

## For Interested Party Review – August 2008 Draft

### 3745-1-07     **Beneficial use designations.**

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules and federal statutory provisions referenced in this rule, see rule 3745-1-03 of the Administrative Code.]

[Comment: Water quality criteria designed to protect beneficial uses are in rules 3745-1-40 to 3745-43 of the Administrative Code.]

- (A) Pursuant to section 6111.042 of the Revised Code, this rule sets forth the beneficial uses recognized as present and planned uses of Ohio's surface waters in a manner consistent with the act, and rules adopted thereunder. All the beneficial uses in this rule, except for secondary contact recreation, modified warmwater habitat, limited warmwater habitat and limited resource water meet the goals of the act. Water bodies designated secondary contact recreation, modified warmwater habitat and limited resource water have been the subject of use attainability analyses and have been found to be incapable of meeting the goals of the act. Water bodies designated limited warmwater habitat will undergo use attainability analyses and will be redesignated other aquatic life habitats. No additional water bodies will be designated limited warmwater habitat.
- (B) This rule designates waters as having beneficial uses based upon the definitions provided in paragraphs (C) to (H) of this rule. Additional use designations for individual water bodies are found in rules 3745-1-08 to 3745-1-32 of the Administrative Code.
- (C) Water supply use designations. Water quality criteria designed to protect these beneficial uses are in rule 3745-1-40 of the Administrative Code.
- (1) Public water supply. These are waters that, with conventional filtration treatment and disinfection as defined in rule 3745-81-01 of the Administrative Code, will be suitable for human intake and meet federal regulations for drinking water. The following water bodies are designated public water supply:
- (a) All water bodies designated public water supply in rules 3745-1-08 to 3745-1-32 of the Administrative Code;
- (b) All publicly owned lakes and reservoirs;
- (c) All privately owned lakes and reservoirs used as water sources for public water systems;



criteria for the protection of the general water based recreation use shall protect the visual aesthetic qualities of the water and reduce potential human health risks associated with the coincidental consumption of chemical contaminants present in sport caught fish.

- (3) Bathing waters. These are waters that, during the recreation season, are heavily used for swimming. The bathing water use applies to all water bodies where a lifeguard or bathhouse facilities are present, and to any additional water bodies designated bathing waters in rules 3745-1-08 to 3745-1-32 of the Administrative Code.
- (4) Primary contact recreation. These are waters that, during the recreation season, are suitable for one or more full-body contact recreation activities such as, but not limited to, wading, swimming, boating, water skiing, canoeing, kayaking, and scuba diving. Three classes of primary contact recreation use are defined to reflect differences in the observed and potential frequency and intensity of usage.
- (a) Class A primary contact recreation. These are waters that support, or potentially support, frequent primary contact recreation activities. The following water bodies are designated as class A primary contact recreation waters:
- (i) All water bodies defined as lakes and having publicly or privately improved access points; and
- (ii) All water bodies listed in table 7-1 of this rule.

[Comment: The streams and rivers listed in table 7-1 of this rule are popular paddling streams with public access points developed, maintained, and publicized by governmental entities.]

Table 7-1. Popular paddling streams with identified public access points designated class A primary contact recreation. The class A designation extends from the most upstream identified public access point to the mouth. (From "Boating On Ohio Streams," Ohio department of natural resources, division of watercraft. The description of these areas is on the Ohio department of natural resources website at <http://www.dnr.state.oh.us/watercraft/areas/tabid/2306/default.aspx>.)

