

Addressing Waters Not Meeting Water Quality Goals

The Clean Water Act requires that States identify waters not meeting water quality goals and then prioritize them for action to restore their beneficial uses. The resulting list of prioritized impaired waters is known as the 303(d) list. Ohio's 2012 303(d) list is presented in Section L4.

Ohio made substantial changes to its listing process in 2010 (see Sections A and J in the 2010 Integrated Report (Ohio EPA, 2010)). The overall effect of the modifications was to report more detailed results that provide a sharper focus on where problems exist. A conservative, multi-step process was developed to ensure that listings approved by U.S. EPA in the 2008 303(d) list were not delisted without good cause and that the process was as transparent as possible. Ohio's 2010 303(d) list was approved by U.S. EPA on June 2, 2010.

Ohio's 2012 Integrated Report and 303(d) list contain relatively few changes compared to the major adjustments made in 2010. This section outlines the listing framework, lays out the prioritizing and delisting processes and results, and reports on the status of Ohio total maximum daily load (TMDL) efforts including schedules for future TMDLs and monitoring in Ohio.

J1. Ohio's 303(d) Listing Framework

The process of listing involves assigning a condition status (a category) for each of four beneficial uses for each assessment unit. Data requirements, descriptions of available data, assessment methodologies, and results were discussed and reported by individual beneficial use in Sections E, F, G, and H.

In 2010, Ohio modified the five-category listing structure suggested by U.S. EPA to accommodate listing by beneficial use and introduced subcategories to give more information about a water's status. In 2012, one additional subcategory is being added to allow accurate reporting of the status of assessment units relative to approved TMDLs and data availability. Table J-1 summarizes the categories and subcategories used in the 2012 report.

Also in 2010, Ohio began listing by beneficial use within each assessment unit and reporting on a smaller assessment unit size. Watershed assessment units shifted from an average size of 130 square miles to 27 square miles. Under the old system, an impairment of one beneficial use caused the assessment unit to be category 5 (impaired) regardless of the status of other uses.

Figure J-1 illustrates the significance of these changes in the listing procedures. In the example, an assessment unit listed in 2008 as impaired (i.e., category 5) appeared on the 2010 303(d) list as five units with four uses each; thus, reporting one piece of information changed to reporting 20 pieces of information. Whereas the 2008 list indicated only that the unit was impaired, the new listing indicates all of the following information:

- Aquatic life use is impaired (5) in one unit, not impaired (1) in one, and unknown (3) in one. A TMDL to address impairments has been completed in one unit (4A), and the impairment in the remaining unit is being addressed in some other way (4B, e.g., a discharge permit).
- Recreation use is impaired (5) in three units, unknown (3) in one, and a TMDL to address the impairment in one unit has been completed (4A).

Table J-1. Category definitions for the 2012 Integrated Report and 303(d) list.

Category ¹		Subcategory	
0	No waters currently utilized for water supply		
1	Use attaining	h	Historical data
		t	TMDL complete; AU is now attaining water quality standards
		x	Retained from 2008 IR
2	Not applicable in Ohio system		
3	Use attainment unknown	h	Historical data
		i	Insufficient data
		t	TMDL complete; included in TMDL(s) for other units, but there may be no or not enough data to assess this unit
		x	Retained from 2008 IR
4	Impaired; TMDL not needed	A	TMDL complete
		B	Other required control measures will result in attainment of use
		C	Not a pollutant
		h	Historical data
		n	Natural causes and sources
		x	Retained from 2008 IR
5	Impaired; TMDL needed	M	Mercury
		h	Historical data
		x	Retained from 2008 IR

¹ Shading indicates categories defined by U.S. EPA; additional categories and subcategories are defined by Ohio EPA.

- Human health results based on fish tissue analysis indicate that four of the five units are impaired (5) and one is unknown (3).
- Public drinking water supplies exist in only two of the five units, and one of those is impaired (5). The status of the other is unknown (3).

Table J-2 shows the number of potential listings that could result from the combination of smaller assessment units and listing by individual use.

For the aquatic life use, we continued the transition that began in 2010 of translating data evaluated at the 11-digit hydrologic unit size to the smaller 12-digit size. We expect that the few remaining relic categories will be dealt with as those areas are monitored again.

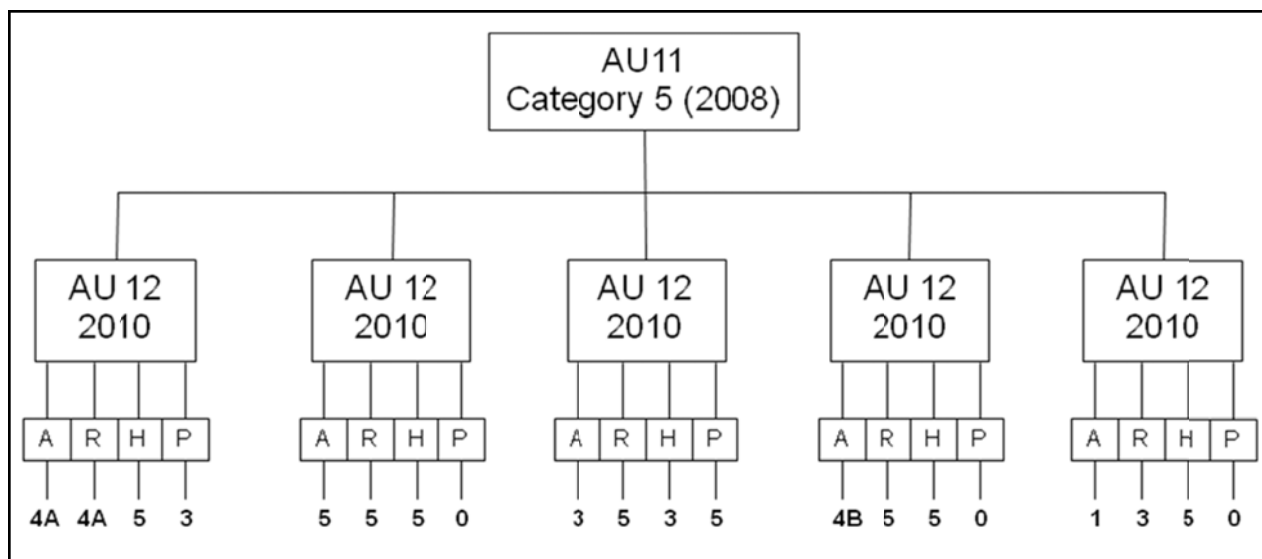


Figure J-1. Listing by smaller assessment units and individual beneficial uses.

Table J-2. Potential listing opportunities in Ohio's listing framework.

Assessment Unit (AU) Type	2008 and Before			2010 and After		
	Number of AUs	Status Reports per Unit	Total Number of Possible Listings	Number of AUs	Status Reports per Unit	Total Number of Possible Listings
Watershed	331	1	331	1538	4	6,152
Large river	23	1	23	38	4	152
Lake Erie shore	3	1	3	3	4	12
Totals	357	1	357	1,579	4	6,316

J2. Prioritizing the Impaired Waters: the 303(d) List

The impaired waters were identified and assigned a category by individual beneficial use in Sections E, F, G, and H. After waters are identified as impaired and requiring a TMDL, the category 5 waters are prioritized to produce the 303(d) list (see Section L4). Because Ohio uses a highly integrated monitoring and TMDL linkage to ensure efficient use of resources, it makes sense to continue to set priorities by assessment unit rather than by individual use.

Ohio River and Lake Erie

Other organizations have accepted lead responsibility for TMDLs in two special waters affected by multiple jurisdictions: U.S. EPA for the open waters of Lake Erie and ORSANCO for the mainstem of the Ohio River. Ohio EPA automatically assigns these waters a low priority for *Ohio EPA-initiated action*. Ohio EPA is participating in TMDL and similar actions conducted by the lead organizations.

In October 2011, Ohio EPA sent a letter to U.S. EPA requesting that they initiate a TMDL for the western basin of Lake Erie. U.S. EPA is considering the request.

Inland Waters

For inland waters, a point system is used to assign priority. A total of 20 points could be assigned to an assessment unit, distributed as shown in Figure J-2. The priority results for specific assessment units are reported in Section L and in assessment unit summary information available on the web page.

As a practical matter, only the 1,538 watershed and 38 large river assessment units are included in the priority-setting exercise. Lake Erie nearshore areas were assigned the priority of the appropriate surrounding or contiguous watershed assessment unit.

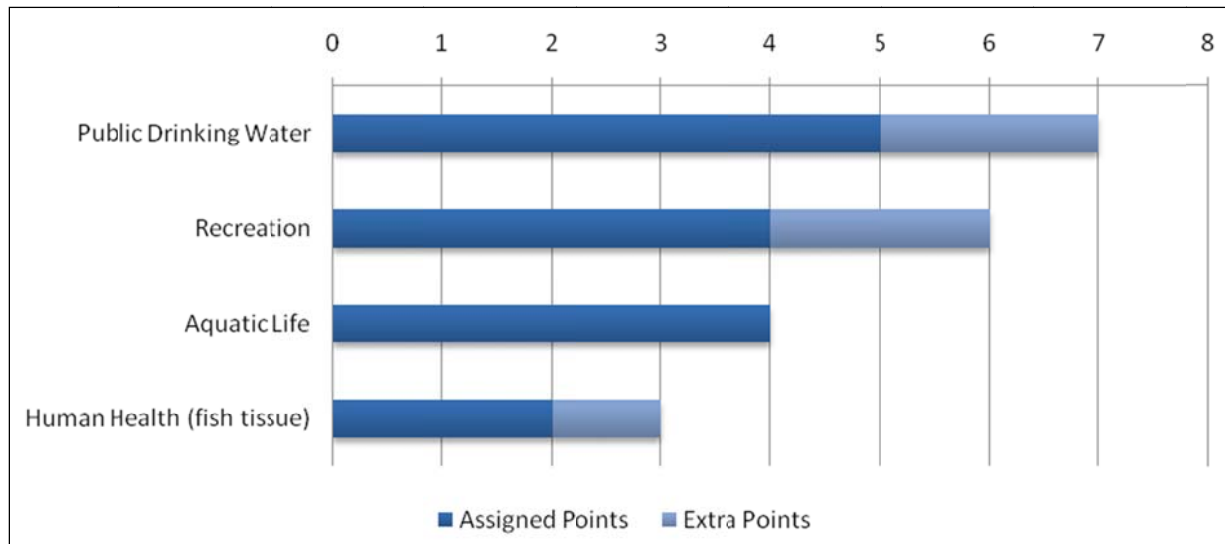


Figure J-2. Priority points assigned based on use impairment or other factors (extra points).

The assessment units were assigned priority points using the guidelines in Table J-3. The points assigned to the public drinking water and human health uses are straightforward. For the recreation and aquatic life uses, points are assigned based on a computed index score (see Section F2 and G2). The lowest quartile (scores between 0 and 25) get the fewest points because a TMDL may not be the most effective way to address the impairments. Scores in this range indicate severe basin-wide problems, comprehensive degradation that may require significant time and resources and broad-scale fixes, including, possibly, fundamental changes in land use practices. Educating about how water quality is affected by various practices and encouraging stewardship may be more effective in these areas than a traditional TMDL approach.

Scores in the highest quartile (between 75.1 and 100) generally indicate a localized water quality issue. Addressing the impairment may not require a complete watershed effort; rather, a targeted fix for a particular problem may be most effective. Thus, these receive the next lowest number of priority points. The most points are awarded for scores in the middle quartiles (between 25.1 and 50 and between 50.1 and 75), indicating problems of such scale that purposeful action should produce a measurable response within a 10-year period. These waters are the best candidates for a traditional TMDL.

Two additional points may be awarded to assessment units that are impaired for the recreation use and contain Class A waters. Class A waters are those most suitable for recreation, such as popular paddling streams and lakes with public access points developed, maintained, and publicized by governmental entities.

Table J-3. Priority points for impaired assessment units.

