

Rulemaking for Aquatic Life Use Updates

Meeting Summary

Rulemaking Advisory Committee Meeting #6

Dec. 16, 9 a.m.

Virtual Meeting (Zoom)

List of Attendees

Advisory Committee Members: Sarah Cloud, Tommy Cianciolo (for Trout Unlimited), James Fraser, Megan Hill, Chris McCabe, Susie Smith, Glen Spain, Lindsey Spencer (for Oregon Farm Bureau and Oregon Forest & Industries Council), Burke Strobel (for Portland Water Bureau)

Agency Advisors: Rebecca Anthony, Brian Bangs, Greg Sieglitz, Jason Pappani, Michele Maier

DEQ Staff: James McConaghie, Connie Dou, Debra Sturdevant, Trina Brown, Angela Rowland, Mailea Miller-Pierce

Interested Persons: Paula Calvert, April Catan, Julia Crown, Christopher Farrar, Victoria Frankeny, Rick Hafele, Gina Hoff, Sandy Lyon, Rebecca McCoun, Alex Rice, Andrea Sumerau, David Waltz, Kristen Walz, Jackie White, Ken Yates



State of Oregon
Department of
Environmental
Quality

Water Quality Standards and Assessment

700 NE Multnomah St.,
Suite 600
Portland, OR 97232
Phone: 503-229-5619
Contact: James McConaghie

james.mcconaghie@deq.oregon.gov

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

List of handouts and presentation notes

- Presentation Slides

Agenda

Time	Topic
9 a.m.	Welcome and Introduction
9:20 a.m.	Resident Trout Spawning: 2003 rulemaking and implementation
9:40 a.m.	Resident Trout Spawning Designation rule options
10:30 a.m.	Break (10 mins)
10:40 a.m.	Resident Trout rule options con't.
11 a.m.	Discussion: RAC preferences and concerns
11:20 a.m.	Input for fiscal impact statement
11:45 a.m.	Wrap Up, Next Steps
12 p.m.	Adjourn meeting

Meeting Summary

I. Introduction and Resident Trout Spawning: 2003 Rulemaking and History of Implementation

DEQ discussed logistics and ground rules for the meeting. The meeting was opened up for questions to the committee before the meeting started and there were no questions.

II. Resident Trout Spawning Rule History and Implementation

Debra Sturdevant presented on the 2003 Rulemaking and History of Implementation of Resident Trout Spawning criteria to provide meeting context. The goal of the presentation was to give context for the DO standard. The last time the DO standard was last substantively revised was in 1996. The 2003 rulemaking involved revision of the temperature standards and designated the fish and aquatic life use subcategories associated with temperature to clarify when and where the criteria apply. Fish use maps and tables were adopted at that time. While salmon, steelhead, and bull trout (a native char species) were designated, other resident trout spawning areas were not designated at that time because there is no temperature criterion specific to resident trout spawning. In addition, statewide data on trout spawning locations was not readily available. In 2003, DEQ did not substantively revise the DO standard but reformatted division 42 rules. The salmon and steelhead spawning use maps and tables were cross-referenced in the DO rule language but the resident trout spawning language remained as a narrative.

In 2004, as EPA was reviewing the temperature standard revisions and use maps, they asked for information on how DEQ would apply the DO spawning criteria to resident trout. Therefore, in the 2004 memo, DEQ identified default dates to apply the DO spawning criteria. DEQ developed statewide dates for resident trout spawning and dates by basin for bull trout spawning. The goal was to refine all these designations as more information was developed on resident trout and bull trout spawning activities.

In WQ assessment (303d impaired waters list), DO spawning criteria have been applied to nearly all streams with resident trout as a year-round use. In 2022, 72 assessment units were listed for DO spawning based only on presumed resident trout spawning.

The objective for this rulemaking is to clarify when and where active resident trout spawning occurs. However, there are still data gaps that need to be addressed.

III. Dissolved Oxygen Salmonid Spawning Uses: Resident Trout Spawning Policy Options

James discussed why the RAC was reconvened. As DEQ was preparing to publish the proposed rules for public comment, DEQ reviewed the resident trout spawning rule language with EPA and OR-DOJ and received input that the proposal was not workable as intended. Changes to DEQ's policy proposal required DEQ to get input from the RAC and update the fiscal impact statement before moving forward.