| <u>Water body name</u>                                | <u>Flows into</u>         | <u>Drainage basin</u>           |
|---|---------------------------|---------------------------------|
| <u>Alum creek</u>                                     | <u>Big Walnut creek</u>   | <u>Scioto</u>                   |
| <u>Ashtabula river</u>                                | <u>Lake Erie</u>          | <u>Ashtabula</u>                |
| <u>Auglaize river</u>                                 | <u>Maumee river</u>       | <u>Maumee</u>                   |
| <u>Big Darby creek</u>                                | <u>Scioto river</u>       | <u>Scioto</u>                   |
| <u>Big Walnut creek</u>                               | <u>Scioto river</u>       | <u>Scioto</u>                   |
| <u>Black river</u>                                    | <u>Lake Erie</u>          | <u>Black</u>                    |
| <u>Black river, East branch</u>                       | <u>Black river</u>        | <u>Black</u>                    |
| <u>Black river, West branch</u>                       | <u>Black river</u>        | <u>Black</u>                    |
| <u>Blanchard river</u>                                | <u>Auglaize river</u>     | <u>Maumee</u>                   |
| <u>Buck creek</u>                                     | <u>Mad river</u>          | <u>Great Miami</u>              |
| <u>Caesar creek</u>                                   | <u>Little Miami river</u> | <u>Little Miami</u>             |
| <u>Captina creek</u>                                  | <u>Ohio river</u>         | <u>Central Ohio tributaries</u> |
| <u>Chagrin river</u>                                  | <u>Lake Erie</u>          | <u>Chagrin</u>                  |
| <u>Conneaut creek</u>                                 | <u>Lake Erie</u>          | <u>Ashtabula</u>                |
| <u>Conotton creek</u>                                 | <u>Tuscarawas river</u>   | <u>Muskingum</u>                |
| <u>Cuyahoga river</u>                                 | <u>Lake Erie</u>          | <u>Cuyahoga</u>                 |
| <u>Deer creek</u>                                     | <u>Scioto river</u>       | <u>Scioto</u>                   |
| <u>Duck creek</u>                                     | <u>Ohio river</u>         | <u>Central Ohio tributaries</u> |
| <u>Four-Mile/Talawanda creek<br/>(Fourmile creek)</u> | <u>Great Miami river</u>  | <u>Great Miami</u>              |
| <u>Grand river</u>                                    | <u>Lake Erie</u>          | <u>Grand</u>                    |
| <u>Great Miami river</u>                              | <u>Ohio river</u>         | <u>Great Miami</u>              |
| <u>Greenville creek</u>                               | <u>Stillwater river</u>   | <u>Great Miami</u>              |
| <u>Hocking river</u>                                  | <u>Ohio river</u>         | <u>Hocking</u>                  |
| <u>Huron river</u>                                    | <u>Lake Erie</u>          | <u>Huron</u>                    |
| <u>Huron river, East branch</u>                       | <u>Huron river</u>        | <u>Huron</u>                    |
| <u>Huron River, West branch</u>                       | <u>Huron river</u>        | <u>Huron</u>                    |

| <u>Water body name</u>                  | <u>Flows into</u>         | <u>Drainage basin</u>             |
|---|---------------------------|-----------------------------------|
| <u>Killbuck creek</u>                   | <u>Walhonding river</u>   | <u>Muskingum</u>                  |
| <u>Kokosing river</u>                   | <u>Walhonding river</u>   | <u>Muskingum</u>                  |
| <u>Licking river</u>                    | <u>Muskingum river</u>    | <u>Muskingum</u>                  |
| <u>Licking river, South fork</u>        | <u>Licking river</u>      | <u>Muskingum</u>                  |
| <u>Licking river, North fork</u>        | <u>Licking river</u>      | <u>Muskingum</u>                  |
| <u>Little Beaver creek</u>              | <u>Ohio river</u>         | <u>Little Beaver</u>              |
| <u>Little Miami river, East fork</u>    | <u>Little Miami river</u> | <u>Little Miami</u>               |
| <u>Little Miami river</u>               | <u>Ohio river</u>         | <u>Little Miami</u>               |
| <u>Little Muskingum river</u>           | <u>Ohio river</u>         | <u>Central Ohio tributaries</u>   |
| <u>Little Scioto river (Marion co.)</u> | <u>Scioto river</u>       | <u>Scioto</u>                     |
| <u>Loramie creek</u>                    | <u>Great Miami river</u>  | <u>Great Miami</u>                |
| <u>Mad river</u>                        | <u>Great Miami river</u>  | <u>Great Miami</u>                |
| <u>Mahoning river</u>                   | <u>Ohio river</u>         | <u>Mahoning</u>                   |
| <u>Mahoning river, West branch</u>      | <u>Mahoning river</u>     | <u>Mahoning</u>                   |
| <u>Maumee river</u>                     | <u>Maumee bay</u>         | <u>Maumee</u>                     |
| <u>Mohican river</u>                    | <u>Walhonding river</u>   | <u>Muskingum</u>                  |
| <u>Mohican river, Black fork</u>        | <u>Mohican river</u>      | <u>Muskingum</u>                  |
| <u>Mohican river, Clear fork</u>        | <u>Mohican river</u>      | <u>Muskingum</u>                  |
| <u>Mohican river, Lake fork</u>         | <u>Mohican river</u>      | <u>Muskingum</u>                  |
| <u>Muskingum river</u>                  | <u>Ohio river</u>         | <u>Muskingum</u>                  |
| <u>Ohio Brush creek</u>                 | <u>Ohio river</u>         | <u>Southwest Ohio tributaries</u> |
| <u>Olentangy river</u>                  | <u>Scioto river</u>       | <u>Scioto</u>                     |
| <u>Ottawa river</u>                     | <u>Auglaize river</u>     | <u>Maumee</u>                     |
| <u>Paint creek</u>                      | <u>Scioto river</u>       | <u>Scioto</u>                     |
| <u>Paint creek, North fork</u>          | <u>Paint creek</u>        | <u>Scioto</u>                     |
| <u>Portage river</u>                    | <u>Lake Erie</u>          | <u>Portage</u>                    |
| <u>Portage river, Middle branch</u>     | <u>Portage river</u>      | <u>Portage</u>                    |
| <u>Portage river, North branch</u>      | <u>Portage river</u>      | <u>Portage</u>                    |
| <u>Pymatuning creek</u>                 | <u>Shenango river</u>     | <u>Mahoning</u>                   |
| <u>Raccoon creek</u>                    | <u>Ohio river</u>         | <u>Southeast Ohio tributaries</u> |
| <u>Rocky fork creek (Rocky fork)</u>    | <u>Paint creek</u>        | <u>Scioto</u>                     |
| <u>Rocky river, East branch</u>         | <u>Rocky river</u>        | <u>Rocky</u>                      |

