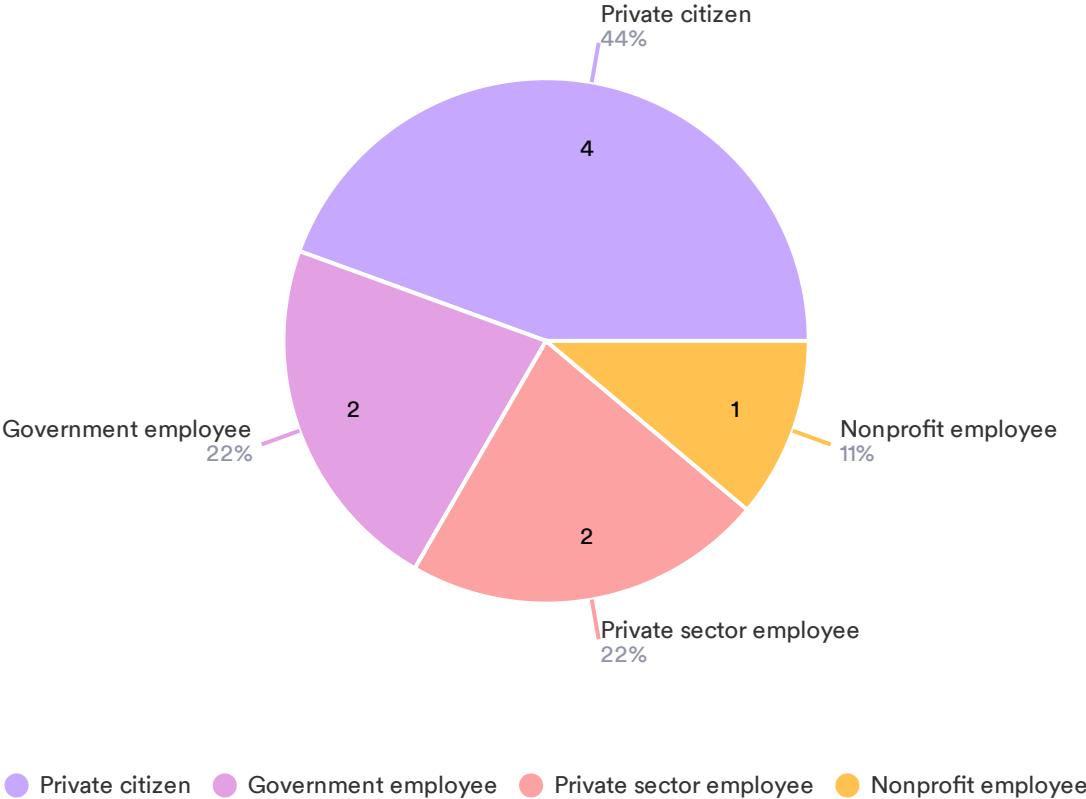


Mid-Coast Water Planning Partnership

September 28, 2021 Post-Webinar Survey (8 respondents)

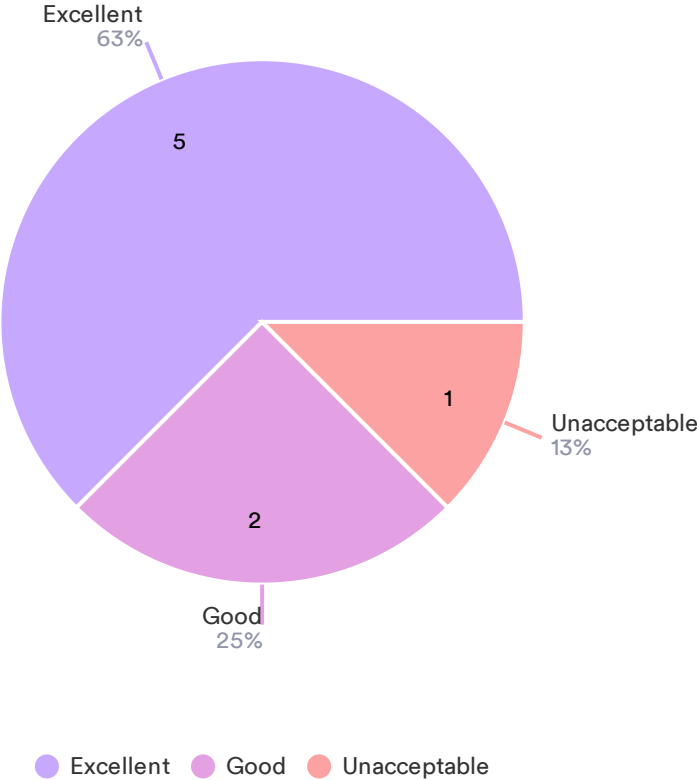
1. Please select the category, or categories, that best represent you.