Points	Condition	# Assessment Units	
		WAUs	LRAUs
Human Health Use impairment (fish tissue contaminants) (maximum of 3 points)			
2	Listed as impaired for Fish Contaminants (Human Health Use)	493	30
+ 1	Additional point in assessment units that have greater than 500 parts per billion PCBs or mercury	15	5
Recreation Use impairment (maximum of 6 points)			
1	Listed as impaired, with assessment unit score ¹ between 0 and 25	51	1
2	Listed as impaired, with assessment unit score ¹ between 75.1 and 100	75	10
3	Listed as impaired, with assessment unit score ¹ between 25.1 and 50	148	1
4	Listed as impaired, with assessment unit score ¹ between 50.1 and 75	151	3
+ 2	Additional points if assessment unit contains Class A waters	76	15
Aquatic Life Use impairment (maximum of 4 points)			
1	Listed as impaired, with assessment unit score ¹ between 0 and 25	242	4
2	Listed as impaired, with assessment unit score ¹ between 75.1 and 100	46	10
3	Listed as impaired, with assessment unit score ¹ between 25.1 and 50	122	1
4	Listed as impaired, with assessment unit score ¹ between 50.1 and 75	127	2
Public Drinking Water Use impairment (maximum of 7 points)			
5	Listed as impaired for Public Drinking Water Use for one indicator	4	3
+ 2	Additional points in assessment units impaired for second indicator	2	2
1	Not listed as impaired, but on watch list; one point for each indicator	31	3

¹ The assessment unit score is reported on the summary sheets in Section L and on the assessment unit summaries on the web.

J3. Summary of Results

The consolidated results of the 2012 analysis are shown in Table J-4 and Figures J-3 through J-5. Compared with past reports, the number of TMDLs continues to rise and the number of units with an “unknown” condition continues to decrease.

The introduction of the “t” subcategory was necessary because TMDLs have been approved in a number of areas and changes since the TMDL indicate that the 4A category does not tell the whole story. The “t” subcategory was assigned a total of 84 times during the 2012 analysis. New data in 60 WAUs indicate that the waters are now meeting WQS; the “1t” category is assigned to 5 WAUs for the recreation use and 55 WAUs for the aquatic life use. For 21 WAUs for the aquatic life use, the units are included in TMDLs for their larger watershed although there is not enough data to assess the unit’s attainment status (“3it” or “3t”). A similar situation occurs in three WAUs where TMDLs would not typically be completed but the units are included in larger TMDLs (1 is “4Ct”, 2 are “4nt”). Without the “t” subcategory, the number of 4A assignments would increase from 739 to 823.

Table J-4. Summary of results for each beneficial use¹.

	Human Health (Fish Contaminants)	Recreation	Aquatic Life	Public Drinking Water
Watershed assessment units				
Not being used for public water supply	0	0	0	1421
Attains	180	102	312	36
Unknown	850	671	247	76
Impaired, needs TMDL	508	421	537	4
Impaired, TMDL complete	0	344	387	1
Impaired, other remedy	0	0	0	0
Impaired, not pollutant	0	0	6	0
Impaired, natural condition	0	0	49	0
Total watershed units evaluated	1538	1538	1538	1538
Large river assessment units				
Not being used for public water supply	0	0	0	29
Attains	1	1	14	2
Unknown	2	18	0	4
Impaired, needs TMDL	35	15	18	3
Impaired, TMDL complete	0	4	3	0
Impaired, other remedy	0	0	0	0
Impaired, not pollutant	0	0	3	0
Total large river units evaluated	38	38	38	38
Lake Erie assessment units				
Attains	0	1	0	3
Unknown	0	0	0	0
Impaired, needs TMDL	3	2	3	0
Total Lake Erie units evaluated	3	3	3	3

¹ Reported using federally-defined categories (see Table J-1), except for two defined by Ohio (category 0 (not being used for public water supply) and subcategory 4n (impaired due to natural condition)). Other Ohio-defined subcategories are included in federal categories.

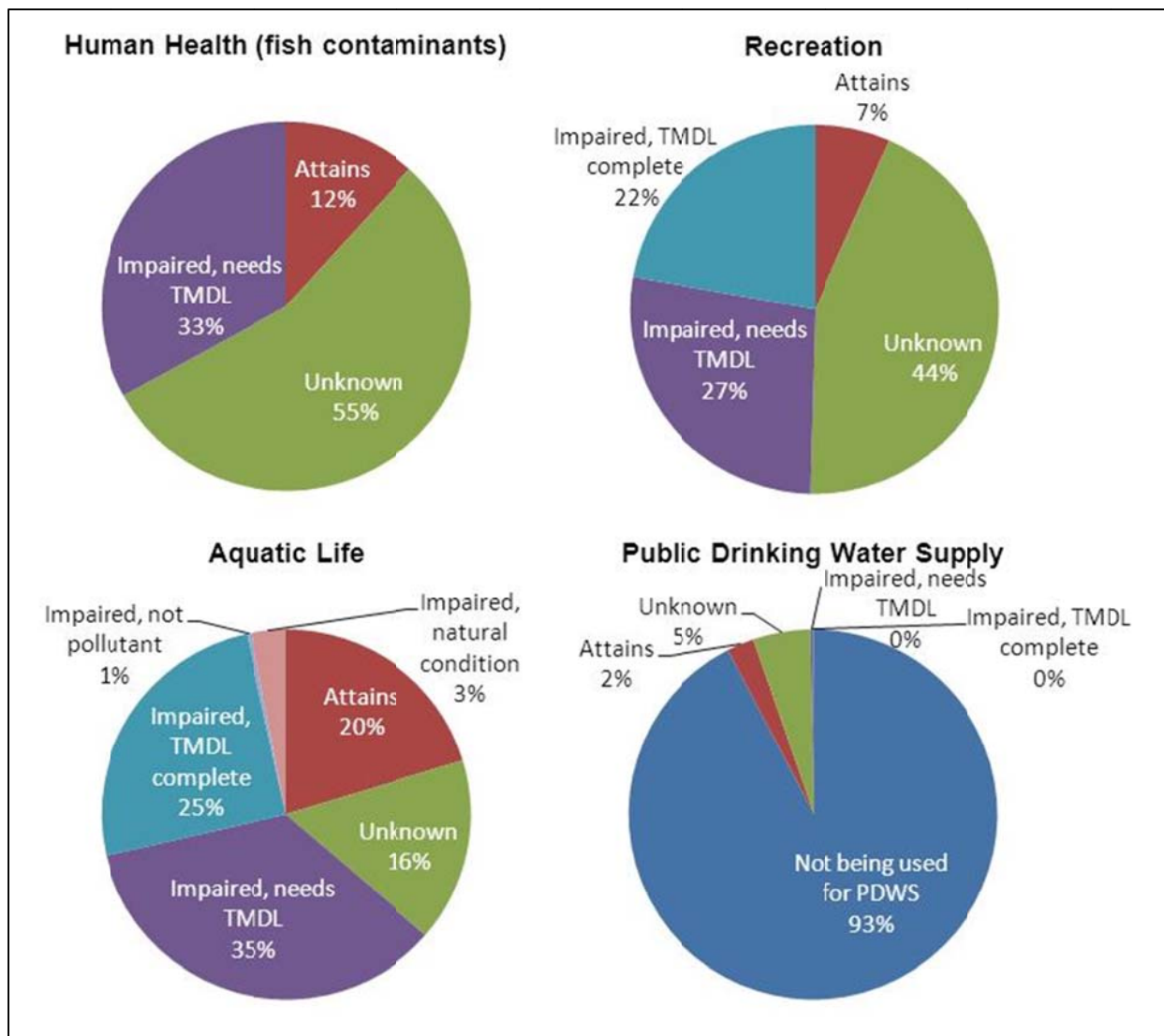


Figure J-3. Summary of 2012 IR results for watershed assessment units by beneficial use.

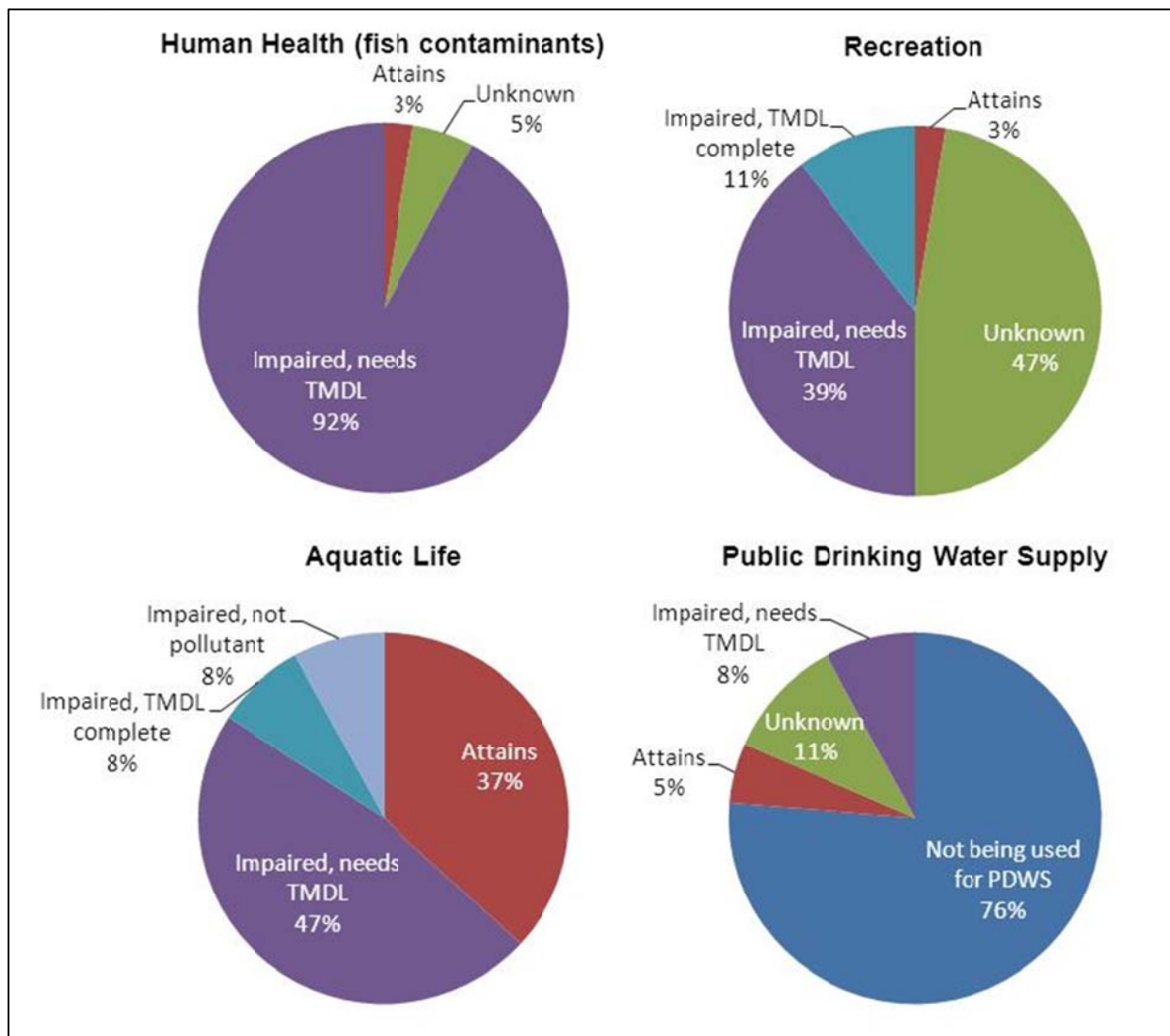


Figure J-4. Summary of 2012 IR results for large river assessment units by beneficial use.

