Integrated Report to Congress on the Condition Of Water Resources in Kentucky, 2012

Volume I. 305(b) Assessment Results with Emphasis on the Salt River – Licking River Basin Management Unit and the Upper Cumberland River – 4-Rivers Basin Management Unit

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Kentucky Energy and
Environment Cabinet
Division of Water
September 17, 2013

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Kentucky Department for Environmental Protection
Kentucky Division of Water
Water Quality Branch
Frankfort, Kentucky

This report has been approved for release:

Peter Goodmann, Acting Director
Kentucky Division of Water

10/30/2013

Date

ACKNOWLEDGMENTS

Volume I of this report covers years two and three of the third 5-year cycle of the intensive interagency watershed monitoring effort including work from state, federal and local agencies. The Kentucky Department of Fish and Wildlife Resources and their district fisheries biologists have assisted with monitoring and reporting effort by providing data for this report. The U.S. Army Corps of Engineers, Louisville and Nashville Districts, contributed to monitoring and data submittal on the reservoirs they manage in the Salt River – Licking River and Upper Cumberland River – 4-Rivers Basin Management Units. The Kentucky Division of Environmental Program Support provided analyses of all water quality samples submitted by Division of Water. Appreciation goes out to Division of Water staffs in the regional offices. Particularly those in the basin management units of emphasizes: Florence, Morehead and Columbia for collecting many of the ambient surface water quality samples. U.S. EPA National Health and Environmental Effects Research Laboratory in Corvallis, Oregon provided the random monitoring design. Thank you to those who have promoted the watershed effort through Kentucky Division of Water. I would like to thank all the staffs in Water Quality and Watershed Management branches of Kentucky Division of Water for their dedication to the efforts of monitoring and assessing the waters of the Commonwealth. I am grateful to those who made valuable comments on this report.

Randall G. Payne
Kentucky 305(b) Coordinator
July 31, 2012

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Executive Summary

I. Section 305(b), Volume I

The 2012 Integrated Report (IR) on the condition of water resources in Kentucky is submitted to the U. S. Environmental Protection Agency (EPA) to fulfill requirements of sections 303(d), 305(b) and 314 of the Federal Water Pollution Control (or Clean Water) Act of 1972 (P.L. 92-500), as subsequently amended. Section 305(b) of the Act requires states to assess and report water quality conditions to EPA every two years. The Kentucky Division of Water (KDOW) submits its biennial report on water quality in the integrated reporting format and has beginning with the 2006 report. This reporting format provides categories to report assessment results per designated use of assessed waterbodies, thus providing a convenient method to track waterbodies and segments by designated use and assessment results. Below are the categories assessed waterbody designated uses are assigned (Table 1).

Table 1. Reporting categories assigned to surface waters through the assessment process.

Category	Definition
1	All designated uses for water body fully supporting.
2	Assessed designated use(s) is/are fully supporting, but not all designated uses assessed.
2B	Segment currently supporting use(s), but 303(d) listed & proposed to EPA for delisting.
3	Designated use(s) has/have not been assessed (insufficient or no data available).
4A	Segment with an EPA approved or established TMDL for the listed uses not attaining full support. TMDL approval # ________________
4B	Nonsupport segment with an approved alternative pollution control plan (e.g. BMP) stringent enough to meet full support level of all uses within a specified time.
4C	Segment is not meeting full support of assessed use(s), but this is not attributable to a pollutant or combination of pollutants.
5	TMDL is required.
5B	Segment does not support designated uses based on evaluated data, but based on Kentucky listing methodology insufficient data are available to make a listing determination. No TMDL needed.

While this reporting cycle is comprehensive providing a statewide update on water quality conditions of waterbodies in all river basins, or BMUs (basin management unit), the focus is on the Salt River – Licking River BMU and the Upper Cumberland River – 4-Rivers BMU. There are five BMUs in the state: 1) Kentucky River; 2) Salt-Licking Rivers; 3) Upper Cumberland and 4-Rivers; 4) Green-Tradewater; and 5) Big Sandy-Little Sandy-Tygarts. Since 1998 the KDOW (Kentucky Division of Water) has executed a five-year rotating BMU monitoring strategy. This strategy has many advantages for the state to monitor and manage water resources, namely it focuses available resources to a particular BMU once every five years providing an in-depth assessment of water quality and issues specific to regional water resources.

The assessment results use three classifications to denote relative level of designated use support: fully supporting (good to excellent water quality); partially supporting (fair water quality, does not fully meet designated use); and nonsupporting (poor water quality).

The KDOW monitors wadeable and boatable waters and lakes or reservoirs. In the ambient water quality network all stations are monitored for a suite of conventional and toxic pollutants on a monthly or bimonthly frequency. Water quality stations in a given BMU are monitored monthly once every five years, and are otherwise monitored bimonthly four of five years. When the rotating BMU monitoring strategy was adopted the KDOW expanded the primary (permanent, regular monitored stations) water quality stations to 72 and added approximately 20 additional watershed water quality stations per BMU. This has provided greater coverage of water quality stations and the flexibility to add watershed stations for monitoring watersheds for particular reasons (e.g. landuse considerations, TMDL development, intra-basin issues) for each BMU. Many of the wadeable primary water quality stations are monitored for biological community health once every five years. The KDOW develops biological monitoring plans for wadeable streams including a reference network for development and refinement of biological metrics, and targeted monitoring to address needs and fill gaps in each BMU. Probability-based monitoring design of wadeable streams (stream order 1 – 5) is employed in each BMU to provide a nonbiased assessment of water quality, laying the foundation for trends across the state. This random approach provides water quality data that is nonbiased and can be applied to many issues and water quality needs for the KDOW. For example, nutrient gradients and other water quality variables, and given the nature of the data it is often a resource that can be drawn upon for new issues that may emerge. The TMDL section monitors waterbodies and associated watersheds to scope the extent and verify sources of each pollutant affecting a 303(d) listed waterbody as part of TMDL development. Publicly owned lakes and reservoirs are monitored per BMU to determine current water quality conditions and trophic state trend. A suite of physical and chemical variables are monitored three times during the growing season, spring, summer and fall. This interval provides data under the most environmentally stressful conditions when water quality degradation is most likely manifested.

Warmwater and Coldwater Aquatic Habitat Use Support – Streams

Statewide

Based on the NHD 1:24,000 scale, Kentucky has nearly 91,000 miles of streams, many of these miles are small, 1st and 2nd order intermittent or perennial streams up to the great rivers, the Ohio and the Mississippi that account for about 850 miles. To date, there are 10,256 miles (11.3 percent) assessed for coldwater and warmwater aquatic habitat designated uses (collectively often referred to as aquatic life use) of the approximately 91,000 miles. Of assessed miles with in-stream data, 5,138 (50 percent) fully support this designated use. The number of assessed miles not supporting these designated uses is 5,118 miles, or approximately 50 percent (Figure 1). Since the 2010 IR the number of miles not supporting aquatic life use has increased about two percent statewide. The five leading causes (pollutants) affecting water quality associated with this designated use are shown in Figure 2 by stream miles. The percentage of stream miles monitored and assessed for this use is presented by major river basin in Figure 3.

Figure 1. Support level for total stream miles monitored by all methods for aquatic life use per the 2012 Integrated Report.

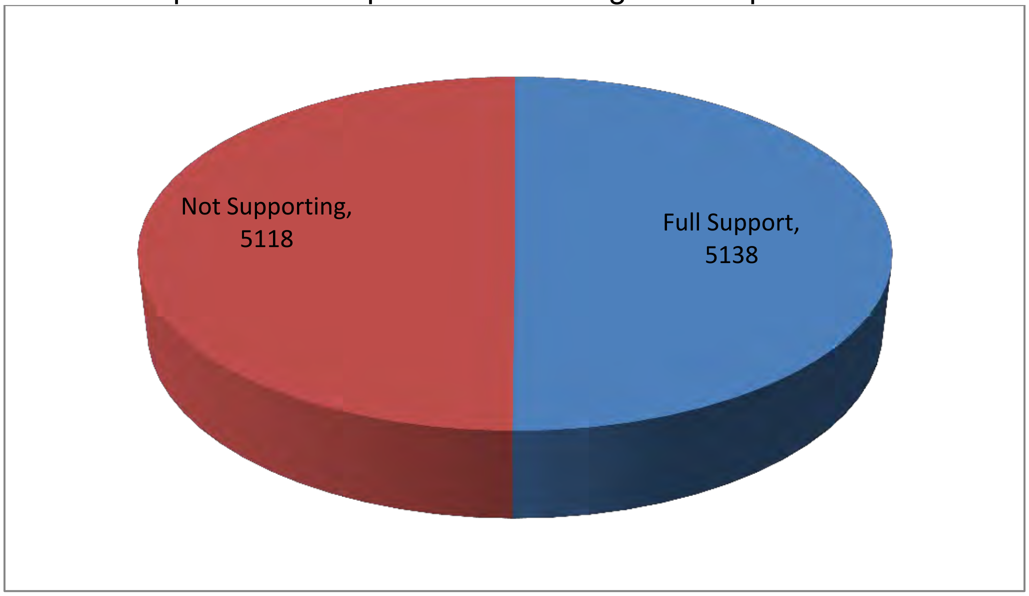


Figure 2. The five leading causes (pollutants) affecting aquatic life use water quality statewide, in miles

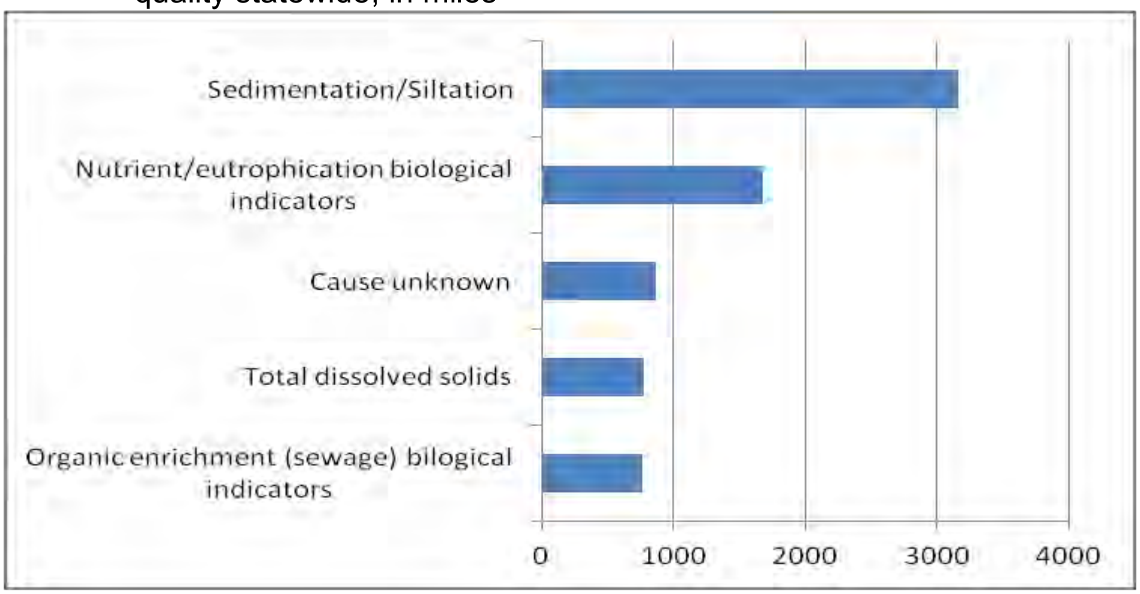
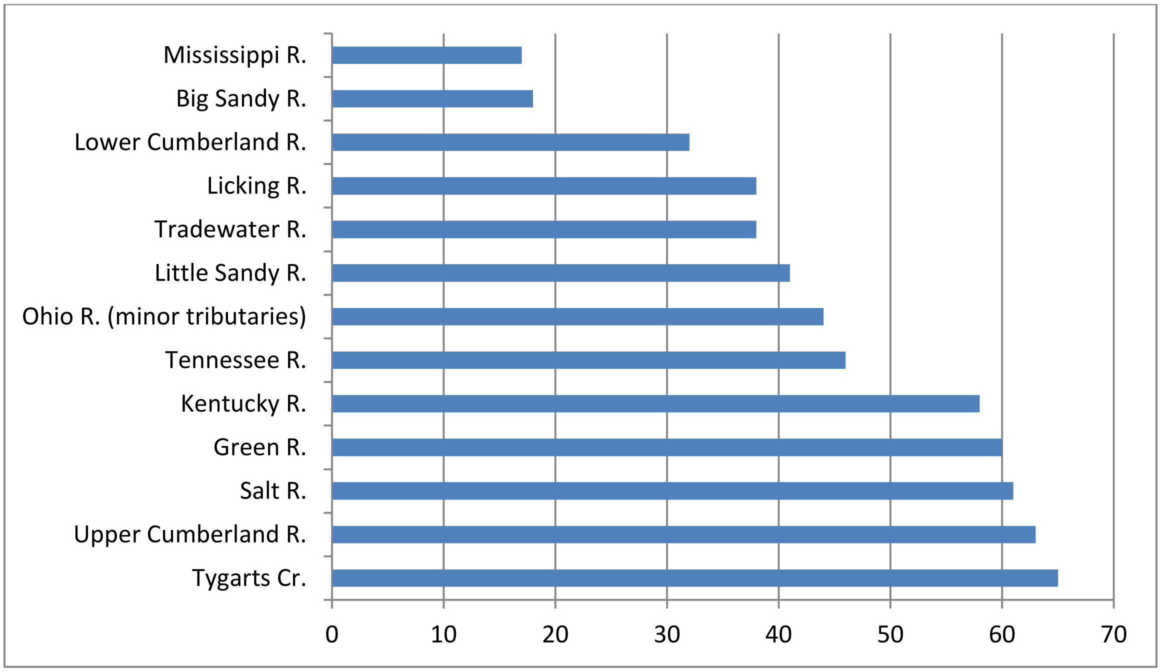


Figure 3. Percentage of aquatic life use support by major river basin, 2012.



When comparing the last four 305(b) reporting cycles (2006 – 2012) for this use, support has decreased from a high of 60 percent fully supporting aquatic life use to the current 50 percent fully supporting level (Figure 4). One probable reason for this perceived decline is because much current effort is directed toward monitoring impaired watersheds in order to develop total maximum daily load (TMDL) for pollutants causing impairment to 303(d) listed waterbodies. To illustrate this point, Figure 5 depicts the total pollutant-waterbody combinations (number of pollutants per assessed waterbody) since the 2006. One will note this number increased substantially over the period 2006 – 2010, but nearly leveled-off between the 2010 and 2012 reporting cycles.

Primary Contact Recreation Use Support – Streams

Statewide

Primary contact recreation use (PCR) is often referred to as swimming use since the criteria applicable to this designated use are to protect people from pathogens that may cause gastric illness if any water is ingested when swimming. There are nearly 5,070 stream miles assessed for this designated use with 70 percent of those stream miles

Figure 4. Percentage of statewide assessed stream miles supporting and not supporting the aquatic life use over four 305(b) reporting cycles.

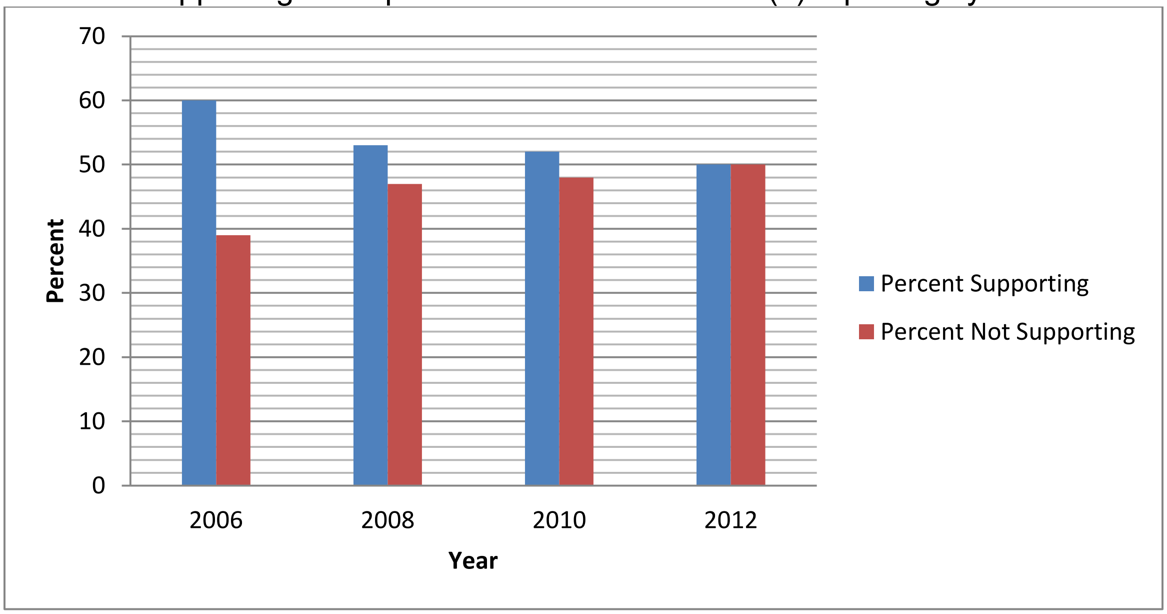
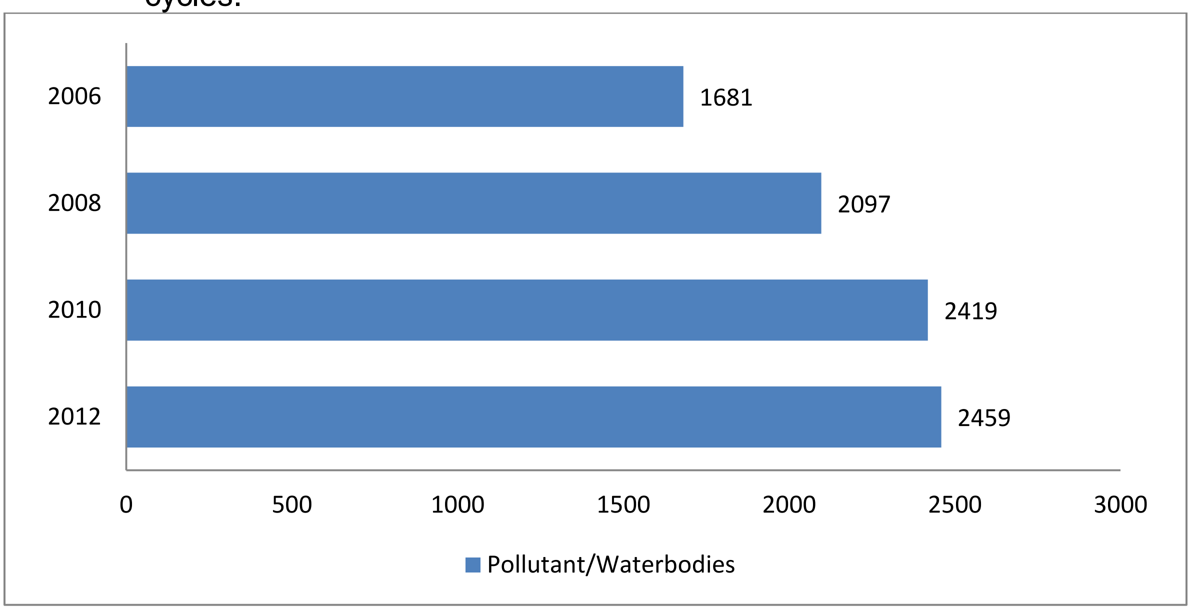
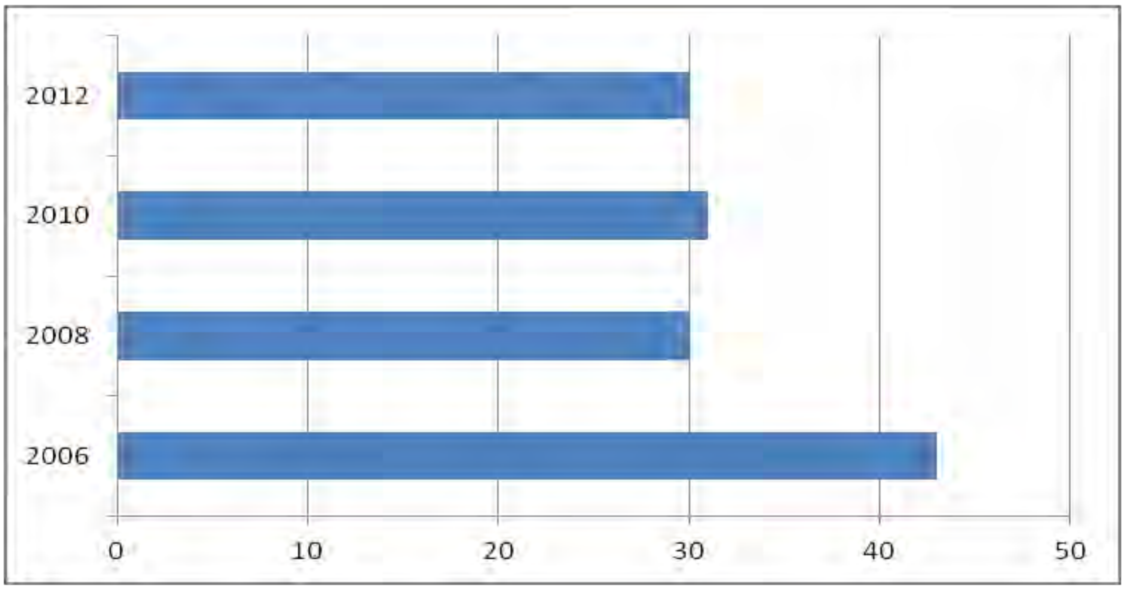


Figure 5. Pollutant/waterbody combinations over the last four 305(b) reporting cycles.



not supporting the use and 30 percent fully supporting. This compares with 4,762 stream miles assessed for the 2010 Integrated Report (IR) with 3,268 stream miles or 69 percent not supporting the use. Compared with the 2008 IR, the percentage of stream miles not supporting is equal (70 percent); there were 4,493 stream miles assessed and 43 percent of 3,773 assessed stream miles reported in the 2006 IR (Figure 6). Each river basin in the state and the percentage of fully supporting assessed stream miles is shown in Figure 7.

Figure 6. Percentage of assessed stream miles supporting primary contact recreation between 2006 and 2012.



Secondary Contact Recreation Use Support – Streams

Statewide

This designated use provides protection to someone recreating on a waterbody where only incidental contact or less than full body immersion is anticipated. Some examples of this recreation are boating, fishing and wading. There have been 1,989 stream miles assessed and 1,339 miles (67 percent) fully support this use, with 650 miles (33 percent) not supporting. These statistics are illustrated in Figure 8 by major river basin. The percentage of full support for this designated use has been declining slightly since the 2006 IR (Figure 9).

Figure 7. Percentage of assessed stream miles supporting primary contact recreation use by river basin, 2012.

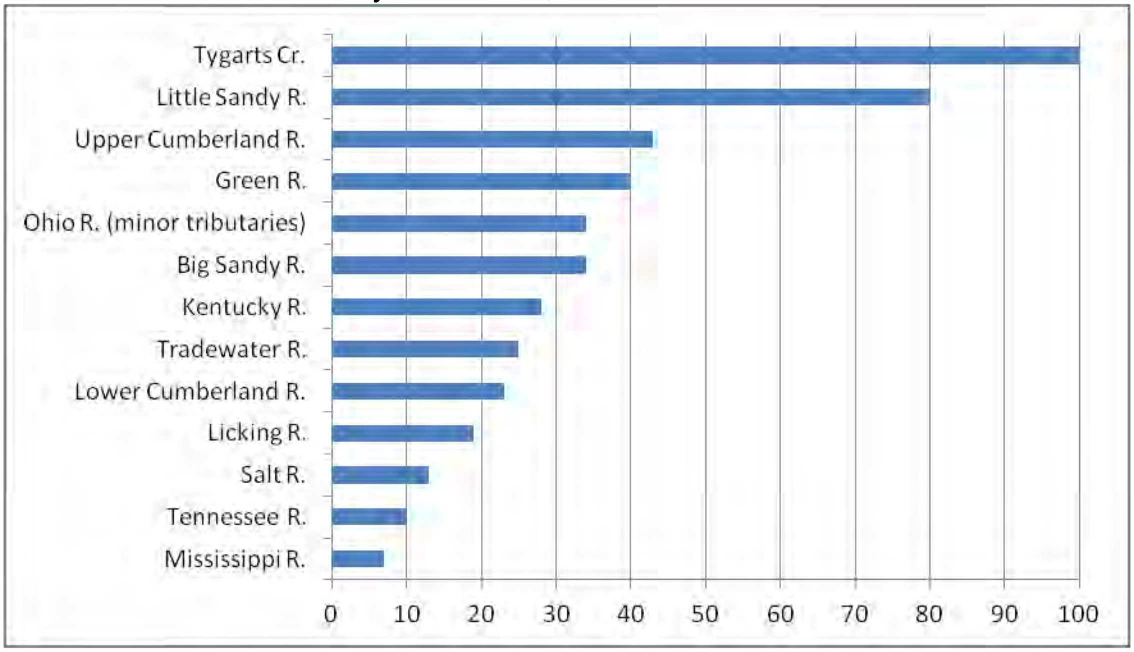
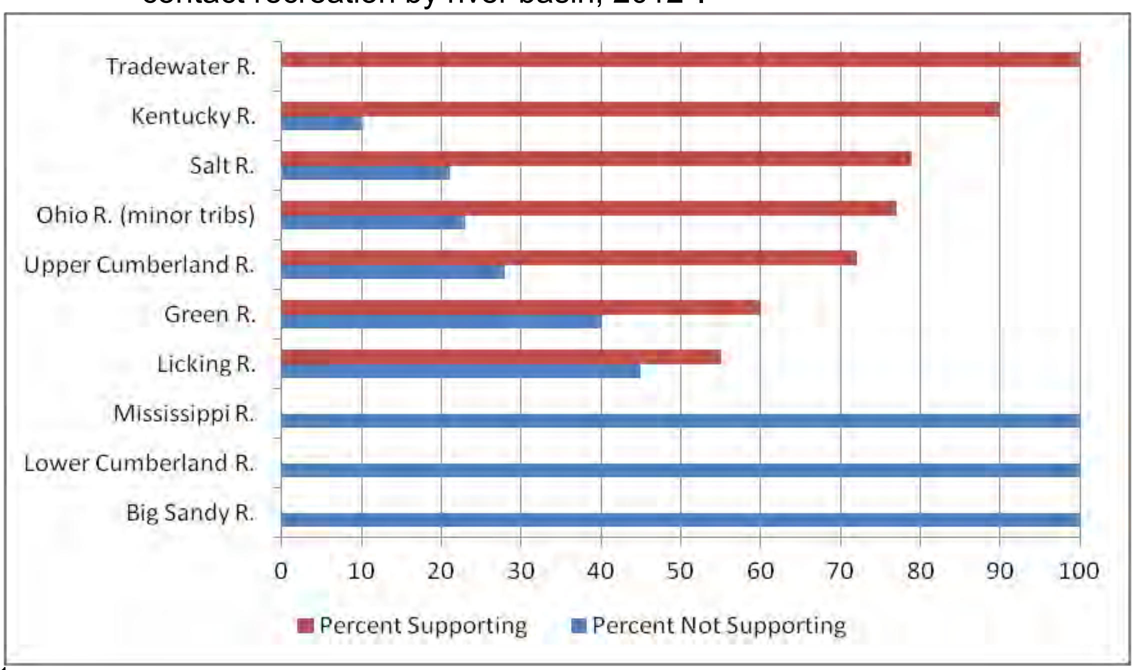
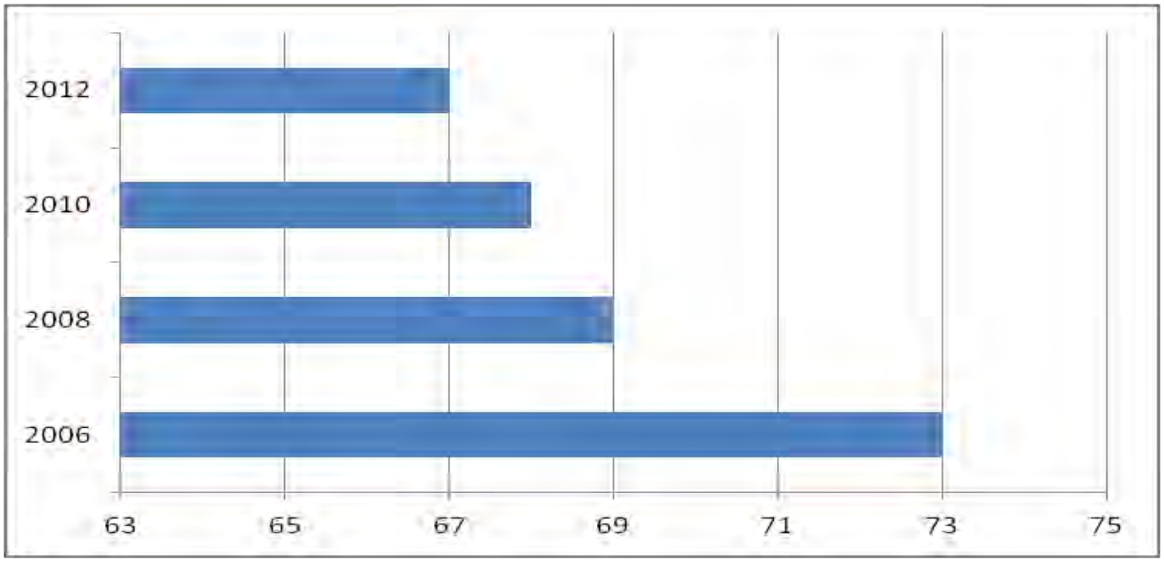


Figure 8. Percentage of stream miles supporting or not supporting secondary contact recreation by river basin, 2012[1].



[1]No miles were monitored the Little Sandy River, Tennessee River or Tygarts Creek basins.

Figure 9. Statewide percentage of assessed stream miles supporting secondary contact recreation use.



Fish Consumption Use Support – Streams

Statewide

This use is not a designated use in Kentucky, but it is implied as one in water quality standards (401 KAR 10:031 Section 2). Like contact recreation uses, this use is based on criteria to protect human health. Fish tissue is analyzed for possible residue of contaminants; the two of primary concern are methylmercury and polychlorinated biphenyl (PCB) chemicals. There have been 1,140 stream miles assessed for fish consumption with 695 stream miles (61 percent) fully supporting and 447 miles not supporting (39 percent). This is a decrease in supporting stream miles since the 2010 IR of one percent and four percent since the 2008 IR; however, current support has increased by 10 percent compared to the 2006 IR (Figure 10).

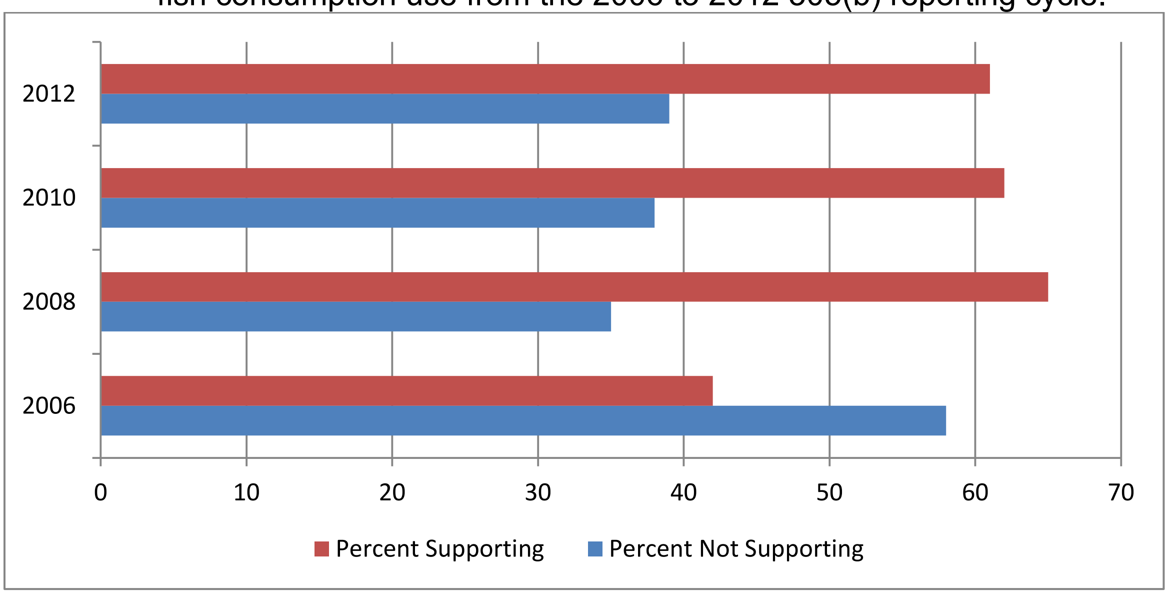
There is a statewide fish consumption advisory that differs from fish consumption assessed to determine whether this implied use is supporting or not based on monitored data. The latter is based on waterbody specific monitoring and comparing the fish tissue body burden results for specific pollutants (e.g. mercury, PCB, chlordane) to our water quality standards that apply. The advisory is a precautionary alert for those sensitive populations (children six years and younger and women of childbearing age) to consider limiting their consumption of fish to no more than one meal (a meal is considered eight ounces) per week. This advisory was issued on April 11, 2000 because of low levels of mercury found in fish tissue statewide.

Domestic Water Supply Use – Streams

Statewide

Six hundred ninety stream miles are assessed for this designated use and all stream miles where this use applies is fully supporting domestic (drinking) water supply use. This level of support is the same per the 2006, 2008 and 2010 IRs.

Figure 10. Percentage of assessed stream miles supporting and not supporting fish consumption use from the 2006 to 2012 305(b) reporting cycle.



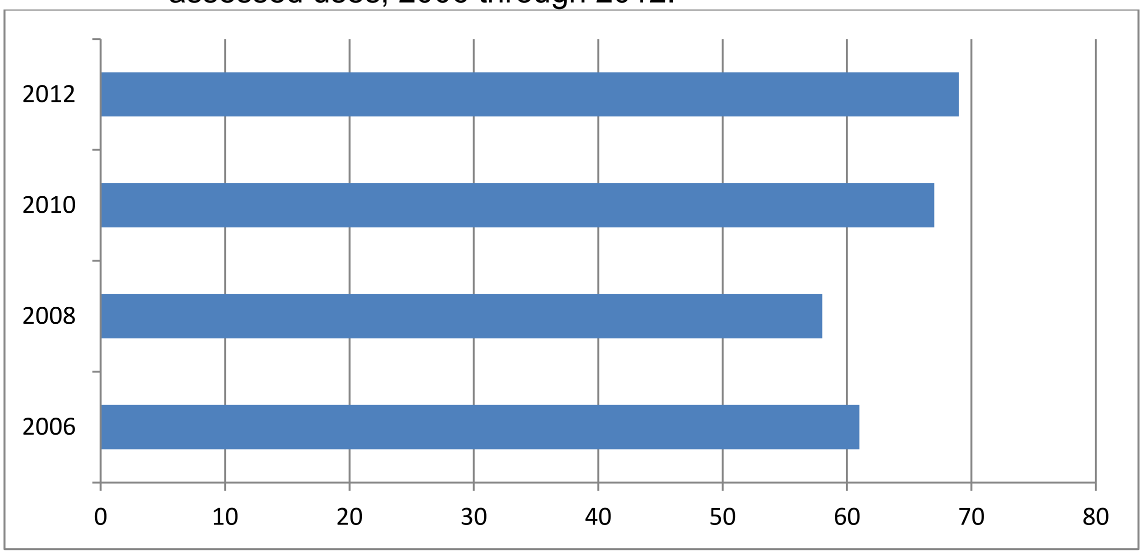
Lakes and Reservoirs Fully Supporting All Assessed Designated Uses

Statewide

The lakes program was implemented in 1987 at publically owned and accessible reservoirs. The purpose was to assess the designated uses of aquatic life, secondary contact recreation and drinking water; monitoring now often extends to collect data for fish consumption and primary contact recreation.

An element of 305(b) reporting is the requirement to determine trends of trophic state on the state's publically owned reservoirs. Current assessment results show 69 percent of all lakes monitored (127) support all assessed designated uses. This compares to 67 percent in 2010, 58 percent in 2008 and 61 percent in 2006 (Figure 11). The five leading causes (pollutants) identified in these waterbodies resulting in not supporting designated uses are shown by acreage in Figure 12.

Figure 11. Percent of monitored and assessed lakes that fully support all assessed uses, 2006 through 2012.

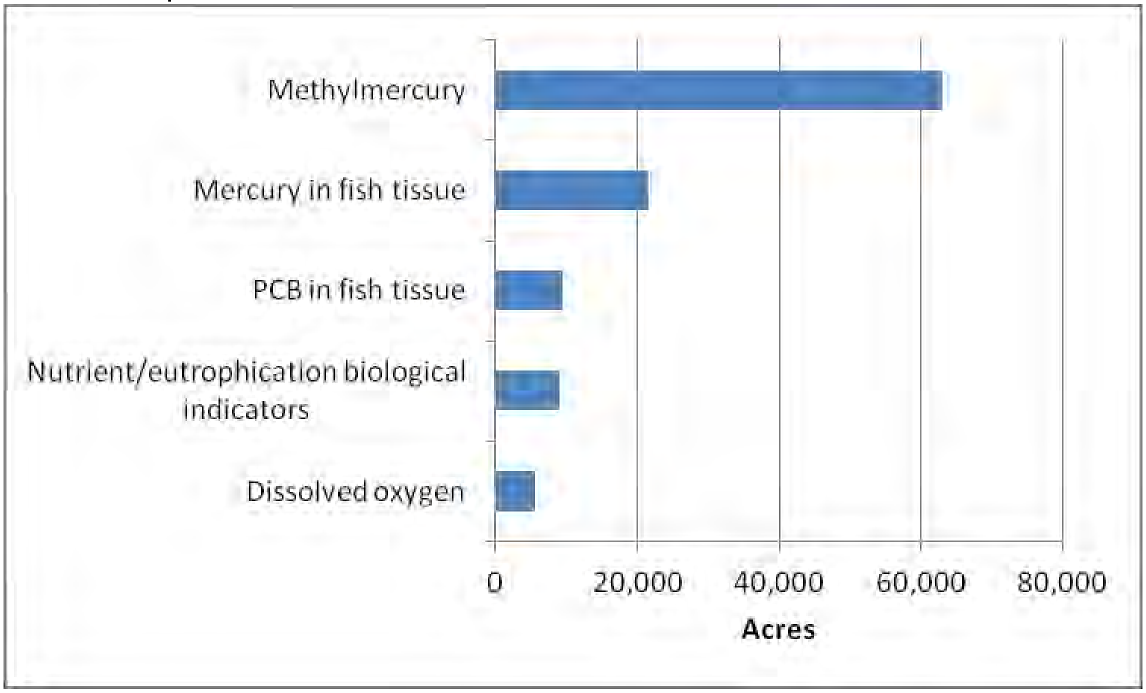


Aquatic Habitat Designated Use – Lakes and Reservoirs

Statewide

There are 222,076 surfacewater-acres that are publicly accessible statewide, a prerequisite for this monitoring program. Of those acres 99 percent (220,033 acres) have been assessed. Currently, 211,312 out of 220,033 acres assessed fully support this designated use. This is a 96 percent support level, and has remained relatively constant since the 2006 IR (Figure 13).

Figure 12. Five leading causes (pollutants) identified by as affecting lakes, ponds and reservoirs, 2012.



Primary Contact Recreation – Lakes and Reservoirs

Statewide

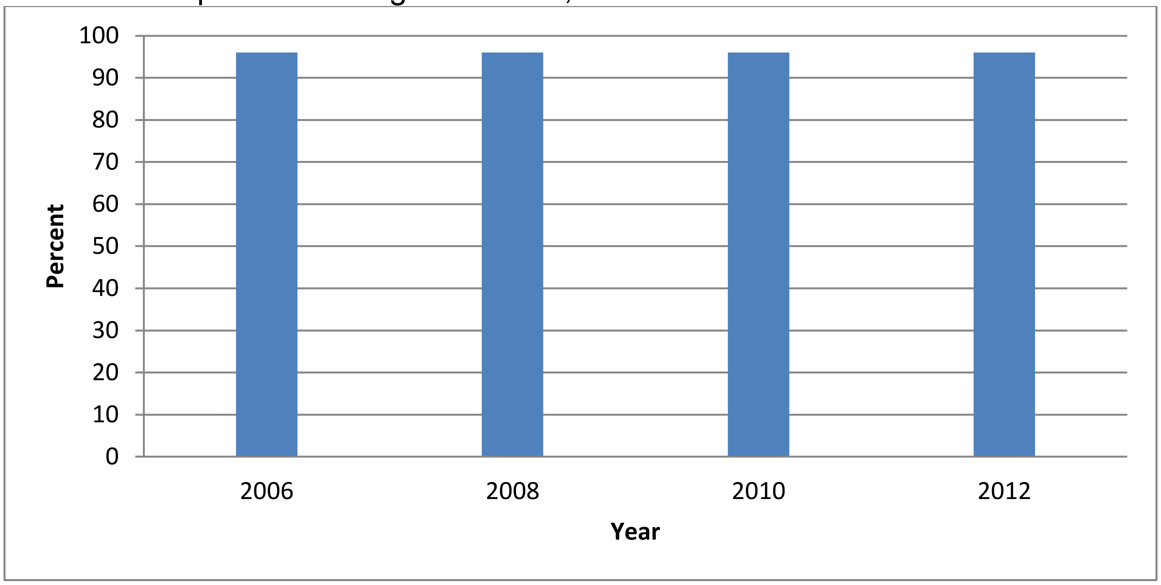
This designated use support is based on bacteria (*Escherichia coli*) and pH criteria for support determination. There are relatively few surface acres assessed out of the 219,557 acres designated. Of those monitored and assessed, 61,930 acres (100 percent) support. This compares to 99.7 percent in 2010, 100 percent in 2008 and 100 percent in 2006 (Figure 14).

Secondary Contact Recreation – Lakes and Reservoirs

Statewide

Secondary contact recreation criteria are developed to protect people from incidental contact with water, such as boating, fishing or wading, i.e. less than full body immersion. The methodology of assessing this designated use support is provided in Chapter 3.2. This reporting cycle includes 215,749 surfacewater-acres assessed with nearly 99 percent (212,969 acres) of those acres supporting

Figure 13. Percentage of reservoir and lake surface acres fully supporting aquatic life designated uses, 2006 – 2012.



this use. In comparison to the three previous 305(b) reporting cycles, this is an increased percentage of designated use support over the span of 2006 to present (Figure 15). It should be noted there were only 23,441 acres monitored and assessed in the 2006 IR; this number increased substantially in the 2008 IR, reaching 213,814 acres assessed.

Fish Consumption Use – Lakes and Reservoirs

Statewide

Fish consumption is not a designated use in Kentucky water quality standards, but the use is implied in 401 KAR 10:031 Section 2 and through human health criteria in Section 6. There were 205,452 surfacewater-acres assessed in the current IR, with 121,113 surfacewater-acres (59 percent) supporting that use. Lake Cumberland, with 50,250 surface acres, does not support fish consumption due to mercury in fish tissue. This one major reservoir not supporting fish consumption is 60 percent of the total acres (84,339) not supporting. Percentage of monitored acreage of reservoir and lake surface water that fully support this implied use has remained relatively constant, although it

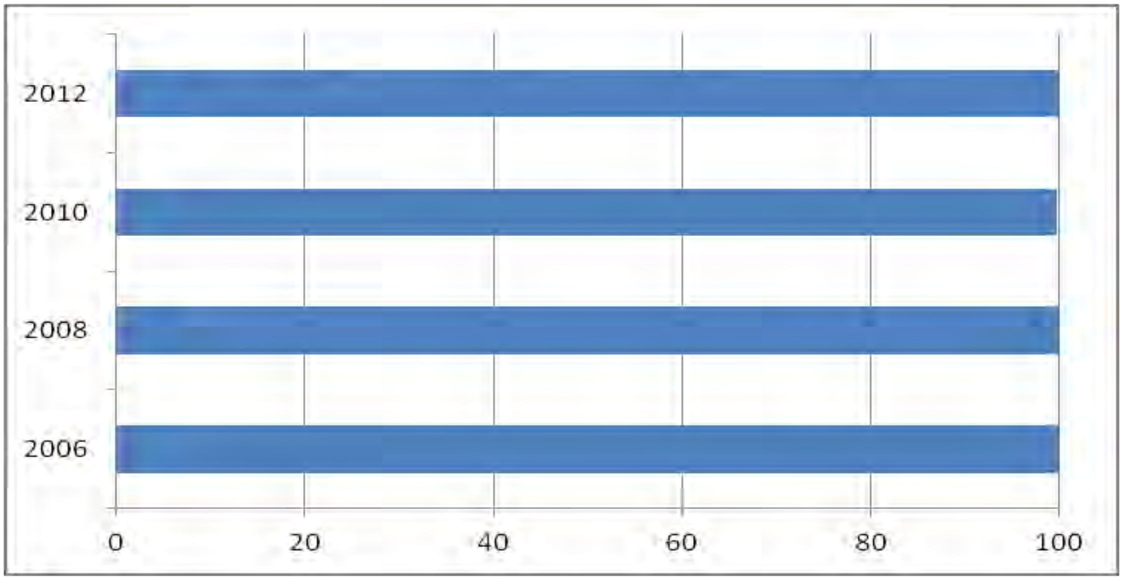


Figure 14. Percentage of reservoir surface acres that fully support primary contact recreation use, 2006 through 2012.

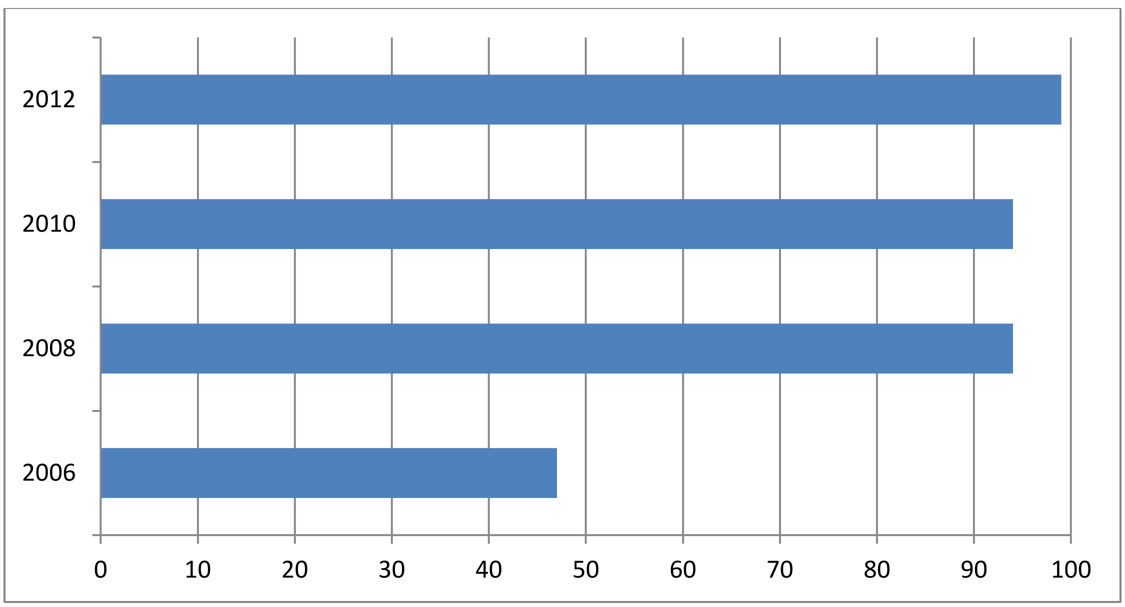
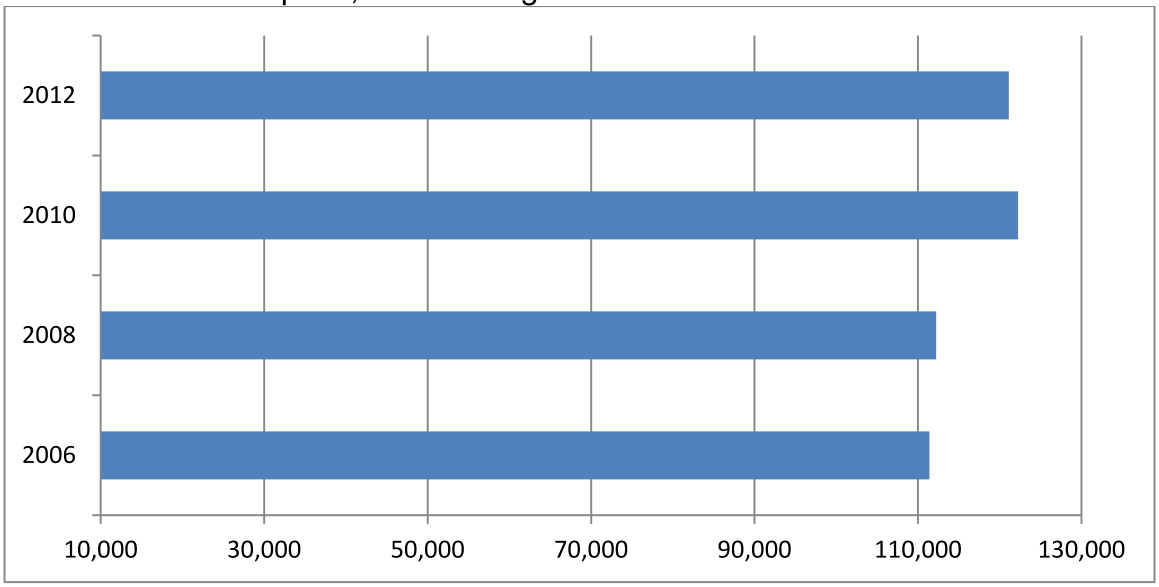


Figure 15. Percentage of assessed reservoir and lake surfacewater-acres that fully support secondary contact recreation designated use.

has increased by four percent as seen in the 2010 IR, and remained stable in the current report (Figure 16).

Figure 16. Number of reservoir and lake surfacewater-acres that support fish consumption, 2006 through 2012.



Domestic Water Supply – Lakes and Reservoirs

Statewide

There are 181,850 surfacewater-acres assessed for this designated use. Of those acres, 181,264 acres (>99 percent) fully support the use, with 586 acres not supporting the use. All waterbodies not meeting this use is due to nutrient enrichment resulting in taste and odor concerns.

II. Section 303(d), Volume II

Volume II of the IR addresses the section of the Clean Water Act requiring states to submit a list of waters impaired for any designated use. Specifically, the 303(d) list is a subset of the 305(b) list of assessed waters; those requiring a TMDL (total maximum daily load) be developed for each pollutant that exceeds the water quality standard. The TMDL is a calculation of the total amount of a pollutant a waterbody can assimilate while meeting applicable designated uses (warmwater and coldwater aquatic habitat; primary and secondary contact recreation; domestic water supply; outstanding state resource water; and fish consumption [an implied use]). For the 2012 IR cycle there are 2,459 pollutant-waterbody combinations (PWC). Currently, 57 TMDLs are scheduled for completion during federal fiscal year (FFY) 2012 and 50 in FFY 2013. There are 775 pollutant-waterbody combinations presently under development. At the time of writing this report, EPA has approved 314 PWCs. Based on current monitored data the KDOW is requesting 76 PWC be delisted given current results. If EPA denies any of these requests the waterbodies and associated pollutants will be maintained on the 303(d) list requiring development of a TMDL. Figure 17 indicates the various stages of the TMDL process (including requested delistings) statewide for Kentucky.

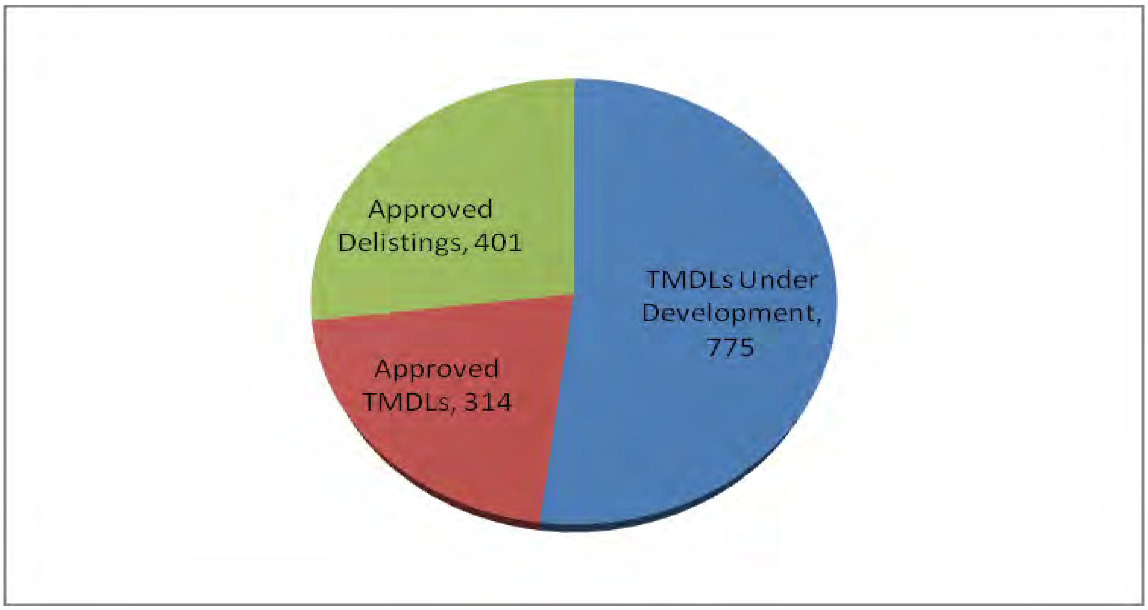


Figure 17. Status of the TMDL process in Kentucky through the 2010 Integrated Report cycle.

Chapter 1. Introduction

The 2012 Integrated Report (IR) was prepared by the Kentucky Division of Water (KDOW), Department for Environmental Protection (DEP), for submittal to the U.S. Environmental Protection Agency (EPA) to fulfill requirements of sections 303(d), 305(b) and 314 of the Federal Water Pollution Control (or Clean Water) Act of 1972 (P.L. 92-500), as subsequently amended. Section 305(b) of the Act requires states to assess and report current water quality conditions to EPA every two years.

In 2006 an IR was released for the first time by the Commonwealth. It was produced in two volumes, and this procedure has followed since. Volume 1 reports the 305(b) assessment methods, processes, overview of the Commonwealth's water resources, monitoring programs, statistical findings, georeferencing of monitored waters and assessment results, including a comprehensive table listing all waters or segments assessed by designated use, the causes (pollutants or pollution) for impairment and probable sources. Volume 2 of the IR lists those waters and segments that were not fully supporting one or more designated uses (DU), based on monitored data, and require a TMDL (total maximum daily load) calculation for those pollutants causing the impairments. By integrating the two reports users, of the information in the first IR (2006) found this comprehensive reporting medium of greater utility by having all relevant information together in two volumes. The use of assessment categories to assign assessed stream segments and lakes or reservoirs provides an accurate and convenient method for the Commonwealth to track the miles (or acres) of assessed and non-assessed uses, while also tracking those impaired waters from the time of 303(d) listing through the TMDL process and post-implementation.

KDOW utilized the assessment database (ADB) to store designated use assessments and aid in producing the various tables and compilation of statistics that were presented in this report. The current report was based on assessment data stored in ADB version 2.2; this database had been modified to function per the particular needs of KDOW. As with previous IRs (305[b] reports), ADB provides assessment information of waterbodies and segments that include geographic information (latitude – longitude) used to georeference those assessments. This proved to be a reliable mechanism to produce the reach-indexed (geospatial) maps.

The KDOW operates its primary monitoring programs under a five-year rotating watershed management approach implemented in 1998. This IR represents monitoring efforts from the third cycle of the BMU (basin management unit) monitoring strategy; the Salt River – Licking River and the Upper Cumberland – 4-Rivers BMUs were of primary focus in this 2012 IR; these BMUs were monitored beginning in April 2009 – March 2010 and April 2010 – March 2011, respectively. This report also incorporated 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. Monitoring of the Ohio River mainstem is primarily accomplished by the Ohio River Valley Water Sanitation Commission (ORSANCO). Assessment of the river is reported in ORSANCO's 2012 305(b) Report; segments not supporting any assessed designated use are listed in Volume 2 of the Kentucky IR.

The 2012 303(d) list contains 6,274.53 miles and 2,459 pollutant-waterbody combinations. This monitoring cycle was years two and three of the five-year BMU cycle. Much of the monitoring activities focused on TMDL-associated watersheds to identify the extent, concentrations and track sources of pollutants of concern necessary for TMDL calculation. To maintain overall awareness of aquatic life support conditions, and compare results over time, KDOW conducted a probabilistic designed biosurvey of the Salt River – Licking River and Upper Cumberland – 4-Rivers BMUs. This biosurvey provides information on aquatic life use support projected as a percent of total stream miles (wadeable streams defined as 1^{st} – 5^{th} Strahler order) in the BMU. A comparison of those results can then be made to the previous probabilistic biosurvey for each of these BMUs.

Not all impaired waters were listed in the 303(d) report. For example, evaluated data from discharge monitoring reports (DMRs) were not on the 303(d) list because permit compliance should result in protection of the designated uses; also, the DMR data were not instream data, but from samples collected at the outfall.

Chapter 2. Background

2.1 Atlas of Kentucky's Water Resources and Profile of Select Demographic and Physiographic Statistics Atlas of Kentucky

State population, 2010[1] 4,339,367

Surface area (square miles) 40,409
Number of counties 120

Number of major physiographic regions 5
Number of level III ecoregions 7
Number of level IV ecoregions 25

Number of major basins 12
Number of USGS[2] 8-digit HUCs[3] 42
Number of stream miles (1:24,000 NHD[4]) 90,961
Number of stream-formed border miles (Big Sandy River, Levisa Fork, Mississippi River and Ohio River) 983
Number of publicly owned lake and reservoir surface acres (estimated) 229,500
Three largest reservoirs by surface acres
Kentucky Lake (Kentucky portion) 57,103
Cumberland Lake 47,623
Barkley Lake (Kentucky portion) 42,780

Wetland acres (approximation)[5] 324,000

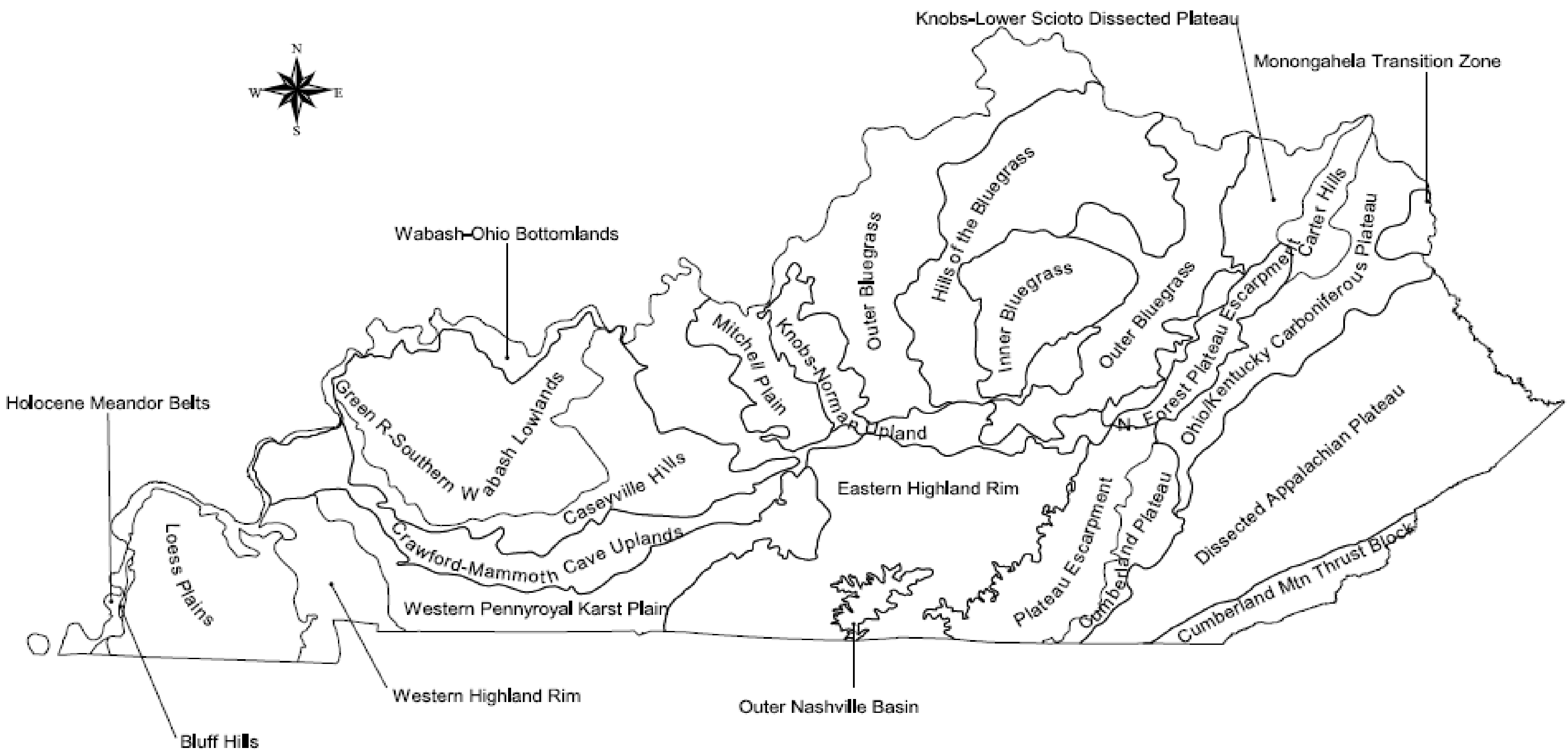
[1]US Census Bureau
[2]United States Geological Survey
[3]Hydrolgic unit code
[4]National hydrography dataset
[5]*The state of Kentucky's environment: 1994 status report*. The Kentucky Environmental Commission, 1995.

The physiography of Kentucky provides a landscape of 25-Level IV Ecoregions (Figure 2.1-1) that are diverse geologically and physically and provide a variety of microclimates that are important in forming and supporting diverse plant and aquatic communities. This rich aquatic biodiversity is a result of an environment that provided long and stable conditions. However, sediments and rocks were transported into northern Kentucky along the Ohio River by meltwaters from glacial ice that covered much of eastern America north of the Ohio River during the Quaternary (Pleistocene Epoch) (http://www.uky.edu/KGS/geoky/quaternary.htm) (accessed October 17, 2013) . While the state has many miles of streams and rivers, natural lakes are uncommon and are found along the Lower Ohio and Mississippi rivers in the Jackson Purchase (region west of the Tennessee River [Reservoir]); most of these lakes were formed by oxbows or shallow depression basins. Many of the major rivers in the Commonwealth have been dammed for flood control and secondarily to provide generation of electricity. This change has altered the natural aquatic communities of these systems while providing drinking water supplies, tourism and recreational opportunities. While only a portion of wetlands exist from what was estimated to have occurred historically (1.5 million acres), loss of wetland acreage has slowed with federal and state regulations and disincentives in place for altering wetlands (The Kentucky Environmental Commission, 1995). By river basin, the Green River has the largest proportion of remaining wetland acres, approximately 88,000. As indicated by the number of caves in Kentucky, there are significant karst areas in the state, but the largest karst landscape exists in the Green River basin, which includes Mammoth Cave. These areas of karst present special concerns for water quality protection because groundwater flows may be unknown and difficult to monitor due to limited access.

2.2 Programmatic

In order to better characterize the waters of the state and better coordinate resources toward addressing problems, Kentucky adopted a Watershed Management Framework in 1997. The purpose of this management framework

Figure 2.1-1. Level IV Ecoregions of Kentucky.



is to use programs, people, information, and funds as efficiently as possible to protect, maintain, and restore water and land resources. This approach provides a framework within which participating individuals and institutions can link and support mutually complimentary project and monitoring goals for watershed management.

Coordinated, multi-agency watershed monitoring was initiated in 1998 in the Kentucky River basin, and monitoring for the first five-year watershed cycle was completed in 2002. The first five-year cycle of monitoring focused on obtaining a snapshot of conditions of Kentucky's waters, especially wadeable streams. Most local, state, and federal agencies in Kentucky with monitoring responsibilities cooperated in the watershed monitoring effort. Some agencies simply provided their data and carried out monitoring as usual; others revised their sampling programs and sampling methods for better fit with the watershed monitoring plan.

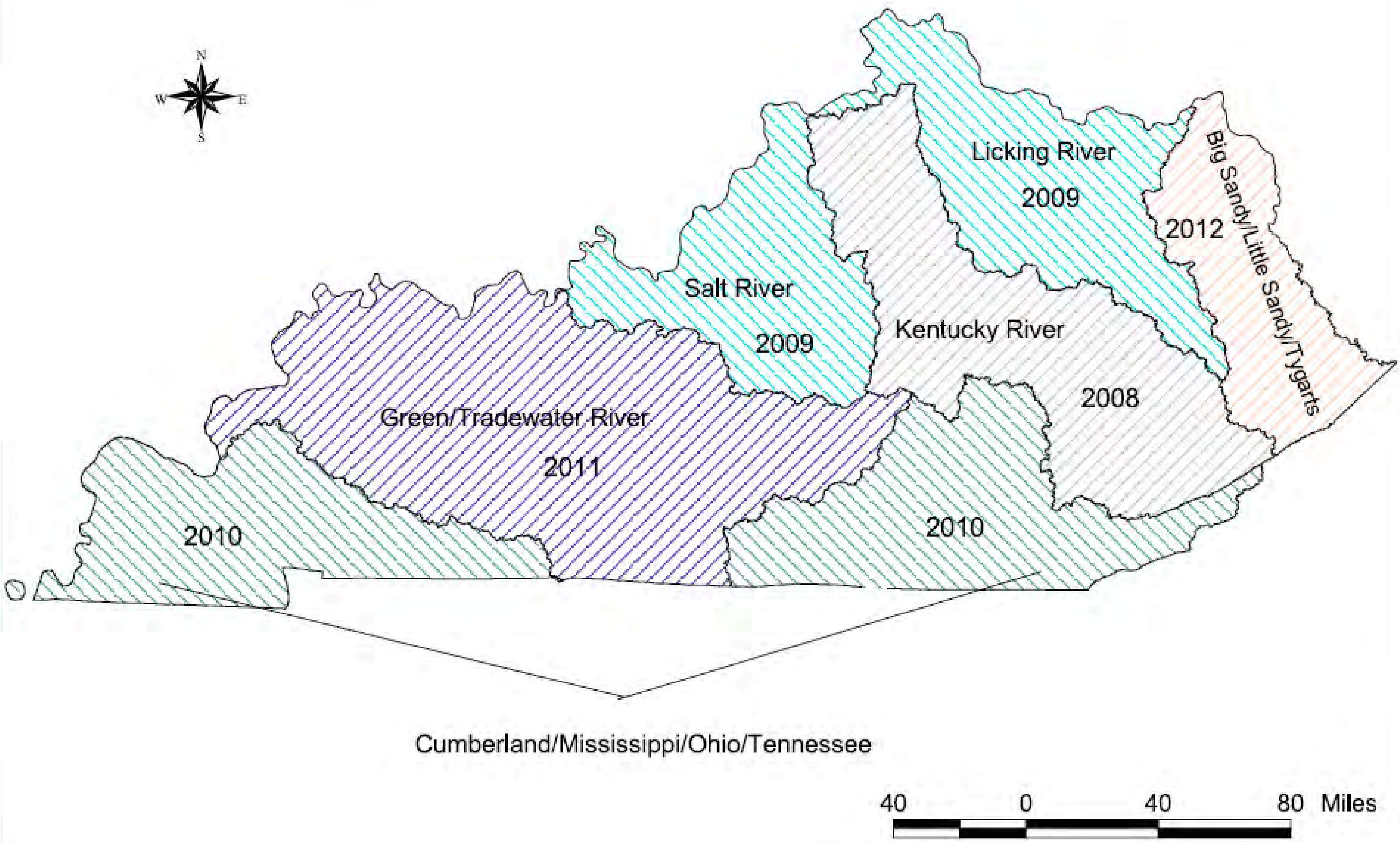
The same general monitoring goals were implemented from the first monitoring cycle for the second five-year cycle. The general BMU monitoring strategy to characterize and track watershed health was continued through implementation of fundamental monitoring programs. These programs consist of the ambient monitoring of physicochemical water quality properties through a network of permanent stations that have the design and monitoring requirements necessary for statistical trends analysis, probabilistic biosurvey in wadeable streams that provide data for statistical analysis of the aquatic life use support in each BMU, and targeted biological and physicochemical monitoring program on a subset of reference reach streams.

During this third cycle, the TMDL Section continued intensive monitoring of select watersheds as TMDL development increased. Monitoring for TMDL development has focused on pathogens for primary and secondary contact recreation, pH often associated with mined lands, metals and recently nutrient (commonly nitrogen and phosphorus) impaired watersheds.

Monitoring aspects started in the second BMU cycle began a concerted effort to monitor specific bioregions or ecoregions so analyses for the development of numeric nutrient criteria could begin. The preferred basis for numeric nutrient criteria will be based on biological response thresholds from nutrients and at a concentration to prevent aquatic life use impairment. Existing fish, macroinvertebrate and diatom community data from intensive bioregion monitoring between 1999 and 2007 were analyzed to identify possible nutrient thresholds to total nitrogen (TN) and total phosphorus (TP) where there was clear change in biological integrity or community structure. These analyses were used to identify regions with good or poor relationships, recognize potential confounding factors and prioritize further data collection needs. Data from the KDOW's reference reach waterbodies were teased from the composite of all data to estimate nutrient concentrations from the least impacted, biologically diverse aquatic habitats in each bioregion, and certain ecoregions (Figure 2.1-1). Biological responses to varying nutrient concentrations were studied closely in the Crawford-Mammoth Cave Uplands Ecoregion. A report on this study describing the analysis of nutrient breakpoints associated with a recognized macroinvertebrate community response was published by USGS and can be accessed at http://pubs.usgs.gov/sir/2010/5164 (accessed July 17, 2012). Hydrological effects on water quality samples, specifically a suite of nutrient constituents, were characterized from a subset of reference reach streams across the range of ecoregions and watershed sizes under high flow (runoff conditions) and low flow conditions.

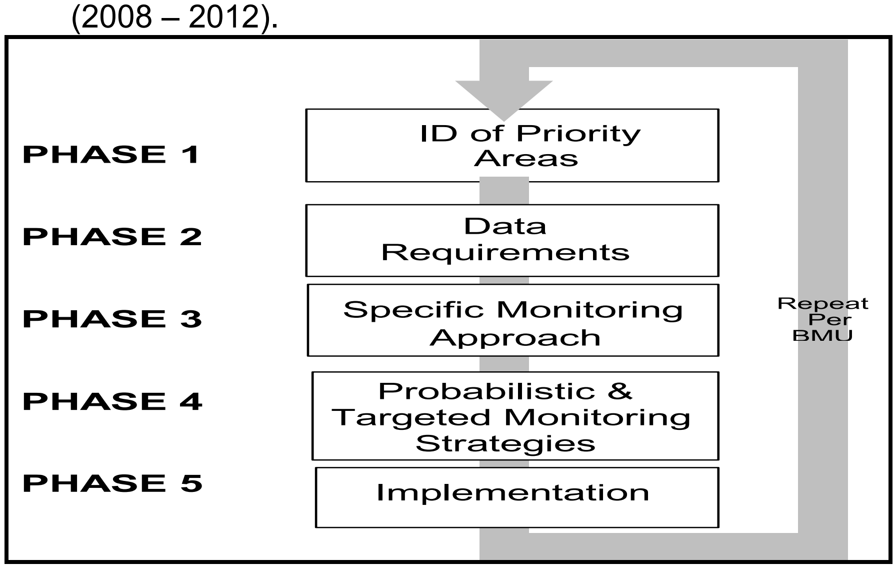
According to the adopted framework, the state is divided into five BMUs (Figure 2.2-1) for the purposes of focusing management activities spatially and temporally. Activities within each of the five units follow a five-year cycle so efforts can better be focused within a basin. Phases in the current cycle include: 1) identification of priority areas (waterbodies or watersheds); 2) data requirements for each specific study or project; 3) implement specific monitoring approach for those identified studies or projects; 4) use of both probabilistic and targeted monitoring strategies as suited; and 5) implement data requirements, monitoring strategy/s and action through appropriate methodologies and programs (Figure 2.2-2). State and federal agency partners participate in the

Figure 2.2-1. Kentucky basin management units and monitoring years of the third five-year cycle.



process that provides a collaborative mechanism for information exchange between interested parties engaged in an active role in management of natural resources. Examples of how other agencies have gotten involved in the monitoring and assessment process include the Kentucky Department of Fish and Wildlife that monitor streams in a given BMU using the KDOW's fish biosurvey protocols. This has resulted in many stream assessments that would not have been possible without this additional resource. It has worked well for both agencies providing a better understanding of stream health and conditions to both agencies while increasing the number of stream miles the Commonwealth has monitored and can report. The U.S. Forest Service has cooperated through the use of both targeted and probabilistic biosurvey programs on the Daniel Boone National Forest following the protocols of the KDOW. With budget and personnel reductions over the last several years the USACE (United States Army Corps of Engineers) and KDOW have shared resources (staff and laboratory capacity) to accomplish mutual need of continued reservoir monitoring. The KDOW has over 25 years of historic data on many publicly owned reservoirs.

Figure 2.2-2. Phases of the third cycle of the basin management unit approach (2008 – 2012).



Each BMU will follow the rotation of the third cycle of the watershed management framework according to the schedule below. The following is the cycle beginning with planning phase-year with the monitoring and assessment in years two and three, respectively. Monitoring activities begin in April and end in March the following year.

- April 2007 – March 2009 – Kentucky River basin
- April 2008 – March 2010 – Salt River and Licking River basins
- April 2009 – March 2011 – upper Cumberland River and 4-Rivers (lower Cumberland, Ohio, Mississippi and Tennessee rivers) basins
- April 2010 – March 2012 – Green River and Tradewater River basins
- April 2011 – March 2013 – Big Sandy River, Little Sandy River and Tygarts Creek basins

Benefits of this approach include:

- Planning and determination of monitoring strategy developed on a watershed approach for TMDL-specific monitoring;
- Increased coordination of resource management activities focused on identified priorities in each basin;
- Greater ability to stretch limited dollars for implementation activities through partnering and coordination of efforts; spin-off benefit of the initial BMU cycle approach;
- Collaboration of state and federal agencies effectively increasing manpower, expertise and environmental disciplines;
- Additional data as monitoring efforts are coordinated – approximately a four-fold increase in assessment data has been realized since the inception of the watershed approach in 1998; and
- Increase in quality assurance of data as agencies standardize methods and procedures.

The 2004 305(b) Report represented the completion of the first monitoring and assessment cycle of the five BMU management framework. Whereas the purpose of monitoring in the first watershed cycle was to obtain baseline data statewide, monitoring in the second cycle (begun in 2003) focused on impaired watersheds. The focus in the third cycle is on impaired watersheds, but special data needs will also drive this cycle. For example, special studies to derive data in the effort to develop numeric nutrient criteria for wadeable streams and reservoirs continue in the third cycle. Continued, ambient monitoring will be maintained at long-term stream, lake and reservoir stations, probabilistic biosurveys, and on a subset of reference reach streams to monitor the current physicochemical and biological condition of those watersheds.

2.2.1 Overview of Programs Related to Monitoring and Assessment

The Division of Water has the primary responsibility of monitoring and assessing the Commonwealth's water resources, and overseeing the permitting of facilities and industries that discharge point sources to waters through Kentucky Pollutant Discharge Elimination System (KPDES).

To monitor the designated uses of Kentucky's waters and monitor the effectiveness of various control programs, such as KPDES, the KDOW has a number of monitoring programs to monitor biological and water quality indicators for 305(b) and 303(d) purposes. Table 2.2.1-1 highlights the monitoring programs and the indicators associated with each. A more comprehensive discussion of surface water quality monitoring programs follows in Chapter 3.

For those waters requiring a TMDL pollutant reduction, the division's TMDL program manages this process by coordinating the monitoring and development of those discharge or load reductions necessary to bring the impaired designated use (DU) into full support. The primary source of pollutants affecting the Commonwealth's waters emanate from nonpoint sources (NPS). The fact that sedimentation became the leading pollutant in the 2004 305(b) cycle was a direct reflection on NPS pollution being the most significant source of degradation to the state's waters. This trend follows nationwide.

Table 2.2.1-1. Waterbody resources and monitoring programs.

	Long-term Surface Water[a]	Rotating Surface Water[a]	Targeted Biological Monitoring[b, c]	Reference Reach[b]	Probabilistic Biosurvey[d]	Lake Monitoring[e]	Ground-water & Springs Monitoring[a]
Wadeable Streams (1st-5th order)		X	X	X	X		
Large (boatable) Rivers	X	X	X				
Lakes/Reservoirs						X	
Groundwater							X
Swamps/Wetlands[f]	--	--	--	--	--	--	--

[a]Indicators: physicochemical and pathogen indicator.
[b]Indicators: macroinvertebrates, fish, algae, physicochemical, habitat.
[c]Includes some 6th order streams where wadeable and associated with ambient water quality stations.
[d]Indicators: macroinvertebrates, physicochemical, habitat.
[e]Indicators: physicochemical, fish kills, macrophytes, algae.
[f]Monitoring methodology under development.

The primary objectives of the ambient monitoring program were to establish current conditions and long-term records and trends for water quality, biological health, and fish tissue residue in the state's major watersheds. Sub-objectives were identified as determining: 1) the quality of water in outstanding resource waters; 2) background or baseline water quality conditions in streams not impacted by discharges; 3) the extent to which point and nonpoint sources affect trophic state of lakes and reservoirs; and 4) the impact of acid precipitation on water quality of lakes and reservoirs. There are 72 primary water quality stations throughout the Commonwealth that are monitored on a monthly or bimonthly frequency. Primary water quality stations are monitored monthly during a given BMU water-year, and those stations outside of the current water-year BMU are monitored bimonthly. These stations are located at mid- and lower watershed reaches of 8-digit HUC basins. Station location also occurs near the inflow and outflow of major reservoirs, for example Green River Reservoir in the Green River basin. Implemented with the rotating basin management approach were the rotating watershed stations. These stations are monitored for the same suite of water quality parameters as the primary stations, but are established to provide monitored data in smaller watersheds for a variety of reasons. Those primary considerations for watershed monitoring are: 1) TMDL development; 2) characterize water quality in reference watersheds; 3) monitor waters that receive permitted discharge (for instance a municipal wastewater treatment plant) to characterize upstream and downstream water quality; and 4) characterize water quality conditions in certain landscapes, such as agricultural or resource extraction (mining) areas.

KDOW's biological monitoring program has a long history in aquatic resource monitoring to determining the health and long-term water quality of stream and river resources. In addition to conducting biological community surveys, water quality variables are included in the monitoring program. Biological monitoring was implemented in the 1970s with significant refinement of the program as more research led to the development of biological multimetric indices (for more information go to http://water.ky.gov/Pages/SurfaceWaterSOP.aspx) (accessed July 25, 2012). A portion of KDOW's biological monitoring emphasis was shifted to development of those metrics and associated criteria through a reference reach approach. This was implemented in the 1990s based on an ecoregional approach to determine reference conditions in each basin. These waters do not represent pristine conditions rather they represent the best examples of high quality water and biological integrity in each of the four identified bioregions. Through this effort a network of streams, or stream reaches that represent reference biological conditions, have been identified throughout the Commonwealth. These stream reaches are listed in water quality standards, 401 KAR 10:030 and can be accessed at: http://www.lrc.ky.gov/kar/401/010/030.htm (accessed July 25, 2012). One to three biological communities (macroinvertebrates, fishes, or algae) were sampled per biosurvey. When one community only was used to make an aquatic life use support determination, either macroinvertebrates or fishes were monitored, typically the former.

A random biosurvey effort was initiated with the help of EPA's technical support group in Corvallis, Oregon. Kentucky's approach was to sample macroinvertebrates once at 50 sites in each BMU. In 2004 nutrients and additional chemical water quality variables were added to the suite of indicators used by this program. These additional data were added to aid in the development of numeric nutrient criteria, gain a more comprehensive knowledge of what ambient water quality variable values were in each BMU, and increase the confidence of each aquatic life use assessment. This program allows KDOW to report on aquatic life use support in wadeable streams on a BMU and statewide scale over the five year watershed cycle. Section 305(b) use support determinations made through the probabilistic biosurvey program were made only on segments directly monitored, whereas extrapolated use support over a given BMU was used for informational purposes, resource conditions and planning purposes only. This program was important both on the statewide level as well as national level, as indicated by EPA's nationwide probabilistic monitoring efforts in wadeable streams, lakes and reservoirs, large rivers and a planned survey of wetlands.

The lake and reservoir monitoring program began in the early 1980s as part of the Clean Lakes monitoring initiative. Currently KDOW monitors all significant publicly- owned lakes and reservoirs in the state (approximately 105 waterbodies). Many of the U.S. Army Corps of Engineers (USACE) reservoirs and Kentucky Lake, a Tennessee Valley Authority (TVA) project, were typically monitored by those respective agencies, and KDOW, meeting each agency's data requirements. The working relationship between KDOW and USACE Louisville and Nashville districts has proved to be a good cooperative effort that is beneficial to both parties by increasing available resources (e.g. USACE may provide the field work and KDOW, in coordination with Division of Environmental Program Support [DEPS] provides chemical analyses).

Physicochemical water quality variables and chlorophyll *a* were analyzed to determine current Trophic State status of these waterbodies. Monitoring occurs three times during the growing season (spring, summer and fall) to capture the seasonal variability and is reflected in an overall trophic state status of the resource. By monitoring these resources every five years trends in water quality can be measured. This monitoring program collects data sufficient to determine aquatic life, secondary contact recreation and drinking water supply DUs. The majority of these resources are posted by Kentucky Fish and Wildlife

Department as “no swimming” waterbodies, precluding applicability of PCR monitoring.

2.3 Costs Associated with Water Pollution

Putting a dollar figure on the costs associated with water pollution is difficult to determine. However, the costs associated with KPDES-permitted facilities, which are primarily comprised of industrial facilities, package wastewater treatment plants, and municipal wastewater treatment plants, are in the tens of millions of dollars considering construction, operating, maintenance, compliance, and administrative costs. Figures obtained from KDOW, Facilities Construction Branch, give some insight into the costs associated with treating household, business and industrial wastes (Table 2.3-1).

However, these costs are only a portion of the total costs to society. The increased cost of technology needed to treat potable water in areas of heavy siltation/sedimentation alone may result in loss of source water supply because the cost of treatment is prohibitive, while areas of organic industrial contamination may require expensive continuous carbon-based treatment. Medical and loss of productivity costs associated with various diseases that may result from waterborne pollution are not known. For example, consumption of fish flesh that has elevated levels of mercury carries increased reproductive

Table 2.3-1. Costs to taxpayers for municipal wastewater treatment facilities (planning, design and construction) for the control of pollution from houses, businesses and industries.

	Clean Water State Revolving Fund	EPA Special Appropriation Grants	American Recovery & Reinvestment Act
FFY 2011	22,552,800	0.00	0.00
FFY 2010	31,118,400	4,760,000	0.00
FFY 2009	10,377,720	3,347,000	49,878,100
Prior to FFY 2009	442,160,757 (first loan made in 1988)	54,160,002 (first grant awarded in 1998)	0
Total	$506,209,677	$62,267,002	$49,878,100

health risks for women of childbearing age and developmental health concerns for children. Fish contaminated with elevated levels of PCBs carry increased cancer risks to the general population. Pollutants affect commercial fisheries where restricted consumption, or loss of resources reduces the commercially available fish population; additionally, some members of society rely on subsistence fishing to supply a portion of their nutritional needs. Water pollution may also result in loss of revenue to governments and local businesses if recreation areas are unsafe for swimming or fishing. The shipping industry relies on barges to move many commodities around the nation, and the cost of maintaining shipping channels prone to fill due to excess sedimentation is an ongoing expense to both industries and governments.

2.4 Monitoring and Assessment Issues Facing the Commonwealth

The challenges facing the Commonwealth and nation during this time of continued economic downturn has resulted in little opportunity for expansion of monitoring programs. Through these challenges, the KDOW has maintained its core monitoring programs, and taken on special projects, especially related to development of draft numeric nutrient criteria. However, the overriding issue is sufficient personnel to conduct an all encompassing monitoring program that has the capacity to not only maintain core programs, but is capable of implementing pre- and post-monitoring studies associated with permitting programs. Requisite with the monitoring needs, there is a longstanding need for technical staff to fully manage the data. Data are almost always collected to address specific programmatic requirements or needs; however, data collected in conjunction with the programmatic requirements often could be explored in varying ways and associations that would result in data utilization and application to a wide-range of resource management objectives.

Pertaining to numeric nutrient criteria, KDOW assessed the data on-hand that was related to numeric nutrient criteria development in certain types of waterbodies. It was determined there existed more information associated with wadeable streams and the decision was made to focus on that waterbody type to begin nutrient criteria development. As data gaps and associations needed to tie water quality data to biological data in regions became apparent, a plan to move forward with studies to address those needs was developed. While a substantial amount of data have been collected, there continues regions where statistical analyses have not indicated definitive correlation between biological community structure and nutrient concentrations. The response of the biological community to increasing nutrient concentration is strongly desired in order to produce protective numeric nutrient criteria for the aquatic habitat.

In the interim of nutrient criteria development, the KDOW began addressing organic enrichment problems through applying a 1 mg/L total phosphorus discharge limit to those waters impaired by nutrients, along with increased nutrient sampling.

Nutrient criteria development for wadeable streams will be followed closely for lakes and reservoirs. Water column chemistry data are relatively complete and span approximately 25 years. Along with water column physical and chemical data, the suite of water quality constituents provide information necessary to characterize the trophic state of these waterbodies during the growing season; samples are collected spring, summer, and fall. The majority of reservoirs have remained stable according to the TSI (trophic state index), but there were trends of increased trophic level occurring in some waters.

Kentucky's wetlands are primarily bottomland hardwood systems that flood seasonally, corresponding to the winter and spring rainy season. Any excess nutrients will likely have a subtle impact on these environments since the supply of water comes from flooding rivers, and seasonal inundation. These bottomland hardwoods naturally do not hold standing surface water for a prolonged period of the year.

To date, there have been no recognizable geographic patterns in mercury levels in fish tissue in Kentucky. A potential strategy to aid in detecting a possible pattern may be moving toward a geographically large, random monitoring scheme. With many programs, less than one full time equivalent was charged with managing this program, including sample collections and tissue preparation. The state laboratory does not have the instrumentation or staff to perform methylmercury analysis in fish tissue. Therefore, the additional expense of contracting this analysis with a third party is necessary. Challenges within this monitoring program are undergoing address and it is anticipated instrumentation and personnel to run and maintain it will come to fruition this fiscal year.

States are now faced with the situation where they are asked to maintain a robust ambient monitoring program to characterize and track conditions of the state's waters (305[b] reporting) and at the same time collect data for TMDL development in hundreds of impaired waterbodies and segments, eventually tracking the success of implementation. Like most states, Kentucky's schedule requires hundreds (2480 as of the 2012 IR cycle) of TMDLs be developed. The 2002 303(d) list had 946 pollutant/water body combinations and those TMDLs are scheduled to be developed by 2015. Additional staff, lab resources, and especially contractual monies, must be obtained to accomplish this workload. KDOW is working to establish arrangements to fund TMDL planning, data collection, lab analysis, and development with internal, contractual, and interested third-party resources, including volunteer organizations.

Industrial and point source monitoring is important to the Commonwealth's assessment of the effectiveness of permitted facilities adhering to their permit limits, and if the permitted limits are appropriate and protective for the receiving waters. The primary target of this monitoring program would be to gage the biological integrity in these waters. This monitoring need may only be fulfilled with significant monetary and personnel resources; however, neither of these resources will likely become sufficient anytime soon. This permit biomonitoring program would help fulfill sections 301, 302, 303, 305, 306, 307, 308, 314 and 402 of the CWA. Milestones would be incremental, with resources initially directed to pre-permit biomonitoring. As resources increase biomonitoring would be implemented prior to permit renewals. The earliest implementation would be 2016 and, given the resources needed to undertake this objective, it is currently not viewed as realistic in this timeframe.

Chapter 3. Surface Water Monitoring and Assessment

3.1 Monitoring Program - General

Kentucky Division of Water has used NHD 1:24,000 scale maps for monitoring, planning, and assessment since 2004. As noted in Chapter 2, there are over 90,000 miles of streams in the Commonwealth at this resolution. Of particular interest in this 2012 IR are new 305(b) assessments of two BMUs, the Salt River – Licking River and Upper Cumberland – 4-Rivers. These BMUs were the focus of monitoring in water-years 2009 and 2010, respectively; a water-year is April through March. Table 3.1-1 provides population of stream miles for those two BMUs by river basin.

Table 3.1-1. Total stream miles (NHD 1:24,000 scale) of respective river basins in the Salt – Licking and Upper Cumberland – 4-Rivers BMUs.

Salt River - Licking River BMU	22,322
Salt River Basin	9,621
Licking River Basin (incl. minor Ohio River Tributary HUCs)	12,701
Upper Cumberland River - 4-Rivers BMU, including Ohio River minor tributaries	21,166
upper Cumberland River Basin	10,433
4-Rivers Basin (lower Cumberland, Mississippi, adjacent Ohio and Tennessee rivers)	10,733

In this reporting cycle, primary monitoring occurred in 21 of the state's 42 eight-digit HUCs (hydrologic unit codes) established by the U.S. Geological Survey (USGS). Table 3.1-2 provides data on the number and types of water-bodies assessed and stream segments per the monitoring program for water-years 2009 and 2010. In the Salt River – Licking River BMU, those data are from HUCs 05140101, 05140102, 05140103, 05140104, 05100101, 051002102, 05090201 and 05090203. Many of these assessments stemmed from intensive watershed monitoring in 2009 water-year, and data from 2005 – 2009 were considered for assessment at the primary long-term water quality stations and for domestic water supply use. However, some data more than five years old were considered valid this reporting period, particularly biological data.

Table 3.1-2. Numbers of streams, stream segments, lakes and reservoirs assessed in the Salt River – Licking River BMU and Upper Cumberland River – 4-Rivers BMU of focus during the 2009 and 2010 water-years.

BMU	Number of Streams	Number of Stream Segments	Number of Lakes	Number of Reservoirs	Number of Springs
Salt	138	193	0	16	4
Licking	212	286	0	12	0
BMU Total	350	479	0	28	4
Upper Cumberland	262	339	0	13	0
4-Rivers	196	287	4	9	0
BMU Total	458	626	4	22	0

The upper Cumberland River watershed is comprised of the following five HUCs: 05130101; 05130102; 05130103; 05130104; and 05130105. The 4-Rivers (lower Cumberland, Tennessee, Mississippi and Ohio) portion of the BMU is comprised of HUCs 05130205; 05130206; 0604005; 0604006; 08010100; 08010201; 08010202; and 05140206. Most monitoring of waters in this BMU occurred during the water-year 2010; however, data from 2006 - 2010 were considered for assessment decisions made at the primary long-term water quality stations and domestic water supply use. Additionally, data older than five years were considered valid for this reporting period, particularly biological data.

Springs were added to the KDOW's monitoring program during the 2008 305(b) cycle; additional springs were monitored in the Salt River – Licking River BMU and reported herein. These are significant resources in karstic regions of the state. Karst can be found in every basin of the Commonwealth, but is most common in south-central Kentucky in the Green River basin. Given the sensitivity of groundwater to land use, subsurface (losing) streams and associated surface waters in regions of porous limestone, monitoring significant springs was made a priority by the KDOW. This effort was undertaken by

KDOW's Groundwater Section following the Water Quality Branch's SOP used for surface water quality monitoring programs. The locations of those monitored springs are shown in Figure 3.1-1.

3.1.1 Ambient (Long-Term) Monitoring Network

Water Quality. Kentucky Division of Water's statewide ambient water quality monitoring network consists of 72 fixed stations (Table 3.1.1-1 and Figure 3.1.1-1). This network was expanded from 44 to 72 in 1998 following the watershed approach adopted by the Commonwealth in 1997. Primary ambient stations were located in the downstream and mid-unit reaches of USGS 8-digit HUCs, upstream of major reservoirs and in the downstream reaches of major tributaries. The Salt River – Licking River BMU had 15 ambient stations and the Upper Cumberland River – 4-Rivers BMU had 14 ambient water quality stations (Table 3.1.1-1). The ambient stations of a BMU were sampled monthly during the water-year the unit was in phase. During the intervening four water-years sampling frequency was reduced to bimonthly to devote more monitoring and laboratory resources to the rotating watershed water quality network (discussed later). Field measurements were taken for pH, dissolved oxygen, specific conductance and temperature; samples were analyzed for nutrients and metals; pesticides and herbicides were included if the streams drained predominantly agricultural or residential districts of urban areas. During the recreation season of May through October water quality samples were collected to determine if levels of pathogen-indicating bacteria reflect a concern for people who recreate in these waters. The purpose of the ambient water quality network was to assess long-term conditions and trends on rivers and the larger streams of the state.

Biology. Fish, macroinvertebrate and algae data from select ambient stations provide long-term information on the mainstem of rivers and many major tributaries. The ambient biological stations are located at sample points on streams where primary water quality samples are collected monthly or bi-monthly for physicochemical water quality variables. The monitoring of biological communities is discussed in detail in Section 3.1.4.

Figure 3.1-1. Monitored springs in the Salt River basin, 2009.

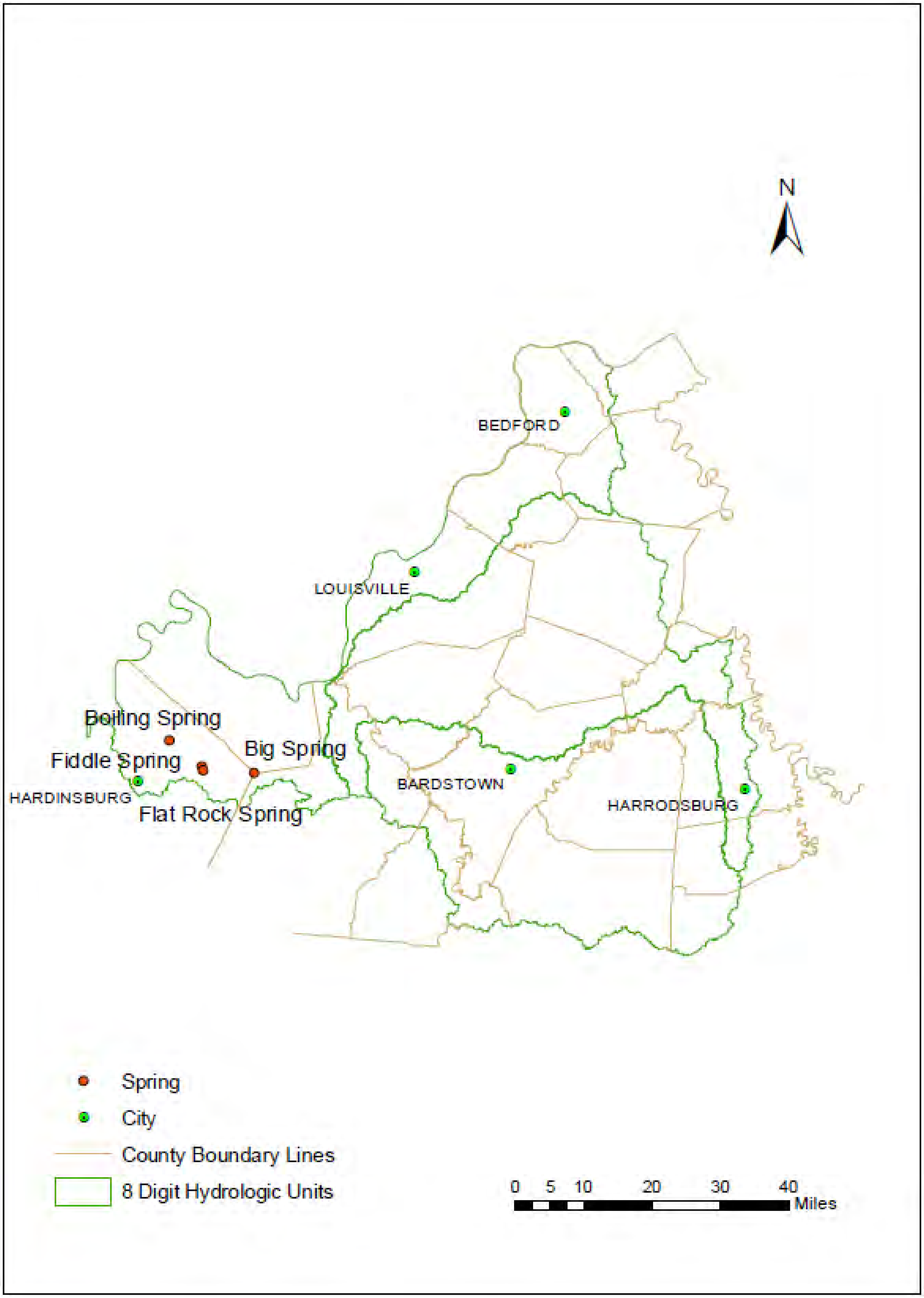


Table 3.1.1-1. Statewide primary water quality stations with the Salt – Licking and Upper Cumberland – 4-Rivers BMUs highlighted in bold type.

River Basin & Stream	Station	HUC	Mile point	Location	Latitude (dd)	Longitude (dd)	Collection Frequency[a]	Station Type
Big Sandy								
[a]Tug Fork	PRI002	05070201	35.1	at Kermit, WV	37.8379	-82.40970	Bi-monthly	hydrologic unit index site
[a]Tug Fork	PRI003	05070201	77.7	at Freeburn	37.56615	-82.14358	Bi-monthly	mid-hydrologic unit index site
[a]Levisa Fork	PRI006	05070202	115.0	nr Pikeville	37.46435	-82.52589	Bi-monthly	hydrologic unit index site
[a]Levisa Fork	PRI064	05070203	29.6	nr Louisa	38.1160	-82.6002	Bi-monthly	hydrologic unit index site
[a]Levisa Fork	PRI094	05070203	75.0	at Auxier	37.72905	-82.75436	Bi-monthly	mid-hydrologic unit index site
[a]Beaver Creek	PRI095	05070203	95.0	at Allen	37.60280	-82.72754	Bi-monthly	major tributary
[a]Johns Creek	PRI096	05070203	26.6	at McCombs	37.6553	-82.5870	Bi-monthly	inflow to Dewey Res. major tributary
Little Sandy								
[a]Little Sandy River	PRI049	05090104	13.2	at Argillite	38.49053	-82.83404	Bi-monthly	hydrologic unit index site
Tygarts Creek								
[a,b]Tygarts Creek	PRI048	05090103	23.5	nr Lynn	38.5997	-82.9528	Bi-monthly	hydrologic unit index site
Cumberland River								
Cumberland River	**PRI086**	**05130101**	**661.0**	**at Calvin**	**36.72244**	**-83.62537**	**Bi-monthly**	**mid-hydrologic unit index site**
Cumberland River	**PRI009**	**05130101**	**563.0**	**at Cumberland Falls**	**36.83558**	**-84.34015**	**Bi-monthly**	**hydrologic unit index site**
Clear Fork	**PRI087**	**05130101**	**0.9**	**nr Williamsburg**	**36.72617**	**-84.14224**	**Bi-monthly**	**major tributary**
[a]Rockcastle River	**PRI010**	**05130102**	**24.7**	**at Billows**	**37.17137**	**-84.29673**	**Bi-monthly**	**hydrologic unit index site**
[a]Horse Lick Creek	**PRI051**	**05130102**	**0.1**	**nr Lamero**	**37.32011**	**-84.13841**	**Bi-monthly**	**special interest watershed**
Cumberland River	**PRI007**	**05130103**	**423.0**	**nr Burkesville**	**36.68879**	**-85.56670**	**Bi-monthly**	**hydrologic unit index site**
Buck Creek	**PRI088**	**05130103**	**12.3**	**nr Dykes**	**37.0601**	**-84.4264**	**Bi-monthly**	**major tributary**
[a]S. Fk. Cumberland R.	**PRI008**	**05130104**	**44.8**	**at Blue Heron**	**36.6703**	**-84.5492**	**Bi-monthly**	**hydrologic unit index site**
[a]Little River	**PRI043**	**05130205**	**24.4**	**nr Cadiz**	**36.84104**	**-87.77731**	**Bi-monthly**	**major tributary**
Red River	**PRI069**	**05130205**	**49**	**nr Keysburg**	**36.64063**	**-86.97961**	**Bi-monthly**	**hydrologic unit index site**
Kentucky River								
[a, b]Eagle Creek	PRI022	05100205	21.5	at Glenco	38.7061	-84.8254	Monthly	hydrologic unit index site
[a, c]Kentucky River	PRI114	05100205	56.5	at Frankfort	38.2901	-84.879	Monthly	hydrologic unit index site
[b]Kentucky River	PRI066	05100205	30.5	nr Lockport	38.4450	-84.9569	Monthly	hydrologic unit index site
[b]Kentucky River	PRI067	05100205	119.0	at High Bridge	37.8201	-84.7051	Monthly	hydrologic unit index site
[a]Elkhorn Creek	PRI098	05100205	10.3	nr Peaks Mill	38.2686	-84.81429	Monthly	major tributary

Table 3.1.1-1 (cont.). Statewide primary water quality stations with the Salt – Licking and Upper Cumberland – 4-Rivers BMUs highlighted in bold type.

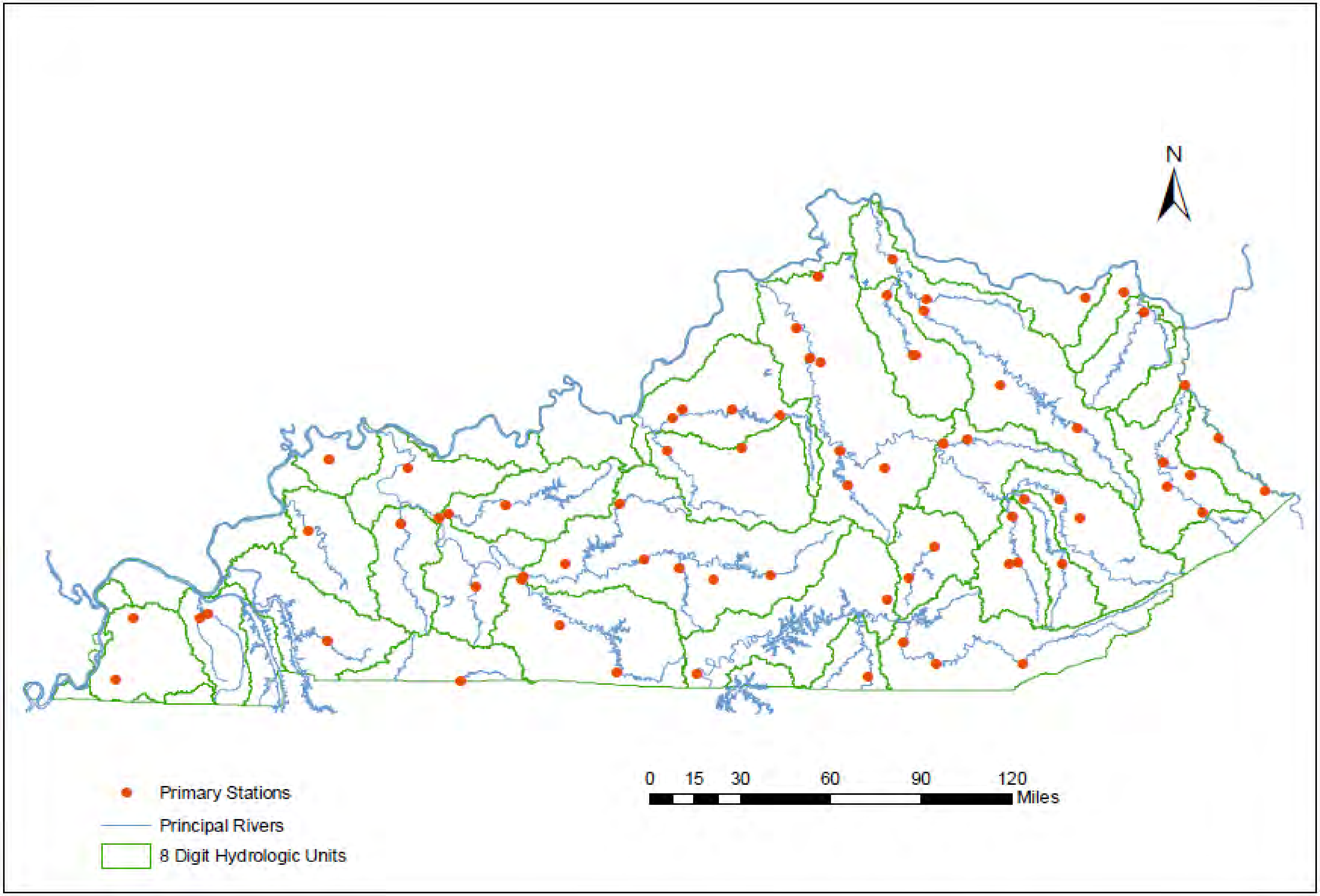
River Basin & Stream	Station	HUC	Mile point	Location	Latitude (dd)	Longitude (dd)	Collection Frequency[a]	Station Type
[a, b]Dix River	PRI045	05100205	34.7	nr Danville	37.64176	-84.66113	Monthly	hydrologic unit index site
Silver Creek	PRI099	05100205	5.9	nr Ruthton	37.73251	-84.43674	Monthly	major tributary
[b]Kentucky River	PRI058	05100204	171.5	nr Trapp	37.84675	-84.08182	Monthly	hydrologic unit index site
[b]Red River	PRI046	05100204	21.6	Clay City	37.86468	-83.93316	Monthly	hydrologic unit index site
N. Fork Kentucky R.	PRI031	05100201	49.7	Jackson	37.55127	-83.38464	Monthly	hydrologic unit index site
Troublesome Creek	PRI115	05100201	7.2	nr Caney School	37.45871	-83.26384	Monthly	major tributary
[a]Middle Fork Kentucky River	PRI032	05100202	8.4	nr Tallega	37.55505	-83.59373	Monthly	hydrologic unit index site
Middle Fork Kentucky River	PRI104	05100202	67.7	nr Dryhill	37.22294	-83.376836	Monthly	inflow to Buckhorn Lake
[a]So. Fork Kentucky R.	PRI033	05100203	12.1	at Booneville	37.47513	-83.67082	Monthly	hydrologic unit index site
Red Bird River	PRI091	05100203	5.5	nr Oneida	37.23690	-83.64500	Monthly	major tributary
Goose Creek	PRI092	05100203	3.4	nr Oneida	37.23280	-83.69103	Monthly	major tributary
Licking River								
Licking River	**PRI062**	**05100101**	**226**	**at West Liberty**	**37.91470**	**-83.26169**	**Bi-monthly**	**inflow to Cave Run Reservoir**
[a]Slate Creek	**PRI093**	**05100101**	**10.0**	**nr Owingsville**	**38.1415**	**-83.7285**	**Bi-monthly**	**major tributary**
[a]Licking River	**PRI061**	**05100101**	**78.2**	**at Claysville**	**38.52058**	**-84.18310**	**Bi-monthly**	**mid-hydrologic unit index site**
[a]N. Fork Licking River	**PRI060**	**05100101**	**6.9**	**nr Milford**	**38.58123**	**-84.16566**	**Bi-monthly**	**major tributary**
[a]S. Fork Licking River	**PRI059**	**05100102**	**11.7**	**at Morgan**	**38.6033**	**-84.4008**	**Bi-monthly**	**hydrologic unit index site**
[a]Hinkston Creek	**PRI102**	**05100102**	**0.2**	**at Ruddles Mill**	**38.30471**	**-84.23778**	**Bi-monthly**	**major tributary**
[a]Stoner Creek	**PRI101**	**05100102**	**0.6**	**nr Ruddles Mill**	**38.3029**	**-84.2497**	**Bi-monthly**	**major tributary**
[b]Licking River	**PRI111**	**05100101**	**35.5**	**at Butler**	**38.7898**	**-84.3674**	**Bi-monthly**	**hydrologic unit index site**
Ohio River Tributary								
[a]Kinniconick Creek	**PRI063**	**05090201**	**10.4**	**nr Tannery**	**38.57458**	**-83.18811**	**Bi-monthly**	**major tributary**
Salt River								
[a,b]Salt River	**PRI029**	**05140102**	**22.9**	**at Shepherdsville**	**37.98524**	**-85.71720**	**Bi-monthly**	**hydrologic unit index site**
[a]Salt River	**PRI052**	**05140102**	**82.5**	**at Glensboro**	**38.00231**	**-85.06028**	**Bi-monthly**	**major reservoir inflow**
Brashears Creek	**PRI105**	**05140102**	**1.2**	**at Taylorsville**	**38.03040**	**-85.35154**	**Bi-monthly**	**major tributary**
[a]Beech Fork	**PRI041**	**05140103**	**48.0**	**nr Maud**	**37.83266**	**-85.29610**	**Bi-monthly**	**major tributary**

Table 3.1.1-1 (cont.). Statewide primary water quality stations with the Salt – Licking and Upper Cumberland – 4-Rivers BMUs highlighted in bold type.

River Basin & Stream	Station	HUC	Mile point	Location	Latitude (dd)	Longitude (dd)	Collection Frequency[a]	Station Type
[a]Floyds Fork	**PRI100**	**05140102**	**7.4**	**nr Shepherdsville**	**38.03447**	**-85.65936**	**Bi-monthly**	**major tributary**
[a]Rolling Fork	**PRI057**	**05140103**	**12.3**	**nr Lebanon Jct.**	**37.82267**	**-85.74787**	**Bi-monthly**	**hydrologic unit index site**
Green River								
[a]Green River	PRI018	05110001	226.0	at Munfordville	37.2687	-85.8853	Bi-monthly	hydrologic unit index site
Green River	PRI076	05110001	334.0	at Neatsville	37.1919	-85.1303	Bi-monthly	major reservoir inflow
[a]Nolin River	PRI021	05110001	80.9	at White Mills	37.55536	-86.03182	Bi-monthly	major reservoir inflow
[a]Russell Creek	PRI077	05110001	10.0	nr Bramlett	37.16790	-85.47005	Bi-monthly	major tributary
Little Barren River	PRI078	05110001	6.3	nr Monroe	37.2264	-85.6776	Bi-monthly	major tributary
Bear Creek	PRI075	05110001	11.8	nr Huff	37.2488	-86.3612	Bi-monthly	major tributary
Barren River	PRI072	05110002	1.0	nr Woodbury	37.17069	-86.62052	Bi-monthly	hydrologic unit index site
Barren River	PRI073	05110002		nr Holland	36.69646	-86.04678	Bi-monthly	major reservoir inflow
Drakes Creek	PRI074	05110002	8.0	nr Bowling Green	36.93492	-86.39227	Bi-monthly	major tributary
[b]Green River	PRI055	05110003	72.0	at Livermore	37.47832	-87.12694	Bi-monthly	hydrologic unit index site
Mud River	PRI056	05110003	17.4	nr Gus	37.12324	-86.90042	Bi-monthly	major tributary
Green River	PRI103	05110003	150.0	nr Woodbury	37.18242	-86.61034	Bi-monthly	hydrologic unit index site
Rough River	PRI014	05110004	62.5	nr Dundee	37.54720	-86.72139	Bi-monthly	mid-hydrologic unit index site
Rough River	PRI054	05110004	1.0	nr Livermore	37.49934	-87.06574	Bi-monthly	hydrologic unit index site
[c]Panther Creek	PRI113	05110005	2.7	nr West Louisville	37.72497	-87.31513	Bi-monthly	major tributary
Pond River	PRI012	05110006	12.4	nr Sacramento	37.44179	-87.35285	Bi-monthly	hydrologic unit index site
Ohio River Tributary								
[c]Highland Creek	PRI110	05140102	14.0	nr Smith Mill	37.75699	-87.79514	Bi-monthly	major tributary
Tradewater River								
[a, c]Tradewater River	PRI112	05140205	25.0	nr Piney	37.39896	-87.90456	Bi-monthly	hydrologic unit index site
Tennessee River								
[b]Clarks River	**PRI106**	**06040006**	**17.6**	**nr Sharpe**	**36.96130**	**-88.49322**	**Bi-monthly**	**hydrologic unit index site**
W. Fork Clarks River	**PRI107**	**06040006**	**8.6**	**nr Symsonia**	**36.93245**	**-88.54396**	**Bi-monthly**	**major tributary**
Mississippi River								
[a, c]Bayou de Chien	**PRI109**	**08010201**	**13.6**	**nr Cayce**	**36.61543**	**-89.03025**	**Bi-monthly**	**major tributary**
[a,b]Mayfield Creek	**PRI042**	**08010201**	**13.7**	**nr Magee Spgs**	**36.92989**	**-88.94297**	**Bi-monthly**	**major tributary**

[a]Longterm ambient water quality stations that are also long-term ambient biological monitoring stations (covered under the biomonitoring QAPP)
[b]Station where pesticides and herbicides are sampled for during April, May, June, July and October
[c]Stations created since 2004 (these changes were necessary for sampler safety issues)

Figure 3.1.1-1. Fixed (long-term) ambient surface water quality network.



Fish Tissue. Tissue is analyzed for mercury (total and methyl-), selenium, PCBs, chlordane, DDT and toxaphene. Results are used to determine if potential problems exist with contaminants in fish tissue that require further sampling. These results are used to make fish consumption support determinations on specific waterbodies or segments. The widespread pollutant of concern in Kentucky fishes is mercury. The following criteria for methyl-mercury were used to determine level of use support for 305(b) determination: 0.0 – 0.3 ppm was full use support, greater than 0.3 – 1.0 ppm was partial support and greater than 1.0 ppm was nonsupport. The EPA methylmercury fish tissue criteria are written with accuracy to the tenths place (two significant digits), therefore, the KDOW rounds to the nearest tenth mg/Kg. For example, if the laboratory results are less than 0.35 mg/Kg the waterbody is assessed fully supporting. If results were not elevated, no further fish tissue sampling was conducted. This method of assessment closely follows EPA's recommended application of basing water quality evaluation for total mercury on fish tissue concentration of methylmercury.

3.1.2 Rotating Watershed Network

An interagency monitoring team established several objectives for the rotating watershed water quality monitoring stations. The objectives were: 1) obtain an overall representation of the quality of the basin's water resources; 2) determine water quality conditions associated with major land cover or land uses such as forest, urban, agriculture and mining; 3) characterize the basin's least impacted waters; and 4) collect data for establishing total maximum daily loads (TMDLs) as required by Section 303(d) of the Clean Water Act. Water quality parameters analyzed were similar to those described earlier for the ambient network.

The chemistry laboratory of the Kentucky Energy and Environment Cabinet analyzed water quality samples collected by KDOW. The rotating watershed water quality monitoring network consisted of 14 stations in the Salt River – Licking River BMU (Table 3.1.2-1 and Figures 3.1.2-1 and 2) and 14 stations in the Upper Cumberland River – 4-Rivers BMU (Tables 3.1.2-2 and 3 and Figures 3.1.2-3 and 4). Rotating watershed stations were typically located at the downstream reaches of USGS 11-digit HUC watersheds. Monthly sampling was conducted over the 12-month watershed monitoring period April 2009 – March 2010 in the Salt River – Licking River BMU and April 2010 – March 2011 in the Upper Cumberland River – 4-Rivers BMU to characterize water quality of those watersheds. The KDOW follows water quality sample collection and preservation procedures described in *In-situ water quality measurements and meter calibration* and *Sampling surface water quality in lotic (streams) systems* SOPs (http://water.ky.gov/Pages/SurfaceWaterSOP.aspx) (2009 and 2010, respectively) (accessed July 17, 2012).

Table 3.1.2-1. Salt River – Licking River basin management unit rotating watershed water quality stations.

Site ID	Stream	Latitude	Longitude	Mile Point	Description
		Salt River Basin (April 2009 – March 2010)			
SRW002	Chaplin River	37.8912	-85.1993		nr Chaplin
SRW005	Sinking Creek	37.8688	-86.3879		at Clifton
Mills					
SRW006	Harrods Creek	38.3611	-85.5748		nr Prospect
SRW008	Currys Fork	38.3074	-85.4506		nr Crestwood
SRW012	Floyds Fork	38.1887	-85.4603		at Fisherville
SRW013	Cox Creek	37.9742	-85.5319		at Solitude
SRW014	Sulphur Creek	37.8878	-85.0938		at Sulphur
Lick Rd					
		Licking River Basin (April 2009 – March 2010)			
LRW001	Licking River	39.0631	-84.4954		at Newport
LRW003	South Fork	38.7117	-84.4466		nr Falmouth
	Greasy Creek				
LRW007	Triplett Creek	38.1536	-83.4550		nr Morehead
LRW008	Blackwater Cr.	37.9249	-83.4165		nr Ezel
LRW009	N. Fork Licking River	38.0550	-83.3307		nr Leisure
LRW011	Fox Creek	38.2547	-83.6529		at SR 111
LRW012	Johnson Creek	38.4671	-84.0660		nr Piqua

Figure 3.1.2-1. Salt River basin primary and rotating water quality stations.

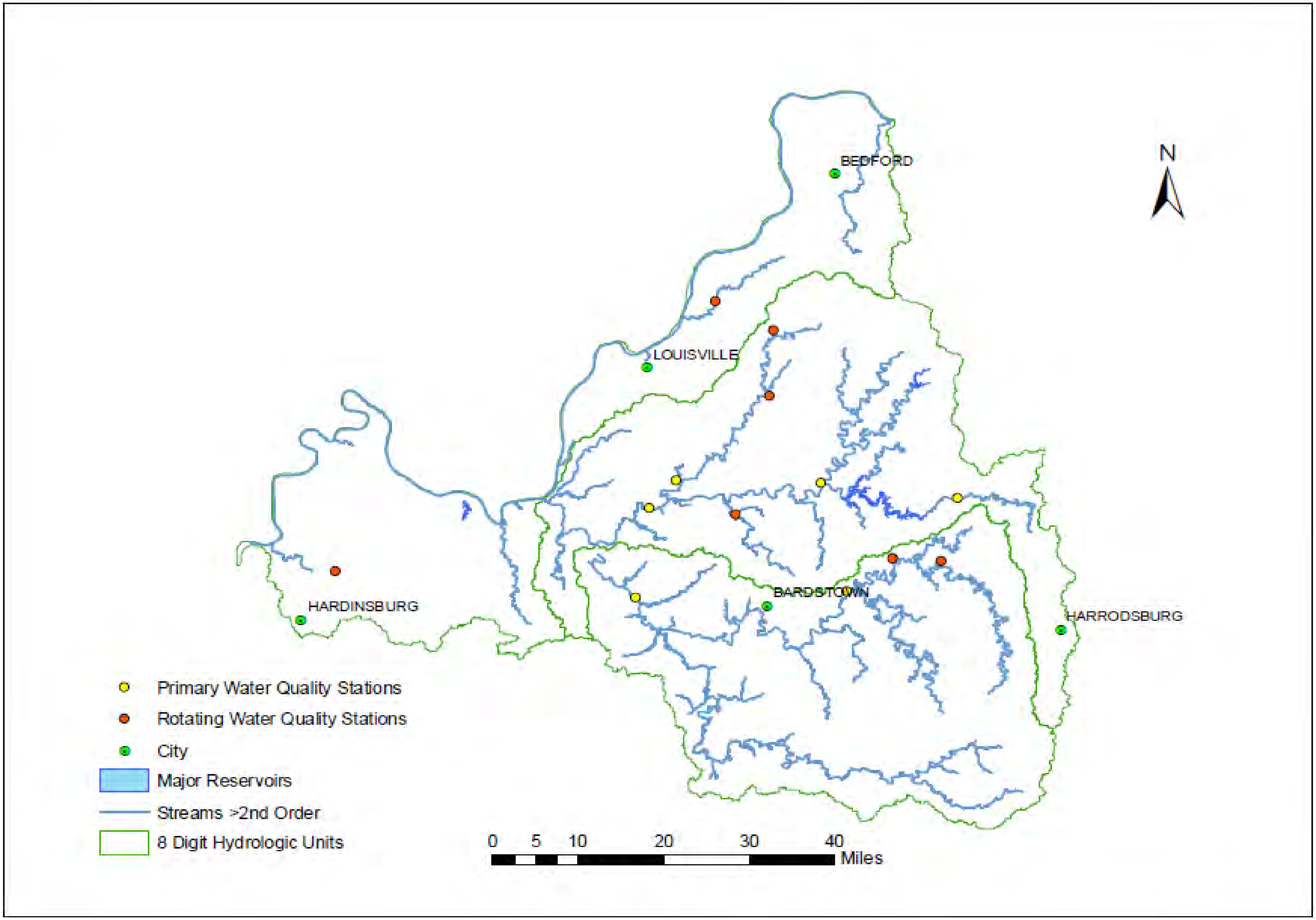


Figure 3.1.2-2. Licking River basin primary and rotating water quality stations.

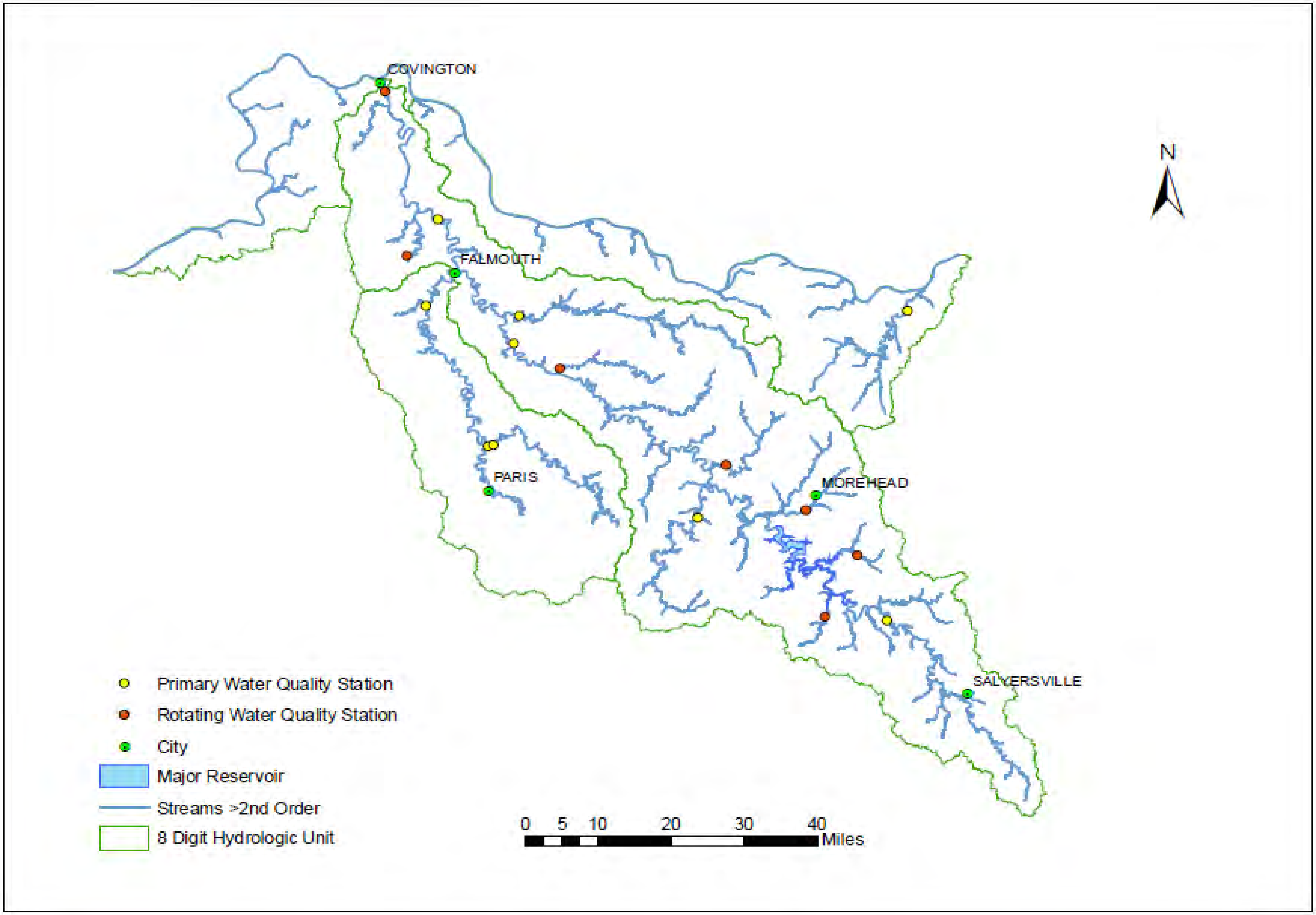


Table 3.1.2-2. Upper Cumberland River basin rotating watershed water quality stations.

Site ID	Stream	Latitude	Longitude	Mile Point	Description
		Upper Cumberland River Basin (April 2010 – March 2011)			
CRW014	Laurel River	37.0420	-84.0483	31.6	nr Lily
CRW015	Marsh Creek	36.7439	-84.3710	7.2	nr Sand Hill
CRW016	Jellico Creek	36.7455	-84.2659	5.4	nr Duckrun
CRW017	Richland Creek	36.8690	-83.8980	1.8	at Barbourville
CRW018	Straight Creek	36.7734	-83.6701	1.6	nr Straight Cr.
CRW019	Yellow Creek	36.7098	-83.6449	1.0	nr Ponza
CRW020	Poor Fork Cumberland R.	36.8933	-83.2656	5.4	nr Rosspoint
CRW021	Clover Fork Cumberland R.	36.8609	-83.2920	1.9	at Golden Ash
CRW022	Martins Fork Cumberland R.	36.8472	-83.3255	1.9	at Harlan
CRW010	Roundstone Cr.	37.3354	-84.2325	0.5	at Sinks
CRW011	Middle Fork Rockcastle R.	37.3438	-84.0808	4.6	nr Parrott
CRW012	South Fork Rockcastle R.	37.2964	-84.0933	5.2	nr Cornette
CRW008	Marrowbone Creek	36.7864	-85.4202	1.2	nr Leslie
CRW009	Crocus Creek	36.5856	-85.3388	2.4	nr Bakerton

Figure 3.1.2-3. Upper Cumberland River basin primary and rotating water quality stations.

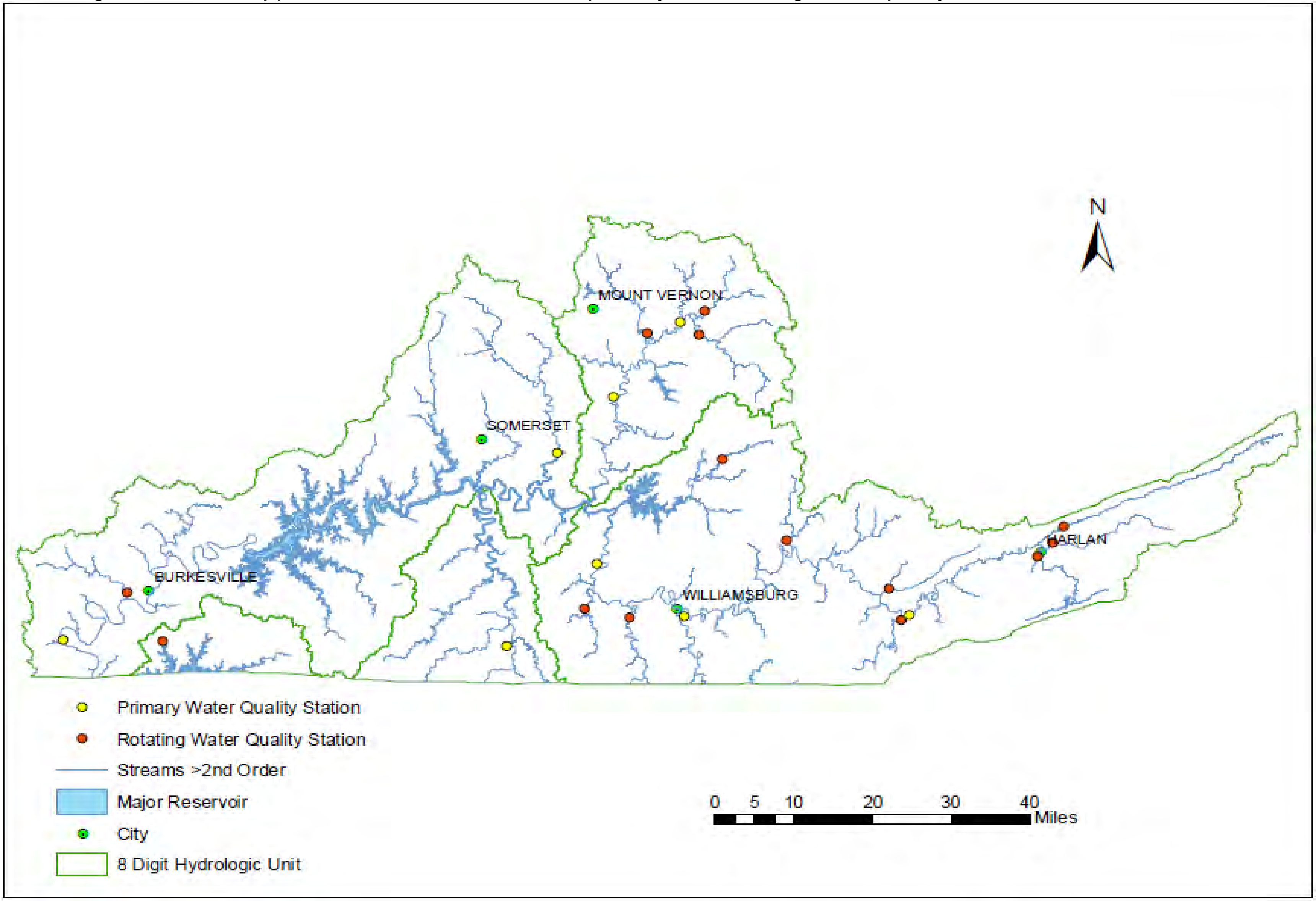
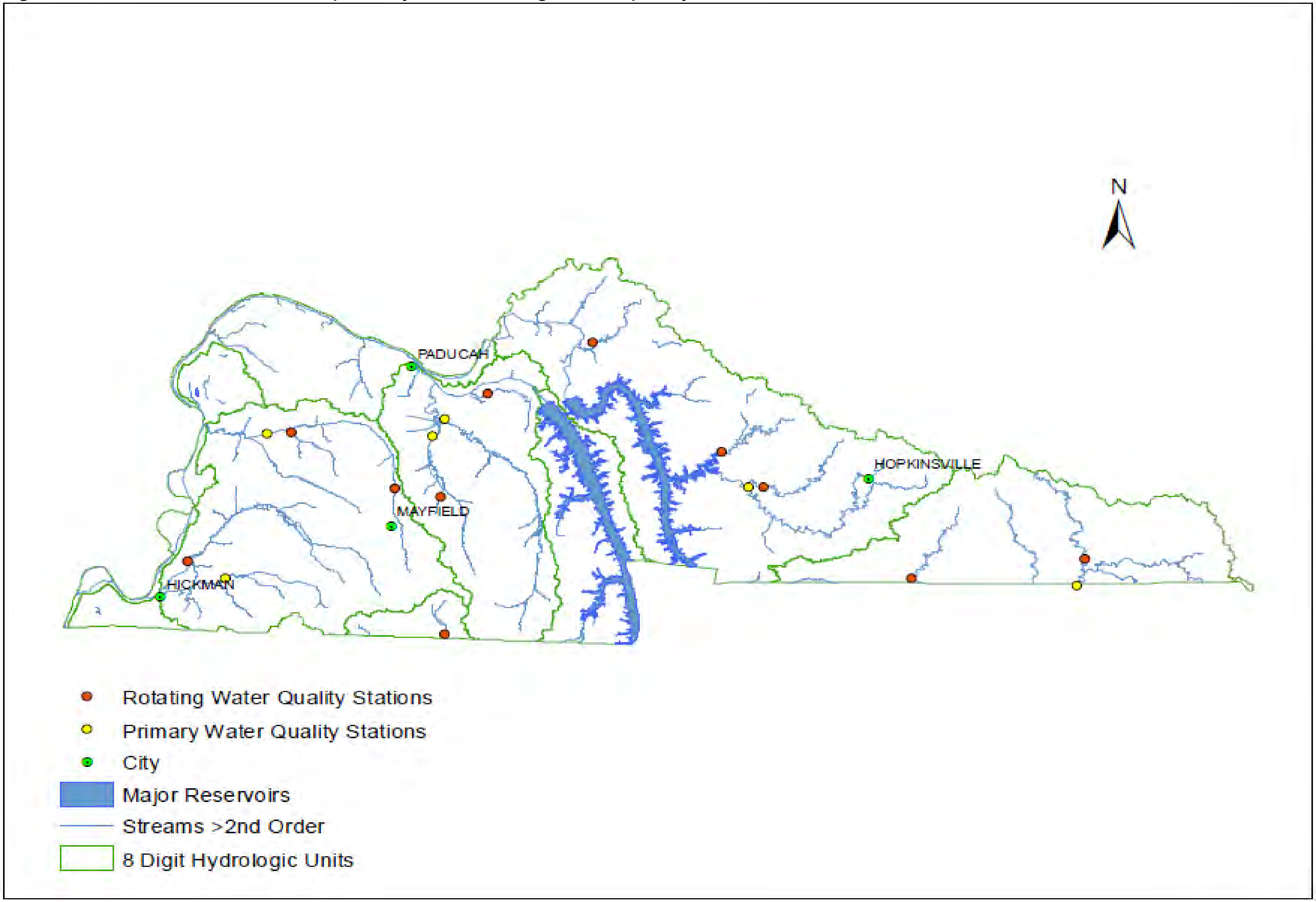


Table 3.1.2-3. 4-Rivers basin rotating watershed water quality stations.

