WASHINGTON STATE DEPARTMENT OF
Natural Resources

PETER GOLDMARK
Washington State Commissioner of Public Lands

MEMORANDUM

TO: Forest Practices Board

FROM: Jim Hotvedt, Adaptive Management Program Administrator

DATE: January 27, 2014

SUBJECT: Type F/Np dispute resolution

Water typing was a key component of the 1999 Forests & Fish Report (FFR) and the subsequent 2005 Forest Practices Habitat Conservation Plan (FPHCP). The TFW Policy Committee (Policy Committee) has been considering the question of a permanent system for identifying the break-point between Type F and Type Np waters off-and-on for several years.

The Policy Committee co-chairs submitted a memorandum to the Forest Practices Board (Board) in November 2011 stating that a wide range of priority issues had been raised by Policy Committee representatives, in particular, development of a comprehensive Type N water strategy to meet Clean Water Act Assurances and the need to address specific concerns about water typing and implementation of a permanent water typing rule. They indicated that at least three items on the Policy Committee work list were, by definition, related to water typing, including how to identify the Type F/Np water break and the interplay between permanent and interim rule language for Type F streams. At its November 8, 2011 meeting, the Board passed a motion directing the Policy Committee to make completion of Clean Water Act Assurances milestones the top priority for their 2012 work plan, with water typing as the next highest priority. Policy completed a charter on December 19, 2011 for establishing a Type N water typing strategy to satisfy the related Clean Water Act assurances milestone. Through the charter, the Policy Committee agreed that "While work on priority one and two may occur concurrently, work on the permanent water typing rules strategy cannot delay completing work on the Type N Water strategy."

The Type F/Np water break is recognized as a priority issue for resolution within the Policy Committee. At its December 1, 2011 monthly meeting, the Policy Committee formed a Type F/Np Policy Committee subgroup (many members who also served on the Type N water typing strategy subgroup) to develop recommendations for determining the Type F/Np break. As directed by the Board, the Policy Committee prioritized its efforts on developing the Type N water strategy during 2012, approving the final strategy document at its March 7, 2013 monthly meeting. The Type F/Np subgroup concurrently worked on Type F/Np water typing issues during 2012 as time allowed.

Dispute Resolution

At the January 3, 2013 Policy Committee meeting, the Conservation Caucus invoked dispute resolution (Stage 1) under WAC 222-12-045 Adaptive management program and Board

Manual Section 22 Guidelines for Adaptive Management Program with regard to core issues before the Type F/Np Policy Committee subgroup.

At its February 7, 2013 policy meeting, the Policy Committee agreed that resolution of the dispute would be a completed charter containing objectives and tasks by July 11, 2013, the 6-month dispute resolution timeline (January 3-July 11, 2013). Progress was being made on the Type F/Np draft charter from the Stage 1 efforts, most notably by agreeing to structure its discussion according to four main issues of concern: 1) off-channel habitat likely to be used by fish; 2) electrofishing, protocol surveys, and physical default criteria; 3) use of a model to produce fish habitat water type maps, and 4) rule and guidance implementation. Issues not contained within those categories which became sticking points early on in the process were "shared risk" and "fish habitat."

Not having reached agreement on a charter by its July 11, 2013 monthly meeting, the Policy Committee agreed to extend Stage 1 dispute resolution. However, because a charter was not completed by the September 5, 2013 policy committee monthly meeting, the Conservation Caucus chose to invoke Stage 2 dispute resolution. At the same meeting, the Policy Committee agreed to mediation rather than formal arbitration as a means of settling the dispute. Under the Stage 2 dispute resolution process, the Policy Committee had three months to agree on a charter (to December 5, 2013). Since the Policy Committee failed to agree on a charter through the mediated process, the next step in the dispute resolution process was for the Policy Committee to agree to extend the mediation process or to forward the dispute to the Forest Practices Board for "final determination regarding dispute resolution" (WAC 222-12-045 (2)(h)(ii)(D)). (See also Board Manual 22 Part 5. Dispute Resolution). At their December 5, 2013 meeting, five caucuses voted to extend Stage 2 believing that progress was being made, while four caucuses did not. The latter favored forwarding the issue to the Board for resolution.

