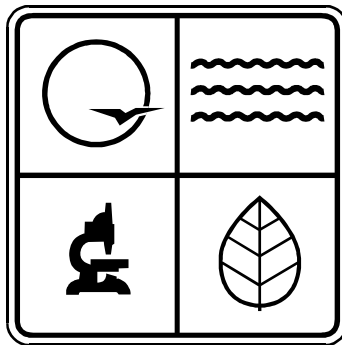


MISSOURI
WATER QUALITY REPORT
(SECTION 305(b) REPORT)

2010

MISSOURI DEPARTMENT OF NATURAL RESOURCES



WATER PROTECTION PROGRAM

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CHAPTER 1. EXECUTIVE SUMMARY

The Missouri Water Quality Report is published every two years. The report summarizes water quality issues and judges the degree of progress Missouri has made toward meeting Federal Clean Water Act goals. The water quality assessments made in this report will help direct future water quality management efforts to those waters most in need of restoration or protection.

WATER RESOURCES AND PROBLEMS

Missouri has an area of 69,000 square miles and a population of 5.6 million people, according to the 2000 census. About half of the population is concentrated on opposite sides of the state in the Kansas City and St. Louis metro areas, leaving most of the state and its waters rural in nature. Surface and groundwater in Missouri are quite varied in quantity and quality, corresponding closely with geology and land use.

Northern and Western Missouri

Northern and western Missouri, originally prairie land, are now used primarily for crop and livestock production and are underlain by bedrock containing several relatively impermeable shale and clay layers. Surface waters are more turbid and are greatly affected by high rates of sediment deposition. These deposits, caused by soil erosion, result in poor aquatic habitat due to the fine, unstable materials of stream bottoms. Up to 8,000 miles of classified streams may be affected by these processes or other types of degradation of aquatic habitat, such as flow modification or channelization.

Rivers and reservoirs used as drinking water supplies often contain herbicides. In the recent past, several reservoirs that served as public drinking water reservoirs exceeded drinking water standards for atrazine or health advisory levels for cyanazine. Currently, however, there are no actively used drinking water reservoirs for which atrazine or cyanazine exceed these levels. This is due in part to local watershed management programs aimed at reducing herbicide runoff. Several other herbicides are occasionally found in drinking water reservoirs, also at concentrations below health advisory levels.

The quality of groundwater in northern and western Missouri is also influenced by the geology of the area. Public water supply sources include reservoirs and wells. The wells obtain water primarily from glacial drift deposits in portions of north-central and western Missouri. Wells in western Missouri, south of Kansas City, obtain water from limestone aquifers, except for the extreme western limits of Missouri, near the state border with Kansas. Private water supplies are obtained from glacial drift deposits and from underlying limestone bedrock in portions of northwestern, central, eastern, and northeastern Missouri. However, deep bedrock wells in many north-central and northwestern Missouri locations tap water supplies too mineralized for drinking water purposes. About one quarter of private wells in this portion of Missouri exceed the drinking water standard for nitrate and about two percent exceed drinking water standards for pesticides. This contamination is often caused by localized surface contamination of the wellhead and does not represent widespread contamination of the underground aquifer. Deeper aquifers are well protected from surface contamination by impermeable strata.

The Ozark Plateau

The Ozark Plateau, including the Springfield Plateau, consists of predominantly hilly topography. There are some very rugged portions, as well as significant areas of gentle to almost flat landscape. The bedrock, consisting of limestone, dolomite, and sandstone, yields groundwater of excellent quality, generally requiring no treatment and adequate in supply for most urban, industrial, and other needs. The soil or subsoil has developed by weathering from the bedrock formations and is generally 20 to 80 feet thick.

Some areas have extremely thin soils, and other locations where weathering has been extensive have a thickness of 100 feet and more. The subsoil has moderate to high infiltration rates, which contribute to the recharge of groundwater supplies. Ozark streams are generally clear, with baseflows well sustained by

many seeps and springs. Some streams and reservoirs in the Ozarks are becoming nutrient and algae enriched due to increasing human population and domestic animal production in their watersheds.

Groundwater contamination risks are moderate to high due to the permeability of the soil and bedrock. Any number of surface activities, including agricultural and suburban-urban storm water and wastewater disposal, mining, storm water runoff, lawn care, improper well construction or closure, and individual on-site wastewater disposal practices, pose threats to surface water and groundwater quality. However, overall water quality remains good, due in large part to the efforts of all parties to protect the aquifers.