Site ID	Stream	Latitude	Longitude	Mile Point	Description
		4-Rivers Basin (April 2010 – March 2011)			
CRW005	Whipporwill Creek	36.6970	-86.9631	4.5	nr Dot
CRW001	Livingston Creek	37.1431	-88.1635	5.9	nr Dycusburg
CRW002	Muddy Fork Little River	36.9139	-87.8442	5.7	nr Cadiz
CRW003	Sinking Fork Little River	36.8407	-87.7408	4.1	nr Cadiz
CRW004	West Fork Red River	36.6516	-87.3777	16.55	nr Oak Grove
MRW001	Mayfield Creek	36.8189	-88.6304	38.2	nr Hickory
MRW002	Wilson Creek	36.9338	-88.8858	0.7	nr Cunningham
MRW003	Obion Creek	36.6494	-89.1226	8.6	at Whaynes Corner
MRW004	Terrapin Creek	36.5086	-89.4989	3.7	nr Bell City
TRW001	Cypress Creek	37.0294	-88.4130	3.1	nr Calvert City
TRW002	Panther Creek	36.8047	-88.5187	1.3	nr Hicksville

Figure 3.1.2-4. 4-Rivers basin primary and rotating water quality stations.



3.1.3 Swimming Advisory Monitoring

KDOW continued to sample areas with long-standing swimming advisories in three basins in 2009 and 2010: 12 sites in the upper Cumberland River basin on five streams, 18 watersheds or sites in the Northern Kentucky area (lower Licking River basin), and nine in 2009 increased to 11 sites in 2010 on the North Fork Kentucky River basin from Chavies to the headwaters. In 2007 the KDOW began monitoring beach or marina areas for *Escherichia coli* at 12 large reservoirs. In 2010 this effort included two reservoirs in the upper Cumberland River basin (Dale Hollow Lake and Laurel River Lake); Rough River Lake and Barren River Lake were sampled in 2009. Samples collected at these reservoirs indicated bacteria concentrations were below criteria for swimming.

3.1.4 Biomonitoring and Biosurvey Programs

Introduction. There are four biological monitoring programs within KDOW. Those programs have the same primary purpose of assessing the aquatic life use support of streams in the Commonwealth and targeting areas of interest or concern. Each program is driven by broad objectives, together they provide a comprehensive program that addresses aquatic life use attainment from several approaches: 1) random, overall snapshot of the ambient conditions; 2) the integration of conditions in relatively large watersheds monitored for long-term water quality trend evaluation; 3) impact assessments related to nonpoint source pollution; 4) impact assessments related to point source pollution; and 5) a regional reference program to assess least impacted streams for development and refinement of metric benchmarks used to assess stream eco-systems. Locations of targeted biological monitoring that occurred in the Salt River basin, Licking River basin, upper Cumberland River basin, and the 4-Rivers basin are shown in Figures 3.1.4-1, 2, 3 and 4, respectively.

Reference Reach Program. In 1991, KDOW began a Reference Reach (RR) program to gather data from the state's least impacted streams. Biologists first identified potential least impacted waters representative of Level-III Ecoregions. Then, data on physicochemical water quality, sediment quality, fish tissue residue, habitat condition, and biotic conditions were collected to define the potential environmental quality for each stream; this to provide a baseline to compare to other streams in the same ecoregion

Figure 3.1.4-1. Salt River basin targeted biological sample locations, 2009 (locations on streams <3rd order do not have an associated blue line).

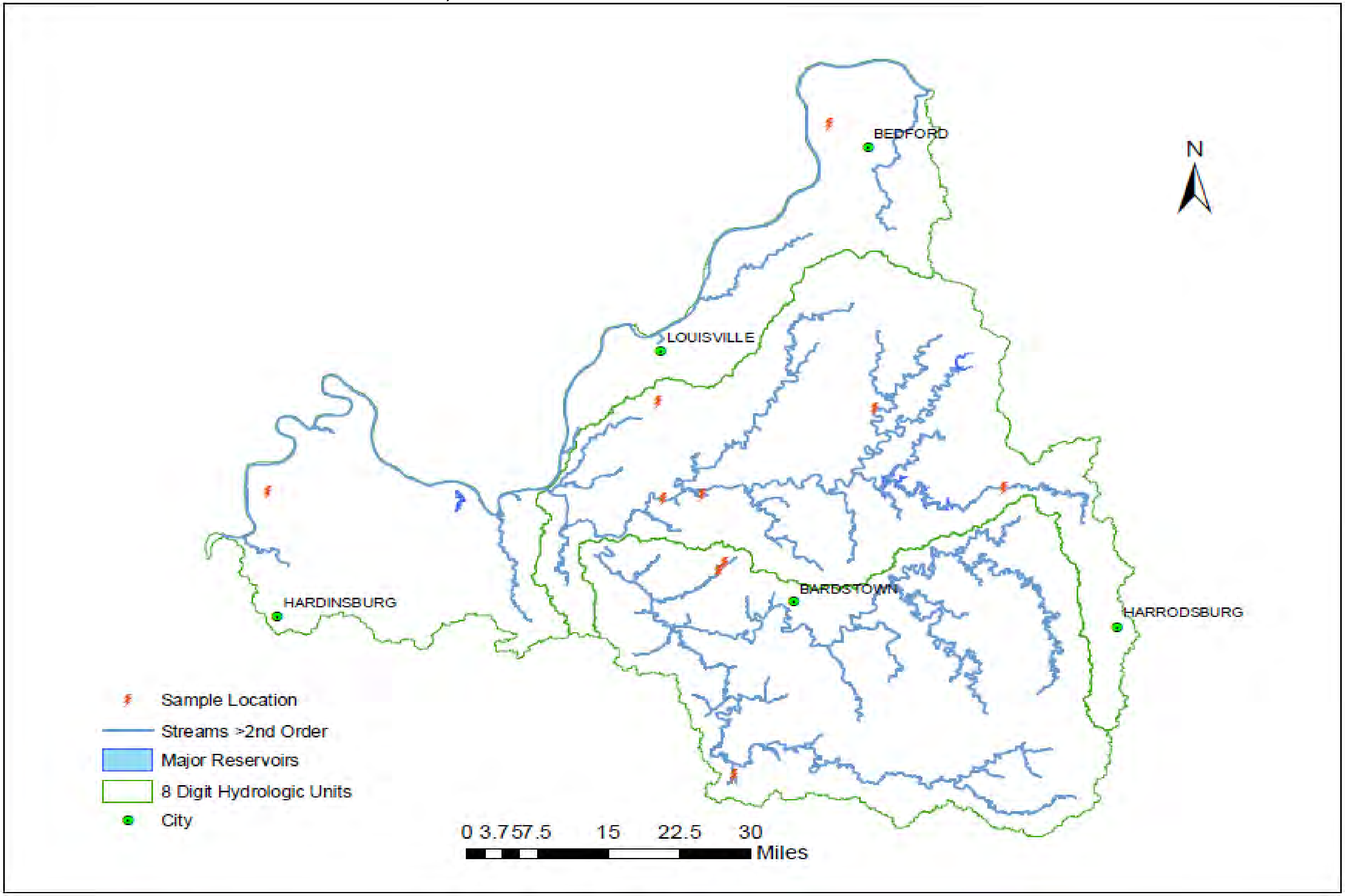


Figure 3.1.4-2. Licking River basin targeted biological sample locations, 2009 (locations on streams <3rd order do not have an associated blue line).

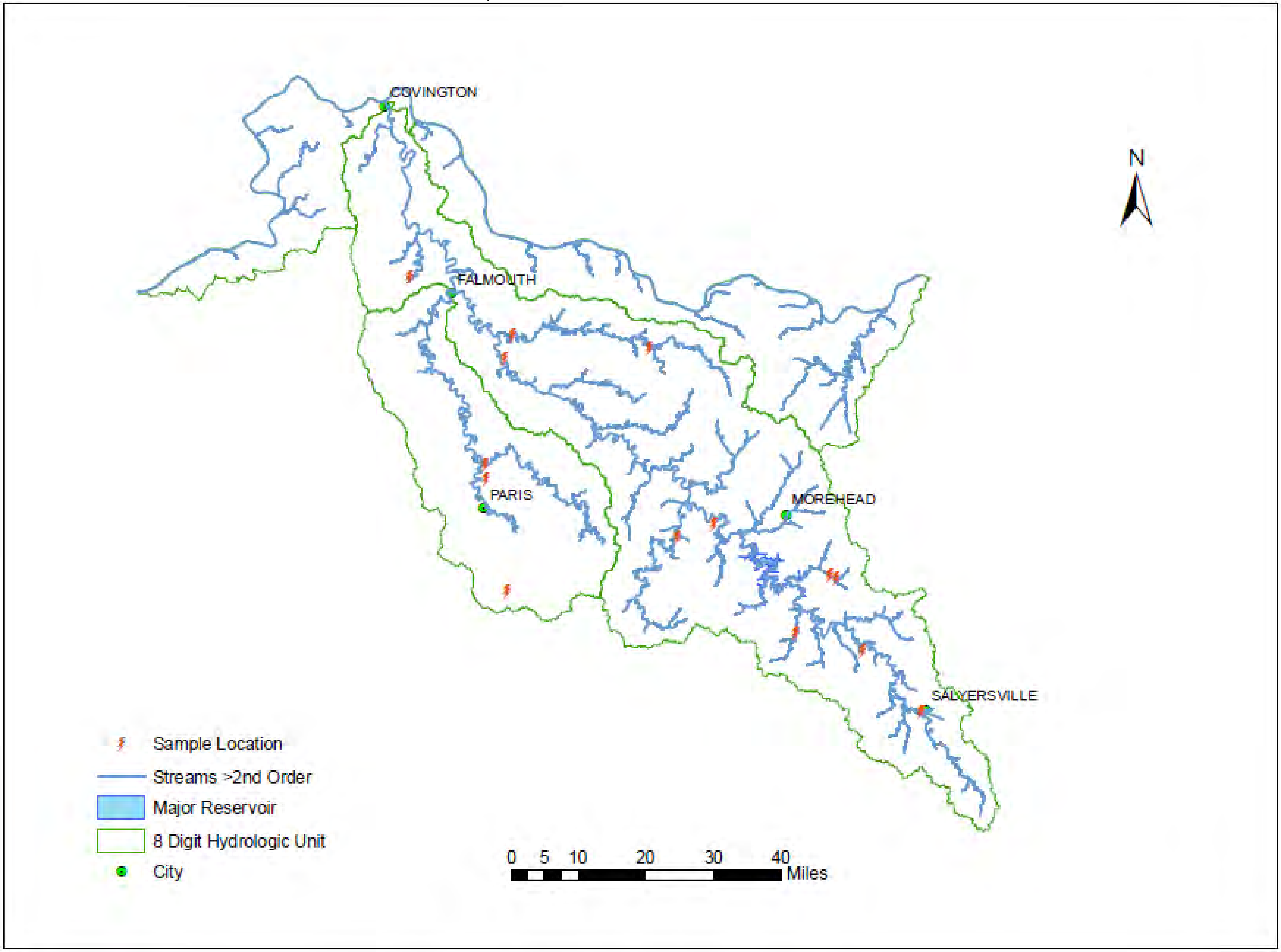


Figure 3.1.4-3. Upper Cumberland River basin targeted biological sample locations, 2010 (locations on streams <3rd order do not have an associated blue line).

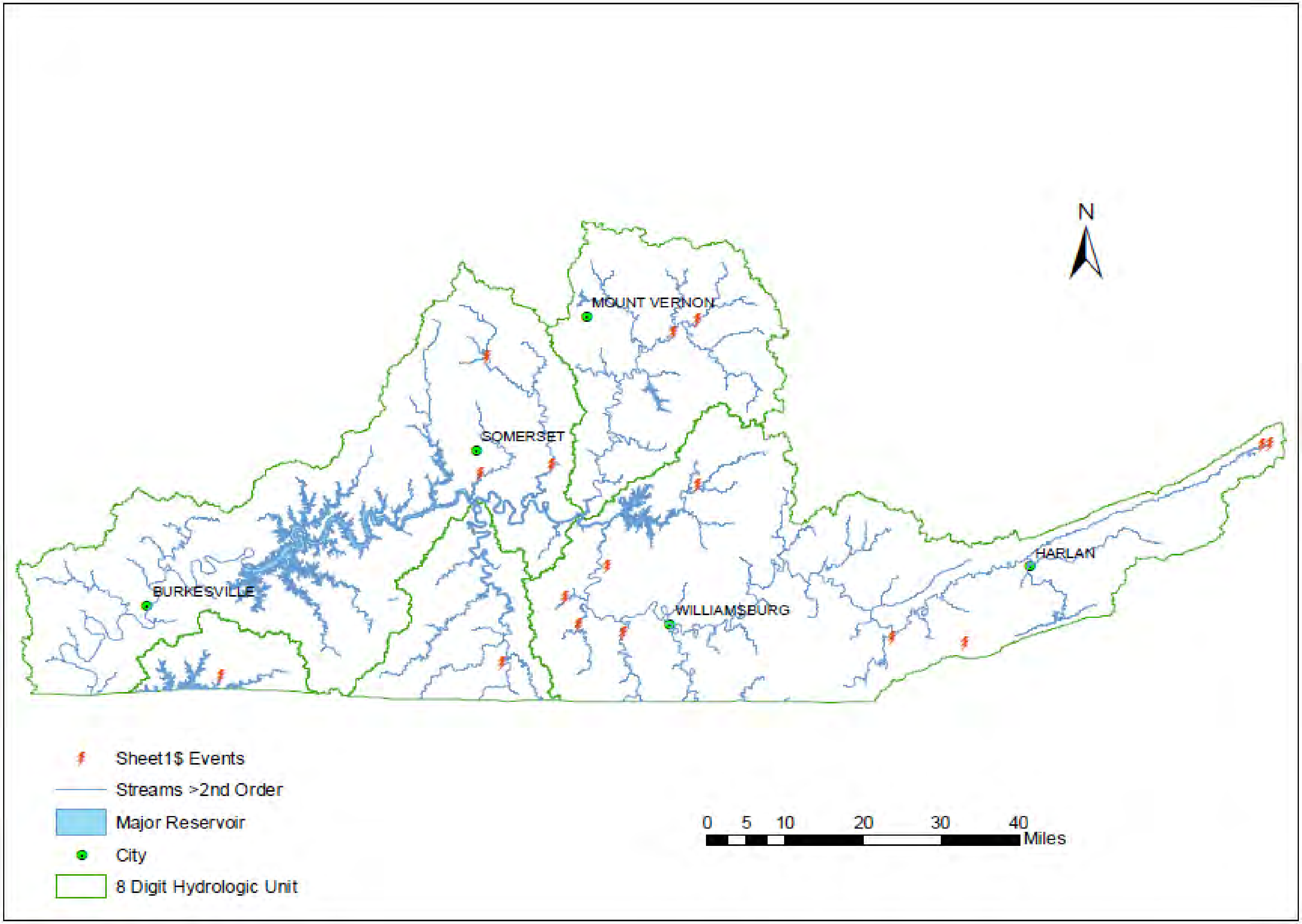
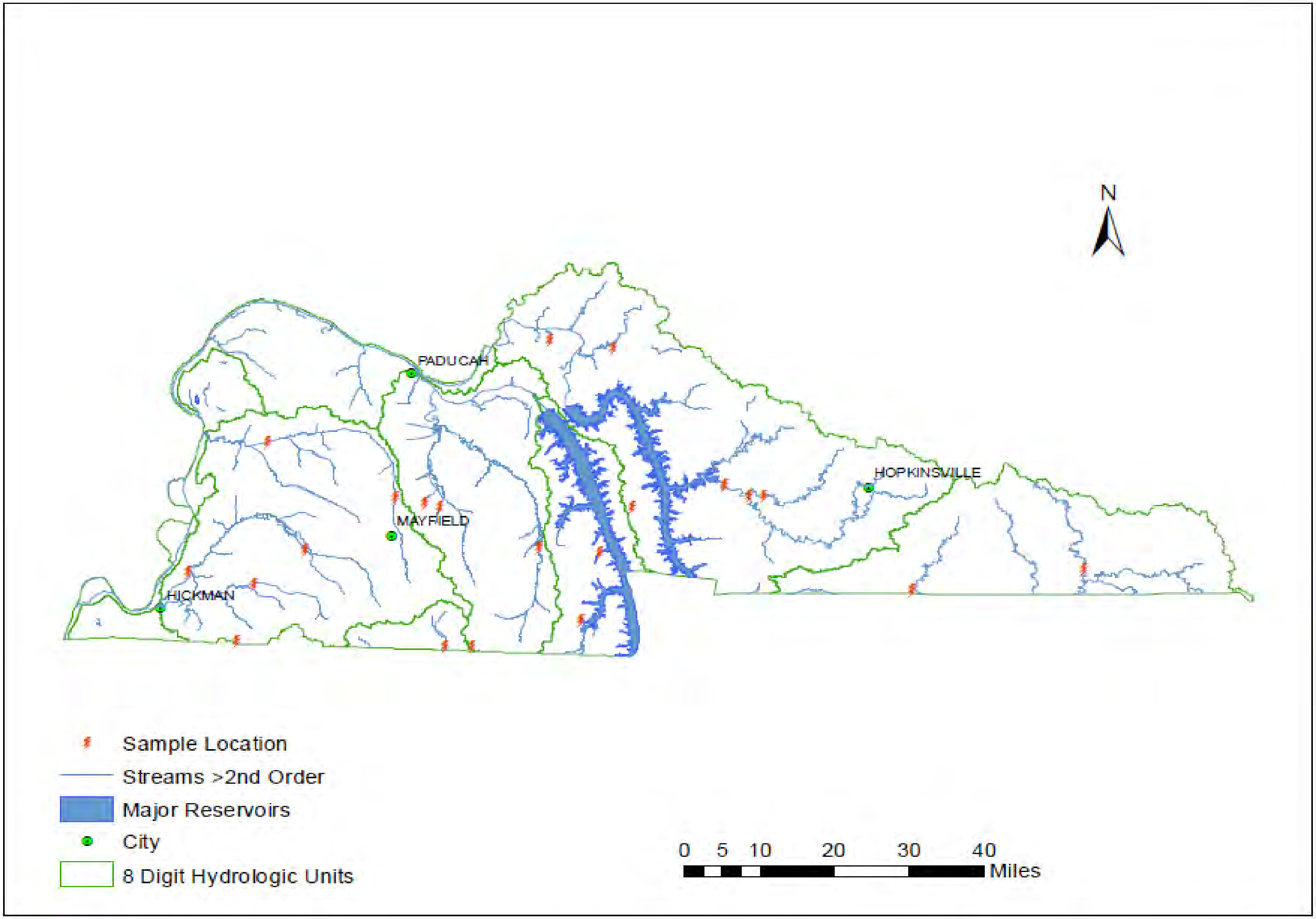


Figure 3.1.4-4. 4-Rivers basin targeted biological sample locations, 2010 (locations on streams <3rd order do not have an associated blue line).



to those reference conditions. Data from the reference reach program provided the basis for the development of multimetric indices for the various ecoregions that were subsequently combined into appropriate bioregions of the Commonwealth; results indicated multimetric indices could be developed resulting in four bioregions. Fifty-five stream sites from seven Level-III Ecoregions were initially sampled in the spring and fall of 1992-1993. Since that time, many additional potential reference reach streams were sampled. Some were adopted as reference reach streams; others were rejected because they did not possess adequate quality to represent least impacted condition. Currently, 194 RR stream and segment combinations totaling 1,240.3 miles are identified throughout the Commonwealth (Table 3.1.4-1). Thirteen (44.40 miles) candidate exceptional streams, or segments, are proposed for inclusion in 401 KAR 10:030 during the triennial review of 2012 (Table 3.1.4-2). Exceptional waters are those aquatic habitats that support either a fish or macroinvertebrate community that scored “excellent” on the appropriate multimetric index.

Watershed Biological Monitoring Program (WBMP). The WBMP monitored streams in a fixed-station network aligned with a subset of primary water quality stations so long-term water quality trends can be tracked with biological community integrity in targeted fourth and fifth order watersheds of the Salt River – Licking River BMU and the Upper Cumberland – 4-Rivers BMU (Figures 3.1.4-5 and 3.1.4-6). Targeted stations were placed in the downstream reaches of fourth, fifth and occasionally sixth order (on 1:24,000 scale USGS topographic maps) watersheds. One reason for this choice was that the number of these watersheds closely matched the available monitoring resources. Another favorable attribute of this design was that these watersheds were more hydrologically uniform in size than 11-digit HUC watersheds. A biosurvey was conducted at these stations which typically include two or three biological communities (macroinvertebrates, fishes, or diatoms) to determine the condition of wadeable streams. Also collected were

Table 3.1.4-1. Reference reach streams in Kentucky with those in bold to emphasize streams in the Salt River – Licking River and Upper Cumberland River – 4-Rivers BMUs.

Stream	County	Location	Basin	Start Segment	End Segment	Total Miles
Hobbs Fork	Martin	Mouth to headwaters	Big Sandy	3.9	0.0	3.9
Hobbs Fork, UT	Martin	Hobbs Fork to headwaters	Big Sandy	0.6	0.0	0.6
Lower Pigeon Branch	Pike	Left Fork to headwaters	Big Sandy	1.9	0.6	1.3
Russell Fork	Pike	Clinch Field RR Yd off SR 80 to Kentucky – Virginia state line	Big Sandy	16.5	15.0	1.5
Toms Branch	Pike	Mouth to headwaters	Big Sandy	1.6	0.0	1.6
Bark Camp Creek	**Whitley**	**Above backwaters to headwaters**	**Upper Cumberland**	**0.1**	**4.0**	**3.9**
Bad Branch	**Letcher**	**Mouth to headwaters**	**Upper Cumberland**	**0.0**	**3.0**	**3.0**
Beaver Creek	**McCreary**	**Above backwaters to Freeman and Middle Forks**	**Upper Cumberland**	**2.4**	**7.1**	**4.7**
Brownies Creek	**Bell, Harlan**	**Blacksnake Branch to headwaters**	**Upper Cumberland**	**9.3**	**16.75**	**7.45**
Brushy Creek	**Pulaski**	**Mouth to headwaters**	**Upper Cumberland**	**0.0**	**16.5**	**16.5**
Buck Creek	**Pulaski**	**Above backwaters to 0.8 mile upstream of confluence of Hurricane Creek**	**Upper Cumberland**	**11.7**	**55.0**	**43.3**
Bunches Creek	**Whitley**	**Mouth to headwaters**	**Upper Cumberland**	**0.0**	**3.3**	**3.3**
Cane Creek	**Whitley**	**Mouth to headwaters**	**Upper Cumberland**	**0.0**	**11.85**	**11.85**
Cogur Fork	**McCreary**	**Mouth to headwaters**	**Upper Cumberland**	**0.0**	**7.95**	**7.95**
Dog Slaughter Creek	**Whitley**	**Near mouth to North and South forks**	**Upper Cumberland**	**0.05**	**1.15**	**1.1**
Eagle Creek	**McCreary**	**Near mouth to headwaters**	**Upper Cumberland**	**0.05**	**6.75**	**6.7**
Fugitt Creek	**Harlan**	**Land use change to headwaters**	**Upper Cumberland**	**0.5**	**4.6**	**4.1**
Horse Lick Creek	**Jackson**	**Mouth to Clover Bottom**	**Upper Cumberland**	**0.0**	**12.3**	**12.3**
Howards Creek	**Clinton**	**Dale Hollow Lake backwaters to headwaters**	**Upper Cumberland**	**0.6**	**4.6**	**3.8**
Indian Creek	**McCreary**	**Laurel Fork to Barren Fork**	**Upper Cumberland**	**2.4**	**6.8**	**4.4**
Jackie Branch	**Whitley**	**Mouth to headwaters**	**Upper Cumberland**	**0.0**	**1.65**	**1.7**
Laurel Fork of Clear Fork	**Whitley**	**Tennessee state line to Tiny Branch/Pine Creek**	**Upper Cumberland**	**4.3**	**13.1**	**8.8**
Laurel Fork of Middle Fork Rockcastle River	**Jackson**	**Mouth to headwaters**	**Upper Cumberland**	**0.0**	**12.3**	**12.3**
Little South Fork Cumberland River	**McCreary/ Wayne**	**Lake Cumberland backwaters to Langham Branch**	**Upper Cumberland**	**4.4**	**35.5**	**31.1**
Marsh Creek	**McCreary**	**Laurel Creek to Kentucky/Tennessee State Line**	**Upper Cumberland**	**8.8**	**26.5**	**17.7**
Mud Camp Creek	**Cumberland**	**Mouth to Collins Branch**	**Upper Cumberland**	**0.0**	**1.2**	**1.2**
Mud Camp Creek	**Cumberland, Monroe**	**UT to headwaters**	**Upper Cumberland**	**3.8**	**8.8**	**5.0**
Poor Fork Cumberland River	**Letcher**	**Franks Creek to headwaters**	**Upper Cumberland**	**41.4**	**51.7**	**10.3**

Table 3.1.4-1. Reference reach streams in Kentucky with those in bold to emphasize streams in the Salt River – Licking River and Upper Cumberland – 4-Rivers BMUs.

Stream	County	Location	Basin	Start Segment	End Segment	Total Miles
Presley House Branch	**Letcher**	**Mouth to headwaters**	**Upper Cumberland**	**0.0**	**1.5**	**1.5**
Puncheoncamp Branch	**McCreary**	**Mouth to headwaters**	**Upper Cumberland**	**0.0**	**1.85**	**1.85**
Rock Creek	**McCreary**	**White Oak Creek to Kentucky/Tennessee state line**	**Upper Cumberland**	**4.0**	**21.5**	**17.5**
Shilalah Creek	**Bell**	**Mouth to headwaters**	**Upper Cumberland**	**0.0**	**5.5**	**5.5**
Sinking Creek	**Laurel**	**Mouth to White Oak Creek**	**Upper Cumberland**	**0.0**	**9.9**	**9.9**
South Fork Dog Slaughter Creek	**Whitley**	**Mouth to headwaters**	**Upper Cumberland**	**0.0**	**4.6**	**4.6**
Sulphur Creek	**Clinton**	**Dale Hollow Lake backwaters to headwaters**	**Upper Cumberland**	**1.7**	**5.1**	**3.4**
UT of Rock Creek (at river mile 9.3)	**McCreary**	**Mouth to headwaters**	**Upper Cumberland**	**0.0**	**1.3**	**1.3**
UT of Rock Creek (at river mile 17.5)	**McCreary**	**Mouth to headwaters**	**Upper Cumberland**	**0.0**	**1.2**	**1.2**
Watts Branch	**McCreary**	**Mouth to headwaters**	**Upper Cumberland**	**0.0**	**2.6**	**2.6**
Watts Creek	**Harlan**	**Camp Blanton Reservoir to headwaters**	**Upper Cumberland**	**2.4**	**4.4**	**2.0**
Beaverdam Creek	Edmonson	Mouth to headwaters	Green	0.0	14.5	14.5
Caney Fork	Barren	Source to river mile 0.85	Green	6.6	0.0	6.6
Cane Run	Hart	Nolin River Reservoir backwaters to headwaters	Green	0.8	6.5	5.7
Clifty Creek	Todd	Sulphur Lick to Little Clifty Creek	Green	0.0	13.4	13.4
Clifty Creek	Grayson	Barton Runt to Western KY Pkwy	Green	7.5	17.3	9.8
E. Fork Little Barren River	Metcalfe	Leatherwood Creek to Flat Lick Creek	Green	18.9	20.7	1.8
Elk Lick C	Logan	0.6 mile above SR 106 to Edger Creek and Barren Fork	Green	3.6	11.8	8.2
Ellis Fork of Damron Creek	Adair, Russell	Mouth to headwaters	Green	0.0	3.2	3.2
Falling Timber Creek	Metcalfe	Landuse change to headwaters	Green	10.8	15.2	4.4
Fiddlers Creek	Breckinridge	Mouth to headwaters	Green	0.0	5.9	5.9
Forbes Creek	Christian	Mouth to UT	Green	0.0	4.1	4.1
Gasper River	Logan	Clear Fork to Wiggington Creek	Green	17.2	35.6	18.4
Goose Creek	Casey, Russell	Mouth to Little Goose Creek	Green	0.0	8.5	8.5
Green River, UT	Adair	Land use change to headwaters	Green	3.2	0.8	2.4
Halls Creek	Ohio	UT to headwaters	Green	4.8	9.6	4.8
Lick Creek	Simpson	Mouth to headwaters	Green	0.0	10.2	10.2
Linders Creek	Hardin	Mouth to Sutzer Creek	Green	0.0	7.9	7.9
Little Short Creek	Grayson	Mouth to headwaters	Green	0.0	3.1	3.1
Lynn Camp Creek	Hart	Mouth to Lindy Creek	Green	0.0	8.5	8.5
McFarland Creek	Christian, Hopkins	Grays Branch to UT	Green	1.5	5.0	3.5
Meeting Creek	Hardin	Little Meeting Cr to Petty Branch	Green	5.2	14.0	8.8

Table 3.1.4-1. Reference reach streams in Kentucky with those in bold to emphasize streams in the Salt River – Licking River and Upper Cumberland – 4-Rivers BMUs.

Stream	County	Location	Basin	Start Segment	End Segment	Total Miles
Muddy Creek	Ohio	Landuse change to headwaters	Green	13.0	15.5	2.5
North Fork Rough River	Breckinridge	Buffalo Creek to reservoir dam	Green	22.1	26.9	4.8
Peter Creek	Barren	Candy Fork to Dry Fork	Green	11.6	18.5	6.9
Pond Run	Breckinridge, Ohio	Lane use change to headwaters	Green	1.4	6.8	5.4
Rough River	Hardin	Linders Creek to Vertrees Creek	Green	138.0	149.4	11.4
Russell Creek	Adair, Green	Mouth to Columbia STP	Green	0.0	40.0	40.0
Russell Creek	Adair, Russell	Reynolds Creek to Mt. Olive, Hudson and Williams Creek	Green	56.9	66.3	9.4
Sixes Creek	Ohio	Wild Branch to headwaters	Green	2.0	7.5	5.5
Sulphur Branch	Edmonson	Mouth to headwaters	Green	0.0	3.0	3.0
Trammel Creek	Allen, Warren	Mouth to Kentucky – Tennessee state line	Green	0.0	30.6	30.6
UT of Green River	Adair	Landuse change to headwaters	Green	1.7	3.2	1.5
W. Fork Pond River	Christian	UT to East Branch Pond River	Green	12.45	22.5	10.05
UT of White Oak Creek	Adair	SR 76 to Hovious Road Crossing	Green	0.0	2.4	2.4
Backbone Creek	Henry, Shelby	Mouth to Scrabble Creek	Kentucky	0.0	1.65	1.65
Big Double Creek	Clay	Mouth to confluence of Left and Right Forks	Kentucky	0.0	4.4	4.4
Bill Branch	Leslie, Harlan	Mouth to Right and Left Fork of Bill Branch	Kentucky	0.0	0.3	0.3
Buffalo Creek	Owsley	Side road along mainstem	Kentucky	0.0	1.6	1.6
Cavanaugh Creek	Jackson	Mouth to headwaters	Kentucky	0.0	8.3	8.3
Chester Creek	Wolfe	Mouth to Headwaters	Kentucky	0.0	2.8	2.8
Clear Creek	Woodford	Hifner Rd bridge, 2.1 mi S of Mortonsville	Kentucky	0.0	9.0	9.0
Clemmons Fork	Breathitt	Mouth to headwaters	Kentucky	0.0	4.8	4.8
Coles Fork	Breathitt	in Robinson Forest	Kentucky	0.0	6.2	6.2
Craig Creek	Leslie	Mouth to UT	Kentucky	0.0	2.7	2.7
Drennon Creek	Henry	Flat Bottom Rd crossing	Kentucky	8.7	12.2	3.5
East Fork Indian Creek	Menifee	Mouth to headwaters	Kentucky	0.0	9.0	9.0
Elisha Creek	Leslie	Elisha Creek Road	Kentucky	0.95	3.3	2.35
Evans Fork	Estill	Mouth to headwaters	Kentucky	0.0	3.0	3.0
Falling Rock Branch	Breathitt	Mouth to headwaters	Kentucky	0.0	0.7	0.7
Gladie Creek	Menifee	0.2 mi upstream of bridge	Kentucky	0.0	8.4	8.4
Griers Creek	Woodford	Kentucky River backwaters to UT	Kentucky	0.1	3.5	3.4
Grindstone Creek	Franklin	Kentucky River backwaters to headwaters	Kentucky	0.1	2.1	2.0
Hines Creek	Madison	Kentucky River backwaters to UT	Kentucky	0.1	1.9	1.8
Hopper Cave Branch	Jackson	Mouth to headwaters	Kentucky	0.0	1.8	1.8
Indian Creek	Carroll	Mouth to headwaters	Kentucky	0.0	5.4	5.4
Indian Fork	Shelby	Mouth to headwaters	Kentucky	0.0	3.3	3.3
Laurel Fork	Owsley	Mouth to Big Branch	Kentucky	0.0	3.75	3.75

Table 3.1.4-1. Reference reach streams in Kentucky with those in bold to emphasize streams in the Salt River – Licking River and Upper Cumberland – 4-Rivers BMUs.

Stream	County	Location	Basin	Start Segment	End Segment	Total Miles
Left Fork Big Double Creek	Clay	Mouth to headwaters	Kentucky	0.0	1.5	1.5
Line Fork	Letcher	Defeated Creek to headwaters	Kentucky	12.2	28.6	6.4
Little Middle Fork Elisha Creek	Leslie	Mouth to headwaters	Kentucky	0.0	0.75	0.75
Little Millseat Branch	Breathitt	Mouth to headwaters	Kentucky	0.0	1.2	1.2
Little Sixmile Creek	Henry	Mouth to headwaters	Kentucky	0.0	5.3	5.3
Middle Fork Kentucky River	Leslie	Hurts Creek to Greasy Creek	Kentucky	75.2	85.5	10.3
Mill Creek	Owen	Near mouth to headwaters	Kentucky	0.05	8.3	8.25
Millseat Branch	Breathitt	Mouth to headwaters	Kentucky	0.0	1.85	1.85
Muddy Creek	Madison	Elliston, KY to Viney Creek	Kentucky	13.8	20.65	6.85
Musselman Creek	Grant	Mouth to headwaters	Kentucky	0.0	9.0	9.0
Right Fork Buffalo Creek	Owsley	Mouth to headwaters	Kentucky	0.0	11.75	11.75
Roaring Fork	Breathitt	Mouth to headwaters	Kentucky	0.0	0.9	0.9
Rock Lick Creek	Jackson	Mouth to headwaters	Kentucky	0.0	9.6	9.6
Sand Ripple Creek	Franklin, Henry	Kentucky River backwaters to headwaters	Kentucky	0.1	3.9	3.9
Severn Creek	Owen	Kentucky River backwaters to North Fork Severn Creek	Kentucky	1.35	3.0	1.65
Shelly Rock Fork	Breathitt	Mouth to headwaters	Kentucky	0.0	0.6	0.6
Sixmile Creek	Henry, Shelby	Little Sixmile Creek to dam	Kentucky	7.1	15.3	8.2
South Fork Station Camp Creek	Jackson	Mouth to Rock Lick Creek	Kentucky	0.0	9.7	9.7
Spruce Branch	Clay	Mouth to Rock Lick Creek	Kentucky	0.0	1.0	1.0
Station Camp Creek	Estill	Off KY Hwy 1209 at Estill-Jackson County boundary	Kentucky	3.3	22.7	19.4
Steer Fork	Jackson	Mouth to headwaters	Kentucky	0.0	2.7	2.7
Sturgeon Creek	Lee, Owsley	Duck Fork to Little Sturgeon Creek	Kentucky	1.3	13.7	12.4
Sugar Creek	Leslie	Landuse change to headwaters	Kentucky	0.6	5.4	4.8
Sulphur Creek	Franklin	Mouth to headwaters	Kentucky	0.0	5.2	5.2
UT of Cawood Branch	Leslie	Mouth to headwaters	Kentucky	0.0	2.1	2.1
UT of Cedar Creek	Owen	Mouth to headwaters	Kentucky	0.0	1.4	1.4
UT of Glenns Creek	Woodford	Mouth to headwaters	Kentucky	0.0	1.9	1.9
UT of Jacks Creek	Madison	Mouth to headwaters	Kentucky	0.0	1.15	1.15
UT of Kentucky River	Franklin	Landuse change to headwaters	Kentucky	0.1	1.4	1.3
UT of Line Fork	Letcher	Mouth to headwaters	Kentucky	0.0	0.6	0.6
Wolfpen Creek	Menifee	Mouth to headwaters	Kentucky	0.0	3.6	3.6
Blackwater Creek	**Morgan**	**Eaton Creek to Greasy Creek**	**Licking**	**3.8**	**11.7**	**7.9**
Botts Fork	**Menifee**	**Mouth to landuse change**	**Licking**	**0.0**	**2.1**	**2.1**
Brushy Fork	**Menifee**	**Reservoir backwaters to headwaters**	**Licking**	**0.7**	**5.6**	**4.9**
Brushy Fork	**Pendleton**	**Mouth to headwaters**	**Licking**	**0.0**	**5.8**	**5.8**
Bucket Branch	**Morgan**	**Leisure – Paragon Rd bridge**	**Licking**	**0.0**	**1.9**	**1.9**
Craney Creek	**Rowan**	**Mouth to headwaters**	**Licking**	**0.0**	**11.2**	**11.2**
Devils Fork	**Morgan**	**Mouth to headwaters**	**Licking**	**0.0**	**8.5**	**8.5**
Grovers Creek	**Pendleton**	**Kincaid L. backwaters to UT**	**Licking**	**0.5**	**3.4**	**2.9**
North Fork Licking River	**Morgan**	**Cave Run L. backwaters to Devils Fk**	**Licking**	**8.4**	**13.4**	**5.0**

Table 3.1.4-1. Reference reach streams in Kentucky with those in bold to emphasize streams in the Salt River – Licking River and Upper Cumberland – 4-Rivers BMUs.

Stream	County	Location	Basin	Start Segment	End Segment	Total Miles
South Fork Grassy Creek	**Pendleton**	**Mouth to Greasy Creek**	**Licking**	**0.0**	**19.8**	**19.8**
West Creek	**Harrison**	**Mouth to headwaters**	**Licking**	**0.0**	**9.8**	**9.8**
Big Sinking Creek	Carter	KY 986 bridge	Little Sandy	15.9	11.0	4.9
Arabs Fork	Elliott	KY 1620 bridge	Little Sandy	4.7	0.0	4.7
Big Caney Creek	Elliott	Grayson L. backwaters to headwaters	Little Sandy	15.3	1.8	13.5
Big Sinking Creek	Carter, Elliott	SR 986 to Clay and Arab forks	Little Sandy	15.2	10.7	4.5
Laurel Creek	Elliott	Carter School Rd Bridge	Little Sandy	14.7	7.6	7.1
Meadow Branch	Elliott	Mouth to headwaters	Little Sandy	1.4	0.0	1.4
Middle Fork Little Sandy R.	Elliott	Mouth to Sheepskin Branch	Little Sandy	3.4	0.0	3.4
Nichols Creek	Elliott	Green Branch to headwaters	Little Sandy	2.0	0.0	2.0
Jackson Creek	**Graves**	**Mouth to headwaters**	**Mississippi**	**0.0**	**3.0**	**3.0**
Obion Creek	**Hickman**	**Hurricane Creek to Little Creek**	**Mississippi**	**26.35**	**36.55**	**10.2**
Terrapin Creek	**Graves**	**Kentucky – Tennessee Stateline to East and West Forks**	**Mississippi**	**2.7**	**6.0**	**3.3**
Crooked Creek	Crittenden	Rush Creek to City Lake Dam	Ohio	17.9	26.2	8.3
Double Lick Creek	Boone	Mouth to headwaters	Ohio	0.0	3.5	3.5
Garrison Creek	Boone	Mouth to headwaters	Ohio	0.0	4.7	4.7
Kinniconick Creek	Lewis	McDowell Creek to headwaters	Ohio	5.05	50.9	45.85
Middle Fork Massac Creek	McCracken	Hines Road to pond	Ohio	3.1	6.4	3.3
Second Creek	Boone	Backwaters to headwaters	Ohio	0.2	2.7	2.5
UT of Big Sugar Creek	Gallatin	I-71 to headwaters	Ohio	1.0	3.4	2.4
UT of Corn Creek	Trimble	Mouth to headwaters	Ohio	0.0	2.3	2.3
UT of Massac Creek	**McCracken**	**Mouth to headwaters**	**Ohio**	**0.0**	**1.7**	**1.7**
W. Fork Massac Creek	**McCracken**	**SR 724 to Little Massac Creek**	**Ohio**	**3.6**	**6.2**	**2.6**
Yellowbank Creek	Breckinridge	Ohio River backwaters to headwaters	Ohio	1.8	11.8	10.0
Blood River	**Calloway**	**Grubbs Lane bridge; O.75 mi E of State Line Rd**	**Tennessee**	**15.15**	**18.7**	**3.55**
Grindstone Creek	**Calloway**	**Kentucky Lake backwaters to headwaters**	**Tennessee**	**0.7**	**2.9**	**2.2**
Soldier Creek	**Marshall**	**HWY 58 bridge**	**Tennessee**	**5.3**	**2.6**	**2.7**
Panther Creek	**Calloway**	**Kentucky Lake backwaters to headwaters**	**Tennessee**	**0.5**	**5.7**	**5.2**
Soldier Creek	**Marshall**	**Mouth to South Fork Soldier Cr.**	**Tennessee**	**0.0**	**5.7**	**5.7**
Sugar Creek	**Calloway**	**Kentucky Lake backwaters to Soldier Creek**	**Tennessee**	**2.5**	**3.2**	**0.7**
Sugar Creek	**Graves**	**Mouth to unnamed reservoir**	**Tennessee**	**0.0**	**3.9**	**3.9**
Trace Creek	**Graves**	**Mouth to Neely Branch**	**Tennessee**	**0.0**	**3.0**	**3.0**
UT of Panther Creek	**Graves**	**Mouth to headwaters**	**Tennessee**	**0.0**	**2.0**	**2.0**
W. Fork Clarks River	**Graves**	**Soldier Creek to Duncan Creek**	**Tennessee**	**20.1**	**23.5**	**3.4**
Wildcat Creek	**Calloway**	**Ralph Wright Road crossing to headwaters**	**Tennessee**	**3.6**	**6.8**	**3.2**
East Fork Flynn Fork	Caldwell	Land use change to headwaters	Tradewater	2.15	4.6	2.45
Piney Creek	Caldwell	L. Beshear backwaters to headwaters	Tradewater	4.5	10.2	5.7

Table 3.1.4-1. Reference reach streams in Kentucky with those in bold to emphasize streams in the Salt River – Licking River and Upper Cumberland – 4-Rivers BMUs.

Stream	County	Location	Basin	Start Segment	End Segment	Total Miles
Tradewater River	Christian, Hopkins	Dripping Springs Br to Buntin Lake dam	Tradewater	131.1	123.2	7.9
Sandlick Creek	Christian	Camp Creek to headwaters	Tradewater	4.5	8.6	4.1
Tradewater River	Christian	Dripping Springs to Buntin Lake	Tradewater	125.8	133.9	8.1
UT of Piney Creek	Caldwell	Mouth to headwaters	Tradewater	0.0	2.9	2.9
UT of Sandlick Creek	Christian	Mouth to headwaters	Tradewater	0.0	1.4	1.4
Cedar Creek	Bullitt	Mouth to Greens Branch	Salt	0.0	5.2	5.2
Chaplin River	Washington	Thompson Creek to Cornishville	Salt	40.9	54.2	13.3
Harts Run	Bullitt	Mouth to headwaters	Salt	0.0	2.3	2.3
Lick Creek	Washington	Mouth to 0.1 mile below dam	Salt	0.0	4.1	4.1
Otter Creek	Larue	Landuse change to East and Middle Forks Otter Creek	Salt	1.7	2.9	1.2
Overalls Creek	Bullitt	Mouth to headwaters	Salt	0.0	3.2	3.2
Salt Lick Creek	Marion	Mouth to headwaters	Salt	0.0	8.6	8.6
Sulphur Creek	Anderson	Mouth to Cheese Lick and Brush Cr	Salt	0.0	10.0	10.0
West Fork Otter Creek	Larue	Mouth to headwaters	Salt	0.0	5.4	5.4
Wilson Creek	Bullitt, Nelson	Mouth to headwaters	Salt	0.0	18.4	18.4
Crooked Creek	**Trigg**	**Energy Lake backwaters to headwaters**	**Lower Cumberland**	**3.0**	**9.1**	**6.1**
Donaldson Creek	**Trigg**	**Lake Barkley backwaters to UT**	**Lower Cumberland**	**4.0**	**7.2**	**3.2**
Elk Fork	**Todd**	**Kentucky – Kentucky stateline to Dry Branch**	**Lower Cumberland**	**7.5**	**23.1**	**15.6**
Sugar Creek	**Livingston**	**Lick Creek to UT**	**Lower Cumberland**	**2.2**	**6.9**	**4.7**
West Fork Red River	**Christian**	**Carter Rd bridge**	**Lower Cumberland**	**14.7**	**32.2**	**17.5**
Whippoorwill Creek	**Logan**	**Mouth to Vicks Branch**	**Lower Cumberland**	**0.0**	**13.2**	**13.2**

Table 3.1.4-2. Candidate exceptional streams and segments as defined in 401 KAR 10:030.

Basin	Stream	Segment Description	Segment Mile Points	Total Miles	Lat-Long (downstream)	Lat-Long (upstream)	County	Reference[a] or Exceptional[b]
Big Sandy	Thompson Fork	Mouth to Headwaters	0.0-1.0	1.0	37.68467 -82.66785	37.67509 -82.67561	Floyd	Exceptional
	UT of Open Fork Paint Creek	Mouth to Headwaters	0.0-0.8	0.8	37.97376 -83.05616	37.98494 -83.0521	Morgan	Exceptional
Kentucky	Bullskin Creek	Mouth to Headwaters	0.0-14.6	14.6	37.27327 -83.64432	37.19870 -83.48494	Clay	Exceptional
	Joyce Fork	Mouth to Headwaters	0.0-1.2	1.2	37.35043 -83.55770	37.35948 -83.54521	Owsley	Exceptional
	Little Sturgeon Creek	Mouth to Warren Chapel Branch	0.0-3.0	3.0	37.47850 -83.81356	37.44893 -83.78880	Owsley	Exceptional
	Low Gap Branch	Mouth to Headwaters	0.0-0.8	0.8	37.15323 -82.98323	37.15809 -82.9929	Letcher	Exceptional
	Lower Devil Creek	Mouth to Middle Fork Lower Devil Creek	0.0-4.65	4.65	37.64425 -83.60963	37.68870 -83.60403	Lee	Exceptional
Cumber-land	Clear Creek	Scaffold Cane Branch to Davis Branch	3.45-7.8	4.45	37.44225 -84.27864	37.48548 -84.25547	Rockcastle	Exceptional
	Kettle Creek	Kentucky/Tennessee State Line	1.75-6.1	4.35	36.6153 -85.4912	36.651 -85.44512	Monroe	Exceptional
	Little White Oak Creek	Mouth to Headwaters	0.0-2.6	2.6	37.10211 -84.19981	37.12675 -84.18402	Laurel	Exceptional
	UT of Cane Creek of Rockcastle River	Mouth to Headwaters	0.0-1.2	1.2	37.05159 -84.19762	37.06649 -84.18907	Laurel	Exceptional
Ohio	Ashbys Fork	Mouth to Petersburg Road (SR 20)	0.0-3.7	3.7	39.03846 -84.81574	39.07717 -84.79557	Boone	Exceptional
	UT of UT of Corn Creek	UT to Headwaters	0.15-2.2	2.05	38.60125 -85.41691	38.60731 -85.38680	Trimble	Exceptional

[a]Reference Reach streams and segments have the greatest biological integrity and intact habitat of those streams in a given bioregion. [b]Exceptional streams and segments must score "excellent" on the MBI or KIBI based on 50th %tile for Mountain, Bluegrass and Pennyroyal and 75th %tile for the Mississippi Valley-Interior River Lowlands bioregions. *Streams that are already Exceptional in 401 KAR 10:030 but are proposed for a segment change based on new data, or to conform to NHD mile points.

Figure 3.1.4-5. Salt River – Licking River BMU long-term ambient water quality stations with associated biological community data.

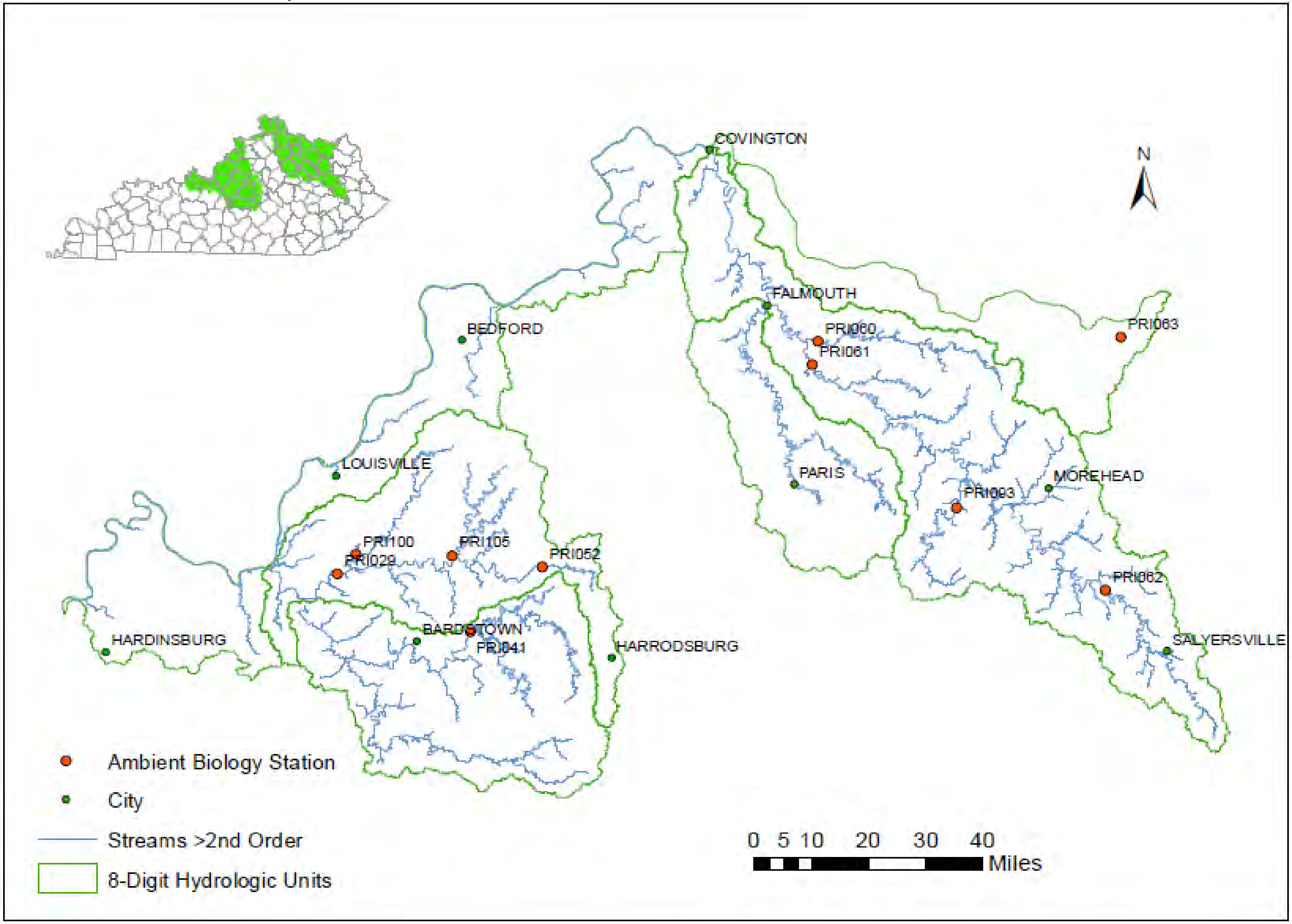
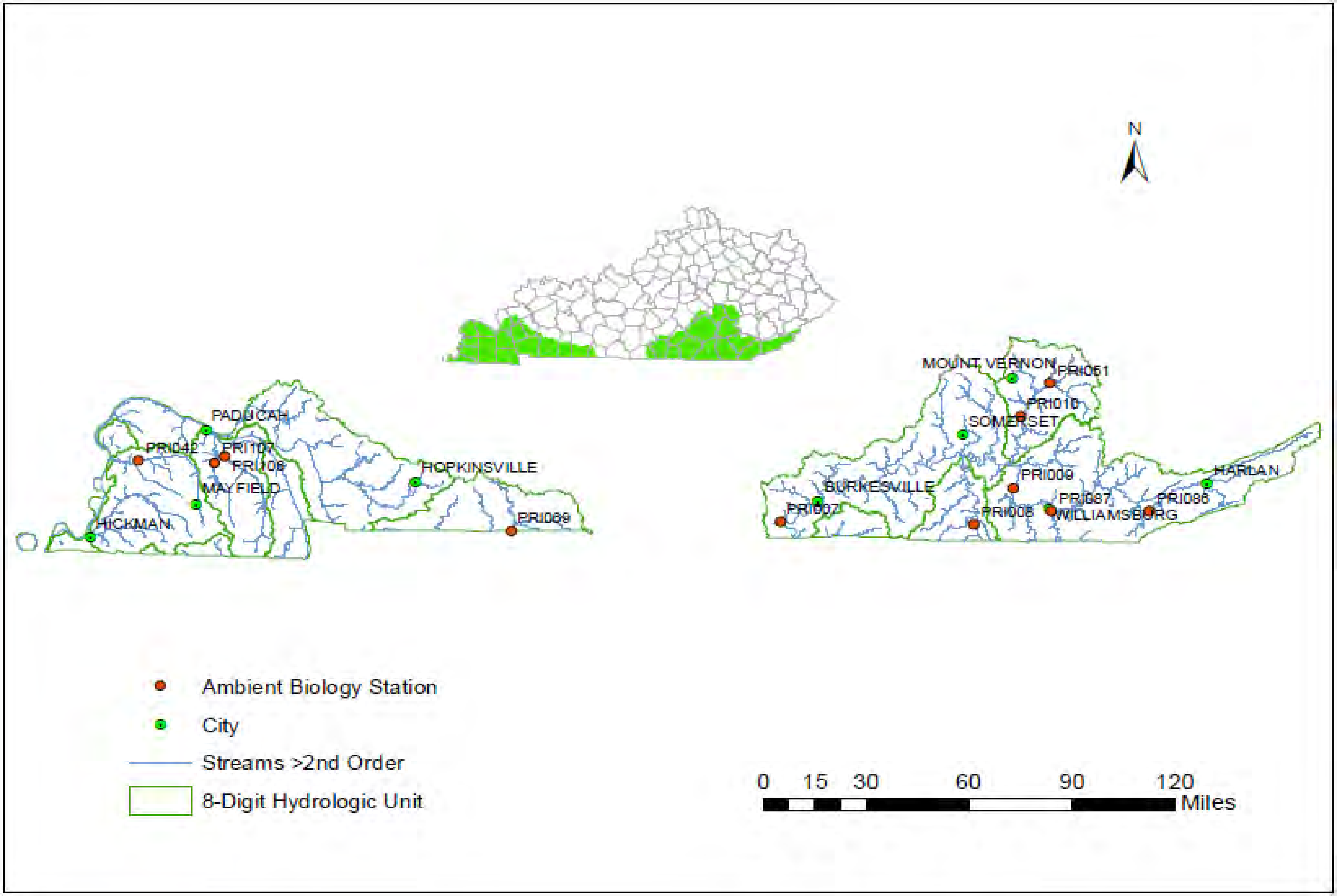


Figure 3.1.4-6. Upper Cumberland River – 4-Rivers BMU long-term ambient water quality stations with associated biological community data.



nutrient samples (unionized ammonia, nitrite-nitrate, total phosphorus, and total Kjeldahl-nitrogen) in addition to bulk water quality variables (total suspended solids, chloride, sulfate, alkalinity, hardness and total organic carbon). *In situ* physicochemical measurements were made at time of water quality sample collection using a multiparameter probe for pH, temperature, DO, percent DO saturation and specific conductance. Ambient water quality data were collected at these locations on a monthly basis during the BMU cycle. These stations are revisited every five years.

Nonpoint Source Program (NPSP). The Kentucky Nonpoint Source Pollution Control Program's goal is to protect the quality of Kentucky's surface and groundwater from NPS (nonpoint source) pollutants, abate NPS threats and restore degraded waters to the extent that water quality standards are met and beneficial uses are supported. The NPSP is achieving this through federal, state, local and private partnerships which promote complimentary, regulatory and non-regulatory nonpoint source pollution control initiatives at both statewide and watershed levels.

Pollutants from nonpoint sources are sometimes referred to as runoff or diffuse pollution. Unlike pollutants from industrial and sewage treatment plants, NPS pollutants are caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-produced pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters and even underground sources of drinking water. These pollutants include:

- Excess fertilizers, herbicides and insecticides from agricultural lands and residential areas;
- Oil, grease and toxic chemicals from urban runoff and energy production;
- Sediment from improperly managed construction sites, crop and silviculture lands and eroding streambanks;
- Acid mine drainage; and
- Bacteria and nutrients from livestock, pet wastes and faulty septic systems.

Atmospheric deposition and hydromodification are also sources of NPS pollution. NPS pollution is the primary contributor to water pollution in Kentucky. Monitoring of streams impacted by NPS pollutants follows KDOW standard protocol; each biosurvey conducted at these stations typically included two biological communities, macroinvertebrates and fishes, to determine the condition of wadeable streams. Also collected were nutrient samples (unionized ammonia, nitrite-nitrate, total phosphorus, and total Kjeldahl- nitrogen) in addition to bulk water quality variables (total suspended solids, chlorides, sulfates, alkalinity, hardness and total organic carbon). Physical measurements were also made at time of water quality sample collection; a multiparameter probe was used to measure pH, temperature, DO, percent DO saturation and specific conductance.

Probabilistic Biosurvey Program (PBP). KDOW conducts random biosurveys of streams across the Commonwealth. Each year the probabilistic biosurvey program coordinator selects the 8-digit HUCs to be monitored in a particular BMU. The target population is all wadeable streams 1st through 5th order within the HUCs of each BMU. Then a request is sent to EPA's National Health and Environmental Research Laboratory, Office of Research and Development, Corvallis, Oregon, where the EMAP (Environmental Monitoring and Assessment Program) Design Group uses EPA's Reach File Version 3 – Alpha (RF3-Alpha) as a sampling frame. A frequency table is established for the population candidate streams (based on stream order) across the HUCs. Based on those frequencies, a random, weighted (by stream order) survey design is utilized to determine the sample stream population and locations of the sample point for the study. A sample size of 50 sites with approximately an equivalent number (based on frequency) in each of the five stream order categories: 1st, 2nd, 3rd, 4th and 5th were selected. An oversample of 200% (100 sites) for a total of 150 sites, including the base sites are derived per study. This oversample provides reserve samples for alternative sites when those initial sites do not conform to target population parameters (e.g. non-wadeable, miss-mapped features), are inaccessible due to safety concerns, or to which access is denied by landowners. Standard protocol dictates that surrogate stream sample sites be selected sequentially from the oversample population when replacement of an initial sample site is necessary. Since the random design is weighted, no regard to replacement of an initial sample site with one of equivalent Strahler order is required.

A biosurvey of the macroinvertebrate community (and where appropriate fish community) was conducted to determine condition of wadeable streams; additionally, the probabilistic program collected nutrient samples (unionized ammonia, nitrite-nitrate, total phosphorus, and total Kjeldahl-nitrogen) in addition to bulk water quality variables (total suspended solids, chlorides, sulfates, alkalinity, hardness and total organic carbon). *In situ* measurements were also made at time of water quality sample collection; a Hydrolab® or YSI multiparameter probe was used to measure pH, temperature, DO, percent DO saturation and specific conductance.

For this reporting cycle, the probabilistic network consisted of 48 sites in the Licking River – Salt River BMU (Figures 3.1.4-7 and 8) and 47 sites in the Upper Cumberland – 4-Rivers BMU (Figure 3.1.4-9 and 10). Names of sample locations can be located in Tables 3.1.4-3, 4, 5 and 6.

Table 3.1.4-3. Key to stream names sampled and assessed in the Salt River basin using probabilistic methodology.

1. Panther Creek	13. Cartwright Creek
2. Woolper Creek	14. Salt Lick Creek
3. Pawley Creek	15. Pleasant Run
4. Broad Run	16. Bullskin Creek
5. UT of Mill Creek	17. Salt River
6. Cox Creek	18. Northern Ditch
7. Cartwright Creek	19. Thompson Creek
8. Cedar Creek	20. Cartwright Creek
9. UT[a] of Rolling Fork	21. Glens Creek
10. Mill Creek	22. Currys Fork
11. Bullskin Creek	23. Harrods Creek
12. Guist Creek	

[a]UT= Unnamed tributary

Figure 3.1.4-7. Probabilistic biological survey sites in the Salt River basin (please refer to key in Table 3.1.4-3 for stream names).

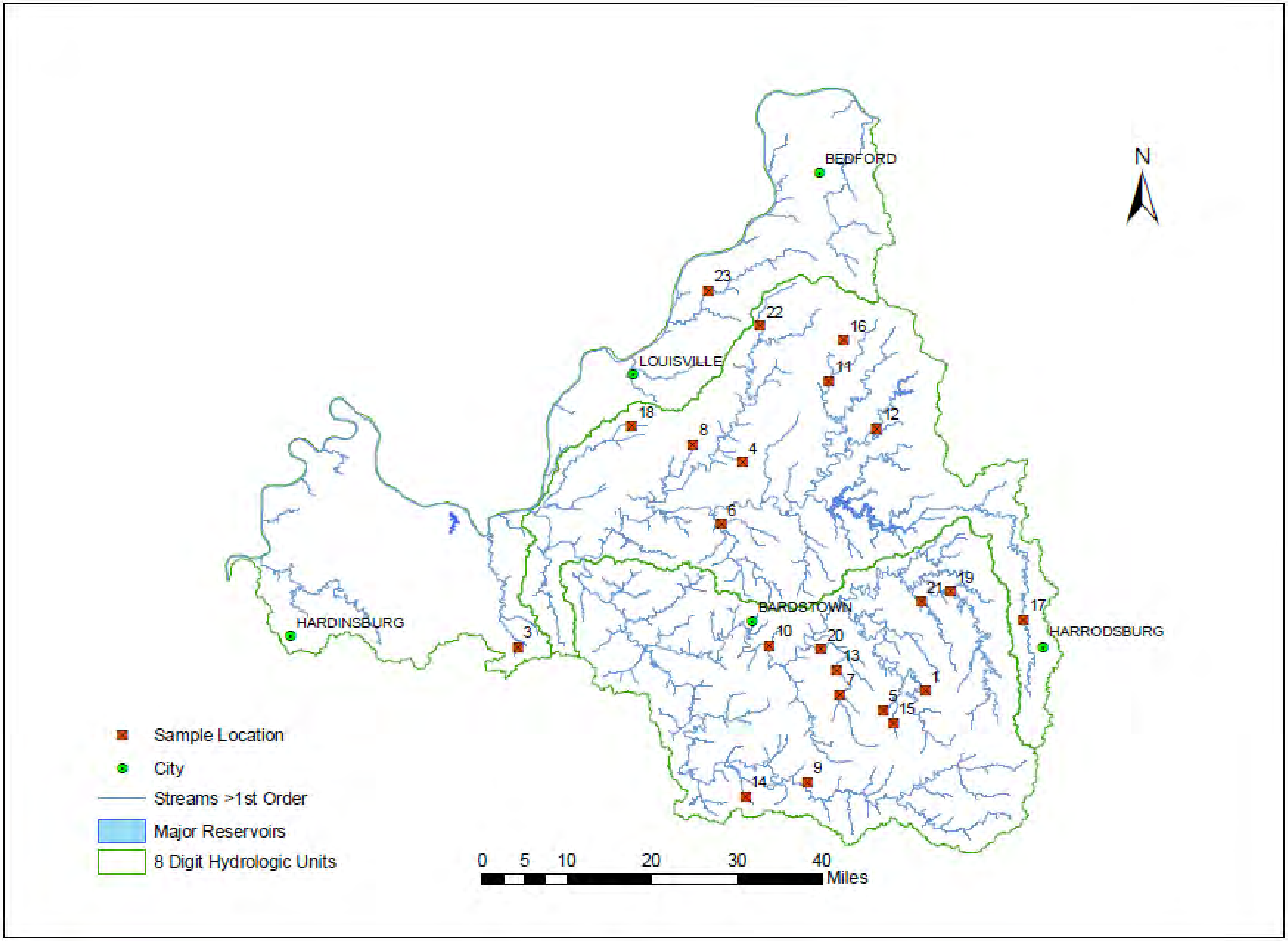


Figure 3.1.4-8. Probabilistic biological survey sites in the Licking River basin (please refer to key in Table 3.1.4-4 for stream names).

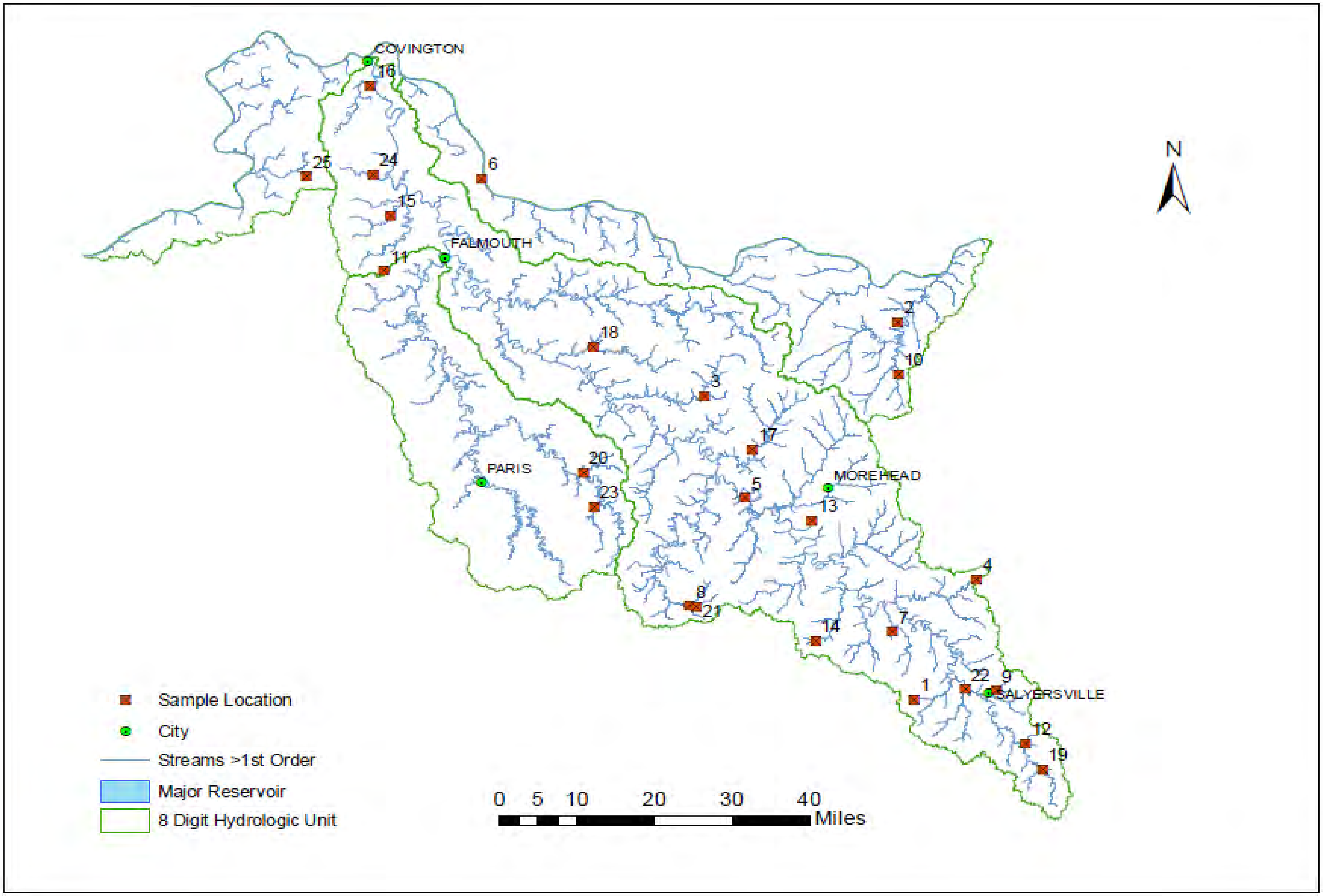


Table 3.1.4-4. Key to stream names sampled and assessed in the Licking River basin using probabilistic methodology.

1. Wheel Rim Fork	14. Little Blackwater Creek
2. UT[a] of McKinney Branch	15. Middle Fork Grassy Creek
3. Allison Creek	16. Banklick Creek
4. Fannins Fork	17. Fox Creek
5. UT[a] of Licking River	18. Five Lick Creek
6. Stepstone Creek	19. Licking River
7. Little Caney Creek	20. Somerset Creek
8. Slate Creek	21. Slate Creek
9. Horsepen Fork	22. Licking River
10. Grassy Fork	23. Grassy Lick Creek
11. Brushy Fork	24. Cruises Creek
12. Puncheon Camp Creek	25. McCoys Fork
13. Scott Creek	

[a]UT= Unnamed tributary

Table 3.1.4-5. Key to stream names sampled and assessed in the Upper Cumberland River basin using probabilistic methodology.

1. Brushy Creek	13. UT[a] of Smith Creek
2. Indian Creek	14. Allen Creek
3. Leatherwood Creek	15. UT[a] of Sulphur Creek
4. Beaver Creek	16. Alum Cave Branch
5. Dudley Creek	17. Lewis Branch
6. Otter Creek	18. Beech Bingham Branch
7. Sand Lick Creek	19. Pine Creek
8. Fishing Creek	20. Catron Creek
9. Beaver Creek	21. Powers Branch
10. Marrowbone Creek	22. UT[a] of Cane Creek
11. UT[a] of Cumberland River	23. Poor Fork Cumberland River
12. Big Clifty Creek	24. UT[a] of Powder Mill Creek

[a]UT= Unnamed tributary

Table 3.1.4-6. Key to stream names sampled and assessed in the 4-Rivers basin using probabilistic methodology.

1. Horse Creek	13. UT[a] of Vulton Creek
2. UT of Cumberland River	14. White Creek
3. Montgomery Creek	15. Wallace Fork
4. Muddy Fork Little River	16. Montgomery Creek
5. Cypress Creek	17. Donaldson Creek
6. UT of UT of UT of Little Bayou Creek	18. Smith Branch
7. Middle Fork Clarks River	19. UT of West Fork Red River
8. Middle Fork Creek	20. Caddle Creek
9. UT of Middle Fork Clarks River	21. Mayfield Creek
10. Shawnee Creek	22. UT[a] of W. Fork Mayfield Creek
11. UT[a] of Middle Fork Massac Creek	23. Little Bee Creek
12. Whayne Branch	

[a]UT= Unnamed tributary

3.1.5 Lake and Reservoir Monitoring

Lakes and reservoirs are monitored over the growing season (April through October) for designated use support determination and trophic state using the Carlson Trophic State Index (TSI) for chlorophyll *a*. This method of determining trophic state of lakes is convenient as it allows for the numerical ranking of lakes according to increasing trophic state (oligotrophic, mesotrophic, eutrophic, and hyper-eutrophic). The growing season average TSI value is used to determine the trophic state of each lake.

Water quality and physical measurements were made in spring, summer and fall, typically with an interval of six to eight weeks to allow sufficient time for seasonal changes to occur. Publicly accessible lakes and reservoirs are the population of these resources monitored in Kentucky. Water quality variables, including nutrients (unionized ammonia, nitrite-nitrate, total phosphorus, TKN, total soluble phosphorus, soluble reactive orthophosphate and total organic carbon), chlorophyll *a*, standard variables (total suspended solids, chlorides, sulfates, alkalinity and hardness) and water column water quality (DO, pH, temperature and specific conductance) was profiled at each station per lake. The majority of these waters were small, usually several hundred acres or less in surface area; therefore, one sample station in the forebay (or center of lake if a

Figure 3.1.4-9. Probabilistic biological survey sites in the upper Cumberland River basin (please refer to key in Table 3.1.4-5 for stream names).

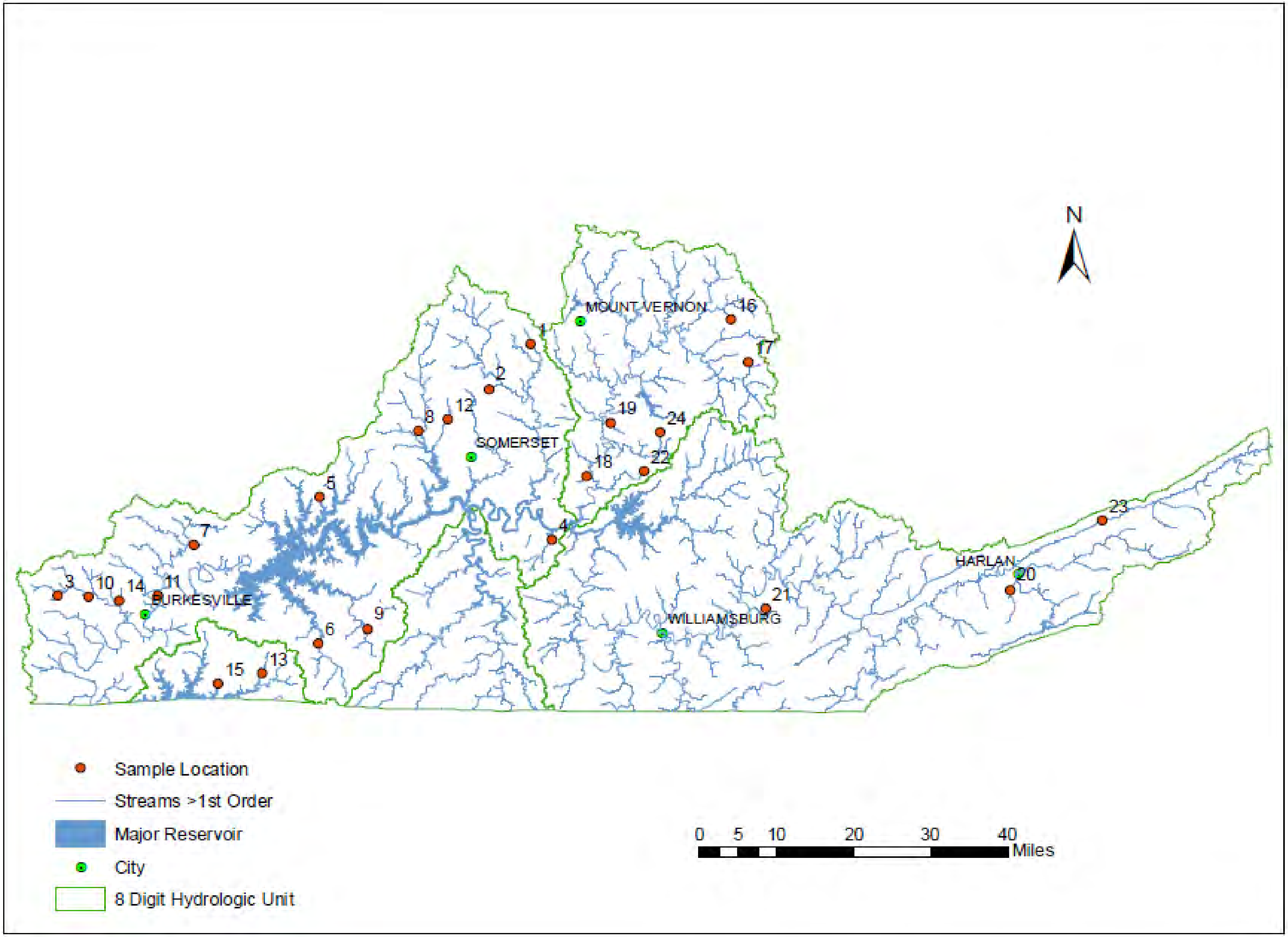
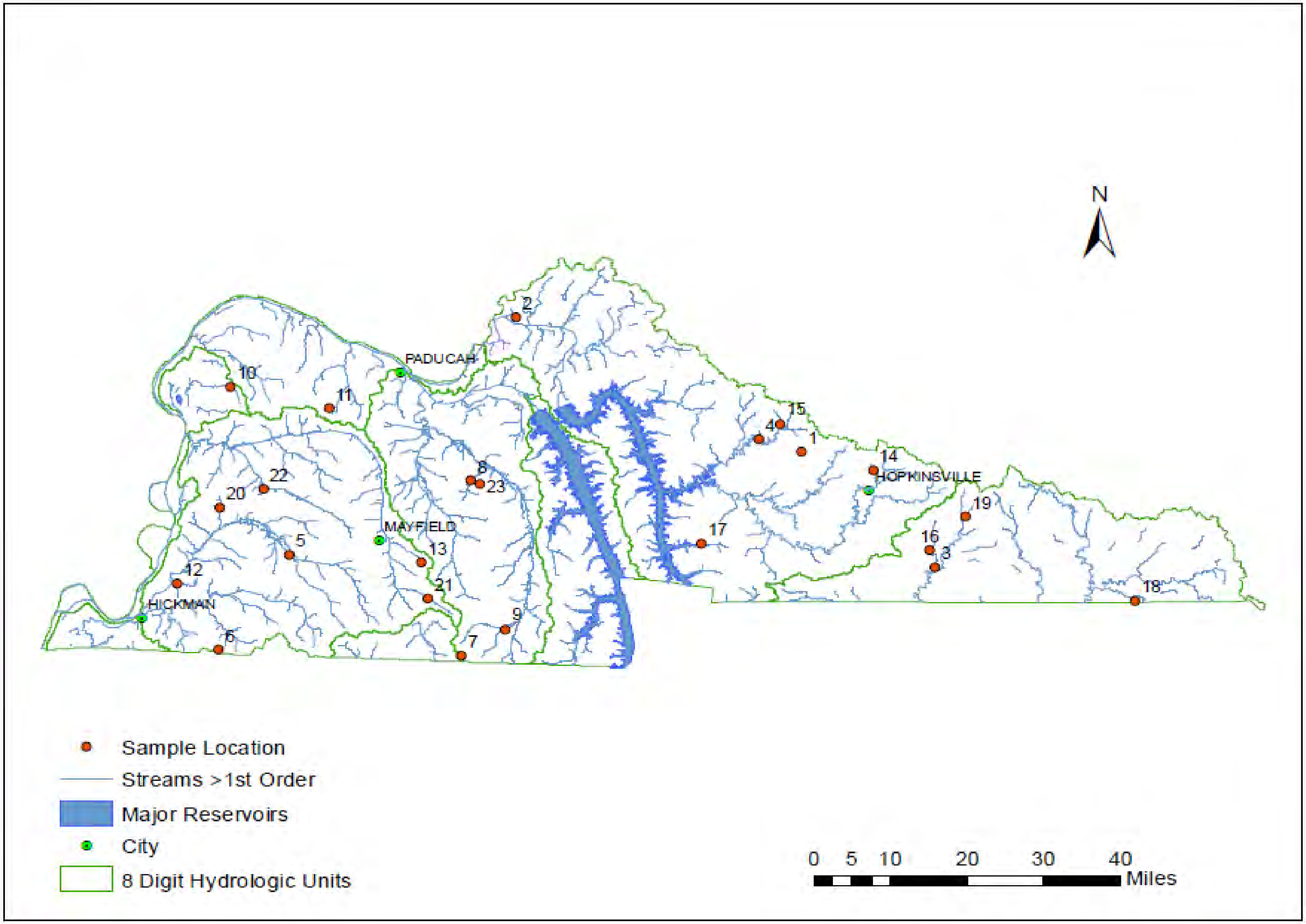


Figure 3.1.4-10. Probabilistic biological survey sites in the 4-Rivers basin (please refer to key in Table 3.1.4-6 for stream names).



natural waterbody) was sufficient to characterize the status of the majority of lakes and reservoirs.

The Louisville USACE district cooperated in shared monitoring of their dam projects in the Salt River – Licking River BMU; whereas the Nashville USACE district did the same in the Upper Cumberland River – 4-Rivers BMU. The water quality parameters described above were used to determine the trophic status of each reservoir. Multiple monitoring stations were placed in these large reservoirs. Often, the major in-flow and out-flow tributaries of each reservoir were monitored for water quality as well, often including pathogen indicators for recreation use support determinations. These tributary streams were assessed for aquatic life use support based on physicochemical data.

Those lakes and reservoirs monitored in the Salt River – Licking River and Upper Cumberland River – 4-Rivers BMU are identified in Table 3.1.5-1. Maps of use support assessment results follow in Appendix C.

Table 3.1.5-1. Lakes and reservoirs monitored in the Salt River – Licking River and Upper Cumberland River – 4-Rivers basin management units during 2009 and 2010, respectively.

Lake or Reservoir Name	Size (Acres)	Basin	County	Latitude (dd)	Longitude (dd)
A J Jolly Lake	204	Licking	Campbell	38.88306	-84.37417
Carlisle City Lake[a]	8.4	Licking	Nicholas	38.30991	-84.04023
Cave Run Lake	8270	Licking	Rowan; Menifee; Morgan	38.11917	-83.46250
Doe Run Lake	49	Licking	Kenton	38.98750	-84.55219
Evans Branch Reservoir[a]	19	Licking	Rowan	38.19342	-83.43409
Fleming Lake[a]	47	Licking	Fleming	38.42840	-82.75204
Greenbriar Lake	137	Licking	Montgomery	38.01989	-83.84753
Kincaid Lake	162	Licking	Pendleton	38.72431	-84.29069
Lake Carnico	112	Licking	Nicholas	38.34632	-84.04188
Sand Lick Creek Lake	78	Licking	Fleming	38.38664	-83.61290
Williamstown Lake	300	Licking	Grant	38.65601	-84.53755
Beaver Creek Lake	148	Salt	Anderson	37.96266	-85.02265
Chickasaw Park Pond[b]	1.5	Salt	Jefferson	38.23961	-85.83145
Fagan Branch Reservoir[a]	127	Salt	Marion	37.52111	-85.23972
Guist Creek Lake	317	Salt	Shelby	38.20803	-85.15450
Lake Jericho	137	Salt	Henry	38.44572	-85.28160
Long Run lake	30	Salt	Jefferson	38.26549	-85.41658
Marion County Sportsman Lake	29	Salt	Marion	37.51330	-85.24754
McNeely Lake	53	Salt	Jefferson	38.09780	-85.63646
Miles Park Pond #4[b]	3.9	Salt	Jefferson	38.23115	-85.46538
Reformatory Lake	54	Salt	Oldham	38.39956	-85.43958
Shelby Lake	64	Salt	Marion	38.23306	-85.2172
Sympson Lake	127	Salt	Nelson	37.80729	-85.50980
Taylorsville Lake	3050	Salt	Spencer	38.0179	-85.2731
Tom Wallace Lake[b]	4.8	Salt	Jefferson	38.08558	-85.77285
Willisburg Lake	127	Salt	Washington	37.80734	-85.16250
Willisburg Lake	127	Salt	Washington	37.80734	-85.16250
Willow Pond	3.3	Salt	Jefferson	38.24425	-85.70125
Beulah (Tyner) Lake	87	Upper Cumberland	Jackson	37.37889	-83.91306
Cannon Creek Lake	243	Upper Cumberland	Bell	36.68083	-83.70222

Table 3.1.5-1 (cont.). Lakes and reservoirs monitored in the Salt River – Licking River BMU and the Upper Cumberland River – 4-Rivers BMU during 2009 and 2010, respectively.

Lake or Reservoir Name	Size (Acres)	Basin	County	Latitude (dd)	Longitude (dd)
Corbin City Reservoir	139	Upper Cumberland	Laurel	36.97024	-84.12020
Cranks Creek Lake	219	Upper Cumberland	Harlan	36.73907	-83.23758
Dale Hollow Reservoir	4300	Upper Cumberland	Clinton; Cumberland	36.63167	-85.15806
Energy Lake	370	Lower Cumberland	Trigg	36.86031	-88.01534
Fish Lake	27	Ohio	Ballard	37.0534	-89.09434
Hematite Lake	85	Lower Cumberland	Trigg	36.89647	-88.04269
Honker Lake	190	Lower Cumberland	Lyon	36.90976	-88.02869
Lake Barkley	45,600	Lower Cumberland	Lyon; Trigg	37.01799	-88.21527
Lake Cumberland	50,250	Upper Cumberland	Pulaski; Russell; Wayne	36.85806	-85.14028
Lake Linville	273	Upper Cumberland	Rockcastle	37.38889	-84.34444
Laurel River Reservoir	6060	Upper Cumberland	Laurel; Whitley	36.96151	-84.26492
Laurel Creek Reservoir	88	Upper Cumberland	McCreary	36.68493	-84.44280
Martins Fork reservoir	334	Upper Cumberland	Harlan	36.75139	-83.25889
Metropolis Lake	36	Ohio	McCracken	37.14779	-88.76665
Swan Pond	193	Mississippi	Ballard	37.01227	-89.11780
Turner Lake	61	Ohio	Ballard	37.17278	-89.04167
Wood Creek Lake	672	Upper Cumberland	Laurel	37.213667	-84.19813

[a]Lakes where data were evaluated rather than monitored (assessments for domestic water supply designated use).
[b]Fish consumption for human health assessed only.

3.2 Assessment Methodology

General Assessment Methods. Beginning with the 2005 electronic 305(b) report submittal, the Commonwealth began assigning assessed uses of stream segments and lakes to the appropriate category of the five reporting categories recommended by EPA (U.S. EPA, 2005). Of those categories, two categories were divided to better define assessment results, creating 2B and 5B, to track assessed segments that did not conform to the national categories. Those categories used by the Commonwealth are listed in Table 3.2-1. Many waterbody segments had monitored data for only one use assessment, typically aquatic life use (warmwater or coldwater aquatic habitat [WAH or CAH]). When considering waters for assessment, KDOW solicited data from a variety of entities. This included other government agencies, such as state agencies (e.g. Department of Fish & Wildlife), and federal agencies (USACE, USF&WS [United States Fish & Wildlife Service] and USGS). Also, data from universities and ORSANCO were considered.

Generally, data older than five years were not considered for assessment; however, assessment decisions were made on a case-by-case basis and data older than five years resulted in assessment if they were considered valid for a waterbody. Data type was the primary consideration for older data, with biological data considered more reliable for assessment.

A number of causes (pollutants) in EPA's 2006 IR guidance were considered pollution rather than pollutants. A waterbody found not supporting a use and shown to be impaired by pollution, without identified pollutants, does not require a TMDL, rather an alternative plan to bring the use back to full support (Category 4B). Causes considered pollution are found in Table 3.2-2. The rationale behind pollutant vs. pollution is that a pollutant is a measurable variable, and its presence above criteria results in designated use impairment. It is the causal variable (e.g. sedimentation/siltation, total phosphorus, ammonia, mercury, etc.), not the indicator or response variable of one or more pollutants. An example of pollution is *alteration in stream-side or littoral vegetative cover*, a category that in and of itself may not directly attribute to impairment or water

Table 3.2-1. Reporting categories assigned to surface waters during the assessment process.

Category	Definition
1	All designated uses for water body fully supporting.
2	Assessed designated use(s) is/are fully supporting, but not all designated uses assessed.
2B	Segment currently supporting use(s), but 303(d) listed & proposed to EPA for delisting.
3	Designated use(s) has/have not been assessed (insufficient or no data available).
4A	Segment with an EPA approved or established TMDL for all listed uses not attaining full support.
4B	Nonsupport segment with an approved alternative pollution control plan (e.g. BMP) stringent enough to meet full support level of all uses within a specified time.
4C	Segment is not meeting full support of assessed use(s), but this is not attributable to a pollutant or combination of pollutants.
5	TMDL is required.
5B	Segment does not support designated uses based on evaluated data, but based on Kentucky listing methodology insufficient data are available to make a listing determination. No TMDL needed.

quality degradation. The loss of this vegetative integrity can result in excess nutrients and sedimentation/siltation (pollutants) that will subsequently affect biological communities, water quality, in-stream habitat and temperature. The previous example also serves to clarify why *habitat assessment (streams)* is considered pollution. Pollutants such as sedimentation/siltation, nutrients, or water temperature are listed with those nonsupporting segments, directly identifying the pollutant(s) and associated pollution that should be addressed to restore full use support.

The cause *habitat assessment (streams)* was a commonly reported pollution for streams not supporting aquatic life use based on biological community results. It should be noted that streams with this identified pollution make their way on the 303(d) list since it is almost never without associated pollutants such as sedimentation/siltation since the loss of intact riparian vegetation often results in excess sedimentation, excess nutrients and elevated water temperature. In the uncommon circumstance where *habitat assessment (streams)* was the only reported "cause," it was recognized that pollutants had

Table 3.2-2. List of those causes considered pollution by the KDOW (ADB numerical codes listed).

(67) Abnormal fish histology (lesions)
(84) Alteration in stream-side or littoral vegetative covers
(85) Alterations in wetland habitats
(105) Benthic-macroinvertebrate bioassessment (streams)
(150) Chlorophyll *a*
(161) Combination benthic/fishes bioassessments (streams)
(162) Combined biota/habitat bioassessments (streams)
(181) Debris/floatable/trash
(205) Dissolved oxygen saturation
(218) Eurasian water milfoil, *Myriophyllum spicatum*
(227) Excess algal growth
(228) Fish-passage barrier
(229) Fish kills
(230) Fishes bioassessment (streams)
(243) Habitat assessment (streams)
(266) Lake bioassessment
(270) Low flow alterations
(312) Non-native aquatic plants
(313) Non-native fish, shellfish, or zooplankton
(316) Odor threshold number
(319) Other flow regime alterations
(331) Particle distribution (embeddedness)
(336) Periphyton (Aufwuchs) indicator bioassessments (stream)
(344) Physical substrate habitat alterations
(368) Secchi disk transparency
(387) Suspended algae
(402) Total organic carbon
(412) Trophic State Index
(422) *Dreissena polymorpha,* zebra mussel
(445) Abnormal fish deformities, erosions, lesions, tumors
(446) Habitat assessment (lakes/reservoirs)
(450) High flow regime
(459) Taste and odor
(460) Aquatic plants (native)
(465) Fish advisory (no restriction)
(466) Sediment screening value exceedence
(471) Bottom deposits
(477) Bacterial slimes
(478) Aquatic plants (macrophytes)
(479) Aquatic algae

not been observed or measured that was impacting the biological community(s). In these instances the cause *impairment unknown* was associated with those waterbodies or segments which, as a pollutant-surrogate, result in assigning it to the 303(d) list. In these instances more intensive investigation is needed to determine individual pollutants than the initial biosurvey provided. It is recognized that to restore aquatic life use, pollution (e.g. riparian vegetative zone) must be rectified as part of the process in addressing the pollutant(s).

Another group of causes considered pollution that may be recognized in stream biosurveys are those indicating non-native aquatic plants, non-native fish, shellfish, or zooplankton; an example of this pollution type is the Asiatic clam, *Corbicula fluminea*. While these conditions are undesirable and can have a negative impact on the native plant or animal communities in a waterbody, non-natives, almost without exception, have been introduced accidentally or intentionally via commerce or recreation (ship ballasts, boating, aquarists, sportspersons [non-native trout], etc.). To develop and implement a TMDL to eliminate these non-natives would often be more damaging to the environment (e.g. biocides or mechanical removal), or unpopular in the case of trout species, than leaving them in-place because they are often widespread and prevalent. For example, if the non-native carp, *Cyprinus carpio*, found in many perennial streams and reservoirs in the state, was considered a pollutant rather than pollution, a TMDL would be required to address this in thousands of stream miles and reservoir acres. These examples are instances where the occurrence of impairments considered pollution (non-natives) alone will not result in a category 5 listing, rather a category 2 listing if all biological community metrics indicate the aquatic life use is supported.

Causes that may be indicators (response variables) of nonsupport aquatic life use but are not pollutants themselves: 1) *benthic macroinvertebrate bioassessment (streams)*; 2) *chlorophyll a*; 3) *combination benthic/fishes bioassessment*; 4) *combined biota/habitat bioassessments (streams)*; 5) *dissolved oxygen saturation*; 6) *excess algal growth*; 7) *fishes bioassessment (streams)*; 8) *lake bioassessment*; 9) *periphyton (aufwuchs) indicator* *bioassessments (stream)*; 10) *Secchi disk transparency*; 11) *suspended algae*; 12) *trophic state index*; 13) *fish advisory – no restriction*; and 14) *particle distribution (embeddedness)*.

The KDOW uses macroinvertebrates and fishes routinely to make aquatic life use support determinations in streams. These biological indicators provided the data necessary to produce KDOW's multimetric indices through correlation with stressors resulting in the assignment of tolerance levels based on taxon, percent dominance of tolerant taxa, percent intolerant taxa, such as Ephemeroptera (mayflies), feeding strategy (e.g. filterers or scrapers), as well as community composition related to watershed drainage area. While these biological communities are robust environmental indicators of water quality and integrity of habitat, a tolerant community is not a pollutant, but a manifestation of those tolerant organisms exploiting conditions that do not support clean-water, intolerant populations.

With physicochemical variables collected at time of biosurveys and habitat assessment (in-stream habitat and land use observations), the most detrimental pollutants are usually recognized as contributors to the degraded biological community. Most stream miles in Kentucky not supporting aquatic life use were impaired primarily by the pollutants *sedimentation/siltation (habitat smothering)*, *nutrient enrichment*, *cause unknown* and *total dissolved solids*. All these pollutants affect in-stream habitat or physicochemical variables that manifest in the biological community structure. Again, in cases where no pollutants were recognized, *impairment unknown* is listed, which places the water body or segment in category 5, requiring a TMDL.

The total number of assessed stream miles was determined by adding the miles represented by the random survey (not extrapolated data, only the assessment segment) and the miles assessed by targeted monitoring. However, for comparison, results were also presented separately for targeted surveys and random (extrapolated) stream miles.

3.2.1 Aquatic Life Use

The water quality and biological data provided by the programs described in the preceding sections were used to assess use support in rivers and streams. Table 3.2.1-1 provides the primary designated uses of Kentucky waters and the indicators employed to make those use support determinations. Fish consumption is not a defined designated use in Kentucky's water quality standards; however, it is strongly implied in water quality standards, 401 KAR 10:031 Section 2 and Section 6 for human health criteria for fish consumption. Given the comprehensive suite of biological and physicochemical parameters sampled by KDOW for many stream assessments a determination can typically be made identifying the causes and sources of pollutant or pollution affecting the resource. Further investigation required for TMDL development will lead to identification of causes and sources where previous surveys may not have identified specific pollutants.

Data were categorized as either *monitored* or *evaluated* for assessment. Monitored data were derived from site-specific surveys and generally no more than five years old. Typically, data older than five years were considered evaluated, but this did not change the assessment category a waterbody and/or segment had been assigned unless there were more recent monitored data. In some instances where conditions were believed to have remained mostly unchanged, monitored data collected prior to 2006 were considered valid, along with the associated assessment results. Additionally, data from the random survey network were used. Like the targeted stations, each random survey station was used to assess a limited reach of stream around the sample point. Few evaluated waters remain in the assessment database. Although all efforts in the watershed initiative were to gather defensible, monitored data there were some data more than five years old, strong anecdotal information, and extrapolation of discharge data that resulted in evaluated assessments.

Table 3.2.1-1. Designated uses in Kentucky waters and the indicators used to assess level of support.

Use	Aquatic Life	Primary or Secondary Contact Recreation	Fish Consumption[a]	Drinking Water[b]
Core Indicators	Stream: 1-2 biological communities: Macroinvertebrates and fishes Dissolved oxygen Temperature pH Specific conductance Lake/Reservoir: Dissolved oxygen Temperature pH Specific conductance Fish kills	Stream: Pathogen indicators: fecal coliform; *E. coli* pH Lakes/Reservoir: Pathogen indicators: fecal coliform or *E. coli* pH	Mercury Methylmercury PCBs Phenol	Inorganic chemicals Organic chemicals Pathogen indicators: fecal coliform, *E. coli*
Supplemental Indicators	Chlorophyll-*a* Trophic State Index (TSI) Secchi depth Diatoms Chemical Sediments	Nuisance macrophytes Nuisance macroscopic algal growth Nuisance algal blooms Suspended sediment Debris & unnatural oil slick Human toxic or behavioral response	Other chemicals of concern found in water quality standards	Odor Taste Treatment problems caused by poor water quality

[a]Implied designated use per 401 KAR 10:031 Sections 2 and 6
[b]All core indicators are based on "at the tap" CCR received from PWS

Water Quality Data. Chemical data collected by KDOW and others were assessed according to EPA guidance (U.S. EPA, 1997). Water quality data were compared to criteria contained in Kentucky Water Quality Regulations (401 KAR 10:031). The segment fully supported WAH use when criteria for dissolved oxygen, un-ionized ammonia, temperature and pH were not met in 10 percent or less of the samples collected. Impaired, partial support was indicated if any one criterion for these parameters was not met in 11-25 percent of the samples. A segment was impaired, not supporting, if any one criterion was not met in more than 25 percent of the samples.

Data for total metals were reviewed and those that exceeded acute criteria listed in state water quality standards (401 KAR 10:031) were analyzed, using at least three years of data. The segment fully supported WAH use if all criteria were met at stations with quarterly or less frequent sampling, or if only one exceedance occurred at stations with monthly sampling. Impaired, partial support was indicated if any one criterion was not met more than once but in less than 10 percent of the samples. The segment was impaired, not supporting, if criteria were exceeded in greater than 10 percent of the samples. The assessment criteria were closely linked to the way state and federal water quality criteria were developed. Aquatic life was considered protected if, on average, the acute criteria were not exceeded more than once every three years. Data were also compared to chronic criteria. Observations that equaled chronic criteria were not considered to exceed water quality standards. Toxic criteria were assessed based on 36 (five years) or more samples from the primary ambient water quality network; other stations were considered if the minimum samples were met. The segment fully supported WAH use if all criteria were met or exceeded only once. Impaired, partial support was assessed if any criterion was not met more than once, but in less than 10 percent of samples. The segment was impaired, not supporting if criteria were exceeded in greater than 10 percent of samples.

Biological Data (streams). Decisions about use attainment for aquatic life were primarily made using biological data obtained from monitoring programs within the KDOW and other agencies. There are a number of reasons biological data are important in making level of support decisions for aquatic life use. Biological communities (indicators) integrate conditions of their environment and thus serve as good long-term indicators of the habitat (physical, chemical, and habitat) they live in. The core indicators for bioassessment are outlined in Table 3.2.1-2. Level of use support was dependent on the indicator community(s) health and integrity, with supplemental physicochemical and habitat data. These results were applied for assessment purposes as outlined in Table 3.2.1-2.

Macroinvertebrates have been used extensively in water quality monitoring and impact assessment since the early 1900s. Today, macroinvertebrates are used throughout the world in water quality assessment as environmental indicators of biological integrity to describe water quality conditions or health of the aquatic ecosystem, and to identify causes (pollutants)

Table 3.2.1-2. Biological criteria for assessment of warm- or coldwater aquatic habitat (streams) use support[a].

Indicator	Fully Supporting	Partial Support	Nonsupport
Algae	Diatom Bioassessment Index (DBI) Classification of excellent or good; biomass similar to reference/control.	DBI classification of fair; increased biomass (if nutrient enriched) of filamentous green algae.	DBI classification of poor; biomass very low (toxicity), or high (organic enrichment).
Macroinvertebrates	Macroinvertebrate Bioassessment Index (MBI) excellent or good, high EPT, sensitive species present.	MBI classification of fair, EPT lower than expected in relation to available habitat, reduction in relative abundance of sensitive taxa. Some alterations of functional groups evident.	MBI classification of poor; EPT low, total number of individuals of tolerant taxa very high. Most functional groups missing from community.
Fishes	Index of Biotic Integrity (IBI) excellent or good; presence of uncommon, endangered or species of special concern.	IBI fair.	IBI poor, very poor, or no fish.

[a]Acronyms used in this table: EPT= Ephemeroptera, Plecoptera, Trichoptera; RA= relative abundance; TNI- total number of individuals

of impairment. This indicator community is relatively sedentary, spending a significant portion of their life cycle in the aquatic environment. Various populations of a community are dependent on multiple habitats in the aquatic environment for support of the different consumer levels throughout the food web (herbivores, omnivores, and carnivores) and, significantly, many sensitive taxa live in or on the sediments of streams (benthos). These characteristics and habits make this a key indicator group of their environment. KDOW defines benthic macroinvertebrates as organisms large enough to be seen by the unaided eye, can be retained by a U.S. Standard Number 30 sieve (28 mesh/inch, 600 μm openings), and live at least part of their life cycle within or upon available substrates of a waterbody. In addition to determining use support level, biomonitoring will identify those Exceptional Waters (401 KAR 10:030) (those waters that are among the most biologically diverse and represent biological integrity to a high degree in a given bioregion) occurring across the Commonwealth.

The evaluation of fish community structure is an important component of biological monitoring providing reliable assessments for the CWA, Section 305(b). The Kentucky Index of Biotic Integrity (KIBI) was developed based on reference conditions, tolerances, and community feeding structure of species present. Advantages of using fish as biological indicators include their widespread distribution, utilization of a variety of trophic levels, stable populations during summer months, and the availability of extensive life history information (Karr et al. 1986).

Algal (primarily diatoms) communities are important water quality indicators, particularly as it relates to trophic status (nutrient or organic enrichment) and toxicity conditions. This indicator group is critical to the food web of streams, beginning the process of primary production through photosynthesis. The Diatom Bioassessment Index (DBI) is used in conjunction with macroinvertebrates or fishes to assess the integrity of this indicator community in headwater and wadeable streams.

Federally Threatened and Endangered Species. Waters with federally threatened or endangered species in November 1975 have an existing use and a designated use of Outstanding State Resource Water (OSRW); the loss or significant decline of one of these populations constitutes an impairment of use. Waters where previously unknown populations of federally listed species inhabit are automatically included in the OSRW designated use per 401 KAR 10:031 Section 8.

Lakes and Reservoirs. Lakes and reservoirs were assessed for aquatic life use by measuring several physicochemical indicators and reported fish kills. The lack of a direct biological indicator is primarily due to most of this resource being manmade, thus supporting altered and unnatural biological communities that are composed almost exclusively of tolerant species (e.g. Tubificidae, *Chironomus* spp., *Chaoborus* spp., *Glyptotendipes* spp., etc.) that are capable of exploiting this often low DO-stressed environment. Thus, the core and supplemental indicators shown in Table 3.2.1-1 are of utmost importance to assure water quality conditions are suitable for supporting sportfish and associated prey fishes. Populations of these fishes are the primary concern for aquatic life use in these created environments. Table 3.2.1-3 outlines specific criteria used in making use assessment decisions.

Trophic state was assessed in lakes and reservoirs using the Carlson Trophic State Index (TSI) for chlorophyll *a*. This method is convenient because it allows lakes and reservoirs to be ranked numerically according to increasing trophic state, and it also provides for a distinction between oligotrophic, mesotrophic, eutrophic, and hypereutrophic lakes and reservoirs. The growing season (March through October) average TSI value was used to rank each lake. Areas of lakes that exhibited trophic gradients or embayment differences may be analyzed separately.

3.2.2 Primary Contact Recreation Use Support

Escherichia coli (*E. coli*) and pH data were used to indicate the level of support for primary contact recreation (PCR) (swimming) use. Primarily, PCR assessment was based on six monthly bacteria grab samples collected during the recreation season of May through October. The use fully supported if the *E. coli* criterion of 240 colonies per 100 mL was not met in less than 20 percent of samples; it was impaired, partial support, if the criterion was not met in greater than 20 to 33 percent of samples; and impaired, nonsupport, if the criterion was not met in greater than 33 percent of samples. Secondary contact recreation (SCR) was also assessed following the same method using fecal coliform data at the concentration of greater than 2000 colonies per 100 mL. Streams with pH less than 6.0 SU or greater than 9.0 SU were considered full support if these criteria were exceeded once, but in less than 10 percent of samples collected in

Table 3.2.1-3. Criteria for lake and reservoir use support classification.

Category	Fish Consumption	Warmwater Aquatic Habitat	Secondary Contact Recreation	Domestic Supply
Not Supporting:	(Pollutant specific)	(At least two of the following criteria)	(At least one of the following criteria)	(At least one of the following criteria)
	Methylmercury >1.0 ppm (fish tissue)	Fish kills caused by poor water quality	Widespread excess macrophytes/macro-scopic algal growth	
	PCBs >1.9 ppm (fish tissue)	Severe hypolimnetic (deepest layer in a thermally stratified lake or reservoir) oxygen depletion	Chronic nuisance algal blooms	Chronic treatment problems caused by poor water quality
		Dissolved oxygen average less than 4 mg/L in the epilimnion (upper most layer of water in a thermally stratified lake or reservoir)		Exceeds drinking water MCL
		Other specific cause (e.g. low pH)		
Partially Supporting: (At least one of the following criteria)	Methylmercury >0.3 – 1.0 ppm (fish tissue)	Dissolved oxygen average less than 5 mg/L in the epilimnion	Localized or seasonally excessive macrophytes/macroscopic algal growth	
	PCBs >0.2 ppm – 1.9 ppm (fish tissue)	Severe hypolimnetic oxygen depletion	Occasional nuisance algal blooms	Occasional treatment problems caused by poor water quality
		Other specific cause (e.g. low pH)	High suspended sediment concentrations during the recreation season	
Fully Supporting:	Methylmercury <0.3 ppm and PCBs <0.2 ppm	None of the above	None of the above	None of the above

the recreation season; impaired, partial support, if the criterion was exceeded more than once, but in less than 10 percent of the samples during the recreation season; and impaired, nonsupport, if the criterion was exceeded in more than 10 percent of samples during the recreation season.

3.2.3 Other Data Sources

Discharge Monitoring Reports (DMRs). Discharge monitoring report (DMR) data, collected by Kentucky Pollutant Discharge Elimination System (KPDES) permit holders, were used to evaluate waterbodies for aquatic life and PCR and SCR uses; this information was obtained from KDOW's permit compliance database. Depending on the relative sizes of the wastewater discharge, the receiving stream and the severity of the permit limit exceedances, it sometimes was possible to assess in-stream uses as nonsupporting either aquatic life or PCR. Because in-stream data were usually not collected, stream assessments based only on DMR data were considered evaluated, not monitored, and these segments were assigned to category 5B. This action results in follow-up compliance monitoring and inspection.

US Army Corps of Engineers (USACE) Reservoir Projects. Dam projects on major streams in Kentucky were monitored with the cooperation of the USACE. This collaborative effort resulted through the need for each agency to share stretched resources to monitor those reservoirs. Reservoir water quality variables were monitored over the growing season (April through October) as were major in-flow and out-flow tributaries of these reservoirs. Aquatic life use support level was determined using these monitored data for reservoir and monitored tributaries. The Louisville USACE District manages those dam projects in the Salt River - Licking River BMU. The Nashville USACE District manages those dam projects in the Upper Cumberland – 4 Rivers BMU.

3.2.4 Fish Consumption Use Support

Fish consumption, in conjunction with aquatic life use, assesses attainment of the fishable goal of the Clean Water Act. Assessment of the fishable goal was separated forming these two use categories in 1992 because the fish consumption advisory does not preclude attainment of the aquatic life use and vis-à-vis. Separating fish consumption and aquatic life use support provides a clearer picture of actual water quality conditions. Table 3.2.1-1 relate those criteria used to make fish consumption support decisions, and Table 3.2.1-3 show the concentrations of methylmercury and PCBs that result in a specific level of support; these concentrations apply to lakes, reservoirs and streams.

Kentucky revised its methodology for issuing fish consumption advisories in 1998 to a risk-based approach patterned after the Great Lakes Initiative. The risk-based approach generally is more conservative than the Food and Drug Administration (FDA) action levels that were used previously. For example, the FDA action level for mercury is 1.0 mg/Kg, but the risk-based number for issuing an advisory is as low as 0.12 mg/Kg. As a result of this change in methodology, a statewide advisory was issued in April 2000 for children under six and women of childbearing age to not consume more than one meal per week of any fish from Kentucky waters because of mercury. However, EPA issued a mercury water quality criterion of 0.3 mg/Kg concentration in fish tissue, and it was subsequently adopted by the Commonwealth. Therefore, for purposes of 305(b) reporting and 303(d) listing, waters were not considered impaired, requiring a TMDL, unless fish had methylmercury tissue concentrations greater than 0.3 mg/Kg. In other words, the fish tissue concentration triggering the statewide precautionary advisory (0.12 mg/Kg) was considered more stringent than water quality standards. The KDOW rationale for not listing specific waterbodies on the 303(d) list without fish tissue data from a particular waterbody is consistent with the EPA October 24, 2000 memo from G.H. Grubbs and R.H. Wayland III (Grubbs and Wayland, EPA 2000).

Other than the statewide advisory for mercury explained above, the following criteria were used to assess support for fish consumption:

- Fully supporting- highest species tissue residue ≤ 0.3 mg/Kg methylmercury;

- Impaired: Partial support- the highest species tissue residue of methylmercury > 0.3 mg/Kg – 1.0 mg/Kg;
- Impaired: Not supporting- the highest species tissue residue of methylmercury > 1.0 mg/Kg.

The Great Lakes Initiative for fish consumption advisories for PCB concentrations in fish tissue are triggered at the following tissue residue levels, and a restricted consumption results in less than full support of this use.

- Fully supporting- no fish consumption restrictions or bans in effect; highest species concentration < 0.2 mg/Kg
- Impaired: Partial support- “restricted consumption,” fish consumption advisory in effect for general population or a subpopulation that potentially could be at greater risk (e.g. pregnant women, children); highest species concentration > 0.2 mg/Kg – 1.9 mg/Kg. Restricted consumption was defined as limits on the number of meals consumed per unit time for one or more fish species
- Impaired: Not supporting- a no consumption fish advisory or ban in effect for general population or a subpopulation that potentially could be at greater risk based on one or more fish species, or a commercial fishing ban in effect; the highest species concentration > 1.9 mg/Kg.

3.2.5 Drinking Water Supply

Drinking water use support was determined in several ways (Table 3.2.1-1). First, compliance with maximum contaminant levels (MCLs) in finished water was determined by the annual average of quarterly samples. This information was obtained from consumer confidence reports (CCR) submitted to KDOW, Compliance and Technical Assistance Branch from treatment facilities. In-stream water quality data generally were not available to assess drinking water use.

3.2.6 Causes and Sources

Causes (pollutants and pollution) and sources were categorized according to EPA guidance. Causes for primary contact recreation, fish consumption, and water supply usually were readily identifiable. The majority of segments or waterbodies not supporting aquatic life use were determined by biological monitoring supplemented by monitoring of select physicochemical parameters. Causes and sources of impairment may not be evident in the field and there may be other pollutants contributing to use impairment that were not listed. Once on the 303(d) list, subsequent intensive monitoring and watershed reconnaissance of land uses in conjunction with TMDL development will more fully identify causes and sources of impairments.

3.2.7 Determination of Assessment Segments

Once a use support determination was made on a waterbody, an appropriate segment or portion of the waterbody representative of the monitored area was determined. Part of this determination was based on the type of data collected (e.g. physicochemical, biological, bacteriological, fish tissue or variables for lake/reservoir assessment).

Aquatic Life, Recreation and Fish Consumption Uses. Monitoring activity that occurred at the primary ambient water quality stations (primary network) and in the rotating watershed stations particular to the BMU cycle phase often had biological data in addition to physicochemical data. Since the primary network stations are located on large streams and rivers, assessed segments are taken downstream and upstream to significant tributary streams; significance of tributaries is based on the watershed area and relative volume. Another important factor considered in defining segments is significant changes in landuse, such as from a contiguous forested area to a non-forested area with fragmented riparian vegetative zone. Documentation of habitat conditions along a stream corridor is determined to bolster the information necessary to draw a more accurate conclusion for segment length. Since many of KDOW's PCR-SCR (recreation) monitoring locations are associated with the ambient water quality network, the same rationale is used to define these segments and typically is the same as the defined segment for the accompanying aquatic life use assessment.

Waters assessed for aquatic life use with biological community data alone or with only one grab sample for physicochemical variables, particularly those data indicating full support, are of shorter segment reach since biological indicators are typically more responsive to subtle changes in water quality and habitat integrity as they integrate these conditions over a relatively long time. Typically the smaller watersheds will result in a short stream reach, but these segments may represent a proportionately greater percentage of the water volume for a particular watershed. These small watersheds (less than 5 square miles) respond quickly to physical stream habitat alterations and pollutants given the lesser water volume and resultant low tolerance to perturbation of the aquatic habitat. In larger watersheds, typically greater than five square miles, proportionately smaller assessment segments are assessed relative watershed area and volume, but the segments generally are longer compared to small watersheds. The greater water volume and physical habitat size of streams draining greater than five square miles provide a degree of buffer to the aquatic community and habitat not possible in small watersheds. These segments often are defined by upstream and downstream tributaries judged to be of significant drainage area relative to the receiving stream. Additionally, riparian zone integrity and landuse are considered when defining the assessment length for streams.

Segments monitored for support determination for fish consumption are defined in a similar method as those reaches assessed using only physicochemical or bacteria data. Many fish species are relatively far ranging, and that factor has significant consideration in defining segments. Also, with the plethora of sources, and the likelihood that much of the mercury contamination in waters comes via atmospheric deposition, relatively long reaches are typically defined when making these assessments, whether supporting or not. Still, significant tributaries are often used to make the upstream and downstream termini, with less consideration of habitat, given the nature and effect of this pollutant. In boatable streams that have locks and dams the intervening pool between each lock and dam is usually considered an assessment unit.

Drinking Water Use. Since this use was assessed utilizing finished water data supplied by Public Water Systems (PWS) the assessed segments were usually conservative when applied to the source water. The assessment segments were typically taken from the point of withdrawal and extended upstream one mile. A few exceptions to that rule occurred when multiple uses were assessed (e.g. fish tissue, aquatic life) in the same general area of PWS withdrawal points. Those segments were usually longer in order to accommodate other uses that overlapped the PWS withdrawal point. For reservoirs the assessment was applied to the waterbody.

3.3 Use Assessment Results

Section Overview. This section of the IR presents assessment results focused primarily on two BMUs, the Salt River – Licking River and the Upper Cumberland River – 4-Rivers, which were monitored in water years 2009 and 2010, respectively. Sections follow presenting results based on targeted and random survey biological monitoring, physical and chemical monitoring and many monitored or surveyed events where both were completed. Additionally, a statewide summary updating many waters and segments assessed and incorporated into overall use support summaries is presented in the following subsection. Appendix A contains a table with all assessed waters and the support level per use assessed. Appendix B contains maps that georeference the stream assessments made in the Salt River – Licking River and Upper Cumberland River – 4-Rivers BMUs. Appendix C contains maps that georeference the lakes and reservoirs assessed in those two BMUs. Volume II of this 2012 Integrated Report has the 303(d) subset listing of those waterbodies and segments found in Appendix A of Volume I. The Volume II listings are all waterbodies and segments requiring a TMDL calculation for pollutants. The KDOW continues to census lakes and reservoirs in the Commonwealth, and trend information on these reservoirs is presented following 28 years of data related to trophic state analysis (Section 3.3.4). The two USACE reservoirs in the Salt River – Licking River BMU and five in the Upper Cumberland River – 4-Rivers BMU were cooperatively monitored by KDOW with that agency; the results of those data and trophic state trends were also provided in the lakes section.

3.3.1 Statewide Assessment Results (Use Support)

Targeted Monitoring: Streams and Rivers. For this monitoring and reporting period (Salt River – Licking River and Upper Cumberland River – 4-Rivers BMUs) there were 565 stream segments representing 3,043.44 miles assessed in the Salt River – Licking River BMU. In the Upper Cumberland – 4-Rivers BMU there were 626 stream segments totaling 2,681.94 stream miles assessed. These data represent years two and three of the third five-year intensive monitoring effort based on the rotating BMU strategy. Probabilistic monitoring results are included in the targeted monitoring statistics since that method is used for both stream-specific reach assessments as well as extrapolation of data for aquatic life use support in a given BMU.

Table 3.3.1-1 lists the number of stream and spring miles, and lake, reservoir and pond acres assigned to the 305(b) reporting categories. The table is an accumulation of all waterbodies and segments assessed by the KDOW both historically and in this present reporting cycle. Each waterbody or segment assessed for one or more categories is reported in Table 3.3.1-1. The reporting method results count each assessment unit and all designated uses assessed per segment. With this report each designated use assessed and the assessment unit is reported for each category.

Miles of streams assessed for all DUs and fully supporting (category 1) are 20.50 miles (0.1 percent); those with at least one, but less than all, DU fully supporting (Category 2) are 9,322.20 miles (49.5 percent) (Table 3.3.1-1). Streams not fully supporting one or more designated use and requiring a TMDL (category 5) are 7,820.33 miles (41.6 percent); not supporting one or more DU, but with an approved TMDL (category 4A) are 1,463.94 miles (7.8 percent); not supporting at least one DU, but this is due to pollution only (category 4C) are 34.05 miles (0.2 percent).

There are two state-defined categories, 2B and 5B. Those stream assessment units that have one or more DU now fully supporting the use, but 303(d) listed (category 2B) are 169.35 miles (0.9 percent); this number of miles are not included in the sum total given the category is a temporary assignment until those category 5 DUs are delisted. Stream assessment units that have one or more DU evaluated as not supporting are 145.80 miles (0.8 percent). Statewide statistics presented on a support or nonsupport basis show that 18,683 miles of streams assessed and 9,349 miles fully support, or 50 percent; streams and rivers with segments not fully supporting assessed uses total 9,334 miles, or 50 percent (Table 3.3.1-2). Compared to the 2010 IR (KDOW, 2010) this is a decrease of nearly two percent of assessed stream miles that support assessed DUs.

Note that the column heading “Total in State” in Table 3.3.1-2 is based on the total miles of streams in the state that are populated in the assessment database (ADB) for reporting purposes, not the full population of all streams in the Commonwealth (>91,000 miles) (reported miles in a state accumulate as they are entered in ADB).

Aquatic Life Use. Warmwater and coldwater aquatic habitat DUs assessed totaled 10,256 miles with 5,138 miles fully supporting (Table 3.3.1-2), or 50 percent of stream miles assessed. This is a decrease of two percent of total assessed miles fully supporting compared to the 2010 IR (KDOW, 2010), a decrease of three percent of the total assessed when compared to the 2008 data (KDOW, 2008) and 11 percent compared to the 2006 information (KDOW, 2006). The 2012 305(b) cycle data show the number of miles not fully supporting is 5,118 (50 percent). Compared to the 2010 IR (KDOW, 2010) the percentage of not supporting miles for this DU increased two percent. However, relative to the 2006 IR (KDOW, 2006) stream miles that do not support aquatic life use have increased 11 percent (Table 3.3.1-3). The primary reason for the decrease in

Table: 3.3.1-1. Size of surface waters assigned to reporting categories for Kentucky[1].

Water Body Type	Category									Total	Total Segments
	1	2	2B[2]	3	4A	4B	4C	5	5B[3]		
RIVER (MILES)	20.50	9322.20	169.35	159.90	1463.94	0.00	34.05	7820.33	145.80	18,966.72	2291
FRESHWATER RESERVOIR (ACRES)	269,450.00	514,492.45	8,714.00	109.00	3050.00	0.00	190.00	92,994.10	0.00	880,285.55	121
SPRING (MILES)	0.00	6.45	0.00	0.00	0.00	0.00	0.00	15.60	0.50	22.55	17
FRESHWATER LAKE (ACRES)	0.00	634.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	697.00	4
POND (ACRES)	0.00	3.30	0.00	0.00	0.00	0.00	0.00	1.50	0.00	4.80	2
FRESHWATER WETLANDS (ACRES)	0.00	0.00	0.00	324,000.00	0.00	0.00	0.00	0.00	0.00	324,000.00	0

[1]Refer to Table 3.2-1 on page 47 for a definition of each reporting category.
[2]"Total in State" sum does not include miles in this subcategory as these miles may also occur in other categories (i.e., 1, 2, 4B, 5 and 5B).
[3]Category 5B miles represent evaluated results – not assessed with in-stream monitored data.

Table 3.3.1-2. Individual designated use support summary for streams and rivers in Kentucky (miles)

Designated Use	Total in State	Total Assessed	Supporting-Attaining WQ Standards	Supporting-Attaining WQ Standards but Threatened	Not Supporting-Not Attaining WQ Standards	Not Assessed
Warm Water Aquatic Habitat	10,945.23	9,859.13	4,805.80	0.00	5,053.30	1,086.10
Cold Water Aquatic Habitat	430.90	396.40	331.7	0.00	64.70	34.50
Fish Consumption	11,338.93	1,140.05	695.05	0.00	445.00	10,198.88
Primary Contact Recreation	11,338.93	5,068.96	1,531.50	0.00	3,537.46	6,296.97
Secondary Contact Recreation	11,338.93	1,988.55	1,338.80	0.00	649.75	9,350.38
Drinking Water	857.20	747.05	747.05	0.00	0.00	110.15
Column Total	*46,250.12*	*19,200.14*	*9,449.90*	*0.00*	*9,750.21*	*27,076.98*

Table 3.3.1-3. Miles of streams assessed for aquatic life and percentage of those miles supporting and not supporting the designated use from 2006 to 2012.

305(b) Cycle	Total Miles Assessed	Percentage of Assessed Miles Supporting	Percentage of Assessed Miles Not Supporting
2012	10,256	50	50
2010	9,967	52	48
2008	9,530	53	47
2006	9,550	61	39

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percentage of stream miles not fully supporting the DU is likely a result of the focus shifting in the monitoring program from locating the best available resources and ambient monitoring to focusing on nonsupporting waterbodies and watersheds associated with TMDL development.

Fish Consumption. The percentage of assessed stream miles that fail to support this DU is about 39 percent (Table 3.3.1-2), compared to 38 percent in the 2010 IR. Note, the Ohio River is not included in the aforementioned statistic as the KDOW defers to ORSANCO's 305(b) assessment for member states; however, any segments of the river in Kentucky that do not support this use or any other use is listed in the IR, Volume II, 303(d) list. Besides the statewide fish consumption advisory for mercury, longstanding waterbody-specific consumption advisories for fish remain in effect in several rivers and streams throughout the Commonwealth (http://water.ky.gov/waterquality/Pages/FishConsumption.aspx) (accessed May 15, 2012). The 2009 advisory (most recent at time of writing) remained unchanged. Because of interstate issues and complexity of identifying all sources of mercury, EPA is conducting national studies and will likely be involved in eventual efforts to calculate TMDLs and reduce mercury inputs by setting new mercury limits.

Polychlorinated biphenyl (PCB) contamination findings led to two water bodies (Knox Creek and Fish Trap Lake) added to that advisory in 2007; both waterbodies occur in the Big Sandy River basin. Knox Creek originates in Virginia and is a tributary of Tug Fork River. Fishtrap Lake is approximately 1,100 surface acres and was formed by impounding the Levisa Fork. The fish consumption advisory includes the entire reservoir and the Levisa Fork from the reservoir backwaters to the Kentucky - Virginia state line. Virginia has a similar fish consumption advisory on Knox Creek to the headwaters and on a portion of Levisa Fork.

PCBs are man-made chemical products that are similar in chemical structure. These chemicals are toxic and persistent in the environment. In 1976 congress passed legislation that prohibits the manufacture, process and distribution in commerce of PCBs. Polychlorinated biphenyls contaminate fish flesh in six streams totaling 142.8 miles as listed below:

- Knox Creek from mouth at Tug Fork River to Kentucky - Virginia state line
- Levisa Fork from Fishtrap Lake backwaters to Kentucky - Virginia state line
- Mud River from Hancock Lake Dam to mouth in Logan, Butler and Muhlenberg counties
- Town Branch Creek, headwaters to mouth in Logan, Butler and Muhlenberg counties
- West Fork Drakes Creek, dam at City of Franklin to mouth in Simpson and Warren counties
- Little Bayou Creek from headwaters to mouth in McCracken County.

Primary (Swimming) Contact Recreation Use. The percentage of assessed stream miles that do not support primary contact recreation (PCR) continues as the highest of all uses at 70 percent representing, 3,537 stream miles (Table 3.3.1-2). This represents an increase of one percent compared to the 2010 IR (KDOW, 2010) and equals the 2008 results (KDOW, 2008). This designated use also represents the second highest number of assessed stream miles, 5,069 (Table 3.3.1-2) in the state; an increase of 307 miles assessed since the 2010 IR. Note water quality bacteria criteria for this designated use apply during the recreation months of May through October; a criterion for pH also applies to this DU.

There continues to be a number of swimming advisories on segments of streams and rivers in Kentucky. Below are the waterbodies and segments where advisories exist. One may also access this information at: http://water.ky.gov/waterquality/Pages/SwimmingAdvisories.aspx (accessed May 15, 2012).

Upper Cumberland River Basin

- Cumberland River from SR 2014 bridge to Pineville SR 66 bridge and from SR 219 bridge to Harlan
- Martins Fork from Harlan to Cawood Water Plant

- Catrons Creek
- Clover Fork
- Straight Creek
- Poor Fork from Harlan to Looney Creek
- Looney Creek from mouth to Lynch Water Plant Bridge

Lower Licking River Basin

- Banklick Creek
- Threemile Creek

Kentucky River Basin

- North Fork Kentucky River upstream of Chavies to source (headwaters)

Secondary Contact Recreation Use. Secondary contact recreation DU criteria apply year-round, and criteria for support of this use are based on fecal coliform standard of 2000 colonies/100 mL in streams, lakes and reservoirs, in addition to the pH criterion. Of the 1,989 miles of streams assessed there are 650 miles not supporting this DU. This represents 33 percent of assessed streams, a slight increase (one percent) from the 2010 IR (KDOW, 2010). Compared to 2008 results, this is an increase of three percent of assessed stream miles (KDOW, 2008). No comparison for years prior to the 2006 IR can be made as no assessments for the SCR use in flowing waters were made based on pathogen indicator (bacteria) data. In streams and rivers, the secondary contact recreation standard is applied to protect people from incidental water contact or partial body emersion that may occur in such activities as fishing and boating; the same pH criterion applies to this DU as it does to primary contact recreation.

Drinking Water Use. Drinking water standards apply to the source water at point of intake. Drinking water use support was assessed by review of the Consumer Confidence Reports (CCR) over a five-year span. The annual CCR is based on the average annual quarterly results for contaminants as reported in MORs (monthly operating reports) and are required by the Safe Drinking Water

Act. The average annual result of these quarterly data is determined for compliance purposes; if an average annual quarterly contaminant exceeds the MCL the source water does not support the DU. The MCLs (maximum contaminant levels) are based on concentration of each contaminant in the finished product distributed for public consumption. Of those stream miles assessed (747), all were fully supporting drinking (domestic) water use (Table 3.3.1-2). There were 57 additional stream miles assessed for this DU compared to the 2010 IR.

Probability Monitoring: Aquatic Life Use. A simple question has been asked over the course of the history of the Clean Water Act: "What is the condition (health) of the nation's waters"? Various studies have been undertaken to answer that question. However, findings concluded that while agencies have been good at collecting data about site-specific conditions of states' waters, there exist no data to determine the overall condition and trend of the waters on a national scale. A national study was undertaken to answer that question and related questions (Are water quality [fishable and swimmable] conditions improving?). Are there new issues and threats related to aquatic ecosystem health or any successes? The national surveys were undertaken in-part to help citizens determine if more money and resources need to go toward water quality issues, or if the billions of dollars being spent to curb and control pollution is simply not working.

To begin to answer this complex question, it was determined that a statistically valid random biosurvey of the nation's streams was necessary. The EPA oversaw the development and implementation of a random design study of the nation's streams and was able to make substantive decisions concerning the ecological condition of wadeable streams in the contiguous states. The random survey may be likened to a political poll in which a random sample of likely, eligible voters in a given congressional district, or nationally in a presidential race, is polled to discover the likelihood of a particular candidate to win election. In the national survey, all wadeable streams of Strahler order 1-4 in similar ecoregions, or group of similar ecoregions based on biological similarities known as bioregions, define the population from which to randomly select representative stream segments in order to draw scientifically sound conclusions on the findings of those data. The national study segregated the contiguous 48 states into three broad regions defined as West, Eastern Highlands and Eastern Lowlands (Wadeable Streams Assessment, U.S. EPA, 2006). The next wadeable streams and rivers survey was conducted in 2008-9 and a report is scheduled for publication in 2012.

The next national probabilistic study implemented by EPA was to assess the condition of the nation's lakes and reservoirs. The monitoring is scheduled to occur in summer and fall 2012, and a report on the findings is planned for release in 2014.

The first statewide random wadeable streams (Strahler order 1-5) biosurvey was completed in the initial phase of the five-year cycle in Kentucky. This program is now in the third five-year cycle. Results for the first completed 5-year cycle (1998 – 2002) were presented in Table 3.3.1-3 and Figure 3.3.1-1 of the 2006 IR (KDOW, 2006). While other monitoring priorities prevented a probabilistic biosurvey of the Kentucky River BMU in water-year 2007, it will be included in this program in 2013.