Background

In the mid-1990s, three issues emerged that led to the adoption of emergency forest practices rules, and ultimately permanent rules, for addressing water quality issues, water typing inconsistencies, and threatened and endangered salmonids. These issues were a growing number of streams not meeting water quality standards as defined by the Federal Clean Water Act, accuracy of water type base maps used to establish fish presence—and absence—for purposes of implementing appropriate forest practices protection measures, and the pending listing of several species of salmonids in Washington as threatened or endangered under the Endangered Species Act. Resolution of these issues resulted in water typing becoming a key component of the riparian strategy in the 1999 FFR and the subsequent 2005 FPHCP.

The 2005 FPHCP riparian strategy supports the overall performance goals established in the 1999 FFR, in Schedule L-1, and later adopted in rule (WAC 222-12-045(2)(a)), which states that forest practices – either singularly or cumulatively – are intended to be conducted in a manner that will not significantly impair the capacity of aquatic habitat to support harvestable levels of salmonids, support the long-term viability of other covered species, and meet or exceed water quality standards (including protection of designated uses, narrative and numeric criteria and antidegradation).

The conservation objective of the FPHCP riparian strategy is to restore riparian function to high levels on lands covered by the FPHCP and to maintain those levels once they are attained (WAC 222-30-010(2), 1999 FFR, and Schedule L-1). The riparian strategy includes two separate systems for classifying aquatic habitats. The first is a "water typing" system that classifies surface waters, including rivers, streams, lakes, ponds, impoundments and tidal waters.

At the February 2005 Forest Practices Board meeting, the Board agreed to continue to follow the provisions of the original interim water typing rule (WAC 222-16-031) while using new water type maps based on the permanent water typing system. The permanent water typing system (WAC 222-16-030) has four classes:

- Type S includes "shorelines of the state,"
- Type F includes "fish habitat" waters,
- Type Np includes "non-fish, perennial" waters, and
- Type Ns includes "non-fish, seasonal" waters.

These four classes are related to the five classes of the interim water typing system (WAC 222-16-031) in that Type S waters closely coincide with Type 1 waters, the Type F class includes both Type 2 and Type 3 waters, and Type Np and Type Ns waters are the same as Type 4 and Type 5 waters, respectively.

The FPHCP riparian strategy recognizes that certain ecological functions – such as stream bank stability, large woody debris recruitment, shade, sediment filtration, and litter fall and other nutrients – are important for creating, restoring and maintaining aquatic and riparian habitats. The riparian strategy protects these and other functions along typed waters by restricting forest practices activities from the most sensitive parts of riparian areas and by limiting activities in other areas. The water typing system determines what buffer configuration is applied under the rules, which in turn, relates to the extent of fish habitat that is supported by the overall riparian strategy.

According to the FFR, fish habitat to be incorporated within Type F water designation would be determined by a GIS model:

> "As used herein "fish habitat" means habitat which is used by fish at any life stage at any time of the year including potential habitat likely to be used by fish which could be recovered by restoration or management and includes off-channel habitat. Fish habitat will be established based upon a multi-parameter, field-verified, peer-reviewed GIS logistic regression model using geomorphic parameters such as basin size, gradient, elevation and other indicators." (1999 FFR, page 14).

The performance target of the model was to have a high level of statistical accuracy and to equally allocate error for over- and under-prediction of fish habitat:

> "...the risks between resource protection and timber harvest as determined by a model with a statistical accuracy of +/- 5% will be revised so that the line demarcating fish and non-fish habitat waters will be drawn so as to be equally likely to be over and under inclusive" (FFR, page 14).

Upon adoption of the model-generated statewide water type maps, the FFR anticipated that:

> "...electrofishing to prove the presence or absence of fish will no longer affect stream type determination from an operational standpoint." (FFR, page 14).

The FPHCP assumed shared risk regardless of the method used for identifying fish-bearing waters:

> "Failure to correctly identify fish-bearing waters will occur and is assumed to lessen over time. It is assumed that any methods used to map or delineate such waters will have an approximately equal probability of identifying waters as fish-bearing where fish do not actually occur or the reverse, identifying waters as non-fish-bearing where fish actually do occur. It is further assumed that such errors will be relatively small and largely offset at the landscape scale. This assumption is based upon the fact that this concept of equal error probabilities was inherent to the FPHCP" (NMFS biological opinion, page 180).

In 2001, the Board defined "fish habitat" as:

> "habitat, which is used by fish at any life stage at any time of the year including potential habitat likely to be used by fish, which could be recovered by restoration or management and includes off-channel habitat" (WAC 222-16-030).