Salmonid spawning criteria are identified under the dissolved oxygen standard rule. For resident trout species, the rule states that the DO spawning criteria applies to active spawning areas used by resident trout species. Because the state lacks specific data on the location of resident trout spawning habitat, this criterion has been applied very widely by default.

There are two components to designating Salmonid spawning uses. The spatial component is where habitat is located, and temporal component is when spawning through emergence occurs. There are specific ranges of

habitat conditions that are suitable to resident trout spawning. Resident trout spawning occurs in clear, silt free cold-water streams with riffle habitats above pools and flow velocities of 1.0-3.0 ft/sec. They need fine gravels substrates of ½ - 3 inches diameter and depths around <1-3 ft. These conditions are most commonly found in headwater and tributary streams.

DEQ showed the RAC maps of potential salmonid spawning habitat areas. It is estimated that about 99% of salmon and steelhead spawning habitat is known by ODFW. It is likely that greater than 95% of the distribution of resident trout habitat is known, but the location of trout spawning areas within them are not generally known. That is the data gap.

Resident trout species are generally not a high wildlife management priority, and these species are not generally ESA listed, with the exception of Lahontan cutthroat trout.

A map was shown displaying where data gaps occur throughout the state. DEQ has assessed where the resident trout occur in relation to salmon and steelhead. There is a lot of overlap between salmon and steelhead spawning and resident trout spawning or occurrence. Therefore, there is reasonable assurance that the resident trout species are also being protected in many areas that they co-occur with salmonids.

There are three major data gaps that DEQ has identified: 1) Areas that are upstream of anadromous spawning are often where resident trout spawn according to the literature. 2) In contrast, in areas that are downstream of anadromous spawning habitat are less likely to be resident trout spawning habitats. The probability is much lower that the trout are spawning in areas downstream of salmon and steelhead spawning. 3) The third data gap includes subbasins or basins where anadromous species do not occur, mostly in eastern OR. These are areas where it is difficult to make inferences about spawning habitat because salmon and steelhead do not occur there, and data about trout spawning habitat is not readily available at this time.

For prior implementation DO to resident trout spawning, DEQ made a conservative assumption in the absence of data and applied the spawning criteria to all waters of the state with trout. In practice this is virtually all waterbodies, and it is highly conservative. There are a few limited stream segments where DEQ has received documentation from ODFW that trout spawning does not occur and DEQ has not applied the spawning criteria.

There was a slide on the original Resident trout spawning proposal. The glitch in our proposed rule was including the presumed spawning use designated in the rule. EPA said that the presumed uses must be treated as designated uses. Changing a presumed use would then require a UAA, rulemaking, and ESA consultation. This approach would have designated the use inaccurately and over-conservatively. This would have led to higher regulatory and administrative burden to correct later. DEQ no longer considers this a viable approach.

There are two preferred policy options that DEQ see as viable. Option 1: Designating all known spawning habitat and committing to address data gaps and identifying additional spawning habitats. This will include an “inventory” mechanism to speedily and transparently apply criteria to newly identified spawning habitat. This would allow waters to be protected without having to do a full rulemaking. We could prioritize additional designations in the triennial review process.

James described policy option 1. Designate what is known. Known areas of resident trout spawning would all be designated now in this rulemaking. There would be an inventory as part of the rule committing DEQ to do this. Consultations with district biologists, ODFW, and literature reviews would be used to determine which waterbodies may support resident trout spawning. Then DEQ would do periodic rulemakings to update known spawning habitats in triennial reviews.

Greg Sieglitz asked whether in addressing the data gaps if there are specific new or redirected funds of funding/staffing recourses identified within ODFW, DEQ, USFWS, others to conduct analyses and surveys to do this in the somewhat near future? James said that there are not known funding sources, but we can look for funding sources when we identify areas that we can target. There are no dedicated resources to do this right now, only from DEQ.

Susie Smith asked about permitted discharge for NPDES permit renewal, if there are data gaps in those areas, upon NPDES renewal, would a study or survey be required, with some kind of compliance schedule? James said that it's likely DEQ would use permit renewal as a convenient time to determine the resident trout spawning status of unknown waterbodies. Receiving waters would be a high priority. DEQ needs to have some internal conversations about whether the department would be responsible for that, either permitting program or standards program, or if there would be any new requirements for permittees. Debra clarified that we would mostly consult with the district biologists about the status- we don't necessarily need a survey or study to be done to decide whether DEQ would apply DO spawning criteria to a waterbody.

