we believe, intended to be a holistic interpretation about eligibility, grounded in science and confirmed by practice. As such, eligibility is a separate question than whether or not all the actual template metrics meet all the sometimes conflicting RCWs and WACs which require a balance between competing requirements of science and policy.

Our proposal meets the Legislative intent, and the template eligibility test in a variety of ways: prior alternate plans; simplification; site-specific physical features; and "relatively low impact" (Policy and Science tracks). Early discussions by TFW Policy's Template Sub-Committee confirmed that at least some of the metrics in the WFFA Proposal met this WAC eligibility requirement, therefore the administrative screening hurdle has been met. The remaining metrics will be informed by the science reviews and further TFW Policy discussions. After nearly 4 years languishing in TFW Policy it is time to sit down and work collaboratively on each other's needs in search of consensus as intended by our legislature, including multiple regulatory deferences to SFLOs due to a finding of disproportionate impacts of Forest and Fish on SFLOs in the SBEIS submitted January 21, 2001.

While WFFA certainly has a responsibility to work collaboratively to address other stakeholder concerns, denying eligibility for this SFLO Template clearly is not supported by the Legislative intent, WAC language, or past practices.

Appendix A WAC 222-12-0403

*Cooperative development of guidelines for alternate plans.

The department will develop the section for alternate plans (WAC 222-12-090(21)) to submit to the board in cooperation with representatives of the small forest landowner office and advisory committee, the departments of ecology and fish and wildlife, United States Fish and Wildlife Service, National Marine Fisheries Service, and affected Indian tribes.

The manual should include:

(1) As required by RCW 76.13.110(3), the small forest landowner office recommendations for alternate plans or alternate harvest restrictions that meet riparian functions while generally requiring less costly regulatory prescriptions;

(2) The effectiveness of strategies for meeting resource objectives and protecting public resources;

(3) Template prescriptions designed to meet resource objectives to address common situations that are repeatedly addressed in alternate plans or strategies to simplify the development of future plans or strategies, including low impact situations and site-specific physical features;

(4) Appropriate recognition or credit for improving the condition of public resources; and

(5) Criteria to assist the department in determining whether a small forest landowner alternate plan qualifies as a low impact alternate plan.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). WSR 01-12-042, § 222-12-0403, filed 5/30/01, effective 7/1/01.]

SMALL FOREST LANDOWNER BUFFER WIDTH DISPUTE

Majority Report to the Forest Practices Board

TFW Policy Caucuses:
DNR, Eastern Washington Tribal Governments (EWTG), Western Washington Tribes (WWT), Ecology-WDFW , CONSERVATION CAUCUS

July 22, 2022

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1- EXECUTIVE SUMMARY

The majority caucus recommend the Board:

1. Not approve the proposed alternate plan template prescriptions:
   - The prescriptions do not provide protection of public resources at least equal to those required in the act and the rules;
   - The riparian protections in the rules apply to all landowners, there is no special "deference" or "special regulatory" standard for small forest landowners;
   - The science used to support the different prescriptions does not conclusively demonstrate that any of the prescriptions will provide protection for public resources at least equal in overall effectiveness to the protection provided by the Forest Practices Act and Rules.
   - The prescriptions will not meet the desired future conditions (DFC) of the riparian forests as called for in the rules.
2. Find site specific riparian prescriptions in which small forest landowners can harvest within the RMZ while meeting the equal protection requirements of the rule by:
   - Supporting development of AP templates and alternate harvest prescriptions specifically designed for small forest landowners to be included in BM Sec 21 to address site specific conditions to facilitate small forest landowner management of RMZs;
   - Directing Policy to review and refine the experimental alternate harvest prescriptions for conifer restoration and conifer thinning being developed by Policy; and
   - Supporting amending Board Manual Section 21 to improve guidance to encourage and help small forest landowners design and implement alternate plans.

FRAMING THE DISPUTE

Upon receipt of the WFFA Western Washington Low Impact Alternate Plan Proposal Initiation in February 2015, the Forest Practices Board (Board) directed the TFW Policy Committee (Policy) to review the proposal sufficiently to provide the Board a strategy and timeline to fully evaluate the proposal. In May 2015, the Board accepted the strategy and directed Policy to "*Beginning no later than October 2015, determine whether the alternate plan template proposal meets the criteria outlined in WAC 222-12-0403 and consider different strategies moving forward*". At the November 2017 FPB meeting additional direction was given to Policy to consider strategies to identify site-specific situations in which certain prescriptions could be grouped into alternate plan templates.

At the December 5, 2019 Policy meeting Policy reviewed the Alternate Plan Template Workgroup recommendations to address the Board's request. The Workgroup found that the proposal does not meet the requirements as a whole but there may be elements that do meet the requirements of a template alternate plan. *Policy accepted the Workgroup recommendations:*

1) *"Form a small technical workgroup to evaluate under what, if any, site-specific conditions a 75 foot and 50 foot buffer, respectively, would be acceptable as a prescription for Type F streams; and under what, if any, site-specific conditions a 25 foot buffer would be acceptable as a prescription for Type Np streams. The workgroup shall provide a recommendation to Policy by May 2020."*
2) *"Recommend to the Forest Practices Board that the SFL AP template proposal does not meet the criteria of a template per the rule standards in WAC 222-12-0403 (3) in whole, but may in part be a template or other form of prescription with more site specific criteria (see Motion 4)."*
3) *"Form a technical workgroup including the State caucuses and other interested parties to continue to work on the experimental conifer restoration and conifer thinning alternate harvest prescriptions, including*

consideration of a monitoring and evaluation component that would later be developed by CMER. The workgroup shall provide a recommendation to Policy by May 2020."

Policy Recommendations to the Board

At the August 2020 meeting the Board accepted the Policy recommendation "*that the Small Forest Landowner Alternate Prescription Template proposal, in whole, does not meet the criteria of a template per the rule standards in WAC 222-12-0403(3)."*

Alternate Harvest Prescription Workgroup

At the December 2019 meeting Policy also moved to form the Alternative Harvest Prescriptions (AHP) Workgroup and a charter was approved at the February 2020 meeting. After several meetings, the Workgroup completed two draft alternative harvest prescriptions and draft monitoring plan request for CMER. Policy moved to "*Accept for TFW Policy Committee review the draft alternate harvest prescriptions for conifer thinning and conifer restoration and the alternate harvest prescription monitoring and evaluation strategy request for CMER as developed by the workgroup".*

Buffer Width Workgroup

Policy formed a "Small Forest Landowner Prescriptions Technical (SFL-PT) Workgroup in December 2019 to address the question of "are there elements of the proposal that may meet the alternate plan requirements".

The SFL-PT Workgroup began reviewing elements of the WFFA proposal under an approved workgroup in February 2020 and delivered a final report to Policy in May 2020. The SFL-PT Workgroup could not reach consensus that any prescription within the proposal meet the requirements of a template. There was agreement that 75' may work as a buffer width for a template in certain situations. At the June 2020 Policy meeting the SFL Caucus invoked dispute resolution "*based upon a lack of progress on the core RMZ width prescriptions of 25, 50, and 75 feet, despite some progress in the workgroups being made. Specifically this Dispute is limited to RMZ widths within WFFA's "Alternate Harvest prescriptions for Small Forest Landowners in Western Washington, January 21, 2015" proposal"* and accepted by Policy.

The dispute was concluded without consensus at the end of Stage 2 in May 2021, however, the small forest landowner caucus requested a delay in preparation of the majority/minority reports until the Policy request for CMER review of the WFFA scientific justification supporting their *Alternate Harvest prescriptions for Small Forest Landowners in Western Washington template proposal* was complete.

The majority caucuses agree with the assessment of the mediator (Fulcrum report) which states that all caucuses agreed:

- The original SFL template proposal as a whole did not meet the criteria to qualify as a template.
- The state Small Forest Landowners Office has been seriously underfunded for years and is only now fully able to meet its original intent of providing adequate technical assistance to its clientele.
- The Forestry Riparian Easement Program (FREP) is a valuable program but has been seriously underfunded for years and has a multi-year backlog of applications.
- It can be difficult for non-professionals to complete the Alternate Management Plans available to Small Forest Landowners. Additional technical assistance and simplified procedures will help.
- The water and wildlife resources of the State of Washington are important and must be protected.
- The current alternative RMZ's for exempt 20-acre parcels is an available program but is seldom used by SFL since most 20-acre parcel owners do not appear to be actively managing their forest land.
- Any agreement reached should only apply to the Western Washington; Eastern Washington conditions are different.

The majority caucuses believe the areas of non-agreement in the dispute to be:

- Parties could not agree that any of the four proposed buffer prescriptions qualify as a template.
- Participants did not agree that reduction of buffer widths as a template or standardized alternate plan would have "a relatively low impact" on resources. However, as one party stated, "Any impact is too much of an impact."
- Parties could not agree on the various 'science' used to justify or oppose the proposal. The scientific justification report was never formally reviewed and approved by CMER and Policy members are not have in consensus on whether the scientific justification report supports the template proposals.

Majority caucuses recommendations to the Board to resolve this dispute

The majority caucus believes that each prescription is to be weighed on their ability to implement the existing forest practices rules for alternate plans. The rules hold that all alternate plans (which include templates) must provide protection of public resources equal to those required in the act and the rules. The riparian protections in the rules apply to all landowners:

- There is no special "deference" or "special regulatory" standard for small forest landowners;
- There is a statutory intent for the Board to find site specific prescriptions in which small forest landowners can meet the equal protection requirement and harvest within the RMZ.

