



## Draft Rules – 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. The rules in Chapter 3745-1 contain the following: 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 an antidegradation policy. 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 Chapter 3745-1 of the OAC. The use designations are defined in rule 3745-1-07 of the OAC and are briefly discussed below. The water quality criteria and values protective of the designated uses are found within Chapter 3745-1 of the OAC.

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 Chapter 3745-1 of the OAC. 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 rules are under review?**

This rulemaking includes review of four beneficial use designation rules including the Hocking River (3745-1-08), Little Beaver Creek (3745-1-15), Little Miami River (3745-1-18) and Chagrin River (3745-1-22) watersheds.

#### **What types of changes are being considered?**

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 four drainage basins listed above. Three broad types of changes are being considered:

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

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 aquatic life habitat use designation for just a single stream is under consideration for revision as part of this rulemaking, as highlighted below. The draft 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 recommended revisions are

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available on the Division of Surface Water web page at: <http://www.epa.ohio.gov/dsw/dswrules.aspx#120473213-interested-party-review>.

- The Limited Warmwater Habitat (LWH) designation of Herrold Run, a tributary to Federal Creek in Athens County, is under consideration to be re-designated EWH. The LWH designation is a temporary designation originating from 1978 that is being phased out. This designation was never approved by US EPA. This is the last waterbody within the Hocking River drainage basin that still carries the relict LWH designation. Herrold Run was documented to fully attain the applicable EWH biocriteria. Most of the water quality criteria for the EWH and LWH uses are identical except that more stringent chemical criteria for ammonia, dissolved oxygen, dissolved solids, pH and temperature would apply to protect the more sensitive components of the biological community. The EWH biological criteria would also apply.

### 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 is consistent with 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 Ohio EPA’s routine monitoring, 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 re-designate the water body SCR to reflect the recreational potential based upon field observations and data gathered during the stream survey.

In this rulemaking, twenty-one currently undesignated water bodies are recommended for PCR based upon field observations of the water body and consideration of the factors mentioned above. There are no water bodies are under consideration to be designated SCR.

### Designations Specifically Assigned for the First Time

Only about one-third of surface water bodies in the state are 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. This rulemaking would add designations for twenty-one currently unlisted water bodies.

With the exception of the biological criteria, the 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.

Fifteen currently undesignated water body segments are under consideration to be designated WWH. Two of these streams are also recommended for the Seasonal Salmonid Habitat (SSH) designation to protect the Steelhead Trout that have been documented to inhabit these streams on a seasonal basis. Designation of these water body segments as WWH will not result in any changes to chemical specific criteria already applicable. The WWH biological criteria will also now be applicable to these waters. The SSH designation carries slightly more stringent chemical criteria for a few parameters such as dissolved oxygen and ammonia on a seasonal basis to protect these more pollution-sensitive fish.

Five undesignated water body segments are being considered for a CWH designation resulting from surveys of streams in which a coldwater biological signature was documented. The water quality criteria applicable to undesignated streams are the same as those that are applicable to the CWH designation except that more stringent chemical criteria apply for ammonia, cyanide, dissolved oxygen, pH and temperature. There are no specific numeric biocriteria applicable to CWH. One small stream, an unnamed tributary at Duck Creek RM 4.8, is being considered for a LRW designation because of severe habitat limitations resulting from extensive physical alterations that preclude the attainment of the applicable biocriteria. The designation of LRW will result in less stringent aquatic life water quality criteria for all pollutants.

All twenty-one of the water body segments under consideration to be designated an aquatic life use for the first time, as described above, are also under consideration to be designated PCR. 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 and do not result in any new regulatory requirements.

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The Agricultural Water Supply (AWS) and Industrial Water Supply (IWS) use designations are also being considered for the twenty-one streams that are under consideration to be designated an aquatic life use for the first time as described above. No Public Water Supply (PWS) designations are under consideration at this time.

The AWS use designation is for the prevention of 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 have previously been field verified. In this rulemaking, verifications of existing designated uses (typically WWH, AWS, IWS and PCR uses) are recommended for six water bodies. For these water bodies, the symbols identifying the use designations in the water quality standards rules will change from asterisks to plus or circle symbols to indicate that they are based on the results of stream surveys.