In addition, the Board declared that:

> "Until the fish habitat water type maps described below are adopted by the board, the Interim Water Typing System established in WAC 222-16-031 will continue to be used. The department in cooperation with the departments of fish and wildlife, and ecology, and in consultation with affected Indian tribes will classify streams, lakes and ponds. The department will prepare water type maps showing the location of Type S, F, and N (Np and Ns) Waters within the forested areas of the state. The maps will be based on a multiparameter, field-verified geographic information system (GIS) logistic regression model. The multiparameter model will be designed to identify fish habitat by using geomorphic parameters such as basin size, gradient, elevation and other indicators. The modeling process shall be designed to achieve a level of statistical accuracy of 95% in separating fish habitat streams and nonfish habitat streams. Furthermore, the demarcation of fish and nonfish habitat

> waters shall be equally likely to over and under estimate the presence of fish habitat." (WAC 222-16-030).

The final model did not achieve the target level of accuracy. As a result, in February 2005, the Forest Practices Board chose not to adopt the model-generated water type maps and retained the current process for delineating Type F waters by taking no formal rule action. The Board's two sets of February 2005 meeting minutes indicated that DNR should, for a limited duration, implement a hybrid option which allowed DNR to update the Water Type Base and Activity Maps, and incorporate the new S, F, and N symbology. The "hybrid option" also included establishing fish habitat criteria, identifying fish habitat features, and revising Board Manual Section 13, along with training.

To date, stakeholders have not been successful in establishing fish habitat criteria, identifying fish habitat features, or revising Board Manual Section 13. Lacking adoption of the model maps, the current rule for delineating Type F water relies on using physical characteristics, or following a protocol survey methodology, or requesting ID Teams (WAC 222-16-031).

Issues under Dispute

As you can see from the attached recommendations from TFW Policy Committee caucuses, a number of issues have been addressed in Policy Committee discussions over the last couple of years. In no particular order, these include:

- Identification and protection of off-channel habitat likely to be used by fish,
- Protection of stream associated wetlands,
- Electrofishing for determination of fish use/presence,
- Accuracy of the current water typing system in delineating the Type F/Np break,
- Accuracy of physical default criteria in determining fish habitat,
- Down-grading streams that have been field surveyed and determined to have fish,
- Accuracy and use of a model to produce fish habitat water maps,
- Balance of errors and associated risks in establishing the Type F/Np water typing break (shared risk),
- Definition of fish habitat,
- Definition of defined channel and permanent natural barriers, and
- Rule and guidance implementation.

Policy Committee Recommendations

Attached you will find recommendations from TFW Policy Committee caucuses to the Board on how to resolve the dispute. These recommendations vary in scope, from the Board sending the task back to the Policy Committee to the Board itself resolving issues.

Attachments:

TO: Washington State Forest Practices Board

FROM: Ecology/Department of Fish & Wildlife Caucus
Department of Natural Resources Caucus
Industrial Landowners Caucus
Small Forest Landowners Caucus
Counties Caucus

SUBJECT: Joint Recommendation of Resolution of the Type F Charter

DATE: December 23, 2013

Background:

The Board asked Policy to prepare recommendations for implementation of the water typing system with an emphasis on completion of Type N water recommendations followed by recommendations for Type F waters. Policy formed subcommittees for both of these issue areas. The Type F subcommittee worked through calendar year 2012 focusing on implementation issues and largely avoiding substantive Policy concerns. In January 2013, the Conservation Caucus invoked stage 1 of dispute. In an attempt to expedite the Charter development timeline, Policy agreed to resolve the dispute by broadening the type F discussion and putting specific action items into a Charter. The process of developing a Charter flushed out some specific areas of concern to many different caucuses that are broadly captured as: off-channel habitat; current practice of identifying the F/N break (electrofishing, protocol surveys, and physical default criteria), use of a model to produce fish habitat water type maps, and rule and guidance implementation.

Despite progress in outlining the details of these issues in a Charter, there remained some overarching concerns with respect to two fundamental concepts related to shared risk and fish habitat. Some caucuses strongly believed that until there was a common understanding of these fundamental concepts, further progress on the tasks identified in the charter would be difficult. In July 2013, the Conservation Caucus exercised their right to invoke stage two of dispute resolution, and Policy agreed to focus on resolving these fundamental concepts in a mediated process. Mediation, while helpful in creating some specific examples about how these concepts could be addressed within the context of some of the issue areas identified in the charter, did not fully satisfy all caucuses. At the end of mediation, Policy could not agree on how to move forward in the dispute resolution process. As a result, the issue of Type F water typing, as a whole, is before the Forest Practice Board.

