

Water Quality Program

Oregon's 2018 Integrated Report Call for Data Submission Guidelines

Purpose of this document

This document describes the elements required to ensure the use of high quality data for the water quality assessment, which results in the Integrated Report (IR) and updates to the 303(d) list of water quality limited waterbodies. For this assessment, surface water quality will be assessed by comparing measured chemical, physical, and biological parameters to water quality criteria and standards. The methods used to make these comparisons and determine a final assessment conclusion are covered in the DEQ Assessment Methodology document that will be released in draft form in Spring 2018. Below is a data submission guide for those organizations interested in submitting data for inclusion in the assessment process. The information is also summarized in a checklist at the end of the document.

Note: Organizations that are on-going participants in DEQ's Volunteer Monitoring Program can continue to use data reporting procedures established for that program. Data submitted under that program do not need to be resubmitted under this Call for Data.

Data Quality Requirements

Organizations submitting data to DEQ must sign a verification form confirming that the following requirements have been met:

- **Must have a Project Plan** - A document that includes a purpose statement, the number of samples collected, and quality assurance and quality control protocols for collecting and analyzing samples. Organizations must submit a project plan along with the data.
- **Use widely Approved Methods** - Sampling and laboratory analysis must follow widely accepted scientific methods and protocols. These may include ODEQ-MOMs, USEPA, USGS and Standard Methods for the Examination of Water and Wastewater. All acceptable methods include applicable precision and accuracy checks and are listed in the respective data submission templates.

Data Submission Requirements

In order for submitted data to be considered for the Integrated Report, data must meet all of the following requirements:

- **Oregon Waters** - Data and information submitted to DEQ must be collected from waters within Oregon's borders.
- **Collected within the Data Window** - DEQ has not completed a comprehensive statewide call for water quality data from outside sources since 2009. For this reason, DEQ is requesting data from the past ten years (**1/1/2008 to 12/31/2017**) to fill this time gap for the 2018 IR. This requirement means that a sample date and/or analysis date is required for each result. DEQ will be implementing new fixed reporting units (segments) for the 2018 IR and will need to reconcile past 303(d) listings to the new framework. For this reason, for the 2018 IR, DEQ will accept data outside of this data window related to existing 303(d) listings that submitters would like to be reviewed with new methodologies. Future data calls will include a more limited range of data.
- **Related to a Specific Location** - Assessing water quality is highly dependent on the accuracy of the sample location. All data submitted to DEQ for assessment purposes must include the location of each monitoring station in latitude and longitude, ideally with the associated reference datum (example - NAD83), and a description of the monitoring location that includes the waterbody name.

Priority Data



State of Oregon
Department of
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Quality

Laboratory and
Environmental
Assessment
Program

7202 NE Evergreen
Parkway,
Suite 150
Hillsboro, OR 97124
Phone: 503-693-5700
800-452-4011
Fax: 503-693-4999
Contact: Lesley
Merrick

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DEQ will review all data submitted. However, some types of data are more readily usable for the assessment process. Please consider the following when considering submitting data to DEQ:

- Representative of the Waterbody** – The water quality assessment process is intended to characterize a water body and determine if the designated beneficial uses are being supported. Prior to submitting data, please consider if the data represents ambient conditions in the waterbody. Examples of non-ambient samples include: data collected in mixing zones, storm event sampling, samples collected in stagnant side-channels or isolated pools, spills or toxic releases, and other sampling outside of normal conditions.
- Parameters with an Assessment Methodology** – The assessment methodology provides the framework for interpreting numeric and narrative criteria and making an assessment conclusion (impaired vs. non-impaired) for a water body. In order to have a transparent process, DEQ will prioritize data with established methodologies. The table below provides a quick reference to parameters for which DEQ currently has methodologies in place to interpret numeric and narrative criteria.