Groundwater is relied upon heavily for drinking water supply in this part of Missouri. Most municipalities in the southern half of the state rely on groundwater for drinking water supply. The number of private drinking water wells statewide is not known, but is probably between 100,000 and 250,000, mostly south of the Missouri River. The major groundwater concern is the often rapid and unfiltered transmission of contaminated surface runoff or leachate from some septic tanks, underground storage tanks, landfills, dumps, and liquid waste storage ponds, and animal production or processing wastes through fractures or sinkholes directly into potable aquifers. Properly cased wells into deep aquifers rarely encounter water quality problems, but shallow or improperly cased wells are at risk.

In the Joplin area, the shallow bedrock aquifer has elevated levels of sulfate and several heavy metals due to mineralization of groundwater in flooded mines. Some private wells in this area exceed drinking water standards for lead or cadmium. Localized contamination of shallow private wells due to leaks, spills and improper disposal of industrial or commercial chemicals occurs in the larger metro areas of Springfield and Joplin.

The Mississippi Embayment

Missouri's southeastern corner is a large alluvial plain of the Mississippi River. Originally a vast system of wetlands, it has been drained and almost entirely converted to crop production. Almost all surface waters in the area are drainage ditches and may not attain beneficial uses because of degradation of aquatic habitat due to channelization. Channelization creates a homogeneous, low quality aquatic habitat. Sloughing of the channel banks, which fills the channel bottoms, buries better habitat, and leaves unstable substrate, is a problem.

Groundwater is abundant due to high infiltration rates on these flat fields. Public water supplies that tap deeper aquifers provide good quality water, but shallow private wells commonly have nitrates and low levels of pesticides. The frequency of exceedence of drinking water standards for nitrates and pesticides in private wells is similar to northern Missouri, about 18 percent and two percent, respectively.

Alluvial Aquifers

The remaining major aquifer is the alluvial aquifer system of the major rivers of the state. In northern Missouri, where surface and deep aquifer supplies are unreliable, many towns depend on the alluvial aquifer of a large nearby stream. Landfills and industrial land use in Kansas City and St. Louis have historically been located on river floodplains and have caused local contamination of the Mississippi, Missouri and Meramec river aquifers in St. Louis and the Missouri River aquifer in Kansas City. Some municipal water supplies have been affected.

WATER POLLUTION CONTROL ACTIVITIES

Authority for enforcement of the Missouri Clean Water Law and for state regulations concerning water pollution resides with the Department of Natural Resources' Water Protection Program. Authority for the regulation of pesticide application rests with the Missouri Department of Agriculture. A permit from the Department of Natural Resources is not normally required to apply pesticides.

Point Source Controls

In order to legally discharge pollutants to waterways in Missouri, a party must obtain a National Pollutant Discharge Elimination System (NPDES) permit from the Department of Natural Resources. This permit sets limits on the amounts of certain pollutants that can be discharged. It may also set requirements for monitoring the effluent or the receiving stream.

The number of miles of classified streams judged to be impaired by point source wastewater discharges is somewhat greater than the estimate from 1984, when statewide data on stream quality first became available. In 1984, 105 miles of classified stream were judged to be impaired by domestic or industrial wastewater. Domestic and industrial discharges include wastewater from cities, subdivisions, apartment complexes, mobile home parks, businesses and industries. Stream miles impaired by point source discharges in more recent years were 104 miles in 2002, 101 miles in 2004, 83 miles in 2006, 70 miles in 2008, and 170 miles in 2010. The change in impaired mileage during the recent reporting cycles may be due in part to evolving data requirements and analytical methods, as prescribed by Missouri's 303(d) Listing Methodology. Also, the number of permitted point source discharges is likely higher than it was in 1984.

Hog and poultry production in concentrated animal feeding operations (CAFOs) are now major agribusinesses in Missouri. The large amount of animal waste generated at these facilities requires proper management to prevent water pollution. CAFOs are incorporated into the point source permit program, consistent with federal requirements.

Concern over eutrophication of large, recreationally important reservoirs led to changes in the state regulations for discharges of wastewater. These regulations impose phosphorus concentration limits on most wastewater discharges in the Table Rock Lake and Lake Taneycomo watersheds. These limits may be further affected as numeric nutrient criteria for lakes are implemented.