Policy has made slow, but steady progress on developing a common understanding of shared risk and the definition of habitat and on creating a draft Charter with objectives and tasks related to the identified Type F topics. These are highly complex issues; many of which will require substantive policy discussion including requests for technical input, and potentially additional data and/or science. Resolution of the issues will affect ecological and economic resources. For the adaptive management process to work effectively, Policy must be given the time to perform a thorough analysis of options and to prepare and present thoughtful science based recommended solutions to the Board.

<u>Recommendation</u>:
The five caucus majority believes the Policy Committee must present recommendations to the Board containing clear options with associated implications to consider before changing rules or guidance. We believe the board should direct Policy to design a water typing system that meets Forests and Fish goals while minimizing and balancing error (shared risk). Policy should be tasked with completing the Charter to collaboratively resolve these long-standing issues. The Charter should outline specific objectives, tasks, timelines and identification of appropriate Policy or Technical sub-groups. The Policy Committee must address the following topic areas, accompanying questions are not exclusive but are provided to indicate the kinds of issues being considered under each topical area.

- Off-Channel Habitat
    - How do landowners and DNR currently identify and protect off-channel habitat based on current rules?
    - Are there gaps in the current identification and protection of off-channel habitat used by fish for essential life functions?
    - If so, how can off-channel habitat used by fish for essential life functions be clearly defined so that rules can be repeatable, implementable, and enforceable?
- Electrofishing, protocol surveys, and physical default criteria
    - In the absence of a model, how does the current system balance the errors and associated risks in establishing the Type F/N water typing break?
    - How accurate is the current system in delineating the F/N break?
    - If there is a need to more accurately delineate the F/N break, how can the current system be modified to more appropriately address fish habitat and shared risk?
- Use of a Model to produce fish habitat water type maps
    - Would an updated model (e.g. using LiDAR or other recent information) provide improved model performance acceptable for use (minimal and balanced error) in establishing a regulatory water type map that could be used in forest practices?
    - Could the current run of the model be used in areas where it works well?
- Rule & Guidance Implementation
    - Are rule changes necessary? If so, what are the ecological and economic impacts of the options?
    - Can additional rule and/or guidance make the system more effective?

The completed Charter should be presented to the Board at the May 2014 meeting.

In closing, **the five caucus majority respectfully request the Board direct the Policy Committee to continue their work on development of the Charter.** Policy should also be accountable for reporting progress on Charter implementation on a quarterly basis, after the May 2014 Board meeting.

Recommendations to the Washington Forest Practices Board at its February 12, 2014 Meeting for Further Direction to the Policy Committee on Next steps in Adoption of a Permanent Water Typing Rule

Proposed by the Conservation Caucus

December 23, 2013, revised 1/15/14

PROBLEM STATEMENT:

In 2005, the Forest Practices Board did not adopt as rule the FFR-proposed fish-habitat model (from which existing DNR hydro-layer maps are derived) to determine whether a water body is Type F (fish-bearing) or Type N (non fish-bearing). Instead, the Board decided to maintain reliance on the interim water-typing rule (WAC 222-16-031) that prescribes physical channel characteristics to presume fish use and a Type F designation and allows the routine use of "electrofishing" to establish presently unoccupied stream reaches as Type N. Additionally, since the Board did not adopt the Model as "rule", the Board directed Policy to define the break between Type F and Type N waters. Policy has not yet agreed to meet this goal.

The status quo interim water-typing rule, however, is not biologically adequate and the Board has a duty to adopt a permanent rule for various reasons, including: (1) on its face, the interim rule does not protect off-channel habitat; (2) the interim rule permits levels of "electrofishing" to exclude presently unoccupied fish habitat at levels that exceed the terms of the incidental take permit issued by USFWS and NOAA Fisheries; (3) the interim rule does not consider as present-day fish habitat that habitat which is likely to be occupied by fish outside the spring/summer electrofishing window; and (4) the interim rule does not consider as habitat stream reaches that are likely to be restored as habitat resulting from improved riparian conditions provided by the FP HCP Type F buffers.