Causes and Sources Related to Nonsupport of Uses. The leading causes (pollutants) for designated use nonsupport of Kentucky streams and rivers are: 1) fecal coliform + *E. coli* (pathogen indicators); 2) sedimentation/siltation; 3) nutrient/eutrophication biological indicators; 4) cause unknown; and 5) total dissolved solids (Table 3.3.1-4). The top five identified causes impairing Kentucky streams have shifted positions, with a new cause, "cause unknown" becoming the fourth most identified cause affecting rivers and streams as compared to the 2010 IR (KDOW, 2010). Fecal coliform + *E. coli* (pathogen indicators) returned as the number one cause, followed by sedimentation/siltation. The cause fecal coliform + *E. coli* (pathogen indicators) had historically been the most frequently identified cause impairing streams in Kentucky until the 2004 305(b) report (KDOW, 2004) when sedimentation/siltation supplanted pathogen indicators. About 31 miles fewer

Table 3.3.1-4. Ranking of causes (pollutants) affecting Kentucky rivers and streams.

Cause	Total Size
1. Fecal coliform + *E. coli* (pathogen indicators)	3,548.43
2. Sedimentation/Siltation	3,166.50
3. Nutrient/eutrophication biological indicators	1,673.26
4. Cause Unknown	868.90
5. Total Dissolved Solids	774.30
6. Organic enrichment (sewage) biological indicators	763.21
7. Specific Conductance	761.67
8. Iron	266.75
9. pH	228.13
10. Total Suspended Solids (TSS)	221.26
11. Mercury in Fish Tissue	199.30
12. Oxygen, Dissolved	187.00
13. Phosphorus (Total)	185.00
14. PCB in Fish Tissue	153.20
15. Methylmercury	124.20
16. Chlorine	111.80
17. Lead	88.35
18. Nitrate/Nitrite (Nitrite + Nitrate as N)	68.45
19. Copper	62.40
20. Nitrogen (Total)	53.07
21. Polychlorinated Biphenyls	52.10
22. Temperature, Water	42.25
23. Ammonia (Un-ionized)	37.50
24. Ammonia (Total)	34.55
25. Other	30.00
26. Oil and Grease	20.91
27. BOD, Carbonaceous	18.65
28. Beta Particles and Photon Emitters	18.60
29. Gross Alpha	18.60
30. Chloride	17.60
31. Total Kjeldahl Nitrogen (TKN)	14.40
32. Zinc	11.80
33. Mercury	11.40
34. Cadmium	8.20
35. Manganese	7.70
36. Ethylene Glycol	6.90
37. Nickel	3.60
38. Nitrates	2.95
39. Chromium (total)	2.60
40. Salinity	2.15
41. Selenium	1.50
42. Sulfates	1.40
43. Chlorine, Residual (Chlorine Demand)	0.70

than reported in the 2010 IR for sedimentation/siltation is herein reported; whereas, 382 additional stream miles are associated with pathogen indicators for use impairment in the 2012 IR (Table 3.3.1-4). The top three causes are closely related since bacteria and nutrients will adsorb to the sediment and silt running off into waterbodies. The fifth leading cause of impairment is total dissolved solids (TDS), surpassing specific conductance since the 2010 IR. The two causes are closely linked as specific conductance (specific conductivity) is the measure of electrical conductivity (opposite of resistance) in the water column; the more ions in solution (total dissolved solids) the greater the electrical conductivity.

The leading sources of these impairments are: 1) agricultural related; 2) habitat related (other than hydromodification); 3) source unknown; 4) urban or municipal; and 5) mining (Table 3.3.1-5). These are the same leading sources of pollutants and the relative source-contribution remained unchanged since the 2010 IR. The category “agriculture” remained the most frequently related source of pollutants in this reporting cycle. Of the 9,295 stream miles (categories 4A + 4C + 5 + 5b - 2B= 9,295) (Table 3.3.1-1) not supporting one or more DUs, about 46 percent of pollutant sources are from agriculture, with “habitat related (other than hydromodification)” second at 36 percent (Table 3.3.1-5). The category “agriculture” has the greatest increase of associated impaired stream miles since the last biennium, an increase of 475 stream miles or about 12 percent; whereas, the category “miscellaneous” has the greatest percent increase of miles at 28 percent. The miscellaneous category contains sources of pollutants such as upstream source, introduction of non-native organisms, recreational and spill related impacts. The greatest decrease in miles associated with a source category is in “mining,” down 114 miles or about six percent. The greatest decrease as a percent (50 percent) of source related miles was in the category “atmospheric deposition”; however, few miles were associated with this source making this decrease seem significant. The greatest percentage decrease of frequently identified source-associated impaired miles was found in

Table 3.3.1-5. Probable sources of impairment to Kentucky rivers and streams[1].

Source Categories	Miles
Agriculture	
Agriculture (unspecified)	1,487.17
Crop production (crop land or dry land)	604.70
Non-irrigated crop production	598.90
Livestock (grazing or feeding operations)	529.70
Managed pasture grazing	316.65
Grazing in riparian or shoreline zones	211.95
Unrestricted cattle access	208.25
Animal Feeding Operations (NPS)	162.30
Irrigated crop production	84.90
Rangeland grazing	41.60
Manure runoff	38.55
Permitted runoff from confined animal feeding operations (CAFOS)	18.50
Aquaculture (not permitted)	5.80
Dairies (outside milk parlor areas)	4.50
Specialty crop production	3.60
Category total (agriculture)	4,317.07
Habitat Related (other than hydromodification)	
Loss of riparian habitat	1,546.67
Channelization	671.25
Streambank modifications/destabilization	460.40
Habitat modification – other than hydromodification	366.66
Site clearance (land development or redevelopment)	208.10
Dredging (e.g. navigation channels)	109.05
Category total	3,362.13
Source Unknown (total)	2,669.11
Urban or Municipal	
Municipal point source discharges	816.96
Urban runoff/storm sewers	520.13
Unspecified urban stormwater	275.20
Municipal (urbanized high density area)	145.65
Wet weather discharges (non-point source)	78.80
Sanitary sewer overflows (collection system failures)	73.90
Wet weather discharges (point source and combination of stormwater, SSO or CSO)	55.85
Impervious surface/parking lot runoff	25.45
Combined sewer overflows	4.30
Discharges from municipal separate storm sewer systems (MS4)	3.50
Category total	1,999.74

Table 3.3.1-5 (cont.). Probable sources of impairment to Kentucky rivers and streams[1].

Source Categories	**Miles**
Mining	
Surface mining	794.20
Coal mining (unspecified)	555.50
Sand/gravel/rock mining or quarries	115.85
Acid mine drainage	112.93
Impacts from abandoned mine lands (inactive)	87.55
Legacy Coal Extraction	54.10
Mountaintop mining	42.25
Coal mining (subsurface)	39.80
Dredge mining	30.20
Coal mining discharges	15.20
Mine tailings	9.10
Reclamation of inactive mining	7.40
Subsurface (hardrock) mining	5.10
Category total	1,869.18
Residential Related	
Package plant or other permitted small flows discharges	654.38
On-site treatment systems (septic systems and similar decentralized systems)	445.65
Rural (residential areas)	116.30
Unspecified domestic waste	66.60
Residential districts	33.12
Category total	1,316.05
Non-point Source, Unspecified	
Non-Point Source	541.42
Category Total	541.42
Fuel or Energy Related (other than coal)	
Petroleum/natural gas activities	329.80
Petroleum/natural gas production activities (permitted)	181.60
Category total	511.14
Transportation	
Highway/road/bridge runoff (non-construction related)	322.72
Highways, roads, bridges, infrastructure (new construction)	79.75
Airports	1.70
Category total	404.17
Erosion and Sedimentation	
Post-development erosion and sedimentation	259.90
Channel erosion/incision from upstream hydromodifications	70.20

Table 3.3.1-5 (cont.). Probable sources of impairment to Kentucky rivers and streams[1].

Source Categories	Miles
Erosion and Sedimentation (cont.)	
Sediment resuspension (contaminated sediment)	30.35
Erosion from derelict land (barren land)	15.75
Sediment resuspension (clean sediment)	11.55
Category total	387.75
Silviculture	
Silviculture activities (unspecified)	170.15
Silviculture harvesting	112.50
Woodlot site clearance	19.40
Silviculture Reforestation	6.60
Forest roads (road construction and use)	3.30
Woodlot site management	2.80
Category total	314.75
Miscellaneous	
Upstream source	55.10
Introduction of non-native organisms (accidental or intentional)	48.20
Other recreational pollution sources	29.40
Other spill related impacts	24.46
Runoff from forest/grassland/parkland	18.10
Golf courses	17.50
Off-road vehicles	10.40
Drought-related impacts	9.80
Drainage/filling/loss of wetlands	9.10
Sources outside state jurisdiction or borders	3.60
Upstream/downstream source	3.30
Marina/boating pumpout releases	2.60
NPS pollution from military base facilities (other than port facilities)	2.50
Category total	234.06
Industrial	
Industrial point source discharge	188.95
Unpermitted discharge (industrial/commercial wastes)	23.30
Industrial/commercial site stormwater discharge (permitted)	5.20
Commercial districts (industrial parks)	4.80
Commercial districts (shopping/office complexes)	2.60
Category total	224.85
W*aste Disposal*	
Sewage discharges in unsewered areas	105.90
Illegal dumps or other inappropriate waste disposal	74.00
Inappropriate waste disposal	73.10
Landfills	47.65
Septage disposal	21.75
Category total	322.40

Table 3.3.1-5 (cont.). Probable sources of impairment to Kentucky rivers and streams[1].

Source Categories	Miles
Hydromodifications: dams or impoundments (stream flow)	
Impacts from hydrostructure flow regulation/modification	68.10
Upstream impoundments (e.g. NRCS structures)	27.35
Dam or impoundment	18.60
Category total	114.05
Natural	
Natural Sources	28.20
Natural conditions – water quality standards use attainability analysis needed	1.20
Category total	29.40
Atmospheric Deposition	
Atmospheric deposition – toxics	11.20
Category total	11.20

[1]Information is based on 305(b) assessment results.

"transportation" and "fuel or energy related", each about 8.5 percent. These statistics are the result of grouping related subcategories under broad categories to better reflect those significant sources that contributes to impairment of streams in the state.

Statewide Aquatic Life and Primary Contact Recreation Support by Basin. Individual use support by major river basin is shown in Table 3.3.1-6. This overview of the Commonwealth's major river basins shows the greatest percentage of assessed river miles not supporting aquatic life use is found in the Mississippi River basin (83 percent) and the Big Sandy River basin the second greatest percent of not supporting miles at 82 percent. Figure 3.3.1-1 shows the percentages of aquatic life and PCR uses that fully support by major river basin. Those two river basins have been the number one or two basins with the least supporting miles for aquatic life use in each biennial reporting cycle since the 2006 IR. The landuse in each basin is intensive. The Mississippi River basin in Kentucky is located in the Jackson Purchase region where agriculture production is the predominant landuse. Most all streams in this basin, among others, have been moved and channelized with the associated wetlands drained. A result is the loss of habitat structure, hydrologic regime change and loss of riparian habitat that affects water quality and habitat directly and indirectly by loss of the in-stream and out-of-stream upland buffering this habitat provides. Similarly, in landuse intensity the Big Sandy River basin has the most percentage of land involved with coal production in the Commonwealth, based on mine licenses and tonnage (source, http://www.kentuckycoal.org/documents/CoalFacts08.pdf, accessed May 21, 2012). This landuse alters stream hydrology and associated chemical composition of the water that often results in unnaturally high concentrations of total dissolved solids (salts) that may be composed of metals, other cations and anions; this change in water chemistry may have a toxic affect on aquatic life presenting physiological challenges that most freshwater organisms cannot tolerate. The lower Cumberland River basin has the third greatest percent of nonsupporting assessed streams, 68 percent or 32 percent fully supporting (Figure 3.3.1-1). The Tradewater River basin and the Licking River basin are next, each with 62 percent of assessed streams not supporting aquatic life use. The Tradewater River basin landuse is primarily agriculture as is most of the western Pennyroyal physiographic region. Overall landuse in this basin is similar to the Jackson Purchase, except there is a greater variety of landscape uses, including broken forested land.

The Licking River basin drains an area of Kentucky from the mountainous region in Magoffin County, flowing through the Hills of the Bluegrass and the Outer Bluegrass ecoregions where the Licking River discharges to the Ohio River near Newport. This region is forested with limited coal mining mainly located in Magoffin and adjacent Menifee and Morgan counties. The 8,270 acre Cave Run Lake is a reservoir created by a USACE dam on the mainstem of the Licking River. This middle portion of the basin is primarily forest, small-scale crop and livestock farming while intermixed with small cities (population <10,000). The lower one-third of the basin enters the Bluegrass Region where there are a greater density of farms, primarily livestock and limited crop production. Within this portion approximately the final 30 miles of the river, and those associated direct tributaries, are in the urbanized area of Northern Kentucky. Thus, streams in this basin flow through a mosaic of diverse landforms and uses. Thirty-eight percent of assessed miles support aquatic life use (Figure 3.3.1-1).

Table 3.3.1-6. Number of river miles assessed and level of support by use in each major river basin. Those basins in bold type are emphasized this reporting cycle.

Basin	Total Assessed	Supporting	Partially Supporting	Not Supporting
Big Sandy				
Aquatic Life	783.40	142.95	319.75	320.70
Fish Consumption	77.35	54.05	15.30	8.00
Primary Contact Rec.	455.70	153.10	36.10	266.50
Secondary Contact Rec.	51.30	0.00	2.50	48.80
Drinking Water	104.25	104.25	0.00	0.00
Green River				
Aquatic Life	1883.80	1129.60	437.65	316.55
Fish Consumption	338.30	176.20	101.00	61.10
Primary Contact Rec.	1073.95	430.75	171.95	471.25
Secondary Contact Rec.	622.75	372.45	77.90	172.40
Drinking Water	252.00	252.00	0.00	0.00
Kentucky River				
Aquatic Life	1944.90	1125.95	562.90	256.05
Fish Consumption	307.75	153.10	143.45	11.20
Primary Contact Rec.	939.35	261.15	136.50	541.70
Secondary Contact Rec.	444.20	398.65	8.90	36.65
Drinking Water	142.30	142.30	0.00	0.00
Licking River				
Aquatic Life	**956.32**	**367.30**	**319.40**	**269.62**
Fish Consumption	**32.65**	**32.65**	**0.00**	**0.00**
Primary Contact Rec.	**589.17**	**109.70**	**90.90**	**388.57**
Secondary Contact Rec.	**206.12**	**113.25**	**52.05**	**40.92**
Drinking Water	**87.00**	**87.00**	**0.00**	**0.00**

Table 3.3.1-6 (cont.). Number of river miles assessed and level of support by use in each major river basin. Those basins in bold type are emphasized this reporting cycle.

Basin	Total Assessed	Supporting	Partially Supporting	Not Supporting
Little Sandy				
Aquatic Life	225.75	93.45	105.10	27.20
Fish Consumption	8.00	8.00	0.00	0.00
Primary Contact Rec.	59.00	47.05	11.00	0.95
Secondary Contact Rec.	0.00	0.00	0.00	0.00
Drinking Water	2.00	2.00	0.00	0.00
Lower Cumberland				
Aquatic Life	**397.90**	**125.40**	**159.35**	**113.15**
Fish Consumption	**48.85**	**37.45**	**9.40**	**0.00**
Primary Contact Rec.	**195.05**	**44.10**	**47.80**	**103.15**
Secondary Contact Rec.	**2.45**	**0.00**	**2.45**	**0.00**
Drinking Water	**37.15**	**37.15**	**0.00**	**0.00**
Mississippi River				
Aquatic Life	**305.25**	**52.75**	**120.20**	**132.30**
Fish Consumption	**95.00**	**90.80**	**4.20**	**0.00**
Primary Contact Rec.	**59.55**	**3.70**	**10.10**	**45.75**
Secondary Contact Rec.	**5.35**	**0.00**	**0.00**	**5.35**
Drinking Water	**0.00**	**0.00**	**0.00**	**0.00**
Ohio River (minor tribs)				
Aquatic Life	**562.40**	**210.60**	**160.85**	**154.95**
Fish Consumption	**18.60**	**11.40**	**0.00**	**7.20**
Primary Contact Rec.	**160.80**	**54.65**	**11.80**	**94.35**
Secondary Contact Rec.	**79.15**	**60.65**	**0.00**	**18.50**
Drinking Water	**0.00**	**0.00**	**0.00**	**0.00**
Salt River				
Aquatic Life	**1127.52**	**685.45**	**242.50**	**199.57**
Fish Consumption	**61.10**	**45.90**	**14.20**	**1.00**
Primary Contact Rec.	**573.75**	**77.05**	**89.50**	**407.20**
Secondary Contact Rec.	**280.15**	**220.65**	**5.25**	**54.25**
Drinking Water	**5.15**	**5.15**	**0.00**	**0.00**

Table 3.3.1-6 (cont.). Number of river miles assessed and level of support by use in each major river basin. Those basins in bold type are emphasized this reporting cycle

Basin	Total Assessed	Supporting	Partially Supporting	Not Supporting
Tennessee River				
Aquatic Life	**302.70**	**140.15**	**108.55**	**54.00**
Fish Consumption	**24.95**	**13.70**	**11.25**	**0.00**
Primary Contact Rec.	**189.15**	**18.20**	**35.65**	**135.30**
Secondary Contact Rec.	**0.00**	**0.00**	**0.00**	**0.00**
Drinking Water	**0.00**	**0.00**	**0.00**	**0.00**
Tradewater River				
Aquatic Life	293.20	110.40	72.00	110.80
Fish Consumption	0.00	0.00	0.00	0.00
Primary Contact Rec.	145.85	36.40	0.00	109.45
Secondary Contact Rec.	105.40	34.80	17.00	53.60
Drinking Water	25.80	25.80	0.00	0.00
Tygarts Creek				
Aquatic Life	112.25	72.60	36.95	2.70
Fish Consumption	50.70	5.40	0.00	45.30
Primary Contact Rec.	55.50	55.50	0.00	0.00
Secondary Contact Rec.	0.00	0.00	0.00	0.00
Drinking Water	2.00	2.00	0.00	0.00
Upper Cumberland				
Aquatic Life	**1379.44**	**870.35**	**291.35**	**217.74**
Fish Consumption	**78.80**	**66.40**	**12.40**	**0.00**
Primary Contact Rec.	**562.19**	**240.15**	**59.40**	**262.64**
Secondary Contact Rec.	**191.68**	**138.35**	**4.00**	**49.33**
Drinking Water	**88.70**	**88.70**	**0.00**	**0.00**

Of the remaining basins specifically part of the two BMUs of focus in this report, the Ohio River minor tributaries have 44 percent of assessed river miles as supporting aquatic life use (Table 3.3.1-6 and Figure 3.3.1-1). Most streams, other than the major rivers discharging into the Ohio River, flow relatively short distances and nearly all have Ohio River backwater inundating the lower 0.3 to 1 mile of the mouth of these streams. Because these streams are on the floodplain of the Ohio River the fertile ground is often planted in crop production or grazed by livestock. However, towns, cities and the associated infrastructure located along the Ohio River may dominate the landuse of these watersheds.

Forty-six percent of assessed stream miles in the Tennessee River basin are not supporting aquatic life use (Table 3.3.1-6 and Figure 3.3.1-1). This river basin is located in the Jackson Purchase with land uses as described for the Mississippi River basin.

The basins with the most assessed stream miles not supporting primary contact recreation are: 1) Mississippi River (93 percent); 2) Tennessee River (90 percent); 3) Salt River (87 percent); 4) Licking River (81 percent); 5) Lower Cumberland River (77 percent); and 6) Tradewater River (75 percent) (Table 3.3.1-6); These basins have one common denominator: widespread agriculture. The Tennessee River and Mississippi River basins are intensively managed for agriculture, especially row cropping of soybeans and corn, in addition to livestock production. The greatest percentage of assessed stream miles supporting this use is in Tygarts Creek (100 percent), the Little Sandy River (80 percent) and the Upper Cumberland River basin (43 percent) (Figure 3.3.1-1).

Inappropriate discharge of wastewater, both gray and black water, from straight-pipes to streams is a common occurrence in the Commonwealth, especially in unsewered areas. Those unsewered areas where topography lessens the effectiveness of septic tanks and often precludes suitable land to run lateral field lines only exacerbate the condition. The associated pathogens with the straight-pipe discharge have no known effect on the aquatic life as they target warm-blooded hosts. Compared to the 2010 IR, basins with the greatest increase in percentage of assessed miles supporting PCR are the Tennessee River, the Kentucky River, the Big Sandy River and the Tradewater River (Figure 3.3.1-2). The Big Sandy River basin has long been a problematic area for pathogen-related water quality concerns. Much of this region is mountainous with many dense populations occurring in the narrow stream valleys, the only areas suitable for human settlement and commerce. This landform does not have adequate soil types or land available outside floodplains for proper septic

Figure 3.3.1-1. Aquatic life and primary (swimming) contact recreation use support (based on stream miles) by major river basins in Kentucky, 2012 305(b) cycle.

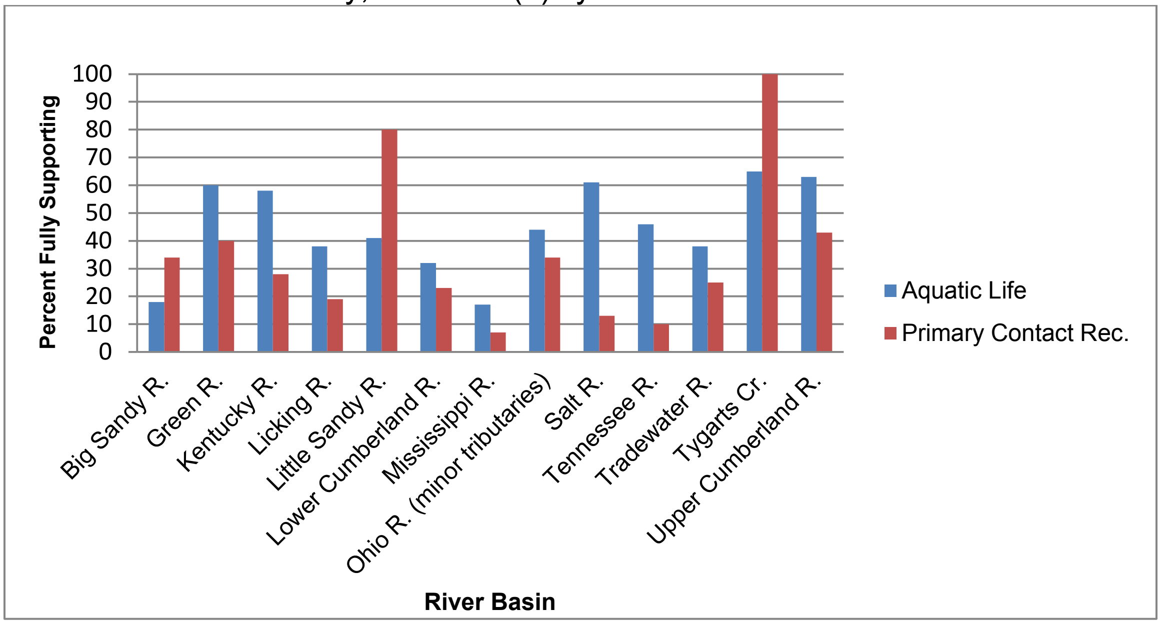
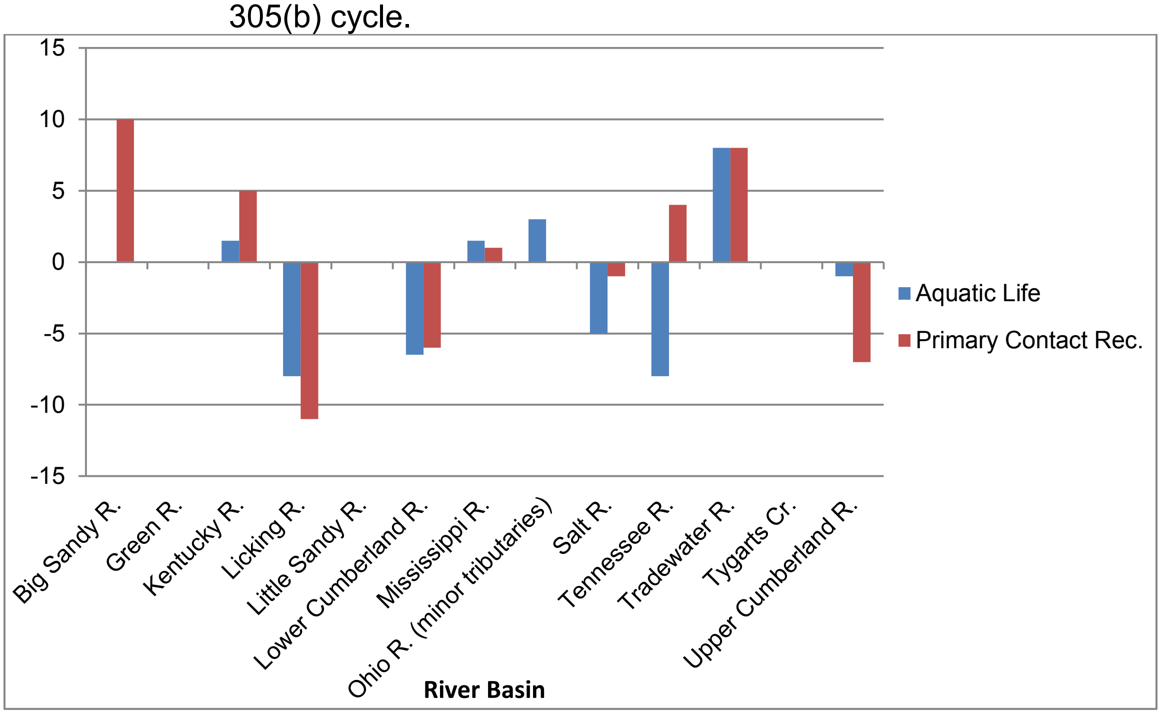


Figure 3.3.1-2. Percent change regarding full support level (based on stream miles) in major river basins in Kentucky between 2010 and 2012 305(b) cycle.



treatment. However, there has been an effort to educated and eliminate illegal straight-pipes in some of the most problematic areas.

To better contrast the changes of designated use (specifically aquatic life and primary contact recreation) support to the last 305(b) cycle on a basin-scale, Figure 3.3.1-2 illustrates the relative change in designated use support between the two periods (2010 and 2012). This graph highlights that while this reporting cycle is focused on the Salt River – Licking River and Upper Cumberland River – 4-Rivers BMUs, this report includes statewide updates to all BMUs (specific comparisons of DU results on the two BMUs of focus in this reporting cycle to the last cycle [2006 and 2008] that focused on each are made in following paragraphs). Those river basins that have a positive percent change (increase in full support) considering aquatic life use are the Kentucky River, Mississippi River, Ohio River minor tributaries and Tradewater River (Figure 3.3.1-2). The greatest decline in percentage of stream miles assessed for aquatic life and primary contact recreation DUs occurred in the Licking River, Lower Cumberland River, Tennessee River and Salt River basins (Figure 3.3.1-2). This may partially be attributed to ongoing landuses in these basins and more intensive monitoring in 303(d) listed watersheds as that program moves toward TMDL development for pollutants and their sources.

3.3.2 Use Assessment Results for 305(b) Reporting Cycle 2012

Salt River – Licking River Basin Management Unit. The two river basins that comprise this BMU are geographically separated by the Kentucky River basin. Given this separation, the two river basins have dissimilar characteristics regarding geologic and physiographic characteristics resulting in differing expectations regarding water chemistry and biological community composition. These differences are most pronounced in the upper one-half of the river basins.

The Salt River rises in Casey and Boyle counties, an area in the Knobs-Norman Upland (71c) that divides the bluegrass ecoregions from the rest of the Interior Plateau. It flows north for about 30 miles and then turns west flowing for anther 95 miles where it discharges into the Ohio River near West Point along the Bullitt and Hardin county lines. The major tributaries are the Chaplin River, Beech, Rolling and Floyds forks. The Taylorsville Lake (reservoir) is a 3,050 acre USACE dam project on the mainstem. The streams of the Salt River basin are upland with moderately high gradient, shoals and consist of rocky substrate.

The geology of the region the headwaters and upper one-fourth of the watershed flows through is of Pennsylvanian-age and Silurian-age sedimentary rocks and high gradient valleys. These characteristics make this ecoregion more ecologically diverse compared to the Outer Bluegrass (71d) and Hills of the Bluegrass (71k) ecoregions that the remainder and greatest proportion of the basin flows through. The Hills of the Bluegrass is underlain by Upper Ordovician calcareous rocks and shale that are relatively high in phosphorus. The Outer Bluegrass has usually less relief than the ecoregions 71c or 71k and has naturally higher phosphorus content; the rivers are entrenched with springs, sinkholes and intermittent and perennial streams. The streams commonly have moderate gradients with some having high gradients; cobble, boulder and bedrock dominate the streambed composition.

This region of the Bluegrass contains the most populated area of the Commonwealth, the Louisville metropolitan area, with a variety of manufacturing and industrial facilities associated with urban and suburban landuses. The rural area is primarily a mixture of small towns, light industries and agriculture. The agricultural uses are small farms used for livestock grazing, hay production and limited row crops of corn, soybeans and a declining burley tobacco production.

The Licking River basin rises in Magoffin County on the Dissected Appalachian Plateau (69d) Ecoregion of eastern Kentucky. This region is in the eastern Kentucky coalfield; the geology is Pennsylvanian-age shale, siltstone, sandstone and coal. The streams in this basin are characteristic of moderate to high gradient, with riffles, shoals and rocky substrate composed of boulders, cobble and gravels. The water is softer, lower pH and low in fertility compared to the Salt River basin.

However, most of the upper one-third of the Licking River flows through a lower plateau adjacent to 69d, this is the Western Alleghany Plateau and in this basin is divided into three level IV ecoregions, from east to west, Ohio/Kentucky Carboniferous Plateau (70f), Northern Forested Plateau Escarpment (70g) and Knobs-Lower Scioto Dissected Plateau (70d). This plateau is lower than the adjacent Ecoregions 69d, 68a and 68c. This plateau region is a mixture of forests (mixed evergreen and deciduous), pastureland and small cropland, with 70f the most cleared of the Western Alleghany Plateau. Water quality in many streams in Ecoregion 70f has been lowered by mining, logging and agriculture. Most of the USACE dam project on the mainstem of the Licking River, Cave Run Lake, is located in this ecoregion. Ecoregion 70g is highly dissected with narrow valleys and ravines. Pennsylvanian quartzose sandstone caps the tops of ridges and Mississippian limestone, shale and siltstone occurs on the lower slopes. This ecoregion is higher in elevation than adjacent 70f and 70d. Many cliffs occur and the streams are generally high gradient. The most important land uses are logging and recreational activities. The Knobs-Lower Scioto Dissected Plateau (70d) contains high gradient streams underlain by shales. The geology consists of Pennsylvanian-age and Silurian-age sedimentary rocks. There is no coal mining and the major landuse is small farms used for livestock grazing and hay production.

The lower two-thirds of the Licking River basin flows through two of the three ecoregions of the Interior Plateau that the Salt River does, ecoregions 71d and 71k. In general, the water chemistry is of higher pH, higher natural nutrient concentrations and alkalinity. The Licking River discharges into the Ohio River at Newport after flowing for about 310 miles. While most of the lower river watershed is in a rural area comprised of farms (livestock grazing, hay production and some cropland), small towns and their associated infrastructure, approximately the lower 30 miles of the river flows through a region where landuses are those associated with primarily suburban and urban areas.

Salt River Basin Results. The Salt River Basin is intrastate and drains about 4,150 square miles of parts or all of 18 counties in north-central Kentucky.

The headwaters of the Salt River rise in Boyle County in the Knobs-Norman Upland Ecoregion (Ecoregion 71c). From there it flows northward into southern Anderson County where it bends westward to its eventual confluence with the Ohio River near West Point, Hardin County. Along this course it picks up four principle tributaries, Rolling Fork, Chaplin River, Beech Fork and Floyds Fork. The streams in the Silver - Little Kentucky River HUC (05140101) of the Salt River Basin discharge directly into the Ohio River. According to the 1:24,000-scale NHD, there are 9,621 miles of streams in this basin. The watershed is bounded on the north and west by the Ohio River, on the east by the drainage divide with the Kentucky River basin and on the south by the drainage divide with the Green River basin. The general topography ranges from nearly flat along alluvial plains to gently rolling pastures to hilly, steeply sloping hillsides in upland areas. The elevation of land surface ranges from slightly less than 400 feet to more than 1,200 feet above mean sea level. Data from the 2010 U.S. Census Bureau indicate that of the 12 counties with the greatest percent population increase, seven are in the Salt River basin, and six of those are in the Louisville metropolitan area. Principle cities in the basin include Louisville- Jefferson County, Radcliff, LaGrange, Shelbyville and many smaller communities.

Following are highlights of data and statistical analyses related particularly to the Salt River basin, both targeted and probability based biosurveys to determine aquatic life use; other monitoring results as they relate to each of the remaining three designated uses and fish consumption. The table found in Appendix A contains the complete monitoring results for each specific waterbody and segment assessed in the Commonwealth. The assessment information is grouped by river basin. For refinement to the degree of use support, nonsupport miles were further subdivided into partial support and nonsupport based on physicochemical, MBI or KIBI results and scores. This assists KDOW in recognizing the relative degree of potential pollutant and habitat impacts on each system. Appendix B contains reach indexed maps of assessment results based on NHD 1:24,000 scale for this basin.

Causes, Sources and Landuses. The five most common causes (pollutants) and sources of pollutants or pollution particular to the Salt River basin are listed in Table 3.3.2-1. The leading pollutant impairing aquatic life use in streams of the Salt River basin is nutrient/eutrophication biological indicators, affecting nearly 250 stream miles. Combine that with one of the other top five cause of impairment in the basin, organic enrichment (sewage) biological indicators, and the miles affected by nutrient related stressors is approximately 390 stream miles. This compares to about 250 impaired stream miles associated with these two causes in the last cycle focusing on this basin (KDOW, 2006). This is a 56 percent increase in the stream miles identified affected by excess nutrients.

The second most commonly associated cause of impairment in this basin is sedimentation/siltation that affects about 210 assessed stream miles. This compares to nearly 200 stream miles according to 2006 reporting information. The pollutant category “cause unknown” is the last of the top five pollutants identified with assessed stream miles in the Salt River basin; it is associated with nearly 60 stream miles. The pollutant “cause unknown” is assigned to stream reaches when the pollutants contributing to impairment cannot be identified. Identifying actual pollutants is always a goal when monitoring and assessing waterbodies, but sometimes that is not possible. This pollutant-surrogate is most often associated with streams where biological community data is collected with a limited suite of water quality variables. While the biological community is a robust indicator of the health of a waterbody, integrating the prevailing conditions over time, it is not always possible to identify the reasons for impairment without intensive monitoring. This is the role the TMDL monitoring program fulfills when a 303(d) listed waterbody is scheduled for TMDL development.

The most commonly associated pollutant associated with designated use assessment is pathogens. This pollutant is monitored in conjunction with contact recreation use support and the bacterium *E. coli* is the surrogate indicator of the presence of pathogens. Pathogens are associated with 450 stream miles not supporting contact recreation. The number of stream miles impaired by this pollutant is comparable to that in 2006 when about 410 stream miles were identified as less than fully supporting contact recreation due to this pollutant.

Contributing sources of pollutants affecting streams in this basin are those that may be commonly associated with landuses in an area influenced by an urban and suburban region. Municipal point source discharges was associated with about 210 impaired stream miles, as it was in the 2006 IR; however, the stream miles have dropped about 120 since that report. The sources "urban runoff/storm sewers" and "package plant or other permitted small flows discharges" were associated with about 240 impaired stream miles. The source "agriculture" was not in the top five most frequently associated sources of pollutants in the 2006 report, but currently 150 stream miles were identified with this source. Similar to the surrogate pollutant "cause unknown," the source code "source unknown" was listed with 150 stream miles. Future intensive monitoring will document the exact sources of pollutants, particularly with TMDL monitoring.

In reviewing the five most commonly identified pollutants in this basin there is relationship among them. Sedimentation/siltation has been the most common or nearly most common pollutant impairing waterbodies statewide and this basin. Geologically phosphorus is naturally high in the ecoregions associated with this basin. Sediments entering waters is itself a pollutant, but also is an important conveyance for other pollutants to enter waterways. Four of the five commonly identified pollutants in this basin are either sediments or pollutants that readily attach to sediments. Sediments not only often carry other pollutants, but cause physical smothering and loss of habitat, negatively affecting the aquatic habitat necessary to support diverse biological communities.

Targeted Monitoring: Aquatic Life Use. The targeted monitoring programs resulted in 685 (61 percent) stream miles fully supporting this use (Table 3.3.1-6 and Figure 3.3.1-1). When assessing this designated use many elements of the aquatic environment are typically monitored, physical, chemical and biological. When all three of these environmental elements are monitored and full support is indicated conditions in the watershed are likely in balance with the aquatic resources. While many of those 1,100 plus stream miles assessed

Table 3.3.2-1. Number of assessed river miles with the top five causes and sources in the major river basins within the Salt River – Licking River and Upper Cumberland River – 4-Rivers BMUs.

River Basin	Miles		Miles
Licking River			
Causes		*Sources*	
Pathogens	529.62	Source unknown	284.40
Nutrient/Eutrophication Biological Indicators	288.95	Agriculture	246.27
Sediments/Siltation	246.27	Nonpoint source	172.97
Organic enrichment (sewage) biological indicators	122.2	Livestock (grazing or feeding operations	134.15
Cause unknown	88.2	Loss of riparian habitat	129.52
Salt River			
Pathogens	450.90	Municipal point source discharges	206.75
Nutrient/eutrophication biological indicators	248.55	Source unknown	150.70
Sedimentation/siltation	209.90	Agriculture	149.75
Organic enrichment (sewage) biological indicators	142.10	Urban runoff/storm sewers	136.80
Cause unknown	58.90	Package plant or other permitted small flows discharges	102.55
Upper Cumberland River			
Sedimentation/Siltation	311.30	Source unknown	197.91
Specific conductance	311.30	Loss of riparian habitat	135.40
Pathogens	235.06	Surface mining	129.15
Nutrient/Eutrophication Biological Indicators	89.51	Agriculture	73.00
Cause unknown	85.15	Package plant or other permitted small flows discharges	67.31
Lower Cumberland River			
Sedimentation/siltation	138.50	Source unknown	149.55
Pathogens	132.50	Agriculture	124.50
Nutrient/Eutrophication Biological Indicators	101.35	Crop production (crop land or dry land)	87.35
Cause unknown	73.05	Municipal point source discharges	71.20
Organic enrichment (sewage) biological indicators	58.30	Livestock (grazing or feeding operations)	49.75

Table 3.3.2-1 (cont.). Number of assessed river miles with the top five causes and sources in the major river basins within the Salt River – Licking River and Upper Cumberland River – 4-Rivers BMUs.

River Basin	Miles		Miles
Mississippi River (cont.)			
Causes		*Sources*	
Sedimentation/siltation	180.00	Agriculture	118.70
Pathogens	61.35	Channelization	112.35
Nutrient/eutrophication biological indicators	51.70	Loss of riparian habitat	99.70
Iron	34.30	Source unknown	71.05
Lead	29.45	Non-irrigated crop production	52.05
Ohio River (minor tributaries)			
Nutrient eutrophication biological indicators	26.30	Inappropriate waste disposal	18.60
Sedimentation/siltation	23.30	Industrial point source discharge	18.60
Beta particles and photon emitters	18.60	Non-irrigated crop production	16.30
Copper	18.60	Agriculture	14.30
Gross alpha	18.60	Source unknown	13.30
Tennessee River			
Pathogens	151.05	Source unknown	145.40
Cause unknown	62.20	Agriculture	62.80
Sedimentation/siltation	46.60	Urban runoff/storm sewers	23.05
Nutrient/eutrophication biological indicators	34.50	Package plant or other permitted small flows discharges	18.20
Iron	23.85	Channelization	16.80

by targeted monitoring were based on biological community structure along with one-time grab samples for conventional pollutants, a sizeable number of those miles were assessed using water column physicochemical data (including conventional and toxic pollutants) at long-term ambient watershed stations. The percentage of assessed miles fully supporting this DU decreased four percent since the last intensive monitored results were reported on this basin in 2006 (KDOW, 2006). The relative percent change by individual basin since the 2010 305(b) cycle is shown in Figure 3.3.1-2.

Targeted Monitoring: Fish Tissue. Fish tissue samples were analyzed for mercury, PCB, chlordane, DDT and toxaphene contamination in this BMU. Of the 61 miles assessed for fish consumption, 46 miles (about 75 percent) were fully supporting (Table 3.3.1-6). Approximately 15 miles (nearly 25 percent) were not fully supporting this use. Of those 15 stream miles, all but one mile was partially supporting, meaning the fish tissue residue for mercury was >0.3 mg/Kg but <1.0 mg/Kg (not supporting the mercury tissue residue is >1.0 mg/Kg). All stream miles not supporting fish consumption in this basin is due to mercury tissue residue. Compared to the 2006 IR results this basin had 73 miles assessed for fish consumption and 47 stream miles fully supported fish consumption (KDOW, 2006).

Targeted Monitoring: Primary (Swimming) Contact Recreation. Criteria for both pH and the bacteria pathogen indicator *E. coli* apply to this DU. Water column samples were analyzed for the presence and quantity of *E. coli* or fecal coliform colonies to assess this DU. There were nearly 574 stream miles assessed in the Salt River basin (Table 3.3.1-6). Of those stream miles, 77 (13 percent) were fully supporting and approximately 497 miles (87 percent) were partially or not supporting (Table 3.3.1-6). Full support of this DU declined 29 percent since the last intensive survey assessment was reported in the 2006 IR. An overview of this is shown in Figure 3.3.1-1; a relative percent change in support level since the 2010 IR shown in Figure 3.3.1-2.

In reviewing the top sources of pollutants in this basin per Table 3.3.2-1 three of the five sources identified can be prime sources for *E. coli*, municipal point source discharges, urban runoff/storm sewers and package plant or other permitted small flows discharges. Aging, failing and inadequate infrastructure is an ongoing concern confronting local governments in-state and nationwide. Inadequate funding is a primary reason for these challenges and that is not likely to change in the near-term. However, as planned regional wastewater treatment facilities do come online, it is anticipated measurable reduction of bacteria concentrations in the associated watersheds will occur.

Targeted Monitoring: Secondary Contact Recreation. This DU has both fecal coliform (pathogen indicator) and pH criteria in water quality standards. There are about 280 stream miles assessed for this designated use in the Salt River basin (Table 3.3.1-6). Of those miles, 221 stream miles (79 percent) fully support the DU. Approximately 60 stream miles (21 percent) are less than full support.

Targeted Monitoring: Domestic Water Supply. All miles (5.15) assessed in this basin fully support this use (Table 3.3.1-6).

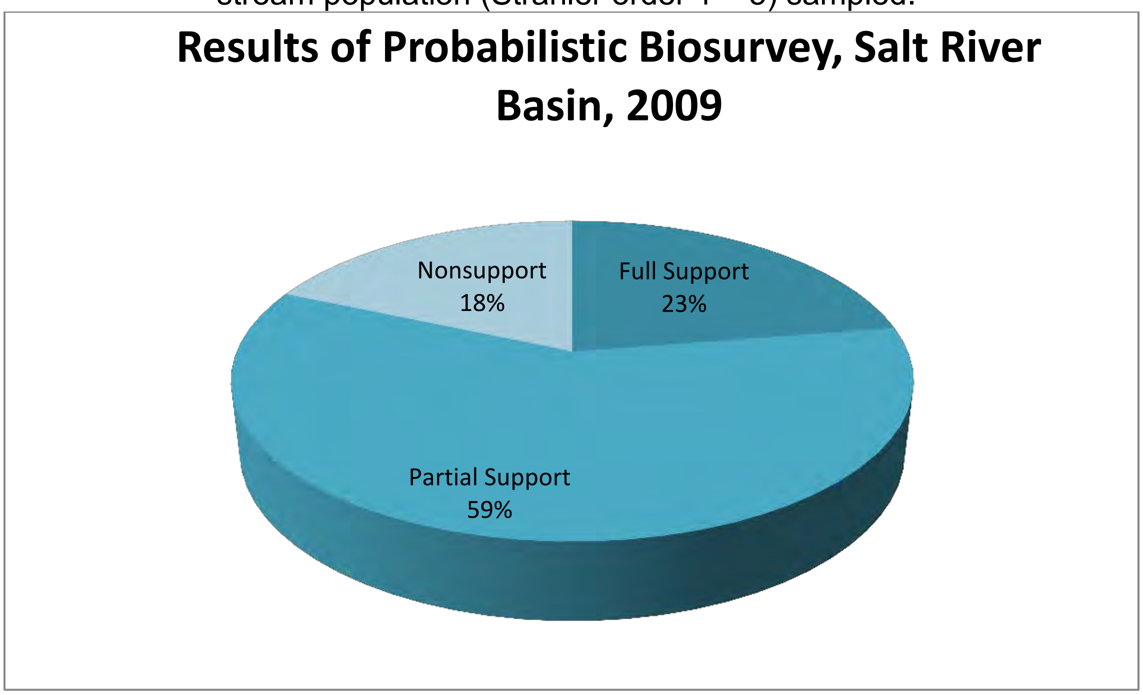
Probability Biosurvey of the Salt River Basin. A biosurvey of the Salt River basin was performed according to EMAP and Kentucky SOP protocol for macroinvertebrates (SOP - Sampling Benthic Macroinvertebrate Communities) and fishes (SOP - Collection Methods for Fish) (accessed June 6, 2012) . As Table 3.3.2-2 conveys, out of 5,292 stream miles of the defined stream population, 2,597 stream miles were represented in the probability analysis. Once the probability data were extrapolated, 585 miles or 23 percent of the representative wadeable streams in this BMU were fully supporting aquatic life use, 1,532 miles or 59 percent of representative wadeable streams were partially supporting and 18 percent (480 representative stream miles) were not supporting aquatic life use (Table 3.3.2-2 and Figure 3.3.2-1).

A random biosurvey was conducted in 2004 using the same monitoring protocol for the same defined stream population. Those results were presented in the 2006 305(b) report (KDOW, 2006). The level of support was 17 percent per the 2004 monitored data. This recent (2009) survey findings indicate a six percent increase in fully supporting stream miles. The level of partially supporting stream miles was 57 percent per 2004 data and 26 percent nonsupporting. The current probabilistic biosurvey data indicate 59 percent currently partially supporting and 18 percent nonsupporting the DU. These are favorable results over the five year period.

Table 3.3.2-2. Aquatic use attainment results based on the 2009 probability biosurvey of the Salt River basin (all numbers rounded to nearest integer).

Project ID	Salt River Basin
Target Population	Streams Strahler Order 1-5
Sample Frame	EPA River Reach File 3 (1:100,000 Scale)
Type of Water body	Wadeable Streams
Size of Defined Stream Population	5,292 mi
Size of Non-Defined Population	2,034 mi
Size of Defined Sampled Population	2,597 mi
Designated Use	Aquatic Life
Attaining Full Use Support	585 mi
Not Attaining Full Use (partial support)	1,532 mi
Not Attaining Full Use (nonsupport)	480 mi
Indicator	Biology (Macroinvertebrates & Fishes)
Assessment Date	2009
Precision	90% at 95% Confidence Level

Figure 3.3.2-1. Proportions of aquatic life use support level in the Salt River basin based on probability biosurveys. Graph is of the representative stream population (Strahler order 1 – 5) sampled.



Probability and Targeted Monitoring Compared (Aquatic Life Use). There were 1,128 stream miles assessed under the targeted monitoring programs for this DU and 2,597 represented stream miles assessed using probabilistic biosurvey protocol in the Salt River basin. The relative support determined by each targeted program was much greater as a percentage compared to the probabilistic data (Table 3.3.2-3). Sixty-one percent of targeted stream miles supported the DU; whereas, 23 percent of stream miles were considered fully supporting as determined by the probabilistic program.

Of important consideration pertaining to these results, the targeted monitoring data represent only a fraction (43 percent) of miles represented by the random biosurvey miles of 5,292 stream miles. In the mix of targeted streams a proportion of RR streams are monitored each cycle to confirm the current status of aquatic life use. Further consideration must be given as to the criteria for the selection of streams for probability monitoring compared to the targeted monitoring. An equitable number of Strahler stream order 1 and 2 streams, in addition to Strahler order 3 – 5 are selected so the study is representative of all wadeable streams in the basin, whereas this is not the case with targeted monitoring. Smaller watersheds of low stream order (i.e. small watersheds) show stress in biological communities to relatively smaller-scale perturbations compared to the large watersheds. Larger watersheds (>5 square miles) can often assimilate more disturbances relative to watershed size, particularly physical disturbances, compared to headwater streams. Also, the approach to selecting sample locations differs significantly between the two biological programs. The targeted stations are located in the best available stream reach for most monitoring programs. The probabilistic approach is designed to randomly detect the prevailing habitat and associated biological conditions in a defined stream population (like Strahler order watersheds) at randomly select locations throughout the study area without regard to prevailing in-stream habitat (Section 3.1.4).

Table 3.3.2-3. Comparison of probability and targeted monitoring results for aquatic life use in the Salt River basin.

	Full Support		Partial Support		Nonsupport	
	Probability	Target	Probability	Target	Probability	Target
Miles	585	685	1,532	243	480	200
Percent	23	61	59	22	18	18

Licking River Basin. The Licking River drains a diverse watershed, with forested hills and ridges in the upper reaches, rolling farmland along the middle region and an urban center near the confluence with the Ohio River at Newport. The Licking River was named for the mineral springs and salt licks that attracted buffalo and other animals to the basin; it rises in the highlands of the Central Appalachians in Magoffin County. The elevation ranges from about 1,500 feet in the headwaters to about 460 feet above mean sea level at the mouth. The river flows northwest crossing three Level III Ecoregions and has a length of about 300 miles before discharging into the Ohio River. This basin drains all or portions of 20 counties and is intrastate. It is bordered on the north by the Ohio River, south by the Kentucky River basin and to the east by the Big Sandy River – Little Sandy River – Tygarts Creek basins. The two principal tributaries are the North Fork, which joins the mainstem of the river near Milford, and the South Fork that joins the river at Falmouth. According to NHD (1:24,000 scale), there are 9,570 miles in the basin (HUCs 05100101 and 05100102). Included in this basin for management and assessment purposes is an additional 2,087 stream miles in adjacent HUC 05090201 (Ohio River minor tributaries). This area drained by Ohio River minor tributaries has an area of 767 square miles; the largest watershed is Kinniconick Creek. The Licking River drains an area of roughly 3,600 square miles, or about nine percent of the entire state. A dam near the town of Farmers on the Rowan - Bath county line (about 173 stream miles upstream from the Ohio River) forms Cave Run Lake, an 8,300-acre reservoir that impounds approximately 30 miles of the mainstem and the lower reaches of several tributaries. Smaller, low-water dams occur on Slate Creek, Stoner Creek, South Fork Licking River and other streams.

Following are highlights of data and statistical analyses related particularly to the Licking River basin and minor Ohio River tributaries, both targeted and probability based biosurveys to determine aquatic life use and other monitoring results as they relate to each of the four designated uses. Appendix A contains a table of complete monitoring results for each specific waterbody and segment as related to streams and rivers. For refinement to the degree of use support, nonsupport miles were further subdivided into partial support and nonsupport based on physicochemical, MBI or KIBI scores. This assists KDOW in recognizing the relative degree of potential pollutant and habitat impacts on each system. Appendix B contains reach indexing maps of these assessment results based on NHD 1:24,000 scale for this basin.

Causes, Sources and Land Uses. The top five causes (pollutants) and their sources in this basin are identified Table 3.3.2-1. Pathogens (indicated by the presence of *E. coli* and fecal coliform) are the leading cause of contact recreation DU impairment in the Licking River basin. This cause affects nearly 530 assessed stream miles and applies to the DUs PCR and SCR. This pollutant indicator was associated with 333 stream miles in the 2006 IR. The increase in stream miles assessed for PCR and SCR since the 2006 IR is 164 miles or 26 percent. However, by percent of monitored and assessed miles less than full support the percentage has increased 13 percent.

The second leading cause affecting the most stream miles (289) assessed in this basin is nutrient/eutrophication biological indicators (Table 3.3.2-1). The fourth leading cause or pollutant (organic enrichment (sewage) biological indicators) is closely tied to the second leading cause category, nutrient/eutrophication. If combined these two pollutants would be not only the second leading cause, but only about 110 miles less than the leading pollutant identified through monitoring and assessment. The third most frequently identified pollutant is sedimentation/siltation found associated with 246 stream miles. The fifth leading cause is unidentified, designated as cause unknown in Table 3.3.2-1. The pollutant “cause unknown” is assigned to stream reaches when the pollutants contributing to impairment cannot be identified. Identifying actual pollutants is always a goal when monitoring and assessing waterbodies, but sometimes that is not possible. This pollutant-surrogate is most often associated with streams where biological community data are collected with a limited suite of water quality variables collected once. While the biological community is a robust indicator of the health of a waterbody, integrating the prevailing conditions over time, it is not always possible to identify the reasons for impairment without more intensive monitoring. This is the role the TMDL monitoring program fulfills when a 303(d) listed waterbody is scheduled for TMDL development.

Four of the five (excludes cause unknown) leading causes of impairment reported here are the same as reported in the 2006 IR. Only the relative contribution has changed for those four pollutants.

"Source unknown" is currently the most identified source category by stream miles (284) in the Licking River basin (Table 3.3.2-1). Similar with respect to the pollutant-surrogate "cause unknown" this category is used when no obvious observable source of the pollutants affecting waterbodies is recognized. The second most frequently observed source of pollutants was agriculture, affecting 246 stream miles. This compares to the 2006 IR when agriculture was recognized as the leading source of pollutants in the basin. Nonpoint source is the third leading source and is associated with 173 stream miles. The fourth leading source is "livestock (grazing or feeding operations)." This is a subcategory of agriculture, and when they are combined the two form the number one category among suspected sources of pollutant in the Licking River basin. The fifth leading source is loss of riparian habitat. This is a critical component of aquatic environment that helps maintain the physicochemical and biological health. This zone of vegetation stabilizes stream banks as the rooted vegetation (primarily woody species) resists erosion of the soil. Additionally, vegetation impedes and filters sediment runoff from surrounding land, and excess nutrients are utilized by this vegetation reducing the quantity of nutrients that may enter the waterbody.

Targeted Monitoring: Aquatic Life Use. Data analysis results from the targeted monitoring programs indicate 367 miles (38 percent) fully supporting this DU out of 956 miles (Table 3.3.1-6). Of the approximately 62 percent of stream miles not supporting this DU, 33 percent (319 miles) are partially supporting and 28 percent (270 miles) of assessed miles are not supporting. The aquatic life DU has the most assessed stream miles of any of the other DUs, both in this and other basins. The aquatic life designated use is sensitive to many possible perturbations due to the physical, chemical and interdependent biological functions that require a relatively narrow range of variability to maintain a healthy aquatic environment. The majority of miles assessed for this DU were monitored using biological community function and integrity as the key indicator(s) (typically macroinvertebrates or fishes) along with water quality grab samples for conventional pollutants at time of the biosurvey. However, miles associated with boatable waters and long-term ambient water quality stations were monitored for water quality using both conventional and toxic pollutants as indicators of DU support. The percent of stream miles assessed that fully support this DU decreased by 17 percent since the last focused monitoring (KDOW, 2006). Along with this increase, the percentage of those in the category of "nonsupport" increased nine percent. The partial support and nonsupport assessment categories each result in a waterbody or segment listed on the 303(d) list (provided criteria for listing are met); however, the relative degree of impact on a waterbody is considered less for a partially supporting result due to frequency of pollutants exceeding criteria, number of pollutants and the degree to which the biological community integrity is lost.

Targeted Monitoring: Fish Tissue. Fish tissue samples were analyzed for mercury, PCB, chlordane, DDT and toxaphene contamination in this BMU. Of the approximately 32.65 stream miles assessed, all fully support this use (Table 3.3.1-6). This compares with 100 percent of assessed stream miles fully supporting this use in the last intensive monitoring year (KDOW, 2006).

Targeted Monitoring: Primary (Swimming) Contact Recreation. Both pH and the pathogen indicator bacterium (*E. coli*) criteria apply to this DU. Water column samples were analyzed for the presence and quantity of *E. coli* to assess this use. There were 589 stream miles assessed in this BMU; 19 percent (112 miles) of those stream miles fully support that use (Figure 3.3.1-1 and Table 3.3.1-6). Pathogens (*E. coli* is an indicator) are the most prevalent cause impairing stream miles in this BMU (Table 3.3.2-1). Since the last intensive BMU monitoring cycle, the percentage of assessed streams fully supporting this DU remained the same; however, the number of miles decreased by 12 percent (Figure 3.3.1-2) (KDOW, 2006).

Targeted Monitoring: Secondary Contact Recreation. This DU has both fecal coliform (pathogen indicator) and pH criteria in water quality standards. There are about 206 miles assessed for this designated use in the BMU and nearly 55 percent of stream miles (113) are fully supporting (Table 3.3.1-6). Forty-five percent of stream miles (92) assessed were less than fully supporting the DU.

Targeted Monitoring: Domestic Water Supply. Of the 87 stream miles assessed for domestic water supply all miles are fully supporting (Table 3.3.1-6). This level of support remained unchanged since the last reporting cycle (KDOW, 2006).

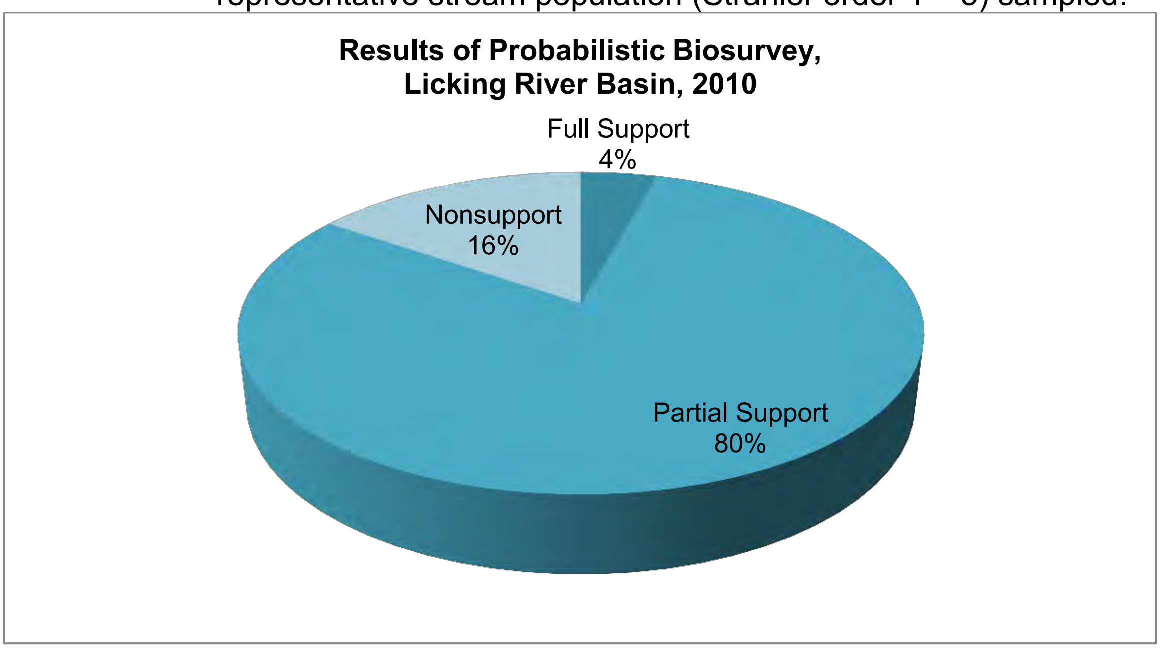
Probability Biosurvey of the Licking River Basin. A biosurvey of the Licking River basin was performed according to EMAP and Kentucky SOP protocol for macroinvertebrates (SOP - Sampling Benthic Macroinvertebrate Communities) and fishes (SOP - Collection Methods for Fish) (accessed June 6, 2012) . As Table 3.3.2-4 data indicate, out of 7,489 stream miles of the defined stream population, 3,918 stream miles were represented in the probability analysis. Once the probability data were extrapolated, 168 miles or 4 percent of the representative wadeable streams in this BMU were fully supporting aquatic life use, 3,145 miles or 80 percent of representative wadeable streams were partially supporting and 605 stream miles or nearly 16 percent were not supporting aquatic life use (Table 3.3.2-5 and Figure 3.3.2-2).

A random biosurvey was conducted in 2004 using the same monitoring protocol for the same defined stream population. Those results were presented in the 2006 305(b) report (KDOW, 2006). The percentage of stream miles fully supporting was 39 percent. Over that five-year span current probabilistic data indicate a 35 percent decrease in fully supporting stream miles. It is not known why the level of supporting stream miles decreased by this amount.

Table 3.3.2-4. Aquatic use attainment results based on the 2009 probability biosurvey of the Licking River basin (all numbers rounded to nearest integer).

Project ID	Licking River Basin
Target Population	Streams Strahler Order 1-5
Sample Frame	EPA River Reach File 3 (1:100,000 Scale)
Type of Water body	Wadeable Streams
Size of Defined Stream Population	7,489 mi
Size of Non-Defined Population	1,312 mi
Size of Defined Sampled Population	3,918 mi
Designated Use	Aquatic Life
Attaining Full Use Support	168 mi
Not Attaining Full Use (partial support)	3,145 mi
Not Attaining Full Use (nonsupport)	605 mi
Indicator	Biology (Macroinvertebrates & Fishes)
Assessment Date	2009
Precision	90% at 95% Confidence Level

Figure 3.3.2-2. Proportions of aquatic life use support level in the Licking River basin based on probability biosurveys. Graph is of the representative stream population (Strahler order 1 – 5) sampled.



Probability and Targeted Monitoring Compared (Aquatic Life Use). Probability and targeted monitoring results differed in the Licking River Basin (Table 3.3.2-5). In this basin, the targeted biosurvey and ambient water quality program data account for 956 stream miles assessed; this compares to 3,918 stream miles represented by the probabilistic biosurvey, or four times the stream miles. The targeted data resulted in 38 percent of stream miles fully supporting, 33 percent partially supporting and 28 percent not supporting the DU. This contrasts to the 4 percent fully supporting, 80 percent partially supporting and 15 percent not supporting the DU based on probabilistic extrapolation of data (Table 3.3.2-5). While it is not possible to determine why there is a disparate level of support indicated by these two monitoring methods, it must be noted that the two programs by design differ in their objectives. The targeted monitoring programs include reference reach streams, potential exceptional water surveys and waterbodies monitored for TMDL development. Many of the targeted streams are Strahler order 3 or greater whereas probability monitoring design selects an equitable number of Strahler order 1 – 5 streams. These smaller watersheds chosen at random typically manifest stress in biological communities to relatively smaller-scale perturbations than large watersheds; the larger watersheds can often assimilate more disturbances relative to watershed size. Also, the approach to locating sample stations differs significantly between the two biological programs. The targeted stations are located in the best available stream reach. The probabilistic approach is designed to randomly detect the prevailing habitat and associated biological conditions in a defined stream population (like Strahler order watersheds) at randomly selected locations throughout the study area.

Upper Cumberland River – 4-Rivers BMU. This BMU is divided in two primary basins, the upper Cumberland River in southeast and south-central Kentucky and 4-Rivers in west Kentucky. The Cumberland River basin rises in southeast Kentucky near the Kentucky – Virginia border in Letcher County on the southeast slope of Pine Mountain. It drains much of southeast Kentucky, enters

Table 3.3.2-5. Comparison of probability and targeted monitoring results for aquatic life use in the Licking River basin.

	Full Support		Partial Support		Nonsupport	
	Probability	Target	Probability	Target	Probability	Target
Miles	168	367	3,145	319	605	270
Percent	4	38	80	33	15	28

Tennessee below Burkesville, then re-enters the Commonwealth in west Kentucky just west of Fort Campbell military base, discharging (30,441 cubic feet per second) into the Ohio River near Smithland after flowing 687 miles from the source. The entire drainage basin is 18,081 square miles and drains parts of Kentucky and Tennessee. The Cumberland and Tennessee rivers parallel each other, and both discharge into the Ohio River within nine linear miles of each other.

The diverse physiographic characteristics of these two portions of the BMU have influenced the ecoregions and diversity of plants and animals immensely. The physiographic regions this river drains are diverse, (Black Mountain elevation 4,145 ft.) and high plateau in the upper Cumberland River watershed transitioning to cypress swamps, bottomland hardwoods and coastal plain regions in west Kentucky where these rivers discharge into the Ohio and Mississippi rivers. The mainstem of the Cumberland River is approximately 700 miles (1,127 km) long. Major tributaries (in Kentucky) include: 1) South Fork; 2) Little South Fork; 3) Rockcastle River; and 4) Red River. The upper Cumberland River basin drains approximately 6,250 square miles and overall the river basin drains approximately 18,000 square miles in Kentucky and Tennessee. Principal Kentucky cities in the basin are: Corbin; Middlesboro; London, Somerset; and Hopkinsville.

The Mississippi, Ohio and Tennessee rivers complete that portion of this BMU known as “4-Rivers” (including the Lower Cumberland River basin). These are large rivers; the Tennessee River is the largest tributary of the Ohio. The Tennessee River drains 40,876 square miles covering portions of seven southeastern states as it courses along 652 river miles draining physiographic regions as diverse as the Blue Ridge Mountains to coastal plain where it discharges into the Ohio River near Paducah. The Ohio River discharges into the Mississippi River near Cairo, Illinois at river mile 981. It is the largest tributary of the Mississippi River with an average discharge volume of 281,000 cubic feet per second draining 189,422 square miles of watershed extending from New York to Alabama. This river represents an aquatic climatic transition zone as it courses along the periphery of the humid subtropical and humid continental climatic zones integrating fauna and flora of both zones. This basin drains a region bound roughly from north to south from southwest New York to north Alabama and east to the southern Appalachian province of Virginia. The Mississippi River is the largest river in the US, both in system length (2,320 miles) and drainage area (1,151,000 square miles). It flows along Kentucky's western border with Missouri for 68 miles.

Causes, Sources and Land Uses. Causes (pollutants) and sources of pollutants or pollution particular to the Upper Cumberland – 4 Rivers BMU are listed in Table 3.3.2-1. The upper and lower Cumberland River basins have similar causes of impairment, but the sources are different as one might expect given the two different physiographic regions. The upper basin drains approximately 5,200 square miles within Kentucky, primarily in the Cumberland Plateau and Mountains physiographic region, which encompasses about 10,500 square miles. This region is a highly dissected plateau with steep slopes and narrow sinuous valleys. The geologic stratigraphy is composed mainly of sandstone, shale and coal. Thus, the pH is slightly lower in this region (decidedly so on the south slope of Pine Mountain) as compared to most of the state with less buffering capacity. The primary land uses in this region are deep (underground) and surface coal mines, forest related activities and small-scale livestock grazing, with small cities dotting the landscape in the valleys. The limestone strata are primarily in that portion of this basin that flows through the eastern Pennyroyal region. This landscape is rugged; it is the foothills of the Cumberland Plateau, having fertile, broad bottomland in the river valleys where most of the agriculture is practiced. The terrain has significant karst with sinkholes, caves and underlying streams that increases the sensitivity of the watersheds to surface uses.

In geographic areas of significant resource extraction, sedimentation and dissolved solids (specific conductivity) are often the prevailing pollutants as vegetation is removed and bare soil and geologic strata are exposed. This is the case in the upper basin as both pollutants are tied as the most frequently associated pollutant by stream mile (Table 3.3.2-1). Elevated total dissolved solids (as indicated by specific conductivity) are a particular concern in these waters that often have low buffering capacity and are naturally infertile. In areas of significant land disturbance and exposure of geologic strata, an abundance of ions from minerals such as iron, magnesium and calcium are liberated into the water column, along with other metals. These two pollutants of issue within the upper Cumberland basin, along with related habitat disruption or loss, account for 623 stream miles of the 1,032 miles (60 percent) impacted by the top five pollutants in the Upper Cumberland basin (Table 3.3.2-1).

The significant landuses in this basin are reflected in identified sources of the pollutants. The top three sources are loss of riparian habitat, surface mining and source unknown. The category source unknown was the greatest source of pollutants cited (33 percent), reflecting the often complex mosaic of potential sources in the landscape (Table 3.3.2-1). The pollutant "pathogens" accounted for 235 stream miles (23 percent of the top five pollutant-miles) and is the third most frequently reported pollutant in this basin. This pollutant indicator is associated mostly with primary contact recreation DU. The topography of this region greatly influences this result. The population is distributed sparsely in small towns and many rural residential communities. Given the decentralized population, and that many residences are located in stream valleys, there are large portions of the population that cannot connect to sewer systems. This also presents residential areas that are built on hydric soils that render septic system operation ineffective. Through field observations, inspections and programs implemented in certain regions of the Commonwealth, it is known that many households discharge their grey and black water into streams via straight-pipes.

However, recognition of this concern has brought about a reduction through education and investment in proper infrastructure.

An often associated pollutant with sedimentation/siltation and pathogens is nutrients. This fifth most frequently recognized pollutant was associated with 90 stream miles in the upper Cumberland River basin. The mountainous region of the Commonwealth is naturally low in nutrients given the geologic nature of the strata. It is due to this make-up, along with certain other chemical and physical qualities, that make this basin one of great diversity under limited minimally disturbed conditions.

The lower Cumberland basin is composed of one HUC (05130205) with a drainage area of 1,351 square miles. This watershed is located in the western Pennyroyal Physiographic Region. The landuses in this section of the basin are primarily agricultural with a rural population. Topography in this basin is less rugged and mean elevations are lower with less karstic conditions. A significant amount of agricultural acreage is cultivated for corn and soybean production; livestock grazing for both beef production and dairy is another important component of the agricultural business in the region. Recreation related uses are associated with Lake Barkley, a large USACE reservoir created by damming the mainstem Cumberland River. This reservoir, located in west Kentucky and Tennessee, has 57,920 total water-surface acres with 42,780 water-surface acres in Kentucky. The largest city in this basin is Hopkinsville, with nearby Fort Campbell Military Base to the south. The most commonly identified pollutants for this basin are sedimentation/siltation, pathogens (bacteria), nutrient/eutrophication biological indicators, organic enrichment (sewage) biological indicators and cause unknown (Table 3.3.2-1). Primary sources of these pollutants are identified as source unknown, agriculture, crop production, municipal point source discharges and livestock (grazing or feeding operations). When all identified agricultural sources are combined they represent 56 percent of stream miles identified per the top five categories (Table 3.3.2-1). In regions of the Commonwealth where land disturbance is a major part of the land use, sedimentation/siltation is the leading pollutant. This, followed by pathogen indicating bacteria that are present on the soil as well as nutrients adsorbed to the soil particles.

The remainder of this BMU covers the Jackson Purchase region, an area bound on the west by the Mississippi River, north by the Ohio River and east by the Tennessee River. This region is alluvial with loess soils deposited from glaciated areas to the north. Geologically the region is part of the Mississippi River delta, associated with the Gulf Coastal Plain of the southeast US that extends from the mouth of the Mississippi River up to the mouth of the Ohio River. The common landuse on this broad floodplain is row crops, primarily corn and soybeans. Much of the natural systems of this area were altered by intensive agricultural use, particularly the draining of swamps and bottomland hardwoods and stream channelization for crop production.

The Tennessee River drainage in Kentucky is an area identified by two eight-digit HUCs, (06040005 and 06040006), with a total drainage of 1,041 square miles. The largest tributary in this portion of the Tennessee River is the Clarks River, which discharges to the Tennessee River four miles above its confluence with the Ohio River.

The Ohio River minor tributaries associated with this BMU are identified by one eight-digit HUC (05140206) and drains 326 square miles. The two principle streams in this drainage are Massac and Humphrey creeks; the greatest linear distance from the southern watershed boundary to the Ohio River is about 17 miles.

The Mississippi River drainage is comprised of three eight-digit HUCs, 08010100, 08010201 and 08010202 encompassing 1,203 square miles. The Obion and Mayfield creeks watersheds are the principal drainages directly discharging into the Mississippi River in the Jackson Purchase.

The most significant pollutant in this region of great rivers is sediments/siltation, accounting for 250 affected stream miles. This pollutant affects more stream miles than any other in this BMU, as well as the nation. Soils, particularly clays, have high negative charges and thus adsorb cations readily, and these constituents are then transported to receiving streams where habitat buffering provided by riparian vegetation has been lost. As wetlands were ditched and drained, the delayed result was streams and ditches that filled in with sediments, resulting in substantial flooding and erosion. The result is an ongoing cycle of filling and dredging of these stream channels. Soils in this region are particularly susceptible to erosion since they are of particularly fine material (sands and silts) from wind-carried loess. Pathogen indicators impact 212 stream miles, and nutrients also are identified as a significant pollutant in this basin, with 113 stream miles affected.

Significant sources of these pollutants are agricultural sources (248 stream miles), source unknown (230 stream miles) and channelization (129 stream miles) (Table 3.3.2-1). As previously noted, in areas of large-scale land disturbance sedimentation is nearly always the leading pollutant. The loss of riparian habitat is associated with many impaired stream miles in this region. That vegetative zone functions as a barrier to sedimentation, pathogens and nutrients lessening the amount of nutrients entering the water by actively utilizing those nutrients for production.

Upper Cumberland River Basin - Targeted Monitoring: Aquatic Life Use. The aquatic life DU has the most assessed stream miles of any of the other DUs in this basin. The aquatic life designated use is sensitive to many potential perturbations due to the physical, chemical and interdependent biological functions that require a relatively narrow range of variability to maintain a healthy aquatic environment. The majority of miles assessed for this DU were monitored using biological community function and integrity as the key indicator(s) (typically macroinvertebrates or fishes) along with water quality grab samples for conventional pollutants at time of the biosurvey. However, stream miles associated with boatable waters and long-term ambient water quality stations were monitored for water quality using both conventional and toxic pollutants as indicators of level of DU support.

Of the 1,379 stream miles assessed for this DU, 870 (63 percent) of those miles fully support, while 291 stream miles (21 percent) partially support and 218 (16 percent) stream miles were nonsupporting (Table 3.3.1-6; Figure 3.3.1-1).

This level of support by percentage of stream miles monitored and assessed remained the same when compared to the results of the last intensive monitor results reported in the 2008 IR; however, the percentage of supporting stream miles decreased by one percent (Figure 3.3.1-2) since the 2010 reporting cycle. The current number of stream miles assessed was nearly the same as the last intensive monitoring cycle, 1,379 compared to 1,320 in 2008. The percentages of stream miles partially supporting and nonsupporting were nearly unchanged, too. The partial support and nonsupport assessment categories each result in a waterbody or segment listed on the 303(d) list (provided criteria for listing are met); however, the relative degree of impact on a waterbody is considered less for a partially supporting result due to frequency of pollutants exceeding criteria, number of pollutants and the degree to which the biological community integrity is lost.

Targeted Monitoring: Fish Tissue. Fish tissue samples were analyzed for mercury, PCB, chlordane, DDT and toxaphene contamination in this BMU. Of the approximately 79 stream miles assessed, 66 (84 percent) fully support this use and about 12 miles (15 percent) were partially supporting (Table 3.3.1-6); all stream miles not fully supporting this use was due to mercury in fish tissue. This compares with 88 percent (92 out of 105 miles) of assessed stream miles fully supporting this use in the last intensive monitoring year (2005) (KDOW, 2008).

Targeted Monitoring: Primary (Swimming) Contact Recreation. Standards for both pH and the bacteria pathogen indicator (*E. coli*) apply to this DU Water column samples were analyzed for the presence and quantity of *E. coli* to assess this use support. There were 562 stream miles assessed in the upper Cumberland River basin (Table 3.3.1-6) for this DU. Of those stream miles, 240 (43 percent) (Figure 3.3.1-1) were fully supporting, 59 miles (11percent) were partially supporting and 263 stream miles (47 percent) were not supporting (Table 3.3.1-6). While this is an increase by percentage (8 percent) of stream miles supporting this DU since the last intensive monitoring year for this basin (2005), there is a six percent decline in assessed stream miles since the last 305(b) reporting cycle. The upper Cumberland River basin (above Pineville) has had a long-standing swimming advisory based on pathogens that currently remains in effect (see section 3.3.1). Small discharge package plants were an identified likely source of high concentration of *E. coli* colonies. Given the region is primarily rural, a large percentage of residential units and small businesses are not connected to sewers. In many of those areas wastewater is discharged through straight-pipes to streams or septic systems that may be located in poorly drained soils associated with bottomland. A related scenario exists for the wastewater treatment facilities, which often are built in the flood zone of rivers, as these areas provide the limited sites to seat a facility. There is now a concerted effort in this region to construct regional wastewater treatment plants; federal grant moneys have been procured for this need.

Targeted Monitoring: Secondary Contact Recreation. This DU has both fecal coliform (pathogen indicator) and pH criteria in water quality standards to measure the support level of this DU. There are about 192 miles assessed for this DU in the basin and nearly 72 percent of stream miles (138) are fully supporting (Table 3.3.1-6). Approximately 53 percent of stream miles (53) assessed were less than fully supporting the DU. This compares to 50 percent full support per the 2008 IR.

Targeted Monitoring: Domestic Water Supply. All miles (88.7) assessed in the upper Cumberland River basin were fully supporting this DU (Table 3.3.1-6).

Probability Biosurvey of the Upper Cumberland River Basin. A biosurvey of the upper Cumberland River basin was performed according to EMAP and Kentucky SOP protocol for macroinvertebrates (SOP - Sampling Benthic Macroinvertebrate Communities) and fishes (SOP - Collection Methods for Fish) (accessed June 6, 2012). As indicated by the information in Table 3.3.2-6, of the 7,762 miles of defined stream resources, 6,099 stream miles were represented in the probability analysis. Once the probability data were analyzed, the extrapolated results indicate 3,228 miles or 53 percent of wadeable streams in this BMU were fully supporting aquatic life use, 2,126 miles (35 percent) of wadeable streams were partially supporting and 12 percent (745 miles) were not supporting the aquatic life use (Table 3.3.2-6 and Figure 3.3.2-3).

A random biosurvey was conducted in 2005 using similar monitoring protocol for the same defined stream population. The percentage of stream miles fully supporting was 15 percent (KDOW, 2008). Over that five-year span current probabilistic data indicate a 38 percent increase in fully supporting stream miles. Probabilistic biosurvey is not a program that functions to discriminate on a small scale, such as an individual watershed, but to provide scientifically-sound data for statistical analysis on a large scale. These results fit with current water quality trend analysis completed statewide using data from the primary water quality network. Certain water quality properties in the upper Cumberland River basin showed improvement over 25 years. Examples of those water quality constituents include iron, sulfates and total suspended solids.

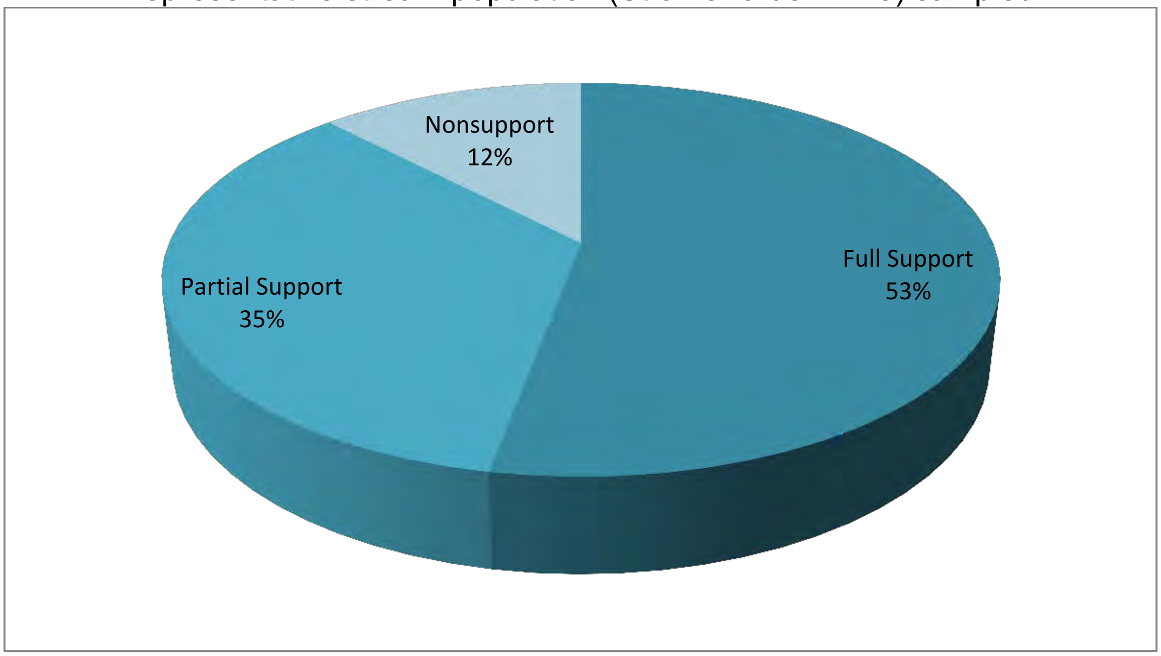
Table 3.3.2-6. Aquatic use attainment results based on the 2010 probability biosurvey of the Upper Cumberland River basin (all numbers rounded to nearest integer).

Project ID	Upper Cumberland – 4-Rivers BMU (Upper Cumberland River Basin)
Target Population	Streams Strahler Order 1-5
Sample Frame	EPA River Reach File 3 (1:100,000 Scale)
Type of Water body	Wadeable Streams
Size of Defined Stream Population	7,762 mi
Size of Non-Defined Population	1,468 mi
Size of Defined Sampled Population	6,099 mi
Designated Use	Aquatic Life
Attaining Full Use Support	3,228 mi
Not Attaining Full Use (partial support)	2,126 mi
Not Attaining Full Use (nonsupport)	745 mi
Indicator	Biology (Macroinvertebrates and/or Fishes)
Assessment Date	2010
Precision	90% at 95% Confidence Level

Probability and Targeted Monitoring Compared (Aquatic Life Use). The probability and targeted monitoring results were comparable in this basin (Table 3.3.2-7). Relative to the other basins in this IR, the upper Cumberland

River basin has a high level of aquatic life support. The results of the targeted monitoring mirror those last reported in the 2008 IR. Targeted monitoring

Figure 3.3.2-3. Proportions of aquatic life use support in the Upper Cumberland River basin based on probability biosurveys. Graph is of the representative stream population (Strahler order 1 – 5) sampled.



represented 1,379 stream miles, and of those, 870 miles (63 percent) supported the DU (Table 3.32-7; Figure 3.3.2-3). However, the probabilistic biosurvey results indicate higher level of aquatic life use when compared to the 2008 data. Percentage of wadeable stream miles supporting aquatic life use increased from 15 percent to 53 percent and the percentage of less than full supporting stream miles fell from 85 percent to 47 percent (Table 3.3.2-7; Figure 3.3.2-3). The number of stream miles represented by the probability study population that fully support the DU is 3,228. This is an important move in the percentage of stream miles supporting based on probabilistic data. Given the stream miles represented by this study are an equitable number among the Strahler order 1 – 5 population, the results reflect a great percentage of all wadeable streams from headwater to large watersheds that meet this DU. In a region of intense landuse from mineral extraction these results may indicate a change in the overall landuse. This basin had some positive findings in the water quality trends analysis (http://pubs.usgs.gov/sir/2009/5027/) that covered 25 years (1979 – 2004) of water quality monitored data from the ambient water quality network; a recap of this report was presented in the 2010 IR. A water quality property that can indicate physical disruption in the landscape is TSS. This property had significant statistical decrease observed in the data from the five upper Cumberland River basin ambient stations. Given this region-wide decrease in TSS, the suggestion can be made that large-scale land disturbance has decreased, the streamside buffer zone integrity has increased, better management of onsite sediments and controls have occurred, or a combination of those.

Table 3.3.2-7. Comparison of probability and targeted monitoring results for aquatic life use in the upper Cumberland River basin.

	Full Support		Partial Support		Nonsupport	
	Probability	Target	Probability	Target	Probability	Target
Miles	3228	870	2126	291	745	218
Percent	53	63	35	21	12	16

The targeted monitoring effort is a result of a combination of programs described earlier that interjects a bias into the results of degree of use support based on the objectives for the monitoring programs. This basin is one of the most biologically diverse aquatic environments in the Commonwealth, and indeed the country. It contains some of the highest water quality in the state and there is considerable forestland that creates a buffer for many streams to retain relatively healthy watersheds. The largest number of reference reach and exceptional waterbodies and OSRWs are in this basin. This bolsters the percentage of stream miles with excellent water quality and focuses considerable monitoring effort in waterbodies with those qualities (Table 3.1.4-1). Again, the resultant close percentages of supporting stream miles in this basin are of considerable interest given the nature of the two types of monitoring.

4-Rivers Basin (Lower Cumberland, Lower Ohio [minor tributaries], Mississippi and Tennessee Rivers) - Targeted Monitoring: Aquatic Life Use. The targeted monitoring effort resulted in 529 miles of the 1,568 miles (34 percent) assessed for aquatic life use in the 4-Rivers basins as fully supporting (Tables 3.3.1-6). In this region of intensive agriculture, determining the support level of aquatic life use will often be inconclusive or may be difficult with information less than biological community structure evaluation. This is due in part to the correct timing of water quality sample collection with respect to agricultural land management practices. Pesticide and herbicide applications (under proper use) often are only applied after pest management data signal the damage is approaching economic threshold where chemical treatment is cost-effective. Minimization of environmental effects can be expected if appropriate application threshold is met and is coincident with proper environmental conditions (between rainfalls whenever practicable). Likewise, if chemical monitoring is not timed to coincide with these agricultural practices, the effects may go unnoticed in conventional physicochemical monitoring. While the majority of miles assessed at targeted monitoring locations for aquatic life were assessed based on biological monitoring, some of those miles were assessed using physicochemical data at long-term and rotating watershed locations. Most of these stations are large watersheds of greater than 5th-Strahler order.

In the 2008 IR, 1,415 stream miles were assessed for this DU with 38 percent (539 miles) fully supporting the use. The total miles monitored increased compared to 2008 (up 153 stream miles) and the percentage of fully supporting miles was down slightly, four percent (see Figure 3.3.1-1 and Figure 3.3.1-2 for individual river basin results Figure 3.3.1-1). This change in total number of miles monitored and percentage of fully supporting stream miles is too close to signal a difference in the results between those two intensive monitoring cycles.

Fish Tissue. Fish tissue samples were analyzed for mercury, PCB, chlordane, DDT and toxaphene contamination in this BMU. Of the approximately 188 stream miles assessed, 153 (82 percent) fully support this use, about 25 miles (13 percent) partially support and 7 miles (4 percent) were nonsupport

(Table 3.3.1-6); all stream miles not fully supporting this use was due to mercury in fish tissue, with the exception of 7.2 miles due to PCBs. This compares with 86 percent (171 miles) of assessed stream miles fully supporting this use in the last intensive monitoring year (2005) (KDOW, 2008).

Targeted Monitoring: Primary (Swimming) Contact Recreation. Water column samples were analyzed for the presence and quantity of fecal coliform colonies to assess this use support. There were 605 stream miles assessed in these basins for PCR (Table 3.3.1-6). Of those stream miles, 121 (20 percent) were fully supporting and 484 miles (80 percent) were partially or not supporting this use. The full supporting miles are low in each individual river basin (Figure 3.3.1-1). There were two primary sources related to this high concentration of bacteria colonies, agriculture and loss of riparian habitat. Where agriculture is an intensive land use, the loss of protective riparian vegetation (habitat) is most prevalent. Through efforts of the KDOW and federal agencies, funding (cost share and grants) and education for riparian zone-specific protection is ongoing, although there is much work left to do.

Targeted Monitoring: Secondary Contact Recreation. This DU has both fecal coliform (pathogen indicator) and pH criteria in water quality standards that apply to this DU. Approximately 87 stream miles were assessed for this designated use in the 4-Rivers basin and about 70 percent of stream miles (61) fully support the DU (Table 3.3.1-6). All stream miles supporting this use are in the Ohio River minor tributaries basin. Partially supporting this use were 2.45 miles (3 percent) and 24 stream miles (27 percent) were not supporting the DU.

Targeted Monitoring: Domestic Water Supply. All miles (42.3) assessed in the 4-Rivers basins fully supported this use (Table 3.3.1-6).

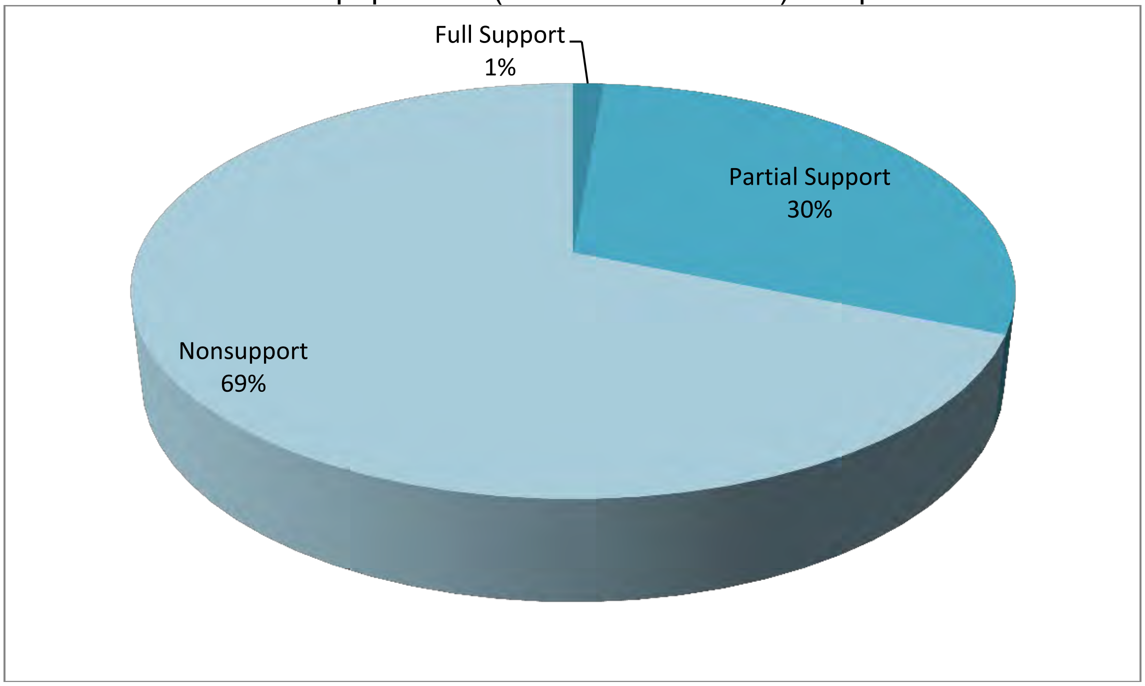
Probability Biosurvey of 4-Rivers Basins. A biosurvey of the 4-Rivers basins (lower Cumberland, Tennessee and Mississippi rivers and Ohio River minor tributaries) was completed according to EMAP and Kentucky SOP protocol for macroinvertebrates (SOP - Sampling Benthic Macroinvertebrate Communities) and fishes (SOP - Collection Methods for Fish) (accessed June 6, 2012) . As indicated by the information in Table 3.3.2-8, of the 9,946 miles of defined stream resources 6,797 stream miles were represented in the probability analysis. Once the probability data were analyzed, the extrapolated results indicate 90 miles or 1 percent of wadeable streams in this BMU were fully supporting aquatic life use, 2,033 miles (30 percent) of wadeable streams were partially supporting and 69 percent (4,674 miles) were not supporting the aquatic life use (Table 3.3.2-8 and Figure 3.3.2-4).

The last probabilistic biosurvey in 2005 used the same methodology, and the results were presented in the 2008 IR (KDOW, 2008). The percentage of stream miles fully supporting was 10 percent; 90 percent of stream miles (5,034) were not fully supporting the DU. The probabilistic program can discriminate on a large scale the prevailing pollutants occurring in the defined study area. Results from both the 2008 and current 305(b) cycles indicate sedimentation is the pollutant most frequently occurring in streams and watersheds not meeting the aquatic life DU (Table 3.3.2-1). Sediments usually have other associated pollutants with it due to the physical and chemical characteristics of soil. Nutrients are another leading pollutant (Table 3.3.2.1) in these impaired watersheds; they are often an associated pollutant in areas with high sediment runoff.

Table 3.3.2-8. Aquatic life use attainment results based on the 2010 probability biosurvey of the 4-Rivers basins (all numbers rounded to nearest integer).

Project ID	4-Rivers Basins Probability Survey
Target Population	Streams Strahler Order 1-5
Sample Frame	EPA River Reach File 3 (1:100,000 Scale)
Type of Water body	Wadeable Streams
Size of Defined Population	9,946 mi
Size of Non-Defined Population	3,148 mi
Size of Defined Sampled Population	6,797 mi
Designated Use	Aquatic Life
Attaining Full Use Support	90 mi
Not Attaining Full Use (nonsupport)	4,674 mi
Not Attaining Full Use (partial support)	2,033 mi
Indicator	Biology (Macroinvertebrates)
Assessment Date	2005
Precision	90% at 95% Confidence Level

Figure 3.3.2-4. Proportions of aquatic life use support in the 4-Rivers basins based on probability biosurveys. Graph is of the representative stream population (Strahler order 1 – 5) sampled.



Probability and Targeted Monitoring Compared (Aquatic Life Use). The results of these two programs differed considerably in the percentage of support level miles that were monitored (Table 3.3.2-9). Targeted monitoring accounted for 1,532 stream miles monitored compared to a representative 6,797 stream miles in the probabilistic biosurvey (Table 3.3.2-9). Thirty-five percent of targeted stream miles supported the aquatic life DU; whereas, one percent of stream miles in this basin represented in the random survey fully supported the DU. Targeted biomonitoring results indicate 1,003 stream miles (66 percent) were less than full support; whereas, 6,707 stream miles (99 percent) did not support the aquatic life DU per the random biosurvey.

As discussed, the probabilistic biosurvey results were little changed between the last monitoring cycle and the one reported here. With that, the targeted monitoring results are nearly identical with a bit over one-third of stream miles fully supporting the use and two-thirds less than full support. Little change

Table 3.3.2-9. Comparison of probabilistic and targeted monitoring results for aquatic life use in the 4-Rivers basins.

	Full Support		Partial Support		Nonsupport	
	Probability	Target	Probability	Target	Probability	Target
Miles	90	529	2,033	549	4,674	454
Percent	1	35	30	36	69	30

in land use and population has occurred in the intervening five years, along with facility permitting in the region. Thus, the results between the programs are similar when comparing the 2005 and 2010 data. A portion of targeted monitoring focuses on identifying high quality waterbodies in monitoring cycles and cycle-to-cycle follow-up monitoring. This bias becomes apparent in regions where large-scale landuses that disturb land cover exist. The predominant landuse in this region is agriculture. Based on the most recent landuse information available, agricultural activities are 54 percent of the landuse in the 4-Rivers region. That further divides into two major components, pasture at 14 percent and row crops accounting for nearly 40 percent. The second greatest landuse is forestland at 34 percent followed by developed land (municipalities, subdivisions, industry, etc.) at 6 percent. This landuse information dovetails with the findings by field biologists working in the area that agriculture is a predominate source as indicated in Table 3.3.2.1.

Integrated Surface Water and Groundwater Assessment of Large Karst Springs in the Salt River Basin. The initial project was started in the Green – Tradewater River BMU in 2006. The purpose of this project was to assess the nonpoint source (NPS) impacts to groundwater, and to integrate groundwater and surface water quality information with biological data to better define the nexus between the two systems. Groundwater and surface water are conjunctive systems, no where more directly so than in karst terrain. This monitoring strategy provides needed information on spring conditions relative to NPS impacts to both the surface water and groundwater programs.

To assess surface water that had a direct nexus with groundwater, five karst springs with measured discharge were monitored monthly for three years in the Salt River basin (Table 3.3.2-10). Site selection was based on identifying large, well-developed karst basins where perennial surface streams are limited, and where large discrete springs discharge the drainage of these basins to surface waters. Other site selection criteria include accessibility and landowner cooperation. Additional considerations include whether these sites would provide new data, will support other programs (e. g. 305(b), TMDL, wellhead protection, etc.), and whether land use in the basins represents nonpoint source pollutants of concern.

Tables 3.3.2-11 and 12 show the uses assessed in miles or acres statewide for springs for each use by support-level. All five assessed springs in the Salt River - Licking River BMU fully support the aquatic life DU. Monitoring and data provided by the USGS – Kentucky District.

Table 3.3.2-10. Springs monitored in the Salt River basin management unit during water-year 2008.

Spring Name	County	Karst Basin Area (mi^2)	Base Flow Discharge (ft^3/s)[a]
Big Spring	Hardin	8.4	0.65[b]
Boiling Spring	Breckinridge	126.5	10[c]
Fiddle Spring	Breckinridge	11	0.9[c]
Flat Rock Springs	Breckinridge	45	3.5[b]
Ross Karst Spring	Breckinridge	44	3.4[b]

[a]USGS – Kentucky District
[b]Estimate base flow.
[c]Actual base flow.

3.3.3 Ohio River

ORSANCO assessed uses of the 664 miles of the Ohio River mainstem that forms Kentucky's northern border and a summary of those findings are presented in the ORSANCO 2012 305(b) report. All miles bordering Kentucky support aquatic life use and drinking water use. Primary contact recreation was impaired for nearly 350 stream miles, or about 53 percent of the river in Kentucky. The pollutant causing the impairment in these miles was the

Table 3.3.2-11. Individual designated use support summary (in miles) for springs in Kentucky, 2012.

Designated Use	Total in State	Total Assessed	Supporting Water Quality Standards	Not Supporting Water Quality Standards	Size of Resource Not Assessed
Warm Water Aquatic Habitat	11.90	11.90	5.75	6.15	0.00
Fish Consumption	11.90	0.00	0	0	11.90
Primary Contact Recreation	11.90	9.95	0.00	9.95	1.95
Secondary Contact Recreation	11.90	0.00	0.00	0.00	11.90
Domestic Water Supply	0.70	0.70	0.70	0.00	0.00
Column Total	48.30	22.55	6.45	16.10	25.75

Table 3.3.2-12. Individual designated use support summary (in acres) for springs in Kentucky, 2012.

Designated Use	Total in State	Total Assessed in State	Supporting Water Quality Standards	Not Supporting Water Quality Standards	Size of Resource Not Assessed
Warm Water Aquatic Habitat	0.40	0.40	0.40	0.00	0.40
Fish Consumption	0.40	0.40	0.00	0.00	0.40
Primary Contact Recreation	0.40	0.40	0.00	0.00	0.40
Secondary Contact Recreation	0.40	0.40	0.00	0.00	0.40
Domestic Water Supply	0.00	0.00	0.00	0.00	0.00
Column Total	1.60	1.60	0.40	0.00	1.60

pathogen indicator, *E. coli*. No reaches of the Ohio River fully support all assessed uses. This limited support was often a result of combined sewer overflows (CSOs) during and immediately following rainfall events along the riverfront and downstream of urban areas. All miles of the Ohio River partially supported the fish consumption use because of PCBs and dioxin. While methylmercury residue in fish tissue was a cause of less than full support in many of those stream miles. The Ohio River segment associated with mercury-related impairment was the reach from just below Louisville to approximately 0.5-mile upstream of the Wabash River mouth (river miles 772.35-843.1), or approximately 11 percent of the 664 river miles.

3.3.4 Assessment Results of Lakes and Reservoirs: Focus on Salt River – Licking River BMU and Upper Cumberland River – 4-Rivers BMU

Introduction. Since the initiation of the rotating basin approach in 1998, the Commonwealth's significant publicly-owned lakes and reservoirs are monitored over a five year cycle instead of the previous seven to eight year cycle. During this two year reporting period, 46 lakes and reservoirs were assessed (maps located in Appendix C) in the two BMUs of focus.

Designated uses in lakes consist of warmwater aquatic habitat (WAH) (sometimes in conjunction with coldwater aquatic habitat (CAH) in lakes with a two-story fishery) and primary and secondary contact recreation (PCR and SCR). Many reservoirs also have an intake for domestic water supply (DWS) use where drinking water criteria are implemented. Indicators monitored or sampled for analysis to determine lake or reservoir health (water quality) may be found in Table 3.2.1-1. Assessment for fish consumption was made at lakes where fish tissue contaminant data exist.

3.3.4.1 Assessment of Trophic State and Use Support.

Trophic state is assessed in lakes using the Carlson Trophic State Index (TSI) for chlorophyll *a*. Trophic state is a measure of the productivity of the waterbody and two primary components of this index are total phosphorus and chlorophyll *a*. This method is convenient because it allows numerical ranking of lakes according to increasing trophic state, and provides for a distinction between oligotrophic, mesotrophic, eutrophic, and hypereutrophic lakes. Each of those descriptive categories can be thought of in terms of increasing productivity of a waterbody. For example, oligotrophic conditions occur in waterbodies low in nutrients (low productivity), clear transparent water, ample dissolved oxygen throughout the lake habitats, good water quality and many species of fishes. Mesotrophic lakes have an intermediate level of productivity, water is generally clear and the lake has submerged aquatic plants, dissolved oxygen is good or adequate in all habitat zones. Eutrophic lakes have high biological productivity, often low water column visibility, periodic algal blooms and support large numbers (but few species) of fishes, plants and other organisms, the deep portions of the lake have inadequate dissolved oxygen. The water column clarity of eutrophic lakes may be green (algae dominated lakes) or clear (macrophyte dominated lakes). The hypereutrophic lakes are extremely nutrient-rich with severe algal blooms and low water clarity due to the chlorophyll concentration; the deeper water in these lakes may be nearly anoxic (without oxygen). Lakes and reservoirs productivity, or trophic state, can be a reflection of the natural conditions of the waterbody (and may exhibit natural succession over significant time), or may accelerate at unnatural rates (years to a few decades) through human activities. Thus, a lake may be located in a geologic region where fertility of soils and rocks are naturally high resulting in nutrient enrichment of the waterbody, or in areas of low nutrient-rich soils and rocks resulting in oligotrophic conditions. An oligotrophic lake can become hypereutrophic if there is residential fertilizer runoff, agricultural runoff and sewage discharge.

The growing season (April – October) average TSI value is used to rank each lake by trophic state; trends in lake trophic state are tracked and reported herein. Large lakes that exhibit intra-trophic gradients or embayment differences often are analyzed separately. Designated use support in lakes is determined by criteria listed in Table 3.2.1-3.

3.3.4.2 Results

Statewide. Tables 3.3.4.2-1 through 3.3.4.2-9 present statewide summaries of use support, impairments (causes) and sources of impairments for reservoirs, ponds and lakes. The water quality assessment of lakes includes about 99 percent of the publicly-owned surfacewater acres of this waterbody type (Table 3.3.4.2-1). Eighty-seven of 127 lakes, ponds and reservoirs (68.5 percent) fully support their uses, and 40 (31.5 percent) do not support one or more uses. However, of those 87 waterbodies that support all assessed DUs, one (Willisburg Lake) is currently in Category 2B/5 and is submitted to USEPA for delisting based on current data analysis. On an acreage basis per assessed designated use, approximately 89 percent (788,588 acres) of the 885,331 acres fully support assessed designated uses, and approximately 12 percent (96,743 acres) do not support one or more DUs (Table 3.3.4.2-1 – 3).

This compares to 86 of 129 lakes fully supporting assessed DUs, or 67 percent, reported in the 2010 IR. On an assessed surface water acreage basis there were 9,649 fewer acres not supporting one or more uses, although the total assessed acreage declined 14,592 acres.

The list of causes (pollutants) for reservoirs and lakes is presented in Tables 3.3.4.2-4 – 6. High levels of methylmercury and mercury in fish tissue were the two most frequently identified pollutants, affecting 84,736 acres of reservoirs, lakes and ponds (Table 3.3.4.4 through 6). The pollutant PCBs in fish tissue is the number three pollutant of greatest concern on an acreage basis, affecting 9,353 acres (Table 3.3.4.2-4). A fish consumption advisory for PCBs is in place for two reservoirs of considerable size (Fishtrap and Green River lakes), resulting in a high percentage of lake (reservoir) acres impacted by priority organics (Table 3.3.4.2-4). Nutrients/eutrophication biological indicators and dissolved oxygen were the fourth and fifth most frequent impairments affecting 9,056 and 5,543 acres, respectively. The next three pollutants impact a total of 7,152 surface acres throughout the state. The pollutant organic enrichment (sewage) biological indicators impacts water quality on 4,254 acres and is closely related to the fourth most common pollutant, nutrients/eutrophication biological indicators. Together these affect 13,331 acres and would become the third most common pollutants on an acreage scale. The nutrient related pollutants have an indirect

Table 3.3.4.2-1. Individual designated use support summary (in acres) for Kentucky reservoirs.

Use	Total Size	Size Assessed	Size Fully Supporting	Size Fully Supporting but Threatened	Size Not Supporting	Size Not Assessed
Warm Water Aquatic Habitat	219,235	217,514	208,512	0	9,002	1,720
Cold Water Aquatic Habitat	2,519	2,519	2,519	0	0	0
Fish Consumption[1]	219,235	205,384	121,074	0	84,310	13,851
Primary Contact Recreation	219,235	61,930	61,930	0	0	157,305
Secondary Contact Recreation	219,235	215,432	212,652	0	2,780	3,803
Domestic Water Supply	195,770	181,850	181,264	0	586	13,920

[1]Not a designated use in Kentucky water quality standards, but implied in 401 KAR 10:031

Table 3.3.4.2-2. Individual use support summary for Kentucky lakes.

Use	Total Size	Size Assessed	Size Fully Supporting	Size Fully Supporting but Threatened	Size Not Supporting	Size Not Assessed
Warm Water Aquatic Habitat	317	317	281	0	36	0
Fish Consumption	317	63	36	0	27	254
Primary Contact Recreation	317	0	0	0	0	317
Secondary Contact Recreation	317	317	317	0	0	0

Table 3.3.4.2-3. Individual use support summary for Kentucky ponds.

Use	Total Size	Size Assessed	Size Fully Supporting	Size Fully Supporting but Threatened	Size Not Supporting	Size Not Assessed
Warm Water Aquatic Habitat	4.8	0	0	0.0	0.0	4.8
Fish Consumption	4.8	4.8	3.3	0.0	1.5	0.0
Primary Contact Recreation Water	4.8	0.0	0.0	0.0	0.0	4.8
Secondary Contact Recreation Water	4.8	0.0	0.0	0.0	0.0	4.8

Table 3.3.4.2-4. Number of acres of Kentucky reservoirs, lakes and ponds affected by individual causes (pollutants).

Cause	Total Size
1. Methylmercury	63,136.50
2. Mercury in Fish Tissue	21,571.10
3. PCB in Fish Tissue	9,353
4. Nutrient/Eutrophication Biological Indicators	9,020
5. Dissolved Oxygen	5,507
6. Organic Enrichment (Sewage) Biological Indicators	4,254
7. Total Suspended Solids (TSS)	1,810
8. Sedimentation/Siltation	1,088
9. Chlorophyll-*a*	557
10. Aquatic plants (macrophytes)[1]	486
11. Manganese	317
12. Dissolved Oxygen Saturation[1]	128

[1]This is pollution, not a pollutant; as such an indicator of pollutants.

Table 3.3.4.2-5. Number of acres of Kentucky lakes (natural) affected by causes.

Cause	Total Size
Dissolved Oxygen	36
Nutrient/Eutrophication Biological Indicators	36
Mercury in fish tissue	27

Table 3.3.4.2-6. Number of acres of Kentucky ponds affected by cause.

Cause	Total Size
Methylmercury	1.5

impact on available dissolved oxygen in aquatic environments, and this is particularly manifest in standing waters or waters of long retention time, such as lakes and reservoirs. It is this relationship that results in dissolved oxygen depletion and closely tracks, but lags behind the plant nutrient-enrichment of these waterbodies. Related to the low dissolved oxygen problem was the pollution-indicator, dissolved gas super-saturation, which often occurs in eutrophic conditions during daylight hours as photosynthesis from excess algae produces the diurnal swing to high dissolved oxygen saturation.

A naturally shallow lake or reservoir basin or those that have excessive sedimentation resulting in shallow basins often provide suitable habitat for the proliferation of nuisance aquatic plants that impair secondary contact recreation and account for the fifth highest cause of use nonsupport. The pollutants sedimentation/siltation and total suspended solids (TSS) are associated with nearly 2,900 acres not supporting either aquatic life or secondary contact recreation.

To further illustrate the relatedness of pollutants, natural occurrence of manganese may be released from anoxic hypolimnetic water (deepest water-layer in stratified reservoirs and lakes) affecting drinking water supply. Nutrients (resulting in high production of aquatic macrophytes and algae) in runoff will build-up in the lake sediments; under resulting low dissolved oxygen conditions the nutrients are recycled creating a compounding adverse affect on beneficial uses of the waterbody.

Likely sources of these pollutants are identified in Tables 3.3.4.2-7 through 9. Given mercury is associated with the greatest number of lake-acres this pollutant resulted in “atmospheric deposition – toxics” as the leading source of pollutants for Kentucky’s lakes and reservoirs (50,250 acres). The second most commonly identified source of pollutants is “source unknown” associated with 33,452 acres. The frequency of “source unknown” is primarily due to the pollutant mercury, too. This pollutant enters aquatic environments from multiple pathways and relating a source is often difficult in areas where there is a good possibility for localized discharges. Industrial point source discharges became the third most common source of lake pollutants, followed by municipal point source discharges and fifth, upstream source. Agriculture sources and related subcategories accounted for 11,134 acres (Tables 3.3.4.2-7 and 8). These agriculture and related sources were down from 23,823 acres; a decline of 12,689 acres or nearly 47 percent. Municipal point sources, agricultural-related sources and septic systems, were the most commonly identified sources related to nutrient impairments (Tables 3.3.4.2-7 and 8); “upstream sources” was the third most frequently reported source associated with inflow issues in watersheds.

Trophic state index was determined for those acres of reservoirs and lakes for the five possible categories of TSI (Tables 3.3.4.2-10 and 11). A distinction between lakes (natural waterbodies) and reservoirs (manmade lakes or impoundments) is made for these results.

Salt River – Licking River BMU. Trophic state index was calculated for all lakes and reservoirs that included monitoring for aquatic life use. Aquatic life use is routinely monitored at all reservoirs that are part of the clean lakes program. Many waterbodies that are a domestic water supply for communities have restricted access that inhibits monitoring for aquatic life use due to resulting limitations on available *in situ* information.

Of the fully supporting reservoirs (9 of 11) in the Licking River basin, four have stable TSIs and one is decreasing (Table 3.3.4.2-12). Those reservoirs with stable TSIs are eutrophic and the one decreasing reservoir is mesotrophic. Cave Run Lake is the largest reservoir in this basin and is managed jointly by the US Forest Service and USACE. Cave Run Lake has been mesotrophic for many years, but the decrease in TSI is a positive trend. The Licking River was impounded in the late 1960s to create this reservoir. Since that occurrence, populations of freshwater mussel species that are common and diverse in this river have been declining. The freshwater mussel, *Lampsilis abrupta* (pink

Table 3.3.4.2-7. Sources of causes (pollutants and pollution) to Kentucky reservoirs.

Source	Total Size
Atmospheric deposition – toxics	50,250.00
Source unknown	33,423.10
Industrial point source discharge	8,210 .00
Municipal point source discharges	6,129.00
Upstream source	5,596.00
Agriculture	4,633.00
On-site treatment systems (septic systems and similar decentralized systems)	3,708.00
Livestock (grazing or feeding operations)	3,356.00
Internal nutrient recycling	3,161.00
Non-irrigated crop production	3,109.00
Surface mining	1,810.00
Natural sources	970.00
Littoral/shore area modifications (non-riverine)	423.00
Rural (residential areas)	317.00
Unspecified urban stormwater	170.00
Changes in ordinary stratification and bottom water hypoxia/anoxia	148.00
Nonpoint source	148.00
Crop production (crop land or dry land)	137.00
Golf courses	78.00
Contaminated sediments	18.00

Table 3.3.4.2-8. Sources of causes (pollutants) to Kentucky lakes (natural).

Source	Total Size
Internal Nutrient Recycling	36.00
Non-irrigated crop production	36.00
Rural (residential areas)	36.00
Source Unknown	27.00

Table 3.3.4.2-9. Source of causes (pollutants) to Kentucky ponds.

Source	Total Size
Source Unknown	1.5

Table 3.3.4.2-10. Trophic state of reservoirs in Kentucky

Trophic State	Number of Reservoirs	Total Size
Oligotrophic	13	59,564.40
Mesotrophic	26	74,915.00
Eutrophic	49	79,370.00
Hypereutrophic	1	3,050.00
Dystrophic	0	0

Table 3.3.4.2-11. Trophic state of lakes in Kentucky

Trophic Status	Number of Lakes	Total Size
Oligotrophic	0	0.00
Mesotrophic	0	0.00
Eutrophic	4	317.00
Hypereutrophic	0	0.00

mucket), is a federally endangered mussel and is found in the river below the dam. Changes in temperature regime (from warmwater to coldwater) and flow below the dam have resulted in a marked decline in these populations. These environmental changes have likely been the trigger that has affected reproduction. Currently, only adults and dead shells occur below the dam. Similar results have been reported concerning this species below dams in Tennessee (Parmalee and Bogan, 1998).

Doe Run and Kincaid lakes are impaired for WAH (Table 3.3.4-13). Doe Run Lake is eutrophic and the TSI trend is stable. The TSI could not be calculated with reliability due to absence of certain data during the summer sample period for Kincaid Lake. The pollutants affecting both reservoirs are nutrients/eutrophication biological indicators and dissolved oxygen (low).

There are 16 reservoirs in the Salt River basin monitored and assessed in this reporting cycle (Tables 3.3.4.2-14 and 15). Nine of the 16 reservoirs fully support all monitored and assessed DUs (Table 3.3.4.2-14). The TSI was calculated on three reservoirs supporting aquatic life use, two had a decreasing TSI trend and one was stable. Seven reservoirs do not support one or more monitored and assessed designated uses (Table 3.3.4.2-15). All had aquatic life use assessed as not supporting. Nutrient-related impacts were common to all, usually associated with low dissolved oxygen. All were small reservoirs, with

Taylorsville Lake the largest at 3,050 surface acres. The TSI for that USACE reservoir was hypereutrophic and the trend increasing. An overabundance of plant nutrients (primarily nitrogen and phosphorus) have been trapped in this reservoir due to the heavy agricultural land use in the river basin above the reservoir. This has been a longstanding impact on this reservoir that resulted nearly as quickly as the river valley was flooded in 1983. Landuse data determined from the National Land Cover Dataset indicate 50 percent of the Taylorsville Lake watershed is forested and 38 percent is in agricultural uses, primarily pasture; these data were determined in 2001, the most recent available for the area.

Upper Cumberland River – 4-Rivers BMU. Twelve reservoirs were monitored and assessed in the upper Cumberland River basin. Four reservoirs are USACE projects that make-up the majority of the surface acres of reservoirs in this basin. Lake Cumberland is the second largest reservoir in the Cumberland River system and the largest intrastate lake, encompassing 50,250 surface acres in southeast and south-central Kentucky. The three other USACE managed reservoirs in this basin are Martins Fork Lake, Laurel River Lake and Dale Hollow Lake.

The TSI values were calculated for all reservoirs where aquatic life use was monitored and assessed (Table 3.3.4.2-16 and 17). There are only two reservoirs in this basin that have eutrophic conditions, Lake Linville and Corbin City Reservoir; the trend in the latter is stable and unknown in the former due to lack of previous cycle data. Those two reservoirs have watersheds that are impacted by landuses in their watersheds. Lake Linville is formed by damming Renfro Creek, a tributary of Roundstone Creek, Rockcastle County. The upper watershed is heavily cleared and consists of primarily agricultural uses. The known pollutants of concern in this watershed are nutrients and sedimentation/siltation. Nuisance algae blooms have occurred in this reservoir for many years; taste and odor is an ongoing concern of customers using this drinking water source. Corbin City Reservoir is a small waterbody on the Laurel River. The watershed above the reservoir drains much of London and agricultural land above London and between London and Corbin. Five reservoirs were oligotrophic and four were mesotrophic. The TSI trend for the oligotrophic reservoirs is decreasing in four and stable in one. Trends for TSI are decreasing in three of the four mesotrophic reservoirs. Overall, TSI trend information is good in this basin relative to organic enrichment. Nearly all the ecoregions this basin encompasses are mountainous and natural fertility is low resulting in aquatic systems adapted to low fertility (oligotrophic) conditions.

The two reservoirs monitored and assessed that have at least one DU not fully supporting are Lake Cumberland and Corbin City Reservoir (Table 3.3.4.2-17). Lake Cumberland fully supports aquatic life, secondary contact recreation and domestic water supply DUs. The mercury residue in fish tissue resulted in partial support for that use. The likely source is listed as atmospheric deposition given the lack of manufacturing and regional number of power generators that burn coal.

Twelve reservoirs and lakes were monitored and assessed in the 4-Rivers basin (Table 3.3.4.2-18 and 19). Seven of those waterbodies fully support all assessed DUs, including two large reservoirs, Barkley and Tennessee lakes. This region of the state has most of the few natural lakes in the Commonwealth, three were monitored, Swan Pond, Turner Lake and Metropolis Lake are natural lakes and occur in this region.

The TSI was calculated on 11 of 12 lakes monitored in the 4-Rivers basin in 2010 (Table 3.3.4.2-18 and 19). Eight lakes were eutrophic three of those lakes supporting aquatic life use have a decreasing TSI trend, one was stable. Three of the eutrophic lakes not supporting aquatic life use had increasing trophic state trend; one did not have previous cycle data for TSI calculation and comparison. The remaining three lakes were mesotrophic with two having increasing trend and one decreasing. This region of the state supports some of the most widespread and intense agricultural landuses. Of the five lakes in the 4-Rivers basin not supporting one or more DU, all had excess nutrients as indicated by the list of causes in Table 3.3.4.2-19. The National Land Cover

Table 3.3.4.2-12. Licking River basin reservoirs that fully support assessed uses.

Reservoir	Acres	County	Trophic State	Eutrophication Trend	Uses
A.J. Jolly Lake (Campbell County Lake)	204	Campbell	Eutrophic	Stable	WAH
Carlisle City Lake	8.4	Nicholas	NA	NA	DWS
Cave Run Lake	8,270	Rowan	Mesotrophic	Decreasing	WAH, SCR
Evans Branch Reservoir	19	Rowan	NA	NA	DWS
Flemingsburg Lake	47	Fleming	NA	NA	DWS
Greenbriar Lake	137	Montgomery	Eutrophic	Stable	WAH
Lake Carnico	112	Nicholas	Eutrophic	Stable	WAH
Sandlick Creek Lake	78	Fleming	Eutrophic	Stable	WAH
Williamstown Lake	300	Grant	Eutrophic	NA	WAH, DWS

Table 3.3.4.2-13. Licking River basin reservoirs not fully supporting assessed use.

Lake/Reservoir	Acres	County	Trophic State	Trend	Impaired Use	Cause (pollutant)	Source
Doe Run Lake	49	Kenton	Eutrophic	Stable	WAH	Dissolved oxygen, nutrient/eutrophication biological indicators	Source unknown, upstream source
Kincaid Lake	162	Pendleton	NA	NA	WAH	Dissolved oxygen, nutrient/eutrophication biological indicators	Agriculture

Table 3.3.4.2-14. Salt River basin reservoirs that fully support assessed uses.

Reservoir/Lake	Acres	County	Trophic State	Eutrophication Trend	Uses
Doe Valley Lake	372	Meade	NA	NA	DWS
Fagan Branch Reservoir	127	Marion	NA	NA	DWS
Long Run Lake	30	Jefferson	Mesotrophic	Decreasing	WAH
Marion County Sportsman Lake	29	Marion	Eutrophic	Stable	WAH
Miles Park Pond #4	3.9	Jefferson	NA	NA	FC
Reformatory Lake	54	Oldham	Eutrophic	Decreasing	WAH, FC
Sympson Lake	127	Nelson	NA	NA	WAH, DWS
Tom Wallace Lake	4.8	Jefferson	NA	NA	FC
Watterson Lake	4.3	Jefferson	NA	NA	FC

Table 3.3.4.2-15. Salt River basin reservoirs not fully supporting assessed uses.

Reservoir	Acres	County	Trophic State	Trophic Trend	Use Impaired	Cause of Impairment	Source of Impairment
Beaver Creek Lake	148	Anderson	Eutrophic	Stable	WAH. SCR	Chlorophyll-a, dissolved oxygen, organic enrichment (sewage) biological indicators, aquatic plants (macrophytes)	Changes in ordinary stratification and bottom water hypoxia/anoxia, littoral/shore area modifications (non-riverine), on-site treatment systems (septic systems and similar decentralized systems), non-point source
Guist Creek Lake	317	Shelby	Eutrophic	Decreasing	WAH, FC, DWS	Dissolved oxygen, nutrient/eutrophication biological indicators, mercury in fish tissue	On site treatment systems, source unknown, natural sources, agriculture, rural (residential areas)
Lake Jericho	137	Henry	Eutrophic	Increasing	WAH	Dissolved oxygen, nutrient/eutrophication biological indicators	Livestock (grazing or feeding operations); crop production; agriculture
McNeely Lake	53	Jefferson	Eutrophic	Stable	FC	Methylmercury	Source unknown

Table 3.3.4.2-15 (cont.). Salt River basin reservoirs not fully supporting assessed uses.

Reservoir	Acres	County	Trophic State	Trophic Trend	Use Impaired	Cause of Impairment	Source of Impairment
Shelby Lake	64	Marion	NA	NA	WAH	Dissolved oxygen saturation, nutrient/eutrophication biological indicators	Internal nutrient recycling, agriculture
Taylorsville Lake (Reservoir)	3,050	Spencer	Hyper-eutrophic	Increasing	WAH, FC	Methylmercury, dissolved oxygen, nutrient/eutrophication biological indicators	Municipal point source discharges; source unknown; livestock (grazing or feeding operations); upstream source; agriculture
Willisburg Lake	127	Washington			WAH	Dissolved oxygen, nutrient/eutrophication biological indicators	Source unknown, upstream source

Table 3.3.4.2-16. Upper Cumberland River basin reservoirs that fully support assessed uses.

Reservoir/Lake	Acres	County	Trophic State	Eutrophication Trend	Uses
Buck Creek Lake	25	Lincoln	NA	NA	DWS
Cannon Creek Lake	243	Bell	Oligotrophic	Stable	WAH, CAH, SCR, DWS
Chenoa Lake	37	Bell	Mesotrophic	Increasing	WAH, DWS
Cranks Creek Lake	219	Harlan	Oligotrophic	Stable	WAH, SCR
Dale Hollow Lake (Reservoir)	4300	Clinton	Mesotrophic	Decreasing	WAH, SCR, FC
Lake Linville	273	Rockcastle	Eutrophic	Stable	WAH, SCR, DWS
Laurel River Lake (Reservoir)	6060	Whitley	Oligotrophic	Decreasing	WAH, SCR, FC, DWS
Martins Fork Lake (Reservoir)	334	Harlan	Mesotrophic	Decreasing	WAH, SCR, FC, DWS
Tyner (Beulah) Lake	87	Jackson	Oligotrophic	Decreasing	WAH, CAH, SCR, DWS
Wood Creek Lake	672	Laurel	Mesotrophic	Decreasing	WAH, CAH, SCR, DWS

Table 3.3.4.2-17. Upper Cumberland River basin reservoirs not fully supporting assessed uses.

Reservoir	Acres	County	Trophic State	Trophic Trend	Use Impaired	Cause of Impairment	Source of Impairment
Corbin City Reservoir	139	Laurel	Eutrophic	NA	WAH, DWS	Nutrient/eutrophication biological indicators, organic enrichment (sewage) biological indicators	Internal nutrient recycling; municipal point source discharges; agriculture
Lake Cumberland	50,250	Russell	Oligotrophic	Decreasing	FC	Methylmercury	Atmospheric deposition - toxics

Table 3.3.4.2-18. 4-Rivers basin reservoirs and lakes that fully support assessed uses.

Reservoir/Lake	Acres	County	Trophic State	Eutrophication Trend	Uses
Crawford Lake	30.6	McCracken	NA	NA	FC
Kentucky Lake	48,100	Calloway	Eutrophic	Decreasing	WAH, PCR, SCR, FC, DWS
Lake Barkley	45,600	Lyon	Mesotrophic	Decreasing	WAH, SCR, FC, DWS
Lake Blythe	89	Christian	Mesotrophic	Increasing	WAH, SCR
Lake Morris	170	Christian	Eutrophic	Decreasing	WAH, SCR
Swan Pond	193	Ballard	Eutrophic	Decreasing	WAH, SCR
Turner Lake	61	Ballard	Eutrophic	Stable	WAH, SCR

Table 3.3.4.2-19. 4-Rivers basin reservoirs and lakes not fully supporting assessed designated uses.

Reservoir	Acres	County	Trophic State	Trophic Trend	Use Impaired	Cause of Impairment	Source of Impairment
Energy Lake	370	Trigg	Eutrophic	Increasing	WAH	Nutrient/eutrophication biological indicators	Source unknown
Fish Lake	27	Ballard	Eutrophic	NA	FC	Mercury in fish tissue	Source unknown
Hematite Lake	85	Trigg	Mesotrophic	Increasing	WAH, SCR	Dissolved oxygen, nutrient/eutrophication biological indicators, aquatic plants (macrophytes)	Littoral/shore areas modifications (non-riverine); source unknown; natural sources; agriculture
Honker Lake	190	Lyon	Eutrophic	Increasing	SCR	Aquatic plants (macrophytes)	Littoral/shore area modifications (non-riverine); source unknown; natural sources
Metropolis Lake	36	McCracken	Eutrophic	Increasing	WAH	Dissolved oxygen, nutrient/eutrophication biological indicators	Internal nutrient recycling; non-irrigated crop production; rural (residential areas); shallow lake/reservoir

dataset was accessed to determine the landuses in the region by percentage. When considering potential widespread sources of pollutants, the area is obviously rural with only six percent of the land area developed. The greatest landuse in the region is agricultural activities at nearly 54 percent (Table 3.3.4.2-20). That information reflects the likely sources of pollutants affecting watersheds in this area. One of the greatest disturbances to the aquatic environment is the practice of moving streams from their natural channel to a new one. This takes out the natural sinuosity of the stream channel in an attempt to reduce the footprint of any given stream and move water out quickly during periods of heavy rainfall. This removes the most important in-stream habitats and the important near-stream habitat, the riparian zone. Once this is done there are no buffers to filter sediment, bacteria, pesticides, nutrients and other pollutants from entering the waterbodies. Those streams that flow into a reservoir or lake carry those pollutants into the lake where much of the pollutant loads accumulate in these waterbodies. Positive steps have been made in working with the agricultural community of the region and greater, more broadly encompassing future efforts should lead toward environmental protection and restoration, compatible with farming methods that ensure minimization of pollutant impacts.

Table 3.3.4.2-20. Landuses in the 4-Rivers basin (National Land Cover Dataset, 2001).

Landuse	Percent of Total Area	Area (acres)
Forest	34.2	976,508.3
Agriculture (total)	53.6	1,529,452.0
Pasture	14.2	404,615.2
Row Crop	39.6	1,130,572.9
Developed	6.0	172,080.6
Natural Grassland	1.1	31,162.7
Wetland	5.0	14,3116.3
Barren	0.1	2,634.8
Total	100.0	2,854,954.6

Literature Cited

Karr, J. R., K. D. Fausch, P. L. Angermeier, P. R. Yant and I. J. Schlosser. 1986. Assessment of biological integrity in running waters: A method and its rationale. Illinois Nat. Hist. Surv. Spec. Publ. 5.

Kentucky Division of Water. 2010. Integrated Report to Congress on the condition of water resources in KY, 2010. Frankfort, KY.

_____. 2008. Integrated Report to Congress on the condition of water resources in KY, 2008. Frankfort, KY.

_____. 2006. 2006 Integrated Report to congress on water quality in Kentucky. Frankfort, KY.

_____. 2005. Kentucky ambient/watershed water quality monitoring standard operating procedure manual. Frankfort, KY.

_____. 2004. 2004 Kentucky report to congress on water quality. Frankfort, Kentucky.

ORSANCO. 2010. 2010 Biennial Assessment of Ohio River water quality conditions (draft). Cincinnati, OH.

Parmalee, P. W. and A. E. Bogan. 1998. The freshwater mussels of Tennessee. The University of Tennessee Press. Knoxville, TN.

The Kentucky Environmental Commission. 1995. The state of Kentucky's environment: 1994 status report. Frankfort, KY.

U. S. Environmental Protection Agency. 2006. Wadeable streams assessment: a collaborative survey of the nation's streams EPA 841-B-06-002. Washington, D.C.

U. S. Environmental Protection Agency. 2005. Guidance for 2006 assessment, listing and reporting requirements pursuant to sections 303(d), 305(b) and 314 of the clean water act. Office of Water. Washington, D.C.

U. S. Environmental Protection Agency. 1997. Guidelines for preparation of the comprehensive state water quality assessments (305(b) Reports) and electronic updates. Office of Water. Washington, D.C.

