Written Comments for eastern Oregon/Siskiyou rule review

Letters from stakeholders

Dear Terry and Daniel:

Thanks for talking just now about the Eastside/Siskiyou monitoring effort. I am transmitting a few comments now in writing based on my discussions with science advisor Chris Frissell.

1. Re: the proposed Stakeholder Survey going out next week and due 2/28: You can expect my response to emphasize the objective of "water quality" over "fish habitat," as water quality tends to reference straightforward, measurable state standards, whereas fish habitat does not.

2. Per the Riparian Review Charter document, we strongly agree that GIS classification of ownership and other landscape variables should be completed in short order and up front, as proposed. This analysis should then be used to structure sampling design to ensure field temperature and riparian monitoring site selection is representative of the dominant classes of field conditions.

3. Can we start field work likely to be considered necessary this summer? It is unfortunate that the proposed schedule in the Riparian Review Charter document foregoes the possibility of field monitoring during late spring-summer of 2017. If possible, we highly recommend finding a way to expedite in spring of 2017 the installation of at least a provisional set of thermographs in the Siskiyou and Eastern Oregon regions. (Is Board approval even needed to authorize this work?) We would suggest that the monitoring installations should be done according to existing Ripstream design criteria and using the GIS analyses to define sample site selection during the 2017 temperature critical monitoring period (see previous point). More intensive field sampling of canopy shade and other riparian conditions can then occur later in the summer for those monitored sites if a project charter is fully approved at the July 2017 Board meeting. Acquisition of an expedited, preliminary field data set in late spring and summer of 2017 will be invaluable to identify and iron out potential logistical hurdles and ensure a complete and robust full set of data can be compiled efficiently and expeditiously in the subsequent years.

4. Front load lit and date review too. The initial GIS analysis in early 2017 should be accompanied by data review of published literature and extant state and federal agency data sources that may inform recent-decade trends in stream temperature and riparian condition on private and checkerboard public-private forest lands in the Siskiyou and Eastern Oregon regions. This review should identify existing data that may be directly useful in a Ripstream analytic context, as well as help inform the selection of field sites and field survey protocols for monitoring. If such a review is put off until after July 2017, it could further delay getting a preliminary set of ODF field monitoring sites on the ground.

I hope this is helpful.

Regards,

Mary Scurlock

February 21, 2017

RE: Eastern Oregon and Siskiyou Region Streamside Protections Review

Dear Mr. Olson,

Thank you for the opportunity to comment on the Department of Forestry's consideration of Siskiyou and Eastern Oregon streamside protections. I chose a written submission because the survey questions seemed to imply that a problem existed and the Department was looking for the best solution. Fundamentally, I am not confident that there is a problem.

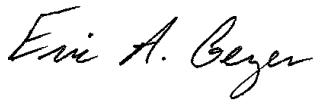
In 2001, Roseburg Resources committed a large swath of contiguous, harvest-age timberland to a comprehensive watershed research project named the Hinkle Creek Watershed Study. Oregon State University led a research team that consisted of several state and federal agencies, university researches, and others. The objective was to understand if modern intensive harvest practices were having a measureable effect on water quality and stream biota. There was a special emphasis on effects to fish.

After completion of the 10 year study, the results have been very positive and encouraging. In general, fish either showed no significant impacts or, in some cases, responded positively to harvest within the watershed. This begs the question, "What is the problem?" If one assumes there is a problem that needs to be resolved but doesn't know what the problem is, to what extent the problem exists, or even if there is a problem, then it will be virtually impossible to change actions and achieve a desirable outcome. In the process, landowners lose value, increase costs, or both, for no definitive return.

When considering next steps for the Siskiyou and Eastern Oregon regions, I would encourage the Department to first identify whether there is a problem, and then confine any changes to narrowly address any issues that may exist. If substantial, peer-reviewed research does not exist for these areas, the Department may want to consider conducting research and/or monitoring that first attempts to define if there is a problem, and what exactly is causing it. This type of work should only be considered if there is some indication that the problem needs to be prioritized over other Department objectives. I am not aware of any such problem currently, but these areas are outside those for which I am most familiar.

In conclusion, I would strongly recommend that the Department seek opportunities to work collaboratively with landowners in these areas throughout the process. The most positive, long-term solutions will come when those affected understand the problem, have input into the proposed resolution, and subsequently, respect the proposed solution. Anything short of that fosters frustration and resistance, and ultimately a bare-minimum response. A collaborative approach with affected landowners, on the other hand, has consistently been shown to exceed best management practices and promote robust, adaptive action, such as landowners strong support of the Oregon Plan for the last twenty years.

Thank you for your consideration,



Eric Geyer

From: mike newton [mailto:mikenewton@peak.org]
Sent: Monday, January 09, 2017 2:12 PM
To: ALLEN Marganne <marganne.allen@state.or.us>
Subject: Hawkins paper of value in planning

Hi, Marganne,

The attached Hawkins et al paper has a close resemblance to other papers dealing with responses of fish to removal of cover along streams. The possibility that buffer rules might reduce the fishery has been pretty widely published.