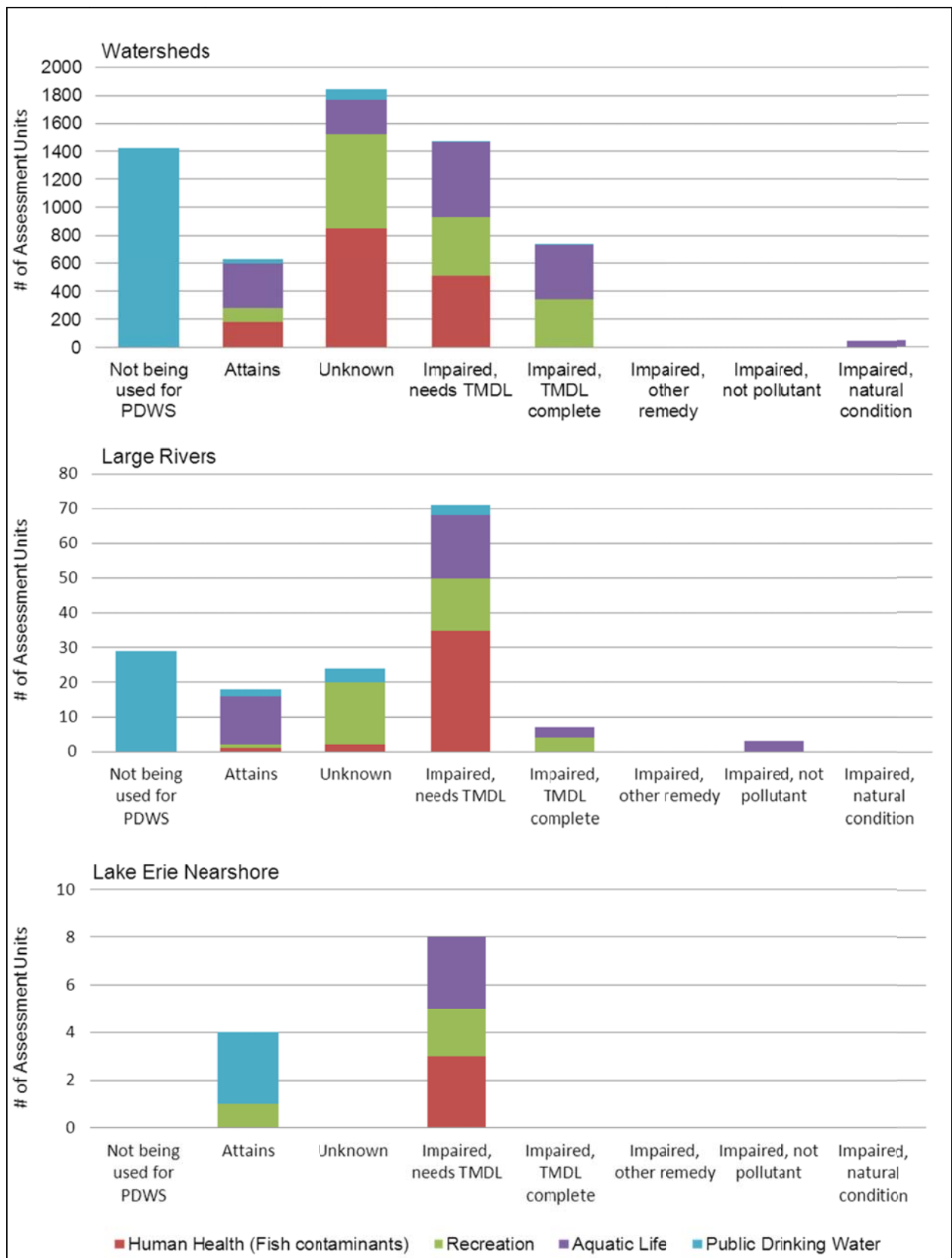


Figure J-5. Summary of 2012 results by assessment unit type.

J4. Changes to the 2012 303(d) List

Federal regulations require a demonstration of good cause for not including water bodies on the Section 303(d) list that were included on previous 303(d) lists (40 CFR 130.7(b)(6)(iv)). Over time, U.S. EPA has modified the wording of reasons for delisting in guidance (U.S. EPA 2005, 2006, 2009, 2011) to be used in preparing this report. Ohio is removing 262 assessment units and adding 244 units based on these four reasons:

- Change in methodology: continuation of the change to smaller assessment units introduced in 2010; for aquatic life use only
- Flaw in original listing: explained in detail for each change; many of these are corrections to minor issues that arose during the 2010 transition to smaller units
- New data: the assessment and interpretation of more recent data
- TMDL approved: approval by U.S. EPA of a TMDL

Table J-5 summarizes the number of watershed, large river, and Lake Erie nearshore assessment units being delisted from the 2012 303(d) list. Table J-6 and Figure J-6 summarize the number of assessment units being changed for each of the four reasons. Each assessment unit removed or added for each reason is presented in Tables J-6 through J-13.

Table J-5. Number of assessment units removed from or added to the 303(d) list.

	Number of Assessment Units			
	Watershed	Large River	Lake Erie	Total
Delistings				
Human Health (fish tissue)	5	0	0	5
Recreation	79	3	0	82
Aquatic Life	173	1	0	174
Public Drinking Water Supply	1	0	0	1
Total	258	4	0	262
New Listings				
Human Health (fish tissue)	10	1	0	11
Recreation	175	6	0	181
Aquatic Life	48	4	0	52
Public Drinking Water Supply	0	0	0	0
Total	233	11	0	244

Table J-6. Summary of reasons for changes to the 2012 303(d) list.

Reason for Change	Number of Assessment Units	
	Removals	Additions
Change in methodology (2010 AU size)	55	1
Flaw in original listing	7	6
New data	63	237
TMDL approved	137	--

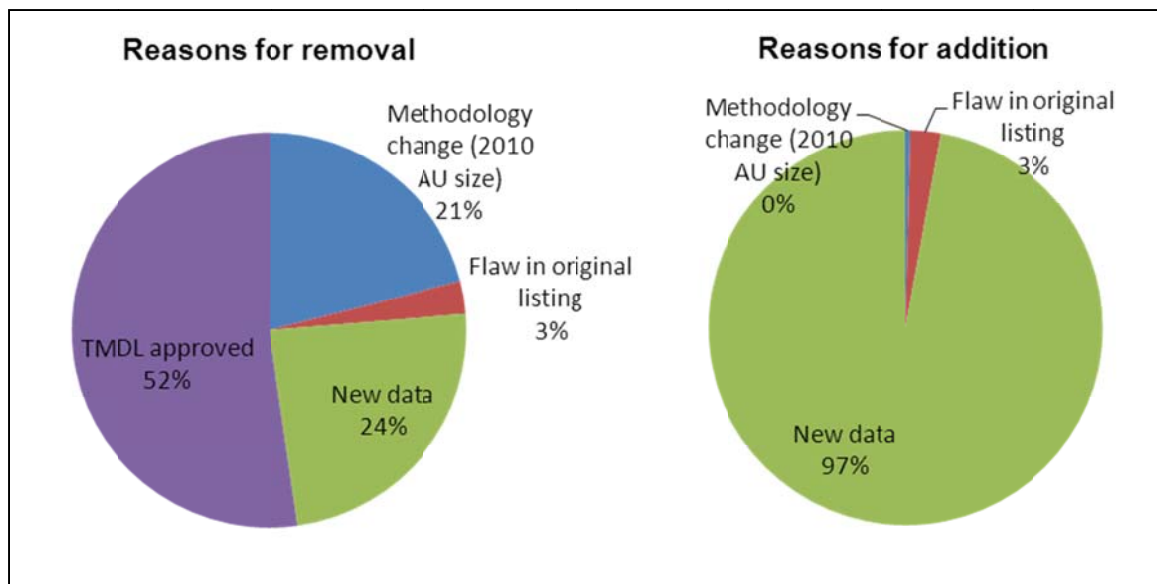


Figure J-6. Summary of reasons for changes to the 2012 303(d) list.

Table J-7. Removals from 303(d) list because of change in methodology (2010 AU size).

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category
ALU	04100003 04 05	Town of Alvarado-Fish Creek	5x	3
ALU	04100011 02 02	Strong Creek	5hx	3
ALU	04110001 06 03	Heider Ditch-Frontal Lake Erie	5x	3t
ALU	04110002 05 03	Headwaters Chippewa Creek	5x	4Ah
ALU	04110002 05 05	Willow Lake-Cuyahoga River	5x	4A
ALU	04110003 05 01	Marsh Creek-Frontal Lake Erie	5x	3
ALU	04110003 05 02	City of Euclid-Frontal Lake Erie	5x	3
ALU	04110004 04 01	Griggs Creek	5x	4n
ALU	04110004 04 02	Peters Creek-Mill Creek	5x	4A
ALU	04110004 06 01	Coffee Creek-Grand River	5x	3i
ALU	04110004 06 02	Mill Creek	5x	1
ALU	04110004 06 03	Village of Mechanicsville-Grand River	5x	3
ALU	04110004 06 04	Paine Creek	5x	4n
ALU	04110004 06 05	Talcott Creek-Grand River	5x	3i
ALU	04110004 06 06	Big Creek	5x	4A
ALU	04110004 06 07	Red Creek-Grand River	5x	4A
ALU	05030201 06 01	Rich Fork	5x	1h
ALU	05030201 06 02	Cranenest Fork	5x	1h
ALU	05030201 06 04	Witten Fork	5x	1h
ALU	05030201 06 05	Straight Fork-Little Muskingum River	5x	1h
ALU	05030201 07 01	Clear Fork Little Muskingum River	5x	1h
ALU	05030201 07 02	Archers Fork	5x	1h
ALU	05030201 07 04	Fifteen Mile Creek	5x	1h
ALU	05030201 10 01	Stillhouse Run-Ohio River	5x	3t
ALU	05040001 05 01	Swartz Ditch-Middle Branch Nimishillen Creek	5	4A
ALU	05040001 05 06	Town of East Sparta-Nimishillen Creek	5	4A

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category
ALU	05040003 07 02	Martins Creek	5x	3i
ALU	05060001 12 02	O'Shaughnessy Dam-Scioto River	5hx	3
ALU	05060001 23 06	Town of Circleville-Scioto River	5x	3
ALU	05080001 15 02	Headwaters Mad River	5x	1t
ALU	05080001 16 04	Anderson Creek	5x	1t
ALU	05080001 16 05	Storms Creek	5x	1t
ALU	05080001 17 01	East Fork Buck Creek	5x	1t
ALU	05080001 17 02	Headwaters Buck Creek	5x	1t
ALU	05080001 17 03	Sinking Creek	5x	1t
ALU	05080001 17 04	Beaver Creek	5x	1t
ALU	05080001 17 06	City of Springfield-Buck Creek	5x	1t
ALU	05080001 18 02	Pondy Creek-Mad River	5x	4n
ALU	05080001 18 03	Mill Creek	5x	1t
ALU	05080001 18 04	Donnels Creek	5x	4nt
ALU	05080001 18 06	Jackson Creek-Mad River	5x	1t
ALU	05080001 19 03	Huffman Dam-Mad River	5x	3it
ALU	05080002 01 05	Town of Oakwood-Great Miami River	5hx	3
ALU	05080002 04 04	Dry Run-Great Miami River	5hx	3
ALU	05080002 07 06	Town of New Miami-Great Miami River	5x	3
ALU	05080002 09 03	Paddys Run	5hx	4nh
ALU	05080002 09 06	Jordan Creek-Great Miami River	5hx	3
ALU	05080002 09 07	Doublelick Run-Great Miami River	5hx	3
ALU	05090202 02 02	South Fork Massies Creek	5x	1
ALU	05090202 02 03	Massies Creek	5x	1
ALU	05090202 02 06	Shawnee Creek-Little Miami River	5x	1
ALU	05090202 04 01	North Branch Caesar Creek	5x	1
ALU	05090202 04 02	Upper Caesar Creek	5x	1
ALU	05090202 04 03	South Branch Caesar Creek	5x	1
ALU	05090202 14 03	Horner Run-Little Miami River	5hx	3

Table J-8. Removals from the 303(d) list because of a flaw in the original listing analysis.