9 Responses



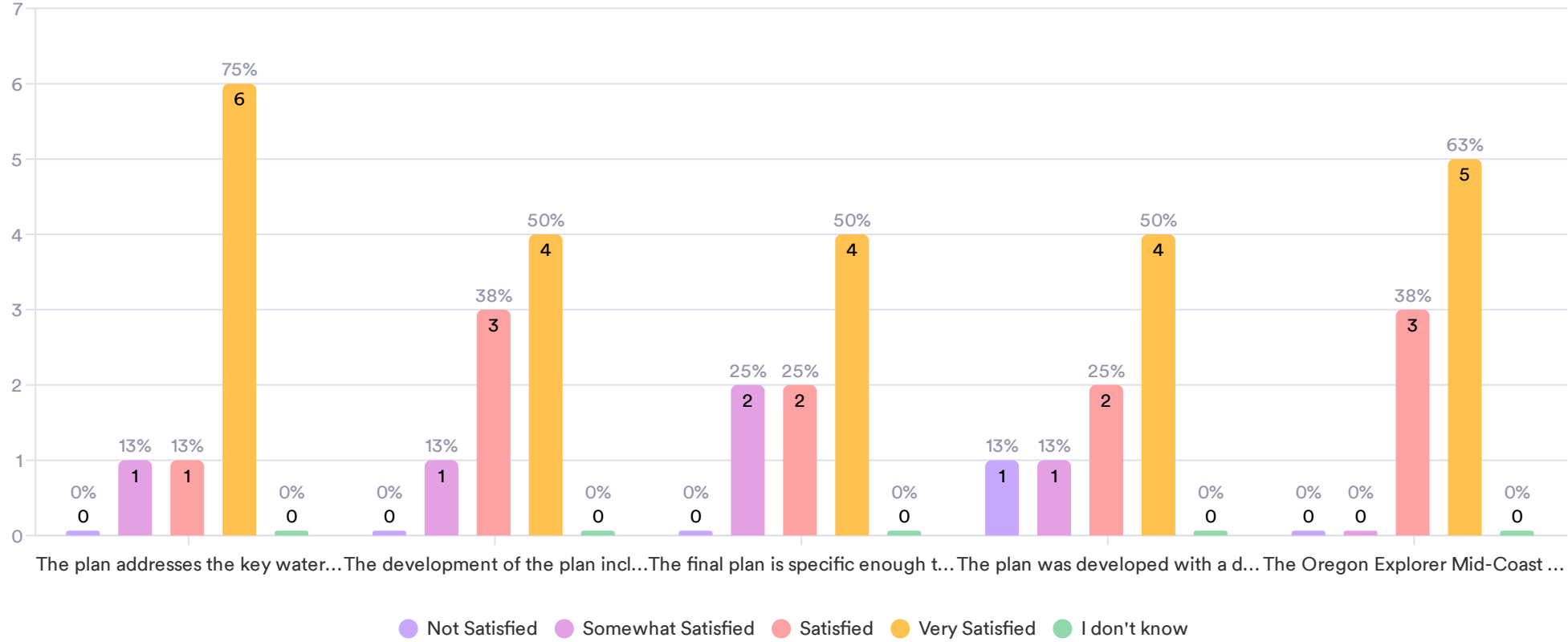
2. Overall, how would you rate the quality of the content of the Mid-Coast Water Action Plan?