I'd appreciate knowing how your team responds to learning that the density of shading by South-side buffers seems to have a negative relation to freshwater fisheries. It seems Hawkins et al are not alone in their findings.

Please allow such data to enter into your approaches toward ecosystem management in Eastside riparian areas.

And while you are at it, I hope you will bring such studies to the attention of the Board of Forestry. They need to be inform about important literature that apparently has not been brought to their attention.

Thank you!

Mike

From: mike newton [mailto:mikenewton@peak.org]
Sent: Monday, January 09, 2017 2:01 PM
To: ALLEN Marganne <marganne.allen@state.or.us>
Subject: FW: January 2017 Riparian Workshop Planning Committee Meeting set for Salem on Jan. 12 from 1-4pm

Good afternoon, Marganne,

I have been impressed by evidence that the buffer on the south sides of streams is virtually the ONLY influence on stream temperature, and is the primary source of woody debris. Consideration of one-sided buffers has apparently never even reached the ears of BOF. I think it is mandatory that the

Board be informed that leaving buffers on the North side of streams has no measurable positive influence on either temperature or woody debris, if we can assume that it is the trees on the South side that respond in most cases to our prevailing winds.

It seems logical that function should drive regulatory process, Eastside or Westside, and that there be acknowledgement that buffer organization accord to solar radiation and wind direction be THE critical factors in protecting streams. Thus far, the relation between Oregon's regulatory process and stream ecology almost do not intersect. We have a blanket rule, and must follow it regardless of condition of stream, its biota, or adjacent forest. I'd like to think the State of Oregon take leadership in bringing the rules up to date. In the current discussion of Eastside streams, it would make sense to offer *constructive guidelines adapted on an individual stream basis, and to include the reliance of the fishery on solar energy,* ideally overseen by OSU Extension people, i.e. Extension Foresters trained in riparian ecology as well as forest ecology, in general.

In my view, stream and aquatic biology can be enhanced by consideration of the fishery, but only by:

a) Prescribing buffers to minimize warming ONLY where buffers keep sun off the water between 9AM and 5 PM. Please note in the paper by Cole and Newton (2013) that does this with an excellent result, especially when compared to ODF rules, in enhancing the fishery while keeping water temperature cool.
b) Considering buffer North of stream water *only* in terms of the frequency of North winds of hurricane velocity toward placement of woody debris.
c) Considering all such rules as focused compatibly with net benefits to the fishery, which is presumably the primary focus of most (or all) these rules.

In the many years I have been studying stream temperature, buffer design and stream temperatures, I have yet to see rules that make sense for the fishery. To the best of my knowledge, the few studies that have evaluated fish in the same streams where buffer function has been studies, allowing some warming of water by allowing increased solar radiation on the water has resulted in a) only temporary increase in temperature, and b) a remarkable increase in fish productivity associated with increase in net solar radiation—up to a point. In Cole and Newton (2013) we observed that removing buffers of any kind in a cold headwater stream led to a large increase in temperature, and a doubling in productivity of trout. When buffering was limited to South-side only, increase in stream temperature was not measurable, but fish productivity was nearly as great as with no buffers whatever. Please note in Cole and Newton (2013) that temperature of stream water rises quickly when entering a clearing, and loses virtually all that heat almost immediately downstream. Cumulative warming with periodic modest openings does not lead to destructively warmed streams, but does lead to more productive reaches. When buffering was 50 feet on both sides, fish productivity was not very different from where there was no harvest. Our fish data were provided by Oregon Department of Fisheries and Wildlife, and OSU's Hinkle Creek Watershed Research Cooperative.

I'd like to think any consideration of buffers and their designs will be linked to the resource being protected. It seldom is. Please allow this kind of thinking to be prevalent in further planning of stream environments, eastside (or westside).

I hope the above information is useful as you go into Eastside planning. Incidentally, Hawkins et al, 1983 is based on data from southwest Oregon, perhaps in the area on which you will be offering planning guidance.

Mike

PS: The excellent paper by Hawkins, C.P, et al, 1983, (in Can. J. Fish and Aquatic Science 40(8):1173-1185) makes it very clear that radiation reaching the water has important positive influences on young salmonids. There are apparently few if any exceptions. My sense is that any light reaching the stream other than direct sun while sun is high in the sky is an important driver in fish nutrition. I have yet to find evidence to the contrary as long as temperature doesn't exceed 21.7^{o} C, the highest we observed in Cole and Newton (2013) where 100 percent of buffer was removed, both sides. This had the highest biomass of salmonids of any treatment we did with increasing buffer, including no harvest whatever. In our work, each increase from uncut forest led to increase in temperature *and increase in fish biomass*, as measured by Oregon Department of Fisheries and Wildlife, (Jim Brick ODFW, source). Analogous data were observed by OSU's Hinkle Creek Watershed Research Cooperative regarding heavy thinning of buffers. In both situations, it took three years following increasing light on streams before biomass of fish peaked.

