Ohio Environmental Protection Agency

January 2011

Surface Water Quality – Interested Party Review

Proposed Revisions to Water Quality Standards Use Designations (OAC 3745-1)

What are water quality standards?

Water quality standards are state regulations or rules that protect lakes, rivers, streams and other surface water bodies from pollution. The rules are in Chapter 3745-1 of the Ohio Administrative Code (OAC). 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 use designations; and procedures for applying the water quality criteria to wastewater dischargers.

Which water quality standards rules are proposed at this time?

This rulemaking includes amendments to eight rules that address beneficial use designations. See page 4 for a listing of the proposed rules.

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 protective of the designated uses are found in rules 3745-1-07, 3745-1-33 and 3745-1-34 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 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 the use designations must be adopted as water quality standard rule revisions.

Why are the rules being amended; what types of changes are 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 selected water bodies in eight of the 23 major drainage basins in the state.

Four broad types of changes are proposed:

1) changing beneficial use designations for specific water bodies;
2) adding water bodies that are currently undesignated to the rules;
3) verifying existing beneficial use designations already listed in the rules; and
4) identifying the locations of public water supply intakes.

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 rules also contain an antidegradation designation, state resource water (SRW), for some water bodies. That designation is being removed from those water bodies for which a more recent antidegradation classification was assigned in the antidegradation rule (see paragraphs (A)(25) and (E)(1) of rule 3745-1-05 of the OAC).

Where did the new information come from?

The new information for this rulemaking came from water body surveys. The Agency has an ongoing 5-year basin monitoring schedule that rotates monitoring efforts

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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 water body surveys conducted in the past several years, reflect 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 25 years, many water bodies have still not 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.

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 rules (indicated by asterisks) and those based on the results of water body surveys (indicated by plus signs). Since 1978, the reason for most use designation changes has been that water body surveys show that the default use designations for those water bodies are not attainable. Although it may appear from this fact sheet that water quality is getting either better or worse, nearly all use designation changes are the results of the water body surveys demonstrating that the 1978 default use designations are not correct.

Federal regulations prohibit removal of existing uses, defined as those uses actually attained in the water body on or after November 28, 1975. Changes to allow a lower use designation may occur only if the existing use for that water body, as designated in the water quality standards, has never been verified by a biological and habitat survey, and the current designated use is not attainable, as determined through the use attainability analysis.

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 *www.epa.ohio.gov/dsw/Home.aspx*. Look for it in the DSW Topic Index at the top of the web page.

How many water bodies are involved with these rule changes?

Results of water body surveys, conducted from 2007 to 2009, indicate that changes in the beneficial use designations are needed for 140 water bodies (157 water body segments) in seven drainage basins. Verifications of existing uses are included for 176 water bodies in eight drainage basins.

Table 1 lists the rules and identifies the types of changes proposed. Figure 1 shows the particular areas within the drainage basins for which changes are proposed. Table 2 summarizes the proposed use designation changes. Noteworthy highlights follow Table 2. Specific use designation changes for each water body proposed for revisions are listed in Attachment A at the end of this fact sheet.

I'm interested in a particular water body. How can I tell if its use designations are being revised?

Figure 1 is a map identifying county and watershed boundaries. From this map locate the rule number for your area of interest. If you believe the particular water body is in one of these watersheds, consult the applicable rule or the detailed summary of use designation changes attached to the end of this fact sheet.

How will the changes affect controls placed on water pollution?

Some changes will bring about more stringent controls, other changes may allow less stringent controls. The assigned use designation governs the levels of chemical water quality criteria that apply to protect the use designation. 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 discharges may be required.

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

In both situations, the levels of water quality must be compatible with the water body's potential beneficial use designations. See Table 2 and the accompanying text for

more specific information. 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 web at *www.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 *www.epa.ohio.gov/dsw/wqs/criteria.aspx*.

If the goal of the Clean Water Act is to clean up water bodies, why are some designations becoming less stringent?

The Clean Water Act goal related to the water quality standards program is to provide, wherever attainable, water quality that provides for the protection and propagation of fish, shellfish, and wildlife and to provide for recreation in and on the water. This goal is also referred to as the "fishable/swimmable" goal.

An important part of this goal is the "wherever attainable" component. Attainability is based on the potential of the water body; that is, given appropriate pollution controls, such as point source limitations and nonpoint source best management practices, can the water body be expected to attain the designated uses? If the answer is yes, then those uses are assigned. However, there are water bodies in Ohio that, regardless of pollution controls, will not be able to attain the Clean Water Act goal of fishable/swimmable, usually because of physical habitat conditions or acid mine drainage impacts. In this rulemaking, 21 water bodies are proposed for a use that does not meet the fishable/swimmable goal.

It is also important to recognize that the use designations for some of the streams contained within the scope of this rulemaking represent the Agency's first assessment of a stream's use designation potential. While some of the proposed use designations may appear to be "downgrades," they actually represent the Agency's first scientific assessment of the potential of a particular stream to achieve a particular use based upon an evaluation of biological and habitat data collected by Ohio EPA biologists. It is also important to emphasize that the treatment required of a discharger not only must be set to meet the designated uses of the water body to which it discharges, but must also be protective of all downstream beneficial uses.

What additional information is the Agency seeking?

The Agency wants to hear from interested stakeholders (public, local officials, and National Pollutant Discharge Elimination System (NPDES) permit holders) who may be impacted by these use designation changes 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.

What is the rulemaking schedule?

A public hearing on these 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 B, 50 West Town Street, Suite 700, in Columbus, Ohio at **2:00 p.m. on February 10, 2011**. The purpose of the public hearing is to give interested persons the opportunity to present oral or written comments on the proposed rules.

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 mid 2011.

How can I comment on the proposed revisions?

Please submit your comments in one of the following ways:

By email: *dsw_rulecomments@epa.state.oh.us*
By fax: (614) 644-2745
By postal mail:

Rule Coordinator
Ohio EPA, Division of Surface Water
P.O. Box 1049
Columbus, Ohio 43216-1049

Comments on the proposed rule revisions must be received no later than 5:00 p.m. on February 10, 2011.

How can I get more information?

Copies of this fact sheet and the proposed use designation rules are on the Division of Surface Water website at *www.epa.ohio.gov/dsw/Home.aspx*.

For more information about the proposed rules, please contact:

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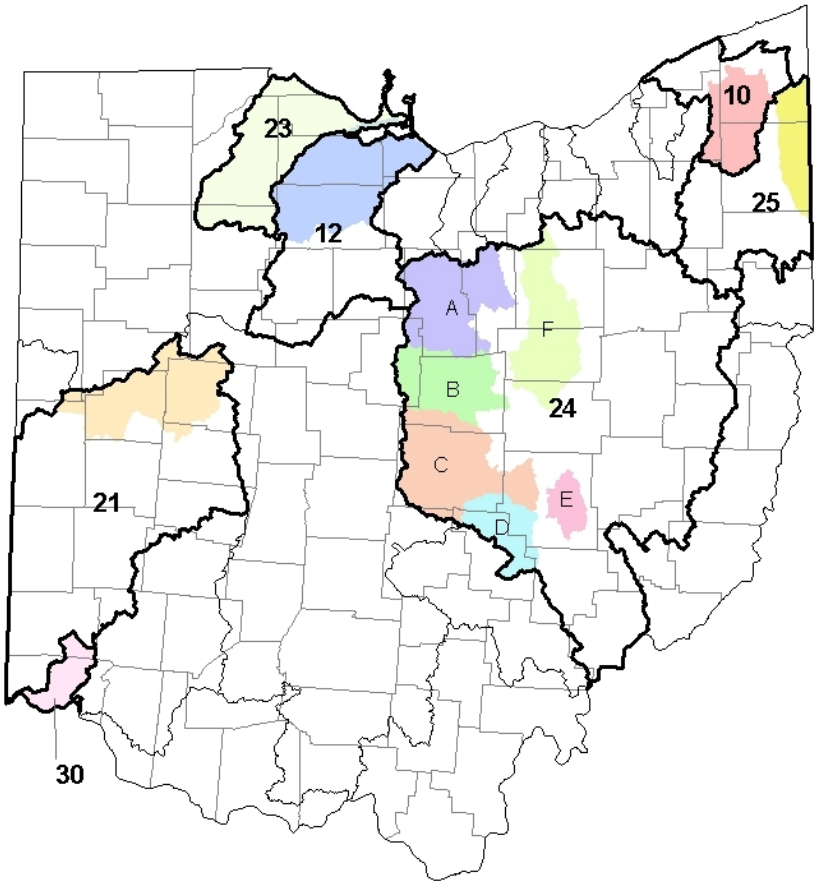
Table 1. Reasons for Rule Revisions*			
Rule # / Drainage Basin	Use Designation Changes	Use Designation Verifications	Number of Water Bodies with Use Designations Being Changed / Verified
3745-1-10 Grand River Basin	✔	✔	10 / 17
3745-1-12 Sandusky River Basin	✔	✔	6 / 16
3745-1-19 Huron River Basin		✔	0 / 1
3745-1-21 Great Miami River Basin	✔	✔	11 / 11
3745-1-23 Portage River Basin	✔	✔	6 / 10
3745-1-24 Muskingum River Basin	✔	✔	103 / 115
3745-1-25 Mahoning River Basin	✔	✔	3 / 5
3745-1-30 Mill Creek Basin	✔	✔	1 / 1
Totals			140 / 176

