ROGUE BASIN
PARTNERSHIP

November 26, 2024

Fish Passage Program
Oregon Department of Fish and Wildlife
4034 Fairview Industrial Drive SE
Salem, Oregon 97302

To whom it may concern,

Thank you for this renewed opportunity to provide comment regarding ODFW's Statewide Fish Passage Barrier Prioritization List update. The Rogue Basin Partnership (RBP) uses this list to guide and prioritize fish passage restoration work in Rogue River tributaries. We are very appreciative of ODFW's effort directed at the development and maintenance of this priority list. We also appreciate the incorporation of our July 2023 comments into the most recent iteration of the Priority List.

RBP is an ongoing collaboration of 23 organizations dedicated to advancing ecosystem restoration in the Rogue River Basin. RBP's Rogue Restoration Action Plan (RRAP) identifies improving fish passage among the highest of priorities in the restoration of fish and wildlife populations in the Basin. Specifically, Strategy 3.2 in the RRAP is: "implement priority barrier removal projects by securing landowner agreements and funding, contract technical support to develop design and engineering cost estimates, conduct assessments and studies for review, and manage construction contractors to complete barrier removal efforts."

RBP respectfully offers the following additional comments related to the barrier list update:

1. The Middle Fork Diversion Dam (Barrier ID #19246) should be identified in "Subbasin (HUC8)" column as "Upper Rogue," not "Middle Rogue"

2. Lower Alphonso Dam (Barrier ID # 22824) should be identified in "Subbasin (HUC8)" column as "Middle Rogue," not "Upper Rogue."

3. An unnamed dam on Poorman Creek (Barrier ID #46002) a Grave Creek tributary should be identified in "Subbasin (HUC8)" column as "Lower Rogue," not "Upper Rogue."

4. At Cascade Ranch Diversion Dam (Barrier ID # 22764), the Rogue River Watershed Council, an RBP partner organization, has completed a project that installed a pre-cast irrigation structure eliminating the need for the annual construction of a push-up dam at that site. The fish screening infrastructure was also updated. Therefore, we recommend that barrier be removed from the list.

5. At LBID Dam (Barrier ID 28277), an “Auto-up” value of “4” has been assigned. However, the “Auto-up” tab/sheet assign an auto-up value of “1.” We believe “1” or “0” to be the correct auto-up value and the “Auto up” column in the “Draft List” tab/sheet should be changed from “4” to “1.” Similarly, at White Brown Push-up Dam (Barrier ID # 22796) and Floyd Ditch Push-up Dam (Barrier ID # 22854), the “Auto-up” column values on the “Draft List” tab/sheet do not match the values on the “Auto-up” tab/sheet. We have recommend reviewing “auto-up” values for accuracy.

6. At LBID Dam (Barrier ID 28277), we believe Small-scale Suckers are present though not identified in the “Species” column. Suckers are shown to be present at Little Butte Creek barriers both upstream and downstream of the LBID Dam. Therefore, suckers should be added to the “Species” column and the “# NMF Species” column should be changed from “5” to “6”

7. At Zundel Dam (Barrier ID 22866), 5 species of NMF have been identified. At MID NFLB (Barrier ID # 7401), 6 species of NMF have been identified. This difference is because Small-scale Suckers are shown to be present at MID NFLB and not at Zundel. These barriers are less than 0.5 miles apart. As such, we are unclear if this an error. If so, this would affect the “# NMF Species” score. The same is true for Spring Chinook – they are shown as present at MID NFLB but not at any other Little Butte Creek barriers (though this would not alter the “# NMF Species” score as Fall Chinook are already present at all Little Butte barriers).

Thank you for the opportunity to provide input to this important effort. To re-iterate, RBP is very supportive of the effort directed at the development and maintenance of ODFW’s Fish Passage Priority List. We find it extremely useful in guiding our work with landowners and irrigators to improve fish passage around the Rogue River Basin.