I'll see if I can provide you with a copy of Hawkins et al, one of my primary resources pertaining to fish and buffers.

February 28, 2017

Re: Siskiyou-Eastern Oregon Stream Side Protection Review

Oregon Department of Forestry,

Please accept these comments related to ODF's request for input for how best to address the Board of Forestry's direction to ODF to evaluate whether a rulemaking is needed for the riparian protections in the Forest Practices Act for riparian protections in the Siskiyou Region and all of Eastern Oregon. I am responding for the Board of Directors of the Oregon Small Woodlands Association (OSWA), an organization that represents the interests of over 3000 family forest owners in Oregon. It is OSWA's opinion that ODF is taking the right approach by first determining what is needed in evaluating the effectiveness of the existing riparian rules in these areas. We appreciate ODF's outreach to the regulated community for recommendations.

OSWA is not convinced the existing riparian protections in the FPA for the Siskiyou and Eastern Oregon Regions are not adequate to protect the riparian functions needed to meet the objectives of the FPA. We support research to help evaluate any riparian concerns and feel strongly that any

decisions to modify the existing rules be driven by science. In your evaluation of riparian functions, we recommend you focus on the complete list of riparian issues surrounding riparian areas and not focus on a single attribute as ODF and the Board did with the new rules for other Westside forests. With a single focus on temperature, OSWA believes the Board, following ODF's recommendations, overlooked the positive benefits to fish species from the minor and temporary increases in stream temperatures following a timber harvest and in reality, created no substantive benefits for fish, the species the new rules are supposed to create better habitat for. Please do not make the same mistake during these riparian evaluations.

When you evaluate the health of all the riparian functions under the existing rules, OSWA recommends you start by evaluating all the science available for fish health in forest streams. We believe this will give you a good understanding about what science tells us about what fish species actually need to have a healthy riparian area. This could assist you in determining where information about riparian functions for these regions is missing and where to focus the research that is needed. There appears to be a lack of science for riparian functions in the Siskiyou and Eastern Oregon Regions. With the large volume of fish research in the Pacific Northwest, focusing on fish needs, should help determine the types of research needed to invest the limited resources available for riparian research.

It is OSWA's opinion, there is no immediate riparian crisis that needs to be solved. We advise ODF to take the time needed to do a complete evaluation. During OSWA's outreach to our members in Eastern Oregon and to Stewardship Foresters in Eastern Oregon, we surmise that harvest operations in Eastern Oregon, within 100 feet of a fish bearing stream, is quite limited. The lack of log markets in Eastern Oregon have reduced the harvests on private lands in Eastern Oregon. OSWA suggests ODF ask all its Eastside Stewardship Foresters to evaluate projected harvests near riparian areas. If near term and long term probability is low, like OSWA believes it is, ODF might consider delaying its Eastside review and focus its limited resources on the Siskiyou Region and other Board issues such as Marbled Murrelets and other more pressing Board issues.

OSWA appreciates the opportunity to comment and look forward to working with ODF and assisting in any way we can to evaluate the effectiveness of the riparian rules in the Siskiyou and Eastside Regions. OSWA will support science that suggests modifications in riparian rules are needed, but insist science be the only driver of any recommended changes.

Sincerely,

Jim James

Jim James

Executive Director

Oregon Small Woodlands Association

February 27, 2017

Sent via electronic email: daniel.D.Olson@Oregon.gov

Daniel D. Olson
Private Forests Division,
Oregon Department of Forestry
2600 State Street
Salem, Oregon 97310

RE: Public Comment on the Siskiyou Exemption and Oregon Department of Forestry Monitoring Strategy for the Siskiyou Region

Dear Mr. Olson,

Thank you for the opportunity to provide public comment on the Siskiyou-Eastern Oregon Streamside Protection Review. Please accept as the official filing from Orca Conservancy the following letter.

Orca Conservancy is an all-volunteer 501(c)(3) Washington State non-profit organization, established in 1996, with the mission of working on behalf of Orcinus orca, the killer whale, and protecting the wild places on which it depends. Orca Conservancy currently represents over 20,000+ members and supporters, and collaborates with some of the world's top research institutions and environmental groups to address the most critical issues now facing wild orcas. The organization's urgent attention is on the endangered Southern Resident killer whale.

