Data Submitted (UTC 11): 9/25/2021 7:00:00 AM
First name: Karen
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Organization:
Title:
Comments: Please see attached letter.

Dear John,

The following are my comments on the above referenced Report, as well as your introductory letter, to be entered into the public record.

1. Introductory Letter. Elkhorn Creek was designated a Wild and Scenic River 25 years ago, in 1996. Its early designation speaks to the high public interest in preserving the river values protected by the 1968 Act--free flow, high water quality, and Outstandingly Remarkable Values specific to each river segment. However, the two federal agencies (BLM and USFS) who equally share responsibility for public lands in the Elkhorn Creek river corridor are just now developing a Comprehensive River Management Plan. The River Values Report is the first step in this process. A truly outstanding feature of the 1968 Act is that free flow, water quality, and specific ORV's are protected once the designation is made. Elkhorn Creek has therefore remained pristine since 1996.

(a)Beachie Creek Fire. In accordance with the 1968 Act, the values described in the Report are those which caused Elkhorn Creek to be designated a Wild and Scenic River in the first place. Thus, the description is prior to the Beachie Fire, which had a devastating effect on this area. As a management strategy, I am most concerned about the high soil burn severity (42% of the corridor) and even moderate Soil burn severity (56%). It is imperative to keep the public out of this river corridor (including kayakers) until these fragile soils recover and are revegetated.

Considering the fire impact, it is proactive to continue the 1/2 mile interim river boundary, and I hope that is the width protected in the final Plan. For clarification purposes, the words "on each side11 should be added after Elkhorn Creek (p. 1, last full paragraph) here and elsewhere.

(b) ORV's. It was helpful to state at the outset the cri[shy] teria for an "outstandingly remarkable" river value. Perhaps not obvious, it must be river related, but also a "unique, rare, or exemplary11 feature when compared with other rivers in the region. This definition sets up the analyses carried out in the Values Report.

Xl) Scenery. It is clear from the photographs and descriptions that scenery should be an ORV for these river segments. Fortunately, the Beachie Fire will not change several components of the Scenic ORV--geology, river flow, light quality, and 11untouched by modern humans". The latter component will depend somewhat on management.

(2) Fisheries. I have a professional background in fisheries, and started my career working on the Ocean Salmon Project in California. Anadromous fish species are in such dire straits that any river segment having critical habitat for ESA-listed species should be protected as an ORV if the criteria apply.

(3) Wildlife. The two groups of species mentioned here - mollusks and amphibians - that meet the ORV criteria are quite sensitive to human disturbance. Thus, lack of access should be a key element of the Management Plan. At the top of p. 3, it is un[shy] clear what "this species" refers to. If it's more than one, it should read .,these species0[bull]

(c) Planning Process. This is well summarized on p.3; I like the flow chart. The River Values Report, the first step in the process, is intended to identify and characterize river values and specific ORV's for each Elkhorn Creek

Wild and Scenic River segment.

(d}} PublicComment. The bulleted items allow for public input on a broad range of topics, which is great. I have found that comments at the scoping level, if properly considered, lead to a better EA and Management Plan. I do not have personal exper[shy] ience with Elkhorn Creek but I have visited and hiked surrounding areas.

(e) Figures. The legend in Figure 1 is too small to read but it is largely repeated in Figure 3 of the Report. Figures 2 and 3 are quite sobering and sad.

B.. River Values Report. The cover photograph illustrates my point that components of the Scenic ORV--geology, river flow, and light--will survive any cataclismic event such as a fire. As an example, Silver Falls Trail of Ten Falls was inundated by severe flooding in 1995-1996, destroying the Canyon trail, but the play of light, boulders in the creeks, and waterfalls remained. The recovery process was quite interesting to observe.

The Table of Contents is correctly pagenated to correspond with the text.

The Introduction is excellent, describing the Report as a "detailed description of and indicators for the river values", which will 11become the basis for future management decisions". Figure 1 illustrates well the free flowing aspect of the creek.

(a) Wild and Scenic Rivers Act Requirements. These are summarized in more etai ere tan int e intro uctory letter. To qualify as a "unique" 11rare11 feature, an ORV must be a "conspic[shy] uous example" of that value. "River related" means located in or within 1/4 mile of a river, contributing substantially to func[shy] tioning of the river ecosystem, and/or owing its location or exis[shy] tence to the presence of the river. The determination of whether or not a river has a particular ORV is, by law, a professional judgment by the responsible officials as informed by the interdis[shy] ciplinary team, best available scientific information, and public participation.

