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Justin Green
Water Quality Division Administrator
Oregon Department of Environmental Quality
700 NE Multnomah Street, Suite 600
Portland, OR 97232-4100
green.justin@deq.state.or.us

Submitted Via Email: IntegratedReport@deq.state.or.us

Re: Comments on 2022 Integrated Report Assessment Methodology

Dear Mr. Green,

Thank you for the opportunity to comment on the Oregon Department of Environmental Quality's ("ODEQ") 2022 Integrated Report Assessment Methodology proposed updates. These comments are submitted on behalf of the Oregon Farm Bureau, Oregon Forest & Industries Council, Oregon Seed Council, Oregonians for Food & Shelter, Oregon Association of Nurseries, Oregon Cattlemen's Association, Oregon Water Resources Congress, and Oregon Dairy Farmers' Association.

We understand that you are seeking our top three priority recommendations for methodology updates from the matrix supplied by ODEQ. While we provide our comments in order of significance below, including our three priorities, given the lack of information from ODEQ on what exactly it proposes to change as part of the Methodology revisions, we are providing feedback on all of the updates that were of interest to our coalition.

Please note that this is our initial feedback based on the very limited information provided by ODEQ in the matrix, and we will have additional feedback as ODEQ more fully develops these concepts and moves forward with its formal assessment of its Methodology. To that end, we would suggest that as ODEQ continues to narrow its list of priorities for the Methodology update, ODEQ provide a more detailed prospectus outlining the changes ODEQ anticipates for public comment prior to selecting the updates that move forward. Further, our coalition found ODEQ's bifurcated approach to the Methodology and Report unfair to stakeholders. Requiring completion of the

Methodology without an understanding of the practical effects of the changes in the Report made it impossible to fully comment on the Methodology and to contextualize the changes made in the Methodology. We strongly suggest that ODEQ design the process in 2022 to allow for comments on the Methodology and outcomes in the Report at the same time.

ODEQ Proposed Update 19: Assessment Unit Framework

As you will recall, our coalition had significant concerns with ODEQ's revisions to its assessment unit framework that it adopted in its 2018 Integrated Report Methodology. We submitted extensive comments on this framework in January 2020 with our comments on the 2018-2020 Integrated Report and Methodology. We continue to urge ODEQ to move away from watershed scale assessment units for stream order 4 or less streams in the Methodology.

Our organizations continue to believe that moving to watershed scale assessment units for stream order 4 or less streams does not represent sound agency policy or standards for scientific rigor. In order to be scientifically defensible, decisions to list waterbodies as impaired must be based on water body specific data and cannot be done on a watershed wide scale or based upon pooling data (i.e. extrapolating data from samples from neighboring waterways or tributaries). Watersheds are composed of hundreds of individual water bodies. Within a watershed, water quality can easily differ from water body to water body, particularly when those waterways are under different ownership and may have experienced differing current and historic riparian management.

Further, it does not appear that ODEQ is analyzing whether the selected beneficial use for the sampled tributary would actually apply to all waterbodies in the watershed AU or be an appropriate basis for listing all waterbodies in the watershed AU. This is particularly important in the context of irrigation and drainage ditches, many of which are closed diversion systems which are screened to prevent fish from entering the system and where water diverted does not return to the stream. Many of the standards for fish life or human drinking water would not apply to these water bodies, as they are separate systems that do not support those beneficial uses. Instead of undertaking a site-specific analysis based on site specific data, ODEQ has chosen to aggregate almost all of this man-made infrastructure across the state into its watershed scale analysis, in the process applying inappropriate beneficial uses and listing criteria to these waterbodies. This approach is not scientifically justified or legally appropriate.

By listing entire watersheds without showing waterbody specific evidence of an impairment for each water body in the watershed, ODEQ is subjecting landowners to regulation without data supporting that regulation. We strongly urge ODEQ to reconsider this approach as part of its 2022 Integrated Report Methodology Update.