Brian Bangs asked whether there are resident trout spawning areas covered under anadromous spawning uses. James said that there are large areas of overlap between resident and anadromous habitat.

James described policy Option 1A- Essentially the same as option 1 except DEQ would also propose to designate areas upstream of anadromous spawning. The scientific literature says that it is likely that resident trout spawn upstream of spawning habitat for anadromous species.

Susie Smith asked what the percentage of likelihood it is that they are spawning upstream of anadromous species. James said we don't have anything quantitative and there are no survey data to back this up in terms of the percentage of likelihood. She asked whether there is a way to use references to back up our assumptions about upstream spawning. James replied that there is qualitative scientific documentation supporting that assumption, and DEQ would include these in the technical support documentation.

James talked about how the resident trout spawning inventory would work. The inventory would be identified as a requirement for DEQ to establish and make public in the rule. There would be structure (add known spawning habitat as identified) and change procedures (how the data are added and changed- FHD, third parties, district biologists, triennial reviews). Changes to the inventory would only occur if the experts agreed and sign off on it. The authority for applying the DO spawning criteria to areas determined to have trout spawning come from the DO rule (active spawning areas narrative) and the antidegradation policy. Supporting documents (the implementation procedures (IMD) and web map would be provided for transparency and regulatory clarity on where and when criteria are applied). The goal is to be able to rapidly add spawning habitat as it is identified.

Susie Smith asked how the procedure and inventory is used to update the fish use maps. Deb said that the inventory will be a real time database and transparent to the public through our website. There would only be habitat added after ODFW concurrence. Even if not designated by the rule, we would still have to apply criteria because the DO spawning narrative and the antidegradation policy protect existing uses.

James replied that at this time, DEQ would designate the waters with known spawning habitat for anadromous salmon and steelhead species, and for resident trout, including the ESA listed resident species, Bull Trout and Lahontan Cutthroat Trout, as salmonid spawning use per the DO standard. The department would follow-up with ODFW and the USFWS to identify additional areas of spawning habitat. This new habitat would be placed in the inventory of resident trout spawning habitat. The inventory would clearly communicate to the public where DEQ is applying criteria for resident trout spawning. The habitat from the inventory would be periodically adopted as use designations in future rulemakings

Greg Sieglitz asked if the preferred approach is to leave off the map the large areas of the state outside the range of anadromous fish, that currently contain resident trout (Redband trout) until data are provided about specific spawning areas for those species? James said that yes, this preferred approach is to designate the spawning habitat we do know and that is what would go on the map. Then we would continue after the rulemaking with the inventory which allows us to add habitat designations later. Debra said that DEQ is anticipating that the district biologists in some of the basins will be able to quickly help us identify some areas that have high certainty of supporting resident trout spawning. Also, given the data gaps, DEQ would consider designating areas of likely or probable spawning habitat from professional opinion. We don't necessarily need to wait for survey data or the FHD to be updated for this purpose. DEQ recognizes it is unlikely that every stream would be surveyed and that would be a huge effort. It would be enough at this stage to identify additional waters that are likely or high probability of supporting spawning habitat based on the professional opinion of ODFW fish biologists, especially if there is agreement among biologists from USFWS, OSU or other experts.

Greg said he is familiar with the effort that it took to identify spawning habitat for the anadromous fish species, and he is concerned from a practical standpoint there will be enough resources for doing this for resident trout as it would be a large effort. There is a lot of Redband habitat that does not appear on the proposed map in eastern Oregon, for example. He is concerned that it will take a lot of time and effort in getting the required information needed for these species.

James acknowledges that it would take a lot of time and efforts to survey resident trout habitat for spawning habitat. The initial proposal was meant to avoid this effort by applying criteria by default until more information is gathered, but that seems legally unworkable. We want to discuss the possible funds, grants, and resources that may be available. Also targeting the known areas that we know we can designate, based not only on survey data but also on professional opinion.