* In addition, throughout the rules the locations of public water supply intakes are identified. These are not use designation changes because all such areas are already designated public water supply by rule (See paragraph (B)(3) of rule 3745-1-07 of the OAC).

Figure 1. Rules and Associated Drainage Basins with Proposed Revisions to Use Designations



3745-1-**10** Grand River Basin
3745-1-**12** Sandusky River Basin
3745-1-**21** Great Miami River Basin
3745-1-**23** Portage River Basin
3745-1-**24** Muskingum River Basin
A Mohican River sub-basin
B Kokosing River sub-basin
C Licking River sub-basin
D Moxahala Creek sub-basin
E Salt Creek sub-basin
F Killbuck Creek sub-basin
3745-1-**25** Mahoning River Basin
3745-1-**30** Mill Creek Basin

Table 2. Summary of Proposed Use Designation Changes to Rules:
3745-1-10 Grand River Basin 3745-1-12 Sandusky River Basin 3745-1-21 Great Miami River Basin
3745-1-23 Portage River Basin 3745-1-24 Muskingum River Basin 3745-1-25 Mahoning River Basin
3745-1-30 Mill Creek Basin

Use Designation Category	Water Body Segments with Designations Becoming More Stringent				Water Body Segments with Designations Becoming Less Stringent				Water Body Segments with Designations Assigned for the First Time		
	#	Miles	Existing	Proposed	#	Miles	Existing	Proposed	#	Miles	Proposed
Aquatic Life	5	48.0	EWH	CWH+EWH	1	4.7	CWH	WWH	2	9.7	CWH+EWH
	8	57.7	EWH	CWH	6	31.7	EWH	WWH	5	18.9	CWH
	12	91.4	WWH	CWH+EWH	1	3.5	EWH	MWH	21	115.6	WWH
	31	184.8	WWH	CWH	3	19.8	WWH	MWH	7	39.0	MWH
	12	117.5	WWH	EWH	8	20.5	LWH	LRW	1	5.2	LRW
	1	2.3	LWH	CWH+EWH							
	2	10.7	LWH	CWH							
	9	49.5	LWH	WWH							
	4	25.2	LRW	WWH							
	1	1.4	LRW	MWH							
Totals	85	588.5			19	80.2			36	188.4	
Recreation	9	83.4	SCR	PCR	0	0			36	188.4	PCR
Water Supply	0	0			0	0			37	195.9	AWS+IWS

Aquatic Life Use Designation Changes

✎ Thirty one water bodies or water body segments are proposed to be redesignated from **Warmwater Habitat (WWH)** to **Coldwater Habitat (CWH).** Recent biological surveys have demonstrated that these water bodies currently support aquatic organisms indicative of a CWH.

Redesignation from WWH to CWH will result in more stringent water quality criteria for ammonia, cyanide, dissolved oxygen, pH, phenol, silver and temperature.

In addition, Beaver Creek (Seneca County) in the Sandusky River watershed is proposed to be redesignated from CWH to WWH based on a 2009 biological survey that demonstrated the presence of a warm water community. Beaver Creek had not been previously sampled, with the CWH designation based on the 1978 water quality standards rules. This redesignation will result in the application of less stringent criteria for the parameters mentioned above.

✎ Twelve water bodies or water body segments are proposed to be redesignated from WWH to **Exceptional Warmwater Habitat (EWH)**, including the State Scenic designated Kokosing and Mohican Rivers located primarily in Knox and Richland Counties. Recent biological surveys have demonstrated attainment of the EWH use in these water bodies.

The water quality criteria for the EWH and WWH uses are the same except that more stringent biological criteria and more stringent chemical criteria for ammonia, dissolved oxygen, pH and temperature apply to EWH.

Biological criteria are indices, contained in Table 7-15 of rule 3745-1-07 of the OAC, that measure the biological health and biodiversity of streams. They are used to determine whether a stream is attaining the EWH, WWH and **Modified Warmwater Habitat (MWH)** use designations.

✎ Six water bodies or water body segments are proposed for redesignation from EWH to WWH.

Four of these segments are small portions (3.5 miles or less per stream segment) of tributaries located along the upper Grand River and previously designated EWH based only on the results of fish community sampling. A more comprehensive evaluation of these tributaries conducted in 2007 involved additional sampling sites at which both the

fish and macroinvertebrate communities were assessed. The 2007 assessment revealed that these streams do not fully attain the EWH biocriteria. The survey found that these segments are actually WWH as they drop into the lacustrine lowlands of the Grand River mainstem, while the most upstream reaches exhibit a cold water biological community.

Bucklew Run, a 5½ mile long tributary of the lower Killbuck Creek is currently listed as a verified EWH stream based on an assessment of only the fish community at a single location in 1994. A survey of Bucklew Run conducted in 2009 showed that while the fish community still scored within the range of nonsignificant departure for EWH expectations, the macroinvertebrate community was more consistent with WWH expectations, and both surveys showed habitat scores as measured by the Qualitative Habitat Evaluation Index (QHEI) were also more in line with WWH than EWH expectations.

Finally, a portion of Jonathan Creek, a tributary of Moxahala Creek located primarily in Perry County that was believed to be capable of supporting exceptional biological communities in 1978 (denoted in the water quality standards use designation tables with an asterisk) was found to actually be more consistent with a WWH expectation. A 2008 biological survey demonstrated that the biological community failed to fully attain the EWH biocriteria at any of the eight locations sampled along the length of Jonathan Creek. All eight sites did fully attain WWH biological expectations. This was the first comprehensive survey of the upper 17 miles of Jonathan Creek ever conducted by Ohio EPA.

Redesignation from EWH to WWH will result in less stringent biological criteria and less stringent chemical criteria for ammonia, dissolved oxygen, pH and temperature.

✎ Three water bodies (Wasteweir Run in the Licking River watershed and Mile Creek and Jackson Center Creek in the Great Miami River watershed) are proposed for redesignation from WWH to MWH and one water body (Painter Run in the Jonathan Creek watershed) is proposed for redesignation from EWH to MWH.

Of these streams, only Wasteweir Run had been previously surveyed. The macroinvertebrate community of Wasteweir Run was surveyed at two locations in 1984 with results ranging from fair to poor, which fall below WWH expectations. A sampling of the fish and macroinvertebrate community at one location along Wasteweir Run conducted in 2008 revealed the presence of a fish and macroinvertebrate community that falls below WWH expectations, consistent with the altered physical habitat that was observed.