We recognize that alternate plans can be used as a tool to deal with a variety of situations uniquely affecting small forest landowners. The majority caucuses recommend the Board continue to support development of AP templates and alternate harvest prescriptions specifically designed for small forest landowners to be included in BM Sec 21:

- We recommend development of additional templates to address site specific conditions to facilitate small forest landowner management of RMZs, including templates designed to fulfill rule identified situations to:
    - Address sites where the cumulative impacts of regulations disproportionately impact a landowner
    - Make minor on-the-ground modifications, which result in significant operation efficiencies
    - Address circumstances where a landowner has an economically inaccessible unit
    - Address circumstances where a landowner has an economically inaccessible unit
    - Facilitate voluntary landscape, riparian or stream restoration
- We recommend TFW Policy continue to review and refine of the experimental alternate harvest prescriptions for conifer restoration and conifer thinning being developed by Policy.
- We recommend further work on the Board Manual to improve guidance to encourage and help small forest landowners design and implement alternate plans.

2- MATRIX OF BUFFER ALTERNATIVES

Buffer Prescriptions	Majority Position and Opinions
75' Variable RMZ for S/F >15' BFW	ECY-WDFW, DNR, EWTG, WWT, and Conservation Caucus do not support this proposed prescription because there are concerns with the idea of "variable" width buffers in a template, as well as concerns that it will not lead to the protection of the resources at least equal in overall effectiveness to the protection provided by the current rules. While there was some discussion on supporting this proposal if the variable width component was removed and it was approached in a site-specific manner, the current alternative plan rules already will allow a 75' RMZ if site specific conditions allow it.
50' Variable RMZ for F 5'-15' BFW	ECY-WDFW, EWTG, WWT, DNR, and Conservation Caucus do not support this proposed prescription due to the same concerns about a "variable" width buffer, and an agreement that it will not lead to the protection of the resources at least equal in overall effectiveness to the protection provided by the current rules.
25' Fixed RMZ on F <5' BFW	ECY-WDFW, EWTG, WWT, DNR, and Conservation Caucus do not support this proposed prescription because it significantly deviates from the protection offered by current rule and would likely lead to a decrease in ecological function. We note that this proposed buffer is only half the width of the "full-length buffers" executed under the CMER Hardrock study, which were demonstrated to be inadequate protection for water temperature on even Np streams. It is also narrower than minimum 20-acre exempt rule buffer of 29 feet.
25' Fixed RMZ Full Length on all Np Waters	ECY-WDFW, EWTG, WWT, DNR, and Conservation Caucus do not support this proposed prescription because it would not lead to the protection of the resources at least equal in overall effectiveness to the protection provided by the current rule. We also note, as above, that this proposed buffer is only half the width of the "full-length buffers"

	executed under the CMER Hardrock study, which were demonstrated to be inadequate protection for water temperature on Np streams. We would also note that Np buffer alternatives are currently being developed for Board consideration, and a 25' RMZ is not currently on the table for consideration, and that any consideration of Type Np buffer templates should be delayed until the Board approves new Type Np rules.

3- SCIENCE BASIS

The majority caucuses do not believe the science used to support the different prescriptions conclusively demonstrated that any of the prescriptions will provide protection for public resources at least equal in overall effectiveness to the protection provided by the Forest Practices Act and Rules.

In the review of the science used to support the buffer prescriptions, Mark Teply from Cramer Fish Sciences observed, "… deficiencies in use and application of science in the WFFA analysis affected their function evaluation of all prescriptions equally…" Teply recognized that current FP rules already do not provide maximum riparian functions, and determined that all the proposed prescriptions would lead to even lower levels of these function than required under current forest practices rules.

For example, when reviewing the capacity of the prescriptions to provide adequate shade to the streams, Teply observed:

- "WFFA relied on unvalidated models to characterize effects of forest management on shade loss and WFFA's predictions using the DOE shade model underrepresent shade loss reported in westside field studies that test effects of fixed-width no-harvest buffers."
- The report states that "the rate calculated by the contractor likely underrepresents the shade loss in effective shade terms. Further, because these rates are calculated from averages, they do not incorporate variability that does exist in the rate of shade loss *within each study*. There *is* variability in shade loss, stand to stand, as affected by such factors as species composition, stocking density, stand height, stream orientation, latitude, season, and time of day."

Ultimately, Teply concluded that WFFA's use of best available science to evaluate the riparian shade function was "deficient, but also that WFFA's predictions using the DOE shade model do not comport with field studies testing the effects of riparian management compared to that in unmanaged forests. Projections in Table 3 of the WFFA report likely underestimate the amount of shade loss that would occur."

In the subsequent review of Teply's evaluation by the Adaptive Management Program's Independent Scientific Peer Review (ISPR) process (done through the University of Washington), reviewers largely concluded Teply's work was 'technically sound and unbiased.' But the reviewers also raised substantive questions about the overall framework in which the initial evaluation was conducted. Specifically, the

reviewers questioned how the evaluation could be conducted without fully understanding the landscape context in which the prescriptions will occur. One of the reviewers summarized this concern, "I think a really BIG shortcoming of the WFFA proposal is that there is no attempt to give context to where and when on the landscape these timber harvests might occur…. Without context, this is all an exercise in blindly approving actions without the institutional capacity to gage the consequences."

Ultimately, the same reviewer concluded, "Personally, I am quite sympathetic to the needs of the small forest landowners who wish to extract value from their riparian adjacent ownership, but their proposals [i.e., the *Alternate Plan Template*] have some serious shortcomings."

When Policy asked CMER to interpret Teply's technical findings from his review of the scientific justification document, the members of the committee could not come to consensus. As stated in one of the position papers submitted to Policy by CMER, a large reason CMER could not come into consensus on the findings was because, "The SFLO template proposal did not follow CMER's project development, literature review, scoping, best available science, alternatives analysis or QA/QC process outlined in the CMER Protocols and Standards Manual and referenced in DNR's adaptive management board manual (Section 22). Additionally, the author never revised his report in response to the Teply review."

More substantively, the lack of consensus also resulted when group members found the Teply review contained contradictory information, and when it was unclear to some group members the extent to which ISPR comments addressed the science in the SJ or in Teply's review of that science. "There was no opportunity for group members to discuss these issues with Teply or with the ISPR reviewers, and ultimately the full group was not able to come to agreement on how to interpret the various findings. As a result, CMER members found it difficult to engage in substantive discussions on the technical merits of the SFLO prescriptions based on Teply's review of those prescriptions."

Ultimately, taking into account the concerns raised in the Teply report and the ISPR review, as well as CMER's inability to come to consensus on the scientific justification, we do not believe that there is adequate scientific support to justify the idea that these proposed templates would not lead to a decrease in riparian function.

4- EFFECTIVENESS QUESTION

a. What is the standard for smalls related to overall effectiveness?
   The Forests and Fish report (FFR) recognized that the changes in the stream buffer rules and statutes will impose substantial additional financial burdens on forest landowners. It also recognized small forest landowners may experience a disproportionate economic impact by the rules. The Report recommended the development of alternate plans as means of addressing such impacts while still maintaining a level of protection for public resources at least equal in overall effectiveness to the protection provided by the forest practices rules.

   The FFR stated the development of alternate plans "*is not a small landowner 'exemption' that sets lower standards of resource protection for small landowners.* Instead, it applies the same riparian and related buffers to small landowners as is applied to all other forest landowners, and provides partial compensation to those small landowners who volunteer to enter into easements covering riparian areas." The rules, in WAC 222-12-040, 0401(6) state that small

forest landowners are not exempted from providing protection for riparian functions because of their status as small forest landowners.

The rules provide the opportunity for small forest landowners prepare alternate plans to be used as a tool to deal with a variety of situations, including where the cumulative impacts of regulations disproportionately impact a landowner. In some instances an alternate plan may be used to make minor on-the-ground modifications, which result in significant operation efficiencies. The alternate plan process may be used to address circumstances where a landowner has an economically inaccessible unit. The alternate plan process may also be used to facilitate voluntary landscape, riparian or stream restoration.

b. How does each alternative meet the full alternate plan approval standard?
The majority caucus believes that each prescription is to be weighed on their ability to implement the existing forest practices rules for alternate plans. The rules in WAC 222-12-0403 state that Board Manual Section 21 "should include . . . [t]emplate prescriptions designed to meet resource objectives to address common situations that are repeatedly addressed in alternate plans or strategies to simplify the development of future plans or strategies, including low impact situations and site-specific physical features.

5- WHAT IS DRIVING THE MAJORITY PERSPECTIVE OR BELIEF IN OUR POSITION?

The majority caucus perspective is that the proposed alternate plan template prescriptions do not meet the protection of public resources as required by rule:

- We believe that each prescription is to be weighed on their ability to implement the existing forest practices rules for alternate plans. The rules hold that all alternate plans (which include templates) must provide protection of public resources equal to those required in the act and the rules. The riparian protections in the rules apply to all landowners:
  - There is no special "deference" or "special regulatory" standard for small forest landowners;
  - There is a statutory intent for the Board to find site specific prescriptions in which small forest landowners can meet the equal protection requirement and harvest within the RMZ.
- We do not believe the science used to support the different prescriptions conclusively demonstrated that any of the prescriptions will provide protection for public resources at least equal in overall effectiveness to the protection provided by the Forest Practices Act and Rules.
  - We find the concerns raised in the Teply report and the ISPR review, as well as CMER's inability to come to consensus on the scientific justification does not provide adequate scientific support to justify the idea that the proposed templates prescriptions would not lead to a decrease in riparian function.
- We also have low to no confidence that any of the template prescriptions will meet the desired future conditions (DFC) of the riparian forests as called for in the rules.