Sincerely,

Sara Mosser, Executive Director
Rogue Basin Partnership

ODFW Fish Passage Program
Oregon Department of Fish & Wildlife
4034 Fairview Industrial Dr SE
Salem, OR 97302

RE: ODFW revised statewide Fish Passage Barrier Priority List

Oregon Department of Fish and Wildlife Fish Passage Task Force,

The Wild Salmon Center appreciates the opportunity to provide feedback on the Oregon Department of Fish and Wildlife's (ODFW) revised statewide Fish Passage Barrier Priority List. Wild Salmon Center (WSC) is the leading conservation organization working on Pacific salmon across the Pacific Rim. We know that healthy wild salmon populations are important to all of us. They provide culture, subsistence, thriving local economies, Tribal, commercial, and recreational harvest opportunities, and when managed appropriately, habitats that provide clean water for communities, fish, and wildlife.

WSC supports ODFW's efforts to prioritize barriers statewide to help direct enforcement and restoration efforts throughout Oregon. We commend ODFW for incorporating climate change predictions and cold water access into the barrier prioritization framework during the 2024 update. This forward-thinking approach acknowledges the critical role these factors play in fish passage and habitat connectivity. Additionally, including these factors is an example of ODFW adhering to its Climate and Ocean Change Policy, adopted in July 2020.

WSC offers the following feedback on the proposed barrier assessment and prioritization process.

- Page 5 "Level of Fish Passage" - There is no quantitative measure that accounts for the percentage of time a crossing serves as a migratory barrier for both adult and juvenile fish. For instance, the scoring system for values #3 and #1 assigns a flat score regardless of whether the crossing is a barrier 10%, 30%, 60%, or more of the time. In contrast, the Washington Department of Fish and Wildlife (WDFW) employs a quantitative approach that incorporates passage percentage (33%, 60%, 100%), offering a more precise measure of how often a crossing restricts fish passage during migration periods. Without quantitative measurement across barriers, prioritization of fish passage structures cannot occur based upon anticipated fish benefit.

- Page 6, "Listed Native Migratory Fish" - One of the scoring factors for prioritization is whether there are "listed" native migratory fish below the barrier. If so, the barrier will receive a higher score compared to one without listed species. A barrier should be a red flag and considered for correction regardless of the status of the fish rather than waiting until a species is "listed." Failure to consider all barriers may result in the omission of barriers in need of replacement, and missed opportunities to coordinate on appropriate sizing criteria for barriers being replaced based on transportation system upgrades alone (e.g. a local road department replacing a failing culvert with one of the same size due to unawareness of the fish passage problem).

- Page 6, "Species Diversity" - We value that for each NMF species present, there are points awarded to the overall score. It would be helpful if the document, or an attachment, could clearly identify at what frequency this data is field verified and updated.

During future development, WSC recommends that ODFW complement the proposed barrier prioritization, which incorporates climate change factors, with development of a detailed methodology for designing fish passage crossings that accounts for climate change predictions. This could include guidance on anticipated changes to bank full width, flow regimes, and hydrologic variability. Integrating such design considerations will ensure crossings remain effective and resilient in changing environmental conditions. WDFW has developed a similar framework and web application that practitioners frequently use to design fish passage crossings. Like other work, leveraging lessons learned from this framework and tool could help ODFW address climate-related changes to stream channel morphology and lead to improve both the permitting and design process for more resilient water-crossing structures.

Again, thank you for the opportunity to comment on revisions to the statewide Fish Passage Barrier Priority List and the methods used to assess it. We ask the department to consider the following recommendations and include them in the update for adoption in April 2025 or subsequent revisions.

