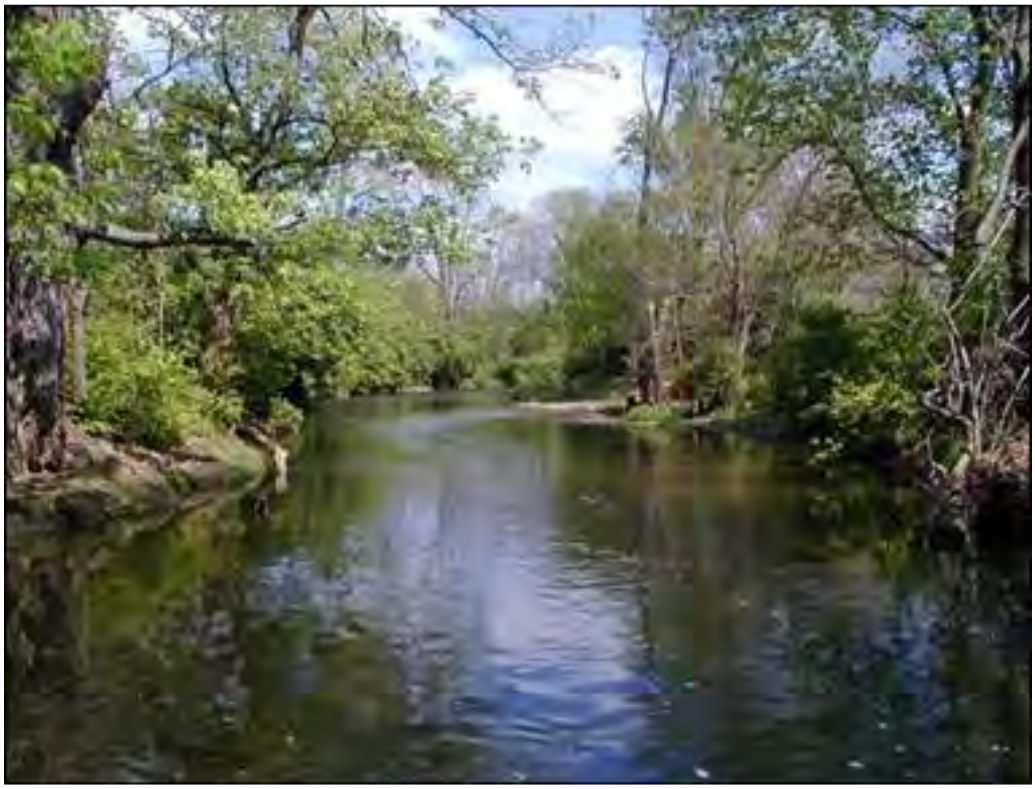
Integrated Report to Congress on the Condition of Water Resources in Kentucky, 2014

Volume II. 303(d) List of Surface Waters



Kentucky Energy and Environment Cabinet
Department for Environmental Protection
Division of Water
Water Quality Branch
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This report has been approved for release:

Peter Goodmann, Director
Kentucky Division of Water

4 December 2015
Date

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Summary of the 2014 303(d) List of Impaired Waters

The 1972 Federal Water Pollution Control Act, commonly known as The Clean Water Act, requires States to assess and report current water quality conditions to Congress biannually. While many agencies and individuals contribute assessment data, the Kentucky Division of Water (KDOW) of the Kentucky Department for Environmental Protection is responsible for Section 305(b) and Section 303(d) reporting requirements for surface waters.

The 2014 Integrated Report (IR) replaces the 2012 IR previously prepared by KDOW. The 305(b) portion of the report (Volume I) lists all water quality assessment results for surface waters (streams, springs, ponds, and reservoirs) in Kentucky. The 303(d) portion of the report (Volume II)-(see Kentucky 2014 303(d) List.xls) is a subset of these assessed waters including all waters not supporting one or more designated uses and requiring the development of a Total Maximum Daily Load (TMDL). Only those segments that are impaired and still require a TMDL are in Category 5 (on the 303(d) list) of Volume II. It is suggested that the user refer to Volume I to obtain a listing of all waters assessed as impaired. This excel file contains a tab of proposed delistings for 2014 (see Kentucky 2014 303(d) List.xls). These segments appear on a separate tab in the 303(d) excel file because they are no longer in Category 5. Additionally, you can find a link to summaries of new listings in the '2014 New Listings' tab in the excel file.