| <u>Water body name</u>                  | <u>Flows into</u>         | <u>Drainage basin</u>             |
|---|---------------------------|-----------------------------------|
| <u>Rocky river</u>                      | <u>Lake Erie</u>          | <u>Rocky</u>                      |
| <u>Rocky river, West branch</u>         | <u>Rocky river</u>        | <u>Rocky</u>                      |
| <u>Salt creek</u>                       | <u>Scioto river</u>       | <u>Scioto</u>                     |
| <u>Sandusky river</u>                   | <u>Sandusky bay</u>       | <u>Maumee</u>                     |
| <u>Sandy creek</u>                      | <u>Tuscarawas river</u>   | <u>Muskingum</u>                  |
| <u>Scioto Brush creek</u>               | <u>Scioto river</u>       | <u>Scioto</u>                     |
| <u>Scioto Brush creek, North fork</u>   | <u>Scioto brush creek</u> | <u>Scioto</u>                     |
| <u>Scioto Brush creek, South fork</u>   | <u>Scioto brush creek</u> | <u>Scioto</u>                     |
| <u>Scioto river</u>                     | <u>Ohio river</u>         | <u>Scioto</u>                     |
| <u>St. Joseph river</u>                 | <u>Maumee river</u>       | <u>Maumee</u>                     |
| <u>St. Marys river</u>                  | <u>Maumee river</u>       | <u>Maumee</u>                     |
| <u>Stillwater river</u>                 | <u>Great Miami river</u>  | <u>Great Miami</u>                |
| <u>Straight creek</u>                   | <u>Ohio river</u>         | <u>Southwest Ohio tributaries</u> |
| <u>Sugar creek</u>                      | <u>Tuscarawas river</u>   | <u>Muskingum</u>                  |
| <u>Sunfish creek</u>                    | <u>Ohio river</u>         | <u>Central Ohio tributaries</u>   |
| <u>Symmes creek</u>                     | <u>Muskingum river</u>    | <u>Muskingum</u>                  |
| <u>Tiffin river</u>                     | <u>Maumee river</u>       | <u>Maumee</u>                     |
| <u>Tinkers creek</u>                    | <u>Cuyahoga river</u>     | <u>Cuyahoga</u>                   |
| <u>Tuscarawas river</u>                 | <u>Muskingum river</u>    | <u>Muskingum</u>                  |
| <u>Twin creek</u>                       | <u>Great Miami river</u>  | <u>Great Miami</u>                |
| <u>Vermilion river</u>                  | <u>Lake Erie</u>          | <u>Vermilion</u>                  |
| <u>Walhonding river</u>                 | <u>Muskingum river</u>    | <u>Muskingum</u>                  |
| <u>White Oak creek (Whiteoak creek)</u> | <u>Ohio river</u>         | <u>Southwest Ohio tributaries</u> |
| <u>Whitewater river</u>                 | <u>Great Miami river</u>  | <u>Great Miami</u>                |
| <u>Wills creek</u>                      | <u>Muskingum river</u>    | <u>Muskingum</u>                  |
| <u>Wills creek, Seneca fork</u>         | <u>Wills creek</u>        | <u>Muskingum</u>                  |

- (b) Class B primary contact recreation. These are waters that support, or potentially support, occasional primary contact recreation activities. All surface waters of the state are designated as class B primary contact recreation unless otherwise designated as bathing waters, class A primary contact recreation, class C primary contact recreation or secondary contact recreation.
  - (c) Class C primary contact recreation. These are water bodies that support, or potentially support, infrequent primary contact recreation activities such as, but not limited to, wading. The following water bodies are designated class C primary contact recreation:
    - (i) All water body segments with drainage areas less than 3.1 square miles and meeting the definition of historically channelized watercourse, unless they are specifically designated a different recreational use in rules 3745-1-08 to 3745-1-30 of the Administrative Code;
    - (ii) All water bodies specifically designated class C primary contact recreation in rules 3745-1-08 to 3745-1-30 of the Administrative Code.
  - (5) Secondary contact recreation. These are water bodies that, for reasons of limited access, result in minimal exposure potential to water borne pathogens because the waters are rarely used for water based recreation such as, but not limited to, wading. These waters are situated in remote, sparsely populated areas, or otherwise have restricted access points, thereby greatly limiting the potential for water based recreation activities. Waters designated secondary contact recreation are identified in rules 3745-1-08 to 3745-1-30 of the Administrative Code
- (E) Base aquatic life use designation.
- (1) These are waters conducive to the survival, protection and propagation of fish and other aquatic species that naturally, or through intentional introduction and management by resource agencies, inhabit surface waters of the state. Other wildlife species that depend upon aquatic resources are likewise afforded protection.
  - (2) The designation of base aquatic life use shall apply to all water bodies that are not otherwise designated under the tiered aquatic life use system described in paragraph (F) of this rule.

