

Fish and Aquatic Life Use Updates 2022

Summary

Rulemaking Advisory Committee Meeting #2

Feb. 28, 2022

Virtual Meeting (Zoom)

List of Attendees

Advisory Committee Members: Emily Bowes, Sarah Cloud, James Fraser, Liz Hamilton, Megan Hill, Steve Kucas, John Schaefer, Chris McCabe, Sharla Moffett, John Runyon, Susan Smith, Glen Spain, Mike Eliason, Rich Wildman (for Oregon Farm Bureau and Oregon Forest & Industries Council).

Agency Advisors: Brian Bangs, Jon Bowers, Rebecca Anthony, Michelle Maier

DEQ Staff: James McConaghie, Debra Sturdevant, Connie Dou, Trina Brown, Angela Rowland, Aron Borok

Interested Persons: Julia Crown, April Catan, Charles Hurlocker, Michael Martin, Liz Perkin, Jackie White, Marika Sitz, Camille Flinders, Ben Kirsch, Caroline Lobdell, Richard Grost, Janet Davis, Andrew Janos, Johnny Leavy, Kristin Anderson, Ted Hart, Sandy Lyon, Kristina Glassner, Jan Nelson, Richard Nawa, Tommy Cianciolo, Lynne Krasnow

List of handouts and presentation notes

- Meeting Agenda
- Advisory Committee Charter
- Presentation Slides

Agenda

Time	Topic
9 a.m.	Welcome and Introduction
9:15 a.m.	Temperature Decision Rules and Designation Methods
10:30 a.m.	Break
10:40 a.m.	Temperature Decision Rules con't.
11:15 a.m.	Draft Temperature Use Maps – Online Web Viewer Orientation and Discussion
12 p.m.	Lunch Break
1 p.m.	Documenting potential use changes and justification
2:30 p.m.	Break
2:40 p.m.	Aquatic Life Use Definitions and Crooked River pH criteria
3:45 p.m.	Wrap-Up
4 p.m.	Adjourn Meeting



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DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.

Meeting Summary

I. Introduction and Welcome Presentation

Went over meeting objectives, agenda and ground rules - clearly stated; no suggestions to change.

II. Temperature Decision Rules / Methods

James discussed the temperature decision rules/methods for use updates per his presentation.

Objectives for this meeting:

- Inform RAC how use revisions came about
- Statewide perspective on methodology/procedures – big picture (James pointed out that there would be future opportunities to comment on specific reaches and this discussion is about the methodology for the revisions statewide).
- Worked with TWG on data and application
- Want RAC input on policy questions and consequences of outcomes

Talked about technical evaluation and role of technical work group.

Salmon & Trout Rearing and Migration

DEQ was asked if we would be discussing the Salmon and Steelhead spawning criterion. More recent work out of California that suggests 12°C was more protective for spawning that applies mostly to survival of eggs. Since DEQ is not reviewing the temperature criteria for this rulemaking this is somewhat out of scope. DEQ is updating the places and times where spawning use is designated and will apply whatever criterion is in effect for our regulations.

There was a clarifying question about whether all the decision rule criteria had to be met to designate this use, or just one of them. The way it was written was not clear- but if all have to be met it would restrict the number of waters eligible for protection. DEQ clarified that waters fitting any of the characteristics would be designated- but it does not need to meet all of them. We will make sure that is clarified in the description in the Technical Support Document.

Bull Trout Spawning & Juvenile Rearing

Question: How is spawning and rearing use for bull trout is identified. There is bull trout spawning in the lower Deschutes, which doesn't show up on the draft maps. DEQ replied that if ODFW or USFWS identifies habitat for bull trout spawning it will be classified for the 'Bull Trout spawning & juvenile rearing' use. If there is bull trout spawning or rearing habitat that was not included in this use subcategory on the draft map it could be an oversight. Any of these will be addressed and corrected in future drafts of the maps.