The majority caucuses recommend the Board continue to support development of AP templates and alternate harvest prescriptions specifically designed for small forest landowners to be included in BM Sec 21 to:

- Add on additional templates to address site specific conditions to facilitate small forest landowner management of RMZs, including templates designed to fulfill rule identified situations to:
    - Address sites where the cumulative impacts of regulations disproportionately impact a landowner
    - Make minor on-the-ground modifications, which result in significant operation efficiencies
    - Address circumstances where a landowner has an economically inaccessible unit
    - Address circumstances where a landowner has an economically inaccessible unit
    - Facilitate voluntary landscape, riparian or stream restoration
- Direct Policy to review and refine the experimental alternate harvest prescriptions for conifer restoration and conifer thinning being developed by Policy.
- Amend Board Manual Section 21 to improve guidance to encourage and help small forest landowners design and implement alternate plans.

6- Lessons Learned and Recommendations for Improving Dispute Process

The majority caucus recommend the Board request the Adaptive Management Program bring forward recommendations for improving the dispute resolution process. This would be achieved through an Adaptive Management Program Administrator coordinated effort with the TFW Policy and CMER Committees and concentrate on reviews of:

- Timelines for dispute resolution
- Need for on-call contracts
- Need for quick entry into and exit from the dispute process or adhering to the rule-prescribed timelines
- Any other suggestions/recommendations brought forward within the Adaptive Management Pogram

ANNEXES

A. Fulcrum Report

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISIONER OF PUBLIC LANDS
1111 WASHINGTON STREET SE
OLYMPIA WA 98504

360-902-1000
WWW.DNR.WA.GOV

MEMORANDUM

October 25, 2022

TO: Forest Practices Board

FROM: Saboor Jawad, Adaptive Management Program Administrator (AMPA)

Saboor.Jawad@dnr.wa.gov | 360-742-7130

SUBJECT: Consensus Recommendation of TFW Policy on SFL Relatively Low Impact Criteria

This memo transmits a TFW Policy consensus recommendation for your consideration of approval. The recommendation emerged from stage 2 of a dispute over Small Forest Landowner (SFL) proposal initiation (PI) on the inclusion of a specified definition of "relatively low impact" criteria in Board Manual Section 21: Guidelines for Alternate Plans (BM21).

The attached recommendation lists key points of agreement among TFW Policy caucuses. Board action is requested to convene a stakeholder group to amend BM21 such that it includes, among others, the following key points:

- Reorganize BM21 and dedicate a part for SFL and clarify the alternate plan process
- Develop criteria for SFL low impact alternate plans by consolidating existing guidance in BM21 and providing an expanded list of examples of harvest opportunities to be considered within riparian management zones (RMZ) for SFL
- Add user friendly guidance encouraging SFL to utilize the available expertise through the Small Forest Landowner Office of the Department of Natural Resources to assist SFL harvest design within RMZ while maintaining or improving riparian functions

Dispute Background:

In August, 2021, the Washington Farm Forestry Association (WFFA) submitted a PI request to the Board and, subsequently, to the program administrator. The PI stated that WAC 222-12-0403(5) requires a definition for "relatively low impact" alternate plans for SFLs. Three point criteria were presented as consensus recommendation of the Small Forest Landowner Advisory Committee (SFLOAC). The proposal requested the approval of the definition by the Board and sought to

update BM21. The following was the three point criteria proposed to define a relatively low impact alternate plan:

1- An activity with short-term impact which produces a better long-term outcome
2- An activity beyond the point of diminishing returns for resource protection
3- Smaller harvest units with stream reaches that are relatively smaller in width or shorter in length than typical larger landowner harvests

TFW Policy received the administrator analysis on this PI in September, 2021. Based on lack of consensus at TFW Policy, the SFL caucus invoked dispute resolution in January 2022. TFW Policy initiated the informal stage of the dispute process at their February 2022 meeting. The committee's co-chairs facilitated the informal sessions with the intent to seek resolution through: discussion of the criteria requirement in WAC 222-12-0403(5); review of the existing guidance in BM21; WFFA requested discussion about their interpretation of a legislative regulatory mitigation standard to only be applied to small forest landowner alternate harvests; and, a TFW Policy review of the requested definition of "relatively low impact" for inclusion in BM21. The dispute could not be resolved in stage 1 which is the informal stage for disputes.

At the May, 2022 regular meeting of TFW Policy, the SFL caucus moved the dispute to stage 2 requiring formal mediation. Triangle Associates mediated the dispute in stage 2 which was concluded with a consensus recommendation on 20 July 2022. The mediator's final report is also attached to this memo.

Attachments:

- TFW Policy's consensus recommendation
- Mediators final report
- WFFA's proposal initiation request

TFW Policy Motion
July 20, 2022

(reached consensus on July 20, 2022)

Description: *The following Motion and Key Points of Agreement (Attachment A) were agreed upon and through a vote at the July 20, 2022 Timber Fish and Wildlife (TFW) Policy Committee meeting to resolve the Criteria for Small Forest Landowners (SFL) Low Impact Alternate plan dispute. All voting caucuses reached consensus on the content. The Washington Department of Fish and Wildlife (part of the State caucus) and the Conservation caucus declined to participate in this dispute.*

The Department of Natural Resources (DNR) and SFL (Washington Farm Forestry Association) caucuses have been working on an agreement of a potential motion to resolve the Criteria for SFLs Low Impact Alternate Plans Dispute.

TFW Policy recommends the Forest Practices Board request staff to prepare an amendment to Board Manual Section 21 (BM Sec. 21), *Guidelines for Alternate Plans*. This amendment will create a new part designed to aggregate existing information into technical guidance for SFLs on how to implement the forest practices Alternate Plan (AP) rules as outlined below.

Policy requests the Board ask DNR staff to convene a stakeholder group to amend BM Sec. 21 according to the process outlined in WAC 222-12-090 to develop advisory technical guidance in support of the forest practices AP rules for SFLs, and where:

1. The stakeholder group will include field staff/ID team members who are experienced with SFL AP field reviews;
2. The stakeholder group will:
    a) Consolidate existing board manual alternate plan guidance into a new part devoted to technical guidance for small forest landowners;
    b) Follow the Key Points of Agreement agreed to by the SFL and DNR caucuses in Attachment A; and
    c) Provide guidance on how to access the DNR Small Forest Landowner Office for online assistance and how to contact DNR Regions for field assistance, WAC 222-12-0402.
3. The Board request staff to re-insert previous Board-approved “Imminent Mortality” guidance back into BM Sec. 21; and,
4. The Board include the BM Sec. 21 amendment effort in the Board’s 2022 and 2023 Work Plans, with the intention of having recommendations to the Board by its February 2023 meeting.

TFW Policy Motion
July 20, 2022

(reached consensus on July 20, 2022)

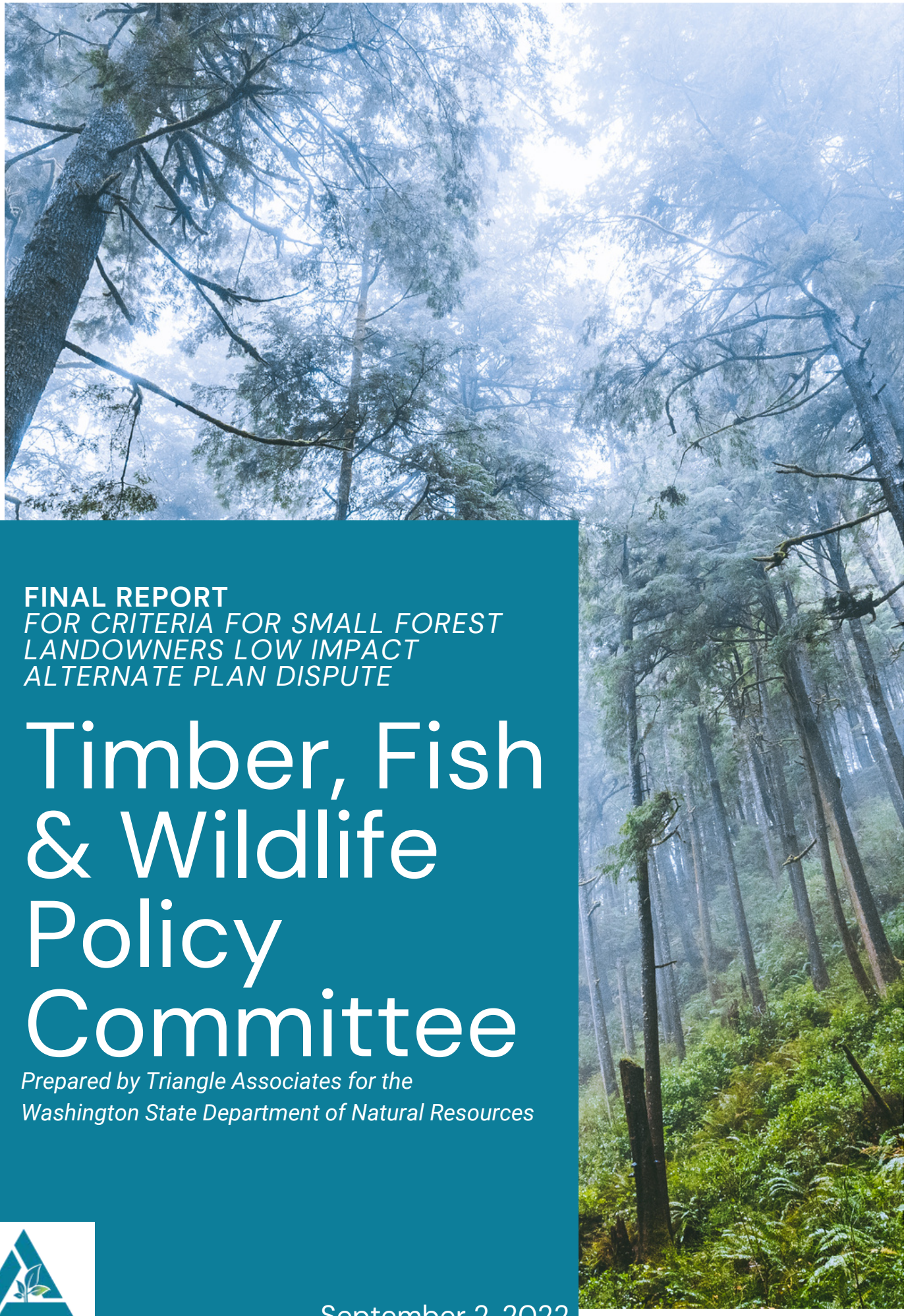
Attachment A

Small Forest Landowners (WFFA) and Department of Natural Resources (DNR) Key Points of Agreement

The collaboration and consensus recommendations from the Small Forest Landowners Advisory Committee are appreciated and helped initiate important conversations within the Adaptive Management Program. The Small Forest Landowners (SFLs) and Department of Natural Resources (DNR) caucuses have determined that rather than utilizing general principles to define "low impact" for SFL Alternate Plans (APs), a Forest Practices Board Manual Section 21 (BM Sec. 21) amendment addressing WAC 222-12-0403(5) is preferred based on the key points of agreement below.