Sincerely,

Kirk Blaine
Sr. Program Manager for Wild Fish - Oregon
Wild Salmon Center
kblaine@wildsalmoncenter.org

Oregon
Tina Kotek, Governor

Department of Transportation
Environmental and Hydraulic
Engineering Section
4040 Fairview Industrial Dr. SE
Salem, OR 97302-1142
Phone: (503) 986-3459
Fax: (503) 986-3407

November 26, 2024

Katherine Nordholm
Fish Screens and Passage Coordinator
4034 Fairview Industrial Dr. SE
Salem, OR 97302

Mx. Norldholm,

The Oregon Department of Transportation (ODOT) appreciates the opportunity to provide public comments on the development of the Oregon Department of Fish and Wildlife's (ODFW) draft 2024 Statewide Fish Passage Barrier Priority List. This list is central to the mission of the ODOT Fish Passage Program in delivering on our commitment to the Oregon Plan for Salmon and Watersheds. As you know, the ODOT Fish Passage Program uses this list to prioritize available program funding across the State Highway network, leverage other business lines within ODOT, pursue applicable grant opportunities, and collaborate with Federal, State, Local, and Tribal partners.

Kudos to you and team for recognizing the need for including climate change and stream temperature metrics as it pertains to fish passage. ODOT also appreciates the critical ODFW internal review of the previous and existing prioritization process, and the robust conversations on related considerations with ODFW Fish Passage Task Force Members.

In general, ODOT does not have any significant concerns or comments on the development of this proposed prioritization methodology or resulting priority list. Two general comments pertaining to consistency with habitat quantity and species distribution scoring are provided below. Specific comments for ODOT owned locations identified in the draft 2024 list are provided as an attachment for your review.

Habitat Quantity Methodology
ODOT recognizes that the current habitat quantity score is based on miles of fish habitat that would become accessible to the Native Migratory Fish (NMF) species currently present below the barrier, if passage were provided. We understand that the value is measured as the number of miles between the priority barrier and the next complete barrier upstream, due to an artificial obstruction or naturally occurring barrier, or the end of fish use. Likewise, we appreciate that the ODFW Fish Passage Barrier Database contains approximately 41,839 inventoried Artificial Obstructions (AOs).

Considering NMF population declines, and the urgent need to address passage at high priority barriers in the near term, ODOT recommends incorporating documented AOs with partial passage designations upstream of priority barriers into the prioritization equation. This can help separate project locations with multiple documented passage barriers upstream from locations where no documented barriers are present. The key difference with this separation is to see where planned actions can immediately benefit populations of NMF, versus a project opening access into a system with multiple additional barriers that are unaccounted for in current prioritization methods.

Currently this metric seems to be inconsistently used in the "Auto up/down" options for ODFW District staff. A statewide standardized process can better help with consistency across various Districts. One option would be to reduce the number of miles a site receives credit for by the number of documented AOs upstream. Another alternative would be to reduce the habitat quality score for locations where multiple AOs would restrict movement

of NMF in areas upstream of the priority location. As NMF are restricted to the habitat that is made accessible following priority barrier removal, it seems prudent to restrict the scoring potential of these locations to coincide with the actual species benefit resulting from the priority barrier removal. With limited resources, project sponsors can better prioritize funding where the habitat quantity or quality value incorporated into the methodology reflects the actual habitat made accessible for NMF through project actions, and avoid allocating resources to projects where habitat gains are only “on paper” or otherwise misconstrued.

NMF Species Distribution
With the adoption of updated Oregon Administrative Rules in 2023, several new species of NMF were formally recognized by ODFW to be considered for passage rules and criteria. In review of the draft priority list, there seems to be some discrepancy on ODOT-owned locations for where these species may occur. It is recommended that distributions of species recently added under OARs be cross checked against the proposed list for consistency.

A consistent species determination method is recommended for ODFW Districts across the state. One ODFW District using professional judgment as opposed to another District using documented observations at barrier locations can skew the priority list for species with limited available distribution datasets. The addition of one or two species for one location, and not another, can skew the resulting priority of these barriers. This is especially apparent on a statewide scale. Specific ODOT examples to review are provided in the attached comments.

Again, ODOT expresses its gratitude for your work and development of this important list. Please do not hesitate to reach out if we can provide more clarity or discussion into any of these comments.

