
M1. Legend and Explanatory Notes

HUC11: The U.S. Geological Survey designated 11-digit Hydrologic Unit Code for Ohio's 331 Watershed Assessment Units (WAUs).

WAU/LRAU/Lake Erie AU Description: A geographic description of the Watershed, Large River, or Lake Erie Assessment Units.

WAU/LRAU Size (mi²): The watershed drainage area of the Assessment Unit in square miles.

Integrated Report Assessment Category: U.S. EPA guidance requires each Assessment Unit to be assigned to one of five categories which reflects status of designated uses. The five categories and their definitions are as follows.

- Category 1 All designated uses are met.
- Category 2 Some of the designated uses are met but there is insufficient data to determine if remaining designated uses are met.
- Category 3 Insufficient data to determine whether any designated uses are met.
- Category 4 Water is impaired or threatened but a TMDL is not needed.
 - 4A There are U.S. EPA approved TMDLs for all pollutants impairing designated uses.
 - 4B Other pollution control practices required by local, State, or Federal authority are expected to address all water-pollutant combinations and attain all Water Quality Standards protecting designated uses in a reasonable period of time.
 - 4C The impairment of designated use(s) is not caused by a pollutant.
- Category 5 Water is impaired or threatened and a TMDL is needed.

Priority Points: A number between 1 and 20 if the Integrated Report Assessment Category is 5. Otherwise, blank. See Section J2 for an explanation of how the points are determined.

Next Scheduled Monitoring: The planned monitoring year when Ohio EPA expects to revisit the Assessment Unit for comprehensive monitoring.

Aquatic Life Use Assessment (ALU)

(See Section G for a detailed explanation of the assessment process)

Subcategories of ALU: The designated aquatic life uses as codified in the Ohio Water Quality Standards - EWH (Exceptional Warmwater Habitat), WWH (Warmwater Habitat), CWH (Coldwater Habitat), MWH-C (Modified Warmwater Habitat-Channelized), MWH-MD (Modified Warmwater Habitat-Mine Drainage), MWH-I (Modified Warmwater Habitat-Impounded), LRW/LRW-S (Limited Resource Water), LWH/WWH-L (Limited Warmwater Habitat), SSH (Seasonal Salmonid Habitat).

Sampling Years: Years with data available for specific streams and rivers within the Assessment Unit that were used to assess status of the designated aquatic life use(s).

Impairment: Yes, No, or Unknown depending on the assessment of the available sampling locations and their designated aquatic life use.

Data Assessment Summary (WAUs): Available site data from the Assessment Unit are grouped according to 4 stream size categories. Spatial category **Attainment** statistics are generated based on the proportion of sampling locations which are in full, partial, or non attainment. A weighting method is used to impart more significance to sites in larger drainage classes. Linear category **Attainment** statistics are generated based on extrapolation of full, partial, or non attaining miles to the total number of monitored stream miles. The **WAU Score** statistics are generated by averaging the spatial and linear **Attainment** statistics; these scores, weighted by stream size, reflect the relative proportion on a 0 to 100 scale of full, partial, and non attainment in the Assessment Unit.

Data Assessment Summary (LRAUs and Lake Erie AUs): **Attainment** statistics were generated based on extrapolation of full, partial, or non attaining miles to the total number of monitored river miles (LRAUs) or the proportion of shoreline sampling sites in full, partial, or non attainment for the Lake Erie AUs.

High Magnitude Causes: The listing of the most prominent “agents” deemed responsible for the observed aquatic life use impairment in the Assessment Unit and which will be the initial focus of restoration activities or TMDL development within the watershed. Blank if the Assessment Unit is unassessed (**Impairment: Unknown**), unless the AU was listed as impaired (**Integrated Report Assessment Category: 4 or 5**) in a previous Integrated Report and data are now considered historical, or the aquatic life uses are unimpaired (**Impairment: No**).

High Magnitude Sources: The listing of the most prominent origins of the “agents” (high magnitude causes) deemed responsible for the observed aquatic life use impairment.