Key Points of Agreement

1. SFLs are impacted more by regulation than other landowners who harvest timber in Washington State.
2. One intent of BM Sec. 21 is to provide guidance to SFLs on the rule requirements for an AP, methods to determine how their forest is eligible for an AP, and how to layout an AP including situations in which an AP can support riparian functions while addressing disproportionate economic impacts to smalls.
3. However, the BM Sec. 21 guidance is confusing, and the AP process can be intimidating to SFLs and turn them away from the application process.
4. The intent is to:
    a. Provide information on the areas of the AP process that SFLs can clearly participate in and benefit economically from.
    b. Develop an AP process for SFLs to implement an approach to develop a harvest plan within the rule identified Riparian Management Zone (RMZ), which is a low impact to riparian functions.
5. There is a need to:
    a. Reorganize the manual and dedicate a part for SFLs to help clarify the AP process.
    b. Develop "criteria to assist the department in determining whether a small forest landowners alternate plan qualifies as a low impact alternate plan" to be included in BM Sec. 21 [WAC 222-12-0403(5)] by:
        - Consolidation and review of existing guidance in BM Sec. 21 and creation of a new part exclusively for small forest landowners within BM Sec. 21; and
        - Developing an expanded list of examples for harvest opportunity to be considered within the RMZ for SFLs and includes information on situations where the design of the AP and field review can be more successful.
    c. Develop user friendly ways to encourage SFLs to utilize the available expertise to harvest within the RMZ while maintaining or improving riparian function.



FINAL REPORT
FOR CRITERIA FOR SMALL FOREST LANDOWNERS LOW IMPACT ALTERNATE PLAN DISPUTE

Timber, Fish & Wildlife Policy Committee

Prepared by Triangle Associates for the Washington State Department of Natural Resources

TRIANGLE

September 2, 2022

Timber, Fish and Wildlife (TFW) Policy Committee
Criteria for Small Forest Landowners (SFL) Low Impact Alternate Plan Dispute
Final Report

(v. 9-2-2022)

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I. Executive Summary

The Triangle Associates (Triangle) meditation team was contracted by the Department of Natural Resources Adaptive Management Program to mediate the SFL Low Impact Alternate Plan dispute. This Final Report describes the background of the dispute and steps the mediation team took to resolve it. Report sections are as follows:

- Background Information
- Steps to Resolve the Dispute
- Mediation Methods

The background information section describes previous efforts from caucuses to resolve the dispute; includes dispute language developed by the Department of Natural Resources (DNR); identifies caucuses that did and did not participate; and explains all stages.

The steps to resolve the dispute describes the process the mediation team went through to resolve the dispute with the parties; that a mediation agreement was established; and the types of mediation meetings and documents developed to document the dispute resolution process.

Mediation methods provides details about how the mediation team worked with parties to resolve the dispute, including communication styles and questions the mediation team asked the disputing parties to build consensus and ultimately find resolution.

II. Background Information

a. Dispute Language

The description for the Criteria for SFL Low Impact Alternate Plan Dispute is excised from the mediation team's contract with the DNR as follows:

> "In August 2021, the SFL caucus submitted a proposal to the Forest Practices Board (Board) and to the Adaptive Management Program Administrator. This Proposal Initiation (PI) requested the inclusion of a specified definition of "relatively low impact" criteria in Board Manual Section 21: Guidelines for Alternate Plans (BM Sec. 21).
> At the TFW Policy Committee's (Policy) December 2021 meeting, the SFL caucus invoked dispute resolution on lack of consensus for the Policy to accept for review and recommendations to the Board the inclusion of the criteria in BM Sec. 21. The following was the description of the dispute at the beginning of Stage 1:
>
> The SFL caucus invokes dispute resolution on lack of consensus to include a specified definition of "relatively low impact" criteria in BM Sec. 21 to assist the department in determining whether a SFL alternate plan qualifies as a low impact alternate plan.
>
> The DNR caucus did not support acceptance of the PI because they believe the criteria identified in WAC 222-12-0403(5) is being met through existing board manual guidance and the development of alternate plan templates and alternate harvest

prescriptions; the SFL caucus believes that the criteria guidance to determine whether a small forest landowner alternate plan qualifies as a low impact alternate plan is not adequately addressed in BM Sec. 21.

The SFL caucus believed the dispute could be resolved by broadening the dispute to request a Policy review of:

- BM Sec. 21 to determine if criteria exists to determine if an alternate plan submitted by a SFL qualifies as a low impact alternate plan;
- The Washington Farm Forestry Association (WFFA) interpretation of a SFL legislative standard as outlined in the PI "RCW regulatory mitigation (only for SFLs) that must additionally be considered when looking at "…alternate harvest restrictions on smaller harvest units" (RCW 76.13.100 (2)).
- The WFFA requested definition of "relatively low impact" as developed by the SFL Advisory Committee for inclusion in BM Sec. 21 to provide further "Criteria to assist the department in determining whether a SFL alternate plan qualifies as a low impact alternate plan."
- The DNR and SFL caucuses could not agree on a potential motion to resolve the Relatively Low Impact PI dispute in stage 1. At Policy's May 2022 meeting, the SFL caucus invoked stage II of the dispute resolution, requiring external mediation to resolve the dispute."

b. Participant Caucuses

The Policy caucuses that participated in this dispute include:

- DNR
- SFL
- Department of Ecology
- Westside Tribes
- Eastside Tribes
- Counties
- Industrial Landowners

c. Non-Participant Caucuses

The Policy caucuses that chose not to participate in this dispute include:

- Conservation
- Washington Department of Fish and Wildlife, a member of the State Caucus

d. Stage I

Stage I of this dispute involved working for several months to informally resolve the dispute outside of regularly scheduled Policy meetings. zStage I did not resolve the dispute; however, it ended in an agreement between DNR and the SFL caucuses to prepare a resolution motion to address the preparation and review of relatively low impact alternate plan guidance for inclusion in the board manual.

e. Stage II

Triangle Associates (Triangle) was chosen as the mediator for Stage II. After consulting with participating caucuses, Triangle (the mediation team) worked mostly with the DNR and SFL caucuses while providing frequent updates to other participating caucus members. The dispute was resolved with a consensus decision by Policy on July 20th, 2022.

III. Steps to Resolve the Dispute

The mediation team engaged with Policy caucus members to facilitate a mediation process through the following steps:

- Gain support of a Mediation Agreement.
- Facilitate a kickoff meeting with Policy.
- Conduct assessment interviews with DNR and SFL caucus members and offer interviews to all other dispute participants.
- Develop and distribute an Assessment Report to Policy.
- Convene numerous meetings with the main disputing parties, DNR and SFL.
- Reach preliminary consensus at the July 7th Policy meeting.
- Reach full consensus to resolve the dispute by all participating Policy caucus members at the July 20th Policy meeting.

For additional details of these steps, see below.

a. Mediation Agreement

Triangle developed a Mediation Agreement that each participating caucus member agreed to sign. This was to ensure that caucuses agreed on the mediation team's role, to establish ground rules, and to address confidentiality. It also outlines responsibilities of the mediator and the parties, describes appropriate communications to support coming to agreement, and expectations for how the parties will make decisions.

b. Kickoff: 1st Policy Committee Meeting

A dispute kickoff meeting was held on May 18th and the meeting time was used to:

- Explain the mediation process and review the Mediation Agreement.
- Hear observations from the mediation team and for parties to share their positions and interests.
- Identify information needed to resolve the dispute and confirm mediation team next steps, including:
    - schedule assessment interviews and follow-up meetings with the disputing parties;
    - keep all caucus members aware of the progress as the process continued; and
    - bring any potential agreement back to Policy for review.

Following this meeting, Triangle updated the Mediation Agreement and asked caucuses to contact Triangle if they wanted to participate in an assessment interview.

c. Assessment Interviews

After the May 18th kickoff meeting, Triangle held assessment interviews with the DNR and SFL caucuses. All other participating caucuses were offered assessment interviews and opted out since the dispute was mainly focused on resolving differences between two parties. The one-on-one interviews that were held were used to establish rapport with each caucus, ask questions, share communication preferences, and explore options on how to move the dispute forward.

d. Assessment Report

The Assessment Report summarizes the interviews with DNR and SFL and the information from the caucus position papers from Stage I of this dispute. The report components include a dispute summary; decision-making abilities; the mediation team's understanding of the dispute; the caucuses' understanding of the interpretation of the legislative intent for regulatory relief for SFLs; information needed to resolve the dispute and positions on BM Sec. 21 regarding criteria to determine if a SFL alternate plan qualifies as a low impact alternate plan; information needed to address the proposal initiation's request for additional guidance in BM Sec. 21; and possible solutions.

e. DNR and SFL Caucus Meetings

After confirming with Policy that the mediation team would work mainly with DNR and SFL caucuses to explore options and strive to reach resolution, mediation meetings were held with the DNR and SFL caucuses on numerous dates, including May 26th, June 1st, June 9th, and June 23rd.