- (3) Water quality criteria designed to protect this beneficial use are in rule 3745-1-42 of the Administrative Code.
- (F) Tiered aquatic life use designations. Ten subcategories of aquatic life uses are currently utilized by Ohio EPA in its regulatory and water quality management work. Water quality criteria designed to protect these beneficial uses are in rules 3745-1-42 and 3745-1-43 of the Administrative Code.
- (1) Warmwater habitat.
- (a) Common meaning – This term usually describes and applies to the typical rivers, streams and creeks found throughout all areas of Ohio. This stream habitat typically has at least some natural features and it supports healthy, well balanced populations of fish and other aquatic life.
- (b) Technical definition – These are waters capable of supporting and maintaining a balanced, integrated, adaptive community of warmwater aquatic organisms having a species composition, diversity, and functional organization comparable to the twenty-fifth percentile of the identified reference sites within each of the following ecoregions: the interior plateau ecoregion, the Erie/Ontario lake plains ecoregion, the western Allegheny plateau ecoregion and the eastern corn belt plains ecoregion. For the Huron/Erie lake plains ecoregion, the comparable species composition, diversity and functional organization are based upon the ninetieth percentile of all sites within the ecoregion.
- (c) Specific water bodies designated warmwater habitat are identified in rules 3745-1-08 to 3745-1-32 of the Administrative Code.
- (2) Exceptional warmwater habitat.
- (a) Common meaning – This term usually describes and applies to the rivers, streams and creeks in Ohio that possess unique or special features that set them apart from other warmwater streams. The stream habitat typically has mostly natural features and it supports highly diverse or unusual populations of fish and other aquatic life.
- (b) Technical definition – These are waters capable of supporting and maintaining an exceptional or unusual community of warmwater aquatic organisms having a species composition, diversity, and functional organization comparable to the seventy-fifth percentile of the identified reference sites on a statewide basis.

(c) Specific water bodies designated exceptional warmwater habitat are identified in rules 3745-1-08 to 3745-1-32 of the Administrative Code.

(3) Modified warmwater habitat.

(a) Common meaning – This term usually describes and applies to the rivers, streams and creeks in Ohio that have been highly modified by human activities and because of this cannot support well balanced populations of fish and other aquatic life. The alteration of the stream habitat must be irretrievable and considered permanent over a time scale of at least fifty years.

(b) Technical definition – These are waters that have been the subject of a use attainability analysis and have been found to be incapable of supporting and maintaining a balanced, integrated, adaptive community of warmwater organisms due to irretrievable modifications of the physical habitat. Such modifications are of a long-lasting duration (i.e., fifty years or longer) and may include the following examples:

(i) Extensive stream channel modification activities permitted under sections 401 and 404 of the act or Chapter 6131. of the Revised Code;

(ii) Extensive sedimentation resulting from abandoned mine land runoff; and

(iii) Extensive permanent impoundment of free-flowing water bodies.

(c) Each water body designated modified warmwater habitat will be listed in the appropriate use designation rule (rules 3745-1-08 to 3745-1-32 of the Administrative Code) and will be identified by ecoregion and type of physical habitat modification as listed in the modified warmwater habitat biological criteria table in rule 3745-1-43 of the Administrative Code. The modified warmwater habitat designation can be applied only to those waters that do not attain the warmwater habitat biological criteria in rule 3745-1-43 of the Administrative Code because of irretrievable modifications of the physical habitat. All water body segments designated modified warmwater habitat will be reviewed on a triennial basis (or sooner) to determine whether the use designation should be changed.

(4) Coldwater habitat.

(a) Common meaning – This term usually describes and applies to the rivers, streams and creeks in Ohio that maintain cooler summer water temperatures and thus are able to support different species of aquatic life than are found in warmwater streams. The stream habitat typically has mostly natural features and a year-round connection to ground water.

(b) Technical definitions –

(i) Coldwater habitat inland trout streams. These are waters that support trout stocking and management under the auspices of the Ohio department of natural resources, division of wildlife, excluding waters in lake run stocking programs, lake or reservoir stocking programs, experimental or trial stocking programs, and put and take programs on waters without, or without the potential restoration of, natural cold water attributes of temperature and flow. The director shall designate these waters in consultation with the director of the Ohio department of natural resources.