ENDANGERED SOUTHERN RESIDENT KILLER WHALE POPULATION - On November 18, 2005, after evaluating the five listing factors of the Endangered Species Act, 16 U.S.C. §§ 1531-1544, the National Marine Fisheries Service (NMFS) issued a final ruling listing the Southern Resident Killer Whales (SRKWs), as endangered under the Act. The southern resident population is comprised of three pods (identified as J-, K-, and L- pods) and is arguably the most familiar killer whale population to the general public. It occurs primarily in the Georgia Basin and

Puget Sound from late spring to fall, when it typically comprises the majority of killer whales found in Washington. The population travels more extensively during other times of the year to sites as far north as the Queen Charlotte Islands in British Columbia and as far south as Monterey Bay in California.[1] As NMFS recently acknowledged, "new information … confirms that … [S]outhern [R]esidents spend substantial time in coastal areas of Washington, Oregon and California and utilize salmon returns to these areas."[2] These coastal waters are recognized as an essential foraging area for this critically endangered population in the winter and spring, and are currently under consideration to be designated as critical habitat for the SRKW.[3]

Southern Resident killer whales (SRKW) are dietary fish-specialists and depend on abundant populations of Chinook salmon for their survival, social cohesion and reproductive success.[4] Experts anticipate that climate change and ocean acidification will contribute to further significant declines in regional salmon abundance during the coming decades, thus impeding Southern Resident recovery.[5] After over a decade of federal protection, the population has yet to show signs of significant recovery, with 78 members total as of January 2016 — now seven members fewer than when they were initially listed and their survival remains in question and is far from guaranteed[6] — the population growth needs to exceed 200 members to reach historical levels.[7] A 79th member of the SRKWs, Lolita, currently resides in Miami Seaquarium.[8]

Based on the natural history and behavior of the endangered SRKWs, it is imperative that prey species, specifically Chinook salmon, are of sufficient quality and quantity are available to support not only individual growth, reproduction, and development, but to further encourage the overall growth of this population. Prey depletion is recognized as one of the major threats to the survival and recovery of the SRKW community, and rebuilding depleted salmon stocks is listed as a top priority for the population.[9]

---

[1] Wiles, G. J. 2004. Washington State status report for the killer whale. Washington Department Fish and Wildlife, Olympia. 106 pp.

[2] Michael J. Ford, Nat'l Marine Fisheries Serv., Status Review Update of Southern Resident Killer Whales 26 (2013). In fact, evidence indicates that Southern Residents spend the majority of time in coastal and offshore waters. Cf. M. Bradley Hanson, et al., Assessing the Coastal Occurrence of Endangered Killer Whales Using Autonomous Passive Acoustic Recorders, 134 J. OF THE ACOUSTICAL SOC'Y OF AMERICA 3486, 3486 (2013) [hereinafter Coastal Occurrence] (explaining that "on average the whales occur in inland waters less than half of the days each year")

[3] 12-Month Finding on a Petition to Revise the Critical Habitat Designation for the Southern Resident Killer Whale Distinct Population Segment, 80 FR 9682, published 2/24/2015

[4] Center for Biological Diversity, Petition to Revise the Critical Habitat Designation for the Southern Resident Killer Whale (*Orcinus orca*) under the Endangered Species Act 5 (Jan. 16, 2014)

[5] See, e.g. Lisa G. Crozier et al., Predicting Differential Effects of Climate Change at the Population Level with Life-Cycle Models of Spring Chinook Salmon, 14 GLOBAL CHANGE BIOLOGY 236, 237, 247 (2008) (predicting that global warming and changing ocean conditions will lower survival and fertility among all populations of Pacific salmon, (*Oncorhynchus* spp.)

[6] Olesiuk, P. F., M. A. Bigg and G. M. Ellis. 1990. Life history and population dynamics of resident killer whales (Orcinus orca) in the coastal waters of British Columbia and Washington State. Report of the International Whaling Commission (Special Issue 12):209–243. Estimates neonate mortality between 37-50%

[7] Palo (1972) put forth a tentative estimate of 225- 300 whales for Puget Sound and the Georgia Basin in 1970 (Palo, G. J. 1972. Notes on the natural history of the killer whale Orcinus orca in Washington State. Murrelet 53:22-24)

[8] Amendment to the Endangered Species Act Listing of the Southern Resident Killer Whale Distinct Population Segment, 80 FR 7380, published 2/10/2015

[9] National Marine Fisheries Service. 2008. Recovery Plan for Southern Resident Killer Whales (*Orcinus orca*). National Marine Fisheries Service, Northwest Region, Seattle, Washington.

PROTECTIVE STREAM BUFFER STANDARDS IN THE SISKIYOU REGION - The Rogue watershed area encompasses approximately 3.3 million acres (just over 5,100 square miles). The Rogue Basin includes approximately 1 million acres of private forest land managed under the Oregon Forest Practices Act.[10] Nearly all the native fish species in the Rogue basin have been identified as "species of concern" because of their depressed numbers, and Coho salmon has been listed as threatened under the federal Endangered Species Act. Southern Oregon/Northern California coastal Coho salmon were listed as threatened in 1997 and reaffirmed in 2005. Rogue populations of spring Chinook are in precipitous decline. Non-hatchery spring Chinook averaged about 29,000 during the 1940s through the 1970s. During the last ten years, population estimates averaged less than 9,000. Additionally, the Rogue basin serves as an important wildlife corridor, containing designated critical habitat for the northern spotted owl and providing habitat to dozens of other species, including bald eagles, black bear, river otters, and Roosevelt elk.[11]

