

## 2022 Integrated Water Quality Monitoring and Assessment Report Call for Level 3 Credible Data

Ohio EPA is asking for biological, chemical and/or fish tissue data you may wish to submit for consideration as the Agency prepares its 2022 Integrated Report. Both the state and federal governments have an interest in utilizing all available data to make informed decisions about managing Ohio's aquatic resources. Ohio EPA is soliciting data primarily from NPDES major permit holders, level 3 qualified data collectors and others that may be in possession of level 3 credible data. The data can be of various types (bacteria, biological, and chemical water quality data) and must have been collected during the following time frames:

- Bacteria = 2020 – 2021 (recreation season)
- Biological, chemical and fish tissue = 2019 – 2020

**Bacteria data must be received by September 15, 2021, all other data must be received by April 30, 2021.**

### What types of data is Ohio EPA requesting?

#### Microbiological Data

Ohio EPA measures recreation use attainment by comparing the level of indicator bacteria present in ambient water samples against the bacteria criteria contained in [rule 3745-1-37 of Ohio's water quality standards](#). These indicator bacteria serve as predictors for the possible presence of enteric pathogens in the water that can cause a variety of illnesses. The type of indicator bacteria that Ohio EPA is utilizing in the 2022 Integrated Report is *E. coli*.

Data collected by NPDES discharge permit holders at ambient stream sites upstream and downstream of discharge locations and reported in discharge monitoring reports will be extracted from the SWIMS database. **It is unnecessary to resubmit data already submitted into SWIMS.** However, if bacteria data were collected at additional ambient stations and not reported through SWIMS, permit holders may voluntarily submit this data to the Agency. Data must have been collected between May 1, 2020, and September 15, 2021, and must meet the basic terms of acceptability found in the requirements listed below.

#### Biological Data

Ohio EPA measures aquatic life use attainment in Ohio streams and rivers by comparing indices generated from fish and aquatic macroinvertebrate data against the biological criteria contained in Ohio's water quality standards, [OAC 3745-1-07, Table 7-1](#). Field collection and data analysis methodologies for fish and macroinvertebrate community assessments are strictly adhered to and must follow procedures as outlined in documents available from Ohio EPA's biological criteria website: [epa.ohio.gov/dsw/bioassess/BioCriteriaProtAqLife.aspx](http://epa.ohio.gov/dsw/bioassess/BioCriteriaProtAqLife.aspx).

Physical habitat data should be in the form of the Qualitative Habitat Evaluation Index (QHEI) and must be included if fish community data are being submitted. QHEI procedure manuals and forms can also be found at the above website location.

Chemical water quality data collected in conjunction with biological data is of interest to Ohio EPA. Data should follow the parameters discussed below.

## Chemical Water Quality Data

Ohio EPA primarily uses sampling methods described in the "[Surface Water Field Sampling Manual](#)." Sample collection and analysis method references are listed in [OAC 3745-4-06](#). Ohio EPA is interested in other chemical water quality data collected and analyzed by these methods or others of similar quality control/quality assurance rigor.

## Fish Tissue Data

Ohio EPA primarily uses sampling methods described in the "[State of Ohio Cooperative Fish Tissue Monitoring Program Fish Collection Guidance Manual](#)" and analysis methods from U.S. EPA's "[Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1, Fish Sampling and Analysis. Third edition](#)." Sample collection and analysis method references are listed in [OAC 3745-4-06](#). Ohio EPA is interested in other fish tissue data collected and analyzed by these methods or others of similar quality control/quality assurance rigor.

### **Do I have Level 3 data?**

Credible Data rules ([OAC 3745-4-01 to 06](#)), developed in accordance with the 2003 credible data law ([ORC 6111.50 to 6111.56](#)), established a water quality monitoring program for the purpose of collecting credible data under the act and required qualified data collectors to follow plans pertaining to data collection. The law further required that collectors submit a certification that the data were collected in accordance with such a plan.

Additionally, the law established that external data found to be compliant with the specifications for "level 3 credible data," which generally means data from a level 3 qualified data collector, can be used for certain regulatory and reporting purposes, such as the Section 303(d) list of Ohio's impaired waters.

If you have collected data following these procedures, then you may have level 3 credible data eligible for inclusion in the Integrated Report.

