



Proposed Rule – Beneficial Use Designations

Water Quality Standards Use Designations (OAC Chapter 3745-1)

What does OAC Chapter 3745-1 cover?

Ohio Administrative Code (OAC) Chapter 3745-1 contains Ohio's standards for water quality. Water quality standards are state regulations or rules that protect lakes, rivers, streams and other surface water bodies from pollution. These rules contain: beneficial use designations such as warmwater aquatic life habitat, public water supply and primary contact recreation; numeric levels and narrative statements (water quality criteria) protective of the beneficial use designations; and procedures for applying the water quality criteria to wastewater discharges. This rulemaking involves water body beneficial use designations.

What are beneficial use designations?

A goal of the Clean Water Act is to achieve fishable and swimmable conditions in water bodies, wherever attainable. The fishable and swimmable goals equate to the warmwater habitat (WWH) and primary contact recreation (PCR) use designations in OAC Chapter 3745-1. The use designations are defined in OAC rule 3745-1-07 and are briefly discussed below. The water quality criteria and values protective of the designated uses are found within OAC Chapter 3745-1.

Beneficial use designations are the water quality goals for lakes, rivers, streams and other water bodies. Designations include such uses as aquatic life habitats (warmwater, coldwater, etc.), recreation (bathing waters, primary contact, secondary contact) and water supplies (public, agricultural, industrial).

Beneficial use designations are assigned to specific water bodies in OAC Chapter 3745-1. Each of the 23 major drainage basins or watersheds in the state is assigned a rule in Chapter 3745-1. Specific water quality criteria are associated with each beneficial use and are the minimum specific target conditions to be maintained in the water bodies. Together the uses and criteria may be the basis for permit limits in wastewater discharge permits and conditions in Section 401 water quality certifications. Changes to designated uses are adopted as water quality standard rule revisions.

Which water quality standards rule is under review at this time?

This rulemaking consists of a review of the beneficial use designation rule for the Wabash River (OAC 3745-1-29) watershed. The Wabash River, which originates near Fort Recovery in west central Ohio, drains nearly 40,000 square miles as it flows for 509 miles from Ohio through Indiana and along the Indiana-Illinois border southward to its confluence with the Ohio River downstream of Evansville, Indiana. The Wabash River flows from Ohio into Indiana at river mile 466.10 in Mercer County, placing about 43 miles of the river or about 8% of its total length within Ohio (Figure 1). The drainage area at this point is about 309 square miles, which accounts for less than 1% of all the land surface that drains into the Wabash River. The major tributary to the Wabash River within Ohio is Beaver Creek, which enters the Wabash River at river mile 468.82. The Wabash River watershed is also home to Grand Lake St. Marys, Ohio's largest inland lake by surface area, which is hydrologically connected to the Wabash River via Beaver Creek. The Wabash River and its tributaries within Ohio lie within the Eastern Cornbelt Plains (ECBP) ecoregion.

What changes are being proposed?

State law and the federal Clean Water Act require Ohio EPA to periodically update rules to reflect the latest scientific information. The Agency has evaluated information regarding beneficial use designations for the drainage basin listed above. Three broad types of changes are being proposed:

- 1) Changing beneficial use designations for specific water bodies;
- 2) Adding water bodies that are currently undesignated to the rule; and
- 3) Verifying existing beneficial use designations already listed in the rule.

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Changes, additions and verifications of existing beneficial use designations are based upon the findings of biological, habitat, and water quality surveys. Other available pertinent information is also consulted, including information and comments from interested persons. The paragraphs below explain the changes in more detail.

[Aquatic Life Use Designation Changes](#)

The current aquatic life habitat use designations for 16 stream segments are proposed for revision and are highlighted below. The proposed revisions are summarized by drainage basin in Table 1, while specific details are listed in Table 2. Supporting documents containing data and information to support the proposed revisions are available on the Division of Surface Water web page at: <http://epa.ohio.gov/dsw/dswrules.aspx#120473215-proposed-rules>.

Most of the water bodies presently listed in OAC 3745-1-29 were assigned a WWH designation as part of the original designations assigned to water bodies in the State, prior to the development of Ohio's biological assessment program and biological criteria. The vast majority of original designations made in the 1970s and early 1980s was for the WWH use designation. While the reassignment of the aquatic life habitat use designation to a lower use for these water bodies may appear at first glance to be a "downgrade", this actually represents the first scientific assessment of most of these streams.