Since 1998, Kentucky has monitored surface waters using a five-year rotating watershed management approach in which each of the five major Basin Management Units (BMUs) receives intensive monitoring in sequential years over the five-year cycle. To make the 303(d) list reflective of the current 305(b) assessment results, the 2014 303(d) list contains new and cumulative listings of impaired waters and designated uses from monitoring and assessment between April 2010 and March 2012 on 2124 stream miles in the Green River basin and 442 stream miles in the Tradewater River basin. An additional 799 stream miles are listed as less than full support in the Ohio River minor tributaries associated with the Green – Tradewater BMU. The report also incorporates assessment data and results from monitoring that occurred during this reporting cycle outside of the

BMUs of focus, thus providing a statewide update of monitoring results. There are 255 new listings, primarily from the above mentioned monitoring. Links to assessment summaries for these new listings can be found in the 'Draft 2014 New Listings' Tab in the Draft 2014 303(d) List excel file as well as appended to the stream segments on the Kentucky Water Health Portal http://watermaps.ky.gov/WaterHealthPortal/. The number of impaired waters does not represent a declining trend in water quality but instead is a result of increased monitoring efforts in regions that previously had only a few monitoring stations on large rivers and streams.

For this volume, DOW continued the river mile and stream name updates that began in 2006. River miles have been changed from those in the 2012 Integrated Report to more accurately match the location description with the river miles in the National Hydrography Data Set river miles. For updates in the 2014 303(d) list see the 'Comments' field in the Kentucky 2014 303(d) List.xls.

EPA and state TMDL program managers began developing a new path forward for the TMDL program in August 2011, the long term vision for the Clean Water Act Section 303(d) program (The Vision). Historically, KDOW's focus has been TMDL monitoring, resulting in monitoring for over 700 pollutant/waterbody combinations. The Vision identifies six components, Prioritization, Assessment, Engagement, Integration, Protection, and Alternatives. Moving forward at KDOW, the Vision will guide prioritization of TMDL development, for more effective management of resources and effort.

As of May 2012, KDOW has submitted and EPA has approved TMDLs for 313 pollutant/waterbody combinations. EPA has also approved delisting requests for 431 pollutant/waterbody combinations. Delisting approval is granted when KDOW has demonstrated that a listed pollutant/waterbody combination no longer requires a TMDL, although the segment may still be listed as impaired for other pollutants.

Chapter 4. TMDLs Planned for Public Notice During 2014

Stream Name	River Miles	County	Pollutant	Quarter
Bat East Creek	3.4 to 7.5	Muhlenburg	*E. coli*	2nd
Bat East Creek	0.0 to 3.3	Muhlenburg	*E. coli*	2nd
Beech Creek	0.0 to 3.9	Muhlenburg	*E. coli*	2nd
Caney Creek	0.0 to 8.2	Hopkins	pH	3rd
Caney Creek	0.0 to 3.6	Muhlenburg	*E. coli*	2nd
Caney Creek	3.6 to 7.6	Muhlenburg	*E. coli*	2nd
Chenoweth Run	0.0 to 5.2	Jefferson	Fecal Coliform	1st
Chenoweth Run	5.2 to 9.2	Jefferson	Fecal Coliform	1st
Claylick Creek	4.8 to 10.7	Crittenden	Fecal Coliform	3rd
Copper Creek	0.0 to 2.7	Hopkins	pH	3rd
Copper Creek	0.0 to 2.7	Hopkins	Iron	3rd
Copper Creek	0.0 to 2.7	Hopkins	Zinc	3rd
Copperas Creek	0.0 to 3.6	Hopkins	pH	3rd
Copperas Creek	0.0 to 3.6	Hopkins	Iron	3rd
Copperas Creek	0.0 to 3.6	Hopkins	Cadmium	3rd
Copperas Creek	0.0 to 3.6	Hopkins	Zinc	3rd
Copperas Creek	0.0 to 3.6	Hopkins	Nickel	3rd
Crooked Creek	0.0 to 3.0	Daviess	Fecal Coliform	2nd
Currys Fork	0.0 to 4.8	Oldham	Fecal Coliform	1st
Deserter Creek	0.0 to 3.1	Daviess	Fecal Coliform	2nd
Floyds Fork	0.0 to 11.6	Bullitt	Fecal Coliform	1st
Floyds Fork	11.6 to 24.2	Jefferson	Fecal Coliform	1st
Floyds Fork	24.2 to 34.1	Jefferson	Fecal Coliform	1st
Fox Run	0.0 to 1.1	Hopkins	pH	3rd
Houston Creek	0.0 to 9.0	Bourbon	*E. Coli*	3rd
Hurricane Creek	0.0 to 1.8	Hopkins	Iron	3rd
Hurricane Creek	0.0 to 1.8	Hopkins	Zinc	3rd
Hurricane Creek	0.0 to 1.8	Hopkins	pH	3rd
Indian Creek	0.0 to 0.7	Bourbon	Fecal Coliform	3rd
Knoblick Creek	0.0 to 2.1	Daviess	Fecal Coliform	2nd
Little Stoner Creek	0.0 to 5.0	Clark	*E. Coli*	3rd
Little Whipporwill Creek	0.0 to 4.2	Logan	*E. coli*	2nd
Long Falls Creek	0.0 to 7.6	McLean	Fecal Coliform	2nd
Long Falls Creek	7.6 to 11.8	McLean	Fecal Coliform	2nd
Long Run	0.0 to 10.0	Jefferson	Fecal Coliform	1st
North Fork Panther Creek	4.2 to 9.1	Daviess	Fecal Coliform	2nd
Northern Ditch	0.0 to 7.3	Jefferson	Fecal Coliform	3rd
Ohio River	475.1 to 477.6	Kenton, Boone	*E. coli*	2nd

