

Final Submittal Review, Revisions to Ohio's Designated Use Rules, OAC Chapter 3745-1-09, WQSTS OH2007-188

DATE: FEB 23 2009

Summary

On May 11, 2007 the U.S. Environmental Protection Agency received from the Ohio Environmental Protection Agency (Ohio EPA) a formal rule package containing use designation changes to Ohio Administrative Code Chapter 3745-1-09: Water Quality Standards Beneficial Use Designations. These changes affected aquatic life, recreation, and water supply use categories for selected stream segments located within the Scioto River basin. For aquatic life use, the package included seven changes to more stringent designations, three changes to less stringent designations, and 31 designations assigned for the first time. Recreational use changes included 11 changes to more stringent criteria, four changes to less stringent criteria, and 31 first-time designations.

These revised rules were adopted on May 1, 2007 and became effective August 1, 2007. This submission was incomplete until December 31, 2008 when EPA received a letter of certification from the Ohio Office of the Attorney General. Pursuant to Section 303(c)(3) of the Clean Water Act (CWA) and Federal regulations at 40 CFR 131.21, EPA is required to review and approve new and revised State water quality standards before they can become effective for Clean Water Act purposes. EPA completed its review of the above revisions to Ohio's designated use rules prior to receipt of the Attorney General certification on December 31, 2008, but could not take action on the revised rules until the certification letter was received.

Area Affected

The action area for purposes of the ESA Section 7 evaluation consists of specified stream segments within the Scioto River drainage basin. This basin is shown on the attached map (Figure 1).

CWA Sections 101(a)(2)/303(c)(2)/40CFR131 Review

Water quality standards requirements of CWA Sections 101(a)(2) and 303(c)(2) are implemented through federal regulations contained in 40CFR131. Federal regulations at 40CFR131.21 require EPA to review and approve or disapprove state-adopted water quality standards. In making this determination, EPA must consider the following requirements of 40CFR131.5:

- whether state-adopted uses are consistent with CWA requirements;
- whether the state has adopted criteria protective of the adopted uses;
- whether the state has followed legal procedures for revising its standards;

- whether state standards are based on appropriate technical and scientific data and analyses; and
- whether the state's submission includes certain basic elements as specified in 40CFR131.6, including use designations that are consistent with the provisions of Sections 101(a)(2) and 303(c)(2) of the CWA.

Section 101(a)(2) of the CWA specifies that designated uses “provide for the protection and propagation of fish, shellfish and wildlife and provide for recreation in and on the water.” Section 303(c)(2) of the CWA requires that standards shall protect the public health and shall take into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational, agricultural, industrial, and navigational purposes. These sections of the Act are reflected in the Federal regulations at 40CFR131.10(a).

Ohio use designations are defined in Rule 3745-1-07 of the Ohio Administrative Code. Based on these definitions, aquatic life designated uses of “warmwater” (WWH), “exceptional warmwater” (EWH), and “coldwater” (CWH) are consistent with the requirement of Section 101(a)(2) the Clean Water Act for the protection and propagation of fish, shellfish and wildlife, whereas “modified warmwater” (MWH) and “limited resource water” (LRW) do not meet this requirement. For recreational use, “primary contact” (PCR) meets the 101(a)(2) requirement for the provision of recreation in or on the water, whereas “secondary contact” (SCR) is considered as not meeting the 101(a)(2) requirement. Use designations for public (“PWS”), agricultural (“AWS”) or industrial (“IWS”) water supplies are compliant with the CWA 303(c)(2) requirement that use and value for these uses be considered to protect public health.

Table 1 lists each stream segment for which use designation changes or initial assignments are proposed, along with US EPA's determination of compliance with the CWA. Segments which meet CWA requirements are listed as such. For any segment which varies from CWA requirements for one or more uses, the table will include an explanation of Region 5 staff's determination for those designations. These determinations will account for the requirement in federal regulations at 40CFR131.10(j) that any use designations that do not meet the CWA 101(a)(2) requirements must be supported with a use attainability analysis justifying the designated use under one of the criteria listed in 40CFR131.10(g). Based on our review, we have determined that all use designation changes are consistent with the water quality standards requirements of CWA Sections 101(a)(2) and 303(c)(2) and the implementing regulations at 40CFR131.