Nonpoint Source Controls

In recent years, several different types of nonpoint sources of pollution have come under regulatory control through a permitting process. Regulations are in place to prevent leakage from underground storage tanks and for the secondary containment of bulk agricultural chemical storage sites. Large sand and gravel mining operations require a general permit for storm water and smaller operations have been provided with guidelines for best management practices (BMPs), in addition to the 404 permit required of all sand and gravel operations. Storm water runoff discharge permits are issued for construction sites and other areas with more than one acre of bared ground. About 50 percent of all permits now issued by the Water Pollution Control Branch are storm water permits on land disturbance activities. Active mining areas that discharge water must operate under permits, although many abandoned mine lands still rely on voluntary controls. Many cities and large towns must now obtain storm water permits in order to manage pollution due to urban runoff.

Control of many agricultural nonpoint sources, such as erosion from cropland and pasture, or runoff of fertilizer, pesticides and animal waste, is addressed by Missouri's voluntary nonpoint source management program. This program works with federal, state and local governments, universities, private groups, and individual landowners to implement watershed projects that employ nonpoint source control practices and often monitor water quality results. Local watershed projects have resulted in significant reductions of atrazine levels in targeted drinking water reservoirs, in certain cases bringing them into compliance with water quality standards.

Programs with dedicated funding sources have worked best. A tax on coal has funded reclamation of abandoned coal-mined lands nationwide. Twenty-two years of such reclamation in Missouri has reduced the number of stream miles impaired by abandoned coal mine drainage from about 100 to about six miles. A state sales tax for soil erosion control started providing funds for watershed level soil erosion control programs in 1985. This program, coupled with federal soil conservation programs, is reducing soil erosion in Missouri, based on the findings of periodic USDA National Resource Inventories.

Total Maximum Daily Loads

If a water body is deemed impaired by a pollutant, and it is determined that sufficient controls are not currently in place to protect water quality, it is placed on Missouri's Section 303(d) List. At this point, the Department is required to propose some form of additional pollution control that will restore the water to full attainment of the impaired use. This usually takes the form of a Total Maximum Daily Load, or TMDL. A TMDL is a document that includes a calculation of the amount of a specific pollutant a water body can absorb and still meet water quality standards. It also includes a plan to implement that limit, broken down into allocations from specific sources. Since 1999, DNR and EPA have established and implemented over 100 TMDLs and permits in lieu of TMDLs (PILOs). The current list of waters required to have TMDLs written, with the scheduled year of completion, can be found in Table 17 in Appendix 2.

COSTS AND BENEFITS

The economic costs of wastewater treatment and nonpoint source management are extremely diffuse and difficult to calculate. The total operating costs of municipal, private, and industrial treatment plants are not readily available. Likewise, it is difficult to estimate total expenditures on nonpoint source management. The amounts that the State of Missouri spends on various aspects of water pollution control and prevention, however, may give some indication of the relative investments required.

The Missouri Department of Natural Resources annually spends about \$3.3 million on monitoring and analysis of ambient water and related media. Approximately \$3.6 million is spent on permit issuance annually and about \$7.6 million on other facets of water pollution control and administrative support. Another significant expense is grants aimed at the improvement of water quality. The Section 319 grant program distributes about \$3.0 million annually of federal Section 319 funds specifically, as well as additional funding through other sources. The Special Area Land Treatment (SALT) program distributes about \$4.6 million annually for nonpoint source projects.

The economic benefits of improved water quality are even harder to quantify. Of all the money spent on water-based recreation and fishing in Missouri, it is nearly impossible to tell how much is dependent upon improved water quality. The same is true for the expense of drinking water treatment. But however great the economic benefits may be, the true benefits of clean water are high-quality recreation experiences, healthy and confident use of water resources, and a robust aquatic biological community.