Best,

Allen Gillette
Aquatic Biology and Fish Passage Program Coordinator
ODOT Environmental and Hydraulic Engineering Section
4040 Fairview Industrial Dr. Se
Salem, OR 97302
Office: (503) 986-3459

Oregon Department of Transportation Comments on ODFW Draft Statewide High Priority Barrier List 2024				
Subbasin (HUC8)	**ODFW Barrier ID**	**Barrier Name**	**Stream Name**	**Comment**
Middle Rogue	3752	Unnamed Culvert	Galls Creek	Please confirm Psg. Level of "3" for this location. Structure contains fish passage improvement devices and may be mostly passable during periods of migration for local species and life histories when fish passage flows are present.
Sixes	3951	Unnamed Culvert	Boulder Creek	Please confirm with ODFW District regarding Auto Down score applicability with multiple AOs (dams) documented downstream in ODFW Barrier database. Please confirm species used in priority equation. Western Brook Lamprey may also be present.
Sixes	4490	Unnamed Culvert	Jim Creek	Please confirm species used in priority equation. Western Brook and Pacific Lamprey may also be present.
Wilson-Trask-Nestucca	4553	Unnamed Culvert	Killiam Creek	Please confirm passage level of "3". During periods of migration, this structure seems to be a significant barrier to adults. Please also confirm species used in priority equation, as Western Brook Lamprey may also be present.
North Umpqua	5774	Unnamed Culvert	Bogus Creek	Please confirm species and life stages used in priority equation with ODFW District Office. ODFW telemetry studies in the basin suggest summer steelhead may spawn in tributaries of this size and location, with winter steelhead showing preference for
Lower Willamette	7381	Unnamed Culvert	Tryon Creek	Please confirm species used in priority equation, specifically; expected Large Scale Sucker distribution in this system.
Nehalem	7688	Unnamed Culvert	Knickerson Creek	Please confirm Psg. Level of "4" used in equation, as ODFW barrier database includes "Completely passable" under
Klamath	9318	Unnamed Culvert	Moss Creek	Please confirm Psg. Level of "3" used in equation, as ODFW Barrier database includes "Completely passable" under
Necanicum	9398	Unnamed Culvert	Asbury Creek	Please confirm species used in priority equation. Western Brook Lamprey may also be present.
Powder	9416	Unnamed Culvert	Fish Creek	Please confirm species used in priority equation. This location may have also have current or historic Bull Trout use (ESA-T), and historic Summer STL use (ESA - T).
Chetco	10457	Unnamed Culvert	Shy Creek	Please confirm species used in priority equation. Western Brook and Pacific Lamprey may also be present.
Siuslaw	10886	Unnamed Culvert	Hollo Creek	Please confirm species used in priority equation. Fall Chinook juveniles may use this location as refugia during rearing / downstream migration with proximity to mainstem Siuslaw. Western Brook Lamprey may also be present.
Wilson-Trask-Nestucca	11563	Unnamed Culvert	Fox Creek	Please confirm species used in priority equation. Western Brook Lamprey may also be present.
Lower Willamette	11766	Kellogg Dam	Kellogg Creek	Please confirm with ODFW District regarding Auto Down score applicability with multiple (12+) AOs documented upstream in ODFW Barrier database. Please confirm species distribution of Large Scale Sucker potential at this location.