8 Responses



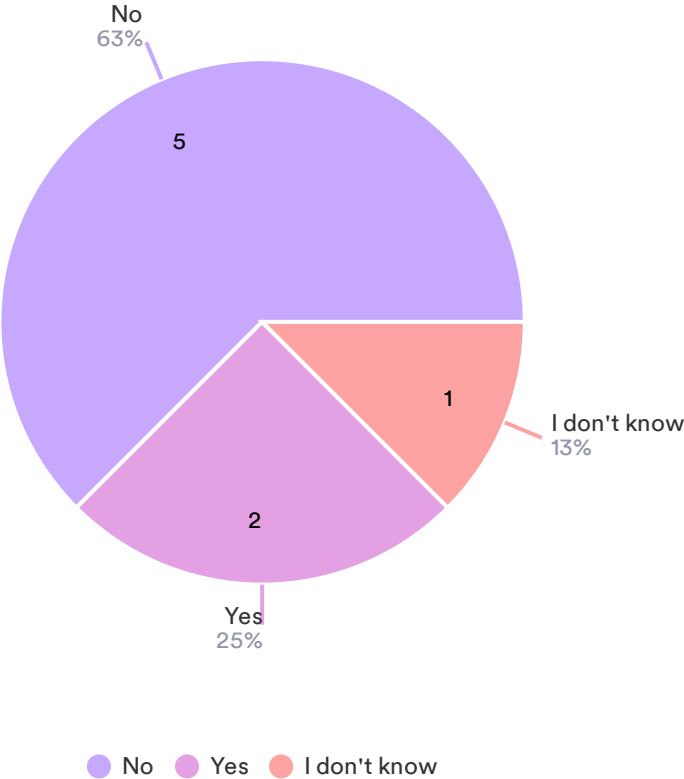
3. Based on your participation in the Mid-Coast Water Planning Partnership webinar on the new draft Mid-Coast Water Action Plan, how satisfied are you that:

8 Responses



4. Based on your review and understanding of the content of the Mid-Coast Water Action Plan, do you believe the plan has any major gaps?

8 Responses



4a. If you answered yes to the last question, please identify the key gap, or gaps, that you believe is/are missing in the plan (2 responses)

1. Emergency preparedness is present, though under-represented. When (though hopefully "if") the Cascadia Subduction Zone Quake occurs, the extraordinary efforts made on other parts of the plan may be largely reset without a robust system to address the needs of humans.
2. Thank you for allowing opportunity to provide comments. We voiced early concerns that there seemed to be a few participants that had personal "axes to grind" in terms of their longtime advocacy against commercial forest operations. We were assured several times that this was a cooperative process based on the precepts of a consensus process, and that issues that were not supported by everyone or lacked adequate substance would not make it to the final report. Much of this document seems very useful, and right on the mark with the needs of the community to plan for safe and abundant water into the future. Having said that, I have to admit that I was dismayed with a couple of sections of the document, shocked at the level of misinformation and slanted commentary evident. Section 8 "ecosystem protection and enhancement" as well as Appendix I which described the Oregon Forest Practices Act (FPA) and current condition of riparian areas.

Section 8 contains by far the highest number of individual action items (16), even though it likely already represents one of the smallest areas of potential gain- streams coming from forestlands in the state of Oregon already contain the highest quality water of streams within any land use. Oregon's forest practices act contains road construction and maintenance BMPs as well as riparian buffers of varying sizes, that have proven to dramatically minimize and, in many cases, eliminate water quality impacts at the point of harvest and certainly downstream (see Groom et al 2011, Hatten et al 2017, Bladon et al 2016, Davis et al 2016). Many of the action items listed in this section are redundant and seem very scattered, unlike those of the other sections where goals are far more targeted. Action items 44, 45, 46, and 50 could all be summed up by the language already existing within Action item 44, I would encourage eliminating and consolidating in this way.

Action item 45 states "Advocate for increasing wooded buffer zones" and in the desired outcomes it states, "woody buffers zones associated with all stream sizes... are increased" in order to "provide adequate ecological functions." Again, this language is based on an unfounded assumption that ALL current buffers in Oregon, on all landowner properties are currently too small to "provide ADEQUATE ecological functions" [emphasis added]. This is simply not true. The adequacy of the current buffers has been the emphasis of several research studies looking at both water quality outcomes as well as fish response. These studies have document vastly improved water quality outcomes on forest lands, and the "adequacy" of those buffers has been well documented. Suffice it to say, this language is not acceptable to forest landowners in Oregon who strive to adhere to these strict regulatory measures and give up asset value on their lands to provide adequate protection. I am personally offended by this language and would strongly encourage a rewrite as mentioned above- collapsing these action items into the language already existing for Action item 44.

Action item 47 simply states a desire for "longer forest rotations" without any context to how this would do anything towards water quality, or what target rotation would be desired, or what this goal is based upon at all. Clearly there is an assumption by the author that whatever any landowner is currently using as a rotation age it

is too short. Yet the watersheds across this planning horizon vary dramatically, as do the rotation ages that landowners are implementing. This statement should be removed from the document altogether. I believe that many landowners who have participated at various points in this process would take exception to this unfounded "Action item" being imbedded in this plan. We strongly encourage removing this item.

