

APPENDIX A

OHIO ADMINISTRATIVE CODE 3745-1-26 Cuyahoga River drainage basin.

(A) The water bodies listed in table 26-2 of this rule are ordered from downstream to upstream. Tributaries of a water body are indented. The aquatic life habitat, water supply and recreation use designations are defined in rule 3745-1-07 of the Administrative Code. The state resource water use designation is defined in rule 3745-1-05 of the Administrative Code. The most stringent criteria associated with any one of the use designations assigned to a water body will apply to that water body.

(B) Figure 1 of the appendix to this rule is a generalized map of the Cuyahoga river drainage basin.

(C) RM, as used in this rule, stands for river mile and refers to the method used by the Ohio environmental protection agency to identify locations along a water body. Mileage is defined as the lineal distance from the downstream terminus (i.e., mouth) and moving in an upstream direction.

(D) The following symbols are used throughout table 26-2 of this rule:

* Designated use based on the 1978 water quality standards;

+ Designated use based on the results of a biological field assessment performed by the Ohio environmental protection agency;

o Designated use based on justification other than the results of a biological field assessment performed by the Ohio environmental protection agency; and

L An L in the warmwater habitat column signifies that the stream segment is designated limited warmwater habitat.

(E) The following uses, criteria and conditions shall apply to the Cuyahoga river ship channel.

(1) The Cuyahoga river ship channel is a unique segment of the Cuyahoga river. It is a federally maintained navigation channel which originates at the Newburgh and South Shore railroad bridge (river mile 5.6) and empties into the Cleveland harbor portion of Lake Erie. The maintenance of the channel is important to commerce and the economic well being of the Cleveland area. The channel averages two hundred seventy feet in width, is maintained at a uniform depth of twenty-three feet and is vertically sheet piled along the vast majority of its length. The physical configuration of the channel results in a ten-day time of travel for a mass of water entering the ship channel at critical low flow conditions.

Modeling projections of water quality in the channel have shown that levels of oxygen demanding materials found in natural waters are sufficient to depress dissolved oxygen below the warmwater habitat criteria. The modeling simulations also indicate that the existing loads of oxygen demanding materials could maintain the warmwater habitat dissolved oxygen criteria if the river depth was

decreased to twelve feet. However, this would preclude the use of the channel for commercial navigation.

The physical habitat of the channel and the prevailing background dissolved oxygen regime are insufficient to support any resemblance of the warmwater habitat aquatic life use designation. A use attainability analysis has been conducted and indicates the extant fauna is substantially degraded and the potential for recovery of the fauna to the level characteristic of other Lake Erie river mouths is precluded by irretrievable human induced conditions. However, the ship channel is used by fish as a migratory route in the spring months. This seasonal and stream flow related use shall be recognized and protected through this rule.

Full body contact recreational uses such as rowing, sculling and jet skiing do occur in the ship channel. The ship channel is also used as an industrial water supply but has no potential to support agricultural or public water supply uses.

(2) Use designations for the Cuyahoga river ship channel are as follows:

(a) Aquatic life;

(i) During the months of June through January, and during the remaining months of the year whenever the river flow is less than seven hundred and three cubic feet per second at the United States geological survey gage at Independence (#04208000), the aquatic life use shall be limited resource water - navigation maintenance as defined in rule 3745-1-07 of the Administrative Code.

(ii) During the months of February through May whenever the river flow equals or exceeds seven hundred and three cubic feet per second at the United States geological survey gage at Independence (#04208000), the aquatic life use shall be fish passage. The fish passage use is defined as those rivers or other water bodies that have been the subject of a use attainability analysis and have been found to be incapable of supporting and maintaining a balanced, integrated, adaptive community of warmwater organisms but are capable of supporting the passage of warmwater fish during migratory periods.

(b) Industrial water supply as defined in rule 3745-1-07 of the Administrative Code; and

(c) Primary contact recreation as defined in rule 3745-1-07 of the Administrative Code.

(3) The criteria and other provisions to protect the designated uses of the ship channel shall be those set forth in rules 3745-1-01 to 3745-1-07 of the Administrative Code with the following exceptions:

(a) The limited resource water dissolved oxygen criterion shall be 1.5 mg/l minimum. No dissolved oxygen average criteria apply.

(b) The fish passage criteria shall be the same as the warmwater habitat criteria in rule 3745-1-07 of the Administrative Code, with the exception that the biological criteria do not apply.

(4) Pursuant to United States environmental protection agency regulations (" 40 CFR Part 130.7 "), the director shall utilize the phased total maximum daily load approach as a means of progressing toward attainment of the dissolved oxygen criteria established in paragraph (E)(3) of this rule. The phased total

maximum daily load approach is generally recognized by the United States environmental protection agency as an appropriate methodology for achieving a total load reduction compatible with achieving water quality criteria ("Guidance for Water Quality-based Decisions and the TMDL Process, EPA 440/4-91-001"). In this instance the concept must consider the expectation of dissolved oxygen enhancement through means other than additional point and nonpoint source load reductions. Based on the background presented in paragraph (E)(1) of this rule and extensive data collection and analysis, the following total maximum daily load components shall be established for oxygen demanding substances.

(a) The wasteloads for point sources shall be those presented in table 26-1 of this rule. Loads for permit 3PA00002 may be established after the steps in paragraphs (E)(4)(b), (E)(4)(c) and (E)(4)(d) of this rule are completed.

(b) The total maximum daily load shall include a component for expected dissolved oxygen enhancement through such means as, but not limited to, off channel re-aeration, sediment remediation and flow augmentation.

(c) An evaluation of the site-specific technical and cost feasibility aspects of implementing off channel re-aeration shall be the first scheduled phase of the Cuyahoga river ship channel total maximum daily load. This evaluation shall be completed no later than two years after the adoption of this rule.

(d) Implementation of off channel re-aeration or other dissolved oxygen enhancement measures, and any wasteload allocation for permit 3PA00002 for oxygen demanding substances, shall occur only after these components of the total maximum daily load are incorporated into this rule.

(5) These standards reflect the desire for restoring and maintaining multiple uses of the ship channel expressed by the Cuyahoga river remedial action plan coordinating committee. All parties, private and public, who contribute to the dissolved oxygen problem may share a responsibility in the study and attainment of these standards. The dissolved oxygen criteria established in paragraph (E)(3) of this rule are intended to be the minimum planning targets for the remedial action planning process to use in evaluating beneficial use restoration. The remedial action planning process should consider innovative means of achieving this target such as off channel re-aeration, sediment remediation and flow augmentation, either alone or in combination with additional point and nonpoint source controls. As with all standards, it will be appropriate to periodically re-assess the dissolved oxygen criteria based upon information collected as part of the feasibility study conducted pursuant to paragraph (E)(4)(c) of this rule or any other studies.

(6) These standards shall be reviewed, and revised if appropriate, every three years. Pursuant to Section 118 of the act (the "Great Lakes Critical Programs Act of 1990") the director shall continue to develop the Cuyahoga river remedial action plan - stage two report in conjunction with the Cuyahoga river remedial action plan coordinating committee. Studies undertaken as part of the remedial action plan and the feasibility study conducted pursuant to paragraph (E)(4)(c) of this rule shall be important components of the standards review process.

Table 26-1. Cuyahoga river ship channel point source loads of oxygen demanding substances.

Table 26-2. Use designations for water bodies in the Cuyahoga river drainage basin.

See Tables at

http://www.registerofohio.state.oh.us/pdfs/3745/0/1/3745-1-26_PH_FF_A_RU_20061220_0834.pdf

Figure 1. Cuyahoga river drainage basin.

See Figure at

http://www.registerofohio.state.oh.us/pdfs/3745/0/1/3745-1-26_PH_FF_A_APP1_20061220_0834.pdf

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APPENDIX B

Sampling Calculation Methods

BUI 3a: Degradation of Fish Populations

IBI (Index for Biological Integrity) and MIwb (Modified Index of Well Being) are used to determine the BUI 3a attainment status.

IBI

The IBI is a single score patterned after the multi-metric index described by Karr (1981). It was designed to evaluate small Midwestern warm water streams but has been modified for uses in many regions and ecosystem types. The metrics attempt to quantify a biologist's best professional judgment (BPJ) of the quality of the fish assemblage.

To accomplish a repeatable standard score, this score is based on the following 12 technical metrics set out by the USEPA:

1. **Total Number Species** - direct community diversity measure and general indicator of environmental quality
2. **Number of Darter Species/ Percent Round-Bodied Suckers** - site specific species requiring clean water. Darters are found in headwater or wading stream and represented by round-bodied suckers in boating sites
3. **Number of Sunfish Species/ Number of Headwater Species** - favor quiet pools and in-stream cover; indicate degree of preservation of original pools and riffles and channel components of the stream reach
4. **Number of Sucker Species/ Number of Minnow Species** - relatively long-lived and favor high environmental quality; serve as long-term indicators of surrounding conditions
5. **Number of Intolerant Species/ Number of Sensitive Species** - serve as indicators of degradation; greater proportion of intolerant species indicates less degradation
6. **Percent Tolerant Species** - serves as indicator of degradation; greater proportion of tolerant species signifies a greater degree of degradation
7. **Percent Omnivores** - represents degree of disruption to the food base; greater proportion of omnivores indicates greater environmental degradation
8. **Percent Insectivores** - measures community integrity in the middle of the food chain; fewer insectivores suggest depletion of insect food base and therefore a greater degree of environmental degradation
9. **Percent Top Carnivores/ Percent Pioneering Species** - measures fish species at the top of the food chain; more carnivores suggest a greater food base and therefore a relatively good community structure
10. **Number of Individuals** - excluding tolerant species, serves as a measure of toxic sensitivity and total degradation
11. **Percent Hybrids/ Number of Simple Lithophilic Species** - indicate levels of stress and disturbance in stream reach; lithophilic spawners require clean gravel or cobble and are a good indicator in non-headwater streams
12. **Percent DELT Abnormalities** - measures Deformities, Eroded fins, Lesions or Tumors and usually indicate overcrowding, disease or high levels of toxicity

The scores of these 12 metrics are added for each station to give an IBI ranging from a maximum of 60 (excellent) to a minimum of 12 (very poor). It uses professional judgment, but in a prescribed manner, and it includes quantitative standards for discriminating the condition of the fish assemblage. This metric gives us an analytical view into the level of degradation of the fish population for a specific sampling site at a specific point in time. IBI scores are taken at every designated sampling site in each subwatershed to give us a full representative sample of the fish population through the specific riverine area of interest.

MIwb

Sampling sites with drainage over 20 square miles use the additional MIwb metric. The MIwb is a modified version of the Index of Well-Being (IWB). It retains the same formula as the IWB, however highly tolerant species, hybrids, and exotic species are eliminated from the abundance (i.e., number and biomass) components of the formula. This modification increases the sensitivity of the index to a wider array of environmental disturbances. This score takes into account the number of individuals caught per unit distance sampled, the biomass of individuals caught per unit distance, and incorporates the *Shannon diversity index formula*.

$$H = -\sum_{j=1}^S p_j \ln p_j$$

The IWB (Gammon 1976, 1980, Hughes and Gammon 1987) integrates two abundance and two diversity measures in an approximately equal fashion, thereby representing fish assemblage quality more realistically than a single diversity or abundance measure.

BUI 6: Degradation of Benthos

ICI (Invertebrate Community Index) is used to determine the BUI 6 attainment status.

The ICI is a summary of 10 metrics representing aquatic macroinvertebrate community integrity. It is evaluated and scored in relation to conditions at specific ecoregion reference sites. The Cuyahoga River belongs to the Erie/Ontario Lake Plain Ecoregion. The 10 Metrics used to calculate this score are:

1. Total Number of Taxa
2. Number of Mayfly Taxa
3. Number of Caddisfly Taxa
4. Number of Dipteran Taxa
5. % Mayfly Composition
6. % Caddisfly Distribution
7. % Tribe Tanytarsini Midge Composition
8. % Other Dipteran and Non-insect Composition
9. % Tolerant Organisms
10. Number of Qualitative EPT Taxa

Each metric has four scoring categories of 6, 4, 2, or 0 points. The maximum total score is 60 and the minimum is 0.

- Note: Six points are scored if a given metric has a value comparable to those of exceptional stream communities and 0 points for metric values strongly deviating from the expected range of good values.

Most metric scores are calibrated to stream drainage area. Once an ICI score is calculated it is compared to the narrative range table for the ecoregion to which it belongs. There are 7 possible narrative ranges to which these scores are referenced. Our narrative ranges in accordance with ICI scores are:

1. 46-60 **Exceptional**
2. 42-44 **Very Good**
3. 34-40 **Good**
4. 30-32 **Marginally Good**
5. 14-28 **Fair**
6. 2-12 **Poor**
7. 0 **Very Poor**

Scores in the range of “Marginally Good” are considered non-significant departures and are our basis for deciding the delisting targets for sample types Lacustrary, Headwaters, Wading, Boat.

BUI 14a Loss of Fish Habitat

The 7 metrics for QHEI include:

1. **Substrate:** This metric includes two components, substrate type and substrate quality.
 2. **Instream Cover:** The first half of instream cover is the *type* that is present. Any cover that is in more than five percent of the sampling area should be noted, but should not be counted if in areas of the stream that are too shallow (usually <20 cm) to make it useful. Instream cover *amount* can be categorized by: extensive, moderate, sparse, or nearly absent. **Extensive** cover is that which is present in greater than 75 percent of the sampling area. **Moderate** is about 25%-75%, **Sparse** is less than 25%, and **Nearly Absent** is when no large patch of any type exists anywhere in the sampling area.
 3. **Channel Morphology:** Relates to quality of the stream with regard to creation and stability of macrohabitat. This includes: channel sinuosity, channel development, channelization, and channel stability.
 4. **Riparian Zone:** This metric measures the quality of the riparian buffer zone of floodplain vegetation, including riparian zone width, floodplain quality, and extent of bank erosion. To score each component, one looks downstream and averages both the left and right banks.
 5. **Pool Quality:** Pool quality consists of three areas: maximum depth of pool or glide, current type, and morphology.
 6. **Riffle Quality:** If no riffles exist, a zero should be recorded. If not, riffle quality consists of three areas; Riffle Depth, Substrate Stability, and Embeddedness.
 7. **Map Gradient:** Calculated from USGS 7.5 minute topographic maps by measuring elevation drop through the sampling area. First, the stream length is measured between the first contour line upstream and the first contour line downstream of sampling site and then dividing the distance by the contouring interval. A minimum distance of one mile should be used if contours are "packed" together.
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The Cuyahoga AOC Geometric Sampling Design

The Cuyahoga River AOC has developed a modified Geometric Sampling Design to determine locations of sampling sites that complete a full representative sample of the watershed. The QHEI, IBI, MIwb, and ICI scores for the respective BUI's need a comprehensive representation to show the complete current status of the Cuyahoga River AOC.

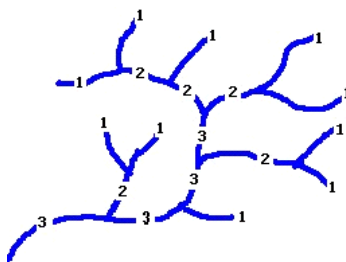
But first, we must look at what a geometric sampling regime is. The current geometric sampling regime employed by the Ohio EPA is in place to assess the water quality of all of the watersheds (identified by HUC12 units) in Ohio. Theoretically, in Ohio's geometric sampling regime the first site is at the mouth of the hydrologic unit, then the number of sampling sites is doubled each time the size of the watershed area is halved. For example, within a 200mi² study area, there will be one sample site with a watershed of 200 mi², two with watersheds of 100 mi², etc.

Although the location of sampling sites in a geometric sampling regime is related to stream order and drainage area, sampling is not limited to wadeable streams. Based on the drainage area at a given sampling site, the site can be placed into one of 5 strata.

| <u>Stream Order Strata</u> | <u>Stream Category</u> | <u>Drainage area (sq.mi.)</u> |
|----------------------------|------------------------|-------------------------------|
| 1 | Primary Headwater | .2-1 |
| 2 | Headwater | 1.1-4.7 |
| 3 | Headwater or Wading | 4.8-23 |
| 4 | Wading or Boat | 24-109 |
| 5 | Boat | 110+ |

Sampling protocol, especially for invertebrates and fish vary for primary headwater, headwater, wading and boat sites (OEPA 1999).

In Ohio there are 25 study areas, each with between 80 and 140 sites; with approximately 5 study areas monitored per year, which is about 1000 sites sampled every 2 years. It is very important for states to determine specific causes of impairment in order to provide plans for watershed management, such as TMDLs.



Stream Order: This classifies streams according to size and position in the watershed. When 2 of the 1st order streams intersect, the downslope stream is assigned an order of 2 and so on.

The Cuyahoga AOC's Modifications and Process of Determining Sampling Locations

Two questions were asked when looking into how to determine the locations and number of sampling sites within each HUC12 subwatershed to show a complete representation of their current status in regards to the QHEI, IBI, MIwb, and ICI scores.

- **How many sites are needed per sample area?**

To tackle this question, we looked at the drainage area of each of the 21 HUC12 subwatersheds in the AOC.

From there, the drainage area was halved until each subwatershed was under 5sq.mi. (The primary headwater classification). When the subwatershed reaches just under the 5 sq. mi classification, it's then clustered with others that met the minimum drainage at that stage. All others continue to be halved until below 5 sq. mi in drainage.

This gave us groupings of HUC12 subwatersheds to assign the total minimum number of sampling sites needed for a complete representative sample. We created ranges for each of the respective groupings that would allow a margin of variation that could address any external factors such as highly urbanized subwatersheds and any unique layouts to be determined on an individual basis.

- **Where should the sampling sites be located?**

For this question, we looked both at drainage area as well as stream order to determine locations of the sampling sites. We placed the first site at the confluence of the subwatershed. The following sites were added in accordance to the table we developed, while being aware of the unique stream order layout of each HUC12 to optimize the representation. The number of sites calculated in the previous step was placed strategically throughout the watershed until the full sample was complete and satisfied the Geometric Sampling Design.

This process allows the Cuyahoga River AOC to employ a tested sampling regime, while keeping in mind the uniqueness of the watershed.

The Cuyahoga river sample site design by HUC12 is on the following page.

Geometric Sampling Design for Cuyahoga River AOC BUI Delisting

| HUC12 Tributaries | Drainage Area (sqm) | 0.5 Drainage | 0.25 Drainage | 0.125 Drainage | 0.0625 Drainage |
|--|---------------------|--------------|---------------|----------------|-----------------|
| Euclid Creek | 41100030503 | 23.31 | 11.655 | 5.8275 | 2.91375 |
| Doan Brook-Frontal Lake Erie | 41100030504 | 45.29 | 22.645 | 11.3225 | 5.66125 |
| Cahoon Creek-Frontal Lake Erie | 41100010204 | 38.43 | 19.215 | 9.6075 | 4.80375 |
| City of Cleveland-Cuyahoga River | 41100020604 | 23.58 | 11.79 | 5.895 | 2.9475 |
| Big Creek | 41100020603 | 37.37 | 18.685 | 9.3425 | 4.67125 |
| Town of Cuyahoga Heights-Cuyahoga River | 41100020605 | 19.08 | 9.54 | 4.77 | |
| Mill Creek | 41100020601 | 19.26 | 9.63 | 4.815 | |
| Village of Independence-Cuyahoga River | 41100020602 | 16.97 | 8.485 | 4.2425 | |
| Town of Twinsburg-Tinkers Creek | 41100020504 | 55.53 | 27.765 | 13.8825 | 6.94125 |
| Headwaters Tinkers Creek | 41100020502 | 25.25 | 12.625 | 6.3125 | 3.15625 |
| Pond Brook | 41100020501 | 16.62 | 8.31 | 4.155 | |
| Willow Lake-Cuyahoga River | 41100020505 | 24.23 | 12.115 | 6.0575 | 3.02875 |
| Headwaters Chippewa Creek | 41100020503 | 17.82 | 8.91 | 4.455 | |
| Brandywine Creek | 41100020404 | 27.06 | 13.53 | 6.765 | 3.3825 |
| Boston Run-Cuyahoga River | 41100020405 | 46.44 | 23.22 | 11.61 | 5.805 |
| Furnace Run | 41100020403 | 20.3 | 10.15 | 5.075 | 2.5375 |
| Yellow Creek | 41100020402 | 31.21 | 15.605 | 7.8025 | 3.90125 |
| Mud Brook | 41100020401 | 29.77 | 14.885 | 7.4425 | 3.72125 |
| City of Akron-Little Cuyahoga River | 41100020304 | 19.66 | 9.83 | 4.915 | |
| Wingfoot Lake Outlet-Little Cuyahoga River | 41100020303 | 30.79 | 15.395 | 7.6975 | 3.84875 |
| Mogadore Reservoir-Little Cuyahoga River | 41100020501 | 12.91 | 6.455 | 3.2275 | |

Total sites (minimum) per HUC12 for good representative sample:

| | | |
|-------|-------|---------|
| (4-6) | (7-9) | (10-12) |
|-------|-------|---------|

(Trib.'s starting under 20 sqmi initial drainage refer to 0.25 level, 20.1-45sqmi to 0.125 level, and 45.1- 60 sqmi to 0.0625 level)
 exceptions for highly urbanized trib.'s and unique layouts to be determined on an individual basis

APPENDIX C

SECTION I

Sampling Site Tables by BUI and Sample type

(For applicable Credible Data and sampling point specific BUIs) BUIs 3a, 6, 14a, 10a

BUI 3a: Degradation of Fish Populations

| Delisting Progress Matrix | | | | | | | | | | | | |
|---|-------------|------------------------|---------|------------------------------|-------------|------------------------------|------------------|-------------------------------|-------------------|--|-------------|--------------|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled |
| Lacustuary, LRW Sites | | | | | | | WWH | | WWH | Site must have <i>greater than</i> 20 sq. mi. in drainage calculate MIwb scores. | | |
| Needed for Delisting Lacustuary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | |
| Needed for Delisting Lacustuary-LRW: | | | | | | | L-IBI > 16 | | MIwb > 5.1 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | |
| Needed for Delisting Headwaters: | | | | | | | IBI > 36 | | NA | | | |
| Needed for Delisting Wading: | | | | | | | IBI > 34 | | MIwb > 7.5 | | | |
| Needed for Delisting Boat: | | | | | | | IBI > 36 | | MIwb > 8.2 | | | |
| N = not in attainment | | * = no data | | Y = meets delisting criteria | | | | | | | | |
| LRW | | | | | | | | | | | | |
| Cuyahoga River | LRW | 0.2 | 41.5033 | -81.7111 | 41100020605 | Y | 32 | Y | 7.374 | 809 | NEORS | 2012 |
| Cuyahoga River | LRW | 2.75 | 41.4881 | -81.6933 | 41100020605 | Y | 26 | Y | 8.016 | 805 | NEORS | 2012 |
| Cuyahoga River | LRW | 5 | 41.4706 | -81.6692 | 41100020605 | N | 11 | N | 3.99 | * | OhioEPA | 2008 |
| Cuyahoga River | LRW | 5.1 | 41.4688 | -81.6698 | 41100020605 | N | 12 | N | 3.991 | 788 | Ohio EPA | 2008 |
| Cuyahoga River | LRW | 5.9 | 41.4633 | -81.6806 | 41100020605 | Y | 38 | Y | 8.507 | 788 | NEORS | 2012 |

| Delisting Progress Matrix | | | | | | | | | | | | |
|---|-------------|------------------------|-----------|------------------------------|-------------|------------------------------|------------------|-------------------------------|-------------------|--|-------------|--------------|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled |
| Lacustuary, LRW Sites | | | | | | | WWH | | WWH | Site must have <i>greater than</i> 20 sq. mi. in drainage calculate MIwb scores. | | |
| Needed for Delisting Lacustuary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | |
| Needed for Delisting Lacustuary-LRW: | | | | | | | L-IBI > 16 | | MIwb > 5.1 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | |
| Needed for Delisting Headwaters: | | | | | | | IBI > 36 | | NA | | | |
| Needed for Delisting Wading: | | | | | | | IBI > 34 | | MIwb > 7.5 | | | |
| Needed for Delisting Boat: | | | | | | | IBI > 36 | | MIwb > 8.2 | | | |
| N = not in attainment | | * = no data | | Y = meets delisting criteria | | | | | | | | |
| Lacustuary | | | | | | | | | | | | |
| Cuyahoga River | Lacustuary | 0.2 | 41.5033 | -81.7111 | 41100020605 | N | 32 | N | 7.374 | 809 | NEORS | 2012 |
| Cuyahoga River | Lacustuary | 2.75 | 41.4881 | -81.6933 | 41100020605 | N | 26 | N | 8.016 | 805 | NEORS | 2012 |
| Cuyahoga River | Lacustuary | 5 | 41.4706 | -81.6692 | 41100020605 | N | 11 | N | 3.99 | * | OhioEPA | 2008 |
| Cuyahoga River | Lacustuary | 5.1 | 41.4688 | -81.6698 | 41100020605 | N | 12 | N | 3.991 | 788 | Ohio EPA | 2008 |
| Cuyahoga River | Lacustuary | 5.9 | 41.4633 | -81.6806 | 41100020605 | N | 38 | N | 8.507 | 788 | NEORS | 2012 |
| Euclid Creek | Lacustuary | 0.2 | 41.5856 | -81.5631 | 41100030503 | N | 34 | N | 7.357 | 23.3 | NEORS | 2010 |
| Euclid Creek | Lacustuary | 0.4 | 41.35087 | -81.561319 | 41100030503 | N | 38 | N | 5.9 | * | NEORS | 2013 |
| Euclid Creek | Lacustuary | 0.55 | 41.345527 | -81.560248 | 41100030503 | N | 32 | N | 7.3 | * | NEORS | 2013 |
| Euclid Creek | Lacustuary | 0.65 | 41.5833 | -81.5594 | 41100030503 | N | 32 | N | 7.068 | 23 | NEORS | 2012 |
| Euclid Creek | Lacustuary | 1 | 41.344166 | -81.554379 | 41100030503 | N | 24 | N | 7.3 | * | NEORS | 2013 |