A list of stream designations recommended 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 changes under consideration comes from water body surveys conducted by Ohio EPA as part of its routine stream monitoring efforts across the state. Ohio EPA's monitoring program consists of surveying the chemical, physical and biological characteristics of selected water bodies throughout the state each year following a regular 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 draft rule revisions, incorporating the results of water body surveys conducted in the past several years, reflect the Agency's responsibility to assign beneficial water uses. In addition, most of the data for the updates in the Little Miami River drainage basin came from the Midwest Biodiversity Institute (MBI), a credible data collector that provided Level III credible data to Ohio EPA through the credible data program.

Although the Agency has used the water body survey approach to determine applicable use designations for 35 years, many, mostly smaller, water bodies have 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).

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](http://epa.ohio.gov/dsw/tmdl/OhioIntegratedReport.aspx).

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## How many water bodies are involved with these rule changes?

Results of water body surveys, conducted in past years, indicate that additions/changes in the current beneficial use designations are needed for 21 water body segments in four drainage basins. In addition, verifications of existing designations are included for 6 water body segments in three drainage basins.

Table 1 lists the rules and identifies the types of changes under consideration. Figure 1 shows the particular areas within Ohio for which changes are being considered. 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?

The assigned use designations govern the levels of chemical water quality criteria that apply to protect the use designation. Some of these revisions require more stringent controls, other changes may allow less stringent controls. The coldwater and exceptional warmwater habitat uses bring about stricter chemical criteria, as does the replacement of a limited warmwater habitat or limited resource water use with a warmwater habitat use. In these cases, where higher use designations result in the application of more 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](http://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](http://epa.ohio.gov/dsw/wqs/criteria.aspx).

These draft revisions are not projected to affect water pollution controls, based upon a review and analysis of existing regulated discharges to these stream segments. This finding is based on several factors: 1) A lack of change to the criteria that already apply to most of these water bodies; 2) A lack of regulated discharges to water bodies where more stringent criteria would apply; 3) Existing permit limits that are protective of the draft use designation revisions; 4) Less stringent criteria that would apply for water bodies where a revision from an EWH to WWH designation is under consideration or as a result of less stringent criteria that would apply for water bodies where the MWH or LRW aquatic life habitat use is under consideration.

## 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 draft 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.

In addition to the draft rule amendments, Ohio EPA is also seeking comments and feedback on the draft Common Sense Initiative (CSI) Business Regulation Impact Analysis form, which is being released with these draft rules during interested party review.

## How are the amendments formatted in the draft rules?

Text that is considered for deletion is identified in strikeout font; new text is underlined.

## What is the rulemaking schedule?

At this time, the Agency is soliciting input on these draft rule revisions. Ohio EPA is required by section 121.39(D) of the Revised Code to contact potentially affected parties prior to adopting rule changes.

At the close of the draft rule comment period, the Agency will review the comments and make necessary changes to the rules. The Agency will then file proposed rules with the Joint Committee on Agency Rule Review, the Legislative Service Commission and the Secretary of State.

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At that point, another comment period, including one or more public hearings, will be scheduled. After the close of the comment period, the Agency will review the comments, make any necessary changes and then adopt the final rules.

Ohio EPA expects to file the proposed rules during fall 2021.

### How can I comment on the draft rules?

Please submit your comments in one of the following ways:

- By email: [dsw\\_rulecomments@epa.ohio.gov](mailto: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 draft rules must be received no later than 5:00 p.m. December 17, 2021.**

### How can I get more information?

Copies of this fact sheet, CSI form and the draft rules are on the Division of Surface Water website at [epa.ohio.gov/dsw/dswrules.aspx](http://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](http://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](http://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](http://epa.ohio.gov/dsw/document_index/psdindx.aspx).