Core Cold Water Habitat

Question from RAC: Will a summary of the temperature data supporting core cold water designations be included in the TSD? Yes, there is an appendix which includes a detailed summary of the temperature data that was considered and how it was analyzed.

Links to ODFW's database and timing tables were provided. ODFW is in the process of updating these databases and has been coordinating with DEQ. The final updates for these data sets will be posted by ODFW when available.

There was a question about determining draft use designations- did indicators for core cold water all have to be met or only one of them? Seems like the water temperatures are the best indicator.

DEQ responded that when this method was developed in 2003 we did not have much temperature data, so some habitat indicators, such as early Chinook spawning timing, were used as indicators which would indicate colder waters.

Areas from EPA's Cold Water Refuge that were being classified for core cold water may not be obvious on the draft use maps. Most of the cold water refuge tributaries that EPA identified were already designated for core cold water. The ones that weren't were usually in the Gorge area and had limited contributing areas, so were not obvious on the map, but they have been accounted for.

If any steelhead are spawning after June 1 they would be considered for habitat indicators of core cold water use. DEQ recorded this as 'late summer steelhead' because it so happens that late timing as defined was only observed in summer steelhead populations. This can be clarified to 'steelhead' in the Technical Support Document.

DEQ is highlighting the major changes in the methodology in red on the presentations. The TSD will explain all the data that DEQ considered. The major sources were listed in the methods overview document shared with the advisory committee prior to the meeting. The TSD will also detail what specific variables and sources were applied to the methods to determine the designation updates.

Migration Corridors

Are physical barriers that keep fish out of reaches accounted for in this and other designations? ODFW accounts for passage barriers (both natural and artificial) on their habitat distribution database- especially in defining the upstream extent of spawning habitat. The habitat must be accessible and suitable to be included for particular species and life stages. Barriers primarily affect distribution of anadromous habitat. Resident fish are often found above passage barriers- and the aquatic life use subcategories protect them as well. Some uses, like salmon & trout rearing and migration, are applied upstream including upstream of many reservoirs.

Are any of the uses getting less stringent, or is DEQ only changing uses to more stringent designations? There are some changes of each. DEQ prepared change maps on the web map to highlight where designations are being updated to a different use subcategory. There are changes to both more and less stringent uses.

Links to the primary data sources were provided in the chat:

ODFW Fish Habitat Distribution Data and Viewer:

https://nrimp.dfw.state.or.us/FHD_FPB_Viewer/index.html

<https://nrimp.dfw.state.or.us/nrimp/default.aspx?pn=fishdistdata>

Other ODFW resources: <https://nrimp.dfw.state.or.us/nrimp/default.aspx?pn=dataresources>

Timing tables are in the middle of an update and will be re-posted by ODFW soon.

Cool Water Species

DEQ explained the methodology used to designate waters in this subcategory. There were no questions or discussion on the methods to designate cool water species habitat.

Warm Water Species

DEQ explained the purpose of this designation and waterbodies affected. DEQ is not considering any changes at this time. No questions or comments.

Salmon & Steelhead Spawning

DEQ was asked how it will account for Climate change in this Rulemaking. There was caution against policy decisions that would narrow the window on timing or designations when habitats would be under pressure from warming. Spawning timing is likely to change with climate change. It was suggested that DEQ should look at where the projections related to climate change are going. DEQ should aim for a regulatory scheme that will be valid for the next 20-30 years. How is DEQ factoring in climate change for the future? It was suggested DEQ should approach this issue with a precautionary stance.

DEQ acknowledged there is often a data gap about whether current understanding of habitat distribution and timing reflects uses that have already shifted or approximate the historical baseline. ODFW is still refining and improving information about what is accurate habitat distribution for the last 20-30 years. There at least haven't been big changes in habitat distribution in the fish habitat database from ODFW from 2003 to 2021; mainly replacement of estimates from professional judgement with field surveys.

How detailed is the data for each period of time for spawning timing in the ODFW timing tables? The resolution of ODFW's timing tables is for two-week periods. They are not precise down to the day and there is variability from year to year. The spawning information in the timing tables are based on long-term and repeated observation of timing.