Stream Name	River Miles	County	Pollutant	Quarter
Ohio River	477.6 to 488.0	Boone	*E. coli*	2nd
Ohio River	603.3 to 608.1	Jefferson	*E. coli*	2nd
Ohio River	608.1 to 609.2	Jefferson	*E. coli*	2nd
Ohio River	614.9 to 683.0	Jefferson, Hardin, Meade	*E. coli*	2nd
Ohio River	683.0 to 719.5	Meade, Breckinridge, Hancock	*E. coli*	2nd
Ohio River	719.5 to 735.7	Hancock	*E. coli*	2nd
Ohio River	735.7 to 756.4	Hancock, Daviess	*E. coli*	2nd
Ohio River	756.4 to 760.6	Daviess	*E. coli*	2nd
Ohio River	760.6 to 789.3	Daviess, Henderson	*E. coli*	2nd
Ohio River	789.3 to 792.1	Henderson	*E. coli*	2nd
Ohio River	792.1 to 793.2	Henderson	*E. coli*	2nd
Ohio River	793.2 to 798.4	Henderson	*E. coli*	2nd
Ohio River	798.4 to 799.8	Henderson	*E. coli*	2nd
Ohio River	799.8 to 802.9	Henderson	*E. coli*	2nd
Ohio River	802.9 to 820.1	Henderson	*E. coli*	2nd
Ohio River	820.1 to 826.4	Henderson	*E. coli*	2nd
Ohio River	826.4 to 847.3	Henderson, Union	*E. coli*	2nd
Ohio River	853.4 to 857.6	Union	*E. coli*	2nd
Ohio River	862.1 to 872.8	Union	*E. coli*	2nd
Ohio River	878.2 to 882.9	Crittenden	*E. coli*	2nd
Ohio River	894.6 to 910.3	Livingston	*E. coli*	2nd
Ohio River	920.5 to 925.8	Livingston	*E. coli*	2nd
Ohio River	317.2 to 319.4	Boyd	*E. coli*	2nd
Ohio River	319.4 to 340.8	Boyd, Greenup	*E. coli*	2nd
Ohio River	356.6 to	Greenup,	*E. coli*	2nd