For more information about these draft rules, please contact:

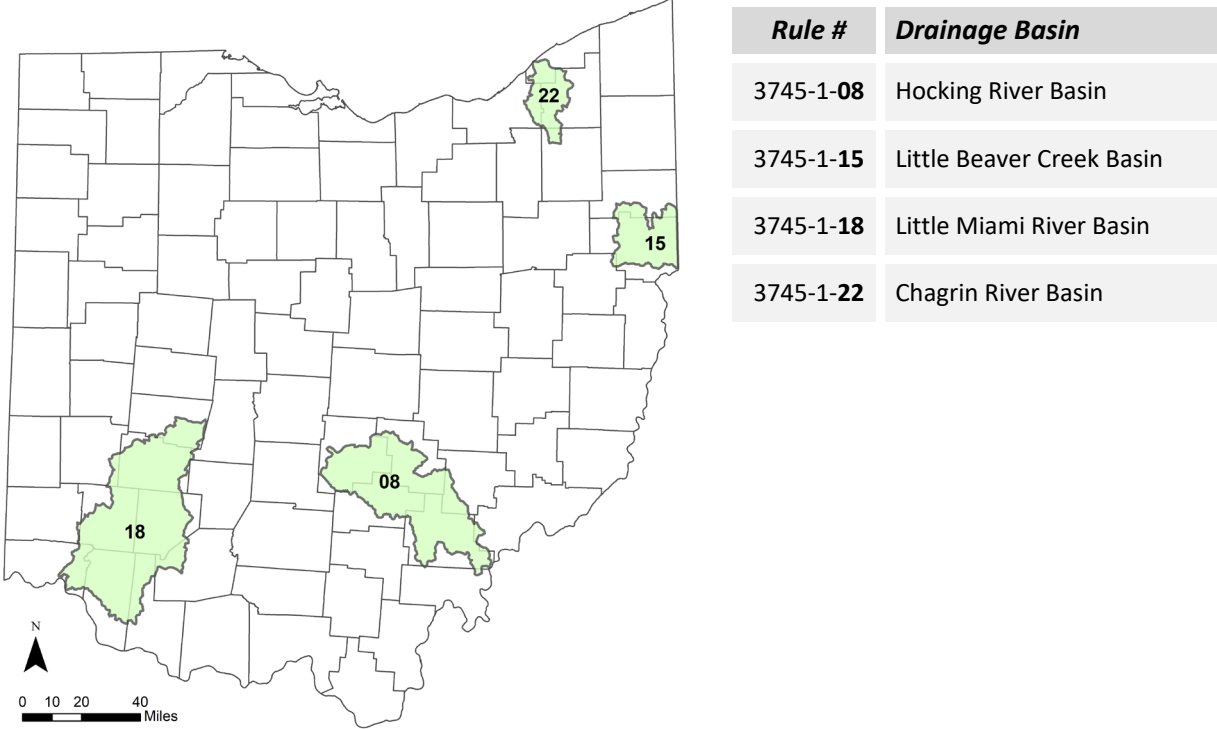
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**Table 1. Summary of Draft Rule Revisions**

Rule #	Drainage Basin	New Additions	Use Designation Changes	Use Designation Verifications
3745-1-08	Hocking River Basin	0	1	2
3745-1-15	Little Beaver Creek Basin	1	0	0
3745-1-18	Little Miami River Basin	13	0	1
3745-1-22	Chagrin River Basin	7	0	3
<b>Totals</b>		<b>21</b>	<b>1</b>	<b>6</b>

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Figure 1. Drainage Basins & Associated Rules where Revisions are under Consideration



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**Table 2. Summary of Draft Revisions Under Consideration**