| Delisting Progress Matrix | | | | | | | | | | | | |
|---|-------------|-----------------------|-----------|------------------------------|-------------|------------------------------|------------------|-------------------------------|-------------------|--|-------------|--------------|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | <i>Site must have greater than 20 sq. mi. in drainage calculate MIwb scores.</i> | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | |
| Needed for Delisting Lacustrary-LRW: | | | | | | | L-IBI > 16 | | MIwb > 5.1 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | |
| Needed for Delisting Headwaters: | | | | | | | IBI > 36 | | NA | | | |
| Needed for Delisting Wading: | | | | | | | IBI > 34 | | MIwb > 7.5 | | | |
| Needed for Delisting Boat: | | | | | | | IBI > 36 | | MIwb > 8.2 | | | |
| N = not in attainment | | * = no data | | Y = meets delisting criteria | | | | | | | | |
| Wading | | | | | | | | | | | | |
| Euclid Creek | Wading | 2.7 | 41.5658 | -81.5358 | 41100030503 | N | 24 | N | 5.32 | 21.4 | NEORS | 2010 |
| Euclid Creek | Wading | 1.65 | 41.5738 | -81.547 | 41100030503 | N | 28 | N | 6.667 | 21.8 | NEORS | 2012 |
| Euclid Creek | Wading | 0.55 | 41.5833 | -81.5594 | 41100030503 | N | 32 | N | 7.068 | 23 | NEORS | 2012 |
| Euclid Creek | Wading | 1.65 | 41.342275 | -81.547 | 41100030503 | N | 28 | N | 5.6 | * | NEORS | 2013 |
| Euclid Creek | Wading | 2.7 | 41.333033 | -81.5358 | 41100030503 | N | 26 | N | 6.1 | * | NEORS | 2013 |
| Euclid Creek | Wading | 3.3 | 41.323201 | -81.530393 | 41100030503 | N | 30 | NA | 0 | * | NEORS | 2013 |
| Euclid Creek | Wading | 6.9 | 41.303078 | -81.508764 | 41100030503 | N | 22 | NA | 0 | * | NEORS | 2013 |
| Big Creek | Wading | 0.15 | 41.446 | -81.6865 | 41100020603 | N | 28 | N | 6.667 | 37.1 | NEORS | 2012 |
| Tinker's Creek | Wading | 6.4 | 41.385 | -81.525 | 41100020504 | N | 20 | N | 6.26 | 84 | Ohio EPA | 2006 |
| Tinker's Creek | Wading | 7.9 | 41.3837 | -81.4993 | 41100020504 | N | 22 | N | 5.77 | 69.5 | Ohio EPA | 2008 |
| Tinker's Creek | Wading | 9 | 41.375 | -81.4858 | 41100020504 | N | 22 | N | 6.989 | 68 | Ohio EPA | 2011 |
| Tinker's Creek | Wading | 6.5 | 41.3853 | -81.5236 | 41100020504 | N | 26 | N | 6.793 | 84 | Ohio EPA | 2008 |
| Tinker's Creek | Wading | 11 | 41.3584 | -81.4739 | 41100020504 | N | 26 | N | 5.308 | 61 | Ohio EPA | 2007 |
| Tinker's Creek | Wading | 10.1 | 41.3646 | -81.4764 | 41100020504 | N | 28 | N | 6.62 | 67 | Ohio EPA | 2007 |
| Tinker's Creek | Wading | 14.3 | 41.3361 | -81.4571 | 41100020504 | N | 28 | N | 5.732 | 55 | Ohio EPA | 2010 |
| Tinker's Creek | Wading | 16.7 | 41.3183 | -81.4406 | 41100020504 | N | 30 | N | 6.581 | 51 | Ohio EPA | 2006 |
| Tinker's Creek | Wading | 22.1 | 41.2853 | -81.4061 | 41100020504 | N | 30 | N | 5.879 | 41 | Ohio EPA | 2011 |
| Tinker's Creek | Wading | 0.1 | 41.3647 | -81.6092 | 41100020504 | Y | 34 | Y | 9.301 | 96 | Ohio EPA | 2008 |
| Tinker's Creek | Wading | 2.2 | 41.3739 | -81.5792 | 41100020504 | Y | 38 | Y | 7.625 | 94 | Ohio EPA | 2006 |
| Tinker's Creek | Wading | 2.5 | 41.3744 | -81.5734 | 41100020504 | Y | 42 | Y | 8.293 | 91 | Ohio EPA | 2008 |
| Tinker's Creek | Wading | 5.1 | 41.389 | -81.5432 | 41100020504 | Y | 44 | Y | 7.289 | 85 | Ohio EPA | 2008 |
| Tinker's Creek | Wading | 0.1 | 41.2154 | -81.3635 | 41100020501 | Y | 38 | Y | 9.1 | * | OhioEPA | 2008 |
| Tinker's Creek | Wading | 2.5 | 41.387628 | -81.546135 | 41100020501 | Y | 42 | Y | 8.3 | * | OhioEPA | 2008 |
| Tinker's Creek | Wading | 5.1 | 41.353103 | -81.469917 | 41100020501 | Y | 44 | N | 7.3 | * | OhioEPA | 2008 |
| Brandywine Creek | Wading | 1.5 | 41.2778 | -81.5454 | 41100020404 | N | 30 | N | 7.093 | 24.6 | Ohio EPA | 2010 |
| Furnace Run | Wading | 0.2 | 41.2018 | -81.5724 | 41100020403 | Y | 42 | Y | 8.576 | 20.3 | Ohio EPA | 2012 |
| Yellow Creek | Wading | 1.2 | 41.1633 | -81.5932 | 41100020402 | Y | 38 | Y | 8.724 | 29.9 | Ohio EPA | 2009 |
| Yellow Creek | Wading | 1 | 41.1622 | -81.5884 | 41100020402 | Y | 42 | Y | 9.084 | 30.2 | Ohio EPA | 2006 |
| Yellow Creek | Wading | 4.6 | 41.1576 | -81.6369 | 41100020402 | Y | 42 | N | 5.557 | 22.8 | Ohio EPA | 2010 |
| Little Cuyahoga River | Wading | 5.2 | 41.0722 | -81.4861 | 41100020304 | N | 30 | N | 7.039 | 47 | Ohio EPA | 2010 |
| Little Cuyahoga River | Wading | 7.1 | 41.0603 | -81.4631 | 41100020304 | N | 32 | N | 6.958 | 31 | Ohio EPA | 2010 |

| Delisting Progress Matrix | | | | | | | | | | | | | |
|---|-------------|------------------------|-----------|------------------------------|-------------|------------------------------|------------------|-------------------------------|-------------------|--|-------------|--------------|--|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled | |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | Site must have <i>greater than</i> 20 sq. mi. in drainage calculate MIwb scores. | | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | | |
| Needed for Delisting Lacustrary-LRW: | | | | | | | L-IBI > 16 | | MIwb > 5.1 | | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | | |
| Needed for Delisting Headwaters: | | | | | | | IBI > 36 | | NA | | | | |
| Needed for Delisting Wading: | | | | | | | IBI > 34 | | MIwb > 7.5 | | | | |
| Needed for Delisting Boat: | | | | | | | IBI > 36 | | MIwb > 8.2 | | | | |
| N = not in attainment | | * = no data | | Y = meets delisting criteria | | | | | | | | | |
| Headwater | | | | | | | | | | | | | |
| Doan Brook | Headwaters | 5.5 | 41.4909 | -81.5842 | 41100030504 | N | 18 | NA | 0 | 4.4 | Ohio EPA | 2011 | |
| Doan Brook | Headwaters | 6.7 | 41.4839 | -81.5658 | 41100030504 | N | 20 | NA | 0 | 1.2 | NEORS | 2010 | |
| Doan Brook | Headwaters | 6.1 | 41.4839 | -81.5658 | 41100030504 | N | 24 | NA | 0 | 1.4 | Ohio EPA | 2011 | |
| Doan Brook | Headwaters | 0.75 | 41.533 | -81.6296 | 41100030504 | N | 28 | NA | 0 | 9.1 | NEORS | 2012 | |
| Ninemile Creek | Headwaters | 3.34 | 41.5457 | -81.5522 | 41100030504 | N | 20 | NA | 0 | 0.7 | NEORS | 2011 | |
| Ninemile Creek | Headwaters | 0.4 | 41.5574 | -81.5991 | 41100030504 | N | 22 | NA | 0 | 11.8 | NEORS | 2011 | |
| South Branch Doan Brook | Headwaters | 1.4 | 41.4739 | -81.559 | 41100030504 | N | 24 | NA | 0 | 3.4 | NEORS | 2010 | |
| Trib. to Ninemile Creek | Headwaters | 0.01 | 41.5429 | -81.5552 | 41100030504 | N | 12 | NA | 0 | 3.1 | NEORS | 2011 | |
| East Branch Euclid Creek | Headwaters | 0.25 | 41.5618 | -81.5277 | 41100030503 | N | 28 | NA | 0 | 12.5 | NEORS | 2009 | |
| East Branch Euclid Creek | Headwaters | 0.1 | 41.5602 | -81.5302 | 41100030503 | N | 30 | NA | 0 | 12.5 | Ohio EPA | 2011 | |
| East Branch Euclid Creek | Headwaters | 0.01 | 41.5604 | -81.5307 | 41100030503 | N | 32 | NA | 0 | 12.5 | NEORS | 2009 | |
| East Branch Euclid Creek | Headwaters | 0.2 | 41.5608 | -81.5288 | 41100030503 | N | 34 | NA | 0 | 12.5 | Ohio EPA | 2011 | |
| Euclid Creek- East Branch | Headwaters | 0.25 | 41.334209 | -81.313031 | 41100030503 | N | 28 | NA | 0 | * | NEORS | 2013 | |
| Euclid Creek- East Branch | Headwaters | 2.8 | 41.344108 | -81.284406 | 41100030503 | N | 24 | NA | 0 | * | NEORS | 2013 | |
| Euclid Creek-Unnamed Trib | Headwaters | 1.5 | 41.331106 | -81.303159 | 41100030503 | N | 22 | NA | 0 | * | NEORS | 2013 | |
| Trib. to Cuyahoga R. | Headwaters | 0.3 | 41.36 | -81.6116 | 41100020605 | N | 34 | NA | 0 | 3.1 | Ohio EPA | 2012 | |
| West Creek | Headwaters | 1.8 | 41.4148 | -81.6652 | 41100020604 | N | 26 | NA | 0 | 9.2 | Ohio EPA | 2011 | |
| West Creek | Headwaters | 5.3 | 41.3899 | -81.6982 | 41100020604 | N | 28 | NA | 0 | 3.8 | NEORS | 2010 | |
| West Creek | Headwaters | 0.1 | 41.4158 | -81.6475 | 41100020604 | N | 32 | NA | 0 | 13.2 | Ohio EPA | 2011 | |
| West Creek | Headwaters | 5.75 | 41.3836 | -81.6934 | 41100020604 | N | 32 | NA | 0 | 3.5 | NEORS | 2010 | |
| Big Creek | Headwaters | 0.2 | 41.4458 | -81.6869 | 41100020603 | N | 30 | NA | 0 | 19.3 | NEORS | 2011 | |
| Ford Branch Big Creek | Headwaters | 4.7 | 41.423 | -81.8019 | 41100020603 | N | 16 | NA | 0 | 3.7 | NEORS | 2010 | |
| Mill Creek | Headwaters | 0.12 | 41.4178 | -81.6383 | 41100020601 | Y | 44 | NA | 0 | 19.5 | NEORS | 2012 | |
| Mill Creek | Headwaters | 0.7 | 41.4242 | -81.6376 | 41100020601 | Y | 40 | NA | 0 | 17.3 | NEORS | 2012 | |
| Mill Creek | Headwaters | 2.75 | 41.445 | -81.6256 | 41100020601 | N | 30 | NA | 0 | 15.1 | NEORS | 2012 | |
| Mill Creek | Headwaters | 3.15 | 41.4422 | -81.6216 | 41100020601 | N | 20 | NA | 0 | 15 | NEORS | 2012 | |
| Mill Creek | Headwaters | 6.8 | 41.4233 | -81.5659 | 41100020601 | N | 22 | NA | 0 | 4.5 | NEORS | 2012 | |
| Mill Creek | Headwaters | 8.3 | 41.4305 | -81.5442 | 41100020601 | N | 22 | NA | 0 | 3.9 | NEORS | 2012 | |
| Mill Creek | Headwaters | 10.12 | 41.4456 | -81.5317 | 41100020601 | N | 20 | NA | 0 | 2.6 | NEORS | 2012 | |
| Mill Creek | Headwaters | 10.7 | 41.4518 | -81.5256 | 41100020601 | N | 20 | NA | 0 | 2.2 | NEORS | 2011 | |
| Mill Creek | Headwaters | 11.52 | 41.4626 | -81.5214 | 41100020601 | N | 18 | NA | 0 | 0.9 | NEORS | 2011 | |
| Mill Creek | Headwaters | 11.85 | 41.4671 | -81.5203 | 41100020601 | N | 12 | NA | 0 | 0.7 | NEORS | 2011 | |
| Chippewa Creek | Headwaters | 0.4 | 41.3172 | -81.5936 | 41100020503 | Y | 42 | NA | 0 | 17.6 | Ohio EPA | 2009 | |

| Delisting Progress Matrix | | | | | | | | | | | | |
|---|-------------|------------------------|-----------|------------------------------|-------------|------------------------------|------------------|-------------------------------|-------------------|--|-------------|--------------|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled |
| Lacustuary, LRW Sites | | | | | | | WWH | | WWH | Site must have <i>greater than</i> 20 sq. mi. in drainage calculate MIwb scores. | | |
| Needed for Delisting Lacustuary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | |
| Needed for Delisting Lacustuary-LRW: | | | | | | | L-IBI > 16 | | MIwb > 5.1 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | |
| Needed for Delisting Headwaters: | | | | | | | IBI > 36 | | NA | | | |
| Needed for Delisting Wading: | | | | | | | IBI > 34 | | MIwb > 7.5 | | | |
| Needed for Delisting Boat: | | | | | | | IBI > 36 | | MIwb > 8.2 | | | |
| N = not in attainment | | * = no data | | Y = meets delisting criteria | | | | | | | | |
| Tinker's Creek | Headwaters | 24.4 | 41.2692 | -81.3931 | 41100020502 | N | 26 | NA | 0 | 19 | Ohio EPA | 2006 |
| Tinker's Creek | Headwaters | 25.1 | 41.2628 | -81.3944 | 41100020502 | N | 26 | NA | 0 | 19 | Ohio EPA | 2009 |
| Tinker's Creek | Headwaters | 28.8 | 41.2158 | -81.3728 | 41100020502 | N | 34 | NA | 0 | 3.6 | Ohio EPA | 2006 |
| Trib. to Tinker's Creek | Headwaters | 0.6 | 41.2542 | -81.4188 | 41100020502 | N | 30 | NA | 0 | 0.2 | Ohio EPA | 2013 |
| Pond Brook | Headwaters | 2.3 | 41.3173 | -81.4011 | 41100020501 | N | 20 | NA | 0 | 10.9 | Ohio EPA | 2012 |
| Pond Brook | Headwaters | 1.4 | 41.3053 | -81.3997 | 41100020501 | N | 22 | NA | 0 | 15.7 | Ohio EPA | 2012 |
| Pond Brook | Headwaters | 3.5 | 41.3346 | -81.4018 | 41100020501 | N | 26 | NA | 0 | 5 | NEORS | 2008 |
| Pond Brook | Headwaters | 0.9 | 41.2983 | -81.4042 | 41100020501 | N | 30 | NA | 0 | 15.8 | Ohio EPA | 2006 |
| Pond Brook | Headwaters | 2.6 | 41.3216 | -81.4013 | 41100020501 | N | 32 | NA | 0 | 7.6 | Ohio EPA | 2011 |
| Pond Brook | Headwaters | 3.4 | 41.3314 | -81.4028 | 41100020501 | N | 32 | NA | 0 | 5 | Ohio EPA | 2012 |
| Pond Brook | Headwaters | 3.7 | 41.3356 | -81.4021 | 41100020501 | Y | 38 | NA | 0 | 1.6 | Ohio EPA | 2012 |
| Pond Brook | Headwaters | 4.3 | 41.3419 | -81.4078 | 41100020501 | Y | 38 | NA | 0 | 1.5 | Ohio EPA | 2006 |
| Trib. to Pond Brook | Headwaters | 0.2 | 41.3212 | -81.4036 | 41100020501 | N | 28 | NA | 0 | 0.2 | Ohio EPA | 2011 |
| Sagamore Creek | Headwaters | 0.6 | 41.3529 | -81.5852 | 41100020404 | Y | 46 | NA | 0 | 5.7 | Ohio EPA | 2008 |
| Furnace Run | Headwaters | 4.8 | 41.2404 | -81.6137 | 41100020403 | Y | 40 | NA | 0 | 10.8 | Ohio EPA | 2006 |
| Furnace Run | Headwaters | 1.1 | 41.2039 | -81.5863 | 41100020403 | Y | 42 | NA | 0 | 19.7 | Ohio EPA | 2009 |
| Furnace Run | Headwaters | 0.4 | 41.2008 | -81.576 | 41100020403 | Y | 44 | NA | 0 | 19.9 | Ohio EPA | 2009 |
| Furnace Run | Headwaters | 0.9 | 41.2039 | -81.5836 | 41100020403 | Y | 44 | NA | 0 | 19.8 | Ohio EPA | 2009 |
| Furnace Run | Headwaters | 6.5 | 41.2532 | -81.6295 | 41100020403 | Y | 46 | NA | 0 | 7.6 | Ohio EPA | 2012 |
| Furnace Run | Headwaters | 7.3 | 41.2602 | -81.637 | 41100020403 | Y | 46 | NA | 0 | 5.6 | Ohio EPA | 2006 |
| Furnace Run | Headwaters | 7.8 | 41.2664 | -81.6397 | 41100020403 | Y | 48 | NA | 0 | 4.9 | Ohio EPA | 2006 |
| Furnace Run | Headwaters | 8 | 41.2682 | -81.6408 | 41100020403 | Y | 48 | NA | 0 | 2.8 | Ohio EPA | 2006 |
| Furnace Run | Headwaters | 7.2 | 41.2601 | -81.6374 | 41100020403 | Y | 50 | NA | 0 | 5.7 | Ohio EPA | 2012 |
| Furnace Run | Headwaters | 6.9 | 41.2575 | -81.633 | 41100020403 | Y | 52 | NA | 0 | 5.9 | Ohio EPA | 2012 |
| Furnace Run | Headwaters | 0.2 | 41.121 | -81.3411 | 41100020403 | Y | 36 | Y | 7.7 | * | OhioEPA | 2008 |
| Furnace Run | Headwaters | 0.9 | 41.20139 | -81.581783 | 41100020403 | Y | 48 | NA | 0 | * | OhioEPA | 2008 |
| Furnace Run | Headwaters | 4.8 | 41.223601 | -81.628132 | 41100020403 | Y | 42 | NA | 0 | * | OhioEPA | 2008 |
| Furnace Run | Headwaters | 6.5 | 41.240384 | -81.639118 | 41100020403 | Y | 52 | NA | 0 | * | OhioEPA | 2008 |
| Furnace Run | Headwaters | 7.3 | 41.255097 | -81.649418 | 41100020403 | Y | 45 | NA | 0 | * | OhioEPA | 2008 |
| Furnace Run | Headwaters | 7.8 | 41.274968 | -81.654568 | 41100020403 | Y | 48 | NA | 0 | * | OhioEPA | 2008 |
| Yellow Creek | Headwaters | 0.1 | 41.947 | -81.3425 | 41100020402 | Y | 40 | Y | 8.9 | * | OhioEPA | 2008 |
| Wingfoot Lake Outlet | Headwaters | 1.5 | 41.0414 | -81.3822 | 41100020303 | N | 18 | NA | 0 | 5.8 | Ohio EPA | 2006 |
| Wingfoot Lake Outlet | Headwaters | 2.8 | 41.0274 | -81.372 | 41100020303 | N | 26 | NA | 0 | 4.5 | Ohio EPA | 2006 |
| Wingfoot Lake Outlet | Headwaters | 0.1 | 41.0542 | -81.3992 | 41100020303 | N | 30 | NA | 0 | 7.2 | Ohio EPA | 2006 |

| Delisting Progress Matrix | | | | | | | | | | | | |
|---|-------------|------------------------|---------|------------------------------|-------------|------------------------------|------------------|-------------------------------|-------------------|--|-------------|--------------|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | Site must have <i>greater than</i> 20 sq. mi. in drainage calculate MIwb scores. | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | |
| Needed for Delisting Lacustrary-LRW: | | | | | | | L-IBI > 16 | | MIwb > 5.1 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | |
| Needed for Delisting Headwaters: | | | | | | | IBI > 36 | | NA | | | |
| Needed for Delisting Wading: | | | | | | | IBI > 34 | | MIwb > 7.5 | | | |
| Needed for Delisting Boat: | | | | | | | IBI > 36 | | MIwb > 8.2 | | | |
| N = not in attainment | | * = no data | | Y = meets delisting criteria | | | | | | | | |
| Bath Creek | Headwaters | 1.8 | 41.1773 | -81.6587 | 41100020402 | N | 26 | NA | 0 | 3.1 | Ohio EPA | 2010 |
| Bath Creek | Headwaters | 2.3 | 41.1851 | -81.6611 | 41100020402 | N | 26 | NA | 0 | 1.7 | Ohio EPA | 2010 |
| Bath Creek | Headwaters | 2.1 | 41.1829 | -81.6599 | 41100020402 | N | 30 | NA | 0 | 1.8 | Ohio EPA | 2010 |
| Beaver Meadow Run | Headwaters | 0.1 | 41.3614 | -81.4703 | 41100020504 | N | 22 | NA | 0 | 6.1 | Ohio EPA | 2006 |
| Beaver Meadow Run | Headwaters | 1.2 | 41.3706 | -81.4592 | 41100020504 | N | 28 | NA | 0 | 3.6 | Ohio EPA | 2006 |
| Boston Run | Headwaters | 0.3 | 41.2447 | -81.5458 | 41100020405 | Y | 54 | NA | 0 | 2.7 | Ohio EPA | 2011 |
| Dugway Brook | Headwaters | 2.4 | 41.5122 | -81.5905 | 41100030504 | N | 12 | NA | 0 | 2.6 | NEORS | 2010 |
| Dugway Brook | Headwaters | 0.37 | 41.5497 | -81.6088 | 41100030504 | Y | 36 | NA | 0 | 6.2 | NEORS | 2010 |
| Hawthorn Creek | Headwaters | 0.8 | 41.3833 | -81.4892 | 41100020504 | N | 30 | NA | 0 | 6.5 | Ohio EPA | 2006 |
| Rock Creek | Headwaters | 0.3 | 41.2695 | -81.6382 | 41100020403 | Y | 50 | NA | 0 | 1.4 | Ohio EPA | 2006 |
| Trib. to Salt Run | Headwaters | 0.4 | 41.2184 | -81.5228 | 41100020405 | N | 24 | NA | 0 | 1.2 | Ohio EPA | 2010 |
| Wood Creek | Headwaters | 0.2 | 41.3778 | -81.5744 | 41100020504 | N | 12 | NA | 0 | 3.2 | Ohio EPA | 2006 |
| Wood Creek | Headwaters | 1.3 | 41.3867 | -81.5667 | 41100020504 | N | 20 | NA | 0 | 2.7 | Ohio EPA | 2006 |

