From:	Chasin, Elliot@Wildlife
To:	Public Comments@BOF
Cc:	Hannigan, Edith@BOF; Hedge, Eric@BOF; Baer, Isabel@Wildlife
Subject:	CDFW Comment on Class II-L Rule Plead.
Date:	Friday, December 3, 2021 4:33:36 PM
Attachments:	Class II-L Letter to BOF_Final.pdf

Warning: this message is from an external user and should be treated with caution.

Board of Forestry,

Thank you for the opportunity to provide further comment on the FPR 916.9(g) rule plead regarding Class II Watercourse designations under consideration by the Forest Practice Committee. We have the following concerns about the potential impacts this proposed rule change could have on anadromous fish:

1. Removing the channel width criteria will remove Class II-L protections from watercourses that contribute large woody debris (LWD) to Class I Watercourses.
2. The plead seems to be driven by the results of a study focusing on only two of the many critical benefits provided by Class II-L Watercourses.
3. The drainage area criteria alone are not sufficient to continue to protect wide streams that transport LWD.

Given these concerns, CDFW believes the channel width criteria found in FPR 916.9(g) should remain.

Class II-L Watercourses provide critical inputs to anadromous Class I Watercourses. These inputs include cool and deep water, large riparian trees to enable in-stream large woody debris (LWD), and complex nutrients. Riparian forests are the source of many of these inputs. Riparian forests also mitigate some of the negative effects of timber harvest on anadromous fish habitat, such as erosion and sediment deposition. These inputs and mitigation effects are reduced when the width of riparian buffers decrease.

Impact of the proposed rule change on LWD recruitment and transport

The channel width criteria for Class II-L designation should be retained to continue protecting LWD recruitment and transport. LWD creates structural complexity that is critical for anadromous fish survival (CDFG 2004). FPR 916.9(a)(6) explicitly states that the Anadromous Salmonid Protection (ASP) rules are designed to "protect, maintain and restore" trees and wood that "provide large woody debris recruitment" and the ISOR for the 2009 ASP rules states "Class II-L Watercourses … may be able to supply wood of a size that would function as large wood for the Class I Watercourse."

Wide Class II Watercourses increase the potential for a greater mosaic of fish habitat in Class I Watercourses. The width and depth of streams is directly correlated with the size of wood a stream can transport and the distance that wood can travel during heavy rain events (Leinkamper and Swanson, 1987; Bilby and Ward, 1989, Baudrick and Grant, 2001). Given the importance of channel width in LWD transport, protection of riparian areas that provide LWD inputs near wide Class II Watercourses is crucial.

EMC study does not justify removal of the channel width criteria

The impetus for the proposal to remove the channel width criteria is an EMC funded study, which determined that watershed area is more likely to be correlated with stream flow permanence and watercourse connectivity than channel width. This study justifies using drainage area as an appropriate metric to identify Class II Watercourses that provide greater late-season streamflow and greater connectivity. These two features are goals of the ASP rules found in FPR 916.9(a).

The conclusions presented in the study are sound. However, the study did not address the other goals of the ASP rules: preventing sediment loads, erosion control, migration and flow blockage, LWD recruitment and transport, shading, and nutrient inputs. All these goals benefit fish and fish habitat. It is premature to reduce Class II-L Watercourse designations without assessing these factors.

A potential compromise: Reducing the coastal drainage area threshold

Another solution may be to reduce the coastal watershed size requirement to 80 acres. The 100-acre watershed requirement for the coast may be insufficient to capture a minimum channel width that supports LWD transport.

CDFW believes even if the number of watercourses that would lose Class II-L protections from this proposed rule change is small, it is worth ensuring those wider streams remain protected. An 80-acre watershed drainage area threshold would likely avoid the loss of wider Class II-L's and align the watershed size requirement with CDFW's recommendation from 2013 (see attached letter).

However, we still recommend keeping the channel width criteria in place even if reducing the drainage area threshold accomplishes the goals of LWD recruitment and transport. Mapping the drainage area is typically a desktop exercise. We believe that measuring channel width has value for in-field verification of stream classifications. This is helpful during PHIs and is convenient for plan preparation when mapping tools are unavailable.