Oregon Department of Transportation Comments on ODFW Draft Statewide High Priority Barrier List 2024				
Subbasin (HUC8)	**ODFW Barrier ID**	**Barrier Name**	**Stream Name**	**Comment**
Lower Columbia-Clatskanie	11800	Unnamed Culvert	Fox Creek	Please include City of Rainier under Owner information. Please confirm species used in priority equation. Pacific Lamprey may also be present. Western Brook lamprey spawning recently observed by ODFW staff (Pete Baki) at this location.
Coquille	12257	MF Coquille Falls	Middle Fork Coquille River	Please confirm species used in priority equation. Western Brook Lamprey may also be present.
Wilson-Trask-Nestucca	14082	Unnamed Culvert	Butte Creek	Please confirm species used in priority equation. Western Brook Lamprey may also be present.
South Umpqua	14541	Unnamed Culvert	Canyon Creek	Please confirm barrier type for this location. Field visits have this location identified as concrete chute, with no cover. Please confirm Psg. level of "3", as this location may not provide any passage for any species life stages present in Canyon Creek. Please confirm habitat quality and stream temperature scoring due to recent severe fires in watershed.
North Umpqua	15632	Unnamed Culvert	Fairview Creek	Please confirm each species habitat distance used in priority equation corresponds to ODFW District data for habitat available upstream of OR 138E. Previous discrepancies included coho and steelhead habitat availability upstream of natural bedrock partial barrier. ODFW telemetry studies in the basin suggest summer steelhead may spawn in tributaries of this size and location, with winter steelhead showing preference for spawning in mainstem
Lower Malheur	17046, 17845	Unnamed Culvert	Pole Creek	Please confirm Psg. level of "5" used in equation. ODOT culvert inventory data and recent (2023) staff site visits suggest structure may be backwatered, with swim through conditions provided under most flows.
Tualatin	24998	Unnamed Culvert	White Creek	Washington County is the current Owner / Operator of NW Gales Creek Road at this location.
Lower Malheur	33232, 38809	Unnamed Culvert	Calf Creek	Please confirm Psg. level of "5" used in equation. ODOT culvert inventory data suggests structure may be backwatered, with swim through conditions provided under most flows.
Lower Columbia-Clatskanie	33563	Unnamed Culvert	Merrill Creek	Please confirm structure type. A degraded fish ladder is located downstream from the highway crossing, and is a significant barrier. Please confirm species use at this location, as Western Brook Lamprey may also be present.
Nehalem	40024	Tide gate	Gallagher Slough	Please confirm this barrier is included in Statewide Prioritization Scoring
North Umpqua	4333	Unnamed Culvert	Old Hatchery Creek	Please confirm this barrier is included in Statewide Prioritization Scoring

CAROLLO LAW GROUP

Dominic Carollo
Managing Attorney
dcarollo@carollolegal.com · 541-957-5900
PO Box 2456, Roseburg, OR 97470
2315 Old Hwy 99 S., Roseburg, OR 97471

November 27, 2024

ODFW Fish Passage Program
4034 Fairview Industrial Drive SE
Salem, OR 97302

Via email: Fish.Passage@ODFW.Oregon.Gov

RE: COMMENTS OF WINCHESTER WATER CONTROL DISTRICT ON REVISED STATEWIDE FISH PASSAGE BARRIER PRIORITY LIST

On behalf of the Winchester Water Control District ("WWCD"), please accept the following comments on the Oregon Department of Fish and Wildlife's ("ODFW") revised Statewide Fish Passage Barrier Priority List ("revised priority list"), as well as a supplemental analysis by senior fisheries scientist Mr. Ian Courter, included and incorporated herein at "Attachment 1." In consideration of the following comments and attachment, WWCD requests that ODFW reconsider the ranking of Winchester Dam, and assign the Dam a "Group 8" ranking, as was found in the 2013 Statewide Fish Passage Priority List.

Introduction

WWCD opposes ODFW's revised priority list, both in its methodology, and in its ranking of the Winchester Dam. The revised priority list utilizes subjective methodology to inflate the Winchester Dam's ranking, without quantifiable data supporting the conclusions reached. This subjective methodology has caused the Winchester Dam's ranking to rise over 100 spots since 2013, despite WWCD having made improvements to the Dam's fish ladder in that time. Winchester Dam's ranking in the revised priority list is now higher than Galesville Dam, which is a complete passage barrier. For the reasons that follow, WWCD urges ODFW to revise its passage methodology and priority ranking, returning Winchester Dam to the ranking it held in 2013.

Background

The Winchester Dam was first constructed in 1890, and raised to its current height of 16 feet in 1907. The fish ladder at Winchester Dam was constructed in 1946, and modified in the 1980s. Subsequent changes to the fish ladder have been made to accommodate migratory salmonids and lampreys. A fish viewing window provides a popular stop along Highway 99 and Interstate 5, where the public can watch migratory fish pass upstream. An online livestream of the fish ladder attracts thousands of viewers, and provides up-to-date passage statistics.