During these meetings, the mediation team worked with the DNR and SFL caucuses to develop a Key Points of Agreement document and helped refine and complete the Potential Draft Motion to Resolve the Dispute (collectively referred to the "Motion" throughout the remainder of this document). In between meetings, the mediation team communicated with both caucuses numerous times to keep progress moving. It was shared by the SFL caucus that the goal of reaching agreement by July would meet their interest to move the Motion forward at the August 11th FPB meeting.

During the June 23rd meeting, DNR and SFL caucus members reached agreement on all outstanding key points and asked the mediation team to meet with the participating caucus members prior to the next Policy meeting on July 7th to brief them on the progress made. The mediation team met individually with the Department of Ecology, Westside Tribes, Eastside Tribes, Counties, and Industrial Landowners caucuses between June 27th – July 6th to brief them on the Motion, answer any questions, and flag issues for further discussion at the next Policy meeting.

f. Preliminary Consensus: 2nd Policy Committee Meeting

On July 7th, Policy met for a second time as a group on this dispute. DNR and SFL caucuses and the mediation team presented the potential Motion for questions and discussion. The State caucus requested that the DNR and SFL caucuses provide clarification on what happens if the SFL Office loses funding to provide technical assistance to SFLs and if part of the recommendation to the FPB should include a request to keep funding for the SFL Office. DNR and SFL agreed to

add language to the Motion to incorporate the State's request between the July 7th and July 20th meetings.

The mediation team asked caucus members whether they could reach preliminary consensus on the Motion and all members present said yes. The term preliminary was used because: (1) the Westside Tribes caucus member was not in attendance at the July 7th meeting, and (2) the suggestion by the State on July 7th was not yet incorporated. The mediation team met with the Westside Tribes caucus member on July 19th and DNR and SFL provided language to address the State caucus' point at the July 20th meeting.

Prior to July 20th, the mediation team emailed Policy to re-share the Motion, notify them of the upcoming decision, and a request to respond if they would not be able to reach consensus. No responses were received.

g. Resolution: 3rd Policy Committee Meeting

On July 20th, the DNR and SFL caucuses and mediation team shared their engagement updates and revised the Motion to incorporate the State's suggestion. Several caucus members asked questions and summarized their interests and positions related to the document. The SFL caucus moved to adopt the Motion and the DNR caucus seconded the motion. All caucus members were present and reached consensus on the dispute. *See attached Motion and Key Points of Agreement for resolution reached.*

After the resolution was reached, it was shared that the Motion might not be able to be included on the FPB August 11th agenda and instead may have to be put forth for a decision by the FPB in November. Either way, the DNR caucus member agreed to include the consensus Motion as part of his Co-chair memo to the FPB and verbally bring up the recommendation at the August 11th FPB meeting in the interest of moving this resolution forward.

IV. Mediation Methods

The following is a short list of mediation methods to consider for future disputes.

a. Seek to Understand

The mediation team often asked each caucus to seek to understand each other, their point of view, and whether what the other party was saying was reasonable. To do this, the mediator asked each party to employ their active listening skills. The dispute came down to specific words and their meaning that either caucus could or could not live with. By sharing, listening, and summarizing, commonality was found. The mediator consistently emphasized that caucuses should be open to work toward resolutions that may not be perfect but that they could live with and discover the language together that describes those solutions.

b. Communications, Trust & Relationship Building

The Policy committee will likely work on similar disputes in the future; therefore, it is imperative that safe space for communicating openly is sustained, additional trust is built, and relationships are maintained and continue to grow. This will help to foster collaboration,

information sharing, and problem-solving. The mediation team recommends consistent communication principals and trust and relationship building opportunities be incorporated into Policy's ongoing process. For example, this might include continuing to utilize a neutral-third party to facilitate discussions and engaging with each other on the ground through forest walks/tours, casual meetings over coffee/food, and/or pre-post meeting get togethers.

c. Working on Iterations of Disagreement and Transitioning to Agreement

Working on the Motion in iterations was a large part of this process. The mediator asked caucuses to first identify the main points of disagreement and then, through conversation and listening, identify where the two parties had commonality on each point. The parties were able to transition all points of disagreement to agreement through collaborative revisions. This was done by asking each party to listen to each other with their interest in mind and strive to identify language that might work for each party.

d. Keep All Policy Members in the Loop

Between the small group meetings, the mediation team provided Policy caucus members with important updates about the dispute progress via email and then utilized one-on-one virtual meetings to provide more substantive updates prior to the July meetings. This process was efficient and informative for Policy members.

TFW Policy Motion
July 20, 2022

(reached consensus on July 20, 2022)

Description: *The following Motion and Key Points of Agreement (Attachment A) were agreed upon and through a vote at the July 20, 2022 Timber Fish and Wildlife (TFW) Policy Committee meeting to resolve the Criteria for Small Forest Landowners (SFL) Low Impact Alternate plan dispute. All voting caucuses reached consensus on the content. The Washington Department of Fish and Wildlife (part of the State caucus) and the Conservation caucus declined to participate in this dispute.*

The Department of Natural Resources (DNR) and SFL (Washington Farm Forestry Association) caucuses have been working on an agreement of a potential motion to resolve the Criteria for SFLs Low Impact Alternate Plans Dispute.

TFW Policy recommends the Forest Practices Board request staff to prepare an amendment to Board Manual Section 21 (BM Sec. 21), *Guidelines for Alternate Plans*. This amendment will create a new part designed to aggregate existing information into technical guidance for SFLs on how to implement the forest practices Alternate Plan (AP) rules as outlined below.

Policy requests the Board ask DNR staff to convene a stakeholder group to amend BM Sec. 21 according to the process outlined in WAC 222-12-090 to develop advisory technical guidance in support of the forest practices AP rules for SFLs, and where:

1. The stakeholder group will include field staff/ID team members who are experienced with SFL AP field reviews;
2. The stakeholder group will:
    a) Consolidate existing board manual alternate plan guidance into a new part devoted to technical guidance for small forest landowners;
    b) Follow the Key Points of Agreement agreed to by the SFL and DNR caucuses in Attachment A; and
    c) Provide guidance on how to access the DNR Small Forest Landowner Office for online assistance and how to contact DNR Regions for field assistance, WAC 222-12-0402.
3. The Board request staff to re-insert previous Board-approved “Imminent Mortality” guidance back into BM Sec. 21; and,
4. The Board include the BM Sec. 21 amendment effort in the Board’s 2022 and 2023 Work Plans, with the intention of having recommendations to the Board by its February 2023 meeting.

TFW Policy Motion
July 20, 2022

(reached consensus on July 20, 2022)

Attachment A

Small Forest Landowners (WFFA) and Department of Natural Resources (DNR) Key Points of Agreement

The collaboration and consensus recommendations from the Small Forest Landowners Advisory Committee are appreciated and helped initiate important conversations within the Adaptive Management Program. The Small Forest Landowners (SFLs) and Department of Natural Resources (DNR) caucuses have determined that rather than utilizing general principles to define "low impact" for SFL Alternate Plans (APs), a Forest Practices Board Manual Section 21 (BM Sec. 21) amendment addressing WAC 222-12-0403(5) is preferred based on the key points of agreement below.

Key Points of Agreement

1. SFLs are impacted more by regulation than other landowners who harvest timber in Washington State.
2. One intent of BM Sec. 21 is to provide guidance to SFLs on the rule requirements for an AP, methods to determine how their forest is eligible for an AP, and how to layout an AP including situations in which an AP can support riparian functions while addressing disproportionate economic impacts to smalls.
3. However, the BM Sec. 21 guidance is confusing, and the AP process can be intimidating to SFLs and turn them away from the application process.
4. The intent is to:
    a. Provide information on the areas of the AP process that SFLs can clearly participate in and benefit economically from.
    b. Develop an AP process for SFLs to implement an approach to develop a harvest plan within the rule identified Riparian Management Zone (RMZ), which is a low impact to riparian functions.
5. There is a need to:
    a. Reorganize the manual and dedicate a part for SFLs to help clarify the AP process.
    b. Develop "criteria to assist the department in determining whether a small forest landowners alternate plan qualifies as a low impact alternate plan" to be included in BM Sec. 21 [WAC 222-12-0403(5)] by:
        - Consolidation and review of existing guidance in BM Sec. 21 and creation of a new part exclusively for small forest landowners within BM Sec. 21; and
        - Developing an expanded list of examples for harvest opportunity to be considered within the RMZ for SFLs and includes information on situations where the design of the AP and field review can be more successful.
    c. Develop user friendly ways to encourage SFLs to utilize the available expertise to harvest within the RMZ while maintaining or improving riparian function.

"Stewards of the land... for generations to come."

Washington FARM FORESTRY ASSOCIATION

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www.wafarmforestry.com

August 2, 2021

Forest Practices Board
c/o Department of Natural Resources
Forest Practices Division
PO Box 47012
Olympia WA 98504-7012

(via electronic transmittal to forestpracticesboard@dnr.wa.gov)

Dear Board Members:

The Washington Farm Forestry Association (WFFA) is a membership based non-profit organization that represents approximately 1100 tree farming families that collectively own about 150,000 acres of forest land in Washington State. Our objectives include educating small landowners about improved management of forest land, representing small forest landowners in the legislative process and in the Adaptive Management Program (AMP) through CMER science, and Policy, and educating the public on the contribution of small forest landowners to the environment and rural economies in Washington.