{{b) Elkhorn Creek Segments. Figure 2 again shows the geological/creek diversity qualities that contribute to the Scenic ORV. The human figure, here and elsewhere, provides scale. The interim corridor boundaries follow directly from the designation (which states a maximum acreage) but it still would be helpful to state 110n each side" after Elkhorn Creek (p. 2, para 3). That distance is clearly what is meant, as shown in Figure 3. Figure 3 provides a great deal of information, most importantly land administration (BLM or USFS), ownership and segment classification, but also the location of recreation sites in the surrounding area.

About 90% of Elkhorn Creek is designated as "Wild", meaning it is 11free of impoundments and generally inaccessible except by trail, with watershed or shorelines essentially primitive and water un[shy] polluted". To remain "Wild" the segment must remain generally inaccessible in order to retain primitive shorelines and unpolluted water.

(c) Evaluation Process. The description of this process was good and I found it quite interesting.

(1) Prior Evaluations. The ORV's have been reviewed several times already, primarily to support the designation of the Creek as a Wild and Scenic River in 1996. The Scenic ORV is well described at the bottom of p. 5, and all components remain now with the exception of the "dense relatively undisturbed mature and old[shy] growth forest." Another component of the Scenic ORV, given on p. 6, is "little evidence of human intrusion", and the Management Plan must strive to keep this feature of "Scenic" qualities. I note here and observed in the photographs that several of the Creekside trees are fast growing, such as alder, cedar and maple. These species

should help recover the riparian areas if the creek is closed to the public.

The Wildlife ORV was based on excellent habitat conditions for a variety of species, since modified, but still based on the fact that "the corridor is one of the few undisturbed canyon ecosystems in the foothill region of the Cascade Range". It must remain that way to protect sensitive species. For the slender salamander, the Beachie Fire may have actually improved habitat conditions, since they are found under rocks, wood, bark and in decomposing logs. Be sure to resurvey for this species.

(2) RegionsofComparison:Boundaries. As part of the evaluation process, the ORV's were judged in comparison with the characteristics of other similar regional rivers. The regions of comparison varied with each value, although there is generally a great deal of overlap. Figure 4 is an excellent depiction of the regions of comparison for each river value, showing land ownership as well.

I largely agreed with the boundaries that determined the regions of comparison. For Water Quality, Water Flow, and Geology, the rivers flow generally westerly through similar volcanic terrain with similar gradients. The undammed rivers have similar hydro[shy] graphs to Elkhorn Creek, with high winter/spring flows and dryer summer and early fall flows.

The Scenery and Recreation boundaries, quite similar to those for water quality, flow, and geology, are also appropriate since the area contains rivers with similar visual characteristics, including vegetation, geology, and wild/scenic river designation. The also similar Fisheries boundaries include a large portion of Western Oregon Cascade streams, many of which are also habitat for ESA listed species and within the same "Recovery Domain", so the region of comparison is appropriate.

The Wildlife region of comparison is about half the size of those previously described, with a southern boundary of State Highway 20. The "value" to be compared is "a place that harbors a high concen[shy] tration of at-risk species." Such a place would be "remarkable" for wildlife, warranting ORV designation. The boundary for Cultural Resources is based on similarities in both archaeological and his[shy] toric sites, encompassing the homelands of three native tribes.

Finally, the Botany value uses the Little North Santiam watershed as the region of comparison, which is a typical scale for botanical analyses. The area has similar environmental factors as well.

(3) Regions of Comparison:Evaluation Criteria. I also thought that the evaluation criteria were appropriate for each river value. For Scenery, I think that lack of development, diversity, and simple visual appeal are important criteria. For Recreation, I think that interpretive opportunities are important; willingness to travel long distances is certainly indicative of recreational "value0[bull] For Geology, I have noticed that unique, rare, or 0text[shy] book" examples of a geologic feature warrant ORV designation for other Wild and Scenic river segments.

For Fisheries, both fish populations and habitat are important criteria. For fish populations, wild stocks, listed species, and a diversity of species are all important. For habitat, diversity is also important, as well as habitat critical for ESA species. These two criteria should be considered separately as well as in tandem. Many streams could potentially contain excellent habitat for species which have been extirpated for one reason or another. On the other hand, if wild stocks of listed species occur in marginal habitat, they are still an important river value because the habitat can be improved.

The criteria for Wildlife likewise include both habitat and populations, either terrestrial or aquatic. With respect to habitat, high quality and diversity are important, but so too is habitat that provides connectivity or contiguous habitat conditions, especially for listed species with a limited range. Populations of wildlife must be river dependent and of national or regional significance and concern.