Greg thanked DEQ for the response and wondered if we have the latitude to do the modeling exercise to look at hydrography data and map areas based on the refined hydrography layer to identify areas that may be possible, likely, or not likely. He thinks right now this option 1A map is leaving off a lot of the state in Eastern OR. James replied that we had asked our technical advisory committee if there were any habitat models that could be used to help with this designation. The committee said there weren't any that were going to be ready or usable within the timeframe of this rulemaking. Perhaps if some resources or funding could be identified a landscape model might be possible. It's something DEQ and ODFW need to discuss, perhaps with the federal Services and EPA as well. It will take time to develop models, so that is why DEQ wants to designate what habitat is known or likely now and then build on that in the future with modeling and other information gathering.

Sarah Cloud echoed Greg's concern that it appeared a lot of the state would not be protected, and she thinks DEQ's proposal depends on a lot of 'ifs'. She is also concerned about the salmon and steelhead spawning timing. Resident trout often spawn way past June 15th and saying that salmon and steelhead spawning will protect them, is not totally accurate since they spawn later.

James noted that under option 1A, all the resident trout habitat in the coastal basins of the state, the Grande Ronde, the John Day, and the majority of the Deschutes basin would be designated for resident trout spawning. The main areas of uncertainty are the Willamette Valley floor, downstream of salmon and steelhead spawning habitat, which is less likely to support resident trout spawning, and the arid eastern basins, mainly the Malheur, Powder, Goose and Summer, and Owyhee. Those basins have relatively fewer waterbodies with resident trout, so hopefully it will be easier to get information on which of them do, or do not, support resident trout spawning.

James clarified that while ODFW doesn't identify the exact waterbodies where resident trout spawn, they do identify the timing for spawning activity in the different timing units through the state. The range DEQ uses as the start and end dates that apply to protect resident trout are consistent with the timing from those tables. DEQ does not use the anadromous dates. The method for deriving resident trout spawning dates and explanation of how they're protective of the use is detailed in the technical support document.

Becky Anthony agrees with Greg's assessment that this would be a huge undertaking and will require a lot of time after the rulemaking. James said he knows that ODFW has not committed any resources to this yet, and that DEQ can't commit them to any specific course of action. But ODFW has seemed willing to work with DEQ to the extent that they can. At this time all DEQ can offer is to commit its own staff time to following up with more information during and after the rulemaking. But DEQ felt it was important to use the opportunity of this rulemaking to designate what we can at this time.

The committee adjourned for a 10 minute break at 10:30 a.m.

Brian Bangs indicated he shares Greg's concerns. He asked if waterbodies aren't designated for spawning at first, what criteria apply? James said the year-round DO criteria apply to all these waterbodies regardless of spawning status. Debra replied that DO spawning criteria apply to active spawning areas according to the rule. Trout spawning use has not been designated in rule before now, but if there is a permit or action DEQ is taking, we think we would need to make a determination based on the best available information whether or not the stream is trout spawning habitat. If a stream is not identified as a spawning area, the year-round DO criteria would apply- 8.0 mg/l if designated for core cold-water or in a cold ecoregion, and 6.5 mg/l if cool water species or in a cool ecoregion. DEQs hope to fill some areas in before the rule adoption based on public comment and compiling any additional readily available data. DEQ would need to determine whether the criteria apply when it takes an action – like permit renewal or a TMDL.

James discussed how DEQ will consult with ODFW pre-rulemaking and post-rulemaking. Pre-rulemaking we are identifying any readily available spawning habitat information available from ODFW biologists, reviewing published reports and datasets. Post-rulemaking we will continue to follow up with ODFW and district biologists, evaluate 3rd party data submitted during/after the comment period, identify high priority areas, and identify special projects and funding sources.

Other options evaluated but not viable according to DEQ. Option 2 to postpone designations for DO spawning. The key elements would be to gather more data before making any DO designations in rule, continue implementing the 2004 memo, and follow up with ODFW. Disadvantages: there more regulatory uncertainty, it would be inefficient and postpones other work because it requires an additional rulemaking, and EPA action on the current rules may invalidate the 2004 memo.

Option 3 was to presume spawning occurs in all trout streams until there is further information,- which we now understand would have the same outcome as designating all resident trout habitat as spawning habitat, according to EPA. This is consistent with current implementation procedures except if we include the presumed use in the rule, it would be difficult to correct or reverse later, when data becomes available. The disadvantages are that this approach is inaccurate overly conservative, and possibly burdensome given the DO spawning criterion of 11 mg/l is difficult to meet in some waters. This approach would create a high regulatory and administrative burdens because it would require a Use Attainability Analysis, a rulemaking, and Endangered Species Act consultation to correct the inaccuracies. It would limit the ability to use and incorporate new data because it would not be possible to quickly remove areas discovered to be unsuitable for spawning later on. It is much easier to use and incorporate new data to make a determination that an area is trout spawning habitat and add the use than it is to use the data to remove the use designation where the use does not actually occur.