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category	Explanation of Flaw
RU	04100006 02 01	Silver Creek-Bean Creek	5	3	1 site was incorrectly assigned to unit in 2010; no data available for this unit
RU	04100009 09 03	Crooked Creek-Maumee River	5	3	Wrong data included in 2010 analysis
HH	04110002 01 06	Sawyer Brook-Cuyahoga River	5	1	Error in transferring data from database to report
ALU	04110004 01 03	Baughman Creek	5	4n	Further analysis during TMDL showed causes to be natural
ALU	05040002 08 02	Town of Perrysville-Black Fork Mohican River	5	4n	Further analysis during TMDL showed causes to be natural
ALU	05040002 08 03	Big Run-Black Fork Mohican River	5	4n	Further analysis during TMDL showed causes to be natural
ALU	05060002 08 04	Pigeon Creek	5x	4A	Two Pigeon Creeks in watershed; wrong one delisted in 2010

Table J-9. Removals from the 303(d) list because of new data.

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category
ALU	04100007 03 01	Upper Hog Creek	5hx	1
ALU	04100007 03 02	Middle Hog Creek	5hx	1
ALU	04100007 04 04	Pike Run	5hx	1
ALU	04100007 04 05	Leatherwood Ditch	5hx	1
ALU	04100007 04 06	Beaver Run-Ottawa River	5hx	1
ALU	04100007 05 03	Village of Kalida-Ottawa River	5hx	1
ALU	04100011 01 01	Sawmill Creek	5hx	1
HH	04110002 01 01	East Branch Reservoir-East Branch Cuyahoga River	5h	1
HH	04110002 01 04	Ladue Reservoir-Bridge Creek	5	1
ALU	05030106 09 01	North Fork Captina Creek	5x	1
ALU	05030106 09 02	South Fork Captina Creek	5x	4n
ALU	05030106 09 03	Bend Fork	5x	1
ALU	05030106 09 05	Pea Vine Creek-Captina Creek	5x	1
ALU	05030106 09 06	Cat Run-Captina Creek	5x	4n
ALU	05030201 01 01	Upper Sunfish Creek	5x	1
ALU	05030201 01 02	Piney Fork	5x	1
ALU	05030201 01 03	Middle Sunfish Creek	5x	1
ALU	05030201 01 04	Lower Sunfish Creek	5x	1
ALU	05040001 06 01	Hugle Run	5x	1
ALU	05040001 06 02	Pipe Run	5x	4n
ALU	05040001 06 03	Black Run	5x	1
ALU	05040001 06 04	Little Sandy Creek	5x	1
ALU	05040001 06 05	Armstrong Run-Sandy Creek	5x	1
ALU	05040003 05 01	Headwaters Killbuck Creek	5x	1

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category
ALU	05040003 05 03	Rathburn Run-Little Killbuck Creek	5x	1
ALU	05040003 05 04	Cedar Run-Killbuck Creek	5x	1
ALU	05040003 05 05	Clear Creek-Killbuck Creek	5x	1
ALU	05040003 06 02	Apple Creek	5hx	1
ALU	05040003 06 06	Salt Creek	5hx	1
ALU	05040003 06 07	Tea Run-Killbuck Creek ¹	5hx	3i
ALU	05040003 07 01	Paint Creek	5x	1
ALU	05040003 07 03	Honey Run-Killbuck Creek	5x	1
ALU	05040003 07 04	Black Creek	5x	1
ALU	05040003 08 01	Wolf Creek	5x	1
ALU	05040003 08 03	Bucks Run-Doughty Creek	5x	1
ALU	05040003 08 04	Big Run-Killbuck Creek	5x	1
ALU	05040003 08 05	Bucklew Run-Killbuck Creek	5x	1
ALU	05040004 09 03	Plumb Run-South Branch Wolf Creek	5x	4n
ALU	05060001 01 01	Cottonwood Ditch	5hx	1
ALU	05060001 01 03	Taylor Creek	5hx	1
ALU	05060001 04 01	Gander Run-Scioto River	5hx	1
ALU	05060001 04 03	Wolf Creek-Scioto River	5hx	4n
ALU	05060001 04 05	Town of La Rue-Scioto River	5hx	1
ALU	05060001 12 01	Eversole Run	5hx	1
ALU	05060001 23 04	Grove Run-Scioto River	5x	1
ALU	05080001 08 01	Spring Creek	5x	1
ALU	05080001 08 02	Headwaters Lost Creek	5x	1
ALU	05080001 08 03	East Branch Lost Creek	5x	1
ALU	05080001 08 04	Little Lost Creek-Lost Creek	5x	1
ALU	05080001 08 05	Peter's Creek-Great Miami River	5x	1
ALU	05080002 01 01	North Branch Wolf Creek	5hx	1
ALU	05080002 01 03	Dry Run-Wolf Creek	5hx	1
ALU	05080002 01 06	Opossum Creek-Great Miami River	5hx	1
ALU	05080002 04 01	Headwaters Bear Creek	5hx	1
ALU	05080002 04 02	Mouth Bear Creek	5hx	1
ALU	05080002 04 03	Clear Creek	5hx	1
ALU	05080002 07 01	Elk Creek	5x	4n
ALU	05080002 07 02	Browns Run-Great Miami River	5x	1
ALU	05080002 07 05	Gregory Creek	5x	1
ALU	05090103 02 01	Hales Creek	5hx	1
ALU	05090103 02 04	Howard Run-Pine Creek	5hx	1
HH	05090103 02 04	Howard Run-Pine Creek	5h	1
HH	05090103 02 05	Lick Run-Pine Creek	5h	1

¹ The change in methodology in 2010 (assessment unit size) also contributes to this removal.

Table J-10. Removals from the 303(d) list because of TMDLs approved.

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category
ALU	04100010 01 01	Rader Creek	5	4A
RU	04100010 01 01	Rader Creek	5	4A
ALU	04100010 01 02	Needles Creek	5	4A
RU	04100010 01 02	Needles Creek	5	4A
ALU	04100010 01 03	Rocky Ford	5	4A
RU	04100010 01 03	Rocky Ford	5	4A
RU	04100010 01 04	Town of Rudolph-Middle Branch Portage River	5	4A
ALU	04100010 02 01	Bull Creek	5	4A
RU	04100010 02 01	Bull Creek	5	4A
RU	04100010 02 02	East Branch Portage River	5	4A
RU	04100010 02 03	Town of Bloomdale-South Branch Portage River	5	4A
RU	04100010 02 04	Rhodes Ditch-South Branch Portage River	5	4A
RU	04100010 02 05	Cessna Ditch-Middle Branch Portage River	5	4A
RU	04100010 03 01	North Branch Portage River	5	4A
RU	04100010 03 02	Town of Pemberville-Portage River	5	4A
ALU	04100010 04 01	Sugar Creek	5	4A
RU	04100010 04 01	Sugar Creek	5	4A
ALU	04100010 04 02	Larcarpe Creek Outlet #4-Portage River	5	4A
RU	04100010 04 02	Larcarpe Creek Outlet #4-Portage River	5	4A
ALU	04100010 05 01	Little Portage River	5	4A
RU	04100010 05 01	Little Portage River	5	4A
RU	04100010 05 02	Portage River	5	4A
RU	04110004 04 01	Griggs Creek	5	4A
RU	04110004 04 02	Peters Creek-Mill Creek	5	4A
RU	04110004 04 03	Town of Jefferson-Mill Creek	5	4A
RU	04110004 06 02	Mill Creek	5	4A
RU	04110004 06 04	Paine Creek	5	4A
RU	04110004 06 06	Big Creek	5	4A
RU	04110004 06 07	Red Creek-Grand River	5	4A
RU	04110004 90 01	Grand River Mainstem (Mill Creek to mouth)	5	4A
ALU	05030101 11 02	Little Yellow Creek	5	4A
ALU	05030101 11 03	Carpenter Run-Ohio River	5	4A
ALU	05030103 01 01	Beaver Run-Mahoning River	5	4A
RU	05030103 01 01	Beaver Run-Mahoning River	5	4A
RU	05030103 01 02	Beech Creek	5	4A
RU	05030103 01 03	Fish Creek-Mahoning River	5	4A
ALU	05030103 02 01	Deer Creek	5	4A
RU	05030103 02 01	Deer Creek	5	4A
ALU	05030103 02 02	Willow Creek	5	4A
RU	05030103 02 02	Willow Creek	5	4A
RU	05030103 02 03	Mill Creek	5	4A
RU	05030103 02 04	Island Creek-Mahoning River	5	4A
RU	05030103 03 01	Kale Creek	5	4A
RU	05030103 03 02	Headwaters West Branch Mahoning River	5	4A
ALU	05030103 03 03	Barrel Run	5	4A
RU	05030103 03 03	Barrel Run	5	4A

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category
RU	05030103 03 04	Kirwin Reservoir-West Branch Mahoning River	5	4A
ALU	05030103 03 05	Town of Newton Falls-West Branch Mahoning River	5	4A
RU	05030103 03 05	Town of Newton Falls-West Branch Mahoning River	5	4A
ALU	05030103 03 06	Charley Run Creek-Mahoning River	5	4A
RU	05030103 03 06	Charley Run Creek-Mahoning River	5	4A
RU	05030103 04 01	Headwaters Eagle Creek	5	4A
RU	05030103 04 02	South Fork Eagle Creek	5	4A
ALU	05030103 04 03	Camp Creek-Eagle Creek	5	4A
RU	05030103 04 03	Camp Creek-Eagle Creek	5	4A
ALU	05030103 04 04	Tinkers Creek	5	4A
RU	05030103 04 04	Tinkers Creek	5	4A
RU	05030103 04 05	Mouth Eagle Creek	5	4A
RU	05030103 04 06	Chocolate Run-Mahoning River	5	4A
RU	05040004 06 01	Little Salt Creek	5	4A
RU	05040004 06 02	Headwaters Salt Creek	5	4A
RU	05040004 06 03	Buffalo Fork	5	4A
RU	05040004 06 04	Boggs Creek	5	4A
RU	05040004 06 05	Manns Fork Salt Creek	5	4A
RU	05040004 06 06	Mouth Salt Creek	5	4A
ALU	05060001 17 01	Pawpaw Creek	5	4A
RU	05060001 17 01	Pawpaw Creek	5	4A
ALU	05060001 17 02	Headwaters Walnut Creek	5	4A
RU	05060001 17 02	Headwaters Walnut Creek	5	4A
RU	05060001 17 03	Poplar Creek	5	4A
ALU	05060001 17 04	Sycamore Creek	5	4A
RU	05060001 17 04	Sycamore Creek	5	4A
RU	05060001 17 05	Town of Carroll-Walnut Creek	5	4A
ALU	05060001 18 01	Georges Creek	5	4A
RU	05060001 18 01	Georges Creek	5	4A
ALU	05060001 18 03	Turkey Run	5	4A
RU	05060001 18 03	Turkey Run	5	4A
ALU	05060001 18 05	Big Run-Walnut Creek	5	4A
RU	05060002 14 01	Churn Creek	5	4A
RU	05060002 14 02	Mill Creek	5	4A
RU	05060002 14 03	Turkey Creek	5	4A
RU	05060002 14 04	Turkey Run-South Fork Scioto Brush Creek	5	4A
RU	05060002 14 05	Rocky Fork	5	4A
RU	05060002 15 01	Headwaters Scioto Brush Creek	5	4A
ALU	05060002 15 02	Rarden Creek	5	4A
RU	05060002 15 02	Rarden Creek	5	4A
ALU	05060002 15 03	Jaybird Branch-Scioto Brush Creek	5	4A
RU	05060002 15 03	Jaybird Branch-Scioto Brush Creek	5	4A
RU	05060002 15 04	Dunlap Creek-Scioto Brush Creek	5	4A
RU	05060002 15 05	Bear Creek	5	4A
RU	05060002 15 06	McCullough Creek	5	4A
RU	05060002 15 07	Duck Run-Scioto Brush Creek	5	4A