SIGNIFICANT THREATS TO WATER QUALITY

- Throughout the state, continuing suburban development impacts streams in several ways. Shortening and culverting of channels leads to the direct loss of streams and riparian areas. The increase in impervious surface area in the surrounding watershed leads to unnatural hydrograph patterns, with lower baseflow, and higher stormflow. The altered channel and higher peak flows can increase erosion, while the runoff from the impervious surface carries increased levels of sediment and various chemicals from the urban environment. Elevated nutrient levels or bacterial contamination is also likely if individual or community domestic sewage systems are not well maintained.
- It is believed that channelization may have caused aquatic habitat degradation in roughly 32 percent of Missouri's streams, mainly in the northern and western plains and the southeastern lowlands. Large channelization projects affecting many miles of stream are no longer occurring, but many short projects still occur and continue to reduce the number of miles of natural stream channels statewide. Streams that were channelized many years ago still provide poor aquatic habitat, and these streams still contribute to flooding, high water velocities, and stream bank erosion as they try to recreate their natural sinuosity.
- Eutrophication of large, recreationally important reservoirs continues to be a concern. Heavy residential development around portions of these reservoirs can threaten water quality in many small coves and shoreline areas. The large size of these lakes and rugged local topography make centralized collection and treatment systems for wastewater difficult. Recent imposition of phosphorus limits on most wastewater discharges to Table Rock Lake has improved conditions in the James River arm of the lake.

- Mercury levels in fish in Missouri appear to be generally stable in recent years. As monitoring of mercury in fish in various waters of the state continues, new waters with elevated levels may be found, but those waters that have been monitored for long periods have not shown significant recent shifts in mercury levels. Re-evaluation of human health risk factors for mercury has led the Missouri Department of Health and Senior Services to issue an advisory regarding fish consumption among children 12 years of age and under, pregnant women and women who may become pregnant. These people are advised to limit consumption of all fish caught in Missouri to one meal per week, and consumption of bass over 12 inches in length to one meal per month. For other aspects of the advisory, please refer to www.dhss.mo.gov/fishadvisory/.
- Abandoned lead-zinc mines and their tailings continue to impact waters decades after mining has ceased. Missouri's Superfund Program is addressing some of these concerns. But long-term impacts are expected to remain. Although new mineral extraction operations would be managed under state permits, areas of the state that are very sensitive to disruption are being investigated for mining potential.
- Additional groundwater protection measures are needed. Missouri now has in place programs that register and inspect underground storage tanks and oversee the cleanup of leaking underground storage tank sites, programs for wellhead protection, sealing of abandoned wells and closing of hazardous waste sites. A complete groundwater protection program would also include a groundwater monitoring network and educational programs for those involved in the application of farm chemicals, transporters of hazardous materials, and the general public.
- There are currently 427 Class I concentrated animal feeding operations (CAFOs) located in Missouri. These are operations containing at least 1,000 beef cattle, 2,500 large swine, or 100,000 broiler chickens. These facilities generate large amounts of animal manure and have the potential to cause serious water pollution problems. Commercial application of manure, often on fields at a great distance from its source, is also a growing trend within large-scale agriculture. The department is also concerned by cumulative impacts of numerous small animal production facilities. However, it is no longer issuing Letters of Approval for smaller facilities, meaning that they will be largely unregulated.
- Fish and invertebrates data indicate that many communities throughout the state are suffering from degraded quality of aquatic habitat. Physical alterations of the channel, alterations in stream flow patterns, degraded conditions in the riparian zone, and upland land use changes are all believed to be significant contributors to this problem.

SURFACE WATER SUMMARY

Table 1. Beneficial Use Support Status of Missouri Classified Waters.*

STATUS		STREAM MILES	%	LAKE ACRES	%
Assessed	Full Support of Uses	9,962.8	43.9	118,485	40.6
	Non-Support	3,771.8	16.6	140,259	48.1
Unassessed	Non-support Not Suspected	1,099.6	4.8	28,216	9.7
	Non-Support Suspected	7,874.1	34.7	4,637	1.6

Numbers in Table 1 updated June 15, 2010.

Full Support of Uses: Water quality meets the needs of all uses that Missouri recognizes for a particular water body, such as protection of fish and other aquatic life (the water quality does not interfere with the ability of aquatic life to live, feed and reproduce), livestock and wildlife watering (the water will not cause disease or injury to livestock and wildlife using the water for drinking), drinking water supply (the water meets all state and federal standards as a drinking water supply source water), swimming (the water will not cause disease or injury to swimmers or others participating in water-based recreation who may accidentally swallow small amounts of water), irrigation (the water will not cause disease or injury to crops), industrial water supply (the water will not cause excessive problems with corrosivity or mineral deposits in industrial piping and boilers), fish consumption (fish are safe to eat) and boating and canoeing.

Non-Support: Water quality is seriously affected to the point that at least one recognized use of the water body has been lost. These impairments are documented by data that meets the requirements of Missouri's 303(d) Listing Methodology.

Non-Support Not Suspected: There is inadequate information to make a water quality assessment of these waters, and the department knows of no data or information that would indicate a possible impairment.