Does "spawning use" mean actual spawning use and not adult holding? The timing for spawning is for adult spawning and fertilization. It does not include the time spent in pre-spawn holding. ODFW maintains separate categories of timing for adult holding and other life stage activities in their timing tables.

Can an entity that has data that does not seem to be reflected in ODFW's databases provide that for consideration? DEQ replied yes- ODFW has an intake process to consider data from third parties for the FHD. If a third party brings data of habitat use or timing to DEQ that differs from what ODFW and the Services have designated DEQ needs to consult with them before making changes incorporating that data. DEQ does not have the authority or expertise to make a unilateral decision about changing a habitat use based on data provide by third parties. It will be more efficient for entities to send data they would like considered to ODFW through their FHD data change request form: (<https://nrimp.dfw.state.or.us/FHD-DataChangeRequest/default.aspx?p=1>)

III. Use Change Justification

Aron presented about the use change supporting documentation and specific regulatory requirements for changing designated uses.

What is the definition of a timing unit? These are hydrologic units (sub-basin watersheds, main stems, or similar) where ODFW expects timing of various life-stage activities to occur at about the same time. Recall that ODFW records timing within a resolution of 2 weeks. James highlighted that the ODFW timing and habitat data is based on an overview of about the last 5 generations of the species. For many anadromous species that could mean a timespan of the last 25-30 years. Therefore, it's not just a current snapshot of where fish habitat occurs today. Furthermore, the data do not rely only on observations fish presence surveys to identify habitat that would be accessible and have suitable physical characteristics for each species and life stage. The data really provide our best estimate of where we understand salmonid habitat occurs- whether fish have been directly observed there or not.

IV. pH Criteria for Crooked River and Trout Creek Sub-Basins

Aron presented on the proposed pH criteria change for the Crooked River and Trout Creek sub-basins of the Deschutes basin. There was concern from the RAC about revising the pH criteria to a less stringent level on the basis that the information about pH tolerance was based on older studies from the 60's -80's. There is downstream habitat for bull trout rearing that would be impacted by pH criteria changes in these basins as well. Also questions about the risk of raising the pH criteria in a sensitive habitat area.

DEQ can include more of the information that supports the protectiveness of higher pH criteria. The John Day River has similar species present and the higher criteria is protective there. DEQ's proposal is in line with the natural range of pH and what is protective of the use in these basins.

What are the historical pH ranges have been in these basins, and are there recent excursions? There is historic data that shows higher pH's in these basins. Data as far back as the 1980's shows regular levels as high as 8.5.

DEQ's understanding from the basin coordinators is that DEQ is planning to do a TMDL for pH in the Deschutes basin. That would be an opportunity to confirm that these criteria are accurate, protective, and in line with the natural ranges that are protective of the use.

RAC also raised some concerns whether a maximum limit of 9.0 would protect the uses. It was suggested that the level does not seem to be based on the newest science. There is interest in seeing more of the literature that DEQ is using to support the criteria change.

DEQ considers this an error in the initial designation more than a change based on new information – the criterion was assigned to the whole basin in 1996 but did not account for the difference in geology and natural background of pH between the western slope that drains the cascades and the more arid plateau in the eastern Deschutes basin.

EPA said that this fit a site-specific criterion that would need to be provided to EPA with justification as a requirement of the regulations.

Are there any proposals to increase the pH criteria to 9 in western high-Cascades River basins where it naturally exceeds 8.5 frequently? DEQ is not considering a change to this area, only within the Crooked River and Trout Creek subbasins.

V. Wrap Up

Angela posted in the chat to please send comments about the proposed methods for updating the use subcategories for temperature to: aquaticlife.2022@deq.oregon.gov by March 14. James talked about the schedule and topics for the next meeting as part of the wrap up.

Meeting was Adjourned at 3:45 p.m.

Alternative formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.