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category
ALU	05080001 15 03	Kings Creek	5x	4A
ALU	05080001 15 04	Glady Creek-Mad River	5x	4A
ALU	05080001 16 01	Muddy Creek	5x	4A
ALU	05080001 16 02	Dugan Run	5x	4A
ALU	05080001 16 03	Nettle Creek	5x	4A
ALU	05080001 16 06	Chapman Creek	5	4A
ALU	05080001 16 07	Bogles Run-Mad River	5x	4A
ALU	05080001 17 05	Clarence J Brown Lake-Buck Creek	5x	4A
ALU	05080001 18 01	Moore Run	5x	4A
ALU	05080001 18 05	Rock Run-Mad River	5x	4A
ALU	05080001 19 01	Mud Creek	5x	4A
ALU	05080001 19 02	Mud Run	5x	4A
ALU	05080001 19 04	City of Dayton-Mad River	5x	4A
ALU	05080001 90 03	Mad River Mainstem (Donnels Creek to mouth)	5x	4A
ALU	05080002 02 01	Millers Fork	5	4A
ALU	05080002 02 02	Headwaters Twin Creek	5	4A
RU	05080002 02 03	Swamp Creek	5	4A
ALU	05080002 02 04	Price Creek	5	4A
ALU	05080002 02 05	Lesley Run-Twin Creek	5	4A
RU	05080002 02 05	Lesley Run-Twin Creek	5	4A
ALU	05080002 03 03	Toms Run	5	4A
RU	05090201 09 01	Headwaters East Fork Whiteoak Creek	5	4A
ALU	05090201 09 02	Slabcamp Run-East Fork Whiteoak Creek	5	4A
RU	05090201 09 02	Slabcamp Run-East Fork Whiteoak Creek	5	4A
ALU	05090201 09 03	Little North Fork-North Fork Whiteoak Creek	5	4A
RU	05090201 09 03	Little North Fork-North Fork Whiteoak Creek	5	4A
ALU	05090201 09 04	Flat Run-North Fork Whiteoak Creek	5	4A
ALU	05090201 10 01	Sterling Run	5	4A
PDWS	05090201 10 01	Sterling Run	5	4A
RU	05090201 10 01	Sterling Run	5	4A
ALU	05090201 10 02	Miranda Run-Whiteoak Creek	5	4A
ALU	05090201 10 03	Big Run-Whiteoak Creek	5	4A
ALU	05090202 06 03	Lytle Creek	5	4A
RU	05090202 06 03	Lytle Creek	5	4A
ALU	05090202 06 04	Headwaters Cowan Creek	5	4A
RU	05090202 07 01	East Fork Todd Fork	5	4A
ALU	05090202 07 02	Second Creek	5	4A
RU	05090202 07 02	Second Creek	5	4A
RU	05090202 07 04	Lick Run-Todd Fork	5	4A
ALU	05090202 08 02	Little Muddy Creek	5	4A
RU	05090202 09 01	Muddy Creek	5	4A
ALU	05090202 14 04	Duck Creek	5	4A
ALU	05090202 14 06	Clough Creek-Little Miami River	5	4A
RU	05090202 90 01	Little Miami River Mainstem (Caesar Creek to O'Bannon Creek)	5	4A
RU	05090202 90 02	Little Miami River Mainstem (O'Bannon Creek to Ohio River)	5	4A

Table J-11. Additions to the 303(d) list because of change in methodology (2010 AU size).

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category
ALU	05040001 16 04	Town of Uhrichsville-Stillwater Creek	3x	5

Table J-12. Additions to the 303(d) list because of a flaw in the original listing analysis.

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category	Explanation of Flaw
RU	04100006 02 02	Deer Creek-Bean Creek	3	5	Data from 1 site was incorrectly assigned to another unit in 2010
ALU	05040002 01 03	Brubaker Creek	3i	5	Overlooked in 2010 analysis; only 1 site but it is impaired
ALU	05060002 07 01	Pigeon Creek	4A	5	Two Pigeon Creeks in watershed; wrong one delisted in 2010
ALU	05090202 03 01	Headwaters Anderson Fork	4Ax	5	TMDL approved but one cause (unknown) was not addressed
ALU	05090202 03 02	Painters Run-Anderson Fork	4Ax	5	TMDL approved but one cause (unknown) was not addressed
ALU	05090202 03 03	Mouth Anderson Fork	4Ax	5	TMDL approved but one cause (unknown) was not addressed

Table J-13. Additions to the 303(d) list because of new data.

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category
RU	04100006 05 02	Brush Creek	3	5
RU	04100007 03 02	Middle Hog Creek	3	5
RU	04100007 03 03	Little Hog Creek	3	5
RU	04100007 03 04	Lower Hog Creek	3	5
RU	04100007 03 05	Lost Creek	3	5
HH	04100007 03 06	Lima Reservoir-Ottawa River	1	5
RU	04100007 03 06	Lima Reservoir-Ottawa River	3	5
RU	04100007 04 01	Little Ottawa River	3	5
RU	04100007 04 02	Dug Run-Ottawa River	3	5
RU	04100007 04 03	Honey Run	3	5
RU	04100007 04 04	Pike Run	3	5
RU	04100007 04 05	Leatherwood Ditch	3	5
RU	04100007 04 06	Beaver Run-Ottawa River	3	5
RU	04100007 05 01	Sugar Creek	3	5
RU	04100007 05 02	Plum Creek	3	5
RU	04100007 05 03	Village of Kalida-Ottawa River	3	5
HH	04100010 02 04	Rhodes Ditch-South Branch Portage River	3i	5
RU	04100011 01 01	Sawmill Creek	3	5
RU	04100011 01 02	Pipe Creek-Frontal Sandusky Bay	3	5
RU	04100011 01 03	Mills Creek	3	5
RU	04100011 02 01	Frontal South Side of Sandusky Bay	3	5
RU	04100011 02 02	Strong Creek	3	5
RU	04100011 02 03	Pickrel Creek	3	5

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category
RU	04100011 02 04	Raccoon Creek	3	5
RU	04100011 02 05	South Creek	3	5
ALU	04100011 10 01	East Branch East Branch Wolf Creek	3x	5
RU	04100011 10 01	East Branch East Branch Wolf Creek	3i	5
ALU	04100011 10 02	Town of New Riegel-East Branch Wolf Creek	3x	5
RU	04100011 10 02	Town of New Riegel-East Branch Wolf Creek	3i	5
RU	04100011 10 03	Snuff Creek-East Branch Wolf Creek	3i	5
ALU	04100011 10 04	Wolf Creek	3x	5
RU	04100011 10 04	Wolf Creek	3i	5
ALU	04100011 11 05	Spicer Creek-Sandusky River	4Ax	5
RU	04100011 12 01	Westerhouse Ditch	3	5
ALU	04100011 12 02	Beaver Creek	3x	5
RU	04100011 12 02	Beaver Creek	3	5
ALU	04100011 12 03	Green Creek	3x	5
RU	04100011 12 03	Green Creek	3	5
ALU	04100011 13 01	Muskellunge Creek	3x	5
RU	04100011 13 01	Muskellunge Creek	3	5
RU	04100011 13 02	Indian Creek-Sandusky River	3	5
ALU	04100011 13 03	Mouth Sandusky River	3x	5
RU	04100011 14 02	Town of Helena-Muddy Creek	3	5
ALU	04100011 14 03	Little Muddy Creek	3x	5
RU	04100011 14 03	Little Muddy Creek	3	5
ALU	04100011 14 04	Town of Lindsey-Muddy Creek	3x	5
HH	04100011 14 04	Town of Lindsey-Muddy Creek	3	5
RU	04100011 14 04	Town of Lindsey-Muddy Creek	3	5
ALU	04100011 90 01	Sandusky River Mainstem (Tymochtee Creek to Wolf Creek)	1	5
HH	04100011 90 01	Sandusky River Mainstem (Tymochtee Creek to Wolf Creek)	1	5
ALU	04100011 90 02	Sandusky River Mainstem (Wolf Creek to Sandusky Bay)	4C	5
RU	04100011 90 02	Sandusky River Mainstem (Wolf Creek to Sandusky Bay)	3i	5
RU	04110001 01 06	Cossett Creek-West Branch Rocky River	3	5
ALU	05030101 10 01	Upper Cross Creek	3x	5
RU	05030101 10 01	Upper Cross Creek	3	5
ALU	05030101 10 02	Salem Creek	3x	5
RU	05030101 10 02	Salem Creek	3	5
RU	05030101 10 03	Middle Cross Creek	3	5
ALU	05030101 10 04	McIntyre Creek	3x	5
RU	05030101 10 04	McIntyre Creek	3	5
ALU	05030101 10 05	Lower Cross Creek	3x	5
RU	05030101 10 05	Lower Cross Creek	3	5
ALU	05030106 02 01	South Fork Short Creek	3x	5
ALU	05030106 02 02	Middle Fork Short Creek	3x	5
RU	05030106 02 02	Middle Fork Short Creek	3	5
ALU	05030106 02 03	North Fork Short Creek	3x	5

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category
RU	05030106 02 03	North Fork Short Creek	3	5
RU	05030106 02 04	Piney Fork	3	5
RU	05030106 02 05	Perrin Run-Short Creek	3	5
ALU	05030106 02 06	Little Short Creek	3x	5
HH	05030106 02 07	Dry Fork-Short Creek	3	5
RU	05030106 02 07	Dry Fork-Short Creek	3	5
RU	05030106 03 01	Crabapple Creek	3	5
RU	05030106 03 02	Headwaters Wheeling Creek	3	5
RU	05030106 03 03	Cox Run-Wheeling Creek	3	5
RU	05030106 03 04	Flat Run-Wheeling Creek	3	5
RU	05030106 07 02	Upper McMahan Creek	3	5
ALU	05030106 07 03	Little McMahan Creek	3x	5
HH	05030106 07 04	Lower McMahan Creek	3	5
HH	05030106 09 05	Pea Vine Creek-Captina Creek	3	5
ALU	05030106 12 01	Rush Run	3x	5
RU	05030106 12 01	Rush Run	3	5
ALU	05030106 12 02	Salt Run-Ohio River	3x	5
RU	05030106 12 02	Salt Run-Ohio River	3	5
RU	05030106 12 04	Glenns Run-Ohio River	3	5
HH	05030201 07 05	Eightmile Creek-Little Muskingum River	3	5
RU	05030201 10 09	Cow Creek-Ohio River	3	5
RU	05030202 07 01	Headwaters Leading Creek	3	5
RU	05030204 05 01	Little Monday Creek	3	5
RU	05030204 05 02	Lost Run-Monday Creek	3	5
RU	05030204 05 04	Kitchen Run-Monday Creek	3	5
RU	05040001 04 01	Conser Run	3	5
RU	05040001 04 02	Middle Branch Sandy Creek	3	5
RU	05040001 04 03	Pipes Fork-Still Fork	3	5
ALU	05040001 04 04	Muddy Fork	3x	5
RU	05040001 04 04	Muddy Fork	3	5
ALU	05040001 04 05	Reeds Run-Still Fork	3x	5
RU	05040001 04 05	Reeds Run-Still Fork	3	5
ALU	05040001 04 06	Headwaters Sandy Creek	3x	5
RU	05040001 04 06	Headwaters Sandy Creek	3	5
RU	05040001 06 01	Hugle Run	3	5
RU	05040001 06 02	Pipe Run	3	5
RU	05040001 06 03	Black Run	3	5
RU	05040001 06 04	Little Sandy Creek	3	5
RU	05040001 06 05	Armstrong Run-Sandy Creek	3	5
RU	05040001 06 06	Indian Run-Sandy Creek	3	5
RU	05040001 06 07	Beal Run-Sandy Creek	3	5
RU	05040003 05 01	Headwaters Killbuck Creek	3	5
RU	05040003 05 02	Little Killbuck Creek-Killbuck Creek	3	5
RU	05040003 05 03	Rathburn Run-Little Killbuck Creek	3	5
RU	05040003 05 04	Cedar Run-Killbuck Creek	3	5
RU	05040003 05 05	Clear Creek-Killbuck Creek	3	5