BUI 6: Degradation of Benthos

| Delisting Progress Matrix | | | | | | | | | |
|---|-------------------------|-----------------------------|---------|----------|-------------|------------------------------|----------------------------|-------------|--------------|
| BUI:6 Degradation of Benthos | | | | | | | | | |
| River Segment or Monitoring Location | Sample area Designation | RM | Lat | Long | HUC12 | Meets ICI Delisting Criteria | Latest Score ICI Data From | Data Source | Year Sampled |
| Lacustrary Sites | | | | | | | | | |
| Needed for Delisting Lacustrary: | | | | | | ICI >34 | <i>LRW ICI>12</i> | | |
| Headwaters, Wading, Boat Sites (Riverine) | | | | | | | | | |
| Needed for Delisting Headwaters, Wading and Boat: | | | | | | ICI >30 | | | |
| N = not in attainment | * = no data | Y= Meets Delisting Criteria | | | | | | | |
| LRW | | | | | | | | | |
| Cuyahoga River | LRW | 0.2 | 41.5033 | -81.7111 | 41100020605 | Y | 40 | Ohio EPA | 2008 |
| Cuyahoga River | LRW | 5.9 | 41.4633 | -81.6806 | 41100020605 | N | 18 | NEORS | 2012 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-------------------------|-----------------------------|-----------|------------|-------------|------------------------------|----------------------------|-------------|--------------|
| BUI:6 Degradation of Benthos | | | | | | | | | |
| River Segment or Monitoring Location | Sample area Designation | RM | Lat | Long | HUC12 | Meets ICI Delisting Criteria | Latest Score ICI Data From | Data Source | Year Sampled |
| Lacustrary Sites | | | | | | | | | |
| Needed for Delisting Lacustrary: | | | | | | ICI >34 | <i>LRW ICI>12</i> | | |
| Headwaters, Wading, Boat Sites (Riverine) | | | | | | | | | |
| Needed for Delisting Headwaters, Wading and Boat: | | | | | | ICI >30 | | | |
| N = not in attainment | * = no data | Y= Meets Delisting Criteria | | | | | | | |
| Lacustrary | | | | | | | | | |
| Cuyahoga River | Lacustrary | 7.01 | 41.4492 | -81.6833 | 41100020605 | N | 30 | NEORS | 2012 |
| Cuyahoga River | Lacustrary | 7.1 | 41.4475 | -81.6847 | 41100020605 | N | 30 | NEORS | 2012 |
| Euclid Creek | Lacustrary | 0.55 | 41.345527 | -81.333133 | 41100030503 | Y | 34 | NEORS | 2013 |
| Euclid Creek | Lacustrary | 0.65 | 41.5833 | -81.5594 | 41100030503 | N | 24 | NEORS | 2012 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-------------------------|-------------|---------|-----------------------------|-------------|------------------------------|----------------------------|-------------|--------------|
| BUI:6 Degradation of Benthos | | | | | | | | | |
| River Segment or Monitoring Location | Sample area Designation | RM | Lat | Long | HUC12 | Meets ICI Delisting Criteria | Latest Score ICI Data From | Data Source | Year Sampled |
| Lacustuary Sites | | | | | | | | | |
| Needed for Delisting Lacustuary: | | | | | | ICI >34 | | LRW ICI >12 | |
| Headwaters, Wading, Boat Sites (Riverine) | | | | | | | | | |
| Needed for Delisting Headwaters, Wading and Boat: | | | | | | ICI >30 | | | |
| N = not in attainment | | * = no data | | Y= Meets Delisting Criteria | | | | | |
| Wading/ Headwaters/ Boat (Riverine) | | | | | | | | | |
| Big Creek | Wading (Riverine) | 0.15 | 41.446 | -81.6865 | 41100020603 | Y | 32 | NEORS | 2012 |
| Cuyahoga River | Wading (Riverine) | 49.7 | 41.1342 | -81.44029999 | 41100020304 | Y | 32 | Ohio EPA | 2005 |
| Euclid Creek | Wading (Riverine) | 0.55 | 41.5833 | -81.5594 | 41100030503 | N | 24 | NEORS | 2012 |
| Euclid Creek | Wading (Riverine) | 1.65 | 41.5738 | -81.547 | 41100030503 | Y | 36 | NEORS | 2012 |
| Euclid Creek | Wading (Riverine) | 2.7 | 41.5658 | -81.5358 | 41100030503 | Y | 42 | NEORS | 2010 |
| Little Cuyahoga River | Wading (Riverine) | 5.2 | 41.0722 | -81.48609999 | 41100020304 | Y | 34 | Ohio EPA | 2010 |
| Little Cuyahoga River | Wading (Riverine) | 7.1 | 41.0603 | -81.4631 | 41100020304 | N | 26 | Ohio EPA | 2010 |
| Tinkers Creek | Wading (Riverine) | 0.1 | 41.3647 | -81.6092 | 41100020501 | Y | 42 | Ohio EPA | 2008 |
| Big Creek | Headwaters (Riverine) | 4.4 | 41.446 | -81.754 | 41100020603 | Y | 38 | NEORS | 2010 |
| Doan Brook | Headwaters (Riverine) | 0.75 | 41.533 | -81.6296 | 41100030504 | N | 20 | NEORS | 2012 |
| Doan Brook | Headwaters (Riverine) | 6.7 | 41.4839 | -81.5658 | 41100030504 | N | 6 | NEORS | 2010 |
| Dugway Brook | Headwaters (Riverine) | 0.37 | 41.5497 | -81.6088 | 41100030504 | N | 8 | NEORS | 2010 |
| Dugway Brook | Headwaters (Riverine) | 2.4 | 41.5122 | -81.5905 | 41100030504 | N | 22 | NEORS | 2010 |
| East Branch Euclid Creek | Headwaters (Riverine) | 0.01 | 41.5604 | -81.5307 | 41100030503 | Y | 42 | NEORS | 2009 |
| East Branch Euclid Creek | Headwaters (Riverine) | 0.2 | 41.5608 | -81.5288 | 41100030503 | N | 24 | Ohio EPA | 2008 |
| East Branch Euclid Creek | Headwaters (Riverine) | 0.25 | 41.5618 | -81.5277 | 41100030503 | Y | 34 | NEORS | 2009 |
| Ford Branch Big Creek | Headwaters (Riverine) | 4.7 | 41.423 | -81.8019 | 41100020603 | N | 12 | NEORS | 2009 |
| Furnace Run | Headwaters (Riverine) | 0.4 | 41.2008 | -81.57599999 | 41100020403 | Y | 34 | Ohio EPA | 2006 |
| Furnace Run | Headwaters (Riverine) | 1.1 | 41.2039 | -81.58629999 | 41100020403 | Y | 38 | Ohio EPA | 2009 |
| Furnace Run | Headwaters (Riverine) | 6.5 | 41.2532 | -81.62949999 | 41100020403 | Y | 40 | Ohio EPA | 2009 |
| Furnace Run | Headwaters (Riverine) | 7.3 | 41.2602 | -81.637 | 41100020403 | Y | 40 | Ohio EPA | 2006 |
| Furnace Run | Headwaters (Riverine) | 7.8 | 41.2664 | -81.6397 | 41100020403 | Y | 44 | Ohio EPA | 2006 |
| Furnace Run | Headwaters (Riverine) | 8 | 41.2682 | -81.6408 | 41100020403 | Y | 44 | Ohio EPA | 2006 |
| Mill Creek | Headwaters (Riverine) | 0.12 | 41.4178 | -81.6383 | 41100020601 | N | 22 | NEORS | 2011 |
| Mill Creek | Headwaters (Riverine) | 0.7 | 41.4242 | -81.6376 | 41100020601 | N | 24 | NEORS | 2011 |
| Mill Creek | Headwaters (Riverine) | 2.75 | 41.445 | -81.6256 | 41100020601 | Y | 30 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 3.15 | 41.4422 | -81.6216 | 41100020601 | Y | 34 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 6.8 | 41.4233 | -81.5659 | 41100020601 | Y | 36 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 8.3 | 41.4305 | -81.5442 | 41100020601 | Y | 36 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 10.12 | 41.4456 | -81.5317 | 41100020601 | Y | 38 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 10.7 | 41.4518 | -81.5256 | 41100020601 | Y | 38 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 11.52 | 41.4626 | -81.5214 | 41100020601 | Y | 40 | NEORS | 2012 |
| Rock Creek | Headwaters (Riverine) | 0.3 | 41.2695 | -81.6382 | 411000* | N | 26 | Ohio EPA | 2006 |
| South Branch Doan Brook | Headwaters (Riverine) | 1.4 | 41.4739 | -81.559 | 41100030504 | Y | 34 | NEORS | 2010 |
| West Creek | Headwaters (Riverine) | 5.75 | 41.3836 | -81.6934 | 41100020604 | Y | 36 | NEORS | 2010 |
| Yellow Creek | Headwaters (Riverine) | 0.1 | 41.947 | -81.3425 | 41100020402 | Y | 46 | Ohio EPA | 2008 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-------------------------|-------|-----------------------------|--------------|-------------|------------------------------|----------------------------|-----------------------|--------------|
| BUI:6 Degradation of Benthos | | | | | | | | | |
| River Segment or Monitoring Location | Sample area Designation | RM | Lat | Long | HUC12 | Meets ICI Delisting Criteria | Latest Score ICI Data From | Data Source | Year Sampled |
| Lacustrine Sites | | | | | | | | | |
| Needed for Delisting Lacustrine: | | | | | | ICI >34 | | <i>LRW ICI >12</i> | |
| Headwaters, Wading, Boat Sites (Riverine) | | | | | | | | | |
| Needed for Delisting Headwaters, Wading and Boat: | | | | | | ICI >30 | | | |
| N = not in attainment | * = no data | | Y= Meets Delisting Criteria | | | | | | |
| Cuyahoga River | Boat (Riverine) | 0.2 | 41.5033 | -81.7111 | 41100020605 | Y | 40 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 5.9 | 41.4633 | -81.6806 | 41100020605 | N | 18 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 7 | 41.4485 | -81.6838 | 41100020605 | N | 24 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 7.01 | 41.4492 | -81.6833 | 41100020605 | Y | 30 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 7.1 | 41.4475 | -81.6847 | 41100020605 | Y | 30 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 8 | 41.4394 | -81.67529999 | 41100020605 | Y | 34 | NEORS | 2010 |
| Cuyahoga River | Boat (Riverine) | 8.3 | 41.4394 | -81.6708 | 41100020605 | Y | 34 | NEORS | 2009 |
| Cuyahoga River | Boat (Riverine) | 8.6 | 41.4381 | -81.668 | 41100020605 | Y | 34 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 9.7 | 41.4269 | -81.6658 | 41100020605 | Y | 36 | NEORS | 2009 |
| Cuyahoga River | Boat (Riverine) | 10.1 | 41.4219 | -81.66249999 | 41100020605 | Y | 36 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 10.3 | 41.4211 | -81.6592 | 41100020605 | Y | 38 | NEORS | 2008 |
| Cuyahoga River | Boat (Riverine) | 10.75 | 41.4189 | -81.6511 | 41100020605 | Y | 38 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 11 | 41.4177 | -81.647 | 41100020605 | Y | 38 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 11.3 | 41.4178 | -81.6417 | 41100020605 | Y | 38 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 12.1 | 41.4081 | -81.6336 | 41100020604 | Y | 40 | NEORS | 2009 |
| Cuyahoga River | Boat (Riverine) | 14.2 | 41.3842 | -81.625 | 41100020604 | Y | 40 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 15.6 | 41.3789 | -81.6147 | 41100020604 | Y | 40 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 16.2 | 41.3653 | -81.61279999 | 41100020604 | Y | 40 | Ohio EPA | 2011 |
| Cuyahoga River | Boat (Riverine) | 17.3 | 41.3567 | -81.5978 | 41100020604 | Y | 42 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 20.6 | 41.3216 | -81.5873 | 41100020604 | Y | 42 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 20.8 | 41.3194 | -81.5875 | 41100020604 | Y | 42 | Ohio EPA | 2007 |
| Cuyahoga River | Boat (Riverine) | 24.1 | 41.2886 | -81.56529999 | 41100020604 | Y | 44 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 26.5 | 41.2631 | -81.56 | 41100020304 | Y | 44 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 33.2 | 41.2008 | -81.5686 | 41100020304 | Y | 46 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 39.7 | 41.1386 | -81.5528 | 41100020304 | Y | 46 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 42.6 | 41.1172 | -81.5253 | 41100020304 | Y | 50 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 48.7 | 41.1492 | -81.4567 | 41100020304 | Y | 50 | Ohio EPA | 2008 |
| Little Cuyahoga River | Boat (Riverine) | 6.2 | 41.0631 | -81.4802 | 41100020304 | N | 14 | Ohio EPA | 2010 |