The evaluation criteria for Cultural resources are different for historic versus "pre-contact" resources. Historic ORV's relate to a one-of-a-kind event, person, or activity in the region that occurred at least 50 years ago. Pre-contact criteria focus on the traditional cultural or religious significance of a resource (i.e., plant) or location to indigenous people. Again, they should be outstanding or rare examples.

The criteria for Botanical resources aiesimilar to that for Wildlife and Fisheries--unique, rare, a diversity, exemplary and/or critically imperiled. In addition, some species have special value because tliey are habitat for rare, dependent species. In some cases this alone may result in an ORV designation, which is appropriate. I am especially concerned about the impact of human intrusion on botanical resources; ORV designation can sometimes affect manage[shy] ment in a positive way by limiting access.

(d) River Setting. The river is well-described in this section. The photographs speak to the scenic beauty and the various components that contribute to that beauty. However, Elkhorn Creek is important and valuable because of its remoteness and lack of access. This allows sensitive fish and wildlife species to flourish and contributes to the scenic beauty as well. This feature must be preserved in the Management Plan, especially as soils and vegetation recover from the Beachie Fire.

(e) Discussion of River Values

(1) Free Flow. The 1968 Wild and Scenic Rivers Act was passed primarily to protect this river feature, as many rivers were threatened with dam construction. Figure 5 illustrates how the geology of Elkhorn Creek enhances the "Scenic" contribution of free flow by creating diversity in the form of waterfalls and pools.

The annual hydrology scheme is well described here. I did not realize that groundwater was the predominant source of streamflow in this area during the dry summer months. Presumably this allows water storage during years with greater rainfall. As part of the Management Plan I would recommend monitoring actual water availa[shy] bility (surface flow and groundwater) since it is critical to fish and some wildlife.

I think federally reserved water rights should be established on these segments to protect not only free flow and water quality, but also the critical habitat for salrnonids that depends on these features. Water right certificate 14923 makes me nervous in its lack of speci[shy] ficity as to point of diversion and quantity (the maximum of 50 cfs could amount to quite a lot during low flow periods, when it most likely would be used). This water right should be clarified and the diversion point located on the Little North Fork rather than Elkhorn to maintain the free flow status of Elkhorn Creek. Water right 81390, at the headwaters on private land, also needs to be clarified. It could also involve diversion from the headwaters, most likely in the summer when stream flows are already low. Due to remoteness as a river value, it's a really bad idea to consider using this headwater pond as a source of water for fighting fires.

Stream morphology is well described, ith the steep gradient at the upper end beautifully illustrated by the photograph in Figure 6. Again, the variety in gradient creates a scenic diversity and a multitude of habitats for fish and wildlife. Riparian habitat in the lower end of the creek where it flattens out is also nicely illustrated by the photograph in Figure 7. The streamside vegeta[shy] tion shown here is fast growing, so hopefully will recover quickly from the Beachie Fire.

A flow gauge should be established on Elkhorn Creek as part of the Management Plan.

(2) Water Quality. I have an enduring image of visit[shy] ing the Three Pools area north of Elkhorn Creek and watching a young man flick a cigarette butt into a pristine pool without any hesitation. As much as I promote recreation on forested lands, I think pristine waters are best protected by limiting public access, water quality in particular.

Apparently Elkhorn Creek is a 303(d) water quality limited stream because stream temperatures can exceed the 17.8 C maximum for anadro[shy] mous fish rearing. Removal of strearnside vegetation due to the Bea[shy] chie Fire may exacerbate the situation. It will help to protect higher flows, which reduce stream temperatures overall.

Elkhorn Creek is in the Little North Santiam River 6th field water[shy] shed, which was found to be "functioning properly", although some variables were rated only "fair", including Fire Regime Condition (Table 2). Again, the Beachie Fire was a considerable setback and a new watershed assessment will need to be done. Obviously soil conditions are worse, but Aquatic Habitat conditions may have been improved by downed logs. An increase in snags and downed wood may improve habitat for the slender salamander and cavity nesters.

Regardless of the fire, Watershed Assessment recommendations as to road closures and improvements at stream crossings should continue. In particular, a "network of roads" on both Forest Service and private lands in the Elkhorn Creek upper watershed could contribute sediment and increase turbidity. This is quite harmful to salmonid species and the risk can be reduced by maintaining or removing these roads.

The stream temperature issue is described in more detail on p. 18, and compared with other stream segments in Figure 8. It is correct to conclude that lower flows and increased solar insolation are responsible for the temperature rise. Again, the best solution is to protect upstream flows.