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category
RU	05040003 06 01	Little Apple Creek	3	5
RU	05040003 06 02	Apple Creek	3	5
RU	05040003 06 03	Shreve Creek	3	5
RU	05040003 06 04	Jennings Ditch-Killbuck Creek	3	5
RU	05040003 06 05	North Branch Salt Creek	3	5
RU	05040003 06 06	Salt Creek	3	5
RU	05040003 06 07	Tea Run-Killbuck Creek	3	5
RU	05040003 07 01	Paint Creek	3	5
RU	05040003 07 02	Martins Creek	3	5
RU	05040003 07 03	Honey Run-Killbuck Creek	3	5
RU	05040003 07 04	Black Creek	3	5
RU	05040003 07 05	Shrimplin Creek-Killbuck Creek	3	5
RU	05040003 08 01	Wolf Creek	3	5
RU	05040003 08 02	Headwaters Doughty Creek	3	5
RU	05040003 08 03	Bucks Run-Doughty Creek	3	5
RU	05040003 08 05	Bucklew Run-Killbuck Creek	3	5
RU	05040003 09 01	Mohawk Creek	3	5
RU	05040003 09 02	Dutch Run-Walhonding River	3	5
ALU	05040003 09 03	Beaver Run	1hx	5
RU	05040003 09 03	Beaver Run	3	5
ALU	05040003 09 04	Simmons Run	1hx	5
RU	05040003 09 04	Simmons Run	3	5
RU	05040003 09 05	Darling Run-Walhonding River	3	5
ALU	05040003 09 06	Headwaters Mill Creek	1hx	5
RU	05040003 09 06	Headwaters Mill Creek	3	5
ALU	05040003 09 07	Spoon Creek-Mill Creek	1hx	5
RU	05040003 09 07	Spoon Creek-Mill Creek	3	5
RU	05040003 09 08	Crooked Creek-Walhonding River	3	5
ALU	05040004 03 01	Robinson Run-Muskingum River	3x	5
RU	05040004 03 02	Village of Adams Mills-Muskingum River	3	5
RU	05040004 03 03	North Branch Symmes Creek	3	5
RU	05040004 03 04	South Branch Symmes Creek-Symmes Creek	3	5
ALU	05040004 03 05	Blount Run-Muskingum River	3x	5
RU	05040004 03 05	Blount Run-Muskingum River	3	5
RU	05060001 01 01	Cottonwood Ditch	3	5
RU	05060001 01 02	Headwaters Scioto River	3i	5
RU	05060001 01 03	Taylor Creek	3	5
RU	05060001 01 04	Silver Creek-Scioto River	3	5
ALU	05060001 02 01	Headwaters Rush Creek	3x	5
RU	05060001 02 01	Headwaters Rush Creek	3	5
ALU	05060001 02 02	McDonald Creek	3x	5
RU	05060001 02 02	McDonald Creek	3	5
ALU	05060001 02 03	Dudley Run-Rush Creek	3x	5
RU	05060001 02 03	Dudley Run-Rush Creek	3	5
HH	05060001 03 01	Rock Fork	3	5
RU	05060001 03 01	Rock Fork	3i	5

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category
RU	05060001 03 02	Headwaters Little Scioto River	3	5
RU	05060001 03 03	City of Marion-Little Scioto River	3	5
HH	05060001 03 04	Honey Creek-Little Scioto River	3	5
RU	05060001 03 04	Honey Creek-Little Scioto River	3	5
RU	05060001 04 01	Gander Run-Scioto River	3	5
RU	05060001 04 03	Wolf Creek-Scioto River	3	5
RU	05060001 04 04	Wildcat Creek	3	5
RU	05060001 04 05	Town of La Rue-Scioto River	3	5
RU	05060001 04 06	Glade Run-Scioto River	3	5
ALU	05060001 05 01	Patton Run	3x	5
RU	05060001 05 01	Patton Run	3	5
ALU	05060001 05 04	Fulton Creek	3x	5
RU	05060001 05 04	Fulton Creek	3i	5
RU	05060001 07 03	Smith Run-Bokes Creek	3	5
RU	05060001 12 01	Eversole Run	3	5
RU	05060001 12 03	Indian Run	3	5
RU	05060001 12 04	Hayden Run-Scioto River	3	5
RU	05060001 12 05	Dry Run-Scioto River	3	5
RU	05060001 23 01	Scioto Big Run	3	5
RU	05060001 23 02	Kian Run-Scioto River	3	5
RU	05060001 23 03	Grant Run-Scioto River	3	5
RU	05060001 23 04	Grove Run-Scioto River	3	5
RU	05060001 23 05	Dry Run	3	5
ALU	05060001 90 01	Scioto River Mainstem (L. Scioto R. to Olentangy R.); excluding O'Shaughnessy and Griggs reservoirs	1	5
RU	05060001 90 02	Scioto River Mainstem (Olentangy River to Big Darby Creek)	3i	5
RU	05060002 01 02	Richmond Ditch-Deer Creek	3	5
RU	05060003 90 01	Paint Creek Mainstem (Rocky Fork to mouth)	1	5
RU	05080001 07 01	Leatherwood Creek	3	5
RU	05080001 07 02	Mosquito Creek	3i	5
RU	05080001 07 03	Brush Creek-Great Miami River	3	5
RU	05080001 07 04	Rush Creek	3	5
RU	05080001 08 02	Headwaters Lost Creek	3	5
RU	05080001 20 02	West Fork Honey Creek	1	5
RU	05080001 20 03	Indian Creek	3	5
ALU	05080001 20 04	Pleasant Run-Honey Creek	3x	5
RU	05080001 20 04	Pleasant Run-Honey Creek	1	5
RU	05080001 20 05	Poplar Creek-Great Miami River	3	5
ALU	05080001 90 01	Great Miami River Mainstem (Tawawa Creek to Mad River)	1	5
RU	05080001 90 01	Great Miami River Mainstem (Tawawa Creek to Mad River)	3i	5
RU	05080002 01 01	North Branch Wolf Creek	3	5
RU	05080002 01 02	Headwaters Wolf Creek	3	5
RU	05080002 01 03	Dry Run-Wolf Creek	3	5

Use	Assessment Unit Number	Assessment Unit Name	2010 Category	2012 Category
RU	05080002 01 04	Holes Creek	3	5
RU	05080002 01 06	Opossum Creek-Great Miami River	3	5
RU	05080002 04 01	Headwaters Bear Creek	3	5
RU	05080002 04 03	Clear Creek	3	5
RU	05080002 07 04	Dicks Creek	3	5
RU	05080002 09 01	Pleasant Run	3	5
RU	05080002 09 02	Banklick Creek-Great Miami River	3	5
RU	05080002 09 05	Taylor Creek	3	5
RU	05080002 90 01	Great Miami River Mainstem (Mad River to Four Mile Creek)	3i	5
RU	05080002 90 02	Great Miami River Mainstem (Four Mile Creek to Ohio River)	3	5
RU	05090101 06 05	Claylick Run-Raccoon Creek	3	5
ALU	05090103 01 01	Solida Creek-Ohio River	3x	5
RU	05090103 01 01	Solida Creek-Ohio River	3	5
ALU	05090103 01 03	Ice Creek	3x	5
HH	05090103 01 03	Ice Creek	3	5
RU	05090103 01 03	Ice Creek	3	5
ALU	05090103 01 04	Storms Creek	3x	5
ALU	05090103 01 06	Ginat Creek	3x	5
RU	05090103 01 06	Ginat Creek	3	5
RU	05090103 01 07	Grays Branch-Ohio River	3	5
RU	05090103 02 01	Hales Creek	3	5
RU	05090103 02 03	Little Pine Creek	3	5
RU	05090103 02 04	Howard Run-Pine Creek	3	5
RU	05090103 02 05	Lick Run-Pine Creek	3	5
RU	05090103 05 01	Headwaters Little Scioto River	3	5
RU	05090103 05 02	Sugarcamp Creek	3	5
RU	05090103 05 04	McDowell Creek-Little Scioto River	3	5
RU	05090103 06 01	Headwaters Rocky Fork	3	5
ALU	05090103 06 02	Long Run	3x	5
RU	05090103 06 02	Long Run	3	5
RU	05090103 06 03	McConnel Creek-Rocky Fork	3	5
RU	05090103 06 04	Frederick Creek	3	5
ALU	05090103 06 06	Munn Run-Ohio River	3x	5
RU	05090103 06 06	Munn Run-Ohio River	3	5
RU	05090202 02 04	Little Beaver Creek	3	5
RU	05090202 12 04	Backbone Creek-East Fork Little Miami River	3	5
RU	05090202 14 01	Sycamore Creek	1	5

J5. Schedule for TMDL Work

Once waters are assessed and the impaired waters are prioritized, the next step is to determine a schedule to address the monitoring needs of all waters and restoration needs (including TMDLs) of the impaired ones. Various factors must be considered, including Ohio's ongoing

TMDL work, the process identified to do TMDLs, the monitoring strategy, and the resources available for the work.

Over the past few years, TMDL projects transitioned from the old HUC11-scale watersheds to the new, smaller HUC12-scale watersheds. Through 2009, TMDLs were completed using the HUC11-scale assessment units. Projects submitted for approval after April 1, 2010, reflect the new HUC12-size units. Tables in Section J4 and the TMDL status map in Section K reflect current information based on the HUC12 units.

J5.1. Ohio TMDL Status

Ohio EPA is currently working on TMDLs in about 75 project areas, encompassing more than half of Ohio, as illustrated in the “Ohio TMDL Program Progress” map in Section K. Most of these TMDLs address aquatic life use impairments, and many also address recreation use impairment. TMDLs in 50 of the areas are approved, and implementation is proceeding. Table J-14 summarizes Ohio TMDLs approved by U.S. EPA at the 11-digit hydrologic unit level. Table J-15 summarizes Ohio TMDLs approved by U.S. EPA at the 12-digit hydrologic unit level.

J5.2. Long-Term Schedules for Monitoring and TMDLs

Ohio’s five-year basin approach (see Section D) provides a foundation for scheduling monitoring and TMDL projects. The assessment methodology allows that, generally, aquatic life use monitoring data up to ten years old are valid for judging assessment units, so it follows that each assessment unit must be monitored at least once every ten years to maintain coverage. However, resources to maintain this pace are no longer available; cycling through the entire basin rotation would take about 15 to 20 years at current resource levels. Thus, each assessment unit is assigned to one of the next three monitoring cycles using the following factors:

- Ohio EPA’s five-year basin monitoring strategy
- time since most recent assessment
- distribution of work effort among Ohio EPA district offices
- priority ranking
- TMDL schedule

Experience in completing TMDLs indicates that local involvement is a key to success. However, it is difficult to gauge the level of local interest sufficient to sustain a TMDL effort. Thus, the schedule is flexible and can be influenced by expressions of local interest to undertake a TMDL (e.g., significant interest from local citizens and decision-makers, especially combined with involvement from local governments).

In an effort to maintain the monitoring and TMDL schedule, Ohio EPA is committed to researching and pursuing additional resources, both in terms of funding and partnering opportunities.

The scheduling and TMDL information is reported on the table in Section L5. A map illustrating the long-term monitoring schedule is included in Section K. Detailed information for each assessment unit is also available on the IR web site (<http://www.epa.ohio.gov/dsw/tmdl/2012IntReport/index.aspx>).

J5.3 Short-Term Schedule for TMDL Development

Ohio EPA has scheduled several TMDL projects during the next two years, as indicated in Table J-16. Because Ohio's TMDL process begins with a watershed assessment, all TMDLs to be completed in the next two years are already in progress.

The TMDL goal is restoration of the designated uses through the attainment of applicable criteria. Pollutants to be targeted for pollutant load characterization and as measures of interim progress will be determined as part of the TMDL process described in Section C1.

Table J-14. Ohio TMDLs¹ approved by U.S. EPA at the 11-digit hydrologic unit scale.