BUI 14a Loss of Fish Habitat

| Delisting Progress Matrix | | | | | | | | | |
|---|-------------|------------------------|---------|--------------|-------------|-------------------------------|--------------------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for Lacustrary= | | | | | | | QHEI >55 (LRW target= 0) | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment * = no data Y= meets delisting criteria | | | | | | | | | |
| LRW - For LRW waters, a QHEI evaluation is not applicable, scores are shown for informational purposes. | | | | | | | | | |
| Cuyahoga River | LRW | 0.2 | 41.5033 | -81.7111 | 41100020605 | Y | 36.3 | NEORS | 2012 |
| Cuyahoga River | LRW | 2.75 | 41.4881 | -81.69329999 | 41100020605 | Y | 32.3 | NEORS | 2012 |
| Cuyahoga River | LRW | 5.1 | 41.4688 | -81.6698 | 41100020605 | Y | 30.5 | Ohio EPA | 2008 |
| Cuyahoga River | LRW | 0.2 | 41.5033 | -81.7111 | 41100020605 | Y | 36.3 | NEORS | 2012 |
| Cuyahoga River | LRW | 2.75 | 41.4881 | -81.69329999 | 41100020605 | Y | 32.3 | NEORS | 2012 |
| Cuyahoga River | LRW | 5.1 | 41.4688 | -81.6698 | 41100020605 | Y | 30.5 | Ohio EPA | 2008 |
| Cuyahoga River | LRW | 5.9 | 41.4633 | -81.6806 | 41100020605 | Y | 34.8 | NEORS | 2012 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-------------|------------------------|-----------|------------|-------------|-------------------------------|--------------------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for Lacustrary= | | | | | | | QHEI >55 (LRW target= 0) | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment * = no data Y= meets delisting criteria | | | | | | | | | |
| Lacustrary | | | | | | | | | |
| Cuyahoga River | Lacustrary | 7 | 41.4485 | -81.6838 | 41100020605 | Y | 69.8 | NEORS | 2011 |
| Cuyahoga River | Lacustrary | 7.01 | 41.4492 | -81.6833 | 41100020605 | Y | 71 | NEORS | 2012 |
| Cuyahoga River | Lacustrary | 7.1 | 41.4475 | -81.6847 | 41100020605 | Y | 73.5 | NEORS | 2010 |
| Euclid Creek | Lacustrary | 0.2 | 41.5856 | -81.5631 | 41100030503 | N | 73 | NEORS | 2014 |
| Euclid Creek | Lacustrary | 0.4 | 41.58507 | -81.561319 | 41100030503 | N | 47 | NEORS | 2014 |
| Euclid Creek | Lacustrary | 0.55 | 41.584311 | -81.560248 | 41100030503 | Y | 66 | NEORS | 2014 |
| Euclid Creek | Lacustrary | 0.65 | 41.5833 | -81.5594 | 41100030503 | Y | 68 | NEORS | 2008 |
| Euclid Creek | Lacustrary | 1 | 41.582297 | -81.554379 | 41100030503 | Y | 64 | NEORS | 2013 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-------------------|------------------------|-----------|-----------------------------|-------------|-------------------------------|--------------------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for Lacustrary= | | | | | | | QHEI >55 (LRW target= 0) | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | | * = no data | | Y= meets delisting criteria | | | | | |
| Wading/ Headwaters/ Boat (Riverine) | | | | | | | | | |
| Euclid Creek | Wading (Riverine) | 1.65 | 41.5738 | -81.547 | 41100030503 | Y | 64.5 | NEORS | 2008 |
| Euclid Creek | Wading (Riverine) | 1.85 | 41.573102 | -81.542923 | 41100030503 | Y | 78.5 | NEORS | 2013 |
| Euclid Creek | Wading (Riverine) | 2.7 | 41.5658 | -81.5358 | 41100030503 | N | 55.5 | NEORS | 2010 |
| Euclid Creek | Wading (Riverine) | 3 | 41.563568 | -81.530951 | 41100030503 | Y | 63.25 | NEORS | 2013 |
| Euclid Creek | Wading (Riverine) | 3.3 | 41.561401 | -81.530393 | 41100030503 | Y | 62.25 | NEORS | 2013 |
| Euclid Creek | Wading (Riverine) | 6.9 | 41.518735 | -81.508764 | 41100030503 | Y | 70.5 | NEORS | 2013 |
| Chippewa Creek | Wading (Riverine) | 0.3 | 41.3164 | -81.5908 | 41100020503 | Y | 82.5 | Ohio EPA | 2010 |
| Big Creek | Wading (Riverine) | 0.15 | 41.446 | -81.6865 | 41100020603 | Y | 71.5 | NEORS | 2012 |
| Brandywine Creek | Wading (Riverine) | 1.5 | 41.2778 | -81.5454 | 41100020404 | Y | 75.5 | Ohio EPA | 2010 |
| Tinker's Creek | Wading (Riverine) | 0.1 | 41.3647 | -81.6092 | 41100020504 | Y | 78.5 | Ohio EPA | 2008 |
| Tinker's Creek | Wading (Riverine) | 2.2 | 41.3739 | -81.5792 | 41100020504 | Y | 74 | Ohio EPA | 2006 |
| Tinker's Creek | Wading (Riverine) | 2.5 | 41.387628 | -81.546135 | 41100020504 | Y | 74 | Ohio EPA | 2008 |
| Tinker's Creek | Wading (Riverine) | 5.1 | 41.353103 | -81.469917 | 41100020504 | Y | 88.5 | Ohio EPA | 2008 |
| Tinker's Creek | Wading (Riverine) | 6.4 | 41.385 | -81.525 | 41100020504 | Y | 88.5 | Ohio EPA | 2006 |
| Tinker's Creek | Wading (Riverine) | 6.5 | 41.3853 | -81.5236 | 41100020504 | Y | 73 | Ohio EPA | 2008 |
| Tinker's Creek | Wading (Riverine) | 7.9 | 41.3837 | -81.4993 | 41100020504 | Y | 83 | Ohio EPA | 2008 |
| Tinker's Creek | Wading (Riverine) | 9 | 41.375 | -81.4858 | 41100020504 | Y | 67 | Ohio EPA | 2011 |
| Tinker's Creek | Wading (Riverine) | 10.1 | 41.3646 | -81.4764 | 41100020504 | Y | 73.5 | Ohio EPA | 2010 |
| Tinker's Creek | Wading (Riverine) | 11 | 41.3584 | -81.4739 | 41100020504 | Y | 72.5 | Ohio EPA | 2007 |
| Tinker's Creek | Wading (Riverine) | 14.3 | 41.3361 | -81.4571 | 41100020504 | Y | 68.5 | Ohio EPA | 2010 |
| Tinker's Creek | Wading (Riverine) | 17.7 | 41.3108 | -81.4372 | 41100020504 | N | 50.5 | Ohio EPA | 2006 |
| Tinker's Creek | Wading (Riverine) | 22.1 | 41.2853 | -81.4061 | 41100020504 | Y | 61 | Ohio EPA | 2011 |
| Tinker's Creek | Wading (Riverine) | 25.2 | 41.2267 | -81.362801 | 41100020502 | Y | 63 | Ohio EPA | 2008 |
| Tinker's Creek | Wading (Riverine) | 17.7 | 41.3108 | -81.4372 | 41100020501 | N | 50.5 | Ohio EPA | 2006 |
| Tinker's Creek | Wading (Riverine) | 22.1 | 41.2853 | -81.4061 | 41100020501 | Y | 61 | Ohio EPA | 2011 |
| Tinker's Creek | Wading (Riverine) | 14.3 | 41.277806 | -81.386833 | 41100020501 | Y | 68.5 | Ohio EPA | 2008 |
| Brandywine Creek | Wading (Riverine) | 1.5 | 41.2778 | -81.5454 | 41100020404 | Y | 75.5 | Ohio EPA | 2010 |
| Brandywine Creek | Wading (Riverine) | 6.2 | 41.3584 | -81.4739 | 41100020404 | N | 57.5 | NEORS | 2014 |
| Furnace Run | Wading (Riverine) | 0.2 | 41.2018 | -81.5724 | 41100020403 | Y | 76 | Ohio EPA | 2012 |
| Yellow Creek | Wading (Riverine) | 0.1 | 41.947 | -81.3425 | 41100020402 | Y | 84 | Ohio EPA | 2008 |
| Yellow Creek | Wading (Riverine) | 1 | 41.1622 | -81.58839999 | 41100020402 | Y | 74.5 | Ohio EPA | 2012 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|------------------------|-----------|-----------------------------|-------------|-------------------------------|--------------------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for Lacustrary= | | | | | | | QHEI >55 (LRW target= 0) | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | | * = no data | | Y= meets delisting criteria | | | | | |
| Yellow Creek | Wading (Riverine) | 1.2 | 41.1633 | -81.5932 | 41100020402 | Y | 80.5 | Ohio EPA | 2009 |
| Little Cuyahoga River | Wading (Riverine) | 5.2 | 41.0722 | -81.48609999 | 41100020304 | Y | 61.5 | Ohio EPA | 2010 |
| Little Cuyahoga River | Wading (Riverine) | 7.1 | 41.0603 | -81.4631 | 41100020304 | Y | 66.5 | Ohio EPA | 2010 |
| Ninemile Creek | Headwaters (Riverine) | 0.4 | 41.5574 | -81.5991 | 41100030504 | N | 53.5 | NEORS | 2013 |
| Ninemile Creek | Headwaters (Riverine) | 3.34 | 41.5457 | -81.5522 | 41100030504 | Y | 61.3 | NEORS | 2011 |
| Trib. to Ninemile Creek | Headwaters (Riverine) | 0.01 | 41.5429 | -81.5552 | 41100030504 | N | 55 | NEORS | 2011 |
| Doan Brook | Headwaters (Riverine) | 0.75 | 41.533 | -81.6296 | 41100030504 | Y | 62 | NEORS | 2014 |
| Doan Brook | Headwaters (Riverine) | 0.8 | 41.533 | -81.6296 | 41100030504 | N | 49 | NEORS | 2008 |
| Doan Brook | Headwaters (Riverine) | 1.4 | 41.5257 | -81.6264 | 41100030504 | Y | 67.5 | NEORS | 2010 |
| Doan Brook | Headwaters (Riverine) | 5.5 | 41.4909 | -81.5842 | 41100030504 | Y | 64 | Ohio EPA | 2011 |
| Doan Brook | Headwaters (Riverine) | 6.1 | 41.4839 | -81.5658 | 41100030504 | Y | 63 | Ohio EPA | 2011 |
| Doan Brook | Headwaters (Riverine) | 6.7 | 41.4839 | -81.5658 | 41100030504 | Y | 58.75 | NEORS | 2014 |
| South Branch Doan Brook | Headwaters (Riverine) | 1.4 | 41.4739 | -81.559 | 41100030504 | Y | 61.5 | NEORS | 2014 |
| Dugway Brook | Headwaters (Riverine) | 0.37 | 41.5497 | -81.6088 | 41100030504 | Y | 63.5 | NEORS | 2010 |
| Dugway Brook | Headwaters (Riverine) | 2.4 | 41.5122 | -81.5905 | 41100030504 | N | 55 | NEORS | 2010 |
| East Branch Euclid Creek | Headwaters (Riverine) | 0.01 | 41.5604 | -81.5307 | 41100030503 | Y | 74 | NEORS | 2009 |
| East Branch Euclid Creek | Headwaters (Riverine) | 0.1 | 41.5602 | -81.53019999 | 41100030503 | Y | 65.8 | Ohio EPA | 2011 |
| East Branch Euclid Creek | Headwaters (Riverine) | 0.2 | 41.5608 | -81.5288 | 41100030503 | Y | 63.8 | Ohio EPA | 2011 |
| Euclid Creek- East Branch | Headwaters (Riverine) | 0.25 | 41.561338 | -81.528178 | 41100030503 | Y | 58.5 | NEORS | 2013 |
| Euclid Creek-Unnamed Trib | Headwaters (Riverine) | 1.5 | 41.56442 | -81.519627 | 41100030503 | Y | 62.5 | NEORS | 2013 |
| Euclid Creek- East Branch | Headwaters (Riverine) | 2.8 | 41.571887 | -81.499076 | 41100030503 | Y | 67.75 | NEORS | 2013 |
| Trib. to Cuyahoga R. | Headwaters (Riverine) | 0.3 | 41.36 | -81.6116 | 41100020605 | Y | 75 | Ohio EPA | 2012 |
| West Creek | Headwaters (Riverine) | 0.1 | 41.4158 | -81.64749999 | 41100020604 | N | 59.5 | Ohio EPA | 2011 |
| West Creek | Headwaters (Riverine) | 0.2 | 41.4147 | -81.6478 | 41100020604 | N | 55 | NEORS | 2008 |
| West Creek | Headwaters (Riverine) | 1.8 | 41.4148 | -81.6652 | 41100020604 | Y | 65 | Ohio EPA | 2011 |
| West Creek | Headwaters (Riverine) | 2.1 | 41.4136 | -81.6705 | 41100020604 | N | 47 | NEORS | 2008 |
| West Creek | Headwaters (Riverine) | 2.5 | 41.4147 | -81.6478 | 41100020604 | N | 56.8 | Ohio EPA | 2010 |
| West Creek | Headwaters (Riverine) | 2.8 | 41.41484 | -81.66519 | 41100020604 | Y | 65.5 | Ohio EPA | 2010 |
| West Creek | Headwaters (Riverine) | 3.7 | 41.4111 | -81.6931 | 41100020604 | N | 50 | NEORS | 2008 |
| West Creek | Headwaters (Riverine) | 5.3 | 41.3899 | -81.6982 | 41100020604 | N | 59.5 | NEORS | 2010 |
| West Creek | Headwaters (Riverine) | 5.75 | 41.3836 | -81.6934 | 41100020604 | Y | 74.5 | NEORS | 2010 |
| West Creek | Headwaters (Riverine) | 7.9 | 41.3667 | -81.6892 | 41100020604 | N | 52.5 | NEORS | 2008 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|------------------------|---------|-----------------------------|-------------|-------------------------------|--------------------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for Lacustrary=- | | | | | | | QHEI >55 (LRW target= 0) | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | | * = no data | | Y= meets delisting criteria | | | | | |
| Chippewa Creek | Headwaters (Riverine) | 0.3 | 41.3164 | -81.5908 | 41100020503 | Y | 82.5 | Ohio EPA | 2010 |
| Chippewa Creek | Headwaters (Riverine) | 1.5 | 41.3211 | -81.6406 | 41100020503 | N | 56.5 | NEORS | 2014 |
| Chippewa Creek | Headwaters (Riverine) | 2.6 | 41.3244 | -81.6722 | 41100020503 | Y | 77.5 | NEORS | 2014 |
| Chippewa Creek | Headwaters (Riverine) | 3.2 | 41.3122 | -81.6917 | 41100020503 | N | 52.5 | NEORS | 2014 |
| Big Creek | Headwaters (Riverine) | 0.2 | 41.4458 | -81.68689999 | 41100020603 | Y | 64 | NEORS | 2008 |
| Big Creek | Headwaters (Riverine) | 4.4 | 41.446 | -81.754 | 41100020603 | Y | 63.5 | NEORS | 2011 |
| Ford Branch Big Creek | Headwaters (Riverine) | 4.7 | 41.423 | -81.8019 | 41100020603 | Y | 62 | NEORS | 2010 |
| Upper Big Creek | Headwaters (Riverine) | 7.8 | 41.4028 | -81.7572 | 41100020603 | Y | 61 | NEORS | 2014 |
| Mill Creek | Headwaters (Riverine) | 0.1 | 41.4183 | -81.6378 | 41100020601 | Y | 68.5 | NEORS | 2008 |
| Mill Creek | Headwaters (Riverine) | 0.12 | 41.4178 | -81.6383 | 41100020601 | Y | 64.8 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 0.7 | 41.4242 | -81.6376 | 41100020601 | Y | 72.5 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 2.75 | 41.445 | -81.6256 | 41100020601 | Y | 73.3 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 3.15 | 41.4422 | -81.6216 | 41100020601 | Y | 63 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 6.8 | 41.4233 | -81.5659 | 41100020601 | Y | 63.5 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 8.3 | 41.4305 | -81.5442 | 41100020601 | Y | 72 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 10.12 | 41.4456 | -81.5317 | 41100020601 | Y | 82.3 | NEORS | 2011 |
| Mill Creek | Headwaters (Riverine) | 10.7 | 41.4518 | -81.5256 | 41100020601 | N | 51 | NEORS | 2011 |
| Mill Creek | Headwaters (Riverine) | 11.52 | 41.4626 | -81.5214 | 41100020601 | N | 55.5 | NEORS | 2011 |
| Mill Creek | Headwaters (Riverine) | 11.85 | 41.4671 | -81.5203 | 41100020601 | N | 51.8 | NEORS | 2011 |
| Tinker's Creek | Headwaters (Riverine) | 24.4 | 41.2692 | -81.3931 | 41100020504 | Y | 63 | Ohio EPA | 2006 |
| Tinker's Creek | Headwaters (Riverine) | 25.1 | 41.2628 | -81.3944 | 41100020504 | N | 54.5 | Ohio EPA | 2009 |
| Tinker's Creek | Headwaters (Riverine) | 28.8 | 41.2158 | -81.3728 | 41100020504 | N | 47 | Ohio EPA | 2007 |
| Chippewa Creek | Headwaters (Riverine) | 1.5 | 41.3211 | -81.6406 | 41100020503 | N | 56.5 | NEORS | 2014 |
| Chippewa Creek | Headwaters (Riverine) | 1.8 | 41.3206 | -81.6481 | 41100020503 | Y | 71 | NEORS | 2014 |
| Chippewa Creek | Headwaters (Riverine) | 2.6 | 41.3244 | -81.6722 | 41100020503 | Y | 77.5 | NEORS | 2014 |
| Chippewa Creek | Headwaters (Riverine) | 3.2 | 41.3122 | -81.6917 | 41100020503 | N | 52.5 | NEORS | 2014 |
| Mud Brook | Headwaters (Riverine) | 0.5 | 41.2175 | -81.4711 | 41100020401 | N | 50.5 | Ohio EPA | 2014 |
| Mud Brook | Headwaters (Riverine) | 1.25 | 41.3206 | -81.6481 | 41100020401 | Y | 71 | Ohio EPA | 2014 |
| Mud Brook | Headwaters (Riverine) | 2.2 | 41.3244 | -81.6722 | 41100020401 | Y | 77.5 | Ohio EPA | 2014 |
| Mud Brook | Headwaters (Riverine) | 3.2 | 41.3122 | -81.6917 | 41100020401 | N | 52.5 | Ohio EPA | 2014 |
| Trib to Mud Brook | Headwaters (Riverine) | 5.48 | 41.1718 | -81.4781 | 41100020401 | N | 46 | Ohio EPA | 2014 |
| Tinker's Creek | Headwaters (Riverine) | 24.4 | 41.2692 | -81.3931 | 41100020502 | Y | 63 | Ohio EPA | 2006 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|------------------------|-----------|-----------------------------|-------------|-------------------------------|--------------------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for Lacustrary= | | | | | | | QHEI >55 (LRW target= 0) | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | | * = no data | | Y= meets delisting criteria | | | | | |
| Tinker's Creek | Headwaters (Riverine) | 25.1 | 41.2628 | -81.3944 | 41100020502 | N | 54.5 | Ohio EPA | 2009 |
| Tinker's Creek | Headwaters (Riverine) | 28.8 | 41.2158 | -81.3728 | 41100020502 | N | 47 | Ohio EPA | 2007 |
| Tinker's Creek | Headwaters (Riverine) | 30 | 41.2422 | -81.3819 | 41100020502 | N | 56.5 | Ohio EPA | 2014 |
| Trib. to Tinker's Creek | Headwaters (Riverine) | 0.6 | 41.2542 | -81.4188 | 41100020502 | N | 28.5 | Ohio EPA | 2013 |
| Pond Brook | Headwaters (Riverine) | 0.9 | 41.2983 | -81.4042 | 41100020501 | N | 28 | Ohio EPA | 2006 |
| Pond Brook | Headwaters (Riverine) | 1.4 | 41.3053 | -81.3997 | 41100020501 | N | 32.5 | Ohio EPA | 2012 |
| Pond Brook | Headwaters (Riverine) | 2.3 | 41.3173 | -81.4011 | 41100020501 | N | 38 | Ohio EPA | 2012 |
| Pond Brook | Headwaters (Riverine) | 2.6 | 41.3216 | -81.4013 | 41100020501 | N | 57 | Ohio EPA | 2013 |
| Pond Brook | Headwaters (Riverine) | 3.4 | 41.3314 | -81.4028 | 41100020501 | Y | 61 | Ohio EPA | 2013 |
| Pond Brook | Headwaters (Riverine) | 3.7 | 41.3356 | -81.4021 | 41100020501 | N | 25.8 | Ohio EPA | 2012 |
| Pond Brook | Headwaters (Riverine) | 4.3 | 41.3419 | -81.4078 | 41100020501 | N | 44.5 | Ohio EPA | 2006 |
| Trib. to Pond Brook | Headwaters (Riverine) | 0.2 | 41.3212 | -81.4036 | 41100020501 | N | 58 | Ohio EPA | 2011 |
| Sagamore Creek | Headwaters (Riverine) | 1.2 | 41.3125 | -81.5481 | 41100020505 | Y | 66.5 | NEORS | 2014 |
| Sagamore Creek | Headwaters (Riverine) | 2.4 | 41.3508 | -81.5547 | 41100020505 | Y | 62 | NEORS | 2014 |
| Sagamore Creek | Headwaters (Riverine) | 0.6 | 41.3529 | -81.5852 | 41100020505 | Y | 73.5 | Ohio EPA | 2008 |
| Furnace Run | Headwaters (Riverine) | 0.2 | 41.121 | -81.3411 | 41100020403 | Y | 65.5 | Ohio EPA | 2008 |
| Furnace Run | Headwaters (Riverine) | 0.4 | 41.2008 | -81.57599999 | 41100020403 | Y | 77.5 | Ohio EPA | 2009 |
| Furnace Run | Headwaters (Riverine) | 0.7 | 41.2014 | -81.5736 | 41100020403 | Y | 69.5 | Ohio EPA | 2010 |
| Furnace Run | Headwaters (Riverine) | 0.9 | 41.2039 | -81.5836 | 41100020403 | Y | 75 | Ohio EPA | 2009 |
| Furnace Run | Headwaters (Riverine) | 1.1 | 41.2039 | -81.58629999 | 41100020403 | Y | 74 | Ohio EPA | 2009 |
| Furnace Run | Headwaters (Riverine) | 4.8 | 41.223601 | -81.628132 | 41100020403 | Y | 71.5 | Ohio EPA | 2008 |
| Furnace Run | Headwaters (Riverine) | 6.5 | 41.2532 | -81.62949999 | 41100020403 | Y | 78.8 | Ohio EPA | 2012 |
| Furnace Run | Headwaters (Riverine) | 6.9 | 41.2575 | -81.633 | 41100020403 | Y | 66.5 | Ohio EPA | 2012 |
| Furnace Run | Headwaters (Riverine) | 7.2 | 41.2601 | -81.6374 | 41100020403 | Y | 79.5 | Ohio EPA | 2012 |
| Furnace Run | Headwaters (Riverine) | 7.3 | 41.255097 | -81.649418 | 41100020403 | Y | 80.5 | Ohio EPA | 2008 |
| Furnace Run | Headwaters (Riverine) | 7.5 | 41.26 | -81.6371 | 41100020403 | Y | 85 | Ohio EPA | 2009 |
| Furnace Run | Headwaters (Riverine) | 7.8 | 41.274968 | -81.654568 | 41100020403 | Y | 74.5 | Ohio EPA | 2008 |
| Furnace Run | Headwaters (Riverine) | 8 | 41.2682 | -81.6408 | 41100020403 | Y | 72 | Ohio EPA | 2006 |
| Yellow Creek | Headwaters (Riverine) | 1.4 | 41.154 | -81.6144 | 41100020402 | Y | 73.5 | Ohio EPA | 2014 |
| Yellow Creek | Headwaters (Riverine) | 1.65 | 41.1606 | -81.649 | 41100020402 | Y | 76 | Ohio EPA | 2014 |
| Yellow Creek | Headwaters (Riverine) | 3.5 | 41.1358 | -81.6765 | 41100020402 | N | 39.5 | Ohio EPA | 2014 |
| Yellow Creek | Headwaters (Riverine) | 4.6 | 41.1576 | -81.6369 | 41100020402 | Y | 60 | Ohio EPA | 2010 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|------------------------|-----------|-----------------------------|-------------|-------------------------------|--------------------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for Lacustrary= | | | | | | | QHEI >55 (LRW target= 0) | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | | * = no data | | Y= meets delisting criteria | | | | | |
| Upstream Spring Creek | Headwaters (Riverine) | 1.5 | 41.255908 | -81.577686 | 41100020402 | Y | 68 | Ohio EPA | 2014 |
| Bath Creek | Headwaters (Riverine) | 2.1 | 41.1829 | -81.65989999 | 41100020402 | N | 54.5 | Ohio EPA | 2010 |
| Bath Creek | Headwaters (Riverine) | 2.3 | 41.1851 | -81.6611 | 41100020402 | N | 43.5 | Ohio EPA | 2010 |
| L. Cuy R - Chessie Trib | Headwaters (Riverine) | 4.11 | 41.0861 | -81.4869 | 41100020304 | Y | 61 | Ohio EPA | 2014 |
| Trib to L. Cuyahoga | Headwaters (Riverine) | 11.59 | 41.0779 | -81.4214 | 41100020303 | N | 58 | Ohio EPA | 2014 |
| Springfield Lake Outlet | Headwaters (Riverine) | 0.3 | 41.0553 | -81.4567 | 41100020303 | N | 52 | Ohio EPA | 2014 |
| Wingfoot Lake Outlet | Headwaters (Riverine) | 0.1 | 41.0542 | -81.39919999 | 41100020303 | N | 49 | Ohio EPA | 2006 |
| Wingfoot Lake Outlet | Headwaters (Riverine) | 1.5 | 41.0414 | -81.3822 | 41100020303 | N | 45.5 | Ohio EPA | 2006 |
| Wingfoot Lake Outlet | Headwaters (Riverine) | 2.8 | 41.0274 | -81.372 | 41100020303 | N | 48.5 | Ohio EPA | 2006 |
| Hawthorn Creek | Headwaters (Riverine) | 0.8 | 41.3833 | -81.4892 | 41100020504 | Y | 70.5 | Ohio EPA | 2006 |
| Rock Creek | Headwaters (Riverine) | 0.3 | 41.2695 | -81.6382 | 41100020403 | Y | 77 | Ohio EPA | 2006 |
| Trib. to Salt Run | Headwaters (Riverine) | 0.4 | 41.2184 | -81.5228 | 41100020405 | Y | 63.5 | Ohio EPA | 2010 |
| Wood Creek | Headwaters (Riverine) | 0.2 | 41.3778 | -81.5744 | 41100020504 | Y | 68 | Ohio EPA | 2006 |
| Wood Creek | Headwaters (Riverine) | 1.3 | 41.3867 | -81.5667 | 41100020504 | Y | 62 | Ohio EPA | 2006 |
| Beaver Meadow Run | Headwaters (Riverine) | 0.1 | 41.3614 | -81.4703 | 41100020504 | Y | 77 | Ohio EPA | 2006 |
| Beaver Meadow Run | Headwaters (Riverine) | 1.2 | 41.3706 | -81.4592 | 41100020504 | Y | 77 | Ohio EPA | 2006 |
| Boston Run | Headwaters (Riverine) | 0.3 | 41.2447 | -81.5458 | 41100020405 | Y | 75.5 | Ohio EPA | 2011 |
| Brandywine Creek | Headwaters (Riverine) | 2.5 | 41.2491 | -81.4521 | 41100020404 | Y | 72 | NEORS | 2014 |
| Brandywine Creek | Headwaters (Riverine) | 3.4 | 41.2831 | -81.5048 | 41100020404 | N | 46 | NEORS | 2014 |
| Brandywine Creek | Headwaters (Riverine) | 5.5 | 41.2942 | -81.5187 | 41100020404 | N | 53.5 | NEORS | 2014 |
| Brandywine Creek | Headwaters (Riverine) | 6.2 | 41.3584 | -81.4739 | 41100020404 | N | 57.5 | NEORS | 2014 |
| Brandywine Creek | Headwaters (Riverine) | 6.4 | 41.2559 | -81.473 | 41100020404 | Y | 62 | NEORS | 2014 |
| Cuyahoga River | Boat (Riverine) | 0.2 | 41.5033 | -81.7111 | 41100020605 | N | 36.3 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 2.75 | 41.4881 | -81.69329999 | 41100020605 | N | 32.3 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 7 | 41.4485 | -81.6838 | 41100020605 | Y | 69.8 | NEORS | 2011 |
| Cuyahoga River | Boat (Riverine) | 7.01 | 41.4492 | -81.6833 | 41100020605 | Y | 71 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 7.1 | 41.4475 | -81.6847 | 41100020605 | Y | 73.5 | NEORS | 2010 |
| Cuyahoga River | Boat (Riverine) | 7.55 | 41.4443 | -81.67919999 | 41100020604 | N | 51 | NEORS | 2007 |
| Cuyahoga River | Boat (Riverine) | 8.2 | 41.439 | -81.6713 | 41100020604 | N | 58.3 | NEORS | 2009 |
| Cuyahoga River | Boat (Riverine) | 8.6 | 41.4381 | -81.668 | 41100020604 | Y | 74.8 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 8.8 | 41.4356 | -81.6636 | 41100020604 | Y | 83 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 10.1 | 41.4219 | -81.66249999 | 41100020604 | Y | 72.3 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 10.75 | 41.4189 | -81.6511 | 41100020604 | Y | 72.5 | NEORS | 2012 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------|------------------------|---------|-----------------------------|-------------|-------------------------------|--------------------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for Lacustrary= | | | | | | | QHEI >55 (LRW target= 0) | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | | * = no data | | Y= meets delisting criteria | | | | | |
| Cuyahoga River | Boat (Riverine) | 11 | 41.4177 | -81.647 | 41100020604 | Y | 83.5 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 11.3 | 41.4178 | -81.6417 | 41100020604 | Y | 72 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 11.95 | 41.4097 | -81.6344 | 41100020602 | Y | 63.5 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 12.7 | 41.3842 | -81.625 | 41100020602 | Y | 90.5 | NEORS | 2014 |
| Cuyahoga River | Boat (Riverine) | 14.1 | 41.3953 | -81.63 | 41100020602 | Y | 66.5 | NEORS | 2014 |
| Cuyahoga River | Boat (Riverine) | 15.6 | 41.3789 | -81.6147 | 41100020602 | Y | 81.8 | Ohio EPA | 2010 |
| Cuyahoga River | Boat (Riverine) | 16.2 | 41.3653 | -81.61279999 | 41100020602 | Y | 73.8 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 17.3 | 41.3567 | -81.5978 | 41100020505 | Y | 83 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 20.6 | 41.3216 | -81.5873 | 41100020505 | Y | 85 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 20.8 | 41.3194 | -81.5875 | 41100020505 | N | 56 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 22.4 | 41.3029 | -81.57299999 | 41100020505 | Y | 75.5 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 24.1 | 41.2886 | -81.56529999 | 41100020505 | Y | 83.5 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 26.5 | 41.2631 | -81.56 | 41100020405 | Y | 80.5 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 33.2 | 41.2008 | -81.5686 | 41100020405 | Y | 83 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 39.7 | 41.1386 | -81.5528 | 41100020405 | Y | 81 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 42.6 | 41.1172 | -81.5253 | 41100020405 | Y | 85.5 | Ohio EPA | 2008 |
| Little Cuyahoga River | Boat (Riverine) | 6.2 | 41.0631 | -81.4802 | 41100020304 | N | 42 | Ohio EPA | 2010 |
| Little Cuyahoga River | Boat (Riverine) | 6.5 | 41.0644 | -81.4422 | 41100020304 | N | 57.5 | Ohio EPA | 2014 |
| Little Cuyahoga River | Boat (Riverine) | 6.8 | 41.0944 | -81.5217 | 41100020304 | Y | 62.5 | Ohio EPA | 2014 |

BUI 10a: Beach Closings (Recreational Contact)

| Delisting Progress Matrix | | | | | | | | | |
|--|----------|-----------|---|--|---------------------------------|--------------------------------------|---|-------------|--------------|
| BUI:10 Beach Closings (Recreational Contact) | | | | | | | | | |
| Beach Name | Latitude | Longitude | # of Days Sampled (recreational season) | Days greater than the SSM of 235cfu/100 ml | Meets Delisting Criteria (year) | % Days over the SSM of 235 cfu/100ml | CSO Long Term Management (Delisting Override) | Data Source | Year Sampled |
| when all beaches have at least 3 of thier last 5 year samples reach a target | | | | | | Equal to or less than 10% | | | |
| ry days in the recreational season or have a long-term CSO Management P | | | | | | | | | |
| *not in attain *no data | | | *meets delisting criteria | | | | | | |
| | | | | | | % Days over 235cfu/100 ml | | | |
| Edgewater (west location) | 41.4887 | -81.7404 | 153 | 38 | N | 25% | N | NEORS | 2009 |
| Edgewater (west location) | 41.4887 | -81.7404 | 150 | 22 | N | 15% | | NEORS | 2010 |
| Edgewater (west location) | 41.4887 | -81.7404 | 151 | 39 | N | 27% | | NEORS | 2011 |
| Edgewater (west location) | 41.4887 | -81.7404 | 164 | 14 | y | 9% | | NEORS | 2012 |
| Edgewater (west location) | 41.4887 | -81.7404 | 152 | 0 | * | 0% | | NEORS | 2013 |

| Delisting Progress Matrix | | | | | | | | | |
|--|----------|-----------|---|--|---------------------------------|--------------------------------------|---|-------------|--------------|
| BUI:10 Beach Closings (Recreational Contact) | | | | | | | | | |
| Beach Name | Latitude | Longitude | # of Days Sampled (recreational season) | Days greater than the SSM of 235cfu/100 ml | Meets Delisting Criteria (year) | % Days over the SSM of 235 cfu/100ml | CSO Long Term Management (Delisting Override) | Data Source | Year Sampled |
| when all beaches have at least 3 of thier last 5 year samples reach a target | | | | | | Equal to or less than 10% | | | |
| ry days in the recreational season or have a long-term CSO Management P | | | | | | | | | |
| *not in attain *no data | | | *meets delisting criteria | | | | | | |
| | | | | | | % Days over 235cfu/100 ml | | | |
| Edgewater (east location) | 41.4893 | -81.7392 | 153 | 45 | N | 29% | N | NEORS | 2009 |
| Edgewater (east location) | 41.4893 | -81.7392 | 150 | 20 | N | 13% | | NEORS | 2010 |
| Edgewater (east location) | 41.4893 | -81.7392 | 151 | 39 | N | 27% | | NEORS | 2011 |
| Edgewater (east location) | 41.4893 | -81.7392 | 164 | 17 | y | 10% | | NEORS | 2012 |
| Edgewater (east location) | 41.4893 | -81.7392 | 152 | 21 | N | 14% | | NEORS | 2013 |

| Delisting Progress Matrix | | | | | | | | | |
|---|----------|-----------|---|--|---------------------------------|--------------------------------------|--|-------------|--------------|
| BUI:10 Beach Closings (Recreational Contact) | | | | | | | | | |
| Beach Name | Latitude | Longitude | # of Days Sampled (recreational season) | Days greater than the SSM of 235cfu/100 ml | Meets Delisting Criteria (year) | % Days over the SSM of 235 cfu/100ml | CSO Long Term Management (Delisting Override) | Data Source | Year Sampled |
| When all beaches have at least 3 of their last 5 year samples reach a target of 10% or less days in the recreational season or have a long-term CSO Management Plan | | | | | | Equal to or less than 10% | | | |
| *not in attain *no data *meets delisting criteria | | | | | | % Days over 235cfu/100 ml | | | |
| Euclid Beach (east location) | 41.5843 | -81.5686 | 153 | 56 | N | 37% | N (This location will have the CSO Long Term Management Override once the Euclid Creek Relief Sewer Tunnel is completed) | NEORS | 2009 |
| Euclid Beach (east location) | 41.5843 | -81.5686 | 150 | 54 | N | 37% | | NEORS | 2010 |
| Euclid Beach (east location) | 41.5843 | -81.5686 | 151 | 64 | N | 43% | | NEORS | 2011 |
| Euclid Beach (east location) | 41.5843 | -81.5686 | 164 | 58 | N | 35% | | NEORS | 2012 |
| Euclid Beach (east location) | 41.5843 | -81.5686 | 152 | 62 | N | 41% | | NEORS | 2013 |

| Delisting Progress Matrix | | | | | | | | | |
|---|----------|-----------|---|--|---------------------------------|--------------------------------------|--|-------------|--------------|
| BUI:10 Beach Closings (Recreational Contact) | | | | | | | | | |
| Beach Name | Latitude | Longitude | # of Days Sampled (recreational season) | Days greater than the SSM of 235cfu/100 ml | Meets Delisting Criteria (year) | % Days over the SSM of 235 cfu/100ml | CSO Long Term Management (Delisting Override) | Data Source | Year Sampled |
| When all beaches have at least 3 of their last 5 year samples reach a target of 10% or less days in the recreational season or have a long-term CSO Management Plan | | | | | | Equal to or less than 10% | | | |
| *not in attain *no data *meets delisting criteria | | | | | | % Days over 235cfu/100 ml | | | |
| Euclid Beach (west location) | 41.5838 | -81.5694 | 153 | 58 | N | 38% | N (This location will have the CSO Long Term Management Override once the Euclid Creek Relief Sewer Tunnel is completed) | NEORS | 2009 |
| Euclid Beach (west location) | 41.5838 | -81.5694 | 150 | 41 | N | 28% | | NEORS | 2010 |
| Euclid Beach (west location) | 41.5838 | -81.5694 | 151 | 66 | N | 44% | | NEORS | 2011 |
| Euclid Beach (west location) | 41.5838 | -81.5694 | 164 | 64 | N | 43% | | NEORS | 2012 |
| Euclid Beach (west location) | 41.5838 | -81.5694 | 152 | 0 | * | * | | NEORS | 2013 |

| Delisting Progress Matrix | | | | | | | | | |
|---|----------|-----------|---|--|---------------------------------|--------------------------------------|--|-------------|--------------|
| BUI:10 Beach Closings (Recreational Contact) | | | | | | | | | |
| Beach Name | Latitude | Longitude | # of Days Sampled (recreational season) | Days greater than the SSM of 235cfu/100 ml | Meets Delisting Criteria (year) | % Days over the SSM of 235 cfu/100ml | CSO Long Term Management (Delisting Override) | Data Source | Year Sampled |
| when all beaches have at least 3 of thier last 5 year samples reach a target of 0 days in the recreational season or have a long-term CSO Management Plan | | | | | | Equal to or less than 10% | | | |
| *not in attain *no data *meets delisting criteria | | | | | | | | | |
| | | | | | | % Days over 235cfu/100 ml | | | |
| Villa Angela Beach (west location) | 41.5861 | -81.5667 | 153 | 50 | N | 33% | N (This location will have the CSO Long Term Management Override once the Euclid Creek Relief Sewer Tunnel is completed) | NEORS | 2009 |
| Villa Angela Beach (west location) | 41.5861 | -81.5667 | 150 | 41 | N | 28% | | NEORS | 2010 |
| Villa Angela Beach (west location) | 41.5861 | -81.5667 | 151 | 59 | N | 39% | | NEORS | 2011 |
| Villa Angela Beach (west location) | 41.5861 | -81.5667 | 164 | 52 | N | 35% | | NEORS | 2012 |
| Villa Angela Beach (west location) | 41.5861 | -81.5667 | 152 | 0 | * | * | | NEORS | 2013 |

| Delisting Progress Matrix | | | | | | | | | |
|---|----------|-----------|---|--|---------------------------------|--------------------------------------|--|-------------|--------------|
| BUI:10 Beach Closings (Recreational Contact) | | | | | | | | | |
| Beach Name | Latitude | Longitude | # of Days Sampled (recreational season) | Days greater than the SSM of 235cfu/100 ml | Meets Delisting Criteria (year) | % Days over the SSM of 235 cfu/100ml | CSO Long Term Management (Delisting Override) | Data Source | Year Sampled |
| when all beaches have at least 3 of thier last 5 year samples reach a target of 0 days in the recreational season or have a long-term CSO Management Plan | | | | | | Equal to or less than 10% | | | |
| *not in attain *no data *meets delisting criteria | | | | | | | | | |
| | | | | | | % Days over 235cfu/100 ml | | | |
| Villa Angela Beach (east location) | 41.5851 | -81.5677 | 153 | 66 | N | 43% | N (This location will have the CSO Long Term Management Override once the Euclid Creek Relief Sewer Tunnel is completed) | NEORS | 2009 |
| Villa Angela Beach (east location) | 41.5851 | -81.5677 | 150 | 54 | N | 36% | | NEORS | 2010 |
| Villa Angela Beach (east location) | 41.5851 | -81.5677 | 151 | 70 | N | 47% | | NEORS | 2011 |
| Villa Angela Beach (east location) | 41.5851 | -81.5677 | 164 | 65 | N | 40% | | NEORS | 2012 |
| Villa Angela (east location) | 41.5851 | -81.5677 | 152 | 63 | N | 42% | | NEORS | 2013 |

| Delisting Progress Matrix | | | | | | | | | |
|--|-----------|------------|---|--|---------------------------------|--------------------------------------|---|-------------|--------------|
| BUI:10 Beach Closings (Recreational Contact) | | | | | | | | | |
| Beach Name | Latitude | Longitude | # of Days Sampled (recreational season) | Days greater than the SSM of 235cfu/100 ml | Meets Delisting Criteria (year) | % Days over the SSM of 235 cfu/100ml | CSO Long Term Management (Delisting Override) | Data Source | Year Sampled |
| when all beaches have at least 3 of thier last 5 year samples reach a target | | | | | | Equal to or less than 10% | | | |
| ry days in the recreational season or have a long-term CSO Management P | | | | | | | | | |
| *not in attain *no data | | | *meets delisting criteria | | | % Days over 235 | | | |
| Shoreby Beach, Bratenahl | 41.557022 | -81.606533 | 99 | 41 | N | 41% | NA | CCBH | 2009 |
| Shoreby Beach, Bratenahl | 41.557022 | -81.606533 | 99 | 7 | Y | 7% | | CCBH | 2010 |
| Shoreby Beach, Bratenahl | 41.557022 | -81.606533 | 99 | 26 | N | 26% | | CCBH | 2011 |
| Shoreby Beach, Bratenahl | 41.557022 | -81.606533 | 99 | 20 | N | 20% | | CCBH | 2012 |
| Shoreby Beach, Bratenahl | 41.557022 | -81.606533 | 99 | 20 | N | 20% | | CCBH | 2013 |