DEQ is proposing Option 1 or 1A for designating resident trout spawning. The preference is option 1A which designates habitat upstream of anadromous species which is known from the literature where resident trout spawn. Our goal is to designate known and likely resident trout spawning habitat. This is an improvement from previous rule where we did not designate resident trout spawning habitat at all.

Susie Smith reiterated that it is important for DEQ to discuss the likelihood of spawning habitat where it is assumed to occur and support it with the literature and sources. James said DEQ will do that in the supporting documentation for this rule.

Greg Sieglitz mentioned that there are a couple of other resources for potential resident fish data spawning and otherwise-ODF forestry notification surveys in concert with ODFW bios, watershed counsels and land and water conservation districts- you could rally OWEB to get the councils and districts to send in data and maps or edit maps with their local expertise. They all have local knowledge and data but not comprehensive in most cases. Brian Bangs added to also reach out to USGS FRESC group with requests.

IV. Fiscal Impact Statement

Mailea presented on the Fiscal impact statement. She gave a background of what the fiscal impact statement is and mentioned that DEQ is required to consult the RAC to gain any information about possible fiscal impacts from the rule.

The only potential differences from the last proposal would be possible delisting of waterbodies that were listed for DO spawning based only on the assumption that resident trout spawn there. DEQ's permitting department indicated that no individual permits should be affected; therefore, there are no expected fiscal impacts on either small or large businesses. In addition, no active TMDLs would be impacted. If waterbodies are delisted for DO spawning impairments, then a slight positive fiscal impact may occur if less DEQ staff time related to permits and TMDLs is required.

DEQ will provide the next FIS draft to the RAC by early January. Before that time if there are any comments or questions, the RAC may send them to: Aquaticlife.2022@deq.oregon.gov.

V. Wrap up and Adjournment

James highlighted the remaining avenues for the RAC to provide input on documents, and the next steps in the rulemaking process and schedule. DEQ will send the draft of the meeting summary to the group in about a week for review and corrections. We will send the revised FIS in early January 2023 and allow two weeks for comments. At any time, the committee can send comments or questions to: Aquaticlife.2022@deq.oregon.gov.

James showed the revised project schedule and highlighted the key dates. DEQ files the Notice of Rule with the Secretary of State mid- February 2023. The open public comment period starts in mid- February 2023 (45 days duration). The public hearing will be in March 2023. The public comment period will be closed in early April 2023. DEQ will present to the Environmental Quality Commission in July 2023.

Burke Strobel asked how long it would take for the rule to become effective after the EQC adopts it. DEQ staff explained they have around 30 days to submit the rule package to the Secretary of State and EPA once the EQC takes their action. Then EPA has 30-60 days to approve or disapprove Oregon's rule. It will have to go through ESA consultation, which will take an uncertain amount of time.

Burke asked if there may be possible issues with the EPA that we can foresee. Deb said one of the biggest areas that we are still working on is the UAA and how much documentation will be sufficient to meet EPAs

expectations. We have been working with EPA closely on the documentation needed for the UAA process, which is required when changing a designation to a use with a less stringent criteria.

Gina Hoff (US Bureau of Reclamation) asked where to find the documents as she is new to the process. James directed her to the rulemaking website: <https://www.oregon.gov/deq/rulemaking/Pages/aquaticlife2022.aspx>. Materials and meeting summaries/minutes from past RAC meetings are available there.

The floor was opened for non-committee members to ask questions. There were no questions from the public.

The meeting was adjourned at 11:44 a.m.

Contact information for any questions: Aquaticlife.2022@deq.oregon.gov or James.mcconaghie@deq.oregon.gov.

Alternative formats

[Español](#) | [한국어](#) | [繁體中文](#) | [Русский](#) | [Tiếng Việt](#) | [العربية](#)

Contact: 800-452-4011 | TTY: 711 | deqinfo@deq.state.or.us

DEQ does not discriminate on the basis of race, color, national origin, disability, age or sex in administration of its programs or activities.

Visit DEQ's [Civil Rights and Environmental Justice page](#).