ESA Section 7 Evaluation

Consistent with Section 7 of the ESA and Federal Regulations at 50 CFR Part 402, EPA is required to consult with the United States Fish and Wildlife Service (FWS) on any action that may affect federally-listed threatened and endangered species. Pursuant to the “Memorandum of Agreement Between the Environmental Protection Agency, Fish and Wildlife Service and National Marine Fisheries Service Regarding Enhanced Coordination Under the Clean Water Act and Endangered Species Act” (the MOA)

governing consultation with FWS, the approval of new and revised State water quality standards under Section 303 of the CWA is an action requiring consultation.

The Ohio field office of the FWS provided EPA with a list of Federally-listed endangered or threatened species that are, or may be, extant within the state of Ohio, including a listing of counties of current, recent, or possible distribution for each species. EPA compared the list against the map of the Scioto River basin and was able to identify the species that are, or may be, present within all or part of the action area: Indiana bat (*Myotis sodalis*), Scioto madtom (*Noturus trautmani*), northern riffleshell mussel (*Epioblasma torulosa rangiana*), and clubshell mussel (*Pleurobema clava*). Based on our review, we have concluded that the adopted designated use changes will have no effect on:

- any listed species on 31 segments assigned an aquatic life use designation for the first time;
- any listed species on seven segments receiving more stringent aquatic life use designations; and
- the Scioto madtom in Barron Creek.

In addition, our analysis further indicates that the adopted designated use changes are not likely to adversely affect:

- the Indiana bat in Barron Creek, Clover Run, and Jumping Run; and
- the northern riffleshell and clubshell mussels in Barron Creek.

To date, EPA has initiated, but not completed, consultation with FWS on the revised rules approved above. EPA has determined that this approval action does not violate Section 7(d) of the ESA, which prohibits irreversible or irretrievable commitments of resources that have the effect of foreclosing the formulation or implementation of reasonable and prudent alternatives, and has included in the record the basis for the conclusion that there are not impacts of concern during the interim period until the consultation is completed.

Table I. Summary of rule changes to OAC Chapter 3745-1-09, Scioto Basin, and U.S. EPA Clean Water Act determinations.

Stream Segment	Changes	CWA Determination
Alum Creek - headwaters to Alum Creek Reservoir (RM 39.0)	Delete SRW	Not applicable. SRW is not a use designation; SRW is being replaced by other categories of high quality waters under Ohio's antidegradation rules; see OAC 3745-1-05, par. 25.
Alum Creek at RM 26.60	change PWS location to RM 26.74	Not applicable; no change in water quality standards.
Bales Ditch (Spring Fork RM 3.64) - downstream St. Rte. 29 (RM 1.3) to mouth	None > WWH, AWS, IWS, SCR	Meets CWA requirements. Habitat within WWH range, good macroinvertebrates and exceptional fish. Approve SCR; limited access ag ditch, not used for recreation. (131.10(a))
Ballenger-Jones Ditch - U.S. Route 42 (RM 2.4) to the mouth	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Good habitat and biology. PCR meets CWA 101(a)(2). (131.10(a))
Barron Creek - headwaters to Rosedale-Plain City Rd. (RM 2.1)	PCR > SCR	Meets CWA requirements. Small ag ditch, all private property, shallow. (131.10(a),(j)(2))
Barron Creek - Rosedale-Plain City Rd. (RM 2.1) to the mouth	EWB > WWH; PCR > SCR	Meets CWA requirements. Poor habitat, moderate macros, good fish. Ag ditch, all private property, shallow. (131.10(a),(j)(2))
Bee Run	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Habitat poor due to ag ditch maintenance but fish IBI is marginally good. PCR meets CWA 101(a)(2). (131.10(a))
Big Darby Creek - confluence with Flat Branch (RM 79.23) to the mouth	Delete SRW	Not applicable. See Alum Creek.
Big Darby Creek - headwaters to Township Rd. 157 (RM 79.23)	WWH > EWH/CWH; SCR > PCR; delete SRW	Meets CWA requirements. Very high fish and macroinvertebrate scores; in addition, 7 coldwater taxa collected at RM 83.2. (131.10(i)) PCR meets CWA 101(a)(2). SRW is not a designated use.
Big Walnut Creek - Delaware-Morrow County line to Hoover Reservoir	Delete SRW	Not applicable. See Alum Creek.