SECTION II

Sampling Site Tables by HUC12 and Sample type

City of Cleveland- Cuyahoga River

041100020605

| Delisting Progress Matrix | | | | | | | | | | | | |
|---|-------------|------------------------|---------|-------------------------------------|-------------|------------------------------|------------------|-------------------------------|-------------------|---|-------------|--------------|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | <i>Site must have greater than 20 Sq. Miles in Drainage to calculate MIwb scores.</i> | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | |
| Needed for Delisting Headwaters: | | | | | | | IBI > 36 | | NA | | | |
| Needed for Delisting Wading: | | | | | | | | | MIwb > 7.5 | | | |
| Needed for Delisting Boat: | | | | | | | | | MIwb > 8.2 | | | |
| N = not in attainment | | * = no data | | Y = meets delisting criteria | | | | | | | | |
| | | | | | | IBI | | MIwb | | | | |
| Cuyahoga River | LRW | 0.2 | 41.5033 | -81.7111 | 41100020605 | Y | 32 | Y | 7.374 | 809 | NEORS | 2012 |
| Cuyahoga River | LRW | 2.75 | 41.4881 | -81.6933 | 41100020605 | Y | 26 | Y | 8.016 | 805 | NEORS | 2012 |
| Cuyahoga River | LRW | 5 | 41.4706 | -81.6692 | 41100020605 | N | 11 | N | 3.99 | 788 | OhioEPA | 2008 |
| Cuyahoga River | LRW | 5.1 | 41.4688 | -81.6698 | 41100020605 | N | 12 | N | 3.991 | 788 | Ohio EPA | 2008 |
| Cuyahoga River | LRW | 5.9 | 41.4633 | -81.6806 | 41100020605 | Y | 38 | Y | 8.507 | 788 | NEORS | 2012 |
| Cuyahoga River | Lacustrary | 7 | 41.4485 | -81.6838 | 41100020605 | N | 30 | N | 7.411 | 786 | NEORS | 2011 |
| Cuyahoga River | Lacustrary | 7.01 | 41.4492 | -81.6833 | 41100020605 | N | 26 | N | 8.046 | 786 | NEORS | 2012 |
| Cuyahoga River | Lacustrary | 7.1 | 41.4475 | -81.6847 | 41100020605 | N | 30 | N | 7.898 | 786 | NEORS | 2009 |

| Delisting Progress Matrix | | | | | | | | | |
|--|-------------------------|--------------------|---------|------------------------------------|-------------|------------------------------|------------------|-----------------------|--------------|
| BUI:6 Degradation of Benthos | | | | | | | | | |
| River Segment or Monitoring Location | Sample area Designation | RM | Lat | Long | HUC12 | Meets ICI Delisting Criteria | Latest Score ICI | Data Source | Year Sampled |
| Lacustrary Sites | | | | | | | | | |
| Needed for Delisting Lacustrary: | | | | | | | ICI >34 | LRW ICI >12 | |
| Headwaters, Wading, Boat Sites (Riverine) | | | | | | | | | |
| Needed for Delisting Headwaters, Wading and Boat: | | | | | | | ICI >30 | | |
| N = not in attainment | | * = no data | | Y= Meets Delisting Criteria | | | | | |
| Cuyahoga River | LRW | 0.2 | 41.5033 | -81.7111 | 41100020605 | Y | 40 | Ohio EPA | 2008 |
| Cuyahoga River | LRW | 5.9 | 41.4633 | -81.6806 | 41100020605 | N | 18 | NEORS | 2012 |
| Cuyahoga River | Lacustrary | 7.01 | 41.4492 | -81.6833 | 41100020605 | N | 30 | NEORS | 2012 |
| Cuyahoga River | Lacustrary | 7.1 | 41.4475 | -81.6847 | 41100020605 | N | 30 | NEORS | 2012 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-------------|-----------------------------|---------|----------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustuary = | | | | | | QHEI >55 (LRW target= 0) | | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | QHEI >60 | | | |
| LRW - For LRW waters, a QHEI evaluation is not applicable, but scores are shown for information purposes. | | | | | | | | | |
| N = not in attainment | * = no data | Y= meets delisting criteria | | | QHEI | | | | |
| Cuyahoga River | LRW | 0.2 | 41.5033 | -81.7111 | 41100020605 | Y | 36.3 | NEORS | 2012 |
| Cuyahoga River | LRW | 2.75 | 41.4881 | -81.6933 | 41100020605 | Y | 32.3 | NEORS | 2012 |
| Cuyahoga River | LRW | 5.1 | 41.4688 | -81.6698 | 41100020605 | Y | 30.5 | Ohio EPA | 2008 |
| Cuyahoga River | LRW | 5.9 | 41.4633 | -81.6806 | 41100020605 | Y | 34.8 | NEORS | 2012 |

Town of Cuyahoga Heights –Cuyahoga River (West Creek)

041100020604

| Delisting Progress Matrix | | | | | | | | | | | | | | |
|---|-------------|------------------------------|---------|----------|-------------|------------------------------|------------------|-------------------------------|--|-------------------------|-------------|--------------|------|--|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled | | |
| Delisting Progress Matrix | | | | | | | | | | | | | | |
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | | | |
| Lacustuary, LRW Sites | | | | | | | | | | | | | | |
| Needed for Delisting Lacustuary: | | | | | | WWH | | WWH | Site must have greater than 20 Sq. Miles in Drainage to calculate MIwb scores. | | | | | |
| Headwaters, Wading, Boat Sites | | | | | | IBI > 42 | | MIwb > 8.6 | | | | | | |
| Needed for Delisting Headwaters: | | | | | | IBI > 36 | | NA | | | | | | |
| Needed for Delisting Wading: | | | | | | IBI > 34 | | MIwb > 7.5 | | | | | | |
| Needed for Delisting Boat: | | | | | | IBI > 36 | | MIwb > 8.2 | | | | | | |
| N = not in attainment | * = no data | Y = meets delisting criteria | | | IBI | | | | | | | | MIwb | |
| Cuyahoga River | Boat | 7.55 | 41.4443 | -81.6792 | 41100020604 | N | 26 | N | 7.614 | 749 | NEORS | 2007 | | |
| Cuyahoga River | Boat | 8 | 41.4394 | -81.6753 | 41100020604 | N | 32 | Y | 8.634 | 746 | Ohio EPA | 2009 | | |
| Cuyahoga River | Boat | 8.6 | 41.4381 | -81.668 | 41100020604 | N | 34 | Y | 9.661 | 745 | NEORS | 2012 | | |
| Cuyahoga River | Boat | 8.8 | 41.4356 | -81.6636 | 41100020604 | Y | 40 | Y | 9.07 | 745 | Ohio EPA | 2008 | | |
| Cuyahoga River | Boat | 10.1 | 41.4219 | -81.6625 | 41100020604 | N | 34 | Y | 10.006 | 744 | NEORS | 2012 | | |
| Cuyahoga River | Boat | 10.5 | 41.4194 | -81.6561 | 41100020604 | Y | 36 | Y | 8.472 | 731 | NEORS | 2004 | | |
| Cuyahoga River | Boat | 10.75 | 41.4189 | -81.6511 | 41100020604 | Y | 36 | Y | 9.207 | 743 | NEORS | 2012 | | |
| Cuyahoga River | Boat | 11 | 41.4177 | -81.647 | 41100020604 | Y | 44 | Y | 8.498 | 743 | Ohio EPA | 2008 | | |
| Cuyahoga River | Boat | 11.3 | 41.4178 | -81.6417 | 41100020604 | N | 32 | Y | 9.298 | 730 | NEORS | 2012 | | |

| Delisting Progress Matrix | | | | | | | | | | | | | |
|---|-------------|-----------------------|---------|------------------------------|-------------|------------------------------|------------------|-------------------------------|-------------------|---|-------------|--------------|--|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled | |
| Delisting Progress Matrix | | | | | | | | | | | | | |
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled | |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | <i>Site must have greater than 20 Sq. Miles in Drainage to calculate MIwb scores.</i> | | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | | |
| Needed for Delisting Headwaters: | | | | | | | IBI > 36 | | NA | | | | |
| Needed for Delisting Wading: | | | | | | | IBI > 34 | | MIwb > 7.5 | | | | |
| Needed for Delisting Boat: | | | | | | | IBI > 36 | | MIwb > 8.2 | | | | |
| N = not in attainment | | * = no data | | Y = meets delisting criteria | | | | | | | | | |
| | | | | | | IBI | | | MIwb | | | | |
| Cuyahoga River | Boat | 7.55 | 41.4443 | -81.6792 | 41100020604 | N | 26 | N | 7.614 | 749 | NEORS | 2007 | |
| Cuyahoga River | Boat | 8 | 41.4394 | -81.6753 | 41100020604 | N | 32 | Y | 8.634 | 746 | Ohio EPA | 2009 | |
| Cuyahoga River | Boat | 8.6 | 41.4381 | -81.668 | 41100020604 | N | 34 | Y | 9.661 | 745 | NEORS | 2012 | |
| Cuyahoga River | Boat | 8.8 | 41.4356 | -81.6636 | 41100020604 | Y | 40 | Y | 9.07 | 745 | Ohio EPA | 2008 | |
| Cuyahoga River | Boat | 10.1 | 41.4219 | -81.6625 | 41100020604 | N | 34 | Y | 10.006 | 744 | NEORS | 2012 | |
| Cuyahoga River | Boat | 10.5 | 41.4194 | -81.6561 | 41100020604 | Y | 36 | Y | 8.472 | 731 | NEORS | 2004 | |
| Cuyahoga River | Boat | 10.75 | 41.4189 | -81.6511 | 41100020604 | Y | 36 | Y | 9.207 | 743 | NEORS | 2012 | |
| Cuyahoga River | Boat | 11 | 41.4177 | -81.647 | 41100020604 | Y | 44 | Y | 8.498 | 743 | Ohio EPA | 2008 | |
| Cuyahoga River | Boat | 11.3 | 41.4178 | -81.6417 | 41100020604 | N | 32 | Y | 9.298 | 730 | NEORS | 2012 | |

| BUI:6 Degradation of Benthos | | | | | | | | | |
|--|-------------------------|--------------------------|---------|----------|-------------|------------------------------|----------------------------|-------------|--------------|
| River Segment or Monitoring Location | Sample area Designation | RM | Lat | Long | HUC12 | Meets ICI Delisting Criteria | Latest Score ICI Data From | Data Source | Year Sampled |
| Lacustuary Sites | | | | | | | | | |
| Needed for Delisting Lacustuary: | | | | | | ICI >34 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | |
| Needed for Delisting Headwaters, Wading and Boat: (EWH= ICI >42) | | | | | | ICI >30 | | | |
| not in attain | * = no data | Y= Meets Delisting Crite | | | | | | | |
| ICI | | | | | | | | | |
| Cuyahoga River | Boat (Riverine) | 8 | 41.4394 | -81.6753 | 41100020604 | Y | 34 | NEORS | 2010 |
| Cuyahoga River | Boat (Riverine) | 8.3 | 41.4394 | -81.6708 | 41100020604 | Y | 34 | NEORS | 2009 |
| Cuyahoga River | Boat (Riverine) | 8.6 | 41.4381 | -81.668 | 41100020604 | Y | 34 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 9.7 | 41.4269 | -81.6658 | 41100020604 | Y | 36 | NEORS | 2009 |
| Cuyahoga River | Boat (Riverine) | 10.1 | 41.4219 | -81.6625 | 41100020604 | Y | 36 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 10.3 | 41.4211 | -81.6592 | 41100020604 | Y | 38 | NEORS | 2008 |
| Cuyahoga River | Boat (Riverine) | 10.75 | 41.4189 | -81.6511 | 41100020604 | Y | 38 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 11 | 41.4177 | -81.647 | 41100020604 | Y | 38 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 11.3 | 41.4178 | -81.6417 | 41100020604 | Y | 38 | Ohio EPA | 2008 |
| West Creek | Headwaters (Riverine) | 5.75 | 41.3836 | -81.6934 | 41100020604 | Y | 36 | NEORS | 2010 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|-----------------------------|----------|-----------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustrary = | | | | | | | QHEI >55 | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | * = no data | Y= meets delisting criteria | | | QHEI | | | | |
| Cuyahoga River | Boat (Riverine) | 7.55 | 41.4443 | -81.6792 | 41100020604 | N | 51 | NEORS | 2007 |
| Cuyahoga River | Boat (Riverine) | 8.2 | 41.439 | -81.6713 | 41100020604 | N | 58.3 | NEORS | 2009 |
| Cuyahoga River | Boat (Riverine) | 8.6 | 41.4381 | -81.668 | 41100020604 | Y | 74.8 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 8.8 | 41.4356 | -81.6636 | 41100020604 | Y | 83 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 10.1 | 41.4219 | -81.6625 | 41100020604 | Y | 72.3 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 10.75 | 41.4189 | -81.6511 | 41100020604 | Y | 72.5 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 11 | 41.4177 | -81.647 | 41100020604 | Y | 83.5 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 11.3 | 41.4178 | -81.6417 | 41100020604 | Y | 72 | NEORS | 2012 |
| West Creek | Headwaters (Riverine) | 0.1 | 41.4158 | -81.6475 | 41100020604 | N | 59.5 | Ohio EPA | 2011 |
| West Creek | Headwaters (Riverine) | 0.2 | 41.4147 | -81.6478 | 41100020604 | N | 55 | NEORS | 2008 |
| West Creek | Headwaters (Riverine) | 1.8 | 41.4148 | -81.6652 | 41100020604 | Y | 65 | Ohio EPA | 2011 |
| West Creek | Headwaters (Riverine) | 2.1 | 41.4136 | -81.6705 | 41100020604 | N | 47 | NEORS | 2008 |
| West Creek | Headwaters (Riverine) | 2.5 | 41.4147 | -81.6478 | 41100020604 | N | 56.8 | Ohio EPA | 2010 |
| West Creek | Headwaters (Riverine) | 2.8 | 41.41484 | -81.66519 | 41100020604 | Y | 65.5 | Ohio EPA | 2010 |
| West Creek | Headwaters (Riverine) | 3.7 | 41.4111 | -81.6931 | 41100020604 | N | 50 | NEORS | 2008 |
| West Creek | Headwaters (Riverine) | 5.3 | 41.3899 | -81.6982 | 41100020604 | N | 59.5 | NEORS | 2010 |
| West Creek | Headwaters (Riverine) | 5.75 | 41.3836 | -81.6934 | 41100020604 | Y | 74.5 | NEORS | 2010 |
| West Creek | Headwaters (Riverine) | 7.9 | 41.3667 | -81.6892 | 41100020604 | N | 52.5 | NEORS | 2008 |

Village of Independence – Cuyahoga River

041100020602

| Delisting Progress Matrix | | | | | | | | | | | | |
|---|-------------|------------------------|------------------------------|----------|-------------|------------------------------|------------------|-------------------------------|-------------------|---|-------------|--------------|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | Site must have <u>greater than</u> 20 Sq. Miles in Drainage to calculate MIwb scores. | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | NA | | | |
| Needed for Delisting Headwaters: (EWH IBI >46) | | | | | | | IBI > 36 | | | | | |
| Needed for Delisting Wading: (EWH IBI >46, MIwb >8.9) | | | | | | | IBI > 34 | | MIwb > 7.5 | | | |
| Needed for Delisting Boat: (EWH IBI >44, MIwb >9.1) | | | | | | | IBI > 36 | | MIwb > 8.2 | | | |
| Not in attainment | | * = no data | Y = meets delisting criteria | | | | | | | | | |
| | | | | | | IBI | | | MIwb | | | |
| Cuyahoga River | Boat | 11.95 | 41.4097 | -81.6344 | 41100020602 | Y | 36 | Y | 9.617 | 709 | NEORS | 2012 |
| Cuyahoga River | Boat | 15.6 | 41.3789 | -81.6147 | 41100020602 | Y | 48 | Y | 9.718 | 698 | Ohio EPA | 2008 |
| Cuyahoga River | Boat | 16.2 | 41.3653 | -81.6128 | 41100020602 | Y | 46 | Y | 9.494 | 698 | NEORS | 2011 |

| Delisting Progress Matrix | | | | | | | | | | |
|---|-------------------------|-------------|-----------------------------|--------------|-------------|------------------------------|------------------|-------------|--------------|--|
| BUI:6 Degradation of Benthos | | | | | | | | | | |
| River Segment or Monitoring Location | Sample area Designation | RM | Lat | Long | HUC12 | Meets ICI Delisting Criteria | Latest Score ICI | Data Source | Year Sampled | |
| Lacustrary Sites | | | | | | | | | | |
| Needed for Delisting Lacustrary: | | | | | | | ICI >34 | | LRW ICI >12 | |
| Headwaters, Wading, Boat Sites (Riverine) | | | | | | | | | | |
| Needed for Delisting Headwaters, Wading and Boat: | | | | | | | ICI >30 | | | |
| N = not in attainment | | * = no data | Y= Meets Delisting Criteria | | | | | | | |
| Cuyahoga River | Boat (Riverine) | 12.1 | 41.4081 | -81.6336 | 41100020602 | Y | 40 | NEORS | 2009 | |
| Cuyahoga River | Boat (Riverine) | 14.2 | 41.3842 | -81.625 | 41100020602 | Y | 40 | NEORS | 2012 | |
| Cuyahoga River | Boat (Riverine) | 15.6 | 41.3789 | -81.6147 | 41100020602 | Y | 40 | NEORS | 2012 | |
| Cuyahoga River | Boat (Riverine) | 16.2 | 41.3653 | -81.61279999 | 41100020602 | Y | 40 | Ohio EPA | 2011 | |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------|-----------------------------|---------|----------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustrary = | | | | | | QHEI >55 (LRW target= 0) | | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | QHEI >60 | | | |
| LRW - For LRW waters, a QHEI evaluation is not applicable, but scores are shown for information purposes. | | | | | | | | | |
| N = not in attainment | * = no data | Y= meets delisting criteria | | | QHEI | | | | |
| Cuyahoga River | Boat (Riverine) | 11.95 | 41.4097 | -81.6344 | 41100020602 | Y | 63.5 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 12.7 | 41.3842 | -81.625 | 41100020602 | Y | 90.5 | NEORS | 2014 |
| Cuyahoga River | Boat (Riverine) | 14.1 | 41.3953 | -81.63 | 41100020602 | Y | 66.5 | NEORS | 2014 |
| Cuyahoga River | Boat (Riverine) | 15.6 | 41.3789 | -81.6147 | 41100020602 | Y | 81.8 | Ohio EPA | 2010 |
| Cuyahoga River | Boat (Riverine) | 16.2 | 41.3653 | -81.6128 | 41100020602 | Y | 73.8 | NEORS | 2012 |

Willow Lake- Cuyahoga River

041100020505

| Delisting Progress Matrix | | | | | | | | | | | | | | |
|---|-------------|------------------------------|---------|----------|-------------|------------------------------|------------------|-------------------------------|-------------------|---|-------------|--------------|------|--|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled | | |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | Site must have <i>greater than</i> 20 Sq. Miles in Drainage to calculate MIwb scores. | | | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | | | |
| Needed for Delisting Headwaters: | | | | | | | IBI > 36 | | NA | | | | | |
| Needed for Delisting Wading: | | | | | | | IBI > 34 | | MIwb > 7.5 | | | | | |
| Needed for Delisting Boat: | | | | | | | IBI > 36 | | MIwb > 8.2 | | | | | |
| N = not in attainment | * = no data | Y = meets delisting criteria | | | IBI | | | | | | | | MIwb | |
| Cuyahoga River | Boat | 17.3 | 41.3567 | -81.5978 | 41100020505 | Y | 48 | Y | 8.603 | 597 | Ohio EPA | 2008 | | |
| Cuyahoga River | Boat | 20.6 | 41.3216 | -81.5873 | 41100020505 | Y | 46 | Y | 10.625 | 583 | Ohio EPA | 2008 | | |
| Cuyahoga River | Boat | 20.8 | 41.3194 | -81.5875 | 41100020505 | N | 26 | N | 5.921 | 583 | Ohio EPA | 2008 | | |
| Cuyahoga River | Boat | 22.4 | 41.3029 | -81.573 | 41100020505 | N | 34 | Y | 8.245 | 559 | Ohio EPA | 2008 | | |
| Cuyahoga River | Boat | 24.1 | 41.2886 | -81.5653 | 41100020505 | N | 34 | Y | 8.797 | 555 | Ohio EPA | 2008 | | |

| Delisting Progress Matrix | | | | | | | | | |
|--|------------------------|--------------------------|---------|----------|-------------|------------------------------|----------------------------|-------------|--------------|
| BUI:6 Degradation of Benthos | | | | | | | | | |
| River Segment or Monitoring | Sample area Designatio | RM | Lat | Long | HUC12 | Meets ICI Delisting Criteria | Latest Score ICI Data From | Data Source | Year Sampled |
| Lacustuary Sites | | | | | | | | | |
| Needed for Delisting Lacustuary: | | | | | | ICI >34 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | |
| Needed for Delisting Headwaters, Wading and Boat: (EWH= ICI >42) | | | | | | ICI >30 | | | |
| not in attainment | * = no data | Y= Meets Delisting Crite | | | | | | | |
| ICI | | | | | | | | | |
| Cuyahoga River | Boat (Riverine) | 17.3 | 41.3567 | -81.5978 | 41100020505 | Y | 42 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 20.6 | 41.3216 | -81.5873 | 41100020505 | Y | 42 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 20.8 | 41.3194 | -81.5875 | 41100020505 | Y | 42 | Ohio EPA | 2007 |
| Cuyahoga River | Boat (Riverine) | 24.1 | 41.2886 | -81.5653 | 41100020505 | Y | 44 | Ohio EPA | 2008 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|-----------------------------|---------|----------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustuary = | | | | | | QHEI >55 (LRW target= 0) | | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | QHEI >60 | | | |
| LRW - For LRW waters, a QHEI evaluation is not applicable, but scores are shown for information purposes. | | | | | | | | | |
| N = not in attainment | * = no data | Y= meets delisting criteria | | | QHEI | | | | |
| Sagamore Creek | Headwaters (Riverine) | 0.6 | 41.3529 | -81.5852 | 41100020505 | Y | 73.5 | Ohio EPA | 2008 |
| Cuyahoga River | Headwaters (Riverine) | 1.2 | 41.3125 | -81.5481 | 41100020505 | Y | 66.5 | NEORS | 2014 |
| Sagamore Creek | Headwaters (Riverine) | 2.4 | 41.3508 | -81.5547 | 41100020505 | Y | 62 | NEORS | 2014 |
| Cuyahoga River | Boat (Riverine) | 17.3 | 41.3567 | -81.5978 | 41100020505 | Y | 83 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 20.6 | 41.3216 | -81.5873 | 41100020505 | Y | 85 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 20.8 | 41.3194 | -81.5875 | 41100020505 | N | 56 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 22.4 | 41.3029 | -81.573 | 41100020505 | Y | 75.5 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 24.1 | 41.2886 | -81.5653 | 41100020505 | Y | 83.5 | Ohio EPA | 2008 |