Recreation Use Assessment (WAUs and LRAUs)¹

(See Section F for a detailed explanation of the assessment process)

Subcategory of Use: “Primary Contact” refers to waters that are suitable for full-body contact recreation, such as swimming, canoeing and diving during the recreation season.

Impairment: Yes, No, or Unknown depending on the assessment of the available data from sampling locations within the Assessment Unit (AU).

No. of Ambient Sites: The number of specific stream and river locations sampled by the Ohio EPA within the Assessment Unit where fecal coliform bacteria data were available for the period of record.

No. of NPDES MOR Sites: The number of permit holders within the Assessment Unit that collected fecal coliform bacteria data at one or more stream, river or lake locations and reported it to Ohio EPA via the Surface Water Information Management System (SWIMS) database during the period of record. Sites were generally a paired set of upstream and downstream locations far field from the point of discharge.

No. of Ambient Sampling Records: The number of fecal coliform bacteria values available from ambient sites within the Assessment Unit for the period of record.

No. of NPDES MOR Records: The number of fecal coliform bacteria values available from NPDES MOR sites within the AU for the period of record.

Geometric Mean: The geometric mean of all available fecal coliform bacteria data collected within the Assessment Unit for the period of record computed as the arithmetic mean of the log-transformed data.

75th %ile: A fecal coliform bacteria level at which 75% of all the results collected within the Assessment Unit were below that value and 25% were above.

90th %ile: A fecal coliform bacteria level at which 90% of all the results collected within the Assessment Unit were below that value, and 10% were above.

Other: Descriptive information about related issues such as the presence and location of dermal contact advisories for water bodies located within the Assessment Unit, if any exist.

¹ The Bathing Water recreation use was evaluated for the three Lake Erie Assessment Units using *E. coli* bacteria sample results (Section M4) . See Section F for specific method details.

Public Drinking Water Supply (PDWS) Use Assessment

(See Section H for a more detailed explanation of the assessment process)

PDWS Use Designations and PWS: The Public Drinking Water Supply (PDWS) beneficial use only applies within 500 yards of active drinking water intakes, all publicly owned lakes, all privately owned lakes and reservoirs used as a source of public drinking water, and all surface waters used as emergency water supplied. All current PDWS use zones were described and the associated public water systems identified as [PWS Name]. Only waters with active PWS intakes were assessed at this time.

Overall PDWS Use Support: This determination (Yes/No/Unknown) was based on all assessment results from all PDWS zones in the AU. In order to be considered in overall Full Support (Yes), sufficient data was required for assessment of at least the nitrate indicator at all PDWS zones in the AU. In order for each indicator status to be considered "Full Support," sufficient data was required for all PDWS zones within the AU. Pesticide information was included when sufficient data was available. If any zones were identified as "Impaired" for any indicator this would trigger an overall status of "Not Support."

Watch list: In addition to assessment of impairment status, water quality data was evaluated at each zone to identify waters in need of additional monitoring. These trigger points are more conservative than the water quality criteria used for the impairment determinations. Waters with at least one nitrate detection ≥ 8 mg/L or pesticide levels $\geq 3X$ the WQC (instantaneous) or quarterly pesticide average \geq annual average criteria were identified on the watch list.

Fish Consumption Advisory (FCA) Assessment

(See Section E for a more detailed explanation of the assessment process)

Results of comparing FCA information to the single route exposure human health water quality criteria in Ohio's Water Quality Standards.

Waters Within the WAU/LRAU/Lake Erie AU Sampled and Assessed: Yes indicates data were available to assess; blank when no data exists or unknown.

FCA Issued: Yes indicates that a water body specific advisory regarding the human consumption of sport fish has been issued by the Ohio Department of Health for at least one water body within the Assessment Unit. Left blank when no advisory issued for waters within the Assessment Unit.

Impairment Due to FCA: Yes indicates that the level of chemical contamination associated with the issuance of the FCA was sufficiently high enough that exceedence of the single route human health water quality criterion is indicated.

Pollutant(s) (Waterbody): The specific chemical pollutant or pollutants responsible for the FCA are identified along with the specific waters within the Assessment Unit for which the advisory was issued.