Table I (continued)

Stream Segment	Changes	CWA Determination
Buck Run	SCR > PCR	Meets CWA requirements. PCR meets CWA 101(a)(2).
Clear Creek - all other segments	Delete SRW	Not applicable. See Alum Creek.
Clear Creek (RM 7.4)	Delete SRW	Not applicable. See Alum Creek.
Clover Groff Ditch - Feder Rd. to mouth	SCR > PCR	Meets CWA requirements. PCR meets CWA 101(a)(2).
Clover Groff Ditch - headwaters to Feder Rd. (RM 2.5)	SCR > PCR; delete SRW	Meets CWA requirements. PCR meets CWA 101(a)(2). SRW is not a designated use.
Clover Run	EWH > WWH; PCR > SCR	Meets CWA requirements. Habitat good but not excellent; biological data suggest upper WWH range. Ag ditch with limited access, shallow. 131.10(a),(j)(2))
East Branch	WWH > CWH/WWH	Meets CWA requirements. Coldwater fish and macroinvertebrate taxa collected. (131.10(i))
East Fork Queer Creek	Delete SRW	Not applicable. See Alum Creek.
Fitzgerald Ditch - headwaters to RM 1.65	WWH>None> WWH	Meets CWA requirements. Ohio EPA restored WWH given lack of a UAA in support of proposed removal of designation. (131.10(j)(2))
Gay Run	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Good habitat and fish scores. PCR meets CWA 101(a)(2). (131.10(a))
Georges Run	PCR > SCR	Meets CWA requirements. Ag ditch, all private, is fenced off. (131.10(a), (j)(2))
Glen Echo Ravine	None > WWH, PCR	Meets CWA requirements. Poor biology but habitat shows WWH potential. PCR meets CWA 101(a)(2). (131.10(a))
Hamilton Ditch - Feder Rd. to mouth	SCR > PCR	Meets CWA requirements. PCR meets CWA 101(a)(2).
Hamilton Ditch - headwaters to Feder Rd. (RM 2.1)	SCR > PCR; delete SRW	Meets CWA requirements. PCR meets CWA 101(a)(2). SRW is not a designated use.
Hay Run - headwaters to Mechanicsburg-Plain City Rd.	WWH>None> WWH	Meets CWA requirements. Ohio EPA restored WWH given lack of a UAA in support of proposed removal of designation. (131.10(j)(2))
Hay Run - upstream Mechanicsburg-Plain City Rd. (RM 0.5) to the mouth	WWH > EWH	Meets CWA requirements. Exceptional biology despite subpar habitat, possibly due to groundwater inflow. (131.10(a))

Table I (continued)

Stream Segment	Changes	CWA Determination
Hellbranch Run - all other segments	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Marginal habitat, but biology shows potential. PCR meets CWA 101(a)(2). (131.10(a))
Hellbranch Run - Kropp Rd. (RM 5.04) to the mouth	WWH > EWH	Meets CWA requirements. Excellent instream habitat, very good macroinvertebrates. (131.10(i))
Jumping Run - adjacent Bullard-Rutan Rd. (RM 1.5) to the mouth	EWH > WWH	Meets CWA requirements. Habitat good but not excellent; fish fair, macros good. (131.10(a),(j)(2))
Jumping Run - headwaters to Bullard-Rutan Rd.	EWH>None>EWH	Meets CWA requirements. Ohio EPA restored EWH given lack of a UAA in support of proposed removal of designation. (131.10(j)(2))
Kilbourne Run (Alum Creek RM 16.34)	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Subpar macroinvertebrates but very good habitat. PCR meets CWA 101(a)(2). (131.10(a))
Laurel Run	Delete SRW	Not applicable. See Alum Creek.
Little Darby Creek - headwaters to Lake Run (RM 36.9)	EWH > CWH/EWH; delete SRW	Meets CWA requirements. Several coldwater organisms. (131.10(a)) SRW is not a designated use.
Little Darby Creek (Big Darby Creek RM 78.34)	None > CWH/EWH, AWS, IWS, PCR	Meets CWA requirements. Excellent fish and macroinvertebrates, cold water taxa. PCR meets CWA 101(a)(2). (131.10(a))
McKenna Creek (Big Walnut Ck. RM 29.65)	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Macroinvertebrates rated "fair", no fish or habitat data. PCR meets CWA 101(a)(2). (131.10(a))
Middle Fork Laurel Run	Delete SRW	Not applicable. See Alum Creek.
Middle Fork Salt Creek	Delete SRW	Not applicable. See Alum Creek.
Morgan Fork	Delete SRW	Not applicable. See Alum Creek.
Olentangy River - Delaware Reservoir (RM 32.3) to Old Winter Rd. (RM 20.4)	Delete SRW	Not applicable. See Alum Creek.
Olentangy River - I-270 to St. Rte. 161 (RM 9.7)	Delete SRW	Not applicable. See Alum Creek.
Olentangy River - Old Winter Rd. (RM 20.4) to I-1270 (RM 11.6)	Delete SRW	Not applicable. See Alum Creek.
Olentangy River at RM 18.19	Delete SRW	Not applicable. See Alum Creek.