Boston Run- Cuyahoga River

41100020405

| Delisting Progress Matrix | | | | | | | | | | | | |
|--|-------------|-----------------------|---------|----------|-------------|------------------------------|------------------|-------------------------------|-------------------|---|-------------|--------------|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | Site must have <i>greater than 20 Sq. Miles</i> in Drainage to calculate MIwb scores. | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | NA | | | |
| Needed for Delisting Head (EWH IBI >46) | | | | | | | IBI > 36 | | NA | | | |
| Needed for Delisting Wad (EWH IBI >46, MIwb >8.9) | | | | | | | IBI > 34 | | MIwb > 7.5 | | | |
| Needed for Delisting Boat (EWH IBI >44, MIwb >9.1) | | | | | | | IBI > 36 | | MIwb > 8.2 | | | |
| not in attain * = no data Y = meets delisting criteria | | | | | | | | | | | | |
| LRW | | | IBI | | | | MIwb | | | | | |
| Cuyahoga River | Boat | 26.5 | 41.2631 | -81.56 | 41100020405 | Y | 36 | N | 8.092 | 522 | Ohio EPA | 2008 |
| Cuyahoga River | Boat | 33.2 | 41.2008 | -81.5686 | 41100020405 | Y | 42 | Y | 8.276 | 480 | Ohio EPA | 2008 |
| Cuyahoga River | Boat | 39.7 | 41.1386 | -81.5528 | 41100020405 | Y | 36 | Y | 8.367 | 433 | Ohio EPA | 2008 |
| Cuyahoga River | Boat | 42.6 | 41.1172 | -81.5253 | 41100020304 | Y | 46 | Y | 8.492 | 340 | Ohio EPA | 2008 |
| Boston Run | Headwaters | 0.3 | 41.2447 | -81.5458 | 41100020304 | Y | 54 | NA | NA | 2.7 | Ohio EPA | 2011 |
| Trib. to Salt Run (RM 1. | Headwaters | 0.4 | 41.2184 | -81.5228 | 41100020304 | N | 24 | NA | NA | 1.2 | Ohio EPA | 2010 |

| Delisting Progress Matrix | | | | | | | | | |
|---|------------------------|------|---------|----------|-------------|------------------------------|------------------|-------------|--------------|
| BUI:6 Degradation of Benthos | | | | | | | | | |
| River Segment or Monitoring | Sample area Designatio | RM | Lat | Long | HUC12 | Meets ICI Delisting Criteria | Latest Score ICI | Data Source | Year Sampled |
| Lacustrary Sites | | | | | | | ICI >34 | | |
| Headwaters, Wading, Boat Sites | | | | | | | ICI >30 | | |
| Needed for Delisting Headwaters, Wading and Boat: (EWH= ICI > | | | | | | | ICI >30 | | |
| not in attain * = no data Y= Meets Delisting Crite | | | | | | | | | |
| ICI | | | | | | | | | |
| Cuyahoga River | Boat (Riverine) | 26.5 | 41.2631 | -81.56 | 41100020405 | Y | 44 | NEORS | 2012 |
| Cuyahoga River | Boat (Riverine) | 33.2 | 41.2008 | -81.5686 | 41100020405 | Y | 46 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 39.7 | 41.1386 | -81.5528 | 41100020405 | Y | 46 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 42.6 | 41.1172 | -81.5253 | 41100020304 | Y | 50 | Ohio EPA | 2008 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|-----------------------------|---------|----------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustrary = | | | | | | | QHEI >55 | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | * = no data | Y= meets delisting criteria | | | QHEI | | | | |
| Cuyahoga River | Boat (Riverine) | 26.5 | 41.2631 | -81.56 | 41100020405 | Y | 80.5 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 33.2 | 41.2008 | -81.5686 | 41100020405 | Y | 83 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 39.7 | 41.1386 | -81.5528 | 41100020405 | Y | 81 | Ohio EPA | 2008 |
| Cuyahoga River | Boat (Riverine) | 42.6 | 41.1172 | -81.5253 | 41100020405 | Y | 85.5 | Ohio EPA | 2008 |
| Trib. to Salt Run | Headwaters (Riverine) | 0.4 | 41.2184 | -81.5228 | 41100020405 | Y | 63.5 | Ohio EPA | 2010 |
| Boston Run | Headwaters (Riverine) | 0.3 | 41.2447 | -81.5458 | 41100020405 | Y | 75.5 | Ohio EPA | 2011 |

Euclid Creek
041100020503

| Delisting Progress Matrix for Euclid Creek | | | | | | | | | | | | |
|---|-------------|-----------------------|-----------|-----------|-------------|------------------------------|------------------------------|----------------------|-------------------|---|-------------|--------------|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | |
| River Name or Monitoring | Sample Type | River Mile/Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled |
| Lacustuary, LRW Sites | | | | | | | WWH | | WWH | Site must have <i>greater than</i> 20 Sq. Miles in Drainage to calculate MIwb scores. | | |
| Needed for Delisting Lacustuary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | NA | | | |
| Needed for Delisting Head (EWH IBI >46) | | | | | | | IBI > 36 | | NA | | | |
| Needed for Delisting Wadi (EWH IBI >46, MIwb >8.9) | | | | | | | IBI > 34 | | MIwb > 7.5 | | | |
| Needed for Delisting Boat: (EWH IBI >44, MIwb >9.1) | | | | | | | IBI > 36 | | MIwb > 8.2 | | | |
| not in attainm | | | | | | * = no data | Y = meets delisting criteria | IBI | | MIwb | | |
| Euclid Creek | Lacustuary | 0.2 | 41.5856 | -81.5631 | 41100030503 | N | 34 | N | 7.357 | 23.3 | NEORS | 2010 |
| Euclid Creek | Lacustuary | 0.4 | 41.58507 | -81.56132 | 41100030503 | N | 38 | N | 5.9 | * | NEORS | 2013 |
| Euclid Creek | Lacustuary | 0.55 | 41.584311 | -81.56025 | 41100030503 | N | 32 | N | 7.3 | * | NEORS | 2013 |
| Euclid Creek | Lacustuary | 0.65 | 41.5833 | -81.5594 | 41100030503 | N | 32 | N | 7.068 | 23 | NEORS | 2012 |
| Euclid Creek | Lacustuary | 1 | 41.582297 | -81.55438 | 41100030503 | N | 24 | N | 7.3 | * | NEORS | 2013 |
| Euclid Creek | Wading | 1.65 | 41.5738 | -81.547 | 41100030503 | N | 28 | N | 6.667 | 21.8 | NEORS | 2012 |
| Euclid Creek | Wading | 1.85 | 41.573102 | -81.54292 | 41100030503 | N | 28 | N | 5.6 | * | NEORS | 2013 |
| Euclid Creek | Wading | 2.7 | 41.5658 | -81.5358 | 41100030503 | N | 24 | N | 5.32 | 21.4 | NEORS | 2010 |
| Euclid Creek | Wading | 3 | 41.563568 | -81.53095 | 41100030503 | N | 26 | N | 6.1 | * | NEORS | 2013 |
| Euclid Creek | Wading | 3.3 | 41.561401 | -81.53039 | 41100030503 | N | 30 | NA | 0 | * | NEORS | 2013 |
| Euclid Creek | Wading | 6.9 | 41.518735 | -81.50876 | 41100030503 | N | 22 | NA | 0 | * | NEORS | 2013 |
| East Branch Euclid Creek | Headwaters | 0.01 | 41.5604 | -81.5307 | 41100030503 | N | 32 | NA | 0 | 12.5 | NEORS | 2009 |
| East Branch Euclid Creek | Headwaters | 0.1 | 41.5602 | -81.5302 | 41100030503 | N | 30 | NA | 0 | 12.5 | Ohio EPA | 2011 |
| East Branch Euclid Creek | Headwaters | 0.2 | 41.5608 | -81.5288 | 41100030503 | N | 34 | NA | 0 | 12.5 | Ohio EPA | 2011 |
| Euclid Creek-East Branch | Headwaters | 0.25 | 41.561338 | -81.52818 | 41100030503 | N | 28 | NA | 0 | * | NEORS | 2013 |
| Euclid Creek-Unnamed Trib | Headwaters | 1.5 | 41.56442 | -81.51963 | 41100030503 | N | 22 | NA | 0 | * | NEORS | 2013 |
| Euclid Creek-East Branch | Headwaters | 2.8 | 41.571887 | -81.49908 | 41100030503 | N | 24 | NA | 0 | * | NEORS | 2013 |

| BUI:6 Degradation of Benthos | | | | | | | | | |
|---|-------------------------|--------------------------|-----------|-----------|-------------|------------------------------|----------------------------|-------------|--------------|
| River Segment or Monitoring Location | Sample area Designation | RM | Lat | Long | HUC12 | Meets ICI Delisting Criteria | Latest Score ICI Data From | Data Source | Year Sampled |
| Lacustuary Sites | | | | | | | | | |
| Needed for Delisting Lacustuary: | | | | | | ICI >34 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | |
| Needed for Delisting Headwaters, Wading and Boat: | | | | | | (EWH= ICI >30 | | | |
| not in attain | * = no data | Y= Meets Delisting Crite | | | | | | | |
| ICI | | | | | | | | | |
| Euclid Creek | Lacustuary | 0.55 | 41.584311 | -81.56025 | 41100030503 | Y | 34 | NEORS | 2013 |
| Euclid Creek | Lacustuary | 0.65 | 41.5833 | -81.5594 | 41100030503 | N | 24 | NEORS | 2012 |
| Euclid Creek | Wading (Riverine) | 1.65 | 41.5738 | -81.547 | 41100030503 | Y | 36 | NEORS | 2012 |
| Euclid Creek | Wading (Riverine) | 2.7 | 41.5658 | -81.5358 | 41100030503 | Y | 42 | NEORS | 2010 |
| East Branch Euclid | Headwaters (Riverine) | 0.01 | 41.5604 | -81.5307 | 41100030503 | Y | 42 | NEORS | 2009 |
| East Branch Euclid | Headwaters (Riverine) | 0.2 | 41.5608 | -81.5288 | 41100030503 | N | 24 | Ohio EPA | 2008 |
| East Branch Euclid | Headwaters (Riverine) | 0.25 | 41.5618 | -81.5277 | 41100030503 | Y | 34 | NEORS | 2009 |

| Delisting Progress Matrix | | | | | | | | | |
|--|----------|---------------------------|---|--|---------------------------------|--------------------------------------|--|-------------|--------------|
| BUI:10 Beach Closings (Recreational Contact) | | | | | | | | | |
| Beach Name | Latitude | Longitude | # of Days Sampled (recreational season) | Days greater than the SSM of 235cfu/100 ml | Meets Delisting Criteria (year) | % Days over the SSM of 235 cfu/100ml | CSO Long Term Management (Delisting Override) | Data Source | Year Sampled |
| when all beaches have at least 3 of thier last 5 year samples reach a target | | | | | | Equal to or less than 10% | | | |
| ry days in the recreational season or have a long-term CSO Management P | | | | | | | | | |
| *not in attain | *no data | *meets delisting criteria | | | | | | | |
| | | | | | | % Days over 235cfu/100 ml | | | |
| Euclid Beach (west location) | 41.5838 | -81.5694 | 153 | 58 | N | 38% | N (This location will have the CSO Long Term Management Override once the Euclid Creek Relief Sewer Tunnel is completed) | NEORS | 2009 |
| Euclid Beach (west location) | 41.5838 | -81.5694 | 150 | 41 | N | 28% | | NEORS | 2010 |
| Euclid Beach (west location) | 41.5838 | -81.5694 | 151 | 66 | N | 44% | | NEORS | 2011 |
| Euclid Beach (west location) | 41.5838 | -81.5694 | 164 | 64 | N | 43% | | NEORS | 2012 |
| Euclid Beach (west location) | 41.5838 | -81.5694 | 152 | 0 | * | * | | NEORS | 2013 |

| Delisting Progress Matrix | | | | | | | | | |
|---|----------|-----------|---|--|---------------------------------|--------------------------------------|--|-------------|--------------|
| BUI:10 Beach Closings (Recreational Contact) | | | | | | | | | |
| Beach Name | Latitude | Longitude | # of Days Sampled (recreational season) | Days greater than the SSM of 235cfu/100 ml | Meets Delisting Criteria (year) | % Days over the SSM of 235 cfu/100ml | CSO Long Term Management (Delisting Override) | Data Source | Year Sampled |
| when all beaches have at least 3 of thier last 5 year samples reach a target y days in the recreational season or have a long-term CSO Management P | | | | | | Equal to or less than 10% | | | |
| *not in attain *no data | | | *meets delisting criteria | | | | | | |
| | | | | | | % Days over 235cfu/100 ml | | | |
| Euclid Beach (east location) | 41.5843 | -81.5686 | 153 | 56 | N | 37% | N (This location will have the CSO Long Term Management Override once the Euclid Creek Relief Sewer Tunnel is completed) | NEORS | 2009 |
| Euclid Beach (east location) | 41.5843 | -81.5686 | 150 | 54 | N | 37% | | NEORS | 2010 |
| Euclid Beach (east location) | 41.5843 | -81.5686 | 151 | 64 | N | 43% | | NEORS | 2011 |
| Euclid Beach (east location) | 41.5843 | -81.5686 | 164 | 58 | N | 35% | | NEORS | 2012 |
| Euclid Beach (east location) | 41.5843 | -81.5686 | 152 | 62 | N | 41% | | NEORS | 2013 |

| Delisting Progress Matrix | | | | | | | | | |
|---|----------|-----------|---|--|---------------------------------|--------------------------------------|--|-------------|--------------|
| BUI:10 Beach Closings (Recreational Contact) | | | | | | | | | |
| Beach Name | Latitude | Longitude | # of Days Sampled (recreational season) | Days greater than the SSM of 235cfu/100 ml | Meets Delisting Criteria (year) | % Days over the SSM of 235 cfu/100ml | CSO Long Term Management (Delisting Override) | Data Source | Year Sampled |
| when all beaches have at least 3 of thier last 5 year samples reach a target y days in the recreational season or have a long-term CSO Management P | | | | | | Equal to or less than 10% | | | |
| *not in attain *no data | | | *meets delisting criteria | | | | | | |
| | | | | | | % Days over 235cfu/100 ml | | | |
| Villa Angela Beach (west location) | 41.5861 | -81.5667 | 153 | 50 | N | 33% | N (This location will have the CSO Long Term Management Override once the Euclid Creek Relief Sewer Tunnel is completed) | NEORS | 2009 |
| Villa Angela Beach (west location) | 41.5861 | -81.5667 | 150 | 41 | N | 28% | | NEORS | 2010 |
| Villa Angela Beach (west location) | 41.5861 | -81.5667 | 151 | 59 | N | 39% | | NEORS | 2011 |
| Villa Angela Beach (west location) | 41.5861 | -81.5667 | 164 | 52 | N | 35% | | NEORS | 2012 |
| Villa Angela Beach (west location) | 41.5861 | -81.5667 | 152 | 0 | * | * | | NEORS | 2013 |

| Delisting Progress Matrix | | | | | | | | | |
|--|----------|---------------------------|---|--|---------------------------------|--------------------------------------|--|-------------|--------------|
| BUI:10 Beach Closings (Recreational Contact) | | | | | | | | | |
| Beach Name | Latitude | Longitude | # of Days Sampled (recreational season) | Days greater than the SSM of 235cfu/100 ml | Meets Delisting Criteria (year) | % Days over the SSM of 235 cfu/100ml | CSO Long Term Management (Delisting Override) | Data Source | Year Sampled |
| When all beaches have at least 3 of their last 5 year samples reach a target | | | | | | Equal to or less than 10% | | | |
| y days in the recreational season or have a long-term CSO Management Plan | | | | | | | | | |
| *not in attain | *no data | *meets delisting criteria | | | | | | | |
| | | | | | | % Days over 235cfu/100 ml | | | |
| Villa Angela Beach (east location) | 41.5851 | -81.5677 | 153 | 66 | N | 43% | N (This location will have the CSO Long Term Management Override once the Euclid Creek Relief Sewer Tunnel is completed) | NEORS | 2009 |
| Villa Angela Beach (east location) | 41.5851 | -81.5677 | 150 | 54 | N | 36% | | NEORS | 2010 |
| Villa Angela Beach (east location) | 41.5851 | -81.5677 | 151 | 70 | N | 47% | | NEORS | 2011 |
| Villa Angela Beach (east location) | 41.5851 | -81.5677 | 164 | 65 | N | 40% | | NEORS | 2012 |
| Villa Angela (east location) | 41.5851 | -81.5677 | 152 | 63 | N | 42% | | NEORS | 2013 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|-----------------------------|-----------|------------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustrary = | | | | | | | QHEI >55 | | |
| QHEI Score needed f Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | * = no data | Y= meets delisting criteria | | | QHEI | | | | |
| Euclid Creek | Lacustrary | 0.2 | 41.5856 | -81.5631 | 41100030503 | N | 73 | NEORS | 2014 |
| Euclid Creek | Lacustrary | 0.4 | 41.58507 | -81.561319 | 41100030503 | N | 47 | NEORS | 2014 |
| Euclid Creek | Lacustrary | 0.55 | 41.584311 | -81.560248 | 41100030503 | Y | 66 | NEORS | 2014 |
| Euclid Creek | Lacustrary | 0.65 | 41.5833 | -81.5594 | 41100030503 | Y | 68 | NEORS | 2008 |
| Euclid Creek | Lacustrary | 1 | 41.582297 | -81.554379 | 41100030503 | Y | 64 | NEORS | 2013 |
| Euclid Creek | Wading (Riverine) | 1.65 | 41.5738 | -81.547 | 41100030503 | Y | 64.5 | NEORS | 2008 |
| Euclid Creek | Wading (Riverine) | 1.85 | 41.573102 | -81.542923 | 41100030503 | Y | 78.5 | NEORS | 2013 |
| Euclid Creek | Wading (Riverine) | 2.7 | 41.5658 | -81.5358 | 41100030503 | N | 55.5 | NEORS | 2010 |
| Euclid Creek | Wading (Riverine) | 3 | 41.563568 | -81.530951 | 41100030503 | Y | 63.25 | NEORS | 2013 |
| Euclid Creek | Wading (Riverine) | 3.3 | 41.561401 | -81.530393 | 41100030503 | Y | 62.25 | NEORS | 2013 |
| Euclid Creek | Wading (Riverine) | 6.9 | 41.518735 | -81.508764 | 41100030503 | Y | 70.5 | NEORS | 2013 |
| East Branch Euclid Creek | Headwaters (Riverine) | 0.01 | 41.5604 | -81.5307 | 41100030503 | Y | 74 | NEORS | 2009 |
| East Branch Euclid Creek | Headwaters (Riverine) | 0.1 | 41.5602 | -81.5302 | 41100030503 | Y | 65.8 | Ohio EPA | 2011 |
| East Branch Euclid Creek | Headwaters (Riverine) | 0.2 | 41.5608 | -81.5288 | 41100030503 | Y | 63.8 | Ohio EPA | 2011 |
| Euclid Creek- East Branch | Headwaters (Riverine) | 0.25 | 41.561338 | -81.528178 | 41100030503 | Y | 58.5 | NEORS | 2013 |
| Euclid Creek-Unnamed Trib | Headwaters (Riverine) | 1.5 | 41.56442 | -81.519627 | 41100030503 | Y | 62.5 | NEORS | 2013 |
| Euclid Creek- East Branch | Headwaters (Riverine) | 2.8 | 41.571887 | -81.499076 | 41100030503 | Y | 67.75 | NEORS | 2013 |

Doan Brook
041100020504

| Delisting Progress Matrix | | | | | | | | | | | | | |
|---|-------------|------------------------|---------|------------------------------|-------------|------------------------------|------------------|-------------------------------|-------------------|---|-------------|--------------|--|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled | |
| Lacustuary, LRW Sites | | | | | | | WWH | | WWH | Site must have <i>greater than 20 Sq. Miles in Drainage to calculate MIwb scores.</i> | | | |
| Needed for Delisting Lacustuary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | | |
| Needed for Delisting Headwaters: | | | | | | | IBI > 36 | | NA | | | | |
| Needed for Delisting Wading: | | | | | | | IBI > 34 | | MIwb > 7.5 | | | | |
| Needed for Delisting Boat: | | | | | | | IBI > 36 | | MIwb > 8.2 | | | | |
| N = not in attainment | | * = no data | | Y = meets delisting criteria | | | | | | | | | |
| | | | | | | IBI | | | MIwb | | | | |
| Ninemile Creek | Headwaters | 0.4 | 41.5574 | -81.5991 | 41100030504 | N | 22 | NA | 0 | 11.8 | NEORS | 2011 | |
| Ninemile Creek | Headwaters | 3.34 | 41.5457 | -81.5522 | 41100030504 | N | 20 | NA | 0 | 0.7 | NEORS | 2011 | |
| Trib. to Ninemile Creek | Headwaters | 0.01 | 41.5429 | -81.5552 | 41100030504 | N | 12 | NA | 0 | 3.1 | NEORS | 2011 | |
| Doan Brook | Headwaters | 0.75 | 41.533 | -81.6296 | 41100030504 | N | 28 | NA | 0 | 9.1 | NEORS | 2012 | |
| Doan Brook | Headwaters | 5.5 | 41.4909 | -81.5842 | 41100030504 | N | 18 | NA | 0 | 4.4 | Ohio EPA | 2011 | |
| Doan Brook | Headwaters | 6.1 | 41.4839 | -81.5658 | 41100030504 | N | 24 | NA | 0 | 1.4 | Ohio EPA | 2011 | |
| Doan Brook | Headwaters | 6.7 | 41.4839 | -81.5658 | 41100030504 | N | 20 | NA | 0 | 1.2 | NEORS | 2010 | |
| South Branch Doan Brook | Headwaters | 1.4 | 41.4739 | -81.559 | 41100030504 | N | 24 | NA | 0 | 3.4 | NEORS | 2010 | |
| Dugway Brook | Headwaters | 0.37 | 41.5497 | -81.6088 | 41100030504 | Y | 36 | | 0 | 6.2 | NEORS | 2010 | |
| Dugway Brook | Headwaters | 2.4 | 41.5122 | -81.5905 | 41100030504 | N | 12 | NA | 0 | 2.6 | NEORS | 2010 | |

| BUI:6 Degradation of Benthos | | | | | | | | | |
|---|-------------------------|------|--------------------------|----------|-------------|------------------------------|------------------|-------------|--------------|
| River Segment or Monitoring Location | Sample area Designation | RM | Lat | Long | HUC12 | Meets ICI Delisting Criteria | Latest Score ICI | Data Source | Year Sampled |
| Lacustuary Sites | | | | | | | ICI >34 | | |
| Needed for Delisting Lacustuary: | | | | | | | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | |
| Needed for Delisting Headwaters, Wading and Boat: | | | | | | | (EWH= ICI >42) | | ICI >30 |
| not in attain | * = no data | | Y= Meets Delisting Crite | | | | | | |
| ICI | | | | | | | | | |
| Doan Brook | Headwaters (Riverine) | 0.75 | 41.533 | -81.6296 | 41100030504 | N | 20 | NEORS | 2014 |
| Doan Brook | Headwaters (Riverine) | 6.7 | 41.4839 | -81.5658 | 41100030504 | N | 6 | NEORS | 2010 |
| South Branch Doan | Headwaters (Riverine) | 1.4 | 41.4739 | -81.559 | 41100030504 | Y | 34 | NEORS | 2010 |
| Dugway Brook | Headwaters (Riverine) | 0.37 | 41.5497 | -81.6088 | 41100030504 | N | 8 | NEORS | 2010 |
| Dugway Brook | Headwaters (Riverine) | 2.4 | 41.5122 | -81.5905 | 41100030504 | N | 22 | NEORS | 2010 |

| Delisting Progress Matrix | | | | | | | | | |
|--|-----------|------------|---|--|---------------------------------|--------------------------------------|---|-------------|--------------|
| BUI:10 Beach Closings (Recreational Contact) | | | | | | | | | |
| Beach Name | Latitude | Longitude | # of Days Sampled (recreational season) | Days greater than the SSM of 235cfu/100 ml | Meets Delisting Criteria (year) | % Days over the SSM of 235 cfu/100ml | CSO Long Term Management (Delisting Override) | Data Source | Year Sampled |
| When all beaches have at least 3 of their last 5 year samples reach a target | | | | | | Equal to or less than 10% | | | |
| ry days in the recreational season or have a long-term CSO Management P | | | | | | | | | |
| *not in attainment | | | *no data | | | *meets delisting criteria | | | |
| | | | | | | % Days over 235 | | | |
| Shoreby Beach, Bratenahl | 41.557022 | -81.606533 | 99 | 41 | N | 41% | NA | CCBH | 2009 |
| Shoreby Beach, Bratenahl | 41.557022 | -81.606533 | 99 | 7 | Y | 7% | | CCBH | 2010 |
| Shoreby Beach, Bratenahl | 41.557022 | -81.606533 | 99 | 26 | N | 26% | | CCBH | 2011 |
| Shoreby Beach, Bratenahl | 41.557022 | -81.606533 | 99 | 20 | N | 20% | | CCBH | 2012 |
| Shoreby Beach, Bratenahl | 41.557022 | -81.606533 | 99 | 20 | N | 20% | | CCBH | 2013 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|------------------------|---------|-----------------------------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustrary = | | | | | | | QHEI >55 | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | | * = no data | | Y= meets delisting criteria | | QHEI | | | |
| Ninemile Creek | Headwaters (Riverine) | 0.4 | 41.5574 | -81.5991 | 41100030504 | N | 53.5 | NEORS | 2013 |
| Ninemile Creek | Headwaters (Riverine) | 3.34 | 41.5457 | -81.5522 | 41100030504 | Y | 61.3 | NEORS | 2011 |
| Trib. to Ninemile Creek | Headwaters (Riverine) | 0.01 | 41.5429 | -81.5552 | 41100030504 | N | 55 | NEORS | 2011 |
| Doan Brook | Headwaters (Riverine) | 0.75 | 41.533 | -81.6296 | 41100030504 | Y | 62 | NEORS | 2014 |
| Doan Brook | Headwaters (Riverine) | 0.8 | 41.533 | -81.6296 | 41100030504 | N | 49 | NEORS | 2008 |
| Doan Brook | Headwaters (Riverine) | 1.4 | 41.5257 | -81.6264 | 41100030504 | Y | 67.5 | NEORS | 2010 |
| Doan Brook | Headwaters (Riverine) | 5.5 | 41.4909 | -81.5842 | 41100030504 | Y | 64 | Ohio EPA | 2011 |
| Doan Brook | Headwaters (Riverine) | 6.1 | 41.4839 | -81.5658 | 41100030504 | Y | 63 | Ohio EPA | 2011 |
| Doan Brook | Headwaters (Riverine) | 6.7 | 41.4839 | -81.5658 | 41100030504 | Y | 58.75 | NEORS | 2014 |
| South Branch Doan Brook | Headwaters (Riverine) | 1.4 | 41.4739 | -81.559 | 41100030504 | Y | 61.5 | NEORS | 2014 |
| Dugway Brook | Headwaters (Riverine) | 0.37 | 41.5497 | -81.6088 | 41100030504 | Y | 63.5 | NEORS | 2010 |
| Dugway Brook | Headwaters (Riverine) | 2.4 | 41.5122 | -81.5905 | 41100030504 | N | 55 | NEORS | 2010 |