Appendix I is full of misinformation and the authors personal commentary on the Oregon Forest Practices Act. For example, on page 136 it states "As of August 2021, the FPA does not have any water quality protection provisions for operations in landslide-prone areas." This is simply not true. The author may wish to see different or increased protections, but it is not true that none exist within the Forest Practices Act. Here are a few of the rules currently in place for the protection of water quality in landslide-prone areas; 629-625-0200, 625-0310, 625-0330, 629-630-0150, 630-0400, 630-0500, and there are others. Furthermore, roads have, by far, the greatest effect on stability of slopes on forestlands, at least on a unit area basis (Sidle et al., 1985). Since the inception of the FPA, there have been rules governing the location, design, construction, and maintenance of forest roads for the purpose of reducing sediment delivery to waters of the state. In 1983, improvements were made specifically to reduce the risk of landslides, and in 2002, rules were enhanced to address landslides and public safety. Several technical notes were published in 2003 to help landowners reduce landslide risks in their operations (ODF 2003a,b,c). Administrative guidance is also available to help landowners identify slide-prone sites and streams (Robison et al. 1999).

This mixture of prescriptive rules, best management practices, and technical guidance have worked to reduce forestry-related mass wasting. For example, in their intensive field review of the source and characteristics of landslides associated with two large rain events in 1996, Robison et al. (1999) conclude: "Based on the low numbers of road-associated landslides surveyed in this study and on the smaller sizes of these landslides (as compared with previous studies), current road management practices are almost certainly reducing the size of road associated landslides, as well as the number of landslides." Importantly, rules governing high risk sites apply to forestry operations in all of western Oregon, not just those areas that pose a risk to public safety.

Another example is at the top of page 137 where it states, "As of August 2021, the FPA still lacks provisions to protect small, non-fish-bearing, ephemeral and intermittent streams during harvesting" that is incorrect. The author may personally believe that the protection measures for small, non-fish-bearing streams should be greater, but it is not correct to state that the act "lacks provisions to protect". Here are some examples of the provisions in place to protect small, non-fish-bearing streams; 629-625-0200, 629-625-0320, 625-0330, 629-625-0700, 629-630-0600, 630-0700, 629-630-0800, and there are others.

Furthermore, several dates are referenced when updates to the Oregon FPA have been made, even up to claims that "as of August 2021..." giving the reader the impression that this is a comprehensive list of the latest updates to the Act. However, there is not a single mention of the June 2020 legislation that was passed and went into effect January of 2021 expanding buffers around streams, including all flowing fish and non-fish streams when helicopter herbicides in forestry are applied. This legislation, Senate Bill 1602, created the 300-foot buffers for all homes, schools, domestic water intakes, agriculture intakes, and community or municipal water intakes. The bill also created a first in the nation notification system to be built into the FERNS system that will allow "real-time" notification for neighbors when helicopter applications are going to occur. I highly suggest edits to this section- the Oregon Department of Forestry can help you edit the section to remove the erroneous claims that there are NO protections for slopes or certain streams. They can also help you with language regarding Senate Bill 1602 so your document is accurate and reflects actions that are already in place that go beyond what is described here.

What is a specific action you can take to help implement the Mid-Coast Water Planning Partnership Water Action Plan? (7 responses)

1. Collaborate with Lincoln SWCD, ODA, and other partners to develop NRCS EQIP funding pools to assist landowners with conservation practices that will address water quality and water quantity concerns in the Siletz Source Water Area and the Upper Yaquina Strategic Implementation Area over the next 3-5 years.
2. Continue to volunteer to help with the action plan implementation.
3. Use the Oregon Explorer Tool with the intent of learning its strengths and weaknesses to share with others its utility and areas needing improvement.
4. Make sure the plans website is intuitively and easily accessible. Keep a focus on the educational opportunities in illustrating the importance of water and conservation to human culture and the environment as a whole.
5. As a member of the Greater Newport Area's Vision 2040 advisory committee, I can work to tie together the actions of the mid-coast water partnership water action plan with the V2040 goals. I can then work to promote / support the water goals as a part of the efforts to move forward the 2040 vision. And track the work to complete those goals over time.
6. My members own and manage many of the lands that contain the source water for water systems in the mid-coast. We work everyday to protect streams and other waters during our forest operations. We work cooperatively with several watershed council and other volunteer groups to prioritize projects to restore riparian ecosystems from the effects of legacy operations. We will continue to do all of this work for the protection and enhancement of waters and riparian areas. We will also strive for the highest levels of compliance with existing State and Federal rules and regulations governing forest operations and activities.
7. Working to establish the Lincoln County Water System Alliance (LCWSA) to serve as a "Local Implementation Organization," with the MCWPP's support to provide enhanced coordination with state and federal entities regarding regulations, permits, and funding. The LCWSA represents the major water purveyors throughout the county and will develop and implement a 50 year plan for water supplies and system improvements countywide - as included in the Mid-Coast Water Action Plan.

