April 6, 2009

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Board of Forestry and Fire Protection
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Dear Mr. Chairman,

We are writing to express our concern regarding the most recent version of the Board of Forestry's (Board) Threatened or Impaired Watershed Rule Review Draft Regulatory Proposal dated April 2, 2009. After a thorough review of the proposed regulations, we strongly recommend the Board delay publicly noticing the rule package until the Board's Forest Practice Committee (Committee) considers the following issues.

- Site Specific Approach has not been thoroughly developed in the T&E Rule Package and the current sub section as written would preclude use. A site-specific (spatially-explicit) approach to riparian management that addresses site and regional variability as well as disturbance processes in riparian areas was supported by: i) the 2008 BOF scientific literature review (SWC 2008), ii) a consensus opinion by the assembled 'experts' that attended the October 21 2008 BOF meeting, iii) a CDF staff proposal of Nov. 19 2008, and iv) the TAC. In this context, an outline of how a spatially-explicit approach could be conducted was developed in January 2009 and this has been distributed to the Committee and staff for consideration (Spatially Explicit Riparian Management (SERM) by Benda, Martin, Liquori 2009). The outline was also distributed to various experts in the field in February 2009. It was the experts unanimous opinion that a site-specific approach was scientifically defensible and desirable, while cautioning that care must be taken in its regulatory application (Drs. Lee MacDonald, Tom Lisle, Mary Ann Madej, Robert Beschta). Given this consensus, we are disappointed and question why the spatially-explicit approach has yet to be fully vetted by the Committee. The exclusion of this science-based component of riparian management in California threatens the legitimacy of the Board's rulemaking process and raises questions about the decision to expend considerable resources on the science literature review.

- As with any new or different approach to resource management, concerns were raised that a spatially-explicit approach to riparian management would be "too hard", that is, too technically difficult to conduct (and to review). While we support the opportunity for agency staff and the public to raise concerns over a new, untested approach, these concerns are not based on fact or experience. Had the Committee allocated adequate time to address a spatially-explicit approach, we are confident that these concerns would have been put to rest. The scientific principles, literature, and technical tools are readily available to conduct a spatially-explicit approach to riparian management. For example, a

spatially-explicit approach to riparian management is currently being advocated in the Northwest Forest Plan and by various national forests (FEMAT 2006, Everest and Reeves 2006). Furthermore the existence of science and tools for a spatially-explicit approach underpins the consensus expert opinion outlined above. [References that detail the approach and available analytical methods and tools could be made available to the developers of the T&E rule package and the BOF.]

- The TAC, created by the BOF to supply scientific background to the development of new T&E, was in consensus. The TAC, in the context of policy options addressing riparian management in California, agreed on the following: 1) Riparian buffers are effective but need to be flexible; 2) Regional, watershed and site variability must be recognized; 3) Stream classification system should be reviewed and updated; 4) Adaptive management is essential for progress; 5) problem-solving approach (e.g., using process based science) could lead to T/I success; and 6) Permanent science panel & cooperative research process needed.

  It is important to note that not one of the six TAC items of consensus above are included in the prescriptive, one-size-fits all T&E rules as they are currently drafted. Yet, a site-specific approach would accommodate all of them. Again, it is an enigma how the TAC-sponsored approach to future riparian management, which is in agreement with the scientific literature review and the expert consensus, has not been fully vetted by the Committee.

- Regional, watershed & site variability must be recognized within proposed rule package. We believe the current proposed set of rules does not adequately address regional, watershed, and site variability. This is particularly relevant for Class II and III streams (e.g., variable thermal loading and erosion potential).

- Forest disturbance (fires, insects, disease) should be recognized within the proposed rule package. Forest disturbances in California, particularly fire that may be increasing due to a changing climate, can threaten riparian protection systems and potentially enhance fires outside of riparian areas. Riparian management, within the context of T&E rules, should address forest disturbance processes that could include creating fire breaks within riparian zones at strategic locations in a watershed.

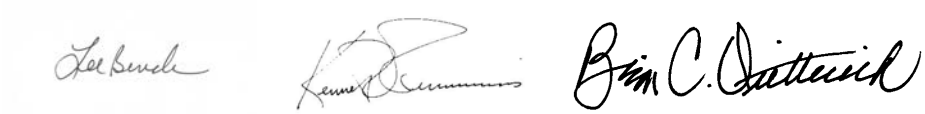
- Source distance curves are being used out of context. Source distance curves are only one component that can inform riparian management. Other equally important considerations include environmental context, such as the role of large wood in stream habitats, the connectivity distances between Class II and III channels with Class I streams that govern transfer of wood, litter, and thermal energy downstream, and the current ecological condition of stream habitat that may reflect past land use or other natural disturbances.

- A spatially-explicit approach to riparian management engenders a data rich, watershed-scale context. California agencies have been struggling with adopting a watershed-scale approach to forest management for over a decade that incorporates cumulative effects, riparian management, TMDLs, and habitat restoration. To date there has been little success, thus reinforcing a tendency to use dated scientific principles and approaches. A spatially-explicit approach, as articulated in this outline and made available to the T&E rule makers sub-committee, describes how this approach can inform other watershed-scale issues including road erosion, sediment delivery, and restoration.

In summary, the seven issues outlined in this letter demonstrate a serious disconnect between the science, collective opinion of scientific experts, the bulk of the scientific literature and the *BOF Threatened or Impaired Watersheds Rule Review Draft Regulatory Proposal* as currently proposed in the April 2, 2009 draft form (and ready for noticing). Given more scientifically-defensible options to riparian management exist that may better protect beneficial uses, we recommend the Board delay the approval of the current rule package as proposed, and not notice this package until further analysis and consideration can be given to adaptive management (or spatially-explicit) approaches.

A fresh look at the T &E rule package by scientists who have already been tasked by the BOF (TAC, SWC, Expert Panel) in this process will create a better opportunity to align the literature and proposed regulations. Your consideration of this matter will be greatly appreciated. We offer our services to the Committee to further develop a Spatially-Explicit Riparian Management approach and to help incorporate the seven points discussed in this letter into the proposed rule package.

Sincerely,



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_Douglas J. Martin Ph.D., Fisheries Scientist
_Sari Sommarstrom, Ph.D., Sommarstrom & Associates
_Bill Trush, Ph.D., McBain &Trush

References

Everest, F. H., and G. H. Reeves. 2007. Riparian and aquatic habitats of the Pacific Northwest and Southeast Alaska: Ecology, Management History and Potential Management Strategies. Gen.Tech. Rep. PNW-GTR-692 Pacific Northwest Research Station.

FEMAT 2006. Northwest Forest Plan

Sound Watershed Consulting (SWC) 2008. Scientific literature review of forest management effects on riparian functions of anadromous salmonids. Prepared for the California State Board of Forestry and Fire Protection. Sept. 2008.