Appendix A. Section 305(b) Statewide Assessment Results, 2012
With Assessment Code Interpretive Keys

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Abbott Creek 0.0 to 3.2	Big Sandy River	5070203	FLOYD	5-NS	3	3	3	3	3	1/26/2009	WAH, FC, PCR, SCR
Arkansas Creek 0.0 to 3.6	Big Sandy River	5070203	FLOYD	5-NS	3	3	3	3	3	12/15/2009	WAH, FC, PCR, SCR
Arnold Fork 0.0 to 2.6	Big Sandy River	5070203	KNOTT	5-NS	3	3	3	3	3	12/15/2009	WAH, FC, PCR, SCR
Banjo Branch 0.0 to 1.5	Big Sandy River	5070203	JOHNSON	5-PS	3	3	3	3	3	1/26/2009	WAH, FC, PCR, SCR
Barnetts Creek 0.0 to 1.6	Big Sandy River	5070203	JOHNSON	5-PS	3	3	3	3	3	1/26/2009	WAH, FC, PCR, SCR
Bear Creek 0.0 to 2.0	Big Sandy River	5070204	LAWRENCE	2-FS	5-NS	3	3	3	3	1/20/2004	WAH, FC, PCR, SCR
Beaver Creek 0.0 to 7.1	Big Sandy River	5070203	FLOYD	5-NS	5-NS	3	3	3	3	12/15/2009	WAH, FC, PCR, SCR
Bent Branch 0.0 to 0.8	Big Sandy River	5070203	PIKE	3	5B-NS	3	3	3	3	1/26/2009	WAH, FC, PCR, SCR
Big Branch 0.0 to 2.7	Big Sandy River	5070201	PIKE	2-FS	3	3	3	3	3	10/17/2007	WAH, FC, PCR, SCR
Big Creek 0.0 to 1.9	Big Sandy River	5070201	PIKE	2-FS	5-NS	3	3	3	3	1/26/2009	WAH, FC, PCR, SCR
Big Creek 10.6 to 15.1	Big Sandy River	5070201	PIKE	5-PS	3	3	3	3	3	11/12/2008	WAH, FC, PCR, SCR
Big Creek 7.3 to 10.6	Big Sandy River	5070201	PIKE	5-PS	3	3	3	3	3	1/27/2009	WAH, FC, PCR, SCR
Big Mine Creek 1.4 to 3.9	Big Sandy River	5070203	MAGOFFIN	5-PS	5-PS	5-PS	3	3	3	1/27/2004	WAH, FC, PCR, SCR
Big Mine Creek 5.8 to 8.4	Big Sandy River	5070203	MAGOFFIN	5-PS	3	3	3	3	3	11/10/2003	WAH, FC, PCR, SCR
Big Sandy River 0.0 to 27.1	Big Sandy River	5070204	BOYD	5-NS	2-FS	3	2-FS	3	3	1/29/2009	WAH, FC, PCR, SCR, DWS
Bill D Branch 0.0 to 1.1	Big Sandy River	5070203	KNOTT	5-NS	3	3	3	3	3	12/15/2009	WAH, FC, PCR, SCR
Bill D Branch 1.1 to 2.9	Big Sandy River	5070203	KNOTT	5-NS	3	3	3	3	3	12/15/2009	WAH, FC, PCR, SCR
Blackberry Creek 1.2 to 5.9	Big Sandy River	5070201	PIKE	2-FS	3	3	3	3	3	7/30/2004	WAH, FC, PCR, SCR
Blaine Creek 35.0 to 39.8	Big Sandy River	5070204	LAWRENCE	5-NS	5-NS	3	3	3	3	1/30/2009	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Blaine Creek 40.9 to 45.3	Big Sandy River	5070204	LAWRENCE	5-PS	5-NS	5-NS	3	3	3	1/30/2009	WAH, FC, PCR, SCR
Blaine Creek 8.2 to 17.6	Big Sandy River	5070204	LAWRENCE	5-NS	2-FS	3	3	3	3	1/29/2009	WAH, FC, PCR, SCR
Brushy Fork 0.0 to 10.0	Big Sandy River	5070203	PIKE	5-PS	3	3	3	3	3	1/30/2009	WAH, FC, PCR, SCR
Buck Branch 0.0 to 2.8	Big Sandy River	5070203	FLOYD	5-NS	3	3	3	3	3	12/15/2009	WAH, FC, PCR, SCR
Buffalo Creek 0.0 to 1.8	Big Sandy River	5070203	FLOYD	5-NS	3	3	3	3	3	7/30/2004	WAH, FC, PCR, SCR
Buffalo Creek 0.0 to 1.5	Big Sandy River	5070203	JOHNSON	5B-NS	5B-NS	3	3	3	3	1/30/2009	WAH, FC, PCR, SCR
Caleb Fork 0.0 to 1.2	Big Sandy River	5070203	FLOYD	5-NS	3	3	3	3	3	12/15/2009 - 12/17/2009	WAH, FC, PCR, SCR
Caney Creek 0.0 to 1.5	Big Sandy River	5070202	PIKE	5B-NS	5B-NS	3	3	3	3	1/30/2009	WAH, FC, PCR, SCR
Caney Fork 0.0 to 7.5	Big Sandy River	5070203	KNOTT	5-NS	5-NS	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Caney Fork 7.5 to 11.3	Big Sandy River	5070203	KNOTT	5-NS	3	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Cat Fork 0.0 to 2.85	Big Sandy River	5070204	LAWRENCE	2-FS	3	3	3	3	3	1/30/2009	WAH, FC, PCR, SCR
Cat Fork 2.85 to 7.0	Big Sandy River	5070204	LAWRENCE	2-FS	3	3	3	3	3	1/30/2009	WAH, FC, PCR, SCR
Clear Creek 0.0 to 4.9	Big Sandy River	5070203	FLOYD	5-NS	5-NS	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Coldwater Fork 2.1 to 5.3	Big Sandy River	5070201	MARTIN	5-PS	3	3	3	3	3	11/17/2003	WAH, FC, PCR, SCR
Coldwater Fork 5.3 to 8.7	Big Sandy River	5070201	MARTIN	2-FS	3	3	3	3	3	10/10/2006	WAH, FC, PCR, SCR
Curtis Crum Reservoir	Big Sandy River	5070201	MARTIN	3	3	3	3	2-FS	3	2/20/2009	WAH, FC, PCR, SCR, DWS
Daniels Branch 0.0 to 0.4	Big Sandy River	5070201	PIKE	2-FS	3	3	3	3	3	10/15/2007	WAH, FC, PCR, SCR
Dewey Lake	Big Sandy River	5070203	FLOYD	2-FS	3	5-PS	3	3	3	5/24/2008	WAH, FC, PCR, SCR
Dry Creek 0.0 to 4.0	Big Sandy River	5070203	KNOTT	5-PS	3	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Elkhorn Creek 0.0 to 10.7	Big Sandy River	5070202	PIKE	5-PS	5-NS	3	3	3	3	2/2/2009	WAH, FC, PCR, SCR
Elkhorn Creek 10.7 to 18.2	Big Sandy River	5070202	PIKE	3	3	3	2-FS	3	3	2/20/2009	WAH, FC, PCR, SCR
Elkhorn Lake	Big Sandy River	5070202	LETCHER	3	3	3	3	2-FS	3	2/19/2009	WAH, FC, PCR, SCR, DWS
Fishtrap Reservoir	Big Sandy River	5070202	PIKE	2-FS	3	2-FS	5-PS	3	3	5/29/2008 - 4/12/2010	WAH, FC, PCR, SCR
Frasure Creek 0.0 to 5.2	Big Sandy River	5070203	FLOYD	5-PS	5-NS	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Georges Creek 0.0 to 2.9	Big Sandy River	5070203	LAWRENCE	5-PS	3	3	3	3	3	2/2/2009	WAH, FC, PCR, SCR
Georges Creek 2.9 to 6.5	Big Sandy River	5070203	LAWRENCE	2-FS	3	3	3	3	3	2/2/2009	WAH, FC, PCR, SCR
Goose Creek 0.0 to 2.2	Big Sandy River	5070203	FLOYD	5-NS	3	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Greasy Creek 0.0 to 4.7	Big Sandy River	5070203	JOHNSON	5-PS	3	3	3	3	3	2/2/2009	WAH, FC, PCR, SCR
Griffin Creek 0.0 to 2.5	Big Sandy River	5070203	LAWRENCE	2-FS	3	3	3	3	3	7/30/2004	WAH, FC, PCR, SCR
Hall Fork 0.0 to 2.0	Big Sandy River	5070203	FLOYD	5-NS	2-FS	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Harmond Branch 0.0 to 0.9	Big Sandy River	5070203	PIKE	3	5B-NS	5B-NS	3	3	3	2/2/2009	WAH, FC, PCR, SCR
Harriett Branch 0.6 to 2.3	Big Sandy River	5070204	LAWRENCE	5-PS	3	3	3	3	3	2/2/2009	WAH, FC, PCR, SCR
Hobbs Fork 0.0 to 3.9	Big Sandy River	5070201	MARTIN	2-FS	3	3	3	3	3	2/2/2009	WAH, FC, PCR, SCR, DWS
Hood Creek 0.0 to 3.6	Big Sandy River	5070204	LAWRENCE	5-PS	3	3	3	3	3	1/27/2004	WAH, FC, PCR, SCR
Hood Creek 3.6 to 5.4	Big Sandy River	5070204	LAWRENCE	2-FS	3	3	3	3	3	11/21/2003	WAH, FC, PCR, SCR
Hurricane Creek 1.0 to 3.4	Big Sandy River	5070203	PIKE	5B-NS	5B-NS	3	3	3	3	2/2/2009	WAH, FC, PCR, SCR
Ice Dam Creek 0.0 to 0.4	Big Sandy River	5070204	BOYD	5-NS	3	3	3	3	3	12/10/2003	WAH, FC, PCR, SCR
Ice Dam Creek 0.4 to 2.4	Big Sandy River	5070204	BOYD	5-NS	3	3	3	3	3	12/10/2003	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Indian Creek 0.0 to 3.5	Big Sandy River	5070202	PIKE	5-PS	3	3	3	3	3	2/2/2009	WAH, FC, PCR, SCR
Island Creek 0.0 to 1.7	Big Sandy River	5070203	PIKE	5-PS	3	3	3	3	3	11/20/2003	WAH, FC, PCR, SCR
Jacks Creek 0.0 to 4.4	Big Sandy River	5070203	FLOYD	5-NS	5-NS	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Jennys Creek 5.3 to 10.8	Big Sandy River	5070203	JOHNSON	5-NS	3	3	3	3	3	9/5/2003	WAH, FC, PCR, SCR
Jenny's Creek 0.0 to 3.1	Big Sandy River	5070203	JOHNSON	5-PS	3	3	3	3	3	2/3/2009	WAH, FC, PCR, SCR
Johns Branch 0.0 to 1.6	Big Sandy River	5070203	FLOYD	5-NS	3	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Johns Creek 0.0 to 5.8	Big Sandy River	5070203	JOHNSON	5-PS	2-FS	3	3	3	3	2/3/2009	WAH, FC, PCR, SCR
Johns Creek 24.0 to 30.65	Big Sandy River	5070203	PIKE	5-PS	5-NS	3	2-FS	3	3	1/21/2004 - 2/3/2009	WAH, FC, PCR, SCR
Johns Creek 34.4 to 42.5	Big Sandy River	5070203	PIKE	5-NS	3	3	3	3	3	11/20/2003	WAH, FC, PCR, SCR
Johnson Branch 0.0 to 0.9	Big Sandy River	5070202	PIKE	2-FS	3	3	3	3	3	10/27/2003	WAH, FC, PCR, SCR
Jones Fork 0.0 to 9.9	Big Sandy River	5070203	KNOTT	5-NS	3	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Keaton Fork 0.0 to 5.1	Big Sandy River	5070204	JOHNSON	5-NS	3	3	3	3	3	2/3/2009	WAH, FC, PCR, SCR
Knox Creek 0.0 to 8.0	Big Sandy River	5070201	PIKE	5-PS	5-PS	3	5-NS	3	3	2/3/2009 - 4/12/2010	WAH, FC, PCR, SCR
Left Fork Beaver Creek 0.0 to 11.4	Big Sandy River	5070203	FLOYD	5-PS	5-NS	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Left Fork Beaver Creek 13.55 to 18.7	Big Sandy River	5070203	FLOYD	5-NS	2-FS	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Left Fork Beaver Creek 11.4 to 13.55	Big Sandy River	5070203	FLOYD	5-NS	5-NS	3	3	3	3	2/8/2010	WAH, FC, PCR, SCR
Left Fork Beaver Creek 18.7 to 28.6	Big Sandy River	5070203	FLOYD	5-NS	5-NS	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Left Fork Blaine Creek 0.0 to 2.1	Big Sandy River	5070204	LAWRENCE	5-NS	5-NS	5-NS	3	3	3	1/27/2004	WAH, FC, PCR, SCR
Left Fork Malachi Branch 0.0 to 0.7	Big Sandy River	5070201	PIKE	5-PS	3	3	3	3	3	10/15/2007	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Left Fork Middle Creek Levisa Fork 0.0 to 10.3	Big Sandy River	5070203	FLOYD	5-NS	5-NS	5-NS	3	3	3	2/4/2009	WAH, FC, PCR, SCR
Levisa Fork 0.0 to 5.8	Big Sandy River	5070203	LAWRENCE	5-NS	2-FS	3	3	3	3	2/4/2009	WAH, FC, PCR, SCR, DWS
Levisa Fork 118.8 to 127.7	Big Sandy River	5070202	PIKE	5-NS	5-PS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Levisa Fork 5.8 to 15.3	Big Sandy River	5070203	LAWRENCE	5-PS	2-FS	3	5-PS	3	3	1/12/2004	WAH, FC, PCR, SCR
Levisa Fork 15.3 to 31.4	Big Sandy River	5070203	LAWRENCE	2-FS	2-FS	3	3	3	3	1/25/2006	WAH, FC, PCR, SCR
Levisa Fork 31.4 to 54.7	Big Sandy River	5070203	FLOYD	5-NS	5-NS	3	3	2-FS	3	2/4/2009	WAH, FC, PCR, SCR, DWS
Levisa Fork 57.4 to 58.4	Big Sandy River	5070203	FLOYD	3	3	3	3	2-FS	3	2/4/2009	WAH, FC, PCR, SCR, DWS
Levisa Fork 65.2 to 98.0	Big Sandy River	5070202	PIKE	5-PS	5-NS	3	3	2-FS	3	2/4/2009	WAH, FC, PCR, SCR, DWS
Levisa Fork 98.0 to 101.25	Big Sandy River	5070202	PIKE	3	5-NS	3	2-FS	3	3	2/4/2009	WAH, FC, PCR, SCR
Lick Branch 0.0 to 1.3	Big Sandy River	5070201	MARTIN	5-NS	3	3	3	3	3	11/12/2008	WAH, FC, PCR, SCR
Lick Creek 0.3 to 4.7	Big Sandy River	5070202	PIKE	5-PS	3	3	3	3	3	2/5/2009	WAH, FC, PCR, SCR
Little Cat Fork 1.1 to 3.7	Big Sandy River	5070204	LAWRENCE	2-FS	3	3	3	3	3	11/20/2003	WAH, FC, PCR, SCR
Little Fork 0.0 to 0.5	Big Sandy River	5070201	PIKE	2-FS	3	3	3	3	3	10/17/2007	WAH, FC, PCR, SCR
Little Paint Creek 3.2 to 6.5	Big Sandy River	5070203	JOHNSON	5-PS	3	3	3	3	3	2/5/2009	WAH, FC, PCR, SCR
Little Paint Creek 6.5 to 11.6	Big Sandy River	5070203	JOHNSON	5-PS	5-NS	5-NS	3	3	3	2/13/2004	WAH, FC, PCR, SCR
Lockwood Creek 2.6 to 3.2	Big Sandy River	5070204	BOYD	5-PS	3	3	3	3	3	2/5/2009	WAH, FC, PCR, SCR
Long Branch 0.0 to 2.0	Big Sandy River	5070203	FLOYD	5-NS	3	3	3	3	3	11/12/2003	WAH, FC, PCR, SCR
Long Fork 0.0 to 1.4	Big Sandy River	5070203	FLOYD	5-PS	3	3	3	3	3	2/5/2009	WAH, FC, PCR, SCR
Long Fork 0.4 to 7.5	Big Sandy River	5070202	PIKE	5-PS	3	3	3	3	3	2/5/2009	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Lower Chloe Creek 0.0 to 1.5	Big Sandy River	5070203	PIKE	5-NS	3	3	3	3	3	2/5/2009	WAH, FC, PCR, SCR
Lower Elk Fork 0.4 to 2.4	Big Sandy River	5070201	PIKE	2-FS	3	3	3	3	3	11/17/2003	WAH, FC, PCR, SCR
Lower Laurel Fork 0.0 to 7.9	Big Sandy River	5070204	LAWRENCE	5-PS	3	3	3	3	3	2/13/2004	WAH, FC, PCR, SCR
Lower Pigeon Branch 0.6 to 1.9	Big Sandy River	5070202	PIKE	2-FS	3	3	3	3	2-FS	11/12/2008	WAH, FC, PCR, SCR, OSRW
Mare Creek 0.0 to 0.3	Big Sandy River	5070203	FLOYD	5B-NS	3	3	3	3	3	2/5/2009	WAH, FC, PCR, SCR
Marrowbone Creek 1.4 to 11.3	Big Sandy River	5070202	PIKE	5-PS	3	3	3	3	3	11/13/2003	WAH, FC, PCR, SCR
Martin County Lake	Big Sandy River	5070201	MARTIN	2-FS	3	3	3	3	3	1/1/1998	WAH, FC, PCR, SCR, DWS
Meade Branch 0.0 to 0.1	Big Sandy River	5070203	LAWRENCE	5B-NS	3	3	3	3	3	2/5/2009	WAH, FC, PCR, SCR
Meathouse Fork 0.0 to 2.9	Big Sandy River	5070203	PIKE	5-PS	3	3	3	3	3	2/5/2009	WAH, FC, PCR, SCR
Middle Creek Levisa Fork 0.0 to 4.6	Big Sandy River	5070203	FLOYD	5-NS	5-PS	3	3	3	3	2/5/2009	WAH, FC, PCR, SCR
Middle Creek Levisa Fork 4.6 to 6.5	Big Sandy River	5070203	FLOYD	5B-NS	5B-NS	3	3	3	3	2/5/2009	WAH, FC, PCR, SCR
Middle Fork Rockcastle Creek 0.0 to 16.8	Big Sandy River	5070201	MARTIN	5-PS	3	3	3	3	3	11/18/2008	WAH, FC, PCR, SCR
Miller Creek 0.0 to 6.4	Big Sandy River	5070203	JOHNSON	5-NS	3	3	3	3	3	11/12/2003	WAH, FC, PCR, SCR
Mud Creek 0.0 to 2.7	Big Sandy River	5070203	FLOYD	5-NS	3	3	3	3	3	2/13/2004	WAH, FC, PCR, SCR
Mudlick Branch 0.0 to 0.2	Big Sandy River	5070201	MARTIN	5B-NS	3	3	3	3	3	2/5/2009	WAH, FC, PCR, SCR
Mudlick Creek 3.7 to 4.1	Big Sandy River	5070203	JOHNSON	3	5B-NS	3	3	3	3	2/5/2009	WAH, FC, PCR, SCR
Nats Creek 0.0 to 3.1	Big Sandy River	5070203	LAWRENCE	5-PS	3	3	3	3	3	8/3/2004	WAH, FC, PCR, SCR
Old Road Fork 0.0 to 2.1	Big Sandy River	5070201	MARTIN	2-FS	3	3	3	3	3	2/5/2009	WAH, FC, PCR, SCR
Open Fork 6.4 to 11.3	Big Sandy River	5070203	MORGAN	5-PS	5-NS	5-NS	3	3	3	1/15/2004	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Otter Creek 0.0 to 0.5	Big Sandy River	5070203	FLOYD	5-NS	5-NS	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Paddle Creek 0.0 to 1.4	Big Sandy River	5070204	BOYD	5-NS	3	3	3	3	3	12/10/2003	WAH, FC, PCR, SCR
Paint Creek 0.0 to 7.1	Big Sandy River	5070203	JOHNSON	5-NS	5-NS	3	3	3	3	2/5/2009	CAH, FC, PCR, SCR
Paint Creek 7.1 to 8.3	Big Sandy River	5070203	JOHNSON	5-PS	5-NS	3	3	3	3	2/9/2009	CAH, FC, PCR, SCR
Paintsville Reservoir	Big Sandy River	5070203	JOHNSON	2-FS	3	2-FS	5-PS	3	3	5/29/2008	WAH, CAH, FC, PCR, SCR
Panther Fork 0.0 to 2.95	Big Sandy River	5070201	MARTIN	5-PS	3	3	3	3	3	2/8/2009	WAH, FC, PCR, SCR
Penhook Branch 0.0 to 0.35	Big Sandy River	5070203	FLOYD	5B-NS	3	3	3	3	3	2/9/2009	WAH, FC, PCR, SCR
Peter Creek 0.0 to 5.8	Big Sandy River	5070201	PIKE	5-NS	3	3	3	3	3	8/3/2004	WAH, FC, PCR, SCR
Pigeonroost Fork 0.0 to 1.3	Big Sandy River	5070201	MARTIN	5-NS	3	3	3	3	3	8/3/2004	WAH, FC, PCR, SCR
Pond Creek 0.0 to 9.7	Big Sandy River	5070201	PIKE	5-NS	5-NS	3	3	3	3	2/11/2009	WAH, FC, PCR, SCR
Prater Creek 0.0 to 4.8	Big Sandy River	5070203	FLOYD	2-FS	3	3	3	3	3	2/16/2004	WAH, FC, PCR, SCR
Puncheon Branch 0.0 to 3.6	Big Sandy River	5070203	KNOTT	5-PS	3	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Raccoon Creek 5.6 to 7.4	Big Sandy River	5070203	PIKE	5-PS	3	3	3	3	3	11/17/2003	WAH, FC, PCR, SCR
Raccoon Creek 0.0 to 2.0	Big Sandy River	5070203	PIKE	5B-NS	5B-NS	3	3	3	3	2/11/2009	WAH, FC, PCR, SCR
Right Fork Beaver Creek 0.0 to 17.4	Big Sandy River	5070203	FLOYD	5-PS	5-NS	5-NS	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Right Fork Beaver Creek 30.3 to 33.4	Big Sandy River	5070203	KNOTT	5-PS	5-NS	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Right Fork Beaver Creek 17.4 to 23.3	Big Sandy River	5070203	FLOYD	5-NS	5-NS	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Right Fork Beaver Creek 23.3 to 30.3	Big Sandy River	5070203	KNOTT	5-NS	2-FS	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR
Right Fork Beaver Creek 33.4 to 37.9	Big Sandy River	5070203	KNOTT	5-NS	3	3	3	3	3	12/17/2009	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Right Fork of Island Creek 0.0 to 1.7	Big Sandy River	5070203	PIKE	5B-NS	5B-NS	3	3	3	3	2/13/2009	WAH, FC, PCR, SCR
Right Fork of Little Paint Creek 0.4 to 2.1	Big Sandy River	5070203	FLOYD	5-NS	3	3	3	3	3	2/13/2009	WAH, FC, PCR, SCR
Right Fork of Panther Fork 0.0 to 1.05	Big Sandy River	5070201	MARTIN	5-NS	3	3	3	3	3	2/13/2009	WAH, FC, PCR, SCR
Right Fork of Whitecabin Branch 0.0 to 1.1	Big Sandy River	5070201	MARTIN	5-NS	3	3	3	3	3	2/13/2009	WAH, FC, PCR, SCR
Righthand Fork 0.0 to 2.0	Big Sandy River	5070203	KNOTT	5-NS	3	3	3	3	3	12/18/2009	WAH, FC, PCR, SCR
Road Fork 1.3 to 1.9	Big Sandy River	5070201	PIKE	5B-NS	3	3	3	3	3	2/13/2009	WAH, FC, PCR, SCR
Rob Fork 0.0 to 1.0	Big Sandy River	5070202	PIKE	5-NS	3	3	3	3	3	2/13/2009	WAH, FC, PCR, SCR
Robinson Creek 0.0 to 2.1	Big Sandy River	5070202	PIKE	2-FS	3	3	3	3	3	8/14/2002	WAH, FC, PCR, SCR
Rock Fork 0.0 to 7.0	Big Sandy River	5070203	FLOYD	5-PS	2-FS	3	3	3	3	12/18/2009	WAH, FC, PCR, SCR
Rockcastle Creek 13.25 to 15.3	Big Sandy River	5070201	MARTIN	5-NS	3	3	3	3	3	8/3/2004	WAH, FC, PCR, SCR
Rockcastle Creek 3.7 to 13.25	Big Sandy River	5070201	MARTIN	5-PS	3	3	2-FS	3	3	1/14/2004	WAH, FC, PCR, SCR
Rockcastle Creek 0.0 to 3.7	Big Sandy River	5070204	LAWRENCE	5-PS	5-NS	3	3	3	3	2/13/2009	WAH, FC, PCR, SCR
Rockhouse Fork 0.0 to 6.4	Big Sandy River	5070201	MARTIN	5-PS	3	3	3	3	3	2/13/2009	WAH, FC, PCR, SCR
Russell Fork 6.2 to 9.2	Big Sandy River	5070202	PIKE	2-FS	3	3	3	3	3	11/25/2003	WAH, FC, PCR, SCR
Russell Fork 0.0 to 6.3	Big Sandy River	5070202	PIKE	2-FS	2-FS	3	3	2-FS	3	2/13/2009	WAH, FC, PCR, SCR, DWS
Russell Fork 12.9 to 16.45	Big Sandy River	5070202	PIKE	2-FS	3	3	3	2-FS	2-FS	2/13/2009	WAH, FC, PCR, SCR, DWS, OSRW
Salisbury Branch 0.0 to 1.8	Big Sandy River	5070203	KNOTT	5-PS	3	3	3	3	3	12/18/2009	WAH, FC, PCR, SCR
Salt Lick Creek 0.0 to 6.8	Big Sandy River	5070203	FLOYD	5-PS	3	3	3	3	3	12/18/2009	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Shannon Branch 0.0 to 0.75	Big Sandy River	5070201	PIKE	2-FS	3	3	3	3	3	10/16/2007	WAH, FC, PCR, SCR
Shelby Creek 0.0 to 6.0	Big Sandy River	5070202	PIKE	5-PS	5-PS	3	3	3	3	2/16/2009	WAH, FC, PCR, SCR
Shelby Creek 6.0 to 13.3	Big Sandy River	5070202	PIKE	5-PS	3	3	3	3	3	2/17/2009	WAH, FC, PCR, SCR
Simpson Branch 0.0 to 1.8	Big Sandy River	5070203	FLOYD	5-PS	3	3	3	3	3	12/18/2009	WAH, FC, PCR, SCR
Sizemore Branch 0.0 to 2.0	Big Sandy River	5070203	FLOYD	5-NS	3	3	3	3	3	12/18/2009	WAH, FC, PCR, SCR
Spewing Camp Branch 0.0 to 3.1	Big Sandy River	5070203	FLOYD	5-NS	5-NS	5-NS	3	3	3	12/18/2009	WAH, FC, PCR, SCR
Spurlock Creek 0.0 to 0.6	Big Sandy River	5070203	FLOYD	5-NS	5-NS	3	3	3	3	12/18/2009	WAH, FC, PCR, SCR
Spurlock Creek 0.6 to 4.0	Big Sandy River	5070203	FLOYD	5-NS	2-FS	3	3	3	3	12/18/2009	WAH, FC, PCR, SCR
Steele Creek 0.0 to 2.4	Big Sandy River	5070203	FLOYD	5-NS	3	3	3	3	3	12/18/2009	WAH, FC, PCR, SCR
Stephens Branch 0.0 to 2.6	Big Sandy River	5070203	FLOYD	5-NS	3	3	3	3	3	12/18/2009	WAH, FC, PCR, SCR
Straight Fork 0.0 to 0.8	Big Sandy River	5070201	MARTIN	5-PS	3	3	3	3	3	2/17/2009	WAH, FC, PCR, SCR
Stratton Branch 0.4 to 2.1	Big Sandy River	5070203	FLOYD	5-NS	3	3	3	3	3	2/17/2009	WAH, FC, PCR, SCR
Sturgeon Branch 0.0 to above 1.1	Big Sandy River	5070203	JOHNSON	3	3	3	3	3	3		WAH, FC, PCR, SCR
Sycamore Creek 0.0 to 3.8	Big Sandy River	5070203	PIKE	5-PS	3	3	3	3	3	2/17/2009	WAH, FC, PCR, SCR
Thompson Fork 0.0 to 1.0	Big Sandy River	5070203	FLOYD	2-FS	3	3	3	3	3	2/17/2009	WAH, FC, PCR, SCR
Toms Branch 0.0 to 1.6	Big Sandy River	5070202	PIKE	2-FS	3	3	3	3	2-FS	2/17/2009	WAH, FC, PCR, SCR, OSRW
Toms Creek 0.0 to 8.0	Big Sandy River	5070203	JOHNSON	5-PS	3	3	3	3	3	8/3/2004	WAH, FC, PCR, SCR
Tug Fork 71.9 to 77.7	Big Sandy River	5070201	PIKE	2-FS	3	3	5-PS	3	3	11/25/2003	WAH, FC, PCR, SCR
Tug Fork 0.0 to 10.45	Big Sandy River	5070201	LAWRENCE	2-FS	2-FS	3	3	3	3	2/17/2009	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Tug Fork 10.45 to 41.95	Big Sandy River	5070201	MARTIN	2-FS	2-FS	3	3	2-FS	3	2/17/2009	WAH, FC, PCR, SCR, DWS
Tug Fork 78.2 to 84.8	Big Sandy River	5070201	PIKE	2-FS	2-FS	3	3	3	3	2/17/2009	WAH, FC, PCR, SCR
Turkey Creek 0.0 to 5.9	Big Sandy River	5070203	FLOYD	5-NS	5-NS	3	3	3	3	12/22/2009	WAH, FC, PCR, SCR
Upper Pidgeon Branch 0.0 to 1.8	Big Sandy River	5070202	PIKE	5-NS	3	3	3	3	3	10/27/2003	WAH, FC, PCR, SCR
UT of Barnetts Creek	Big Sandy River	5070203	JOHNSON	5B-NS	3	3	3	3	3	2/17/2009	WAH, FC, PCR, SCR
UT of Big Sandy River 0.0 to 0.9	Big Sandy River	5070204	BOYD	5B-NS	5B-NS	3	3	3	3	2/17/2009	WAH, FC, PCR, SCR
UT of Hobbs Fork 0.0 to 0.6	Big Sandy River	5070201	MARTIN	2-FS	3	3	3	3	2-FS	8/1/2008	WAH, FC, PCR, SCR, OSRW
UT of Johns Creek 0.0 to 0.2	Big Sandy River	5070203	JOHNSON	5B-NS	5B-NS	3	3	3	3	2/17/2009	WAH, FC, PCR, SCR
UT of Mud Creek 0.0 to 0.3	Big Sandy River	5070203	FLOYD	3	5B-NS	3	3	3	3	2/19/2009	WAH, FC, PCR, SCR
UT of Mudlick Branch 0.0 to 0.6	Big Sandy River	5070201	MARTIN	5-NS	3	3	3	3	3	2/19/2009	WAH, FC, PCR, SCR
UT of Open Fork Paint Creek 0.0 to 0.8	Big Sandy River	5070203	MORGAN	2-FS	3	3	3	3	3	10/10/2006	WAH, FC, PCR, SCR
UT of Stave Branch 0.0 to 0.5	Big Sandy River	5070203	JOHNSON	5B-NS	3	3	3	3	3	2/18/2009	WAH, FC, PCR, SCR
Venters Branch 0.4 to 1.8	Big Sandy River	5070201	MARTIN	5-NS	3	3	3	3	3	2/18/2009	WAH, FC, PCR, SCR
Whites Creek 0.6 to 3.5	Big Sandy River	5070204	BOYD	2-FS	3	3	3	3	3	9/22/2003	WAH, FC, PCR, SCR
Williams Fork 0.0 to 0.2	Big Sandy River	5070203	JOHNSON	5B-NS	3	3	3	3	3	2/18/2009	WAH, FC, PCR, SCR
Wilson Creek 0.0 to 2.9	Big Sandy River	5070203	FLOYD	5-NS	3	3	3	3	3	12/22/2009	WAH, FC, PCR, SCR
Wolf Creek 0.0 to 6.6	Big Sandy River	5070201	MARTIN	5-PS	5-PS	3	3	3	3	2/18/2009	WAH, FC, PCR, SCR
Wolf Creek 17.6 to 20.5	Big Sandy River	5070201	MARTIN	5-PS	3	3	3	3	3	2/18/2009	WAH, FC, PCR, SCR
Wolf Creek 6.6 to 17.6	Big Sandy River	5070201	MARTIN	5-NS	3	3	3	3	3	2/18/2009	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Wolfpen Branch 0.0 to 1.7	Big Sandy River	5070202	PIKE	5-NS	3	3	3	3	3	11/17/2003	WAH, FC, PCR, SCR
Yatesville Reservoir	Big Sandy River	5070204	LAWRENCE	2-FS	3	2-FS	3	3	3	5/29/2008	WAH, FC, PCR, SCR
Adams Fork 0.0 to 4.6	Green River	5110004	OHIO	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Adams Fork 8.9 to 9.8	Green River	5110004	OHIO	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Alexander Creek 0.0 to 3.6	Green River	5110001	EDMONSON	2-FS	3	3	3	3	3	11/12/2002	WAH, FC, PCR, SCR
Alexander Creek 3.6 to 7.1	Green River	5110001	EDMONSON	2-FS	3	3	3	3	3	11/12/2002	WAH, FC, PCR, SCR
Austin Creek 2.6 to 3.6	Green River	5110003	LOGAN	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Bacon Creek 0.2 to 17.2	Green River	5110001	HART	2-FS	5-NS	3	2-FS	3	3	3/1/2003 - 10/25/2007	WAH, FC, PCR, SCR
Bacon Creek 27.1 to 32.6	Green River	5110001	HART	2-FS	5-NS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Bacon Creek 17.2 to 27.1	Green River	5110001	HART	5-PS	5-NS	3	3	3	3	2/26/2003	WAH, FC, PCR, SCR
Bacon Creek 32.6 to 33.6	Green River	5110001	LARUE	5B-NS	5B-NS	3	3	3	3	10/29/2007	WAH, FC, PCR, SCR
Barnett Creek 0.0 to 3.3	Green River	5110004	OHIO	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Barnett Creek 3.3 to 10.4	Green River	5110004	OHIO	2-FS	3	3	3	3	3	10/29/2007	WAH, FC, PCR, SCR
Barren River 0.0 to 8.4	Green River	5110002	BUTLER	2-FS	2-FS	2-FS	3	3	2-FS	1/4/2008	WAH, FC, PCR, SCR, OSRW
Barren River 104.9 to 119.4	Green River	5110002	ALLEN	2-FS	5-NS	5-NS	3	3	3	1/4/2008	WAH, FC, PCR, SCR, DWS
Barren River 29.6 to 35.0	Green River	5110002	WARREN	3	2-FS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Barren River 35.0 to 44.0	Green River	5110002	WARREN	3	2-FS	3	3	2-FS	3	3/1/2003	WAH, FC, PCR, SCR, DWS
Barren River 8.4 to 15.1	Green River	5110002	WARREN	2-FS	3	3	3	3	2-FS	3/1/2003	WAH, FC, PCR, SCR, OSRW
Barren River 78.9 to 79.9	Green River	5110002	ALLEN	2-FS	3	3	3	3	3	10/19/2006	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Barren River Lake	Green River	5110002	ALLEN	2-FS	3	2-FS	2-FS	3	3	1/28/2008	WAH, FC, PCR, SCR
Barren Run 0.0 to 6.1	Green River	5110001	LARUE	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Bat East Creek 3.4 to 7.5	Green River	5110003	MUHLENBERG	5-PS	3	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Bat East Creek 0.0 to 3.3	Green River	5110003	MUHLENBERG	5-PS	2-FS	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Bays Fork of Barren River 6.2 to 15.5	Green River	5110002	ALLEN	5-PS	3	3	3	3	3	10/1/2007	WAH, FC, PCR, SCR
Bear Creek 14.7 to 22.4	Green River	5110001	EDMONSON	5-NS	3	3	3	3	3	2/28/2003	WAH, FC, PCR, SCR
Bear Creek 22.4 to 30.6	Green River	5110001	GRAYSON	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Bear Creek 8.05 to 12.7	Green River	5110001	EDMONSON	2-FS	2-FS	2-FS	3	3	3	1/22/2008	WAH, FC, PCR, SCR
Beaver Creek 15.8 to 28.1	Green River	5110002	BARREN	2-FS	3	3	3	2-FS	3	3/1/2003	WAH, FC, PCR, SCR, DWS
Beaver Creek 8.5 to 15.5	Green River	5110002	BARREN	2-FS	5-NS	3	3	3	3	1/18/2008	WAH, FC, PCR, SCR
Beaverdam Creek 0.0 to 14.5	Green River	5110001	EDMONSON	2-FS	3	3	3	3	2-FS	11/12/2002	CAH, FC, PCR, SCR, OSRW
Beech Creek 0.0 to 3.9	Green River	5110003	MUHLENBERG	4A-NS	4A-NS	4A-NS	3	3	3	2/14/2006	WAH, FC, PCR, SCR
Big Brush Creek 0.0 to 5.0	Green River	5110001	GREEN	5-PS	4A-NS	2-FS	3	3	3	10/29/2007	WAH, FC, PCR, SCR
Big Brush Creek 13.0 to 17.4	Green River	5110001	GREEN	2-FS	3	3	3	3	3	10/27/2007	WAH, FC, PCR, SCR
BIg Brush Creek 5.0 to 7.1	Green River	5110001	GREEN	3	2-FS	2-FS	3	3	3	11/27/2007	WAH, FC, PCR, SCR
Big Brush Creek 7.1 to 13.0	Green River	5110001	GREEN	3	4A-NS	2-FS	3	3	3	11/27/2007	WAH, FC, PCR, SCR
Big Creek 3.9 to 9.2	Green River	5110001	ADAIR	5-PS	4A-PS	4A-PS	3	3	3	3/1/2003 - 10/30/2007	WAH, FC, PCR, SCR
Big Pitman Creek 0.0 to 13.9	Green River	5110001	GREEN	2-FS	4A-NS	4A-PS	3	3	3	10/30/2007	WAH, FC, PCR, SCR
Big Pitman Creek 27.5 to 32.6	Green River	5110001	TAYLOR	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Big Pitman Creek 13.9 to 17.8	Green River	5110001	GREEN	3	4A-PS	2-FS	3	3	3	10/30/2007	WAH, FC, PCR, SCR
Big Pitman Creek 17.8 to 23.65	Green River	5110001	TAYLOR	3	4A-NS	2-FS	3	3	3	10/30/2007	WAH, FC, PCR, SCR
Big Reedy Branch 0.0 to 2.4	Green River	5110001	EDMONSON	5-NS	3	3	3	3	3	3/19/2009	WAH, FC, PCR, SCR
Big Reedy Creek 7.8 to 12.5	Green River	5110001	EDMONSON	5-PS	5-NS	3	3	3	3	3/1/2003 - 3/19/2009	WAH, FC, PCR, SCR
Billy Creek 0.0 to 4.8	Green River	5110001	HARDIN	5-PS	4A-NS	3	2-FS	3	3	3/1/2003 - 10/30/2007	WAH, FC, PCR, SCR
Black Snake Branch 1.6 to 2.9	Green River	5110001	TAYLOR	5-PS	3	3	3	3	3	10/30/2007	WAH, FC, PCR, SCR
Blacklick Creek 11.3 to 12.3	Green River	5110002	LOGAN	5B-NS	3	3	3	3	3	1/15/2004	WAH, FC, PCR, SCR
Brier Creek 0.0 to 4.9	Green River	5110006	MUHLENBERG	4A-NS	4A-NS	4A-NS	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Briggs Lake	Green River	5110003	LOGAN	2-FS	3	2-FS	3	3	3	11/14/2006 - 11/14/2008	WAH, FC, PCR, SCR
Brush Creek 0.0 to 6.1	Green River	5110001	CASEY	5-PS	3	3	3	3	3	10/30/2007	WAH, FC, PCR, SCR
Brush Creek 0.0 to 2.15	Green River	5110001	GREEN	3	4A-PS	2-FS	3	3	3	10/30/2007	WAH, FC, PCR, SCR
Brush Fork 0.0 to 4.4	Green River	5110005	McLEAN	5-NS	5-NS	5-NS	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Brushy Pond Creek 1.4 to 6.0	Green River	5110004	BUTLER	2-FS	3	3	3	3	3	10/30/2007	WAH, FC, PCR, SCR
Buck Creek 0.0 to 8.0	Green River	5110005	McLEAN	5-PS	5-NS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Buck Creek 2.0 to 8.1	Green River	5110006	CHRISTIAN	5-PS	2-FS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Buck Fork 12.9 to 19.3	Green River	5110006	CHRISTIAN	5-PS	5-NS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Buck Fork 0.0 to 5.8	Green River	5110006	TODD	5-PS	3	3	3	3	3	10/31/2007	WAH, FC, PCR, SCR
Burnett Fork 0.0 to 1.3	Green River	5110005	DAVIESS	5-PS	3	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Butler Fork 2.5 to 4.4	Green River	5110001	ADAIR	5-NS	4A-NS	2-FS	3	3	3	10/31/2007	WAH, FC, PCR, SCR

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Calhoun Creek 0.0 to 2.8	Green River	5110001	CASEY	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Campbellsville City Reservoir	Green River	5110001	TAYLOR	2-FS	3	5-PS	3	3	3	11/13/2006	WAH, FC, PCR, SCR, DWS
Cane Run 0.0 to 3.7	Green River	5110005	DAVIESS	5-PS	3	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Cane Run 0.9 to 6.5	Green River	5110001	HART	2-FS	3	3	3	3	2-FS	9/14/2007	WAH, FC, PCR, SCR, OSRW
Caney Creek 0.0 to 6.8	Green River	5110004	OHIO	2-FS	2-FS	2-FS	3	3	3	1/23/2008	WAH, FC, PCR, SCR
Caney Creek 10.05 to 14.0	Green River	5110004	OHIO	3	2-FS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Caney Creek 0.0 to 3.6	Green River	5110003	MUHLENBERG	5-NS	3	3	3	3	3	3/19/2009	WAH, FC, PCR, SCR
Caney Creek 1.4 to 5.3	Green River	5110006	MUHLENBERG	3	5-NS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Caney Creek 3.6 to 7.6	Green River	5110003	MUHLENBERG	5-NS	3	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Caney Creek 6.8 to 10.05	Green River	5110004	OHIO	3	2-FS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Caney Fork 0.0 to 6.7	Green River	5110002	BARREN	2-FS	3	3	3	3	2-FS	11/30/2007	WAH, FC, PCR, SCR, OSRW
Caneyville City Reservoir	Green River	5110004	GRAYSON	3	3	5-PS	3	5-PS	3	1/1/1992	WAH, FC, PCR, SCR, DWS
Casey Creek 3.0 to 4.95	Green River	5110001	CASEY	2-FS	4A-PS	2-FS	3	3	3	10/30/2007 - 1/22/2008	WAH, FC, PCR, SCR
Casey Creek 19.4 to 21.7	Green River	5110001	CASEY	2-FS	3	3	3	3	3	10/31/2007	WAH, FC, PCR, SCR
Casey Creek 8.3 to 12.5	Green River	5110001	CASEY	2-FS	3	3	3	3	3	10/31/2007	WAH, FC, PCR, SCR
Cash Creek 0.0 to 5.8	Green River	5110005	HENDERSON	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Clay Lick Creek 4.1 to 5.3	Green River	5110001	METCALFE	5-PS	3	3	3	3	3	12/3/2002	WAH, FC, PCR, SCR
Claylick Creek 2.4 to 3.4	Green River	5110001	WARREN	5-PS	4A-NS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Clear Fork Creek 0.0 to 6.0	Green River	5110002	WARREN	2-FS	3	3	3	3	3	10/1/2007	WAH, FC, PCR, SCR

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Clifty Creek 0.0 to 13.4	Green River	5110003	TODD	2-FS	3	3	3	3	2-FS	11/12/2002	WAH, FC, PCR, SCR, OSRW
Clifty Creek 7.4 to 21.0	Green River	5110004	GRAYSON	2-FS	3	3	3	3	2-FS	11/12/2002	WAH, FC, PCR, SCR, OSRW
County Lake	Green River	5110001	METCALFE	2-FS	3	2-FS	3	3	3	11/14/2006	WAH, FC, PCR, SCR
Cox Run 0.0 to 3.4	Green River	5110001	HARDIN	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Craborchard Creek 3.4 to 7.3	Green River	5110006	HOPKINS	4A-NS	4A-NS	4A-NS	3	3	3	2/29/2008	WAH, FC, PCR, SCR
Craborchard Creek 9.1 to 10.2	Green River	5110006	HOPKINS	4A-NS	4A-NS	4A-NS	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Crooked Creek 0.0 to 3.0	Green River	5110005	DAVIESS	3	5-NS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Cypress Creek 0.0 to 6.0	Green River	5110006	McLEAN	2-FS	5-NS	5-NS	3	3	3	1/10/2008	WAH, FC, PCR, SCR
Cypress Creek 23.1 to 26.5	Green River	5110006	MUHLENBERG	5-NS	5-NS	3	3	3	3	1/14/2010	WAH, FC, PCR, SCR
Cypress Creek 26.5 to 33.6	Green River	5110006	MUHLENBERG	5-PS	2-FS	2-FS	3	3	3	3/1/2003 - 1/14/2010	WAH, FC, PCR, SCR
Daniels Creek 0.0 to 5.7	Green River	5110004	BRECKINRIDGE	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Deer Creek 0.0 to 8.4	Green River	5110005	WEBSTER	5-NS	2-FS	2-FS	3	3	3	1/9/2008	WAH, FC, PCR, SCR
Deer Creek 8.4 to 17.8	Green River	5110005	WEBSTER	2-FS	3	3	3	3	3	11/5/2007	WAH, FC, PCR, SCR
Deserter Creek 0.0 to 3.1	Green River	5110005	DAVIESS	5-PS	5-NS	3	3	3	3	3/1/2003 - 3/19/2009	WAH, FC, PCR, SCR
Dismal Creek 0.0 to 3.2	Green River	5110001	EDMONSON	2-FS	3	3	3	3	3	11/5/2007	WAH, FC, PCR, SCR
Dorsey Run 2.1 to 3.9	Green River	5110001	HARDIN	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Drakes Creek 0.0 to 23.4	Green River	5110002	WARREN	2-FS	2-FS	2-FS	5-PS	3	3	1/18/2008	WAH, FC, PCR, SCR
Drakes Creek 0.0 to 9.0	Green River	5110006	HOPKINS	4A-NS	4A-NS	4A-NS	3	3	3	2/14/2006	WAH, FC, PCR, SCR
Dry Creek 0.0 to 4.5	Green River	5110001	CASEY	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
East Branch 0.0 to 1.3	Green River	5110006	CHRISTIAN	5-PS	2-FS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
East Fork Barren River 4.2 to 8.7	Green River	5110002	MONROE	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
East Fork of Deer Creek 0.0 to 6.8	Green River	5110005	WEBSTER	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
East Fork of Little Barren River 0.0 to 15.9	Green River	5110001	METCALFE	2-FS	4A-NS	4A-PS	3	3	3	2/28/2003 - 11/30/2007	WAH, FC, PCR, SCR
East Fork of Little Barren River 18.9 to 20.7	Green River	5110001	METCALFE	2-FS	2-FS	2-FS	3	3	2-FS	10/1/2007	WAH, FC, PCR, SCR, OSRW
East Fork of Little Barren River 20.7 to 30.0	Green River	5110001	METCALFE	5-PS	4A-PS	2-FS	3	3	3	11/30/2007	WAH, FC, PCR, SCR
East Prong of Indian Camp Creek 0.0 to 6.25	Green River	5110003	BUTLER	5-PS	3	3	3	3	3	3/19/2009	WAH, FC, PCR, SCR
Eaton Branch 0.0 to 1.9	Green River	5110002	BARREN	5-PS	3	3	3	3	3	12/3/2007	WAH, FC, PCR, SCR
Elk Creek 0.0 to 5.4	Green River	5110006	HOPKINS	5-NS	3	3	3	3	3	3/1/2002	WAH, FC, PCR, SCR
Elk Creek 7.6 to 10.6	Green River	5110006	HOPKINS	3	5-NS	3	3	3	3	7/16/2001	WAH, FC, PCR, SCR
Elk Lick Creek 3.6 to 11.8	Green River	5110003	LOGAN	2-FS	3	3	3	3	3	11/12/2002	WAH, FC, PCR, SCR
Elk Pond Creek 0.0 to 4.9	Green River	5110006	MUHLENBERG	5-NS	5-NS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Ellis Fork of Damron Creek 0.0 to 3.2	Green River	5110001	RUSSELL	2-FS	3	3	3	3	2-FS	10/1/2004	WAH, FC, PCR, SCR, OSRW
Falling Timber Creek 0.0 to 6.9	Green River	5110002	BARREN	2-FS	3	3	2-FS	3	3	2/28/2003 - 11/5/2007	WAH, FC, PCR, SCR
Falling Timber Creek 10.8 to 15.2	Green River	5110002	METCALFE	2-FS	2-FS	2-FS	3	3	2-FS	1/23/2008	WAH, FC, PCR, SCR, OSRW
Fiddlers Creek 0.0 to 5.9	Green River	5110004	BRECKINRIDGE	2-FS	3	3	3	3	2-FS	11/12/2002	WAH, FC, PCR, SCR, OSRW
Flat Creek 0.0 to 10.9	Green River	5110006	HOPKINS	5-NS	5-NS	5-NS	3	3	3	12/17/2002 - 11/6/2007	WAH, FC, PCR, SCR
Forbes Creek 0.0 to 7.45	Green River	5110006	CHRISTIAN	2-FS	3	3	3	3	2-FS	12/3/2007	WAH, FC, PCR, SCR, OSRW
Ford Ditch 0.0 to 3.3	Green River	5110005	DAVIESS	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Freeman Lake	Green River	5110001	HARDIN	2-FS	3	2-FS	3	3	3	1/28/2008	WAH, FC, PCR, SCR
Gasper River 14.6 to 17.2	Green River	5110002	LOGAN	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Gasper River 7.75 to 14.6	Green River	5110002	WARREN	2-FS	2-FS	3	3	3	3	3/1/2003 - 1/18/2008	WAH, FC, PCR, SCR
Gasper River 17.2 to 35.6	Green River	5110002	LOGAN	2-FS	3	3	3	3	2-FS	11/6/2007	WAH, FC, PCR, SCR, OSRW
Gilles Ditch 0.0 to 5.4	Green River	5110005	DAVIESS	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Glens Fork 0.0 to 7.1	Green River	5110001	ADAIR	5-PS	4A-NS	4A-NS	3	3	3	3/1/2003 - 11/6/2007	WAH, FC, PCR, SCR
Goodman Springs (9000-0230)	Green River	5110001	HARDIN	2-FS	5-NS	3	3	3	3	1/25/2008	WAH, FC, PCR, SCR
Goose Creek 0.0 to 8.5	Green River	5110001	CASEY	2-FS	3	3	3	3	2-FS	11/12/2001	WAH, FC, PCR, SCR, OSRW
Goren Mill Spring (9000-0793)	Green River	5110001	HART	5-PS	5-NS	3	3	3	3	1/25/2008	WAH, FC, PCR, SCR
Graham Spring (9000-0051)	Green River	5110002	WARREN	5-PS	5-PS	3	3	3	3	1/25/2008	WAH, FC, PCR, SCR
Grapevine Lake	Green River	5110006	HOPKINS	2-FS	3	2-FS	3	3	3	11/14/2006	WAH, FC, PCR, SCR
Grassy Creek 2.1 to 4.4	Green River	5110004	OHIO	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Green River 109.3 to 151.0	Green River	5110003	BUTLER	3	3	3	2-FS	2-FS	3	3/1/2003 - 1/8/2008	WAH, FC, PCR, SCR, DWS
Green River 151.0 to 170.3	Green River	5110001	WARREN	2-FS	2-FS	2-FS	3	3	2-FS	1/8/2008	WAH, FC, PCR, SCR, OSRW
Green River 210.4 to 250.1	Green River	5110001	HART	2-FS	2-FS	2-FS	5-PS	2-FS	2-FS	3/1/2003 - 1/8/2008	WAH, FC, PCR, SCR, DWS, OSRW
Green River 250.1 to 254.2	Green River	5110001	HART	2-FS	2-FS	3	3	3	2-FS	1/30/2003	WAH, FC, PCR, SCR, OSRW
Green River 254.2to 269.8	Green River	5110001	GREEN	2-FS	2-FS	2-FS	3	3	2-FS	1/8/2008	WAH, FC, PCR, SCR, OSRW
Green River 269.8 to 276.0	Green River	5110001	GREEN	2-FS	2-FS	2-FS	3	3	2-FS	1/8/2008	WAH, FC, PCR, SCR, OSRW

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Green River 283.1 to 308.8	Green River	5110001	TAYLOR	2-FS	5-NS	2-FS	2-FS	2-FS	2-FS	1/9/2008	WAH, FC, PCR, SCR, DWS, OSRW
Green River 328.3 to 344.8	Green River	5110001	ADAIR	2-FS	2-FS	2-FS	3	3	3	1/9/2008	WAH, FC, PCR, SCR
Green River 358.8 to 366.4	Green River	5110001	CASEY	2-FS	3	3	3	3	3	11/12/2002	WAH, FC, PCR, SCR
Green River 374.7 to 383.8	Green River	5110001	LINCOLN	2-FS	3	3	3	2-FS	3	1/9/2008	WAH, FC, PCR, SCR, DWS
Green River 46.1 to 55.0	Green River	5110005	McLEAN	2-FS	3	3	3	2-FS	3	1/8/2008	WAH, FC, PCR, SCR, DWS
Green River 63.2 to 71.7	Green River	5110005	McLEAN	3	3	3	3	2-FS	3	1/8/2008	WAH, FC, PCR, SCR, DWS
Green River 0.0 to 28.0	Green River	5110005	HENDERSON	2-FS	3	3	3	3	3	1/7/2008	WAH, FC, PCR, SCR
Green River 276.0 to 283.1	Green River	5110001	GREEN	3	2-FS	2-FS	2-FS	3	2-FS	1/8/2008	WAH, FC, PCR, SCR, OSRW
Green River 71.7 to 94.2	Green River	5110003	MUHLENBERG	2-FS	5-PS	2-FS	2-FS	2-FS	3	1/8/2008	WAH, FC, PCR, SCR, DWS
Green River Reservoir	Green River	5110001	TAYLOR	2-FS	3	2-FS	5-PS	2-FS	3	10/23/2006	WAH, FC, PCR, SCR, DWS
Groves Creek 0.0 to 6.4	Green River	5110005	WEBSTER	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Halls Creek 4.8 to 9.6	Green River	5110004	OHIO	5-PS	3	3	3	3	5-NS	1/28/2008	WAH, FC, PCR, SCR, OSRW
Havana Creek 0.0 to 2.0	Green River	5110005	WEBSTER	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Head of Rough River Spring 154.85 to 155.8	Green River	5110004	HARDIN	5-PS	5-NS	3	3	3	3	1/25/2008	WAH, FC, PCR, SCR
Indian Camp Creek 0.1 to 3.1	Green River	5110003	BUTLER	5-PS	2-FS	3	3	3	3	3/1/2003 - 11/6/2007	WAH, FC, PCR, SCR
Indian Camp Creek 3.1 to 10.4	Green River	5110003	BUTLER	5-PS	3	3	3	3	3	11/6/2007	WAH, FC, PCR, SCR
Indian Creek 0.0 to 7.5	Green River	5110003	WARREN	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Indian Creek 0.6 to 5.3	Green River	5110002	MONROE	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Isaacs Creek 0.0 to 7.3	Green River	5110006	MUHLENBERG	5-NS	5-NS	5-NS	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Jarrels Creek 0.0 to 1.8	Green River	5110006	MUHLENBERG	5-NS	5-NS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Jarret Fork 0.0 to 1.1	Green River	5110004	GRAYSON	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Jenny Hollow Branch 0.0 to 2.4	Green River	5110004	OHIO	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Joes Branch 0.0 to 4.4	Green River	5110005	DAVIESS	5-PS	3	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Joes Run 0.0 to 4.8	Green River	5110005	DAVIESS	5-PS	3	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Knoblick Creek 0.0 to 2.1	Green River	5110005	DAVIESS	3	5-NS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Knoblick Creek 0.0 to 9.1	Green River	5110005	WEBSTER	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Lake Liberty	Green River	5110001	CASEY	2-FS	3	2-FS	3	3	3	11/14/2006	WAH, FC, PCR, SCR, DWS
Lake Luzerne	Green River	5110003	MUHLENBERG	2-FS	3	3	3	5-PS	3	1/1/1992	WAH, FC, PCR, SCR, DWS
Lake Malone	Green River	5110003	LOGAN	2-FS	3	2-FS	5-PS	2-FS	3	11/14/2006	WAH, FC, PCR, SCR, DWS
Lake Washburn	Green River	5110004	OHIO	2-FS	3	2-FS	3	3	3	11/14/2006	WAH, FC, PCR, SCR
Laurel Creek of Mud River 2.1 to 6.8	Green River	5110003	LOGAN	2-FS	3	3	3	3	3	11/6/2007	WAH, FC, PCR, SCR
Lewis Creek 0.0 to 11.8	Green River	5110003	OHIO	5-PS	2-FS	3	3	3	3	3/1/2001	WAH, FC, PCR, SCR
Lewisburg Lake	Green River	5110003	LOGAN	3	3	3	3	3	3		WAH, FC, PCR, SCR
Lick Creek 0.0 to 10.2	Green River	5110002	SIMPSON	2-FS	3	3	3	3	2-FS	3/19/2009	WAH, FC, PCR, SCR, OSRW
Lick Creek 0.0 to 3.7	Green River	5110005	HENDERSON	5-NS	3	3	3	3	3	3/1/2001	WAH, FC, PCR, SCR
Lick Creek 5.0 to 13.8	Green River	5110005	HENDERSON	5-NS	3	3	3	3	3	2/1/2006	WAH, FC, PCR, SCR
Linders Creek 0.0 to 7.9	Green River	5110004	HARDIN	2-FS	3	3	3	3	2-FS	10/1/2007	WAH, FC, PCR, SCR, OSRW

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Lindy Creek 0.0 to 0.9	Green River	5110001	HART	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Line Creek 0.0 to 7.2	Green River	5110002	MONROE	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Little Barren River 0.0 to 9.8	Green River	5110001	GREEN	2-FS	4A-PS	2-FS	3	3	3	1/2/2008	WAH, FC, PCR, SCR
Little Barren River 9.8 to 15.7	Green River	5110001	GREEN	3	4A-NS	4A-NS	3	3	3	1/2/2008	WAH, FC, PCR, SCR
Little Beaverdam Creek 0.0 to 11.4	Green River	5110001	WARREN	5-PS	3	3	3	3	5-PS	11/14/2007	WAH, FC, PCR, SCR, OSRW
Little Brush Creek 3.2 to 13.2	Green River	5110001	GREEN	2-FS	4A-NS	2-FS	3	3	3	10/1/2007 - 11/14/2007	WAH, FC, PCR, SCR
Little Cypress Creek 0.0 to 8.7	Green River	5110006	MUHLENBERG	5-PS	5-NS	3	3	3	3	1/14/2010	WAH, FC, PCR, SCR
Little Cypress Creek 8.7 to 10.1	Green River	5110006	MUHLENBERG	5-NS	3	3	3	3	3	1/14/2010	WAH, FC, PCR, SCR
Little Muddy Creek 6.6 to 13.15	Green River	5110002	BUTLER	5-PS	3	3	3	3	3	3/1/2001	WAH, FC, PCR, SCR
Little Muddy Creek 5.2 to 6.6	Green River	5110002	BUTLER	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Little Pitman Creek 10.1 to 11.3	Green River	5110001	TAYLOR	2-FS	4A-NS	2-FS	3	3	3	2/5/2007	WAH, FC, PCR, SCR
Little Pitman Creek 0.0 to 10.1	Green River	5110001	TAYLOR	2-FS	4A-NS	4A-PS	3	3	3	10/1/2007 - 11/1/2007	WAH, FC, PCR, SCR
Little Russell Creek 0.0 to 6.1	Green River	5110001	GREEN	2-FS	4A-PS	2-FS	3	3	3	12/6/2007	WAH, FC, PCR, SCR
Little Short Creek 0.0 to 3.1	Green River	5110004	GRAYSON	2-FS	2-FS	3	3	3	2-FS	10/1/2007	WAH, FC, PCR, SCR, OSRW
Little Trammel Creek 0.0 to 2.4	Green River	5110002	ALLEN	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Long Creek 0.0 to 3.3	Green River	5110006	MUHLENBERG	5-PS	3	3	3	3	3	10/1/2007	WAH, FC, PCR, SCR
Long Falls Creek 0.0 to 7.6	Green River	5110005	McLEAN	5-PS	5-NS	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Long Falls Creek 7.6 to 11.9	Green River	5110005	McLEAN	5-PS	5-NS	5-NS	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Long Fork 0.5 to 1.7	Green River	5110002	MONROE	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Long Lick Creek 4.6 to 7.3	Green River	5110004	BRECKINRIDGE	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Lost River Rise (9000-0054)	Green River	5110002	WARREN	2-FS	5-NS	3	3	3	3	1/24/2008	WAH, FC, PCR, SCR
Lynn Camp Creek 0.0 to 8.5	Green River	5110001	HART	2-FS	4A-NS	4A-NS	3	3	2-FS	12/6/2007	WAH, FC, PCR, SCR, OSRW
Mahurin Spring (9000-0202)	Green River	5110004	GRAYSON	2-FS	5-NS	3	3	3	3	1/24/2008	WAH, FC, PCR, SCR
McClure Fork of Bear Creek 3.1 to 4.1	Green River	5110001	GRAYSON	5B-NS	3	3	3	3	3	12/6/2007	WAH, FC, PCR, SCR
McCoy Bluehole Spring (9000-0792)	Green River	5110001	HART	2-FS	5-NS	3	3	3	2-FS	1/25/2008	WAH, FC, PCR, SCR, OSRW
McFarland Creek 1.5 to 5.0	Green River	5110006	CHRISTIAN	2-FS	3	3	3	3	2-FS	11/12/2002	WAH, FC, PCR, SCR, OSRW
McGrady Creek 0.0 to 1.9	Green River	5110004	OHIO	5-PS	2-FS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Meadow Creek 0.0 to 0.8	Green River	5110001	GREEN	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Meadow Creek 0.8 to 7.4	Green River	5110001	GREEN	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Meeting Creek 5.2 to 14.0	Green River	5110004	HARDIN	5-PS	3	3	3	3	5-PS	12/6/2007	WAH, FC, PCR, SCR, OSRW
Middle Fork of Drakes Creek 0.0 to 7.8	Green River	5110002	WARREN	5-PS	3	3	3	3	3	12/6/2007	WAH, FC, PCR, SCR
Middle Fork of Drakes Creek 11.9 to 18.35	Green River	5110002	ALLEN	2-FS	3	3	3	3	3	12/6/2007	WAH, FC, PCR, SCR
Middle Pitman Creek 0.0 to 7.7	Green River	5110001	GREEN	2-FS	4A-NS	4A-NS	3	3	3	12/6/2007	WAH, FC, PCR, SCR
Middle Pitman Creek 8.2 to 10.1	Green River	5110001	TAYLOR	2-FS	4A-NS	2-FS	3	3	3	12/6/2007	WAH, FC, PCR, SCR
Mill Creek 0.0 to 2.6	Green River	5110001	TAYLOR	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Mill Creek 0.0 to 4.2	Green River	5110004	OHIO	3	5-NS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Mill Creek 6.0 to 7.0	Green River	5110002	MONROE	3	3	3	3	2-FS	3	12/6/2007	WAH, FC, PCR, SCR, DWS
Mill Creek Lake (Monroe County)	Green River	5110002	MONROE	2-FS	3	2-FS	3	2-FS	3	11/14/2006	WAH, FC, PCR, SCR, DWS

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Mill Spring (9000-1193)	Green River	5110001	GRAYSON	2-FS	5-NS	3	3	3	3	1/25/2008	WAH, FC, PCR, SCR
Motts Lick Creek 0.0 to 3.3	Green River	5110003	LOGAN	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Mud River 30.9 to 52.2	Green River	5110003	LOGAN	3	2-FS	3	5-NS	3	3	1/2/2008	WAH, FC, PCR, SCR
Mud River 52.2 to 64.0	Green River	5110003	LOGAN	3	3	3	5-NS	3	3	3/1/2003	WAH, FC, PCR, SCR
Mud River 9.1 to 30.9	Green River	5110003	MUHLENBERG	5-NS	2-FS	2-FS	5-NS	3	3	1/2/2008	WAH, FC, PCR, SCR
Mud River 0.0 to 9.1	Green River	5110003	MUHLENBERG	3	3	3	5-PS	3	3	12/6/2007	WAH, FC, PCR, SCR
Muddy Creek 0.0 to 5.9	Green River	5110003	BUTLER	2-FS	5-PS	3	3	3	3	1/18/2008	WAH, FC, PCR, SCR
Muddy Creek 1.9 to 4.9	Green River	5110004	OHIO	5-NS	2-FS	3	3	3	3	2/28/2003	WAH, FC, PCR, SCR
Muddy Creek 5.8 to 9.1	Green River	5110004	OHIO	5-PS	3	3	3	3	3	2/19/2008	WAH, FC, PCR, SCR
Muddy Creek 8.6 to 15.2	Green River	5110003	BUTLER	5-PS	3	3	3	3	3	12/6/2007	WAH, FC, PCR, SCR
Muddy Creek 9.1 to 15.5	Green River	5110004	OHIO	2-FS	3	3	3	3	2-FS	11/12/2002	WAH, FC, PCR, SCR, OSRW
Muddy Creek 0.0 to 5.0	Green River	5110004	OHIO	5-PS	3	3	3	3	3	8/2/2003	WAH, FC, PCR, SCR
Muddy Fork 0.0 to 4.65	Green River	5110006	MUHLENBERG	2-FS	3	3	3	3	3	1/15/2010	WAH, FC, PCR, SCR
Narge Creek 2.6 to 4.2	Green River	5110006	HOPKINS	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
No Creek 0.5 to 9.2	Green River	5110004	OHIO	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Nolin River 88.2 to 98.5	Green River	5110001	HARDIN	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Nolin River 0.0 to 7.7	Green River	5110001	EDMONSON	2-FS	3	3	3	3	3	10/25/2007	WAH, FC, PCR, SCR
Nolin River 37.6 to 88.2	Green River	5110001	HARDIN	2-FS	4A-PS	3	2-FS	2-FS	3	3/1/2003 - 10/25/2007	WAH, FC, PCR, SCR, DWS
Nolin River Reservoir	Green River	5110001	GRAYSON	1-FS	1-FS	1-FS	1-FS	1-FS	1-FS	10/24/2007	WAH, FC, PCR, SCR, DWS

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Nolynn Spring (9000-2673)	Green River	5110001	LARUE	5-PS	5-NS	3	3	3	3	1/25/2008	WAH, FC, PCR, SCR
North Branch of South Fork of Panther Creek 0.0 to 4.2	Green River	5110005	HANCOCK	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
North Fork of Barnett Creek 0.0 to 2.3	Green River	5110004	OHIO	5-PS	3	3	3	3	3	3/19/2009	WAH, FC, PCR, SCR
North Fork of Nolin River 3.0 to 7.0	Green River	5110001	LARUE	5-NS	3	3	3	2-FS	3	12/7/2007	WAH, FC, PCR, SCR, DWS
North Fork of Panther Creek 4.2 to 9.1	Green River	5110005	DAVIESS	5-PS	5-NS	3	3	3	3	3/1/2003 - 12/7/2007	WAH, FC, PCR, SCR
North Fork of Panther Creek 0.0 to 4.2	Green River	5110005	DAVIESS	5-PS	3	3	3	3	3	10/1/2007	WAH, FC, PCR, SCR
North Fork of Rough River 19.4 to 22.0	Green River	5110004	BRECKINRIDGE	2-FS	3	3	3	3	3	12/7/2007	WAH, FC, PCR, SCR
North Fork of Rough River 22.0 to 29.5	Green River	5110004	BRECKINRIDGE	2-FS	3	3	3	3	2-FS	10/1/2007	WAH, FC, PCR, SCR, OSRW
North Fork Panther Creek 9.7 to 12.7	Green River	5110005	DAVIESS	5-PS	3	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Nortonville Lake	Green River	5110006	HOPKINS	3	3	3	2-FS	3	3	1/29/2008	WAH, FC, PCR, SCR
Old Panther Creek 0.4 to 5.7	Green River	5110005	DAVIESS	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Old Panther Creek 5.7 to 8.8	Green River	5110005	DAVIESS	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Otter Creek 0.0 to 6.3	Green River	5110006	HOPKINS	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Panther Creek 0.1 to 3.0	Green River	5110005	DAVIESS	5-NS	5-NS	5-NS	3	3	3	1/22/2008	WAH, FC, PCR, SCR
Panther Creek 17.9 to 20.4	Green River	5110005	DAVIESS	5-NS	3	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Panther Creek 0.0 to 3.6	Green River	5110003	BUTLER	5-PS	3	3	3	3	3	11/2/2008	WAH, FC, PCR, SCR
Panther Creek 3.0 to 5.9	Green River	5110005	DAVIESS	3	5-NS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Peter Creek 11.6 to 18.4	Green River	5110002	BARREN	2-FS	3	3	3	3	2-FS	11/12/2002	WAH, FC, PCR, SCR, OSRW
Pettys Fork 0.0 to 6.1	Green River	5110001	ADAIR	5-PS	4A-PS	4A-PS	3	3	3	3/1/2003 - 10/30/2007	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Pigeon Creek 0.0 to 3.4	Green River	5110004	OHIO	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Pleasant Run 0.0 to 2.1	Green River	5110006	HOPKINS	4A-NS	4A-NS	4A-NS	3	3	3		WAH, FC, PCR, SCR
Pleasant Run 2.1 to 7.8	Green River	5110006	HOPKINS	4A-NS	4A-NS	4A-NS	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Plum Creek 0.0 to 1.7	Green River	5110003	MUHLENBERG	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Plum Creek 1.7 to 3.9	Green River	5110006	MUHLENBERG	5-NS	5-NS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Pond Creek 0.0 to 4.95	Green River	5110003	MUHLENBERG	2-FS	2-FS	2-FS	3	3	3	1/18/2008	WAH, FC, PCR, SCR
Pond Creek 14.4 to 18.1	Green River	5110003	MUHLENBERG	4A-PS	4A-NS	4A-NS	3	3	3	12/31/2007	WAH, FC, PCR, SCR
Pond Creek 18.1 to 22.1	Green River	5110003	MUHLENBERG	4A-PS	4A-NS	4A-NS	3	3	3	12/31/2007	WAH, FC, PCR, SCR
Pond Creek 4.95 to 7.5	Green River	5110003	MUHLENBERG	5-NS	2-FS	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Pond Creek 7.5 to 11.7	Green River	5110003	MUHLENBERG	4A-NS	4A-NS	4A-NS	3	3	3	12/31/2007	WAH, FC, PCR, SCR
Pond Creek 11.7 to 14.4	Green River	5110003	MUHLENBERG	4A-NS	4A-NS	4A-NS	3	3	3	12/31/2007	WAH, FC, PCR, SCR
Pond Drain 0.0 to 2.3	Green River	5110006	McLEAN	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Pond River 1.0 to 20.8	Green River	5110006	HOPKINS	5-PS	2-FS	2-FS	3	3	3	1/18/2008	WAH, FC, PCR, SCR
Pond River 0.0 to 1.0	Green River	5110006	HOPKINS	3	2-FS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Pond River 20.8 to 31.2	Green River	5110006	MUHLENBERG	5-PS	3	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Pond River 57.7 to 61.2	Green River	5110006	CHRISTIAN	2-FS	2-FS	2-FS	3	3	3	1/18/2008	WAH, FC, PCR, SCR
Pond River 61.2 to 71.4	Green River	5110006	MUHLENBERG	5-PS	2-FS	3	3	3	3	3/2/2003	WAH, FC, PCR, SCR
Pond Run 0.0 to 6.8	Green River	5110004	OHIO	2-FS	5-PS	3	3	3	2-FS	10/1/2007 - 1/23/2008	WAH, FC, PCR, SCR, OSRW
Poplar Grove Branch 0.0 to 3.4	Green River	5110001	TAYLOR	3	4A-NS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Puncheon Creek 0.0 to 3.8	Green River	5110002	ALLEN	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Render Creek 0.0 to 3.6	Green River	5110003	OHIO	4A-NS	4A-NS	4A-NS	3	3	3	2/14/2006	WAH, FC, PCR, SCR
Rhodes Creek 0.0 to 1.9	Green River	5110005	DAVIESS	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Rhodes Creek 0.0 to 2.2	Green River	5110005	DAVIESS	5-NS	3	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Rhodes Creek 2.2 to 7.5	Green River	5110005	DAVIESS	5-NS	3	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Richland Slough 0.0 to 3.95	Green River	5110005	HENDERSON	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Robinson Creek 13.7 to 18.8	Green River	5110001	TAYLOR	2-FS	3	3	3	3	3	10/1/2007	WAH, FC, PCR, SCR
Robinson Creek 9.8 to 11.0	Green River	5110001	TAYLOR	5-PS	3	3	3	3	3	12/13/2007	WAH, FC, PCR, SCR
Rocky Creek 4.6 to 12.2	Green River	5110003	MUHLENBERG	2-FS	3	3	3	3	3	10/1/2007	WAH, FC, PCR, SCR
Rough River 0.0 to 10.4	Green River	5110004	McLEAN	5-NS	5-NS	5-PS	3	3	3	1/2/2007 - 1/2/2008	WAH, FC, PCR, SCR
Rough River 27.2 to 28.9	Green River	5110004	OHIO	3	2-FS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Rough River 125.2 to 149.4	Green River	5110004	HARDIN	2-FS	5-PS	3	3	3	2-FS	11/12/2002 - 10/25/2007	WAH, FC, PCR, SCR, OSRW
Rough River 29.8 to 30.8	Green River	5110004	OHIO	3	3	3	3	2-FS	3	1/2/2008	WAH, FC, PCR, SCR, DWS
Rough River 55.1 to 64.3	Green River	5110004	OHIO	5-NS	5-NS	5-NS	3	3	3	1/2/2007 - 1/2/2008	WAH, FC, PCR, SCR
Rough River 87.0 to 90.3	Green River	5110004	BRECKINRIDGE	2-FS	3	3	3	3	3	10/24/2007	WAH, FC, PCR, SCR
Rough River Reservoir	Green River	5110004	HARDIN	2-FS	2-FS	2-FS	5-PS	2-FS	3	10/23/2007	WAH, FC, PCR, SCR, DWS
Round Stone Creek 0.0 to 10.2	Green River	5110001	HART	2-FS	3	3	3	3	3	3/1/2003	CAH, FC, PCR, SCR
Russell Creek 0.0 to 7.2	Green River	5110001	GREEN	2-FS	2-FS	3	3	3	2-FS	12/18/2007	WAH, FC, PCR, SCR, OSRW
Russell Creek 12.8 to 24.1	Green River	5110001	GREEN	2-FS	3	3	3	3	2-FS	3/1/2003	WAH, FC, PCR, SCR, OSRW

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Russell Creek 24.1 to 40.0	Green River	5110001	ADAIR	2-FS	4A-NS	4A-PS	3	3	2-FS	12/18/2007	WAH, FC, PCR, SCR, OSRW
Russell Creek 40.0 to 42.2	Green River	5110001	ADAIR	2-FS	4A-NS	4A-NS	3	3	3	3/1/2003 - 12/18/2007	WAH, FC, PCR, SCR
Russell Creek 42.2 to 60.4	Green River	5110001	ADAIR	2-FS	3	3	3	2-FS	2-FS	12/18/2007	WAH, FC, PCR, SCR, DWS, OSRW
Russell Creek 60.4 to 66.3	Green River	5110001	ADAIR	2-FS	4A-NS	4A-NS	3	3	2-FS	12/18/2007	WAH, FC, PCR, SCR, OSRW
Russell Creek 7.2 to 12.8	Green River	5110001	GREEN	2-FS	2-FS	2-FS	3	3	2-FS	12/18/2007	WAH, FC, PCR, SCR, OSRW
Salem Lake	Green River	5110001	LARUE	2-FS	3	2-FS	3	3	3	11/14/2006	WAH, FC, PCR, SCR, DWS
Salt Lick Creek 0.0 to 1.4	Green River	5110002	WARREN	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Salt Lick Creek 0.0 to 3.7	Green River	5110003	MUHLENBERG	2-FS	3	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Salt Lick Creek 1.8 to 4.6	Green River	5110002	MONROE	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Sandlick Creek 0.0 to 4.0	Green River	5110003	MUHLENBERG	5-PS	3	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Shanty Hollow Lake	Green River	5110001	WARREN	2-FS	3	2-FS	3	3	3	11/14/2006	WAH, FC, PCR, SCR
Sixes Creek 0.0 to 5.6	Green River	5110003	OHIO	2-FS	3	3	3	3	2-FS	12/18/2007	WAH, FC, PCR, SCR, OSRW
Skaggs Creek 12.7 to 23.5	Green River	5110002	BARREN	2-FS	5-NS	3	3	3	3	10/22/2007	WAH, FC, PCR, SCR
Skees KW#1 (9000-1398)	Green River	5110001	HARDIN	5-PS	5-NS	3	3	3	3	1/25/2008	WAH, FC, PCR, SCR
Smith Creek 0.0 to 4.4	Green River	5110004	OHIO	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
South Fork 0.0 to 2.2	Green River	5110001	CASEY	2-FS	3	3	3	3	3	3/1/2001	WAH, FC, PCR, SCR
South Fork 2.2 to 7.5	Green River	5110001	CASEY	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
South Fork Nolin River 0.0 to 6.4	Green River	5110001	LARUE	2-FS	3	3	3	3	3	3/1/2001	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
South Fork of Beaver Creek 0.0 to 3.2	Green River	5110002	BARREN	5-PS	3	3	3	3	3	10/22/2007	WAH, FC, PCR, SCR
South Fork of Little Barren River 0.0 to 23.1	Green River	5110001	METCALFE	2-FS	4A-NS	4A-NS	3	3	3	12/18/2007	WAH, FC, PCR, SCR
South Fork of Little Barren River 23.1 to 30.1	Green River	5110001	METCALFE	5-PS	4A-PS	2-FS	3	3	3	12/18/2007	WAH, FC, PCR, SCR
South Fork of Panther Creek 0.0 to 2.4	Green River	5110005	DAVIESS	5-PS	5-NS	3	3	3	3	1/22/2008	WAH, FC, PCR, SCR
South Fork of Panther Creek 14.0 to 18.3	Green River	5110005	DAVIESS	3	5-NS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
South Fork of Panther Creek 2.4 to 9.55	Green River	5110005	DAVIESS	5-NS	3	3	3	3	3	12/1/2001	WAH, FC, PCR, SCR
South Fork of Panther Creek 9.55 to 14.0	Green River	5110005	DAVIESS	5-PS	5-NS	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
South Fork of Russell Creek 0.0 to 6.4	Green River	5110001	GREEN	2-FS	2-FS	2-FS	3	3	3	12/19/2002 - 12/19/2007	WAH, FC, PCR, SCR
Spa Lake	Green River	5110003	LOGAN	2-FS	3	5-PS	3	3	3	11/14/2006	WAH, FC, PCR, SCR, DWS
Sportsman Club Lake	Green River	5110001	TAYLOR	2-FS	3	3	3	3	3	11/14/2006	WAH, FC, PCR, SCR
Sputzman Creek 1.3 to 4.4	Green River	5110005	HENDERSON	5-PS	3	3	3	3	3	11/12/2002	WAH, FC, PCR, SCR
Sulphur Branch 0.0 to 3.0	Green River	5110001	EDMONSON	2-FS	3	3	3	3	2-FS	10/1/2007	WAH, FC, PCR, SCR, OSRW
Sulphur Creek 0.0 to 10.7	Green River	5110001	ADAIR	3	4A-PS	2-FS	3	3	3	12/19/2007	WAH, FC, PCR, SCR
Sulphur Creek 10.7 to 15.4	Green River	5110001	ADAIR	2-FS	3	3	3	3	3	12/19/2007	WAH, FC, PCR, SCR
Sulphur Fork Creek 0.0 to 5.3	Green River	5110002	ALLEN	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Sulphur Fork Creek 5.3 to 7.9	Green River	5110002	ALLEN	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Sunfish Creek 6.8 to 10.3	Green River	5110001	GRAYSON	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Sweepstakes Branch 1.0 to 4.0	Green River	5110005	DAVIESS	5-PS	3	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Sycamore Creek 0.0 to 1.6	Green River	5110001	EDMONSON	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Taylor Fork 0.0 to 4.0	Green River	5110001	GRAYSON	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Thompson Branch 0.0 to 1.5	Green River	5110002	SIMPSON	2-FS	3	3	3	3	2-FS	9/13/2007	WAH, FC, PCR, SCR, OSRW
Three Lick Fork 0.0 to 3.3	Green River	5110004	OHIO	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Town Branch 0.0 to 6.2	Green River	5110003	LOGAN	3	3	3	5-NS	3	3	12/19/2007	WAH, FC, PCR, SCR
Trammel Creek of Drakes Creek 0.0 to 24.0	Green River	5110002	WARREN	2-FS	2-FS	3	3	3	2-FS	1/18/2008	CAH, FC, PCR, SCR, OSRW
Trammel Creek of Drakes Creek 24.0 to 30.6	Green River	5110002	ALLEN	2-FS	3	3	3	3	2-FS	11/12/2002	CAH, FC, PCR, SCR, OSRW
Tules Creek 5.2 to 13.5	Green River	5110004	BRECKINRIDGE	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Two Mile Creek 0.0 to 4.7	Green River	5110005	DAVIESS	2-FS	3	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Upper Brush Creek 0.0 to 2.8	Green River	5110001	TAYLOR	3	2-FS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
UT of Cypress Creek 0.0 to 3.4	Green River	5110006	MUHLENBERG	5-NS	5-NS	3	3	3	3	1/14/2010	WAH, FC, PCR, SCR
UT of White Oak Creek 0.0 to 3.3	Green River	5110001	ADAIR	2-FS	3	3	3	3	2-FS	12/20/2007	WAH, FC, PCR, SCR, OSRW
UT to Beaverdam Creek 0.0 to 1.3	Green River	5110001	EDMONSON	2-FS	3	3	3	3	3	10/29/2007	WAH, FC, PCR, SCR
UT to Bull Run Creek 0.1 to 1.0	Green River	5110001	CASEY	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
UT to Butler Branch 0.0 to 1.7	Green River	5110001	ADAIR	5-PS	3	3	3	3	3	3/1/2001	WAH, FC, PCR, SCR
UT to Cool Springs Creek 0.0 to 1.6	Green River	5110001	ADAIR	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
UT to Cypress Creek 0.0 to 1.45	Green River	5110006	MUHLENBERG	5-PS	5-PS	3	3	3	3	1/15/2010	WAH, FC, PCR, SCR
UT to Cypress Creek 0.0 to 1.1	Green River	5110006	MUHLENBERG	5-NS	2-FS	3	3	3	3	1/15/2010	WAH, FC, PCR, SCR
UT to Cypress Creek 0.0 to 3.0	Green River	5110006	MUHLENBERG	3	5-NS	3	3	3	3	1/14/2010	WAH, FC, PCR, SCR
UT to Cypress Creek 0.0 to 8.1	Green River	5110006	MUHLENBERG	5-PS	3	3	3	3	3	10/31/2007	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
UT to Dorsey Run 0.0 to 1.0	Green River	5110001	HARDIN	5B-NS	3	3	3	3	3	11/14/2007	WAH, FC, PCR, SCR
UT to Drakes Creek 0.0 to 2.2	Green River	5110006	HOPKINS	5-PS	3	3	3	3	3	11/5/2007	WAH, FC, PCR, SCR
UT to Elk Creek 0.0 to 1.0	Green River	5110006	HOPKINS	3	5-NS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
UT to Elk Creek 0.0 to 3.9	Green River	5110006	HOPKINS	5-PS	3	3	3	3	3	11/5/2006	WAH, FC, PCR, SCR
UT to Flat Creek 0.0 to 3.1	Green River	5110006	HOPKINS	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
UT to Flat Creek 3.1 to 4.1	Green River	5110006	HOPKINS	3	5-NS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
UT to Gasper River 0.0 to 3.1	Green River	5110002	LOGAN	2-FS	3	3	3	3	3	11/6/2007	WAH, FC, PCR, SCR
UT to Green River 0.0 to 0.9	Green River	5110001	CASEY	5B-NS	3	3	3	3	3	12/6/2007	WAH, FC, PCR, SCR
UT to Green River 0.0 to 3.2	Green River	5110001	ADAIR	2-FS	3	3	3	3	2-FS	11/6/2007	WAH, FC, PCR, SCR, OSRW
UT to Hatter Creek 1.2 to 1.8	Green River	5110001	CASEY	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
UT to Joes Branch 0.0 to 2.8	Green River	5110005	DAVIESS	5B-NS	3	3	3	3	3	11/6/2007	WAH, FC, PCR, SCR
UT to Little Cypress Creek 0.0 to 1.75	Green River	5110006	MUHLENBERG	5-NS	5-NS	3	3	3	3	1/15/2010	WAH, FC, PCR, SCR
UT to Little Cypress Creek 0.0 to 3.25	Green River	5110002	MUHLENBERG	5-NS	5-NS	3	3	3	3	1/21/2010	WAH, FC, PCR, SCR
UT to Mays Run 0.0 to 0.4	Green River	5110004	HARDIN	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
UT to Middle Pitman Creek 0.0 to 0.6	Green River	5110001	TAYLOR	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
UT to Nolin River 0.0 to 0.4	Green River	5110001	EDMONSON	3	5B-NS	5B-NS	3	3	3	1/2/2008	WAH, FC, PCR, SCR
UT to Nolin River 0.15 to 0.9	Green River	5110001	HARDIN	5B-NS	3	3	3	3	3	12/7/2007	WAH, FC, PCR, SCR
UT to North Fork of Panther Creek 0.0 to 0.7	Green River	5110005	DAVIESS	5B-NS	3	3	3	3	3	12/7/2007	WAH, FC, PCR, SCR
UT to Pond Creek 0.0 to 2.4	Green River	5110003	MUHLENBERG	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
UT to Pond Run 0.0 to 0.8	Green River	5110004	BRECKINRIDGE	2-FS	3	3	3	3	3	11/12/2002	WAH, FC, PCR, SCR
UT to Richland Creek 0.0 to 1.7	Green River	5110002	BUTLER	5-NS	3	3	3	3	3	12/13/2007	WAH, FC, PCR, SCR
UT to South Fork of Russell Creek 0.0 to 0.6	Green River	5110001	GREEN	4A-NS	3	3	3	3	3	7/31/2002	WAH, FC, PCR, SCR
UT to Tallow Creek 0.0 to 1.7	Green River	5110001	TAYLOR	2-FS	3	3	3	3	3	12/21/2007	WAH, FC, PCR, SCR
UT to UT of Rays Branch 0.0 to 0.25	Green River	5110002	WARREN	5B-NS	5B-NS	3	3	3	3	12/13/2007	WAH, FC, PCR, SCR
UT to UT to Little Cypress Creek 0.0 to 2.6	Green River	5110002	MUHLENBERG	5-NS	5-NS	3	3	3	3	1/21/2010	WAH, FC, PCR, SCR
UT to Welch Creek 0.0 to 0.9	Green River	5110003	BUTLER	5B-NS	5B-NS	3	3	3	3	12/19/2007	WAH, FC, PCR, SCR
UT to West Bays Fork 0.0 to 1.0	Green River	5110002	ALLEN	5-PS	3	3	3	3	3	12/19/2007	WAH, FC, PCR, SCR
UT to West Fork of Lewis Creek 0.0 to 2.2	Green River	5110003	OHIO	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
UT to West Prong of Indian Camp Creek 0.0 to 0.8	Green River	5110003	OHIO	5B-NS	3	3	3	3	3	12/20/2007	WAH, FC, PCR, SCR
UT to Wiggington Creek 0.9 to 1.9	Green River	5110002	LOGAN	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Valley Creek 0.0 to 3.6	Green River	5110001	HARDIN	5-PS	4A-NS	3	3	3	3	1/23/2008	WAH, FC, PCR, SCR
Valley Creek 10.8 to 12.6	Green River	5110001	HARDIN	3	4A-NS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Valley Creek 8.4 to 10.8	Green River	5110001	HARDIN	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Walters Creek 0.0 to 2.5	Green River	5110001	LARUE	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Welch Creek 0.0 to 18.4	Green River	5110003	BUTLER	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
West Fork of Drakes Creek 0.0 to 23.3	Green River	5110002	SIMPSON	2-FS	2-FS	3	5-PS	3	3	1/4/2008 - 1/18/2008	WAH, FC, PCR, SCR
West Fork of Drakes Creek 26.7 to 32.1	Green River	5110002	SIMPSON	2-FS	3	3	5-PS	3	3	12/19/2007	WAH, FC, PCR, SCR
West Fork of Drakes Creek Reservoir	Green River	5110002	SIMPSON	3	3	3	3	2-FS	3	1/29/2008	WAH, FC, PCR, SCR, DWS

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
West Fork of Pond River 1.6 to 8.7	Green River	5110006	CHRISTIAN	5-PS	2-FS	2-FS	3	3	3	1/10/2008	WAH, FC, PCR, SCR
West Fork of Pond River 20.3 to 26.0	Green River	5110006	CHRISTIAN	5-NS	3	3	3	3	5-NS	12/20/2007	WAH, FC, PCR, SCR, OSRW
West Fork of Pond River 8.7 to 20.3	Green River	5110006	CHRISTIAN	2-FS	2-FS	3	3	3	2-FS	11/12/2002	WAH, FC, PCR, SCR, OSRW
Wolf Branch Ditch 0.0 to 4.1	Green River	5110005	DAVIESS	5-PS	3	3	3	3	3	12/17/2002	WAH, FC, PCR, SCR
Wolf Lick Creek 0.0 to 14.6	Green River	5110003	LOGAN	5-PS	2-FS	3	3	3	3	1/18/2008	WAH, FC, PCR, SCR
Arnolds Creek 0.0 to 10.8	Kentucky River	5100205	GRANT	5-PS	3	3	3	3	3	7/22/1999	WAH, FC, PCR, SCR
Back Creek 0.0 to 4.7	Kentucky River	5100205	GARRARD	2-FS	3	3	3	3	3	9/17/1999	WAH, FC, PCR, SCR
Backbone Creek 0.0 to 1.65	Kentucky River	5100205	FRANKLIN	2-FS	3	3	3	3	2-FS	1/27/2010	WAH, FC, PCR, SCR, OSRW
Bailey Run 0.0 to 2.9	Kentucky River	5100205	ANDERSON	5-PS	3	3	3	3	3	10/1/2004	WAH, FC, PCR, SCR
Balls Branch 0.0 to 4.9	Kentucky River	5100205	BOYLE	3	5-NS	3	3	3	3	1/31/2008	WAH, FC, PCR, SCR
Balls Fork 8.3 to 11.3	Kentucky River	5100201	KNOTT	5-NS	3	3	3	3	3	9/17/1999	WAH, FC, PCR, SCR
Baughman Creek 0.0 to 4.6	Kentucky River	5100205	LINCOLN	3	5-NS	3	3	3	3	2/1/2008	WAH, FC, PCR, SCR
Baughman Fork 0.0 to 2.7	Kentucky River	5100205	FAYETTE	4A-PS	3	3	2-FS	3	3	12/15/1999	WAH, FC, PCR, SCR
Baughman Fork 3.4 to 5.9	Kentucky River	5100205	FAYETTE	2-FS	3	3	2-FS	3	3	12/29/1999	WAH, FC, PCR, SCR
Beals Run 0.0 to 1.9	Kentucky River	5100205	WOODFORD	5-NS	3	3	3	3	3	3/3/2005	WAH, FC, PCR, SCR
Bear Branch 0.3 to 1.2	Kentucky River	5100201	PERRY	2-FS	3	3	3	3	2-FS	11/19/2009	WAH, FC, PCR, SCR, OSRW
Beech Fork 0.0 to 8.0	Kentucky River	5100202	LESLIE	2-FS	3	3	2-FS	3	3	12/29/1999	WAH, FC, PCR, SCR
Beech Fork Reservoir	Kentucky River	5100204	POWELL	3	3	3	3	2-FS	3	12/9/2009	WAH, FC, PCR, SCR, DWS
Benson Creek 0.0 to 4.6	Kentucky River	5100205	FRANKLIN	5-PS	3	3	3	3	3	7/23/1999	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Benson Creek 22.1 to 25.7	Kentucky River	5100205	ANDERSON	2-FS	3	3	3	3	3	9/17/1999	WAH, FC, PCR, SCR
Benson Creek 4.6 to 6.7	Kentucky River	5100205	FRANKLIN	5-PS	3	3	3	3	3	7/23/1999	WAH, FC, PCR, SCR
Benson Creek 6.7 to 13.4	Kentucky River	5100205	FRANKLIN	5-NS	3	3	3	3	3	7/23/1999	WAH, FC, PCR, SCR
Berea City lakes (Lower Lake)	Kentucky River	5100205	MADISON	3	3	3	3	2-FS	3	12/9/2009	WAH, FC, PCR, SCR, DWS
Berea City Lakes (Upper Lake)	Kentucky River	5100205	MADISON	3	3	3	3	2-FS	3	12/9/2009	WAH, FC, PCR, SCR, DWS
Bert Combs Lake	Kentucky River	5100203	CLAY	2-FS	3	2-FS	3	2-FS	3	12/4/2009	WAH, CAH, FC, PCR, SCR, DWS
Big Calaboose Creek 0.0 to 2.2	Kentucky River	5100204	WOLFE	2-FS	3	3	3	3	3	3/6/2001	WAH, FC, PCR, SCR
Big Caney Creek 0.3 to 8.0	Kentucky River	5100201	BREATHITT	5-PS	3	3	3	3	3	10/25/1999	WAH, FC, PCR, SCR
Big Creek 0.0 to 3.1	Kentucky River	5100201	PERRY	3	3	3	3	3	3		WAH, FC, PCR, SCR
Big Creek 0.0 to 4.3	Kentucky River	5100203	CLAY	2-FS	3	3	3	3	3	12/19/1999	CAH, FC, PCR, SCR
Big Dan Branch 0.0 to 1.4	Kentucky River	5100203	CLAY	2-FS	3	3	3	3	3	12/29/1999	WAH, FC, PCR, SCR
Big Double Creek 0.0 to 4.4	Kentucky River	5100203	CLAY	2-FS	3	3	3	3	2-FS	1/1/2004	WAH, FC, PCR, SCR, OSRW
Big Laurel Creek 3.6 to 6.4	Kentucky River	5100202	HARLAN	2-FS	3	3	3	3	3	10/4/2004	WAH, FC, PCR, SCR
Big Middle Fork Elisha Creek 0.0 to 1.5	Kentucky River	5100203	CLAY	2-FS	3	3	3	3	3	1/1/2005	WAH, FC, PCR, SCR
Big Sinking Creek 3.6 to 6.0	Kentucky River	5100204	LEE	2-FS	3	3	3	3	3	11/19/2009	WAH, FC, PCR, SCR
Big Twin Creek 0.0 to 3.8	Kentucky River	5100205	OWEN	5-PS	3	3	3	3	3	7/23/1999	WAH, FC, PCR, SCR
Big Willard Creek 0.0 to 4.5	Kentucky River	5100201	PERRY	5-NS	3	3	3	3	3	9/15/1999	WAH, FC, PCR, SCR
Bill Branch 0.0 to 0.3	Kentucky River	5100202	LESLIE	2-FS	3	3	3	3	2-FS	1/1/2005	WAH, FC, PCR, SCR, OSRW
Bill Oak Branch 0.0 to 0.6	Kentucky River	5100203	OWSLEY	2-FS	3	3	3	3	2-FS	1/27/2010	WAH, FC, PCR, SCR, OSRW

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Billey Fork 2.6 to 8.8	Kentucky River	5100204	LEE	2-FS	3	3	3	3	2-FS	10/4/2004	WAH, FC, PCR, SCR, OSRW
Black Creek 0.0 to 4.0	Kentucky River	5100204	POWELL	2-FS	3	3	3	3	3	3/6/2001	WAH, FC, PCR, SCR
Black John Branch 0.0 to 0.4	Kentucky River	5100201	KNOTT	5-NS	2-FS	3	3	3	3	10/28/2009	WAH, FC, PCR, SCR
Blair Branch 0.0 to 0.7	Kentucky River	5100201	KNOTT	5-NS	5-NS	3	3	3	3	10/28/2009	WAH, FC, PCR, SCR
Blue Lick 0.0 to 4.1	Kentucky River	5100205	LINCOLN	3	5-NS	3	3	3	3	2/1/2008	WAH, FC, PCR, SCR
Bolen Branch 0.0 to 1.2	Kentucky River	5100201	KNOTT	2-FS	3	3	3	3	3	9/20/1999	WAH, FC, PCR, SCR
Boltz Lake	Kentucky River	5100205	GRANT	5-PS	3	2-FS	3	3	3	3/22/2004 - 12/7/2009	WAH, FC, PCR, SCR
Boone Creek 0.0 to 7.4	Kentucky River	5100205	FAYETTE	2-FS	3	3	3	3	3	3/4/2005	WAH, FC, PCR, SCR
Boone Creek 7.4 to 12.6	Kentucky River	5100205	FAYETTE	5-PS	5-NS	3	3	3	3	12/15/1999	WAH, FC, PCR, SCR
Boone Fork 1.0 to 2.7	Kentucky River	5100201	BREATHITT	2-FS	3	3	3	3	3	11/19/2009	WAH, FC, PCR, SCR
Bowen Creek 0.0 to 1.6	Kentucky River	5100203	LESLIE	5-PS	3	3	3	3	3	11/19/2009	WAH, FC, PCR, SCR
Breeding Creek 0.9 to 4.2	Kentucky River	5100201	KNOTT	5-NS	5-NS	3	3	3	3	10/28/2009	WAH, FC, PCR, SCR
Brush Creek 0.0 to 6.6	Kentucky River	5100204	POWELL	5-PS	3	3	3	3	3	3/2/2001	WAH, FC, PCR, SCR
Brush Creek 0.0 to 9.7	Kentucky River	5100205	OWEN	2-FS	3	3	3	3	3	7/1/1999	WAH, FC, PCR, SCR
Buck Creek 0.0 to 2.3	Kentucky River	5100204	ESTILL	2-FS	3	3	3	3	3	9/20/1999	WAH, FC, PCR, SCR
Buck Creek 0.0 to 4.0	Kentucky River	5100203	OWSLEY	2-FS	3	3	3	3	3	7/22/1999	WAH, FC, PCR, SCR
Buck Creek Lake	Kentucky River	5130103	LINCOLN	3	3	3	3	2-FS	3	11/2/2009	WAH, FC, PCR, SCR, DWS
Buck Run 0.0 to 5.7	Kentucky River	5100205	OWEN	2-FS	3	3	3	3	3	1/1/2005	WAH, FC, PCR, SCR
Buckhorn Creek 2.4 to 6.8	Kentucky River	5100201	BREATHITT	5-PS	3	3	3	3	3	3/4/2005	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Buckhorn Creek 0.0 to 2.4	Kentucky River	5100201	BREATHITT	2-FS	5-NS	3	3	3	3	2/3/2006	WAH, FC, PCR, SCR
Buckhorn Lake	Kentucky River	5100202	PERRY	2-FS	3		3	2-FS	3	8/15/2005 - 1/13/2010	WAH, FC, PCR, SCR, DWS
Buffalo Creek 0.0 to 1.6	Kentucky River	5100203	OWSLEY	2-FS	3	3	3	3	2-FS	11/23/2009	WAH, FC, PCR, SCR, OSRW
Bull Creek 0.0 to 2.0	Kentucky River	5100203	KNOX	5-PS	3	3	3	3	3	7/22/1999	WAH, FC, PCR, SCR
Bull Creek 0.0 to 4.1	Kentucky River	5100202	LESLIE	2-FS	3	3	3	3	3	12/13/1999	WAH, FC, PCR, SCR
Bullock Pen Creek 0.0 to 1.5	Kentucky River	5100205	BOONE	2-FS	3	3	3	3	3	7/22/1999	WAH, FC, PCR, SCR
Bullock Pen Lake	Kentucky River	5100205	GRANT	5-PS	3	2-FS	3	2-FS	3	11/2/2009	WAH, FC, PCR, SCR, DWS
Bullskin Creek 0.0 to 14.6	Kentucky River	5100203	CLAY	2-FS	3	3	3	3	3	11/19/2009	WAH, FC, PCR, SCR
Campton City Lake	Kentucky River	5100204	WOLFE	2-FS	3	2-FS	3	2-FS	3	11/2/2009	WAH, FC, PCR, SCR, DWS
Cane Creek 0.0 to 2.9	Kentucky River	5100204	POWELL	2-FS	4A-NS	3	3	3	3	12/15/1999	WAH, FC, PCR, SCR
Cane Creek 0.0 to 9.5	Kentucky River	5100201	BREATHITT	2-FS	4A-NS	3	3	3	3	9/15/1999	WAH, FC, PCR, SCR
Cane Run 0.0 to 3.0	Kentucky River	5100205	SCOTT	5-NS	5-NS	5-PS	3	3	3	5/5/2009	WAH, FC, PCR, SCR
Cane Run 3.0 to 9.6	Kentucky River	5100205	SCOTT	5-NS	5-NS	3	3	3	3	10/30/2009	WAH, FC, PCR, SCR
Cane Run 9.6 to 17.4	Kentucky River	5100205	FAYETTE	5-NS	5-NS	5-NS	3	3	3	1/1/1999 - 5/5/2009	WAH, FC, PCR, SCR
Caney Creek 0.0 to 1.5	Kentucky River	5100205	OWEN	5-PS	3	3	3	3	3	10/4/2004	WAH, FC, PCR, SCR
Canoe Creek 0.0 to 0.5	Kentucky River	5100202	BREATHITT	2-FS	3	3	3	3	3	9/30/2005	WAH, FC, PCR, SCR
Carr Fork 0.0 to 5.9	Kentucky River	5100201	PERRY	3	4A-PS	4A-PS	3	3	3	9/30/2005	WAH, FC, PCR, SCR
Carr Fork 15.6 to 26.4	Kentucky River	5100201	KNOTT	5-PS	5-NS	5-NS	3	3	3	8/19/2005 - 10/28/2009	WAH, FC, PCR, SCR
Carr Fork 6.2 to 8.9	Kentucky River	5100201	KNOTT	2-FS	4A-NS	2-FS	3	3	3	8/18/2005 - 10/28/2009	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Carr Fork Reservoir	Kentucky River	5100201	KNOTT	5-PS	3	5-PS	5-PS	3	3	1/12/2010	WAH, FC, PCR, SCR, DWS
Cat Creek 0.0 to 8.0	Kentucky River	5100204	POWELL	5-PS	3	3	3	3	3	3/4/2005	WAH, FC, PCR, SCR
Cavanaugh Creek 0.0 to 8.3	Kentucky River	5100204	JACKSON	2-FS	3	3	3	3	2-FS	11/23/2009	WAH, FC, PCR, SCR, OSRW
Cedar Cove Spring 0.0 to 0.35	Kentucky River	5100205	FRANKLIN	2-FS	3	3	3	3	3	11/23/2009	WAH, FC, PCR, SCR
Cedar Creek 0.0 to 0.5	Kentucky River	5100205	LINCOLN	4C-PS	3	3	3	3	3	11/23/2009	WAH, FC, PCR, SCR
Cedar Creek 0.0 to 9.4	Kentucky River	5100205	OWEN	5-PS	2-FS	2-FS	3	3	3	1/1/2005	WAH, FC, PCR, SCR
Cedar Creek Lake	Kentucky River	5100205	LINCOLN	2-FS	3	2-FS	5-PS	3	3	12/4/2009	WAH, FC, PCR, SCR
Chambers Fork 0.7 to 1.1	Kentucky River	5100204	WOLFE	5-PS	3	3	3	3	3	10/4/2004	WAH, FC, PCR, SCR
Cherry Run 0.0 to 0.9	Kentucky River	5100205	SCOTT	2-FS	3	3	3	3	3	3/4/2005	WAH, FC, PCR, SCR
Chester Creek 0.0 to 2.8	Kentucky River	5100204	WOLFE	2-FS	3	3	3	3	2-FS	11/23/2009	WAH, FC, PCR, SCR, OSRW
Chimney Top Creek 0.0 to 4.6	Kentucky River	5100204	WOLFE	2-FS	3	3	3	3	3	11/23/2009	CAH, FC, PCR, SCR
Clarks Creek 0.0 to 5.2	Kentucky River	5100205	GRANT	2-FS	3	3	3	3	3	10/4/2004	WAH, FC, PCR, SCR
Clarks Run 0.7 to 4.4	Kentucky River	5100205	BOYLE	5-PS	5-NS	3	3	3	3	11/23/2009	WAH, FC, PCR, SCR
Clarks Run 4.4 to 6.7	Kentucky River	5100205	BOYLE	2-FS	5-NS	3	3	3	3	1/31/2002 - 11/23/2009	WAH, FC, PCR, SCR
Clarks Run 6.7 to 14.3	Kentucky River	5100205	BOYLE	5-PS	5-NS	3	3	3	3	1/31/2008 - 11/23/2009	WAH, FC, PCR, SCR
Claylick Creek 0.0 to 2.3	Kentucky River	5100205	OWEN	2-FS	3	3	3	3	3	1/1/2000	WAH, FC, PCR, SCR
Clear Creek 0.0 to 9.0	Kentucky River	5100205	WOODFORD	2-FS	3	3	3	3	2-FS	11/23/2009	WAH, FC, PCR, SCR, OSRW
Clemons Fork 2.2 to 4.8	Kentucky River	5100201	BREATHITT	2-FS	3	3	3	3	2-FS	3/4/2005	WAH, FC, PCR, SCR, OSRW
Clifty Creek 0.0 to 2.0	Kentucky River	5100204	WOLFE	2-FS	3	3	3	3	3	3/6/2001	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Coles Fork 0.0 to 5.5	Kentucky River	5100201	BREATHITT	2-FS	3	3	2-FS	3	2-FS	5/19/1998	WAH, FC, PCR, SCR, OSRW
Collins Fork 2.6 to 6.6	Kentucky River	5100203	CLAY	5-PS	3	3	3	3	3	12/13/1999	WAH, FC, PCR, SCR
Cope Fork 0.0 to 1.9	Kentucky River	5100201	BREATHITT	5-PS	3	3	3	3	3	9/15/1999	WAH, FC, PCR, SCR
Copper Creek 2.2 to 5.05	Kentucky River	5100205	ROCKCASTLE	2-FS	3	3	3	3	3	3/7/2004	WAH, FC, PCR, SCR
Copper Creek 0.0 to 2.2	Kentucky River	5100205	LINCOLN	3	5-NS	3	3	3	3	2/4/2008	WAH, FC, PCR, SCR
Corinth Lake	Kentucky River	5100205	GRANT	2-FS	3	2-FS	3	3	3	12/7/2009	WAH, FC, PCR, SCR
Cow Creek 0.0 to 2.7	Kentucky River	5100204	ESTILL	2-FS	3	3	2-FS	3	3	12/15/1999	WAH, FC, PCR, SCR
Cow Creek 0.0 to 2.7	Kentucky River	5100203	OWSLEY	2-FS	3	3	3	3	3	7/22/1999	WAH, FC, PCR, SCR
Cowbell Lake	Kentucky River	5100204	MADISON	3	3	3	3	2-FS	3	12/9/2009	WAH, FC, PCR, SCR, DWS
Craig Creek 0.1 to 4.0	Kentucky River	5100205	WOODFORD	2-FS	3	3	3	3	2-FS	9/20/2005	WAH, FC, PCR, SCR, OSRW
Crane Creek 0.0 to 5.4	Kentucky River	5100203	CLAY	5-PS	3	3	3	3	3	10/4/2004	WAH, FC, PCR, SCR
Crooked Creek 0.0 to 6.4	Kentucky River	5100204	ESTILL	2-FS	3	3	3	3	3	2/2/2000	WAH, FC, PCR, SCR
Crystal Creek 0.0 to 2.3	Kentucky River	5100201	LEE	5-PS	3	3	3	3	3	3/7/2004	WAH, FC, PCR, SCR
Cutshin Creek 9.7 to 10.7	Kentucky River	5100202	LESLIE	5-PS	3	3	3	3	3	3/7/2003	WAH, FC, PCR, SCR
David Fork 0.0 to 1.65	Kentucky River	5100205	FAYETTE	3	5-NS	3	3	3	3	11/9/2009	WAH, FC, PCR, SCR
Deep Ford Branch 0.3 to 1.3	Kentucky River	5100202	LESLIE	2-FS	3	3	3	3	2-FS	1/27/2010	WAH, FC, PCR, SCR, OSRW
Defeated Creek 0.5 to 1.6	Kentucky River	5100201	KNOTT	5-NS	5-NS	5-NS	3	3	3	9/30/2005 - 10/28/2009	WAH, FC, PCR, SCR
Dix River 0.0 to 3.1	Kentucky River	5100205	GARRARD	2-FS	3	3	3	3	3	11/24/2009	CAH, FC, PCR, SCR
Dix River 33.3 to 36.1	Kentucky River	5100205	GARRARD	2-FS	5-NS	2-FS	3	3	3	1/31/2008 - 12/14/2009	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Dix River 36.1 to 43.8	Kentucky River	5100205	GARRARD	3	5-NS	3	3	3	3	1/31/2008	WAH, FC, PCR, SCR
Dix River 64.3 to 73.9	Kentucky River	5100205	LINCOLN	3	5-NS	3	3	3	3	1/31/2008	WAH, FC, PCR, SCR
Dix River 73.9 to 79.3	Kentucky River	5100205	ROCKCASTLE	2-FS	5-NS	3	3	3	3	1/31/2008 - 11/24/2009	WAH, FC, PCR, SCR
Dog Fork 0.0 to 2.6	Kentucky River	5100204	WOLFE	2-FS	3	3	3	3	3	1/10/2000	CAH, FC, PCR, SCR
Drakes Creek 1.15 to 7.3	Kentucky River	5100205	LINCOLN	2-FS	5-NS	3	3	3	3	4/1/1999 - 2/4/2008	WAH, FC, PCR, SCR
Drennon Creek 8.7 to 12.2	Kentucky River	5100205	HENRY	2-FS	3	3	3	3	2-FS	3/7/2005	WAH, FC, PCR, SCR, OSRW
Drowning Creek 0.05 to 9.3	Kentucky River	5100204	MADISON	2-FS	3	3	3	3	3	11/24/2009	WAH, FC, PCR, SCR
Dry Run 0.0 to 3.1	Kentucky River	5100205	SCOTT	5-PS	3	3	3	3	3	12/16/1999	WAH, FC, PCR, SCR
Duck Fork 0.0 to 4.8	Kentucky River	5100204	LEE	5-PS	3	3	3	3	3	11/24/2009	WAH, FC, PCR, SCR
Eagle Creek 15.3 to 28.5	Kentucky River	5100205	OWEN	2-FS	2-FS	2-FS	3	3	3	2/22/2005 - 12/14/2009	WAH, FC, PCR, SCR
Eagle Creek 50.8 to 58.5	Kentucky River	5100205	GRANT	5-PS	2-FS	2-FS	3	3	3	11/24/2009	WAH, FC, PCR, SCR
Eagle Creek 31.6 to 36.5	Kentucky River	5100205	GRANT	5-NS	3	3	3	3	3	2/3/2006	WAH, FC, PCR, SCR
East Fork Indian Creek 0.0 to 9.1	Kentucky River	5100204	MENIFEE	2-FS	3	3	3	3	2-FS	11/24/2009	CAH, FC, PCR, SCR, OSRW
East Fork Mill Creek 0.0 to 3.1	Kentucky River	5100205	CARROLL	2-FS	3	3	3	3	3	7/23/1999	WAH, FC, PCR, SCR
East Fork Otter Creek 0.0 to 2.7	Kentucky River	5100205	MADISON	5-PS	3	3	3	3	3	12/17/1999	WAH, FC, PCR, SCR
East Hickman Creek 4.2 to 10.2	Kentucky River	5100205	FAYETTE	5-PS	5-NS	3	3	3	3	1/24/2000	WAH, FC, PCR, SCR
Edward Branch 0.0 to 1.7	Kentucky River	5100204	MENIFEE	2-FS	3	3	3	3	3	3/6/2001	WAH, FC, PCR, SCR
Elisha Creek 0.8 to 1.8	Kentucky River	5100203	LESLIE	2-FS	3	3	3	3	2-FS	3/4/2005	WAH, FC, PCR, SCR, OSRW
Elk Creek 0.0 to 1.6	Kentucky River	5100205	OWEN	5-PS	3	3	3	3	3	9/19/1999	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Elkhorn Creek 0.0 to 18.2	Kentucky River	5100205	FRANKLIN	2-FS	2-FS	2-FS	5-PS	3	3	3/1/2005 - 11/24/2009	WAH, FC, PCR, SCR
Elkhorn Creek 0.6 to 3.7	Kentucky River	5100202	LESLIE	2-FS	3	3	3	3	3	9/30/2005	WAH, FC, PCR, SCR
Elmer Davis Lake	Kentucky River	5100205	OWEN	5-PS	3	2-FS	3	3	3	6/3/2004 - 12/7/2009	WAH, FC, PCR, SCR
Emily Run 0.0 to 3.9	Kentucky River	5100205	HENRY	2-FS	3	3	3	3	2-FS	4/1/1999	WAH, FC, PCR, SCR, OSRW
Evans Fork 0.0 to 3.0	Kentucky River	5100204	ESTILL	2-FS	3	3	3	3	2-FS	3/7/2005	WAH, FC, PCR, SCR, OSRW
Fall Lick 0.0 to 2.2	Kentucky River	5100205	LINCOLN	2-FS	3	3	3	3	3	11/24/2009	WAH, FC, PCR, SCR
Falling Rock Branch 0.0 to 0.7	Kentucky River	5100201	BREATHITT	2-FS	3	3	3	3	2-FS	3/7/2005	WAH, FC, PCR, SCR, OSRW
Fishpond Lake	Kentucky River	5100201	LETCHER	2-FS	3	2-FS	3	3	3	12/7/2009	WAH, CAH, FC, PCR, SCR
Five Mile Creek 0.0 to 2.7	Kentucky River	5100205	HENRY	2-FS	3	3	3	3	3	9/21/1999	WAH, FC, PCR, SCR
Flat Creek 0.0 to 7.1	Kentucky River	5100205	FRANKLIN	5-PS	3	3	3	3	3	4/1/1999	WAH, FC, PCR, SCR
Flaxpatch Branch 0.1 to 2.6	Kentucky River	5100201	KNOTT	5-NS	5-NS	3	3	3	3	10/28/2009	WAH, FC, PCR, SCR
Four Mile Creek 0.0 to 7.4	Kentucky River	5100205	CLARK	3	3	3	3	3	3		WAH, FC, PCR, SCR
Freeman Fork 0.0 to 1.3	Kentucky River	5100202	BREATHITT	2-FS	3	3	3	3	3	12/17/1999	WAH, FC, PCR, SCR
Frog Branch 0.0 to 3.4	Kentucky River	5100205	LINCOLN	3	5-NS	3	3	3	3	2/1/2008	WAH, FC, PCR, SCR
Frozen Creek 0.0 to 13.9	Kentucky River	5100201	BREATHITT	5-PS	3	3	3	3	3	10/4/2004	WAH, FC, PCR, SCR
Game Farm Lake	Kentucky River	5100205	FRANKLIN	3	3	3	2-FS	3	3	1/31/2008	WAH, FC, PCR, SCR
General Butler State Park Lake	Kentucky River	5100205	CARROLL	2-FS	3	2-FS	3	3	3	6/3/2004	WAH, FC, PCR, SCR
Gilberts Big Creek 0.0 to 6.2	Kentucky River	5100203	LESLIE	2-FS	3	3	3	3	3	9/21/1999	WAH, FC, PCR, SCR
Gilberts Creek 0.0 to 1.25	Kentucky River	5100205	LINCOLN	3	5-NS	3	3	3	3	1/31/2008	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Gilberts Creek 0.0 to 2.6	Kentucky River	5100205	ANDERSON	2-FS	3	3	3	3	2-FS	9/20/2005	WAH, FC, PCR, SCR, OSRW
Gilmore Creek 0.0 to 5.0	Kentucky River	5100204	WOLFE	2-FS	3	3	3	3	3	3/7/2001	WAH, FC, PCR, SCR
Gladie Creek 0.5 to 7.25	Kentucky River	5100204	MENIFEE	2-FS	3	3	3	3	2-FS	11/24/2009	CAH, FC, PCR, SCR, OSRW
Glenns Creek 0.0 to 5.2	Kentucky River	5100205	FRANKLIN	2-FS	3	3	3	3	3	7/22/1998	WAH, FC, PCR, SCR
Goose Creek 0.0 to 1.85	Kentucky River	5100205	SHELBY	5-PS	3	3	3	3	3	7/22/1999	WAH, FC, PCR, SCR
Goose Creek 0.0 to 8.3	Kentucky River	5100203	CLAY	2-FS	5-PS	2-FS	3	3	2-FS	3/7/2005 - 12/22/2009	WAH, FC, PCR, SCR, OSRW
Goose Creek 1.85 to 4.2	Kentucky River	5100205	SHELBY	5-PS	3	3	3	3	3	9/21/1999	WAH, FC, PCR, SCR
Goose Creek 18.9 to 19.9	Kentucky River	5100203	CLAY	3	3	3	3	2-FS	3	3/1/2005	WAH, FC, PCR, SCR, DWS
Granny's Branch 0.0 to 2.6	Kentucky River	5100203	CLAY	2-FS	3	3	3	3	3	1/10/2000	WAH, FC, PCR, SCR
Grapevine Creek 0.0 to 1.1	Kentucky River	5100201	PERRY	5-NS	3	3	3	3	3	9/13/1999	WAH, FC, PCR, SCR
Grassy Run 0.0 to 6.4	Kentucky River	5100205	GRANT	2-FS	3	3	3	3	3	9/16/1999	WAH, FC, PCR, SCR
Greasy Creek 0.0 to 10.0	Kentucky River	5100202	LESLIE	2-FS	3	3	3	3	3	12/13/1999	WAH, FC, PCR, SCR
Greasy Creek 12.1 to 22.6	Kentucky River	5100202	LESLIE	2-FS	3	3	3	3	3	9/29/1999	WAH, FC, PCR, SCR
Griers Creek 0.0 to 3.5	Kentucky River	5100205	WOODFORD	2-FS	3	3	3	3	2-FS	3/7/2005	WAH, FC, PCR, SCR, OSRW
Grindstone Creek 0.1 to 1.9	Kentucky River	5100205	FRANKLIN	2-FS	3	3	3	3	2-FS	3/22/2005	WAH, FC, PCR, SCR, OSRW
Hall Branch 0.7 to 1.2	Kentucky River	5100205	SCOTT	2-FS	3	3	3	3	3	10/4/2004	WAH, FC, PCR, SCR
Hammons Fork 0.0 to 4.9	Kentucky River	5100203	KNOX	2-FS	3	3	3	3	3	3/22/2005	WAH, FC, PCR, SCR
Hanging Fork Dix River 0.0 to 15.85	Kentucky River	5100205	LINCOLN	2-FS	5-NS	3	3	3	3	12/17/1999 - 2/4/2008	WAH, FC, PCR, SCR
Hanging Fork Dix River 15.85 to 24.15	Kentucky River	5100205	LINCOLN	2-FS	5-NS	3	3	3	3	7/22/1999 - 2/4/2008	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Hanging Fork Dix River 24.15 to 27.6	Kentucky River	5100205	LINCOLN	3	5-NS	3	3	3	3	2/4/2008	WAH, FC, PCR, SCR
Hanging Fork Dix River 27.6 to 32.2	Kentucky River	5100205	LINCOLN	3	5-NS	3	3	3	3	2/4/2008	WAH, FC, PCR, SCR
Hardwick Creek 0.0 to 3.2	Kentucky River	5100204	POWELL	2-FS	5-NS	3	3	3	2-FS	12/17/1999	WAH, FC, PCR, SCR, OSRW
Harris Creek 0.0 to 6.25	Kentucky River	5100205	LINCOLN	3	5-NS	3	3	3	3	2/4/2008	WAH, FC, PCR, SCR
Harts Fork 3.2 to 4.2	Kentucky River	5100205	MADISON	3	3	3	3	3	3		WAH, FC, PCR, SCR
Hatcher Creek 0.0 to 1.2	Kentucky River	5100204	POWELL	2-FS	3	3	3	3	3	3/6/2001	WAH, FC, PCR, SCR
Hatton Creek 0.0 to 4.2	Kentucky River	5100204	POWELL	5-PS	3	3	3	3	3	3/2/2001	WAH, FC, PCR, SCR
Hawes Fork 0.0 to 4.4	Kentucky River	5100201	BREATHITT	5-NS	3	3	3	3	3	9/10/1999	WAH, FC, PCR, SCR
Hector Branch 0.0 to 5.5	Kentucky River	5100203	CLAY	5-PS	3	3	3	3	3	11/25/2009	WAH, FC, PCR, SCR
Hell Creek 0.0 to 3.5	Kentucky River	5100201	LEE		3	3	3	3	3	9/15/1999	WAH, FC, PCR, SCR
Hell For Certain Creek 0.0 to 2.1	Kentucky River	5100202	LESLIE	2-FS	3	3	3	3	2-FS	11/25/2009	WAH, FC, PCR, SCR, OSRW
Hell for Certain Creek 2.1 to 4.9	Kentucky River	5100202	LESLIE	2-FS	3	3	3	3	3	11/25/2009	WAH, FC, PCR, SCR
Herrington Lake	Kentucky River	5100205	GARRARD	5-NS	2-FS	2-FS	5-PS	2-FS	3	3/18/2005	WAH, FC, PCR, SCR, DWS
Hickman Creek 6.0 to 25.5	Kentucky River	5100205	JESSAMINE	5-PS	3	3	3	3	3	10/4/2005	WAH, FC, PCR, SCR
Hickman Creek 0.0 to 6.0	Kentucky River	5100205	JESSAMINE	5-PS	3	3	3	3	3	2/3/2006	WAH, FC, PCR, SCR
Hines Creek 0.1 to 1.9	Kentucky River	5100205	MADISON	2-FS	3	3	3	3	2-FS	3/22/2005	WAH, FC, PCR, SCR, OSRW
Holly Creek 0.0 to 6.2	Kentucky River	5100201	WOLFE	5-PS	3	3	3	3	3	11/25/2009	WAH, FC, PCR, SCR
Honey Branch 0.0 to 1.35	Kentucky River	5100202	LESLIE	2-FS	3	3	3	3	2-FS	3/1/2003	WAH, FC, PCR, SCR, OSRW
Hopper Cave Branch 0.0 to 1.8	Kentucky River	5100204	JACKSON	2-FS	3	3	3	3	2-FS	3/22/2005	WAH, FC, PCR, SCR, OSRW

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Horse Creek 0.0 to 8.3	Kentucky River	5100203	CLAY	5-PS	3	3	3	3	3	10/4/2004	WAH, FC, PCR, SCR
Hoys Fork 0.0 to 3.8	Kentucky River	5100204	ESTILL	2-FS	3	3	3	3	3	2/2/2000	WAH, FC, PCR, SCR
Hunting Creek 0.0 to 2.7	Kentucky River	5100201	BREATHITT	2-FS	3	3	3	3	3	4/1/1999	WAH, FC, PCR, SCR
Indian Creek 0.0 to 5.4	Kentucky River	5100205	CARROLL	2-FS	3	3	3	3	2-FS	3/22/2005	WAH, FC, PCR, SCR, OSRW
Indian Creek 2.6 to 7.8	Kentucky River	5100204	MENIFEE	2-FS	3	3	3	3	3	10/4/2004	CAH, FC, PCR, SCR
Indian Creek 1.25 to 2.6	Kentucky River	5100204	MENIFEE	2-FS	3	3	3	3	3	11/25/2009	CAH, FC, PCR, SCR
Indian Fork 0.0 to 3.3	Kentucky River	5100205	SHELBY	2-FS	3	3	3	3	2-FS	3/22/2005	WAH, FC, PCR, SCR, OSRW
Irishman Creek 0.0 to 4.3	Kentucky River	5100201	KNOTT	5-NS	5-PS	3	3	3	3	10/28/2009	WAH, FC, PCR, SCR
Jessamine Creek 0.0 to 5.3	Kentucky River	5100205	JESSAMINE	2-FS	3	3	3	3	2-FS	7/1/1998	WAH, FC, PCR, SCR, OSRW
John Carpenter Fork 0.0 to 1.2	Kentucky River	5100201	BREATHITT	2-FS	3	3	3	3	2-FS	3/22/2005	WAH, FC, PCR, SCR, OSRW
John Littles Branch 0.0 to 1.7	Kentucky River	5100201	BREATHITT	2-FS	3	3	3	3	3	9/18/2007	WAH, FC, PCR, SCR
Johnson Fork 0.0 to 0.5	Kentucky River	5100204	WOLFE	5-PS	3	3	3	3	3	10/4/2004	WAH, FC, PCR, SCR
Joyce Fork 0.0 to 1.2	Kentucky River	5100203	OWSLEY	2-FS	3	3	3	3	3	11/25/2009	WAH, FC, PCR, SCR
Judy Creek 0.0 to 1.5	Kentucky River	5100204	POWELL	5-NS	3	3	3	3	3	3/2/2001	WAH, FC, PCR, SCR
Judy Creek 1.5 to 3.4	Kentucky River	5100204	POWELL	2-FS	3	3	3	3	3	9/29/1999	WAH, FC, PCR, SCR
Katies Creek 0.0 to 4.05	Kentucky River	5100203	CLAY	2-FS	3	3	3	3	2-FS	11/25/2009	WAH, FC, PCR, SCR, OSRW
Keens Fork 0.0 to 2.3	Kentucky River	5100203	CLAY	2-FS	3	3	3	3	3	5/1/1994	WAH, FC, PCR, SCR
Kentucky River 0.3 to 11.5	Kentucky River	5100205	OWEN	3	3	3	5-NS	3	3	3/9/2005	WAH, FC, PCR, SCR
Kentucky River 120.8 to 121.1	Kentucky River	5100205	MERCER	3	3	3	3	2-FS	3	3/10/2005 - 12/15/2009	WAH, FC, PCR, SCR, DWS