Is there anything you want to let the planning team know about the Mid-Coast Water Action Plan before it is finalized, or as an overall comment? (7 responses)

1. The facilitation during the development of the Plan was excellent, and included the input from the signatories throughout. The link to and inclusion of old and new data resources and previous proposed plans will be especially helpful as our communities implement the actions that are proposed. Current and new organizations within the county have been identified for leadership in the implementation, and they should be supported through the MCWPP. An example for this is the Puget Sound Partnership which focuses on the protection and recovery of the Sound ecosystems. That Partnership supports "Local Integrating Organizations" (LIOs) through capacity funding, resources, and liaison support. Our local organizations, leading the actual implementation of our Action Plan, could be called "Local Implementation Organizations."

2. The new Oregon Explorer planning tool looks like a fabulous resource that I plan to use for short and long range planning for delivery of priority conservation technical and financial assistance in the Mid Coast region--thanks for the run-through of all the different functionality and maps, it was super useful!
3. Great job well done. Thanks to everyone that helped to get our Mid-Coast Water Action Plan created. Our plan has many actions that all can find ways they can help too.
4. Roll with it!
5. Great job to all!!
6. As a retired person with a lot of business experience, I have both a broad knowledge / experience base as well as deep experience in several areas. I have been a Marketing VP and a Chief Operating Officer at small private companies. I am only including this information to hopefully add weight to my comments. The work that the planning team has done with the signatories, in conjunction with the creation of the various work products (e.g., action plan / explorer) is outstanding. These work products are so well thought out, so well executed, and so good that it is hard to express in words how world-class they are. Please thank the entire team members at Creative Resource Strategies, the Institute for Natural Resources, Oregon Sea Grant, and Oregon State Extension Service, as well as yourself and any others involved for the time, effort, and work that has been put in to deliver these outstanding / world-class results.
7. It appears that there's an assumption in this document that forestry activities, even with current rules and Best Management Practices (BMPs) in place, are harmful to aquatic systems. These assumptions are not in harmony with recent findings, and likely reflects impacts in these systems from legacy harvest activities done decades ago. Prior to the 1970s, forest practices were detrimental to water quality, salmonids, and their habitat. Before the implementation of the FPA in 1971, forest management left no trees along streams; had no limitations on equipment operating within stream corridors or on steep hillslopes; allowed broadcast burning of entire watersheds, no limit to size of even-aged harvest units, no adjacent green-up requirements, no requirement of reforestation following harvest, no required protection of streamside overstory or understory, no requirements to provide fish passage at road crossings, and streams could be piled with logging slash. Splash-damming and the straightening and clearing of streams to facilitate log transport were common (Miller 2010). This was followed by an era of stream "cleaning" at the behest of fisheries managers to remove large wood that was thought to block upstream movement of adult spawning salmon. The Alsea Paired Watershed study evaluated forest practices of the era, and documented many of these impacts (Moring 1975, Moring and Lantz 1975). Similar results were found in an intensively studied watershed in British Columbia (Carnation Creek; Hartman et al. 1987). Both studies included an important aspect - measuring fish response – that went beyond the simpler task of measuring changes in watershed conditions and habitat. The findings from the original Alsea study strongly influenced the creation of the nation's first FPA in Oregon. The impacts associated with forest management identified in these studies were addressed through progressive changes to the rules as new information became available. The legacy impacts from these practices have, and will take time to fully recover from, regardless of myriad changes that have been implemented since that era. Nevertheless, these historic impacts continue to be routinely cited as justification for more stringent forest management regulations by environmental groups, and some of those sentiments have found their way into this document.

As noted, Oregon's FPA has been amended more than 30 times since 1971, most of those amendments have been in response to data suggesting improvements for fish habitat and/or water quality. These

rules include road construction and maintenance practices, fish passage, and harvest buffers. In the last four years the FPA has been amended twice to increase the buffer widths, tree density, and tree distribution next to streams with salmon, steelhead, or bull trout (SSBT). The increased protections for salmon streams were prompted by a rigorous evaluation of the effectiveness of stream buffers on small to medium fish-bearing streams (the RipStream project) which ODF began in 2002, using a before-after, control-impact experimental design (Groom et al. 2011a, b).