(ii) Native cold water fauna streams. These are waters capable of supporting populations of native cold water fauna as defined in rule 3745-1-02 of the Administrative Code. Cold water fauna include, but are not limited to, the organisms listed in table 7-2 of this rule. The director shall designate these waters based upon results of use attainability analyses that determine that combinations of these species are present in significant numbers, or could be present in significant numbers if chemical water quality were not limiting. Streams assigned this designated use shall meet these criteria:

(a) Streams with drainage areas greater than or equal to 1.0 square mile must have one or more of the following:

(i) A native population of brook trout;

(ii) Populations of two species of cold water fish, and organisms from two taxa of primary cold water macroinvertebrates; or

(iii) Organisms from four taxa of cold water macroinvertebrates.

(b) Streams with a drainage areas less than 1.0 square mile must have one or both of the following:

(i) One reproducing population of a species of cold water vertebrate; or

(ii) Organisms from four taxa of cold water macroinvertebrates.

(iii) Specific water bodies designated coldwater habitat are identified in rules 3745-1-08 to 3745-1-32 of the Administrative Code.

Table 7-2. Cold water fauna native to Ohio waters. All macroinvertebrate taxa, except those taxa marked with an asterisk, are primary cold water indicators. The taxa marked with an asterisk are secondary cold water indicators. Secondary cold water indicators are common in coldwater habitats but are adapted to a wider range of environmental conditions than the primary cold water indicators.

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| <u>Vertebrates - Fish</u>   |
| <u>American brook lamprey (<i>Lampetra appendix</i>)</u>                            |
| <u>Brook stickleback (<i>Culaea inconstans</i>)</u>                                 |
| <u>Brook trout (<i>Salvelinus fontinalis</i>)</u>                                   |
| <u>Central bigmouth shiner (<i>Notropis dorsalis dorsalis</i>)</u>                  |
| <u>Central mottled sculpin (<i>Cottus bairdi bairdi</i>)</u>                        |
| <u>Central mudminnow (<i>Umbra limi</i>)</u>  |
| <u>Longnose dace (<i>Rhinichthys cataractae</i>)</u>                                |
| <u>Northern brook lamprey (<i>Ichthyomyzon fossor</i>)</u>                          |
| <u>Redside dace (<i>Clinostomus elongatus</i>)</u>                                  |
| <u>Southern redbelly dace (<i>Phoxinus erythrogaster</i>)</u>                       |
| <u>Western tongue-tied minnow (<i>Exoglossum laurae hubbsi</i>)</u>                 |
| <u>Vertebrates - Salamanders</u>  |
| <u>Cave salamander (<i>Eurycea lucifuga</i>)</u>                                    |
| <u>Kentucky spring salamander (<i>Gyrinophilus porphyriticus duryi</i>)</u>         |
| <u>Long-tailed salamander (<i>Eurycea longicauda</i>)</u>                           |
| <u>Midland mud salamander (<i>Pseudotriton montanus diasticus</i>)</u>              |
| <u>Northern red salamander (<i>Pseudotriton ruber ruber</i>)</u>                    |
| <u>Northern spring salamander (<i>Gyrinophilus porphyriticus porphyriticus</i>)</u> |
| <u>Northern two-lined salamander (<i>Eurycea bislineata bislineata</i>)</u>         |
| <u>Southern two-lined salamander (<i>Eurycea bislineata cirrigera</i>)</u>          |
| <u>Macroinvertebrates – Crustacea (crustaceans)</u>                                 |
| <u>Gammarus minus*</u>  |