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Kentucky River 121.1 to 138.5	Kentucky River	5100205	JESSAMINE	2-FS	2-FS	2-FS	5-PS	3	3	12/15/2009	WAH, FC, PCR, SCR
Kentucky River 153.75 to 209.8	Kentucky River	5100204	JESSAMINE	2-FS	2-FS	2-FS	5-PS	2-FS	3	12/15/2009	WAH, FC, PCR, SCR, DWS
Kentucky River 17.4 to 53.2	Kentucky River	5100205	OWEN	2-FS	5-PS	3	2-FS	3	3	3/3/2005 - 12/14/2009	WAH, FC, PCR, SCR
Kentucky River 223.1 to 224.1	Kentucky River	5100204	ESTILL	3	3	3	3	2-FS	3	11/2/2009	WAH, FC, PCR, SCR, DWS
Kentucky River 225.9 to 253.7	Kentucky River	5100204	ESTILL	3	3	3	2-FS	3	3	3/10/2005	WAH, FC, PCR, SCR
Kentucky River 53.2 to 66.95	Kentucky River	5100205	FRANKLIN	2-FS	2-FS	2-FS	5-PS	2-FS	3	2/22/2005 - 12/14/2009	WAH, FC, PCR, SCR, DWS
Kentucky River 145.0 to 146.0	Kentucky River	5100205	GARRARD	3	3	3	3	2-FS	3	12/15/2009	WAH, FC, PCR, SCR, DWS
Kentucky River 67.0 to 84.25	Kentucky River	5100205	FRANKLIN	2-FS	2-FS	3	5-PS	2-FS	3	12/14/2009	WAH, FC, PCR, SCR, DWS
Kentucky River 85.9 to 88.5	Kentucky River	5100205	ANDERSON	3	3	3	3	2-FS	3	12/14/2009	WAH, FC, PCR, SCR, DWS
Kentucky River 99.1 to 119.9	Kentucky River	5100205	JESSAMINE	3	3	3	5-PS	2-FS	3	12/14/2009	WAH, FC, PCR, SCR, DWS
Knob Lick Branch 0.0 to 2.8	Kentucky River	5100204	ESTILL	2-FS	3	3	3	3	3	10/6/2004	WAH, FC, PCR, SCR
Knoblick Creek 0.0 to 4.8	Kentucky River	5100205	LINCOLN	2-FS	5-NS	3	3	3	3	7/22/1999 - 2/4/2008	WAH, FC, PCR, SCR
Lacy Creek 0.0 to 7.25	Kentucky River	5100204	WOLFE	5-PS	3	3	3	3	3	3/22/2005	WAH, FC, PCR, SCR
Lake Reba	Kentucky River	5100205	MADISON	5-PS	3	2-FS	3	3	3	12/7/2009	WAH, FC, PCR, SCR
Lake Vega	Kentucky River	5100205	MADISON	3	3	3	3	2-FS	3	12/9/2009	WAH, FC, PCR, SCR, DWS
Lanes Run 0.0 to 0.5	Kentucky River	5100205	SCOTT	3	5B-NS	3	3	3	3	2/6/2006	WAH, FC, PCR, SCR
Laurel Creek 3.2 to 4.7	Kentucky River	5100203	CLAY	5-PS	3	3	3	3	3	9/29/1999	WAH, FC, PCR, SCR
Laurel Fork 0.0 to 4.2	Kentucky River	5100203	OWSLEY	2-FS	3	3	3	3	2-FS	11/25/2009	WAH, FC, PCR, SCR, OSRW
Leatherwood Creek 0.0 to 4.2	Kentucky River	5100201	BREATHITT	2-FS	3	3	3	3	3	8/1/1998	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Leatherwood Creek 0.6 to 8.2	Kentucky River	5100201	PERRY	2-FS	2-FS	3	3	3	3	12/21/1999	WAH, FC, PCR, SCR
Leatherwood Creek 1.55 to 3.1	Kentucky River	5100202	PERRY	5-PS	3	3	3	3	3	11/25/2009	WAH, FC, PCR, SCR
LeComptes Run 0.0 to 1.9	Kentucky River	5100205	SCOTT	2-FS	3	3	3	3	3	12/17/1999	WAH, FC, PCR, SCR
Lee Branch 0.0 to 1.0	Kentucky River	5100205	WOODFORD	3	5B-NS	3	3	3	3	11/9/2009	WAH, FC, PCR, SCR
Left Fork Big Double Creek 0.0 to 1.5	Kentucky River	5100203	CLAY	2-FS	3	3	3	3	2-FS	3/22/2005	WAH, FC, PCR, SCR, OSRW
Left Fork Buffalo Creek 0.0 to 3.1	Kentucky River	5100203	OWSLEY	2-FS	3	3	3	3	3	12/14/1999	WAH, FC, PCR, SCR
Left Fork Elisha Creek 0.0 to 3.9	Kentucky River	5100203	LESLIE	2-FS	3	3	3	3	3	3/22/2005	WAH, FC, PCR, SCR
Left Fork Island Creek 0.0 to 5.0	Kentucky River	5100203	OWSLEY	5-PS	3	3	3	3	3	4/1/1999	WAH, FC, PCR, SCR
Left Fork Millstone Creek 1.6 to 2.9	Kentucky River	5100201	LETCHER	5-NS	3	3	3	3	3	3/22/2005 - 2/10/2010	WAH, FC, PCR, SCR
Lexington Reservoir No. 4 (Jacobson Reservoir)	Kentucky River	5100205	FAYETTE	3	3	3	3	2-FS	3	12/9/2009	WAH, FC, PCR, SCR, DWS
Lick Creek 0.0 to 5.4	Kentucky River	5100205	CARROLL	5-PS	3	3	3	3	3	10/6/2004	WAH, FC, PCR, SCR
Line Fork 9.1 to 11.6	Kentucky River	5100201	LETCHER	5-PS	3	3	3	3	3	10/6/2004	WAH, FC, PCR, SCR
Line Fork 11.6 to 27.5	Kentucky River	5100201	LETCHER	2-FS	5-PS	3	3	3	2-FS	4/1/1998	WAH, FC, PCR, SCR, OSRW
Little Carr Fork 0.0 to 4.8	Kentucky River	5100201	KNOTT	5-NS	5-NS	3	3	3	3	10/29/2009	WAH, FC, PCR, SCR
Little Goose Creek 0.0 to 7.6	Kentucky River	5100203	CLAY	3	3	3	3	3	3		WAH, FC, PCR, SCR
Little Middle Fork Elisha Creek 0.0 to 0.75	Kentucky River	5100203	LESLIE	2-FS	3	3	3	3	2-FS	3/22/2005	WAH, FC, PCR, SCR, OSRW
Little Millseat Branch 0.0 to 1.2	Kentucky River	5100201	BREATHITT	2-FS	3	3	3	3	2-FS	3/22/2005	WAH, FC, PCR, SCR, OSRW
Little Negro Creek 0.0 to 2.45	Kentucky River	5100205	ROCKCASTLE	2-FS	3	3	3	3	3	11/25/2009	WAH, FC, PCR, SCR
Little Sexton Creek 0.0 to 2.8	Kentucky River	5100203	CLAY	2-FS	3	3	3	3	3	4/1/1999	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Little Sinking Creek 0.0 to 4.6	Kentucky River	5100204	LEE	2-FS	3	3	3	3	3	9/30/1999	WAH, FC, PCR, SCR
Little Sixmile Creek 0.0 to 5.3	Kentucky River	5100205	HENRY	2-FS	3	3	3	3	2-FS	3/22/2005	WAH, FC, PCR, SCR, OSRW
Little Smith Branch 0.3 to 1.4	Kentucky River	5100201	KNOTT	5-NS	5-NS	3	3	3	3	10/29/2009	WAH, FC, PCR, SCR
Little Sturgeon Creek 0.0 to 3.0	Kentucky River	5100204	OWSLEY	2-FS	3	3	3	3	3	11/25/2009	WAH, FC, PCR, SCR
Little Sturgeon Creek 3.0 to 5.5	Kentucky River	5100204	OWSLEY	2-FS	3	3	3	3	3	11/25/2009	WAH, FC, PCR, SCR
Little Sturgeon Creek 5.5 to 7.8	Kentucky River	5100204	OWSLEY	2-FS	3	3	3	3	3	11/25/2009	WAH, FC, PCR, SCR
Little Willard Creek 0.0 to 2.5	Kentucky River	5100201	PERRY	5-NS	3	3	3	3	3	10/6/2004	WAH, FC, PCR, SCR
Log Lick Creek 0.0 to 2.6	Kentucky River	5100204	CLARK	3	3	3	3	3	3		WAH, FC, PCR, SCR
Logan Creek 0.0 to 3.15	Kentucky River	5100205	LINCOLN	2-FS	5-NS	3	3	3	3	10/4/2005	WAH, FC, PCR, SCR
Long Fork 0.0 to 2.0	Kentucky River	5100203	CLAY	2-FS	3	3	3	3	3	9/30/1999	WAH, FC, PCR, SCR
Long Fork 0.0 to 4.6	Kentucky River	5100201	BREATHITT	5-PS	3	3	3	3	3	3/22/2005	WAH, FC, PCR, SCR
Lost Creek 0.0 to 3.7	Kentucky River	5100201	BREATHITT	2-FS	5-NS	2-FS	3	3	3	2/22/2005	WAH, FC, PCR, SCR
Lost Creek 3.7 to 8.95	Kentucky River	5100201	BREATHITT	5-NS	3	3	3	3	3	2/6/2006	WAH, FC, PCR, SCR
Lotts Creek 0.4 to 1.0	Kentucky River	5100201	KNOTT	5-PS	3	3	3	3	3	10/6/2004	WAH, FC, PCR, SCR
Lotts Creek 1.2 to 6.0	Kentucky River	5100201	PERRY	5-NS	3	3	3	3	3	2/6/2006	WAH, FC, PCR, SCR
Low Gap Branch 0.0 to 0.8	Kentucky River	5100201	LETCHER	2-FS	3	3	3	3	3	11/30/2009	WAH, FC, PCR, SCR
Lower Buffalo Creek 0.0 to 2.4	Kentucky River	5100203	OWSLEY	2-FS	3	3	3	3	3	4/1/1999	WAH, FC, PCR, SCR
Lower Cane Creek 0.0 to 4.1	Kentucky River	5100204	POWELL	2-FS	4A-NS	3	3	3	3	11/9/2009	WAH, FC, PCR, SCR
Lower Devil Creek 0.0 to 4.65	Kentucky River	5100201	LEE	2-FS	3	3	3	3	3	11/30/2009	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Lower Hood Branch 0.0 to 1.3	Kentucky River	5100204	POWELL	2-FS	3	3	3	3	3	1/11/1998	WAH, FC, PCR, SCR
Lower Howard Creek 2.65 to 6.5	Kentucky River	5100205	CLARK	5-NS	3	3	3	3	5-NS	12/17/1999	WAH, FC, PCR, SCR, OSRW
Lower Howard Creek 0.0 to 2.7	Kentucky River	5100205	CLARK	2-FS	3	3	3	3	2-FS	1/27/2010	WAH, FC, PCR, SCR, OSRW
Lower Thomas Lake	Kentucky River	5100205	OWEN	3	3	3	3	2-FS	3	3/23/2005	WAH, FC, PCR, SCR, DWS
Lulbegrud Creek 0.0 to 7.3	Kentucky River	5100204	CLARK	5-PS	3	3	2-FS	3	5-PS	12/17/1999	WAH, FC, PCR, SCR, OSRW
Lulbegrud Creek 17.2 to 22.2	Kentucky River	5100204	MONTGOMERY	3	3	3	3	3	3		WAH, FC, PCR, SCR
Lulbegrud Creek 7.3 to 17.2	Kentucky River	5100204	POWELL	2-FS	3	3	3	3	3	2/28/2001	WAH, FC, PCR, SCR
Lytles Fork 0.0 to 14.7	Kentucky River	5100205	SCOTT	2-FS	3	3	3	3	3	3/22/2005	WAH, FC, PCR, SCR
Maces Creek 0.0 to 0.2	Kentucky River	5100201	PERRY	2-FS	2-FS	3	3	3	3	12/21/1999	WAH, FC, PCR, SCR
Marble Creek 0.05 to 3.9	Kentucky River	5100205	JESSAMINE	5-PS	3	3	3	3	3	11/30/2009	WAH, FC, PCR, SCR
McConnell Run 0.0 to 4.4	Kentucky River	5100205	SCOTT	5-PS	3	3	3	3	3	12/17/1999	WAH, FC, PCR, SCR
McKinney Branch 0.0 to 1.9	Kentucky River	5100205	LINCOLN	3	5-NS	3	3	3	3	2/1/2008	WAH, FC, PCR, SCR
Meadow Creek 0.5 to 3.7	Kentucky River	5100203	OWSLEY	5-PS	3	3	3	3	3	10/6/2004	WAH, FC, PCR, SCR
Middle Fork Kentucky River 36.9 to 43.8	Kentucky River	5100202	PERRY	2-FS	2-FS	2-FS	3	3	3	3/3/2005	WAH, FC, PCR, SCR, DWS
Middle Fork Kentucky River 6.45 to 12.6	Kentucky River	5100202	LEE	2-FS	5-PS	2-FS	3	3	2-FS	12/22/2009	WAH, FC, PCR, SCR, DWS, OSRW
Middle Fork Kentucky River 74.6 to 75.2	Kentucky River	5100202	LESLIE	3	3	3	3	2-FS	3	3/11/2005	WAH, FC, PCR, SCR, DWS
Middle Fork Kentucky River 75.2 to 85.4	Kentucky River	5100202	LESLIE	2-FS	3	3	3	3	2-FS	3/22/2005	WAH, FC, PCR, SCR, DWS, OSRW
Middle Fork of Kentucky River 67.9 to 74.6	Kentucky River	5100202	LESLIE	5-PS	5-PS	2-FS	3	3	3	3/3/2005	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Middle Fork Quicksand Creek 0.0 to 10.0	Kentucky River	5100201	KNOTT	2-FS	3	3	3	3	3	9/20/1999	WAH, FC, PCR, SCR
Middle Fork Red River 13.0 to 15.4	Kentucky River	5100204	WOLFE	2-FS	3	3	3	3	3	3/23/2005	WAH, FC, PCR, SCR
Middle Fork Red River 5.85 to 7.3	Kentucky River	5100204	POWELL	2-FS	3	3	3	3	2-FS	11/30/2009	WAH, FC, PCR, SCR, OSRW
Middle Fork Red River 8.9 to 13.0	Kentucky River	5100202	WOLFE	2-FS	3	3	3	3	3	11/30/2009	CAH, FC, PCR, SCR
Middle Fork Right Fork Cane Creek 0.0 to 2.8	Kentucky River	5100204	POWELL	3	4A-NS	3	3	3	3	11/9/2009	WAH, FC, PCR, SCR
Middle Fork, Kentucky River 61.5 to 64.2	Kentucky River	5100202	LESLIE	2-FS	5-NS	5-NS	3	3	3	8/16/2005	WAH, FC, PCR, SCR, DWS
Mike Branch 0.0 to 0.7	Kentucky River	5100203	OWSLEY	2-FS	3	3	3	3	2-FS	1/27/2010	WAH, FC, PCR, SCR, OSRW
Mill Creek 0.0 to 3.3	Kentucky River	5100201	LETCHER	5-NS	3	3	3	3	3	10/7/2004	WAH, FC, PCR, SCR
Mill Creek 0.0 to 5.7	Kentucky River	5100205	CARROLL	2-FS	3	3	3	3	3	4/1/1999	WAH, FC, PCR, SCR
Mill Creek 0.5 to 8.3	Kentucky River	5100205	OWEN	2-FS	3	3	3	3	2-FS	3/23/2005	WAH, FC, PCR, SCR, OSRW
Mill Creek Lake	Kentucky River	5100204	POWELL	2-FS	3	2-FS	3	2-FS	3	6/3/2004 - 12/7/2009	WAH, CAH, FC, PCR, SCR, DWS
Millers Creek 0.0 to 6.7	Kentucky River	5100204	LEE	2-FS	2-FS	3	3	3	3	12/17/1999	WAH, FC, PCR, SCR
Millseat Branch 0.0 to 1.85	Kentucky River	5100201	BREATHITT	2-FS	3	3	3	3	2-FS	3/23/2005	WAH, FC, PCR, SCR, OSRW
Mocks Branch 1.6 to 5.7	Kentucky River	5100205	BOYLE	5-PS	3	3	3	3	3	3/11/2005	WAH, FC, PCR, SCR
Morris Creek 0.1 to 3.7	Kentucky River	5100204	POWELL	3	3	3	3	3	3		WAH, FC, PCR, SCR
Moseby Branch 0.0 to 2.2	Kentucky River	5100205	OWEN	5-NS	3	3	3	3	3	9/16/1999	WAH, FC, PCR, SCR
Muddy Creek 0.0 to 20.6	Kentucky River	5100205	MADISON	2-FS	5-NS	3	2-FS	3	2-FS	12/1/1999	WAH, FC, PCR, SCR, OSRW
Muddy Creek 20.6 to 30.9	Kentucky River	5100205	MADISON	2-FS	3	3	3	3	3	1/2/2000	WAH, FC, PCR, SCR
Muncy Creek 2.7 to 4.7	Kentucky River	5100202	LESLIE	5-NS	3	3	3	3	3	9/30/2004	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Musselman Creek 0.0 to 9.0	Kentucky River	5100205	GRANT	2-FS	3	3	3	3	2-FS	3/23/2005	WAH, FC, PCR, SCR, OSRW
Negro Creek 0.8 to 2.9	Kentucky River	5100205	ROCKCASTLE	2-FS	3	3	3	3	3	11/30/2009	WAH, FC, PCR, SCR
Noland Creek 0.05 to 1.2	Kentucky River	5100204	ESTILL	5-PS	3	3	3	3	3	3/11/2005	WAH, FC, PCR, SCR
North Benson Creek 0.8 to 1.9	Kentucky River	5100205	FRANKLIN	5-PS	3	3	3	3	3	4/1/1999	WAH, FC, PCR, SCR
North Branch Lulbegrud Creek 0.0 to 2.4	Kentucky River	5100204	MONTGOMERY	2-FS	3	3	3	3	3	3/2/2001	WAH, FC, PCR, SCR
North Elkhorn Creek 0.7 to 7.4	Kentucky River	5100205	FRANKLIN	2-FS	3	3	3	3	3	7/24/2003	WAH, FC, PCR, SCR
North Elkhorn Creek 33.6 to 34.6	Kentucky River	5100205	SCOTT	3	3	3	3	2-FS	3	3/11/2005	WAH, FC, PCR, SCR, DWS
North Elkhorn Creek 44.75 to 66.0	Kentucky River	5100205	FAYETTE	5-PS	3	3	3	3	3	10/30/2009	WAH, FC, PCR, SCR
North Elkhorn Creek 66.0 to 73.75	Kentucky River	5100205	FAYETTE	5-PS	5-NS	3	3	3	3	10/4/2005	WAH, FC, PCR, SCR
North Fork Kentucky River 1.3 to 2.3	Kentucky River	5100201	LEE	3	4A-NS	3	3	2-FS	3	11/2/2009	WAH, FC, PCR, SCR, DWS
North Fork Kentucky River 104.1 to 105.1	Kentucky River	5100201	PERRY	3	4A-NS	3	3	2-FS	3	1/4/2010	WAH, FC, PCR, SCR, DWS
North Fork Kentucky River 131.0 to 132.0	Kentucky River	5100201	LETCHER	3	4A-NS	3	3	2-FS	3	1/5/2010	WAH, FC, PCR, SCR, DWS
North Fork Kentucky River 145.5 to 147.9	Kentucky River	5100201	LETCHER	5-NS	4A-NS	3	3	3	3	9/28/2005	WAH, FC, PCR, SCR
North Fork Kentucky River 147.9 to 162.0	Kentucky River	5100201	LETCHER	5-NS	4A-NS	3	3	2-FS	3	1/5/2010	WAH, FC, PCR, SCR, DWS
North Fork Kentucky River 2.3 to 35.7	Kentucky River	5100201	LEE	3	4A-NS	3	2-FS	3	3	3/11/2005	WAH, FC, PCR, SCR
North Fork Kentucky River 35.7 to 47.2	Kentucky River	5100201	BREATHITT	2-FS	4A-NS	2-FS	3	3	3	12/22/2009	WAH, FC, PCR, SCR
North Fork Kentucky River 47.2 to 48.2	Kentucky River	5100201	BREATHITT	3	4A-NS	3	3	2-FS	3	11/2/2009	WAH, FC, PCR, SCR, DWS
North Fork Kentucky River 48.2 to 55.4	Kentucky River	5100201	BREATHITT	3	4A-NS	3	3	3	3		WAH, FC, PCR, SCR, DWS
North Fork Kentucky River 0.0 to 1.3	Kentucky River	5100201	LEE	3	4A-NS	3	3	3	3		WAH, FC, PCR, SCR, DWS

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
North Fork Kentucky River 105.1 to 110.9	Kentucky River	5100201	PERRY	3	4A-NS	3	3	3	3		WAH, FC, PCR, SCR, DWS
North Fork Kentucky River 110.9 to 125.0	Kentucky River	5100201	BREATHITT	2-FS	4A-NS	3	3	3	3	1/5/2010	WAH, FC, PCR, SCR
North Fork Kentucky River 125.0 to 131.0	Kentucky River	5100201	BREATHITT	3	4A-NS	3	3	3	3	2/17/2010	WAH, FC, PCR, SCR
North Fork Kentucky River 132.0 to 145.5	Kentucky River	5100201	LETCHER	3	4A-NS	3	3	3	3		WAH, FC, PCR, SCR
North Fork Kentucky River 55.4 to 77.1	Kentucky River	5100201	PERRY	2-FS	4A-NS	3	3	3	3	1/4/2010	WAH, FC, PCR, SCR
North Fork Kentucky River 77.7 to 89.75	Kentucky River	5100201	PERRY	3	4A-NS	3	3	3	3	2/17/2010	WAH, FC, PCR, SCR
North Fork Kentucky River 89.75 to 99.95	Kentucky River	5100201	PERRY	2-FS	4A-NS	3	3	3	3	1/4/2010	WAH, FC, PCR, SCR
North Fork Kentucky River 99.95 to 104.1	Kentucky River	5100201	PERRY	3	4A-NS	3	3	3	3	2/17/2010	WAH, FC, PCR, SCR
North Fork North Benson Creek 0.0 to 2.2	Kentucky River	5100205	FRANKLIN	5-PS	3	3	3	3	3	4/1/1999	WAH, FC, PCR, SCR
North Severn Creek 0.0 to 2.1	Kentucky River	5100205	OWEN	2-FS	3	3	3	3	3	10/7/2004	WAH, FC, PCR, SCR
Otter Creek 0.0 to 4.1	Kentucky River	5100205	MADISON	1-FS	1-FS	1-FS	1-FS	1-FS	1-FS	2/22/2005	WAH, FC, PCR, SCR
Owsley Fork Lake	Kentucky River	5100205	MADISON	3	3	3	3	2-FS	3	6/3/2004 - 12/9/2009	WAH, FC, PCR, SCR, DWS
Paint Lick Creek 0.0 to 7.5	Kentucky River	5100205	GARRARD	2-FS	3	3	3	3	3	10/25/1999	WAH, FC, PCR, SCR
Paint Lick Creek 7.5 to 22.2	Kentucky River	5100205	MADISON	2-FS	3	3	3	3	3	9/16/1999	WAH, FC, PCR, SCR
Panbowl Lake	Kentucky River	5100201	BREATHITT	2-FS	3	2-FS	3	3	3	6/3/2004 - 12/7/2009	WAH, FC, PCR, SCR
Parched Corn Creek 0.0 to 2.2	Kentucky River	5100204	WOLFE	2-FS	3	3	3	3	3	3/6/2001	WAH, FC, PCR, SCR
Peyton Creek 0.0 to 4.1	Kentucky River	5100205	LINCOLN	3	5-NS	3	3	3	3	2/4/2008	WAH, FC, PCR, SCR
Plum Branch 0.0 to 3.9	Kentucky River	5100204	POWELL	5-PS	3	3	3	3	3	1/1/2005	WAH, FC, PCR, SCR
Polls Creek 0.0 to 4.7	Kentucky River	5100202	LESLIE	5-PS	3	3	3	3	3	9/30/1999	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Potter Fork 0.0 to 4.4	Kentucky River	5100201	LETCHER	5-NS	3	3	3	3	3	9/30/1999	WAH, FC, PCR, SCR
Puncheon Camp Creek 0.0 to 3.5	Kentucky River	5100202	BREATHITT	5-PS	3	3	3	3	3	12/21/1999	WAH, FC, PCR, SCR
Quicksand Creek 0.0 to 17.0	Kentucky River	5100201	BREATHITT	5-PS	5-PS	2-FS	3	3	3	1/5/2010	WAH, FC, PCR, SCR
Quicksand Creek 21.7 to 30.8	Kentucky River	5100201	BREATHITT	5-NS	3	3	3	3	3	2/6/2006	WAH, FC, PCR, SCR
Rattlesnake Creek 0.0 to 1.2	Kentucky River	5100205	GRANT	5-NS	3	3	3	3	3	9/16/1999	WAH, FC, PCR, SCR
Red Bird River 0.0 to 15.3	Kentucky River	5100203	CLAY	2-FS	5-PS	2-FS	3	3	2-FS	1/5/2010	WAH, FC, PCR, SCR, OSRW
Red Lick Creek 0.0 to 5.0	Kentucky River	5100204	ESTILL	5-PS	5-PS	2-FS	3	3	3	2/22/2005 - 12/1/2009	WAH, FC, PCR, SCR
Red River 21.8 to 30.7	Kentucky River	5100204	POWELL	2-FS	2-FS	2-FS	3	3	3	12/1/2009	WAH, FC, PCR, SCR
Red River 31.0 to 32.0	Kentucky River	5100204	POWELL	3	3	3	3	2-FS	3	3/3/2005	WAH, FC, PCR, SCR, DWS
Red River 50.1 to 60.9	Kentucky River	5100204	POWELL	2-FS	3	3	3	3	2-FS	3/14/2005	WAH, FC, PCR, SCR, OSRW
Red River 64.1 to 67.6	Kentucky River	5100204	WOLFE	5-PS	3	3	3	3	5-PS	10/1/2004	WAH, FC, PCR, SCR, OSRW
Red River 70.0 to 83.9	Kentucky River	5100204	WOLFE	5-PS	3	3	3	3	3	10/1/2004	WAH, FC, PCR, SCR
Red River 89.5 to 93.4	Kentucky River	5100204	WOLFE	5-PS	3	3	3	3	3	3/14/2005	WAH, FC, PCR, SCR
Reservoir No. 1 (Lake Ellerslie)	Kentucky River	5100205	FAYETTE	3	3	3	3	2-FS	3	12/9/2009	WAH, FC, PCR, SCR, DWS
Richland Creek 0.0 to 0.8	Kentucky River	5100205	OWEN	5-PS	3	3	3	3	3	1/12/2000	WAH, FC, PCR, SCR
Right Fork Beehive Branch 0.6 to 1.8	Kentucky River	5100201	PERRY	2-FS	3	3	3	3	3	12/1/2009	WAH, FC, PCR, SCR
Right Fork Big Double Creek 0.0 to 2.1	Kentucky River	5100203	CLAY	2-FS	3	3	3	3	3	3/3/2005	WAH, FC, PCR, SCR
Right Fork Buffalo Creek 0.0 to 2.1	Kentucky River	5100203	OWSLEY	2-FS	3	3	3	3	2-FS	10/7/2004	WAH, FC, PCR, SCR, OSRW
Right Fork Cane Creek 2.2 to 5.2	Kentucky River	5100204	POWELL	3	4A-PS	3	3	3	3	11/9/2009	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Right Fork Elisha Creek 0.0 to 3.3	Kentucky River	5100203	LESLIE	2-FS	3	3	3	3	2-FS	3/15/2005	WAH, FC, PCR, SCR, OSRW
Right Fork Lacy Creek 0.0 to 2.2	Kentucky River	5100204	WOLFE	5-PS	3	3	3	3	3	10/4/2005	WAH, FC, PCR, SCR
Right Fork Millstone Creek 0.0 to 1.6	Kentucky River	5100201	LETCHER	5-NS	3	3	3	3	3	3/15/2005	WAH, FC, PCR, SCR
Roaring Fork 0.0 to 0.9	Kentucky River	5100201	BREATHITT	2-FS	3	3	3	3	2-FS	3/15/2005	WAH, FC, PCR, SCR, OSRW
Rock Lick Creek 0.0 to 9.6	Kentucky River	5100204	JACKSON	2-FS	3	3	3	3	2-FS	1/28/2010	WAH, FC, PCR, SCR, OSRW
Rockbridge Fork 0.0 to 3.3	Kentucky River	5100204	WOLFE	2-FS	3	3	3	3	3	12/1/2009	WAH, FC, PCR, SCR
Rockhouse Creek 0.0 to 3.6	Kentucky River	5100201	LETCHER	5-PS	5-NS	3	3	3	3	9/20/1999	WAH, FC, PCR, SCR
Rockhouse Creek 0.7 to 5.7	Kentucky River	5100202	LESLIE	3	3	3	3	3	3		WAH, FC, PCR, SCR
Rose Fork 0.0 to 3.1	Kentucky River	5100204	WOLFE	5-NS	3	3	3	3	3	10/5/2005	WAH, FC, PCR, SCR
Ross Creek 2.7 to 7.3	Kentucky River	5100204	LEE	2-FS	3	3	3	3	3	12/1/2009	WAH, FC, PCR, SCR
Royal Spring 0.0 to 0.7	Kentucky River	5100205	SCOTT	5-NS	3	3	3	2-FS	3	1/7/2010	WAH, FC, PCR, SCR, DWS
Salt Fork 0.0 to 0.8	Kentucky River	5100204	MENIFEE	2-FS	3	3	3	3	3	3/6/2001	WAH, FC, PCR, SCR
Salt River of Sixmile Creek 0.0 to 4.5	Kentucky River	5100205	HENRY	5-PS	3	3	3	3	3	7/22/1999	WAH, FC, PCR, SCR
Sand Lick Fork 0.0 to 5.3	Kentucky River	5100204	POWELL	4A-PS	3	3	3	3	3	12/1/2009	WAH, FC, PCR, SCR
Sand Ripple Creek 0.1 to 3.9	Kentucky River	5100205	HENRY	2-FS	3	3	3	3	3	3/15/2005	WAH, FC, PCR, SCR, OSRW
Sawdridge Creek 0.0 to 3.35	Kentucky River	5100205	OWEN	2-FS	3	3	3	3	3	3/15/2005	WAH, FC, PCR, SCR
Severn Creek 0.55 to 1.35	Kentucky River	5100205	OWEN	3	3	3	3	2-FS	3	3/15/2005	WAH, FC, PCR, SCR, DWS
Severn Creek 1.35 to 3.0	Kentucky River	5100205	OWEN	2-FS	3	3	3	3	2-FS	12/1/2009	WAH, FC, PCR, SCR, OSRW
Sexton Creek 0.1 to 17.2	Kentucky River	5100203	CLAY	5-PS	2-FS	2-FS	3	3	3	2/22/2005	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Shaker Creek 0.1 to 1.4	Kentucky River	5100205	MERCER	2-FS	3	3	3	3	2-FS	3/15/2005	WAH, FC, PCR, SCR, OSRW
Shallow Ford Creek 5.9 to 6.9	Kentucky River	5100205	MADISON	5B-NS	3	3	3	3	3	1/26/2000	WAH, FC, PCR, SCR
Shelly Rock Fork 0.0 to 0.6	Kentucky River	5100201	BREATHITT	2-FS	3	3	3	3	2-FS	3/15/2005	WAH, FC, PCR, SCR, OSRW
Shop Fork 0.0 to 1.4	Kentucky River	5100202	LESLIE	2-FS	3	3	3	3	3	10/6/2004	WAH, FC, PCR, SCR
Silver Creek 0.0 to 11.1	Kentucky River	5100205	MADISON	2-FS	2-FS	2-FS	3	3	3	3/2/2005 - 12/1/2009	WAH, FC, PCR, SCR
Silver Creek 11.1 to 29.8	Kentucky River	5100205	MADISON	5-NS	3	3	3	3	3	12/1/2009	WAH, FC, PCR, SCR
Six Mile Creek 13.9 to 15.9	Kentucky River	5100205	SHELBY	5-NS	3	3	3	3	3	3/2/2011	WAH, FC, PCR, SCR
Sixmile Creek 0.1 to 11.9	Kentucky River	5100205	HENRY	2-FS	2-FS	2-FS	3	3	2-FS	12/1/2009	WAH, FC, PCR, SCR, OSRW
Smith Branch 0.7 to 2.5	Kentucky River	5100201	KNOTT	5-NS	2-FS	3	3	3	3	10/29/2009	WAH, FC, PCR, SCR
Snow Creek 0.0 to 3.9	Kentucky River	5100204	POWELL	5-PS	3	3	3	3	3	10/8/2004	WAH, FC, PCR, SCR
South Benson Creek 0.0 to 5.4	Kentucky River	5100205	FRANKLIN	2-FS	3	3	3	3	3	4/1/1999	WAH, FC, PCR, SCR
South Elkhorn Creek 5.05 to 16.6	Kentucky River	5100205	FRANKLIN	5-PS	5-NS	2-FS	3	3	3	3/16/2005 - 11/9/2009	WAH, FC, PCR, SCR
South Elkhorn Creek 16.6 to 34.5	Kentucky River	5100205	WOODFORD	5-PS	5-NS	2-FS	3	3	3	3/16/2005 - 11/9/2009	WAH, FC, PCR, SCR
South Elkhorn Creek 34.5 to 52.7	Kentucky River	5100205	WOODFORD	5-PS	5-NS	2-FS	3	3	3	11/9/2009 - 12/2/2009	WAH, FC, PCR, SCR
South Fork Kentucky River 11.75 to 18.9	Kentucky River	5100203	OWSLEY	2-FS	5-NS	2-FS	3	2-FS	2-FS	12/2/2009	WAH, FC, PCR, SCR, DWS, OSRW
South Fork Quicksand Creek 0.0 to 16.9	Kentucky River	5100201	BREATHITT	5-NS	3	3	3	3	3	10/11/2004	WAH, FC, PCR, SCR
South Fork Red River 0.0 to 3.9	Kentucky River	5100204	POWELL	4A-NS	3	3	3	3	5-NS	12/22/1999	WAH, FC, PCR, SCR, OSRW
South Fork Red River 4.2 to 10.6	Kentucky River	5100204	POWELL	4A-NS	3	3	3	3	3	12/22/1999	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
South Fork Station Camp Creek 0.0 to 9.7	Kentucky River	5100204	JACKSON	2-FS	3	3	3	3	2-FS	12/2/2009	WAH, FC, PCR, SCR, OSRW
South Fork Station Camp Creek 9.6 to 26.3	Kentucky River	5100204	JACKSON	2-FS	3	3	3	3	3	2/2/2000	WAH, FC, PCR, SCR
Spears Creek 1.0 to 6.2	Kentucky River	5100205	BOYLE	5-PS	3	3	3	3	3	12/2/2009	WAH, FC, PCR, SCR
Spring Creek 0.0 to 1.8	Kentucky River	5100203	CLAY	2-FS	3	3	3	3	3	12/2/2009	WAH, FC, PCR, SCR
Spring Fork 3.1 to 6.9	Kentucky River	5100201	BREATHITT	5-NS	3	3	3	3	3	9/10/1999	WAH, FC, PCR, SCR
Spruce Branch 0.0 to 1.1	Kentucky River	5100203	CLAY	2-FS	3	3	3	3	2-FS	3/1/2003	WAH, FC, PCR, SCR, OSRW
Squabble Creek 0.0 to 4.7	Kentucky River	5100202	PERRY	5-PS	3	3	3	3	3	10/11/2004	WAH, FC, PCR, SCR
Stanford Reservoir	Kentucky River	5100205	LINCOLN	2-FS	3	3	3	2-FS	3	6/3/2003 - 11/2/2009	WAH, FC, PCR, SCR, DWS
State Road Fork 0.0 to 4.3	Kentucky River	5100204	WOLFE	2-FS	3	3	3	3	3	3/7/2001	WAH, FC, PCR, SCR
Station Camp Creek 0.0 to 21.3	Kentucky River	5100204	JACKSON	5-PS	2-FS	2-FS	3	3	5-PS	12/2/2009	WAH, FC, PCR, SCR, OSRW
Steammill Branch 0.6 to 1.6	Kentucky River	5100205	GRANT	5B-PS	3	3	3	3	3	1/26/2000	WAH, FC, PCR, SCR
Steeles Run 0.0 to 5.1	Kentucky River	5100205	FAYETTE	2-FS	5-NS	5-NS	3	3	2-FS	3/16/2005 - 11/9/2009	WAH, FC, PCR, SCR, OSRW
Steer Fork 0.0 to 2.7	Kentucky River	5100204	JACKSON	2-FS	3	3	3	3	2-FS	3/16/2005	WAH, FC, PCR, SCR, OSRW
Stevens Creek 0.0 to 14.4	Kentucky River	5100205	GRANT	3	3	3	3	3	3		WAH, FC, PCR, SCR
Stevens Creek 14.4 to 17.1	Kentucky River	5100205	OWEN	5-PS	3	3	3	3	3	10/13/1999	WAH, FC, PCR, SCR
Stillwater Creek 0.0 to 3.5	Kentucky River	5100204	WOLFE	5-PS	3	3	3	3	3	3/16/2005	WAH, FC, PCR, SCR
Stinnett Creek 1.3 to 4.7	Kentucky River	5100202	LESLIE	5-NS	3	3	3	3	3	10/11/2004	WAH, FC, PCR, SCR
Stump Cave Branch 0.0 to 1.6	Kentucky River	5100204	POWELL	4A-NS	3	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Sturgeon Creek 8.0 to 12.2	Kentucky River	5100204	LEE	5-PS	3	3	3	3	5-PS	10/11/2004	WAH, FC, PCR, SCR, OSRW

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Sudduth Branch 0.0 to 2.55	Kentucky River	5100205	FRANKLIN	2-FS	3	3	3	3	3	12/2/2009	WAH, FC, PCR, SCR
Sugar Creek 0.6 to 5.4	Kentucky River	5100203	LESLIE	2-FS	3	3	3	3	2-FS	1/1/2005	WAH, FC, PCR, SCR, OSRW
Sugar Creek 4.8 to 6.0	Kentucky River	5100205	GARRARD	5-PS	3	3	3	3	3	10/13/2004	WAH, FC, PCR, SCR
Sulphur Creek 0.0 to 1.4	Kentucky River	5100205	HENRY	5-NS	3	3	3	3	3	4/1/1999	WAH, FC, PCR, SCR
Sulphur Lick Creek 0.0 to 5.2	Kentucky River	5100205	FRANKLIN	2-FS	3	3	3	3	2-FS	7/31/2008	WAH, FC, PCR, SCR, OSRW
Swift Camp Creek 0.0 to 13.95	Kentucky River	5100204	WOLFE	5-PS	3	3	3	3	3	12/2/2009	CAH, FC, PCR, SCR
Tate Creek 0.0 to 6.5	Kentucky River	5100205	MADISON	5-NS	3	3	3	3	3	12/22/1999	WAH, FC, PCR, SCR
Tate Creek 6.5 to 11.5	Kentucky River	5100205	MADISON	2-FS	2-FS	3	3	3	3	12/22/1999	WAH, FC, PCR, SCR
Ten Mile Creek 0.0 to 3.0	Kentucky River	5100205	GRANT	5-PS	5-NS	2-FS	3	3	3	12/2/2009	WAH, FC, PCR, SCR
Three Forks Creek 0.0 to 7.6	Kentucky River	5100205	GRANT	5-PS	3	3	3	3	3	9/15/1999	WAH, FC, PCR, SCR
Town Branch 0.0 to 9.2	Kentucky River	5100205	FAYETTE	5-PS	5-NS	3	3	3	3	1/18/2000 - 11/4/2009	WAH, FC, PCR, SCR
Town Branch 10.8 to 12.1	Kentucky River	5100205	FAYETTE	5-NS	5-NS	5-NS	3	3	3	11/4/2009	WAH, FC, PCR, SCR
Town Branch 9.2 to 10.8	Kentucky River	5100205	FAYETTE	5-PS	5-NS	3	3	3	3	1/18/2000 - 11/4/2009	WAH, FC, PCR, SCR
Town Creek 2.5 to 3.5	Kentucky River	5100205	HENRY	5B-NS	3	3	3	3	3	1/26/2000	WAH, FC, PCR, SCR
Trace Fork 1.25 to 3.4	Kentucky River	5100201	KNOTT	5-NS	5-PS	5-NS	3	3	3	10/29/2009	WAH, FC, PCR, SCR
Troublesome Creek 0.0 to 45.1	Kentucky River	5100201	BREATHITT	5-NS	4A-NS	2-FS	3	3	3	12/2/2009	WAH, FC, PCR, SCR
Two Mile Creek 0.0 to 3.1	Kentucky River	5100205	OWEN	3	3	3	3	3	3		WAH, FC, PCR, SCR
Upper Devil Creek 0.0 to 1.0	Kentucky River	5100201	WOLFE	5-PS	3	3	3	3	3	9/15/1999	WAH, FC, PCR, SCR
Upper Hood Branch 0.0 to 1.6	Kentucky River	5100204	POWELL	2-FS	3	3	3	3	3	1/18/2000	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Upper Howard Creek 0.0 to 3.2	Kentucky River	5100205	CLARK	5-PS	3	3	3	3	3	12/22/1999	WAH, FC, PCR, SCR
Upper Jacks Creek 0.0 to 2.2	Kentucky River	5100203	CLAY	5-PS	3	3	3	3	3	12/3/2009	WAH, FC, PCR, SCR
Upper Twin Creek 0.0 to 3.6	Kentucky River	5100202	BREATHITT	5-PS	3	3	3	3	3	12/22/1999	WAH, FC, PCR, SCR
UT of East Hickman Creek 0.8 to 2.2	Kentucky River	5100205	FAYETTE	3	5-NS	3	3	3	3	3/3/2010	WAH, FC, PCR, SCR
UT to Baughman Fork 0.0 to 1.1	Kentucky River	5100205	FAYETTE	4A-NS	3	3	3	3	3	7/5/2003	WAH, FC, PCR, SCR
UT to Cane Run 0.0 to 3.5	Kentucky River	5100205	SCOTT	5-NS	5-NS	3	3	3	3	1/6/2010	WAH, FC, PCR, SCR
UT to Cane Run 0.0 to 2.1	Kentucky River	5100205	FAYETTE	5-NS	3	3	3	3	3	5/5/2009	WAH, FC, PCR, SCR
UT to Cane Run 0.0 to 2.4	Kentucky River	5100205	FAYETTE	5-NS	3	3	3	3	3	5/5/2009	WAH, FC, PCR, SCR
UT to Cawood Branch 0.0 to 2.1	Kentucky River	5100202	LESLIE	2-FS	3	3	3	3	2-FS	1/1/2005	WAH, FC, PCR, SCR, OSRW
UT to Cedar Creek 0.0 to 1.4	Kentucky River	5100205	OWEN	2-FS	3	3	3	3	2-FS	3/4/2005	WAH, FC, PCR, SCR, OSRW
UT to Clear Creek 0.0 to 4.3	Kentucky River	5100205	WOODFORD	2-FS	3	3	3	3	3	1/18/2000	WAH, FC, PCR, SCR
UT to Engle Fork 0.0 to 0.5	Kentucky River	5100201	PERRY	5-NS	3	3	3	3	3	10/13/2004	WAH, FC, PCR, SCR
UT to Flat Creek 0.0 to 1.5	Kentucky River	5100205	FRANKLIN	2-FS	3	3	3	3	3	3/7/2005	WAH, FC, PCR, SCR
UT to Glenns Creek 0.0 to 1.9	Kentucky River	5100205	WOODFORD	2-FS	3	3	3	3	2-FS	3/22/2005	WAH, FC, PCR, SCR, OSRW
UT to Hanging Fork Creek 0.0 to 1.3	Kentucky River	5100205	CASEY	2-FS	3	3	3	3	3	10/13/2004	WAH, FC, PCR, SCR
UT to Jacks Creek 0.0 to 1.15	Kentucky River	5100205	MADISON	2-FS	3	3	3	3	2-FS	3/22/2005	WAH, FC, PCR, SCR, OSRW
UT to Kentucky River 0.1 to 1.4	Kentucky River	5100205	FRANKLIN	2-FS	3	3	3	3	2-FS	3/22/2005	WAH, FC, PCR, SCR, OSRW
UT to Line Fork 0.0 to 0.6	Kentucky River	5100201	LETCHER	2-FS	3	3	3	3	2-FS	3/22/2005	WAH, FC, PCR, SCR, OSRW
UT to N. Elkhorn Creek 0.0 to 5.6	Kentucky River	5100205	FAYETTE	5-PS	3	3	3	3	3	10/14/2004	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
UT to North Branch Lulbegrud Creek 0.0 to 2.2	Kentucky River	5100204	MONTGOMERY	5-NS	3	3	3	3	3	2/7/2006	WAH, FC, PCR, SCR
UT to North Elkhorn Creek 0.0 to 3.5	Kentucky River	5100205	FAYETTE	3	5-NS	3	3	3	3	11/9/2009	WAH, FC, PCR, SCR
UT to Smith Fork 0.0 to 0.55	Kentucky River	5100205	MADISON	5-PS	3	3	3	3	3	3/16/2005	WAH, FC, PCR, SCR
UT to Swift Camp Creek 0.0 to 1.5	Kentucky River	5100204	WOLFE	5-NS	3	3	3	3	3	10/14/1999	WAH, FC, PCR, SCR
UT to Tanyard Branch 1.0 to 1.6	Kentucky River	5100203	CLAY	2-FS	3	3	3	3	3	10/13/2004	WAH, FC, PCR, SCR
UT to Trace Fork 0.05 to 0.7	Kentucky River	5100201	KNOTT	3	5-PS	3	3	3	3	10/29/2009	WAH, FC, PCR, SCR
UT to Upper Howards Creek 2.1 to 2.7	Kentucky River	5100205	CLARK	2-FS	3	3	3	3	3	1/14/2005	WAH, FC, PCR, SCR
Walker Creek 0.0 to 5.4	Kentucky River	5100201	LEE	2-FS	3	3	3	3	3	10/14/1999	WAH, FC, PCR, SCR
Walnut Meadows Branch 0.0 to 3.9	Kentucky River	5100205	MADISON	3	3	3	3	3	3		WAH, FC, PCR, SCR
War Creek 0.0 to 3.1	Kentucky River	5100201	BREATHITT	2-FS	3	3	3	3	3	9/15/1999	WAH, FC, PCR, SCR
War Fork 0.0 to 13.8	Kentucky River	5100204	JACKSON	2-FS	3	3	3	3	2-FS	12/3/2009	CAH, FC, PCR, SCR, OSRW
Watches Fork 0.0 to 1.0	Kentucky River	5100203	OWSLEY	2-FS	3	3	3	3	2-FS	1/28/2010	WAH, FC, PCR, SCR, OSRW
West Fork Mill Creek 0.0 to 1.0	Kentucky River	5100205	CARROLL	5-PS	3	3	3	3	3	7/23/1999	WAH, FC, PCR, SCR
West Fork Otter Creek 0.0 to 2.8	Kentucky River	5100205	MADISON	2-FS	3	3	3	3	3	12/17/1999	WAH, FC, PCR, SCR
West Fork Sugar Creek 0.0 to 2.6	Kentucky River	5100205	GARRARD	2-FS	3	3	3	3	3	3/3/2005	WAH, FC, PCR, SCR
West Hickman Creek 0.0 to 3.1	Kentucky River	5100205	JESSAMINE	5-PS	5-PS	3	3	3	3	1/24/2000	WAH, FC, PCR, SCR
West Hickman Creek 3.1 to 8.4	Kentucky River	5100205	FAYETTE	5-PS	2-FS	3	3	3	3	1/18/2000 - 11/4/2009	WAH, FC, PCR, SCR
White Lick Creek 0.0 to 2.8	Kentucky River	5100205	GARRARD	5-PS	3	3	3	3	3	9/16/1999	WAH, FC, PCR, SCR
White Oak Creek 0.0 to 2.7	Kentucky River	5100204	ESTILL	3	3	3	3	3	3		WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
White Oak Creek 0.0 to 2.8	Kentucky River	5100205	GARRARD	5-NS	5-NS	3	3	3	3	10/14/2004 - 1/31/2008	WAH, FC, PCR, SCR
White Oak Creek 0.0 to 3.4	Kentucky River	5100205	LINCOLN	3	5-NS	3	3	3	3	2/1/2008	WAH, FC, PCR, SCR
Wild Dog Creek 0.0 to 0.6	Kentucky River	5100204	OWSLEY	2-FS	3	3	3	3	3	12/3/2009	WAH, FC, PCR, SCR
Wilgreen Lake	Kentucky River	5100205	MADISON	5-PS	3	5-PS	3	3	3	12/8/2009	WAH, FC, PCR, SCR
Winchester Reservoir	Kentucky River	5100205	CLARK	3	3	3	3	2-FS	3	11/2/2009	WAH, FC, PCR, SCR, DWS
Wolf Run 0.0 to 4.4	Kentucky River	5100205	FAYETTE	5-PS	5-NS	5-NS	3	3	3	1/13/2000 - 10/30/2009	WAH, FC, PCR, SCR
Wolfpen Creek 0.0 to 3.3	Kentucky River	5100204	MENIFEE	2-FS	3	3	3	3	2-FS	3/26/1998	WAH, FC, PCR, SCR, OSRW
Wooten Creek 0.0 to 3.0	Kentucky River	5100202	LESLIE	5-PS	3	3	3	3	3	12/22/1999	WAH, FC, PCR, SCR
A.J.Jolly Lake (Campbell County Lake)	Licking River	5100101	CAMPBELL	2-FS	3	3	3	3	3	3/24/2011	WAH, FC, PCR, SCR
Allison Creek 0.0 to 4.95	Licking River	5100101	FLEMING	5-PS	4A-NS	3	3	3	3	10/8/2010	WAH, FC, PCR, SCR
Banklick Creek 0.0 to 3.45	Licking River	5100101	KENTON	5-PS	5-NS	3	3	3	3	3/17/2011	WAH, FC, PCR, SCR
Banklick Creek 3.45 to 8.2	Licking River	5100101	KENTON	5-NS	5-NS	3	3	3	3	4/13/2001	WAH, FC, PCR, SCR
Banklick Creek 8.2 to 19.2	Licking River	5100101	KENTON	5-PS	5-PS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Beaver Creek 10.0 to 14.4	Licking River	5100101	MENIFEE	5-PS	3	3	3	3	3	3/12/2001	WAH, FC, PCR, SCR
Beaver Creek 7.6 to 15.4	Licking River	5100101	HARRISON	2-FS	3	3	3	3	3	10/19/2005	WAH, FC, PCR, SCR
Big Brushy Creek 0.0 to 1.05	Licking River	5100101	ROWAN	3	5B-NS	3	3	3	3	3/17/2011	WAH, FC, PCR, SCR
Big Half Mountain Creek 0.0 to 4.0	Licking River	5100101	MAGOFFIN	5-NS	3	3	3	3	3	3/4/2009	WAH, FC, PCR, SCR
Blacks Creek 0.0 to 5.7	Licking River	5100102	BOURBON	5-NS	5-NS	3	3	3	3	12/2/2011	WAH, FC, PCR, SCR
Blackwater Creek 3.9 to 11.8	Licking River	5100101	MORGAN	2-FS	5-NS	2-FS	3	3	3	9/20/2005 - 3/17/2011	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Blanket Creek 0.0 to 1.9	Licking River	5100101	PENDLETON	2-FS	3	3	3	3	2-FS	3/4/2005	WAH, FC, PCR, SCR, OSRW
Boone Creek 0.0 to 5.2	Licking River	5100102	BOURBON	5-PS	5-NS	3	3	3	3	12/20/2011	WAH, FC, PCR, SCR
Boone Creek 5.2 to 9.1	Licking River	5100102	BOURBON	5-PS	5-NS	3	3	3	3	12/2/2011	WAH, FC, PCR, SCR
Botts Fork 0.0 to 2.1	Licking River	5100101	MENIFEE	2-FS	3	3	3	3	2-FS	10/24/2005	WAH, FC, PCR, SCR, OSRW
Bowman Creek 0.0 to 6.0	Licking River	5100101	KENTON	2-FS	3	3	3	3	2-FS	10/24/2005	WAH, FC, PCR, SCR, OSRW
Broadtree Fork 0.0 to 1.6	Licking River	5100101	MAGOFFIN	5-NS	3	3	3	3	3	3/4/2009	WAH, FC, PCR, SCR
Broke Leg Creek 0.0 to 1.0	Licking River	5100101	MORGAN	5-PS	3	3	3	3	3	10/25/2005	WAH, FC, PCR, SCR
Broke Leg Creek 1.0 to 4.4	Licking River	5100101	MORGAN	5-PS	3	3	3	3	3	6/24/2005	WAH, FC, PCR, SCR
Brushy Fork 0.0 to 2.2	Licking River	5100101	FLEMING	2-FS	3	3	3	3	3	8/1/2000	WAH, FC, PCR, SCR
Brushy Fork 0.7 to 5.6	Licking River	5100101	MENIFEE	2-FS	3	3	3	3	3	10/25/2005	WAH, FC, PCR, SCR
Brushy Fork 0.0 to 5.8	Licking River	5100101	PENDLETON	2-FS	3	3	3	3	3	3/17/2011	WAH, FC, PCR, SCR
Bucket Branch 0.0 to 1.9	Licking River	5100101	MORGAN	2-FS	3	3	3	3	2-FS	9/20/2005	WAH, FC, PCR, SCR, OSRW
Buffalo Creek 0.0 to 2.85	Licking River	5100101	MAGOFFIN	5-NS	3	3	3	3	3	3/4/2009	WAH, FC, PCR, SCR
Bull Fork 2.4 to 4.4	Licking River	5100101	ROWAN	2-FS	3	3	3	3	3	10/25/2005	WAH, FC, PCR, SCR
Burning Fork 0.0 to 3.3	Licking River	5100101	MAGOFFIN	5-NS	5-NS	3	3	3	3	10/25/2003 - 3/5/2009	WAH, FC, PCR, SCR
Burning Fork 3.3 to 5.2	Licking River	5100101	MAGOFFIN	5-NS	3	3	3	3	3	3/17/2011	WAH, FC, PCR, SCR
Caney Creek 0.0 to 4.2	Licking River	5100101	MORGAN	5-PS	3	3	3	3	3	2/9/1999	WAH, FC, PCR, SCR
Carlisle City Lake	Licking River	5100102	NICHOLAS	3	3	3	3	2-FS	3	3/24/2011	WAH, FC, PCR, SCR, DWS
Caskey Fork 0.0 to 2.3	Licking River	5100101	MORGAN	5-NS	3	3	3	3	3	10/27/2005	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Cassidy Creek 0.0 to 3.9	Licking River	5100101	FLEMING	3	4A-NS	3	3	3	3	1/1/2001	WAH, FC, PCR, SCR
Cassidy Creek 0.5 to 5.0	Licking River	5100101	NICHOLAS	3	3	3	3	3	3		WAH, FC, PCR, SCR
Cave Run Lake	Licking River	5100101	ROWAN	2-FS	3	2-FS	5-PS	3	3	10/6/2011	WAH, FC, PCR, SCR, DWS
Cedar Creek 0.0 to 1.7	Licking River	5100101	ROBERTSON	2-FS	3	3	3	3	2-FS	10/27/2005	WAH, FC, PCR, SCR, OSRW
Christy Creek 0.0 to 4.3	Licking River	5100101	ROWAN	5-PS	3	3	3	3	3	5/12/2001	WAH, FC, PCR, SCR
Clarks Run 0.0 to 2.1	Licking River	5100101	MASON	5-PS	3	3	3	3	3	10/27/2005	WAH, FC, PCR, SCR
Coffee Creek 0.0 to 4.1	Licking River	5100101	MORGAN	5-NS	3	3	3	3	3	9/20/2005	WAH, FC, PCR, SCR
Cooks Branch 0.0 to 2.9	Licking River	5100101	MONTGOMERY	2-FS	3	3	3	3	3	4/26/2004	WAH, FC, PCR, SCR
Cooper Run 0.0 to 10.15	Licking River	5100102	BOURBON	5-NS	5-NS	3	3	3	3	12/8/2011	WAH, FC, PCR, SCR
Coopertown Creek 0.0 to 4.8	Licking River	5100102	GRANT	2-FS	3	3	3	3	3	10/27/2005	WAH, FC, PCR, SCR
Craintown Branch 0.0 to 3.6	Licking River	5100101	FLEMING	5-PS	4A-PS	3	3	3	3	4/20/2001	WAH, FC, PCR, SCR
Crane Creek 0.0 to 2.9	Licking River	5100101	FLEMING	5-PS	3	3	3	3	3	6/30/2004	WAH, FC, PCR, SCR
Craney Creek 0.0 to 5.9	Licking River	5100101	ROWAN	2-FS	3	3	3	3	2-FS	9/20/2005	CAH, FC, PCR, SCR, OSRW
Craney Creek 5.9 to 10.0	Licking River	5100101	ROWAN	2-FS	3	3	3	3	2-FS	4/9/2001	CAH, FC, PCR, SCR, OSRW
Crooked Creek 0.0 to 9.1	Licking River	5100101	NICHOLAS	3	5-NS	3	3	3	3	8/14/2000	WAH, FC, PCR, SCR
Crooked Creek 0.5 to 6.8	Licking River	5100102	HARRISON	2-FS	3	3	3	3	3	10/27/2005	WAH, FC, PCR, SCR
Cruises Creek 0.0 to 8.7	Licking River	5100101	KENTON	5-PS	2-FS	3	3	3	3	3/6/2001 - 3/17/2011	WAH, FC, PCR, SCR
Devils Fork 0.0 to 8.5	Licking River	5100101	MORGAN	2-FS	3	3	3	3	3	10/11/2010	WAH, FC, PCR, SCR, OSRW
Doe Run Lake	Licking River	5100102	KENTON	5-PS	3	3	3	3	3	8/26/2004 - 3/24/2011	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Doty Branch 0.0 to 2.3	Licking River	5100101	FLEMING	5-NS	4A-NS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Dry Creek 0.0 to 2.5	Licking River	5100101	ROWAN	5-PS	3	3	3	3	3	10/27/2005	WAH, FC, PCR, SCR
Elk Fork 0.0 to 4.9	Licking River	5100101	MORGAN	5-PS	3	3	3	3	3	4/9/2001	WAH, FC, PCR, SCR
Elk Fork 12.6 to 14.7	Licking River	5100101	MORGAN	5-PS	3	3	3	3	3	8/3/2000	WAH, FC, PCR, SCR
Elk Fork 4.9 to 10.5	Licking River	5100101	MORGAN	5-NS	3	3	3	3	3	8/3/2000	WAH, FC, PCR, SCR
Elms Run 3.3 to 4.3	Licking River	5100101	ROBERTSON	5B-NS	5B-NS	3	3	3	3	3/17/2011	WAH, FC, PCR, SCR
Evans Branch Reservoir	Licking River	5100101	ROWAN	3	3	3	3	2-FS	3	3/25/2011	WAH, FC, PCR, SCR, DWS
Fannins Branch 1.5 to 3.4	Licking River	5100101	MORGAN	5-PS	3	3	3	3	3	11/1/2005	WAH, FC, PCR, SCR
Flat Creek 0.0 to 0.9	Licking River	5100101	BATH	2-FS	5-NS	3	3	3	3	1/5/2001	WAH, FC, PCR, SCR
Flat Run 0.0 to 2.2	Licking River	5100102	BOURBON	5-PS	5-NS	3	3	3	3	12/8/2011	WAH, FC, PCR, SCR
Flat Run 2.2 to 9.05	Licking River	5100102	BOURBON	5-NS	5-NS	3	3	3	3	12/8/2011	WAH, FC, PCR, SCR
Fleming Creek 12.8 to 16.0	Licking River	5100101	FLEMING	5-PS	4A-NS	3	3	3	3	1/9/2001	WAH, FC, PCR, SCR
Fleming Creek 20.8 to 39.4	Licking River	5100101	FLEMING	5-NS	4A-NS	3	3	3	3	1/8/2001	WAH, FC, PCR, SCR
Fleming Creek 0.0 to 12.8	Licking River	5100101	FLEMING	5-PS	4A-NS	3	3	3	3	1/8/2001	WAH, FC, PCR, SCR
Fleming Creek 16.0 to 20.8	Licking River	5100101	FLEMING	2-FS	4A-NS	3	3	3	3	7/8/2004	WAH, FC, PCR, SCR
Flemingsburg Lake	Licking River	5100101	FLEMING	3	3	3	3	2-FS	3	3/25/2011	WAH, FC, PCR, SCR, DWS
Flour Creek 0.0 to 2.2	Licking River	5100101	PENDLETON	2-FS	3	3	3	3	2-FS	11/1/2005	WAH, FC, PCR, SCR, OSRW
Fox Creek 0.0 to 10.1	Licking River	5100101	FLEMING	5-PS	5-PS	5-PS	3	3	3	3/17/2011	WAH, FC, PCR, SCR
Fox Creek 20.1 to 22.7	Licking River	5100101	FLEMING	5-NS	3	3	3	3	3	8/3/2000	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Fox Creek 10.1 to 16.0	Licking River	5100101	FLEMING	5-PS	3	3	3	3	3	3/17/2011	WAH, FC, PCR, SCR
Grassy Creek 0.0 to 1.3	Licking River	5100101	PENDLETON	3	2-FS	3	3	3	3	8/14/2000	WAH, FC, PCR, SCR
Grassy Creek 4.6 to 10.0	Licking River	5100101	MORGAN	5-PS	3	3	3	3	3	11/1/2005	WAH, FC, PCR, SCR
Grassy Lick Creek 0.0 to 4.6	Licking River	5100102	MONTGOMERY	4C-PS	3	3	3	3	3	3/17/2011	WAH, FC, PCR, SCR
Green Creek 0.0 to 8.15	Licking River	5100102	BOURBON	5-PS	3	3	3	3	3	3/5/2009	WAH, FC, PCR, SCR
Green Creek 8.45 to 9.7	Licking River	5100102	CLARK	5-PS	3	3	3	3	3	3/5/2009	WAH, FC, PCR, SCR
Greenbriar Lake	Licking River	5100101	MONTGOMERY	2-FS	3	3	3	3	3	8/26/2005 - 3/25/2011	WAH, FC, PCR, SCR, DWS
Grovers Creek 0.5 to 3.4	Licking River	5100101	PENDLETON	2-FS	3	3	3	3	2-FS	3/5/2009	WAH, FC, PCR, SCR, OSRW
Hancock Creek 4.3 to 7.6	Licking River	5100102	CLARK	5-NS	3	3	3	3	3	3/5/2009	WAH, FC, PCR, SCR
Harris Creek 0.0 to 0.75	Licking River	5100101	PENDLETON	5B-NS	3	3	3	3	3	3/17/2011	WAH, FC, PCR, SCR
Hillsboro Branch 0.0 to 2.7	Licking River	5100101	FLEMING	2-FS	3	3	3	3	3	3/8/2005	WAH, FC, PCR, SCR
Hinkston Creek 0.0 to 12.6	Licking River	5100102	BOURBON	2-FS	5-NS	2-FS	3	3	3	9/20/2005 - 3/18/2011	WAH, FC, PCR, SCR
Hinkston Creek 20.8 to 31.0	Licking River	5100102	BOURBON	2-FS	5-PS	3	3	3	3	8/4/2000	WAH, FC, PCR, SCR
Hinkston Creek 31.0 to 33.3	Licking River	5100102	NICHOLAS	2-FS	3	3	3	3	3	8/4/2000	WAH, FC, PCR, SCR
Hinkston Creek 41.8 to 49.1	Licking River	5100102	BOURBON	5-PS	5-NS	3	3	3	3	8/4/2000	WAH, FC, PCR, SCR
Hinkston Creek 51.5 to 65.9	Licking River	5100102	MONTGOMERY	5-NS	3	3	3	3	3	10/1/1999	WAH, FC, PCR, SCR
Hinkston Creek 68.0 to 71.5	Licking River	5100102	MONTGOMERY	2-FS	3	3	3	3	3	1/10/2001	WAH, FC, PCR, SCR
Hinkston Creek 13.3 to 14.3	Licking River	5100102	BOURBON	3	3	3	3	2-FS	3	11/3/2005	WAH, FC, PCR, SCR, DWS
Hoods Creek 0.0 to 6.3	Licking River	5100102	CLARK	5-NS	5-NS	5-NS	3	3	3	3/5/2009	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Horsepen Fork 0.0 to 1.2	Licking River	5100101	MAGOFFIN	5-PS	3	3	3	3	3	3/18/2011	WAH, FC, PCR, SCR
Houston Creek 0.0 to 9.0	Licking River	5100102	BOURBON	3	5-NS	3	3	3	3	8/14/2000	WAH, FC, PCR, SCR
Houston Creek 9.0 to 12.7	Licking River	5100102	BOURBON	5-PS	3	3	3	3	3	8/7/2000	WAH, FC, PCR, SCR
Howard Branch 0.0 to 2.0	Licking River	5100101	MAGOFFIN	5-NS	3	3	3	3	3	3/5/2009	WAH, FC, PCR, SCR
Huskens Run 0.0 to 1.5	Licking River	5100102	HARRISON	3	4A-NS	3	3	3	3	6/28/2011	WAH, FC, PCR, SCR
Hutchison Creek 0.0 to 5.4	Licking River	5100102	BOURBON	3	3	3	3	3	3		WAH, FC, PCR, SCR
Indian Creek 0.0 to 0.7	Licking River	5100102	BOURBON	3	5B-NS	5B-NS	3	3	3	9/29/2005	WAH, FC, PCR, SCR
Johnson Creek 0.0 to 8.2	Licking River	5100101	ROBERTSON	2-FS	5-NS	2-FS	3	3	3	3/17/2011 - 3/18/2011	WAH, FC, PCR, SCR
Johnson Creek 0.0 to 0.9	Licking River	5100102	CLARK	5-PS	5-NS	5-NS	3	3	3	3/5/2009	WAH, FC, PCR, SCR
Johnson Creek 0.0 to 3.1	Licking River	5100101	MAGOFFIN	5-NS	5-NS	3	3	3	3	2/13/2001	WAH, FC, PCR, SCR
Johnson Creek 14.6 to 21.8	Licking River	5100101	FLEMING	2-FS	3	3	3	3	3	3/5/2009	WAH, FC, PCR, SCR
Johnson Creek 6.0 to 8.6	Licking River	5100101	MAGOFFIN	5-NS	3	3	3	3	3	3/5/2009	WAH, FC, PCR, SCR
Kennedy Creek 0.0 to 5.7	Licking River	5100102	BOURBON	3	5-NS	3	3	3	3	12/8/2011	WAH, FC, PCR, SCR
Kincaid Lake	Licking River	5100101	PENDLETON	5-PS	3	3	3	3	3	8/26/2005 - 3/25/2011	WAH, FC, PCR, SCR
Knox Hill Branch 0.0 to 2.8	Licking River	5100101	BATH	2-FS	3	3	3	3	3	11/21/2005	WAH, FC, PCR, SCR
Lake Carnico	Licking River	5100102	NICHOLAS	2-FS	3	3	3	3	3	8/26/2004 - 3/25/2011	WAH, FC, PCR, SCR
Lees Creek 0.0 to 4.3	Licking River	5100101	MASON	5-PS	3	3	3	3	3	11/3/2005	WAH, FC, PCR, SCR
Left Fork of Johnson Creek 0.0 to 3.15	Licking River	5100101	MAGOFFIN	5-NS	3	3	3	3	3	3/5/2009	WAH, FC, PCR, SCR
Left Fork White Oak Creek 0.0 to 1.8	Licking River	5100101	MORGAN	5-PS	3	3	3	3	3	8/7/2000	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Lick Branch 0.0 to 2.3	Licking River	5100101	MAGOFFIN	5-NS	3	3	3	3	3	3/5/2009	WAH, FC, PCR, SCR
Lick Creek 0.0 to 2.15	Licking River	5100101	MAGOFFIN	5-PS	3	3	3	3	3	11/3/2005	WAH, FC, PCR, SCR
Lick Creek 2.15 to 4.6	Licking River	5100101	MAGOFFIN	5-NS	3	3	3	3	3	3/6/2009	WAH, FC, PCR, SCR
Licking River 0.0 to 4.65	Licking River	5100101	CAMPBELL	2-FS	5-PS	3	3	2-FS	3	3/18/2011	WAH, FC, PCR, SCR, DWS
Licking River 102.4 to 103.4	Licking River	5100101	NICHOLAS	3	3	3	3	2-FS	3	3/18/2011	WAH, FC, PCR, SCR, DWS, OSRW
Licking River 110.0 to 130.0	Licking River	5100101	NICHOLAS	3	2-FS	2-FS	3	2-FS	3	3/18/2011	WAH, FC, PCR, SCR, DWS
Licking River 14.9 to 21.5	Licking River	5100101	CAMPBELL	3	2-FS	3	3	3	3	2/8/2001	WAH, FC, PCR, SCR, OSRW
Licking River 145.2 to 148.6	Licking River	5100101	FLEMING	3	2-FS	2-FS	3	3	3	3/6/2001	WAH, FC, PCR, SCR
Licking River 224.1 to 241.1	Licking River	5100101	MORGAN	5-NS	5-NS	5-PS	3	2-FS	3	3/18/2011	WAH, FC, PCR, SCR, DWS
Licking River 264.85 to 271.45	Licking River	5100101	MAGOFFIN	5-PS	3	3	3	3	3	3/18/2011	WAH, FC, PCR, SCR
Licking River 271.45 to 293.95	Licking River	5100101	MAGOFFIN	5-PS	3	3	3	2-FS	3	3/18/2011	WAH, FC, PCR, SCR, DWS
Licking River 30.8 to 37.45	Licking River	5100101	PENDLETON	2-FS	2-FS	2-FS	3	3	2-FS	12/8/2005	WAH, FC, PCR, SCR, OSRW
Licking River 4.8 to 14.9	Licking River	5100101	CAMPBELL	3	5-PS	3	3	3	3	2/8/2001	WAH, FC, PCR, SCR, DWS
Licking River 52.6 to 53.6	Licking River	5100101	PENDLETON	3	3	3	3	2-FS	3	3/18/2011	WAH, FC, PCR, SCR, DWS, OSRW
Licking River 159.6 to 170.6	Licking River	5100101	ROWAN	2-FS	3	3	3	3	2-FS	7/31/2008	WAH, FC, PCR, SCR, OSRW
Licking River 174.3 to 180.6	Licking River	5100101	ROWAN	2-FS	2-FS	5-PS	3	2-FS	3	3/18/2011	CAH, FC, PCR, SCR, DWS
Licking River 249.55 to 264.85	Licking River	5100101	MAGOFFIN	5-PS	3	3	3	3	3	3/18/2011	WAH, FC, PCR, SCR
Licking River 293.95 to 302.2	Licking River	5100101	MAGOFFIN	5-NS	3	3	3	3	3	10/11/2010	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Licking River 76.65 to 88.8	Licking River	5100101	HARRISON	5-NS	5-NS	5-PS	3	3	5-NS	3/18/2011	WAH, FC, PCR, SCR, OSRW
Little Beaver Creek 0.0 to 3.3	Licking River	5100101	HARRISON	5-PS	3	3	3	3	3	11/3/2005	WAH, FC, PCR, SCR
Little Blackwater Creek 0.0 to 7.15	Licking River	5100101	MORGAN	5-PS	3	3	3	3	3	10/8/2010	WAH, FC, PCR, SCR
Little Caney Creek 0.0 to 1.95	Licking River	5100101	MORGAN	5-PS	3	3	3	3	3	10/8/2010	WAH, FC, PCR, SCR
Little Flat Creek 0.0 to 2.3	Licking River	5100101	BATH	2-FS	3	3	3	3	3	8/8/2000	WAH, FC, PCR, SCR
Little Stoner Creek 0.0 to 5.3	Licking River	5100102	CLARK	3	5-NS	3	3	3	3	8/14/2000	WAH, FC, PCR, SCR
Lockegee Branch 0.0 to 1.5	Licking River	5100101	ROWAN	2-FS	3	3	3	3	3	9/20/2005	WAH, FC, PCR, SCR
Locust Creek 0.0 to 11.8	Licking River	5100101	FLEMING	5-PS	3	3	3	3	3	11/4/2005	WAH, FC, PCR, SCR
Logan Run 0.0 to 2.3	Licking River	5100101	FLEMING	5-NS	4A-NS	3	3	3	3	3/23/2001	WAH, FC, PCR, SCR
Long Branch 0.0 to 3.9	Licking River	5100101	MAGOFFIN	5-NS	3	3	3	3	3	3/6/2009	WAH, FC, PCR, SCR
Mash Fork 0.0 to 3.0	Licking River	5100101	MAGOFFIN	5-PS	3	3	3	3	3	11/4/2005	WAH, FC, PCR, SCR
Middle Fork Grassy Creek 0.0 to 8.6	Licking River	5100101	PENDLETON	2-FS	3	3	3	3	3	3/22/2011	WAH, FC, PCR, SCR
Middle Fork of Licking River 0 to 2.5	Licking River	5100101	MAGOFFIN	2-FS	5-NS	3	2-FS	3	3	4/9/2001	WAH, FC, PCR, SCR
Mill Creek 0.0 to 2.6	Licking River	5100101	BATH	2-FS	3	3	3	3	3	8/8/2000	WAH, FC, PCR, SCR
Mill Creek 0.0 to 21.6	Licking River	5100102	HARRISON	5-PS	3	3	3	3	3	11/4/2005	WAH, FC, PCR, SCR
Mill Creek 0.0 to 6.4	Licking River	5100101	MASON	2-FS	3	3	3	3	3	11/4/2005	WAH, FC, PCR, SCR
Minor Creek 0.0 to 2.8	Licking River	5100101	MORGAN	2-FS	3	3	3	3	3	9/20/2005	CAH, FC, PCR, SCR
Minor Creek 2.8 to 7.0	Licking River	5100101	MORGAN	2-FS	3	3	3	3	3	11/4/2005	WAH, FC, PCR, SCR
North Fork Licking River 18.55 to 45.5	Licking River	5100101	BRACKEN	5-NS	5-NS	3	3	3	3	3/22/2011	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
North Fork Licking River 2.3 to 18.55	Licking River	5100101	BRACKEN	2-FS	5-NS	2-FS	3	3	3	3/22/2011	WAH, FC, PCR, SCR
North Fork Licking River 12.3 to 13.4	Licking River	5100101	MORGAN	5-PS	3	3	3	3	5-PS	6/22/2004	WAH, FC, PCR, SCR, OSRW
North Fork Licking River 45.5 to 52.55	Licking River	5100101	MASON	2-FS	3	3	3	3	3	3/22/2011	WAH, FC, PCR, SCR
North Fork Licking River 8.5 to 12.3	Licking River	5100101	MORGAN	2-FS	5-NS	2-FS	3	3	2-FS	10/11/2010	WAH, FC, PCR, SCR, OSRW
North Fork Triplett Creek 1.2 to 14.9	Licking River	5100101	ROWAN	3	3	3	3	3	3		WAH, FC, PCR, SCR
North Fork Triplett Creek 14.9 to 15.9	Licking River	5100101	ROWAN	2-FS	3	3	3	3	3	12/31/2000	WAH, FC, PCR, SCR
Oakley Creek 0.0 to 0.9	Licking River	5100101	MAGOFFIN	3	3	3	3	3	3		WAH, FC, PCR, SCR
Oldfield Fork 0.0 to 3.6	Licking River	5100101	MORGAN	5-NS	3	3	3	3	3	11/4/2005	WAH, FC, PCR, SCR
Passenger Branch 0.0 to 1.8	Licking River	5100101	ROWAN	2-FS	3	3	3	3	3	1/18/2001	WAH, FC, PCR, SCR
Phillips Creek 0.0 to 5.3	Licking River	5100101	CAMPBELL	3	5-NS	3	3	3	3	3/6/2001	WAH, FC, PCR, SCR
Poplar Creek 0.0 to 1.2	Licking River	5100101	FLEMING	3	4A-NS	3	3	3	3	10/28/2010	WAH, FC, PCR, SCR
Powder Lick Branch 0.0 to 3.5	Licking River	5100101	LEWIS	2-FS	3	3	3	3	3	11/8/2005	WAH, FC, PCR, SCR
Pretty Run 0.0 to 8.0	Licking River	5100102	CLARK	5-NS	3	3	3	3	3	3/12/2009	WAH, FC, PCR, SCR
Prickly Ash Creek 0.0 to 3.1	Licking River	5100101	BATH	5-NS	3	3	3	3	3	8/9/2000	WAH, FC, PCR, SCR
Puncheon Camp Creek 0.0 to 1.15	Licking River	5100101	MAGOFFIN	5-PS	5-NS	3	3	3	3	10/11/2010	WAH, FC, PCR, SCR
Raven Creek 0.0 to 5.5	Licking River	5100102	HARRISON	2-FS	3	3	3	3	3	11/8/2005	WAH, FC, PCR, SCR
Right Fork of Middle Fork of Licking River 3.1 to 4.6	Licking River	5100101	MAGOFFIN	5-PS	3	3	3	3	3	3/11/2009	WAH, FC, PCR, SCR
Rock Fork 0.0 to 4.0	Licking River	5100101	ROWAN	5-PS	3	3	3	3	3	11/8/2005	WAH, FC, PCR, SCR
Rock Lick 0.0 to 0.8	Licking River	5100101	FLEMING	3	3	3	3	3	3		WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Rockhouse Creek 0.0 to 4.6	Licking River	5100101	MORGAN	3	3	3	3	3	3		WAH, FC, PCR, SCR
Salt Lick Creek 3.0 to 8.0	Licking River	5100101	BATH	5-PS	3	3	3	3	3	6/1/1999	WAH, FC, PCR, SCR
Salt Lick Creek 8.8 to 14.9	Licking River	5100101	BATH	2-FS	3	3	3	3	3	6/30/2004	WAH, FC, PCR, SCR
Salt Spring Branch 0.7 to 2.0	Licking River	5100101	MENIFEE	2-FS	3	3	3	3	3	11/8/2005	WAH, FC, PCR, SCR
Sand Lick Creek 6.0 to 8.1	Licking River	5100101	FLEMING	2-FS	3	3	3	3	3	6/23/2005	WAH, FC, PCR, SCR
Sand Lick Creek 0.0 to 5.8	Licking River	5100101	FLEMING	2-FS	3	3	3	3	3	8/1/1999	WAH, FC, PCR, SCR
Sandlick Creek Lake	Licking River	5100101	FLEMING	2-FS	3	3	3	3	3	8/26/2005 - 3/25/2011	WAH, FC, PCR, SCR
Sawyers Fork 0.0 to 3.3	Licking River	5100101	KENTON	2-FS	3	3	3	3	2-FS	11/8/2005	WAH, FC, PCR, SCR, OSRW
Scott Creek 2.1 to 3.9	Licking River	5100101	ROWAN	5-NS	3	3	3	3	3	10/11/2010	WAH, FC, PCR, SCR
Scrubgrass Creek 0.0 to 1.6	Licking River	5100101	NICHOLAS	5-NS	3	3	3	3	3	8/9/2000	WAH, FC, PCR, SCR
Shannon Creek 0.0 to 8.7	Licking River	5100101	MASON	2-FS	3	3	3	3	3	11/8/2005	WAH, FC, PCR, SCR
Short Creek 0.0 to 7.9	Licking River	5100102	PENDLETON	2-FS	3	3	3	3	3	11/8/2005	WAH, FC, PCR, SCR
Silas Creek 0.0 to 4.75	Licking River	5100102	BOURBON	3	2-FS	3	3	3	3	6/28/2011	WAH, FC, PCR, SCR
Slabcamp Creek 0.0 to 3.7	Licking River	5100101	ROWAN	2-FS	3	3	3	3	2-FS	9/20/2005	CAH, FC, PCR, SCR, OSRW
Slate Creek 0.0 to 13.55	Licking River	5100101	BATH	5-PS	5-PS	2-FS	2-FS	3	5-PS	3/22/2011	WAH, FC, PCR, SCR, OSRW
Slate Creek 17.2 to 18.2	Licking River	5100101	BATH	3	3	3	3	2-FS	3	11/9/2005	WAH, FC, PCR, SCR, DWS
Slate Creek 36.1 to 37.1	Licking River	5100101	MONTGOMERY	3	3	3	3	2-FS	3	3/22/2011	WAH, FC, PCR, SCR, DWS
Slate Creek 42.8 to 52.2	Licking River	5100101	MONTGOMERY	3	2-FS	3	3	3	3	2/15/2001	WAH, FC, PCR, SCR
Slate Creek 52.9 to 57.15	Licking River	5100101	MENIFEE	5-PS	3	3	3	3	3	3/22/2011	WAH, FC, PCR, SCR

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Slate Creek 57.15 to 58.15	Licking River	5100101	MENIFEE	4C-PS	3	3	3	3	3	3/22/2011	WAH, FC, PCR, SCR
Sleepy Run 0.0 to 3.1	Licking River	5100101	FLEMING	3	4A-NS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Somerset Creek 0.0 to 4.45	Licking River	5100102	NICHOLAS	2-FS	3	3	3	3	3	3/23/2011	WAH, FC, PCR, SCR
South Fork Grassy Creek 10.35 to 15.15	Licking River	5100101	PENDLETON	2-FS	2-FS	2-FS	3	3	2-FS	3/22/2011	WAH, FC, PCR, SCR, OSRW
South Fork Licking River 11.6 to 16.95	Licking River	5100102	PENDLETON	2-FS	5-NS	2-FS	3	3	3	3/23/2011	WAH, FC, PCR, SCR
South Fork Licking River 16.95 to 27.6	Licking River	5100102	HARRISON	2-FS	2-FS	3	3	3	3	8/11/2000	WAH, FC, PCR, SCR
South Fork Licking River 2.2 to 7.0	Licking River	5100102	PENDLETON	2-FS	2-FS	3	3	3	3	8/11/2000	WAH, FC, PCR, SCR
South Fork Licking River 35.0 to 46.4	Licking River	5100102	HARRISON	2-FS	2-FS	3	3	3	3	8/11/2000	WAH, FC, PCR, SCR
South Fork Licking River 51.1 to 52.1	Licking River	5100102	HARRISON	3	3	3	3	2-FS	3	11/14/2005	WAH, FC, PCR, SCR, DWS
South Fork Licking River 7.0 to 11.6	Licking River	5100102	PENDLETON	2-FS	3	3	3	3	3	8/11/2000	WAH, FC, PCR, SCR
Spruce Creek 0.0 to 1.7	Licking River	5100101	MONTGOMERY	5-PS	3	3	3	3	3	11/14/2005	WAH, FC, PCR, SCR
Spruce Pine Fork 0.0 to 1.4	Licking River	5100101	MAGOFFIN	5-NS	3	3	3	3	3	3/11/2009	WAH, FC, PCR, SCR
State Road Fork 0.0 to 1.4	Licking River	5100101	MAGOFFIN	5-PS	3	3	3	3	3	3/11/2009	WAH, FC, PCR, SCR
Stinson Creek 0.0 to 3.3	Licking River	5100101	MAGOFFIN	5-NS	3	3	3	3	3	3/11/2009	WAH, FC, PCR, SCR
Stonecoal Branch 0.0 to 2.5	Licking River	5100101	ROWAN	2-FS	3	3	3	3	3	4/11/2001	WAH, FC, PCR, SCR
Stoner Creek 0.0 to 5.55	Licking River	5100102	BOURBON	2-FS	5-NS	2-FS	3	3	3	3/23/2011	WAH, FC, PCR, SCR
Stoner Creek 16.7 to 17.3	Licking River	5100102	BOURBON	3	3	3	3	2-FS	3	11/14/2005	WAH, FC, PCR, SCR, DWS
Stoner Creek 17.3 to 30.1	Licking River	5100102	BOURBON	3	5-PS	3	3	3	3	8/14/2000	WAH, FC, PCR, SCR
Stoner Creek 35.7 to 45.1	Licking River	5100102	BOURBON	3	5-NS	3	3	3	3	12/2/2011	WAH, FC, PCR, SCR

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Stoner Creek 5.55 to 15.0	Licking River	5100102	BOURBON	3	5-NS	3	3	3	3	12/2/2011	WAH, FC, PCR, SCR
Stoner Creek 60.95 to 72.2	Licking River	5100102	CLARK	3	3	3	3	3	3		WAH, FC, PCR, SCR
Stoner Creek 45.1 to 60.95	Licking River	5100102	BOURBON	3	2-FS	3	3	3	3	12/8/2011	WAH, FC, PCR, SCR
Stony Creek 0.0 to 3.0	Licking River	5100101	NICHOLAS	5-NS	3	3	3	3	3	8/10/2000	WAH, FC, PCR, SCR
Straight Creek 0.0 to 1.8	Licking River	5100101	MORGAN	5-NS	3	3	3	3	3	8/10/2000	WAH, FC, PCR, SCR
Strodes Creek 2.7 to 7.9	Licking River	5100102	BOURBON	5-PS	5-PS	2-FS	2-FS	3	3	3/11/2009	WAH, FC, PCR, SCR
Strodes Creek 7.9 to 19.3	Licking River	5100102	BOURBON	5-NS	5-NS	5-NS	2-FS	3	3	3/12/2009	WAH, FC, PCR, SCR
Strodes Creek 19.3 to 26.4	Licking River	5100102	CLARK	5-NS	5-NS	5-NS	3	3	3	3/12/2009	WAH, FC, PCR, SCR
Threemile Creek 0.1 to 4.7	Licking River	5100101	CAMPBELL	5-NS	5-NS	3	3	3	3	10/1/1999	WAH, FC, PCR, SCR
Town Branch 0.0 to 4.0	Licking River	5100101	FLEMING	3	4A-NS	3	3	3	3	4/11/2001	WAH, FC, PCR, SCR
Town Branch 0.3 to 2.3	Licking River	5100102	BATH	2-FS	3	3	3	3	3	9/20/2005	WAH, FC, PCR, SCR
Townsend Creek 0.0 to 2.9	Licking River	5100102	BOURBON	2-FS	2-FS	3	3	3	3	12/2/2011	WAH, FC, PCR, SCR
Townsend Creek 11.7 to 15.4	Licking River	5100102	BOURBON	2-FS	4A-NS	3	3	3	3	6/28/2011	WAH, FC, PCR, SCR
Townsend Creek 2.9 to 4.8	Licking River	5100102	BOURBON	2-FS	4A-NS	3	3	3	3	6/28/2011	WAH, FC, PCR, SCR
Townsend Creek 4.8 to 9.9	Licking River	5100102	BOURBON	2-FS	4A-NS	3	3	3	3	6/28/2011	WAH, FC, PCR, SCR
Townsend Creek 9.9 to 11.7	Licking River	5100102	BOURBON	2-FS	2-FS	3	3	3	3	6/28/2011	WAH, FC, PCR, SCR
Trace Fork 0.0 to 3.1	Licking River	5100101	MAGOFFIN	5-PS	3	3	3	3	3	8/10/2000	WAH, FC, PCR, SCR
Triplett Creek 12.3 to 15.7	Licking River	5100102	ROWAN	3	3	3	3	2-FS	3	3/25/2002	WAH, FC, PCR, SCR, DWS
Triplett Creek 15.7 to 20.5	Licking River	5100101	ROWAN	2-FS	3	3	3	3	3	3/12/2001	WAH, FC, PCR, SCR

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Triplett Creek 5.8 to 12.3	Licking River	5100101	ROWAN	5-PS	5-NS	5-PS	3	2-FS	3	3/23/2011	WAH, FC, PCR, SCR, DWS
UT of Blacks Creek 0.0 to 1.7	Licking River	5100102	BOURBON	5-NS	5-NS	3	3	3	3	12/2/2011	WAH, FC, PCR, SCR
UT of Blacks Creek 0.0 to 2.3	Licking River	5100102	BOURBON	5-NS	5-NS	3	3	3	3	12/2/2011	WAH, FC, PCR, SCR
UT of Blanket Creek 0.0 to 0.2	Licking River	5100101	PENDLETON	5-NS	3	3	3	3	3	3/23/2011	WAH, FC, PCR, SCR
UT of Cooper Run 0.0 to 1.0	Licking River	5100102	BOURBON	3	5-NS	3	3	3	3		WAH, FC, PCR, SCR
UT of Cooper Run 0.0 to 3.05	Licking River	5100102	BOURBON	5-PS	5-PS	3	3	3	3	12/8/2011	WAH, FC, PCR, SCR
UT of Flat Run 0.0 to 2.1	Licking River	5100102	BOURBON	5-PS	5-NS	3	3	3	3	12/8/2011	WAH, FC, PCR, SCR
UT of Houston Creek 0.0 to 0.6	Licking River	5100102	BOURBON	5B-NS	3	3	3	3	3	3/23/2011	WAH, FC, PCR, SCR
UT of Knox Hill Branch 0.0 to 1.1	Licking River	5100101	BATH	4C-NS	3	3	3	3	3	3/23/2011	WAH, FC, PCR, SCR
UT of Owl Creek 0.0 to 0.25	Licking River	5090201	CAMPBELL	5B-NS	3	3	3	3	3	3/23/2011	WAH, FC, PCR, SCR
UT of Pond Creek 0.0 to 1.15	Licking River	5100101	CAMPBELL	5-NS	3	3	3	3	3	3/23/2011	WAH, FC, PCR, SCR
UT of Strodes Creek 0.0 to 3.7	Licking River	5100102	CLARK	5-NS	5-NS	5-NS	3	3	3	3/24/2011	WAH, FC, PCR, SCR
UT of UT of Fourmile Creek 0.0 to 0.5	Licking River	5090201	CAMPBELL	5B-NS	3	3	3	3	3	3/23/2011	WAH, FC, PCR, SCR
UT of UT of UT of Owl Creek 0.0 to 0.1	Licking River	5090201	CAMPBELL	5B-NS	3	3	3	3	3	3/23/2011	WAH, FC, PCR, SCR
UT to Flat Creek 0.0 to 2.2	Licking River	5100101	BATH	2-FS	3	3	3	3	3	4/26/2005	WAH, FC, PCR, SCR
UT to Fleming Creek 0.0 to 2.1	Licking River	5100101	FLEMING	3	4A-NS	3	3	3	3	1/1/2001	WAH, FC, PCR, SCR
UT to Hancock Creek 0.0 to 3.72	Licking River	5100102	CLARK	5-NS	5-NS	5-NS	3	3	3	3/16/2009	WAH, FC, PCR, SCR
UT to Mill Creek 0.0 to 4.0	Licking River	5100101	FLEMING	5-NS	3	3	3	3	3	6/29/2004	WAH, FC, PCR, SCR
UT to Shannon Creek 0.0 to 2.2	Licking River	5100101	MASON	2-FS	3	3	3	3	2-FS	4/29/2004	WAH, FC, PCR, SCR, OSRW

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UT to UT to Lees Creek 0.0 to 1.6	Licking River	5100101	MASON	5-NS	3	3	3	3	3	11/3/2005	WAH, FC, PCR, SCR
Welch Fork 0.0 to 1.0	Licking River	5100101	MENIFEE	2-FS	3	3	3	3	2-FS	11/14/2005	WAH, FC, PCR, SCR, OSRW
West Creek 0.0 to 9.75	Licking River	5100101	HARRISON	2-FS	3	3	3	3	2-FS	3/23/2011	WAH, FC, PCR, SCR, OSRW
Wheel Rim Fork 0.0 to 2.9	Licking River	5100101	MORGAN	5-PS	3	3	3	3	3	3/23/2011	WAH, FC, PCR, SCR
Williams Creek 0.0 to 5.3	Licking River	5100101	MORGAN	5-PS	5-NS	3	3	3	3	3/12/2009	WAH, FC, PCR, SCR
Williamstown Lake	Licking River	5100101	GRANT	2-FS	3	3	3	2-FS	3	8/26/2005 - 3/25/2011	WAH, FC, PCR, SCR, DWS
Willow Creek 0.0 to 6.7	Licking River	5100101	BRACKEN	2-FS	3	3	3	3	3	3/12/2009	WAH, FC, PCR, SCR
Wilson Run 0.0 to 5.1	Licking River	5100101	FLEMING	3	4A-NS	3	3	3	3	4/11/2001	WAH, FC, PCR, SCR
Woodruff Creek 0.0 to 3.7	Licking River	5100102	CLARK	5-NS	5-NS	5-NS	3	3	3	3/12/2009	WAH, FC, PCR, SCR
Allcorn Creek 0.7 to 3.2	Little Sandy River	5090104	GREENUP	5-NS	3	3	3	3	3	11/7/2003	WAH, FC, PCR, SCR
Arabs Fork 0.0 to 5.1	Little Sandy River	5090104	ELLIOTT	2-FS	3	3	3	3	2-FS	11/12/2008	WAH, FC, PCR, SCR, OSRW
Bandy Branch 0.0 to 1.4	Little Sandy River	5090104	ELLIOTT	5-PS	3	3	3	3	3	1/19/2009	WAH, FC, PCR, SCR
Barrett Creek 0.0 to 7.2	Little Sandy River	5090104	CARTER	5-PS	3	3	3	3	3	1/21/2004	WAH, FC, PCR, SCR
Big Caney Creek 1.8 to 13.4	Little Sandy River	5090104	ELLIOTT	2-FS	2-FS	3	3	3	2-FS	1/16/2004	CAH, FC, PCR, SCR, OSRW
Big Sinking Creek 0.0 to 5.7	Little Sandy River	5090104	CARTER	2-FS	3	3	3	3	3	1/19/2009	WAH, FC, PCR, SCR
Big Sinking Creek 5.7 to 15.85	Little Sandy River	5090104	CARTER	2-FS	2-FS	3	3	3	2-FS	1/19/2009	WAH, CAH, FC, PCR, SCR, OSRW
Buffalo Branch 1.3 to 2.1	Little Sandy River	5090104	GREENUP	3	5B-NS	3	3	3	3	1/19/2009	WAH, CAH, FC, PCR, SCR
Cane Creek 0.0 to 4.1	Little Sandy River	5090104	GREENUP	5-PS	3	3	3	3	3	1/21/2004	WAH, FC, PCR, SCR

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Caney Fork 0.9 to 3.5	Little Sandy River	5070204	LAWRENCE	2-FS	3	3	3	3	3	11/11/2003	WAH, FC, PCR, SCR
Clay Fork 0.0 to 4.0	Little Sandy River	5090104	ELLIOTT	2-FS	3	3	3	3	3	2/9/2004	WAH, FC, PCR, SCR
Dry Fork 1.2 to 4.5	Little Sandy River	5090104	LAWRENCE	5-PS	3	3	3	3	3	1/22/2004	WAH, FC, PCR, SCR
East Fork Little Sandy River 24.9 to 26.4	Little Sandy River	5090104	BOYD	2-FS	5-PS	3	3	3	3	1/20/2009	WAH, FC, PCR, SCR
East Fork Little Sandy River 27.6 to 30.9	Little Sandy River	5090104	BOYD	5-PS	3	3	3	3	3	1/20/2009	WAH, FC, PCR, SCR
East Fork Little Sandy River 4.7 to 14.2	Little Sandy River	5090104	GREENUP	2-FS	5-PS	3	3	3	3	1/19/2009	WAH, FC, PCR, SCR
East Fork Little Sandy River 16.9 to 24.9	Little Sandy River	5090104	BOYD	4A-NS	3	3	3	3	3	1/20/2009	WAH, FC, PCR, SCR
East Fork Little Sandy River 26.4 to 26.8	Little Sandy River	5090104	BOYD	5B-PS	3	3	3	3	3	1/20/2009	WAH, CAH, FC, PCR, SCR
Ellingtons Bear Cr 0.0 to 1.5	Little Sandy River	5090104	BOYD	5-PS	3	3	3	3	3	11/10/2003	WAH, FC, PCR, SCR
Everman Cr 0.0 to 5.7	Little Sandy River	5090104	CARTER	5-PS	3	3	3	3	3	1/21/2004	WAH, FC, PCR, SCR
Garner Cr 0.0 to 1.8	Little Sandy River	5090104	BOYD	5-PS	3	3	3	3	3	1/22/2004	WAH, FC, PCR, SCR
Grayson Lake	Little Sandy River	5090104	CARTER	2-FS	3	2-FS	5-PS	2-FS	3	5/29/2008	WAH, FC, PCR, SCR, DWS
Green Br 0.0 to 1.4	Little Sandy River	5090104	ELLIOTT	2-FS	3	3	3	3	3	9/22/2003	WAH, FC, PCR, SCR
Greenbo Lake	Little Sandy River	5090104	GREENUP	2-FS	3	2-FS	3	3	3	5/29/2008	WAH, CAH, FC, PCR, SCR
Hurricane Fork 0.0 to 2.2	Little Sandy River	5090103	BOYD	5-NS	3	3	3	3	3	1/20/2009	WAH, CAH, FC, PCR, SCR
Laurel Branch 1.0 to 2.6	Little Sandy River	5090104	ELLIOTT	2-FS	3	3	3	3	3	12/10/2003	WAH, FC, PCR, SCR
Laurel Creek 0.0 to 7.6	Little Sandy River	5090104	ELLIOTT	2-FS	3	3	3	3	3	9/22/2003	CAH, FC, PCR, SCR
Laurel Creek 7.6 to 11.4	Little Sandy River	5090104	ELLIOTT	2-FS	3	3	3	3	2-FS	11/12/2008	CAH, FC, PCR, SCR, OSRW

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Laurel Creek 11.4 to 14.7	Little Sandy River	5090104	ROWAN	2-FS	3	3	3	3	2-FS	10/10/2006	WAH, CAH, FC, PCR, SCR, OSRW
Left Fork Howard's Creek (Left Fk Redwine Cr) 0.0 to 1.2	Little Sandy River	5090104	ELLIOTT	5-PS	3	3	3	3	3	11/7/2003	WAH, FC, PCR, SCR
Lick Fork 0.0 to 5.2	Little Sandy River	5090104	ELLIOTT	5-PS	3	3	3	3	3	12/10/2003	WAH, FC, PCR, SCR
Little Fork Little Sandy River 12.1 to 23.8	Little Sandy River	5090104	CARTER	5-PS	3	3	3	3	3	1/20/2009	WAH, FC, PCR, SCR
Little Fork Little Sandy River 23.8 to 27.7	Little Sandy River	5090104	ELLIOTT	5-NS	3	3	3	3	3	1/22/2004	WAH, FC, PCR, SCR
Little Fork Little Sandy River 27.7 to 30.5	Little Sandy River	5090104	ELLIOTT	5-PS	3	3	3	3	3	11/11/2003	WAH, FC, PCR, SCR
Little Fork Little Sandy River 5.0 to 6.0	Little Sandy River	5090104	CARTER	5-PS	3	3	3	3	3	1/20/2009	WAH, FC, PCR, SCR
Little Fork Little Sandy River 6.0 to 12.1	Little Sandy River	5090104	CARTER	5-PS	3	3	3	3	3	1/20/2009	WAH, FC, PCR, SCR
Little Sandy River 0.15 to 0.3	Little Sandy River	5090104	GREENUP	3	5-NS	3	3	3	3	1/20/2009	WAH, FC, PCR, SCR
Little Sandy River 0.7 to 1.7	Little Sandy River	5090104	GREENUP	3	3	3	3	2-FS	3	1/21/2009	WAH, FC, PCR, SCR, DWS
Little Sandy River 12.1 to 20.1	Little Sandy River	5090104	GREENUP	5-PS	2-FS	3	2-FS	3	3	11/12/2008 - 1/21/2009	WAH, FC, PCR, SCR
Little Sandy River 42.5 to 48.1	Little Sandy River	5090104	GRAYSON	2-FS	2-FS	3	3	3	3	1/21/2009	WAH, FC, PCR, SCR
Little Sandy River 72.7 to 75.5	Little Sandy River	5090104	ELLIOTT	5-PS	2-FS	3	3	3	3	1/20/2009	WAH, FC, PCR, SCR
Little Sandy River 40.1 to 41.1	Little Sandy River	5090104	CARTER	3	3	3	3	2-FS	3	1/21/2009	WAH, FC, PCR, SCR, DWS
Little Sinking Creek 0.0 to 6.2	Little Sandy River	5090104	CARTER	2-FS	3	3	3	3	3	1/22/2004	WAH, FC, PCR, SCR
Lower Stinson Creek 0.0 to 1.1	Little Sandy River	5090104	CARTER	5-PS	3	3	3	3	3	2/11/2004	WAH, FC, PCR, SCR
Meadow Branch 0.0 to 1.4	Little Sandy River	5090104	ELLIOTT	2-FS	3	3	3	3	2-FS	9/22/2003	WAH, FC, PCR, SCR, OSRW
Middle Fork Little Sandy River 0.0 to 5.8	Little Sandy River	5090104	ELLIOTT	2-FS	3	3	3	3	2-FS	11/12/2008	WAH, FC, PCR, SCR, OSRW

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Middle Fork Little Sandy River 5.8 to 7.5	Little Sandy River	5090104	ELLIOTT	5-PS	3	3	3	3	3	1/22/2004	WAH, FC, PCR, SCR
Near Fork Sandsuck Creek 1.1 to 2.0	Little Sandy River	5090104	GREENUP	5-PS	3	3	3	3	3	1/22/2009	WAH, FC, PCR, SCR
Newcombe Creek 1.1 to 7.3	Little Sandy River	5090104	ELLIOTT	4A-PS	2-FS	3	3	3	3	1/27/2009	WAH, FC, PCR, SCR
Nichols Fork 0.0 to 1.6	Little Sandy River	5090104	ELLIOTT	2-FS	3	3	3	3	2-FS	9/22/2003	WAH, FC, PCR, SCR, OSRW
North Fork Ruin Creek 0.0 to 0.7	Little Sandy River	5090104	ELLIOTT	3	3	3	3	3	3		WAH, FC, PCR, SCR
Oldtown Creek 0.0 to 1.9	Little Sandy River	5090104	GREENUP	5-PS	3	3	3	3	3	11/10/2003	WAH, FC, PCR, SCR
Pigeon Roost Creek 1.6 to 2.0	Little Sandy River	5090104	BOYD	5B-NS	3	3	3	3	3	1/22/2009	WAH, FC, PCR, SCR
Raccoon Creek 0.0 to 5.0	Little Sandy River	5090104	GREENUP	5B-PS	3	3	3	3	3	1/22/2009	WAH, FC, PCR, SCR
Right Fork Newcombe Creek 0.0 to 4.2	Little Sandy River	5090104	ELLIOTT	5-PS	3	3	3	3	3	12/10/2003	WAH, FC, PCR, SCR
Rocky Branch 0.0 to 3.2	Little Sandy River	5090104	ELLIOTT	5-PS	3	3	3	3	3	12/10/2003	WAH, FC, PCR, SCR
South Fork Ruin Creek 0.7 to 5.5	Little Sandy River	5090104	ELLIOTT	5-NS	3	3	3	3	3	1/22/2009	WAH, FC, PCR, SCR
Star Creek 0.0 to 0.6	Little Sandy River	5090104	CARTER	5B-NS	3	3	3	3	3	1/22/2009	WAH, FC, PCR, SCR
Straight Creek 0.0 to 3.8	Little Sandy River	5090104	CARTER	5-PS	3	3	3	3	3	1/22/2004	WAH, FC, PCR, SCR
Tunnel Branch 0.0 to 1.7	Little Sandy River	5090104	GREENUP	5-NS	3	3	3	3	3	11/10/2003	WAH, FC, PCR, SCR
UT of Barrett Creek 0.0 to 0.7	Little Sandy River	5090104	CARTER	5B-NS	3	3	3	3	3	1/22/2009	WAH, FC, PCR, SCR
UT of Clay Fork 0.0 to 1.2	Little Sandy River	5090104	ELLIOTT	5-PS	3	3	3	3	3	1/22/2009	WAH, FC, PCR, SCR
UT to East Fork Little Sandy River 0.0 to 0.3	Little Sandy River	5090104	GREENUP	5-NS	3	3	3	3	3	11/6/2003	WAH, FC, PCR, SCR
UT to Newcombe Creek 0.0 to 0.95	Little Sandy River	5090104	ELLIOTT	2-FS	3	3	3	3	3	12/10/2003	WAH, FC, PCR, SCR
UT to Newcombe Creek 0.0 to 1.35	Little Sandy River	5090104	ELLIOTT	2-FS	3	3	3	3	3	12/10/2003	WAH, FC, PCR, SCR

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Wells Creek 0.0 to 3.5	Little Sandy River	5090104	ELLIOTT	5-PS	3	3	3	3	3	1/22/2004	WAH, FC, PCR, SCR
Whetstone Creek 1.2 to 3.3	Little Sandy River	5090104	GREENUP	5-NS	3	3	3	3	3	1/22/2009	WAH, FC, PCR, SCR
Williams Creek 0.0 to 2.9	Little Sandy River	5090104	BOYD	5-PS	3	3	3	3	3	1/22/2009	WAH, FC, PCR, SCR
Casey Creek 0.0 to 3.6	Lower Cumberland	5130205	TRIGG	5-PS	2-FS	3	3	3	3	3/25/2002	WAH, FC, PCR, SCR
Claylick Creek 14.8 to 15.7	Lower Cumberland	5130205	CRITTENDEN	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Claylick Creek 4.8 to 10.7	Lower Cumberland	5130205	CRITTENDEN	5-NS	4A-NS	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Claylick Creek 10.7 to 14.0	Lower Cumberland	5130205	CRITTENDEN	5-PS	3	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Claylick Creek 2.0 to 4.8	Lower Cumberland	5130205	CRITTENDEN	2-FS	4A-NS	3	3	3	3	1/10/2002	WAH, FC, PCR, SCR
Crab Creek 0.0 to 4.8	Lower Cumberland	5130205	LYON	5-PS	3	3	3	3	3	2/26/2007	WAH, FC, PCR, SCR
Crooked Creek 3.0 to 9.15	Lower Cumberland	5130205	TRIGG	4C-PS	3	3	3	3	4C-PS	2/10/2012	WAH, FC, PCR, SCR, OSRW
Cumberland River 0.0 to 28.65	Lower Cumberland	5130205	LIVINGSTON	2-FS	3	3	2-FS	2-FS	2-FS	3/6/2012	WAH, FC, PCR, SCR, DWS, OSRW
Cypress Creek 0.1 to 6.1	Lower Cumberland	5130205	LIVINGSTON	5-NS	3	3	3	3	3	3/22/2007	WAH, FC, PCR, SCR
Donaldson Creek 3.9 to 7.1	Lower Cumberland	5130205	TRIGG	2-FS	3	3	3	3	2-FS	3/7/2012	WAH, FC, PCR, SCR, OSRW
Donaldson Creek 7.1 to 11.6	Lower Cumberland	5130205	TRIGG	5-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Dry Creek 0.0 to 3.65	Lower Cumberland	5130205	CALDWELL	5-PS	4A-PS	3	3	3	3	3/6/2012	WAH, FC, PCR, SCR
Dry Fork 0.0 to 7.3	Lower Cumberland	5130206	LOGAN	5-PS	3	3	3	3	3		WAH, FC, PCR, SCR
Dry Fork Creek 5.8 to 6.6	Lower Cumberland	5130206	CHRISTIAN	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Dry Fork Creek 0.0 to 8.4	Lower Cumberland	5130205	LYON	2-FS	3	3	3	3	3		WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Eddy Creek 7.7 to 10.25	Lower Cumberland	5130205	LYON	3	4A-NS	3	3	3	3	3/7/2012	WAH, FC, PCR, SCR
Eddy Creek 10.25 to 13.15	Lower Cumberland	5130205	CALDWELL	5-PS	3	3	3	3	3	3/21/2012	WAH, FC, PCR, SCR
Eddy Creek 13.15 to 15.9	Lower Cumberland	5130205	LYON	5-NS	4A-NS	3	3	3	3	3/7/2012	WAH, FC, PCR, SCR
Elk Fork 22.3 to 31.1	Lower Cumberland	5130206	TODD	5-NS	5-NS	3	3	3	3	3/14/2012	WAH, FC, PCR, SCR
Elk Fork 7.5 to 22.3	Lower Cumberland	5130206	TODD	2-FS	3	3	3	3	2-FS	7/5/2001	WAH, FC, PCR, SCR, OSRW
Elk Fork 31.1 to 33.1	Lower Cumberland	5130206	TODD	3	5-NS	3	3	3	3	3/14/2012	WAH, FC, PCR, SCR
Elk Fork 33.1 to 39.6	Lower Cumberland	5130206	TODD	3	2-FS	3	3	3	3	3/14/2012	WAH, FC, PCR, SCR
Energy Lake	Lower Cumberland	5130205	TRIGG	5-PS	3	2-FS	3	3	3	3/3/2006 - 1/5/2012	WAH, FC, PCR, SCR
Ferguson Creek 0.05 to 1.2	Lower Cumberland	5130205	LIVINGSTON	3	4A-NS	3	3	3	3	3/7/2012	WAH, FC, PCR, SCR
Ferguson Creek 1.2 to 2.3	Lower Cumberland	5130205	LIVINGSTON	5-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Franklin Creek 0.0 to 2.4	Lower Cumberland	5130206	TRIGG	3	3	3	3	3	3		WAH, FC, PCR, SCR
Fulton Creek 2.7 to 5.9	Lower Cumberland	5130205	LYON	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Hammond Creek 2.0 to 2.2	Lower Cumberland	5130205	LYON	5B-PS	5B-PS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Hematite Lake	Lower Cumberland	5130205	TRIGG	5-PS	3	5-PS	3	3	3	1/6/2012	WAH, FC, PCR, SCR
Hickory Creek 0.05 to 3.8	Lower Cumberland	5130205	LIVINGSTON	2-FS	4A-NS	3	3	3	3	3/7/2012	WAH, FC, PCR, SCR
Honker Lake	Lower Cumberland	5130205	LYON	2-FS	3	4C-PS	3	3	3	1/18/2012	WAH, FC, PCR, SCR
Horse Creek 5.8 to 7.6	Lower Cumberland	5130205	CHRISTIAN	4C-NS	3	3	3	3	3	3/7/2012	WAH, FC, PCR, SCR
Kenady Creek 0.0 to 4.0	Lower Cumberland	5130205	TRIGG	5-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Lake Barkley	Lower Cumberland	5130205	LYON	2-FS	3	2-FS	2-FS	2-FS	3	1/9/2012	WAH, FC, PCR, SCR, DWS

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Lake Blythe	Lower Cumberland	5130205	CHRISTIAN	2-FS	3	2-FS	3	3	3	3/3/2006	WAH, FC, PCR, SCR
Lake Morris	Lower Cumberland	5130205	CHRISTIAN	2-FS	3	2-FS	3	3	3	1/1/2000	WAH, FC, PCR, SCR, DWS
Laura Furnace Creek 0.0 to 2.9	Lower Cumberland	5130205	TRIGG	3	3	3	3	3	3		WAH, FC, PCR, SCR
Little River 15.3 to 21.1	Lower Cumberland	5130205	TRIGG	5-PS	3	3	3	2-FS	3	3/7/2012	WAH, FC, PCR, SCR, DWS
Little River 30.6 to 31.9	Lower Cumberland	5130205	TRIGG	5-NS	4A-PS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Little River 31.9 to 46.1	Lower Cumberland	5130205	TRIGG	5-PS	4A-PS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Little River 21.1 to 30.6	Lower Cumberland	5130205	TRIGG	5-PS	2-FS	3	5-PS	3	3	3/8/2012	WAH, FC, PCR, SCR
Little River 46.1 to 58.3	Lower Cumberland	5130205	CHRISTIAN	5-NS	4A-NS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Little Whippoorwill Creek 0.0 to 4.05	Lower Cumberland	5130206	LOGAN	2-FS	3	3	3	3	3	6/22/2000	WAH, FC, PCR, SCR
Livingston Creek 4.65 to 7.1	Lower Cumberland	5130205	LYON	5-PS	4A-NS	5-PS	3	3	3	3/8/2012	WAH, FC, PCR, SCR
Livingston Creek 11.6 to 15.5	Lower Cumberland	5130205	LYON	5-NS	3	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Long Creek 0.4 to 3.5	Lower Cumberland	5130205	TRIGG	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Long Pond Branch 2.7 to 3.2	Lower Cumberland	5130205	TRIGG	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Lower Branch 3.4 to 9.3	Lower Cumberland	5130205	CHRISTIAN	5-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Middle Branch of North Fork of Little River 1.3 to 3.9	Lower Cumberland	5130205	CHRISTIAN	5-PS	3	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Montgomery Creek 0.00 to 11.10	Lower Cumberland	5130206	CHRISTIAN	5-PS	3	3	3	3	3	3/8/2012	WAH, FC, PCR, SCR
Muddy Fork Little River 13.2 to 25.3	Lower Cumberland	5130205	TRIGG	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Muddy Fork Little River 24.85 to 28.3	Lower Cumberland	5130205	TRIGG	5-NS	3	3	3	3	3	3/9/2012	WAH, FC, PCR, SCR
Muddy Fork Little River 3.45 to 6.6	Lower Cumberland	5130205	TRIGG	2-FS	2-FS	3	3	3	3	3/8/2012	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
North Fork Little River 0.0 to 0.3	Lower Cumberland	5130205	CHRISTIAN	5-NS	4A-PS	3	3	3	3	3/9/2012	WAH, FC, PCR, SCR
North Fork of Little River 7.0 to 10.9	Lower Cumberland	5130205	CHRISTIAN	5-NS	4A-NS	3	3	3	3	3/9/2012	WAH, FC, PCR, SCR
North Fork of Little River 0.3 to 7.0	Lower Cumberland	5130205	CHRISTIAN	5-PS	4A-PS	3	3	3	3	3/9/2012	WAH, FC, PCR, SCR
North Fork of Little River 10.9 to 16.2	Lower Cumberland	5130205	CHRISTIAN	5-NS	4A-NS	3	3	3	3	3/9/2012	WAH, FC, PCR, SCR
Pleasant Grove Creek 0.0 to 2.2	Lower Cumberland	5130206	LOGAN	5-PS	5-NS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Red River 50.95 to 54.5	Lower Cumberland	5130206	ROBERTSON	2-FS	5-NS	3	3	3	3	3/9/2012	WAH, FC, PCR, SCR
Red River 54.5 to 56.9	Lower Cumberland	5130206	LOGAN	5-NS	3	3	3	3	3	9/14/2007	WAH, FC, PCR, SCR
Red River 57.0 to 65.8	Lower Cumberland	5130206	LOGAN	2-FS	5-NS	3	2-FS	3	3	1/3/2002 - 3/13/2007	WAH, FC, PCR, SCR
Red River 65.8 to 74.3	Lower Cumberland	5130206	LOGAN	5-PS	3	3	3	3	3	3/17/2009	WAH, FC, PCR, SCR
Red River 74.3 to 81.3	Lower Cumberland	5130206	SIMPSON	5-PS	3	3	3	3	3	6/23/2000	WAH, FC, PCR, SCR
Richland Creek 0.7 to 5.4	Lower Cumberland	5130205	LIVINGSTON	3	4A-NS	3	3	3	3	3/9/2012	WAH, FC, PCR, SCR
Sandy Creek 0.1 to 2.4	Lower Cumberland	5130205	LIVINGSTON	3	4A-NS	3	3	3	3	3/9/2012	WAH, FC, PCR, SCR
Sinkhole Near Muddy Fork	Lower Cumberland	5130205	TRIGG	5B-NS	3	3	3	3	3	3/14/2007	WAH, FC, PCR, SCR
Sinking Fork 24.45 to 31.0	Lower Cumberland	5130205	CHRISTIAN	2-FS	3	3	3	3	3	2/26/2009	WAH, FC, PCR, SCR
Sinking Fork 13.6 to 16.8	Lower Cumberland	5130205	CHRISTIAN	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Sinking Fork 31.0 to 32.7	Lower Cumberland	5130205	CHRISTIAN	5-NS	3	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Sinking Fork Little River 2.1 to 5.55	Lower Cumberland	5130205	TRIGG	5-NS	5-NS	3	3	3	3	3/9/2012	WAH, FC, PCR, SCR
Skinframe Creek 0.0 to 4.8	Lower Cumberland	5130205	LYON	5-NS	4A-NS	3	3	3	3	5/2/2002 - 3/9/2012	CAH, FC, PCR, SCR
Skinner Creek 0.0 to 5.9	Lower Cumberland	5130205	TRIGG	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Smith Branch 0.00 to 1.05	Lower Cumberland	5130206	LOGAN	5-PS	3	3	3	3	3	3/9/2012	WAH, FC, PCR, SCR
South Fork of Little River 0.0 to 10.3	Lower Cumberland	5130205	CHRISTIAN	5-NS	4A-NS	3	3	3	3	3/28/2007	WAH, FC, PCR, SCR
South Fork of Little River 10.3 to 20.3	Lower Cumberland	5130205	CHRISTIAN	5-PS	4A-NS	3	3	3	3	3/9/2012	WAH, FC, PCR, SCR
South Fork of Little River 21.3 to 26.1	Lower Cumberland	5130205	CHRISTIAN	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
South Fork of Red River 0.0 to 5.3	Lower Cumberland	5130206	LOGAN	2-FS	2-FS	3	3	3	3	10/10/2006 - 3/17/2009	WAH, FC, PCR, SCR
South Fork Red River 5.3 to 7.9	Lower Cumberland	5130206	LOGAN	3	3	3	3	2-FS	3	5/2/2002	WAH, FC, PCR, SCR, DWS
Spring Creek 3.0 to 3.5	Lower Cumberland	5130205	LYON	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Spring Creek 14.4 to 16.3	Lower Cumberland	5130206	TODD	2-FS	3	3	3	3	3	3/15/2007	WAH, FC, PCR, SCR
Sugar Creek 1.3 to 1.9	Lower Cumberland	5130205	CHRISTIAN	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Sugar Creek 2.2 to 6.9	Lower Cumberland	5130205	LIVINGSTON	5-PS	4A-PS	3	3	3	5-PS	3/9/2012	WAH, FC, PCR, SCR, OSRW
Sulphur Spring Creek 0 to 6.6	Lower Cumberland	5130206	SIMPSON	2-FS	3	3	3	3	3	6/23/2000	WAH, FC, PCR, SCR
Upper Branch 0.0 to 2.8	Lower Cumberland	5130205	CHRISTIAN	5-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR, DWS
UT of Cumberland River 0.10 to 2.20	Lower Cumberland	5130205	LIVINGSTON	5-NS	3	3	3	3	3	3/9/2012	WAH, FC, PCR, SCR
UT of Elk Fork Creek 0.0 to 4.8	Lower Cumberland	5130206	TODD	3	5-PS	3	3	3	3	3/14/2012	WAH, FC, PCR, SCR
UT of West Fork Red River 0.00 to 6.0	Lower Cumberland	5130206	TODD	5-PS	3	3	3	3	3	3/14/2012	WAH, FC, PCR, SCR
UT to Dry Creek 0.0 to 2.9	Lower Cumberland	5130205	TRIGG	5-NS	3	3	3	3	3	10/3/2007	WAH, FC, PCR, SCR
UT to Fulton Creek 0.0 to 0.8	Lower Cumberland	5130205	LYON	2-FS	3	3	3	3	3	10/10/2006	WAH, FC, PCR, SCR
UT to Little Whippoorwill Creek 0.1 to 0.6	Lower Cumberland	5130206	LOGAN	5-NS	3	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Wallace Fork 0.00 to 3.0	Lower Cumberland	5130205	CHRISTIAN	5-PS	3	3	3	3	3	3/14/2012	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Warrens Fork 0.0 to 3.5	Lower Cumberland	5130205	CHRISTIAN	5-PS	3	3	3	3	3	3/14/2012	WAH, FC, PCR, SCR
West Fork Creek (not named on map) 0.6 to 2.0	Lower Cumberland	5130206	TODD	5B-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
West Fork Red River 14.75 to 26.8	Lower Cumberland	5130206	CHRISTIAN	2-FS	5-PS	3	3	3	5-PS	3/14/2012	CAH, FC, PCR, SCR, OSRW
Whippoorwill Creek 0.0 to 13.2	Lower Cumberland	5130206	LOGAN	2-FS	2-FS	3	3	3	2-FS	3/14/2012	WAH, FC, PCR, SCR, OSRW
White Creek 0.0 to 2.2	Lower Cumberland	5130205	CHRISTIAN	5-NS	3	3	3	3	3	3/14/2012	WAH, FC, PCR, SCR
Bayou de Chien 0.0 to 4.2	Mississippi River	8010201	FULTON	3	3	3	5-PS	3	3	2/20/2009	WAH, FC, PCR, SCR
Bayou de Chien 14.3 to 26.1	Mississippi River	8010201	HICKMAN	2-FS	4A-NS	3	2-FS	3	2-FS	3/21/2012	WAH, FC, PCR, SCR, OSRW
Bayou de Chien 8.8 to 14.3	Mississippi River	8010201	HICKMAN	5-NS	2-FS	3	3	3	3	2/27/2007 - 3/21/2012	WAH, FC, PCR, SCR
Brush Creek 0.0 to 6.3	Mississippi River	8010201	HICKMAN	5-PS	3	3	3	3	3	7/7/2000	WAH, FC, PCR, SCR
Brush Creek 0.0 to 8.4	Mississippi River	8010201	GRAVES	5-PS	3	3	3	3	3	7/5/2001	WAH, FC, PCR, SCR
Caddle Creek 0.00 to 2.00	Mississippi River	8010201	CARLISLE	5-PS	3	3	3	3	3	3/21/2012	WAH, FC, PCR, SCR
Caldwell Creek 0.0 to 3.0	Mississippi River	8010202	GRAVES	5-NS	3	3	3	3	3	6/26/2000	WAH, FC, PCR, SCR
Cane Creek 0.0 to 5.3	Mississippi River	8010201	HICKMAN	5-PS	3	3	3	3	5-PS	7/12/2000	WAH, FC, PCR, SCR, OSRW
Cane Creek 0.3 to 4.1	Mississippi River	8010100	BALLARD	5-PS	3	3	3	3	3	7/6/2000	WAH, FC, PCR, SCR
Cane Creek 3.3 to 4.1	Mississippi River	8010201	GRAVES	5B-PS	5B-PS	3	3	3	3	5/4/2002	WAH, FC, PCR, SCR
Cane Creek 0.0 to 4.4	Mississippi River	8010201	HICKMAN	5-NS	3	3	3	3	3	2/23/2007	WAH, FC, PCR, SCR
Central Creek 0.8 to 2.5	Mississippi River	8010201	CARLISLE	3	4A-NS	3	3	3	3	3/25/2002	WAH, FC, PCR, SCR
Cooley Creek 0.65 to 2.3	Mississippi River	8010201	GRAVES	3	4A-NS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Gilbert Creek 1.7 to 3.5	Mississippi River	8010201	GRAVES	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Goose Creek 0.0 to 4.4	Mississippi River	8010201	GRAVES	5-PS	3	3	3	3	3	6/29/2000	WAH, FC, PCR, SCR
Hazel Creek 0.0 to 3.7	Mississippi River	8010100	BALLARD	5-NS	3	3	3	3	3	7/6/2000	WAH, FC, PCR, SCR
Hurricane Creek 0.0 to 3.7	Mississippi River	8010201	CARLISLE	5-PS	3	3	3	3	3	3/21/2006	WAH, FC, PCR, SCR
Jackson Creek 0.0 to 3.0	Mississippi River	8010201	GRAVES	2-FS	3	3	3	3	2-FS	10/10/2006	WAH, FC, PCR, SCR, OSRW
Key Creek 0.0 to 1.9	Mississippi River	8010201	GRAVES	5-NS	3	3	3	3	3	2/28/2007	WAH, FC, PCR, SCR
Knob Creek 1.4 to 3.1	Mississippi River	8010202	GRAVES	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Lick Creek 0.0 to 2.2	Mississippi River	8010201	CARLISLE	5-PS	3	3	3	3	3	2/28/2007	WAH, FC, PCR, SCR
Little Bayou de Chein 10.0 to 12.3	Mississippi River	8010201	FULTON	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Little Bayou de Chien 0.0 to 1.3	Mississippi River	8010201	HICKMAN	5-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Little Creek 0.0 to 5.3	Mississippi River	8010201	HICKMAN	5-NS	3	3	3	3	3	7/7/2000	WAH, FC, PCR, SCR
Little Cypress Creek 0.0 to 2.0	Mississippi River	8010201	GRAVES	5-NS	3	3	3	3	3	6/26/2000	WAH, FC, PCR, SCR
Little Cypress Creek 0.0 to 3.6	Mississippi River	8010201	HICKMAN	5-PS	3	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Little Cypress Creek 5.8 to 6.8	Mississippi River	8010201	HICKMAN	2-FS	3	3	3	3	3	11/7/2001	WAH, FC, PCR, SCR
Little Mayfield Creek 0.0 to 10.6	Mississippi River	8010201	GRAVES	5-PS	3	3	3	3	3	10/10/2006	WAH, FC, PCR, SCR
Little Mud Creek 0.0 to 1.95	Mississippi River	8010201	FULTON	5-PS	3	3	3	3	3	7/12/2000	WAH, FC, PCR, SCR
Long Creek 0.0 to 0.8	Mississippi River	8010201	CARLISLE	5B-PS	5B-PS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Mayfield Creek 1.7 to 5.0	Mississippi River	8010201	CARLISLE	5-PS	3	3	3	3	3	7/10/2000	WAH, FC, PCR, SCR
Mayfield Creek 35.7 to 37.7	Mississippi River	8010201	GRAVES	5-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Mayfield Creek 59.5 to 61.9	Mississippi River	8010201	CALLOWAY	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Mayfield Creek 10.65 to 16.0	Mississippi River	8010201	CARLISLE	5-NS	5-NS	3	3	3	3	3/21/2012	WAH, FC, PCR, SCR
Mayfield Creek 16.0 to 35.7	Mississippi River	8010201	McCRACKEN	5-NS	3	3	3	3	3	6/20/2007	WAH, FC, PCR, SCR
Mayfield Creek 37.7 to 40.4	Mississippi River	8010201	GRAVES	5-NS	5-NS	3	3	3	3	3/21/2012	WAH, FC, PCR, SCR
Mayfield Creek 40.4 to 43.3	Mississippi River	8010201	GRAVES	5-NS	3	3	3	3	3	7/25/2006	WAH, FC, PCR, SCR
Mayfield Creek 51.65 to 59.5	Mississippi River	8010201	GRAVES	5-PS	3	3	3	3	3	3/21/2012	WAH, FC, PCR, SCR
Mississippi River 891.1 to 953.5	Mississippi River	8010100	FULTON	3	3	3	2-FS	3	3	3/2/2007	WAH, FC, PCR, SCR, OSRW
Mud Creek 0.0 to 7.8	Mississippi River	8010201	FULTON	5-NS	3	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Obion Creek 41.0 to 44.4	Mississippi River	8010201	HICKMAN	5-NS	3	3	3	3	3	2/25/2009	WAH, FC, PCR, SCR
Obion Creek 44.4 to 49.9	Mississippi River	8010201	HICKMAN	5-PS	3	3	3	3	3	2/25/2009	WAH, FC, PCR, SCR
Obion Creek 1.35 to 16.25	Mississippi River	8010201	HICKMAN	5-NS	5-NS	3	3	3	3	3/21/2012	WAH, FC, PCR, SCR
Obion Creek 26.35 to 33.25	Mississippi River	8010201	CARLISLE	2-FS	3	3	3	3	2-FS	2/25/2009	WAH, FC, PCR, SCR, OSRW
Obion Creek 33.25 to 36.55	Mississippi River	8010201	HICKMAN	5-NS	3	3	3	3	5-NS	2/25/2009	WAH, FC, PCR, SCR, OSRW
Obion Creek 49.9 to 55.7	Mississippi River	8010201	GRAVES	5-PS	3	3	3	3	3	2/26/2009	WAH, FC, PCR, SCR
Opossum Creek 0.0 to 2.3	Mississippi River	8010201	GRAVES	5-NS	3	3	3	3	3	6/26/2000	WAH, FC, PCR, SCR
Relict (Natural Channel) Mayfield Creek 17.4 to 20.4	Mississippi River	8010201	CARLISLE	5-NS	3	3	3	3	3	10/3/2007	WAH, FC, PCR, SCR
Running Slough 0.3 to 15.7	Mississippi River	8010202	FULTON	5-PS	3	3	3	3	3	7/5/2001	WAH, FC, PCR, SCR
Sand Creek 0.0 to 3.7	Mississippi River	8010201	GRAVES	2-FS	3	3	3	3	2-FS	12/12/2001	WAH, FC, PCR, SCR, OSRW
Shawnee Creek 0.0 to 3.2	Mississippi River	8010100	BALLARD	5-NS	5-PS	3	2-FS	3	3	1/28/2008	WAH, FC, PCR, SCR
Shawnee Creek 3.2 to 12.4	Mississippi River	8010100	BALLARD	5-PS	3	3	2-FS	3	3	3/9/2012	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Shawnee Creek Slough 0.0 to 3.7	Mississippi River	8010100	BALLARD	5-NS	2-FS	3	3	3	3	3/14/2007	WAH, FC, PCR, SCR
South Fork Bayou de Chien 2.0 to 7.4	Mississippi River	8010201	GRAVES	5-NS	3	3	3	3	5-NS	7/5/2001	WAH, FC, PCR, SCR, OSRW
South Fork of Bayou de Chien 0.0 to 2.0	Mississippi River	8010201	GRAVES	5-PS	3	3	3	3	5-PS	3/22/2006	WAH, FC, PCR, SCR, OSRW
Stovall Creek 0.0 to 3.8	Mississippi River	8010201	BALLARD	2-FS	3	3	3	3	3	7/6/2000	WAH, FC, PCR, SCR
Sugar Creek 0.0 to 1.3	Mississippi River	8010201	BALLARD	5-PS	3	3	3	3	3	6/29/2000	WAH, FC, PCR, SCR
Swan Pond	Mississippi River	8010100	BALLARD	2-FS	3	2-FS	3	3	2-FS	1/6/2012	WAH, FC, PCR, SCR, OSRW
Terrapin Creek 2.8 to 6.9	Mississippi River	8010202	GRAVES	2-FS	5-PS	3	3	3	2-FS	3/22/2012	WAH, FC, PCR, SCR, OSRW
Truman Creek 2.0 to 3.2	Mississippi River	8010201	CARLISLE	5B-PS	5B-PS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Truman Creek 3.2 to 4.1	Mississippi River	8010201	CARLISLE	5-PS	3	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
UT of Obion Creek 0.9 to 7.7	Mississippi River	8010201	HICKMAN	5-PS	3	3	3	3	3	3/6/2012	WAH, FC, PCR, SCR
UT of UT of Little Bayou de Chien 0.00 to 0.85	Mississippi River	8010201	FULTON	5-NS	3	3	3	3	3	3/14/2012	WAH, FC, PCR, SCR
UT of West Fork Mayfield Creek 0.00 to 3.00	Mississippi River	8010201	CARLISLE	5-PS	3	3	3	3	3	3/14/2012	WAH, FC, PCR, SCR
UT to Brush Creek 0.0 to 1.9	Mississippi River	8010201	HICKMAN	5-NS	3	3	3	3	3		WAH, FC, PCR, SCR
UT to Mayfield Creek 0.0 to 1.0	Mississippi River	8010201	McCRACKEN	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
UT to Mayfield Creek 1.1 to 3.5	Mississippi River	8010201	GRAVES	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
UT to Mud Creek 0.0 to 2.2	Mississippi River	8010201	FULTON	5-NS	3	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
UT to Obion Creek 1.6 to 2.2	Mississippi River	8010201	HICKMAN	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
UT to Vulton Creek 0.00 to 2.45	Mississippi River	8010201	GRAVES	5-NS	3	3	3	3	3	3/14/2012	WAH, FC, PCR, SCR
West Fork Mayfield Creek 5.3 to 15.5	Mississippi River	8010201	CARLISLE	2-FS	3	3	3	3	3	3/21/2006	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Whayne Branch 1.0 to 8.15	Mississippi River	8010201	HICKMAN	5-NS	3	3	3	3	3	3/14/2012	WAH, FC, PCR, SCR
Wilson Creek 0.0 to 2.15	Mississippi River	8010201	CARLISLE	5-NS	2-FS	3	3	3	3	3/22/2012	WAH, FC, PCR, SCR
Wilson Creek 2.15 to 8.0	Mississippi River	8010201	CARLISLE	2-FS	3	3	3	3	3	7/7/2000	WAH, FC, PCR, SCR
Alexandria Park Lake	Ohio River	5090201	CAMPBELL	3	3	3	5-PS	3	3	1/31/2008	WAH, FC, PCR, SCR
Allen Fork 2.0 to 4.6	Ohio River	5090203	BOONE	5-PS	3	3	3	3	3	4/11/2001	WAH, FC, PCR, SCR
Bayou Creek 0.0 to 11.4	Ohio River	5140206	McCRACKEN	5-PS	3	3	2-FS	3	3	2/24/2009	WAH, FC, PCR, SCR
Bayou Creek 0.0 to 18.9	Ohio River	5140203	LIVINGSTON	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Bear Run 1.6 to 1.9	Ohio River	5140201	BRECKINRIDGE	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Beech Fork 0.05 to 3.3	Ohio River	5140201	BRECKINRIDGE	2-FS	3	3	3	3	3	10/1/2007	WAH, FC, PCR, SCR
Bell Ditch 0.0 to 2.8	Ohio River	5140201	DAVIESS	5-NS	3	3	3	3	3	1/23/2008	WAH, FC, PCR, SCR
Big Bone Creek 1.2 to 10.7	Ohio River	5090203	BOONE	2-FS	3	3	3	3	3	3/3/2005	WAH, FC, PCR, SCR
Big South Fork 2.1 to 4.1	Ohio River	5090203	BOONE	5-PS	3	3	3	3	3	3/4/2009	WAH, FC, PCR, SCR
Big Sugar Creek 0.7 to 2.0	Ohio River	5090203	GALLATIN	5-PS	3	3	3	3	3	3/3/2005	WAH, FC, PCR, SCR
Blackford Creek 0.0 to 3.8	Ohio River	5140201	HANCOCK	2-FS	5-NS	3	3	3	3	1/22/2008	WAH, FC, PCR, SCR
Blackford Creek 3.8 to 8.1	Ohio River	5140201	HANCOCK	5-PS	3	3	3	3	3	2/28/2003	WAH, FC, PCR, SCR
Blackford Creek 8.1 to 10.1	Ohio River	5140201	HANCOCK	2-FS	3	3	3	3	3	1/23/2008	WAH, FC, PCR, SCR
Bracken Creek 2.8 to 11.0	Ohio River	5090201	BRACKEN	5-PS	3	3	3	3	3	10/25/2005	WAH, FC, PCR, SCR
Briery Branch 0.2 to 2.2	Ohio River	5090201	LEWIS	5-PS	3	3	3	3	3	10/24/2005	WAH, FC, PCR, SCR
Brush Creek 0.0 to 2.35	Ohio River	5090201	CAMPBELL	2-FS	5-NS	3	3	3	3	3/16/2011	WAH, FC, PCR, SCR

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Buck Creek 0.0 to 7.2	Ohio River	5140203	LIVINGSTON	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Butchers Branch 0.0 to 0.3	Ohio River	5140201	HANCOCK	2-FS	2-FS	2-FS	3	3	3	6/3/2005	WAH, FC, PCR, SCR
Butchers Branch 0.3 to 2.4	Ohio River	5140201	HANCOCK	4A-NS	4A-NS	4A-NS	3	3	3	2/14/2006	WAH, FC, PCR, SCR
Cabin Creek 3.6 to 11.3	Ohio River	5090201	MASON	5-NS	3	3	3	3	3	2/5/2001	WAH, FC, PCR, SCR
Camp Creek 0.0 to 3.95	Ohio River	5140203	CRITTENDEN	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Carpenter Lake	Ohio River	5140201	DAVIESS	5-PS	3	2-FS	3	3	3	11/14/2006	WAH, FC, PCR, SCR
Casey Creek 0.6 to 9.7	Ohio River	5140202	UNION	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Clanton Creek 0.0 to 4.9	Ohio River	5140206	BALLARD	5-NS	3	3	3	3	3	7/6/2000	WAH, FC, PCR, SCR
Clary Branch 0.0 to 1.9	Ohio River	5090201	LEWIS	5-PS	3	3	3	3	3	4/28/2004	WAH, FC, PCR, SCR
Clover Creek 7.4 to 10.3	Ohio River	5140201	BRECKINRIDGE	5-PS	3	3	3	3	3	11/12/2002	WAH, FC, PCR, SCR
Coefield Creek 0.0 to 8.9	Ohio River	5140203	CRITTENDEN	2-FS	3	3	3	3	3	10/10/2006	WAH, FC, PCR, SCR
Craigs Creek 2.9 to 6.7	Ohio River	5090203	GALLATIN	3	3	3	3	3	3		WAH, FC, PCR, SCR
Crawford Lake	Ohio River	5140206	McCRACKEN	3	3	3	2-FS	3	3	2/20/2009	WAH, FC, PCR, SCR
Crooked Creek 0.0 to 11.9	Ohio River	5140203	CRITTENDEN	5-PS	3	3	3	3	3	2/26/2003	WAH, FC, PCR, SCR
Crooked Creek 0.0 to 5.6	Ohio River	5090201	LEWIS	2-FS	3	3	3	3	3	8/2/2000	WAH, FC, PCR, SCR
Crooked Creek 11.9 to 26.2	Ohio River	5140203	CRITTENDEN	5-NS	5-NS	3	3	3	5-NS	1/24/2008	WAH, FC, PCR, SCR, OSRW
Deer Creek 0.0 to 8.1	Ohio River	5140203	LIVINGSTON	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Dennis O'nan Ditch/Cypress Creek 0.4 to 10.9	Ohio River	5140203	UNION	2-FS	5-NS	2-FS	3	3	3	1/7/2008	WAH, FC, PCR, SCR
Double Lick Creek 0.0 to 3.5	Ohio River	5090203	BOONE	2-FS	3	3	3	3	2-FS	3/7/2005	WAH, FC, PCR, SCR, OSRW

