

Letters from advisory committees of the Oregon Board of Forestry

I. Committee for Family Forestlands

March 2, 2017

TO: Marganne Allen, ODF

FROM: Committee for Family Forestlands (CFF)

RE: Siskiyou/Eastern Oregon Streamside Protection Review

During the February 2017 meeting of the Committee for Family Forestlands, members agreed to put some ideas down on paper to share with Dr. Allen of ODF as to the approach, and types of questions, ODF should be using in their design of the Siskiyou/Eastern Oregon Streamside Protection Review.

Various members of CFF offered opinions and there was agreement that a small group would put some ideas down on paper to inform the Streamside Review process. This memo is the result of the discussion among the small group, which consists of Ed Weber, Scott Gray, Evan Smith, and Jim James.

In terms of a general approach to collecting appropriate data to inform the review, CFF members agree that the following ideas warrant consideration:

- Given the complexity and dynamism of riparian zones, ODF should “go big” with a holistic approach that seeks to model, as best as possible, the interconnected, interdependent dynamic found in such areas. While this approach courts at least some additional uncertainty in the eventual models, it avoids the weakness of a more tailored approach (e.g., temperature only) that necessarily forces decision-makers to extrapolate results from a narrow basis that does not represent the full complexity of the whole. There are recognized stark differences in conditions and vegetation types in each region. Each region needs to be evaluated independently to understand the unique riparian functions needed and determine if a problem actually exists with the existing riparian rules. A problem with existing riparian rules should not be assumed without good scientific evidence such problems exist.
- The discussion raised the likelihood that good science is lacking in many of the areas to be addressed by the Streamside Protections Review. CFF views this as an opportunity to make advances in scientific model-building that improves our overall understanding of riparian zone dynamics both in these regions and potentially in many other areas of Oregon. This would be of benefit to small forestland owners, ODF officials charged with making decisions in these areas, and the citizens of Oregon.
- Key areas of concern for CFF, in terms of specific items that should be studied, include, but are not necessarily limited to, the health and resilience of fish populations, effects of buffer size, effects of water temperature, and effects of large, woody debris. Focusing on the complete list of ecological values of a riparian area rather than a single attribute will

allow for the better modeling of natural variability we know is found in nature. Since there is a tremendous amount of research on the impacts to fish from riparian activities, we suggest the Department start by clearly understanding what we already scientifically know about fish needs from riparian areas, then determine what information, if any, is missing. Once missing science is determined, then determine the most effective way to generate the science needed to assist in making public policy.

- We also believe that the Department of Forestry is taking the right approach in first identifying what the question is about riparian functions, before trying to answer any questions about such functions. Any research to assist decision making needs to be clear on its objectives so it will provide useful answers.

Thank you for your consideration. Please let us know if you have any questions or need clarification on these ideas.

Respectfully submitted,

Ed Weber

Chair, CFF

II. Southwest Oregon Regional Forest Practices Committee

Review on the Effectiveness of FPA Riparian Protection Standards in the Siskiyou Region

Inasmuch as the Board of Forestry (BOF) is seeking to understand influences between forest activities and adjacent aquatic systems, the Southwest Regional Forest Practices Committee (SWRFPC) has prepared the following for the boards' consideration.

It is important that the Board uses research that is peer reviewed to guide them in their considerations throughout this process. The Forest Practices Act (FPA) has a long history of being tied to peer reviewed research; allowing research to pave the direction for policy considerations. This is the primary strength of the Oregon FPA, and we strongly encourage the board to adhere to this standard.

The SWRFPC recognizes the likely direction of the board at this time is to study stream temperature. With this in mind, we recommend that monitoring be conducted in such a way that it incorporates control streams as well as pre-and post-harvest treatment streams to establish a background and any changes that are specific to Siskiyou region streams. Research of this kind will allow the board to filter out much of the variation that comes from natural occurrences such as fluctuations in annual rainfall, temperature, wind events, etc. and hone in on the relationship to forest practice activities, thus informing policy considerations.