The Oregon Department of Environmental Quality (DEQ) has identified more than 150 streams and lakes that are violating water quality standards or are otherwise impaired in the Rogue Basin, noting problems with temperature, bacteria, nutrients, flow, cyanobacteria and sedimentation. According to DEQ there are many hundreds of miles of streams and rivers in the Rogue Basin that are in violation of water quality standards, including waterways on the Clean Water Act's impaired 303(d) list, and watersheds for which Total Maximum Daily Load (TMDL) documents have been approved.[12]

The Forest Practices Act (FPA) is the primary set of regulations governing forestry-related activities on non-federal in Oregon. The FPA includes standards that are designed to ensure forest operations protect the functions of riparian areas, while also meeting state water quality standards. The Oregon Board of Forestry (Board) supports a science-based, adaptive FPA as a foundation for resource protection. As a result, the FPA has been revised from time to time when monitoring and research information informed decisions to alter protection standards.[13] In November 2016, the Oregon Board of Forestry voted to make changes to the Oregon Forest Practices Act in an effort to protect cold water in fish-bearing streams. The specific rules have yet to be developed, but a summary of the major changes follows. The new rules apply to streams with salmon, steelhead, and bull trout (SSBT) in western Oregon (excluding the Siskiyou region).[14] That said, current standards for small and medium fish-bearing streams that apply on these forestlands require 50 and 70-foot Riparian Management Areas (RMAs), that often result in

[10] Forests of Western Oregon: An Overview, 2004, p. 1 - 30.
[11] The Rogue Riverkeeper, 2017. http://rogueriverkeeper.org/
[12] Department of Environmental Quality / Water Quality / Water Quality Programs, 2017. http://www.oregon.gov/deq/wq/programs/Pages/default.aspx
[13] Scoping the Effectiveness of Riparian Protection Standards in Eastern Oregon and the Siskiyou Geographic Region Charter Work Plan, December 30, 2016, p. 1-7.
[14] Oregon State University, Winter 2016. Tall Timber Topics, p. 5.

harvesting down to the 20-foot no-cut buffer minimum.[15] Elsewhere in Western Oregon, the buffers will be 60 feet wide on both sides of small fish-bearing streams and 80 feet on both sides of medium fish-bearing streams.[16]

The Board of Forestry is required to establish regulations and best management practices to "insure that to the maximum extent practicable" water quality standards are achieved and maintained under ORS 527.765(1). The Protecting Cold Water (PCW) quality standard applies statewide, including the Siskiyou region. The National Marine Fisheries Service (NMFS, the agency responsible for threatened and endangered salmon and steelhead) and the Environmental Protection Agency (EPA, administrator of the Clean Water Act) have stated their intent to "disapprove" Oregon's coastal water quality program largely due to inadequate stream protection on private lands. The two agencies want less logging and more protection of stream temperatures, as well as more protection from road- and landslide-related sediment.[17]

The science is clear that removing trees near streams results in warmer stream temperatures. Many streams across the Rogue Basin are already too warm, threatening the health of salmon and other native fish. There are more than 1,500 miles of salmon and steelhead streams in the Rogue Basin. Of these, 317 miles are small and medium streams that should receive increased protection under the new rule.

In closing, we respectfully request the Oregon Department of Forestry to expedite preliminary field monitoring by conducting a comprehensive review of existing research, and to continue efforts mitigating impacts to salmonid species that are protected under the Endangered Species Act by imposing stronger, protective stream buffer standards within the Siskiyou region.

Thank you,

Shari Tarantino

Shari Tarantino
President, Board of Directors
Orca Conservancy

[15] Oregon's Forest Protection Laws. 2002. Oregon Forest Resources Institute: Portland, Oregon, p. 136-155.
[16] Mail Tribue. Siskiyous exempt from tighter stream buffer rules, November 6, 2015. http://www.mailtribune.com/article/20151106/NEWS/151109696
[17] 2010 Oregonian Article on Coastal Zone Lawsuit

~ *Protecting clean water and fish in the Rogue basin*

Daniel Olson
Monitoring Specialist
Private Forests Division
Oregon Department of Forestry
2600 State Street
Salem, OR 97310

February 22, 2017

Re: Public Comment on the Siskiyou Exemption and ODF's Monitoring Strategy for the Siskiyou Region

Dear Mr. Olson:

Thank you for the opportunity to provide public comment on the need for changes to the water protection rules for the Siskiyou Region under the Oregon Forest Practices Act. On behalf of our more than 3,500 members and supporters, we remain concerned that the Siskiyou region's salmon and steelhead streams will be left with significantly less protection than those in the rest of western Oregon, following the Board of Forestry's November 2015 decision to exclude our region from its proposed stream buffer rule. This is a serious concern given the compelling evidence that current rules are inadequate to prevent logging that warms water temperatures in violation of the Protecting Coldwater Criterion ("PCW"), a fundamental component of the state's water quality standard for stream temperature.[1]

We appreciate both the Board's and ODF's efforts to reform stream buffer protections and the Board's decision at the November 2016 meeting to approve a modified monitoring strategy to define monitoring questions and conduct a broad review of the available science on stream buffers in the Siskiyou and eastern Oregon in the next six months.