Cahoon Creek- Frontal Lake Erie

041100010204

| Delisting Progress Matrix | | | | | | | | | |
|--|----------|-----------|---|--|---------------------------------|--------------------------------------|---|-------------|--------------|
| BUI:10 Beach Closings (Recreational Contact) | | | | | | | | | |
| Beach Name | Latitude | Longitude | # of Days Sampled (recreational season) | Days greater than the SSM of 235cfu/100 ml | Meets Delisting Criteria (year) | % Days over the SSM of 235 cfu/100ml | CSO Long Term Management (Delisting Override) | Data Source | Year Sampled |
| when all beaches have at least 3 of thier last 5 year samples reach a target | | | | | | Equal to or less than 10% | | | |
| ry days in the recreational season or have a long-term CSO Management P | | | | | | | | | |
| *not in attain *no data | | | *meets delisting criteria | | | | | | |
| | | | | | | % Days over 235cfu/100 ml | | | |
| Edgewater (west location) | 41.4887 | -81.7404 | 153 | 38 | N | 25% | N | NEORS | 2009 |
| Edgewater (west location) | 41.4887 | -81.7404 | 150 | 22 | N | 15% | | NEORS | 2010 |
| Edgewater (west location) | 41.4887 | -81.7404 | 151 | 39 | N | 27% | | NEORS | 2011 |
| Edgewater (west location) | 41.4887 | -81.7404 | 164 | 14 | y | 9% | | NEORS | 2012 |
| Edgewater (west location) | 41.4887 | -81.7404 | 152 | 0 | * | 0% | | NEORS | 2013 |

| Delisting Progress Matrix | | | | | | | | | |
|--|----------|-----------|---|--|---------------------------------|--------------------------------------|---|-------------|--------------|
| BUI:10 Beach Closings (Recreational Contact) | | | | | | | | | |
| Beach Name | Latitude | Longitude | # of Days Sampled (recreational season) | Days greater than the SSM of 235cfu/100 ml | Meets Delisting Criteria (year) | % Days over the SSM of 235 cfu/100ml | CSO Long Term Management (Delisting Override) | Data Source | Year Sampled |
| when all beaches have at least 3 of thier last 5 year samples reach a target | | | | | | Equal to or less than 10% | | | |
| ry days in the recreational season or have a long-term CSO Management P | | | | | | | | | |
| *not in attain *no data | | | *meets delisting criteria | | | | | | |
| | | | | | | % Days over 235cfu/100 ml | | | |
| Edgewater (east location) | 41.4893 | -81.7392 | 153 | 45 | N | 29% | N | NEORS | 2009 |
| Edgewater (east location) | 41.4893 | -81.7392 | 150 | 20 | N | 13% | | NEORS | 2010 |
| Edgewater (east location) | 41.4893 | -81.7392 | 151 | 39 | N | 27% | | NEORS | 2011 |
| Edgewater (east location) | 41.4893 | -81.7392 | 164 | 17 | y | 10% | | NEORS | 2012 |
| Edgewater (east location) | 41.4893 | -81.7392 | 152 | 21 | N | 14% | | NEORS | 2013 |

Mill Creek
041100020601

| Delisting Progress Matrix for Euclid Creek | | | | | | | | | | | | |
|--|-------------|-----------------------|---------|-------------------------------------|-------------|------------------------------|------------------|-------------------------------|-------------------|---|-------------|--------------|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | <i>Site must have greater than 20 Sq. Miles in Drainage to calculate MIwb scores.</i> | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | |
| Needed for Delisting Headwaters: | | | | | | | IBI > 36 | | NA | | | |
| Needed for Delisting Wading: | | | | | | | IBI > 34 | | MIwb > 7.5 | | | |
| Needed for Delisting Boat: | | | | | | | IBI > 36 | | MIwb > 8.2 | | | |
| N = not in attainment | | * = no data | | Y = meets delisting criteria | | IBI | | | MIwb | | | |
| Mill Creek | Headwaters | 0.12 | 41.4178 | -81.6383 | 41100020601 | Y | 44 | NA | NA | 19.5 | NEORS | 2012 |
| Mill Creek | Headwaters | 0.7 | 41.4242 | -81.6376 | 41100020601 | Y | 40 | NA | NA | 17.3 | NEORS | 2012 |
| Mill Creek | Headwaters | 2.75 | 41.445 | -81.6256 | 41100020601 | N | 30 | NA | NA | 15.1 | NEORS | 2012 |
| Mill Creek | Headwaters | 3.15 | 41.4422 | -81.6216 | 41100020601 | N | 20 | NA | NA | 15 | NEORS | 2012 |
| Mill Creek | Headwaters | 6.8 | 41.4233 | -81.5659 | 41100020601 | N | 22 | NA | NA | 4.5 | NEORS | 2012 |
| Mill Creek | Headwaters | 8.3 | 41.4305 | -81.5442 | 41100020601 | N | 22 | NA | NA | 3.9 | NEORS | 2012 |
| Mill Creek | Headwaters | 10.12 | 41.4456 | -81.5317 | 41100020601 | N | 20 | NA | NA | 2.6 | NEORS | 2012 |
| Mill Creek | Headwaters | 10.7 | 41.4518 | -81.5256 | 41100020601 | N | 20 | NA | NA | 2.2 | NEORS | 2011 |
| Mill Creek | Headwaters | 11.52 | 41.4626 | -81.5214 | 41100020601 | N | 18 | NA | NA | 0.9 | NEORS | 2011 |
| Mill Creek | Headwaters | 11.85 | 41.4671 | -81.5203 | 41100020601 | N | 12 | NA | NA | 0.7 | NEORS | 2011 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-------------------------|-------------|---------|--------------------------|-------------|------------------------------|----------------------------|-------------|--------------|
| BUI:6 Degradation of Benthos | | | | | | | | | |
| River Segment or Monitoring Location | Sample area Designation | RM | Lat | Long | HUC12 | Meets ICI Delisting Criteria | Latest Score ICI Data From | Data Source | Year Sampled |
| Lacustuary Sites | | | | | | | | | |
| Needed for Delisting Lacustuary: | | | | | | ICI >34 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | |
| Needed for Delisting Headwaters, Wading and Boat: | | | | | | (EWH= ICI > | | ICI >30 | |
| not in attainment | | * = no data | | Y= Meets Delisting Crite | | | | | |
| ICI | | | | | | | | | |
| Mill Creek | Headwaters (Riverine) | 0.12 | 41.4178 | -81.6383 | 41100020601 | N | 22 | NEORS | 2011 |
| Mill Creek | Headwaters (Riverine) | 0.7 | 41.4242 | -81.6376 | 41100020601 | N | 24 | NEORS | 2011 |
| Mill Creek | Headwaters (Riverine) | 2.75 | 41.445 | -81.6256 | 41100020601 | Y | 30 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 3.15 | 41.4422 | -81.6216 | 41100020601 | Y | 34 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 6.8 | 41.4233 | -81.5659 | 41100020601 | Y | 36 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 8.3 | 41.4305 | -81.5442 | 41100020601 | Y | 36 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 10.12 | 41.4456 | -81.5317 | 41100020601 | Y | 38 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 10.7 | 41.4518 | -81.5256 | 41100020601 | Y | 38 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 11.52 | 41.4626 | -81.5214 | 41100020601 | Y | 40 | NEORS | 2012 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|------------------------|---------|-----------------------------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustuary = | | | | | | | QHEI >55 | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | | * = no data | | Y= meets delisting criteria | | QHEI | | | |
| Mill Creek | Headwaters (Riverine) | 0.1 | 41.4183 | -81.6378 | 41100020601 | Y | 68.5 | NEORS | 2008 |
| Mill Creek | Headwaters (Riverine) | 0.12 | 41.4178 | -81.6383 | 41100020601 | Y | 64.8 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 0.7 | 41.4242 | -81.6376 | 41100020601 | Y | 72.5 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 2.75 | 41.445 | -81.6256 | 41100020601 | Y | 73.3 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 3.15 | 41.4422 | -81.6216 | 41100020601 | Y | 63 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 6.8 | 41.4233 | -81.5659 | 41100020601 | Y | 63.5 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 8.3 | 41.4305 | -81.5442 | 41100020601 | Y | 72 | NEORS | 2012 |
| Mill Creek | Headwaters (Riverine) | 10.12 | 41.4456 | -81.5317 | 41100020601 | Y | 82.3 | NEORS | 2011 |
| Mill Creek | Headwaters (Riverine) | 10.7 | 41.4518 | -81.5256 | 41100020601 | N | 51 | NEORS | 2011 |
| Mill Creek | Headwaters (Riverine) | 11.52 | 41.4626 | -81.5214 | 41100020601 | N | 55.5 | NEORS | 2011 |
| Mill Creek | Headwaters (Riverine) | 11.85 | 41.4671 | -81.5203 | 41100020601 | N | 51.8 | NEORS | 2011 |

Big Creek

041100020603

| Delisting Progress Matrix | | | | | | | | | | | | |
|--|-------------|------------------------|---------|----------|----------|------------------------------|------------------|-------------------------------|-------------------|---|-------------|--------------|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | Site must have <i>greater than 20 Sq. Miles</i> in Drainage to calculate MIwb scores. | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | NA | | | |
| Needed for Delisting Hez (EWH IBI >46) | | | | | | | IBI > 36 | | NA | | | |
| Needed for Delisting Wa (EWH IBI >46, MIwb >8.9) | | | | | | | IBI > 34 | | MIwb > 7.5 | | | |
| Needed for Delisting Boz (EWH IBI >44, MIwb >9.1) | | | | | | | IBI > 36 | | MIwb > 8.2 | | | |
| not in attainment * = no data Y = meets delisting criteria | | | | | | | | | | | | |
| LRW | | | IBI | | | | MIwb | | | | | |
| Big Creek | Wading | 0.15 | 41.446 | -81.6865 | 4.11E+10 | N | 28 | N | 6.667 | 37.1 | NEORS | 2012 |
| Big Creek | Headwaters | 0.2 | 41.4458 | -81.6869 | 4.11E+10 | N | 30 | NA | 0 | 19.3 | NEORS | 2011 |
| Ford Branch Big Creek | Headwaters | 4.7 | 41.423 | -81.8019 | 4.11E+10 | N | 16 | NA | 0 | 3.7 | NEORS | 2010 |

| BUI:6 Degradation of Benthos | | | | | | | | | | |
|---|-------------------------|-------------|--------|-----------------------------|-------------|------------------------------|----------------------------|-------------|--------------|--|
| River Segment or Monitoring Location | Sample area Designation | RM | Lat | Long | HUC12 | Meets ICI Delisting Criteria | Latest Score ICI Data From | Data Source | Year Sampled | |
| Lacustrary Sites | | | | | | | | | | |
| Needed for Delisting Lacustrary: | | | | | | | ICI >34 | | | |
| Headwaters, Wading, Boat Sites (Riverine) | | | | | | | | | | |
| Needed for Delisting Headwaters, Wading and Boat: | | | | | | | ICI >30 | | | |
| N = not in attainment | | * = no data | | Y= Meets Delisting Criteria | | | | | | |
| ICI | | | | | | | | | | |
| Big Creek | Wading (Riverine) | 0.15 | 41.446 | -81.6865 | 41100020603 | Y | 32 | NEORS | 2012 | |
| Big Creek | Headwaters (Riverine) | 4.4 | 41.446 | -81.754 | 41100020603 | Y | 38 | NEORS | 2010 | |
| Ford Branch Big Creek | Headwaters (Riverine) | 4.7 | 41.423 | -81.8019 | 41100020603 | N | 12 | NEORS | 2009 | |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|-----------------------------|---------|----------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustrary = | | | | | | | QHEI >55 | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | * = no data | Y= meets delisting criteria | | | QHEI | | | | |
| Big Creek | Wading (Riverine) | 0.15 | 41.446 | -81.6865 | 41100020603 | Y | 71.5 | NEORS | 2012 |
| Big Creek | Headwaters (Riverine) | 0.2 | 41.4458 | -81.6869 | 41100020603 | Y | 64 | NEORS | 2008 |
| Big Creek | Headwaters (Riverine) | 4.4 | 41.446 | -81.754 | 41100020603 | Y | 63.5 | NEORS | 2011 |
| Ford Branch Big Creek | Headwaters (Riverine) | 4.7 | 41.423 | -81.8019 | 41100020603 | Y | 62 | NEORS | 2010 |
| Upper Big Creek | Headwaters (Riverine) | 7.8 | 41.4028 | -81.7572 | 41100020603 | Y | 61 | NEORS | 2014 |

Headwaters- Chippewa Creek

041100020503

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|-----------------------------|---------|----------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustrary = | | | | | | | QHEI >55 | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | * = no data | Y= meets delisting criteria | | | QHEI | | | | |
| Chippewa Creek | Wading (Riverine) | 0.3 | 41.3164 | -81.5908 | 41100020503 | Y | 82.5 | Ohio EPA | 2010 |
| Chippewa Creek | Headwaters (Riverine) | 1.5 | 41.3211 | -81.6406 | 41100020503 | N | 56.5 | NEORS | 2014 |
| Chippewa Creek | Headwaters (Riverine) | 1.8 | 41.3206 | -81.6481 | 41100020503 | Y | 71 | NEORS | 2014 |
| Chippewa Creek | Headwaters (Riverine) | 2.6 | 41.3244 | -81.6722 | 41100020503 | Y | 77.5 | NEORS | 2014 |
| Chippewa Creek | Headwaters (Riverine) | 3.2 | 41.3122 | -81.6917 | 41100020503 | N | 52.5 | NEORS | 2014 |

Town of Twinsburg- Tinker's Creek

041100020504

| Delisting Progress Matrix | | | | | | | | | | | | | |
|---|-------------|------------------------|---------|------------------------------|-------------|------------------------------|------------------|-------------------------------|-------------------|--|-------------|--------------|--|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled | |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | Site must have greater than 20 Sq. Miles in Drainage to calculate MIwb scores. | | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | | |
| Needed for Delisting Headwaters: | | | | | | | IBI > 36 | | NA | | | | |
| Needed for Delisting Wading: | | | | | | | IBI > 34 | | MIwb > 7.5 | | | | |
| Needed for Delisting Boat: | | | | | | | IBI > 36 | | MIwb > 8.2 | | | | |
| N = not in attainment | | * = no data | | Y = meets delisting criteria | | | | | | | | | |
| | | | | | | IBI | | | MIwb | | | | |
| Tinkers Creek | Wading | 0.1 | 41.3647 | -81.6092 | 41100020504 | Y | 34 | Y | 9.301 | 96 | Ohio EPA | 2008 | |
| Tinkers Creek | Wading | 2.2 | 41.3739 | -81.5792 | 41100020504 | Y | 38 | Y | 7.625 | 94 | Ohio EPA | 2006 | |
| Tinkers Creek | Wading | 2.5 | 41.3744 | -81.5734 | 41100020504 | Y | 42 | Y | 8.293 | 91 | Ohio EPA | 2008 | |
| Tinkers Creek | Wading | 5.1 | 41.389 | -81.5432 | 41100020504 | Y | 44 | Y | 7.289 | 85 | Ohio EPA | 2008 | |
| Tinkers Creek | Wading | 6.4 | 41.385 | -81.525 | 41100020504 | N | 20 | N | 6.26 | 84 | Ohio EPA | 2006 | |
| Tinkers Creek | Wading | 6.5 | 41.3853 | -81.5236 | 41100020504 | N | 26 | N | 6.793 | 84 | Ohio EPA | 2008 | |
| Tinkers Creek | Wading | 7.9 | 41.3837 | -81.4993 | 41100020504 | N | 22 | N | 5.77 | 69.5 | Ohio EPA | 2008 | |
| Tinkers Creek | Wading | 9 | 41.375 | -81.4858 | 41100020504 | N | 22 | N | 6.989 | 68 | Ohio EPA | 2011 | |
| Tinkers Creek | Wading | 10.1 | 41.3646 | -81.4764 | 41100020504 | N | 28 | N | 6.62 | 67 | Ohio EPA | 2007 | |
| Tinkers Creek | Wading | 11 | 41.3584 | -81.4739 | 41100020504 | N | 26 | N | 5.308 | 61 | Ohio EPA | 2007 | |
| Tinkers Creek | Wading | 14.3 | 41.3361 | -81.4571 | 41100020504 | N | 28 | N | 5.732 | 55 | Ohio EPA | 2010 | |
| Tinkers Creek | Wading | 16.7 | 41.3183 | -81.4406 | 41100020504 | N | 30 | N | 6.581 | 51 | Ohio EPA | 2006 | |
| Tinkers Creek | Wading | 22.1 | 41.2853 | -81.4061 | 41100020504 | N | 30 | N | 5.879 | 41 | Ohio EPA | 2011 | |
| Hawthorn Creek | Headwaters | 0.8 | 41.3833 | -81.4892 | 41100020504 | N | 30 | NA | NA | 6.5 | Ohio EPA | 2006 | |
| Wood Creek | Headwaters | 0.2 | 41.3778 | -81.5744 | 41100020504 | N | 12 | NA | NA | 3.2 | Ohio EPA | 2006 | |
| Wood Creek | Headwaters | 1.3 | 41.3867 | -81.5667 | 41100020504 | N | 20 | NA | NA | 2.7 | Ohio EPA | 2006 | |
| Beaver Meadow Run | Headwaters | 0.1 | 41.3614 | -81.4703 | 41100020504 | N | 22 | NA | NA | 6.1 | Ohio EPA | 2006 | |
| Beaver Meadow Run | Headwaters | 1.2 | 41.3706 | -81.4592 | 41100020504 | N | 28 | NA | NA | 3.6 | Ohio EPA | 2006 | |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|-----------------------------|-----------|------------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustrary = | | | | | | | QHEI >55 | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | * = no data | Y= meets delisting criteria | | | | | | | |
| Tinker's Creek | Wading (Riverine) | 0.1 | 41.3647 | -81.6092 | 41100020504 | Y | 78.5 | Ohio EPA | 2008 |
| Tinker's Creek | Wading (Riverine) | 2.2 | 41.3739 | -81.5792 | 41100020504 | Y | 74 | Ohio EPA | 2006 |
| Tinker's Creek | Wading (Riverine) | 2.5 | 41.387628 | -81.546135 | 41100020504 | Y | 74 | Ohio EPA | 2008 |
| Tinker's Creek | Wading (Riverine) | 5.1 | 41.353103 | -81.469917 | 41100020504 | Y | 88.5 | Ohio EPA | 2008 |
| Tinker's Creek | Wading (Riverine) | 6.4 | 41.385 | -81.525 | 41100020504 | Y | 88.5 | Ohio EPA | 2006 |
| Tinker's Creek | Wading (Riverine) | 6.5 | 41.3853 | -81.5236 | 41100020504 | Y | 73 | Ohio EPA | 2008 |
| Tinker's Creek | Wading (Riverine) | 7.9 | 41.3837 | -81.4993 | 41100020504 | Y | 83 | Ohio EPA | 2008 |
| Tinker's Creek | Wading (Riverine) | 9 | 41.375 | -81.4858 | 41100020504 | Y | 67 | Ohio EPA | 2011 |
| Tinker's Creek | Wading (Riverine) | 10.1 | 41.3646 | -81.4764 | 41100020504 | Y | 73.5 | Ohio EPA | 2010 |
| Tinker's Creek | Wading (Riverine) | 11 | 41.3584 | -81.4739 | 41100020504 | Y | 72.5 | Ohio EPA | 2007 |
| Tinker's Creek | Wading (Riverine) | 14.3 | 41.3361 | -81.4571 | 41100020504 | Y | 68.5 | Ohio EPA | 2010 |
| Tinker's Creek | Wading (Riverine) | 17.7 | 41.3108 | -81.4372 | 41100020504 | N | 50.5 | Ohio EPA | 2006 |
| Tinker's Creek | Wading (Riverine) | 22.1 | 41.2853 | -81.4061 | 41100020504 | Y | 61 | Ohio EPA | 2011 |
| Hawthorn Creek | Headwaters (Riverine) | 0.8 | 41.3833 | -81.4892 | 41100020504 | Y | 70.5 | Ohio EPA | 2006 |
| Wood Creek | Headwaters (Riverine) | 0.2 | 41.3778 | -81.5744 | 41100020504 | Y | 68 | Ohio EPA | 2006 |
| Wood Creek | Headwaters (Riverine) | 1.3 | 41.3867 | -81.5667 | 41100020504 | Y | 62 | Ohio EPA | 2006 |
| Beaver Meadow Run | Headwaters (Riverine) | 0.1 | 41.3614 | -81.4703 | 41100020504 | Y | 77 | Ohio EPA | 2006 |
| Beaver Meadow Run | Headwaters (Riverine) | 1.2 | 41.3706 | -81.4592 | 41100020504 | Y | 77 | Ohio EPA | 2006 |

Headwaters- Tinker's Creek

041100020502

| Delisting Progress Matrix | | | | | | | | | | | | | |
|---|-------------|------------------------|---------|------------------------------|-------------|------------------------------|------------------|-------------------------------|-------------------|--|-------------|--------------|--|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled | |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | Site must have greater than 20 Sq. Miles in Drainage to calculate MIwb scores. | | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | | |
| Needed for Delisting Headwaters: | | | | | | | IBI > 36 | | NA | | | | |
| Needed for Delisting Wading: | | | | | | | IBI > 34 | | MIwb > 7.5 | | | | |
| Needed for Delisting Boat: | | | | | | | IBI > 36 | | MIwb > 8.2 | | | | |
| N = not in attainment | | * = no data | | Y = meets delisting criteria | | | | | | | | | |
| | | | | | | IBI | | | MIwb | | | | |
| Tinkers Creek | Headwaters | 24.4 | 41.2692 | -81.3931 | 41100020502 | N | 26 | NA | NA | 19 | Ohio EPA | 2006 | |
| Tinkers Creek | Headwaters | 25.1 | 41.2628 | -81.3944 | 41100020502 | N | 26 | NA | NA | 19 | Ohio EPA | 2009 | |
| Tinkers Creek | Headwaters | 28.8 | 41.2158 | -81.3728 | 41100020502 | N | 34 | NA | NA | 3.6 | Ohio EPA | 2006 | |
| Trib. to Tinkers Creek (| Headwaters | 0.6 | 41.2542 | -81.4188 | 41100020502 | N | 30 | NA | NA | 0.2 | Ohio EPA | 2013 | |

| Delisting Progress Matrix | | | | | | | | | | |
|--|-----------------------|------------------------|---------|------------------------------|-------------|-------------------------------|------------|-------------|--------------|--|
| BUI:14a Loss of Fish Habitat | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled | |
| QHEI Score needed for LRW and Lacustrary = | | | | | | | QHEI >55 | | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | | |
| N = not in attainment | | * = no data | | Y = meets delisting criteria | | | | | | |
| Tinker's Creek | Wading (Riverine) | 25.2 | 41.2267 | -81.362801 | 41100020502 | Y | 63 | Ohio EPA | 2008 | |
| Tinker's Creek | Headwaters (Riverine) | 24.4 | 41.2692 | -81.3931 | 41100020502 | Y | 63 | Ohio EPA | 2006 | |
| Tinker's Creek | Headwaters (Riverine) | 25.1 | 41.2628 | -81.3944 | 41100020502 | N | 54.5 | Ohio EPA | 2009 | |
| Tinker's Creek | Headwaters (Riverine) | 28.8 | 41.2158 | -81.3728 | 41100020502 | N | 47 | Ohio EPA | 2007 | |
| Tinker's Creek | Headwaters (Riverine) | 30 | 41.2422 | -81.3819 | 41100020502 | N | 56.5 | Ohio EPA | 2014 | |
| Trib. to Tinker's Creek | Headwaters (Riverine) | 0.6 | 41.2542 | -81.4188 | 41100020502 | N | 28.5 | Ohio EPA | 2013 | |