Assessment Unit Code	Assessment Unit Name	U.S. EPA Approval Date	Pollutants Allocated, per U.S. EPA ²
04110002 020	Cuyahoga River (below Black Brook to below Breakneck Creek)	10/11/2000	dissolved oxygen
04110002 030	Cuyahoga River (below Breakneck Creek to below Little Cuyahoga River)		
04110001 070	Rocky River (below West Br. to Lake Erie [including East Br.] and Lake Erie tribs [above Porter Cr to above Cuyahoga R]): Plum Creek	12/04/2001	phosphorus, nitrogen
05090202 010	Little Miami River (headwaters to above Massies Creek)	07/02/2002 05/13/2003	phosphorus, sediment
05090202 020	Little Miami River (above Massies Creek to below Beaver Creek)		
05090202 030	Little Miami River (below Beaver Creek of above Caesar Creek)		
05090202 040	Anderson Fork Caesar Creek		
05090202 050	Caesar Creek (except Anderson Fork)		
05060001 060	Bokes Creek (Scioto River above Bokes Creek to above Mill Creek)	09/27/2002 07/31/2003	phosphorus, sediment
05040001 100	Sugar Creek (headwaters to above Middle Fork Sugar Creek)	11/20/2002 07/08/2003	phosphorus, nitrogen, sediment
05040001 110	South Fork Sugar Creek		
05040001 120	Sugar Creek (upstream Middle Fork to mouth)		
05090101 020	Raccoon Creek (headwaters to above Hewett Fork)	3/20/2003	pH (acid), metals
05090101 030	Raccoon Creek (above Hewett Fork to below Elk Fork)		
05060001 070	Mill Creek (Scioto River basin)	9/02/2003	CBOD, ammonia, phosphorus, sediment, aldrin, d-BHC, dieldrin, endosulfan, endrin, heptachlor
05030201 110	East Fork Duck Creek	9/23/2003	TSS, aluminum, iron, manganese, BOD, ammonia
05030201 120	Duck Creek (except East Fork)		
04110002 040	Cuyahoga River (below Little Cuyahoga River to below Brandywine Creek)	9/26/2003	fecal coliform, phosphorus
04110002 050	Cuyahoga River (below Brandywine Creek to below Tinkers Creek)		
04110002 060	Cuyahoga River (below Tinkers Creek to Lake Erie)		
04110002	Cuyahoga River (mainstem)		

Assessment Unit Code	Assessment Unit Name	U.S. EPA Approval Date	Pollutants Allocated, per U.S. EPA ²
05080001 090	Stillwater River (headwaters to above Swamp Creek)	06/15/2004	nitrates, phosphorus
05080001 100	Stillwater River (above Swamp Creek to above Greenville Creek)		
05080001 110	Greenville Creek (headwaters to below West Branch)		
05080001 120	Greenville Creek (below West Branch to Stillwater River)		
05080001 130	Stillwater River (below Greenville Creek to above Ludlow Creek)		
05080001 140	Stillwater River (above Ludlow Creek to Great Miami River)		
05080001	Stillwater River (mainstem)		
04100007 010	Auglaize River (headwaters to below Pusheta Creek)	09/23/2004	ammonia, phosphorus, pathogens, sediment
04100007 020	Auglaize River (below Pusheta Creek to above Jennings Creek)		
04100007 060	Auglaize River (above Jennings Creek to above Little Auglaize River)		
04110002 010	Cuyahoga River (headwaters to below Black Brook)	09/27/2004	phosphorus, sediment
04100011 020	Sandusky River (headwaters to above Broken Sword Creek)	09/30/2004	phosphorus, pathogens, sediment
04100011 030	Broken Sword Creek		
04100011 040	Sandusky River (below Broken Sword Creek to above Tymochtee Creek)		
04100011 050	Tymochtee Creek (headwaters to below Warpole Creek)		
04100011 060	Tymochtee Creek (downstream Warpole Creek to Sandusky River)		
04100011 070	Sandusky River (below Tymochtee Creek to above Honey Creek)		
04100011 080	Honey Creek		
05090203 010	Mill Creek	04/26/2005	phosphorus, nitrogen
04100012 040	Lake Erie Tributaries (below Huron River to above Vermilion River) [Old Woman and Chappel Creeks]	08/31/2005	nutrients, siltation, habitat alteration
05030204 060	Monday Creek	09/22/2005	pH, metals, sediment
05060001 130	Big Walnut Creek (headwaters to Hoover Dam)	09/26/2005	nutrients (phosphorus), pathogens, siltation, organic enrichment, flow, habitat alteration
05060001 140	Big Walnut Creek (below Hoover Dam to above Alum Creek)		
05060001 150	Alum Creek (headwaters to Alum Creek Dam)		
05060001 160	Big Walnut Creek (above Alum Creek [except above Alum Creek Dam] to Scioto River)		
04110003 010 (partial)	Lake Erie Tributaries (East of Cuyahoga River to West of Grand River; excluding Chagrin River) [Euclid Creek]	09/27/2005	nutrients (phosphorus), organic enrichment, habitat alteration
04100012 010	West Branch Huron River (headwaters to above Slate Run)	09/28/2005	nutrients (phosphorus),

Assessment Unit Code	Assessment Unit Name	U.S. EPA Approval Date	Pollutants Allocated, per U.S. EPA ²
04100012 020	West Branch Huron River (above Slate Run to above East Branch Huron River)		siltation, organic enrichment, flow, habitat alteration
04100012 030	Huron River (above East Branch to Lake Erie) and Lake Erie Tributaries (below Sawmill Creek to below Huron River)		
05030101 070	Middle Fork Little Beaver Creek	09/28/2005	nutrients (phosphorus), pathogens, siltation, organic enrichment, flow, habitat alteration, unionized ammonia
05030101 080	West Fork Little Beaver Creek		
05030101 090	Little Beaver Creek (downstream Middle and West Forks to mouth)		
05030204 070	Sunday Creek	03/31/2006	sediment, bacteria, acidity
05060001 190	Big Darby Creek (headwaters to below Sugar Run)	03/31/2006 10/27/2009	phosphorus, bacteria, sediment
05060001 200	Big Darby Creek (below Sugar Run to above Little Darby Creek)		
05060001 210	Little Darby Creek		
05060001 220	Big Darby Creek (below Little Darby Creek to Scioto River)		
04100010 020	Toussaint Creek	09/22/2006	phosphorus
05040004 020	Wakatomika Creek (headwaters to downstream Brushy Fork)	09/28/2006	bacteria, manganese, iron, aluminum, total dissolved solids, alkalinity
05040004 030	Wakatomika Creek (downstream Brushy Fork to mouth)		
05040001 100	Sugar Creek (headwaters to above Middle Fork Sugar Creek)	05/08/2007	bacteria
05040001 110	South Fork Sugar Creek		
05040001 120	Sugar Creek (upstream Middle Fork to mouth)		
04110003 020	Chagrin River (headwaters to downstream Aurora Branch)	07/10/2007	nutrients (phosphorus and nitrate), bacteria, total suspended solids
04110003 030	Chagrin River (downstream Aurora Branch to mouth)		
05060001 090	Olentangy River (headwaters to downstream Flat Run)	09/18/2007	nutrients (phosphorus), bacteria, total suspended solids
05060001 100	Whetstone Creek		
05060001 110	Olentangy River (downstream Flat Run to downstream Delaware Run); excluding Whetstone Creek		
05060001 120	Olentangy River (downstream Delaware Run to mouth)		
05120101 020	Beaver Creek (Grand Lake St. Marys and tributaries)	09/28/2007	nutrients (phosphorus and nitrate), bacteria
05120101 030	Beaver Creek (downstream Grand Lake St. Marys Dam to mouth)		
05030202 090	Leading Creek	1/9/2008	total dissolved solids, total suspended solids, chlorides

Assessment Unit Code	Assessment Unit Name	U.S. EPA Approval Date	Pollutants Allocated, per U.S. EPA ²
04110001 020	West Branch Black River (headwaters to Black River)	8/20/2008	phosphorus, nitrate, bacteria, total suspended solids
04110001 030	East Branch Black River (headwaters to below Coon Creek)		
04110001 040	East Branch Black River (below Coon Creek to Black River)		
04110001 050	Black River (below East Branch to Lake Erie) and Lake Erie tribs (below Black R. to above Porter Cr)		
05040001 050	Nimishillen Creek	9/25/2008 12/16/2009	sediment, bacteria, phosphorus
04100007 110	Powell Creek	6/18/2009	phosphorus, nitrate-nitrogen, total suspended solids, biological oxygen
04100008 010	Blanchard River (headwaters to downstream Potato Run)	7/2/2009	phosphorus, bacteria, sediment
04100008 020	Blanchard River (downstream Potato Run to upstream Eagle Creek)		
04100008 030	Blanchard River (upstream Eagle Creek to upstream Ottawa Creek)		
04100008 040	Blanchard River (upstream Ottawa Creek to upstream Riley Creek); excluding Blanchard R.		
04100008 050	Riley Creek		
04100008 060	Blanchard River (downstream Riley Creek to mouth); excluding Blanchard R. mainstem		
04100008	Blanchard River (mainstem)		
05060002 070	Salt Creek (headwaters to upstream Queer Creek)		
05060002 080	Middle Fork Salt Creek		
05060002 090	Salt Lick Creek (excluding Middle Fork)		
05060002 100	Salt Creek (upstream Queer Creek to mouth); excluding Little Salt Creek and Middle Fork Salt Creek		
05040001 010	Tuscarawas River (headwaters to downstream Wolf Creek)	9/15/2009	fecal coliform, sediment, phosphorus
05040001 020	Chippewa Creek		
05040001 030	Tuscarawas River (downstream Wolf Creek to downstream Sippo Creek); excluding Chippewa Creek		
05040001 090	Tuscarawas River (downstream Sippo Creek to upstream Sugar Creek); excluding Tuscarawas R. mainstem		
05040001 130	Tuscarawas River (downstream Sugar Cr. to upstream Stillwater Cr.); excluding Tuscarawas R. mainstem		
05040001 180	Tuscarawas River (downstream Stillwater Cr. to upstream Evans Cr.); excluding Tuscarawas R. mainstem		
05040001 190	Tuscarawas River (upstream Evans Creek to mouth); excluding Tuscarawas R. mainstem		

Assessment Unit Code	Assessment Unit Name	U.S. EPA Approval Date	Pollutants Allocated, per U.S. EPA ²
05040001	Tuscarawas River (mainstem)		
05030204 010	Hocking River (headwaters to Enterprise); excluding Rush Creek and Clear Creek	9/25/2009	fecal coliform, total phosphorus, sediment (bedload)
05030204 020	Rush Creek (headwaters to upstream Little Rush Creek)		
05030204 030	Rush Creek (upstream Little Rush Creek to mouth)		
05030204 040	Clear Creek		
05030204 050	Hocking River (Enterprise to upstream Monday Creek); excluding Hocking R. mainstem dst. Duck Creek		
05030204 080	Hocking River (downstream Monday Creek to Athens/RM 33.1); excluding Hocking R. mainstem		
05030204 090	Federal Creek		
05030204 100	Hocking River (downstream Athens/RM 33.1 to mouth); excluding Federal Creek and Hocking R. mainstem		
05030204	Hocking River (mainstem)		
04100009 070	Swan Creek (headwaters to above Blue Creek)		
04100009 080	Swan Creek (above Blue Creek to Maumee River)		
05080001 150	Mad River (headwaters to below Kings Creek)	1/26/2010	fecal coliform, sediment (bedload), nitrate
05080001 160	Mad River (below Kings Creek to below Chapman Creek)		
05080001 170	Buck Creek		
05080001 180	Mad River (below Chapman Cr. to above Mud Cr. [except Buck Cr.])		
05080001 190	Mad River (above Mud Cr. to Great Miami River)		
05080002 030	Twin Creek (headwaters to above Bantas Fork)	3/4/2010	fecal coliform, sediment
05080002 040	Twin Creek (above Bantas Fork to Great Miami River)		
05060001 170	Walnut Creek (headwaters to below Sycamore Creek)	5/4/2010	fecal coliform, sediment
05060001 180	Walnut Creek (below Sycamore Creek to Scioto River)		

¹ One or more assessment units may be included in a TMDL report. The determination is made on a project-by-project basis, at the discretion of Ohio EPA.