- Eleven water bodies currently designated WWH are proposed to be redesignated to Modified Warmwater Habitat (MWH). These water bodies are heavily channelized to maintain drainage to accommodate row crop agriculture and, as a result, the habitat quality is insufficient to support a WWH biological community. These streams lack functional pools and riffles, have minimal to no riparian corridors, have poor substrate quality, are deeply entrenched and lack stream energy (flow) due to very low gradient.
- Five water bodies currently designated WWH are proposed for redesignation to Limited Resource Water (LRW). Biological and habitat assessments of these water bodies were conducted for the first time and found not to support or have the potential to support, the WWH use due to pervasive impacts to the habitat associated with channel maintenance activities.
- No revisions are proposed to current aquatic life habitat use designations for any waterbodies tributary to Grand Lake St. Marys.

[Recreational Use Designation Changes](#)

Most water bodies in the state are designated Primary Contact Recreation (PCR), defined as suitable for full-body contact recreation. The PCR designation represents the "swimmable" goals of the Clean Water Act. Some water bodies are designated Secondary Contact Recreation (SCR), defined as suitable for partial body contact. The determination of whether a water body should be designated PCR or SCR is based on a suite of factors such as the size of the water body, accessibility, and potential for use by children. The only numeric water quality criteria applicable to the recreational use designations are for *E. coli* bacteria.

As part of the 5-year basin biological survey cycle, Ohio EPA field staff occasionally sample streams that are in fact too small and too isolated to support the PCR use. In these cases, a recommendation is made to redesignate the water body SCR to reflect the recreational potential based upon field observations and data gathered during the stream survey.

In this rulemaking, thirteen currently undesignated water bodies are proposed for PCR based upon field observations of the water body and consideration of the factors mentioned above.

[Designations Specifically Assigned for the First Time](#)

Only about one-third of surface water bodies in the state are specifically listed in the water quality standards rules. Those water bodies that are not listed are generally small, unnamed tributaries. As these unlisted water bodies are surveyed and appropriate use designations are determined, they are added to the rules.

With the exception of the biological criteria, the aquatic life water quality criteria applicable to water bodies that are not specifically listed in the rules are the same as those criteria associated with the WWH use designation.

Seven currently undesignated water bodies are proposed to be designated LRW as a result of pervasive habitat impacts related to historic and ongoing channel maintenance activities. A portion of one stream is proposed to be designated

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MWH, also a result of habitat degradation associated with channel maintenance activity. The designation of LRW and MWH will result in the application of less stringent chemical criteria compared to that which applies to undesignated waters.

These eight water body segments that are proposed to be designated an aquatic life use for the first time, as described above, are also proposed to be designated PCR as well as Agricultural Water Supply (AWS) and Industrial Water Supply (IWS). The PCR, AWS, and IWS designations are also proposed for five additional streams for which an aquatic life use designation is being deferred at the present time pending the collection of additional biological and habitat data. The recreational water quality criteria applicable to water bodies that are not specifically listed in rules are the same as those criteria associated with the PCR use designation.

The AWS use designation is intended to prevent adverse effects occurring from use of surface waters to irrigate crops or to water livestock. There are AWS water quality criteria for fourteen chemicals, mostly heavy metals. The designation of water bodies as AWS will result in the application of those water quality criteria.

The IWS use designation is for the protection against adverse effects of the water on industrial processes. There are no specific IWS water quality criteria. Therefore, the designation of water bodies as IWS will not result in any changes to applicable water quality criteria.

Verification of Existing Use Designations

As part of the stream survey process, the use designations identified in the water quality standards rules for many water bodies are verified to be correct. In this rulemaking, verifications of existing designated uses (typically WWH, AWS, IWS and PCR uses) are proposed for twenty water body segments. For these water bodies, the symbols identifying the use designations in the water quality standards rules will change from asterisks to plus signs to indicate that they are based on the results of stream surveys.

A list of stream designations proposed for verification is in Table 3 at the end of this fact sheet. Verifying stream designations does not result in any changes to applicable water quality criteria.

Where does the new information come from?