An extensive ODFW research effort on stream habitat and salmon populations in Coast Range streams has been ongoing since the mid-1990s (Firman and Jacobs 2001). This data set is perhaps the most detailed in the Pacific Northwest and recent analyses of these data has produced results that clearly contradict many of the claims included in the petition. This work has found that the condition of many habitat features is comparable on public and private forest land as are juvenile salmon densities (Anlauf et al. 2011, Steel et al. 2017).

Although forestry in Oregon had historic impacts on fish habitat, current data indicates that contemporary forest management mitigates for those impacts. Anlauf et al. (2011) used data collected from 121 coastal Oregon basins to examine the relationships between 11 stream habitat characteristics and landscape composition (Figure 1). The landscape composition variables included both features that were independent of land management activities (termed immutable features) and characteristics related to past and current land management activities. This analysis concluded that many of the stream habitat attributes were controlled primarily by immutable watershed characteristics, such as stream gradient, catchment geology, climate, and elevation. For example, variation in fine sediment levels among catchments was almost entirely dictated by factors independent of land management. Other attributes that were little influenced by land management included channel width, secondary channel area, pool depth, and channel complexity. Complexity was a composite attribute based on pool frequency, pool characteristics, and area of secondary channel. The attributes most influenced by management-related factors were pool frequency and wood volume. There was relatively little difference in wood abundance on lands under federal, state, or private industrial forest management.

Steel et al. (2017) conducted a similar analysis of stream habitat using data collected from 1998 through 2013 from 490 stream reaches in coastal Oregon basins. They assigned reaches to classes based on the ownership of land upstream of the sampled reach. They found little difference among ownership categories for shade, wood volume, or gravel.

Steel et al. (2017) also examined factors related to the abundance of juvenile coho salmon in these 490 stream reaches. This paper compared juvenile coho salmon densities among three land-ownership categories; public, private industrial forest, and private non-industrial, which included a mix of forest, agriculture, and developed lands. They reported that land ownership type had no influence on juvenile coho density.

In terms of sediment, there are two primary sources of forest management-related sediment; erosion of road surfaces and landslides. Over the last several decades there have been numerous management measures implemented that have greatly reduced sediment related to these sources. Delivery of road sediment to streams was a serious issue prior to the 1990s. However, changes to road management practices, particularly disconnecting road drainage systems from natural drainage networks, has greatly reduced sediment delivery. Reiter et al. (2009) studied trends in turbidity across large timescales (decades) and whole watersheds. They documented steady declines in turbidity as best management practices for roads were improved from the 1970s through early 2000s in the Deschutes River basin in Washington. These road improvements mirrored those in Oregon during the same timeframe. Arismendi et al. (2017) measured turbidity and suspended sediment levels in small non-fish tributaries

of coastal Oregon streams (Trask River drainage) above and below road crossings. They evaluated the effects of road re-construction and timber harvest/log haul phases of forest management and found “minimal increases of both turbidity and suspended sediment concentrations after road improvement, forest harvest, and hauling”.

In the Alsea Paired Watershed Study Revisited, Hatten et al. (2018) found “no evidence that contemporary harvesting techniques affected suspended sediment concentrations or yields”. Overall, “suspended sediment concentrations and yields after contemporary harvesting were similar to pre-treatment levels.” In the Trask River paired watershed study (Bywater-Reyes et al. 2017), there was some evidence of increased sediment yield after harvest, but the underlying geology and physiography of the harvested areas were far more influential on sediment yield than the harvest prescription (buffer or no buffer). This is similar to what Wise and O’Connor (2016) found when they developed a suspended sediment model for Oregon using landscape level variables and actual sediment data. They indicate, “The significant explanatory variables were lithologic province, precipitation, and area disturbed by recent wildfire.”

Other, novel techniques are being used to identify long-term trends in sediment production from forestlands. By examining the layers of sediment deposited on a natural lakebed in the Umpqua River drainage (Loon Lake), Richardson et al. (2018) identified relative rates of sediment accumulation during historic (~515-1945 AD) and contemporary (1946-2012) periods. They found lower sediment accumulation after 1972 than between 1946 and 1971, which they associate with improved road building and timber harvest practices after the FPA was adopted in 1972.

I include all of this here to further reiterate the point that it is unfounded to place blame on contemporary forestry protection measures that ultimately stems from legacy impacts from historic harvest activities. Section 8 should be revised as noted I suggested in my answer to question 4a above.