Recent biological and habitat evaluations of the remaining streams mentioned above also indicate the presence of degraded habitat conditions associated with active and ongoing channel maintenance to maintain agricultural and/or residential drainage. Such regular channel maintenance practices, which are expected to continue indefinitely, have resulted in habitat conditions that are inconsistent with, and are expected to remain inconsistent with, the ability to attain the WWH use designation.

Redesignation from WWH to MWH will result in less stringent biological criteria and less stringent chemical criteria for ammonia and dissolved oxygen. Redesignation from EWH to MWH will result in less stringent biological criteria and less stringent chemical criteria for ammonia, dissolved oxygen, pH and temperature.

✎ Six water bodies or water body segments located in the upper Grand River watershed plus a segment of Jonathan Creek in the Moxahala Creek watershed and Paint Creek in the Killbuck watershed are proposed for redesignation from EWH to CWH. Recent biological surveys have shown that these water bodies support aquatic organisms more indicative of a CWH than of an EWH.

Redesignation from EWH to CWH will result in more stringent water quality criteria for ammonia, cyanide, dissolved oxygen, phenol and silver.

✎ Twelve water bodies or water body segments are proposed for redesignation from WWH to CWH+EWH because recent surveys have demonstrated that these streams, primarily in the Kokosing River watershed, have demonstrated both the presence of native cold water fauna and full attainment of the EWH biological criteria.

Redesignation from WWH to CWH+EWH will result in more stringent biological criteria and more stringent chemical criteria for ammonia, cyanide, dissolved oxygen, pH, phenol, silver and temperature.

In addition, five water bodies or water body segments currently designated EWH, including McKee Creek in the upper Great Miami River basin and several streams in the Kokosing River basin near Mt. Vernon in Knox County, are proposed to be designated CWH in addition to their existing EWH designation based on recent survey results indicating they support native cold water fauna in addition to their full attainment of the EWH biological criteria.

Redesignation from EWH to CWH+EWH will result in more stringent water quality criteria for ammonia, cyanide, dissolved oxygen, phenol and silver.

✎ Twenty water bodies or water body segments located in or adjacent to the Moxahala Creek watershed are proposed for redesignation from **Limited Warmwater Habitat (LWH)** to a different aquatic life use designation. These streams were recently surveyed in part to assess their aquatic life potential because the LWH use is being phased out of Ohio's water quality standards rules.

Nine of these streams are proposed for redesignation to

WWH (including the lower 10.9 miles of Jonathan Creek), two are proposed for redesignation to CWH, and one is proposed for redesignation to CWH+EWH.

Redesignation from LWH to WWH will result in more stringent chemical criteria for total dissolved solids, pH and zinc and the application of the WWH biological criteria. Redesignation from LWH to CWH will result in more stringent water quality criteria for ammonia, cyanide, dissolved solids, dissolved oxygen, pH, phenol, silver, temperature and zinc. Redesignation from LWH to CWH+EWH will also result in the more stringent CWH chemical criteria listed above and in the application of the EWH biological criteria.

Eight of the streams currently designated LWH were found to be severely impacted by acid mine drainage and are proposed for redesignation to the **Limited Resource Water (LRW)** use designation due to pervasive acid mine drainage that is impacting water quality within these streams. One quarter of the Moxahala Creek watershed had previously been strip mined or mined underground. Acid mine drainage continues to be a major issue in the watershed as a result of unreclaimed mining. An acid mine drainage abatement and treatment (AMDAT) plan was developed by the Institute for Government Administration and Rural Development (ILGARD) at Ohio University in 2005. Treatment technologies such as instream treatment utilizing passive and/or active technologies are recommended in the AMDAT plan. ILGARD estimated restoration costs of $50 million excluding annual operation and maintenance. The Moxahala AMDAT plan can be downloaded at: *www.voinovichschool.ohio.edu/Publications.aspx*.

Redesignation from LWH to LRW will result in less stringent aquatic life water quality criteria for all pollutants except pH and zinc. Water quality criteria for the protection of human health and wildlife are not affected by this designation change.

✎ Five water bodies segments are proposed for redesignation from LRW to another use designation.

The lower 1.4 miles of Ogg Creek in the Black Fork Moxahala Creek watershed are proposed for redesignation from LRW to MWH-mine drainage and the lower 4.5 miles of the Moxahala Creek mainstem are proposed for redesignation from LRW to WWH.

Two water bodies in the Portage River watershed and one water body in the nearby Cedar Creek watershed are proposed for redesignation from LRW to WWH. Two of these water bodies fully attained the WWH biological criteria while the third partially attained the WWH biological criteria at several locations that were assessed.

Redesignation from LRW to MWH will result more stringent chemical criteria for all pollutants and the application of the MWH biological criteria. Redesignation from LRW to WWH will result in more stringent water quality criteria for all pollutants and the application of the WWH biological criteria.

Recreational Use Designation Changes

Most water bodies in the state are designated **Primary Contact Recreation (PCR)**, defined as suitable for full-body contact recreation. 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 including: size of the water body, accessibility, water body location, potential use by children, safety considerations, existing water quality, potential water quality, presence of recreational facilities, and physical conditions of the water body. A water body that is not large enough to support full body contact by an adult may still warrant a PCR use if, for example, it flows through an urbanized area or adjacent to a park or residential area where children are likely to use it for recreation. Water bodies determined not to have the potential for PCR are designated SCR.

The only water quality criteria for recreational use designations are for *E. coli* bacteria. These bacteria, while not harmful themselves, are indicators of possible sewage contamination and the possible presence of harmful bacteria and viruses (most commonly those bacteria and viruses that cause earaches and intestinal illness). The water quality criteria for SCR are less stringent than for PCR because there is less chance that someone will be exposed to the water and potentially harmful bacteria in that water.

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 actual observations and data gathered during the stream survey.

In other cases, water bodies never specifically assigned any recreational uses within the water quality standards rules are assigned recreational uses based upon field observations of the water body and consideration of the factors mentioned above.

In this rulemaking, no water bodies are being designated SCR. Nine water bodies currently designated SCR are being redesignated PCR.

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.

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.

✎ Twenty-one currently undesignated water bodies are proposed to be designated WWH, five currently undesignated water bodies are proposed to be designated CWH, and two currently undesignated water bodies are proposed to be designated CWH+EWH.

The specific designation of these water bodies will result in use-specific chemical criteria and, for water bodies designated WWH and EWH, application of biological criteria.

✎ Andrews Run in the Moxahala Creek watershed is proposed for an LRW designation. The water quality of Andrews Run, a small stream with a watershed area of six square miles, is degraded as a result of acid mine drainage resulting from historic strip mining. Impacts are documented in a 2009 water quality survey where pH values ranged from 2.7 to 4.1. Such conditions preclude the attainment of any other aquatic life habitat use designation.

Designation of the LRW use will result in less restrictive aquatic life water quality criteria for all pollutants. Water quality criteria for the protection of human health and wildlife are not affected by this designation change.

✎ Seven currently undesignated water bodies are proposed for a MWH use designation. Six of these water bodies are impacted by habitat alteration associated with drainage maintenance. Channelization has reduced habitat quality and negatively impacted the biological community, with biological indices scoring well below WWH expectations for the ecoregion in which these streams lie. Passive recovery is unlikely as a result of low gradients, high clay soils, and small drainage areas.

The seventh stream recommended for a MWH use is an unnamed tributary located in the headwaters portion of Moxahala Creek. The stream has impacts related to mining, such as extensive embeddedness of the substrate and acid mine drainage.

The designation of these seven streams as MWH will result in less stringent biological criteria and less stringent chemical criteria for ammonia and dissolved oxygen.

✎ The thirty-six water bodies proposed to be designated an aquatic life use for the first time are also proposed to be designated PCR.