CDFW staff have applied USGS StreamStats Spatial Analysis Tools (Bieger et al. 2015) to some Class II Watercourses in the Coastal Zone. The results indicate that several Class II Watercourses with a bankfull width of greater than five feet also have watersheds that are less than 100 acres in drainage area. CDFW's effort to determine the extent of Class II Watercourses that would be affected by this proposed rule change is ongoing and we are willing to continue the exercise (including for interior watersheds) if it would help the Board analyze the potential effects of this proposed rule change.

We thank the Board once again for the opportunity to provide comments and look forward to working together on this topic. If you have questions about this letter or would like additional information, please contact Elliot Chasin.

Sincerely,
Elliot Chasin

References:

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EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

October 4, 2013

Eric Huff
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Dear Mr. Huff:

CLASS II-L IDENTIFICATION AND PROTECTION AMENDMENTS, 2013. NOTICE OF PROPOSED RULEMAKING (AUGUST 23, 2013)

California Department of Fish and Wildlife (CDFW) has actively participated in Board of Forestry and Fire Protection (BOF) Forest Practice Committee meetings and site visits during development of the proposed rulemaking. CDFW provides the following comments and recommendations.

Background

In 2009 the BOF adopted the Title 14, California Code of Regulations (14 CCR) 916.9 [936.9, 956.9], Protection and Restoration of the Beneficial Functions of the Riparian Zone in Watersheds with Listed Anadromous Salmonids rules (ASP rules). ASP rules are part of the California Forest Practice Rules 2013 (FPRs). Included in the ASPs, are rule sections distinguishing between standard Class II watercourses (Class II-S) and large Class II watercourses (Class II-L).

Proposed Amendments to ASP Rules

The BOF is proposing to change some of the protection measures for Class II-S, and identification methods for Class II-L. In summary, the proposed amendments would do the following:

1. Upgrade the protection measures for a Class II-S with a more inclusive core zone (no timber operations) for slope steepness less than or equal to 30 percent.
2. Eliminate three office-based methods for determining Class II-L watercourses including the use of: 1) stream order, 2) U.S. Geological Survey Maps depicting "blue line" streams, and 3) extrapolated drainages areas for an ownership or local region.
3. Eliminate three field-based methods for determining Class II-L watercourses including the use of: 1) observation of mid-summer flows (July 15) during an average hydrologic year, 2) observation of channel characteristics that support

aquatic and plant life that require mid-summer flows, and 3) use of continuous stream flow monitoring data relative to drainage area.

4. Provide two methods a watercourse can be classified as Class II-L including: 1) contributing drainage area (office based), or 2) average active channel width (field based). Qualifying drainage areas are to be at least 100-acres for the Coast District, and at least 150-acres for the North District. Qualifying average active channel width near the confluence of a Class I watercourse is to be greater than or equal to five feet for both districts.
5. Clarify the maximum length of watercourse receiving Class II-L protection measures.
6. Require the Registered Professional Forester (RPF) to map the watercourses that are receiving Class II-L protection
7. Make a general statement that additional site-specific measures may be incorporated as necessary when approved by the California Department of Forestry and Fire Protection (Cal Fire), while referencing 14CCR 916.4(a)(1), which requires the RPF to consider site-specific, past and cumulatively significant impacts when determining water and lake protection measures.
8. Include a sunset date of January 1, 2019, to encourage monitoring, evaluation, and reporting by Cal Fire, on the efficacy of the amendment.

CDFW Analysis

The existing ASP watercourse classification rules have been difficult to implement, in part because there have been multiple interpretations of their methods and intent. There have been several discussions about definitions such as dominant flows, average hydrologic-year, stream order, drainage areas; and Class II-L protection measure distances. In addition, current office-based monitoring by regulatory agencies of rule implementation has been limited. The proposed amendments provide additional protection for Class II-S watercourses, simplify typing characteristics, and strive to provide additional consistency in application and oversight for Class II-L identification.