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Dry Creek 0.2 to 7.0	Ohio River	5090203	BOONE	5-PS	3	3	3	3	3	8/3/2000	WAH, FC, PCR, SCR
Dry Creek 1.1 to 3.0	Ohio River	5090203	GALLATIN	5-PS	3	3	3	3	3	8/3/2000	WAH, FC, PCR, SCR
Dyer Hill Creek 0.4 to 6.0	Ohio River	5140203	LIVINGSTON	5-PS	3	3	3	3	3	1/23/2008	WAH, FC, PCR, SCR
East Fork Cabin Creek 0.0 to 4.7	Ohio River	5090201	LEWIS	2-FS	3	3	3	3	3	10/27/2005	WAH, FC, PCR, SCR
East Fork of Canoe Creek 0.0 to 4.4	Ohio River	5140202	HENDERSON	5-PS	3	3	3	3	3	10/1/2007	WAH, FC, PCR, SCR
Elijahs Creek 0.0 to 5.2	Ohio River	5090203	BOONE	4A-NS	3	3	3	3	3	4/11/2001	WAH, FC, PCR, SCR
Fish Lake	Ohio River	5140206	BALLARD	2-FS	3	2-FS	5-PS	3	3	1/4/2012	WAH, FC, PCR, SCR
Fourmile Creek 0.2 to 8.5	Ohio River	5090201	CAMPBELL	2-FS	5-NS	3	3	3	3	8/3/2000	WAH, FC, PCR, SCR
Fourmile Creek 8.5 to 9.4	Ohio River	5090201	CAMPBELL	2-FS	3	3	3	3	3	4/10/2001	WAH, FC, PCR, SCR
Garrison Creek 0.3 to 4.55	Ohio River	5090203	BOONE	2-FS	3	3	3	3	2-FS	3/17/2011	WAH, FC, PCR, SCR, OSRW
Goose Creek 0.0 to 1.9	Ohio River	5090201	BRACKEN	5-PS	3	3	3	3	3	8/3/2000	WAH, FC, PCR, SCR
Goose Pond Ditch 0.0 to 9.55	Ohio River	5140203	UNION	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Grassy Fork 0.0 to 4.3	Ohio River	5090201	LEWIS	4C-PS	3	3	3	3	3	3/17/2011	WAH, FC, PCR, SCR
Gunpowder Creek 0.0 to 15.0	Ohio River	5090203	BOONE	5-NS	3	3	3	3	3	1/8/2001	WAH, FC, PCR, SCR
Gunpowder Creek 15.4 to 17.1	Ohio River	5090203	BOONE	4A-NS	3	3	3	3	3	8/3/1999	WAH, FC, PCR, SCR
Gunpowder Creek 18.9 to 21.6	Ohio River	5090203	BOONE	5-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Highland Creek 0.0 to 7.6	Ohio River	5140202	UNION	5-PS	5-NS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Highland Creek 7.6 to 21.4	Ohio River	5140202	HENDERSON	5-NS	5-NS	5-NS	3	3	3	1/22/2008	WAH, FC, PCR, SCR
Hood Creek 0.15 to 0.9	Ohio River	5090103	BOYD	5B-NS	5B-NS	3	3	3	3	1/19/2009	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Humphrey Creek 0.0 to 3.4	Ohio River	5140206	BALLARD	5-PS	2-FS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Humphrey Creek 3.4 to 11.2	Ohio River	5140206	BALLARD	2-FS	5-PS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Humphrey Creek 11.2 to 12.7	Ohio River	5140206	BALLARD	5B-PS	5B-PS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Indian Creek 0.0 to 9.4	Ohio River	5090201	LEWIS	2-FS	3	3	3	3	3	1/10/2001	WAH, FC, PCR, SCR
Kingfisher Lake	Ohio River	5140201	DAVIESS	2-FS	3	2-FS	3	3	3	11/14/2006	WAH, FC, PCR, SCR
Kinniconick Creek 1.1 to 50.95	Ohio River	5090201	LEWIS	2-FS	2-FS	2-FS	3	3	2-FS	3/17/2011 - 3/18/2011	WAH, FC, PCR, SCR, OSRW
Lake George (Marion City Lake)	Ohio River	5140203	CRITTENDEN	2-FS	3	2-FS	3	3	3	11/14/2006	WAH, FC, PCR, SCR, DWS
Lake Jericho	Ohio River	5140101	HENRY	5-NS	3	2-FS	3	3	3	8/26/2005	WAH, FC, PCR, SCR
Laurel Fork 5.8 to 15.9	Ohio River	5090201	LEWIS	5-PS	3	3	3	3	3	11/3/2005	WAH, FC, PCR, SCR
Lawrence Creek 2.6 to 4.2	Ohio River	5090201	MASON	2-FS	3	3	3	3	3	11/3/2005	WAH, FC, PCR, SCR
Lead Creek 0.0 to 0.8	Ohio River	5140201	HANCOCK	2-FS	2-FS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Lead Creek 3.5 to 4.5	Ohio River	5140201	HANCOCK	5B-NS	5B-NS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Lee Creek 0.0 to 2.0	Ohio River	5090201	MASON	3	3	3	3	3	3		WAH, FC, PCR, SCR
Lick Run Creek 0.0 to 3.5	Ohio River	5140104	BRECKINRIDGE	5-PS	3	3	3	3	3	3/4/2009	WAH, FC, PCR, SCR
Little Bayou Creek 0.0 to 7.2	Ohio River	5140206	McCRACKEN	4A-NS	3	3	5-NS	3	3	2/24/2009	WAH, FC, PCR, SCR
Little Kentucky River 21.3 to 27.7	Ohio River	5140101	HENRY	5-PS	3	3	3	3	3	2/24/2009	WAH, FC, PCR, SCR
Little South Fork 1.2 to 5.9	Ohio River	5090203	BOONE	2-FS	3	3	3	3	2-FS	4/24/2004	WAH, FC, PCR, SCR, OSRW
Locust Creek 0.0 to 4.1	Ohio River	5090201	BRACKEN	2-FS	5-NS	3	3	3	3	8/8/2000	WAH, FC, PCR, SCR
Locust Creek 4.1 to 12.2	Ohio River	5090201	BRACKEN	5-NS	3	3	3	3	3	8/8/2000	WAH, FC, PCR, SCR

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Massac Creek 3.9 to 4.4	Ohio River	5140206	McCRACKEN	5-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Massac Creek 4.4 to 7.6	Ohio River	5140206	McCRACKEN	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Mauzy Lake	Ohio River	5140202	UNION	2-FS	3	2-FS	3	3	3	11/14/2006	WAH, FC, PCR, SCR
McCools Creek 0.0 to 6.7	Ohio River	5090203	CARROLL	3	3	3	3	3	3		WAH, FC, PCR, SCR
McCoys Fork 0.0 to 2.2	Ohio River	5090203	BOONE	5-PS	3	3	3	3	3	3/22/2011	WAH, FC, PCR, SCR
Metropolis Lake	Ohio River	5140206	McCRACKEN	5-PS	3	2-FS	2-FS	3	5-PS	1/1/2000 - 3/6/2006	WAH, FC, PCR, SCR, OSRW
Middle Creek 0.4 to 5.6	Ohio River	5090203	BOONE	5-PS	3	3	3	3	3	3/6/2009	WAH, FC, PCR, SCR
Middle Fork of Massac Creek 0.0 to 6.4	Ohio River	5140206	McCRACKEN	5-PS	3	3	3	3	5-PS	3/21/2007	WAH, FC, PCR, SCR, OSRW
Mitchell Lake	Ohio River	5140206	BALLARD	3	3	3	3	3	3		WAH, FC, PCR, SCR
Montgomery Creek 0.0 to 6.5	Ohio River	5090201	LEWIS	5-PS	3	3	3	3	3	3/11/2005	WAH, FC, PCR, SCR
Mudlick Creek 0.2 to 6.1	Ohio River	5090203	BOONE	2-FS	3	3	3	3	3	3/11/2009	WAH, FC, PCR, SCR
Mudlick Creek 6.2 to 11.6	Ohio River	5090203	BOONE	3	3	3	3	3	3		WAH, FC, PCR, SCR
Newberry Branch 0.0 to 2.8	Ohio River	5090103	GREENUP	5-NS	3	3	3	3	3	11/11/2003	WAH, FC, PCR, SCR
Newtons Creek 0.0 to 7.85	Ohio River	5140206	McCRACKEN	5-PS	3	3	3	3	3	3/12/2007	WAH, FC, PCR, SCR
Ohio River 319.4 to 317.4	Ohio River	5090103	BOYD	2-FS	5-NS	3	5-PS	2-FS	3	7/24/2014	WAH, FC, PCR, SCR, DWS
Ohio River 340.8 to 319.4	Ohio River	5090103	BOYD	2-FS	5-PS	3	5-NS	2-FS	3	7/24/2014	WAH, FC, PCR, SCR, DWS
Ohio River 356.6 to 340.8	Ohio River	5090103	GREENUP	2-FS	2-FS	3	5-PS	3	3	7/24/2014	WAH, FC, PCR, SCR, DWS
Ohio River 377.7 to 356.6	Ohio River	5090103	GREENUP	2-FS	5-PS	3	5-PS	2-FS	3	7/24/2014	WAH, FC, PCR, SCR, DWS
Ohio River 382.2 to 377.7	Ohio River	5090201	LEWIS	2-FS	2-FS	3	5-PS	3	3	7/24/2014	WAH, FC, PCR, SCR, DWS

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Ohio River 388.0 to 382.2	Ohio River	5090201	LEWIS	2-FS	5-PS	3	5-PS	2-FS	3	7/24/2014	WAH, FC, PCR, SCR, DWS
Ohio River 436.2 to 388.0	Ohio River	5090201	LEWIS	2-FS	3	3	5-PS	2-FS	3	7/24/2014	WAH, FC, PCR, SCR, DWS
Ohio River 464.5 to 436.2	Ohio River	5090201	BRACKEN	2-FS	2-FS	3	5-PS	2-FS	3	7/25/2014	WAH, FC, PCR, SCR, DWS
Ohio River 465.2 to 464.5	Ohio River	5090201	CAMPBELL	2-FS	5-PS	3	5-PS	2-FS	3	7/25/2014	WAH, FC, PCR, SCR, DWS
Ohio River 469.4 to 465.2	Ohio River	5090201	CAMPBELL	2-FS	2-FS	3	5-PS	3	3	7/25/2014	WAH, FC, PCR, SCR, DWS
Ohio River 471.4 to 469.4	Ohio River	5090203	CAMPBELL	2-FS	5-NS	3	5-PS	3	3	7/25/2014	WAH, FC, PCR, SCR, DWS
Ohio River 475.1 to 471.4	Ohio River	5090203	KENTON	2-FS	5-PS	3	5-PS	3	3	7/25/2014	WAH, FC, PCR, SCR, DWS
Ohio River 477.5 to 475.1	Ohio River	5090203	BOONE	2-FS	5-NS	3	5-PS	3	3	7/25/2014	WAH, FC, PCR, SCR, DWS
Ohio River 488.2 to 477.5	Ohio River	5090203	BOONE	2-FS	5-PS	3	5-PS	3	3	7/25/2014	WAH, FC, PCR, SCR, DWS
Ohio River 593.4 to 488.2	Ohio River	5090203	BOONE	2-FS	2-FS	3	5-PS	2-FS	3	7/25/2014	WAH, FC, PCR, SCR, DWS
Ohio River 593.4 to 488.2	Ohio River	5140101	BOONE	2-FS	2-FS	3	5-PS	2-FS	3	7/25/2014	WAH, FC, PCR, SCR, DWS
Ohio River 595.8 to 593.4	Ohio River	5140101	JEFFERSON	2-FS	5-PS	3	5-PS	2-FS	3	7/25/2014	WAH, FC, PCR, SCR, DWS
Ohio River 603.1 to 595.8	Ohio River	5140101	JEFFERSON	2-FS	2-FS	3	5-PS	3	3	7/25/2014	WAH, FC, PCR, SCR, DWS
Ohio River 604.3 to 603.1	Ohio River	5140101	JEFFERSON	2-FS	5-PS	3	5-PS	3	3	7/25/2014	WAH, FC, PCR, SCR, DWS
Ohio River 608.7 to 604.3	Ohio River	5140101	JEFFERSON	2-FS	5-NS	3	5-PS	3	3	7/25/2014	WAH, FC, PCR, SCR, DWS
Ohio River 614.0 to 608.7	Ohio River	5140101	JEFFERSON	2-FS	5-PS	3	5-PS	3	3	7/25/2014	WAH, FC, PCR, SCR, DWS
Ohio River 676.8 to 614.0	Ohio River	5140101	MEADE	2-FS	5-NS	3	5-PS	2-FS	3	7/29/2014	WAH, FC, PCR, SCR, DWS
Ohio River 676.8 to 614.0	Ohio River	5140104	MEADE	2-FS	5-NS	3	5-PS	2-FS	3	7/29/2014	WAH, FC, PCR, SCR, DWS
Ohio River 720.8 to 676.8	Ohio River	5140104	MEADE	2-FS	3	3	5-PS	2-FS	3	7/29/2014	WAH, FC, PCR, SCR, DWS

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Ohio River 720.8 to 676.8	Ohio River	5140201	MEADE	2-FS	3	3	5-PS	2-FS	3	7/29/2014	WAH, FC, PCR, SCR, DWS
Ohio River 736.7 to 720.8	Ohio River	5140201	HANCOCK	2-FS	5-PS	3	5-PS	3	3	7/29/2014	WAH, FC, PCR, SCR, DWS
Ohio River 756.3 to 736.7	Ohio River	5140201	DAVIESS	2-FS	5-PS	3	5-PS	2-FS	3	7/29/2014	WAH, FC, PCR, SCR, DWS
Ohio River 760.6 to 756.3	Ohio River	5140201	DAVIESS	2-FS	5-PS	3	5-PS	2-FS	3	7/29/2014	WAH, FC, PCR, SCR, DWS
Ohio River 776.0 to 760.6	Ohio River	5140201	DAVIESS	2-FS	5-PS	3	5-PS	3	3	7/29/2014	WAH, FC, PCR, SCR, DWS
Ohio River 789.3 to 776.0	Ohio River	5140201	HENDERSON	2-FS	5-PS	3	5-PS	3	3	7/29/2014	WAH, FC, PCR, SCR, DWS
Ohio River 789.3 to 776.0	Ohio River	5140202	HENDERSON	2-FS	5-PS	3	5-PS	3	3	7/29/2014	WAH, FC, PCR, SCR, DWS
Ohio River 792.1 to 789.3	Ohio River	5140202	HENDERSON	2-FS	2-FS	3	5-PS	3	3	7/29/2014	WAH, FC, PCR, SCR, DWS
Ohio River 793.2 to 792.1	Ohio River	5140202	HENDERSON	3	5-PS	3	5-PS	3	3	7/29/2014	WAH, FC, PCR, SCR, DWS
Ohio River 795.7 to 793.2	Ohio River	5140202	HENDERSON	2-FS	5-NS	3	5-PS	3	3	7/29/2014	WAH, FC, PCR, SCR, DWS
Ohio River 799.8 to 795.7	Ohio River	5140202	HENDERSON	2-FS	5-PS	3	5-PS	3	3	7/29/2014	WAH, FC, PCR, SCR, DWS
Ohio River 802.9 to 799.8	Ohio River	5140202	HENDERSON	2-FS	5-NS	3	5-PS	3	3	7/29/2014	WAH, FC, PCR, SCR, DWS
Ohio River 820.1 to 802.9	Ohio River	5140202	HENDERSON	2-FS	5-PS	3	5-PS	3	3	7/29/2014	WAH, FC, PCR, SCR, DWS
Ohio River 826.4 to 820.1	Ohio River	5140202	HENDERSON	2-FS	5-NS	3	5-PS	3	3	7/30/2014	WAH, FC, PCR, SCR, DWS
Ohio River 846.3 to 826.4	Ohio River	5140202	HENDERSON	2-FS	5-PS	3	5-PS	3	3	7/30/2014	WAH, FC, PCR, SCR, DWS
Ohio River 849.7 to 846.3	Ohio River	5140206	UNION	2-FS	5-PS	3	5-PS	3	3	7/30/2014	WAH, FC, PCR, SCR, DWS
Ohio River 853.4 to 849.7	Ohio River	5140203	UNION	2-FS	2-FS	3	5-PS	3	3	7/30/2014	WAH, FC, PCR, SCR, DWS
Ohio River 857.6 to 853.4	Ohio River	5140203	UNION	2-FS	5-PS	3	5-PS	3	3	7/30/2014	WAH, FC, PCR, SCR, DWS
Ohio River 862.1 to 857.6	Ohio River	5140203	UNION	2-FS	2-FS	3	5-PS	3	3	7/30/2014	WAH, FC, PCR, SCR, DWS

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Ohio River 872.8 to 862.1	Ohio River	5140203	UNION	2-FS	5-PS	3	5-PS	2-FS	3	7/30/2014	WAH, FC, PCR, SCR, DWS
Ohio River 878.2 to 872.8	Ohio River	5140203	CRITTENDEN	2-FS	2-FS	3	5-PS	3	3	7/30/2014	WAH, FC, PCR, SCR, DWS
Ohio River 882.9 to 878.2	Ohio River	5140203	CRITTENDEN	2-FS	5-PS	3	5-PS	3	3	7/30/2014	WAH, FC, PCR, SCR, DWS
Ohio River 894.6 to 882.9	Ohio River	5140203	CRITTENDEN	2-FS	2-FS	3	5-PS	3	3	7/30/2014	WAH, FC, PCR, SCR, DWS
Ohio River 910.3 to 894.6	Ohio River	5140203	LIVINGSTON	2-FS	5-PS	3	5-PS	3	3	7/30/2014	WAH, FC, PCR, SCR, DWS
Ohio River 920.5 to 910.3	Ohio River	5140203	LIVINGSTON	2-FS	2-FS	3	5-PS	3	3	8/4/2014	WAH, FC, PCR, SCR, DWS
Ohio River 925.8 to 920.5	Ohio River	5140203	LIVINGSTON	2-FS	5-PS	3	5-PS	3	3	8/4/2014	WAH, FC, PCR, SCR, DWS
Ohio River 981.3 to 925.8	Ohio River	5140206	McCRACKEN	2-FS	2-FS	3	5-PS	2-FS	3	8/4/2014	WAH, FC, PCR, SCR, DWS
Pleasant Run Creek 0.2 to 3.4	Ohio River	5090203	KENTON	2-FS	3	3	3	3	3	7/9/2004	WAH, FC, PCR, SCR
Pup Creek 2.1 to 6.95	Ohio River	5140201	DAVIESS	2-FS	3	3	3	3	3	1/24/2008	WAH, FC, PCR, SCR
Rock Run 0.0 to 5.5	Ohio River	5090201	LEWIS	2-FS	3	3	3	3	3	9/18/2007	WAH, FC, PCR, SCR
Rockhouse Fork 0.0 to 2.1	Ohio River	5090103	GREENUP	5-PS	3	3	3	3	3	2/13/2009	WAH, FC, PCR, SCR
Rush Creek 0.0 to 1.3	Ohio River	5140203	CRITTENDEN	5-PS	3	3	3	3	3	11/12/2002	WAH, FC, PCR, SCR
Sadler Creek 0.0 to 2.4	Ohio River	5140203	LIVINGSTON	5-PS	3	3	3	3	3	1/24/2008	WAH, FC, PCR, SCR
Salt Lick Creek 0.2 to 7.2	Ohio River	5090201	LEWIS	5-PS	3	3	3	3	3	6/24/2004	WAH, FC, PCR, SCR
Scenic Lake	Ohio River	5140202	HENDERSON	5-PS	3	3	3	3	3	1/1/1992	WAH, FC, PCR, SCR
Second Creek 0.5 to 2.9	Ohio River	5090203	BOONE	2-FS	3	3	3	3	2-FS	11/8/2005	WAH, FC, PCR, SCR, OSRW
Snag Creek 0.5 to 5.5	Ohio River	5090201	BRACKEN	3	5-NS	3	3	3	3	8/14/2000	WAH, FC, PCR, SCR
South Fork Gunpowder Creek 4.1 to 6.8	Ohio River	5090203	BOONE	3	5-NS	3	3	3	3	3/3/2001	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
South Fork Gunpowder Creek 0.0 to 2.0	Ohio River	5090203	BOONE	5-NS	3	3	3	3	3	4/10/2001	WAH, FC, PCR, SCR
Stephens Creek 0.0 to 1.8	Ohio River	5090203	GALLATIN	2-FS	3	3	3	3	3	8/10/2000	WAH, FC, PCR, SCR
Straight Fork 0.0 to 1.9	Ohio River	5090201	LEWIS	2-FS	3	3	3	3	3	4/11/2001	WAH, FC, PCR, SCR
Sugg Creek 0.0 to 1.3	Ohio River	5140203	UNION	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Tenmile Creek 0.05 to 1.15	Ohio River	5090201	CAMPBELL	5-PS	3	3	3	3	3	3/16/2005	WAH, FC, PCR, SCR
Trace Creek 0.2 to 4.6	Ohio River	5090201	LEWIS	5-PS	3	3	3	3	3	11/14/2005	WAH, FC, PCR, SCR
Turner Lake	Ohio River	5140206	BALLARD	2-FS	3	2-FS	3	3	3	1/6/2012	WAH, FC, PCR, SCR
Twelve Mile Creek 3.5 to 9.0	Ohio River	5090201	CAMPBELL	2-FS	3	3	3	3	3	8/11/2000	WAH, FC, PCR, SCR
Twelvemile Creek 10.15 to 13.0	Ohio River	5090201	CAMPBELL	2-FS	3	3	3	3	3	11/14/2005	WAH, FC, PCR, SCR
UT of Goose Pond Ditch 0.0 to 1.65	Ohio River	5140203	UNION	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
UT of McKinney Branch 0.0 to 1.2	Ohio River	5090201	LEWIS	5-PS	3	3	3	3	3	3/23/2011	WAH, FC, PCR, SCR
UT of Middle Fork Massac Creek 0.00 to 2.90	Ohio River	5140206	McCRACKEN	5-NS	3	3	3	3	3	3/14/2012	WAH, FC, PCR, SCR
UT to Big Sugar Creek 1.0 to 1.8	Ohio River	5090203	GALLATIN	2-FS	3	3	3	3	2-FS	3/4/2005	WAH, FC, PCR, SCR, OSRW
UT to Chinns Branch 0.0 to 1.1	Ohio River	5090103	GREENUP	5-NS	3	3	3	3	3	11/10/2003	WAH, FC, PCR, SCR
UT to Eagle Creek 0.0 to 1.6	Ohio River	5140203	UNION	5B-NS	5B-NS	3	3	3	3	1/24/2008	WAH, FC, PCR, SCR
UT to Humphrey Branch 0.0 to 1.4	Ohio River	5140206	BALLARD	5B-PS	5B-PS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
UT to Massac Creek 0.0 to 0.4	Ohio River	5140206	McCRACKEN	5B-PS	5B-PS	3	3	3	3	3/1/2007	WAH, FC, PCR, SCR
UT to Massac Creek 0.0 to 0.7	Ohio River	5140206	McCRACKEN	3	5B-PS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
UT to Massac Creek 0.0 to 1.7	Ohio River	5140206	McCRACKEN	5-PS	3	3	3	3	5-PS	3/23/2012	WAH, FC, PCR, SCR, OSRW

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
UT to UT to Eagle Creek 0.0 to 1.2	Ohio River	5140203	UNION	5B-NS	3	3	3	3	3	1/24/2008	WAH, FC, PCR, SCR
UT to UT to West Fork of Massac Creek 0.0 to 0.7	Ohio River	5140206	McCRACKEN	5B-NS	5B-NS	3	3	3	3	3/19/2007	WAH, FC, PCR, SCR
UT to West Fork Massac Creek 0.0 to 1.75	Ohio River	5140206	McCRACKEN	5B-NS	5B-NS	3	3	3	3	3/23/2012	WAH, FC, PCR, SCR
UT to West Fork of Massac Creek 0.0 to 0.8	Ohio River	5140206	McCRACKEN	5B-PS	3	3	3	3	3	3/19/2007	WAH, FC, PCR, SCR
UT to West Fork of Massac Creek 1.75 to 2.0	Ohio River	5140203	McCRACKEN	5B-PS	3	3	3	3	3	3/19/2007	WAH, FC, PCR, SCR
Wardens Slough 1.2 to 3.3	Ohio River	5140203	UNION	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Watterson Lake	Ohio River	5140101	JEFFERSON	3	3	3	2-FS	3	3	3/4/2009	WAH, FC, PCR, SCR
West Fork of Massac Creek 0.0 to 0.3	Ohio River	5140206	McCRACKEN	5B-PS	3	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
West Fork of Massac Creek 1.0 to 6.2	Ohio River	5140206	McCRACKEN	2-FS	3	3	3	3	2-FS	10/10/2006	WAH, FC, PCR, SCR, OSRW
Woolper Creek 11.9 to 14.0	Ohio River	5090203	BOONE	5-NS	5-NS	3	3	3	3	8/10/2000	WAH, FC, PCR, SCR
Woolper Creek 2.8 to 7.45	Ohio River	5090203	BOONE	2-FS	5-NS	3	3	3	3	8/10/2000 - 3/23/2011	WAH, FC, PCR, SCR
Ashers Run 0.0 to 4.8	Salt River	5140102	OLDHAM	3	5-NS	3	3	3	3	2/11/2011	WAH, FC, PCR, SCR
Ashes Creek 0.4 to 6.6	Salt River	5140102	NELSON	2-FS	3	3	3	3	3	10/5/2005	WAH, FC, PCR, SCR
Beargrass Creek 0.5 to 1.8	Salt River	5140101	JEFFERSON	5-NS	3	3	3	3	3	3/3/2009	WAH, FC, PCR, SCR
Beaver Creek 0.0 to 20.9	Salt River	5140103	ANDERSON	2-FS	3	3	3	3	3	4/9/2001	WAH, FC, PCR, SCR
Beaver Lake	Salt River	5140103	ANDERSON	5-NS	3	5-NS	3	3	3	3/4/2009 - 3/25/2011	WAH, FC, PCR, SCR
Beech Creek 4.6 to 19.6	Salt River	5140102	SHELBY	2-FS	5-NS	5-NS	3	3	3	10/5/2005	WAH, FC, PCR, SCR
Beech Fork 109.7 to 111.9	Salt River	5140103	MARION	2-FS	3	3	3	3	3	10/5/2005	WAH, FC, PCR, SCR
Beech Fork 39.5 to 50.4	Salt River	5140103	NELSON	5-NS	5-NS	3	2-FS	3	3	2/2/2011	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Beech Fork 49.7 to 56.5	Salt River	5140103	WASHINGTON	2-FS	3	3	3	3	3	8/11/2000	WAH, FC, PCR, SCR
Beech Fork 56.5 to 85.3	Salt River	5140103	WASHINGTON	2-FS	3	3	3	3	3	8/11/2000	WAH, FC, PCR, SCR
Beech Fork 0.0 to 12.0	Salt River	5140103	NELSON	2-FS	3	3	3	3	3	12/2/2005	WAH, FC, PCR, SCR
Big South Fork 0.0 to 12.65	Salt River	5140103	MARION	2-FS	5-PS	3	3	3	3	9/11/2000 - 2/11/2011	WAH, FC, PCR, SCR
Big South Fork 16.6 to 18.0	Salt River	5140103	MARION	2-FS	3	3	3	3	3	10/6/2005	WAH, CAH, FC, PCR, SCR
Big Spring	Salt River	5140104	HARDIN	2-FS	3	3	3	3	3	10/12/2009	WAH, FC, PCR, SCR
Blue Spring Ditch 0.0 to 2.1	Salt River	5140102	JEFFERSON	2-FS	5-NS	3	3	3	3	2/22/2006	WAH, FC, PCR, SCR
Boiling Spring 0.0 to 0.1	Salt River	5140104	BRECKINRIDGE	2-FS	3	3	3	3	3	10/12/2009	WAH, FC, PCR, SCR
Brashears Creek 0.0 to 13.0	Salt River	5140102	SPENCER	3	5-PS	2-FS	3	3	3	2/2/2011	WAH, FC, PCR, SCR
Brashears Creek 13.0 to 25.9	Salt River	5140102	SHELBY	2-FS	3	3	3	3	2-FS	2/2/2011	WAH, FC, PCR, SCR, OSRW
Broad Run 0.9 to 5.2	Salt River	5140102	BULLITT	5-NS	3	3	3	3	3		WAH, FC, PCR, SCR
Brooks Run 0.0 to 2.7	Salt River	5140102	BULLITT	3	3	3	3	3	3	2/11/2011	WAH, FC, PCR, SCR
Brooks Run 2.7 to 4.4	Salt River	5140102	BULLITT	3	2-FS	3	3	3	3	2/7/2011	WAH, FC, PCR, SCR
Brooks Run 4.4 to 6.4	Salt River	5140102	BULLITT	5-PS	2-FS	3	3	3	3	2/7/2006 - 2/11/2011	WAH, FC, PCR, SCR
Buchanan Creek 0.0 to 3.7	Salt River	5140102	MERCER	2-FS	3	3	3	3	3	10/6/2005	WAH, FC, PCR, SCR
Buckhorn Creek 0.0 to 2.3	Salt River	5140103	MARION	2-FS	2-FS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Bullitt Lick Creek 0.0 to 2.3	Salt River	5140102	BULLITT	5-PS	3	3	3	3	3	7/28/2000	WAH, FC, PCR, SCR
Bullskin Creek 0.0 to 3.4	Salt River	5140102	SHELBY	2-FS	3	3	3	3	3	6/28/2005	WAH, FC, PCR, SCR
Bullskin Creek 14.4 to 22.4	Salt River	5140102	SHELBY	5-PS	3	3	3	3	3	2/2/2011	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Cane Run 0.0 to 7.3	Salt River	5140102	JEFFERSON	2-FS	5-NS	3	3	3	3	2/11/2011	WAH, FC, PCR, SCR
Caney Fork 0.0 to 4.0	Salt River	5140102	NELSON	5-PS	5-NS	3	3	3	3	2/7/2011	WAH, FC, PCR, SCR
Cartwright Creek 0.0 to 6.6	Salt River	5140103	WASHINGTON	2-FS	5-NS	3	2-FS	3	3	4/9/2001	WAH, FC, PCR, SCR
Cartwright Creek 6.6 to12.7	Salt River	5140103	WASHINGTON	2-FS	3	3	3	3	3	10/11/2010	WAH, FC, PCR, SCR
Cartwright Creek 12.7 to 15.3	Salt River	5140103	WASHINGTON	5-PS	3	3	3	3	3	2/2/2011	WAH, FC, PCR, SCR
Cedar Creek 0.0 to 5.2	Salt River	5140102	BULLITT	2-FS	3	3	3	3	2-FS	10/11/2010	WAH, FC, PCR, SCR, OSRW
Cedar Creek 12.05 to 16.1	Salt River	5140102	JEFFERSON	5-PS	3	3	3	3	3		WAH, FC, PCR, SCR
Cedar Creek 4.3 to 11.1	Salt River	5140102	JEFFERSON	3	5-NS	2-FS	3	3	3	3/12/2001 - 2/22/2011	WAH, FC, PCR, SCR
Chaplin River 0.0 to 23.1	Salt River	5140103	NELSON	2-FS	5-NS	2-FS	3	3	3	2/2/2011	WAH, FC, PCR, SCR
Chaplin River 40.9 to 54.2	Salt River	5140103	WASHINGTON	2-FS	3	3	3	3	2-FS	9/20/2005	WAH, FC, PCR, SCR, OSRW
Chaplin River 63.0 to 69.7	Salt River	5140103	MERCER	5-NS	3	3	3	3	3	4/9/2001	WAH, FC, PCR, SCR
Chaplin River 69.7 to 78	Salt River	5140103	MERCER	2-FS	3	3	3	3	3	4/9/2001	WAH, FC, PCR, SCR
Chaplin River 32.6 to 32.8	Salt River	5140103	WASHINGTON	2-FS	3	3	3	3	3	4/9/2001	WAH, FC, PCR, SCR
Cheese Lick 0.7 to 4.4	Salt River	5140103	ANDERSON	5-PS	3	3	3	3	3	10/6/2005	WAH, FC, PCR, SCR
Chenoweth Run 0.0 to 5.25	Salt River	5140102	JEFFERSON	4A-PS	5-NS	5-PS	3	3	3	3/12/2001 - 2/22/2011	WAH, FC, PCR, SCR
Chenoweth Run 5.25 to 9.2	Salt River	5140102	JEFFERSON	4A-PS	5-NS	5-NS	3	3	3	3/12/2001	WAH, FC, PCR, SCR
Chickasaw Park Pond	Salt River	5140101	JEFFERSON	3	3	3	5-PS	3	3	10/7/2005	WAH, FC, PCR, SCR
Clear Creek 0 to 4.4	Salt River	5140103	HARDIN	5-NS	3	3	3	3	3	4/6/2001	WAH, FC, PCR, SCR
Clear Creek 0.0 to 11.0	Salt River	5140102	SHELBY	5-NS	3	3	3	3	3	1/12/2001	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Corn Creek 0.0 to 4.1	Salt River	5140101	TRIMBLE	2-FS	3	3	3	3	3	8/2/2000	WAH, FC, PCR, SCR
Cox Creek 11.4 to 18.6	Salt River	5140102	NELSON	5-NS	5-NS	3	3	3	3	2/7/2011	WAH, FC, PCR, SCR
Cox Creek 0.0 to 4.7	Salt River	5140102	BULLITT	2-FS	5-NS	2-FS	3	3	3	2/2/2011	WAH, FC, PCR, SCR
Cox Creek 18.6 to 23.9	Salt River	5140102	NELSON	5-NS	5-NS	3	3	3	3	11/3/2010	WAH, FC, PCR, SCR
Cox Creek 4.7 to 11.4	Salt River	5140102	NELSON	3	5-NS	3	3	3	3	2/7/2011	WAH, FC, PCR, SCR
Crooked Creek 1.0 to 10.1	Salt River	5140102	SPENCER	2-FS	3	3	3	3	3	8/2/2000	WAH, FC, PCR, SCR
Crooked Creek 5.6 to 12.8	Salt River	5140103	BULLITT	5-NS	3	3	3	3	3	8/11/2000	WAH, FC, PCR, SCR
Currys Fork 0.0 to 4.8	Salt River	5140102	OLDHAM	2-FS	5-NS	2-FS	3	3	3	2/7/2011	WAH, FC, PCR, SCR
Doctors Fork 0.0 to 3.8	Salt River	5140103	BOYLE	2-FS	3	3	3	3	2-FS	10/7/2005	WAH, FC, PCR, SCR, OSRW
Doe Run 4.1 to 7.9	Salt River	5140104	MEADE	2-FS	5-NS	3	3	3	3	3/6/2001	CAH, FC, PCR, SCR
Doe Valley Lake	Salt River	5140104	MEADE	3	3	3	3	2-FS	3	11/15/2005	WAH, FC, PCR, SCR, DWS
Dorridge Creek 0.0 to 3.45	Salt River	5140104	BRECKINRIDGE	2-FS	3	3	3	3	3		WAH, FC, PCR, SCR
East Fork Beech Fork 0.0 to 1.9	Salt River	5140103	WASHINGTON	5-PS	3	3	3	3	3	10/7/2005	WAH, FC, PCR, SCR
East Fork Cox Creek 0.0 to 4.3	Salt River	5140102	BULLITT	2-FS	5-NS	3	3	3	3	2/7/2011	WAH, FC, PCR, SCR
Fagan Branch Reservoir	Salt River	5140103	MARION	3	3	3	3	2-FS	3	3/25/2011	WAH, FC, PCR, SCR, DWS
Fern Creek 1.3 to 4.4	Salt River	5140102	JEFFERSON	5-NS	5-NS	3	3	3	3	5/2/2001	WAH, FC, PCR, SCR
Fern Creek 0.0 to 1.3	Salt River	5140102	JEFFERSON	5-PS	5-NS	3	3	3	3	3/22/2001	WAH, FC, PCR, SCR
Fern Creek 4.4 to 5.9	Salt River	5140102	JEFFERSON	5-PS	5-NS	3	3	3	3	3/12/2001	WAH, FC, PCR, SCR
Fiddle Spring	Salt River	5140104	BRECKINRIDGE	2-FS	3	3	3	3	3	10/12/2009	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Fishpool Creek 0.0 to1.9	Salt River	5140102	JEFFERSON	2-FS	2-FS	3	3	3	3	3/22/2001	WAH, FC, PCR, SCR
Flat Rock Spring	Salt River	5140104	BRECKINRIDGE	2-FS	3	3	3	3	3	10/9/2009	WAH, FC, PCR, SCR
Floyds Fork 0.0 to 11.7	Salt River	5140102	BULLITT	2-FS	5-NS	2-FS	2-FS	3	3	2/7/2011	WAH, FC, PCR, SCR
Floyds Fork 11.7 to 24.2	Salt River	5140102	JEFFERSON	4A-NS	5-NS	2-FS	3	3	3	10/15/1999 - 2/22/2011	WAH, FC, PCR, SCR
Floyds Fork 24.2 to 34.1	Salt River	5140102	JEFFERSON	4A-PS	5-NS	2-FS	3	3	3	2/22/2011	WAH, FC, PCR, SCR
Floyds Fork 34.1 to 61.9	Salt River	5140102	OLDHAM	4A-PS	5-NS	5-NS	3	3	3	2/22/2011	WAH, FC, PCR, SCR
Froman Creek 0.0 to 1.25	Salt River	5140102	NELSON	3	5-NS	3	3	3	3	2/7/2011	WAH, FC, PCR, SCR
Glens Creek 0.0 to 4.8	Salt River	5140103	WASHINGTON	2-FS	3	3	3	3	3	10/10/2005	WAH, FC, PCR, SCR
Goose Creek 0.3 to 3.6	Salt River	5140101	JEFFERSON	5-PS	5-NS	3	3	3	3	3/3/2009	WAH, FC, PCR, SCR
Goose Creek 3.6 to 13.0	Salt River	5140101	JEFFERSON	5-PS	5-NS	3	3	3	3	3/3/2009	WAH, FC, PCR, SCR
Gravel Creek 0.7 to 2.9	Salt River	5140102	BULLITT	2-FS	3	3	3	3	3	10/10/2005	WAH, FC, PCR, SCR
Guist Creek 0.0 to 15.4	Salt River	5140102	SHELBY	2-FS	3	3	3	3	2-FS	3/25/2002	WAH, FC, PCR, SCR, OSRW
Guist Creek 15.7 to 28.0	Salt River	5140102	SHELBY	5-PS	3	3	3	3	3	3/25/2002 - 4/9/2012	WAH, FC, PCR, SCR
Guist Creek Lake	Salt River	5140102	SHELBY	5-PS	3	3	5-PS	2-FS	3	3/4/2009 - 3/29/2011	WAH, FC, PCR, SCR, DWS
Hammond Creek 0.0 to 5.2	Salt River	5140102	ANDERSON	3	3	3	2-FS	3	3	8/4/2000	WAH, FC, PCR, SCR
Hardins Creek 0.0 to 11.4	Salt River	5140104	BRECKINRIDGE	5-PS	3	3	3	3	3	2/25/2011	WAH, FC, PCR, SCR
Hardins Creek 0.0 to 7.0	Salt River	5140103	WASHINGTON	2-FS	3	3	3	3	3	3/7/2001	WAH, FC, PCR, SCR
Hardins Creek 13.3 to 22.9	Salt River	5140103	MARION	5-PS	3	3	3	3	3	6/8/2004	WAH, FC, PCR, SCR
Hardy Creek 1.6 to 5.6	Salt River	5140101	TRIMBLE	5-PS	3	3	3	3	3	3/22/2005	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Hardy Creek 0.0 to 1.4	Salt River	5140101	TRIMBLE	5-NS	3	3	3	3	3	8/1/1999	WAH, FC, PCR, SCR
Harrods Creek 0.0 to 3.2	Salt River	5140101	OLDHAM	4A-NS	5-PS	2-FS	3	3	3	12/1/2005	WAH, FC, PCR, SCR
Harrods Creek 3.2 to 33.0	Salt River	5140101	OLDHAM	2-FS	2-FS	2-FS	3	3	3	3/17/2011	WAH, FC, PCR, SCR
Harts Run 0.0 to 1.8	Salt River	5140103	BULLITT	2-FS	3	3	3	3	2-FS	9/20/2005	WAH, FC, PCR, SCR, OSRW
Hayden Creek 0.0 to 1.3	Salt River	5140103	MERCER	5-NS	3	3	3	3	3	3/8/2005	WAH, FC, PCR, SCR
Hite Creek 0.0 to 5.5	Salt River	5140101	JEFFERSON	5-NS	3	3	3	3	3	4/9/2001	WAH, FC, PCR, SCR
Indian Creek 0.0 to 2.9	Salt River	5140103	MERCER	2-FS	3	3	3	3	2-FS	3/8/2005	WAH, FC, PCR, SCR, OSRW
Jeptha Creek 0.0 to 0.7	Salt River	5140102	SHELBY	5-NS	3	3	3	3	3	8/7/2000	WAH, FC, PCR, SCR
Jeptha Creek 9.1 to 10.15	Salt River	5140102	SHELBY	5-NS	3	3	3	3	3	2/24/2011	WAH, FC, PCR, SCR
Jones Creek 0.0 to 3.9	Salt River	5140103	MARION	5-PS	3	3	3	3	3	4/6/2001	WAH, FC, PCR, SCR
Lick Creek 0.0 to 4.1	Salt River	5140103	WASHINGTON	2-FS	3	3	3	3	2-FS	3/10/2005	WAH, FC, PCR, SCR, OSRW
Little Goose Creek 0.0 to 9.2	Salt River	5140101	JEFFERSON	2-FS	5-PS	3	3	3	3	3/12/2001	WAH, FC, PCR, SCR
Little Kentucky River 0.2 to 21.3	Salt River	5140101	TRIMBLE	3	2-FS	2-FS	3	3	3	12/2/2005	WAH, FC, PCR, SCR
Little South Fork of North Rolling Fork 0.0 to 3.7	Salt River	5140103	CASEY	2-FS	3	3	3	3	3	9/19/2005	WAH, FC, PCR, SCR
Locust Creek 0.0 to 2.0	Salt River	5140101	CARROLL	2-FS	3	3	3	3	3	8/8/2000	WAH, FC, PCR, SCR
Long Lick Creek 0.0 to 10.5	Salt River	5140102	BULLITT	5-NS	3	3	3	3	3	10/12/2005	WAH, FC, PCR, SCR
Long Lick Creek 3.1 to 21.3	Salt River	5140103	WASHINGTON	2-FS	3	3	3	3	3	6/9/2004	WAH, FC, PCR, SCR
Long Run 0.0 to 9.9	Salt River	5140102	JEFFERSON	2-FS	5-NS	3	3	3	3	2/24/2011	WAH, FC, PCR, SCR
Long Run Lake	Salt River	5140102	JEFFERSON	2-FS	3	3	3	3	3	8/26/2005 - 3/29/2011	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Marion County Sportsman Lake	Salt River	5140103	MARION	2-FS	3	3	3	3	3	8/26/2005 - 3/29/2011	WAH, FC, PCR, SCR
McNeely Lake	Salt River	5140102	JEFFERSON	2-FS	3	3	5-NS	3	3	8/26/2005 - 3/29/2011	WAH, FC, PCR, SCR
Mellins Branch 0.0 to 1.5	Salt River	5140101	CARROLL	5-PS	3	3	3	3	3	3/10/2005	WAH, FC, PCR, SCR
Middle Fork Beargrass Creek 0.0 to 2.0	Salt River	5140101	JEFFERSON	5-NS	5-NS	3	3	3	3	3/13/2001	WAH, FC, PCR, SCR
Middle Fork of Beargrass Creek 2.0 to 2.9	Salt River	5140101	JEFFERSON	2-FS	5-NS	3	3	3	3	3/3/2009	WAH, FC, PCR, SCR
Middle Fork of Beargrass Creek 2.9 to 15.3	Salt River	5140101	JEFFERSON	2-FS	5-NS	3	3	3	3	3/3/2001 - 3/3/2009	WAH, FC, PCR, SCR
Middle Fork Otter Creek 0.0 to 4.2	Salt River	5140103	LARUE	2-FS	3	3	3	3	3	4/6/2001	WAH, FC, PCR, SCR
Miles Park Pond #4	Salt River	5140102	JEFFERSON	3	3	3	2-FS	3	3	1/31/2008	WAH, FC, PCR, SCR
Mill Creek 0.0 to 11.2	Salt River	5140101	JEFFERSON	5-NS	5-NS	3	3	3	3	3/13/2001	WAH, FC, PCR, SCR
Mill Creek 11.8 to 23.6	Salt River	5140102	HARDIN	2-FS	3	3	3	3	3	2/6/2001	WAH, FC, PCR, SCR
Mill Creek 6.0 to 7.0	Salt River	5140102	HARDIN	3	3	3	5B-NS	3	3	2/6/2001	WAH, FC, PCR, SCR
Mill Creek 7.0 to 11.8	Salt River	5140102	HARDIN	2-FS	3	3	3	3	3	2/6/2001	WAH, FC, PCR, SCR
Mill Creek 0.0 to 2.7	Salt River	5140103	NELSON	2-FS	3	3	3	3	3	10/12/2005	WAH, FC, PCR, SCR
Mill Creek Branch 0.0 to 0.7	Salt River	5140102	HARDIN	5B-PS	3	3	3	3	3	2/6/2001	WAH, FC, PCR, SCR
Mill Creek Cutoff 0.0 to 2.4	Salt River	5140101	JEFFERSON	2-FS	5-NS	3	3	3	3	3/12/2001	WAH, FC, PCR, SCR
Monks Creek 0.0 to 1.6	Salt River	5140103	NELSON	2-FS	3	3	3	3	3	10/12/2005	WAH, FC, PCR, SCR
Muddy Fork Beargrass Creek 0.0 to 6.9	Salt River	5140101	JEFFERSON	2-FS	5-NS	3	3	3	3	3/12/2001	WAH, FC, PCR, SCR
Mussin Branch 0.0 to 1.7	Salt River	5140103	MARION	4A-NS	4A-NS	4A-NS	3	3	3	2/14/2006	WAH, FC, PCR, SCR
North Rolling Fork 0.0 to 3.7	Salt River	5140103	MARION	2-FS	3	3	3	3	3	4/6/2001	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
North Rolling Fork 16.7 to 20.9	Salt River	5140103	BOYLE	2-FS	3	3	3	3	3	4/6/2001	WAH, FC, PCR, SCR
Northern Ditch 0.0 to 7.3	Salt River	5140102	JEFFERSON	5-PS	5-NS	3	3	3	3	4/1/1998 - 2/24/2011	WAH, FC, PCR, SCR
Otter Creek 0.0 to 10.7	Salt River	5140104	MEADE	2-FS	5-PS	3	3	3	3	3/13/2001	CAH, FC, PCR, SCR
Otter Creek 0.0 to 2.9	Salt River	5140103	LARUE	2-FS	5-PS	3	3	3	2-FS	3/4/2009 - 2/24/2011	WAH, FC, PCR, SCR, OSRW
Overalls Creek 0.0 to 1.35	Salt River	5140101	BULLITT	2-FS	3	3	3	3	2-FS	10/11/2010	WAH, FC, PCR, SCR, OSRW
Pawley Creek 0.0 to 1.0	Salt River	5140104	HARDIN	2-FS	3	3	3	3	3	2/24/2011	WAH, FC, PCR, SCR
Pennsylvania Run 0.0 to 3.3	Salt River	5140102	JEFFERSON	5-NS	5-NS	5-NS	3	3	3	2/24/2011	WAH, FC, PCR, SCR
Pleasant Run 4.2 to 6.9	Salt River	5140103	WASHINGTON	5-PS	3	3	3	3	3	10/13/2005	WAH, FC, PCR, SCR
Plum Creek 0.0 to 17.8	Salt River	5140102	SPENCER	5-NS	3	3	3	3	3	10/13/2005	WAH, FC, PCR, SCR
Plums Run 0.0 to 2.3	Salt River	5140103	WASHINGTON	2-FS	3	3	3	3	3	4/6/2004	WAH, FC, PCR, SCR
Pond Creek 0.0 to 1.5	Salt River	5140101	OLDHAM	5-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Pond Creek/Southern Ditch 5.1 to 8.1	Salt River	5140102	JEFFERSON	5-NS	5-NS	3	3	3	3	3/13/2001	WAH, FC, PCR, SCR
Pope Lick Creek 0.0 to 2.1	Salt River	5140103	JEFFERSON	3	5-NS	3	3	3	3	3/25/2002 - 2/28/2011	WAH, FC, PCR, SCR
Pope Lick Creek 2.1 to 5.5	Salt River	5140102	JEFFERSON	2-FS	5-NS	3	3	3	3	2/24/2011	WAH, FC, PCR, SCR
Pottinger Creek 0.0 to 5.0	Salt River	5140103	NELSON	2-FS	3	3	3	3	3	3/7/2001	WAH, FC, PCR, SCR
Prather Creek 0.0 to 4.25	Salt River	5140103	WASHINGTON	2-FS	3	3	3	3	3	10/11/2010	WAH, FC, PCR, SCR
Pryors Fork 0.0 to 5.4	Salt River	5140101	TRIMBLE	2-FS	3	3	3	3	3	10/11/2010	WAH, FC, PCR, SCR
Reformatory Lake	Salt River	5140101	OLDHAM	2-FS	3	3	2-FS	3	3	3/29/2011	WAH, FC, PCR, SCR
Road Run 0.0 to 7.1	Salt River	5140103	WASHINGTON	5-PS	3	3	3	3	3	10/13/2005	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Rocky Run 0.0 to 2.3	Salt River	5140102	BULLITT	3	5-NS	3	3	3	3	2/28/2011	WAH, FC, PCR, SCR
Rolling Fork 100.2 to 107.9	Salt River	5140103	MARION	3	3	3	3	3	3		WAH, FC, PCR, SCR
Rolling Fork 41.8 to 62.5	Salt River	5140103	LARUE	2-FS	3	3	3	3	2-FS	4/10/2001	WAH, FC, PCR, SCR, OSRW
Rolling Fork 62.5 to 76.3	Salt River	5140103	LARUE	2-FS	3	3	3	3	3	8/11/2000	WAH, FC, PCR, SCR
Rolling Fork 76.3 to 93.7	Salt River	5140103	MARION	2-FS	3	3	3	3	3	3/7/2001	WAH, FC, PCR, SCR
Rolling Fork 98.25 to 99.25	Salt River	5140103	MARION	3	3	3	3	3	3	3/1/2011	WAH, FC, PCR, SCR, DWS
Rolling Fork 0.0 to 37.75	Salt River	5140103	BULLITT	2-FS	5-NS	2-FS	3	3	3	3/1/2011	WAH, FC, PCR, SCR
Rolling Fork 37.75 to 40.7	Salt River	5140103	BULLITT	2-FS	5-NS	2-FS	3	3	3	3/1/2011	WAH, FC, PCR, SCR
Ross Karst Spring	Salt River	5140104	BRECKINRIDGE	2-FS	3	3	3	3	3	10/9/2009	WAH, FC, PCR, SCR
Rowan Creek 0.0 to 7.4	Salt River	5140103	NELSON	2-FS	3	3	3	3	3	4/10/2000	WAH, FC, PCR, SCR
Salt Lick Creek 0.0 to 7.9	Salt River	5140101	MARION	2-FS	3	3	3	3	2-FS	3/1/2011	WAH, FC, PCR, SCR, OSRW
Salt River 11.7 to 25.9	Salt River	5140102	BULLITT	5-PS	5-NS	2-FS	5-PS	3	3	3/1/2011	WAH, FC, PCR, SCR
Salt River 49.7 to 55.4	Salt River	5140102	SPENCER	2-FS	3	3	3	3	3	3/25/2002	WAH, FC, PCR, SCR
Salt River 55.4 to 55.9	Salt River	5140102	SPENCER	2-FS	3	3	2-FS	3	3	3/2/2001	WAH, FC, PCR, SCR
Salt River 57.1 to 61.25	Salt River	5140102	SPENCER	2-FS	2-FS	2-FS	3	2-FS	3	2/28/2006	WAH, FC, PCR, SCR, DWS
Salt River 88.5 to 111.2	Salt River	5140102	ANDERSON	2-FS	3	3	3	3	3	8/11/2000	WAH, FC, PCR, SCR
Salt River 111.9 to 135.25	Salt River	5140102	MERCER	5-NS	3	3	3	3	3	3/2/2011	WAH, FC, PCR, SCR
Salt River 135.25 to 142.6	Salt River	5140102	MERCER	2-FS	3	3	3	3	3	10/14/2005	WAH, FC, PCR, SCR
Salt River 77.8 to 88.8	Salt River	5140102	ANDERSON	2-FS	5-NS	2-FS	2-FS	3	3	3/2/2011	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Scrubgrass Branch 0.2 to 0.7	Salt River	5140103	BOYLE	2-FS	3	3	3	3	3	4/6/2001	WAH, FC, PCR, SCR
Shelby Lake	Salt River	5140102	SHELBY	5-PS	3	3	3	3	3	3/29/2011	WAH, FC, PCR, SCR
Short Creek 0.0 to 5.0	Salt River	5140103	WASHINGTON	5-PS	3	3	3	3	3	6/10/2004	WAH, FC, PCR, SCR
Simpson Creek 0.0 to 6.8	Salt River	5140102	SPENCER	3	2-FS	3	3	3	3	2/1/2001	WAH, FC, PCR, SCR
Sinking Creek 15.4 to 39.75	Salt River	5140104	BRECKINRIDGE	2-FS	5-PS	3	3	3	3	3/22/2011	CAH, FC, PCR, SCR
Sinking Creek 5.9 to 8.7	Salt River	5140104	BRECKINRIDGE	3	3	3	3	3	3		CAH, FC, PCR, SCR
Sinking Creek 8.7 to 15.4	Salt River	5140104	BRECKINRIDGE	5-PS	5-NS	3	3	3	3	3/22/2011	CAH, FC, PCR, SCR
South Fork Beargrass Creek 0.0 to 2.7	Salt River	5140101	JEFFERSON	5-PS	5-NS	3	3	3	3	3/3/2009	WAH, FC, PCR, SCR
South Fork Beargrass Creek 2.7 to 13.6	Salt River	5140101	JEFFERSON	5-NS	5-NS	3	3	3	3	3/15/2001	WAH, FC, PCR, SCR
South Fork Currys Fork 0.0 to 6.1	Salt River	5140102	OLDHAM	3	5-NS	3	3	3	3	3/2/2011	WAH, FC, PCR, SCR
South Long Run 0.0 to 3.35	Salt River	5140102	JEFFERSON	3	5-NS	3	3	3	3	3/2/2011	WAH, FC, PCR, SCR
Southern Ditch 0.0 to 5.9	Salt River	5140102	JEFFERSON	2-FS	5-NS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Sulphur Creek 0.0 to 10.0	Salt River	5140103	ANDERSON	2-FS	5-PS	2-FS	3	3	2-FS	3/2/2011	WAH, FC, PCR, SCR, OSRW
Sympson Lake	Salt River	5140103	NELSON	2-FS	3	3	3	2-FS	3	8/26/2005 - 3/31/2011	WAH, FC, PCR, SCR, DWS
Taylorsville Reservoir	Salt River	5140102	SPENCER	4A-PS	3	2-FS	5-PS	3	3	2/28/2006	WAH, FC, PCR, SCR
Thompson Creek 0.0 to 9.3	Salt River	5140103	WASHINGTON	5-PS	3	3	3	3	3	3/4/2011	WAH, FC, PCR, SCR
Tioga Creek 0.0 to 2.5	Salt River	5140104	HARDIN	5-PS	3	3	3	3	3	10/14/2005	WAH, FC, PCR, SCR
Tom Wallace Lake	Salt River	5140102	JEFFERSON	3	3	3	2-FS	3	3	9/25/2007	WAH, FC, PCR, SCR
Town Creek 0.0 to 4.1	Salt River	5140103	NELSON	2-FS	3	3	3	3	3	4/11/2001	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
UT of Cedar Creek 0.0 to 0.15	Salt River	5140102	BULLITT	5B-NS	3	3	3	3	3	3/4/2011	WAH, FC, PCR, SCR
UT of Mill Creek 0.0 to 1.7	Salt River	5140103	WASHINGTON	5-NS	3	3	3	3	3	3/4/2011	WAH, FC, PCR, SCR
UT of Rolling Fork 0.0 to 2.4	Salt River	5140103	MARION	4C-NS	3	3	3	3	3	3/4/2011	WAH, FC, PCR, SCR
UT of South Fork Currys Fork 0.0 to 1.8	Salt River	5140102	OLDHAM	3	5-PS	3	3	3	3	3/4/2011	WAH, FC, PCR, SCR
UT of UT of Brooks Run 0.0 to 0.35	Salt River	5140102	BULLITT	3	3	3	3	3	3	3/4/2011	WAH, FC, PCR, SCR
UT of UT of North Prong Long Lick Creek 0.0 to 0.25	Salt River	5140103	WASHINGTON	5-NS	3	3	3	3	3		WAH, FC, PCR, SCR
UT to Brooks Run 0.0 to 2.0	Salt River	5140102	BULLITT	5-NS	2-FS	3	3	3	3	8/5/1999	WAH, FC, PCR, SCR
UT to Buffalo Run 0.0 to 1.1	Salt River	5140102	BULLITT	5-NS	3	3	3	3	3	4/8/2004	WAH, FC, PCR, SCR
UT to Carmon Creek 0.0 to 1.9	Salt River	5140101	HENRY	3	5B-NS	5B-NS	3	3	3	9/30/2005	WAH, FC, PCR, SCR
UT to Corn Creek 0.0 to 2.0	Salt River	5140101	TRIMBLE	2-FS	3	3	3	3	2-FS	10/10/2005	WAH, FC, PCR, SCR, OSRW
UT to Hammond Creek 0.0 to 1.8	Salt River	5140102	ANDERSON	5-NS	3	3	3	3	3	4/6/2004	WAH, FC, PCR, SCR
UT to N. Fork Currys Fork 0.0 to 0.1	Salt River	5140102	OLDHAM	3	5B-NS	3	3	3	3	9/28/2005	WAH, FC, PCR, SCR
UT to Pond Creek 0.0 to 0.5	Salt River	5140101	OLDHAM	5-NS	3	3	3	3	3	4/12/2001	WAH, FC, PCR, SCR
UT to Pond Creek 0.5 to 0.9	Salt River	5140101	OLDHAM	2-FS	3	3	3	3	3	4/12/2001	WAH, FC, PCR, SCR
UT to Rolling Fork 0.0 to 0.6	Salt River	5140103	MARION	4A-NS	4A-NS	4A-NS	3	3	3	2/14/2006	WAH, FC, PCR, SCR
UT to Salt River 0.0 to 2.4	Salt River	5140102	MERCER	5-PS	3	3	3	3	3	5/4/2004	WAH, FC, PCR, SCR
UT to Southern Ditch 0.0 to 2.6	Salt River	5140102	JEFFERSON	5-NS	3	3	3	3	3	4/16/2004	WAH, FC, PCR, SCR
UT to UT to Guist Creek 0.0 to 2.4	Salt River	5140102	SHELBY	5-PS	3	3	3	3	3	10/10/2005	WAH, FC, PCR, SCR
West Fork Cox Creek 0.0 to 6.9	Salt River	5140102	BULLITT	3	5-NS	3	3	3	3	3/7/2011	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
West Fork Otter Creek 0.0 to 3.1	Salt River	5140103	LARUE	2-FS	3	3	3	3	2-FS	10/17/2005	WAH, FC, PCR, SCR, OSRW
Wetwoods Creek (Slop Ditch) 2.2 to 4.25	Salt River	5140102	JEFFERSON	5-PS	5-NS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
White Sulphur Creek 0.0 to 3.9	Salt River	5140101	HENRY	3	3	3	3	3	3		WAH, FC, PCR, SCR
Willisburg Lake	Salt River	5140103	WASHINGTON	2-FS	3	3	3	2-FS	3	8/26/2005 - 3/31/2011	WAH, FC, PCR, SCR, DWS
Willow Pond	Salt River	5140101	JEFFERSON	3	3	3	2-FS	3	3	10/7/2005	WAH, FC, PCR, SCR
Wilson Creek 0.0 to 2.2	Salt River	5140103	BULLITT	5-NS	3	3	3	3	5-NS	10/17/2005	WAH, FC, PCR, SCR, OSRW
Wilson Creek 9.5 to 18.35	Salt River	5140103	BULLITT	2-FS	3	3	3	3	2-FS	3/23/2011	WAH, FC, PCR, SCR, OSRW
Withrow Creek 0.0 to 3.9	Salt River	5140103	NELSON	5-PS	3	3	3	3	3	10/17/2005	WAH, FC, PCR, SCR
Wolf Creek 0.0 to 8.7	Salt River	5140104	MEADE	3	3	3	3	3	3		WAH, FC, PCR, SCR
Yellowbank Creek 1.5 to 11.8	Salt River	5140101	BRECKINRIDGE	2-FS	3	3	3	3	2-FS	3/7/2011	WAH, FC, PCR, SCR, OSRW
Younger Creek 0.0 to 4.5	Salt River	5140103	HARDIN	5-PS	3	3	3	3	3	10/17/2005	WAH, FC, PCR, SCR
Anderson Creek 1.9 to 5.05	Tennessee River	6040005	CALLOWAY	2-FS	3	3	3	3	3	3/14/2012	WAH, FC, PCR, SCR
Angle Creek 0.0 to 0.8	Tennessee River	6040006	MARSHALL	5-PS	5-NS	3	3	3	3	3/25/2002	WAH, FC, PCR, SCR
Bear Creek 0.6 to 1.6	Tennessee River	6040006	GRAVES	5-PS	5-PS	3	3	3	3	5/4/2002	WAH, FC, PCR, SCR
Bear Creek 4.0 to 7.2	Tennessee River	6040005	MARSHALL	3	5-NS	3	3	3	3	3/25/2002	WAH, FC, PCR, SCR
Bee Creek 0.0 to 0.7	Tennessee River	6040006	CALLOWAY	5-NS	4A-NS	3	3	3	3	2/22/2007 - 3/14/2012	WAH, FC, PCR, SCR
Bee Creek 0.7 to 2.0	Tennessee River	6040006	CALLOWAY	2-FS	4A-NS	3	3	3	3	3/25/2002 - 1/1/2007	WAH, FC, PCR, SCR
Beechy Creek 0.5 to 3.7	Tennessee River	6040005	CALLOWAY	2-FS	3	3	3	3	3	8/10/2000	WAH, FC, PCR, SCR
Blizzard Ponds Drainage Canal 4.8 to 5.8	Tennessee River	6040006	McCRACKEN		4A-PS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Blizzard Ponds Drainage Canal 0.0 to 3.7	Tennessee River	6040006	McCRACKEN	5-PS	4A-NS	3	3	3	3	10/10/2006	WAH, FC, PCR, SCR
Blood River 10.95 to 18.7	Tennessee River	6040005	CALLOWAY	2-FS	3	3	3	3	2-FS	7/5/2001	WAH, FC, PCR, SCR, OSRW
Camp Creek 0.0 to 5.4	Tennessee River	6040006	McCRACKEN	5-PS	4A-PS	3	3	3	3	3/25/2002	WAH, FC, PCR, SCR
Camp Creek 5.4 to 9.5	Tennessee River	6040006	GRAVES	3	4A-NS	3	3	3	3	3/15/2012	WAH, FC, PCR, SCR
Champion Creek 0.0 to 1.5	Tennessee River	6040006	McCRACKEN	5-NS	3	3	3	3	3	3/25/2002	WAH, FC, PCR, SCR
Chestnut Creek 0.0 to 3.0	Tennessee River	6040006	MARSHALL	5-PS	4A-NS	3	3	3	3	3/25/2002	WAH, FC, PCR, SCR
Chestnut Creek 3.2 to 3.9	Tennessee River	6040006	MARSHALL	5B-NS	5B-NS	3	3	3	3	3/15/2012	WAH, FC, PCR, SCR
Chestnut Creek 3.9 to 4.6	Tennessee River	6040006	MARSHALL	5B-NS	5B-NS	3	3	3	3	3/15/2012	WAH, FC, PCR, SCR
Clarks River 13.1 to 20.5	Tennessee River	6040006	McCRACKEN	5-NS	4A-PS	3	3	3	3	3/15/2012	WAH, FC, PCR, SCR
Clarks River 28.7 to 30.7	Tennessee River	6040006	MARSHALL	2-FS	3	3	3	3	2-FS	3/25/2002	WAH, FC, PCR, SCR, OSRW
Clarks River 31.7 to 34.8	Tennessee River	6040006	MARSHALL	2-FS	3	3	3	3	3	3/25/2002	WAH, FC, PCR, SCR
Clarks River 4.9 to 13.1	Tennessee River	6040006	McCRACKEN	5-PS	3	3	3	3	3	3/25/2002 - 3/28/2007	WAH, FC, PCR, SCR
Clarks River 42.6 to 48.6	Tennessee River	6040006	MARSHALL	2-FS	3	3	3	3	3	3/25/2002	WAH, FC, PCR, SCR
Clarks River 51.8 to 55.1	Tennessee River	6040006	CALLOWAY	2-FS	5-NS	3	2-FS	3	3	3/15/2012	WAH, FC, PCR, SCR
Clarks River 55.6 to 64.7	Tennessee River	6040006	CALLOWAY	5-PS	4A-NS	3	2-FS	3	3	10/2/2007	WAH, FC, PCR, SCR
Clarks River 34.8 to 42.6	Tennessee River	6040006	MARSHALL	5-PS	3	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Clarks River 64.7 to 66.8	Tennessee River	6040006	CALLOWAY	5-PS	4A-NS	3	3	3	3	1/1/2007	WAH, FC, PCR, SCR
Clayton Creek 0.75 to 3.3	Tennessee River	6040006	CALLOWAY	5-PS	3	3	3	3	3	1/1/2007	WAH, FC, PCR, SCR
Clayton Creek 3.3 to 7.7	Tennessee River	6040006	CALLOWAY	5-PS	4A-NS	3	3	3	3	5/2/2002 - 10/10/2006	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Clayton Creek Relict Channel 0.0 to 1.2	Tennessee River	6040006	CALLOWAY	3	4A-PS	3	3	3	3	3/16/2012	WAH, FC, PCR, SCR
Clear Creek 0.7 to 3.1	Tennessee River	6040005	MARSHALL	5-PS	3	3	3	3	3		WAH, FC, PCR, SCR
Cypress Creek 0.1 to 6.2	Tennessee River	6040006	MARSHALL	5-NS	2-FS	3	3	3	3	3/19/2012	WAH, FC, PCR, SCR
Cypress Creek 6.2 to 7.7	Tennessee River	6040006	MARSHALL	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Cypress Creek 7.7 to 9.7	Tennessee River	6040006	MARSHALL	5-NS	3	3	3	3	3	2/27/2002	WAH, FC, PCR, SCR
Damon Creek 0.0 to 1.8	Tennessee River	6040006	CALLOWAY	2-FS	4A-NS	3	3	3	3	10/10/2006	WAH, FC, PCR, SCR
Duncan Creek 0.0 to 2.5	Tennessee River	6040006	MARSHALL	2-FS	4A-NS	3	3	3	3	5/2/2002 - 3/19/2012	WAH, FC, PCR, SCR
East Fork Clarks River 7.2 to 8.0	Tennessee River	6040006	CALLOWAY	3	4A-NS	3	3	3	3	3/19/2012	WAH, FC, PCR, SCR
East Fork of Clarks River 0.0 to 2.7	Tennessee River	6040006	CALLOWAY	2-FS	4A-NS	3	3	3	3	1/1/2007 - 3/19/2012	WAH, FC, PCR, SCR
East Fork of Clarks River 6.1 to 7.1	Tennessee River	6040006	CALLOWAY	3	2-FS	3	3	3	3	3/19/2012	WAH, FC, PCR, SCR
Farley Branch 0.0 to 2.2	Tennessee River	6040006	CALLOWAY	5-PS	4A-NS	3	3	3	3	2/28/2006 - 3/19/2012	WAH, FC, PCR, SCR
Grindstone Creek 0.5 to 2.8	Tennessee River	6040005	CALLOWAY	2-FS	3	3	3	3	2-FS	10/10/2006	WAH, FC, PCR, SCR, OSRW
Guess Creek 0.0 to 2.6	Tennessee River	6040006	LIVINGSTON	5-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Guier Branch 0.0 to 2.9	Tennessee River	6040006	CALLOWAY	3	2-FS	3	3	3	3	3/19/2012	WAH, FC, PCR, SCR
Haskell Branch 1.2 to 4.5	Tennessee River	6040006	GRAVES	5-PS	4A-NS	3	3	3	3	3/19/2012	WAH, FC, PCR, SCR
Hominy Branch 2.3 to 3.8	Tennessee River	8010201	GRAVES	2-FS	3	3	3	3	3	2/28/2007	WAH, FC, PCR, SCR
Island Creek 0.0 to 5.7	Tennessee River	6040006	McCRACKEN	5-PS	5-NS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Island Creek 5.7 to 10.1	Tennessee River	6040006	McCRACKEN	5-PS	3	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Jonathan Creek 10.6 to 18.9	Tennessee River	6040005	CALLOWAY	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Jonathan Creek 7.3 to 10.6	Tennessee River	6040005	CALLOWAY	5-PS	3	3	3	3	3	2/28/2007	WAH, FC, PCR, SCR
Kentucky Lake	Tennessee River	6040005	CALLOWAY	1-FS	1-FS	1-FS	1-FS	1-FS	1-FS	11/28/2006	WAH, FC, PCR, SCR, DWS
Ledbetter Creek 2.8 to 5.3	Tennessee River	6040005	MARSHALL	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Little Bee Creek 0.0 to 2.15	Tennessee River	6040006	MARSHALL	5-NS	3	3	3	3	3	11/17/2011	WAH, FC, PCR, SCR
Little Cypress Creek 3.4 to 6.0	Tennessee River	6040006	MARSHALL	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Little Cypress Creek 0.0 to 3.4	Tennessee River	6040006	MARSHALL	5-NS	5-PS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Little Cypress Creek 7.4 to 7.95	Tennessee River	6040006	MARSHALL	5B-NS	5B-NS	3	3	3	3	3/19/2012	WAH, FC, PCR, SCR
Little Jonathan Creek 0.0 to 3.0	Tennessee River	6040005	CALLOWAY	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Little White Oak Creek 0.0 to 2.4	Tennessee River	6040006	MARSHALL	5B-PS	5B-PS	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Maple Spring Branch 2.7 to 3.25	Tennessee River	6040005	MARSHALL	3	5B-NS	3	3	3	3	9/27/2011	WAH, FC, PCR, SCR
Martins Creek 0.0 to 0.8	Tennessee River	6040006	MARSHALL	5B-PS	5B-PS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Middle Fork Clarks River 2.7 to 4.8	Tennessee River	6040006	CALLOWAY	5-PS	4A-NS	3	3	3	3	3/2/2007 - 3/19/2012	WAH, FC, PCR, SCR
Middle Fork Clarks River 0.0 to 2.7	Tennessee River	6040006	CALLOWAY	2-FS	2-FS	3	3	3	3	5/2/2002 - 3/19/2012	WAH, FC, PCR, SCR
Middle Fork Clarks River 6.1 to 9.1	Tennessee River	6040006	CALLOWAY	3	4A-NS	3	3	3	3	3/19/2012	WAH, FC, PCR, SCR
Middle Fork Clarks River 9.1 to 14.90	Tennessee River	6040006	CALLOWAY	5B-NS	3	3	3	3	3	3/19/2012	WAH, FC, PCR, SCR
Middle Fork Creek 0.2 to 6.0	Tennessee River	6040006	MARSHALL	5-PS	4A-NS	3	3	3	3	3/19/2012	WAH, FC, PCR, SCR
Panther Creek 0.0 to 3.1	Tennessee River	6040005	GRAVES	2-FS	4A-NS	3	3	3	3	3/19/2012	WAH, FC, PCR, SCR
Panther Creek 0.50 to 5.20	Tennessee River	6040005	CALLOWAY	2-FS	3	3	3	3	2-FS	3/19/2012	WAH, FC, PCR, SCR, OSRW
Panther Creek 3.0 to 4.2	Tennessee River	6040006	GRAVES	2-FS	3	3	3	3	3	6/28/2001	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Pryor Branch 0.0 to 2.9	Tennessee River	6040006	GRAVES	2-FS	3	3	3	3	3	6/28/2000	WAH, FC, PCR, SCR
Reeves Branch 0.0 to 0.3	Tennessee River	6040006	MARSHALL	5-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Rockhouse Creek 0.0 to 4.8	Tennessee River	6040006	CALLOWAY	2-FS	3	3	3	3	3	3/21/2006	WAH, FC, PCR, SCR
Sand Lick Branch 0.0 to 1.2	Tennessee River	6040006	CALLOWAY	3	4A-NS	3	3	3	3	3/19/2012	WAH, FC, PCR, SCR
Soldier Creek 0.0 to 5.7	Tennessee River	6040006	MARSHALL	2-FS	4A-NS	3	3	3	3	10/10/2006 - 3/19/2012	WAH, FC, PCR, SCR
South Fork Camp Creek 0.0 to 1.35	Tennessee River	6040006	GRAVES	3	4A-NS	3	3	3	3	3/19/2012	WAH, FC, PCR, SCR
Spring Creek 0.0 to 2.0	Tennessee River	6040006	GRAVES	5-PS	4A-NS	3	3	3	3	3/15/2007 - 3/20/2012	WAH, FC, PCR, SCR
Spring Creek 3.6 to 5.4	Tennessee River	6040006	GRAVES	5-NS	4A-NS	3	3	3	3	3/15/2007 - 3/19/2012	WAH, FC, PCR, SCR
Sugar Creek 0.0 to 3.9	Tennessee River	6040006	GRAVES	2-FS	3	3	3	3	2-FS	6/28/2000	WAH, FC, PCR, SCR, OSRW
Sugar Creek 2.0 to 5.5	Tennessee River	6040005	CALLOWAY	2-FS	3	3	3	3	2-FS	3/15/2007	WAH, FC, PCR, SCR, OSRW
Tennessee River 11.5 to 21.3	Tennessee River	6040006	MARSHALL	2-FS	3	3	3	3	2-FS	12/3/2001	WAH, FC, PCR, SCR, OSRW
Tennessee River 21.3 to 22.7	Tennessee River	6040006	MARSHALL	4C-PS	3	3	2-FS	3	4C-PS	3/20/2006	WAH, FC, PCR, SCR, OSRW
Tennessee River 4.6 to 10.5	Tennessee River	6040006	McCRACKEN	2-FS	3	3	3	3	3	3/20/2007	WAH, FC, PCR, SCR
Tennessee River 1.5 to 4.1	Tennessee River	6040006	McCRACKEN	3	5B-NS	3	3	3	3	3/16/2007	WAH, FC, PCR, SCR
Trace Creek 1.1 to 5.9	Tennessee River	6040006	GRAVES	2-FS	4A-PS	3	3	3	2-FS	3/20/2012	WAH, FC, PCR, SCR, OSRW
Turkey Creek 1.8 to 3.9	Tennessee River	6040005	TRIGG	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Turkey Creek 0.0 to 3.4	Tennessee River	6040006	GRAVES	5-PS	4A-NS	3	3	3	3	1/1/2007 - 3/20/2012	WAH, FC, PCR, SCR
UT of Blizzard Ponds Drainage Canal at RM 3.7 0.0 to 4.2	Tennessee River	6040006	McCRACKEN	3	4A-NS	3	3	3	3	3/20/2012	WAH, FC, PCR, SCR
UT of Middle Fork Clarks River 0.00 to 1.3	Tennessee River	6040006	CALLOWAY	5-NS	3	3	3	3	3	3/14/2012	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
UT of South Fork Camp Creek at RM 0.05 0.0 to 3.0	Tennessee River	6040006	GRAVES	3	4A-NS	3	3	3	3	3/20/2012	WAH, FC, PCR, SCR
UT of UT of Clarks River 0.0 to 0.95	Tennessee River	6040006	MARSHALL	3	5B-NS	3	3	3	3	9/27/2011	WAH, FC, PCR, SCR
UT to Chestnut Creek 0.0 to 0.7	Tennessee River	6040006	MARSHALL		4A-NS	3	3	3	3	3/20/2012	WAH, FC, PCR, SCR
UT to Clarks River 0.0 to 3.3	Tennessee River	6040006	CALLOWAY	5-NS	3	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
UT to Old Beaver Dam Slough 0.0 to 0.5	Tennessee River	6040006	MARSHALL	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
UT to Stice Creek 0.0 to 0.4	Tennessee River	6040006	MARSHALL	5B-NS	5B-NS	3	3	3	3	3/20/2012	WAH, FC, PCR, SCR
UT to Sugar Creek 0.0 to 3.0	Tennessee River	6040005	CALLOWAY	2-FS	3	3	3	3	3		WAH, FC, PCR, SCR
UT to UT to Panther Creek 0.0 to 1.7	Tennessee River	6040006	GRAVES	2-FS	3	3	3	3	2-FS	3/12/2007	WAH, FC, PCR, SCR, OSRW
UT to UT to Tennessee River (Kentucky Lake) 0.15 to 0.8	Tennessee River	6040005	CALLOWAY	5-NS	3	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Wades Creek 0.0 to 4.0	Tennessee River	6040006	MARSHALL	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
West Fork Clarks River 0.0 to 10.35	Tennessee River	6040006	GRAVES	5-NS	4A-NS	3	3	3	3	3/20/2012	WAH, FC, PCR, SCR
West Fork Clarks River 13.1 to 17.2	Tennessee River	6040006	GRAVES	2-FS	4A-NS	3	3	3	3	3/20/2012	WAH, FC, PCR, SCR
West Fork Clarks River 17.2 to 20.1	Tennessee River	6040006	MARSHALL	2-FS	3	3	3	3	3	3/21/2006	WAH, FC, PCR, SCR
West Fork Clarks River 20.1 to 28.5	Tennessee River	6040006	MARSHALL	2-FS	4A-PS	3	5-PS	3	2-FS	3/20/2012	WAH, FC, PCR, SCR, OSRW
West Fork Clarks River 10.35 to 13.1	Tennessee River	6040006	GRAVES	3	4A-NS	3	3	3	3	3/20/2012	WAH, FC, PCR, SCR
West Fork Clarks River 28.5 to 31.4	Tennessee River	6040006	CALLOWAY	3	4A-NS	3	3	3	3	3/20/2012	WAH, FC, PCR, SCR
West Fork Clarks River 31.4 to 34.2	Tennessee River	6040006	CALLOWAY	3	4A-NS	3	3	3	3	3/20/2012	WAH, FC, PCR, SCR
West Fork of Clarks River 34.2 to 38.4	Tennessee River	6040006	CALLOWAY	2-FS	3	3	3	3	3	3/16/2007	WAH, FC, PCR, SCR
West Fork of Clarks River (Relict Channel) 0.0 to	Tennessee River	6040006	GRAVES	4A-PS	4A-NS	3	3	3	3	3/20/2012	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
11.1											
West Fork of Clarks River (Relict Channel) 19.7 to 22.7	Tennessee River	6040006	MARSHALL	2-FS	3	3	5-PS	3	3	1/3/2002	WAH, FC, PCR, SCR
Wildcat Creek 1.3 to 6.8	Tennessee River	6040005	CALLOWAY	2-FS	3	3	3	3	3	10/10/2006	WAH, FC, PCR, SCR
Bishop Ditch 0.0 to 2.7	Tradewater	5140205	WEBSTER	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Brooks Creek 0.0 to 4.9	Tradewater	5140205	HOPKINS	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Buffalo Creek 0.0 to 6.8	Tradewater	5140205	HOPKINS	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Bull Creek 0.0 to 1.0	Tradewater	5140205	WEBSTER	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Cane Run 0.0 to 3.5	Tradewater	5140205	HOPKINS	4A-NS	4A-NS	4A-NS	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Caney Creek 0.0 to 3.3	Tradewater	5140205	CALDWELL	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Caney Creek 0.0 to 8.2	Tradewater	5140205	HOPKINS	5-NS	5-NS	5-NS	3	3	3	10/1/2007	WAH, FC, PCR, SCR
Caney Fork 3.4 to 7.9	Tradewater	5140205	WEBSTER	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Canoe Creek 0.2 to 4.05	Tradewater	5140202	HENDERSON	5-NS	5-NS	3	3	3	3	6/14/2013	WAH, FC, PCR, SCR
Castleberry Creek 0.0 to 2.1	Tradewater	5140205	CHRISTIAN	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Clear Creek 0.0 to 7.5	Tradewater	5140205	HOPKINS	5-NS	2-FS	2-FS	3	3	3	1/18/2008	WAH, FC, PCR, SCR
Clear Creek 19.4 to 26.2	Tradewater	5140205	HOPKINS	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Clear Creek 26.2 to 26.5	Tradewater	5140205	HOPKINS	3	5-NS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Copper Creek 0.0 to 2.7	Tradewater	5140205	HOPKINS	5-NS	5-NS	5-NS	3	3	3	10/1/2007	WAH, FC, PCR, SCR
Copperas Creek 0.0 to 3.6	Tradewater	5140205	HOPKINS	5-NS	5-NS	5-NS	3	3	3	10/1/2007	WAH, FC, PCR, SCR
Craborchard Creek (including Vaughn Ditch) 9.2	Tradewater	5140205	WEBSTER	2-FS	5-NS	2-FS	3	3	3	1/7/2008 - 1/17/2008	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
to 10.1											
Craborchard Creek 19.2 to 21.3	Tradewater	5140205	WEBSTER	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Donaldson Creek 0.0 to 14.2	Tradewater	5140205	HOPKINS	2-FS	5-NS	5-PS	3	3	3	1/18/2008	WAH, FC, PCR, SCR
East Fork of Flynn Fork 2.1 to 4.6	Tradewater	5140205	CALDWELL	2-FS	3	3	3	3	2-FS	11/12/2002	WAH, FC, PCR, SCR, OSRW
East Fork of Hurricane Creek 0.0 to 2.2	Tradewater	5140205	HOPKINS	5-NS	3	3	3	3	3	10/1/2007	WAH, FC, PCR, SCR
Fox Run 0.0 to 1.1	Tradewater	5140205	HOPKINS	5-NS	5-NS	5-NS	3	3	3	10/1/2007	WAH, FC, PCR, SCR
Hoods Creek 0.0 to 7.2	Tradewater	5140205	CRITTENDEN	2-FS	3	3	3	3	3	11/12/2002	WAH, FC, PCR, SCR
Hurricane Creek 0.0 to 1.8	Tradewater	5140205	HOPKINS	5-NS	5-NS	5-NS	3	3	3	1/11/2008	WAH, FC, PCR, SCR
Lake Beshear	Tradewater	5140205	CALDWELL	2-FS	3	2-FS	2-FS	2-FS	3	11/14/2006 - 1/28/2008	WAH, FC, PCR, SCR, DWS
Lake Peewee	Tradewater	5140205	HOPKINS	2-FS	3	2-FS	3	2-FS	3	11/14/2006	WAH, FC, PCR, SCR, DWS
Lambs Creek 0.0 to 3.3	Tradewater	5140205	HOPKINS	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Lick Creek 0.0 to 11.9	Tradewater	5140205	HOPKINS	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Loch Mary	Tradewater	5140205	HOPKINS	2-FS	3	2-FS	3	2-FS	3	11/14/2006	WAH, FC, PCR, SCR, DWS
Lynn Fork 0.0 to 2.4	Tradewater	5140205	WEBSTER	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Moffit Lake	Tradewater	5140205	UNION	2-FS	3	2-FS	3	3	3	11/14/2006	WAH, FC, PCR, SCR
Montgomery Creek 0.0 to 7.3	Tradewater	5140205	CALDWELL	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Owens Creek 1.7 to 2.3	Tradewater	5140205	WEBSTER	5B-NS	3	3	3	3	3	1/11/2008	WAH, FC, PCR, SCR
Pennyrile Lake	Tradewater	5140205	CHRISTIAN	2-FS	3	2-FS	3	3	3	11/14/2006	WAH, FC, PCR, SCR
Pigeonroost Creek 0.0 to 3.9	Tradewater	5140205	CRITTENDEN	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Piney Creek 17.1 to 25.4	Tradewater	5140205	CRITTENDEN	2-FS	3	3	3	3	3	11/12/2002	WAH, FC, PCR, SCR
Piney Creek 4.5 to 10.2	Tradewater	5140205	CALDWELL	2-FS	3	3	3	3	2-FS	11/12/2002	WAH, FC, PCR, SCR, OSRW
Pogue Creek 0.0 to 4.9	Tradewater	5140205	HOPKINS	2-FS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Pond Creek 0.0 to 5.5	Tradewater	5140205	HOPKINS	5-PS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Providence City Reservoir	Tradewater	5140205	WEBSTER	2-FS	3	2-FS	3	2-FS	3	1/1/2002 - 1/28/2008	WAH, FC, PCR, SCR, DWS
Relict Channel of Cypress Creek 0.5 to 3.3	Tradewater	5140205	UNION	2-FS	5-NS	5-PS	3	3	3	1/13/2014	WAH, FC, PCR, SCR
Richland Creek 0.0 to 4.5	Tradewater	5140205	HOPKINS	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Sandlick Creek 4.5 to 8.6	Tradewater	5140205	CHRISTIAN	2-FS	3	3	3	3	2-FS	1/16/2008	WAH, FC, PCR, SCR, OSRW
Sugar Creek 0.0 to 5.3	Tradewater	5140205	HOPKINS	4A-NS	4A-NS	4A-NS	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Trace Branch 2.4 to 2.8	Tradewater	5140205	HOPKINS	5B-NS	3	3	3	3	3	1/16/2008	WAH, FC, PCR, SCR
Tradewater River 0.0 to 17.1	Tradewater	5140205	UNION	2-FS	5-NS	3	3	3	3	3/27/2003	WAH, FC, PCR, SCR
Tradewater River 122.3 to 134.3	Tradewater	5140205	CHRISTIAN	2-FS	3	3	3	3	2-FS	4/1/1998	WAH, FC, PCR, SCR, OSRW
Tradewater River 21.0 to 46.7	Tradewater	5140205	WEBSTER	5-NS	5-NS	5-NS	3	2-FS	3	1/16/2008	WAH, FC, PCR, SCR, DWS
Tradewater River 63.5 to 79.8	Tradewater	5140205	HOPKINS	5-PS	2-FS	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Tradewater River 97.1 to 98.9	Tradewater	5140205	HOPKINS	2-FS	3	3	3	3	3	1/16/2008	WAH, FC, PCR, SCR
Tradewater River 98.9 to 111.5	Tradewater	5140205	CHRISTIAN	5-PS	2-FS	2-FS	3	3	3	1/16/2008	WAH, FC, PCR, SCR
Tyson Branch 0.0 to 2.5	Tradewater	5140205	CALDWELL	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
UT to Clear Creek 0.0 to 2.2	Tradewater	5140205	HOPKINS	5B-NS	5B-NS	3	3	3	3	1/11/2008	WAH, FC, PCR, SCR
UT to Copper Creek 0.0 to 1.1	Tradewater	5140205	HOPKINS	5-NS	3	3	3	3	3	10/1/2007	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
UT to Copperas Creek 0.0 to 0.9	Tradewater	5140205	HOPKINS	5-NS	5-NS	5-NS	3	3	3	1/11/2008	WAH, FC, PCR, SCR
UT to Craborchard Creek 0.0 to 1.7	Tradewater	5140205	WEBSTER	5B-NS	5B-NS	3	3	3	3	1/11/2008	WAH, FC, PCR, SCR
UT to Donaldson Creek 0.0 to 1.8	Tradewater	5140205	CALDWELL	5-PS	3	3	3	3	3	1/11/2008	WAH, FC, PCR, SCR
UT to Hurricane Creek 0.0 to 0.2	Tradewater	5140205	HOPKINS	5-NS	5-NS	5-NS	3	3	3	1/11/2008	WAH, FC, PCR, SCR
UT to Lynn Fork 1.2 to 2.6	Tradewater	5140205	WEBSTER	5B-NS	5B-NS	3	3	3	3	1/11/2008	WAH, FC, PCR, SCR
UT to Piney Creek 0.0 to 2.9	Tradewater	5140205	CALDWELL	2-FS	3	3	3	3	2-FS	1/16/2008	WAH, FC, PCR, SCR, OSRW
UT to Sandlick Creek 0.0 to 1.4	Tradewater	5140205	CHRISTIAN	2-FS	3	3	3	3	2-FS	11/12/2002	WAH, FC, PCR, SCR, OSRW
UT to Slover Creek 0.0 to 1.5	Tradewater	5140205	WEBSTER	5-PS	3	3	3	3	3	1/16/2008	WAH, FC, PCR, SCR
UT to UT to Cypress Creek 0.0 to 0.1	Tradewater	5140205	UNION	3	5B-NS	3	3	3	3	1/11/2008	WAH, FC, PCR, SCR
UT to UT to Slover Creek 0.0 to 1.2	Tradewater	5140205	WEBSTER	5-PS	3	3	3	3	3	1/16/2008	WAH, FC, PCR, SCR
UT to UT to Slover Creek 0.2 to 1.5	Tradewater	5140205	WEBSTER	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
UT to UT to Slover Creek 0.0 to 1.1	Tradewater	5140205	WEBSTER	5B-NS	5B-NS	3	3	3	3	1/11/2008	WAH, FC, PCR, SCR
UT to UT to Tradewater River 0.0 to 0.55	Tradewater	5140205	HOPKINS	5B-NS	5B-NS	3	3	3	3	1/16/2008	WAH, FC, PCR, SCR
Vaughn Ditch 0.0 to 3.2	Tradewater	5140205	WEBSTER	2-FS	5-NS	2-FS	3	3	3	5/8/2013	WAH, FC, PCR, SCR, DWS
Ward Creek 5.1 to 10.3	Tradewater	5140205	CALDWELL	5-NS	3	3	3	3	3	3/19/2009	WAH, FC, PCR, SCR
Weirs Creek 0.0 to 4.9	Tradewater	5140205	HOPKINS	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Whiteside Creek 1.9 to 2.85	Tradewater	5140205	HOPKINS	5B-NS	3	3	3	3	3	1/17/2008	WAH, FC, PCR, SCR
Wolf Creek 0.0 to 1.0	Tradewater	5140205	CRITTENDEN	5-NS	3	3	3	3	3	3/1/2003	WAH, FC, PCR, SCR
Backs Branch 0.0 to 0.9	Tygarts Creek	5090103	GREENUP	5-PS	3	3	3	3	3	11/12/2003	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Brushy Creek 0.0 to 3.9	Tygarts Creek	5090103	GREENUP	2-FS	3	3	3	3	3	1/2/2004	WAH, FC, PCR, SCR
Buffalo Creek 0.0 to 6.7	Tygarts Creek	5090103	CARTER	2-FS	2-FS	3	3	3	3	3/1/2008 - 1/14/2009	WAH, FC, PCR, SCR
Buffalo Creek 6.7 to 9.9	Tygarts Creek	5090103	CARTER	2-FS	3	3	3	3	3	1/14/2009	WAH, FC, PCR, SCR
Jacobs Fork 3.6 to 5.7	Tygarts Creek	5090103	CARTER	5-PS	3	3	3	3	3	11/12/2003	WAH, FC, PCR, SCR
Jacobs Fork 0.0 to 2.05	Tygarts Creek	5090103	CARTER	5-PS	3	3	3	3	3	1/21/2009	WAH, CAH, FC, PCR, SCR
Leatherwood Branch 0.0 to 4.3	Tygarts Creek	5090103	GREENUP	2-FS	3	3	3	3	3	1/21/2004	WAH, FC, PCR, SCR
McGlone Fork 0.0 to 4.9	Tygarts Creek	5090103	CARTER	2-FS	3	3	3	3	3	1/14/2009	WAH, FC, PCR, SCR
Meade Run 0.2 to 1.2	Tygarts Creek	5090103	GREENUP	3	3	3	3	2-FS	3	1/14/2009	WAH, FC, PCR, SCR, DWS
Schultz Creek 1.3 to 4.7	Tygarts Creek	5090103	GREENUP	2-FS	3	3	3	3	3	1/19/2009	WAH, FC, PCR, SCR
Schultz Creek 4.7 to 7.5	Tygarts Creek	5090103	GREENUP	5-PS	3	3	3	3	3	1/14/2009	WAH, FC, PCR, SCR
Slash Branch 0.0 to 0.6	Tygarts Creek	5090103	GREENUP	5B-NS	3	3	3	3	3	1/14/2009	WAH, CAH, FC, PCR, SCR
Smith Creek 2.0 to 4.3	Tygarts Creek	5090103	CARTER	5-PS	3	3	3	3	3	11/11/2003	WAH, FC, PCR, SCR
Smokey Valley Lake	Tygarts Creek	5090103	CARTER	2-FS	3	2-FS	3	3	3	5/29/2008	WAH, FC, PCR, SCR
Smoky Creek 1.4 to 4.3	Tygarts Creek	5090103	CARTER	2-FS	3	3	3	3	3	1/14/2009	WAH, FC, PCR, SCR
Soldier Fork 0.0 to 5.5	Tygarts Creek	5090103	CARTER	5-PS	3	3	3	3	3	1/19/2009	WAH, FC, PCR, SCR
Three Prong Branch 0.0 to 5.8	Tygarts Creek	5090103	CARTER	2-FS	3	3	3	3	3	1/21/2004	WAH, FC, PCR, SCR
Trough Camp 1.5 to 6.1	Tygarts Creek	5090103	CARTER	5-PS	3	3	3	3	3	11/11/2003	WAH, FC, PCR, SCR
Tygarts Creek 0.2 to 25.0	Tygarts Creek	5090103	GREENUP	2-FS	2-FS	3	5-NS	3	3	11/12/2008	WAH, FC, PCR, SCR
Tygarts Creek 25.0 to 36.3	Tygarts Creek	5090103	GREENUP	5-PS	2-FS	3	5-NS	3	3	1/19/2009	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Tygarts Creek 36.3 to 45.5	Tygarts Creek	5090103	GREENUP	2-FS	2-FS	3	5-NS	3	3	1/19/2009	WAH, FC, PCR, SCR
Tygarts Creek 65.0 to 68.5	Tygarts Creek	5090103	CARTER	2-FS	2-FS	3	3	3	3	1/19/2009	WAH, FC, PCR, SCR, DWS
Tygarts Creek 80.8 to 81.8	Tygarts Creek	5090103	CARTER	3	3	3	3	2-FS	3	1/19/2009	WAH, CAH, FC, PCR, SCR, DWS
Tygarts Creek 83.2 to 88.6	Tygarts Creek	5090103	CARTER	5-PS	3	3	2-FS	3	3	1/19/2009	WAH, CAH, FC, PCR, SCR
UT of Little Hood Creek 0.0 to 0.2	Tygarts Creek	5090103	BOYD	5B-NS	3	3	3	3	3	1/19/2009	WAH, CAH, FC, PCR, SCR
UT of Tygarts Creek 0.0 to 0.8	Tygarts Creek	5090103	CARTER	5B-NS	3	3	3	3	3	1/19/2009	WAH, CAH, FC, PCR, SCR
White Oak Creek 0.0 to 1.1	Tygarts Creek	5090103	GREENUP	5-NS	3	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Acorn Fork 0.0 to 1.9	Upper Cumberland	5130101	KNOX	5-NS	3	3	3	3	5-NS	9/18/2007	WAH, FC, PCR, SCR, OSRW
Adams Branch 0.0 to 1.8	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	4/1/1998	WAH, FC, PCR, SCR, OSRW
Allen Creek 0.0 to 4.15	Upper Cumberland	5130103	CUMBERLAND	5-NS	3	3	3	3	3	1/20/2012	WAH, FC, PCR, SCR
Alum Cave Branch 1.7 to 3.60	Upper Cumberland	5130102	JACKSON	5-NS	3	3	3	3	3	1/20/2012	WAH, FC, PCR, SCR
Archers Creek 0.0 to 4.4	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	4/1/1998	WAH, FC, PCR, SCR, OSRW
Bad Branch 0.0 to 3.0	Upper Cumberland	5130101	LETCHER	2-FS	3	3	3	3	2-FS	1/25/2012	CAH, FC, PCR, SCR, OSRW
Bailey Creek 0.0 to 2.6	Upper Cumberland	5130101	HARLAN	3	4A-NS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Bark Camp Creek 0.1 to 3.8	Upper Cumberland	5130101	WHITLEY	5-PS	3	3	3	3	5-PS	11/8/2006	CAH, FC, PCR, SCR, OSRW
Bear Creek 0.0 to 2.8	Upper Cumberland	5130103	CUMBERLAND	2-FS	3	3	3	3	3	1/26/2007	WAH, FC, PCR, SCR
Bear Creek 0.0 to 3.3	Upper Cumberland	5130104	McCREARY	2-FS	3	3	3	3	3	3/23/2012	WAH, FC, PCR, SCR
Bear Creek 0.0 to 2.7	Upper Cumberland	6040005	PULASKI	3	3	3	3	3	3		WAH, FC, PCR, SCR
Beaver Creek 17.7 to 35.5	Upper Cumberland	5130103	WAYNE	5-PS	3	3	3	3	3	1/25/2012	WAH, FC, PCR, SCR

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Beaver Creek 2.4 to 7.2	Upper Cumberland	5130103	McCREARY	2-FS	3	3	3	3	2-FS	1/25/2012	CAH, FC, PCR, SCR, OSRW
Beaver Creek 17.4 to 17.7	Upper Cumberland	5130103	WAYNE	5-PS	3	3	3	3	3	1/25/2012	WAH, FC, PCR, SCR
Becks Creek 0.0 to 4.0	Upper Cumberland	5130101	WHITLEY	5-PS	5-PS	5-PS	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Bee Lick Creek 0.0 to 5.7	Upper Cumberland	5130103	PULASKI	2-FS	3	3	3	3	2-FS	9/19/2000	WAH, FC, PCR, SCR, OSRW
Bee Lick Creek 7.5 to 10.9	Upper Cumberland	5130103	LINCOLN	5-PS	3	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Bennetts Fork of Yellow Creek Bypass 0.0 to 3.2	Upper Cumberland	5130101	BELL	5-PS	3	3	3	3	3	1/26/2007	WAH, FC, PCR, SCR
Bens Fork 0.0 to 2.2	Upper Cumberland	5130101	BELL	5-PS	3	3	3	3	5-PS	1/31/2007	WAH, FC, PCR, SCR, OSRW
Beulah Lake	Upper Cumberland	5130102	JACKSON	2-FS	3	2-FS	3	2-FS	3	1/6/2012	WAH, CAH, FC, PCR, SCR, DWS
Big Branch 0.4 to 2.0	Upper Cumberland	5130101	McCREARY	2-FS	3	3	3	3	2-FS	4/1/1998	WAH, FC, PCR, SCR, OSRW
Big Clifty Creek 1.1 to 4.7	Upper Cumberland	5130103	PULASKI	2-FS	3	3	3	3	3	1/26/2007	WAH, FC, PCR, SCR
Big Clifty Creek 0.0 to 1.1	Upper Cumberland	5130103	PULASKI	2-FS	3	3	3	3	3	1/26/2007	WAH, FC, PCR, SCR
Big Clifty Creek 4.7 to 6.7	Upper Cumberland	5130103	PULASKI	5-PS	3	3	3	3	3	1/25/2012	WAH, FC, PCR, SCR
Big Indian Creek 0.0 to 5.6	Upper Cumberland	5130101	KNOX	5-NS	3	3	3	3	3	9/21/2000	WAH, FC, PCR, SCR
Big Lick Branch 1.1 to 2.6	Upper Cumberland	5130103	PULASKI	2-FS	3	3	3	3	2-FS	12/10/2001	WAH, FC, PCR, SCR, OSRW
Big Lily Creek 0.0 to 5.0	Upper Cumberland	5130103	RUSSELL	2-FS	3	3	2-FS	3	3	1/3/2002	WAH, FC, PCR, SCR
Big Renox Creek 0.0 to 5.8	Upper Cumberland	5130103	CUMBERLAND	5-PS	3	3	3	3	3	7/10/2000	WAH, FC, PCR, SCR
Big Willis Creek 0.0 to 4.0	Upper Cumberland	5130103	CUMBERLAND	3	3	3	3	3	3		WAH, FC, PCR, SCR
Bills Branch 2.4 to 3.7	Upper Cumberland	5130102	JACKSON	3	3	3	3	2-FS	3		WAH, FC, PCR, SCR, DWS
Blacksnake Branch 0.0 to 2.1	Upper Cumberland	5130101	BELL	2-FS	3	3	3	3	2-FS	12/7/2001	WAH, FC, PCR, SCR, OSRW

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Blake Fork 0.0 to 4.6	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	3	1/26/2007	WAH, FC, PCR, SCR
Board Branch 0.5 to 1.8	Upper Cumberland	5130101	HARLAN	5-NS	5-NS	5-NS	3	3	3	11/30/2006	WAH, FC, PCR, SCR
Breedens Creek 0.0 to 2.8	Upper Cumberland	5130101	HARLAN	2-FS	3	3	3	3	2-FS	12/10/2001	WAH, FC, PCR, SCR, OSRW
Briary Creek 0.0 to 4.4	Upper Cumberland	5130103	PULASKI	5-PS	3	3	3	3	3	9/19/2000	WAH, FC, PCR, SCR
Brices Creek 0.0 to 3.2	Upper Cumberland	5130101	KNOX	2-FS	3	3	3	3	2-FS	12/10/2001	WAH, FC, PCR, SCR, OSRW
Brownies Creek 9.9 to 16.7	Upper Cumberland	5130101	BELL	2-FS	3	3	3	3	2-FS	1/25/2012	WAH, FC, PCR, SCR, OSRW
Brush Creek 0.0 to 3.5	Upper Cumberland	5130101	KNOX	5-NS	3	3	3	3	3	12/6/2000	WAH, FC, PCR, SCR
Brush Creek 1.1 to 7.5	Upper Cumberland	5130102	ROCKCASTLE	2-FS	4A-NS	3	3	3	2-FS	1/1/2001	WAH, FC, PCR, SCR, OSRW
Brushy Creek 0.0 to 8.0	Upper Cumberland	5130103	PULASKI	2-FS	3	3	3	3	2-FS	10/10/2006	WAH, FC, PCR, SCR, OSRW
Buck Creek 11.7 to 32.35	Upper Cumberland	5130103	PULASKI	2-FS	2-FS	2-FS	3	3	2-FS	1/25/2012	WAH, FC, PCR, SCR, OSRW
Buck Creek 32.4 to 40.8	Upper Cumberland	5130103	PULASKI	2-FS	3	3	3	3	2-FS	2/26/2009	WAH, FC, PCR, SCR, OSRW
Buck Creek 40.8 to 45.3	Upper Cumberland	5130103	PULASKI	2-FS	3	3	3	3	2-FS	8/23/2007	WAH, FC, PCR, SCR, OSRW
Buck Creek 45.3 to 45.7	Upper Cumberland	5130103	PULASKI	2-FS	3	3	3	3	2-FS	1/25/2012	WAH, FC, PCR, SCR, OSRW
Buck Creek 45.6 to 53.0	Upper Cumberland	5130103	PULASKI	2-FS	3	3	5-PS	3	2-FS	3/22/2006	WAH, FC, PCR, SCR, OSRW
Buck Creek 53.0 to 58.9	Upper Cumberland	5130103	LINCOLN	2-FS	3	3	3	3	2-FS	3/25/2002	WAH, FC, PCR, SCR, OSRW
Buck Creek 0.4 to 2.8	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	12/10/2001	WAH, FC, PCR, SCR, OSRW
Bucks Branch 0.0 to 2.5	Upper Cumberland	5130101	WHITLEY	2-FS	2-FS	2-FS	3	3	2-FS	4/1/1998	WAH, FC, PCR, SCR, OSRW
Buffalo Creek 2.6 to 3.9	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	1/1/2001	WAH, FC, PCR, SCR, OSRW
Bull Run 0.0 to 3.7	Upper Cumberland	5130101	KNOX	5-PS	3	3	3	3	3	3/23/2006	WAH, FC, PCR, SCR

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Bunches Creek 0.0 to 3.3	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	10/10/2006	CAH, FC, PCR, SCR, OSRW
Calf Pen Fork 0.0 to 3.8	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	3	10/10/2006	WAH, CAH, FC, PCR, SCR
Campbell Branch 0.0 to 2.1	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	12/10/2001	WAH, FC, PCR, SCR, OSRW
Cane Branch 0.0 to 2.0	Upper Cumberland	5130103	McCREARY	4A-NS	4A-NS	4A-NS	3	3	3	2/14/2006	WAH, FC, PCR, SCR
Cane Creek 0.0 to 1.5	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	3	11/17/2001	WAH, FC, PCR, SCR
Cane Creek 0.0 to 11.9	Upper Cumberland	5130102	LAUREL	2-FS	3	3	3	3	2-FS	6/10/2005	WAH, FC, PCR, SCR, OSRW
Cane Creek 0.0 to 4.4	Upper Cumberland	5130101	WHITLEY	5-NS	3	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Caney Creek 0.0 to 0.6	Upper Cumberland	5130101	BELL	2-FS	3	3	3	3	2-FS	12/10/2001	WAH, FC, PCR, SCR, OSRW
Cannon Creek 0.0 to 1.8	Upper Cumberland	5130101	BELL	5-PS	3	3	3	3	5-PS	1/26/2007	WAH, FC, PCR, SCR, OSRW
Cannon Creek 4.9 to 6.6	Upper Cumberland	5130101	BELL	2-FS	3	3	3	3	2-FS	11/10/2001	WAH, FC, PCR, SCR, OSRW
Cannon Creek Lake	Upper Cumberland	5130101	BELL	2-FS	3	2-FS	3	2-FS	3	1/5/2012	WAH, CAH, FC, PCR, SCR, DWS
Capuchin Creek 0.0 to 1.3	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	1/26/2007	WAH, FC, PCR, SCR, OSRW
Casey Fork of Marrowbone Creek 0.0 to 2.0	Upper Cumberland	5130103	CUMBERLAND	2-FS	3	3	3	3	3	6/20/2000	WAH, FC, PCR, SCR
Catron Creek 0.0 to 8.9	Upper Cumberland	5130101	HARLAN	5-PS	4A-NS	3	3	3	3	1/25/2012	WAH, FC, PCR, SCR
Chenoa Lake	Upper Cumberland	5130101	BELL	2-FS	3	3	3	2-FS	3	1/5/2012	WAH, FC, PCR, SCR, DWS
Clear Creek 0.8 to 3.2	Upper Cumberland	5130101	BELL	2-FS	3	3	3	3	3	1/3/2002	WAH, FC, PCR, SCR
Clear Creek 3.45 to 7.8	Upper Cumberland	5130102	ROCKCASTLE	2-FS	3	3	3	3	3	1/29/2007	WAH, FC, PCR, SCR
Clear Fork 0.0 to 9.15	Upper Cumberland	5130101	WHITLEY	2-FS	2-FS	3	3	3	3	1/25/2012	WAH, FC, PCR, SCR
Clear Fork 17.0 to 19.4	Upper Cumberland	5130101	WHITLEY	5-PS	3	3	3	3	3	10/10/2006	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Clifty Creek 0.0 to 2.7	Upper Cumberland	5130103	PULASKI	2-FS	3	3	3	3	2-FS	5/2/2002	WAH, FC, PCR, SCR, OSRW
Clover Fork 28.2 to 28.9	Upper Cumberland	5130101	HARLAN	5-PS	4A-NS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Clover Fork 28.9 to 33.8	Upper Cumberland	5130101	HARLAN	5-NS	4A-NS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Clover Fork 9.2 to 15.5	Upper Cumberland	5130101	HARLAN	5-NS	4A-NS	3	3	3	3	9/3/2002	WAH, FC, PCR, SCR
Clover Fork 0.0 to 8.6	Upper Cumberland	5130101	HARLAN	2-FS	4A-NS	3	3	3	3	1/26/2012	WAH, FC, PCR, SCR
Clover Fork 15.5 to 18.2	Upper Cumberland	5130101	HARLAN	5-PS	4A-NS	3	3	3	3	8/8/2007	WAH, FC, PCR, SCR
Clover Fork 18.2 to 28.2	Upper Cumberland	5130101	HARLAN	5-NS	4A-NS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Cloverlick Creek 0.0 to 5.0	Upper Cumberland	5130101	HARLAN	5-PS	4A-NS	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Coffey Branch 0.1 to 2.0	Upper Cumberland	5130104	McCREARY	2-FS	3	3	3	3	3	11/19/2001	WAH, FC, PCR, SCR
Cogur Fork 0.0 to 7.9	Upper Cumberland	5130101	McCREARY	2-FS	3	3	3	3	2-FS	1/25/2012	CAH, FC, PCR, SCR, OSRW
Coles Branch 0.0 to 2.1	Upper Cumberland	5130101	KNOX	2-FS	3	3	3	3	2-FS	4/1/1998	WAH, FC, PCR, SCR, OSRW
Colliers Creek 0 .0 to 4.1	Upper Cumberland	5130101	LETCHER	5-PS	3	3	3	3	5-PS	1/31/2007	WAH, FC, PCR, SCR, OSRW
Copperas Fork 0.0 to 4.23	Upper Cumberland	5130104	McCREARY	4A-NS	4A-NS	4A-NS	3	3	3	2/14/2006	WAH, FC, PCR, SCR
Corbin City Reservoir	Upper Cumberland	5130101	LAUREL	5-PS	3	3	3	2-FS	3	1/5/2012	WAH, FC, PCR, SCR, DWS
Crab Orchard Creek 0.0 to 1.6	Upper Cumberland	5130103	LINCOLN	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Craig Creek 5.8 to 6.8	Upper Cumberland	5130101	LAUREL	5-PS	3	3	3	3	3	1/29/2007	WAH, FC, PCR, SCR
Craigs Creek 6.8 to 9.0	Upper Cumberland	5130101	LAUREL	2-FS	3	3	3	3	3	11/7/2006	WAH, FC, PCR, SCR
Crane Creek 1.4 to 2.0	Upper Cumberland	5130101	HARLAN	5-PS	3	3	3	3	3	11/30/2006	WAH, FC, PCR, SCR
Cranks Creek 1.6 to 2.4	Upper Cumberland	5130101	HARLAN	5-PS	3	3	3	3	3	11/30/2006	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Criscillis Branch 0.0 to 1.9	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	12/10/2001	WAH, FC, PCR, SCR, OSRW
Crocus Creek 0.0 to 4.9	Upper Cumberland	5130103	CUMBERLAND	2-FS	2-FS	2-FS	3	3	3	1/26/2012	WAH, FC, PCR, SCR
Crocus Creek 14.0 to 17.15	Upper Cumberland	5130103	ADAIR	5-PS	3	3	3	3	3	7/10/2000	WAH, FC, PCR, SCR
Crocus Creek 4.9 to 14.0	Upper Cumberland	5130103	CUMBERLAND	5-PS	5-NS	5-NS	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Crooked Creek 5.7 to 12.2	Upper Cumberland	5130102	ROCKCASTLE	2-FS	4A-NS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Crooked Creek 0.1 to 5.7	Upper Cumberland	5130102	ROCKCASTLE	3	4A-PS	3	3	3	3	3/29/2007	WAH, FC, PCR, SCR
Cumberland River 456.0 to 456.7	Upper Cumberland	5130103	RUSSELL	2-FS	3	3	3	3	3	1/27/2012	CAH, FC, PCR, SCR, DWS
Cumberland River 643.6 to 647.7	Upper Cumberland	5130101	BELL	3	4A-NS	3	3	3	3	8/9/2007	WAH, FC, PCR, SCR, DWS
Cumberland River 671.9 to 682.3	Upper Cumberland	5130101	HARLAN	5-PS	3	3	3	3	3	10/10/2006	WAH, FC, PCR, SCR
Cumberland River 379.8 to 430.15	Upper Cumberland	5130103	MONROE	2-FS	2-FS	2-FS	3	2-FS	3	1/26/2012	CAH, FC, PCR, SCR, DWS
Cumberland River 458.8 to 460.2	Upper Cumberland	5130103	RUSSELL	3	5B-PS	3	3	3	3	2/2/2007	CAH, FC, PCR, SCR, DWS
Cumberland River 553.4 to 560.9	Upper Cumberland	5130101	WHITLEY	2-FS	2-FS	3	2-FS	3	2-FS	1/27/2012	WAH, FC, PCR, SCR, DWS, OSRW
Cumberland River 569.4 to 575.1	Upper Cumberland	5130101	WHITLEY	5-PS	3	3	3	3	3	9/8/2007	WAH, FC, PCR, SCR
Cumberland River 584.1 to 585.1	Upper Cumberland	5130101	WHITLEY	3	3	3	3	2-FS	3	9/23/2011	WAH, FC, PCR, SCR, DWS
Cumberland River 653.25 to 659.95	Upper Cumberland	5130101	BELL	2-FS	2-FS	3	3	3	3	5/2/2002 - 1/27/2012	WAH, FC, PCR, SCR
Cumberland River 682.3 to 683.6	Upper Cumberland	5130101	HARLAN	3	3	3	3	3	3		WAH, FC, PCR, SCR
Cumberland River 683.6 to 688.9	Upper Cumberland	5130101	HARLAN	3	4A-NS	3	3	3	3	1/1/2007	WAH, FC, PCR, SCR
Dale Hollow Reservoir	Upper Cumberland	5130105	CLINTON	2-FS	3	2-FS	2-FS	3	3	1/18/2012	WAH, FC, PCR, SCR, DWS

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Davis Branch 0.0 to 2.8	Upper Cumberland	5130101	BELL	2-FS	3	3	3	3	2-FS	12/10/2001	WAH, FC, PCR, SCR, OSRW
Difficulty Creek 0.0 to 3.5	Upper Cumberland	5130104	McCREARY	2-FS	3	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Dog Slaughter Creek 0.0 to 1.2	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	1/27/2012	CAH, FC, PCR, SCR, OSRW
Dry Branch 0.0 to 0.4	Upper Cumberland	5130103	PULASKI	5B-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Dry Fork 0.0 to 3.0	Upper Cumberland	5130102	ROCKCASTLE	2-FS	3	3	3	3	3	8/10/2000	WAH, FC, PCR, SCR
Dudley Creek 1.7 to 3.3	Upper Cumberland	5130103	RUSSELL	2-FS	3	3	3	3	3	1/27/2012	WAH, FC, PCR, SCR
Eagle Creek 0.0 to 6.7	Upper Cumberland	5130101	McCREARY	2-FS	3	3	3	3	2-FS	10/10/2006	WAH, FC, PCR, SCR, OSRW
East Fork of Lynn Camp Creek 0.0 to 4.5	Upper Cumberland	5130101	KNOX	5-PS	3	3	3	3	3	9/21/2000	WAH, FC, PCR, SCR
Elk Spring Creek 0.0 to 7.8	Upper Cumberland	5130103	WAYNE	5-NS	3	3	3	3	3	8/16/2000	WAH, FC, PCR, SCR
Ewing Creek 0.1 to 2.9	Upper Cumberland	5130101	HARLAN	5-NS	3	3	3	3	3	11/19/2001	WAH, FC, PCR, SCR
Ferris Fork Creek 0.0 to 1.2	Upper Cumberland	5130103	CUMBERLAND	5-NS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Ferris Fork Creek 3.0 to 6.0	Upper Cumberland	5130103	METCALFE	2-FS	3	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Fishing Creek 16.4 to 26.6	Upper Cumberland	5130103	PULASKI	2-FS	3	3	3	3	3	1/27/2012	WAH, FC, PCR, SCR
Foresters Creek 0.0 to 5.1	Upper Cumberland	5130101	HARLAN	2-FS	3	3	3	3	3	1/29/2007	WAH, FC, PCR, SCR
Four Mile Run 0.7 to 2.7	Upper Cumberland	5130101	BELL	2-FS	3	3	3	3	2-FS	5/2/2002	WAH, FC, PCR, SCR, OSRW
Fourmile Creek 1.7 to 4.8	Upper Cumberland	5130101	BELL	2-FS	3	3	3	3	2-FS	12/6/2001	WAH, FC, PCR, SCR, OSRW
Franks Creek 3.2 to 4.9	Upper Cumberland	5130101	LETCHER	2-FS	3	3	3	3	3	11/19/2001	WAH, FC, PCR, SCR
Fugitt Creek 0.0 to 4.7	Upper Cumberland	5130101	HARLAN	2-FS	3	3	3	3	2-FS	1/27/2012	CAH, FC, PCR, SCR, OSRW
Gilmore Creek 0.0 to 5.9	Upper Cumberland	5130103	LINCOLN	5-PS	3	3	3	3	3	8/24/2007	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Goodin Creek 2.1 to 2.6	Upper Cumberland	5130101	KNOX	5-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Grassy Branch 0.0 to 0.55	Upper Cumberland	5130102	JACKSON	3	5-NS	3	3	3	3	1/27/2012	WAH, FC, PCR, SCR
Greasy Creek 0.0 to 4.2	Upper Cumberland	5130101	BELL	3	4A-PS	3	3	3	3	12/6/2000	WAH, FC, PCR, SCR
Hale Fork 0.0 to 2.9	Upper Cumberland	5130101	KNOX	2-FS	3	3	3	3	2-FS	12/10/2001	WAH, FC, PCR, SCR, OSRW
Harris Branch 0.25 to 0.6	Upper Cumberland	5130101	HARLAN	5-PS	3	3	3	3	3	11/30/2006	WAH, FC, PCR, SCR
Harrods Fork 0.0 to 5.3	Upper Cumberland	5130103	CUMBERLAND	3	3	3	3	3	3		WAH, FC, PCR, SCR
Hatchell Branch 0.0 to 1.0	Upper Cumberland	5130101	McCREARY	5-PS	3	3	3	3	3	11/19/2001	WAH, FC, PCR, SCR
Hawk Creek 0.0 to 6.6	Upper Cumberland	5130102	LAUREL	2-FS	3	3	3	3	3	2/6/2007	CAH, FC, PCR, SCR
Hays Creek 1.3 to 2.3	Upper Cumberland	5130105	CLINTON	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Hazel Patch Creek 0.0 to 1.8	Upper Cumberland	5130102	LAUREL	5-PS	3	3	3	3	3	2/6/2007	WAH, FC, PCR, SCR
Helton Branch 0.0 to 1.0	Upper Cumberland	5130103	McCREARY	3	3	3	3	3	3		WAH, FC, PCR, SCR
Herb Smith Lake	Upper Cumberland	5130101	HARLAN	2-FS	3	2-FS	3	3	3	1/5/2012	WAH, FC, PCR, SCR
Hinkle Branch 0.0 to 1.8	Upper Cumberland	5130101	KNOX	2-FS	3	3	3	3	2-FS	12/10/2001	WAH, FC, PCR, SCR, OSRW
Honeycut Branch 0.0 to 1.8	Upper Cumberland	5130101	KNOX	2-FS	3	3	3	3	2-FS	12/10/2001	WAH, FC, PCR, SCR, OSRW
Horse Lick Creek 0.0 to 12.3	Upper Cumberland	5130102	JACKSON	2-FS	5-PS	3	3	3	2-FS	10/10/2006 - 1/27/2012	WAH, FC, PCR, SCR, OSRW
Howards Creek 0.6 to 4.6	Upper Cumberland	5130105	CLINTON	2-FS	3	3	3	3	2-FS	7/31/2001	WAH, FC, PCR, SCR, OSRW
Hunting Shirt Branch 0.0 to 2.8	Upper Cumberland	5130101	KNOX	2-FS	3	3	3	3	2-FS	12/10/2001	WAH, FC, PCR, SCR, OSRW
Illwill Creek 8.8 to 12.2	Upper Cumberland	5130105	CLINTON	2-FS	3	3	3	3	3	2/7/2007	WAH, FC, PCR, SCR
Indian Creek 0.0 to 4.2	Upper Cumberland	5130103	PULASKI	5-PS	3	3	3	3	3	1/27/2012	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Indian Creek 0.0 to 4.5	Upper Cumberland	5130102	JACKSON	5-PS	3	3	3	3	3	2/7/2007	WAH, FC, PCR, SCR
Indian Creek 2.3 to 6.7	Upper Cumberland	5130101	McCREARY	2-FS	3	3	3	3	2-FS	10/10/2006	WAH, FC, PCR, SCR, OSRW
Jackie Branch 0.0 to 1.7	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	11/19/2001	WAH, FC, PCR, SCR, OSRW
Jellico Creek 0.0 to 6.1	Upper Cumberland	5130101	WHITLEY	2-FS	2-FS	3	3	3	3	1/27/2012	WAH, FC, PCR, SCR
Jellico Creek 22.5 to 25.3	Upper Cumberland	5130101	McCREARY	2-FS	3	3	3	3	2-FS	2/7/2007	WAH, FC, PCR, SCR, OSRW
Jennys Branch 0.0 to 6.0	Upper Cumberland	5130101	McCREARY	5-PS	3	3	3	3	5-PS	5/2/2002	WAH, FC, PCR, SCR, OSRW
Kennedy Creek 0.0 to 3.0	Upper Cumberland	5130104	WAYNE	2-FS	3	3	3	3	2-FS	12/10/2001	WAH, FC, PCR, SCR, OSRW
Kettle Creek 1.75 to 6.1	Upper Cumberland	5130103	MONROE	2-FS	3	3	3	3	3	2/16/2007	WAH, FC, PCR, SCR
Kilburn Fork 0.0 to 0.9	Upper Cumberland	5130101	McCREARY	2-FS	3	3	3	3	2-FS	2/20/2007	WAH, FC, PCR, SCR, OSRW
Kilburn Fork 0.9 to 6.2	Upper Cumberland	5130101	McCREARY	5-PS	3	3	3	3	5-PS	2/7/2007	WAH, FC, PCR, SCR, OSRW
Lake Cumberland	Upper Cumberland	5130103	RUSSELL	2-FS	3	2-FS	5-PS	2-FS	3	1/17/2012	WAH, FC, PCR, SCR, DWS
Lake Linville	Upper Cumberland	5130102	ROCKCASTLE	2-FS	3	2-FS	3	2-FS	3	1/6/2012	WAH, FC, PCR, SCR, DWS
Laurel Branch 0.0 to 2.2	Upper Cumberland	5130102	LAUREL	2-FS	3	3	3	3	3	2/7/2007	WAH, FC, PCR, SCR
Laurel Creek 0.8 to 3.65	Upper Cumberland	5130101	McCREARY	2-FS	3	3	3	3	2-FS	2/8/2007	CAH, FC, PCR, SCR, OSRW
Laurel Creek 3.65 to 5.1	Upper Cumberland	5130101	McCREARY	5-PS	3	3	3	3	5-PS	2/8/2007	CAH, FC, PCR, SCR, OSRW
Laurel Creek 7.4 to 9.1	Upper Cumberland	5130101	McCREARY	5B-PS	3	3	3	3	5B-PS	2/8/2007	CAH, FC, PCR, SCR, OSRW
Laurel Creek Reservoir	Upper Cumberland	5130101	McCREARY	2-FS	3	2-FS	3	2-FS	3	1/19/2012	WAH, CAH, FC, PCR, SCR, DWS
Laurel Fork of Clear Fork 10.3 to 13.8	Upper Cumberland	5130101	WHITLEY	5-NS	3	3	3	3	5-NS	8/31/2000	WAH, FC, PCR, SCR, OSRW
Laurel Fork of Clear Fork 16.9 to 18.9	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	5/2/2002	WAH, FC, PCR, SCR, OSRW

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Laurel Fork of Clear Fork 4.25 to 10.3	Upper Cumberland	5130101	WHITLEY	5-PS	3	3	3	3	5-PS	2/26/2009	WAH, FC, PCR, SCR, OSRW
Laurel Fork of Kilburn Fork 0.0 to 2.3	Upper Cumberland	5130101	McCREARY	2-FS	3	3	3	3	2-FS	8/14/2000	WAH, FC, PCR, SCR, OSRW
Laurel Fork of Middle Fork 0.0 to 5.0	Upper Cumberland	5130102	JACKSON	2-FS	3	3	3	3	2-FS	10/10/2006	WAH, FC, PCR, SCR, OSRW
Laurel River 33.95 to 44.7	Upper Cumberland	5130101	LAUREL	5-PS	3	3	3	3	3	1/27/2012	WAH, FC, PCR, SCR
Laurel River 0.9 to 2.2	Upper Cumberland	5130101	LAUREL	5-NS	3	3	3	3	3	11/7/2006	CAH, FC, PCR, SCR
Laurel River 23.7 to 24.9	Upper Cumberland	5130101	LAUREL	5-PS	3	3	3	3	3	11/7/2005	WAH, FC, PCR, SCR
Laurel River 26.35 to 33.95	Upper Cumberland	5130101	LAUREL	5-NS	5-NS	3	3	3	3	1/27/2012	WAH, FC, PCR, SCR
Laurel River Reservoir	Upper Cumberland	5130101	WHITLEY	2-FS	3	2-FS	2-FS	2-FS	3	1/19/2012	WAH, FC, PCR, SCR, DWS
Leatherwood Creek 0.0 to 4.0	Upper Cumberland	5130103	CUMBERLAND	2-FS	3	3	3	3	3	1/30/2012	WAH, FC, PCR, SCR
Left Fork of Fugitt Creek 0.0 to 1.5	Upper Cumberland	5130101	HARLAN	2-FS	3	3	3	3	2-FS	1/30/2012	CAH, FC, PCR, SCR, OSRW
Left Fork of Straight Creek 0.0 to 13.1	Upper Cumberland	5130101	BELL	5-NS	4A-NS	2-FS	3	3	3	2/20/2007	WAH, FC, PCR, SCR
Lewis Branch 0.00 to 1.55	Upper Cumberland	5130102	JACKSON	2-FS	3	3	3	3	3	1/30/2012	WAH, FC, PCR, SCR
Lewis Creek 0.0 to 3.5	Upper Cumberland	5130103	CUMBERLAND	5-PS	3	3	3	3	3	2/9/2007	WAH, FC, PCR, SCR
Lick Creek 0.00 to 3.65	Upper Cumberland	5130101	LAUREL	3	5-NS	3	3	3	3	1/30/2012	WAH, FC, PCR, SCR
Lick Fork 0.0 to 1.3	Upper Cumberland	5130101	HARLAN	5-PS	3	3	3	3	3	2/9/2007	CAH, FC, PCR, SCR
Lick Fork of Yellow Creek 0.0 to 2.9	Upper Cumberland	5130101	BELL	2-FS	3	3	3	3	2-FS	5/2/2002	WAH, FC, PCR, SCR, OSRW
Line Creek 2.3 to 5.5	Upper Cumberland	5130102	PULASKI	5-PS	3	3	3	3	3	3/23/2006	WAH, FC, PCR, SCR
Little Clear Creek 0.0 to 10.9	Upper Cumberland	5130101	BELL	5-NS	2-FS	2-FS	3	3	3	1/31/2007	WAH, FC, PCR, SCR
Little Hurricane Fork of Beaver Creek 0.0 to 3.9	Upper Cumberland	5130103	McCREARY	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Little Laurel River 12.7 to 14.8	Upper Cumberland	5130101	LAUREL	5-NS	5-NS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Little Laurel River 14.8 to 23.0	Upper Cumberland	5130101	LAUREL	3	5-NS	3	3	3	3	1/30/2012	WAH, FC, PCR, SCR
Little Laurel River 0.0 to 8.4	Upper Cumberland	5130101	LAUREL	5-PS	5-PS	3	3	3	3	1/30/2012	WAH, FC, PCR, SCR
Little Laurel River 8.4 to 12.7	Upper Cumberland	5130101	LAUREL	5-NS	3	3	3	3	3	1/30/2012	WAH, FC, PCR, SCR
Little Poplar Creek 0.0 to 2.8	Upper Cumberland	5130101	KNOX	5-PS	3	3	3	3	5-PS	8/23/2000	WAH, FC, PCR, SCR, OSRW
Little Poplar Creek 3.1 to 4.4	Upper Cumberland	5130101	KNOX	5-PS	3	3	3	3	3		WAH, FC, PCR, SCR
Little Raccoon Creek 0.0 to 7.7	Upper Cumberland	5130102	LAUREL	5-NS	5-NS	5-NS	3	3	3	11/4/2007	WAH, FC, PCR, SCR
Little Rockcastle River 0.0 to 2.3	Upper Cumberland	5130102	LAUREL	2-FS	3	3	3	3	3	1/3/2002	WAH, FC, PCR, SCR
Little South Fork 4.4 to 35.5	Upper Cumberland	5130104	WAYNE	2-FS	3	3	2-FS	3	2-FS	10/10/2006	WAH, FC, PCR, SCR, OSRW
Little South Fork 0.0 to 4.4	Upper Cumberland	5130104	WAYNE	5-PS	3	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Little White Oak Creek 0.0 to 2.6	Upper Cumberland	5130102	LAUREL	2-FS	3	3	3	3	3	2/27/2009	WAH, FC, PCR, SCR
Long Branch 0.0 to 2.9	Upper Cumberland	5130101	BELL	2-FS	3	3	3	3	2-FS	12/11/2001	WAH, FC, PCR, SCR, OSRW
Looney Creek 0.0 to 5.9	Upper Cumberland	5130101	HARLAN	3	4A-NS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Looney Creek 5.9 to 8.9	Upper Cumberland	5130101	LETCHER	2-FS	3	3	3	3	3		CAH, FC, PCR, SCR
Lynn Camp Creek 0.04 to 3.45	Upper Cumberland	5130101	LAUREL	5-NS	5-NS	3	3	3	3	5/2/2002 - 11/7/2006	WAH, FC, PCR, SCR
Lynn Camp Creek 4.5 to 10.5	Upper Cumberland	5130101	WHITLEY	5-PS	3	3	3	3	3	9/8/2000	WAH, FC, PCR, SCR
Marrowbone Creek 0.0 to 2.8	Upper Cumberland	5130103	CUMBERLAND	5-PS	5-PS	3	3	3	3	1/30/2012	WAH, FC, PCR, SCR
Marrowbone Creek 13.5 to 15.2	Upper Cumberland	5130103	CUMBERLAND	2-FS	3	3	3	3	3	6/20/2000	WAH, FC, PCR, SCR
Marrowbone Creek 3.8 to 8.7	Upper Cumberland	5130103	CUMBERLAND	2-FS	3	3	3	3	3	2/12/2006	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Marsh Creek 0.0 to 13.5	Upper Cumberland	5130101	McCREARY	2-FS	2-FS	3	3	3	2-FS	1/30/2012	WAH, FC, PCR, SCR, OSRW
Marsh Creek 13.5 to 16.5	Upper Cumberland	5130101	McCREARY	5-NS	3	3	3	3	5-NS	5/2/2002	WAH, FC, PCR, SCR, OSRW
Marsh Creek 19.0 to 24.1	Upper Cumberland	5130101	McCREARY	5-NS	3	3	3	3	5-NS	4/1/1998	WAH, FC, PCR, SCR, OSRW
Martin Creek 0.0 to 1.2	Upper Cumberland	5130102	CLAY	2-FS	3	3	3	3	3	8/16/2000	WAH, FC, PCR, SCR
Martins Fork 10.2 to 15.85	Upper Cumberland	5130101	HARLAN	5-NS	3	3	3	2-FS	3	1/30/2012 - 1/31/2012	WAH, FC, PCR, SCR, DWS
Martins Fork 0.0 to 10.2	Upper Cumberland	5130101	HARLAN	2-FS	2-FS	2-FS	3	3	3	1/30/2012	WAH, FC, PCR, SCR
Martins Fork 19.4 to 28.85	Upper Cumberland	5130101	HARLAN	2-FS	5-NS	2-FS	3	3	2-FS	11/30/2006	WAH, FC, PCR, SCR, OSRW
Martins Fork 28.85 to 38.8	Upper Cumberland	5130101	HARLAN	2-FS	3	3	3	3	2-FS	10/10/2006	CAH, FC, PCR, SCR, OSRW
Martin's Fork Reservoir	Upper Cumberland	5130101	HARLAN	2-FS	3	2-FS	2-FS	2-FS	3	1/20/2012	WAH, FC, PCR, SCR, DWS
McCammon Branch 0.0 to 2.8	Upper Cumberland	5130102	JACKSON	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
McFarland Creek 0.8 to 3.9	Upper Cumberland	5130103	MONROE	2-FS	3	3	3	3	2-FS	2/26/2009	WAH, FC, PCR, SCR, OSRW
McFarland Creek 5.65 to 6.2	Upper Cumberland	5130103	MONROE	2-FS	3	3	3	3	2-FS	2/26/2009	WAH, FC, PCR, SCR, OSRW
Meadow Creek 0.0 to 7.4	Upper Cumberland	5130101	KNOX	5-PS	3	3	3	3	3	9/6/2000	WAH, FC, PCR, SCR
Meadow Fork 0.0 to 1.8	Upper Cumberland	5130101	LETCHER	2-FS	3	3	3	3	2-FS	12/3/2001	WAH, FC, PCR, SCR, OSRW
Meshack Creek 0.0 to 2.8	Upper Cumberland	5130103	MONROE	2-FS	3	3	3	3	2-FS	7/6/2000	WAH, FC, PCR, SCR, OSRW
Middle Fork of Rockcastle River 0.0 to 7.9	Upper Cumberland	5130102	JACKSON	2-FS	2-FS	3	3	3	2-FS	1/30/2012	WAH, FC, PCR, SCR, OSRW
Middle Fork of Beaver Creek 0.0 to 2.3	Upper Cumberland	5130103	McCREARY	5-PS	5-NS	5-NS	3	3	5-PS	2/12/2007	CAH, FC, PCR, SCR, OSRW
Middle Fork of Richland Creek 0.0 to 1.2	Upper Cumberland	5130101	KNOX	5-PS	3	3	3	3	3	9/21/2000	WAH, FC, PCR, SCR
Mill Branch of Stinking Creek 0.0 to 2.2	Upper Cumberland	5130101	KNOX	2-FS	3	3	3	3	2-FS	8/14/2007	WAH, FC, PCR, SCR, OSRW