The designation of water bodies as PCR will result in the application of water quality criteria for *E. coli* bacteria.

✎ The **Agricultural Water Supply (AWS)** and **Industrial Water Supply (IWS)** use designations are proposed for the thirty-six water bodies proposed to be designated an aquatic life use for the first time.

The AWS use designation is for protection against adverse effects resulting from use of surface water 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.

In addition, Buckeye Lake, which is already designated EWH and PCR by rule (see paragraphs (B)(1)(c) and (B)(4)(b) of rule 3745-1-07 of the OAC), is proposed for the AWS and IWS uses.

State Resource Waters

✎ The **State Resource Water (SRW)** designation for seven water bodies is proposed for removal.

Ohio EPA is in the process of re-assigning water bodies currently listed as SRW in the use designation rules (rules 3745-1-08 to 32 of the OAC) to a new antidegradation tier under Ohio's antidegradation rule (rule 3745-1-05 of the OAC). Ohio EPA has recently completed biological and habitat surveys of these seven water bodies. The resulting data, along with any historic data available, demonstrate that these seven water bodies have attributes consistent with the general high quality water (GHQW) antidegradation category. The current SRW designation, therefore, no longer has any significance for these water bodies. Consistent with paragraph (A)(25) of rule 3745-1-05 of the OAC, the SRW designation for the water body segments are proposed for removal.

The specific water bodies are listed in Attachment A at the end of this fact sheet.

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 the WWH, AWS, IWS and PCR uses) are proposed for 176 water bodies. 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 Attachment B at the end of this fact sheet. Verifying stream designations does not result in any changes to

applicable water quality criteria.

✎ The **Public Water Supply (PWS)** locations and communities served are being identified or revised for twenty water bodies.

The PWS use designation is for the protection of surface waters used as public drinking water sources. There are specific criteria that apply to the PWS designation (see rules 3745-1-33 and 3745-1-34 of the OAC). These identifications are not use designation changes because all such areas are already designated public water supply by rule (see paragraph (B)(3) of rule 3745-1-07 of the OAC). The PWS use is generally designated for a specific river mile location on a water body near a public water supply intake. The criteria associated with a PWS use apply within 500 yards of the surface water intake.

These updates are summarized in Attachment A at the end of this fact sheet.

Additional Information Resources

Ohio EPA typically publishes the results of the biological and water quality surveys it conducts annually in the form of technical support documents. These reports document the findings of the surveys ranging from physical habitat evaluations to fish and macroinvertebrate community assessments, water quality evaluations and more. The technical support documents are typically published one to two years after the field season in which the data are collected and serve many purposes, one of which is to provide technical support and recommendations for water quality standards use designation rule revisions such as this one.

Published technical support documents can be found on Ohio EPA's Division of Surface Water web page at: *www.epa.ohio.gov/dsw/document_index/psdindx.aspx*.

What changes were made to the draft rules?

Only a few minor changes were made to the November 2010 draft rules, for which the comment period ended on December 20, 2010. The changes are in rule 3745-1-24 and are highlighted below.

✎ The aquatic life use for Sycamore Hollow Run, a tributary of the Muskingum River at river mile 68.04 in Muskingum County was erroneously indicated to be a limited resource water. It is proposed to be designated as a coldwater habitat.

✎ The existing primary contact recreation use for Touby Run in the Rocky Fork Mohican River basin and existing agricultural, industrial, and primary contact recreation use designations for the Mohican River are proposed for verification. The draft rule did not indicate these verifications.

Fact Sheet Attachment A
Summary of Proposed Use Designation Changes

January 2011

Pg #*	Water Body Segment	Existing Designated Uses	Changes in Proposed Rule
Grand River Drainage Basin, OAC 3745-1-10 (2007 survey)			
2	Grand River – headwaters to downstream of the US Route 422 upstream crossing (RM 98.5)	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
2	Grand River – downstream upper crossing of US Route 422 (RM 98.5) to lower crossing of US Route 422 (RM 95.5)	WWH, AWS, IWS, ICR	Designate EWH in lieu of WWH
4	Trumbull Creek – headwaters to Windsor-Mechanicsville Road (RM 3.4)	EWH, AWS, IWS, PCR	Designate CWH in lieu of EWH
4	Trumbull Creek – Windsor-Mechanicsville Road (RM 3.4) to the mouth	EWH, AWS, IWS, PCR	Designate WWH in lieu of EWH
4	Snyder Ditch (Rock Creek RM 15.17)	None	Designate MWH-CM, AWS, IWS, PCR
5	Crooked Creek – headwaters to Windsor-Mechanicsville Road (RM 2.5)	EWH, AWS, IWS, PCR	Designate CWH in lieu of EWH
5	Crooked Creek – Windsor-Mechanicsville Road (RM 2.5) to the mouth	EWH, AWS, IWS, PCR	Designate WWH in lieu of EWH
5	Hoskins Creek – headwaters to Hurlburt Road (RM 2.0)	EWH, AWS, IWS, PCR	Designate CWH in lieu of EWH
5	Indian Creek	EWH, AWS, IWS, PCR	Designate CWH in lieu of EWH
5	Phelps Creek – North Branch/South Branch confluence (RM 8.62) to State Route 534 (RM 2.1)	EWH, AWS, IWS, PCR	Designate CWH in lieu of EWH
5	Phelps Creek – State Route 534 (RM 2.1) to the mouth	EWH, AWS, IWS, PCR	Designate WWH in lieu of EWH
5	Mill Creek – South Windsor Road (RM 4.56) to State Route 534 (RM 1.78)	EWH, AWS, IWS, PCR	Designate CWH in lieu of EWH
5	Mill Creek – State Route 534 (RM 1.78) to the mouth	EWH, AWS, IWS, PCR	Designate WWH in lieu of EWH
5	Swine Creek – headwaters to Girdle Road (RM 7.07)	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
6	Plum Creek	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
Sandusky River Drainage Basin, OAC 3745-1-12 (2009 survey)			
2	Fishing Creek	None	Designate WWH, AWS, IWS, PCR
3	Beaver Creek – Westerhouse ditch (RM 4.73) to the mouth	CWH, AWS, IWS, PCR	Designate WWH in lieu of CWH
3	Beaver Creek – at RM 2.88	CWH, AWS, IWS, PWS, PCR	Designate WWH in lieu of CWH
9	Raccoon Creek – headwaters to U.S. Route 6 (RM 3.1)	WWH, AWS, IWS, SCR	Designate PCR in lieu of SCR