Non-Support Suspected: These are waters for which some data or observations exist indicating that one or more designated uses may not be supported, but the data are not of sufficient quantity or quality to officially rate the water as impaired. The bulk of these waters are streams in the plains areas of the state, where nearly all streams have been affected or modified by agriculture.

* There are 22,708.3 miles of classified streams (permanently flowing streams or streams which maintain permanent pools during dry weather) and approximately 30,000 miles of unclassified streams (streams which are without water during dry weather). There are 291,597 surface acres of classified lakes. The number of surface acres of small unclassified lakes has not been estimated.

Table 2. Individual Use Support Summary for Classified Waters.

BENEFICIAL USE	SIZE ASSESSED	FULL SUPPORT	NON-SUPPORT	NOT ASSESSED	USE NOT APPLICABLE
STREAMS: MILES (PERCENTAGE)	13,734.6 (60.5%)	9,962.8 (43.9%)	3,771.8 (16.6%)	8,973.7 (39.5%)	0 (0.0%)
AQUATIC LIFE	14,428.8 (63.5%)	12,907.9 (56.8%)	1,520.9 (6.7%)	8,279.5 (36.5%)	0 (0.0%)
FISH CONSUMPTION	1,407.6 (6.2%)	704.6 (3.1%)	703.0 (3.1%)	21,300.7 (93.8%)	0 (0.0%)
SWIMMING	6,149.4 (27.1%)	4,466.3 (19.7%)	1,638.1 (7.2%)	15,675.7 (69.0%)	928.2 (4.1%)
DRINKING WATER	2,856.1 (12.6%)	2,856.1 (12.6%)	0 (0.0%)	430.4 (1.9%)	19,421.8 (85.5%)
LAKES: ACRES (PERCENTAGE)	258,744 (88.7%)	118,485 (40.6%)	140,259 (48.1%)	32,853 (11.3%)	0 (0.0%)
AQUATIC LIFE	268,101 (91.9%)	131,165 (45.0%)	136,936 (47.0%)	23,496 (8.1%)	0 (0.0%)
FISH CONSUMPTION	241,470 (82.8%)	219,176 (75.2%)	22,294 (7.6%)	50,127 (17.2%)	0 (0.0%)
SWIMMING	246,540 (84.5%)	246,066 (84.4%)	474 (0.2%)	45,057 (15.5%)	0 (0.0%)
DRINKING WATER	99,806 (34.2%)	99,768 (34.2%)	38 (0.0%)	0 (0.0%)	191,791 (65.8%)

Table 3. Major Water Pollution Sources in Missouri Classified Waters.
(Stream Miles or Lake Acres Impaired)

Source	Stream Miles Impaired	Percent of Total Miles	Lake Acres Impaired	Percent of Total Acres
Unknown	2,053.8	9%	403	*
Agriculture				
Grazing Activities	999.7	4%	--	--
Crop Production	--		147,115	50%
Atmospheric Deposition	716.1	3%	23,164	8%
Mining	447.8	2%	--	--
Tailings	411.3	2%	--	--
Other Mining Activities	36.5	*	--	--
Hydromodification	159.3	1%	358	*
Channelization	100.3	*	--	--
Flow Regulation/Modification	10.0	*	--	--
Upstream Impoundment	29.2	*	308	*
Municipal and Other Domestic Point Sources	153.5	1%	32,977	11%
Urban Runoff and Construction	138.9	1%	33,509	11%
Industrial Point Sources	17.0	*	--	--
Land Disposal	8.5	*	--	--
Natural Sources	7.8	*	--	--
Recreational Activities	7.0	*	--	--

*Less than 1 percent

Table 4. Major Contaminants in Missouri Classified Waters.

Contaminant	Stream Miles Impaired	Percent of Total Miles	Lake Acres Impaired	Percent of Total Acres
Bacteria	1,919.8	8%	474	*
Low D.O.	1,031.2	5%	308	*
Metals	938.9	4%	23,164	8%
Mercury	714.3	3%	23,164	8%
Lead	194.3	1%	--	--
Zinc	66.0	*	--	--
Cadmium	65.5	*	--	--
Nickel	9.7	*	--	--
Copper	3.5	*	--	--
Unknown	313.3	1%	--	--
Chloride	98.9	*	--	--
Habitat Alterations	90.3	*	--	--
Sediment Deposition	68.8	*	--	--
Thermal Modification	22.8	*	--	--
pH	16.3	*	--	--
Gas Supersaturation	10.0	*	--	--
Flow Alterations	7.2	*	50	*