In 2013, ODFW ranked the Winchester Dam at position 126 in the fish passage priority list. At that time, ODFW gave the Dam a "level 1" passage rating—the second best score a dam could receive. In 2019, ODFW unexplainably gave Winchester Dam a passage rating of "3"—a significant increase from the 2013 metric. This change, among others, caused Winchester Dam's ranking to increase by around 100 spots, despite no changes having been made to the Dam or its fish ladder in the interim. In 2024, further changes to the priority ranking methodology have again increased Winchester Dam's ranking.

WWCD strongly opposes the ranking of the Winchester Dam, and the methodology used by ODFW, and urges ODFW to revise the methodology and revise its ranking of the Winchester Dam.

Comments

Winchester Dam is located in a highly accessible, and highly visible stretch of the North Umpqua River. Tens-of-thousands of people drive past Winchester Dam each day, on Highway 99 or Interstate 5. The fish viewing window at Winchester Dam is a popular stop, providing public education on the upstream migration of Oregon's native salmonids. Downstream of Winchester Dam, Amacher Park provides developed RV sites, and a boat ramp catering to anglers and recreationalists.

Public viewing and recreation in and around Winchester Dam is continuous all year. Yet, there is no quantifiable data establishing that Winchester Dam creates a fish passage barrier. WWCD is not aware of any data or analysis which has actually sought to quantify the Dam's impact on migratory fish. Even excluding *quantifiable* data, WWCD is not aware of any confirmed instances where migratory fish have been unable to pass upstream through the fish ladder.

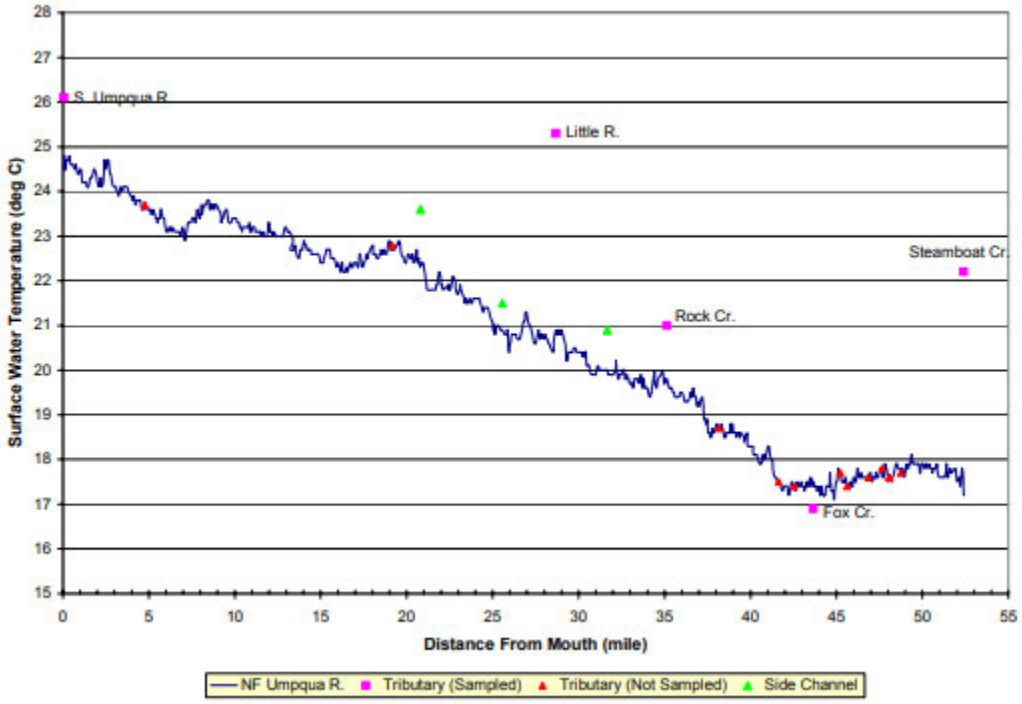
Without data, ODFW has no empirical reason to assign Winchester Dam a fish passage level of "3." It appears that this ranking is based on subjective opinions regarding "the barrier and history of fish passage at the site." Such subjective reasoning should not play a role in ODFW's revised priority list. Where ODFW lacks quantifiable data of fish passage impacts, as is the case with Winchester Dam, a value of "0" of N/A would be more appropriate. ODFW should revise its methodology accordingly.[1]