Policy was unable to agree on a goal for a permanent stream typing rule and associated guidance within the timelines provided by the dispute resolution process. The Conservation Caucus believes that while Caucus stakeholders achieved a greater understanding of each other's respective positions on water typing, the slow rate of progress in finding "workarounds" for fundamental differences in perspectives between parties does not merit further investment of time and resources in dispute resolution without clarifying guidance from the Board. Notably, Policy failed to reach a "common understanding of the role of shared risk in the water typing system and of the fish habitat definition for delineating Type F waters" which it deemed necessary to successful development of a Type F Charter. The Policy Committee has now exhausted all options outlined in their dispute resolution process. Accordingly, the Conservation Caucus respectfully requests the Board's affirmative vote on the following five recommendations:

RECOMMENDATION 1:

> *The Board should direct Policy to develop a permanent water typing rule that identifies fish habitat which is used by fish at any life stage at any time of the year to meet the Stream Typing Resource Objective established by TFW and the HCP and promised by the originally-intended permanent water typing rule regardless of whether a model is adopted as rule, i.e., a permanent rule that meets the intent of WAC 222-16-030 to protect all in-channel and off-channel habitat likely to be used by fish.*

An affirmative vote in support of this Recommendation is required because, on its face, the interim rule does not protect physically connected "off-channel habitat" for smaller streams and rivers (Type 3 Waters) and does not provide the equivalent protection for habitat likely to be used by fish as does WAC 222-16-030, the permanent rule that was never adopted.[1] This recommendation is consistent with the Board's prior direction to Policy (2006) to define the break between Type F and Type N waters. Doing nothing is not an option. This is a policy decision grounded in the plain meaning of the FP HCP; no further empirical inquiry is required.

RECOMMENDATION 2:

> *The Board should direct Policy to develop a permanent water typing rule whose objective is to identify fish habitat accurately for the purpose of providing "Type F buffers" to fish habitat as defined in WAC 222-16-010 consistent with the concept of "shared risk."*[2]

The existing forest practice rules (WAC 222-16-010) define "fish habitat" as "habitat which is used by fish at any life stage at any time of the year including potential habitat likely to be used by fish, which could be recovered by restoration or management and includes off-channel habitat." The FP HCP also defines "fish habitat" in this manner. (See e.g., Schedule L-2). We are asking the Board to clarify that any water typing forest practice regulation, whether model-based or not, must achieve the level of protection set forth in WAC 222-16-010. Again, this is a policy decision grounded in the plain meaning of the FP HCP; no further empirical inquiry is required.

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[1] The interim rule (WAC 222-16-031) provides less protection than the permanent rule, WAC 222-16-030, in part because (a) habitat likely to be used by fish in winter may be systematically eliminated through "electrofishing;" (b) no provision is made for potentially-recoverable habitat; (c) habitat above man-made barriers is not protected.

[2] The concept of "shared risk," embraced by the FP HCP, is that no water typing system can be 100% accurate. In identifying whether fish are "likely" to use habitat, the identification of fish habitat may be over-inclusive in some places and under-inclusive in others. *See* "equal error probabilities" language in – NMFS-FWS Biological Opinion and Section 10 Statement of Findings on the Forest Practices HCP at p. 180 (June 5, 2006).

RECOMMENDATION 3:

> *The Board should direct Policy that it need not further define the meaning of "shared risk" beyond that contemplated by the FPHCP[3]. Policy should develop a permanent stream typing rule that strives to identify as fish-bearing all habitat which is likely to be used by fish with minimal risk of either over- or under- identifying fish habitat, and with approximately equal allocation of this minimal risk. The risk of over- or under-identifying fish habitat and its allocation need not be determined quantitatively for field-based stream typing methods that do not rely on a statistical model.*

The large and small landowners have resisted attempts to refine the identification of "fish habitat" for purposes of a permanent water typing rule in part because they believe that a site-by-site habitat identification process will over-estimate fish habitat. They evidently prefer a system, such as the Fish Habitat Model, which both over- and under-estimates habitat (although, not at 95% accuracy required under WAC 222-16-030) on the grounds that such a system better comports with the principle of "shared risk."