Page #*	Water Body Segment	Existing Designated Uses**	Revisions Under Consideration
<b>Hocking River Drainage Basin, OAC 3745-1-08</b>			
3	Herrold Run	LWH, AWS, IWS, PCR	Designate EWH in lieu of LWH
<b>Little Beaver Creek Drainage Basin, OAC 3745-1-15</b>			
3	Unnamed tributary (Little Beaver Creek RM 14.68)	None	Designate CWH, AWS, IWS, PCR
<b>Little Miami River Drainage Basin, OAC 3745-1-18</b>			
2	Unnamed tributary (Little Miami River RM 0.83)	None	Designate WWH, AWS, IWS, PCR
2	Unnamed tributary to Clough Creek at RM 3.06	None	Designate WWH, AWS, IWS, PCR
2	UT at RM 0.95 to UT to Clough Creek at RM 3.06	None	Designate WWH, AWS, IWS, PCR
2	Unnamed tributary (McCullough Run RM 1.08)	None	Designate WWH, AWS, IWS, PCR
2	Little Duck Creek (Duck Creek RM 2.0)	None	Designate WWH, AWS, IWS, PCR
2	Unnamed tributary (Duck Creek RM 4.8)	None	Designate LRW-SDM, AWS, IWS, PCR
6	Unnamed tributary (Little Miami River RM 13.1)	None	Designate WWH, AWS, IWS, PCR
6	Unnamed tributary (North Branch Sycamore Creek RM 5.4)	None	Designate WWH, AWS, IWS, PCR
7	Unnamed tributary (Sycamore Creek RM 1.12)	None	Designate WWH, AWS, IWS, PCR
7	Unnamed tributary (Polk Run RM 0.70)	None	Designate WWH, AWS, IWS, PCR
7	Unnamed tributary at RM 1.77 to unnamed tributary at Polk Run RM 0.70	None	Designate WWH, AWS, IWS, PCR
7	Unnamed tributary (Polk Run RM 1.79)	None	Designate WWH, AWS, IWS, PCR
10	Unnamed tributary (Sugar Creek RM 3.33)	None	Designate CWH, AWS, IWS, PCR
<b>Chagrin River Drainage Basin, OAC 3745-1-22</b>			
3	Buttermilk Creek (Chagrin River RM 12.69)	None	Designate SSH, WWH, AWS, IWS, PCR
3	Beechers Brook (Chagrin River RM 14.88)	WWH, AWS, IWS, PCR	Add SSH; List as Beechers Brook
3	Unnamed tributary (Chagrin River RM 15.44)	None	Designate SSH, WWH, AWS, IWS, PCR
3	Unnamed tributary (Chagrin River RM 23.93)	None	Designate WWH, AWS, IWS, PCR
3	Unnamed tributary (Aurora Branch RM 1.92)	None	Designate WWH, AWS, IWS, PCR
3	Sunny Lake tributary (Aurora Branch RM 14.61)	WWH, AWS, IWS, PCR	List as Harmon Run
4	Unnamed tributary (Silver Creek RM 3.23)	None	Designate CWH, AWS, IWS, PCR
4	Unnamed tributary (Silver Creek RM 4.0)	None	Designate CWH, AWS, IWS, PCR
4	Unnamed tributary (Chagrin River RM 44.61)	None	Designate CWH, AWS, IWS, PCR

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

\*\* As indicated in OAC 3745-1-08 through OAC 3745-1-30.

## **Index of Acronyms Used**

The following acronyms are used in this table. Designated uses are defined in OAC 3745-1-05 and OAC 3745-1-07.

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AWS = Agricultural Water Supply  
 CWH = Coldwater Habitat  
 EWH = Exceptional Warmwater Habitat  
 IWS = Industrial Water Supply  
 LRW-AMD = Limited Resource Water-Acid Mine Drainage  
 LWH = Limited Warmwater Habitat  
 PCR = Primary Contact Recreation  
 SSH = Seasonal Salmonid Habitat  
 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.

**Table 3. Summary of Existing Use Designations Recommended for Verification**

Page #*	Water Body Segment	Existing Designations Recommended for Verification**
<b>Hocking River Drainage Basin, OAC 3745-1-08</b>		
3	Herrold Run	AWS, IWS, PCR
13	Fetters Run	WWH, AWS, IWS, PCR
<b>Little Beaver Creek Drainage Basin, OAC 3745-1-15</b>		
--- None ---		
<b>Little Miami River Drainage Basin, OAC 3745-1-18</b>		
6	North Branch Sycamore Creek	WWH, AWS, IWS, PCR
<b>Chagrin River Drainage Basin, OAC 3745-1-22</b>		
2	Unnamed tributary (Pierson Creek RM 0.77)	CWH, AWS, IWS, PCR
2	Unnamed tributary (Pierson Creek RM 1.59)	CWH, AWS, IWS, PCR
4	Pebble Brook (Silver Creek RM 3.50)	CWH, AWS, IWS, PCR

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\*\* As indicated in OAC 3745-1-08 through OAC 3745-1-30.

## **Index of Acronyms Used**

The following acronyms are used in this table. Designated uses are defined in OAC 3745-1-05 and OAC 3745-1-07.

AWS = Agricultural Water Supply                      CWH = Coldwater Habitat                      IWS = Industrial Water Supply  
 PCR = Primary 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.