As the Oregon Department of Forestry (ODF) moves forward to develop this monitoring strategy, we ask the Department to:

1. **Expedite preliminary field monitoring during the spring and summer of 2017 based on existing Ripstream design criteria and methodology.** Specifically, ODF should expedite GIS analysis of land ownership and other landscape variables, as proposed in the Charter Work Plan, to inform and structure the sampling design of the monitoring strategy. This will help to ensure that site

selection represents the dominant classes of field conditions. Currently, however, the Charter Work Plan does not identify initial field monitoring that could occur in the late spring and summer of 2017. We ask that ODF move forward to establish some baseline temperature monitoring, based on the Ripstream study design, and to use the preliminary GIS analysis to identify appropriate field sites. This will provide critical data to inform subsequent monitoring and analysis.

2. **Concurrently take action to conduct a comprehensive literature review of the existing data and research on state and private forestlands in the Siskiyou, as well as eastern Oregon.** ODF should move forward to synthesize the available data and existing scientific literature related to stream temperature, forest practices, and water quality in the Siskiyou and eastern Oregon. The "Protecting Coldwater for Salmon and Steelhead on Private Timberland Streams of Oregon's Siskiyou Region: A Synoptic Scientific Look at Stream Warming, Shade, and Logging" report prepared for the Oregon Stream Protection Coalition by Dr. Christopher Frissell with Frissell & Raven Hydrobiological & Landscape Sciences, LLC and Richard Nawa with the Klamath-Siskiyou Wildlands Center provides a synthesis of the scientific literature related to this issue in the Siskiyou region.[2] This report finds no scientific evidence that the relationship between stream temperature and shade is any different in the Siskiyou region than it is in western Oregon. The ecological differences that exist between the Siskiyou region and western Oregon have a minimal effect on that relationship. In fact, the science indicates that small and medium streams in the Siskiyou may actually be more sensitive to temperature changes from changes in shade.

The Importance of Protective Stream Buffer Standards in the Siskiyou Region

The Rogue River watershed stretches across more than 3 million acres, from its headwaters near Crater Lake to the mouth of the river along Oregon's southern coast at Gold Beach. The Rogue Basin includes approximately 1 million acres of private forest land managed under the Oregon Forest Practices Act. Current standards for small and medium fish-bearing streams that apply on these forestlands require 50 and 70-foot Riparian Management Areas (RMAs), respectively, that often result in harvesting down to the 20-foot no-cut buffer minimum.[3] The RipStream study concluded that these standards were not adequate to meet the PCW water quality standard.[4] Excluding the Siskiyou region will leave in place this less protective standard in likely violation of the PCW and putting threatened salmonids at further risk.

Meeting the Protecting Cold Water Criterion

The Board of Forestry is required to establish regulations and best management practices to "insure that to the maximum extent practicable" water quality standards are achieved and maintained under ORS 527.765(1). The PCW water quality standard applies statewide, including the Siskiyou region, to streams that support salmon, steelhead, and bull trout ("SSBT") and to upstream stream reaches necessary to meet the criterion downstream. ODF's own analysis

demonstrates that logging down to the minimum allowed buffer has been shown to cause stream temperatures to increase by an average of 1.45 degrees C, well above the 0.3 degrees C allowed under the PCW standard.[5] If the Siskiyou Exemption remains, many small and medium fish-bearing streams in our region that would qualify for the proposed revised buffer standard would be left with the current inadequate prescriptions.

Impacts to Threatened Southern Oregon/Northern California Coast (SONCC) Coho Salmon in the Siskiyou Region

In addition to compliance with the PCW water quality standard, there is evidence that current buffer standards are not protective of threatened salmonids in the Siskiyou region. In 1999, the Independent Multidisciplinary Science Team (IMST) conducted an analysis of the impacts of forest practices on wild salmonids on forestlands west of the Cascade Range and in the Siskiyou Mountains. The report synthesized findings in the scientific literature, concluding that the removal of trees near streams results in warming stream temperatures.[6] In 2001, NOAA Fisheries, EPA, and USFWS found that Oregon's forest practices "adversely affect temperature-related factors such as shade levels, surface erosion, landslide rates, stream morphology and substrate, and landscape-scale conditions," resulting in "water quality impairments due to forest management activities even with FPA rules and BMPs."[7] A 2004 IMST report reviewing existing riparian buffer standards further states that "current rules for riparian protection, large wood management, sedimentation, and fish passage are not adequate to reserve depressed stocks of wild salmonids."[8]