A definition of "Relatively Low Impact" (RLI), as it pertains to alternate plans for small forest landowners (SFLO), is required by WAC 222-12 0403 (5) [Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). WSR 01-12-042, § 222-12-0403, filed 5/30/01, effective 7/1/01]. Over the 21 years since the Forests and Fish legislation was passed, the requirement has never been developed. In July 2018, the Small Forest Landowner Advisory Committee (SFLOAC) started working on an acceptable definition to meet the requirements of WAC 222-12 0403 (5). The Advisory Committee consists of seven members, including a representative from the Department of Ecology, the Department of Fish and Wildlife, and a Tribal representative. Four additional committee members are small forestland owners who are appointed by the Commissioner of Public Lands from a list of candidates submitted by the Board of Directors of the Washington Farm Forestry Association or its successor organization.

The SFLOAC delivered a final consensus product on the "definition of relatively low impact" to the Department of Natural Resources (DNR) so that they could update the Board Manual Section 21 Guidelines for Alternate Plans in July 2020. The DNR determined that they would need to develop a proposal initiation to take this consensus document through the AMP. That PI was partially developed by DNR, but they informed the SFLOAC committee on July 20, 2021, that they would not advance the PI due to time and staffing limitations. Rather than allow all that effort on behalf of volunteer SFLO members and representatives from the Department of Ecology, the Department of Fish and Wildlife and the westside Tribes to languish, the WFFA agreed to take the consensus agreement through the PI process with the Forest Practices Board (FPB) and into the AMP.

Accordingly, we promptly approached the Forest Practices Board (FPB) Chair regarding the possibility of including the attached proposal initiation (PI) on the "Definition of Relatively Low Impact" as an agenda item for the August 11, 2021, Forest Practices Board meeting. We were told there simply wasn't room on the agenda. Therefore, as representatives of the small forest landowner caucus of the Adaptive Management Program, we will take the PI directly to AMP Policy table for inclusion on its agenda consistent with the processes that are permitted within that framework. We will however be speaking to

this proposal in the public comment period of your August 11, 2021, meeting. We would be delighted to answer any questions that Board members may have at that time.

As the Board members are aware, the Adaptive Management Program is an integral part of the Forest Practices Habitat Conservation Plan (FP HCP) and the Forest Practices Rules. Adaptive Management is the method agreed on by the stakeholders to examine alternative strategies for meeting measurable biological goals and objectives. (FP HCP at 173; WAC 222-12-045(1)). The Implementation Agreement for the FP HCP requires the stakeholders to use the Adaptive Management Program to determine if and when it is necessary or advisable to adjust rules and guidance to achieve the goals of the Forests & Fish Report. (IA at §10.1; WAC 222-10-045(1)). The Board may also use the Adaptive Management Program to adjust rules and guidance to further the purpose of the Forest Practices Act. (WAC 222-08-160(2)).

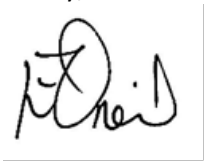
The RLI definition is appropriate for review by the Adaptive Management Program because it is integral to guidance in the Board Manual, Section 21 Part 1. As a participating representative for small forest landowners in both the SFLOAC and AMP, WFFA believes the consensus language for the RLI definition reflects a measured, thoughtful approach that will help in many ongoing AMP discussions.

Our objective for moving this proposal through the adaptive management PI process is to gain more insights from additional stakeholders who don't attend SFLOAC meetings, and to ascertain if there are suggestions for appropriate changes (if any) to improve the RLI definition to ensure it meets the Legislative objectives and the Forest Practices HCP. Following completion of the review by Policy and any appropriate revisions to the RLI definition, WFFA anticipates it will be brought back to the Board for review and adoption, based on Policy's recommendation.

Our goal in advancing this PI is to clear up this long outstanding issue and provide additional context and information for our February 2015 Westside Alternate Plan Template proposal that responds to this legislative intent by proposing alternate harvest restrictions for riparian management zones (RMZs) along typed waters within the AMP process. The lack of a clear definition of "relatively low impact" has hindered discussions on the Westside Alternate Plan Template, and this RLI consensus document can be expected to help inform that discussion. Moreover, we are hopeful that the pending process will serve as a testament to the cooperative spirit that led our predecessors to include adaptive management as part of the original TFW and FFR agreements.

We look forward to bringing forth a AMP approved consensus document that defines Relatively Low Impact as required by WAC 222-12-0403 in the near future.

Sincerely,



Elaine Oneil, PhD
Executive Director
Washington Farm Forestry Association

Encl: Attachment 1: Proposal Initiation Document

Attachment 1: Proposal Initiation Document, Washington Farm Forestry Association Request to the Forest Practices Board, August 11, 2021.

The Washington Farm Forestry Association (WFFA) requests the Forest Practice Board incorporate into Board Manual Section 21 – Guidelines for Alternate Plans the following 100% consensus recommendation from the Small Forest Landowner Advisory Committee (SFLOAC) as approved at their July 21, 2020, meeting. **The full and exact text of the SFLOAC consensus document in available in Appendix 1**. In summary,

> *The Small Forest Landowner Office Advisory Committee (SFLOAC) defined three potential criteria that can be used to define "relatively low impact" alternate plan to the Small Forest Landowner Office as required by WAC 222-12 0403 (5).*
>
> *1) An activity with a short-term impact which produces a better long-term outcome.*
> *2) An activity beyond the point of diminishing returns for resource protection.*
> *3) Smaller harvest units with stream reaches that are relatively smaller in width or shorter in length than typical larger landowner harvests.*
>
> The SFLOAC further reached 100% consensus on the following statement: *"The ongoing engagement of working forest landowners is critical for achieving resource protection objectives. When faced with the disproportionate economic impact of regulations, the risk of land conversion or disengagement by landowners increases, leading to greater and longer lasting impacts than ongoing forest management."*

This Proposal Initiation (PI) for adopting the consensus definition of Relatively Low Impact (RLI) submits the following information consistent with WAC 222-12-045(2) (d) (i) and the Forest Practices Board Manual.

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 Committee 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.

The Small Forest Landowner Advisory Committee (SFLOAC) was established in RCW 76.13.110 to assist the Small Forest Landowner Office in developing policy and recommending rules to the Forest Practices Board. The Small Forest Landowner Office has not been able to complete this PI so the Washington Farm Forestry Association is bringing it to you to assist the Department. While this proposal is not coming direct from DNR, we acknowledge and thank the SFL Office Administrator whose original draft language has largely been retained. While DNR is not a member of the SFLOAC, the SFO Administrator and DNR staff were present and helpful in crafting this recommended language in a process that started at the July 2018 meeting. The Advisory Committee consists of seven members, including a representative from the Department of Ecology, the Department of Fish and Wildlife, and a Tribal representative. Four additional committee members are small forestland owners who are appointed by the Commissioner of

Public Lands from a list of candidates submitted by the Board of Directors of the Washington Farm Forestry Association or its successor organization.

1. The affected forest practices rule, guidance, or DNR product.
As stated in WAC 222-12-0402, "*The small forest landowner office was established within the department to be a resource and focal point for small forest landowner concerns and policies. The legislature recognized that the further reduction in harvestable timber owned by small forest landowners would further erode small forest landowners' economic viability and willingness or ability to keep the lands in forestry use, and, therefore, reduced the amount of habitat available for salmon recovery and conservation of other aquatic resources. The legislature directed that office to assist small forest landowners in preparing alternate plans appropriate to small forest landowners. See RCW 76.13.100 and 76.13.110(3).*"

WAC 222-12-0403 states that "The Dept. of Natural Resources will develop the section for alternate plans (WAC 222-12-090(21)" (Forest Practices Board Manual Section 21: Guidelines For Alternate Plans) "to submit to the board in cooperation with representatives of the small forest landowner office and advisory committee, the departments of ecology and fish and wildlife, United States Fish and Wildlife Service, NOAA Fisheries, and affected Indian tribes.
The manual should include:

> *(1) As required by RCW 76.13.110(3), the small forest landowner office recommendations for alternate plans or alternate harvest restrictions that meet riparian functions while generally requiring less costly regulatory prescriptions;*
> *(2) The effectiveness of strategies for meeting resource objectives and protecting public resources;*
> *(3) Template prescriptions designed to meet resource objectives to address common situations that are repeatedly addressed in alternate plans or strategies to simplify the development of future plans or strategies, including low impact situations and site-specific physical features;*
> *(4) Appropriate recognition or credit for improving the condition of public resources; and*
> ***(5) Criteria to assist the department in determining whether a small forest landowner alternate plan qualifies as a low impact alternate plan."***

The Small Forest Landowner Advisory Committee recommendation specifically addresses WAC 222-12-0403 (5) listed above by developing specific criteria to assist the Department of Natural Resources in determining whether a small forest landowner alternate plan qualifies as a low impact alternate plan. As a reminder, a "template" is a form of an alternate plan that is available only to Small Forest Land Owners (SFLOs).

2. The urgency based on scientific uncertainty and resource risk.
In 2003 the Forest Practice Board approved WAC 222-12-0403(5) that required DNR to cooperatively develop "guidelines for alternate plans" that include these criteria. All Forests and Fish stakeholders have struggled over the ensuing years to implement the regulatory deference intended by RCW 76.13.100 (2) in part because of these missing criteria. This consensus recommendation will not eliminate all uncertainty or resource risk but will help all stakeholders better fulfill their Legislative mandates to protect both resources and the SFLO community that provides those resource protections. WFFA believes formally adopting these consensus criteria **<u>may</u>** help other Forests and Fish stakeholders struggling with the WFFA Low Impact Template Proposal you accepted for their review in February 2015.

The Adaptive Management Program is in the middle of a lot of stress, pulling at the fabric of the TFW Spirit. Collectively we need a win sooner than later – a consensus recommendation from multiple stakeholders may be the "easy win" that will help spark consensus on much tougher issues.