The Conservation Caucus subscribes to the concept of "shared risk" to the extent that any method that identifies physical fish habitat must consider the likelihood of fish occupancy and strive for criteria that are as accurate a proxy for actual fish use as possible. But we do not believe that the principle of "shared risk" prevents Policy from collaboratively working together to recommend a permanent stream typing system whose objective is to identify "fish habitat" as it is already defined in rule.

We believe Policy's ability to agree on permanent fish habitat identification criteria will be enhanced by Board direction that Policy must accept the current definition of "fish habitat" (Recommendation 2 above) as well as the concept of "shared risk" as it is contemplated by the FPHCP.

RECOMMENDATION 4:

> *Direct DNR and Policy to implement further limits or improvements on the use of electrofishing under the current and permanent water typing systems consistent with the recommendations of the U.S. Fish and Wildlife Service and NOAA Fisheries so that WAC 222-16-010 and 222-16-030 are fully implemented.*

The Federal Caucus, which issued the Incidental Take Permit, has announced its concerns that the current interim water-typing rule permits too much electrofishing. Electrofishing is known to have injurious effects on a large proportion of exposed fish and its application in the spring and summertime is systematically used to designated waters as non-fish bearing Type N waters that meet the physical characteristics of fish habitat in WAC 222-16-031, but which are likely overwintering habitats or habitats recovering from historical degradation. Other caucuses have similarly presented their concerns

[3]BO on FPHCP at 180.

about the scope of electrofishing. Key reasons for the change toward increased reliance on physical criteria (either current or modified) and use of non-lethal survey methods include:

1) The "take" of either listed or unlisted fish and other aquatic species caused by long-term, widespread use of electrofishing is not covered by the FP HCP;
2) Electrofishing surveys are not appropriate under certain site conditions (degraded habitat and above man-made blockages) and seasons;
3) Electrofishing reflects only spring/summertime fish presence;
4) Current in-channel physical criteria are a more defensible approximation of the extent of fish habitat than electrofishing and can be refined through research.

RECOMMENDATION 5:

Direct DNR staff, in consultation with WDFW, to revise the model-generated stream typing map using a highly detailed hydrography layer constructed from high-resolution LiDAR-derived digital elevation models within a limited geographical area (e.g. WAU – Watershed Administrative Unit) as a pilot study to examine feasibility and outcome of mapping improvements.

There is reason to believe that even if the model-maps are never adopted as a regulatory representation of stream types, that a LIDAR-based model run would provide a substantially better starting point for stream typing efforts as well as other benefits associated with a more accurate depiction of streams as they exist on the ground. This action also addresses FP HCP expectations that the model maps would be regularly updated/revised.

RECOMMENDATION 6:

Direct DNR, using its usual stakeholder involvement process, to promptly revise the Board Manual to provide clearer guidance for stream typing around barriers and disturbances.

Issues implicating the need for additional written field guidance have been clearly identified by several caucuses in a draft technical memorandum, but Policy has not come to agreement about how to address them. Board direction to address implementation issues identified by a majority of Policy caucuses through the development of Board Manual recommendations would break this gridlock. Although further guidance improvements may be necessary upon promulgation of a permanent rule, guidance improvements to enhance resource protection in the near term should proceed now.

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FINAL DRAFT -- December 19, 2013

Jim Hotvedt, Adaptive Management Program Administrator

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Olympia, WA 98504-7000

Subject: **TYPE F – Questions and Recommendations**

I. Questions

A. Should the Policy Committee develop a permanent water typing rule that applies F buffers to fish habitat as defined in WAC 222-16-010 and WAC 222-16-030?

B. Why continue to use WAC 222-16-030 "Type F" rule language for on the ground determinations yet not follow the definitions of "Type F" from WAC 222-16-030, and why implement WAC 222-16-031, but not use the type 1-5 water typing system?

C. Due to the confusion on the interpretation of WAC 222-16-031 and the resulting disagreements we continue to have at the Policy Committee and in the field, should the Policy Committee develop field guidance for implementing WAC 222-16-031 that is consistent with the permanent rule WAC 222-16-030?

D. Should the Policy committee recommend guidance to consistently locate the end of fish habitat on the ground, and should Policy make a final determination on what is a "permanent" fish barrier and what constitutes a defined channel?

F. Should continuation of single pass electrofishing surveys as a benchmark for delineating the extent of fish habitat occur given the following information?