Contributing Drainage Area in the Coast Forest District

CDFW looked back at several coastal Class II watercourses in Timber Harvest plans (THP) for Class II-L rule implementation. We found that approximately 70% of the Class II watercourses would not receive Class II-L protection if the contributing drainage area of ≥100 acres were the only determinant. Additionally, 50% of the THP-designated Class II-L watercourses would not have received Class II-L protection according to this threshold. Our investigation also revealed the average contributing drainage areas for the THP-identified Class II-L watercourses was approximately 85 acres. Several CDFW-identified Class II-L watercourse drainage areas were substantially smaller. We therefore recommend modifying the contributing drainage area for the Coast Forest District to ≥80 acres to encompass what we believe is a better quantification of Class II-L drainage area. (*See recommendation 1 below*)

Riparian Restoration Considerations

As mentioned in several Forest Practice Committee meetings, and during testimony at the July BOF meeting, CDFW emphasizes acknowledging the need for additional measures for protection and restoration of watercourses that are currently impacted, or have a high risk of being impacted from proposed operations. Existing ASP rules include "Restoration" in the title and as a goal [e.g. 916.9(a)]. Existing FPRs [916.4(a)(1)] also require a forester to evaluate existing conditions and apply appropriate protection measures to watercourses. There may be cases when Class II watercourses don't meet either of the two criteria specified in the draft amendment language, but warrant Class II-L protection due to past impacts.

Additionally, riparian zones and salmonid habitat would benefit, and over time be restored or enhanced, from implementation of Class II-L protection when there are existing impacts affecting the watercourse such as: (1) roads or landings in the riparian zone that are currently negatively affecting the watercourse, (2) existing high or extreme soil erosion hazard rating immediately adjacent to the riparian zone, or (3) unstable areas in the watercourse and lake protection zone. Generally, harvest plans have disclosed these conditions, but many have not incorporated measures to mitigate these conditions. CDFW's recommendation below provides additional specificity for plan preparers to acknowledge impacted conditions and apply protection consistent with existing rule requirements to facilitate restoration of beneficial riparian functions and salmonid habitat. (*See recommendation 2 below*)

CDFW Recommendations

As a Trustee Agency for California's fish and wildlife, CDFW provides the following recommended changes to the NOTICE OF PROPOSED RULEMAKING (AUGUST 23, 2013), intended to enhance the protection and restoration of the beneficial functions of riparian zones in watershed with listed salmonids: (additions shown in **bold underline**, deletions in ~~strikeout~~)

1. Modify the Coast Forest District drainage area:

   916.9 [936.9, 956.9] (g)(1)(A) "1. Contributing drainage area of ≥~~100~~ **80** acres in the Coast Forest District, or ≥150 acres for the Northern and Southern Forest Districts, as measured from the confluence of the receiving Class I watercourse."

2. Add examples to clarify when additional protection measures should be incorporated into the plan as necessary to protect beneficial uses of water relative to riparian function:

   916.9 [936.9, 956.9] (g) Class II Watercourses – The following are the minimum requirements for Class II WLPZ delineation and timber operations. Differing rules are specified for watersheds in the coastal anadromy zone, the Southern Subdistrict of the Coast Forest District, and areas outside the coastal anadromy zone. WLPZ width ranges from 50 to 100 feet slope distance, depending on side slope steepness in the

WLPZ and the watercourse type. Additional site-specific measures ~~may~~ **shall** be incorporated into the plan as necessary to protect beneficial uses of water relative to riparian function pursuant to 14 CCR § 916.2(c), 916.4(a)(1), and 916.9(b). **Site-specific measures may be needed where past, proposed or reasonably foreseeable timber operations individually or cumulatively significantly and adversely affect the beneficial functions of the riparian zone, such as: (1) roads or landings in the riparian zone that are currently negatively affecting the watercourse, (2) existing high or extreme soil erosion hazard rating immediately adjacent to the riparian zone, or (3) unstable areas in the watercourse and lake protection zone. Operational measures specified under 14 CCR § 916.9 [936.9, 956.9], subsection (g)(2) may be utilized as site specific measures.**

The inclusion criteria and protection measures will take several years of implementation to monitor and evaluate. CDFW commits to participate in the review, monitoring and evaluation of these changes. We thank you for the opportunity to participate in the Class II-L rule making process, and look forward to continuing to work with you through the BOF deliberations on this rule package. If you have any questions, please contact Senior Environmental Scientist Joe Croteau at (530) 842-0882, or joe.croteau@wildlife.ca.gov.

Sincerely,

Sandra Morey
Deputy Director

ec: Eric Huff, Regulations Coordinator
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