The ongoing engagement of working forest landowners is critical for achieving resource protection objectives. When faced with the disproportionate economic impact of regulations, the risk of land conversion or disengagement by landowners increases, leading to greater and longer lasting impacts than ongoing forest management. The proposed criteria to determine whether a small forest landowner alternate plan (or template proposal) qualifies as a low impact alternate plan seeks to help address these disincentives for keeping forestland forested by reducing regulatory complexity and cost to small forest landowners, while still protecting resources at least equal in overall effectiveness as the standard rules and act.

The approval standard for alternate plans tries to provide guidance to all stakeholders attempting to balance the uncertainty, resource risk, **and** the legislative obligations to SFLOs disproportionately impacted. WAC 222-12-0401 (6) states: "*Approval Standard. An alternate plan must provide protection for public resources at least equal in overall effectiveness to the protection provided in the act and rules". Please note "the act" in this WAC. The RCW regulatory deference to SFLOs is necessarily included in this Board Manual guidance to encourage alternate plan reviewers to attempt to balance all RCW considerations along with resource risks.*

3. Any outstanding TFW, FFR, or Policy Committee agreements supporting the proposal.
The Legislature recognized the value of alternate plans (particularly "templates") to small forest landowners in the Forest Practices Rules. Low impact alternate plans provide even greater value to small forest landowners for situations warranting greater management flexibility where resource protection can still be met with no, or "relatively low impact on aquatic resources". These consensus recommendations for relatively low impact criteria still do not provide exact metrics for alternate plan/template approval but do serve to remind reviewers and the Adaptive Management Program of the RCW regulatory mitigation (only for SFLOs) that must additionally be considered when looking at ". . .*alternate harvest restrictions on smaller harvest units . . .*" (RCW 76.13.100 (2))

Additionally, RCW 76.09.368 states: "The legislature intends that small forest landowners have access to alternate plan processes or alternate harvest restrictions, or both if necessary, that meet the public resource protection standard set forth in RCW 76.09.370(3), but which also lowers the overall cost of regulation to small forestland owners including, but not limited to, timber value forgone, layout costs, and operating costs. The forest practices board shall consult with the Small Forest Landowner Advisory Committee in developing these alternate approaches."

According to RCW 19.85.030 requirements for the Small Business Economic Impact Statement (SBEIS) that was completed when the Forests and Fish Agreement was adopted by rule, there are identified methods that: "*The agency must consider, without limitation . . . methods for reducing the impact of the proposed rule on small businesses*." These methods include:
"a) *Reducing, modifying, or eliminating substantive regulatory requirement:"*

The proposed criteria to determine whether a small forest landowner alternate plan qualifies as a low impact alternate plan will help to modify the substantive regulatory requirements outlined in the Forest Practices Rules, thus reducing the economic impact on small forest landowners.

4. How the results of the proposal could address Adaptive Management Program key questions and resource objectives or other rule, guidance, or DNR product.

At a minimum this consensus recommendation responds to WAC 222-12 0403 (5) by fulfilling the 2003 Forest Practice Board mandate to define criteria. Consistent with RCW 76.13.110(3) and WAC 222-12-0403(1), the recommended criteria will help alternate plan/template reviewers identify "alternate harvest restrictions that meet riparian functions while generally requiring less costly regulatory prescription.". All existing Alternate Plan approval processes (WAC 222-12- 0401) would remain in effect.

The Section 21 Guidelines for Alternate Plans (below, in part) are available to all forestland owners. The 1st eligibility bullet below for all landowners references site specific **disproportionate impact** situations for all landowners, whereas the disproportionate impacts on SFLOs (generally) referenced above (RCW 19.85.030) require additional mitigations (*"Reducing, modifying, or eliminating substantive regulatory requirement") - hence the need to further define the criteria for "relatively low impact" (RCW 76.13.100) for SFLOs as required by WAC 222-12-0403(5).*

Section 21
Guidelines for Alternate Plans

This section provides guidelines for developing and analyzing alternate plans for activities that vary from specific forest practices rules. Alternate plans may be useful in a variety of situations. Examples could be:

- Where the cumulative impact of rules disproportionately affects a landowner's income production capability.
- Where a landowner's minor on-the-ground modifications could result in significant operational efficiencies.
- Where site conditions have created an economically inaccessible management unit when using the forest practices rules.
- Where local landforms lend themselves to alternate forest management practices.
- Where a landowner proposes methods to facilitate landscape, riparian or stream restoration.

Relatively low impact criteria 1) *An activity with a short-term impact which produces a better long-term outcome* was developed in response to the Section 21 Guidelines for Alternate Plans bullet "Where a landowner proposes methods to facilitate landscape, riparian or stream restoration" as noted above. More detail is provided in the proposed criteria full text (Appendix 1)

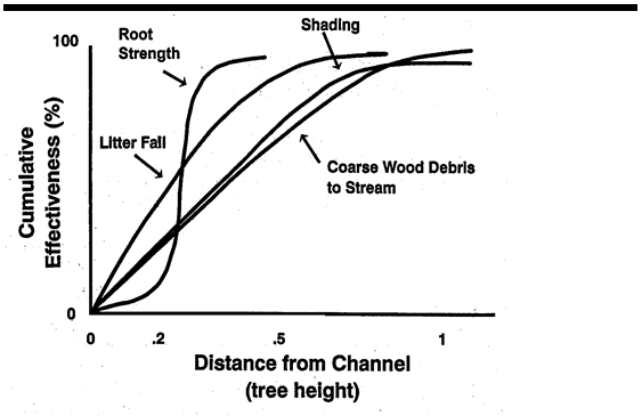
Relatively low impact criteria 2) *An activity beyond the point of diminishing returns for resource protection* was developed in response to the Section 21 Guidelines for Alternate Plans bullet "Where the cumulative impact of rules disproportionately affects a landowner's income production capability" as noted above. This consensus recommendation from the SFLO Advisory Committee recognizes the complexity of multiple riparian functionality science relationships between buffer width and cumulative riparian benefit. More detail is provided in the proposed criteria full text (Appendix 1), and in Question #5 below.

Relatively low impact criteria *3) Smaller harvest units with stream reaches that are relatively smaller in width or shorter in length than typical larger landowner harvests* in this consensus recommendation from the SFLO Advisory Committee recognizes what the legislature also recognized: the smallness of treatment areas (by SFLOs only) is a meaningful resource risk criterion. This 3rd criterion bullet also includes RCW reference for context. More detail is provided in the proposed criteria full text (Appendix 1).

5. Available literature, data and other information supporting the proposal.
As this proposal states, "relatively low impact is the marginal impact/benefit to riparian function/resources generally found beyond the "point of diminishing returns". Applied to RMZs, for the purpose of protecting riparian functions, the relationship between cumulative effectiveness of each riparian function and the distance from the stream channel determines that point of diminishing returns related to protection of riparian function and economic impact to the landowner.

Although there are "areas of influence" defined in Section 21 - Alternate Plan Guidance for most functions the SFLO Advisory Committee's recommendation for "relatively low impact criteria" settled on a more general statement that allows for evolving science and site-specific interpretation by the practitioners/reviewers with the following additional language: Using the FEMAT curve below as an example, the inflection point in determining a relatively low impact occurs where small additional benefit is achieved only with exponentially greater cost per unit of effectiveness (buffer width). Harvesting or other forest management activities outside the RMZ effectiveness inflection point can therefore be classified as relatively low impact.

Figure 4.8 Relationship between cumulative effectiveness of various riparian functions and distance from the stream channel. Distance from channel is expressed as a proportion of tree height. From FEMAT (1993).



Appendix I

Full and exact Small Forest Landowner Advisory Committee consensus language on the definition of "Relatively Low Impact" as approved at the July 2020 meeting is as follows. Caucuses agreeing to this language were: Department of Ecology, Washington Department of Fish and Wildlife, Tribes, Small Forest Landowners.

Small Forest Landowner Office Advisory Committee Recommends the following criteria for defining the term "relatively low impact" to the Small Forest Landowner Office as required by WAC 222-12 0403 (5):

1) An activity with a short-term impact which produces a better long-term outcome.

A "relatively low impact" harvest or forest management activity within a restricted harvest zone (for example, a Riparian Management Zone (RMZ)), is an activity that may temporarily impact aquatic functions/resources, but will expedite the attainment of Desired Future Condition (DFC).

2) An activity beyond the point of diminishing returns for resource protection.

Additionally, "relatively low impact" is the marginal impact/benefit to riparian function/resources generally found beyond the "point of diminishing returns." Applied to RMZs, for the purpose of protecting riparian functions, the relationship between cumulative effectiveness of each riparian function and the distance from the stream channel determines that point of diminishing returns related to protection of riparian function and economic impact to the landowner. Using the FEMAT curve as an example, the inflection point occurs where small additional benefit is achieved only with exponentially greater cost per unit of effectiveness (buffer width). Harvesting or other forest management activities outside the RMZ effectiveness inflection point can therefore be classified as relatively low impact.

3) Smaller harvest units with stream reaches that are relatively smaller in width or shorter in length than typical larger landowner harvests.

RCW 76.13.100(2) partially states: …."The legislature further finds that small forest landowners should have the option of alternate management plans or alternate harvest restrictions on smaller harvest units that may have a relatively low impact on aquatic resources…."

Add to cover letter:
The ongoing engagement of working forest landowners is critical for achieving resource protection objectives. When faced with the disproportionate economic impact of regulations, the risk of land conversion or disengagement by landowners increases, leading to greater and longer lasting impacts than ongoing forest management.