1. Electrofishing likely results in federally prohibited take by two methods: (a.) direct effects of electric shock on fish, and (b.) false negatives achieved through surveying overwintering habitat in the spring and summertime that essential habitat is not buffered per rules.
2. Spring and summertime fish distribution fluctuation with seasonal stream flow.
3. Fish presence surveys do not identify recoverable habitats. Is it possible to explain why the current process for delineating Type F in the field does not use the default physical criteria to determine the F/N break, which accounts for seasonal variability and restorable habitat?

II. Recommendations

A. *Issue 1*: **Different Water Type Standards from Permanent/030 and Interim/031 Rules Get Implemented**.

This disagreement is a result of the difference in rule language between WAC 222-16-031 and WAC 222-16-030. Merging 030 and 031 would ensure proper determination of fish habitat by finalizing the definition of Type F Waters to include off-channel habitat. It would also confirm that stream associated wetlands are protected as defined in 030 and 031. In addition, this provides an opportunity to address how to best move forward in the absence of having a final model. The issues get too easily confused since the AMP implements 031 while working to finalize 030. And operationally, water typing also occurs under a mixture of 030 and 031 language.

- *Solution*: Merge 030 and 031 for the purposes of water typing and to provide a definition of fish habitat. And create a water typing strategy that uses physical defaults and ID Teams to make Type F determinations.

B. *Issue 2*: **Fish Distribution and Fish Habitat Cannot be Determined by a Single Pass Electrofishing Survey**.

There are years of debate among experts regarding single pass electrofishing surveys. These surveys do not account for seasonal variability of fish distribution and recoverable habitat. As a result, permanent downgrades to modeled fish habitat can occur. This method was intended to be a short term solution while the model was finalized. Today we still do not have a reliable model and the protocol surveys are done without considering if spring and summer fish presence actually accounted for fish habitat. In addition, this approach does not consider habitat that has the potential to be restored and maintained, which is one of the foundational principles of our HCP and essential for the protection of endangered species.

Solution: Discontinue the use of electrofishing for permanent downgrades of streams because of the limited survey window and the ineffectiveness of determination of fish habitat.

C. *Issue 3*: **Default Physical Habitat Criteria Are a More Appropriate Measure of Fish Habitat.**

To comply with the Incidental Take Permits issued under the ESA for our HCP, it is our position that the use of physicals nearly eliminates the use of electrofishing surveys and the likely unacceptable level of take that occurs on listed species. Default physicals could be used in conjunction with a final definition of defined channel, permanent natural barriers, and Board Manual guidance on how to determine fish habitat in the field. In addition, clarification of when and where electrofishing surveys can occur likely provides final resolution on the determination of fish habitat.

The counter argument from some caucuses is that the current physicals over predict fish habitat. But, this is solely based on the one pass survey method that uses presence to determine the extent of fish habitat. Physicals can also under predict fish habitat and this has been confirmed through the use of one pass surveys as well. Therefore, physicals should be utilized except in those instances where the presence of fish has been determined through a site visit and confirmed visually or through other approved methods.

This approach resolves longstanding disagreements at the Policy table. It also reduces the disputes that occur with field crews and ID Teams. Finally, this approach provides a method that can be consistently applied across all of DNR's Regions, and it would fulfill WA State's best intentions for the Forest Practices Rules to be implementable, repeatable, and enforceable.

- *Solution1:* Finalize the definition of a defined channel and permanent natural barriers. Create Board Manual Guidance for fish habitat field determinations, including when and where electrofishing can occur.

- *Solution2*: Use current physical defaults as the tool to make the F/N break determination until a method is developed that fulfills WAC 222-16-030.

We look forward to continuing to work with the other Caucuses to help ensure that progress and eventual resolution is brought back to this body when Type F is ready for action. Please contact UCUT central staff, Marc Gauthier/Forests Practices Coordinator or Chase Davis/Forest, Fish, and Wildlife Liaison, should you have questions or require additional information about our Type F recommendations. Thank you for your time and consideration. We appreciate the opportunity to share our thoughts on this critically important matter.

Sincerely,

D.R. Michel, Executive Director

MEMO
TO: Washignton State Forest Practices Board
FROM: West Side Tribal Caucus of the Forests & Fish Policy Committee
DATE: January 15, 2014
RE: Recommendations for Board actions on Type F issues

Background:
Because the Forests & Fish Policy efforts to develop a charter work plan for Type F water typing issues, the West Side tribes make the following recommendations for Board action that can move resolution of the Type F issues forward.