### **Have I already given Ohio EPA my data?**

External data Ohio EPA has received (or plans to receive) and may use for 305(b)/303(d) reporting:

Entity	Dates data were collected	Data description	Basis of qualification <sup>1</sup>
NPDES permittees	2017 – 2021 (May – Oct only)	Bacteria	Data credible – submittal pursuant to permit
Ohio Department of Health (ODH)	2017 – 2021 (May – Oct only)	Bacteria	State agency
Cuyahoga County Health Department	2017 – 2021 (May – Oct only)	Bacteria	Level 3 qualified data collector (under ODH's study plan)

<sup>1</sup> Level 3 qualified data collector requirements are described in OAC Rule 3745-4-03(A)(4). Included above are qualified data collectors Ohio EPA has approved for stream habitat assessment, fish community biology, benthic macroinvertebrate biology and/or chemical water quality assessment.

Entity	Dates data were collected	Data description	Basis of qualification <sup>1</sup>
Northeast Ohio Regional Sewer District	2017 – 2021 (May – Oct only)	Bacteria	Level 3 qualified data collector
	Jul 2006 – Oct 2016	Physical habitat	
	Jun 2006 – Oct 2016	Biology	
	Apr 2006 – Oct 2016	Chemistry	
	2008	Fish tissue	
Ohio Department of Natural Resources	Apr 2006 – Nov 2016	Fish tissue	State agency/Level 3 qualified data collector
	Sep 2006 – Oct 2016 Jun – Oct 2016	Biology (fish only)	
		Physical habitat	
Public Water System compliance database (permittees)	Jan 2016 – Dec 2020	Chemistry	Data credible – submittal pursuant to permit
Syngenta Corp Protection, Inc.	Jan 2015 – Jan 2020	Chemistry	See footnote <sup>2</sup>
The Ohio State University	May – Oct 2006	Biology (macroinvertebrates only)	Level 3 qualified data collector
Midwest Biodiversity Institute	Jul 2010 – Oct 2016	Biology	Level 3 qualified data collector
		Physical habitat	
		Chemistry	
Enviroscience, Inc.	Sep – Nov 2011	Biology	Level 3 qualified data collector
		Physical habitat	
Ohio Department of Transportation	Jun 2007 – Oct 2010	Biology (fish only)	State agency/Level 3 qualified data collector

<sup>2</sup> These data were collected as part of an intensive monitoring program at community water systems required by the Jan 2003 Atrazine Interim Reregistration Eligibility Decision and subsequent Memorandum of Agreement between U.S. EPA and the atrazine registrants (including Syngenta Crop Protection, Inc.). Syngenta suspended Atrazine Monitoring Program and Atrazine Safe Drinking Water activities effective 1/17/2020 in response to Environmental Protection Agency's Proposed Interim Registration Review Decision for atrazine (Docket Number EPA-HQ-OPP-2013-0266).

Entity	Dates data were collected	Data description	Basis of qualification <sup>1</sup>
		Physical habitat	
Heidelberg College	Jun 2012 – Oct 2012	Biology (macroinvertebrates only)	Level 3 qualified data collector
EA Science and Technology, Inc.	Jul 2014 – Oct 2014	Biology	Level 3 qualified data collector
Cleveland Metroparks	Jun 2012 – Sep 2014	Biology (fish only)	Level 3 qualified data collector
Clermont County Office of Environmental Quality	May 2009 – Sep 2016	Chemistry (drinking water)	Level 3 qualified data collector
MAD Scientist, Inc.	Jun 2016 – Sep 2016	Biology (fish only)	Level 3 qualified data collector
Ohio University – Voinovich School	Jun 2016 – Sep 2017	Biology (fish only)	Level 3 qualified data collector
		Physical habitat	
		Chemistry	

**What will be needed in addition to data?**

Specific guidelines for submission of data are listed below. While these guidelines correspond to the regulations regarding credible data, they are not verbatim. To see the regulations, please go to [OAC 3745-4-06](#).

Microbiological Data Requirements

An individual or organization that submits bacteria data to Ohio EPA for consideration in the 2022 Integrated Report shall attest to the validity of the data and adhere to the data quality specification listed here. The submission of data must cover the following:

- Sampling and test methods, QA/QC specifications: Sampling must be conducted in a manner consistent with procedures contained in *Standard Methods for the Examination of Water and Wastewater* or the most relevant version of the “[Surface Water Field Sampling Manual](#).”