ODEQ Proposed Update 6: Updates of Freshwater Biocriteria Reference Condition and Metric Thresholds

Presently, ODEQ employs the PREDictive Assessment Tool for Oregon (PREDATOR) Model¹ to evaluate the changes in resident biological communities in Oregon's wadable streams. This is a multivariate statistical model that uses various benchmarks to evaluate the integrity of freshwater macroinvertebrate communities. Reference sites that are regarded as undisturbed are used to determine the expected number and type of macroinvertebrates for a given Assessment Unit. These are compared to measurements within that Assessment Unit, yielding a percentage of existing macroinvertebrates relative to the expected amount. This percentage is compared to a target percentage that varies across different parts of the state.

ODEQ proposes to update the reference condition approach and review metric thresholds. The reference conditions that are used in this model were collected from 1998 through 2004. These potential changes will require extensive technical input to allow for a more representative model that is both rigorous and provides clear guidelines for constituents to be delisted.

Currently, when an Assessment Unit is added to the 303(d) list, the cause of the low counts of invertebrates is not clear, which also means it is unclear how to improve the water quality of an Assessment Unit that is 303(d)-listed for biocriteria. This has made it extremely difficult for the non-point source community to engage with this criterion and has made these listings less scientifically robust and defensible than other water quality criterion.

If ODEQ updates the biocriteria criterion, we urge it to:

- Engage an advisory committee early in the process and provide ample time for stakeholder review of this complicated topic.
- Modify the criterion so that the listing is better supported by actual data, perhaps through mandatory supplementary information or documentation of biocriteria impairments.
- Include a delisting criterion.

To provide better feedback, we'd also like to know:

- Will the attention of the update focus on modernizing the reference conditions, adjusting the criteria, or both?
- How can this criterion be conveyed in the 2022 IR in a way that allows for greater public understanding of a 303(d)-listing for it and provides clear support for the listing?

¹ <https://www.oregon.gov/deq/FilterDocs/PredatorTechRep.pdf>

- What are the delisting criteria for a water body that has been listed for biocriteria?

Without answers to these questions, it is difficult for us to assess the impacts of updating this assessment method. However, given that we understand ODEQ is likely to move forward with the update given its commitment to EPA, we strongly encourage ODEQ to update the outdated data sets relied upon for the model, resolve our longstanding issues with the defensibility of the model, including the biocriteria listing process, the use of inadequate reference data, and the basis for the listing determinations. Further, we continue to believe that determining what constitutes “detrimental changes to the biological community” is a policy decision and should require a rulemaking and should not be a decision for the methodology.

ODEQ Proposed Update 8: Updates Resulting from Temperature TMDL Litigation

We understand that there is currently a court order which requires ODEQ to rewrite the temperature TMDLs to use the biologically based temperature criteria in place of the natural conditions criteria. While we respect that there is ongoing litigation around the temperature standard requiring this update, we strongly encourage ODEQ to review and adjust Oregon’s water quality standards for temperature. The ongoing litigation does not prevent modernization of the temperature standard, and all stakeholders’ time and resources would be much better spent developing a TMDL for a revised temperature standard that is based upon what is actually achievable and necessary in Oregon.

Further, we believe that with the EPA mandated biocriteria update and our other suggestions around the assessment units and temperature standard, ODEQ will be short on time and resources to complete any additional updates to the assessment methodology. As such, we urge you to focus on those priorities and not pursue any of the remaining updates in the matrix. However, we provide our feedback on those updates below should ODEQ decide to pursue them.

ODEQ Proposed Update 1: Delisting Methodology for Dissolved Oxygen in Freshwater

We support the update for delisting a water body for dissolved oxygen so long as the methodology required for delisting can be reasonably implemented by a stakeholder without a strong technical background. The delisting process for dissolved oxygen must not be significantly more arduous than the process used for listing waterbodies. We urge ODEQ to either provide a “user’s guide” to collecting data properly for a delisting or ensure that the data requirements are not onerous to the point of requiring technical expertise to implement.