Pond Brook

041100020501

| Delisting Progress Matrix | | | | | | | | | | | | | |
|---|-------------|------------------------|---------|------------------------------|-------------|------------------------------|------------------|-------------------------------|-------------------|---|-------------|--------------|--|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled | |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | Site must have <i>greater than 20 Sq. Miles in Drainage to calculate MIwb scores.</i> | | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | | |
| Needed for Delisting Headwaters: | | | | | | | IBI > 36 | | NA | | | | |
| Needed for Delisting Wading: | | | | | | | IBI > 34 | | MIwb > 7.5 | | | | |
| Needed for Delisting Boat: | | | | | | | IBI > 36 | | MIwb > 8.2 | | | | |
| N = not in attainment | | * = no data | | Y = meets delisting criteria | | | | | | | | | |
| | | | | | | IBI | | | MIwb | | | | |
| Pond Brook | Headwaters | 0.9 | 41.2983 | -81.4042 | 41100020501 | N | 30 | NA | NA | 15.8 | Ohio EPA | 2006 | |
| Pond Brook | Headwaters | 1.4 | 41.3053 | -81.3997 | 41100020501 | N | 22 | NA | NA | 15.7 | Ohio EPA | 2012 | |
| Pond Brook | Headwaters | 2.3 | 41.3173 | -81.4011 | 41100020501 | N | 20 | NA | NA | 10.9 | Ohio EPA | 2012 | |
| Pond Brook | Headwaters | 2.6 | 41.3216 | -81.4013 | 41100020501 | N | 32 | NA | NA | 7.6 | Ohio EPA | 2011 | |
| Pond Brook | Headwaters | 3.4 | 41.3314 | -81.4028 | 41100020501 | N | 32 | NA | NA | 5 | Ohio EPA | 2012 | |
| Pond Brook | Headwaters | 3.5 | 41.3346 | -81.4018 | 41100020501 | N | 26 | NA | NA | 5 | NEORS | 2008 | |
| Pond Brook | Headwaters | 3.7 | 41.3356 | -81.4021 | 41100020501 | Y | 38 | NA | NA | 1.6 | Ohio EPA | 2012 | |
| Pond Brook | Headwaters | 4.3 | 41.3419 | -81.4078 | 41100020501 | Y | 38 | NA | NA | 1.5 | Ohio EPA | 2006 | |
| Trib. to Pond Brook (RM) | Headwaters | 0.2 | 41.3212 | -81.4036 | 41100020501 | N | 28 | NA | NA | 0.2 | Ohio EPA | 2011 | |

| Delisting Progress Matrix | | | | | | | | | | | | |
|---|-----------------------|------------------------|---------|------------------------------|-------------|-------------------------------|------------|-------------|--------------|--|--|--|
| BUI:14a Loss of Fish Habitat | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled | | | |
| QHEI Score needed for LRW and Lacustrary = | | | | | | | | QHEI >55 | | | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | | QHEI >60 | | | | |
| N = not in attainment | | * = no data | | Y = meets delisting criteria | | | | | | | | |
| Pond Brook | Headwaters (Riverine) | 0.9 | 41.2983 | -81.4042 | 41100020501 | N | 28 | Ohio EPA | 2006 | | | |
| Pond Brook | Headwaters (Riverine) | 1.4 | 41.3053 | -81.3997 | 41100020501 | N | 32.5 | Ohio EPA | 2012 | | | |
| Pond Brook | Headwaters (Riverine) | 2.3 | 41.3173 | -81.4011 | 41100020501 | N | 38 | Ohio EPA | 2012 | | | |
| Pond Brook | Headwaters (Riverine) | 2.6 | 41.3216 | -81.4013 | 41100020501 | N | 57 | Ohio EPA | 2013 | | | |
| Pond Brook | Headwaters (Riverine) | 3.4 | 41.3314 | -81.4028 | 41100020501 | Y | 61 | Ohio EPA | 2013 | | | |
| Pond Brook | Headwaters (Riverine) | 3.7 | 41.3356 | -81.4021 | 41100020501 | N | 25.8 | Ohio EPA | 2012 | | | |
| Pond Brook | Headwaters (Riverine) | 4.3 | 41.3419 | -81.4078 | 41100020501 | N | 44.5 | Ohio EPA | 2006 | | | |
| Trib. to Pond Brook | Headwaters (Riverine) | 0.2 | 41.3212 | -81.4036 | 41100020501 | N | 58 | Ohio EPA | 2011 | | | |

Brandywine Creek

041100020404

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|-----------------------------|---------|----------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustuary = | | | | | | | QHEI >55 | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | * = no data | Y= meets delisting criteria | | | QHEI | | | | |
| Brandywine Creek | Wading (Riverine) | 1.5 | 41.2778 | -81.5454 | 41100020404 | Y | 75.5 | Ohio EPA | 2010 |
| Brandywine Creek | Headwaters (Riverine) | 2.5 | 41.2491 | -81.4521 | 41100020404 | Y | 72 | NEORS | 2014 |
| Brandywine Creek | Headwaters (Riverine) | 3.4 | 41.2831 | -81.5048 | 41100020404 | N | 46 | NEORS | 2014 |
| Brandywine Creek | Headwaters (Riverine) | 5.5 | 41.2942 | -81.5187 | 41100020404 | N | 53.5 | NEORS | 2014 |
| Brandywine Creek | Wading (Riverine) | 6.2 | 41.3584 | -81.4739 | 41100020404 | N | 57.5 | NEORS | 2014 |
| Brandywine Creek | Headwaters (Riverine) | 6.4 | 41.2559 | -81.473 | 41100020404 | Y | 62 | NEORS | 2014 |

Mud Brook

041100020401

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|-----------------------------|---------|----------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustuary = | | | | | | | QHEI >55 | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | * = no data | Y= meets delisting criteria | | | QHEI | | | | |
| Mud Brook | Headwaters (Riverine) | 0.5 | 41.2175 | -81.4711 | 41100020401 | N | 50.5 | Ohio EPA | 2014 |
| Mud Brook | Headwaters (Riverine) | 1.25 | 41.3206 | -81.6481 | 41100020401 | Y | 71 | Ohio EPA | 2014 |
| Mud Brook | Headwaters (Riverine) | 2.2 | 41.3244 | -81.6722 | 41100020401 | Y | 77.5 | Ohio EPA | 2014 |
| Mud Brook | Headwaters (Riverine) | 3.2 | 41.3122 | -81.6917 | 41100020401 | N | 52.5 | Ohio EPA | 2014 |
| Trib to Mud Brook | Headwaters (Riverine) | 5.48 | 41.1718 | -81.4781 | 41100020401 | N | 46 | Ohio EPA | 2014 |

Furnace Run
041100020403

| Delisting Progress Matrix | | | | | | | | | | | | |
|---|-------------|------------------------|------------------------------|-----------|-------------|------------------------------|------------------|-------------------------------|-------------------|---|-------------|--------------|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | <i>Site must have greater than 20 Sq. Miles in Drainage to calculate MIwb scores.</i> | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | |
| Needed for Delisting Headwaters: (EWH IBI >46) | | | | | | | IBI > 36 | | NA | | | |
| Needed for Delisting Wading: (EWH IBI >46, MIwb >8.9) | | | | | | | IBI > 34 | | MIwb > 7.5 | | | |
| Needed for Delisting Boat: (EWH IBI >44, MIwb >9.1) | | | | | | | IBI > 36 | | MIwb > 8.2 | | | |
| not in attain | | * = no data | Y = meets delisting criteria | | | | | | | | | |
| | | | | | | IBI | | MIwb | | | | |
| Furnace Run | Headwaters | 0.2 | 41.121 | -81.3411 | 41100020403 | Y | 36 | Y | 7.7 | * | OhioEPA | 2008 |
| Furnace Run | Headwaters | 0.4 | 41.2008 | -81.576 | 41100020403 | Y | 44 | NA | 0 | 19.9 | Ohio EPA | 2009 |
| Furnace Run | Headwaters | 0.9 | 41.2039 | -81.5836 | 41100020403 | Y | 44 | NA | 0 | 19.8 | Ohio EPA | 2009 |
| Furnace Run | Headwaters | 1.1 | 41.2039 | -81.5863 | 41100020403 | Y | 42 | NA | 0 | 19.7 | Ohio EPA | 2009 |
| Furnace Run | Headwaters | 4.8 | 41.223601 | -81.62813 | 41100020403 | Y | 42 | NA | 0 | * | OhioEPA | 2008 |
| Furnace Run | Headwaters | 6.5 | 41.2532 | -81.6295 | 41100020403 | Y | 46 | NA | 0 | 7.6 | Ohio EPA | 2012 |
| Furnace Run | Headwaters | 6.9 | 41.2575 | -81.633 | 41100020403 | Y | 52 | NA | 0 | 5.9 | Ohio EPA | 2012 |
| Furnace Run | Headwaters | 7.2 | 41.2601 | -81.6374 | 41100020403 | Y | 50 | NA | 0 | 5.7 | Ohio EPA | 2012 |
| Furnace Run | Headwaters | 7.3 | 41.255097 | -81.64942 | 41100020403 | Y | 45 | NA | 0 | * | OhioEPA | 2008 |
| Furnace Run | Headwaters | 7.8 | 41.274968 | -81.65457 | 41100020403 | Y | 48 | NA | 0 | * | OhioEPA | 2008 |
| Furnace Run | Headwaters | 8 | 41.2682 | -81.6408 | 41100020403 | Y | 48 | NA | 0 | 2.8 | Ohio EPA | 2006 |
| Rock Creek | Headwaters | 0.3 | 41.2695 | -81.6382 | 41100020403 | Y | 50 | NA | 0 | 1.4 | Ohio EPA | 2006 |

| BUI:6 Degradation of Benthos | | | | | | | | | |
|---|-------------------------|--------------------------|---------|----------|-------------|------------------------------|----------------------------|-------------|--------------|
| River Segment or Monitoring Location | Sample area Designation | RM | Lat | Long | HUC12 | Meets ICI Delisting Criteria | Latest Score ICI Data From | Data Source | Year Sampled |
| Lacustrine Sites | | | | | | | | | |
| Needed for Delisting Lacustrine: | | | | | | ICI >34 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | |
| Needed for Delisting Headwaters, Wading and Boat: | | | | | (EWH= ICI | ICI >30 | | | |
| not in attain | * = no data | Y= Meets Delisting Crite | | | | | | | |
| ICI | | | | | | | | | |
| Furnace Run | Headwaters (Riverine) | 0.4 | 41.2008 | -81.576 | 41100020403 | Y | 34 | Ohio EPA | 2006 |
| Furnace Run | Headwaters (Riverine) | 1.1 | 41.2039 | -81.5863 | 41100020403 | Y | 38 | Ohio EPA | 2009 |
| Furnace Run | Headwaters (Riverine) | 6.5 | 41.2532 | -81.6295 | 41100020403 | Y | 40 | Ohio EPA | 2009 |
| Furnace Run | Headwaters (Riverine) | 7.3 | 41.2602 | -81.637 | 41100020403 | Y | 40 | Ohio EPA | 2006 |
| Furnace Run | Headwaters (Riverine) | 7.8 | 41.2664 | -81.6397 | 41100020403 | Y | 44 | Ohio EPA | 2006 |
| Furnace Run | Headwaters (Riverine) | 8 | 41.2682 | -81.6408 | 41100020403 | Y | 44 | Ohio EPA | 2006 |
| Rock Creek | Headwaters (Riverine) | 0.3 | 41.2695 | -81.6382 | 41100020403 | N | 26 | Ohio EPA | 2006 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|------------------------|-----------|-----------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustrary = (EWH score needed = QHEI >) | | | | | | | QHEI >55 | | |
| QHEI Score Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in a * = no data Y= meets delisting criteria | | | | | | | | | |
| | | | | | | | QHEI | | |
| Furnace Run | Headwaters (Riverine) | 0.2 | 41.121 | -81.3411 | 41100020403 | Y | 65.5 | Ohio EPA | 2008 |
| Furnace Run | Headwaters (Riverine) | 0.4 | 41.2008 | -81.576 | 41100020403 | Y | 77.5 | Ohio EPA | 2009 |
| Furnace Run | Headwaters (Riverine) | 0.9 | 41.2039 | -81.5836 | 41100020403 | Y | 75 | Ohio EPA | 2009 |
| Furnace Run | Headwaters (Riverine) | 1.1 | 41.2039 | -81.5863 | 41100020403 | Y | 74 | Ohio EPA | 2009 |
| Furnace Run | Headwaters (Riverine) | 4.8 | 41.223601 | -81.62813 | 41100020403 | Y | 71.5 | Ohio EPA | 2008 |
| Furnace Run | Headwaters (Riverine) | 6.5 | 41.2532 | -81.6295 | 41100020403 | Y | 78.8 | Ohio EPA | 2012 |
| Furnace Run | Headwaters (Riverine) | 6.9 | 41.2575 | -81.633 | 41100020403 | Y | 66.5 | Ohio EPA | 2012 |
| Furnace Run | Headwaters (Riverine) | 7.2 | 41.2601 | -81.6374 | 41100020403 | Y | 79.5 | Ohio EPA | 2012 |
| Furnace Run | Headwaters (Riverine) | 7.3 | 41.255097 | -81.64942 | 41100020403 | Y | 80.5 | Ohio EPA | 2008 |
| Furnace Run | Headwaters (Riverine) | 7.8 | 41.274968 | -81.65457 | 41100020403 | Y | 74.5 | Ohio EPA | 2008 |
| Furnace Run | Headwaters (Riverine) | 8 | 41.2682 | -81.6408 | 41100020403 | Y | 72 | Ohio EPA | 2006 |
| Rock Creek | Headwaters (Riverine) | 0.3 | 41.2695 | -81.6382 | 411000 | Y | 77 | Ohio EPA | 2006 |

Yellow Creek

041100020402

| Delisting Progress Matrix | | | | | | | | | | | | |
|---|-------------|-----------------------|---------|----------|-------------|------------------------------|------------------|-------------------------------|-------------------|---|-------------|--------------|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | Site must have <u>greater than 20 Sq. Miles</u> in Drainage to calculate MIwb scores. | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | |
| Needed for Delisting Hei (EWH IBI >46) | | | | | | | IBI > 36 | | NA | | | |
| Needed for Delisting Wa (EWH IBI >46, MIwb >8.9) | | | | | | | IBI > 34 | | MIwb > 7.5 | | | |
| Needed for Delisting Boz (EWH IBI >44, MIwb >9.1) | | | | | | | IBI > 36 | | MIwb > 8.2 | | | |
| not in attainn * = no data Y = meets delisting criteria | | | | | | | | | | | | |
| LRW | | | IBI | | | | MIwb | | | | | |
| Yellow Creek | Wading | 0.1 | 41.947 | -81.3425 | 41100020402 | Y | 40 | Y | 8.9 | * | OhioEPA | 2008 |
| Yellow Creek | Wading | 1 | 41.1622 | -81.5884 | 41100020402 | Y | 42 | Y | 9.084 | 30.2 | Ohio EPA | 2006 |
| Yellow Creek | Wading | 1.2 | 41.1633 | -81.5932 | 41100020402 | Y | 38 | Y | 8.724 | 29.9 | Ohio EPA | 2009 |
| Yellow Creek | Wading | 4.6 | 41.1576 | -81.6369 | 41100020402 | Y | 42 | N | 5.557 | 22.8 | Ohio EPA | 2010 |
| Bath Creek | Headwaters | 1.8 | 41.1773 | -81.6587 | 41100020402 | N | 26 | NA | 0 | 3.1 | Ohio EPA | 2010 |
| Bath Creek | Headwaters | 2.1 | 41.1829 | -81.6599 | 41100020402 | N | 30 | NA | 0 | 1.8 | Ohio EPA | 2010 |
| Bath Creek | Headwaters | 2.3 | 41.1851 | -81.6611 | 41100020402 | N | 26 | NA | 0 | 1.7 | Ohio EPA | 2010 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|------------------------|-----------|-----------------------------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustrary = | | | | | | | QHEI >55 | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | | * = no data | | Y= meets delisting criteria | | QHEI | | | |
| Yellow Creek | Wading (Riverine) | 0.1 | 41.947 | -81.3425 | 41100020402 | Y | 84 | Ohio EPA | 2008 |
| Yellow Creek | Wading (Riverine) | 1 | 41.1622 | -81.5884 | 41100020402 | Y | 74.5 | Ohio EPA | 2012 |
| Yellow Creek | Wading (Riverine) | 1.2 | 41.1633 | -81.5932 | 41100020402 | Y | 80.5 | Ohio EPA | 2009 |
| Yellow Creek | Headwaters (Riverine) | 1.4 | 41.154 | -81.6144 | 41100020402 | Y | 73.5 | Ohio EPA | 2014 |
| Yellow Creek | Headwaters (Riverine) | 1.65 | 41.1606 | -81.649 | 41100020402 | Y | 76 | Ohio EPA | 2014 |
| Yellow Creek | Headwaters (Riverine) | 3.5 | 41.1358 | -81.6765 | 41100020402 | N | 39.5 | Ohio EPA | 2014 |
| Yellow Creek | Headwaters (Riverine) | 4.6 | 41.1576 | -81.6369 | 41100020402 | Y | 60 | Ohio EPA | 2010 |
| Upstream Spring Creek | Headwaters (Riverine) | 1.5 | 41.255908 | -81.577686 | 41100020402 | Y | 68 | Ohio EPA | 2014 |
| Bath Creek | Headwaters (Riverine) | 2.1 | 41.1829 | -81.6599 | 41100020402 | N | 54.5 | Ohio EPA | 2010 |
| Bath Creek | Headwaters (Riverine) | 2.3 | 41.1851 | -81.6611 | 41100020402 | N | 43.5 | Ohio EPA | 2010 |

City of Akron- Little Cuyahoga River

041100020304

| Delisting Progress Matrix | | | | | | | | | | | | |
|---|-------------|------------------------|---------|----------|-------------|------------------------------|------------------|-------------------------------|-------------------|---|-------------|--------------|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | Site must have <u>greater than 20 Sq. Miles</u> in Drainage to calculate MIwb scores. | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | |
| Needed for Delisting Headwater: (EWH IBI >46) | | | | | | | IBI > 36 | | NA | | | |
| Needed for Delisting Wading: (EWH IBI >46, MIwb >8.9) | | | | | | | IBI > 34 | | MIwb > 7.5 | | | |
| Needed for Delisting Boat: (EWH IBI >44, MIwb >9.1) | | | | | | | IBI > 36 | | MIwb > 8.2 | | | |
| not in attainn * = no data Y = meets delisting criteria | | | | | | | | | | | | |
| LRW | | | | | | | IBI | | MIwb | | | |
| Little Cuyahoga River | Wading | 5.2 | 41.0722 | -81.4861 | 41100020304 | N | 30 | N | 7.039 | 47 | Ohio EPA | 2010 |
| Little Cuyahoga River | Boat | 6.2 | 41.0631 | -81.4802 | 41100020304 | N | 26 | N | 6.414 | 47 | Ohio EPA | 2010 |
| Little Cuyahoga River | Wading | 7.1 | 41.0603 | -81.4631 | 41100020304 | N | 32 | N | 6.958 | 31 | Ohio EPA | 2010 |

| BUI:6 Degradation of Benthos | | | | | | | | | |
|---|-------------------------|-----|---------|----------|-------------|------------------------------|----------------------------|-------------|--------------|
| River Segment or Monitoring Location | Sample area Designation | RM | Lat | Long | HUC12 | Meets ICI Delisting Criteria | Latest Score ICI Data From | Data Source | Year Sampled |
| Lacustrary Sites | | | | | | | | | |
| Needed for Delisting Lacustrary: | | | | | | ICI >34 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | |
| Needed for Delisting Headwaters, Wading and Boat: (EWH= | | | | | | ICI >30 | | | |
| not in attainn * = no data Y= Meets Delisting Crite | | | | | | | | | |
| LRW | | | ICI | | | | | | |
| Little Cuyahoga River | Wading (Riverine) | 5.2 | 41.0722 | -81.4861 | 41100020304 | Y | 34 | Ohio EPA | 2010 |
| Little Cuyahoga River | Boat (Riverine) | 6.2 | 41.0631 | -81.4802 | 41100020304 | N | 14 | Ohio EPA | 2010 |
| Little Cuyahoga River | Wading (Riverine) | 7.1 | 41.0603 | -81.4631 | 41100020304 | N | 26 | Ohio EPA | 2010 |

| Delisting Progress Matrix | | | | | | | | | |
|---|-----------------------|------------------------|-----------------------------|----------|-------------|-------------------------------|------------|-------------|--------------|
| BUI:14a Loss of Fish Habitat | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled |
| QHEI Score needed for LRW and Lacustuary = | | | | | | | QHEI >55 | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | |
| N = not in attainment | | * = no data | Y= meets delisting criteria | | | QHEI | | | |
| Little Cuyahoga River | Wading (Riverine) | 5.2 | 41.0722 | -81.4861 | 41100020304 | Y | 61.5 | Ohio EPA | 2010 |
| Little Cuyahoga River | Boat (Riverine) | 6.2 | 41.0631 | -81.4802 | 41100020304 | N | 42 | Ohio EPA | 2010 |
| Little Cuyahoga River | Boat (Riverine) | 6.5 | 41.0644 | -81.4422 | 41100020304 | N | 57.5 | Ohio EPA | 2014 |
| Little Cuyahoga River | Boat (Riverine) | 6.8 | 41.0944 | -81.5217 | 41100020304 | Y | 62.5 | Ohio EPA | 2014 |
| Little Cuyahoga River | Wading (Riverine) | 7.1 | 41.0603 | -81.4631 | 41100020304 | Y | 66.5 | Ohio EPA | 2010 |
| L. Cuy R - Chessie Trib | Headwaters (Riverine) | 4.11 | 41.0861 | -81.4869 | 41100020304 | Y | 61 | Ohio EPA | 2014 |

Wingfoot Lake- Little Cuyahoga River

041100020303

| Delisting Progress Matrix | | | | | | | | | | | | |
|--|-------------|------------------------|---------|----------|-------------|------------------------------|------------------|-------------------------------|-------------------|---|-------------|--------------|
| BUI 3a: Degradation of Fish Populations | | | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River Mile/ Trib. Mile | Lat | Long | HUC12 | Meets IBI Delisting Criteria | Latest Score IBI | Meets MIwb Delisting Criteria | Latest Score MIwb | Drainage Area (Sq. mi.) | Data Source | Year Sampled |
| Lacustrary, LRW Sites | | | | | | | WWH | | WWH | Site must have <u>greater than 20 Sq. Miles</u> in Drainage to calculate MIwb scores. | | |
| Needed for Delisting Lacustrary: | | | | | | | IBI > 42 | | MIwb > 8.6 | | | |
| Headwaters, Wading, Boat Sites | | | | | | | | | | | | |
| Needed for Delisting Headwater: (EWH IBI >46) | | | | | | | IBI > 36 | | NA | | | |
| Needed for Delisting Wading: (EWH IBI >46, MIwb >8.9) | | | | | | | IBI > 34 | | MIwb > 7.5 | | | |
| Needed for Delisting Boat: (EWH IBI >44, MIwb >9.1) | | | | | | | IBI > 36 | | MIwb > 8.2 | | | |
| not in attainment * = no data Y = meets delisting criteria | | | | | | | | | | | | |
| LRW | | | | | | IBI | | | MIwb | | | |
| Wingfoot Lake Outlet | Headwaters | 1.5 | 41.0414 | -81.3822 | 41100020303 | N | 18 | NA | 0 | 5.8 | Ohio EPA | 2006 |
| Wingfoot Lake Outlet | Headwaters | 2.8 | 41.0274 | -81.372 | 41100020303 | N | 26 | NA | 0 | 4.5 | Ohio EPA | 2006 |
| Wingfoot Lake Outlet | Headwaters | 0.1 | 41.0542 | -81.3992 | 41100020303 | N | 30 | NA | 0 | 7.2 | Ohio EPA | 2006 |

| Delisting Progress Matrix | | | | | | | | | | |
|--|-----------------------|------------------------|---------|----------|-------------|-------------------------------|------------|-------------|--------------|--|
| BUI:14a Loss of Fish Habitat | | | | | | | | | | |
| River Name or Monitoring Location | Sample Type | River mile/ Trib. mile | Lat | Long | HUC12 | Meets QHEI Delisting Criteria | QHEI Score | Data Source | Year Sampled | |
| QHEI Score needed for LRW and Lacustrary = | | | | | | | QHEI >55 | | | |
| QHEI Score needed for Wading, Boat, and Headwater sites = | | | | | | | QHEI >60 | | | |
| N = not in attainment * = no data Y = meets delisting criteria | | | | | | QHEI | | | | |
| Trib to L. Cuyahoga | Headwaters (Riverine) | 11.59 | 41.0779 | -81.4214 | 41100020303 | N | 58 | Ohio EPA | 2014 | |
| Springfield Lake Outlet | Headwaters (Riverine) | 0.3 | 41.0553 | -81.4567 | 41100020303 | N | 52 | Ohio EPA | 2014 | |
| Wingfoot Lake Outlet | Headwaters (Riverine) | 0.1 | 41.0542 | -81.3992 | 41100020303 | N | 49 | Ohio EPA | 2006 | |
| Wingfoot Lake Outlet | Headwaters (Riverine) | 1.5 | 41.0414 | -81.3822 | 41100020303 | N | 45.5 | Ohio EPA | 2006 | |
| Wingfoot Lake Outlet | Headwaters (Riverine) | 2.8 | 41.0274 | -81.372 | 41100020303 | N | 48.5 | Ohio EPA | 2006 | |

APPENDIX D

Literature and Sites Referenced per BUI

Section I

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