² The TMDL goal is restoration of the designated use through the attainment of applicable criteria; pollutants listed here were specifically recognized in U.S. EPA decision documents. TMDL reports typically include such parameters for targeting, pollutant load characterization, and measuring interim progress, and may explore other indicators of watershed condition.

Table J-15. Ohio TMDLs¹ approved by U.S. EPA at the 12-digit hydrologic unit scale.

Assessment Unit Code	Name of 10-digit Hydrologic Unit	U.S. EPA Approval Date	Pollutants Allocated, per U.S. EPA ²
05080001 09 01 – 06	Headwaters Stillwater River	9/8/2009 ³	phosphorus

Assessment Unit Code	Name of 10-digit Hydrologic Unit	U.S. EPA Approval Date	Pollutants Allocated, per U.S. EPA ²
05080001 10 01 – 04	Headwaters Greenville Creek		
05080001 11 01 – 03	Mud Creek-Greenville Creek		
05080001 12 01 – 05	Swamp Creek-Stillwater River		
05080001 13 01 – 03	Painter Creek-Stillwater River		
05080001 14 01 – 06	Ludlow Creek-Stillwater River		
05080001 90 02	Stillwater River Mainstem (Greenville Creek to mouth)		
05090201 09 01 – 04	Headwaters White Oak Creek	2/25/2010	fecal coliform, ammonia, total phosphorus, habitat/ total suspended solids, dissolved oxygen, nitrate + nitrite, atrazine
05090201 10 01 – 03	Sterling Run-White Oak Creek		
05090202 06 01 – 06	Headwaters Todd Fork	3/28/2011	<i>E. coli</i> , total phosphorus, chemical oxygen demand, sediment, total suspended solids, carbonaceous biochemical oxygen demand
05090202 07 01 – 04	East Fork Todd Fork-Todd Fork		
05090202 08 01 – 04	Turtle Creek-Little Miami River		
05090202 09 01 – 03	O'Bannon Creek-Little Miami River		
05090202 14 01 – 06	Sycamore Creek-Little Miami River		
05090202 90 01	Little Miami River Mainstem (Caesar Creek to O'Bannon Creek)		
05090202 90 02	Little Miami River Mainstem (O'Bannon Creek to Ohio River)		
05040004 06 01 – 06	Salt Creek (Muskingum River watershed)	6/6/2011	<i>E. coli</i>
05030103 01 01 – 03	Headwaters Mahoning River	9/28/2011	<i>E. coli</i> , sediment, phosphorus
05030101 02 01 – 04	Deer Creek-Mahoning River	10/19/2011	
05030101 03 01 – 06	West Branch Mahoning River-Mahoning River		
05030101 04 01 – 06	Eagle Creek-Mahoning River		
04100010 01 01 – 04	Rocky Ford-Middle Branch Portage River	9/30/2011	<i>E. coli</i> , total phosphorus, carbonaceous biochemical oxygen demand, sediment
04100010 02 01 – 05	South Branch Portage River-Middle Branch Portage River		
04100010 03 01 – 02	Upper Portage River		
04100010 04 01 – 02	Middle Portage River		
04100010 05 01 – 02	Lower Portage River-Frontal Lake Erie		
05060002 14 01 – 06	South Fork Scioto Brush Creek	9/30/2011	<i>E. coli</i> , phosphorus
05060002 15 01 – 07	Scioto Brush Creek		
04110004 04 01 – 03	Griggs Creek-Mill Creek	To be determined	<i>E. coli</i> , phosphorus, flow regime
04110004 06 01 – 07	Big Creek-Grand River		

¹ One or more assessment units may be included in a TMDL report. The determination is made on a project-by-project basis, at the discretion of Ohio EPA.

² The TMDL goal is restoration of the designated use through the attainment of applicable criteria; pollutants listed here were specifically recognized in U.S. EPA decision documents. TMDL reports typically include such parameters for targeting, pollutant load characterization, and measuring interim progress, and may explore other indicators of watershed condition.

³ The TMDL was revised for one pollutant.

Table J-16. Short-term schedule for TMDL development.

Assessment Unit Code²	Assessment Unit Name
<i>TMDLs to be withdrawn from U.S. EPA¹</i>	
04100012 050	Vermilion River (headwaters to above East Branch)
04100012 060	Vermilion River (above East Branch to Lake Erie)
04110001 060	West Branch Rocky River (bacteria)
04110001 070	Rocky River and East Branch Rocky River (bacteria)
<i>TMDLs approved by U.S. EPA after public review of 2012 303(d) list began</i>	
<i>None at this time</i>	
<i>TMDLs pending approval by U.S. EPA</i>	
<i>None at this time</i>	
<i>TMDLs expected to be submitted to U.S. EPA in FFY 2012</i>	
04100010 07 01 – 06	Cedar Creek-Frontal Lake Erie
04100009 09 01 – 04	Grassy Creek-Maumee River
04110004 01 01 – 06	Headwaters Grand River
04110004 02 01 – 03	Rock Creek
04110004 03 01 – 05	Phelps Creek-Grand River
04110004 05 01 – 02	Three Brothers Creek-Grand River
05040004 04 01 – 07	Jonathan Creek
05040004 05 01 – 04	Moxahala Creek
05080001 01 01 – 03	Headwaters Great Miami River
05080001 02 01 – 04	Muchinippi Creek
05080001 03 01 – 06	Bokengehalas Creek-Great Miami River
05080001 04 01 – 06	Stoney Creek-Great Miami River
05080001 05 01 – 03	Headwaters Loramie Creek
05080001 06 01 – 04	Turtle Creek-Loramie Creek
05060003 01 01 – 03	Headwaters Paint Creek
05060003 02 01 – 02	Sugar Creek
05060003 03 01 – 05	Headwaters Rattlesnake Creek
05060003 04 01 – 07	Lees Creek-Rattlesnake Creek
05060003 05 01 – 05	Rocky Fork
05060003 06 01 – 03	Indian Creek-Paint Creek
05060003 07 01 – 04	Buckskin Creek-Paint Creek
05060003 08 01 – 05	Headwaters North Fork Paint Creek
05060003 09 01 – 04	Little Creek-North Fork Paint Creek
05060003 10 01 – 03	Ralston Run-Paint Creek
05060003 90 01	Paint Creek Mainstem (Paint Creek Lake dam to mouth)
<i>TMDLs expected to be submitted to U.S. EPA in FFY 2013</i>	
04100007 03 01 – 06	Upper Ottawa River
04100007 04 01 – 06	Middle Ottawa River
04100007 05 01 – 03	Lower Ottawa River
05030101 10 01 – 05	Salem Creek-Cross Creek
05030101 11 02, 03, 06, 07, 09	Kings Creek-Ohio River
05030106 02 01 – 07	Piney Fork-Short Creek
05030106 03 01 – 04	Crabapple Creek-Wheeling Creek
05030106 12 01, 02, 04 – 08	Short Creek-Ohio River

Assessment Unit Code ²	Assessment Unit Name
05030102 01 04 – 05 05030102 03 01 – 04 05030102 04 01 05030102 06 01 – 03, 06	Pymatuning Reservoir-Shenango River Pymatuning Creek Big Run-Shenango River Yankee Run-Shenango River
05030106 07 01 – 04 05030106 09 01 – 06 05030106 12 01, 02, 04 – 08 05030201 01 01 – 04 05030201 10 01 – 10	McMahon Creek Captina Creek Piney Fork-Short Creek Sunfish Creek French Creek-Ohio River
05040002 01 01 – 05 05040002 02 01 – 04 05040002 03 01 – 03 05040002 04 01 – 05 05040002 05 01 – 03 05040002 06 01 – 06 05040002 07 01 – 03 05040002 08 01 – 06 05040002 90 01	Headwaters Black Fork Mohican River Rocky Fork-Black Fork Mohican River Headwaters Clear Fork Mohican River Possum Run-Clear Fork Mohican River Muddy Fork Mohican River Jerome Fork-Mohican River Lake Fork Mohican River Mohican River Mohican River Mainstem (entire length)
05040003 01 01 – 03 05040003 02 01 – 03 05040003 03 01 – 07 05040003 04 01 – 03	North Branch Kokosing River Headwaters Kokosing River Schenck Creek-Kokosing River Jelloway Creek-Kokosing River
05040003 05 01 – 05 05040003 05 02 – 07 05040003 05 03 – 05 05040003 05 04 – 05	Headwaters Killbuck Creek Apple Creek-Killbuck Creek Paint Creek-Killbuck Creek Doughty Creek-Killbuck Creek
05040006 01 01 – 04 05040006 02 01 – 05 05040006 03 01 – 04 05040006 04 01 – 09 05040006 05 01 – 04 05040006 06 01 – 04	Headwaters North Fork Licking River Lake Fork Licking River-North Fork Licking River Raccoon Creek South Fork Licking River Rocky Fork-Licking River Big Run-Licking River
05060001 01 01 – 04 05060001 02 01 – 03 05060001 03 01 – 04 05060001 04 01 – 06 05060001 05 01 – 05 05060001 06 01 – 04 05060001 90 01	Headwaters Scioto River Rush Creek Little Scioto River Panther Creek-Scioto River Fulton Creek-Scioto River Mill Creek Scioto River Mainstem (L. Scioto R. to Olentangy R.); excluding O'Shaughnessy and Griggs reservoirs
05060001 12 01 – 05 05060001 23 01 – 06 05060001 90 02	Indian Run-Scioto River Scioto Big Run-Scioto River Scioto River Mainstem (Olentangy River to Big Darby Creek)
05080001 07 01 – 05 05080001 08 01 – 05 05080001 20 01 – 05 05080001 90 01	Tawawa Creek-Great Miami River Lost Creek-Great Miami River Honey Creek-Great Miami River Great Miami River mainstem (Tawawa Creek to Mad River)
05090201 03 01 – 05 05090201 04 01 – 04 05090201 05 01 – 06	Headwaters Ohio Brush Creek West Fork Ohio Brush Creek Lick Fork-Ohio Brush Creek

Assessment Unit Code ²	Assessment Unit Name
TMDLs expected to be submitted to U.S. EPA in FFY 2014	
04100011 01 01 – 03	Lower Sandusky
04100011 02 01 – 05	Pickrel Creek-Frontal Sandusky Bay
04100011 10 01 – 04	Wolf Creek
04100011 11 01 – 05	Rock Creek-Sandusky River
04100011 90 01	Sandusky River Mainstem (Tymochtee Creek to Wolf Creek)
04100011 90 02	Sandusky River Mainstem (Wolf Creek to Sandusky Bay)
04100011 12 01 – 03	Green Creek
04100011 13 01 – 03	Muskellunge Creek-Sandusky River
04100011 14 01 – 05	Muddy Creek-Frontal Sandusky Bay
05040001 04 01 – 06	Headwaters Sandy Creek
05040001 06 01 – 07	Little Sandy Creek-Sandy Creek
05040003 09 01 – 08	Mill Creek-Walhonding River
05040004 03 01 – 05	Symmes Creek-Muskingum River
05040004 08 01 – 09	Brush Creek-Muskingum River
05080002 01 01 – 07	Wolf Creek-Great Miami River
05080002 04 01 – 04	Bear Creek-Great Miami River
05080002 07 01 – 06	Dicks Creek-Great Miami River
05080002 09 01 – 07	Taylor Creek-Great Miami River
05080002 90 01	Great Miami River Mainstem (Mad River to Four Mile Creek)
05080002 90 02	Great Miami River Mainstem (Four Mile Creek to Ohio River)
05090103 01 01, 03 – 07	Ice Creek-Ohio River
05090103 02 01 – 05	Pine Creek
05090103 05 01 – 04	Headwaters Little Scioto River
05090103 06 01 – 06	Little Scioto River-Ohio River

¹ Projects being withdrawn from U.S. EPA consideration for approval due to changes in water quality standards or other significant change affecting load calculations.

² TMDLs are transitioning from the HUC11-scale to the HUC12-scale watersheds.