The revised priority list also fails to consider various factors that demonstrate the benefits of Winchester Dam. For instance, Winchester Dam has impeded the upstream migration on non-native, predatory smallmouth bass. Downstream of Winchester Dam, juvenile salmonids are heavily predated by bass. Upstream of Winchester Dam, smallmouth bass predation is nonexistent or negligible. This positive effect should lower Winchester Dam's priority ranking.

As the revised priority list emphasizes climate change, it should also take into account

[1] Where structures are *complete* passage barriers, or the effects of a barrier on passage have been quantified, ODFW should assign a passage level accordingly. However, where no data exists, ODFW should not arbitrarily assign a passage level based on subjective recommendations that may not be rooted in actual biological reasoning.

Winchester Dam's effect on stream temperatures. The best available evidence from Oregon's Department of Environmental Quality indicates that the temperature of the North Umpqua River *declines* by around one degree Celsius in the river reach at Winchester Dam. This is illustrated by the chart below, which depicts a steep decrease in surface water temperatures between river mile 5 and 10, at Winchester Dam:



Aerial Surveys in the Umpqua River Basin, May 2, 2003 at 30, https://www.oregon.gov/deq/FilterDocs/tmdlTIRump2003.pdf.

This improvement in stream temperatures driven by Winchester Dam's small reservoir should be noted in the revised priority list, dropping Winchester Dam down the list.

Given the above comments, and the analysis of senior fisheries scientist Ian Courter, provided as "Attachment 1" to these comments and incorporated herein, WWCD provides the following recommendations to improve the ranking methodology for the revised priority list:

1. Provide a sensitivity analysis for each metric;
2. Provide biological rationale for each metric;
3. Revise the approach to include empirical evidence in each component of the ranking equation;
4. Discard the arbitrary scalers used in the ranking equation;
5. Revise the "level of fish passage" metric for Winchester Dam to be 1, which is more appropriate given the definitions provided on page 5 of the Draft 2024 methods document and knowledge of passage conditions at Winchester Dam.

For the reasons provided herein, WWCD urges ODFW to revise its passage methodology and priority ranking, returning Winchester Dam to the ranking it held in 2013.

Sincerely,

DOMINIC M. CAROLLO
DMC/klh

Attachment 1

MOUNT HOOD ENVIRONMENTAL
Fisheries and Environmental Consulting

39085 Pioneer Blvd Suite 200 | Sandy, OR 97055
503-668-0033 | mthoodenvironmental.com

November 27, 2024

Carollo Law Group
2315 Old Hwy 99 S
Roseburg, OR 97471

Subject: Comments on Draft 2024 Fish Passage Barrier Priority List: Focus on Winchester Dam Ranking

Summary: Recommended revisions to ranking methodology and Passage Barrier Priority List:

1. Provide a sensitivity analysis for each metric
2. Provide biological rationale for each metric
3. Revise the approach to include empirical in each component of the ranking equation
4. Discard the arbitrary scalers used in the ranking equation
5. Revise the "level of fish passage" metric for Winchester Dam to be 1, which is more appropriate given the definitions provided on page 5 of the Draft 2024 methods document and knowledge of passage conditions at Winchester Dam

Dear Mr. Carollo,

Oregon's Fish Passage Priority List is primarily qualitative and heavily subjective in nature. While two quantitative metrics—habitat area and thermal stability—are included, the prioritization process is largely based on a subjective scoring system informed by qualitative indicators. Additionally, an undocumented scaling scheme is applied to each qualitative indicator, with arbitrary scaler multipliers. The rationale for assigning different levels of importance to these indicators is unclear, as the relative weights of proxy metrics seem to have been decided by committee. Biological reasoning and empirical data played a minimal role in the prioritization process for passage barriers.