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| <u>Macroinvertebrates – Diptera (true flies)</u>                             |  |
| <u>Dicranota sp.</u>   | <u>Heterotrissocladius marcidus</u>        |
| <u>Pedicia sp.</u>   | <u>Metriocnemus eurynotus</u>              |
| <u>Thaumalea americana</u>   | <u>Parachaetocladius sp.</u>               |
| <u>Apsectrotanypus johnsoni</u>  | <u>Parametriocnemus sp.*</u>               |
| <u>Brundiniella eumorpha</u>   | <u>Psilometriocnemus triannulatus</u>      |
| <u>Macropelopia decedens</u>   | <u>Rheocricotopus eminellobus</u>          |
| <u>Meropelopia sp.*</u>  | <u>Thienemanniella boltoni</u>             |
| <u>Radotanypus florens</u>   | <u>Polypedilum (Polypedilum) albicorne</u> |
| <u>Trissopelopia ogemawi</u>   | <u>Polypedilum (Polypedilum) aviceps</u>   |
| <u>Zavrelimyia sp.*</u>  | <u>"Constempellina" n. sp. 1</u>           |
| <u>Diamesa sp.</u>   | <u>Micropsectra sp.*</u>                   |
| <u>Pagastia orthogonia</u>   | <u>Neostempellina reissi</u>               |
| <u>Odontomesa ferringtoni</u>  | <u>Neozavrelia sp. 1</u>                   |
| <u>Prodiamesa olivacea</u>   | <u>Paratanytarsus n. sp. 1</u>             |
| <u>Brillia parva</u>   | <u>Stempellinella boltoni</u>              |
| <u>Chaetocladius piger</u>   | <u>Zavrelia n. sp. 1</u>                   |
| <u>Corynoneura n. sp. 5</u>  | <u>Chelifera sp.</u>                       |
| <u>Eukiefferiella devonica group</u>   | <u>Clinocera (Clinocera) sp.</u>           |
| <u>Heleniella sp.</u>  |  |
| <u>Macroinvertebrates – Ephemeroptera (mayflies)</u>                         |  |
| <u>Ameletus sp.</u>  | <u>Maccaffertium modestum</u>              |
| <u>Baetis tricaudatus</u>  | <u>Habrophlebiodes sp.</u>                 |
| <u>Epeorus sp.</u>   | <u>Dannella simplex</u>                    |
| <u>Maccaffertium ithaca</u>  | <u>Litobrancha recurvata</u>               |
| <u>Macroinvertebrates – Megaloptera (alderflies, dobsonflies, fishflies)</u> |  |
| <u>Nigronia fasciatus</u>  |  |
| <u>Macroinvertebrates – Odonata (dragonflies and damselflies)</u>            |  |
| <u>Boyeria grafiana</u>  |  |
| <u>Lanthus parvulus*</u>   |  |
| <u>Macroinvertebrates – Plecoptera (stoneflies)</u>                          |  |
| <u>Peltoperla sp.</u>  | <u>Leuctra sp.</u>                         |
| <u>Amphinemura sp.</u>   | <u>Eccoptura xanthenes</u>                 |
| <u>Soyedina sp.</u>  | <u>Sweltsa sp.</u>                         |
| <u>Macroinvertebrates – Trichoptera (caddisflies)</u>                        |  |
| <u>Dolophilodes sp.</u>  | <u>Oligostomis sp.</u>                     |
| <u>Wormaldia sp.</u>   | <u>Frenesia sp.</u>                        |
| <u>Ceratopsyche slossonae</u>  | <u>Goera sp.</u>                           |
| <u>Ceratopsyche ventura</u>  | <u>Lepidostoma sp.</u>                     |
| <u>Diplectrona sp.</u>   | <u>Psilotreta indecisa</u>                 |
| <u>Parapsyche sp.</u>  | <u>Psilotreta rufa</u>                     |
| <u>Rhyacophila sp. (excluding R. lobifera)</u>                               | <u>Molanna sp.</u>                         |
| <u>Glossosoma sp.</u>  |  |

- (5) Seasonal salmonid habitat. These are water bodies capable of supporting the passage of salmonids from October to May and are water bodies large enough to support recreational fishing. This use is in effect the months of October to May and applies in addition to any other applicable aquatic life habitat use designations. Specific water bodies designated seasonal salmonid habitat are identified in rules 3745-1-08 to 3745-1-32 of the Administrative Code.
- (6) Limited resource water. These are waters that have been the subject of a use attainability analysis and have been found to lack the potential for any resemblance of any other aquatic life habitat as determined by the biological criteria in rule 3745-1-43 of the Administrative Code. The use attainability analysis must demonstrate that the extant fauna is substantially degraded and that the potential for recovery of the fauna to the level characteristic of any other aquatic life habitat is realistically precluded due to natural background conditions or irretrievable human-induced conditions. For water bodies in the lake Erie drainage basin, the designation of water bodies as limited resource waters shall include demonstrations that the “outside mixing zone average” water quality criteria and values and chronic whole effluent toxicity levels are not necessary to protect the designated uses and aquatic life pursuant to rule 3745-1-35 of the Administrative Code. Specific water bodies designated limited resource water are identified in rules 3745-1-08 to 3745-1-30 of the Administrative Code. All water body segments designated limited resource water will be reviewed on a triennial basis (or sooner) to determine whether the use designation should be changed. Waters designated limited resource water will be assigned one or more of the following causative factors. These causative factors will be listed as comments in rules 3745-1-08 to 3745-1-30 of the Administrative Code.
- (a) Acid mine drainage. These are surface waters that display one or more of these characteristics:
- (i) Sustained pH values below 4.1 s.u.;
  - (ii) Intermittently acidic conditions of sufficient magnitude and duration to suppress biological performance below modified warmwater habitat biological criteria; or
  - (iii) Intermittently acidic conditions combined with severe streambed siltation of sufficient magnitude and duration to suppress biological performance below modified warmwater habitat biological criteria.

(b) Small drainageway maintenance. These are highly modified surface water drainageways (usually less than three square miles in drainage area) that do not possess the stream morphology and habitat characteristics necessary to support any other aquatic life habitat use. Opportunity for improved habitat conditions must be restricted by the operations of a ditch maintenance program as defined in rule 3745-1-02 of the Administrative Code.

(c) Other specified conditions.

(7) Limited warmwater habitat.