Pg #*	Water Body Segment	Existing Designated Uses	Changes in Proposed Rule
9	Raccoon Creek – at RM 13.1	WWH, AWS, IWS, PWS, SCR	Designate PCR in lieu of SCR; Specify PWS as formerly the intake for the city of Clyde
9	Buck Creek	None	Designate WWH, AWS, IWS, PCR
9	Mills Creek	WWH, AWS, IWS, SCR	Designate PCR in lieu of SCR
9	Caswell Ditch (Mills Creek RM 3.95)	WWH, AWS, IWS, SCR	Designate PCR in lieu of SCR
Great Miami River Drainage Basin, OAC 3745-1-21 (2008 survey)			
19	McIntire Run	WWH, AWS, IWS, PCR	Specify PWS at RM 0.38 (City of Piqua)
19	Loramie Creek – Lockington Dam (RM 2.1) to the mouth	WWH, AWS, IWS, PCR, SRW	Remove SRW
19	Mile Creek	WWH, AWS, IWS, PCR	Designate MWH-CM in lieu of WWH
20	Spring Creek	None	Designate MWH-CM, AWS, IWS, PCR
20	Miami and Erie Canal (Loramie Creek RM 20.78)	None	Designate MWH-CM, AWS, IWS, PCR
21	Lee Creek	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
21	Graves Creek	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
21	McKee Creek	EWH, AWS, IWS, PCR	Designate CWH in addition to EWH
21	Bluejacket Creek – headwaters to Opossum Run (RM 5.8)	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
22	Jackson Center Creek	WWH, AWS, IWS, PCR	Designate MWH-CM in lieu of WWH
22	Rennick Creek	None	Designate WWH, AWS, IWS, PCR
22	Unnamed tributary at Great Miami River RM 157.34	None	Designate MWH-CM, AWS, IWS, PCR
Portage River Drainage Basin, OAC 3745-1-23 (2008 survey)			
2	Wolf Ditch	None	Designate WWH, AWS, IWS, PCR
2	Williams Ditch	LRW-SDM, AWS, IWS, SCR	Designate WWH in lieu of LRW-SDM and PCR in lieu of SCR
3	Coon Creek	None	Designate WWH, AWS, IWS, PCR
4	Fenburg Tributary 1 (Rocky Ford RM 10.75)	LRW-SDM, AWS, IWS, SCR	Designate WWH in lieu of LRW-SDM and PCR in lieu of SCR
4	Fenburg Tributary 2 (Fenburg Tributary 1 RM 1.99)	LRW-SDM, AWS, IWS, SCR	Designate WWH in lieu of LRW-SDM and PCR in lieu of SCR
5	Rader Creek – at RM 13.57	PWS	Designate WWH, AWS, IWS, PCR
5	Rader Creek – all other segments	None	Designate WWH, AWS, IWS, PCR
Muskingum River Drainage Basin, OAC 3745-1-24			
Muskingum tributaries and Salt Creek Sub-basin (2008 survey)			
9	Big Bottom Run	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
9	Bluerock Creek	WWH, AWS, IWS, PCR	Designate EWH and CWH in lieu of WWH
9	Little Bluerock Creek	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
9	Little Duncan Run	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
9	Mann's Fork at RM 6.77	WWH, AWS, IWS, PCR, PWS	Specify PWS is for Blue Rock State Park

Pg #*	Water Body Segment	Existing Designated Uses	Changes in Proposed Rule
9	Kent Run	WWH, AWS, IWS, PCR	Designate EWH in lieu of WWH
10	Buffalo Fork	WWH, AWS, IWS, PCR	Designate EWH in lieu of WWH
10	Sycamore Hollow Run	None	Designate CWH, AWS, IWS, PCR
10	Brush Creek	LWH, ASW, IWS, PCR	Designate WWH in lieu of LWH
10	Baughman Run	LWH, AWS, IWS, PCR	Designate WWH in lieu of LWH
10	Turkey Run	LWH, AWS, IWS, PCR	Designate WWH in lieu of LWH
11	Goose Run	LWH, AWS, IWS, PCR	Designate WWH in lieu of LWH
11	Flat Run	None	Designate WWH, AWS, IWS, PCR
Moxahala/Jonathan Creek Sub-basin (2008 survey)			
11	Moxahala Creek – Jonathan Creek (RM 4.54) to the mouth	LRW-AMD, AWS, IWS, PCR	Designate WWH in lieu of LRW-AMD
11	Shawnee Run	LWH, AWS, IWS, PCR	Designate WWH in lieu of LWH
11	Jonathan Creek – Turkey Run (RM 10.90) to the mouth	LWH, AWS, IWS, PCR	Designate WWH in lieu of LWH
11	Jonathan Creek – State Route 204 (RM 27.08) to Turkey Run (RM 10.90)	SRW, EWH, AWS, IWS, PCR	Designate WWH in lieu of EWH; Remove SRW
11	Jonathan Creek - headwaters to State Route 204 (RM 27.08)	SRW, EWH, AWS, IWS, PCR	Designate CWH in lieu of EWH; Remove SRW
11	Thompson Run – headwaters to Coopermill Road (RM 4.73)	LWH, AWS, IWS, PCR	Designate CWH in lieu of LWH
11	Thompson Run – Coopermill Road (RM 4.73) to the mouth	LWH, AWS, IWS, PCR	Designate WWH in lieu of LWH
11	Hibbs Run	LWH, AWS, IWS, PCR	Designate EWH and CWH in lieu of LWH
11	Kent Run	WWH, AWS, IWS, PCR, SRW (PWS at RM 1.3)	Remove SRW; Specify PWS at RM 1.3 is for Maysville
12	Salt Run	LWH, AWS, IWS, PCR	Designate CWH in lieu of LWH
12	Bush Creek	LWH, AWS, IWS, PCR	Designate WWH in lieu of LWH
12	Turkey Run	LWH, AWS, IWS, PCR	Designate WWH in lieu of LWH
12	Painter Run	EWH, AWS, IWS, PCR, SRW	Designate MWH-CM in lieu of EWH; Remove SRW
12	Unnamed tributary at Jonathan Creek RM 13.74	None	Designate WWH, AWS, IWS, PCR
12	Painter Creek (Jonathan Creek RM 16.88)	None	Designate WWH, AWS, IWS, PCR
12	Unnamed tributary at Jonathan Creek RM 19.47	None	Designate WWH, AWS, IWS, PCR
12	Bowling Green Run	None	Designate WWH, AWS, IWS, PCR
13	Morrison Run	LWH, AWS, IWS, PCR	Designate LRW-AMD in lieu of LWH
13	Porter Run	LWH, AWS, IWS, PCR	Designate LRW-AMD in lieu of LWH
13	Elk Run	LWH, AWS, IWS, PCR	Designate LRW-AMD in lieu of LWH
13	Riders Run	LWH, AWS, IWS, PCR	Designate LRW-AMD in lieu of LWH
13	Burley Run	LWH, AWS, IWS, PCR	Designate LRW-AMD in lieu of LWH
13	Snake Run	LWH, AWS, IWS, PCR	Designate LRW-AMD in lieu of LWH

Pg #*	Water Body Segment	Existing Designated Uses	Changes in Proposed Rule
13	Black Fork – RM 2.8 to the mouth	LWH, AWS, IWS, PCR	Designate LRW-AMD in lieu of LWH
13	Black Fork at RM 4.69	WWH, AWS, IWS, PCR, PWS	Specify PWS is for the Village of Crooksville
14	Dry Run at RM 2.23	LWH, AWS, IWS, PCR, PWS	Specify PWS if for the Village of Crooksville
14	Ogg Creek – former Jones Lake outlet (RM 1.4) to the mouth	LRW-AMD, AWS, IWS, PCR	Designate MWH-MA in lieu of LRW-AMD
14	Bear Creek	LWH, AWS, IWS, PCR	Designate LRW-AMD in lieu of LWH
14	Unnamed tributary at Moxahala Creek RM 22.56	None	Designate MWH-MA, AWS, IWS, PCR
14	Andrews Run (Moxahala Creek RM 24.79)	None	Designate LRW-AMD, AWS, IWS, PCR
Licking River Sub-basin (2008 survey)			
14	Licking River – Dillon Lake (RM 6.2 to 12.7)	EWH, AWS, IWS, PCR, SRW	Remove SRW
14	Licking River – Blackhand Gorge State Nature Preserve RM 19.0 to 23.9)	WWH, AWS, IWS, PCR, SRW	Remove SRW
15	Brushy Fork	WWH, AWS, IWS, PCR	Designate EWH in lieu of WWH
15	Painter Run	WWH, AWS, IWS, PCR	Designate EWH in lieu of WWH
15	Long Run	WWH, AWS, IWS, PCR	Designate EWH in lieu of WWH
15	Claylick Creek	WWH, AWS, IWS, PCR	Designate EWH in lieu of WWH
17	Wasteweir Run (South Fork RM 12.83)	WWH, AWS, IWS, PCR	Designate MWH-CM in lieu of WWH
17	Buckeye Lake	EWH, PCR	Designate AWS, IWS
17	Honey Creek	None	Designate WWH, AWS, IWS, PCR
17	Reservoir Feeder	None	Designate MWH-CM, AWS, IWS, PCR
17	North Fork Licking River at RM 3	WWH, AWS, IWS, PCR, PWS	Revise intake location from RM 3.0 to RM 2.9; Specify intake is for the City of Newark
Miscellaneous Muskingum River basin Public Water Supplies			
20	Unnamed tributary at Winding Fork RM 4.08	None	Specify PWS at RM 2.56 (Echoing Hills)
21	Wills Creek at RM 66.7	WWH, AWS, IWS, PCR, PWS	Specify as intake for the City of Cambridge
23	North Crooked Creek	LWH, AWS, IWS, PCR	Specify PWS at RM 4.46 (Village of New Concord)
23	Unnamed tributary at Fox Creek RM 5.56	None	Specify PWS at RM 0.24 (Village of New Concord)
23	Leatherwood Creek at RM 22.36	WWH, AWS, IWS, PCR, PWS	Specify PWS as formerly the intake for Quaker City
27	Stillwater Creek at RM 7.05	WWH, AWS, IWS, PCR, PWS	Specify PWS as intake for Twin City Water
28	Little Stillwater Creek	WWH, AWS, IWS, PCR	Specify PWS at RM 14.55 (Village of Cadiz)
33	Indian Fork – at RMs 3.0 and 3.7	WWH, AWS, IWS, PCR, PWS	Specify PWS intakes for Atwood Park (RM 3.0) and Atwood Resort (RM 3.7)
39	Wolf Creek – at RM 5.12	WWH, AWS, IWS, PCR, PWS	Specify PWS intake is for the City of Barberton