The new information supporting the proposed revisions come from water body surveys. Ohio EPA has an ongoing 5-year basin monitoring schedule that rotates monitoring efforts across the state. The monitoring program consists of surveying the chemical, physical and biological characteristics of selected water bodies throughout the state each year, following the 5-year basin cycle. The purposes of these surveys include determining the present health and uses of the water bodies and predicting the potential health and uses of the water bodies if additional pollution controls were imposed. These proposed rule revisions, incorporating the results of a water body survey reflects the Agency's responsibility to assign beneficial water uses.

Although the Agency has used the water body survey approach to determine applicable use designations for over 30 years, many water bodies have still never been surveyed.

In the 1978 water quality standards rules, only a small number of water bodies were listed with their use designations, determined from information available at the time. All other surface water bodies were assigned the WWH and PCR use designations by default (consistent with baseline goals of the Clean Water Act).

The 1985 water quality standards rules listed all water bodies identified in the Ohio Department of Natural Resources Gazetteer of Ohio Streams and clearly identified their assigned use designations. For most water bodies, the WWH and PCR default use designations were carried over. The 1985 water quality standards rules and subsequent rulemakings included use designations resulting from water body surveys.

Since 1985, the water quality standards rules have distinguished between use designations carried over from the 1978 water quality standards (indicated by asterisks) and those based on the results of water body surveys (indicated by plus signs).

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For information on the current conditions of Ohio water bodies and trends in water quality, see the Ohio EPA Integrated Water Quality Monitoring and Assessment Report. It is available on the web at epa.ohio.gov/dsw/tmdl/OhioIntegratedReport.aspx.

How many water bodies are involved with these rule changes?

Results of water body surveys, indicate that additions/changes in the current beneficial use designations are needed for 29 water body segments in one drainage basin. In addition, verifications of existing designations are included for 20 water body segments in one drainage basins.

Table 1 lists the rule and identifies the types of changes being proposed. Figure 1 shows the location of the Wabash drainage basin, which is the only part of the state for which changes are being proposed. Specific use designation changes for each water body being considered for revisions and for verifications are listed in Tables 2 and 3, respectively, at the end of this fact sheet.

How will the changes affect controls placed on water pollution?

Revisions to designated uses can bring about changes to applicable water quality criteria and ultimately can impact permit limits in cases where those limits are water-quality based. In cases where lower use designations result in the application of less stringent chemical criteria, lower effluent limits for wastewater dischargers may be required.

When a water body's use designation becomes less stringent, existing dischargers must continue the same treatment as before. However, if an existing facility expands its operation or a new facility commences discharging, less stringent pollution controls may be needed to meet the water quality standards for the less stringent use designations.

Detailed information regarding the differences between chemical criteria that apply to various use designations can be viewed in Ohio's water quality standards, available on the at epa.ohio.gov/dsw/rules/3745_1.aspx as well as on tables summarizing aquatic life and human health criteria, available on the web at epa.ohio.gov/dsw/wqs/criteria.aspx.

Overall, there should be no impact as a result of the water body use designation changes, verifications and additions associated with this rulemaking on water pollution controls based upon a review of existing dischargers to these stream segments. This is based on either a lack of change to the criteria that already apply to most of these water bodies, a lack of regulated discharges to water bodies where more stringent criteria would apply, or less stringent criteria that would apply for water bodies where the MWH or LRW aquatic life habitat use is proposed.

What additional information is the Agency seeking?

The Agency is seeking comments from interested stakeholders (public, local officials, and National Pollutant Discharge Elimination System [NPDES] permit holders, industry sectors, other state agencies, consultants and environmental organizations) who may be impacted by these proposed use designation revisions and additions. General comments and specific factual information are welcome. Data on resident fish and macroinvertebrate communities and the physical habitat conditions of the water body are most pertinent to assignment of the proper aquatic life use designation. Data collection must be consistent with acceptable quality assurance protocols to be considered valid.

How are the amendments formatted in the proposed rule?

The existing rule will be rescinded in its entirety and marked "To Be Rescinded" at the top of each page. It will be replaced with new rule OAC 3745-1-29, with all text underlined. This is due to revision to more than 50% of the rule.

What is the rulemaking schedule?