(a) These are waters that were temporarily designated in the 1978 water quality standards as not meeting specific warmwater habitat criteria. Water quality criteria for the support of this use designation are the same as the criteria for the warmwater habitat use designation. However, individual criteria are varied on a case-by-case basis and supersede the criteria for the warmwater habitat where applicable. Any exceptions from warmwater habitat criteria apply only to specific criteria during specified time periods or flow conditions. The adjusted criteria and conditions for specified water bodies are denoted as comments in rules 3745-1-08 to 3745-1-30 of the Administrative Code. Water bodies currently designated limited warmwater habitat will undergo use attainability analyses and will be redesignated other aquatic life habitats. No additional water bodies will be designated limited warmwater habitat.

(b) Specific water bodies designated limited warmwater habitat are identified in rules 3745-1-08, 3745-1-13, 3745-1-16 and 3745-1-24 of the Administrative Code.

(8) Lake habitat.

(a) These are natural or constructed pooled or impounded bodies of water, excluding lake Erie, that meet the definition of lake in rule 3745-1-02 of the Administrative Code.

(b) All inland water bodies meeting the definition of lake in rule 3745-1-02 of the Administrative Code are designated lake habitat. Water quality standards applicable to lake Erie are described in rule 3745-1-31 of the Administrative Code.

(9) Primary headwater habitat.

- (a) Common meaning and importance – These are the networks of small springs, seeps, and streams that, at a minimum, contribute either perennial or seasonal water flow to downstream channel segments. Very often these water bodies are too small to appear on maps of 1:24,000 scale. Primary headwater habitats perform valuable hydrological and ecological functions. High quality primary headwaters often harbor unique populations of insects and amphibians and provide a critical habitat for salamanders. Collectively, these habitats exert strong influences on the chemical, physical and biological quality of downstream waters and on the beneficial uses that larger waters support.
- (b) Waters designated primary headwater habitat – All water body segments with drainage areas less than 1.0 square mile, unless site-specific data confirm that the drainage area for a water body should be different and that alternative drainage area is identified in rule.
- (c) Assignment of primary headwater habitat classes – For purposes of reviewing applications for authorizations required by Chapter 6111. of the Revised Code, the classification system for primary headwater habitats in paragraph (D)(9)(d) of this rule shall be applied if the director believes that such information will be useful in the review process. The classification system is intended to assist in efforts that will avoid, minimize and mitigate the effects of the regulated activity upon the following: the physical habitat conditions of the stream channel; the chemical, physical and biological integrity of the primary headwater habitat; and the existing uses and designated uses of the immediate segment and of downstream stream segments. The assignment of primary headwater class shall be done at the time of project review.

[Comment: A stream mitigation rule package is under development to establish standard protocols for assessing impact and assigning mitigation credit for projects that impact streams. The assessment protocol includes using this classification system for primary headwater streams.]

- (d) Technical classification system for primary headwater habitats - Each primary headwater habitat water body may be classified using the evaluation methods described in "Field Evaluation Manual for Ohio's Primary Headwater Habitat Streams." The director shall consider all pertinent data and information collected by Ohio EPA, an applicant for authorization of an activity regulated under Chapter 6111. of the Revised Code, or a third party. The assignment of primary headwater class does

not require a water quality standard rulemaking under Chapter 119. of the Revised Code.

(i) Class I primary headwater habitat.

(a) These streams are normally dry for much of the year. These streams have little or no aquatic life potential, except seasonally when flowing water is present for short time periods following precipitation or snow melt. Primary headwater habitats assigned to class I may be typified by one or more of the following characteristics:

(i) No significant aquatic habitat;

(ii) No significant aquatic wildlife use; and

(iii) Limited or no potential to achieve higher primary headwater class functions.

(b) Many of the functions of class I primary headwater habitats can be replaced by storm water control best management practices.

(ii) Class II primary headwater habitat.

(a) These streams are normally intermittent but may have perennial flow. They may exhibit moderately diverse communities of warm water adapted native fauna present either seasonally or on an annual basis. The native fauna is characterized by species of vertebrates (temperature facultative species of amphibians and headwater pioneering species of fish) and/or benthic macroinvertebrates. Pool depth and water volume are normally insufficient to support the biological criteria associated with other sub-categories of aquatic life described in this rule. Prevailing temperature conditions in class II primary headwater habitats prevent establishment of class III biology and function.

(b) Many of the functions of class II primary headwater habitats can normally be replaced by storm water control best management practices and the use of stream habitat restoration and mitigation techniques.

(iii) Class III primary headwater habitat.

- (a) These streams are fed by ground water and support a cold water fauna meeting one or more of the following criteria:

  - (i) At least one species of fish listed in table 7-2 of this rule;
  - (ii) A reproducing population at least one species of salamander listed in table 7-2 of this rule; or
  - (iii) Organisms from four taxa of macroinvertebrates listed in table 7-2 of this rule.
  