Sulfate	3.5	*	--	--
Ammonia	2.5	*	--	--
Color	2.0	*	--	--
Chlorine	0.1	*	--	--
Nutrients	--	--	136,401	47%
Nitrogen	--	--	124,606	43%
Chlorophyll	--	--	69,246	24%
Phosphorus	--	--	19,639	7%
Pesticides	--	--	38	*

*Less than 1 percent

Note: Many stream miles in Missouri are affected by more than one pollution source or pollutant; therefore, total miles/acres in Tables 3 and 4 can exceed miles/acres in Table 1 and 2.

CHAPTER 2. MISSOURI AND ITS WATER RESOURCES

Missouri has an area of more than 69,000 square miles and a population of 5.6 million people. About half of the population is concentrated along the border areas on opposite sides of the state in the Kansas City and St. Louis metropolitan areas. Population as well as industrial and commercial activity in major urban areas has remained relatively stable for the past few decades. Patterns of rural land use have changed greatly in some areas, particularly residential development around the larger cities, recreational development adjoining Lake Taneycomo and the eastern ends of Lake of the Ozarks and Table Rock Lake, and the increasing development of large concentrated animal feeding operations in north-central and southwestern Missouri.

Missouri has an extensive stream network that includes more than 22,000 miles of classified streams and more than 291,000 surface acres in its 450 classified lakes. Three distinct regions exist within the state's boundaries and the particular geology and land use of each affect water quality. These areas are a prairie region, which is rolling land predominantly used for row crops and pasture; the Ozarks, a hilly area that is mostly pasture and forest; and the Bootheel, a flat alluvial plain adjoining the Mississippi River in southeast Missouri, which is used mainly for row crop production.

Water Quality Standards

Missouri's Water Quality Standards (10 CSR 20-7.031) provide the names and locations of all classified streams and lakes. This state regulation defines more than 3,600 individual stream and river segments and 450 lakes, lists which beneficial uses are assigned to each of these waters, and defines the level of water quality necessary to meet each of these uses. This is done by setting specific levels of naturally occurring or anthropogenic chemicals, known as numeric criteria, which are not to be exceeded in the water. The department has now revised its water quality standards to include numeric criteria for nutrients (total nitrogen, total phosphorus, total chlorophyll) in lakes. The department is also working to develop criteria for nutrients in streams.

The remaining waters of the state, such as those in the headwater areas that do not have permanently flowing or standing water, and a number of small lakes, are not listed in the Missouri Water Quality Standards and do not have beneficial uses assigned to them. These unclassified waters (as well as the classified waters) are protected by the general criteria in the Water Quality Standards. The general criteria say that these waters must be free from conditions harmful to livestock or aquatic life, as well as aesthetic problems such as demolition debris, trash, tires, odor, discoloration, or the presence of objectionable floating or deposited material. The department is currently seeking to promulgate a rule by which the distinction between classified and unclassified waters would effectively be eliminated and all waters of the state would be protected by numeric criteria.

Table 5. Missouri's Water Resources.

Missouri Population (2000 census)	5,595,211
Surface Area (square miles)	69,704
Number of Four-Digit HUCs*	12
Number of Eight-Digit HUCs*	66
Number of Fourteen-Digit HUCs*	1,500
Classified Stream Miles	22,708.3
Unclassified Stream Miles	234,325.1**
Number of Classified Lakes	450
Total Classified Lake Surface Area (acres)	291,597
Freshwater Wetlands Area (acres)	113,012**

*HUC (Hydrological Unit of Classification): A hierarchical system of watershed delineation, developed by USGS. The system describes scales ranging from major continental basins (two digits) to small local drainages (14 digits).

**From the National Hydrography Dataset, published by the U.S. Geological Survey, 2008.

***From the Land Cover project of the Missouri Resources Assessment Partnership.

CHAPTER 3. SURFACE WATER ASSESSMENT

DESCRIPTION OF MISSOURI'S CURRENT WATER QUALITY MONITORING PROGRAM

Purpose

The major purposes of the water quality monitoring program are (1) to characterize background or reference water quality conditions; (2) to better understand daily, flow event and seasonal water quality variations and their underlying processes; (3) to characterize aquatic biological communities and habitats and to distinguish between the impacts of water chemistry and habitat quality; (4) to assess time trends in water quality; (5) to characterize local and regional impacts of point and nonpoint source discharges on water quality; (6) to check for compliance with water quality standards or wastewater permit limits; (7) to aid in developing TMDLs to prescribe acceptable limits of pollutants to be discharged; and (8) to support development of strategies to return impaired waters to compliance with water quality standards. All of these objectives are statewide in scope.