In my view, the prioritization process is flawed because it attempts to generate quantitative rankings from qualitative assessments. Results of the ranking process are misleading because they imply objectivity and rigor when there is none. This approach is also inherently problematic, leading to situations where priorities shift over time due to public opinion or agency policy urgencies rather than objective, data-driven reasons. Notable examples include Bowman Dam and Winchester Dam. To improve this process, I believe ODFW's Fish Passage Task Force should adopt

quantitative methods grounded in watershed-specific data. For instance, habitat quality should be assessed using existing water quality and physical habitat attribute data, with habitat quality and quantity estimates tailored to each native migratory species impacted by the barriers.

With this context in mind, I will comment specifically on Winchester Dam. This barrier was not included in the 2007 Fish Passage Priority List. However, in 2013, the list was expanded, and the ranking methodology shifted from an entirely qualitative process to a quasi-quantitative system that relied on proxy metrics derived through qualitative reasoning. Winchester Dam was added to the expanded list in 2013 at position 126. In 2019, ODFW revised its methodology again, incorporating a ranking system that emphasized the product of stream habitat quantity and a subjective habitat quality score for conditions upstream of each barrier. Habitat quality scores were assigned by local district biologists. Using this updated method, the area upstream of Winchester Dam received a habitat quality score of 5 out of 7, leading to a relatively high overall score.

Furthermore, without explanation, the "level of fish passage" metric was changed from 1 to 3 in 2019. This was surprising because fish passage at Winchester Dam is not regarded as a limiting factor for migratory fish production in the North Umpqua River. Evidence for delay of migrating adult salmonids at Winchester Dam is lacking. Conversely, anecdotal observations by ODFW staff and empirical evidence from fish passage evaluations (ODFW 1985) indicate adult salmonids do not have difficulty finding the fish ladder entrances, and movement through the ladder is unincumbered.

Migrating juvenile salmonids typically pass over the top of the dam following the majority of flow, with a small number of fish passing downstream via the adult fish ladder. Approximately 75% of the dam's crest provides surface passage and, unlike large water storage and hydropower dams, water spills over Winchester Dam year-round. Studies in Columbia River tributaries have found that surface passage routes provide the highest survival probability for juvenile salmonids. In summary, it is my opinion that there is a lack of empirical data or anecdotal information supporting the hypothesis that Winchester Dam is a source of significant passage delay or injury to juvenile and adult salmonids.

Taken together, high habitat quality scores and level-of-passage scores assigned in 2019 moved Winchester Dam to 24 on the priority list. For the draft 2024 priority list, the methodology was revised again to include additional factors such as cold-water access and thermal stability upstream of each barrier. Under this new system, Winchester Dam rose to position 18, receiving a score of 0.5 for cold-water access and 0 for change in thermal stability. These scores reflect observed cool upstream temperatures and predicted stability of those temperatures in response to climate change. As with other metrics in the passage ranking equation, both temperature scores were multiplied by arbitrary scalers.

Sincerely,

Ian Courter
Senior Fisheries Scientist
Mount Hood Environmental
ian.courter@mthoodenvironmental.com

References

ODFW (Oregon Department of Fish and Wildlife). 1985. Evaluation of the impact of operation of the winchester hydroelectric project on salmonids of the North Umpqua River, Oregon. Fish Division, Oregon Department of Fish and Wildlife. Progress Report. 98pp.

From: [redacted]
To: NORDHOLM Katherine E * ODFW
Subject: Winchester Dam fish passage
Date: Monday, November 11, 2024 7:08:49 AM

> You don't often get email from [redacted]. Learn why this is important

I think the Winchester Dam on No. Fk. Umpqua River should be removed. Recent efforts to upgrade it lead to a significant loss of lamprey. The dam is so old that continual efforts to repair it will be necessary. The current location of the fish ladder is on the opposite side of the river than it should be. We now have good counts at Soda Springs Dam and at Big Bend Pool that could be used as indicators in case Winchester Dam and ladder are removed.

[redacted]