- (b) Primary headwater habitats assigned to class III may be typified by some or all of the following characteristics:

  - (i) High levels of biodiversity;
  - (ii) Fauna adapted to cool or cold water;
  - (iii) Perennial water flow;
  - (iv) Course grained substrates;
  - (v) Presence of rare or endangered species; and
  - (vi) High functional values.
  
- (c) The functions of class III primary headwater habitats can rarely be replaced on a highly disturbed project site through installation of storm water control best management practices and stream habitat restoration and mitigation techniques. Therefore, avoidance of impact is highly preferred whenever feasible and practical. If impacts cannot be avoided, then the project applicant must demonstrate that class III primary headwater habitats are locally and regionally abundant and, as part of an overall mitigation plan, submit a viable watershed management plan that ensures their protection.
  
- (iv) Modified primary headwater habitats.

  - (a) Class I and class II primary headwater habitats may be further classified as modified habitats if they:

- (i) Are historically channelized watercourses;
- (ii) Have permanent structures to impound free-flowing water; or
- (iii) Otherwise have human induced channel modifications that are of long-lasting duration.

(b) Modified primary headwater habitats may include, but are not limited to, streams dominated by native species and streams that, because of long-lasting channel modifications, have a limited potential for increased functional values.

(10) Wetland. All water bodies meeting the definition of wetland in rule 3745-1-02 of the Administrative Code are designated the wetland use.

(G) Drainage use designations.

[Comment: The terms ditch maintenance program and historically channelized watercourse are defined in rule 3745-1-02 of the Administrative Code.]

(1) Upland drainage.

- (a) These are water bodies constructed in the upland areas of watersheds to drain the landscapes of excess water during wet periods.
- (b) The upland drainage use designation shall apply to all water body segments that:
  - (i) Are historically channelized watercourses;
  - (ii) Have an average gradient of less than 0.30 per cent; and
  - (iii) Drain less than 3.1 square miles.

(2) Water conveyance.

- (a) These are water bodies constructed or modified from naturally occurring stream channels to convey excess water during flood events and to drain the landscapes of excess water during wet periods.
- (b) The water conveyance use designation shall apply to all water body segments that:

- (i) Are historically channelized watercourses;
  - (ii) Drain 3.1 square miles or more;
  - (iii) Are under a ditch maintenance program; and
  - (iv) Are designated in rules 3745-1-08 to 3745-1-30 of the Administrative Code for one of the following subcategories of aquatic life use: warmwater habitat, modified warmwater habitat, or limited resource water.
- (3) There are no chemical, bacteria or biological criteria designed for the drainage use designations.

[Comment: The criteria in rule 3745-1-04 of the Administrative Code, applicable to all waters, and the criteria associated with any other assigned beneficial use designations apply to these water bodies.]

- (4) All waters assigned a drainage use designation and meeting the conditions of division (C) of section 6111.12 of the Revised Code shall be subject to an abbreviated antidegradation review under rule 3745-1-05 of the Administrative Code.

(H) Navigation.

- (1) These are water bodies that support commercial navigation or recreational boating and are subject to periodic maintenance of essential navigation features pursuant to authorization granted by the United States Congress under the Rivers and Harbors Act of 1899. This beneficial use category recognizes the importance of these water bodies to Ohio's commercial, industrial and recreational interests.
- (2) The objective of the navigation use designation is to protect ships and their crews and to maintain water quality that will not restrict or prevent navigation.
- (3) There are no chemical, bacteria or biological criteria designed for the navigation use designation.

[Comment: The criteria in rule 3745-1-04 of the Administrative Code, applicable to all waters, and the criteria associated with any other assigned beneficial use designations apply to these water bodies.]

- (4) The navigation use shall be maintained in a fashion that is compatible with attainment of all other designated beneficial uses assigned to the water body

unless a use attainability analysis determines that another use or uses are precluded because of navigation. One or more of the criteria for removal of a use allowed under federal water quality standard regulations, 40 C.F.R. 131.10 must be satisfied.

(5) The navigation use shall apply to the water bodies in table 7-3 of this rule.

Table 7-3. Water bodies assigned the navigation use designation.

|                            |                          |                           |
|----------------------------|--------------------------|---------------------------|
| <u>Ashtabula harbor</u>    | <u>Cleveland harbor</u>  | <u>Conneaut harbor</u>    |
| <u>Cooley canal</u>        | <u>Fairport harbor</u>   | <u>Huron harbor</u>       |
| <u>Lorain harbor</u>       | <u>Muskingum river</u>   | <u>Ohio river</u>         |
| <u>Port Clinton harbor</u> | <u>Put-in-Bay harbor</u> | <u>Rocky river harbor</u> |
| <u>Sandusky harbor</u>     | <u>Toledo harbor</u>     | <u>Toussaint river</u>    |
| <u>Vermilion harbor</u>    | <u>West harbor</u>       |                           |

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