A public hearing on the proposed rules will be held to consider public comments in accordance with Section 119.03 of the Ohio Revised Code. This hearing will be held at the **Ohio EPA Conference Center, Room A, 50 West Town Street, Suite 700, in Columbus, Ohio at 10:30 a.m. on December 18, 2017**. The purpose of the public hearing is to give interested persons the opportunity to present oral or written comments on the proposed rules.

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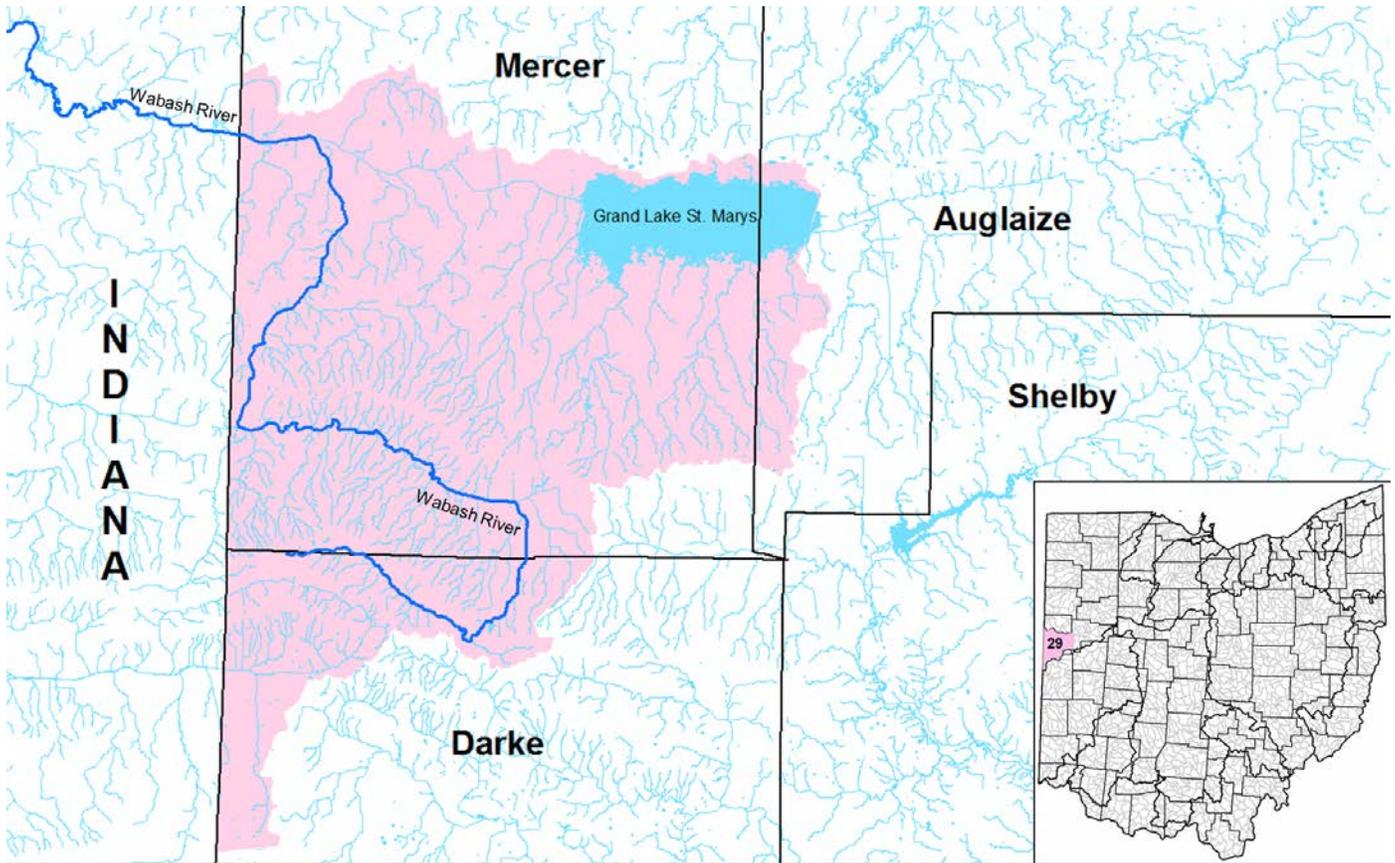
At the close of the public comment period, the Agency will review the comments, make any necessary changes to the rules, and then adopt the rules. This is roughly a two-month process from the close of the comment period. A responsiveness summary will be prepared and sent to everyone who comments on the proposed rules. Final rules could be adopted in early 2018.