Within the Siskiyou region, the Rogue watershed provides habitat for the Southern Oregon/Northern California Coast (SONCC) Evolutionarily Significant Unit (ESU) of coho salmon, listed as a threatened species under the Endangered Species Act first in 1997 and reaffirmed in 2005.[9] The 2014 Final SONCC Coho Recovery Plan from NOAA Fisheries states that the Oregon Forest Practices Act and related regulations are the least protective within the SONCC coho ESU and identified improving timber harvest practices under the Oregon Forest Practices Act as one of the highest priority recovery actions for the Illinois River, Middle Rogue/Applegate, and Upper Rogue coho populations. [10] Inadequate protections under the Oregon Forest Practices Act including stream buffer standards, as identified by the IMST and multiple federal agencies, remain a significant threat to the recovery of native salmonids in the Rogue watershed.

Moving Forward with Siskiyou Region Monitoring Strategy

In conclusion, as ODF moves forward with a monitoring strategy to identify monitoring questions and to conduct a literature review for the Siskiyou region and eastern Oregon, we thank the agency for the opportunity to provide input and comment. Specifically, we ask that preliminary field monitoring in these regions is expedited to begin in the spring and summer of 2017 using the Ripstream design criteria and methodology. Additionally,

we ask the agency to concurrently conduct its comprehensive literature review of existing data and to continue to prioritize improvement of stream buffers in the Siskiyou region to prevent violations of the PCW and to mitigate impacts to salmonid species protected under the Endangered Species Act.

Thanks for your consideration of this critical issue.

Sincerely,

Stacey Detwiler
Conservation Director
Rogue Riverkeeper

[1] Groom et al. 2011. *Response of Western Oregon (USA) stream temperature to contemporary forest management*, Forest Ecology and Management, 262: 1618-1629.
[2] Frissell, Christopher A. and Richard K. Nawa. 2016. Protecting coldwater for salmon and steelhead on private timberland streams of Oregon's Siskiyou region: A synoptic scientific look at stream warming, shade, and logging. Prepared for the Oregon Stream Protection Coalition. Available online < https://www.oregon.gov/ODF/Board/Documents/BOF/20161102/BOFMIN_20161102_MaryScurlock_Agenda%20Item%207_07.pdf >.
[3] Oregon's Forest Protection Laws. 2002. Oregon Forest Resources Institute: Portland, Oregon, p. 136-155.
[4] Groom et al., 2011. *Response of Western Oregon (USA) stream temperature to contemporary forest management*, Forest Ecology and Management, 262: 1618-1629.
[5] Groom et al. 2011. *Response of Western Oregon (USA) stream temperature to contemporary forest management*, Forest Ecology and Management, 262: 1618-1629.
[6] Independent Multidisciplinary Science Team. 1999. Recovery of Wild Salmonids in Western Oregon Forests: Oregon Forest Practices Act Rules and the Measures in the Oregon Plan for Salmon and Watersheds. Technical Report 1999-1 to the Oregon Plan for Salmon and Watersheds, Governor's Natural Resources Office, Salem, Oregon, p. 66.
[7] EPA-FWS-NMFS, 2/28/01 Stream Temperature Sufficiency Analysis Letter to ODF and ODEQ.
[8] Independent Multidisciplinary Science Team. 1999. Recovery of Wild Salmonids in Western Oregon Forests: Oregon Forest Practices Act Rules and the Measures in the Oregon Plan for Salmon and Watersheds. Technical Report 1999-1 to the Oregon Plan for Salmon and Watersheds, Governor's Natural Resources Office, Salem, Oregon, p. 2.
[9] National Marine Fisheries Service. 2014. Final Recovery Plan for the Southern Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon (Oncorhynchus kisutch). National Marine Fisheries Service. Arcata, CA, p. ES-3-ES-4.
[10] *Ibid*., p. ES 5

LONE ROCK
RESOURCES

28 February 2017
Daniel Olson
Oregon Department of Forestry
Private Forests Division/Monitoring Specialist
2600 State Street
Salem, OR 97310

RE: Siskiyou Region and Eastern Oregon Streamside Protection Review

Mr. Olson:

Lone Rock Timber Management Company (LRTM) is a family-owned professionally managed forest management company based in Roseburg, OR. We are responsible for over 129,000 acres of lands in southwest Oregon with approximately 40,000 acres in the Siskiyou region. Our experience managing and working on lands in this specific geography provides us perspective and expertise on meeting the multiple goals of active forest management and resource protection. We appreciate the opportunity to provide our perspectives to the question posed by Oregon Department of Forestry at the direction of the Board of Forestry to review riparian management regulations in the Siskiyou and Eastern Oregon regions.