ODEQ Proposed Update 5: Delisting Methodology for Historical Fecal Coliform Listings

We understand that ODEQ is considering a methodological update to remove old 303(d) listings for fecal coliform. We support this effort to improve the organization and clarity of the state 303(d) list.

ODEQ Proposed Update 2: Revisions to Freshwater Dissolved Oxygen Criterion

ODEQ has stated the specific parts of the DO water quality criterion that may change, but did not provide additional detail on how these parts may change. Since a change to this criterion can affect many waterways across the state, it is difficult for us to provide feedback on this proposal without ODEQ providing clarity on the nature of the changes it anticipates. If ODEQ opts to pursue this change, our organizations will be very interested in reviewing and providing feedback on the proposed changes. This is a significant criterion for the nonpoint community.

Presently, a waterway is added to the 303(d) list for dissolved oxygen (DO) if more than 10% of samples collected on separate days are less than specific concentrations that vary by type of waterway. If fewer than five samples exist in an Assessment Unit, then that Assessment Unit is regarded as having insufficient data and assigned to Category 3. The IR Methodology Document does not describe a specific procedure for delisting water bodies on the 303(d) list for DO impairment.

ODEQ is proposing to update the minimum data requirements, the allowable frequency of DO concentrations dropping below criteria, and the DO tiers. The nature of these updates is unclear, and could impact the criterion in ways that our members care about. Specifically, we would like to know:

- Will changes to minimum data requirements lead to more waterways being classified as “unassessed”? What is the management implication of this for ODEQ?
- How many additional 303(d) listings would have occurred in the 2018/2020 IR if the allowable percent of daily samples less than the water quality criterion is decreased below 10%? The answer to this question will indicate the level of concern that NPS Coalition members should have for this update.
- What will change about the tiers? The DO criteria? The temperatures that define the tiers? The time periods? Any of these changes could affect the number of waterways that are listed for DO. If the changes are significant, the management implications could be as well.

Without answers to these questions, it is difficult for us to assess the impacts of updating this assessment method.

ODEQ Proposed Update 10: Updates to criteria for aquatic weeds, nuisance algae, nutrients

We are concerned that ODEQ is proposing updates to the Integrated Report methodology that would allow it to add Assessment Units to the state 303(d) list for aquatic weeds, nuisance algae, and nutrients without measurements of algae or weeds. A water body can be high in nutrients from natural or anthropogenic sources yet still attain beneficial uses. The potential use of nutrient benchmarks implies that nutrient measurements alone could lead to a 303(d) listing without accompanying data. We do not believe this is appropriate or consistent with the aquatic weeds or nuisance algae criterion. As such, we suggest that updates to the methodology related to this criterion *require* a weight-of-evidence approach that requires measurements of algae, weed, and nutrient parameters prior to listing.

Updates to this criterion must define clearly the protocol for using a weight-of-evidence approach to add an Assessment Unit to the state 303(d) list for aquatic weeds and nuisance algae. We are concerned that a vague definition of a weight-of-evidence approach will lead to arbitrary and capricious 303(d) listings that will entangle our organizations and ODEQ in unnecessary debates over specific waterways. We urge a clear application of multiple lines of evidence by ODEQ water quality assessors if a weight-of-evidence approach is to be included in the methodology for an upcoming Integrated Report.

If a weight-of-evidence approach is developed to add an Assessment Unit to the state 303(d) list for aquatic weed and nuisance algae, ODEQ should define clearly the types of evidence that can and must be used to include weed or algal measurements and associated nutrient measurements. The additional data that could be used in a weight-of-evidence approach for this water quality criterion should be subject to meaningful stakeholder input.

ODEQ Proposed Update 12: New Sediment Criterion

Presently, the sedimentation criterion evaluates stream-specific documentation that demonstrates excessive sedimentation that significantly limits fish or other aquatic life. There are no explicit criteria for Suspended Sediment Concentration (SSC) or Total Suspended Solids (TSS) in a water body.