Pg #*	Water Body Segment	Existing Designated Uses	Changes in Proposed Rule
Killbuck Creek Sub-basin (2009 survey)			
40	Killbuck Creek – wetland area (RM 47.1 - 38.0)	WWH, AWS, IWS, PCR, SRW	Remove SRW
40	Bucklew Run	EWH, AWS, IWS, PCR	Designate WWH in lieu of EWH
41	Charm tributary (Doughty Creek RM 14.34)	None	Designate WWH, AWS, IWS, PCR
41	Wolf Creek – headwaters to Township Road 31 (RM 4.1)	WWH, AWS, IWS, PCR	Designate EWH and CWH in lieu of WWH
41	Unnamed tributary at Wolf Creek RM 6.49	None	Designate EWH, CWH, AWS, IWS, PCR
41	Black Creek	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
41	Unnamed tributary at Black Creek RM 7.35	None	Designate CWH, AWS, IWS, PCR
41	Shrimplin Run	WWH, AWS, IWS, PCR	Designate EWH and CWH in lieu of WWH; List as Shrimplin Creek
41	Sand Run	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
42	Bear Run	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
42	Honey Run	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
42	Paint Creek	EWH, AWS, IWS, PCR	Designate CWH in lieu of EWH
42	Unnamed tributary at Paint Creek RM 3.01	None	Designate EWH, CWH, AWS, IWS, PCR
42	Shreve Creek	WWH, AWS, IWS, SCR	Designate PCR in lieu of SCR
42	Millbrook Tributary (Killbuck Creek RM 43.60)	None	Designate CWH, AWS, IWS, PCR
42	Apple Creek	WWH, AWS, IWS, SCR	Designate PCR in lieu of SCR
43	Little Apple Creek (Apple Creek RM 2.60)	WWH, AWS, IWS, SCR	Designate PCR in lieu of SCR
43	Spring Run	None	Designate CWH, AWS, IWS, PCR
43	Little Apple Creek (Apple Creek RM 9.79)	None	Designate WWH, AWS, IWS, PCR
43	Clear Creek	WWH, AWS, IWS, PCR	Designate EWH and CWH in lieu of WWH
43	Little Killbuck Creek	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
43	Rathburn Run	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
43	Cedar Run	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
Kokosing River Sub-basin (2007 survey)			
44	Kokosing River – headwaters to North Branch (RM 29.66)	WWH, AWS, IWS, PCR	Designate EWH in lieu of WWH
44	Brush Run	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
44	Jelloway Creek – Ireland Creek (RM 9.35) to Fredericktown Amity Road (RM 5.18)	EWH, AWS, IWS, PCR	Designate CWH in addition to EWH
44	Little Jelloway Creek	EWH, AWS, IWS, PCR	Designate CWH in addition to EWH
44	East Branch Jelloway Creek – headwaters to US Route 62 (RM 2.4)	EWH, AWS, IWS, PCR	Designate CWH in addition to EWH
44	Schenck Creek	EWH, AWS, IWS, PCR	Designate CWH in addition to EWH
45	Little Schenck Creek – headwaters to Carson Road (RM 3.5)	WWH, AWS, IWS, PCR	Designate CWH and EWH in lieu of WWH

Pg #*	Water Body Segment	Existing Designated Uses	Changes in Proposed Rule
45	Little Schenck Creek – Carson Road (RM 3.5) to the mouth	WWH, AWS, IWS, PCR	Designate EWH in lieu of WWH
45	Indianfield Run	WWH, AWS, IWS, PCR	Designate EWH and CWH in lieu of WWH
45	Delano Run	None	Designate WWH, AWS, IWS, PCR
45	Center Run	WWH, AWS, IWS, PCR	Designate CWH and EWH in lieu of WWH
45	Dry Creek – headwaters to unnamed tributary at RM 4.74	WWH, AWS, IWS, PCR	Designate CWH and EWH in lieu of WWH
45	Dry Creek – unnamed tributary at RM 4.74 to Dry Run (RM 1.05)	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
45	Armstrong Run	WWH, AWS, IWS, PCR	Designate CWH and EWH in lieu of WWH
45	North Branch Kokosing River – headwaters to unnamed tributary at RM 10.8	WWH, AWS, IWS, PCR	Designate CWH and EWH in lieu of WWH
45	North Branch Kokosing River – East Branch (RM 6.32) to the mouth	WWH, AWS, IWS, PCR	Designate EWH in lieu of WWH
46	Job Run	WWH, AWS, IWS, PCR	Designate CWH and EWH in lieu of WWH
46	East Branch North Branch Kokosing River – headwaters to Knox Lake	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
46	East Branch North Branch Kokosing River – Knox Lake to the mouth	WWH, AWS, IWS, PCR	Designate EWH in lieu of WWH
46	Unnamed tributary at North Branch Kokosing River RM 9.9	None	Designate WWH, AWS, IWS, PCR
46	Granny Creek	WWH, AWS, IWS, PCR	Designate CWH and EWH in lieu of WWH
Mohican River Sub-basin (2007 survey)			
46	Mohican River	WWH, AWS, IWS, PCR	Designate EWH in lieu of WWH
46	Negro Run	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
47	Muddy Fork	WWH, AWS, IWS, PCR	Specify PWS at RM 26.0 (Cinnamon Lake Utilities)
47	Kiser Ditch (Muddy Fork RM 0.92)	None	Designate MWH-CM, AWS, IWS, PCR
47	Redhaw Creek	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
47	Oldtown Run	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
47	Quaker Springs Run	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
47	Newell Run	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
47	Kakotawa Creek	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
48	Black Fork – at RMs 50.82, 53.88 and 54	WWH, AWS, IWS, PCR, PWS	Specify as intakes for the City of Shelby
48	Black Fork – Charles Mill Reservoir (RM 18.47) to the Mohican River confluence	WWH, AWS, IWS, PCR, SRW	Remove SRW
48	Honey Creek – headwaters to unnamed tributary at RM 4.19	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH

Pg #*	Water Body Segment	Existing Designated Uses	Changes in Proposed Rule
48	Unnamed tributary at Rocky Fork RM 10.70	None	Designate WWH, AWS, IWS, PCR
48	Unnamed tributary at Black Fork RM 25.16	None	Designate WWH, AWS, IWS, PCR
49	Unnamed tributary at Black Fork RM 54.46	None	Designate WWH, AWS, IWS, PCR
49	Clear Fork – at RM 30.6	WWH, AWS, IWS, PCR	Specify as intake for the City of Mansfield
49	Pine Run	WWH, AWS, IWS, PCR, SRW	Designate CWH in lieu of WWH
49	Switzer Creek	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
49	Slater Run	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
50	Honey Creek	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
Mahoning River Drainage Basin, OAC 3745-1-25			
Pymatuning Creek Sub-basin (2008 survey)			
7	Shenango River – at RM 68.40	WWH, AWS, IWS, PCR	Specify as a former intake for Pymatuning State Park
7	Little Deer Creek (within Ohio border)	WWH, AWS, IWS, PCR	Designate CWH in lieu of WWH
7	Mud Run – headwaters to East Liberty Street (RM 1.12)	None	Designate CWH, AWS, IWS, PCR
7	Mud Run – East Liberty Street (RM 1.12) to the mouth	None	Designate WWH, AWS, IWS, PCR
8	Wade Creek (Shenago River RM 71.46)	None	Designate WWH, AWS, IWS, PCR
Mill Creek Drainage Basin, OAC 3745-1-30 (2009 survey)			
2	West Fork – headwaters to Winton Lake (~RM 9)	WWH, AWS, IWS, PCR, SRW	Remove SRW

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

Index of Acronyms Used

RM = River Mile

The following acronyms for designated uses 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
EWH = Exceptional Warmwater Habitat
IWS = Industrial Water Supply
LRW-AMD = Limited Resource Water – Acid Mine Drainage
LRW-SDM = Limited Resource Water – Small Drainageway Maintenance
LWH = Limited Warmwater Habitat
MWH-MA = Modified Warmwater Habitat – Mine Affected
MWH-CM = Modified Warmwater Habitat – Channel Modification
PCR = Primary Contact Recreation
PWS = Public Water Supply
SCR = Secondary Contact Recreation
SRW = State Resource Water
WWH = Warmwater Habitat

Fact Sheet Attachment B
Proposed Changes to OAC 3745-1:
Ohio EPA Verified Water Body Use Designations
January 2011

Most of the water bodies listed in the Ohio Administrative Code Chapter 3745-1 rules were designated Warmwater Habitat, Agricultural Water Supply, Industrial Water Supply and Primary Contact Recreation in 1978 as defaults because little real data were available. Biological and water quality surveys conducted since then have enabled Ohio EPA to either verify those use designations or assign more accurate use designations. This document summarizes existing use designations already in rule that were verified through the results of biological and water quality surveys.

Use designations assigned in 1978 are indicated with asterisks in the rules. Use designations assigned based on the results of biological and water quality surveys are indicated with plus signs in the rules. The symbols for the water bodies and use designations listed below are changed from asterisks to plus signs in the proposed rules. These changes to the symbols do not have any effect on the applicable water quality standards for these water bodies.

The page numbers listed below refer to page numbers in the amended rules.

The use designations in this document are defined in paragraph (B) of rule 3745-1-07. The following acronyms are used within this document:

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

Verified Water Body Use Designations

Page	Water Body Segment	Existing Uses Verified
	Rule 3745-1-10 Grand River Drainage Basin (2007 survey)	
4	Bronson Creek	WWH, AWS, IWS, PCR
4	Trumbull Creek (entire length)	AWS, IWS, PCR
4	Spring Creek	WWH, AWS, IWS, PCR
4	Three Brothers Creek	WWH, AWS, IWS, PCR
4	Whetstone Creek	WWH, AWS, IWS, PCR
4	Lebanon Creek	WWH, AWS, IWS, PCR
5	Crooked Creek (entire length)	AWS, IWS, PCR
5	Hoskins Creek	AWS, IWS, PCR
5	Indian Creek	AWS, IWS, PCR
5	North Branch Phelps Creek	WWH, AWS, IWS, PCR
5	South Branch Phelps Creek	WWH, AWS, IWS, PCR
5	Mill Creek (entire length)	AWS, IWS, PCR
5	Garden Creek	WWH, AWS, IWS, PCR
5	Andrews Creek	WWH, AWS, IWS, PCR
6	Plum Creek	AWS, IWS, PCR
6	Center Creek	WWH, AWS, IWS, PCR
6	Mud Run	WWH, AWS, IWS, PCR
	Rule 3745-1-12 Sandusky River Drainage Basin (2009 survey)	
2	Muddy Creek	AWS, IWS
2	Little Muddy Creek	WWH, AWS, IWS, PCR
2	Sandusky River – upstream Roger Young Memorial Park (RM 16.8) to Muskellunge Creek (RM 9.37)	WWH, AWS, IWS, PCR
2	Green Creek - Beaver Creek (RM 20.4) to State Route 20	CWH, AWS, IWS, PCR
3	Green Creek – State Route 20 (RM 10.1) to Sandusky River	WWH, AWS, IWS, PCR
3	Beaver Creek - Westerhouse Ditch (RM 4.73) to the mouth	AWS, IWS, PCR
3	Beaver Creek - at RM 2.88	AWS, IWS, PCR
3	Emerson Creek	WWH, AWS, IWS, PCR
3	Royer Ditch	WWH, AWS, IWS, PCR
3	Westerhouse Ditch	WWH, AWS, IWS, PCR
3	Bark Creek	WWH, AWS, IWS, PCR
3	Muskellunge Creek	WWH, AWS, IWS, PCR
9	South Creek	WWH, AWS, IWS, PCR
9	Pickerel Creek	PCR
9	Little Pickerel Creek	CWH, AWS, IWS, PCR
9	Cold Creek – Blue Hole (RM 4.28) to Lake Erie	CWH, AWS, IWS, PCR
9	Mills Creek	WWH, AWS, IWS
10	Pipe Creek	WWH, AWS, IWS, PCR
10	Sawmill Creek (Note: this is currently listed as a tributary in the **Huron River basin** on page 2)	WWH, AWS, IWS, PCR
	Rule 3745-1-19 Huron River Drainage Basin (part of 2009 Sandusky survey)	
2	Sawmill Creek (Note: this stream is being moved to the Sandusky basin rule, OAC 3745-1-12)	WWH, AWS, IWS, PCR

Verified Water Body Use Designations

Page	Water Body Segment	Existing Uses Verified
	Rule 3745-1-21 Great Miami River Drainage Basin (2008 survey)	
19	Turtle Creek	WWH, AWS, IWS, PCR
19	Mile Creek	AWS, IWS, PCR
20	Plum Creek	WWH, AWS, IWS, PCR
21	Indian Creek	WWH, AWS, IWS, PCR
21	Lee Creek	AWS, IWS, PCR
21	Graves Creek	AWS, IWS, PCR
21	Rum Creek	WWH, AWS, IWS, PCR
21	Brandywine Creek	WWH, AWS, IWS, PCR
22	Little Muchinippi Creek	WWH, AWS, IWS, PCR
22	Jackson Center Creek	AWS, IWS, PCR
22	Willow Creek	WWH, AWS, IWS, PCR
	Rule 3745-1-23 Portage River Drainage Basin (2008 survey)	
2	Otter Creek (entire length)	AWS, IWS, PCR
2	Cedar Creek	WWH, AWS, IWS, PCR
2	Dry Creek	WWH, AWS, IWS, PCR
2	Crane Creek	WWH, AWS, IWS, PCR
2	Henry Creek	WWH, AWS, IWS, PCR
3	Turtle Creek	WWH, AWS, IWS, PCR
3	North Branch Turtle Creek	WWH, AWS, IWS, PCR
3	South Branch Turtle Creek	WWH, AWS, IWS, PCR
3	Ninemile Creek	WWH, AWS, IWS, PCR
3	Wolf Creek	WWH, AWS, IWS, PCR
	Rule 3745-1-24 Muskingum River Drainage Basin	
	Muskingum River Tributaries and Salt Creek Sub-basin (2008 survey)	
9	Island Run	WWH, AWS, IWS, PCR
9	South Branch Island Run	WWH, AWS, IWS, PCR
9	Big Bottom Run	AWS, IWS, PCR
9	Bluerock Creek	AWS, IWS, PCR
9	Little Bluerock Creek	AWS, IWS, PCR
9	Back Run	WWH, AWS, IWS, PCR
9	Dry Riffle Run	WWH, AWS, IWS, PCR
9	Duncan Run	WWH, AWS, IWS, PCR
9	Little Duncan Run	AWS, IWS, PCR
9	Salt Creek	WWH, AWS, IWS, PCR
9	Manns Fork (entire length)	WWH, AWS, IWS, PCR
9	Kent Run	AWS, IWS, PCR
10	Boggs Creek	WWH, AWS, IWS, PCR
10	Indian Run	WWH, AWS, IWS, PCR
10	Buffalo Fork	AWS, IWS, PCR
10	Williams Fork	WWH, AWS, IWS, PCR
10	White Eyes Creek	WWH, AWS, IWS, PCR
10	Pleasant Run	WWH, AWS, IWS, PCR
10	Little Salt Creek	WWH, AWS, IWS, PCR
10	Frog Run	WWH, AWS, IWS, PCR