(3) Scenery ORV. The photographs alone (Fig 9, 10, 11 and elsewhere) are sufficient to convince me that scenery should be an "Outstandingly Remarkable Value" for both Segments 1 and 2 of the Elkhorn Wild and Scenic river corridor. What's nice is that although there is "little evidence of human intrusion11, adding to the scenic value, the BLM bridge on Elkhorn Road serves as a viewing platform of the creek, both upstream and downstream. The bridge also allows a closer view of the creek.

Unfortunately, old growth forest surrounding the creek will no longer obscure surrounding altered landscapes in the middle and background, but the narrow canyon will continue to serve this pur[shy]pose. And, the forest will return. The topography will not change, so views will someday resemble Fig. 10. The fire will not change the water component of the scenery ORV, a product of geology, hydrology and aspect (light), and beautifully described on p. 20, para 1. Many of the vegetative components which provide interest and seasonal contrast will quickly return--alders, vine maple, maple and ferns (Fig. 1).

The "Finding" is that Scenery qualifies as an ORV in the 5.8 mile "Wild" segment but not the short .6 mile "Scenic" segment. This is of course confusing because the segment itself is classified as "Scenic", which has a different basis than the OFN designation. I would have applied the Scenery ORV to both segments. The reason for not including Segment 2 is that several other river segments in

the Region of Comparison with similar geology have already been given the Scenery ORV designation. Thus, Segment 2 is not "rare" or "exemplary". Segment 2, on the other hand, provides "exemplary" scenery because of the visual interplay of vegetation, water and geology, dramatic canyon walls and a natural landscape for an extended length. The Beachie fire will not remove these attributes but will change their form.

(4) Recreation ORV. Elkhorn Creek has very limited recreational use due to its steep, rocky topography which precludes trail development, access points, or developed recreation sites. There are also no safe, developed parking areas, nor any room to create them. Both NFS and BLM lands here are managed to provide a primitive recreational experience, with the potential to experience a high degree of solitude and tranquility. The short "Scenic" segment is more accessible due to the bridge and state highway, but would not draw visitors outside the mid-Willamette Valley due to the lack of recreational opportunities.

The "Finding" is, quite obviously, that Recreation is not an ORV for these river segments. Not only is Elkhorn Creek rarely used by recreationists (a few brave kayakers), but, fortunately for other resource values, there is

little potential for development. Those seeking isolation in an unmodified environment can find these attri[shy] butes at more accessible points within the Region of Comparison.

(5) Geolog ORV. The Baseline Conditions are well described and I really liked Figure 12, which locates and has photographs of the three geological processes that have created the creek morphology (glaciation, fluvial erosion and transport}}. The "Finding" is that Geology is not an ORV because geologic values are not unique or rare within the Region of Comparison. Having read descriptions of river segments where geology is an ORV, I would agree with that finding.

(6) FisheriesORV. As described in 11Baseline Conditions", Elkhorn Creek provides habitat for several special status species (Table 3)--native and hatchery stocks of steelhead trout, spring Chinook salmon, coastal cutthroat trout, and Pacific lamprey. Unfortunately, wild anadromous fish production has largely been extirpated elsewhere by the construction of darns. Thus, it is incredibly important to protect streams where habitat still exists, including Elkhorn Creek. This habitat is viable because the creek flows into the Little North Fork Santiam River, which is also free flowing, thence to the North Fork. None of this passageway is blocked or modified by darn operation, allowing the upstream and downstream migration of anadromous fish.

Critical habitat for both steelhead and Chinook salmon was desig[shy] nated in 2006 for Upper Willamette River populations, and included Elkhorn Creek up to mile 2.25. For winter steelhead, lower Elkhorn Creek (mouth up to 0.9 miles) is quite productive, with an average of about 9 redds per mile over a ten year survey period. A more recent (2020) survey showed 14 redds per mile, as compared with 3.5 redds per mile in the Little North Fork.

Recent surveys have also shown juvenile coho and chinook salmon in the lower portion of Elkhorn Creek, indicating this area is impor[shy] tant for rearing as well as spawning for salmonids. Habitat quality is best in lower Elkhorn creek, nicely illustrated by the photograph in Figure 13. As the upstream gradient increases and the canyon walls close in, habitat decreases. Obviously, however, it is nece[shy] ssary to protect the creek upstream in order to ensure high quality and abundant habitat downstream.

While the Beachie fire probably destroyed the mature riparian forests, it may have increased large wood levels as these trees fell into the creek, creating side channels and stabilizing portions of the floodplain.

In assessing the ORV potential for Elkhorn Creek in Fisheries, I thi-nk it is relevant to consider also the diversity of species, as well as the lack of aquatic invasive species. Surveys should be done for the caddisfly sensitive species mentioned here. Among other attri[shy] butes, they are probably a food source for fish.