This proposed criterion deals with the suspension of sediment in a waterbody, the type of sediment deposition, and various other characteristics related to sediment transportation. (The inclusion of chemical analysis in sediment data is discussed in the toxics narrative methodology update listed below.) ODEQ has described a methodology update that would use a benchmark approach for in-stream sediment and narrative criteria for bottom sludge to assess water quality and habitat impacts associated with sediment.

Development of this criterion will require extensive technical input related to the modeling of sediment transport between Assessment Units, the potential for sediment to impact aquatic life, the mechanisms related to sediment characterization, and sampling requirements for sediment data.

A detailed sediment criterion will have wide-ranging impacts for our members. We understand that it will be technically costly to develop, and, once in existence, it may be challenging to implement and manage since the sources of sediment to a water body can be vast and difficult to determine. As such, we do not think that this update is appropriate or worth ODEQ resources at this juncture, and we would prefer ODEQ not move forward with this update this round. If ODEQ pursues a sediment criterion, we urge a fair, balanced, and transparent approach that does not create unattainable targets or impose arduous compliance burdens upon our members.

ODEQ Proposed Update 11: Applicability of Additional Data Pertaining to Harmful Algal Blooms

ODEQ is proposing to expand the current methodology associated with harmful algal blooms to take into consideration cyanotoxin results taken during water testing completed for drinking water entities. We would like to know how many additional Assessment Units would have been added to the 303(d) list if this update had been part of the 2018 IR Methodology Document? We would also need additional information on how geographic sourcing of this data would work, and the length of waterway that this listing would apply to. We have concerns about listing an entire waterway for harmful algal blooms when the source of the impairment may not be at the drinking water intake where the test was taken. We need additional information to evaluate whether this is an appropriate change to the assessment method for harmful algal blooms.

ODEQ Proposed Update 13: Additional Approaches to Evaluate the Toxics Narrative Criterion

The narrative criterion for toxics in waterways is vague. We have significant concerns about ODEQ combining a vague criterion with the use of proxy data like sediment or fish tissue concentrations. We do not believe that this is a necessary or appropriate update at this point in the absence of more clear criterion for toxics.

ODEQ Proposed Update 14: Specificity on Advisories Related to the Toxics Narrative Criterion

ODEQ is proposing a criterion update that would allow for the listing of more specific health advisories associated with consumption of aquatic organisms. We do not think this approach is advisable or appropriate. OHA advisories are based on public health and information needs, not always on scientific standards related to specific pollutants. At any rate, ODEQ already has water quality standards related to the specific pollutants

that are the subject of health advisories, and compliance with these standards is the appropriate way to approach listings for pollutants of concern. Additionally, it is unclear that that geographic extent of the advisory would match the actual geographic scope of the impairment, causing significantly more listings than may be supported by the data. As such, we urge ODEQ not to move forward with this approach.

ODEQ Proposed Update 17: Reevaluation of "Attainment" for Criteria Associated with the Beneficial Use of "Fish and Aquatic Life"

Unlike the subjects of other updates described here, "Aquatic Life" is not a criterion, but a beneficial use. Numerous criteria could be considered under this term, which appears to have been used as an umbrella term by ODEQ in its Proposed Update 17. We support water quality categorizations based on robust data sets. If this proposed change is pursued, we support the increase of minimum sample requirements for a listing other than Category 3. Otherwise, we need more details on Proposed Update 17 to better evaluate its potential impacts.

Thank you for the opportunity to provide feedback and let us know if you have any questions.

Sincerely,

Mary Anne Cooper
Oregon Farm Bureau

Jeff Stone
Oregon Association of Nurseries

Mike Eliason
Oregon Forest & Industries Council

Jerome Rosa
Oregon Cattlemen's Association

Roger Beyer
Oregon Seed Council

April Snell
Oregon Water Resources Congress

Jenny Dresler
Oregonians for Food & Shelter

Tami Kerr
Oregon Dairy Farmers' Association