Parameters with Assessment Methodologies	
<i>Parameter</i>	<i>Water Type</i>
Alkalinity (Table 30)	Freshwater
Ammonia (Table 30)	Freshwater; Estuarine; Saltwater
Aquatic Weeds	Freshwater; Estuarine; Saltwater
Biocriteria - Macroinvertebrates	Freshwater
Chlorophyll-a	Freshwater; Estuarine; Saltwater
Dissolved Oxygen	Freshwater; Estuarine; Saltwater
E. coli	Freshwater; Estuaries (Non-Shellfish Growing)
Enterococci	Estuarine; Saltwater
Fecal Coliform	Estuaries (Shellfish Growing); Saltwater
Nuisance Algae – (Harmful Algal Blooms)	Freshwater; Estuarine; Saltwater
Nitrates (Table 40)	Freshwater; Estuarine; Saltwater
pH	Freshwater; Estuarine; Saltwater
Phosphorus Elemental	Estuaries; Saltwater
Temperature	Freshwater; Estuarine; Saltwater
Total Dissolved Gas	Freshwater
Total Dissolved Solids	Rivers; Lakes
Toxic Substances – TABLE 30: Aquatic Life Water Quality Criteria for Toxic Pollutants	Freshwater; Estuarine; Saltwater
Toxic Substances – TABLE 40: Human Health Water Quality Criteria for Toxic Pollutants	Freshwater; Estuarine; Saltwater
Turbidity measured in NTU	Freshwater; Estuarine; Saltwater

How to submit data to DEQ

Data submission procedures vary depending on whether data are numeric or non-numeric. Numeric data must be submitted in electronic format using the templates provided on the [2018 IR website](#). There are three types of data submission templates; Grab, Continuous and Biological. The templates include associated meta-data, detection limits and information confirming that the samples were collected and analyzed according to established quality assurance procedures. All column headers in green are required. If any of the required columns are empty, the data may not be used. If entering data qualifier codes, a definition must be provided for each code. DEQ may



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request additional documentation, such as project plans, instrument calibration records, and lab reports. If you need assistance with these templates email IR.DataHelp@deq.state.or.us

Examples of non-numeric data include journal articles, state and federal reports and findings and observations. To be used for assessment purposes, non-numeric data that cannot be tabulated in a spreadsheet must meet the following requirements:

- **Related to a Specific Location** – DEQ cannot base water quality decisions on regional conclusions. Latitude and longitude where the data were collected are required.
- **Reference the Beneficial Use Impairment** – This will help DEQ understand the context of the submission.

Data Validation

Data submitted through the call for data will be screened for completeness, data quality, and reasonable range of results. A reasonable range of results is determined by comparing the data to existing data from the region (sub-basin or basin scale). If data meet this first screen, DEQ will include it in its 2018 assessment. If the data are incomplete or outside the reasonable range, DEQ will analyze quality control data and/or follow up with the submitter for supporting documentation. The intent of the validation is not to eliminate data that may be showing a shift outside of a reasonable range, but rather to ensure that there is not an error in transcription or reporting units.

Quick Checklist

- I have not submitted this data as part of the volunteer monitoring program.
- I have prepared and followed a project plan, Quality Assurance Project Plan, Sampling and Analysis Plan or other similar document, to ensure that data collection, analysis methods and quality control steps are built into the project from the beginning.
- All sample collection and analysis follows widely approved methods. These may include ODEQ-MOMs, USEPA, USGS and Standard Methods for the Examination of Water and Wastewater. Methods used must be specified in the data submission template.
- I am willing to sign a verification form declaring that all methods and quality control protocols were followed.
- My data were collected in Oregon.
- My data were collected between 1/1/2008 and 12/31/2017 or I am submitting data outside of this window that is related to an existing 303(d) listing so that it can be reviewed against new methodologies.
- My data characterize a specific location and I can provide the following information about the location.
 - Location of each monitoring station in latitude and longitude and the reference datum (example – NAD83).
 - Waterbody name and description of the monitoring location.
 - Date the sample was taken.
 - Parameter(s) measured.
 - Measured result for each parameter.
 - Unit of measurement.
 - Method used for measurement, including method detection limits (MDL) or reporting limits (RL) where applicable.



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- Name and contact information of the entity submitting the data.
- Name of all analytical laboratories used.
- Definition of any qualifier used.

If you have checked all of these boxes you are ready to submit! Please email IR.DataHelp@deq.state.or.us if you need assistance submitting data or have additional questions. If you are not able to confirm any of the above statements, DEQ will likely not be able to use the data to make conclusions on water quality in Oregon. If you are interested in learning about preparing monitoring project plans and data quality visit [DEQ's Volunteer Monitoring Resources](#) website.

Document Accessibility

Documents can be provided upon request in an alternate format for individuals with disabilities or in a language other than English for people with limited English skills. To request a document in another format or language, call DEQ in Portland at 503-229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696; or email deqinfo@deq.state.or.us.



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