With respect to water quality, the Beachie fire may be a temporary setback in terms of stream temperatures, as much of the mature ripar[shy] ian for"?est was destroyed which previously provided shade. The best that the agencies can do is leave these areas alone, not cutting down dead trees, and keeping people out so the trees are not a hazard. To avoid siltation, they should continue the closure of unneeded roads and improve any stream crossings.

(7) WildlifeORV. I like the fact that the wildlife species discussed here, which form the basis of the ORV designation for both.river segments, are in lesser known groups but nonetheless important as part of the food chain and simply because they.exist. I also like the emphasis on providing connectivity as an important habitat feature[bull]

Apparently the Elkhorn Creek area includes excellent habitat for pollinator species, which is important not only because of the role they play in supporting the vegetative landscape, but because many of these species are at risk. High quality habitat is available for caddisflies, which are an important component of the food chain and also at risk. Beetles and wood scorpions, while not at risk, are important components of the food chain.

The importance of both terrestrial and aquatic mollusks is well described here. It' is important to note that most species are rare and/or endemic, making it important to protect them wherever they occur. Habitat connectivity is extrem ly important in retaining viable populations, which means protecting intact forest conditions that provide suitable macro and micro conditions. Although both at-risk and common species of mollusks are found elsewhere in the Region of Comparison, the Elkhorn Creek river corridor is seen as a critical link for one endemic species, and a place of common occurrence for species which are rare elsewhere. The text also mentions aquatic mollusks, which play important ecosystem roles and presumably are found here. One at-risk species is found in the Region of Comparison.

Amphibians are the next group considered in the text, and among my favorites. They are also important members of ecosystems, acting as both predator and prey in both aquatic and terrestrial environ[shy] ments as they complete their life cycle. As stated here, the Pacific Northwest hosts.a variety of amphibian species, some of which are endemic to the area and many at risk. Torrent salamanders are one such group which is endemic, with some species listed as at risk. Other semi-aquatic salamander species that rely on rivers are the Pacific giant salamander, western salamander, and rough-skinned newt. I found it interesting that these species can occur in a neotenic formr never leaving the water and breathing through gills. On the other hand, some salamanders are entirely terrestrial, reliant on the moist conditions of riparian areas. Elkhorn Creek provides high quality habitat for several of these: ensatinas (common), slender and clouded salamanders (less common).

Among frog and toad species, common species both here and within the Region of Comparison include the Western Toad, Cascades Frog, and Pacific Tree Frog. Those reliant on an aquatic environment include tailed frogs and the Foothill Yellow-legged Frog. All of these species occur within the region of comparison, but Elkhorn Creek is singled out for ORV designation because it contains high quality, intact habitat. It is also remote, so it may act as refugia for species subject to disease elsewhere.

Elkhorn Creek provides excellent habitat for reptiles in the form of rock and cliff areas. Although none of the species found here are at risk, they serve as an important link connecting to upland popu[shy] lations. Elkhorn Creek also has habitat for river-dependent bird species such as bald eagle and harlequin duck (at risk), as well as American dipper and belted kingfisher. Mammal species of all sizes are common, from bears to bats.

It should be noted that most of these species occur in suitable habi[shy] tat throughout the Region of Comparison, although perhaps not in the high quality found along Elkhorn Creek. Therefore, the "Finding" seems to be based on the importance of the river corridor for two groups, mollusks (connectivity) and amphibians (remoteness). It is relevant that amphibia are the most at-risk group of species world[shy] wide, so should be protected wherever they are found. I am simply pleased that the ORV designation will protect other groups of wildlife as well.

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1. Cultural Resources. None have been found here. I like the BLM predictive model, based on slope and aspect, which finds the likelihood of discovering cultural resources here low due to the steep slopes. The Finding is correct.

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1. Botan[yen][middot] There are no known sites of rare botani[shy] cal species documented in the Elkhorn Creek watershed, and no appar[shy] ent river-related resource values (such as special habitats). There[shy] fore, Botany is not an ORV.

Table 4 summarizes the findings for ORVs within the Wild (1) and Scenic (2) segments of Elkhorn Creek. I agree with all but the lack of "Scenery" as an ORV for Segment 2, especially since this is the only vantage point from which most people will see the creek. I am pleased to see Fisheries and Wildlife designated as ORV's. Fish are always important river resources to me, and I like recog[shy] nition of the importance of maintaining lesser known groups of wildlife species.

This concludes my comments on the River Values Report for Elkhorn Creek. I look forward to participating future steps in formulating a Management Plan for this beautiful river.

Sincerely,

Karen Sjogren