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Mill Creek of Cumberland River 0.8 to 5.6	Upper Cumberland	5130101	McCREARY	2-FS	3	3	3	3	2-FS	12/6/2001	WAH, FC, PCR, SCR, OSRW
Mill Creek of Straight Creek 0.0 to 3.4	Upper Cumberland	5130101	BELL	2-FS	3	3	3	3	2-FS	12/6/2001	WAH, FC, PCR, SCR, OSRW
Mitchell Creek 0.0 to 3.8	Upper Cumberland	5130102	LAUREL	5-NS	3	3	3	3	3	2/26/2009	WAH, FC, PCR, SCR
Moore Branch 0.0 to 0.7	Upper Cumberland	5130101	BELL	5B-PS	5B-NS	5B-NS	3	3	3	5/2/2002 - 2/13/2007	WAH, FC, PCR, SCR
Moore Creek 0.0 to 4.4	Upper Cumberland	5130101	KNOX	2-FS	3	3	3	3	2-FS	12/11/2001	WAH, FC, PCR, SCR, OSRW
Mud Camp Creek 0.0 to 8.8	Upper Cumberland	5130103	CUMBERLAND	2-FS	3	3	3	3	2-FS	2/8/2007	WAH, FC, PCR, SCR, OSRW
Mud Creek of Clear Fork 0.0 to 5.2	Upper Cumberland	5130101	WHITLEY	5-PS	3	3	3	3	5-PS	8/30/2000	WAH, FC, PCR, SCR, OSRW
Mud Lick of Stinking Creek 0.0 to 2.3	Upper Cumberland	5130101	KNOX	2-FS	3	3	3	3	2-FS	12/6/2001	WAH, FC, PCR, SCR, OSRW
Ned Branch 0.5 to 1.9	Upper Cumberland	5130102	LAUREL	2-FS	3	3	3	3	2-FS	12/6/2001	WAH, FC, PCR, SCR, OSRW
North Fork of Dogslaughter Creek 0.0 to 0.7	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	7/31/2001	WAH, FC, PCR, SCR, OSRW
Otter Creek 14.0 to 22.0	Upper Cumberland	5130103	WAYNE	2-FS	3	3	3	3	2-FS	1/30/2012	WAH, FC, PCR, SCR, OSRW
Patterson Creek 0.0 to 5.3	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	3	9/6/2000	WAH, FC, PCR, SCR
Patterson Creek 5.3 to 9.3	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	12/11/2001	WAH, FC, PCR, SCR, OSRW
Peter Cave Branch 0.0 to 1.8	Upper Cumberland	5130102	JACKSON	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Pilot Creek 0.7 to 2.5	Upper Cumberland	5130103	LINCOLN	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Pine Creek 0.00 to 5.1	Upper Cumberland	5130102	LAUREL	2-FS	3	3	3	3	3	1/30/2012	WAH, FC, PCR, SCR
Pitman Creek 6.05 to 26.15	Upper Cumberland	5130103	PULASKI	2-FS	2-FS	3	3	3	3	1/30/2012	WAH, FC, PCR, SCR
Pitman Creek 26.15 to 27.2	Upper Cumberland	5130103	PULASKI	2-FS	3	3	3	3	3	1/31/2012	WAH, FC, PCR, SCR
Pitman Creek 5.4 to 6.0	Upper Cumberland	5130103	PULASKI	2-FS	5-PS	3	3	3	3	1/30/2012	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Pointer Creek 0.2 to 3.9	Upper Cumberland	5130103	PULASKI	2-FS	3	3	3	3	3	9/20/2000	WAH, FC, PCR, SCR
Pond Creek 0.0 to 6.3	Upper Cumberland	5130102	JACKSON	5-PS	3	3	3	3	3	2/14/2007	WAH, FC, PCR, SCR
Poor Fork of Cumberland River 14.9 to 16.3	Upper Cumberland	5130101	HARLAN	5-PS	4A-NS	3	2-FS	3	3	1/31/2012	WAH, FC, PCR, SCR
Poor Fork of Cumberland River 41.4 to 51.7	Upper Cumberland	5130101	LETCHER	2-FS	3	3	3	3	2-FS	1/31/2012	CAH, FC, PCR, SCR, OSRW
Poor Fork of Cumberland River 0.0 to 14.9	Upper Cumberland	5130101	HARLAN	2-FS	2-FS	3	3	2-FS	3	1/31/2012	WAH, FC, PCR, SCR, DWS
Poor Fork of Cumberland River 16.3 to 31.8	Upper Cumberland	5130101	HARLAN	2-FS	4A-NS	3	2-FS	2-FS	3	1/31/2007 - 1/31/2012	WAH, FC, PCR, SCR, DWS
Poplar Creek 4.7 to 5.85	Upper Cumberland	5130101	WHITLEY	5-NS	5-NS	3	3	3	3	9/27/2011	WAH, FC, PCR, SCR
Powder Mill Creek 0.0 to 4.9	Upper Cumberland	5130102	LAUREL	5-PS	3	3	3	3	3	2/26/2009	WAH, FC, PCR, SCR
Presley House Branch 0.0 to 1.5	Upper Cumberland	5130101	LETCHER	2-FS	3	3	3	3	2-FS	10/10/2007	WAH, FC, PCR, SCR, OSRW
Puckett Creek 0.0 to 9.9	Upper Cumberland	5130101	BELL	2-FS	4A-NS	3	3	3	3	8/15/2006	WAH, FC, PCR, SCR
Puncheoncamp Branch 0.0 to 1.8	Upper Cumberland	5130104	McCREARY	2-FS	3	3	3	3	3	11/19/2001	WAH, FC, PCR, SCR
Raccoon Creek 0.0 to 2.7	Upper Cumberland	5130102	LAUREL	5-PS	3	3	3	3	3	8/15/2000	WAH, FC, PCR, SCR
Raccoon Creek 0.0 to 2.3	Upper Cumberland	5130102	JACKSON	5-PS	3	3	3	3	3	1/31/2012	WAH, FC, PCR, SCR
Raleigh Fork 0.0 to 1.1	Upper Cumberland	5130101	LETCHER	5-PS	3	3	3	3	5-PS	1/31/2007	WAH, FC, PCR, SCR, OSRW
Renfro Creek 0.0 to 3.1	Upper Cumberland	5130102	ROCKCASTLE	5-PS	3	3	3	3	3	3/2/2009	WAH, FC, PCR, SCR
Richland Creek 11.6 to 21.5	Upper Cumberland	5130101	KNOX	2-FS	4A-NS	3	3	3	2-FS	8/15/2007	WAH, FC, PCR, SCR, OSRW
Richland Creek 0.0 to 6.3	Upper Cumberland	5130101	KNOX	5-NS	4A-NS	3	3	3	3	1/31/2012	WAH, FC, PCR, SCR
Richland Creek 6.3 to 11.6	Upper Cumberland	5130101	KNOX	3	4A-NS	3	3	3	3	4/12/2012	WAH, FC, PCR, SCR
Roaring Fork 0.0 to 3.6	Upper Cumberland	5130101	KNOX	2-FS	3	3	3	3	2-FS	3/22/2006	WAH, FC, PCR, SCR, OSRW

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Roaring Paunch Creek 0.0 to 7.8	Upper Cumberland	5130104	McCREARY	2-FS	2-FS	2-FS	3	3	3	2/14/2007	WAH, FC, PCR, SCR
Roaring Paunch Creek 7.8 to 15.6	Upper Cumberland	5130101	McCREARY	5-NS	5-NS	5-NS	3	3	3	2/14/2007	WAH, FC, PCR, SCR
Robinson Creek 6.7 to 9.6	Upper Cumberland	5130101	LAUREL	2-FS	3	3	3	3	3	1/3/2002	WAH, FC, PCR, SCR
Rock Creek 0.0 to 4.3	Upper Cumberland	5130104	McCREARY	5-NS	2-FS	2-FS	3	3	3	2/14/2006	WAH, FC, PCR, SCR
Rock Creek 0.0 to 5.8	Upper Cumberland	5130101	McCREARY	2-FS	3	3	3	3	2-FS	5/2/2002	WAH, FC, PCR, SCR, OSRW
Rock Creek 4.3 to 15.5	Upper Cumberland	5130104	McCREARY	2-FS	3	3	3	3	2-FS	2/15/2007	CAH, FC, PCR, SCR, OSRW
Rock Creek 16.5 to 21.5	Upper Cumberland	5130104	McCREARY	2-FS	3	3	5-PS	3	2-FS	1/1/2007	CAH, FC, PCR, SCR, OSRW
Rock Lick Creek 0.0 to 8.8	Upper Cumberland	5130103	PULASKI	2-FS	3	3	3	3	3	9/20/2000	WAH, FC, PCR, SCR
Rockcastle River 40.4 to 48.1	Upper Cumberland	5130102	ROCKCASTLE	2-FS	3	3	3	3	2-FS	1/3/2002	WAH, FC, PCR, SCR, OSRW
Rockcastle River 17.2 to 32.1	Upper Cumberland	5130102	LAUREL	2-FS	2-FS	3	3	3	2-FS	1/31/2012	WAH, FC, PCR, SCR, OSRW
Ross Branch 0.0 to 1.5	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	12/12/2001	WAH, FC, PCR, SCR, OSRW
Roundstone Creek 0.0 to 10.9	Upper Cumberland	5130102	ROCKCASTLE	2-FS	4C-PS	3	3	3	3	2/1/2012	WAH, FC, PCR, SCR
Roundstone Creek 17.1 to 23.9	Upper Cumberland	5130102	ROCKCASTLE	5-NS	3	3	3	3	5-NS	3/22/2006	WAH, FC, PCR, SCR, OSRW
Ryans Creek 0.0 to 5.7	Upper Cumberland	5130101	McCREARY	4A-NS	4A-NS	4A-NS	3	3	5-NS	2/14/2006	WAH, FC, PCR, SCR, OSRW
Sallys Branch 0.00 to 2.90	Upper Cumberland	5130101	LAUREL	3	3	3	3	3	3	2/8/2012	WAH, FC, PCR, SCR
Salt Lick Creek 1.1 to 3.6	Upper Cumberland	5130103	RUSSELL	2-FS	3	3	3	3	3	3/22/2007	WAH, FC, PCR, SCR
Sam Branch 0.0 to 0.5	Upper Cumberland	5130103	PULASKI	5-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Sampson Branch 0.00 to 4.70	Upper Cumberland	5130101	LAUREL	3	3	3	3	3	3	2/9/2012	WAH, FC, PCR, SCR
Sand Lick Creek 0.0 to 1.5	Upper Cumberland	5130103	CUMBERLAND	2-FS	3	3	3	3	3	2/9/2012	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Sanders Creek 0.0 to 5.3	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	12/6/2001	WAH, FC, PCR, SCR, OSRW
Shillalah Creek 0.0 to 5.5	Upper Cumberland	5130101	BELL	2-FS	3	3	3	3	2-FS	7/5/2001	CAH, FC, PCR, SCR, OSRW
Shut-in Branch 0.0 to 1.1	Upper Cumberland	5130101	McCREARY	2-FS	3	3	3	3	2-FS	12/6/2001	WAH, FC, PCR, SCR, OSRW
Sims Fork 0.0 to 5.2	Upper Cumberland	5130101	BELL	5-NS	3	3	3	3	5-NS	12/6/2001	WAH, FC, PCR, SCR, OSRW
Sinking Creek 0.0 to 1.9	Upper Cumberland	5130103	PULASKI	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
Sinking Creek 0.0 to 9.95	Upper Cumberland	5130102	LAUREL	2-FS	3	3	3	3	2-FS	3/2/2009	WAH, FC, PCR, SCR, OSRW
Sinking Creek 9.95 to 13.35	Upper Cumberland	5130102	LAUREL	2-FS	3	3	3	3	2-FS	5/2/2002	WAH, FC, PCR, SCR, OSRW
Sinking Creek 13.35 to 17.65	Upper Cumberland	5130102	LAUREL	5-NS	3	3	3	3	5-NS	3/2/2009	WAH, FC, PCR, SCR, OSRW
Skegg Creek 0.0 to 3.3	Upper Cumberland	5130102	ROCKCASTLE	5-PS	3	3	3	3	3	2/15/2001	WAH, FC, PCR, SCR
Skegg Creek 3.3 to 11.1	Upper Cumberland	5130102	ROCKCASTLE	2-FS	3	3	3	3	3	8/21/2007	WAH, FC, PCR, SCR
Smith Creek 0.0 to 2.2	Upper Cumberland	5130105	CLINTON	2-FS	3	3	3	3	3	3/2/2009	WAH, FC, PCR, SCR
Smith Creek 0.0 to 3.3	Upper Cumberland	5130101	LETCHER	2-FS	3	3	3	3	2-FS	12/6/2001	WAH, FC, PCR, SCR, OSRW
South Fork Cumberland River 43.8 to 49.5	Upper Cumberland	5130104	McCREARY	2-FS	2-FS	3	2-FS	3	2-FS	2/1/2012	WAH, FC, PCR, SCR, OSRW
South Fork Cumberland River 49.5 to 54.8	Upper Cumberland	5130104	McCREARY	2-FS	3	3	3	3	2-FS	2/1/2012	WAH, FC, PCR, SCR, OSRW
South Fork of Colliers Creek 0.0 to 1.9	Upper Cumberland	5130101	LETCHER	5-PS	3	3	3	3	3	1/3/2007	WAH, FC, PCR, SCR
South Fork of Dog Slaughter Creek 0.0 to 4.6	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	7/5/2001	WAH, FC, PCR, SCR, OSRW
South Fork of Rockcastle River 2.0 to 5.8	Upper Cumberland	5130102	JACKSON	2-FS	2-FS	3	3	3	2-FS	2/9/2012	WAH, FC, PCR, SCR, OSRW
South Fork of Rockcastle River 21.2 to 29.1	Upper Cumberland	5130102	LAUREL	5-NS	3	3	3	3	3	8/21/2007	WAH, FC, PCR, SCR
Spring Creek 1.3 to 3.8	Upper Cumberland	5130105	CLINTON	2-FS	3	3	3	3	3	2/16/2007	WAH, FC, PCR, SCR

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Spring Creek 3.8 to 7.4	Upper Cumberland	5130105	CLINTON	2-FS	3	3	3	3	3	7/5/2001	WAH, FC, PCR, SCR
Stevenson Branch 0.0 to 1.9	Upper Cumberland	5130101	BELL	5-NS	3	3	3	3	5-NS	12/4/2007	WAH, FC, PCR, SCR, OSRW
Stinking Creek 0.0 to 2.1	Upper Cumberland	5130101	KNOX	5-NS	5-NS	5-NS	3	3	3	1/3/2001	WAH, FC, PCR, SCR
Stinking Creek 11.3 to 17.6	Upper Cumberland	5130101	KNOX	5-PS	3	3	3	3	3	6/14/2005	WAH, FC, PCR, SCR
Stinking Creek 17.6 to 18.8	Upper Cumberland	5130101	KNOX	2-FS	3	3	3	3	3	9/18/2007	WAH, FC, PCR, SCR
Stoney Fork 0.0 to 2.3	Upper Cumberland	5130101	BELL	5-NS	3	3	3	3	3	12/6/2000	WAH, FC, PCR, SCR
Stony Fork 0.0 to 5.3	Upper Cumberland	5130101	BELL	5-NS	3	3	3	3	3	12/6/2000	WAH, FC, PCR, SCR
Straight Creek 0.0 to 1.7	Upper Cumberland	5130101	BELL	2-FS	4A-NS	3	3	3	3	2/9/2012	WAH, FC, PCR, SCR
Straight Creek 1.7 to 23.3	Upper Cumberland	5130101	BELL	5-PS	2-FS	3	3	3	3	2/16/2007	WAH, FC, PCR, SCR
Sugar Camp Branch 0.0 to 1.4	Upper Cumberland	5130102	PULASKI	5-NS	5-NS	5-NS	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Sulphur Creek 1.7 to 5.2	Upper Cumberland	5130105	CLINTON	2-FS	3	3	3	3	2-FS	2/9/2012	WAH, FC, PCR, SCR, OSRW
Sulphur Creek 0.5 to 2.8	Upper Cumberland	5130103	MONROE	2-FS	3	3	3	3	3		WAH, FC, PCR, SCR
Sulphur Creek 5.2 to 8.1	Upper Cumberland	5130105	CUMBERLAND	2-FS	3	3	3	3	3	3/22/2006	WAH, FC, PCR, SCR
Trace Branch 0.0 to 3.0	Upper Cumberland	5130101	KNOX	2-FS	3	3	3	3	2-FS	4/1/1998	WAH, FC, PCR, SCR, OSRW
Trammel Fork of Marsh Creek 0.0 to 1.9	Upper Cumberland	5130101	McCREARY	2-FS	3	3	3	3	2-FS	12/12/2001	WAH, FC, PCR, SCR, OSRW
Turkey Creek 0.0 to 1.2	Upper Cumberland	5130101	KNOX	2-FS	3	3	3	3	2-FS	12/7/2001	WAH, FC, PCR, SCR, OSRW
UT of Cane Creek 0.0 to 1.2	Upper Cumberland	5130102	LAUREL	2-FS	3	3	3	3	2-FS	2/9/2012	WAH, FC, PCR, SCR, OSRW
UT of Cumberland River 0.0 to 1.95	Upper Cumberland	5130103	CUMBERLAND	5-PS	3	3	3	3	3	2/9/2012	WAH, FC, PCR, SCR
UT of Little Laurel River 0.0 to 1.4	Upper Cumberland	5130101	LAUREL	5-NS	3	3	3	3	3	2/10/2012	WAH, FC, PCR, SCR

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UT of Powder Mill Creek 0.00 to 1.10	Upper Cumberland	5130102	LAUREL	5-PS	3	3	3	3	3	2/9/2012	WAH, FC, PCR, SCR
UT of Smith Creek 0.0 to 1.6	Upper Cumberland	5130103	CLINTON	5-PS	3	3	3	3	3	2/9/2012	WAH, FC, PCR, SCR
UT of UT of Little Laurel River 0.0 to 0.1	Upper Cumberland	5130101	LAUREL	3	5B-NS	3	3	3	3	2/9/2012	WAH, FC, PCR, SCR
UT of UT to Acorn Fork 0.0 to 0.2	Upper Cumberland	5130101	KNOX	5-NS	3	3	3	3	5-NS	9/18/2007	WAH, FC, PCR, SCR, OSRW
UT to Acorn Fork 0.0 to 0.25	Upper Cumberland	5130101	KNOX	5-NS	3	3	3	3	5-NS	9/18/2007	WAH, FC, PCR, SCR, OSRW
UT to Big Clifty Creek 0.0 to 0.5	Upper Cumberland	5130103	PULASKI	3	5B-PS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
UT to Big Creek 0.0 to 1.8	Upper Cumberland	5130104	McCREARY	2-FS	3	3	3	3	3	3/26/2006	WAH, FC, PCR, SCR
UT to Bridge Fork 0.0 to 0.1	Upper Cumberland	5130101	McCREARY	5B-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
UT to Caney Fork 0.0 to 0.6	Upper Cumberland	5130103	RUSSELL	3	3	3	3	3	3		WAH, FC, PCR, SCR
UT to Helton Branch 0.0 to 0.4	Upper Cumberland	5130101	KNOX	5-PS	3	3	3	3	3	3/23/2006	WAH, FC, PCR, SCR
UT to Jennys Branch 0.0 to 1.3	Upper Cumberland	5130101	McCREARY	5-NS	3	3	3	3	5-NS	11/19/2001	WAH, FC, PCR, SCR, OSRW
UT to Pond Creek 0.0 to 0.2	Upper Cumberland	5130102	JACKSON	5B-PS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
UT to Pond Creek 0.0 to 0.2	Upper Cumberland	5130102	JACKSON	5B-PS	5B-PS	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
UT to Rock Creek 0.0 to 1.2	Upper Cumberland	5130104	McCREARY	2-FS	3	3	3	3	2-FS	5/2/2002	WAH, FC, PCR, SCR, OSRW
UT to Rock Creek 0.0 to 1.3	Upper Cumberland	5130104	McCREARY	2-FS	3	3	3	3	3	11/19/2001	WAH, FC, PCR, SCR
UT to Rock Creek 0.0 to 1.9	Upper Cumberland	5130104	McCREARY	2-FS	3	3	3	3	2-FS	11/17/2001	WAH, FC, PCR, SCR, OSRW
UT to UT to Acorn Fork 0.0 to 0.55	Upper Cumberland	5130101	KNOX	5-NS	3	3	3	3	5-NS	9/18/2007	WAH, FC, PCR, SCR, OSRW
Wallins Creek 0.0 to 4.2	Upper Cumberland	5130101	HARLAN	5-NS	3	3	3	3	3	2/19/2007	WAH, FC, PCR, SCR
Watts Branch 0.0 to 2.6	Upper Cumberland	5130104	McCREARY	2-FS	3	3	3	3	2-FS	11/19/2001	WAH, FC, PCR, SCR, OSRW

Waterbody & Segment	Basin	8-Digit HUC	County	WAH/CAH	PCR	SCR	FC	DWS	OSRW	Assessment Date	Designated Uses
Watts Creek 0.0 to 1.3	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	3	2/15/2002	WAH, FC, PCR, SCR
Watts Creek 2.4 to 4.4	Upper Cumberland	5130101	HARLAN	2-FS	3	3	3	3	2-FS	12/4/2001	WAH, FC, PCR, SCR, OSRW
White Oak Creek 0.0 to 1.0	Upper Cumberland	5130102	LAUREL	5-NS	3	3	3	3	3	6/1/2002	WAH, FC, PCR, SCR
White Oak Creek 1.0 to 5.7	Upper Cumberland	5130102	LAUREL	2-FS	3	3	3	3	3	3/2/2009	CAH, FC, PCR, SCR
White Oak Creek 1.1 to 2.2	Upper Cumberland	5130102	ROCKCASTLE	2-FS	3	3	3	3	3	5/2/2002	WAH, FC, PCR, SCR
White Oak Creek 0.0 to 4.2	Upper Cumberland	5130104	McCREARY	5-NS	2-FS	2-FS	3	3	5-NS	2/9/2006	WAH, FC, PCR, SCR, OSRW
White Oak Creek 7.1 to 11.2	Upper Cumberland	5130103	PULASKI	5-PS	3	3	3	3	3	2/19/2007	WAH, FC, PCR, SCR
Whitley Branch 0.0 to 1.0	Upper Cumberland	5130101	LAUREL	3	5B-PS	3	3	3	3	2/10/2012	WAH, FC, PCR, SCR
Whitley Branch 1.1 to 2.6	Upper Cumberland	5130101	LAUREL	3	5-NS	3	3	3	3	4/1/1998	WAH, FC, PCR, SCR
Wildcat Branch 0.0 to 2.1	Upper Cumberland	5130103	PULASKI	4A-NS	4A-NS	4A-NS	3	3	3	2/14/2006	WAH, FC, PCR, SCR
Wolf Creek 0.0 to 1.8	Upper Cumberland	5130101	WHITLEY	5-NS	3	3	3	3	5-NS	8/22/2000	WAH, FC, PCR, SCR, OSRW
Wood Creek 0.0 to 1.95	Upper Cumberland	5130102	LAUREL	5-NS	3	3	3	3	3	2/19/2007	CAH, FC, PCR, SCR
Wood Creek Lake	Upper Cumberland	5130102	LAUREL	2-FS	3	2-FS	3	2-FS	3	1/19/2012	WAH, CAH, FC, PCR, SCR, DWS
Yellow Creek 0.0 to 6.65	Upper Cumberland	5130101	BELL	2-FS	5-NS	3	3	3	3	2/10/2012	WAH, FC, PCR, SCR
Yellow Creek 6.7 to 15.9	Upper Cumberland	5130101	BELL	2-FS	3	3	3	3	3	8/16/2007	WAH, FC, PCR, SCR
Yellow Creek ByPass 0.0 to 3.2	Upper Cumberland	5130101	BELL	2-FS	3	3	3	3	3	3/29/2007	WAH, FC, PCR, SCR
Yocum Creek 0.0 to 6.5	Upper Cumberland	5130101	HARLAN	3	4A-NS	3	3	3	3	8/16/2007	WAH, FC, PCR, SCR
Youngs Creek 0.0 to 5.4	Upper Cumberland	5130101	WHITLEY	2-FS	3	3	3	3	2-FS	8/21/2000	WAH, FC, PCR, SCR, OSRW

[a]WAH/CAH- Warm Water Aquatic Habitat/Cold Water Aquatic Habitat.

[b]PCR- Primary Contact Recreation.
[c]SCR- Secondary Contact Recreation.
[d]FC- Fish Consumption.
[e]DWS- Domestic Water Supply.
[f]OSRW- Outstanding State Resource Water.

[*]Assessment categories as presented on page 63.

Assessment Category	Definition
1	All designated uses for water body fully supporting.
2	Assessed designated use(s) is/are fully supporting, but not all designated uses assessed.
2B	Segment currently supporting use(s), but 303(d) listed & proposed to EPA for delisting.
3	Designated use(s) has/have not been assessed (insufficient or no data available).
4A	Segment with an EPA approved or established TMDL for all listed uses not attaining full support.
4B	Nonsupport segment with an approved alternative pollution control plan (e.g. BMP) stringent enough to meet full support level of all uses within a specified time.
4C	Segment is not meeting full support of assessed use(s), but this is not attributable to a pollutant or combination of pollutants.
5	TMDL is required.
5B	Segment does not support designated uses based on evaluated data, but based on Kentucky listing methodology insufficient data are available to make a listing determination. No TMDL needed.

Cause (Pollutant)	Cause Code
.alpha.-BHC	01
.alpha.-Endosulfan(Endosulfan 1)	02
.beta.-BHC	03
.beta.-Endosulfan (Endosulfan 2)	04
.delta.-BHC	05
1,1,1,2-Tetrachloroethane	06
1,1,1-Trichloroethane	07
1,1,2,2-Tetrachloroethane	08
1,1,2-Trichloroethane	09
1,1-Dichloro-1,2,2-trifluoroethane	10
1,1-Dichloroethane	11
1,2,3,4-Tetrachlorobenzene	12
1,2,4,5-Tetrachlorobenzene	13
1,2,4-Trichlorobenzene	14
1,2,4-Trimethylbenzene	15
1,2-Butylene oxide	16
1,2-Dibromo-3-chloropropane	17
1,2-Dibromo-3-chloropropane (DBCP)	18
1,2-Dichlorobenzene	N/A
1,2-Dichloroethane	19
1,2-Dichloroethylene	20
1,2-Dichloropropane	21
1,2-Diphenylhydrazine	22
1,2-trans-dichloroethylene	N/A
1,3-Butadiene	23
1,3-Dichloropropene	24
1,4-Dioxane	25
2,2'-Dichlorodiethyl ether	26
2,2'-Dichlorodiisopropyl ether	27
2,3,7,8-Tetrachlorodibenzofuran	28
2,3-Dichloropropene	29
2,4,5-TP (Silvex)	30
2,4,5-Trichlorophenol	31
2,4,6-Trichlorophenol	33
2,4-D[1]	34
2,4-Diaminotoluene	35
2,4-Dichlorophenol	36
2,4-Dimethylphenol	37
2,4-Dinitrophenol	38
2,4-Dinitrotoluene	39
2,5-Dichlorophenol	40
2,6-Dinitrotoluene	41
2-Acetylaminofluorene	42
2-Chloroethyl vinyl ether	43

pH, high	491
Cyclohexanamine, N-ethyl-1-phenyl-	494
Perfluorooctane sulfonate (PFOS)	496
Perfluorooctane sulfonate (PFOS) in fish tissue	497
Chlordane in fish tissue	498
DDT in fish tissue	499
Sludge	502
Residues	506
cis-Chlordane	510
trans-Nonachlor	511
Total inorganic nitrogen as N	512
Total soluble inorganic nitrogen as N	513
Bis(2-chloroethyl) ether	516
Bis(2-chloroisopropyl)ether	517
Dichloropropenes	518
Visible Oil	519
Odor	520
Ethanol	521
Nonylphenol	522
Tritium	523
Aluminum, dissolved	524
Aluminum, total recoverable	525
Selenium, dissolved	526
Selenium, total recoverable	527
Mercury, dissolved	528
Mercury, total	529

--Pollution—

Definition of pollution under the CWA (Section 502[19]): *The man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.*
The following is a list of measurements and categories considered pollution. There are ADB (assessment database) codes for these, but in and of themselves do not constitute a pollutant; therefore, alone they will not be included in a 303(d) listing, nor result in a TMDL.

Pollution	**Code**
Abnormal fish histology (lesions)	67
Alteration in stream-side or littoral vegetative covers	84
Alterations in wetland habitats	85
Ambient bioassays -- acute aquatic toxicity	88
Ambient bioassays -- chronic aquatic toxicity	89
Atlantic sea lamprey, *Petromyzon marinus*	98
Benthic macroinvertebrate bioassessments	105
Chlorophyll-*a*	150
Combination benthic/fishes bioassessments	161
Combined biota/habitat bioassessments	162
Dissolved oxygen saturation	205

Sources

Source Group	Source ID	Source
Agriculture		
	4	Animal feeding operations (NPS)
	5	Animal shows and racetracks
	6	Aquaculture (not permitted)
	7	Aquaculture (permitted)
	11	Auction barns
	30	Crop production with subsurface drainage
	31	Dairies (outside milk parlor areas)
	46	Grazing in riparian or shoreline zones
	73	Managed pasture grazing
	87	Non-irrigated crop production
	108	Rangeland grazing
	123	Specialty crop production
	143	Livestock (grazing or feeding operations)
	144	Crop production (crop land or dry land)
	156	Agriculture
	161	Pesticide application
	173	Manure runoff
	174	Unrestricted cattle access
	179	Lake fertilization
Non-Point Sources		
	8	Atmospheric deposition - acidity
	9	Atmospheric deposition - nitrogen
	10	Atmospheric deposition - toxics
	16	Cercla NPL (superfund) sites
	24	Commercial districts (industrial parks)
	26	Commercial districts (shopping/office Complexes)
	67	Land application of wastewater (non-agricultural)
	68	Land application of wastewater biosolids (non-agricultural)
	84	Municipal (urbanized high density area)
	92	On-site treatment systems (septic & similar decencentralized systems)
	97	Other spill related impacts
	107	Post-development erosion and sedimentation
	111	Residential districts
	122	Site clearance (land development or redevelopment)
	130	Unpermitted discharge (domestic wastes)
	131	Unpermitted discharge (industrial/commercial Wastes)
	133	Wastes from pets
	134	Waterfowl
	136	Wildlife other than waterfowl
	141	Non-point source
	146	Sources outside state jurisdiction or borders
	153	Wet weather discharges (non-point source)
	161	Pesticide application

	162	Watershed runoff following forest fire
	169	Unspecified urban stormwater
	171	Unspecified land disturbance
	175	Contaminated groundwater
	177	Urban runoff/storm sewers
	181	Runoff from forest/grassland/parkland
	141	Non-point source
	185	Failing infrastructure (sanitary sewers)
Habitat Impacts		
	19	Channel erosion/incision from upstream hydromodifications
	20	Channelization (canalization)
	21	Clean sediments
	36	Drainage/filling/loss of wetlands
	38	Dredging (e.g., for navigation channels)
	42	Flow alterations from water diversions
	44	Freshettes or major flooding
	51	Historic bottom deposits (not sediment)
	52	Hydrostructure impacts on fish passage
	71	Littoral/shore area modifications (non-riverine)
	72	Loss of riparian habitat
	125	Streambank modifications/destablization
	132	Upstream impoundments (e.g., Pl-566 NRCS structures)
	157	Habitat modification - other than hydromodification
	163	Low water crossing
	186	Shallow lake or reservoir basin
Silviculture		
	43	Forest roads (road construction and use)
	101	Permitted silvicultural activities
	118	Silviculture - large scale (industrial) unpermitted forestry
	119	Silviculture harvesting
	120	Silviculture plantation management
	121	Silviculture reforestation
	137	Woodlot site clearance (majority of KY forestland in private ownership)
	138	Woodlot site management (sm. private tree farms)
	158	Siliviculture, fire suppression
	161	Pesticide application
	162	Watershed runoff following Forest Fire
	166	Silviculture activities
Resource Extraction		
	37	Dredge mining (e.g., coal removal from Big Sandy R. channel)
	2	Acid mine drainage
	22	Coal mining discharges (permitted)
	47	Hardrock Mining Discharges (Permitted)
	48	Heap-leach extraction mining
	56	Impacts from abandoned mine lands (inactive)

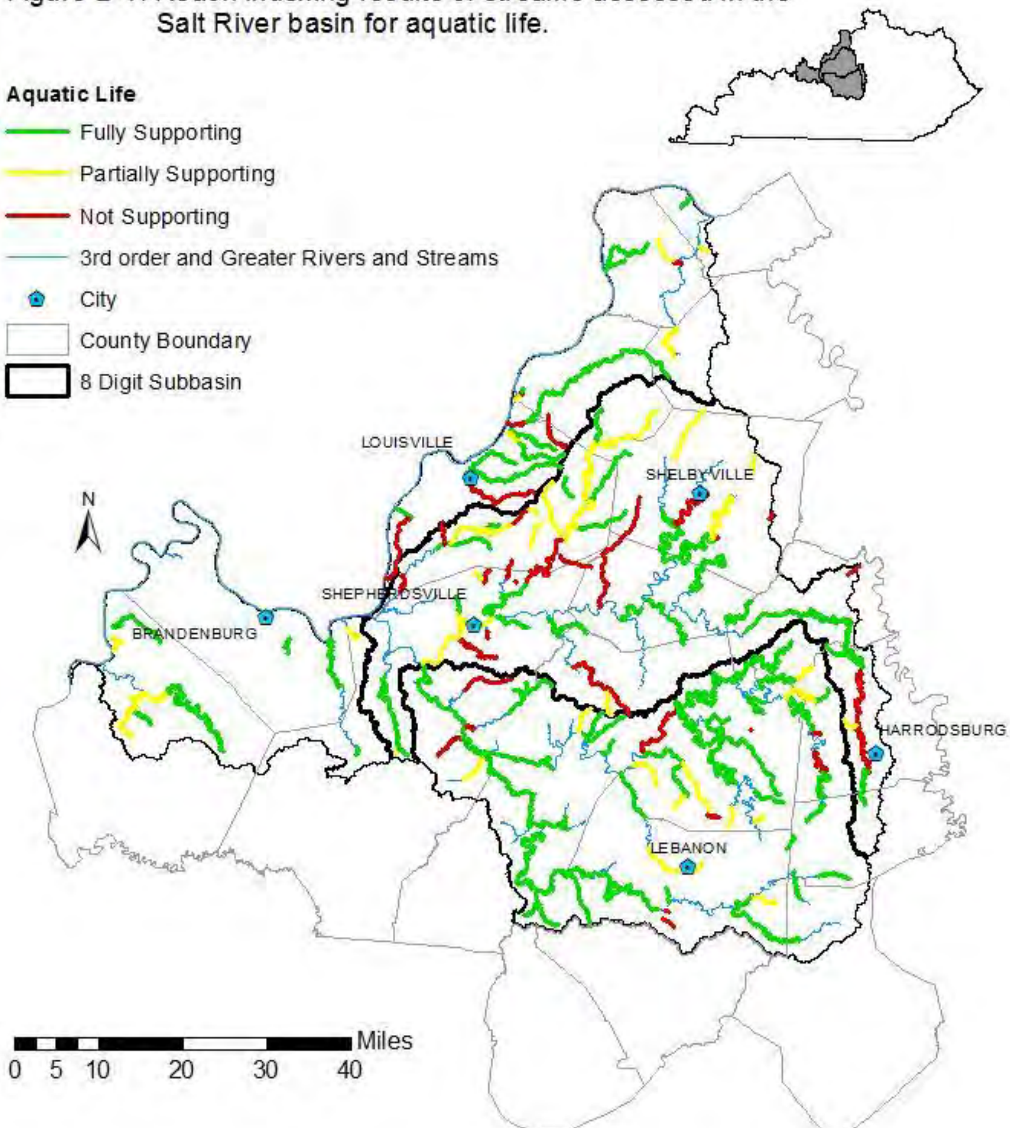
	82	Mine tailings
	83	Mountaintop mining
	93	Open-pit mining
	102	Petroleum/natural gas activities
	103	Petroleum/natural gas production activities (permitted)
	105	Placer mining
	114	Sand/gravel/rock mining or quarries
	126	Subsurface (hardrock) mining
	127	Surface mining
	159	Reclamation of inactive mining
	165	Coal mining
	172	Potash mining
	178	Coal mining (subsurface)
	184	Coal mining (surface/subsurface)
	186	Legacy coal extraction
Municipal Point Sources		
	23	Combined sewer overflows
	33	Discharges from biosolids (SLUDGE) storage, application or disposal
	34	Discharges from Municipal Separate Storm Sewer Systems (MS4)
	85	Municipal point source discharges
	86	Municipal point source impacts from Inadequate Industrial/Commercial Pretreatment
	86	Municipal point source impacts from inadequate industrial/commercial pretreatment
	99	Package plant or other permitted small flows discharges
	115	Sanitary sewer overflows (collection system failures)
	128	Total retention domestic sewage lagoons
	185	Failing treatment infrastructure associated with sanitary sewers (leaking collection system)
	135	Wet weather discharges (point source and combination of stormwater,
		SSO or CSO)
Transportation		
	3	Airports
	12	Ballast water releases
	15	Cargo loading/unloading
	25	Commercial ferries
	49	Highway/road/bridge runoff (non-construction related)
	50	Highways, roads, bridges, infrastructure (new construction)
	112	Salt storage sites
	124	Spills from trucks or trains
	170	Unspecified unpaved road or trail
Industrial Sources		
	61	Industrial land treatment
	62	Industrial point source discharge
	63	Industrial thermal discharges
	64	Industrial/commercial site stormwater discharge (permitted)
	122	Site Clearance (land development or redevelopment)

Recreation Sources		
	95	Other recreational pollution sources
	45	Golf courses
	60	Impacts from resort areas (winter and non-winter resorts)
	91	Off-road vehicles
	106	Pollutants from public bathing areas
	181	Runoff from forest/grassland/parkland
Sediments		
	28	Contaminated sediments
	65	Internal nutrient recycling
	148	Sediment re-suspension (clean sediment)
	149	Sediment re-suspension (contaminated sediment)
Marina/Boating Sources		
	74	Marina boat construction
	75	Marina boat maintenance
	76	Marina dredging operations
	77	Marina fueling operations
	78	Marina-related shoreline erosion
	79	Marina/boating pumpout releases
	80	Marina/boating sanitary on-vessel discharges
	94	Other Marina/Boating On-vessel Discharges
	117	Shipbuilding, repairs, drydocking
Water Quantity or Withdrawal		
	13	Baseflow depletion from groundwater withdrawals
	113	Saltwater intrusion from groundwater overdrafting
	152	Transfer of water from an outside watershed
Permitted Sources (other)		
	1	Above ground storage tank leaks (tank farms)
	8	Atmospheric deposition – acidity
	9	Atmospheric deposition - nitrogen
	10	Atmospheric deposition - toxics
	27	Construction stormwater discharge (permitted)
	69	Landfills
	70	Leaking underground storage tanks
	109	RCRA hazardous waste sites
	146	Sources outside state jurisdiction or borders
	153	Wet weather discharges (non-point source)
	175	Contaminated groundwater
Inappropriate or Illegal		
Waste Disposal		

	54	Illegal dumps or other inappropriate waste disposal
	55	Illicit connections/hook-ups to storm sewers
	116	Septage disposal
	130	Unpermitted discharge (domestic wastes)
	160	Inappropriate waste disposal
	167	Unspecified domestic waste (e.g. straight-pipes)
	168	Sewage discharges in unsewered areas
Other		
	17	Changes in ordinary stratification and bottom water hypoxia/anoxia
	39	Drought-related impacts
	57	Impacts from geothermal development
	65	Internal nutrient recycling
	92	On-site treatment systems (septic & similar decencentralized systems)
	140	Source unknown
	145	Natural conditions - water quality standards use attainability analyses needed
	147	Upstream source
	150	Forced drainage pumping
	151	Naturally occurring organic acids
	154	Upstream/downstream source
	155	Natural sources
	176	Rural (residential areas)
	180	Introduction of non-native organisms (accidental or intentional)
	187	Shallow lake/reservoir basin

Appendix B. Maps of Assessed Streams and Segments for the
Salt River – Licking River BMU and the Upper Cumberland River – 4-Rivers BMU

Figure B-1. Reach indexing results of streams assessed in the Salt River basin for aquatic life.

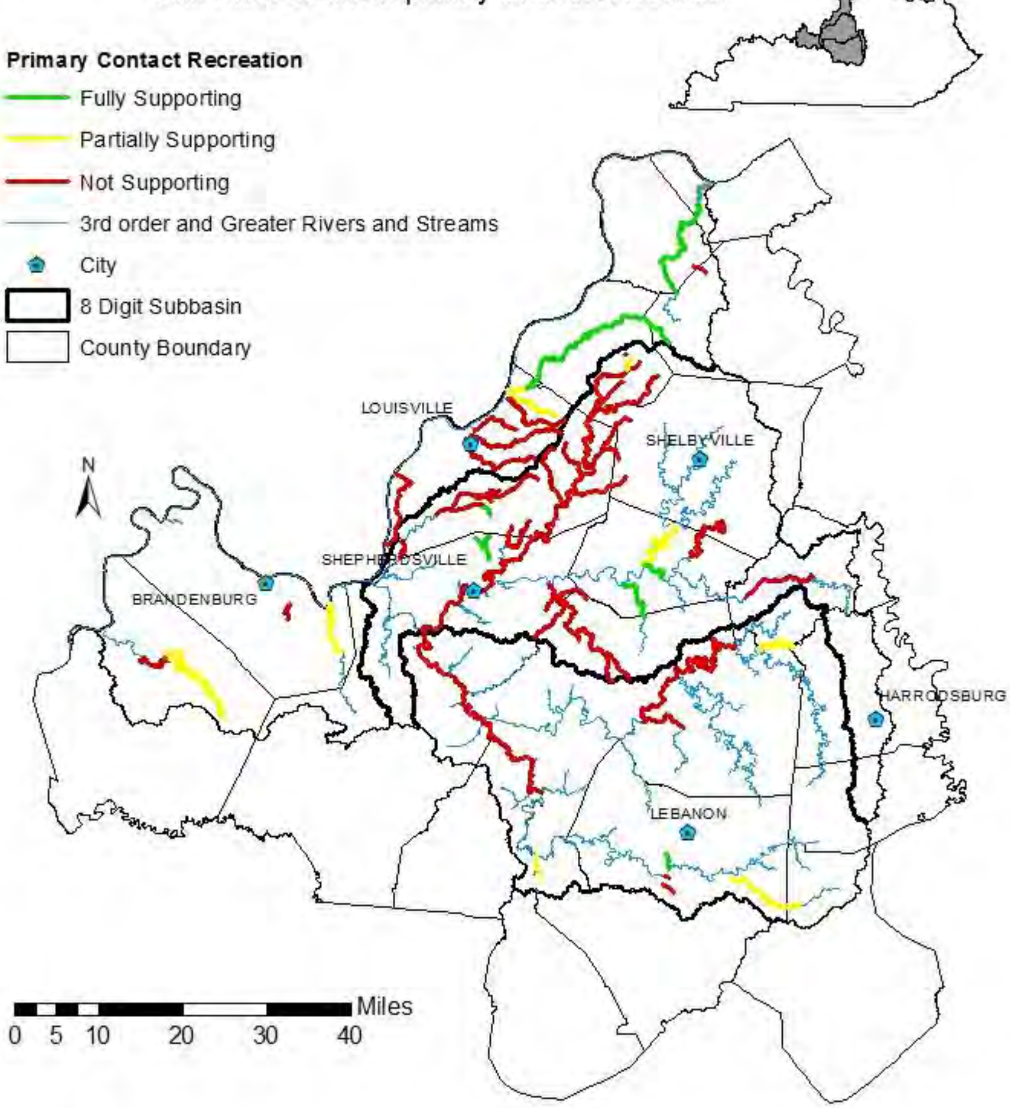


Data Source: 2012 Integrated Report to Congress

This data is distributed by the Commonwealth of Kentucky, Division of Geographic Information (DIG), located in Frankfort, KY. These data area available at http://kygeonet.ky.gov.

Map prepared by:
James Seay, Kentucky Division of Water
July 31, 2013

Figure B-2. Reach indexing results of streams assessed in the Salt River basin for primay contact recreation.



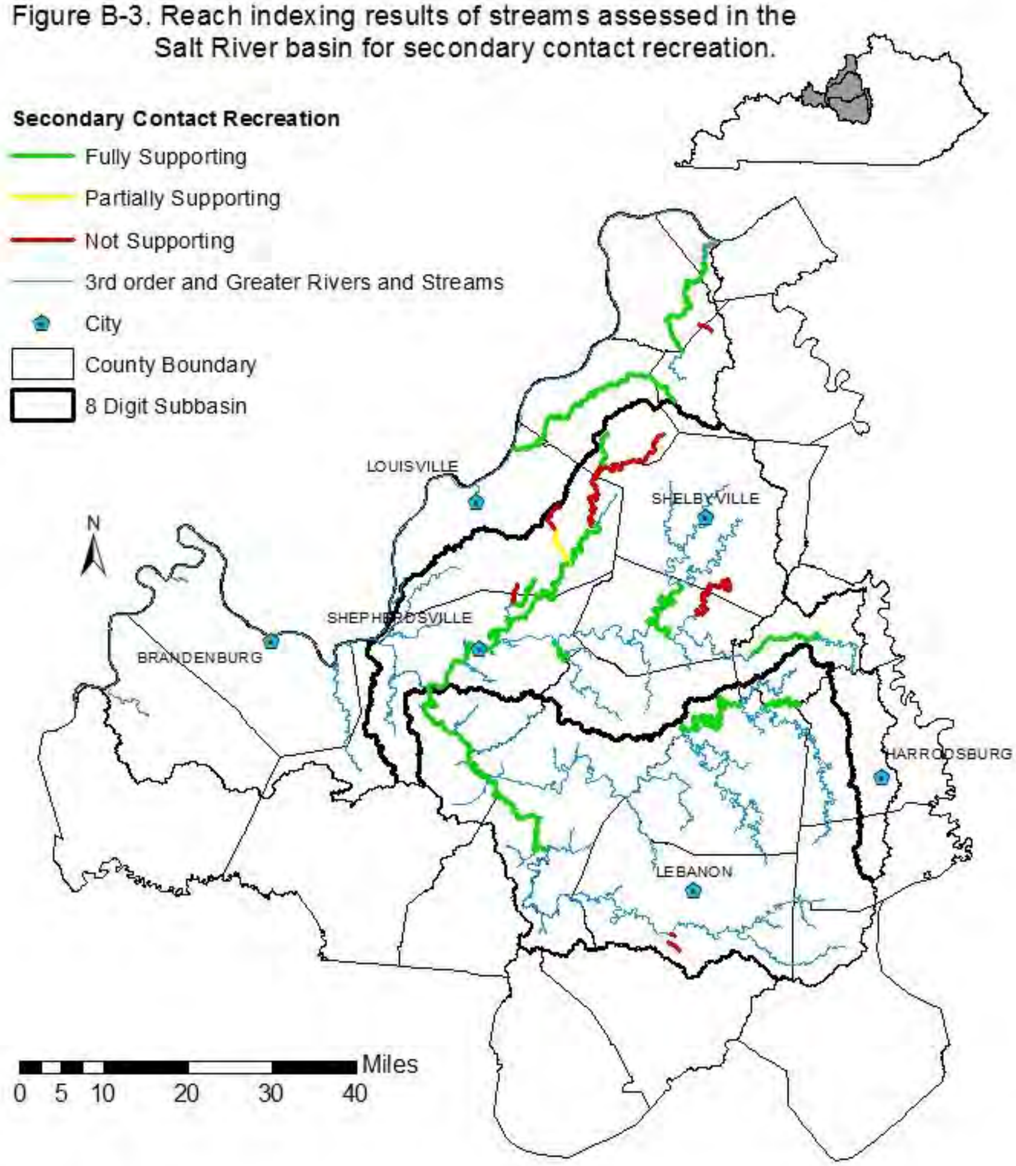
Data Source: 2012 Integrated Report to Congress

This data is distributed by the Commonwealth of Kentucky, Division of Geographic Information (DIG), located in Frankfort, KY. These data area available at http://kygeonet.ky.gov.

Map prepared by:
James Seay, Kentucky Division of Water
July 31, 2013

Kentucky

Figure B-3. Reach indexing results of streams assessed in the Salt River basin for secondary contact recreation.



Data Source: 2012 Integrated Report to Congress

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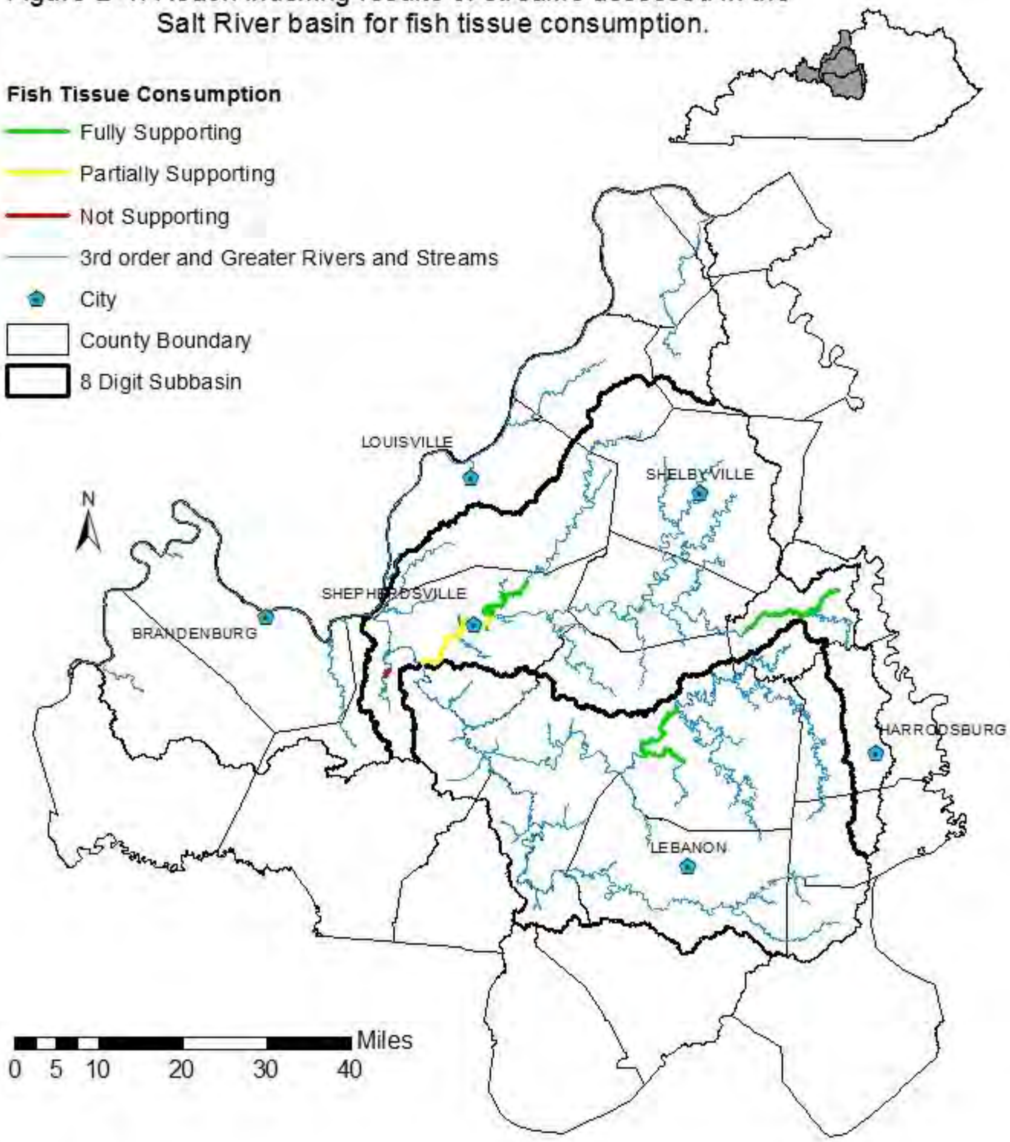
Map prepared by:
James Seay, Kentucky Division of Water
July 31, 2013

Figure B-4. Reach indexing results of streams assessed in the Salt River basin for fish tissue consumption.



Data Source: 2012 Integrated Report to Congress

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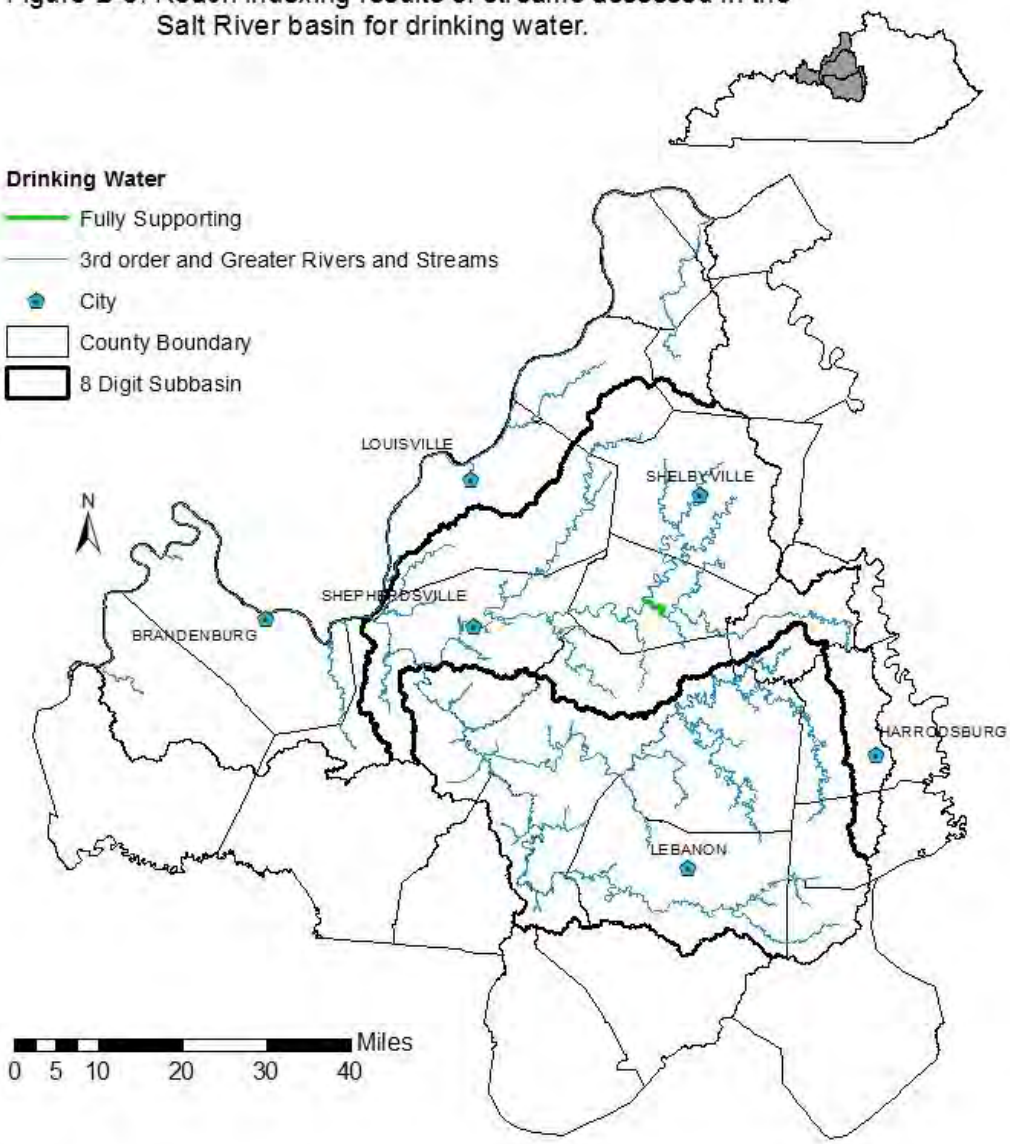
Map prepared by:
James Seay, Kentucky Division of Water
July 31, 2013

Figure B-5. Reach indexing results of streams assessed in the Salt River basin for drinking water.

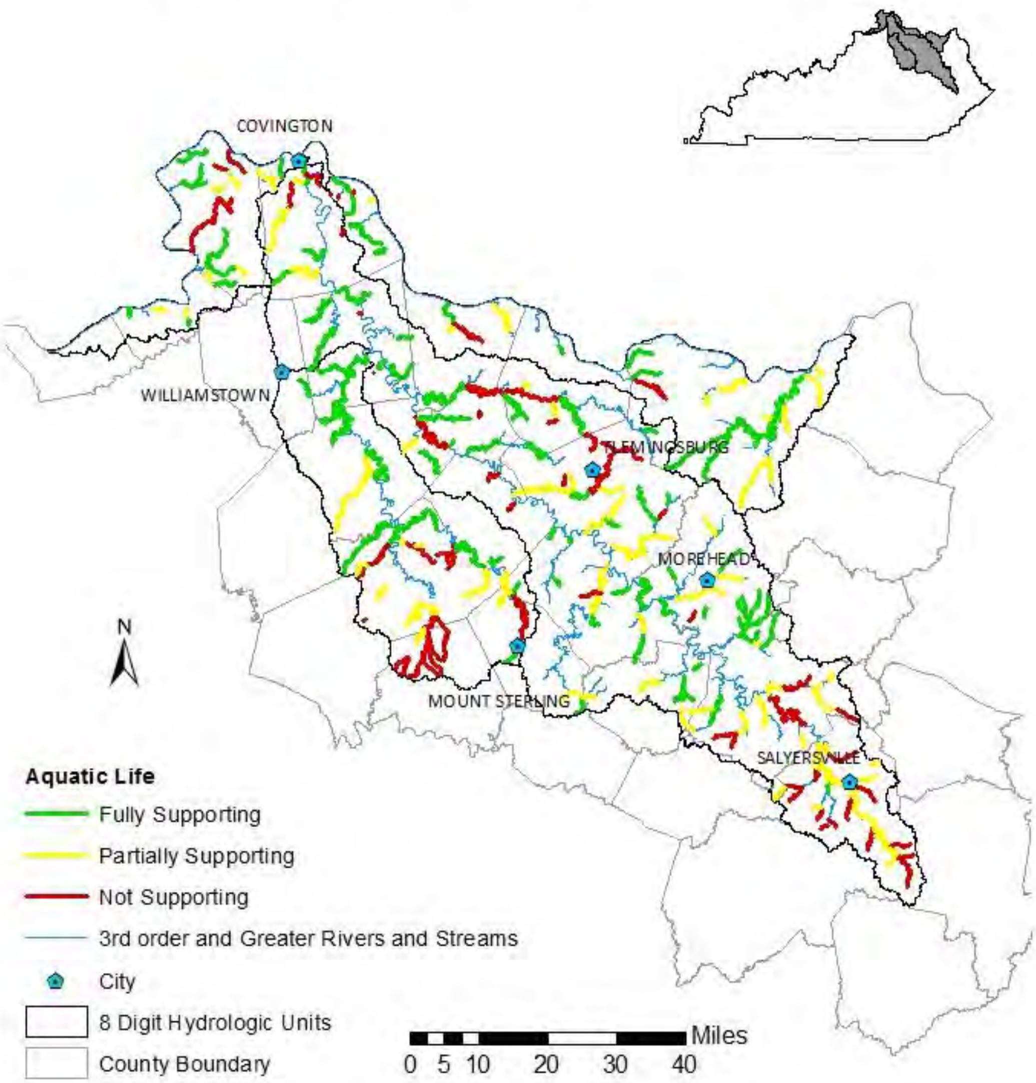


Data Source: 2012 Integrated Report to Congress

This data is distributed by the Commonwealth of Kentucky, Division of Geographic Information (DIG), located in Frankfort, KY. These data area available at http://kygeonet.ky.gov.

Map prepared by:
James Seay, Kentucky Division of Water
July 31, 2013

Figure B-6. Reach indexing results of streams assessed in the Licking River basin for aquatic life.



Data Source: 2012 Integrated Report to Congress

This data is distributed by the Commonwealth of Kentucky, Division of Geographic Information (DIG), located in Frankfort, KY. These data area available at http://kygeonet.ky.gov.

Map prepared by:
James Seay, Kentucky Division of Water
July 31, 2013

Figure B-7. Reach indexing results of streams assessed in the Licking River basin for primary contact recreation.

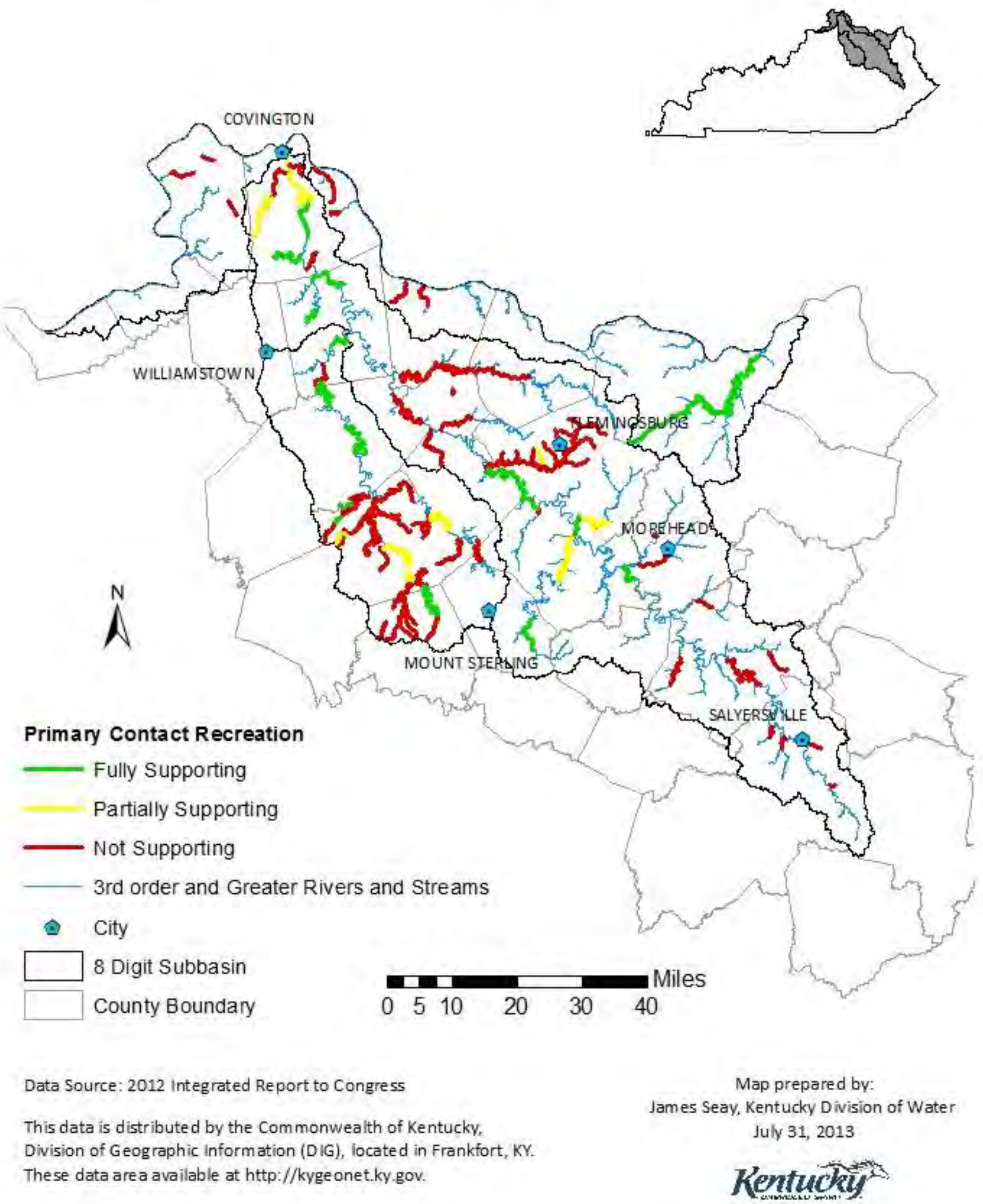


Figure B-8. Reach indexing results of streams assessed in the Licking River basin for secondary contact recreation.

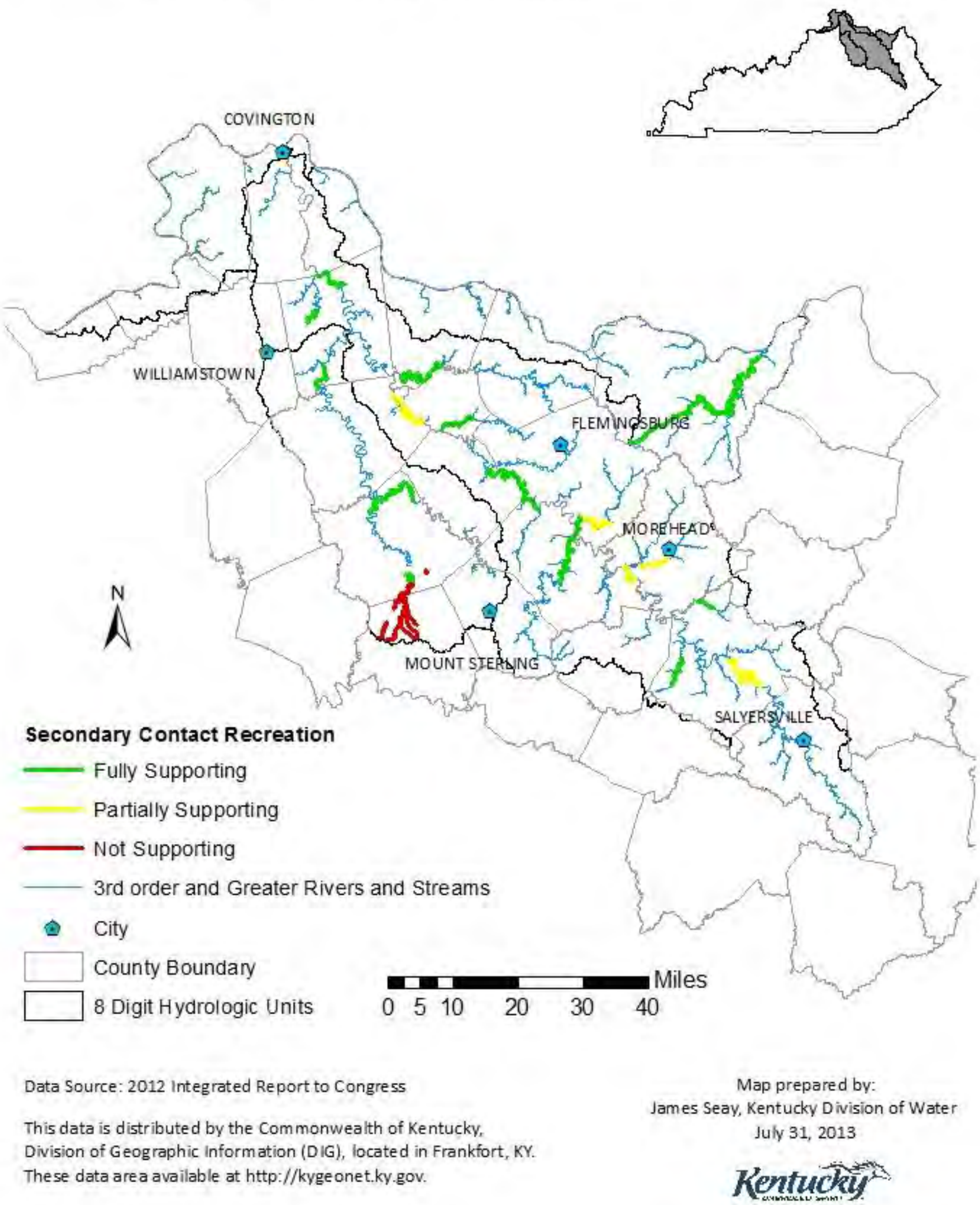
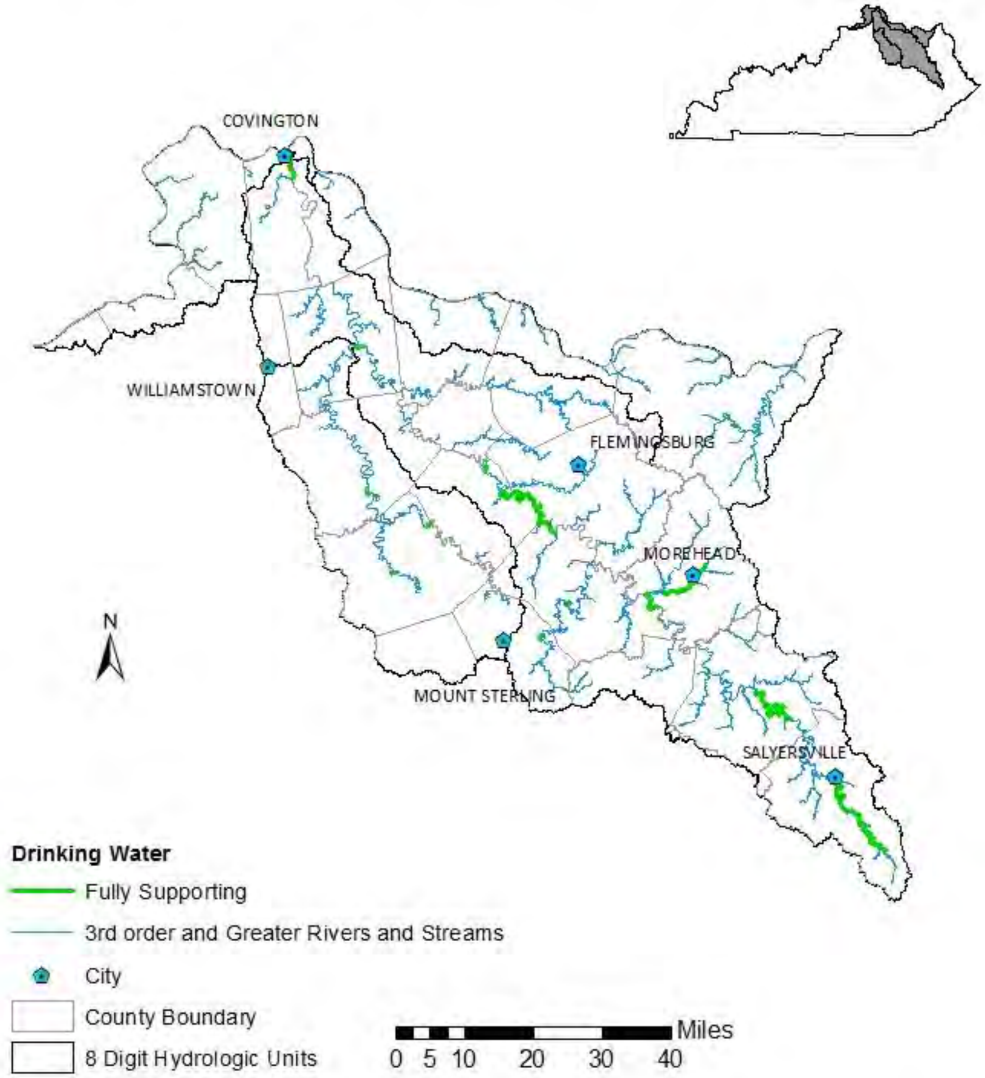


Figure B-10. Reach indexing results of streams assessed in the Licking River basin for drinking water.



Data Source: 2012 Integrated Report to Congress

This data is distributed by the Commonwealth of Kentucky, Division of Geographic Information (DIG), located in Frankfort, KY. These data area available at http://kygeonet.ky.gov.

Map prepared by:
James Seay, Kentucky Division of Water
July 31, 2013

Figure B-11. Reach indexing results of streams assessed in the Upper Cumberland basin for Aquatic Life.

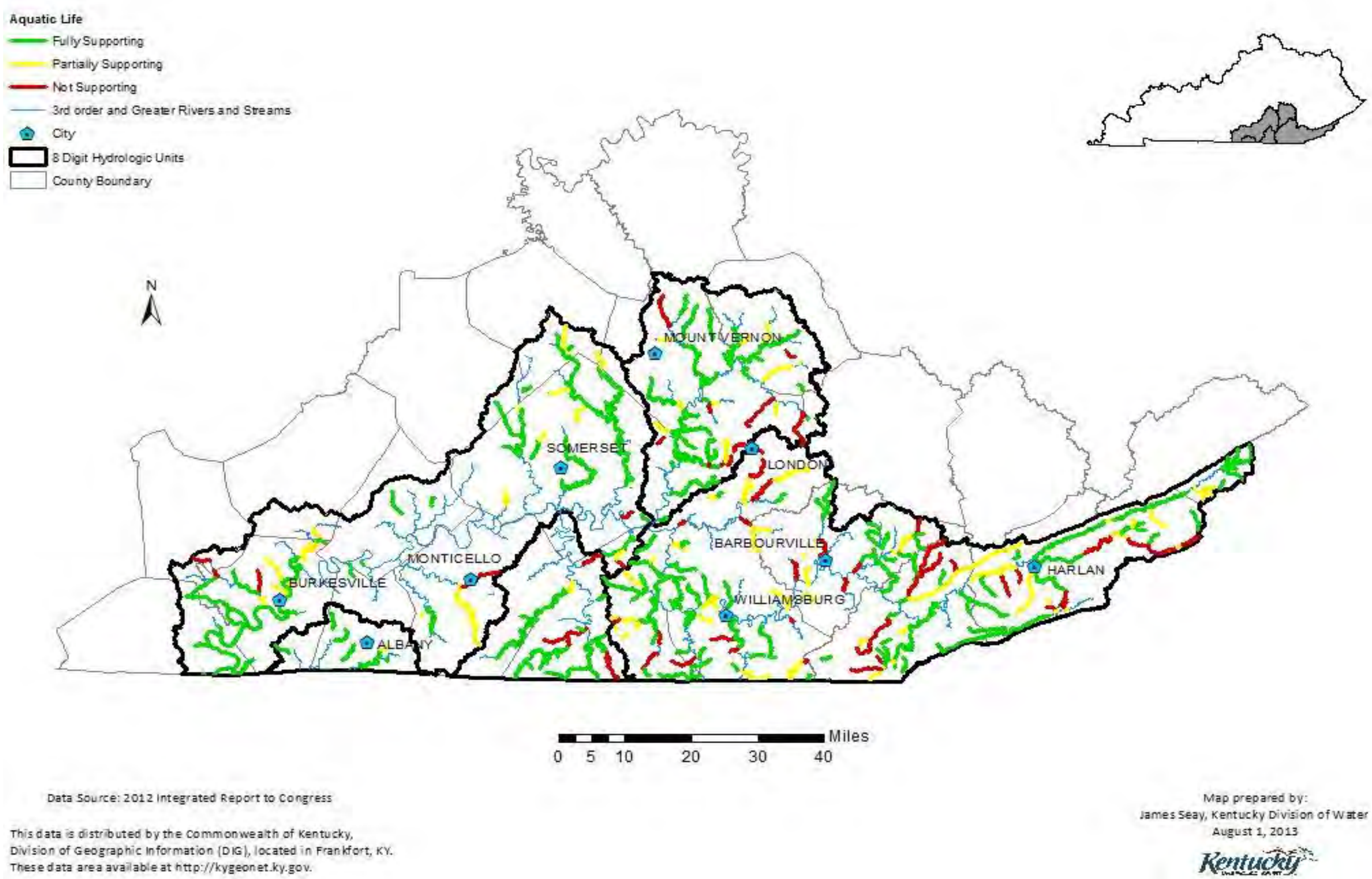


Figure B-12. Reach indexing results of streams assessed in the Upper Cumberland basin for primary contact recreation.

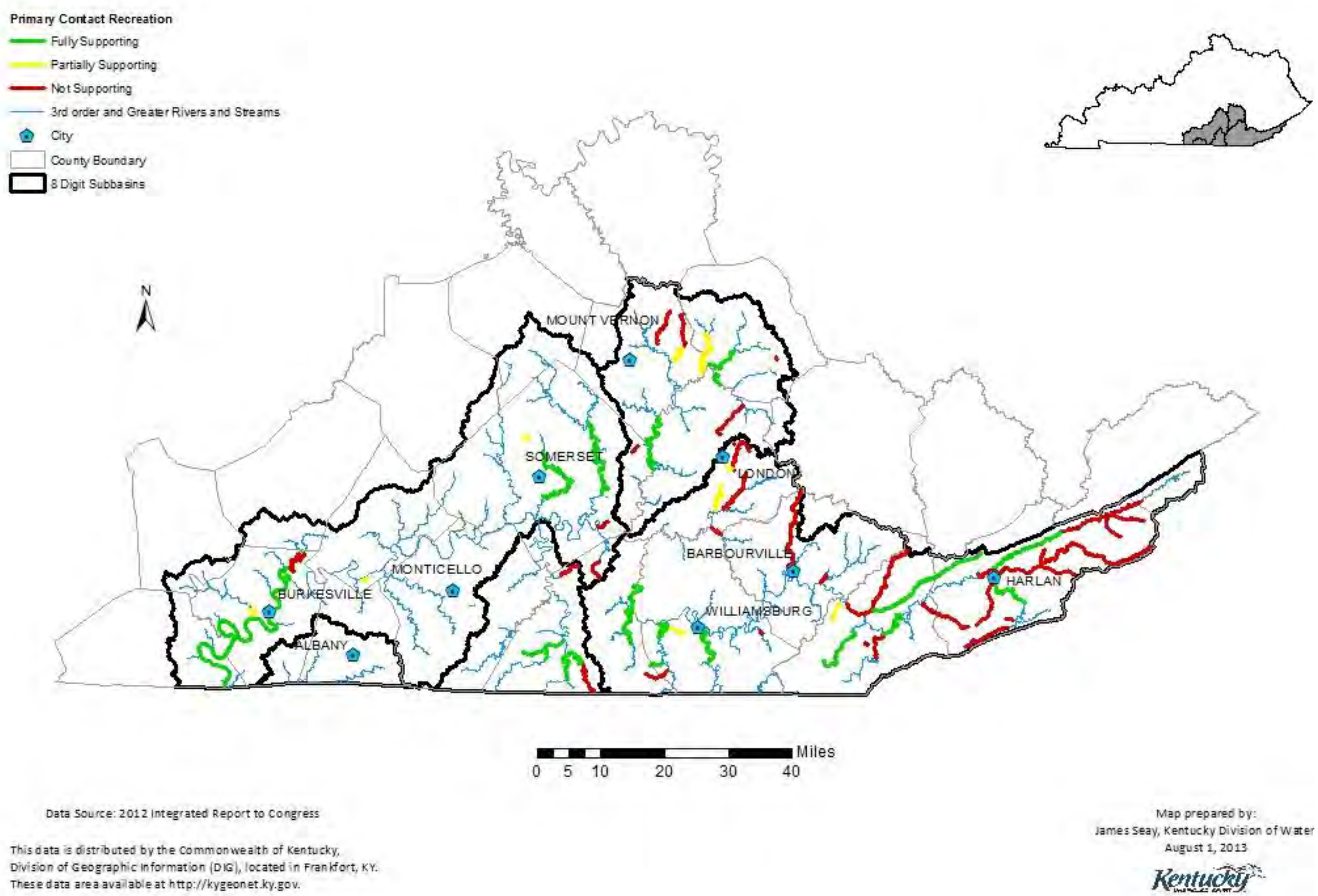


Figure B-13. Reach indexing results of streams assessed in the Upper Cumberland basin for secondary contact recreation.

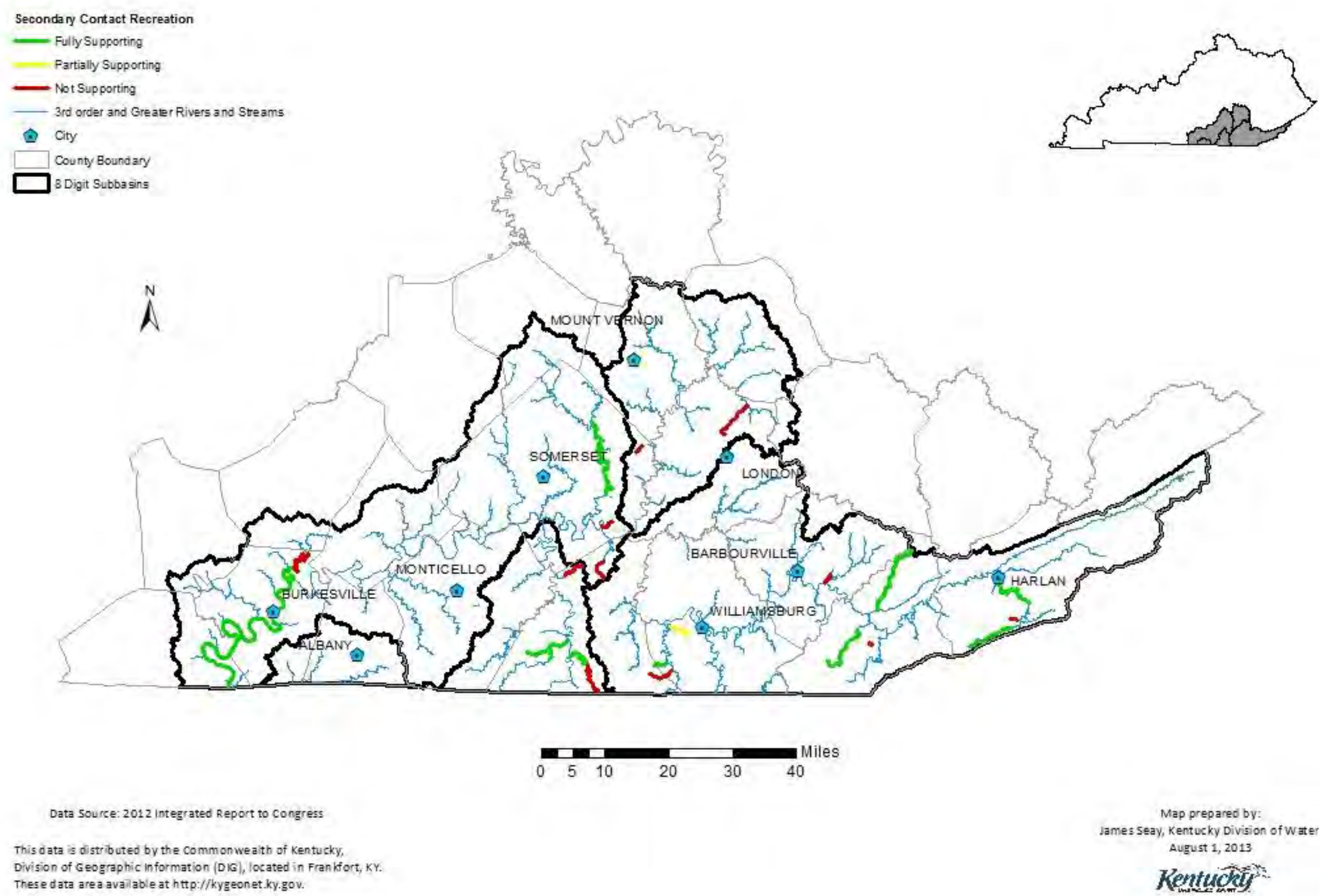


Figure B-14. Reach indexing results of streams assessed in the Upper Cumberland basin for fish tissue consumption.

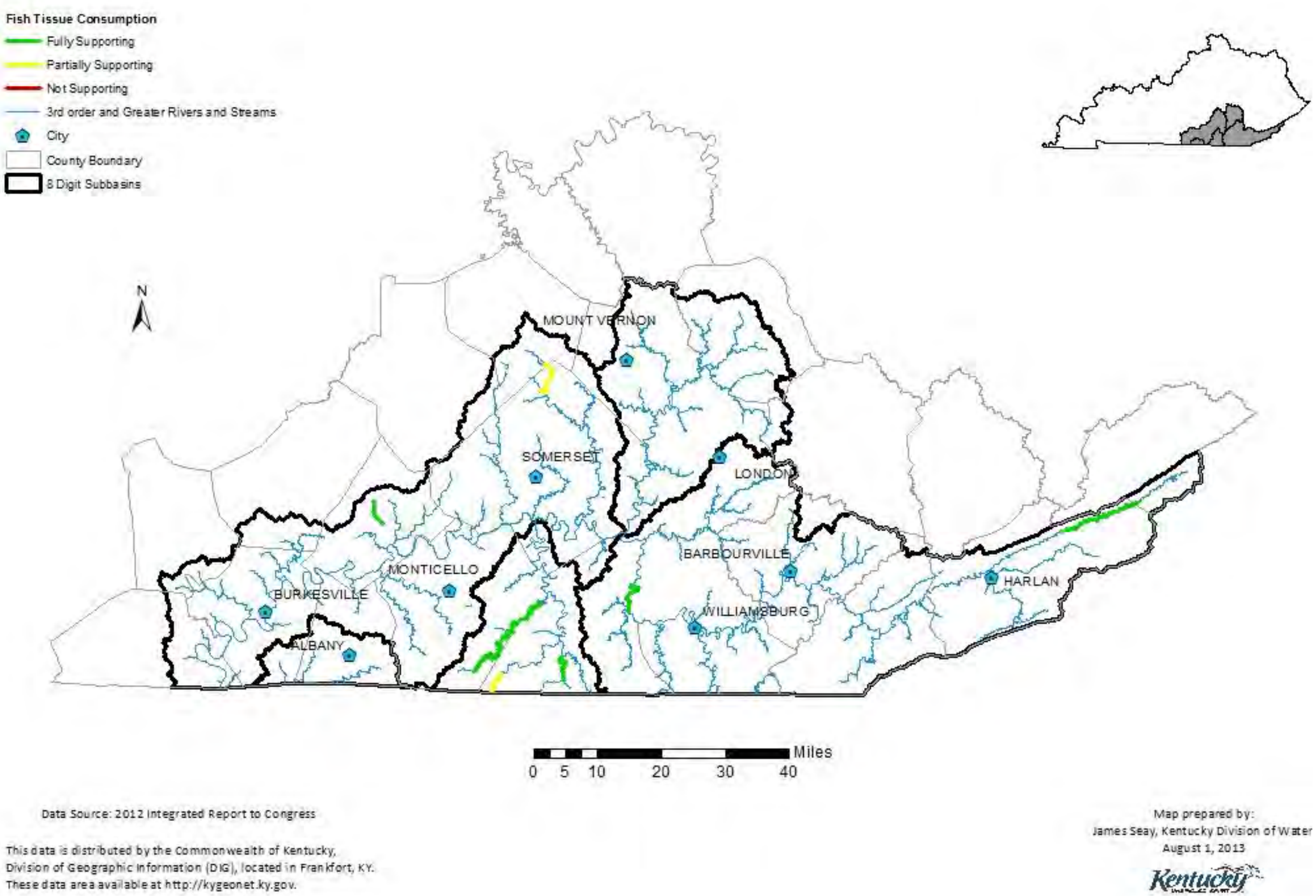


Figure B-15. Reach indexing results of streams assessed in the Upper Cumberland basin for drinking water.

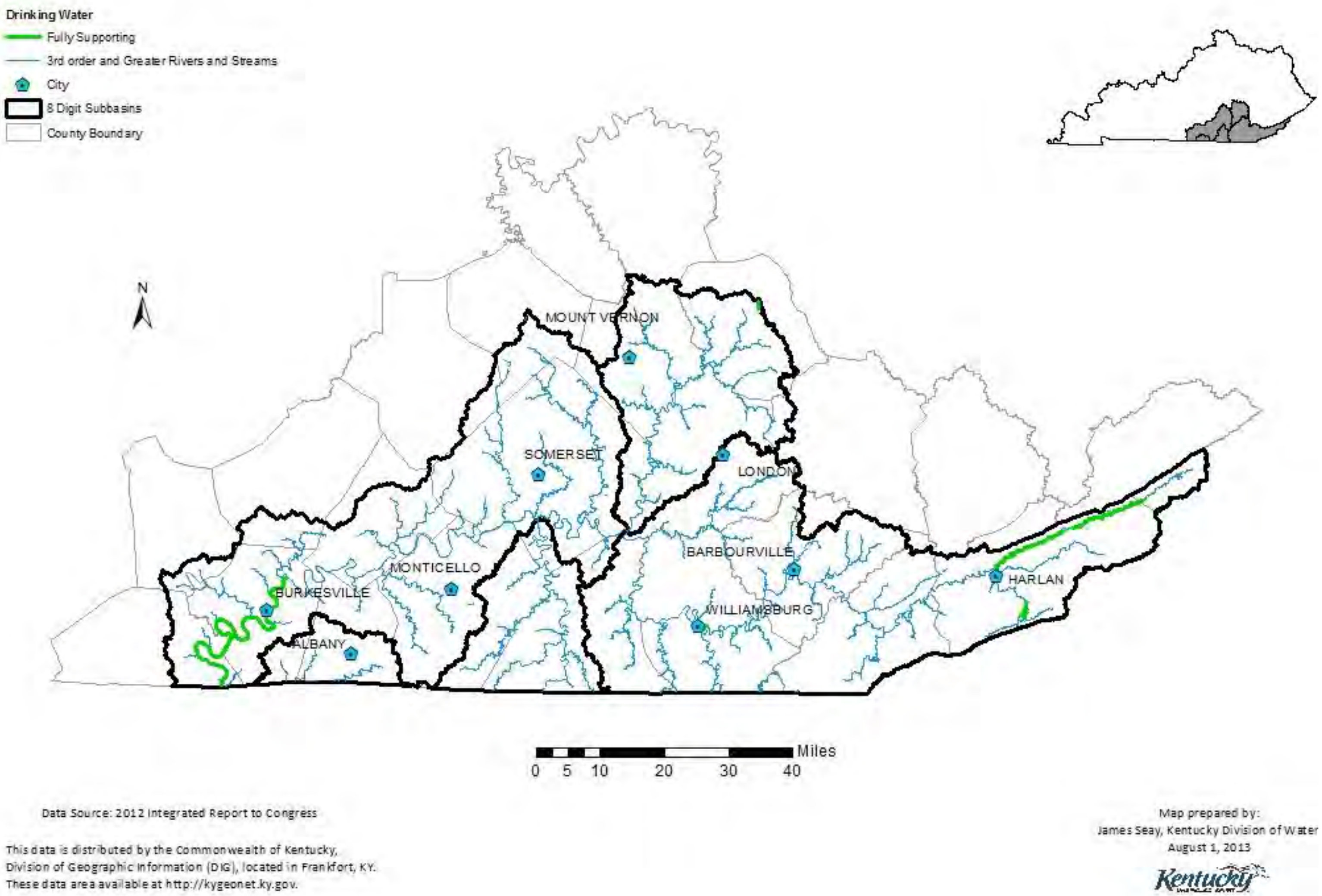


Figure B-16. Reach indexing results of streams assessed in the Four Rivers basin for aquatic life.

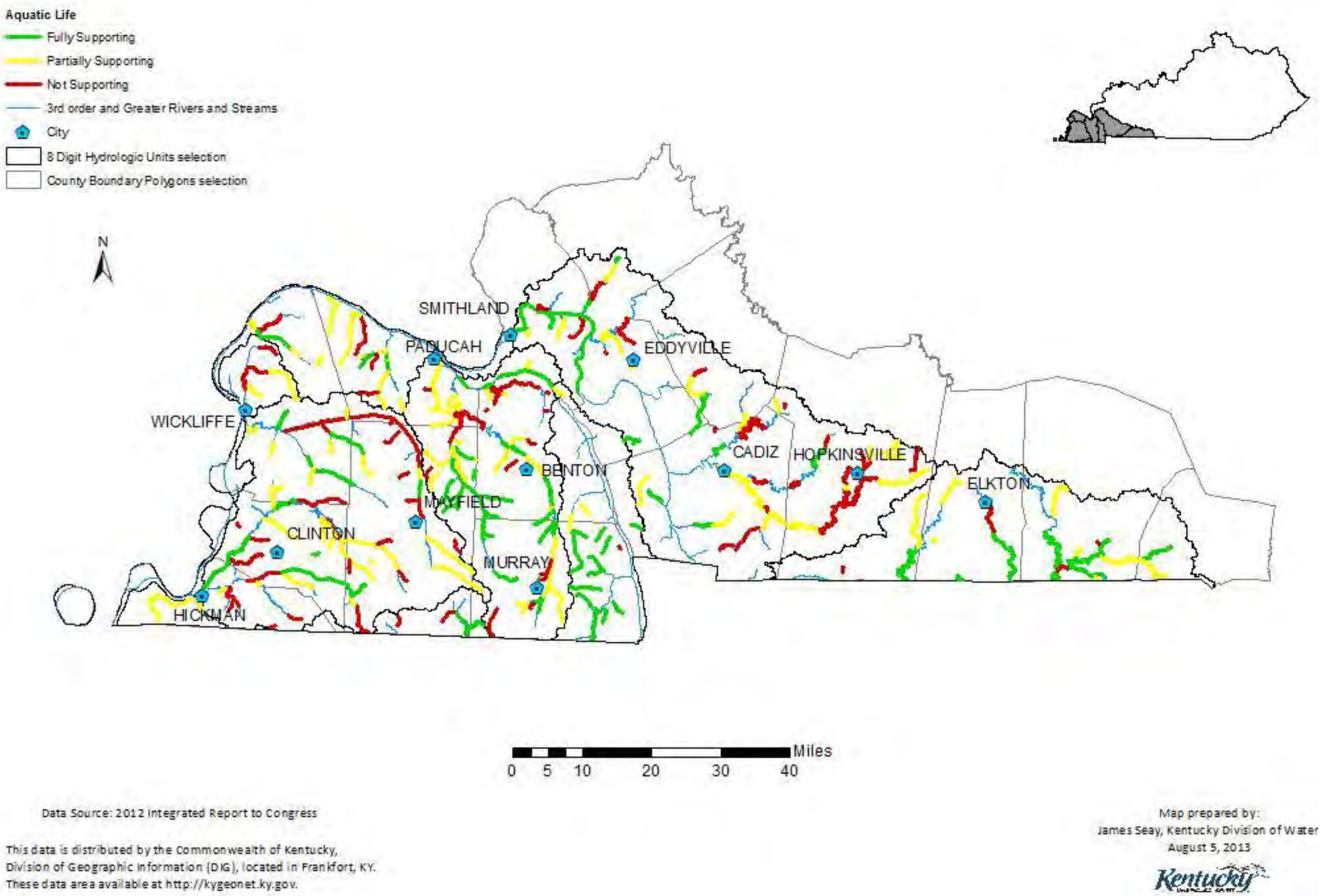
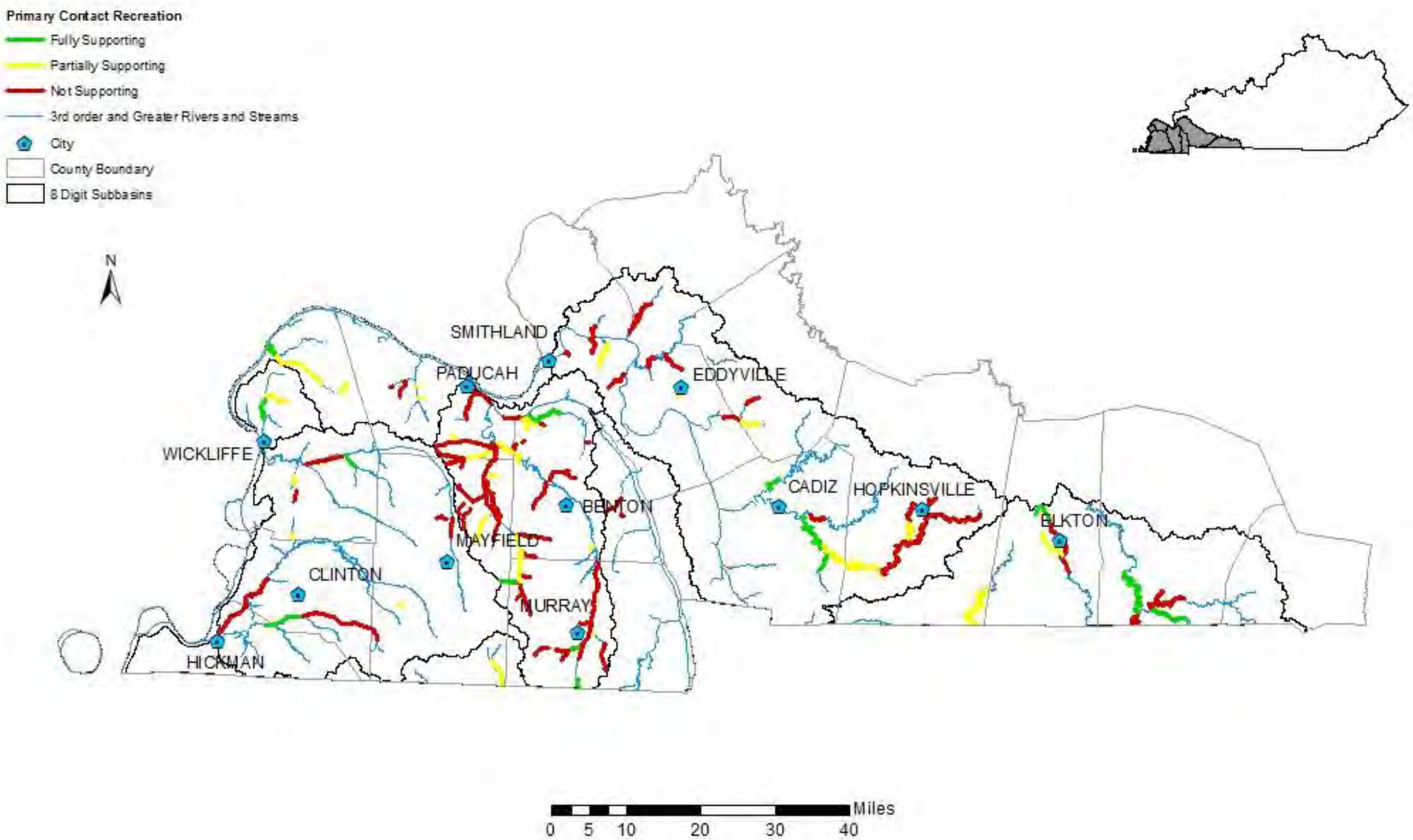


Figure B-17. Reach indexing results of streams assessed in the Four Rivers basin for primary contact recreation.



Data Source: 2012 Integrated Report to Congress

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Map prepared by:
James Seay, Kentucky Division of Water
August 7, 2013

Figure B-18. Reach indexing results of streams assessed in the Four Rivers basin for secondary contact recreation.

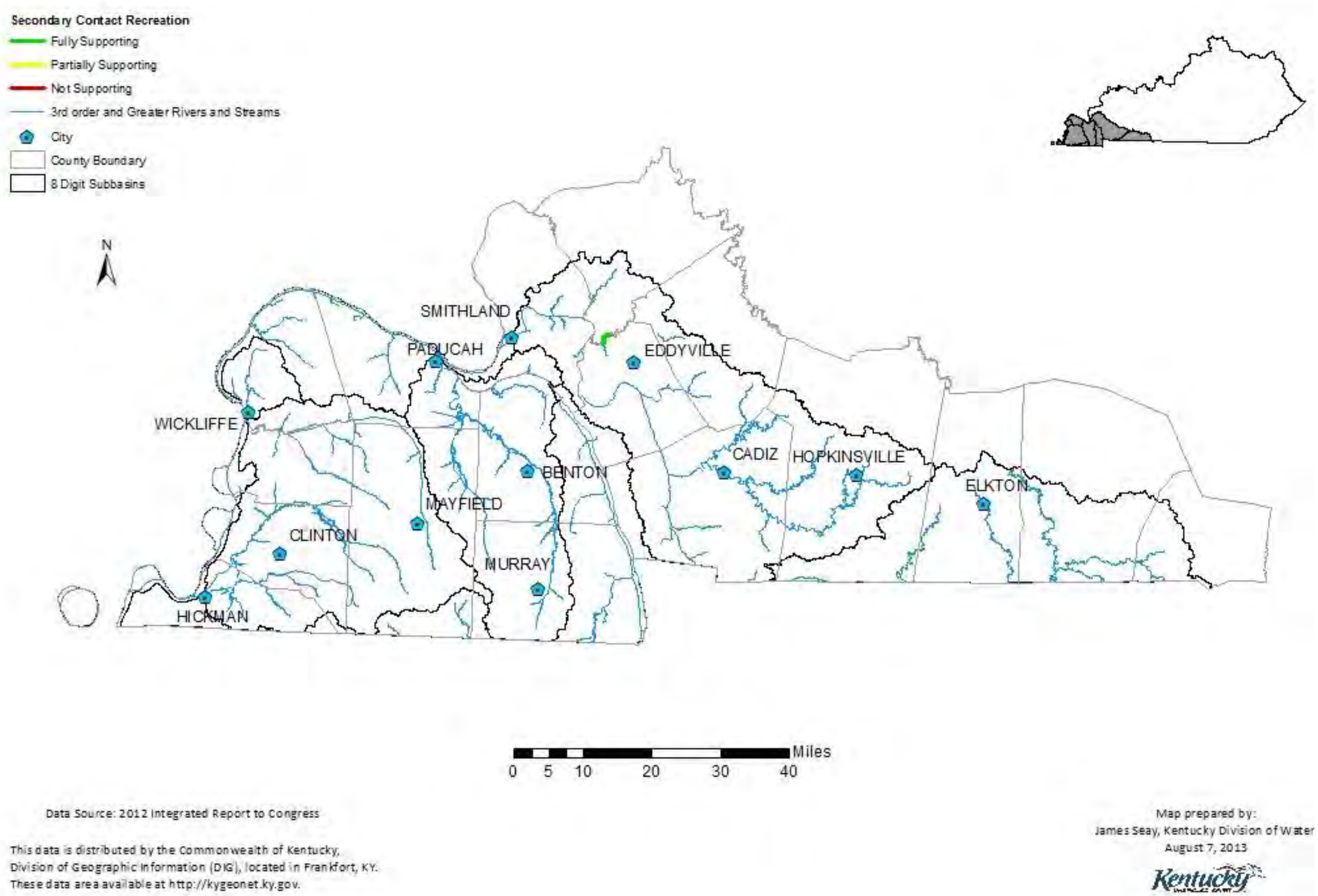


Figure B-19. Reach indexing results of streams assessed in the Four Rivers basin for fish tissue consumption.

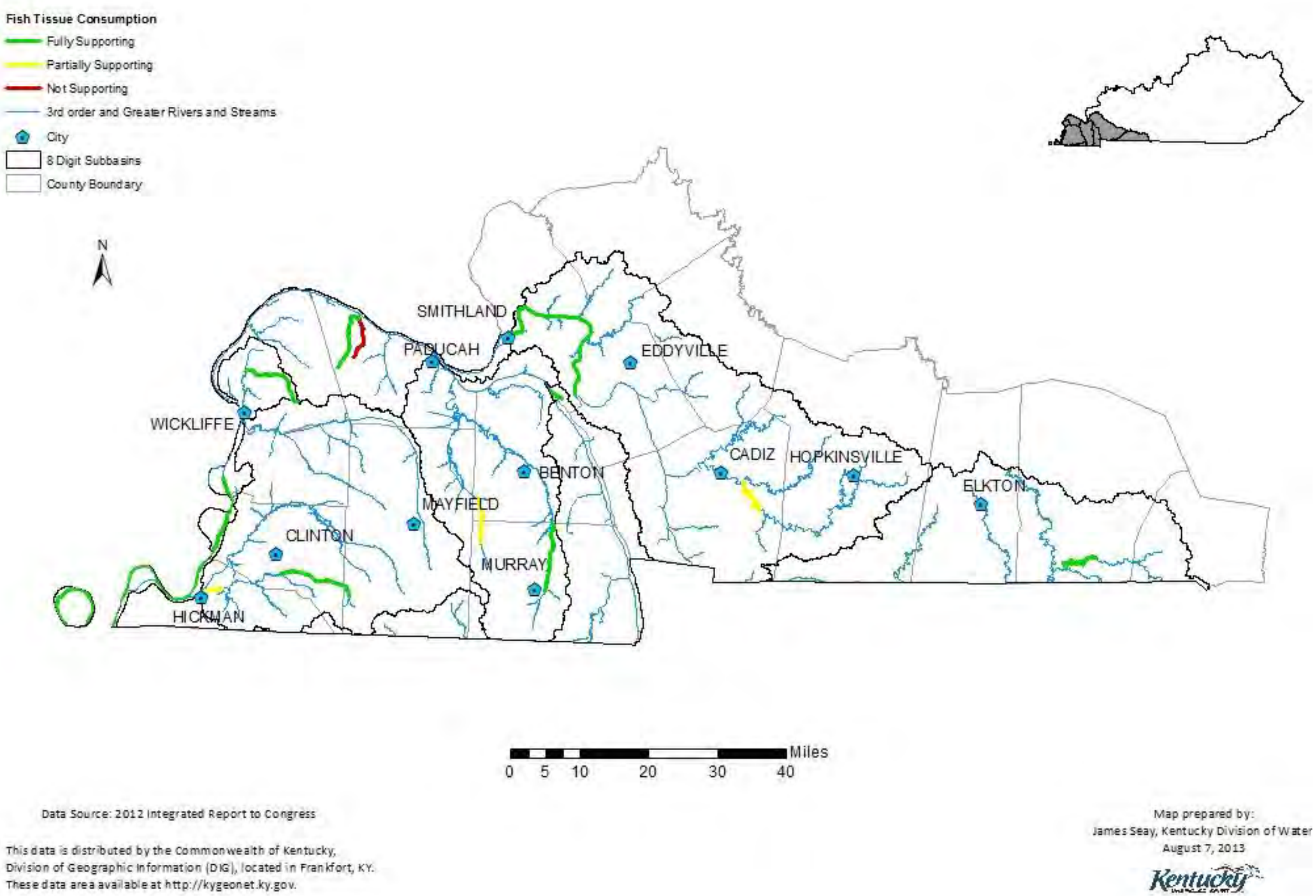
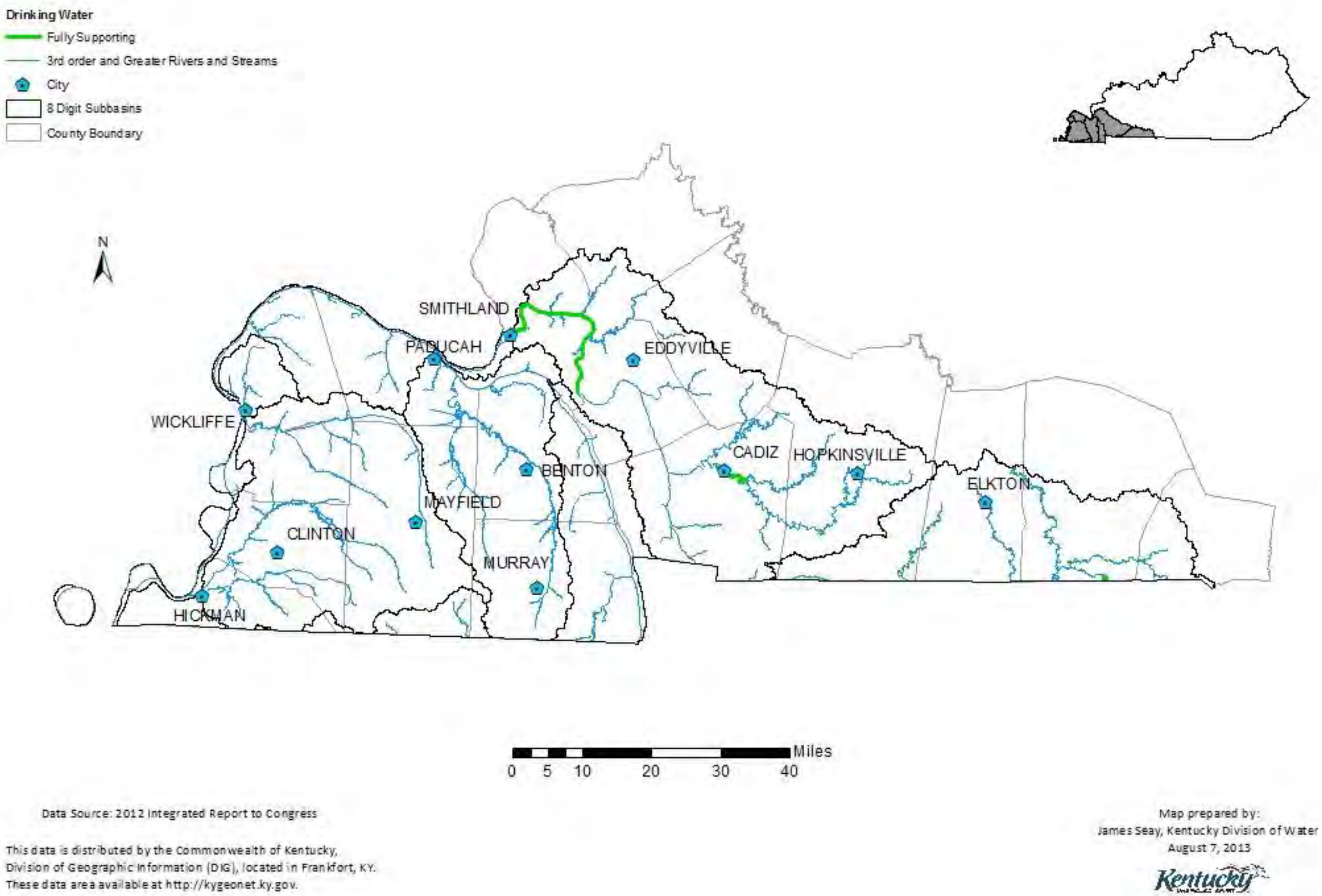


Figure B-20. Reach indexing results of streams assessed in the Four Rivers basin for drinking water.



Appendix C. Maps of Assessed Lakes and Reservoirs for the
Salt River – Licking River BMU and the Upper Cumberland River – 4-Rivers BMU

Figure C-1. Monitoring locations, trophic state index and general use support on A.J. Jolly Lake (aka. Campbell County Lake) in the Licking River basin.

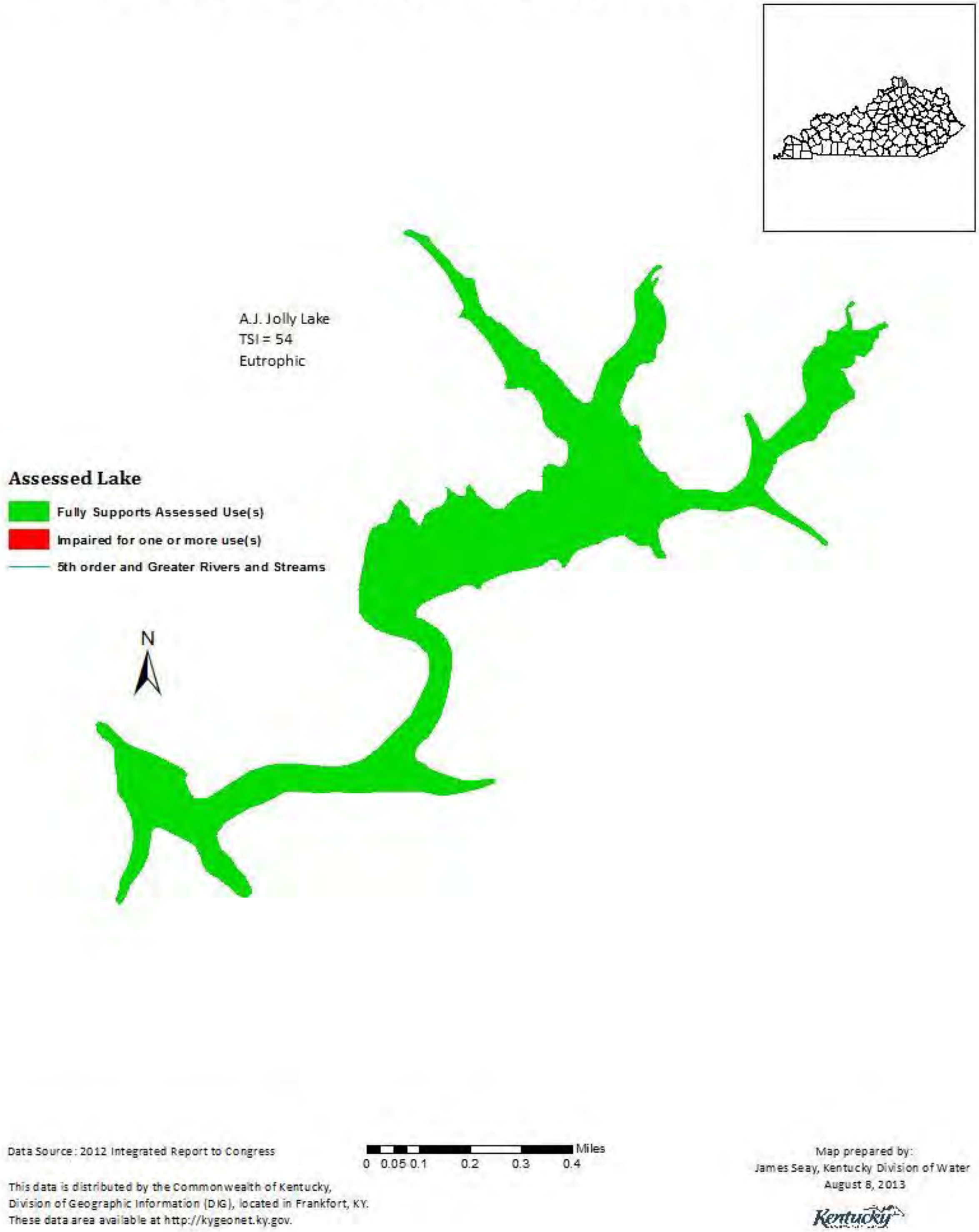


Figure C-2. Monitoring locations, trophic state index and general use support on Alexandria Park Lake in the Licking River basin.

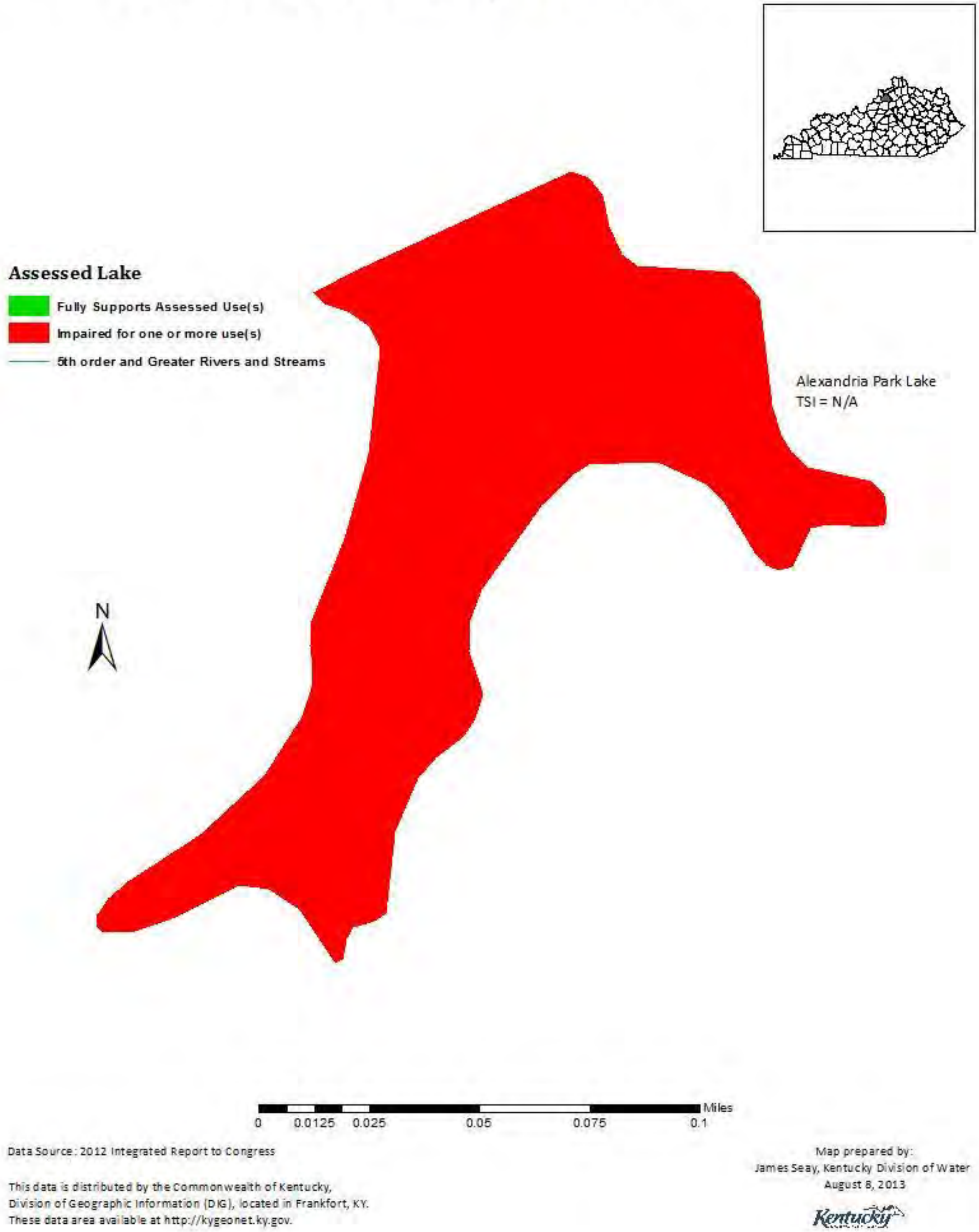


Figure C-3. Monitoring locations, trophic state index and general use support on Beaver Lake in the Salt River basin.

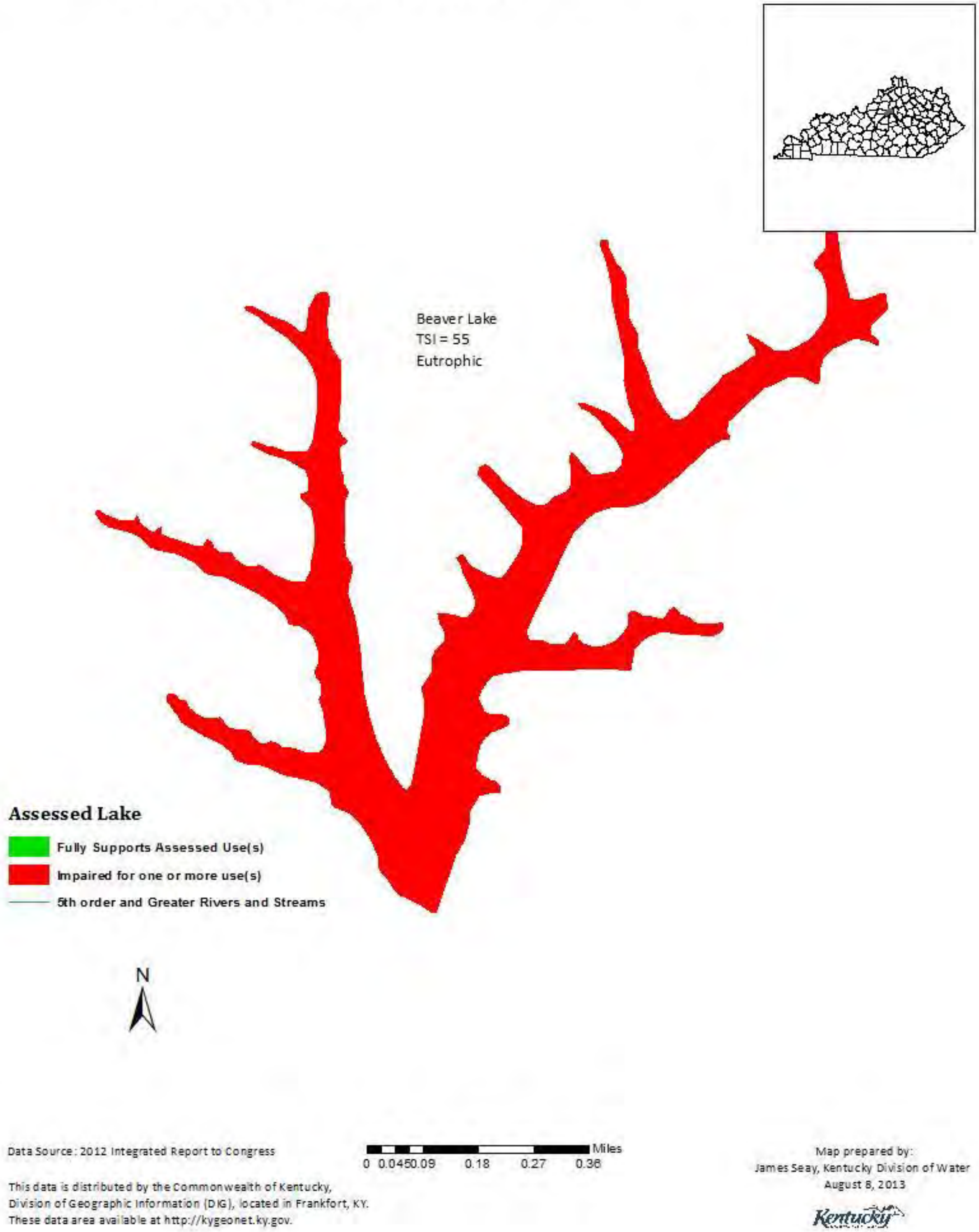


Figure C-4. Monitoring locations, trophic state index and general use support on Carlisle City Lake in the Licking River basin.

Figure C-5. Monitoring locations, trophic state index and general use support on Cave Run Lake in the Licking River basin.

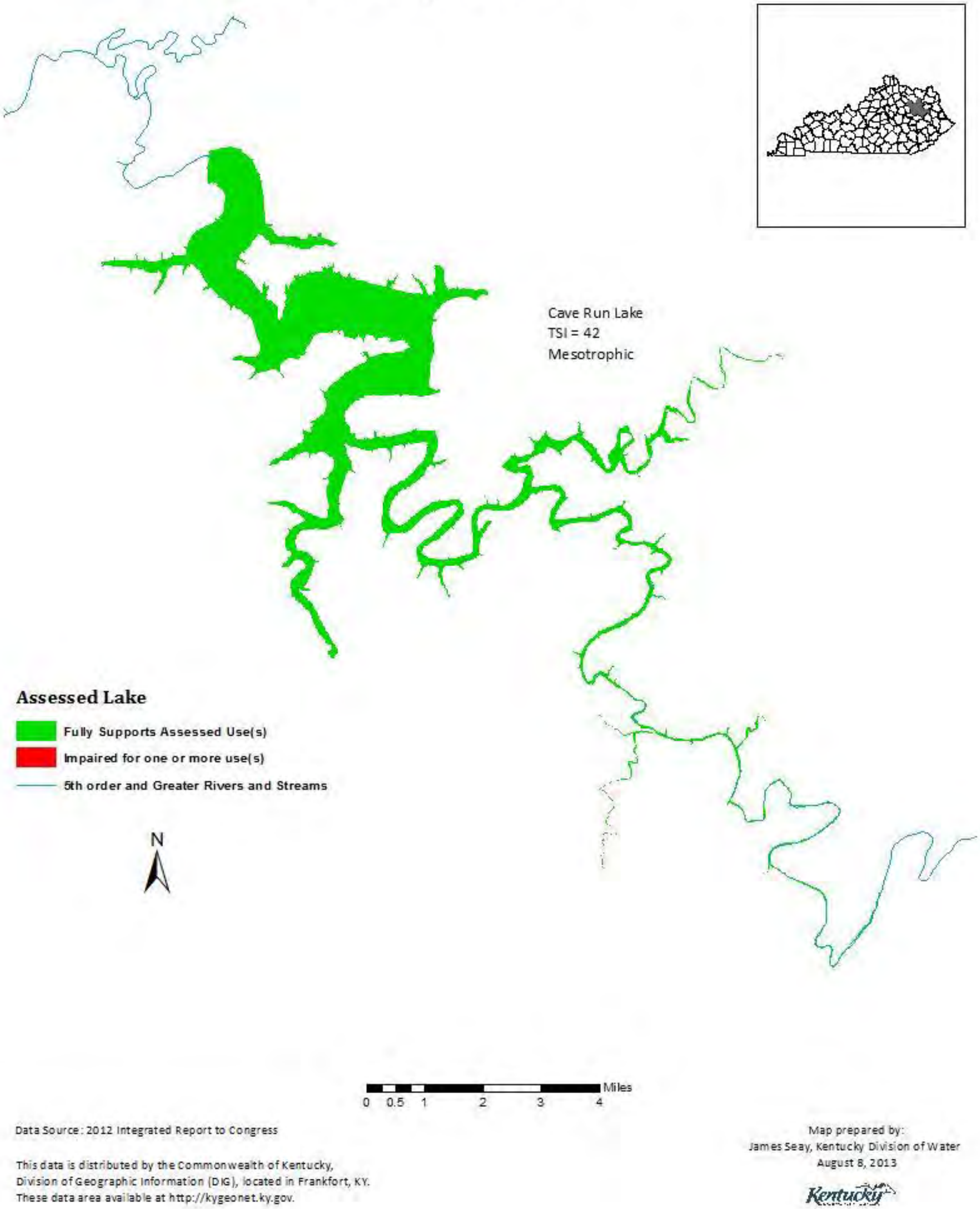


Figure C-6. Monitoring locations, trophic state index and general use support on Chickasaw Park Pond in the Salt River basin.

Figure C-7. Monitoring locations, trophic state index and general use support on Doe Run Lake in the Licking River basin.

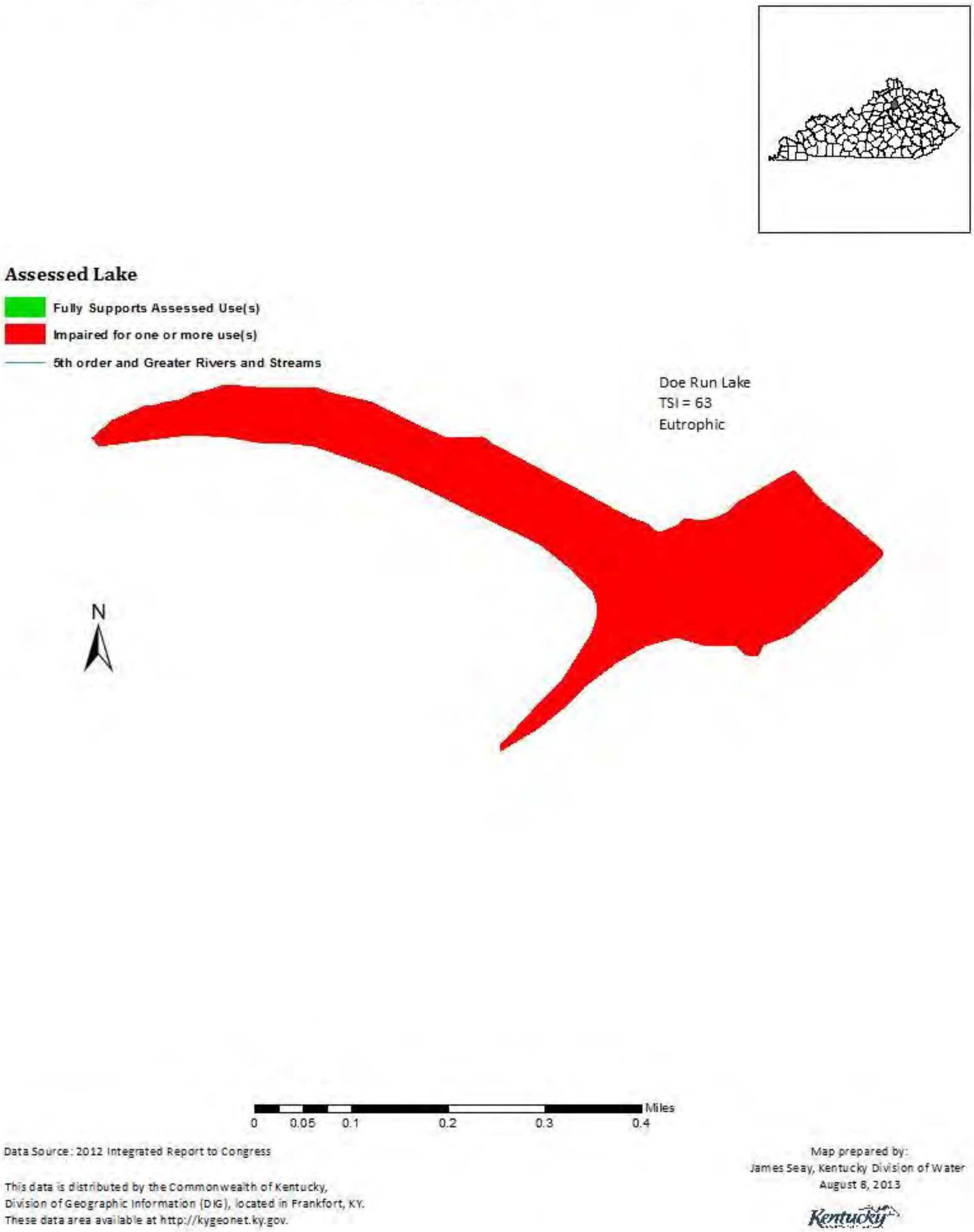


Figure C-8. Monitoring locations, trophic state index and general use support on Doe Valley Lake in the Salt River basin.

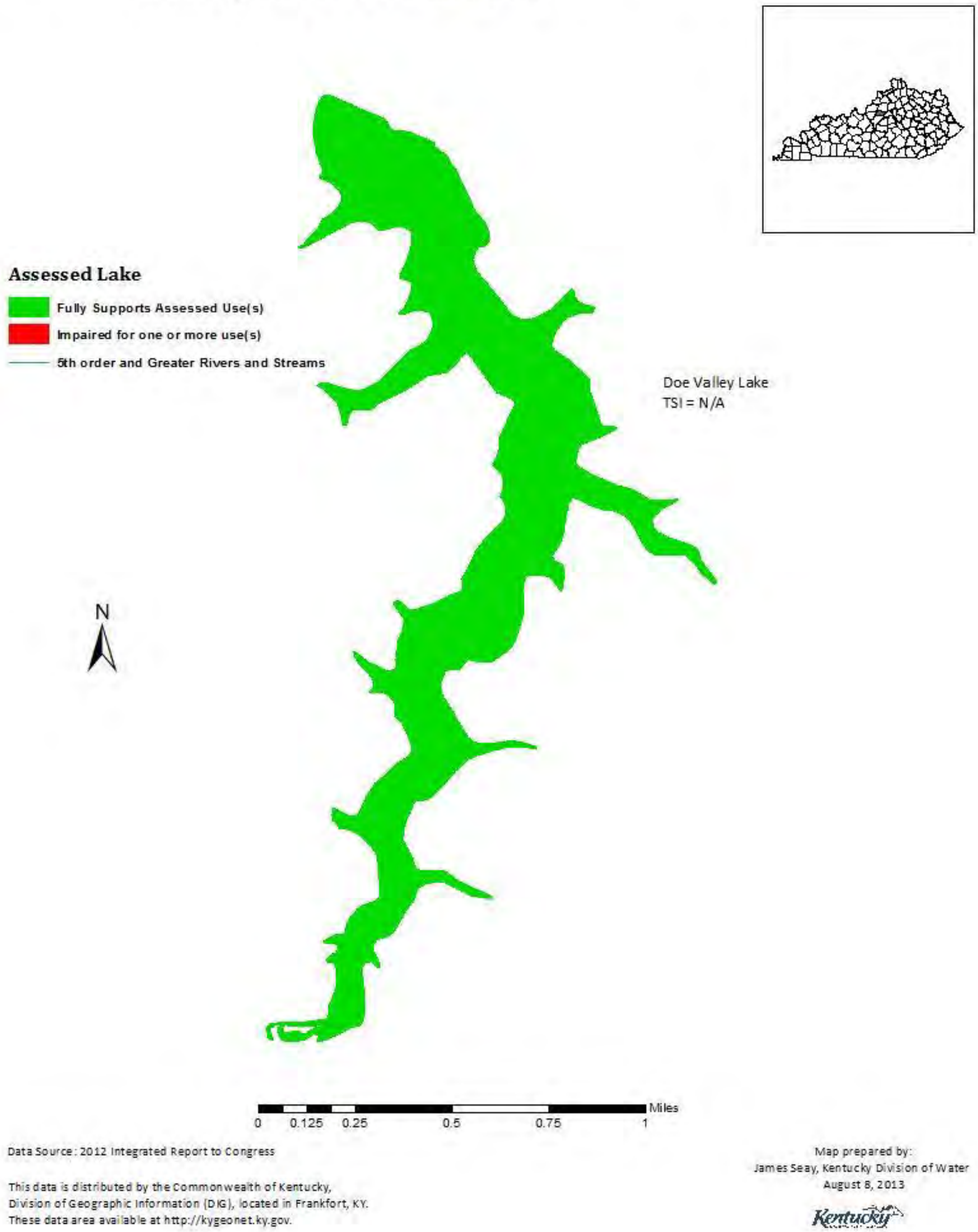


Figure C-9. Monitoring locations, trophic state index and general use support on Evans Branch Reservoir in the Licking River basin.