Water is a critical resource across Oregon. It is no less critical in the Siskiyou region. Thus forest practices and associated regulations should strive to minimize negative impacts to water resources. It seems prudent to review our practices and our regulations on occasion to make sure our practices and rules are meeting their objectives. I can appreciate the interest of the Board in water resources on our forested landscapes in these regions. However, such interest should take into account the land use history of the region, the geology of the region, the geography of the area as well as the forest cover. When evaluating resources for review, the Department and the Board should evaluate riparian rule analysis against other resources of importance in the Siskiyou region. I am not certain riparian rule analysis is the most effective use of agency resources. In regions with declining forest management infrastructure the Department would do well to explore opportunities to enhance management opportunities while regulating practices to manage for other resources.

Any review of forest practices should include or at least acknowledge other land uses' impacts on water resources in the region. Southern Oregon/Siskiyou region has an intensive history with water diversions for irrigation and municipal needs. Mining, agriculture and municipal withdrawals (and inputs) impact water quantity and quality in the region. Without accounting for these factors, determining the effectiveness or impacts from forest management on water quality seems to be challenging.
The geology of the Siskiyou region is different than western Oregon with expansive areas of decomposed granite and other highly erodible substrate materials. This geology leads to different stream structure and composition than other regions of the State. Investigating the relationship of this unique geology with contemporary forest practices should be included in any analysis going forward.

Contemporary forest practices reflect stream protection regulations implemented after adoption of the 1994 stream rules. Site productivity of the Siskiyou region may limit the ability to differentiate pre- and post-1994 practices as much of today's forest landscape still reflects pre-1994 practices and those forests are still growing today. Any review of literature or published research should account for this change in practice after 1994.

Any analysis of effectiveness of riparian rules in the Siskiyou region should incorporate contemporary scientific investigation with clearly defined questions as the starting point. Recognition of gaps in knowledge is important to help identify where further inquiry is needed. Biological outcomes must be a component of any analysis as well.

There are numerous aspects of the Forest Practices Act worth exploring. Water is an important resource we all manage for. Any questions on current regulatory effectiveness at meeting the goals of the regulation in question requires careful analysis and diligence. I appreciate the Department allowing for these comments to be presented.

Sincerely,

Jake Gibbs

Jake Gibbs

P.O. Box 1127 • Roseburg, Oregon 97470 • *Phone:* 541-673-0141 • *Fax:* 541-440-2516

OREGON FOREST &
INDUSTRIES COUNCIL
SUSTAINABILITY. SCIENCE. INNOVATION. GROWTH.

PO Box 12826
Salem, Oregon 97385
(503) 371-2942
Fax (503) 371-6223
www.ofic.com

February 28, 2017

Daniel Olson
Oregon Department of Forestry
2600 State Street
Salem, OR 97310

Daniel,

Thanks for opportunity to provide input into the Siskiyou/ Eastern Oregon Riparian Review. On behalf of over 50 large landowners and manufacturers in the state of Oregon we offer the following comments for your consideration. Up front I would like to note that we are not aware of evidence of a problem with Forestry Practices and stream systems in the Siskiyou or Eastern Oregon Regions. However, we recognize that ODF has authority to conduct monitoring for the purposes of informing the adaptive management process.

Inasmuch as ODF and the Board of Forestry (BOF) are prioritizing riparian review in the Siskiyou and Eastern Oregon Regions highly on their respective lists, we have the following recommendations;

- Past research has sufficiently catalogued the differences that exist between these "drier" regions and other regions of Oregon, see attached report. Information regarding riparian systems garnered from within other regions throughout Oregon should not be extrapolated to the Siskiyou and Eastern Oregon regions without significant vetting.

- Monitoring designed to test the *effectiveness* of forest practices rules should first seek to identify the outcome that the Board desired when promulgating the rule; what *effect* did the Board intend to cause. In this case, the 1994 document titled "The Oregon Forest Practices Act Water Protection Rules, Science and Policy Considerations" should be consulted as a guide to determine those intended effects.

- ODF should conduct an extensive search of the published, peer reviewed literature to inform the state of knowledge, as well as identify gaps.
    - Identified research should be directly applicable to these regions; with strong preference to research conducted within the regions themselves.

- ODF should allow the BOF to weigh into this conversation iteratively;
    - First; identify the questions and stream attributes that would best measure the effectiveness of the RMA rules in the Siskiyou and Eastern Oregon Regions
    - Next; identify the state of information that would inform those questions, as well possible missing elements or gaps in the literature
    - Next; identify the un-answered questions, and prioritize those questions

- Finally; propose method/s of study to help answer the identified question/s

- These iterations should allow extensive stakeholder and technical expert involvement.

- Literature review and question identification must include biological response, and allow for follow-up questions/ studies to be identified and conducted.

Any study ODF designs should be scientifically sound, and statistically valid across the population or area in which the findings will be inferred.

Thanks again for the opportunity to offer comment. The departments' interest in working with landowners to help deliver an effective monitoring program is vital to its success, and we appreciate your efforts to maintain that relationship. We remain dedicated to working with you in this effort.

Sincerely,

Seth A. Barnes

Seth Barnes, Director of Forest Policy

Letters from Board Advisory Committees

See Attachment 2, Agenda Item 7, from July 27, 2017 Board meeting.