We also strongly recommend that monitoring be done simultaneously on these same stream systems that incorporate not only stream temperature, but fish abundance and size. This missing element was a glaring absence in the RipStream study, and caused much circular debate during policy discussions. Furthermore, if relationships are discovered between activities and influences on streams and/or fish populations, follow up studies and analysis should be conducted to explain why or what was the probable cause. The absence of this sort of follow up analysis and

study in the RipStream project was also a glaring omission that plagued policy discussions. We recommend a paired watershed study be initiated similar to the Hinkle Creek study. The benefits of such an effort is that it allows a more robust comparison that studies multiple relationships across hydrologic systems. This type of monitoring and analysis will take a lot of time and effort, however the SWRFPC feels that this level of effort is warranted given the boards responsibility under 527.630 “to encourage economically efficient forest practices that ensure the continuous growing and harvesting of forest tree species and the maintenance of forest land for such purposes as the leading use on privately owned land consistent with sound management of soil, air, water, fish and wildlife resources”.

The SWRFPC thanks you for allowing our input today and looks forward to working with you on this study in the future.

III. Eastern Oregon Regional Forest Practices Committee

Summary of Stream Rule Sub-Committee

1/26/2017

Joe Justice, Lee Fledderjohann, Chris Johnson

At the request of the Chairman of the Eastern Oregon Regional Forest Practices Committee a sub-committee was formed to gather information related to ODF’s request for stream monitoring input. Joe Justice (Hancock Forest Management) Lee Fledderjohann (Collins Pine) and Chris Johnson (Whitefish Cascade) participated in the sub-committee. After initial discussion it was agreed that two primary subjects would be researched and discussed to help the sub-committee make a recommendation to the entire committee. The two subjects are:

- 1. Current Eastside stream rules and basis for those rules**
- 2. Idaho stream rule changes**

Current Rules

In 1994 Oregon adopted its current stream rules. A great deal of work and research went into the adoption of these rules. An excellent paper was written in December of 1994 by ODF which describes the scientific and policy considerations that led to the changes. As a sub-committee we felt it was important to review the current rules, how they were developed, and what effect to streams over time was anticipated.

It was recognized in 1994, as it still is today, that Eastern Oregon streams are incredibly complex. Developing stream rules that deal with all the diversity is no small task. This ultimately led to the conclusion that creating rules that would result in a future desired condition for all fish bearing streams was the best approach. Streamside conditions that existed or mimicked a mature forest would provide the desired future condition. A mature forest condition that develops over time would provide important functions for stream health. Channel stability, filtering, shade, large woody debris, nutrients, and cover are just some of the functions a mature forest condition provides. Mature conditions can be achieved faster than they would naturally

occur using landowner incentives. The rules allow for site specific plans that benefit the RMA, speeding up the time required to achieve a mature forest condition. Site specific plans can allow landowners to remove trees that they otherwise could not without the plan. This is a unique and important aspect of Oregon's stream rules.

A holistic approach was felt to be the best way to protect riparian habitat including water quality. Only considering one or two functions like shade or temperature could have unintended consequences. For instance focusing only on shade could indirectly discourage the growth of shade intolerant tree species, or RMA's could become so overstocked with small trees they become a fire hazard. In the absence of baseline data related to specific stream conditions that covers the diversity of eastside streams, the sub-committee agrees that looking at stream function holistically is still the most reasonable way to protect streams.

In 2001 the Eastside Riparian Function Advisory Committee (ERFAC) was convened by the Department of Forestry and approved by Board of Forestry to meet Executive Order 99-01 signed by Governor Kitzhaber. In February of 2003 the ERFAC committee submitted their report to the Board of Forestry. The ERFAC report, defined the desired future condition of riparian forests to be vigorous, structurally diverse with a broad range of tree species, size and age classes, with an understory of shrubs and herbs. A functioning riparian system was agreed to bring the greatest benefit to RMA's. The work done by this committee led them to conclusions similar to the original work done in 1994, namely that the functions and values of riparian forests include water quality, hydrologic function, the growing and harvesting of trees, and fish and wildlife resources.