Table I (continued)

Stream Segment	Changes	CWA Determination
Olentangy River at RM 31.02	Delete SRW	Not applicable. See Alum Creek.
Olentangy River at RM 31.23	Delete SRW	Not applicable. See Alum Creek.
Paint Creek - Paint Cr. Reservoir (RM 46.5 to No. Fork Paint Cr. (RM 8.1)	Delete SRW	Not applicable. See Alum Creek.
Prairie Run	SCR > PCR	Meets CWA requirements. PCR meets CWA 101(a)(2).
Pretty Run	Delete SRW	Not applicable. See Alum Creek.
Proctor Run	Delete SRW	Not applicable. See Alum Creek.
Queer Creek	Delete SRW	Not applicable. See Alum Creek.
Rocky Fork	Delete SRW	Not applicable. See Alum Creek.
Rocky Fork	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Fish only fair, macroinvertebrates poor to fair, but very good habitat shows WWH potential. PCR meets CWA 101(a)(2). 131.10(a)
Rocky Fork - headwaters to US Rte. 62 (RM 5.1)	Delete SRW	Not applicable. See Alum Creek.
Rocky Fork - US Rte. 62 (RM 5.1) to Gahanna (RM 1.5)	Delete SRW	Not applicable. See Alum Creek.
Salt Creek	Delete SRW	Not applicable. See Alum Creek.
Scioto R. - Dublin Rd. WTP (RM 133.4 to the Olentangy R.	Delete SRW	Not applicable. See Alum Creek.
Scioto R. - Greenlawn Dam (RM 129.8) to Frank Rd. (RM 127.7)	Delete SRW	Not applicable. See Alum Creek.
Scioto R. - Olentangy R. (RM 132.3 to Greenlawn Dam	Delete SRW	Not applicable. See Alum Creek.
Scioto R. - O'Shaughnessy Dam (RM 148.8 to Dublin Rd. WTP Dam	Delete SRW	Not applicable. See Alum Creek.
Smith Ditch - unnamed trib adjacent to Lily Chapel Rd. (RM 3.7) to the mouth	None > EWH, AWS, IWS, PCR	Meets CWA requirements. Excellent habitat, excellent to fair fish. PCR meets CWA 101(a)(2). (131.10(a))

Table I (continued)

Stream Segment	Changes	CWA Determination
Spain Creek - Erie-Lackawanna Railroad Crossing (RM 5.0) to the mouth	WWH > CWH/EWH; SCR > PCR	Meets CWA requirements. Excellent habitat and macroinvertebrates; cold water taxa. PCR meets CWA 101(a)(2). (131.10(i))
Spain Creek - headwaters to Erie-Lackawanna Railroad Crossing (RM 5.0)	WWH > CWH/WWH; SCR > PCR	Meets CWA requirements. Good habitat, macroinvertebrates; restoration potential. PCR meets CWA 101(a)(2). (131.10(i))
Spring Fork	Delete SRW	Not applicable. See Alum Creek.
Spring Run (Alum Creek RM 17.22)	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Biology and habitat range from poor upstream to good downstream. PCR meets CWA 101(a)(2). (131.10(a))
Sugar Run - headwaters to Taylor Rd.(RM 6.7)	SCR > PCR	Meets CWA requirements. PCR meets CWA 101(a)(2).
Sugar Run - Taylor Rd. (RM 6.7) to mouth	SCR > PCR	Meets CWA requirements. PCR meets CWA 101(a)(2).
Sweeney Run - Lafayette-Plain City Road (RM 1.8) to the mouth	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Fair to good biology and habitat. PCR meets CWA 101(a)(2). (131.10(a))
Unnamed trib at Alum Creek RM 23.47	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Good fish, habitat. PCR meets CWA 101(a)(2). (131.10(a))
Unnamed trib at Alum Creek RM 25.50	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Habitat within WWH range, no fish data. PCR meets CWA 101(a)(2). (131.10(a))
Unnamed trib at Big Walnut Creek RM 27.29	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Poor biology and only fair habitat, but has restoration potential. PCR meets CWA 101(a)(2). (131.10(a))
Unnamed trib at Big Walnut Creek RM 32.6	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Fish only fair but habitat indicates potential. PCR meets CWA 101(a)(2). (131.10(a))
Unnamed trib at Culver Creek RM 3.32	None > WWH, AWS, IWS, PCR	Meets CWA requirements. IBI is right at minimum for WWH, good macroinevrtebrates, and good habitat. PCR meets CWA 101(a)(2). (131.10(a))
Unnamed trib at Dysar Run RM 1.67	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Fair to good habitat, good fish IBIs. PCR meets CWA 101(a)(2). (131.10(a))