Analytical testing must be conducted in accordance with U.S. EPA approved methods under [40 CFR 136.3](#). Acceptable references for methods for qualified data collectors are given in [OAC 3745-4-06](#) and include Ohio EPA references, U.S. EPA references and Standard Methods. Data submissions must include a description of the Quality Assurance/Quality Control (QA/QC) plans under which the bacteria sample analysis occurred. This should address topics such as sample handling and preservation, sample holding time, chain of custody, precision, accuracy, etc.

- Description of Sampling Program: A brief description of the purpose of data collection and the sampling design considerations should be provided. Were specific sources of potential contamination under investigation? Were samples collected at fixed station locations? How often and under what kinds of

environmental conditions were samples collected? Have the results been published in a report or the scientific literature?

- Minimum Data Submission: Ohio EPA is requesting only bacteria data (*E. coli*) collected during the recreation season (May 1<sup>st</sup> to October 31<sup>st</sup>) for 2020 and (May 1<sup>st</sup> to September 15<sup>th</sup>) for 2021. The following information must be included in the data submission in an electronic spreadsheet or database format:
  - Sample collection date
  - Sample collection method (with reference)
  - Sample site location including waterbody name, county, river mile (if known), latitude/longitude (decimal degrees or degrees, minutes, and seconds)
  - *E. coli* count
  - Identification of units associated with bacteria counts
  - Any applicable data qualifiers (as received from the lab, if applicable)
  - Contact name, address, telephone number and e-mail address of the person submitting the data set
  - Identification of the laboratory performing the sample analysis

**Bacteria** data must have been collected on or after May 1, 2020, and must meet the basic acceptability specifications listed above. Data must be provided in an electronic format such as Excel or Access.

#### Biological, Chemical, and Fish Tissue Data Requirements

An individual or organization that submits biological, chemical, and/or fish tissue data to Ohio EPA for consideration in the 2022 Integrated Report shall attest to the validity of the data and adhere to the data quality specifications listed here. The submission of data must cover the following:

- Analytical and sampling procedures (examples):
  - [Surface Water Field Sampling Manual](#)
  - [Habitat and biology sampling manuals](#)
  - Only data that are consistent with these guidelines can be considered Level 3 data.
- Description of Sampling Program: A brief description of the purpose of data collection and the sampling design considerations should be provided. Were specific sources of potential contamination under investigation? Were samples collected at fixed station locations? How often and under what kinds of environmental conditions were samples collected? Have the results been published in a report or the scientific literature?

If the data have been or will be submitted as part of the Credible Data Program and there is an approved project study plan, this requirement is potentially waived, pending a successful data review that confirms study plan was adhered to as written.

- Minimum Data Submission: Ohio EPA is requesting biological, chemical, and fish tissue data collected from 2019 – 2020. The following information must be included in the data submission in an electronic spreadsheet or database format:
  - Sample collection date
  - Sample collection method (with reference)

- Sample site location including waterbody name, county, river mile (if known), latitude/longitude (decimal degrees or degrees, minutes and seconds)
- Type of data collected (fish, macroinvertebrate, chemical and physical parameters)
- Analytical and collection methodologies used (include references)
- Any applicable data qualifiers (as received from the lab, if applicable)
- Contact name, address, telephone number and e-mail address of the person submitting the data set
- Identification of the laboratory performing the sample analysis (if applicable)
- Weather conditions, flow and precipitation (all optional)

**Biological, chemical, or fish tissue** data must have been collected on or after January 1, 2019, and must meet the basic acceptability specifications listed above. Data must be provided in an electronic format such as Excel or Access.

#### **How do I send the data?**

Ohio EPA already has data from some credible data collectors, as listed in the table above. Additional data may be available and Ohio EPA is soliciting these data.

The Agency's capacity to accept and utilize the data in preparation of the Integrated Report is dependent upon a variety of factors and the use of all data brought to our attention may not be possible. Data must be provided in electronic format such as Excel or Access.

If you would like to discuss the possible use of data in the 2022 Integrate Report, please contact Jared Burson at [jared.burson@epa.ohio.gov](mailto:jared.burson@epa.ohio.gov) before preparing and submitting any information.

#### **To whom do I send the data?**

Submit all data and supporting information listed above to Jared Burson at [jared.burson@epa.ohio.gov](mailto:jared.burson@epa.ohio.gov).

**Bacteria data must be received by September 15, 2021, all other data must be received by April 30, 2021.**