Table 1. Reasons for Rule Revisions

Rule #	Drainage Basin	New Additions	Use Designation Changes	Use Designation Verifications	# Water Body Segments Added/Changed/Verified
3745-1-29	Wabash River Basin	X	X	X	13/16/20

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Figure 1. Rule and Associated Drainage Basin where Revisions Are Proposed



How can I comment on the proposed rule?

Please submit your comments in one of the following ways:

- By email: dsw_rulecomments@epa.ohio.gov
- By fax: (614) 644-2745
- By postal mail:
Rule Coordinator
Ohio EPA, Division of Surface Water
P.O. Box 1049
Columbus, OH 43216-1049

Comments on the proposed rule must be received no later than 5:00 p.m. **December 18, 2017.**

How can I get more information?

Copies of this fact sheet, CSI form and the proposed rule are on the Division of Surface Water website at epa.ohio.gov/dsw/dswrules.aspx. For additional background information on water quality standards and beneficial uses, please visit the Water Quality Standards Program web page at: epa.ohio.gov/dsw/wqs/index.aspx. The existing rules in OAC Chapter 3745-1 are available at: epa.ohio.gov/dsw/rules/3745_1.aspx. The biological and water quality studies upon which the rule revisions are based are available at: epa.ohio.gov/dsw/document_index/psdindx.aspx.

For more information about these proposed rules, please contact:

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Table 2. Summary of Proposed Revisions

Page #*	Water Body Segment	Existing Designated Uses**	Proposed Revisions
Wabash River Drainage Basin, OAC 3745-1-29			
2	Wabash River – headwaters to Rhynard Fink Road (RM 502.17)	WWH, AWS, IWS, PCR	Designate LRW-SDM in lieu of WWH
2	Wabash River – Rhynard Fink Road (RM 502.17) to Stony Creek (RM 481.40)	WWH, AWS, IWS, PCR	Designate MWH-CM in lieu of WWH
2	Hickory Branch	WWH, AWS, IWS, PCR	Designate MWH-CM in lieu of WWH
2	Beaver Creek	WWH, AWS, IWS, PCR	Designate MWH-CM in lieu of WWH
2	Prairie Creek – headwaters to Erastus Durbin Road (RM 3.08)	None	Designate LRW-SDM, AWS, IWS, PCR
2	Prairie Creek – Erastus Durbin Road (RM 3.08) to the mouth	None	Designate MWH-CM, AWS, IWS, PCR
2	Big Run	WWH, AWS, IWS, PCR	Designate MWH-CM in lieu of WWH
2	Little Beaver Creek	WWH, AWS, IWS, PCR	Designate MWH-CM in lieu of WWH
2	Little Bear Creek	WWH, AWS, IWS, PCR	Designate MWH-CM in lieu of WWH
2	Hardin Creek	WWH, AWS, IWS, PCR	Designate MWH-CM in lieu of WWH
3	Prairie Creek	None	Designate AWS, IWS, PCR
3	Little Chickasaw Creek ^A	WWH, AWS, IWS, PCR	None ^A
3	Chickasaw Creek ^A	WWH, AWS, IWS, PCR	None ^A
3	East Fork Chickasaw Creek ^A	WWH, AWS, IWS, PCR	None ^A
3	Barnes Creek	None	Designate AWS, IWS, PCR
3	Crab Branch	WWH, AWS, IWS, PCR	Designate MWH-CM in lieu of WWH
3	Toti Creek	WWH, AWS, IWS, PCR	Designate MWH-CM in lieu of WWH
3	Unnamed tributary at Toti Creek RM 2.13	None	Designate LRW-SDM, AWS, IWS, PCR
3	Henry Creek	None	Designate AWS, IWS, PCR
3	Fort Creek	None	Designate AWS, IWS, PCR
3	Unnamed tributary at Fort Creek RM 2.17	None	Designate AWS, IWS, PCR
3	Threemile Creek	WWH, AWS, IWS, PCR	Designate LRW-SDM in lieu of WWH
3	Unnamed tributary at Wabash River RM 489.32	None	Designate LRW-SDM, AWS, IWS, PCR
3	Unnamed tributary at Wabash River RM 491.06	None	Designate LRW-SDM, AWS, IWS, PCR
3	Unnamed tributary at Wabash River RM 492.03	None	Designate LRW-SDM, AWS, IWS, PCR
4	Unnamed tributary at Wabash River RM 492.95	None	Designate LRW-SDM, AWS, IWS, PCR
4	Bear Creek (Wabash River RM 494.25) – headwaters to Watkins Road (RM 1.8)	WWH, AWS, IWS, PCR	Designate LRW-SDM in lieu of WWH