(Table I continued)

Stream Segment	Changes	CWA Determination
Unnamed trib at Little Walnut Creek RM 9.5	None > WWH, AWS, IWS, PCR	Meets CWA requirements. IBI is below WWH but habitat is good. PCR meets CWA 101(a)(2). (131.10(a))
Unnamed trib at Olentangy River RM 20.71	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Poor fish, marginally good macroinvertebrates, and fair habitat sum to WWH potential. PCR meets CWA 101(a)(2). (131.10(a))
Unnamed trib at Smith Ditch (RM 0.06)	None > EWH, AWS, IWS, PCR	Meets CWA requirements. Good habitat, excellent fish. PCR meets CWA 101(a)(2). (131.10(a))
Unnamed trib at Whetstone Creek RM 33.71	None > CWH/WWH, AWS, IWS, PCR	Meets CWA requirements. WWH IBI, fair macroinvertebrates, fair habitat. Five coldwater macroinvertebrate taxa collected at one station. PCR meets CWA 101(a)(2). PCR meets CWA 101(a)(2). (131.10(a))
Unnamed trib to Big Darby Cr. RM 18.41	None > WWH, AWS, IWS, SCR	Meets CWA requirements. Fair to good biology data; private ag ditch with limited access, not used for recreation. (131.10(a))
Unnamed trib to Big Darby Cr. RM 20.2	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Biology good, not exceptional. PCR meets CWA 101(a)(2). (131.10(a))
Unnamed trib to Big Darby Cr. RM 23.77	None > WWH, AWS, IWS, SCR	Meets CWA requirements. Good habitat although macroinvertebrate score is marginal. Intermittent flow; very small and shallow stream, not used for recreation. (131.10(a))
Unnamed trib to Big Darby Creek at RM 74.91	None > EWH, AWS, IWS, SCR	Meets CWA requirements. Excellent fish and macroinvertebrates; limited access, not used for recreation. (131.10(a))
Unnamed trib to Big Darby Creek RM 69.4	None > WWH, AWS, IWS, SCR	Meets CWA requirements. Habitat within WWH range, good macroinvertebrates and exceptional fish; small shallow ag ditch not used for recreation. (131.10(a))
Wamp Ditch - adjacent Finley-Guy Rd. (RM 0.4) to mouth	None > WWH, AWS, IWS, SCR	Meets CWA requirements. Poor habitat but marginally good macros. Private ag ditch, shallow. (131.10(a))
West Spring Run (Alum Creek RM 17.15)	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Very poor macroinvertebrates but good habitat. PCR meets CWA 101(a)(2). (131.10(a))

(Table I continued)

Stream Segment	Changes	CWA Determination
Worthington Ditch - upstream Plain City-Georgesville Rd. (RM 1.0) to the mouth	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Fish only fair, but marginally good macros. PCR meets CWA 101(a)(2). (131.10(a))
Yutzy Ditch - adjacent Price-Hilliards Rd. (RM 1.0) to the mouth	None > WWH, AWS, IWS, PCR	Meets CWA requirements. Met WWH criterion for macros. PCR meets CWA 101(a)(2). (131.10(a))