Verified Water Body Use Designations

Page	Water Body Segment	Existing Uses Verified
10	Georges Run	WWH, AWS, IWS, PCR
10	Prairie Fork	AWS, IWS, PCR
10	Brush Creek	AWS, IWS, PCR
10	Baughman Creek	AWS, IWS, PCR
10	Turkey Run	AWS, IWS, PCR
11	Goose Run	AWS, IWS, PCR
	Moxahala/Jonathan Creek Sub-basin (2008 survey)	
11	Moxahala Creek – headwaters to Jonathan Creek (RM 4.54)	LRW-AMD, AWS, IWS, PCR
11	Moxahala Creek – Jonathan Creek (RM 5.4) to the mouth	AWS, IWS, PCR
11	Shawnee Run	AWS, IWS, PCR
11	Jonathan Creek (entire length)	AWS, IWS, PCR
11	Thompson Run (entire length)	AWS, IWS, PCR
11	Hibbs Run	AWS, IWS, PCR
11	Kent Run (entire length)	AWS, IWS, PCR
12	Salt Run	AWS, IWS, PCR
12	Buckeye Fork	LRW-AMD, AWS, IWS, PCR
12	Bush Creek	AWS, IWS, PCR
12	Twomile Run	AWS, IWS, PCR
12	Butcherknife Creek	LRW-AMD, AWS, IWS, PCR
12	Turkey Run	AWS, IWS, PCR
12	Painter Run	AWS, IWS, PCR
12	Valley Run	EWH, AWS, IWS, PCR
13	Morrison Run	AWS, IWS, PCR
13	Porter Run	AWS, IWS, PCR
13	Elk Run	AWS, IWS, PCR
13	Riders Run	AWS, IWS, PCR
13	Burley Run	AWS, IWS, PCR
13	Snake Run	AWS, IWS, PCR
13	Black Fork (entire length)	AWS, IWS, PCR
14	McCluney Creek	AWS, IWS, PCR
14	Bear Creek	AWS, IWS, PCR
	Licking River Sub-basin (2008 survey)	
14	Timber Run	PCR
15	Joes Run	PCR
15	Poverty Run	PCR
15	Stump Run	PCR
15	Brushy Fork	PCR
15	Claylick Creek	PCR
16	Little Claylick Creek	PCR
16	Moots Run	PCR
17	Dutch Fork	PCR
17	Beaver Run	PCR
17	Wasteweir Run	PCR
17	Muddy Fork	PCR
17	Log Pond Run	PCR
17	Dry Run	PCR
18	Clear Fork	PCR

Verified Water Body Use Designations

Page	Water Body Segment	Existing Uses Verified
18	Lake Fork	PCR
18	Tuma Run	PCR
	Killbuck Creek Sub-basin (2009 survey)	
41	Military Run	WWH, AWS, IWS, PCR
41	Black Creek	AWS, IWS, PCR
41	Shrimplin Creek	AWS, IWS, PCR
41	Sand Run	AWS, IWS, PCR
42	Sapps Run	WWH, AWS, IWS, PCR
42	Bear Run	AWS, IWS, PCR
42	Corns Run	WWH, AWS, IWS, PCR
42	Honey Run	AWS, IWS, PCR
42	Salt Creek	WWH, AWS, IWS, PCR
43	Clear Creek	AWS, IWS, PCR
43	Rathburn Run	AWS, IWS, PCR
43	Cedar Run	AWS, IWS, PCR
43	Repp Run	WWH, AWS, IWS, PCR
	Kokosing River Sub-basin (2007 survey)	
44	Brush Run	AWS, IWS, PCR
45	Little Schenck Creek (entire length)	AWS, IWS, PCR
45	Indianfield Run	AWS, IWS, PCR
45	Big Run	WWH, AWS, IWS, PCR
45	Elliott Run	WWH, AWS, IWS, PCR
45	Center Run	AWS, IWS, PCR
45	Dry Creek	AWS, IWS, PCR
45	Dry Creek – Dry Run (RM 1.05) to the mouth	WWH
45	Armstrong Run	AWS, IWS, PCR
46	Job Run	AWS, IWS, PCR
46	East Branch	AWS, IWS, PCR
46	Granny Creek	AWS, IWS, PCR
46	South Branch	WWH, AWS, IWS, PCR
	Mohican River Sub-basin (2007 survey)	
46	Mohican river	AWS, IWS, PCR
46	Negro Run	AWS, IWS, PCR
46	Lake Fork	WWH, AWS, IWS, PCR
47	Plum Run	WWH, AWS, IWS, PCR
47	Unnamed stream (Lake Odell outlet) (Lake Fork RM 6.56)	WWH, AWS, IWS, PCR
47	Crab Run	WWH, AWS, IWS, PCR
47	Oldtown Run	AWS, IWS, PCR
47	Quaker Springs Run	AWS, IWS, PCR
47	Newell Run	AWS, IWS, PCR
47	Kakotawa Creek	AWS, IWS, PCR
48	Orange Creek	WWH, AWS, IWS, PCR
48	Leidigh Creek	WWH, AWS, IWS, PCR
48	Black Fork – Charles Mill Reservoir (RM 18.47) to the mouth	WWH, AWS, IWS, PCR

Verified Water Body Use Designations

Page	Water Body Segment	Existing Uses Verified
48	Big Run	WWH, AWS, IWS, PCR
48	Honey Creek – headwaters to the unnamed tributary at RM 4.19	AWS, IWS, PCR
48	Honey Creek – unnamed tributary at RM 4.19 to the mouth	WWH, AWS, IWS, PCR
49	Touby Run	PCR
49	Whetstone Creek	WWH, AWS, IWS, PCR
49	Brubaker Creek	WWH, AWS, IWS, PCR
49	Shipp Creek	WWH, AWS, IWS, PCR
49	Bear Run	WWH, AWS, IWS, PCR
49	Marsh Run	WWH, AWS, IWS, PCR
49	Switzer Creek	AWS, IWS, PCR
49	Slater Run	AWS, IWS, PCR
50	Honey Creek	AWS, IWS, PCR

Rule 3745-1-25 Mahoning River Drainage Basin

Pymatuning Creek Sub-basin (2008 survey)

7	South Branch	WWH, AWS, IWS, PCR
7	Stratton Creek	WWH, AWS, IWS, PCR
8	McMichael Creek	WWH, AWS, IWS, PCR
8	Black Creek	WWH, AWS, IWS, PCR
8	Gravel Run	WWH, AWS, IWS, PCR

Rule 3745-1-30 Mill Creek Drainage Basin

Mill Creek Sub-basin (2002 survey)

2	Mill Creek – headwaters to I-275 (RM 17.9)	WWH