Stream Name	River Miles	County	Pollutant	Quarter
	377.7	Lewis		
Ohio River	382.9 to 388.0	Lewis	*E. coli*	2nd
Ohio River	464.5 to 465.2	Campbell	*E. coli*	2nd
Ohio River	469.3 to 471.4	Campbell, Kenton	*E. coli*	2nd
Ohio River	471.4 to 475.1	Kenton	*E. coli*	2nd
Panther Creek	3.0 to 5.9	Daviess	Fecal Coliform	2nd
Panther Creek	17.9 to 20.4	Daviess	Phosphorus (Total)	2nd
Pennsylvania Run	0.0 to 3.3	Jefferson	Fecal Coliform	1st
Pleasant Grove Creek	0.0 to 2.2	Logan	*E. coli*	2nd
Plum Creek	0.0 to 1.7	Muhlenburg	*E. coli*	2nd
Pond Creek	0.0 to 4.8	Muhlenburg	*E. coli*	2nd
Pond Creek	14.4 to 18.1	Muhlenburg	*E. coli*	2nd
Pond Creek	18.1 to 22.1	Muhlenburg	*E. coli*	2nd
Pond Creek	4.8 to 7.6	Muhlenburg	*E. coli*	2nd
Pond Creek	7.6 to 11.7	Muhlenburg	*E. coli*	2nd
Pond Creek	11.7 to 14.4	Muhlenburg	*E. coli*	2nd
Pope Lick Creek	2.0 to 5.2	Jefferson	Fecal Coliform	1st
Red River	50.95 to 54.5	Robertson	*E. coli*	2nd
Red River	54.5 to 56.9	Logan	*E. coli*	2nd
Red River	57.0 to 65.8	Logan	*E. coli*	2nd
Red River	65.8 to 74.3	Logan	*E. coli*	2nd
Red River	74.3 to 81.3	Simpson	*E. coli*	2nd
Salt Lick Creek	0.0 to 3.7	Muhlenburg	*E. coli*	2nd
Sand Lick Creek	0.0 to 4.0	Muhlenburg	*E. coli*	2nd
Sinking Creek	0.0 to 9.95	Laurel	*E. coli*	2nd
South Fork Gunpowder Creek	4.1 - 6.8	Boone	Fecal Coliform	3rd
South Fork of Panther Creek	14.0 to 18.3	Daviess	Fecal Coliform	2nd
South Fork of Panther Creek	9.55 to 14.0	Daviess	Fecal Coliform	2nd
South Fork of Panther Creek	0.0 to 2.4	Daviess	Fecal Coliform	2nd
South Fork of Panther Creek	0.0 to 2.4	Daviess	Copper	2nd
South Fork of Red River	0.0 to 7.85	Logan	*E. coli*	2nd
Southern Ditch	0.0 to 5.9	Jefferson	Fecal Coliform	3rd
Stoner Creek	0.0 to 5.5	Bourbon	Fecal Coliform	3rd
Stoner Creek	5.5 to 15.0	Bourbon	Fecal Coliform	3rd
Strodes Creek	2.7 to 19.3	Bourbon	*E. Coli*	3rd
Sulphur Spring Creek	0.0 to 6.6	Simpson	*E. coli*	2nd
UT to Copperas Creek at RM 0.6	0.0 to 0.9	Hopkins	pH	3rd
UT to Copperas Creek at RM 0.6	0.0 to 0.9	Hopkins	Iron	3rd
UT to Copperas Creek at RM 0.6	0.0 to 0.9	Hopkins	Cadmium	3rd
UT to Copperas Creek at RM 0.6	0.0 to 0.9	Hopkins	Zinc	3rd
UT to Hurricane Creek at RM	0.0 to 0.2	Hopkins	Iron	3rd

Stream Name	River Miles	County	Pollutant	Quarter
0.3				
UT to Hurricane Creek at RM 0.3	0.0 to 0.2	Hopkins	Zinc	3rd
UT to Hurricane Creek at RM 0.3	0.0 to 0.2	Hopkins	pH	3rd
UT to Little Whippoorwill Creek	0.1 to 0.6	Logan	*E. coli*	2nd
UT to Pond Creek	0.0 to 2.4	Muhlenburg	*E. coli*	2nd
Whippoorwill Creek	0.0 to 13.2	Logan	*E. coli*	2nd

The TMDLs will be developed if there are approved protocols in place. Data collection is ongoing for some of these TMDLs, which may cause pollutant or segment additions or removals from the above list. If approved protocols for specific pollutants are not in place, other TMDLs will be pursued for development.