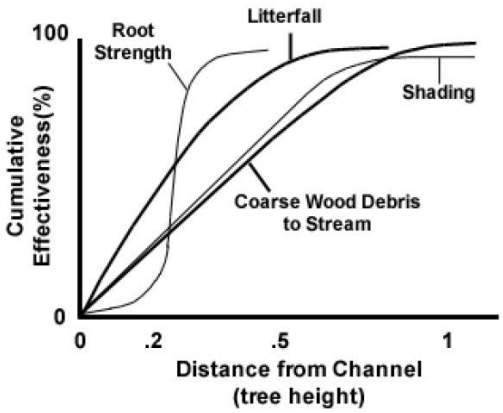


Figure 2. Cumulative effectiveness of various riparian functions.
From Forest Ecosystem Management Assessment Team (FEMAT), (1993).
Forest ecosystem management: an ecological, economic, and social assessment.
Washington DC: US Government Printing Office 1993-793-071.

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISIONER OF PUBLIC LANDS
1111 WASHINGTON STREET SE
OLYMPIA WA 98504

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MEMORANDUM

October 27, 2022

TO: Forest Practices Board

FROM: Marc Engel, Senior Policy Planner, Forest Regulation Division
MarcEngel@dnr.wa.gov / 360 628-1107

SUBJECT: Water Typing System Rulemaking

The Board, at the August meeting discussed the anadromous fish floor (AFF) alternatives and discussed next steps for the permanent water typing system rule making.

The Board took action, by motion, to accept AFF alternatives A4 (7 percent) and D for inclusion and analysis in the draft statewide permanent water typing system rule, and for the Board Chair to direct DNR staff to prepare a CR 102 rulemaking packet for the rule. They also directed staff to not conduct the potential habitat break (PHB) and AFF spatial analysis for the water typing system rule until after the November 2022 Forest Practices Board meeting.

The Board then began a discussion about the remaining water typing system rule elements needed for staff to prepare the information packet needed to begin formal rulemaking (through the filing of a Rule Proposal (CR-102)) for the statewide permanent water typing system rule. At the August meeting, the Board confirmed that the permanent water typing system rule, including an anadromous fish floor, will apply to eastern Washington; and requested staff to prepare a Proposal Initiation to develop an Anadromous Fish Floor validation study through the Adaptive Management Program.

The Board also agreed to discuss at the November board meeting items identified as the remaining unfinished rule elements that need Board resolution. Staff will present background on those elements at the November meeting. They include: clarifying the goals and targets for the water typing system rule; confirming the goals and targets of an AFF; and, determining if a map-based modeled water typing system is one of the goals of the permanent water typing system rule.

DEPARTMENT OF NATURAL RESOURCES

Forest Practices Division
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Olympia, WA 98504

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October 27, 2022

TO: Forest Practices Board

FROM: Marc Engel, Senior Policy Planner, Forest Regulation

SUBJECT: 2022 Work Plan

Attached for consideration at your November 10 meeting, are staff recommended priorities for your 2023 Work Plan.

The Forest Practices Board meeting dates for calendar year 2023 are February 8, May 10, August 9, and November 8, which occur on the 2nd Wednesday of those months. Staff will notify the Office of the Code Reviser of the dates for publication in the Washington State Register.

Also attached for your review is the 2022 work plan accomplishments.

Please feel free to contact me at marc.engel@dnr.wa.gov if you have any questions.

ME/

FOREST PRACTICES BOARD
2023 DRAFT WORK PLAN

2023 Meeting Dates: February 8 / May 10 / August 9 / November 8

TASK	STATUS	COMPLETION DATE (CY 2023 unless noted)
Adaptive Management Program		
· CMER Master Project Schedule*		May
· AMPA will work with the Policy and CMER co-chairs to collaborate and provide recommendations for implementing trigger for dispute resolution	On-going	TBD
· TFW Policy Recommendations to address SAO recommendations: o provide options on ways that decision criteria could be made part of the AMP process (SAO recommendation #6).		TBD
· Westside Type F Riparian Prescription Monitoring Pilot Project		
· Small Forest Landowner Experimental Harvest Prescription*		TBD
· Water Typing Study	On-going	TBD
Annual Reports		
· WAC 222-08-160 Continuing review of FP rules (Annual Evaluations), *by tradition the Board has received an annual evaluation of the implementation of cultural resources protections*		TBD
· Northern Spotted Owl Conservation Advisory Group		November
· TFW Policy Committee Priorities*		August
· Western Gray Squirrel		August
Board Manual Development		
· Section 15 Marbled Murrelet Nesting Platforms		
· Section 21 Guidelines for Small Forest Landowner Alternate Plans		
· Section 22 Adaptive Management Program		
· Section 23 (Part 1) Field Protocol to Locate Mapped Divisions Between Stream Types*	On-going	
CMER Membership		As needed
Critical Habitat - State/federal species listings and critical habitat designations		As needed
Rule Making		
· Water Typing System	On-going	**TBD**
· Marbled Murrelet	CR 101 - February	November
· Np Buffer		**TBD**
NSO Recommendations	Ongoing	
Quarterly Reports		
· Adaptive Management Program*		Each regular meeting

Italics = proposed changes *November 2022*
**= TFW Policy Committee*

FOREST PRACTICES BOARD
2023 DRAFT WORK PLAN

TASK	STATUS	COMPLETION DATE (CY 2023 unless noted)
· Board Manual Development		*As needed*
· Clean Water Act Assurances		May
· Compliance Monitoring		*As needed*
· Legislative Activity		February & May
· NSO Implementation Team		*As needed*
· Rule Making Activities		*As needed*
· Small Forest Landowner Advisory Committee & Office		Each regular meeting
· TFW Cultural Resources Roundtable		To be determined
· TFW Policy Committee Work Plan Accomplishments & Priorities*		Each regular meeting
· Upland Wildlife Working Group		Each regular meeting
· **Work Planning for 2024**		November

Italics = proposed changes *November 2022*
**= TFW Policy Committee*

FOREST PRACTICES BOARD
2022 WORK PLAN

2022 Meeting Dates: February 9 / May 11 / August 10 / November 9 & 10

TASK	STATUS	COMPLETION DATE (CY 2022 unless noted)
Adaptive Management Program		
· CMER Master Project Schedule*	**COMPLETED**	May and August
· Small Forest Landowner Western Washington Low Impact Template TFW Policy Recommendations***** **and Relatively Low Buffer Width** o Workshop & Field Tour (early 2023)	November 10 November 10	November November 10
· AMPA will work with the Policy and CMER co-chairs to collaborate and provide recommendations for implementing trigger for dispute resolution	On-going	TBD
TFW Policy Recommendations to: · address transitioning to a net gains approach (SAO recommendation #5) · provide options on ways that decision criteria could be made part of the AMP process (SAO recommendation #6).	 November 9 In progress	 November November
· Westside Type F Riparian Prescription Monitoring Pilot Project		November
· Type N Experimental Buffer Treatment in Hard Rock Lithology Phase II and Addendum	**COMPLETED**	August
· Type Np Water Riparian Management Zone Buffer Width Recommendations*	November 9	October and November
· Water Typing Study	On-going	TBD
· Type N Experimental Buffer Treatment in Soft Rock Lithology	**COMPLETED**	August
Annual Reports		
· WAC 222-08-160 Continuing review of FP rules (Annual Evaluations), *by tradition the Board has received an annual evaluation of the implementation of cultural resources protections*		TBD
· Northern Spotted Owl Conservation Advisory Group	**On-going**	November
· TFW Policy Committee Priorities*	**COMPLETED**	August
· Western Gray Squirrel	**COMPLETED**	August
· Taylor's Checkerspot Butterfly (2020 and 2021)	**COMPLETED**	August
Board Manual Development		
· Section 12 Application of Forest Chemicals	**COMPLETED**	February
· Section 22 Adaptive Management Program o Part 5.4 Update language to require dispute resolution when consensus cannot be achieved o Create an on-boarding or training process for new members	**COMPLETED**	February

Italics = proposed changes *November 2022*
**= TFW Policy Committee*

FOREST PRACTICES BOARD
2022 WORK PLAN

TASK	STATUS	COMPLETION DATE (CY 2022 unless noted)
· Section 23 (Part 1) Field Protocol to Locate Mapped Divisions Between Stream Types*	On-going	
· Board Manual Section 21 & 22	2023	
· Section 15 Marbled Murrelet	2023	
CMER Membership		As needed
Compliance Monitoring 2020 Annual Report	**COMPLETED**	August
Critical Habitat - State/federal species listings and critical habitat designations		As needed
Field Tour	**COMPLETED**	October
Legislative Reports		
· Legislative Report on Progress Addressing Board Projects, including Recommendations made by the State Auditor's Office Report on the Adaptive Management Program		November (Due December 1st)
· Legislative Report on Rule Making Progress for Water Typing and Type N		Due June 30
· Legislative Report from Small Forest Landowner Work Group on Recommendations for incentives and payment structures to support small forest landowners entering carbon credit market		Due December 1
Rule Making		
· Water Typing System	On-going	November
· Type Np Buffer o Workshop & field tour	**COMPLETED**	October 31 & November 1
· Marbled Murrelet	**Moved to February 2023**	2023
Committee Recommendations on Water Typing System Rule · Committee Workshop (material out by 5/31)	**COMPLETED**	June 27
NSO Recommendations	Ongoing	
Quarterly Reports		
· Adaptive Management Program*		Each regular meeting
· Board Manual Development		*As needed*
· Clean Water Act Assurances		May
· Compliance Monitoring		*As needed*
· Legislative Activity		February & May
· NSO Implementation Team		*As needed*
· Rule Making Activities		*As needed*
· Small Forest Landowner Advisory Committee & Office		Each regular meeting
· TFW Cultural Resources Roundtable		To be determined

Italics = proposed changes *November 2022*
**= TFW Policy Committee*

FOREST PRACTICES BOARD
2022 WORK PLAN

TASK	STATUS	COMPLETION DATE (CY 2022 unless noted)
· TFW Policy Committee Work Plan Accomplishments & Priorities*		Each regular meeting
· Upland Wildlife Working Group		Each regular meeting
· **Work Planning for 2023**		November