Type F West Side Tribal Recommendations

January 15, 2014

Rule-related Recommendations:

West side Tribal Caucus thoughts: The current interim rule suffers from implementation issues, but the rule itself is adequate for the most part.

West side Tribal Caucus recommendations:

1. Make minimal changes to the current rule to change it to permanent, clean up any discrepancies in order to eliminate use of the map as rule, and any other related language changes needed.
2. No changes to fish habitat definitions are recommended.
3. Rule change is recommended to eliminate downgrading streams that have been field surveyed and determined to have fish. Once a stream is verified to have fish, there should be no further effort to determine fish presence or absence. This is stated in the FFR, and in DNR Q/A document, but not in rule yet. It is needed in the rule so that it is clearly required.
4. DNR - Revisit the water type improvement project of 2010. Some changes were made, but implementation has been spotty and has wavered in various DNR regions. Revisit with the stakeholders and coordinate the implementation so all DNR regions are carrying out WTM properly.

Guidance-related Recommendations:

West side Tribal Caucus thoughts: Tribes have participated in many field reviews of water type situations that occur at multiple sites. The "Tech\Ops" memo captured many of these repetitive issues and proposed guidance for those issues. We are currently working these issues out on the ground, FPA by FPA, and have been able to come to agreement. This requires a lot of time and arguing that could be lessened if recommendations are captured in written guidance.

West side Tribal Caucus recommendations:

1. DNR lead a stakeholder group on revising Board Manual 13, "Guidelines for Determining Fish Use for Purposes of Water Typing". This can be done now according to current rules. Later rule changes can be incorporated into the manual at the time of rule adoption.
   a. Provide guidance on the items in the "Tech/ops" memo.
   b. Clarify off-channel habitat within the current rules.
   c. This work would eliminate the need for the "Lenny memo".
2. Take the completed proposed Board Manual to the Forest Practices Board for adoption.

Water tye map & model-related Recommendations:

West side Tribal Caucus thoughts: The tribes have no confidence in re-running the geomorphic model, whether with DEM's or LiDAR-based elevation models, because the cost is high, and the product is not likely to be of the quality desired. At most a LiDAR-based model would produce a better screening tool, due to better modeling of the hydrography. Also, DNR does not have the resources to support the map with field review on the non-forest areas or updating those water types on the map, but these non-forest areas are critical to endangered species. The water typing maps need to reside with an agency that covers all land uses, and has personnel to support the GIS layer and provide field implementation assistance to all types of land uses.

West side Tribal Caucus recommendations:

1. Report to the Board on inaccuracies of water typing maps – assign a technical team or find volunteers
2. Ask DNR to investigate what it would take to acquire state-wide coverage of LiDAR which can be used to better model the hydrography than the 10-meter DEM's (LiDAR is also a very important tool needed for use in screening for unstable slopes) Collaborate with other agencies, counties/cities, Puget Sound Partnership, University of Washington, etc. The LiDAR would be used as a screening tool.
3. Consider moving the water typing administration to the Department of Ecology because the same maps are used by all land uses – forestry, cities, counties, etc. Provide for either Ecology or DNR or a blend of agency responsibilities that will adequately support water typing maps and field implementation on all land uses.

<u>Electrofishing-related Recommendations:</u>

West side Tribal Caucus thoughts: The tribes believe that they understand the effects on fish populations of proper use of electro-fishing for water typing purposes, and believe it is a useful tool whose gains outweigh the impacts of using it, when used properly.

West side Tribal Caucus recommendations:

1. In order to get everyone to the same level of understanding, and to agree on proper use of electro-fishing in protocol surveys, the tribes ask the Board to appoint a technical group to investigate the recent research in the field, and bring a recommendation on proper use of electro-fishing and the effects of such use to FFR Policy and the Board.
2. Ask DNR/DFW to determine the extent of electro-fishing statewide to date and report to FFR Policy and the Board.
3. We recommend that all fish detected (not just last fish detected) be included in the Water Type Modification (WTMs), and that this data be entered into a database. This way, the impacts on fish from electro-fishing will be more than an ephemeral process, but will provide valuable, long-term information, better justifying the use of electro-fishing.
4. FFR Policy will develop a recommendation to the Board on use of electro-fishing.

For questions or clarifications, contact Jim Peters, NWIFC, 360-528-4375, jpeters@nwifc.org