Idaho's Rules

In 2014 the State of Idaho adopted new stream protection rules. It has been suggested that streams in Idaho are similar to streams in Eastern Oregon. Because of this perception of similarity the sub-committee felt it prudent to investigate Idaho's rules. Idaho focused their rulemaking on one stream condition, shade. Relative stocking targets were developed by forest cover type. In general the stocking targets are greater in the wetter forest types and lower in the drier forest type. All fish streams regardless of size have the same relative stocking targets. These targets must be met within 75 feet of the high water mark of any stream. Idaho recognized that management inside RMA's can be desirable to enhance their function. Idaho also recognizes that trees closer to the stream provide more shade than trees farther away.

To provide management flexibility for landowners Idaho rules allow for two harvesting options. 60-30 option and the 60-10 option. The 60-30 option requires more trees in the inner 25 feet and fewer trees to be left in the outer 50 feet. The 60-10 option requires more trees in the first 50 feet and less in the outer 25 feet.

In reviewing the relative stocking requirements in Idaho as compared to Oregon's basal area requirements it appears a much higher stocking level is required in Idaho. Foresters working in Idaho have expressed how difficult it is to have enough stocking to hit the relative targets. In practice it was learned that virtually all fish streams require a 50 foot no cut buffer which allows

some removal of timber in the outer 25 feet. Even though Idaho recognizes the positive benefit of active management in RMA's their rules tend to discourage this practice.

Conclusion

Oregon's stream rules and protection standards are unique in the country. They were developed because it was recognized some fish streams in Oregon were deficient of important attributes. Several years have passed since these rules were adopted. If monitoring is done it should evaluate if the rules are accomplishing the goal of achieving a desired future condition similar to a mature forest with an emphasis toward conifer species. ODF must keep in mind the length of time needed in Eastern Oregon for these rules to impact RMA's. It is our recommendation that any monitoring should be done with the same holistic approach that created the rules.

Eastern Oregon is a vast area with many different and unique attributes. This sub-committee is aware of research on red band trout in the goose lake basin which showed this species of fish is adapted to warmer stream temperatures than previously assumed. Monitoring and evaluating the effect of current stream rules on one function like temperature or shade would be inadequate. Worse yet conclusions could be drawn that may negatively affect RMA habitat. It is for this reason ODF should be cautious when considering Idaho's rules and how they were developed.

It is our recommendation that ODF access data from watershed councils and soil and watershed conservation districts to evaluate the health of forest streams. ODF should also access any research unique to streams or fish in Eastern Oregon, however the conclusions from research should be judged considering the diversity of Eastern Oregon. As an example of diversity many small fish streams in Eastern Oregon go dry for a significant part of the summer. These streams are important to fish during a portion of the year but when water temperature could be the highest, they are dry.

Using basal area as a measure works well and gives credit for larger trees which often bring more benefit to RMAs. Medium and Large fish streams have greater protection than small fish streams. These Medium and Large fish streams are much more likely to have fish present in late summer when water temperature is critical for fish. The larger buffers will contribute more down woody debris to these streams which by their nature tend to flush wood out more often than small fish streams.

This sub-committee believes the RMA protections in Eastern Oregon are working, and we are not aware of any data that demonstrates water quality deficiencies. No rule making should be initiated or considered in the absence of scientifically based, peer reviewed monitoring protocols that show a deficiency and its scope. This monitoring protocol should incorporate the diversity of each ecoregion in Eastern Oregon. ODF should also compute the percentage of stream types by ecoregion to understand the magnitude of any rule change.

It is this sub-committee's hope that this brief summary will help the EORFPC develop a recommendation for ODF's consideration.

On February 22nd 2017 a public meeting of the Eastern Oregon Regional Forest Practices Committee was held. After discussion of the recommendation the EORFPC voted unanimously to adopt the sub-committees recommendations to the Oregon Department of Forestry.