Chapter 5. TMDLs Planned for Public Notice During 2015

Stream Name	River Miles	County	Pollutant	Quarter
Caney Creek	0.0 to 8.2	Hopkins	pH	1st
Canoe Creek	0.0 to 4.05	Henderson	*E. coli*	4th
Canoe Creek	0.0 to 4.05	Henderson	Chromium	4th
Canoe Creek	0.0 to 4.05	Henderson	Copper	4th
Canoe Creek	0.0 to 4.05	Henderson	Zinc	4th
Canoe Creek	4.05 to 14.4	Henderson	*E. coli*	4th
Canoe Creek	14.4 to 23.8	Henderson	*E. coli*	4th
Copper Creek	0.0 to 2.7	Hopkins	pH	1st
Copper Creek	0.0 to 2.7	Hopkins	Iron	1st
Copper Creek	0.0 to 2.7	Hopkins	Zinc	1st
Copperas Creek	0.0 to 3.6	Hopkins	pH	1st
Copperas Creek	0.0 to 3.6	Hopkins	Iron	1st
Copperas Creek	0.0 to 3.6	Hopkins	Cadmium	1st
Copperas Creek	0.0 to 3.6	Hopkins	Zinc	1st
Copperas Creek	0.0 to 3.6	Hopkins	Nickel	1st
Fowlers Fork	0.0 to 3.7	Boone	*E. coli*	1st
Fox Run	0.0 to 1.1	Hopkins	pH	1st
Gunpowder Creek	0.0 to 15.35	Boone	*E. coli*	1st
Hurricane Creek	0.0 to 1.8	Hopkins	Iron	1st
Hurricane Creek	0.0 to 1.8	Hopkins	Zinc	1st
Hurricane Creek	0.0 to 1.8	Hopkins	pH	1st
Long Branch	0.0 to 2.55	Boone	*E. coli*	1st
Ohio River	319.4 to 317.4	Boyd	*E. coli*	3rd
Ohio River	340.8 to 319.4	Boyd, Greenup	*E. coli*	3rd
Ohio River	377.7 to 356.6	Greenup, Lewis	*E. coli*	3rd
Ohio River	388.0 to 382.2	Lewis	*E. coli*	3rd
Ohio River	465.2 to 464.5	Campbell	*E. coli*	3rd
Ohio River	471.4 to 469.4	Campbell, Kenton	*E. coli*	3rd
Ohio River	475.1 to 471.4	Kenton	*E. coli*	3rd
Ohio River	477.5 to 475.1	Kenton, Boone	*E. coli*	3rd
Ohio River	488.2 to 477.5	Boone	*E. coli*	3rd
Ohio River	595.8 to 593.4	Jefferson	*E. coli*	3rd
Ohio River	604.3 to 603.1	Jefferson	*E. coli*	3rd
Ohio River	608.7 to 604.3	Jefferson	*E. coli*	3rd
Ohio River	614.0 to 608.7	Jefferson	*E. coli*	3rd
Ohio River	676.8 to 614.0	Jefferson, Hardin,	*E. coli*	3rd

Stream Name	River Miles	County	Pollutant	Quarter
		Meade		
Ohio River	720.8 to 676.8	Meade, Breckinridge, Hancock	*E. coli*	3rd
Ohio River	736.7 to 720.8	Hancock	*E. coli*	3rd
Ohio River	756.3 to 736.7	Hancock, Daviess	*E. coli*	3rd
Ohio River	760.6 to 756.3	Daviess	*E. coli*	3rd
Ohio River	776.0 to 760.6	Daviess, Henderson	*E. coli*	3rd
Ohio River	789.3 to 776.0	Henderson	*E. coli*	3rd
Ohio River	793.2 to 792.1	Henderson	*E. coli*	3rd
Ohio River	795.7 to 793.2	Henderson	*E. coli*	3rd
Ohio River	799.8 to 795.7	Henderson	*E. coli*	3rd
Ohio River	802.9 to 799.8	Henderson	*E. coli*	3rd
Ohio River	820.1 to 802.9	Henderson	*E. coli*	3rd
Ohio River	826.4 to 820.1	Henderson	*E. coli*	3rd
Ohio River	846.3 to 826.4	Henderson, Union	*E. coli*	3rd
Ohio River	849.7 to 846.3	Union	*E. coli*	3rd
Ohio River	857.6 to 853.4	Union	*E. coli*	3rd
Ohio River	872.8 to 862.1	Union	*E. coli*	3rd
Ohio River	882.9 to 878.2	Crittenden	*E. coli*	3rd
Ohio River	910.3 to 894.6	Livingston	*E. coli*	3rd
Ohio River	925.8 to 920.5	Livingston	*E. coli*	3rd
Riddle Run	0.0 to 4.7	Boone	*E. coli*	1st
South Fork Gunpowder Creek	4.2 to 6.6	Boone	*E. coli*	1st
South Fork Gunpowder Creek	6.6 to 8.0	Boone	*E. coli*	1st
UT of Gunpowder Creek	0.0 to 3.85	Boone	*E. coli*	1st
UT of South Fork Gunpowder Creek	0.0 to 2.5	Boone	*E. coli*	1st
UT to Copperas Creek at RM 0.6	0.0 to 0.9	Hopkins	pH	1st
UT to Copperas Creek at RM 0.6	0.0 to 0.9	Hopkins	Iron	1st
UT to Copperas Creek at RM 0.6	0.0 to 0.9	Hopkins	Cadmium	1st
UT to Copperas Creek at RM 0.6	0.0 to 0.9	Hopkins	Zinc	1st
UT to Hurricane Creek at RM 0.3	0.0 to 0.2	Hopkins	Iron	1st
UT to Hurricane Creek at RM 0.3	0.0 to 0.2	Hopkins	Zinc	1st
UT to Hurricane Creek at RM 0.3	0.0 to 0.2	Hopkins	pH	1st

The TMDLs will be developed if there are approved protocols in place. If approved protocols for specific pollutant are not in place, other TMDLs will be pursued for development.