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Page #*	Water Body Segment	Existing Designated Uses**	Proposed Revisions
4	Bear Creek (Wabash River RM 494.25) – Watkins Road (RM 1.8) to the mouth	WWH, AWS, IWS, PCR	Designate MWH-CM in lieu of WWH
4	Ward Ditch (Wabash River RM 494.77)	WWH, AWS, IWS, PCR	Designate LRW-SDM in lieu of WWH
4	Jordan Ditch	WWH, AWS, IWS, PCR	Designate LRW-SDM in lieu of WWH
4	Unnamed tributary at Mississinewa River RM 109.33	None	Designate LRW-SDM, AWS, IWS, PCR
4	Gray Branch	WWH, AWS, IWS, PCR	Designate MWH-CM in lieu of WWH

* The page numbers listed in the table refer to page numbers in the amended rules.

** As indicated in OAC 3745-1-29.

^ Stream is being moved to OAC 3745-1-29 since it is a tributary within the Wabash River drainage basin.

Index of Acronyms Used

The following acronyms are used in this table. Designated uses are defined in OAC 3745-1-07.

AWS = Agricultural Water Supply

IWS = Industrial Water Supply

LRW-SDM = Limited Resource Water-Small Drainageway Maintenance

MWH-CM = Modified Warmwater Habitat – Channel Modification

PCR = Primary Contact Recreation

SCR = Secondary Contact Recreation

WWH = Warmwater Habitat

RM = River Mile. The river mile is a point location describing the lineal distance from the downstream terminus (i.e., mouth) and moving in an upstream direction.

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Table 3. Summary of Existing Use Designations Proposed for Verification

Page #*	Water Body Segment	Existing Designations Proposed for Verification**
Wabash River Drainage Basin, OAC 3745-1-29		
2	Wabash River – Stony Creek (RM 481.4) to the Indiana state line (RM 466.1)	WWH, AWS, IWS, PCR
2	Wabash River – all other segments	AWS, IWS, PCR
2	Hickory Branch	AWS, IWS, PCR
2	Big Run	AWS, IWS, PCR
2	Little Beaver Creek	PCR
2	Little Bear Creek	AWS, IWS, PCR
2	Hardin Creek	AWS, IWS, PCR
2	Coldwater Creek	AWS, IWS, PCR
2	Burntwood Creek	AWS, IWS, PCR
2	Beaver Creek	AWS, IWS, PCR
2	Crab Creek	AWS, IWS, PCR
2	Toti Creek	AWS, IWS, PCR
2	Stony Creek (Simison Creek)	AWS, IWS, PCR
3	Twomile Creek	AWS, IWS, PCR
3	Threemile Creek	AWS, IWS, PCR
3	Bear Creek (all segments)	AWS, IWS, PCR
3	Ward Ditch	AWS, IWS, PCR
3	Mississinewa River	AWS, IWS
3	Jordan Ditch	AWS, IWS, PCR
3	Grays Branch	AWS, IWS, PCR

* The page numbers listed in the table refer to page numbers in the amended rules.

** As indicated in OAC 3745-1-29.

Index of Acronyms Used

The following acronyms are used in this table. Designated uses are defined in OAC 3745-1-07.

WWH = Warmwater Habitat

AWS = Agricultural Water Supply

PCR = Primary Contact Recreation

IWS = Industrial Water Supply

RM = River Mile. The river mile is a point location describing the lineal distance from the downstream terminus (i.e., mouth) and moving in an upstream direction.