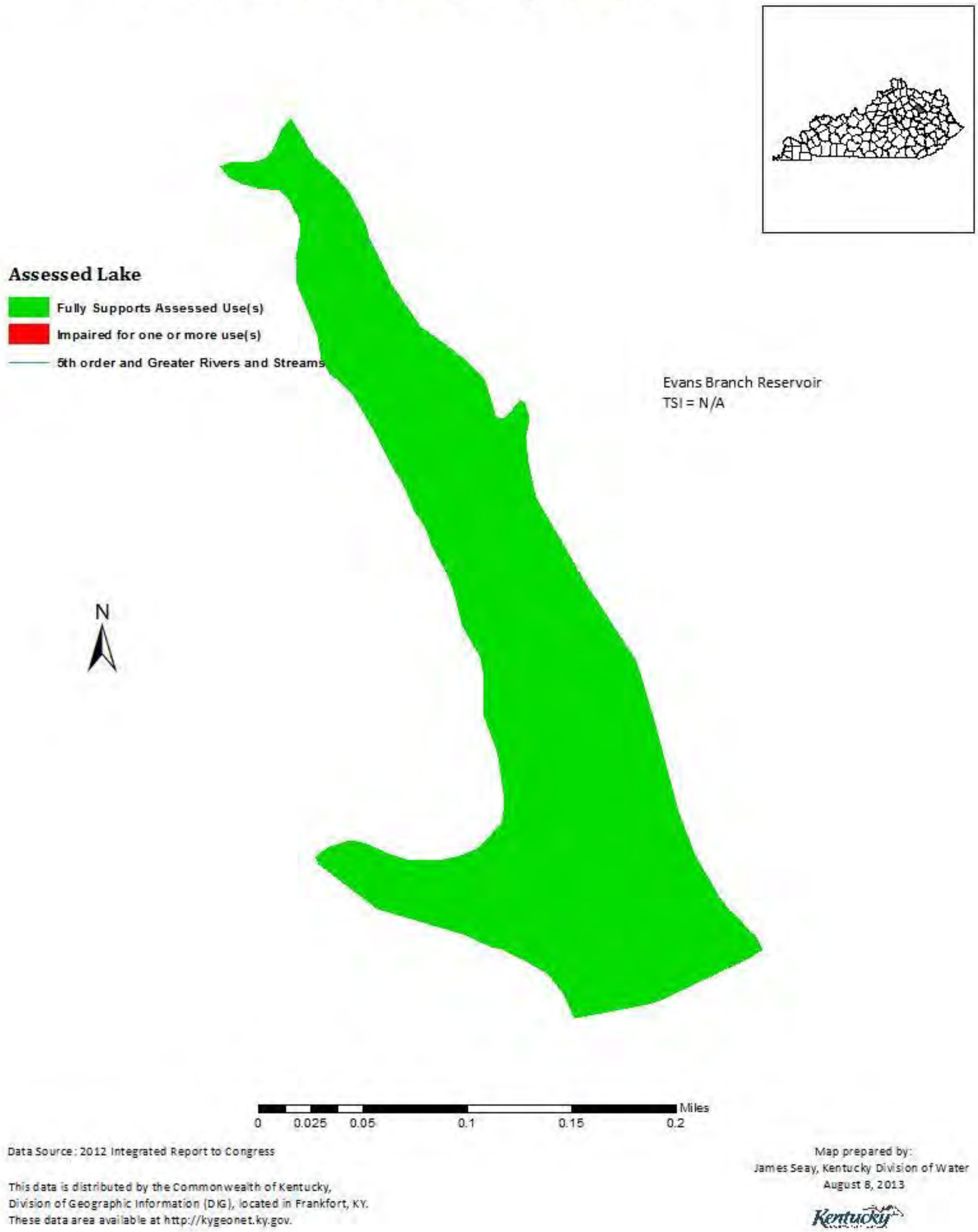


Figure C-10. Monitoring locations, trophic state index and general use support on Fagan Branch Reservoir in the Salt River basin.

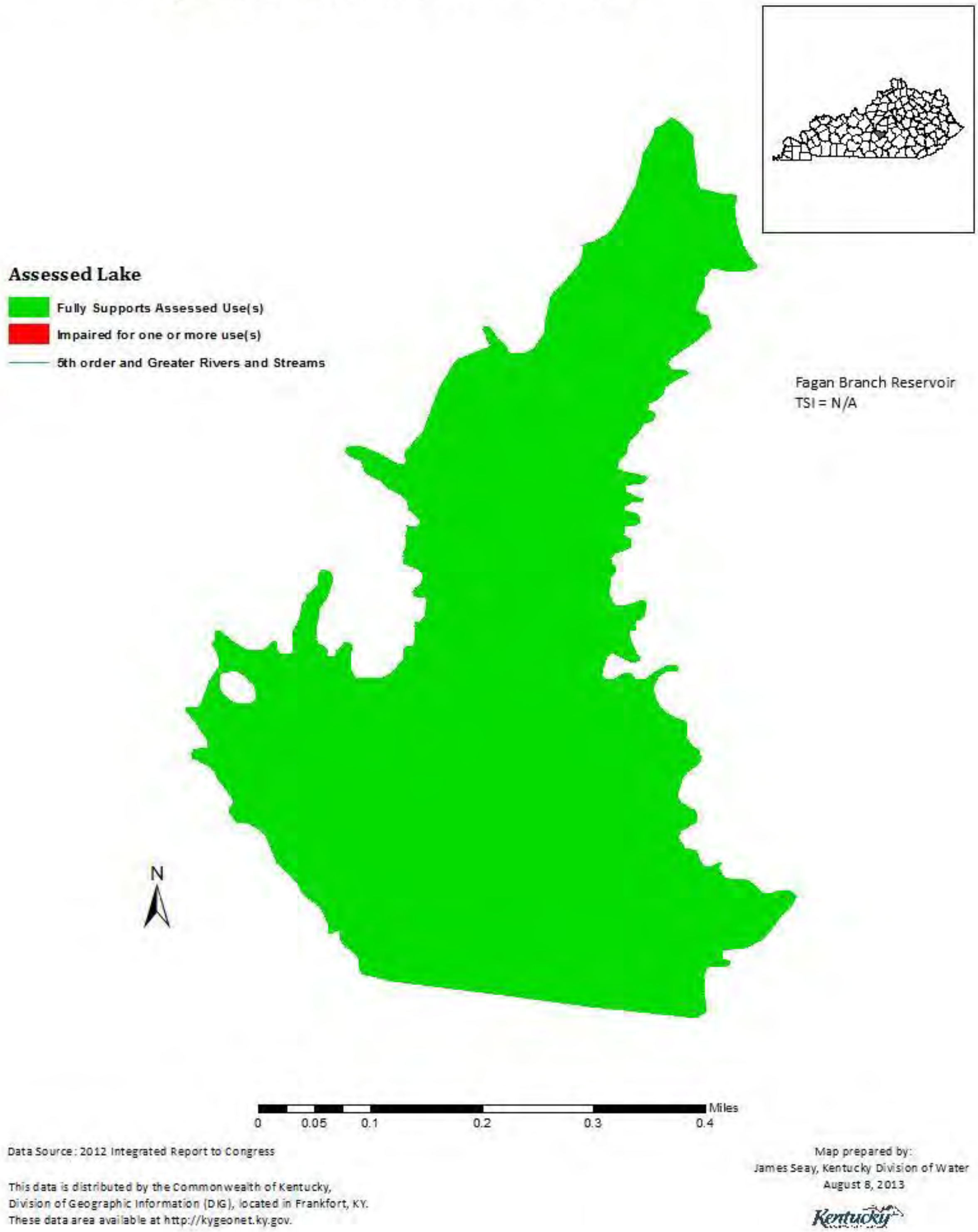


Figure C-11. Monitoring locations, trophic state index and general use support on Flemingsburg Lake in the Licking River basin.

Data Source: 2012 Integrated Report to Congress

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Map prepared by:
James Seay, Kentucky Division of Water
August 8, 2013

Kentucky

Figure C-12. Monitoring locations, trophic state index and general use support on Greenbriar Lake in the Licking River basin.

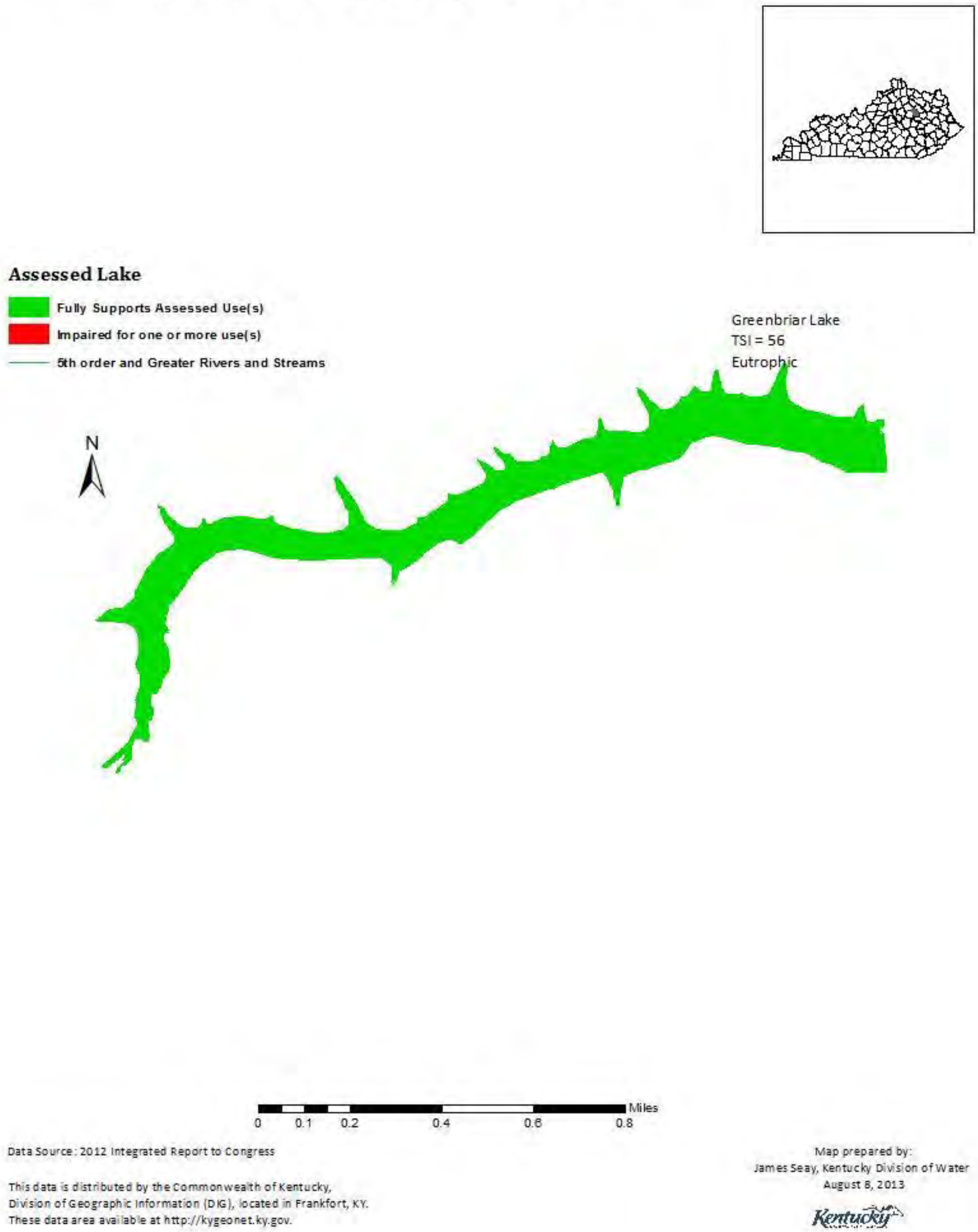
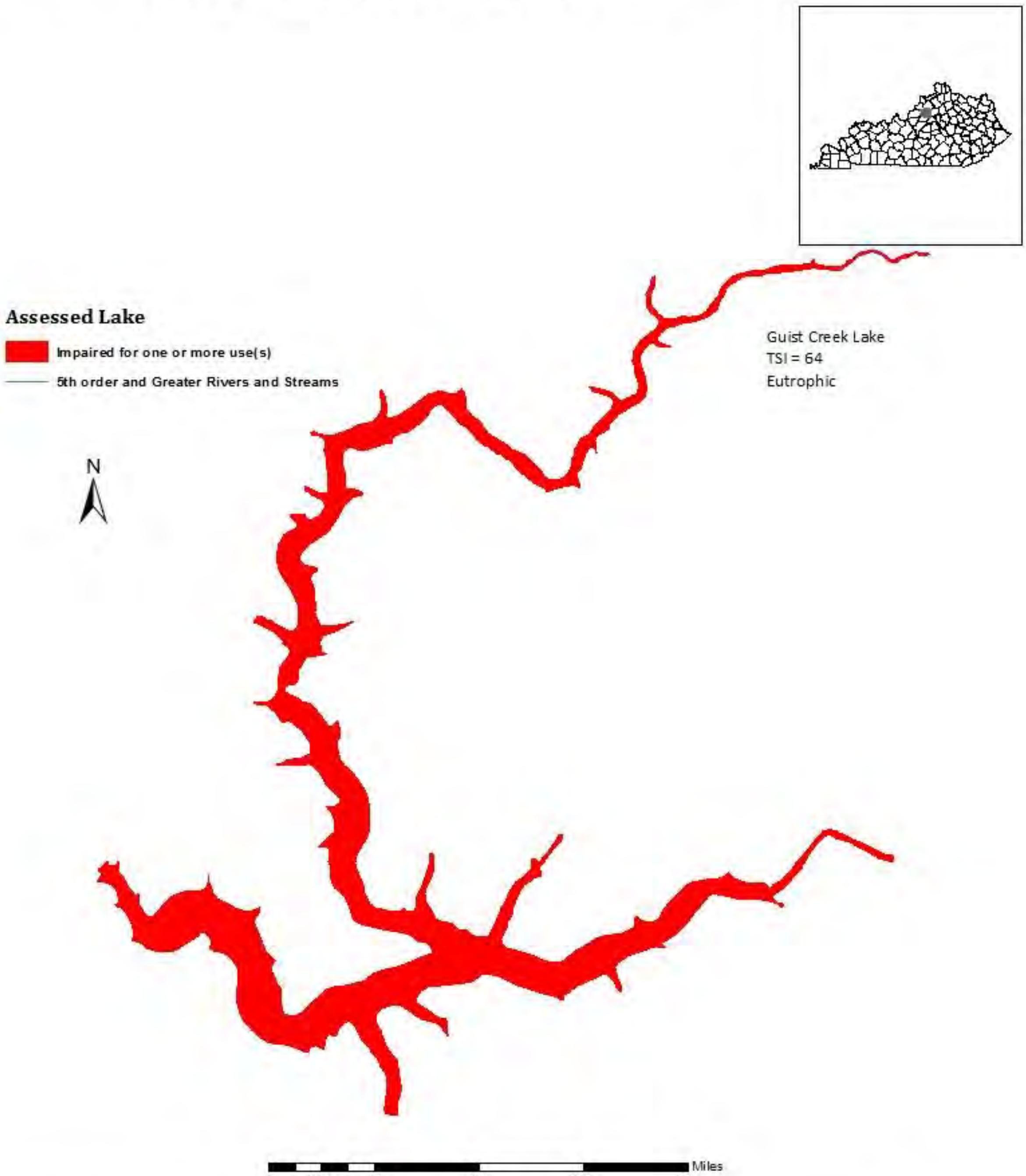


Figure C-13. Monitoring locations, trophic state index and general use support on Guist Creek Lake in the Salt River basin.



Data Source: 2012 Integrated Report to Congress

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Figure C-14. Monitoring locations, trophic state index and general use support on Kincaid Lake in the Licking River basin.

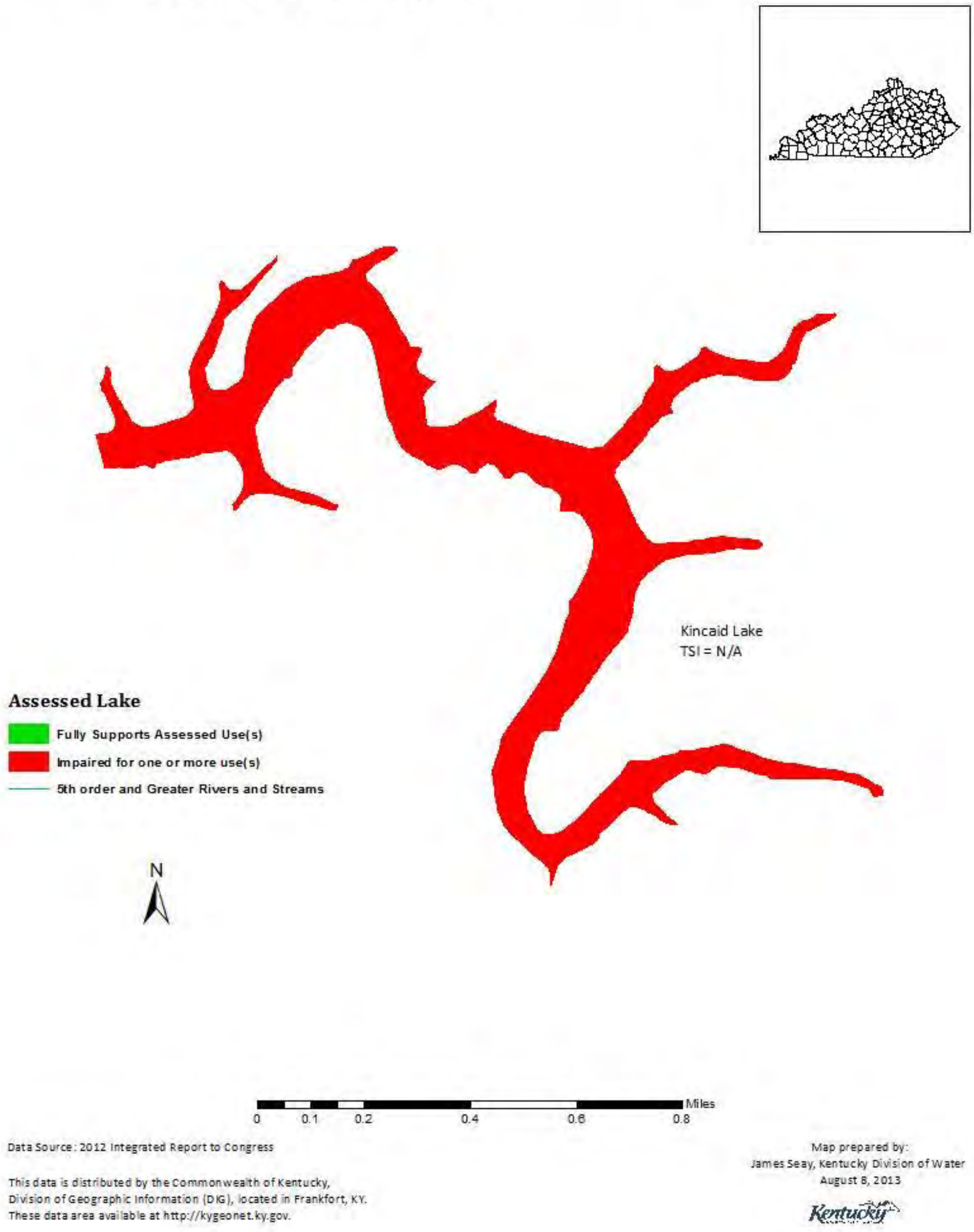


Figure C-15. Monitoring locations, trophic state index and general use support on Lake Carnico in the Licking River basin.

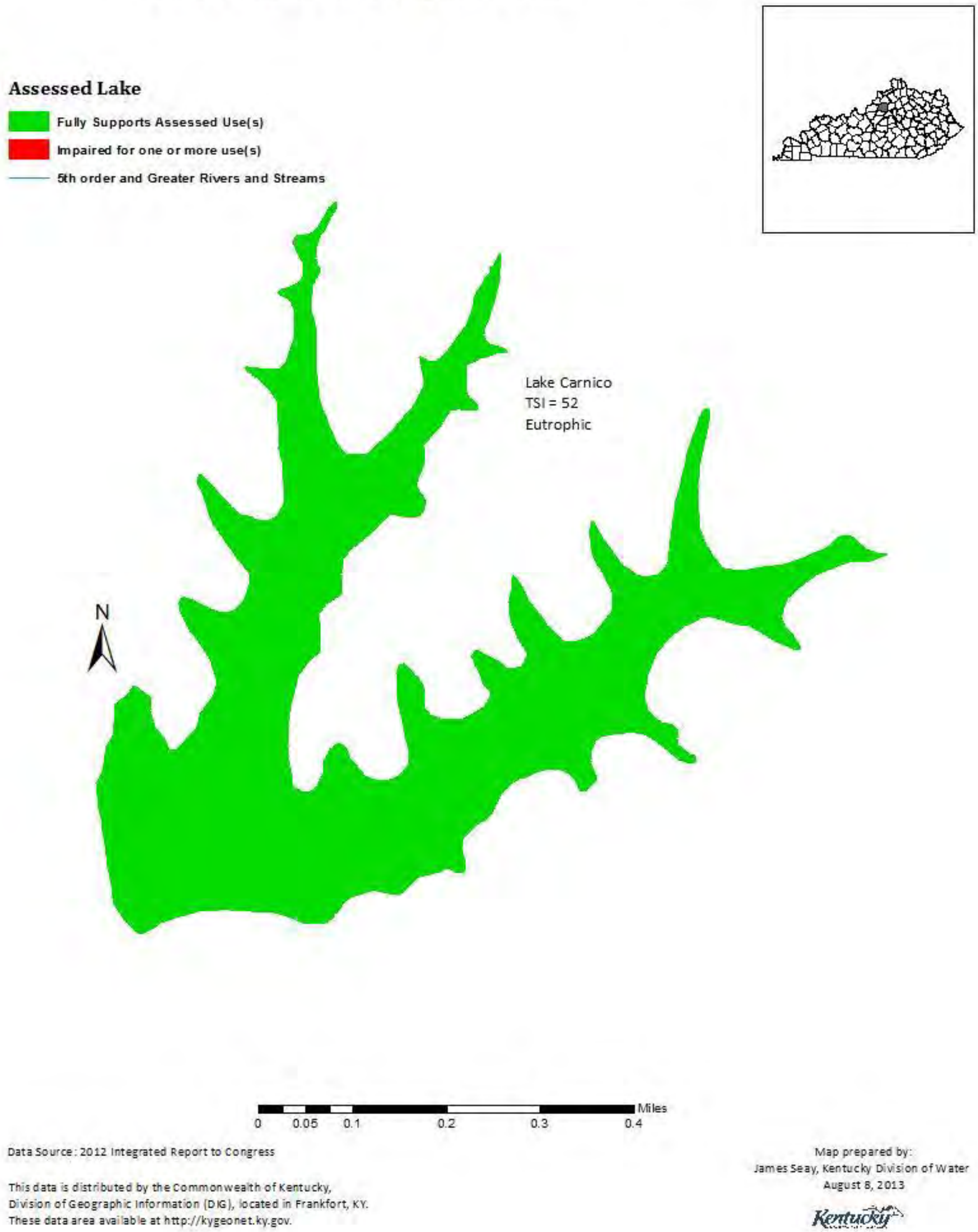


Figure C-16. Monitoring locations, trophic state index and general use support on Long Run Lake in the Salt River basin.

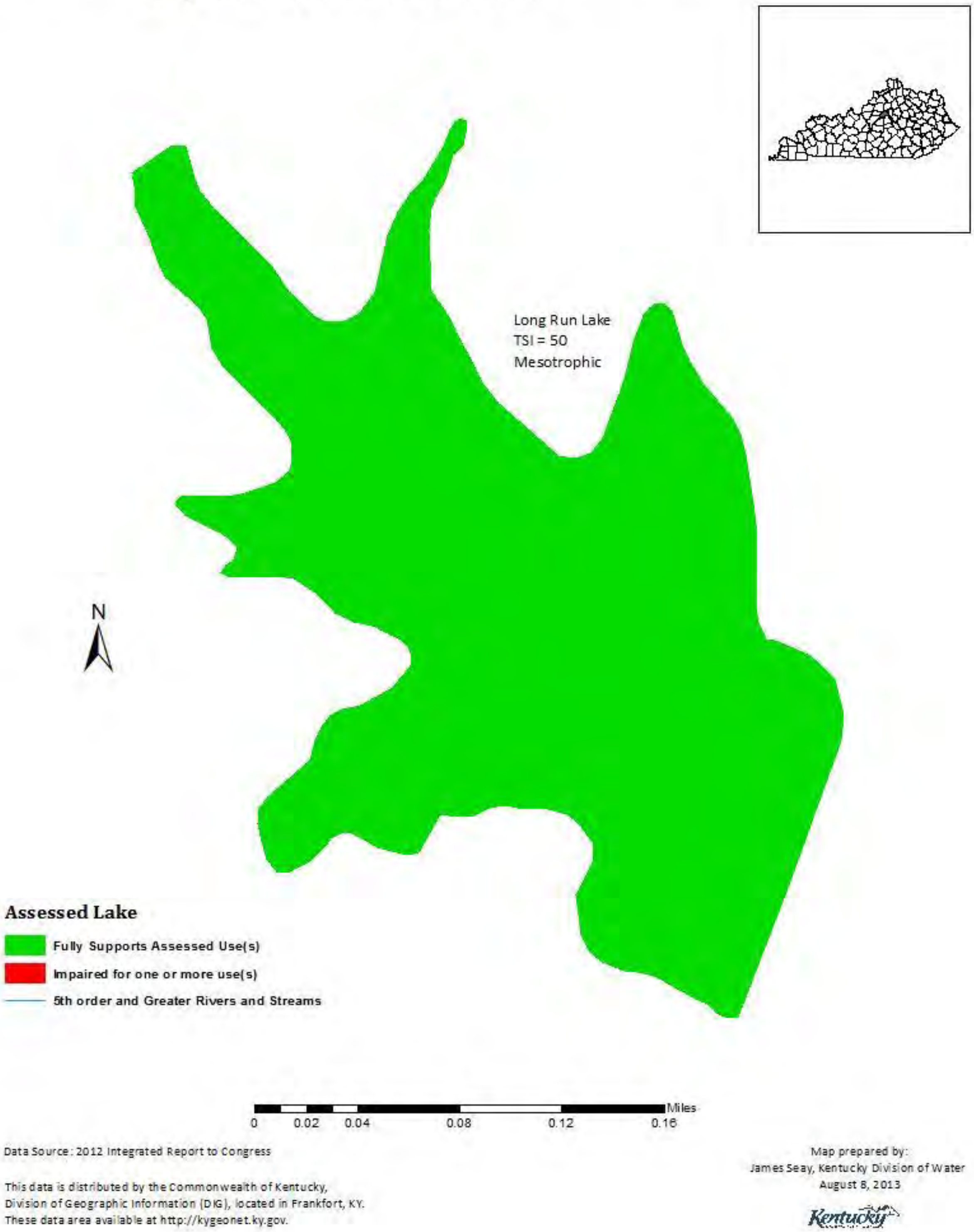


Figure C-17. Monitoring locations, trophic state index and general use support on Marion County Sportsman Lake in the Salt River basin.

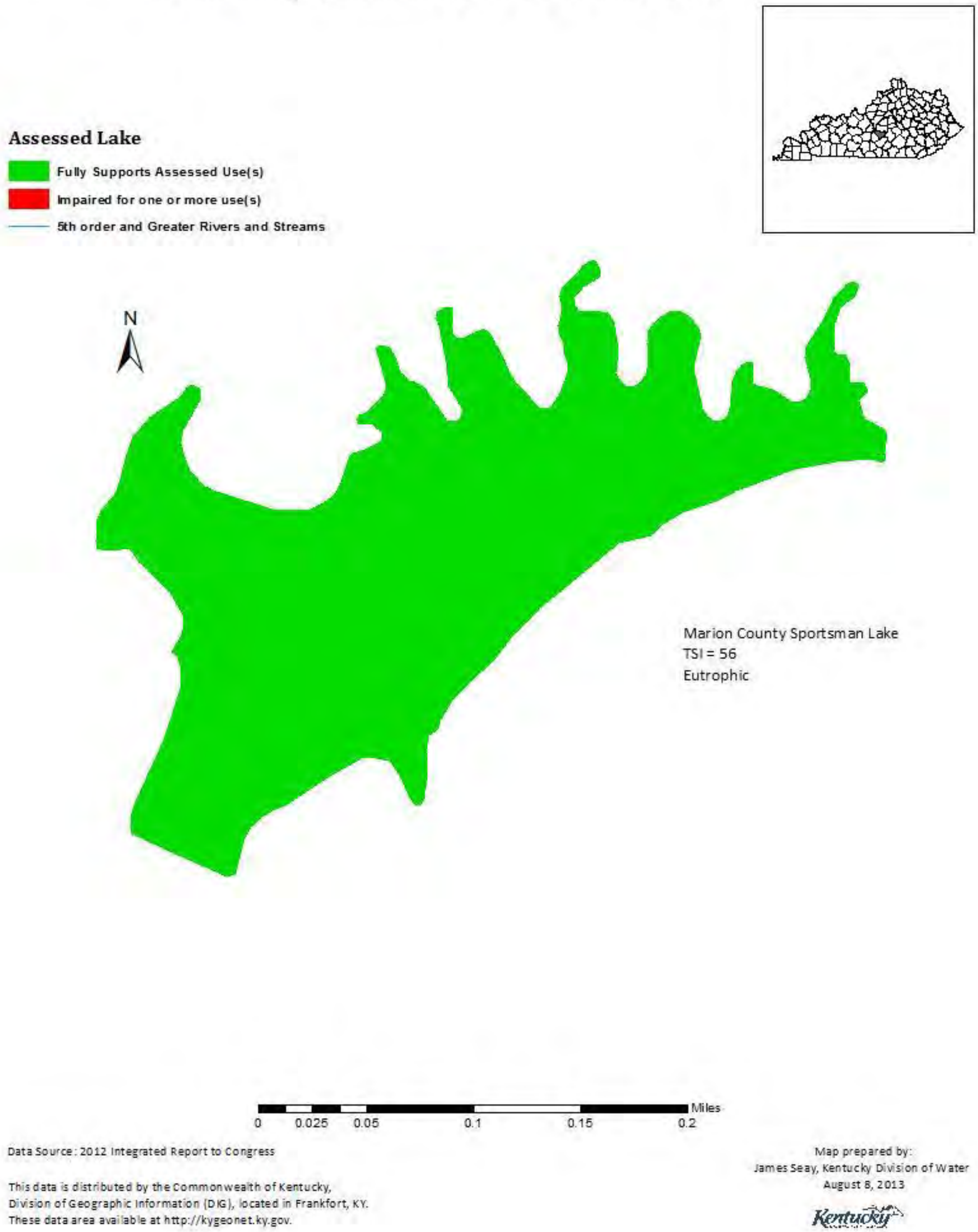


Figure C-18. Monitoring locations, trophic state index and general use support on McNeely Lake in the Salt River basin.

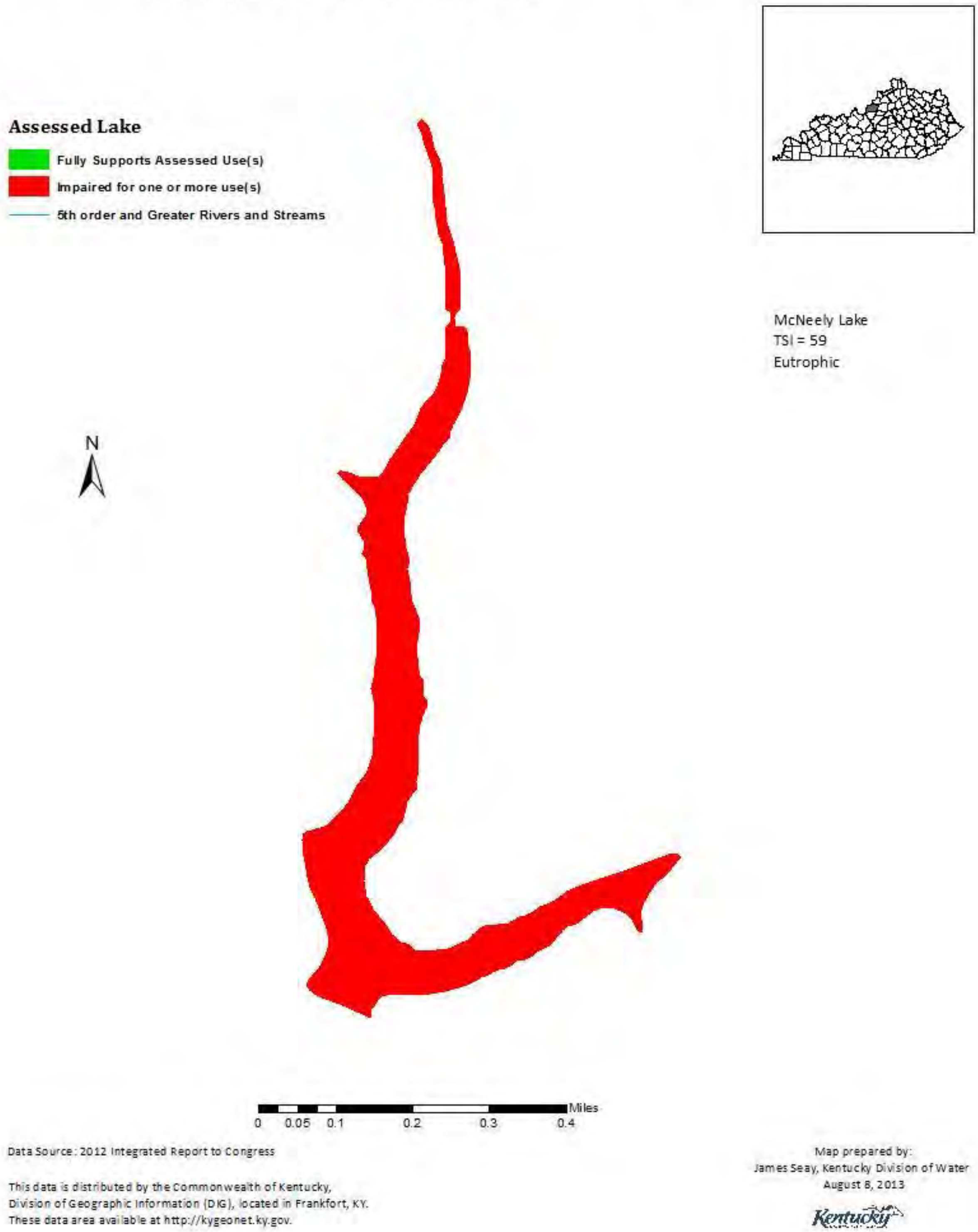


Figure C-19. Monitoring locations, trophic state index and general use support on Miles Park Pond #4 in the Salt River basin.

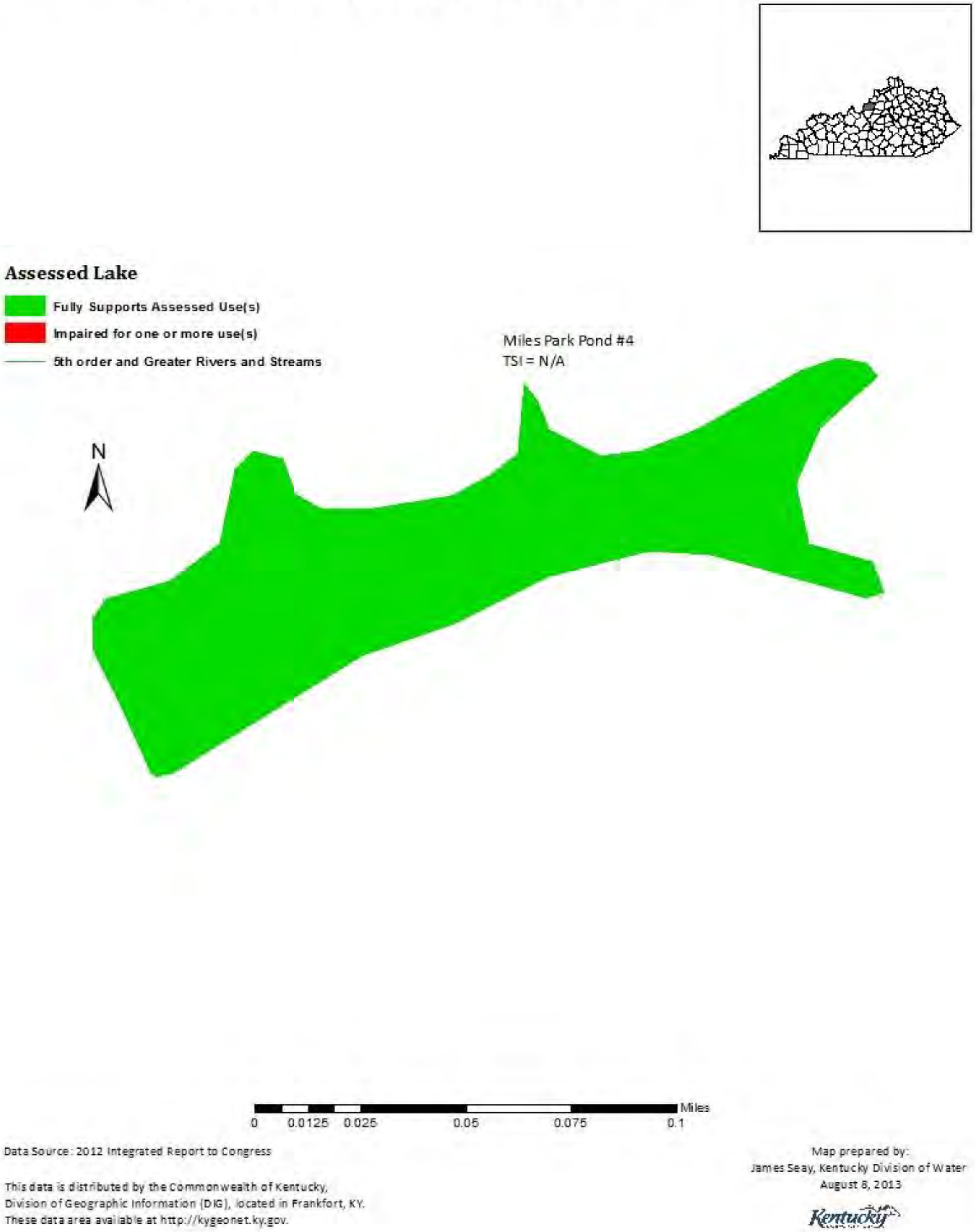


Figure C-20. Monitoring locations, trophic state index and general use support on Reformatory Lake in the Salt River basin.

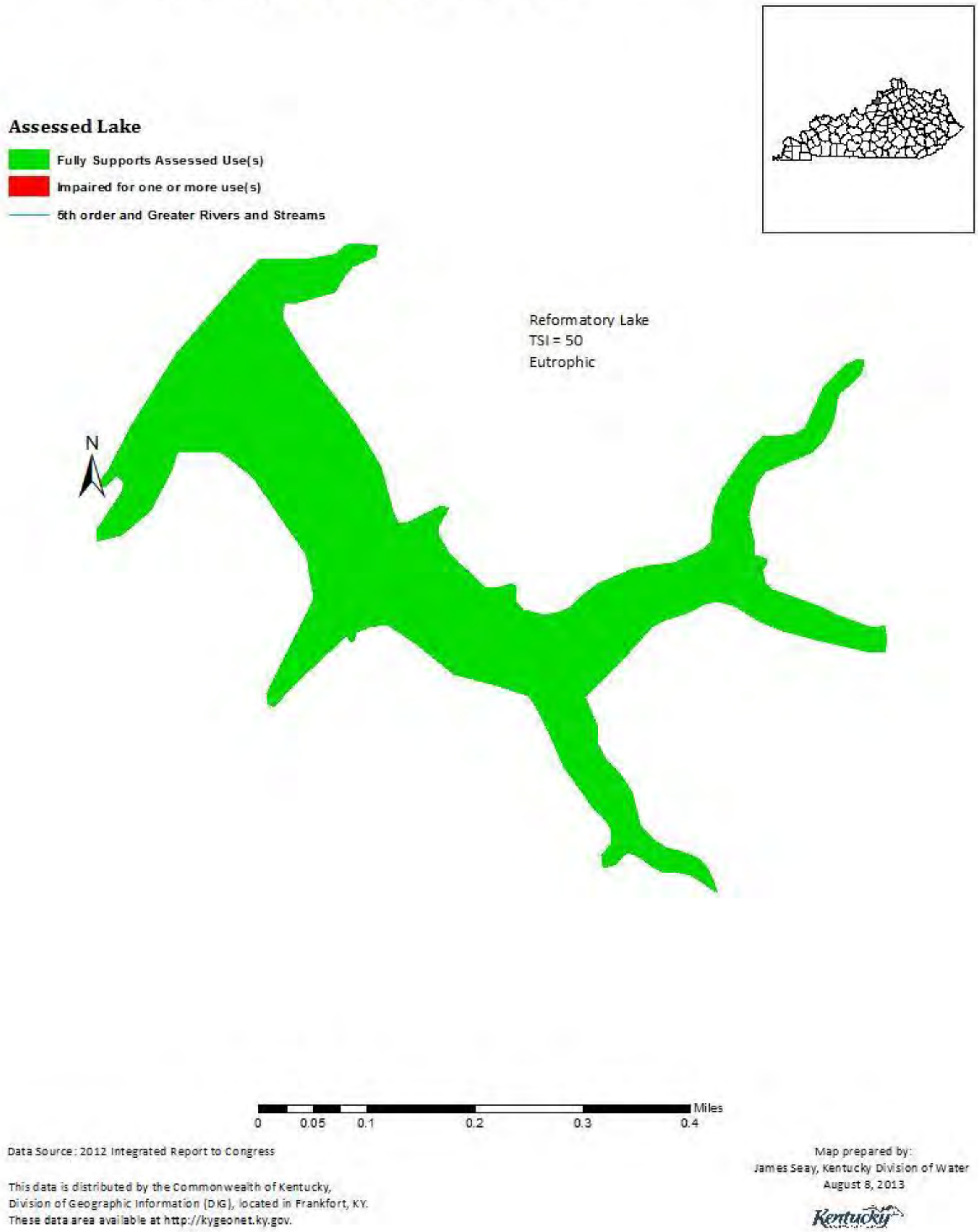


Figure C-21. Monitoring locations, trophic state index and general use support on Shelby Lake in the Salt River basin.

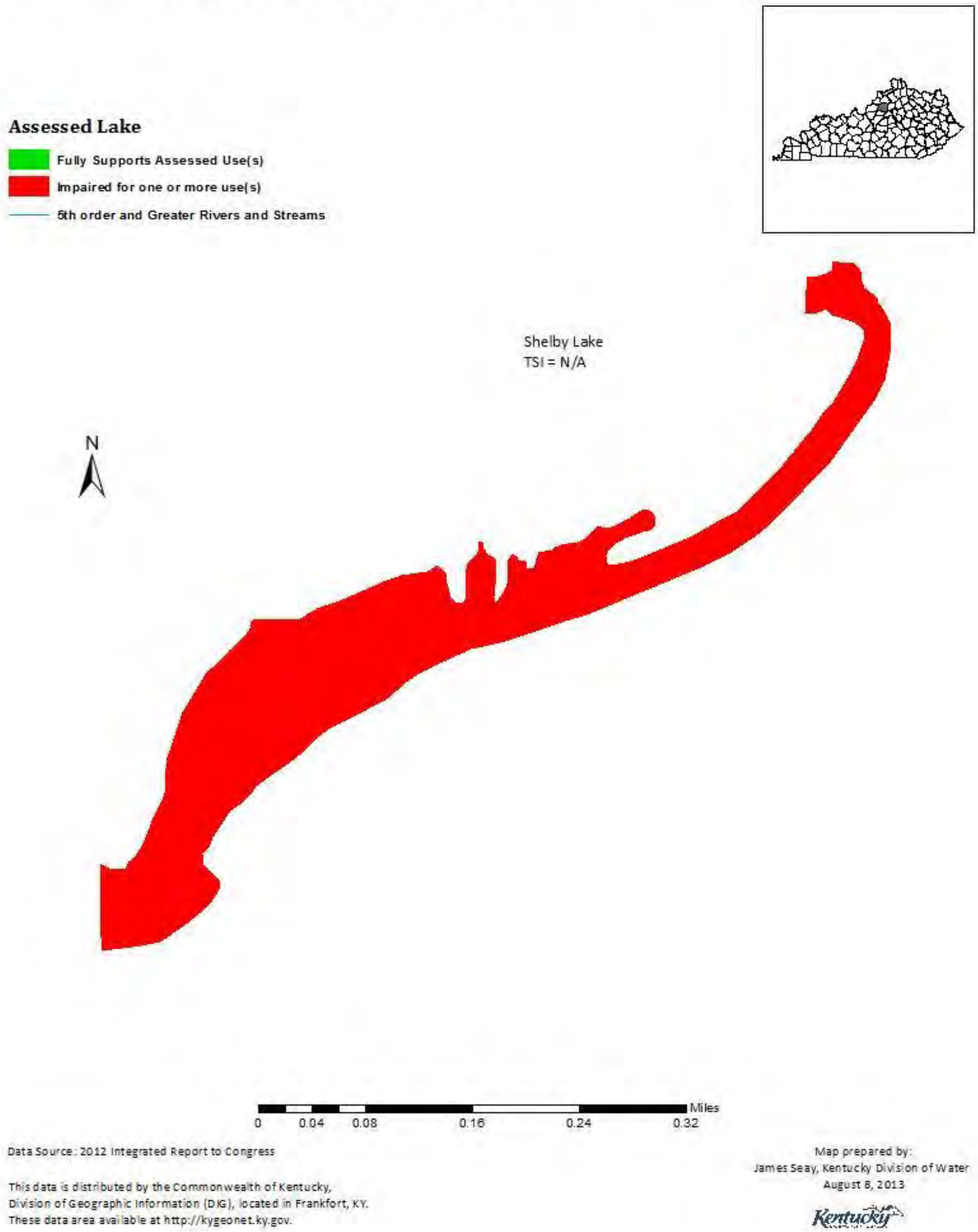


Figure C-22. Monitoring locations, trophic state index and general use support on Sandlick Creek Lake in the Licking River basin.

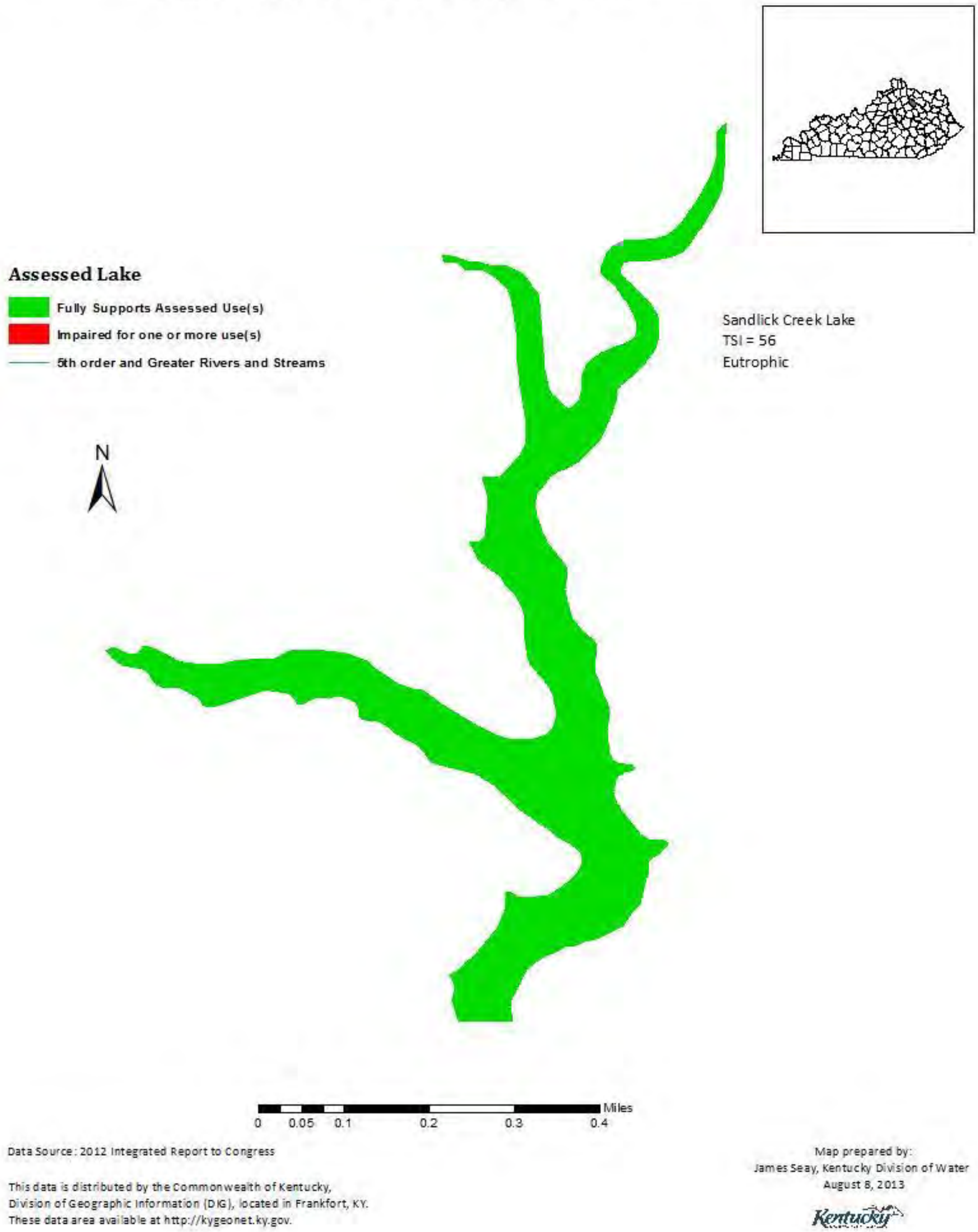


Figure C-23. Monitoring locations, trophic state index and general use support on Sympson Lake in the Salt River basin.

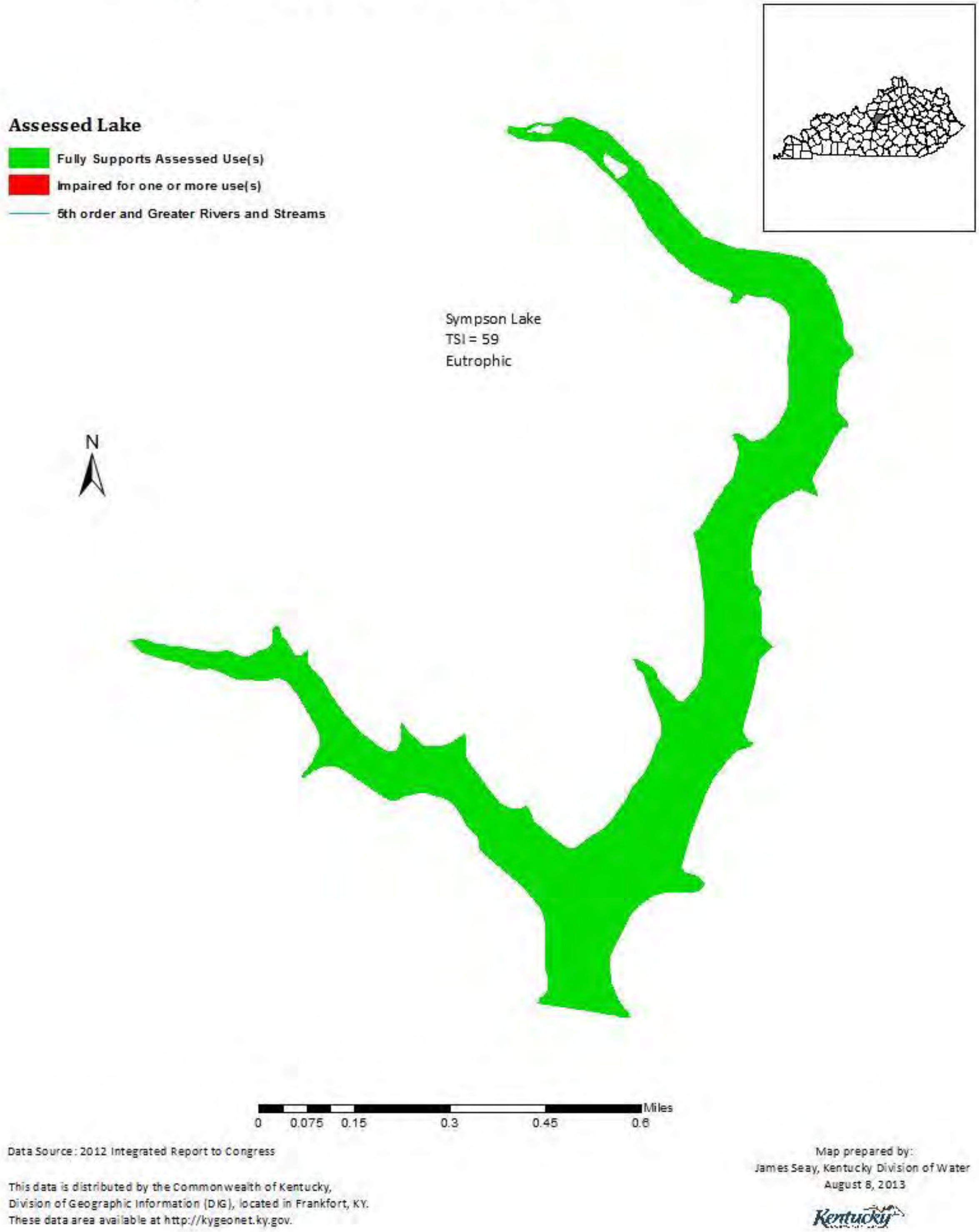


Figure C-24. Monitoring locations, trophic state index and general use support on Taylorsville Reservoir in the Salt River basin.

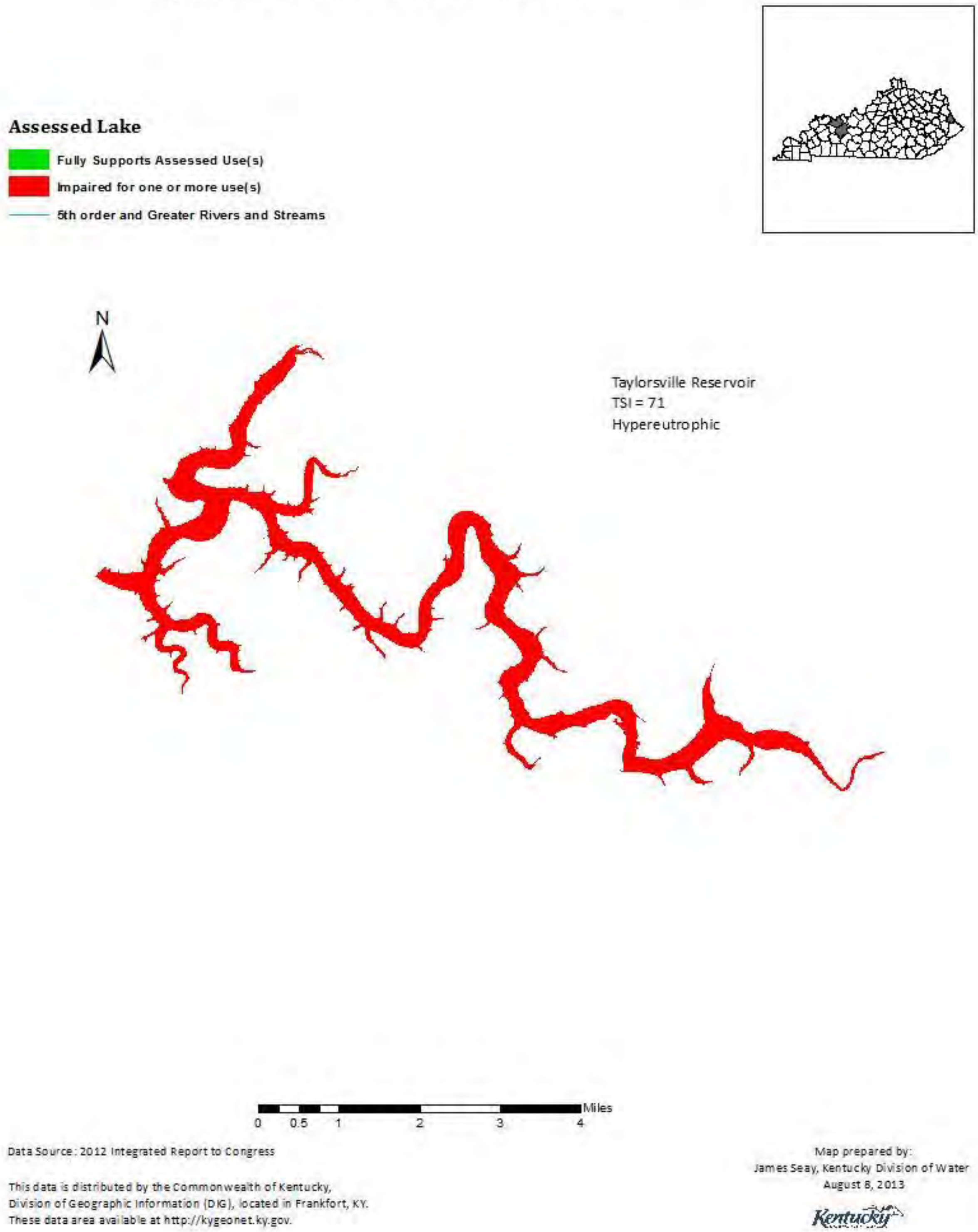


Figure C-25. Monitoring locations, trophic state index and general use support on Tom Wallace Lake in the Salt River basin.

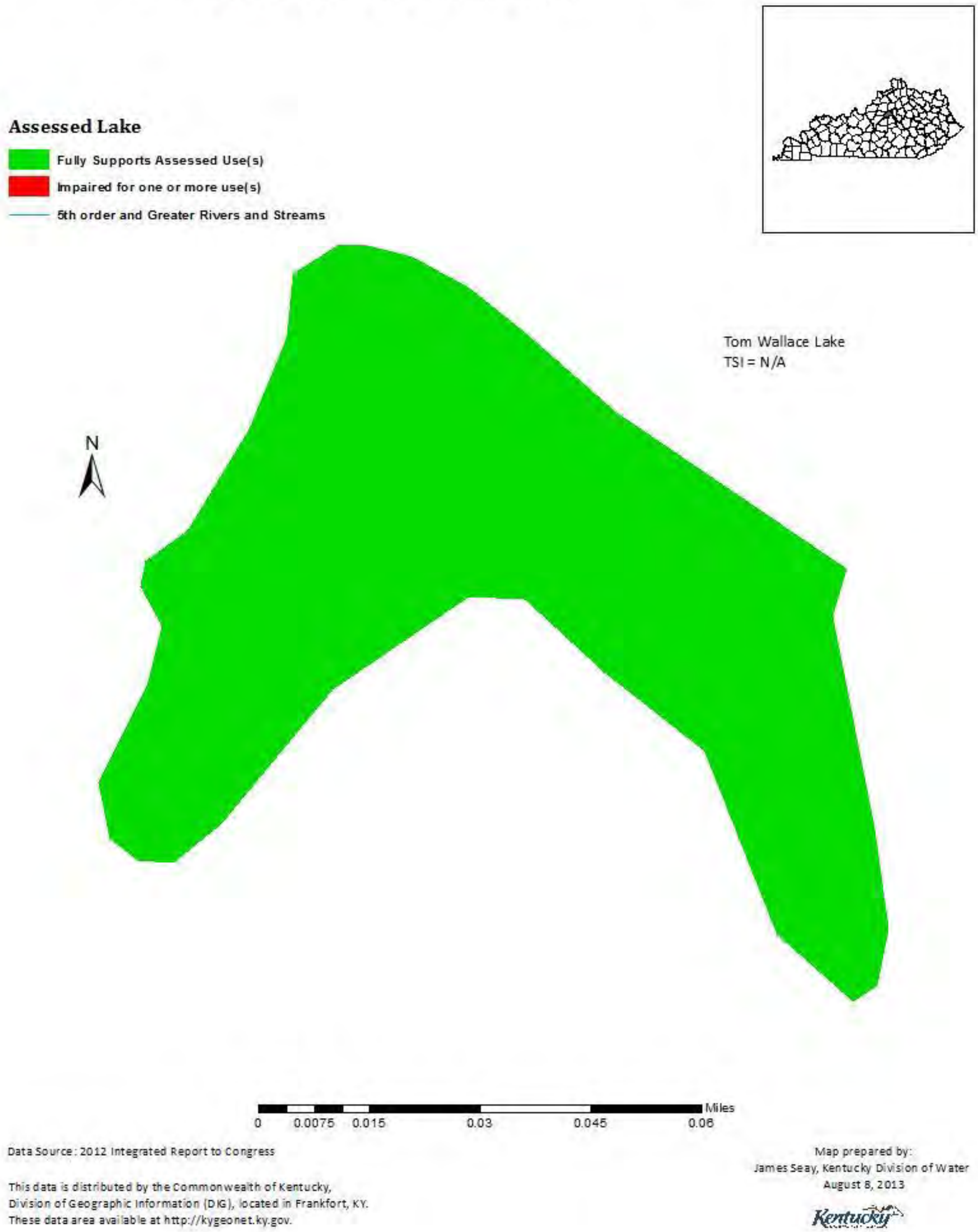


Figure C-26. Monitoring locations, trophic state index and general use support on Williamstown Lake in the Licking River basin.

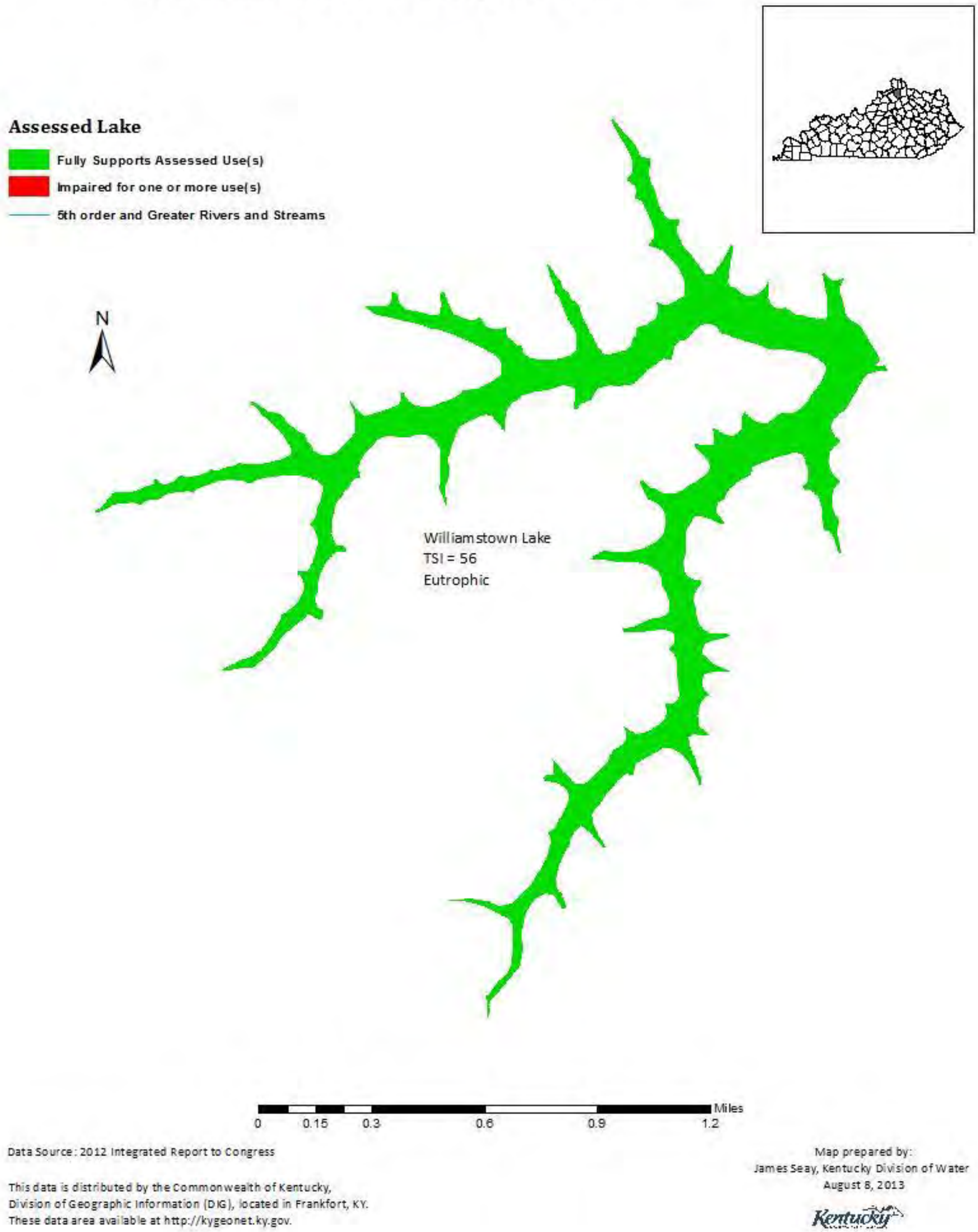
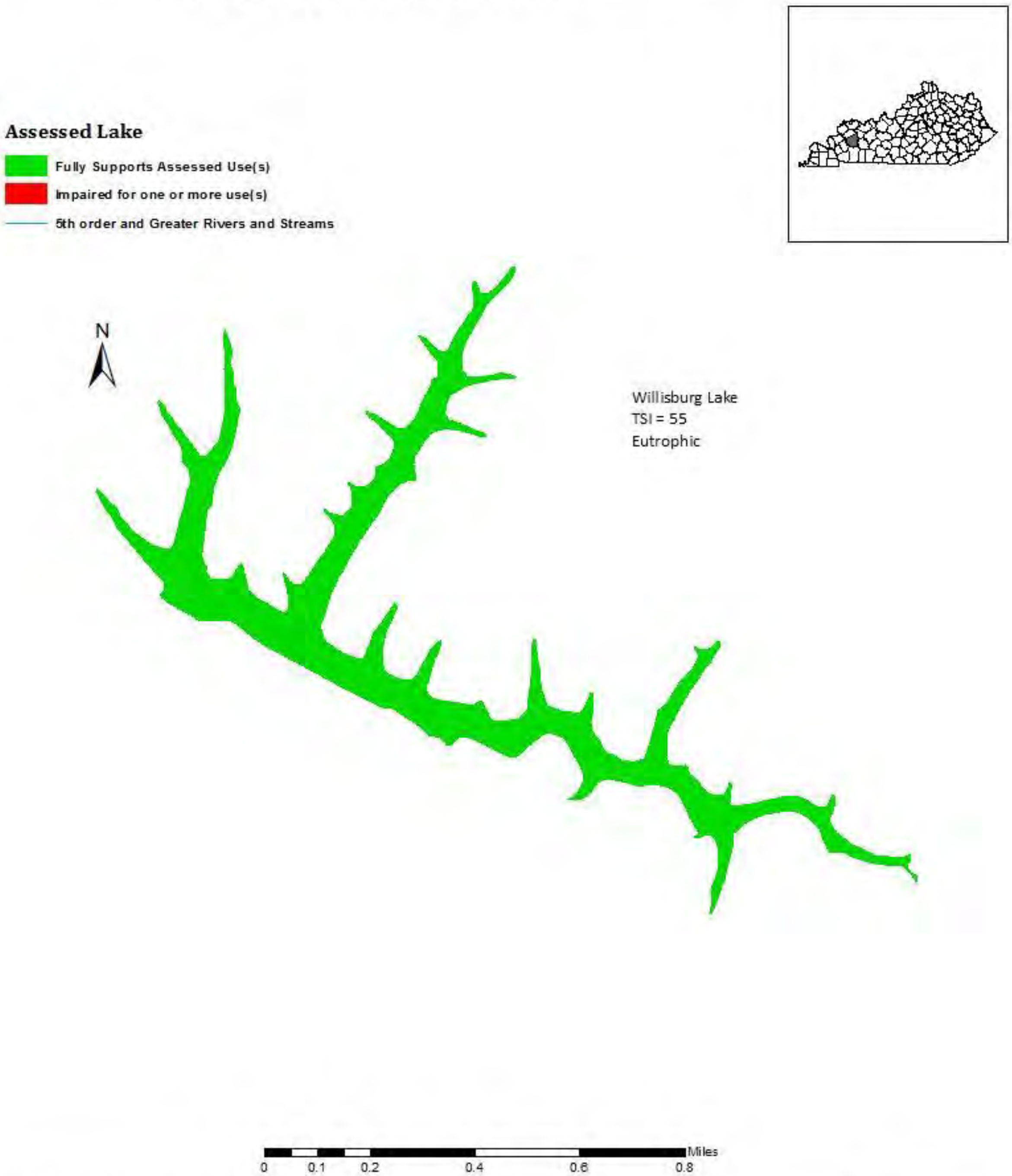


Figure C-27. Monitoring locations, trophic state index and general use support on Willisburg Lake in the Salt River basin.



Data Source: 2012 Integrated Report to Congress

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August 8, 2013

Figure C-28. Monitoring locations, trophic state index and general use support on Willow Pond in the Salt River basin.

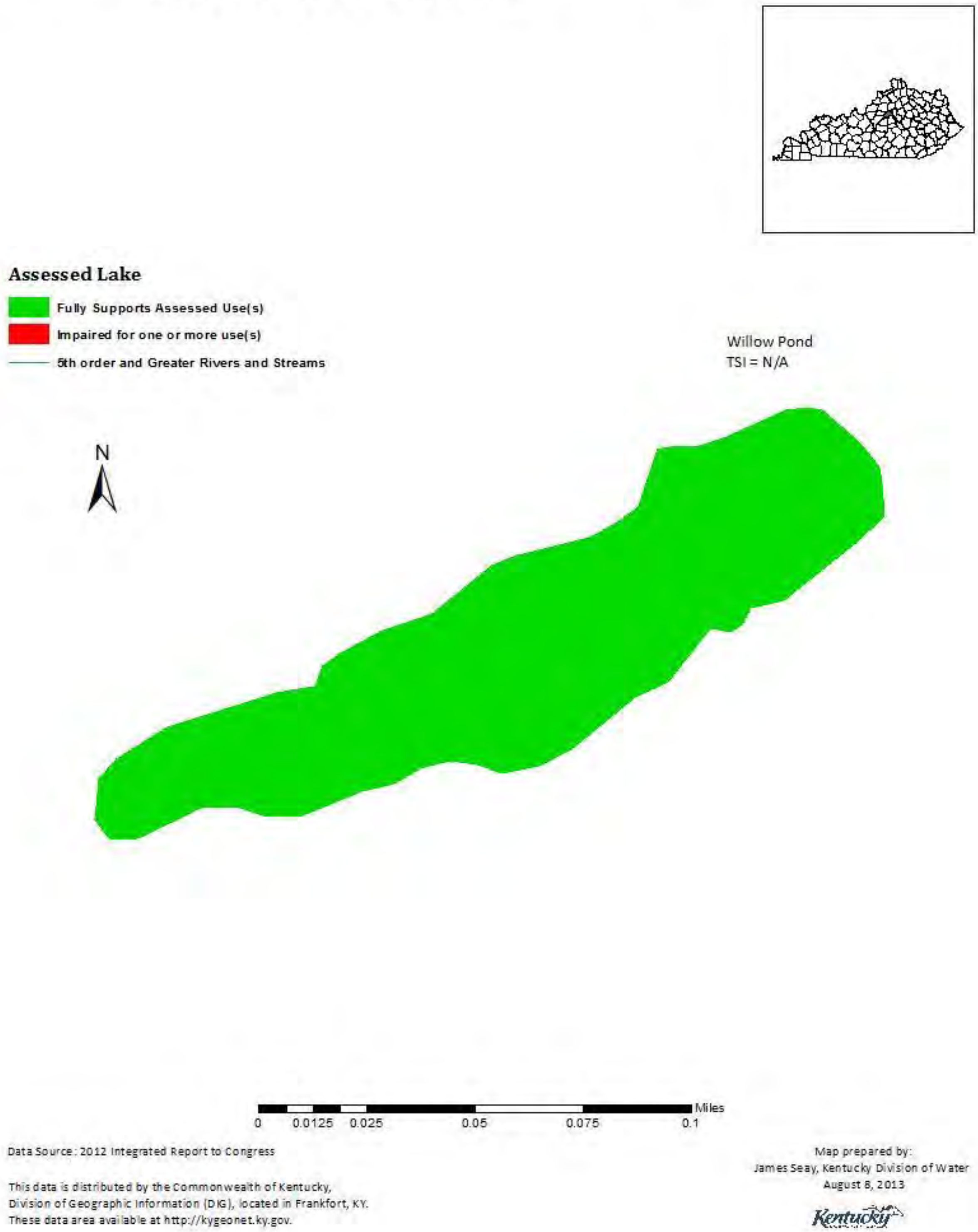


Figure C-29. Monitoring locations, trophic state index and general use support on Beulah (aka. Tyner) Lake in the Upper Cumberland River basin.

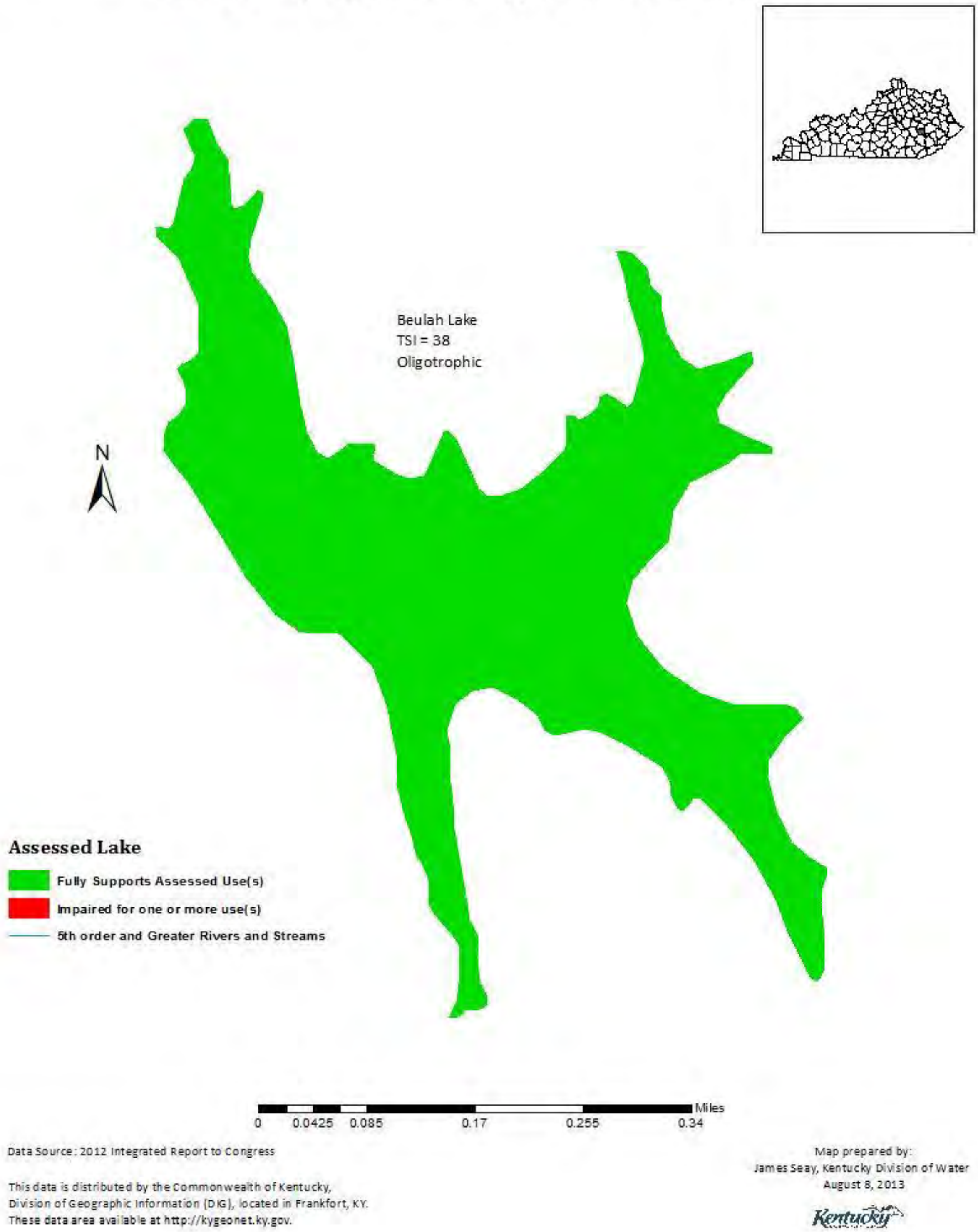


Figure C-30. Monitoring locations, trophic state index and general use support on Cannon Creek Lake in the Upper Cumberland River basin.

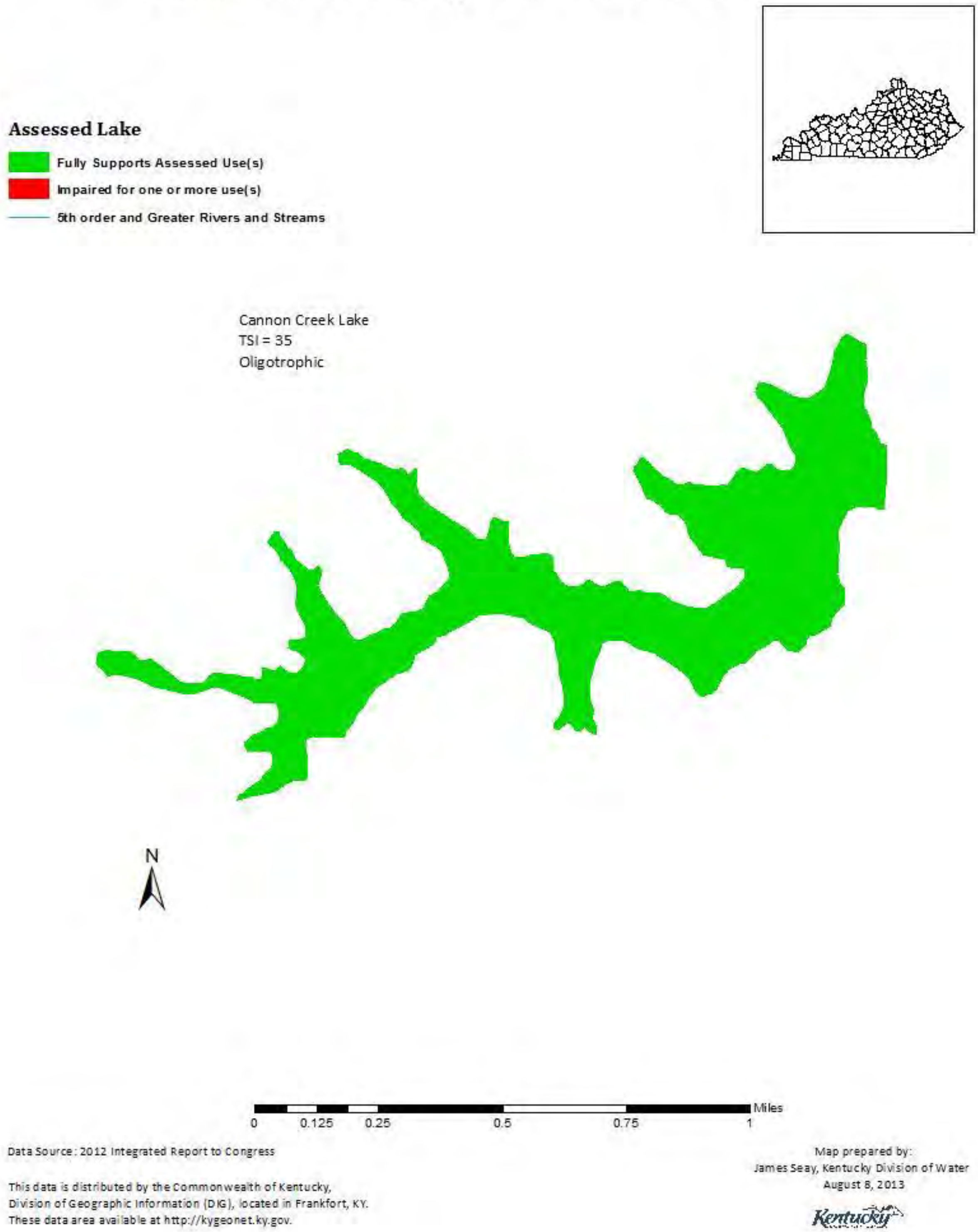


Figure C-31. Monitoring locations, trophic state index and general use support on Chenoa Lake in the Upper Cumberland basin.

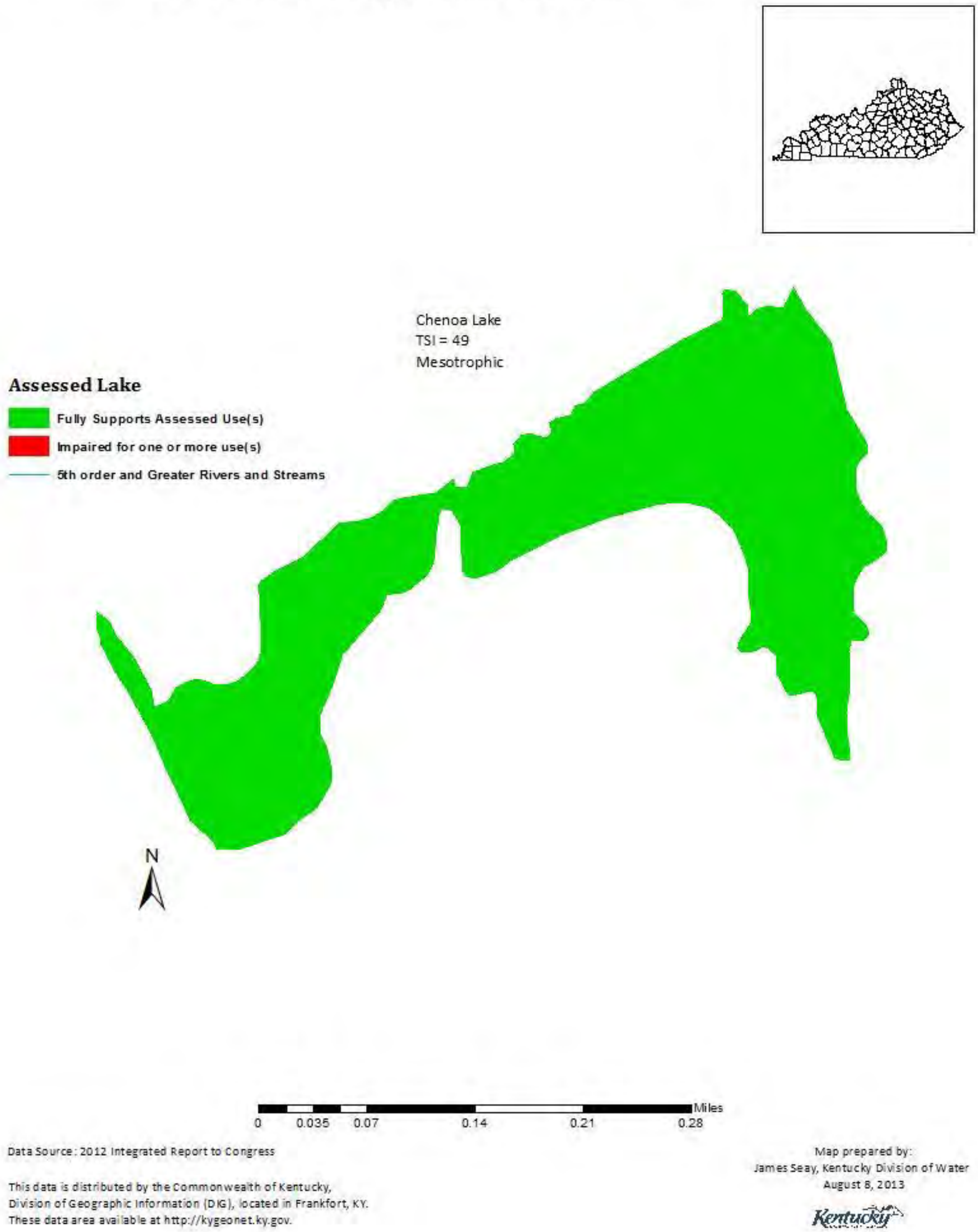


Figure C-32. Monitoring locations, trophic state index and general use support on Herb Smith Lake (aka Cranks Creek Lake) in the Upper Cumberland River basin.

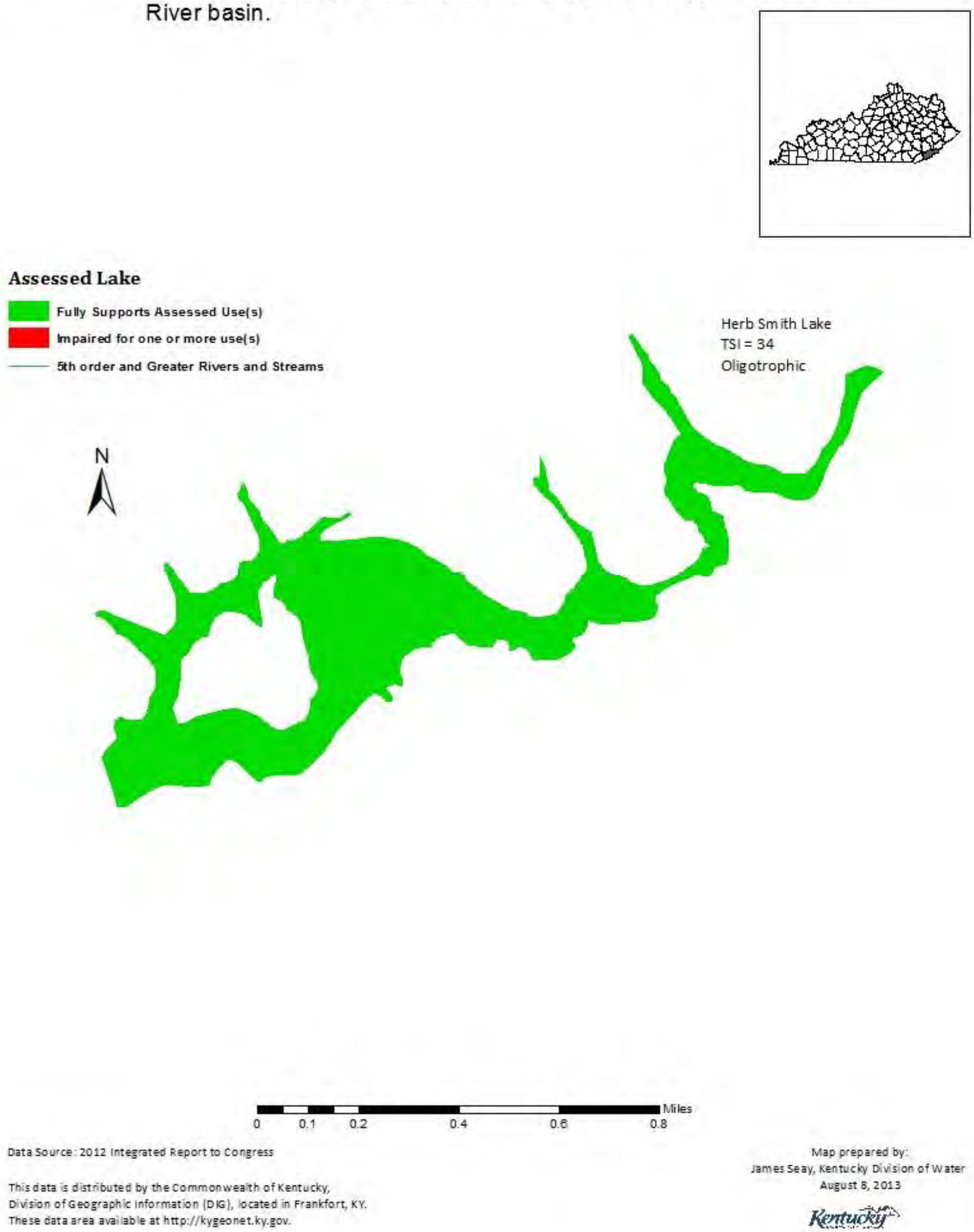


Figure C-33. Monitoring locations, trophic state index and general use support on Crawford Lake in the Four Rivers basin.

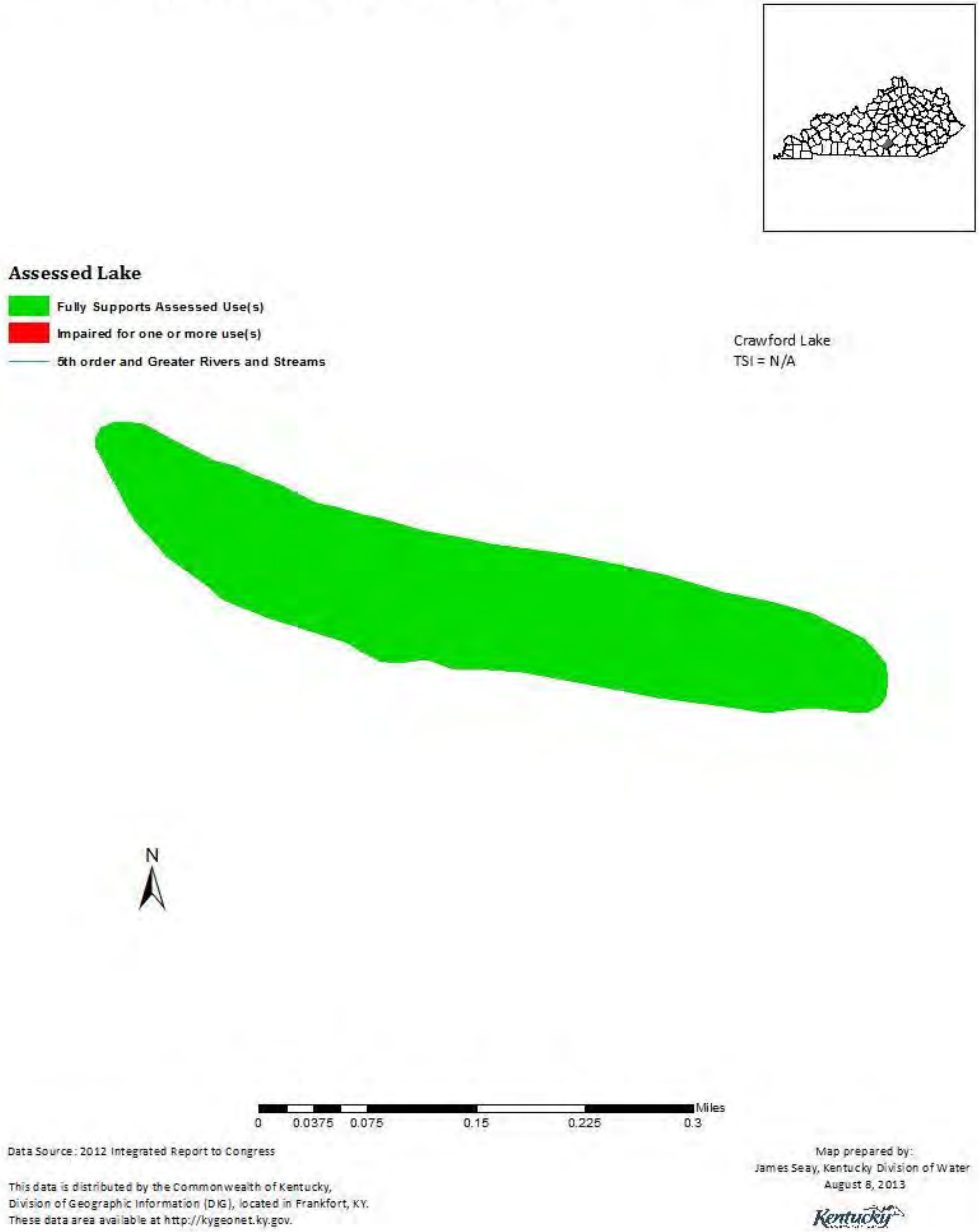
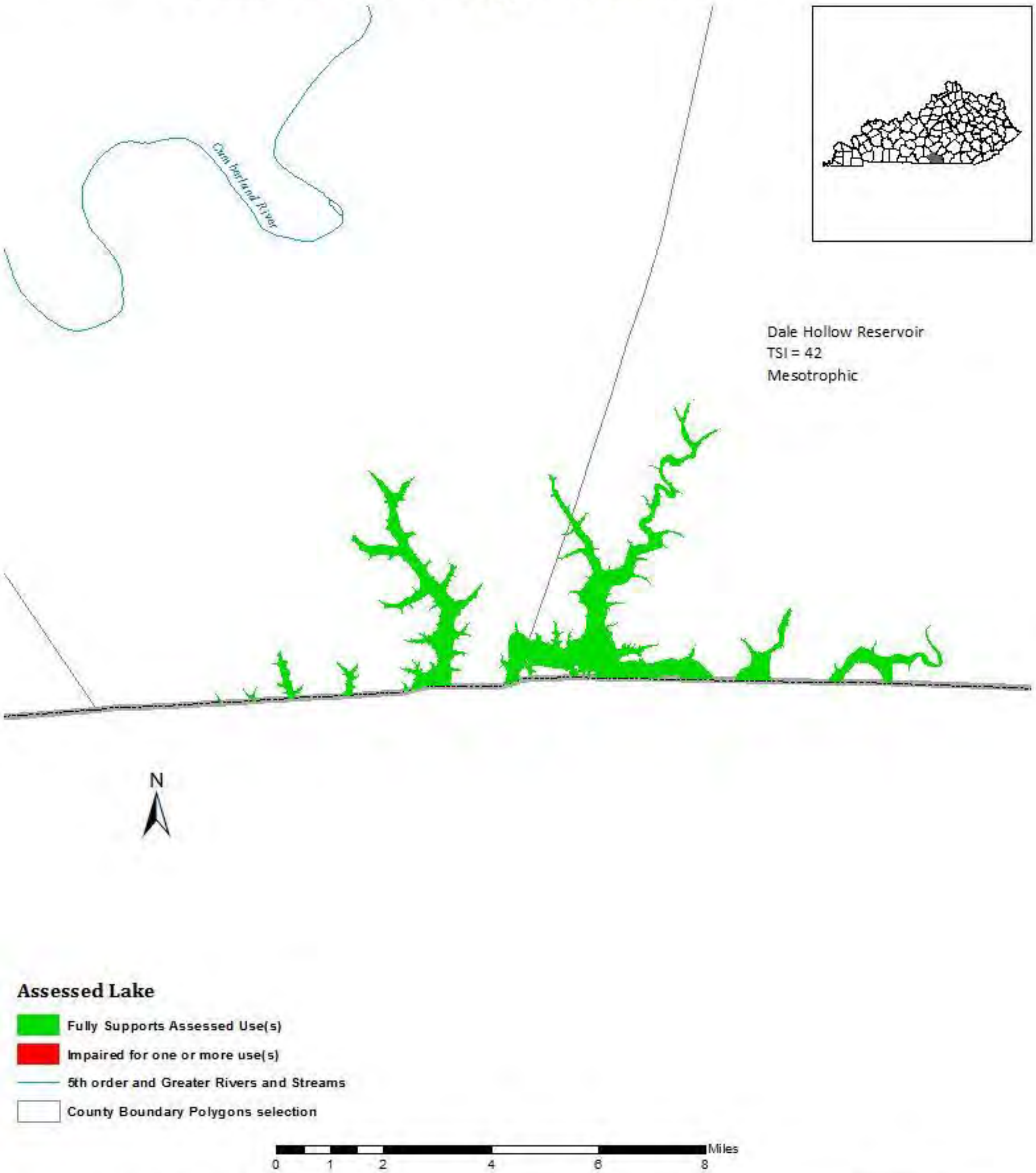


Figure C-34. Monitoring locations, trophic state index and general use support on Dale Hollow Reservoir in the Upper Cumberland basin.



Data Source: 2012 Integrated Report to Congress

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August 8, 2013

Figure C-35. Monitoring locations, trophic state index and general use support on Kentucky Lake, Honker Lake, Hematite Lake, Energy Lake and Lake Barkley in the 4 Rivers region.

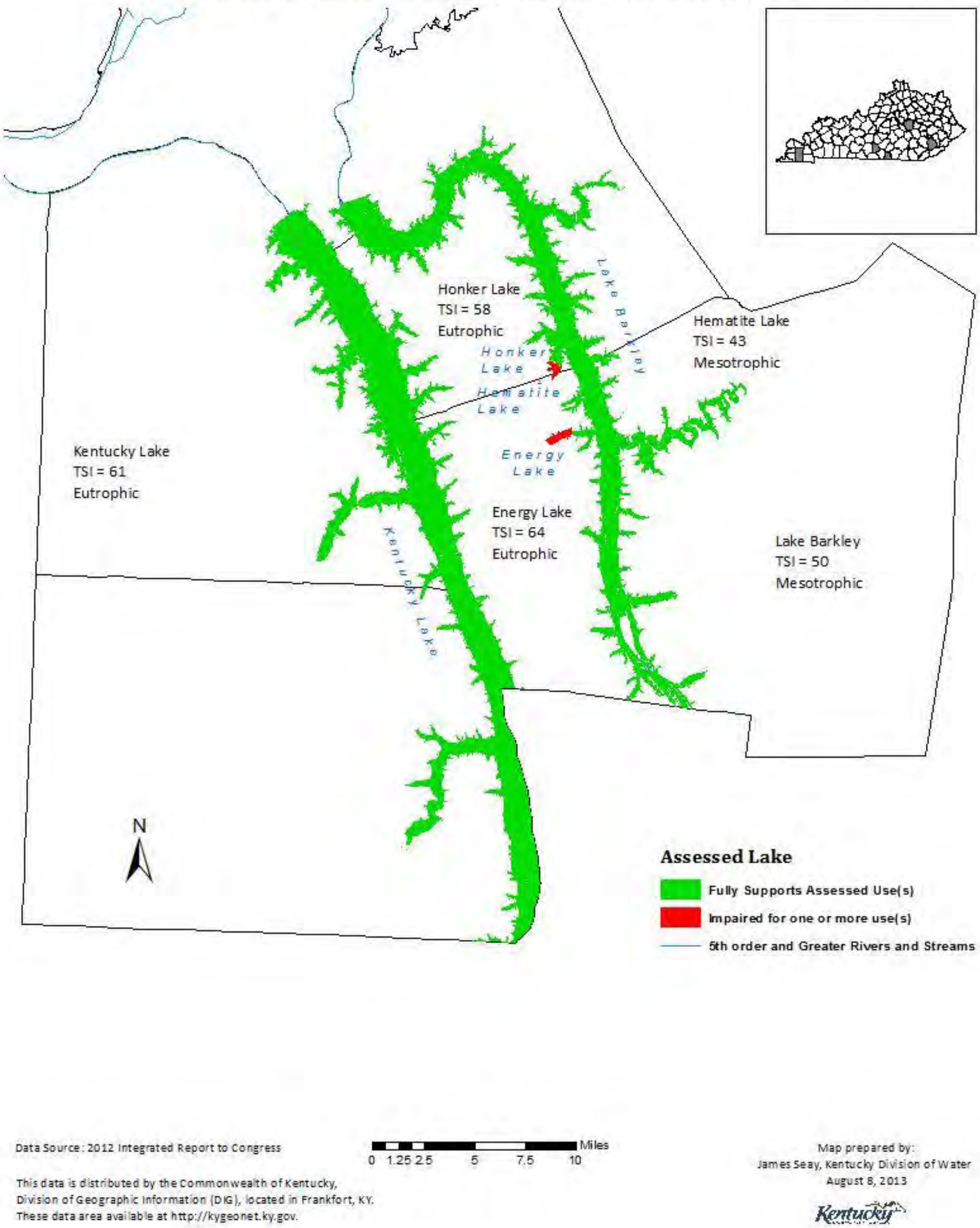

Figure C-36. Monitoring locations, trophic state index and general use support on Lake Blythe in the 4 Rivers basin.

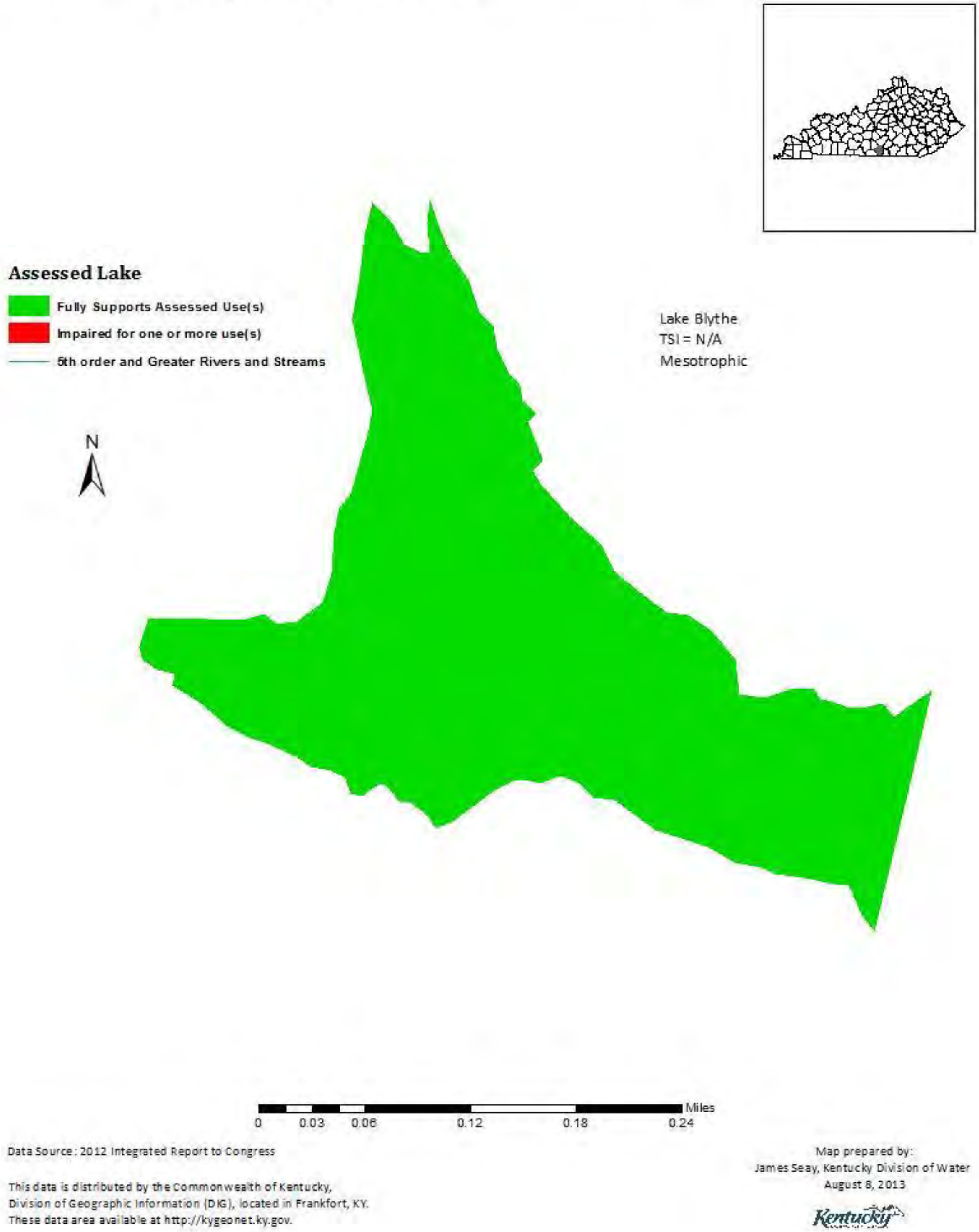

Figure C-37. Monitoring locations, trophic state index and general use support on Lake Cumberland in the Upper Cumberland basin.

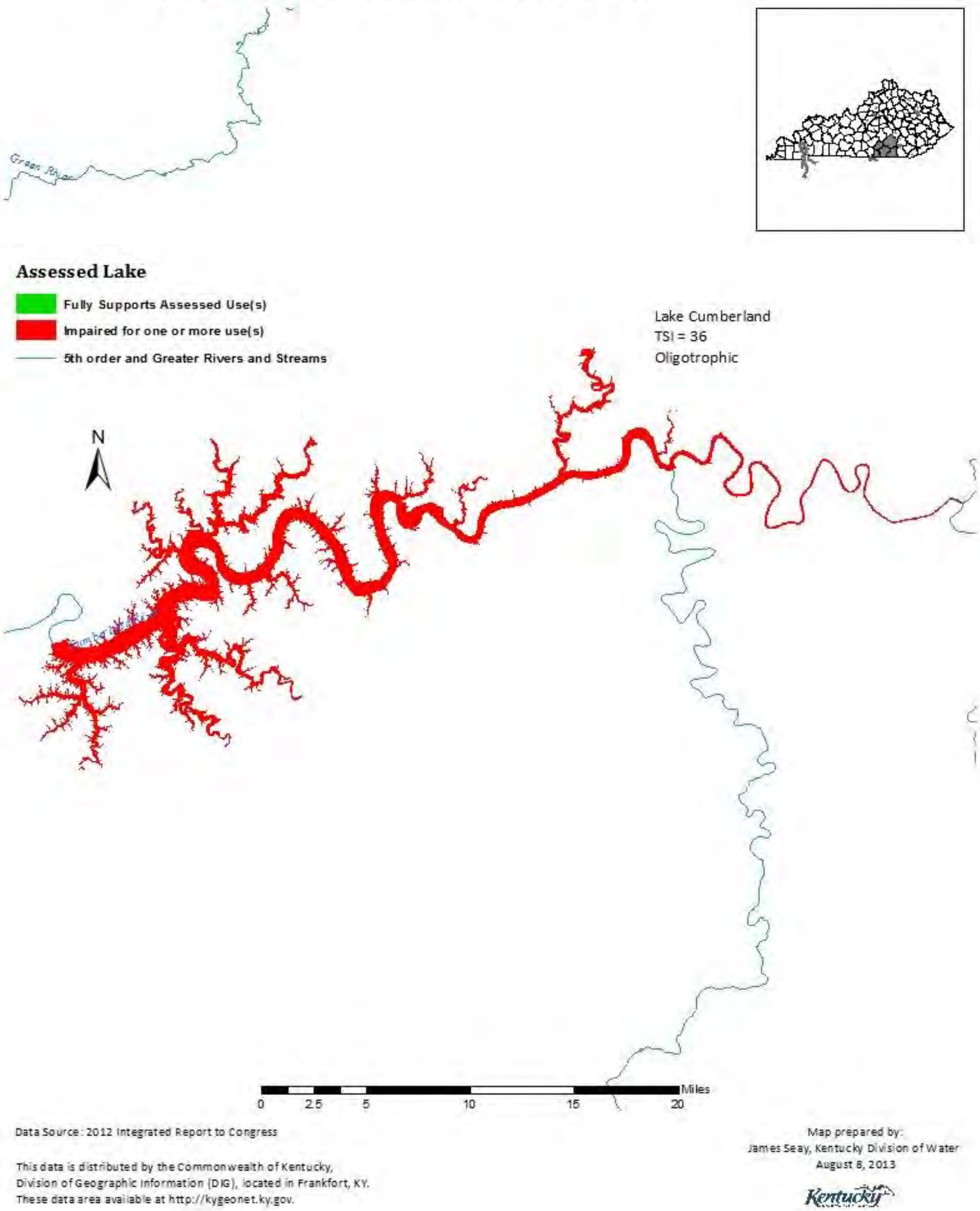

Figure C-38. Monitoring locations, trophic state index and general use support on Lake Linville in the Upper Cumberland basin.

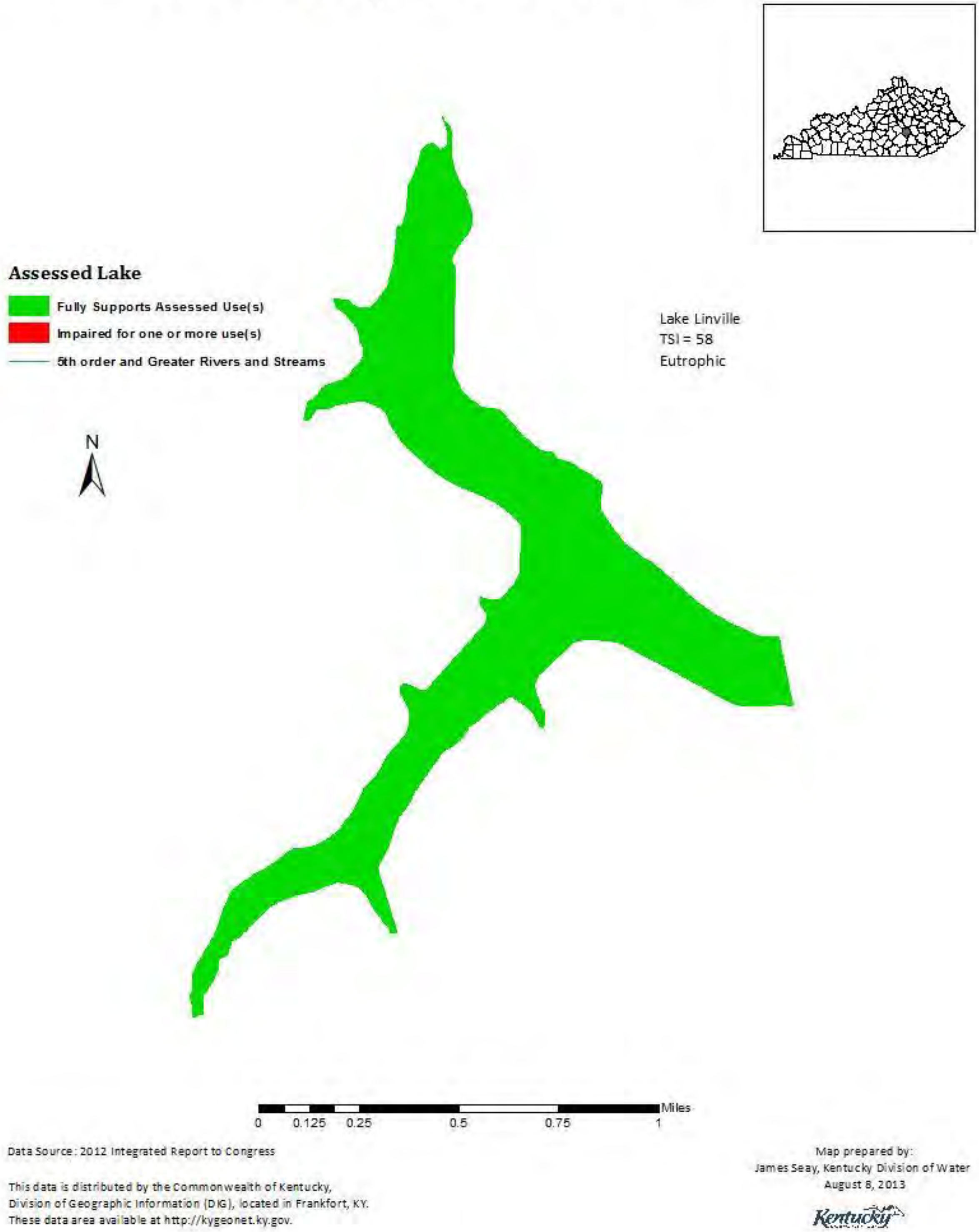

Figure C-39. Monitoring locations, trophic state index and general use support on Lake Morris in the Four Rivers basin.

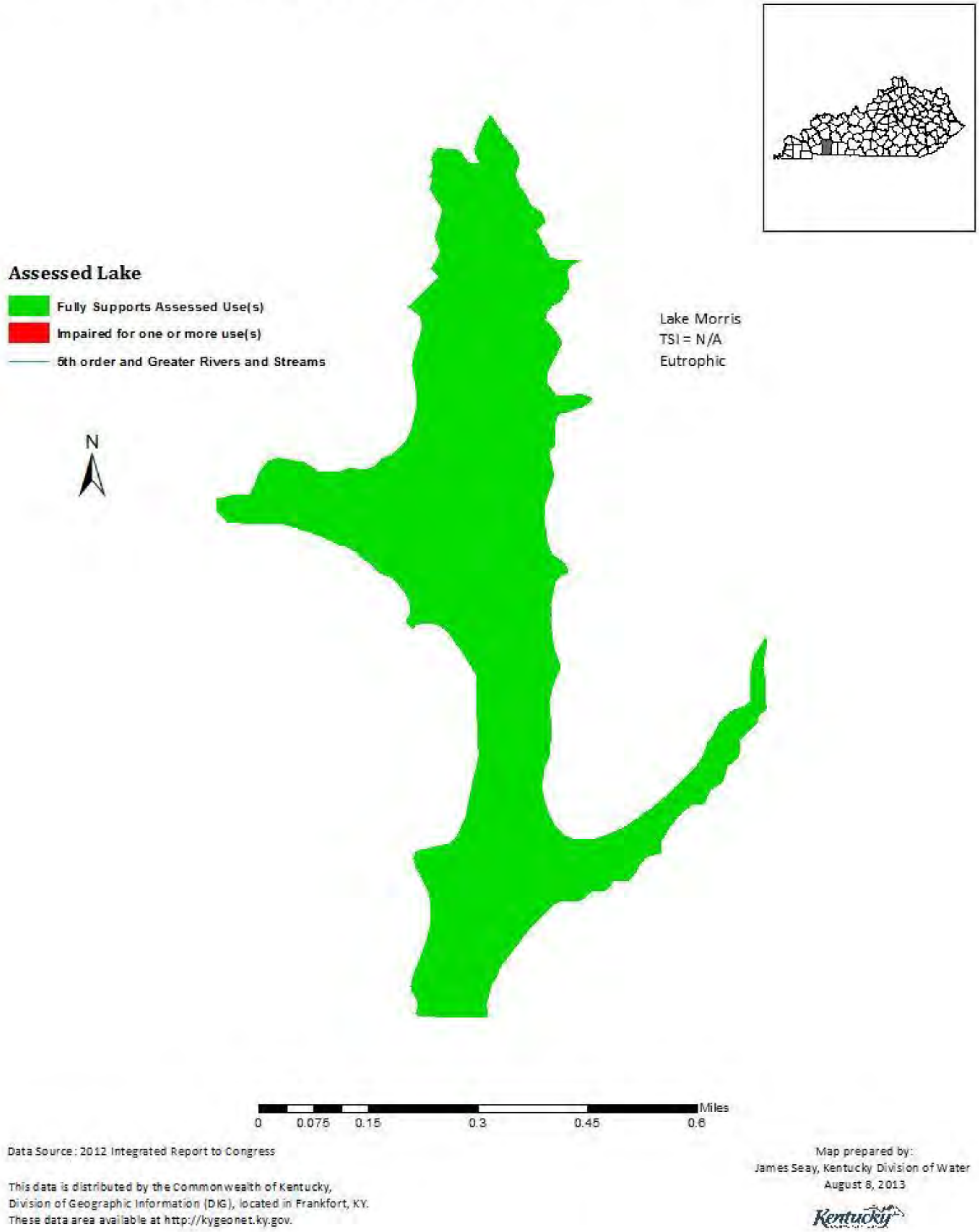

Figure C-40. Monitoring locations, trophic state index and general use support on Laurel Creek Reservoir in the Upper Cumberland River basin.

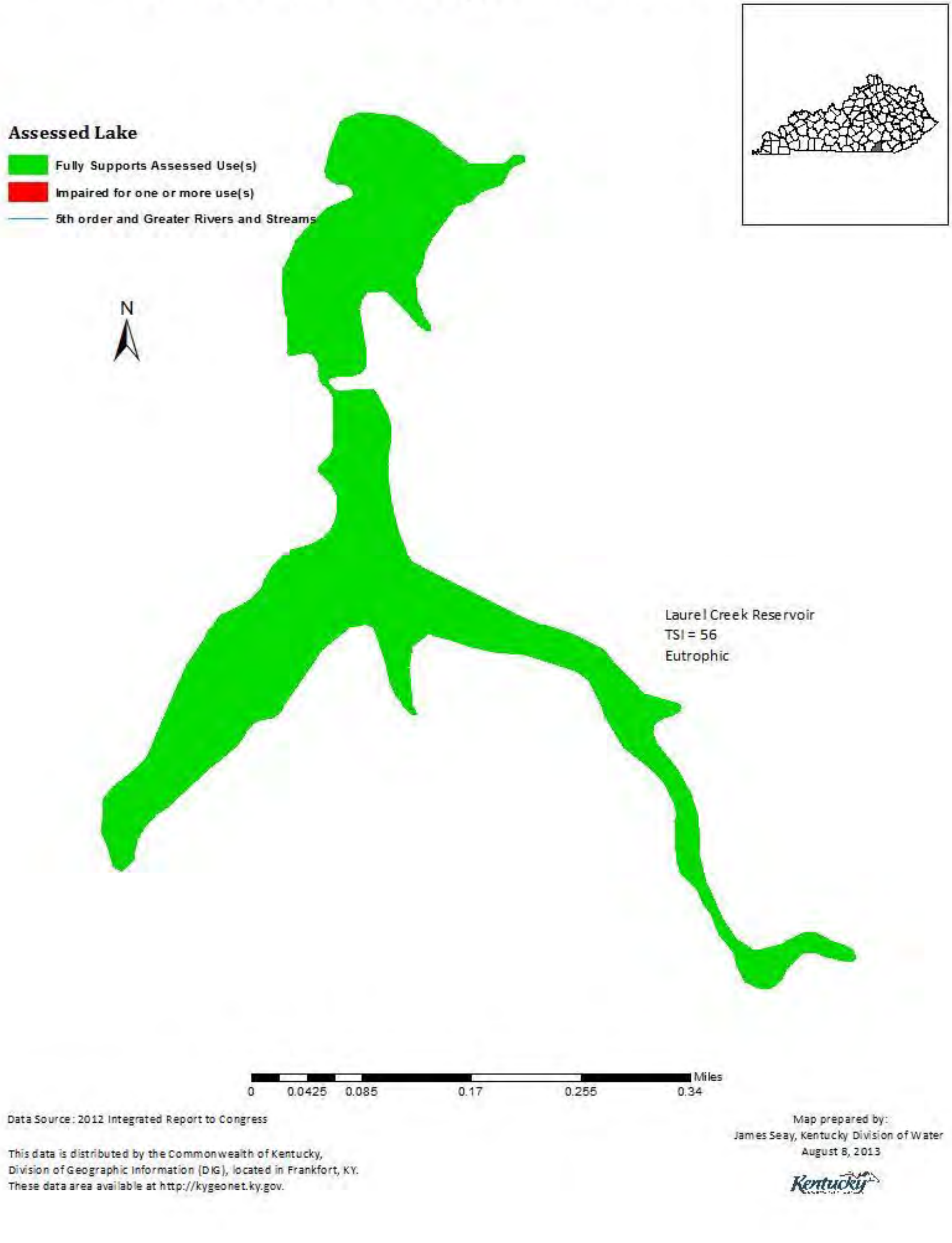

Figure C-42. Monitoring locations, trophic state index and general use support on Martins Fork Reservoir in the Upper Cumberland River basin.

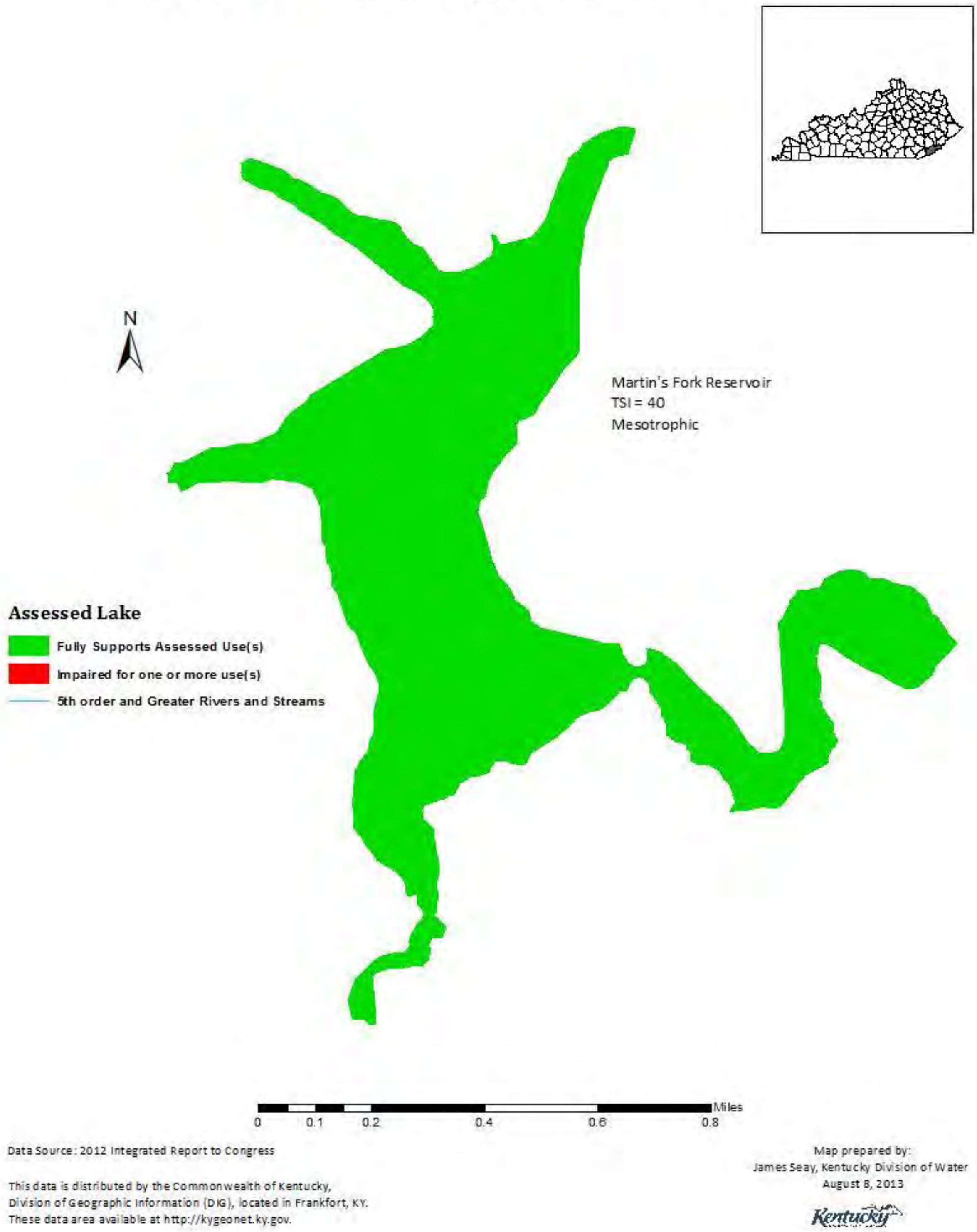

Figure C-43. Monitoring locations, trophic state index and general use support on Metropolis Lake in the Four Rivers basin.

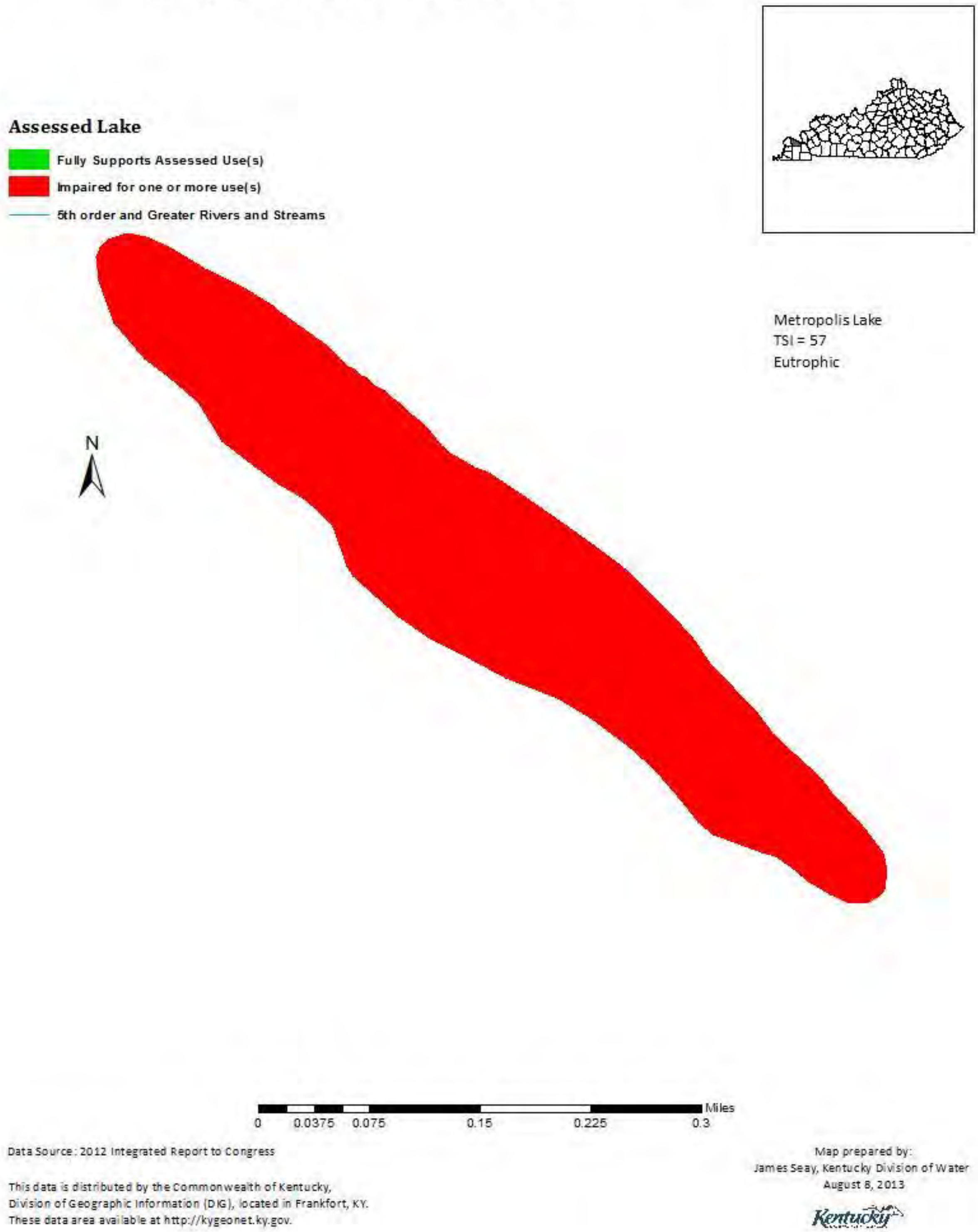

Figure C-44. Monitoring locations, trophic state index and general use support on Swan Pond in the Four Rivers basin.

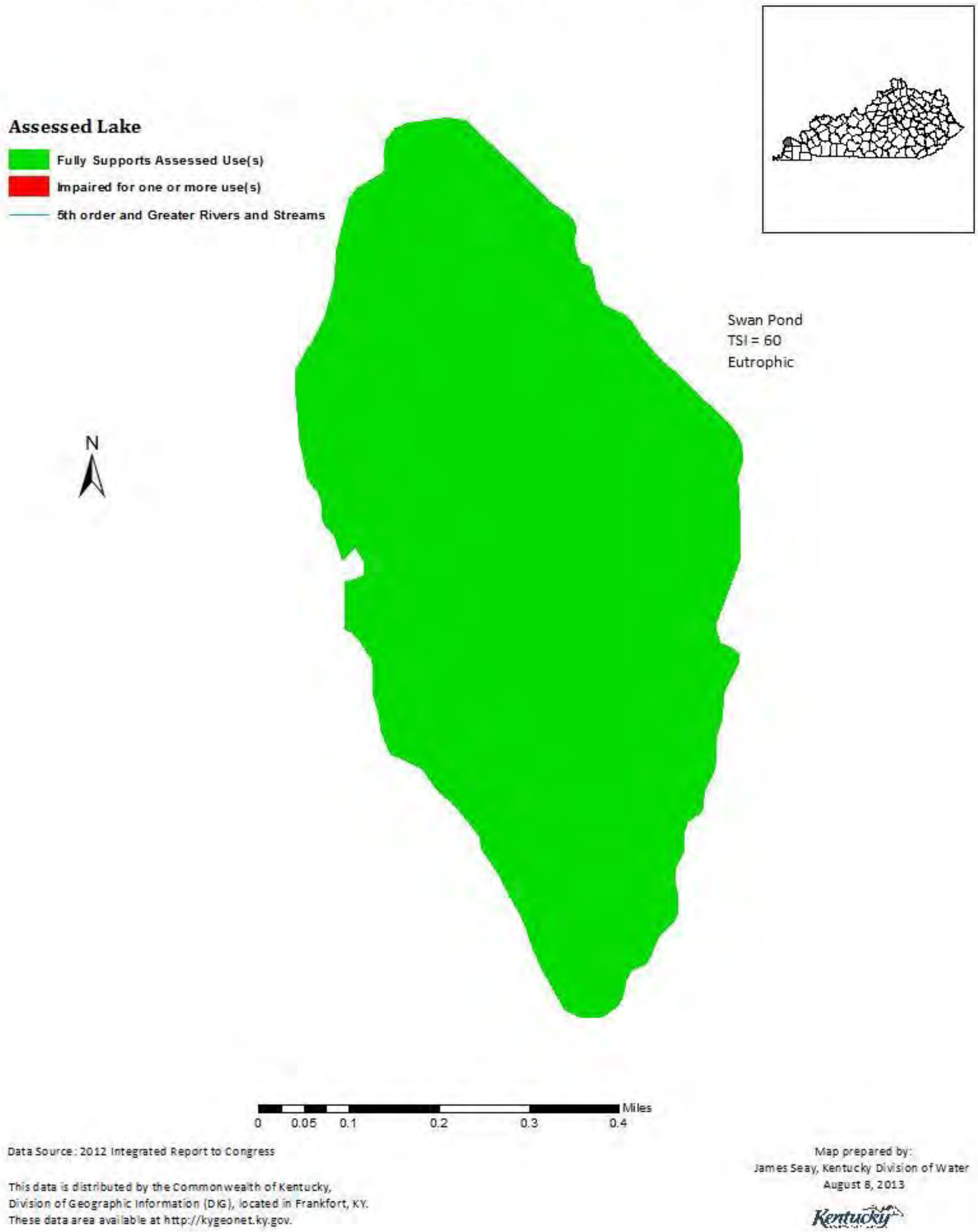

Figure C-45. Monitoring locations, trophic state index and general use support on Turner Lake in the Four Rivers basin.