Coordination with Other Monitoring Efforts in Missouri

The department cooperates with other agencies in performing special water quality studies. In 1998, a multi-agency task force including the Missouri Department of Natural Resources, Missouri Department of Conservation (MDC), U.S. Environmental Protection Agency (USEPA), the U.S. Geological Survey (USGS), U.S. Forest Service (USFS), U.S. Department of Agriculture Natural Resources Conservation Service (USDA NRCS), and University of Missouri convened to develop an outline of a statewide aquatic resources monitoring plan, define partnership roles in this monitoring plan and discuss the kind of research needed to further this new monitoring effort. The first major product of this work group was an agreement to initiate a cooperative statewide aquatic invertebrate and fish monitoring program by MDC and the Department of Natural Resources. In 2000, the Missouri Resource Assessment Monitoring (RAM) Program was created. The RAM program is a biological monitoring program that monitors fish and invertebrate communities in wadeable streams throughout the state. It is designed to sample across the entire state every five to six years. MDC has taken the lead, sampling more than 100 sites each year in various Ecological Drainage Units. Since it began, more than 700 fish samples and 400 invertebrate samples have been taken.

To maximize efficiency, the department routinely coordinates its monitoring activities to avoid overlap with other agencies and provide and receive interagency input on monitoring study design. Data from other sources is used for meeting the same objectives as department-sponsored monitoring. The agencies most often involved are USGS, USEPA, MDC, the U.S. Army Corps of Engineers (COE), the USDA Agricultural Research Service (ARS) and the Missouri Department of Health and Senior Services

(MDHSS). However, the department also tracks the monitoring efforts of the National Park Service (NPS), USFS, several of the state's larger cities, the states of Arkansas, Kansas, Iowa, and Illinois, and graduate level research conducted at universities within Missouri. The department also uses monitoring data acquired by wastewater dischargers as a condition of discharge permits issued by the department. The department began using data collected by volunteers that have passed Quality Assurance and Quality Control (QA/QC) tests in 1995.

Networks and Programs

1. Fixed Station Network

- A. Objective: To better characterize background or reference water quality conditions, to better understand daily, flow event and seasonal water quality variations and their underlying processes, to assess time trends and to check for compliance with water quality standards.
- B. Design Methodology: Sites are chosen based on one of the following criteria:
 - Site is believed to have water quality representative of many neighboring streams of similar size due to similarity in watershed geology, hydrology and land use, and the absence of any impact from a local point or discrete nonpoint water pollution source.
 - Site is downstream of a significant point source or localized nonpoint source area.
- C. Number of Sites, Sampling Methods, Sampling Frequency, Parameters:
 - USGS/DNR cooperative network: 72 sites statewide, horizontally and vertically integrated grab samples six to 12 times per year, analyzed for nutrients, temperature, pH, dissolved oxygen, percent saturation, specific conductance, flow, *E. coli*, fecal streptococci, and fecal coliform; trace metals, major ions and suspended solids two to twelve times annually at all sites; pesticides six times annually at four sites.
 - DNR chemical monitoring of more than 70 sites two to four times per year for nutrients, major ions, flow, temperature, pH, dissolved oxygen and specific conductance.
 - DNR raw water sampling of public drinking water reservoirs: grab samples at five sites four times per year for 10 common agricultural herbicides.
 - UMC/DNR lake monitoring network: about 100 lakes monitored spring through fall for nutrients, chlorophyll, turbidity and suspended solids.
 - DNR routine monitoring of finished public drinking water supplies for bacteria and trace contaminants.
 - Routine bacterial monitoring of swimming beaches at Missouri state parks during the recreational season by the department's Division of State Parks.
 - Routine monitoring of sediment on 10 to 15 discretionary sites annually. All sites are monitored for several heavy metals and organic contaminants. A pore water sample is analyzed for ammonia and a Microtox toxicity test or similar toxicity screening test on the pore water or whole sediment sample is performed.

2. Intensive Surveys

- A. Objective: To characterize the water quality impacts from a specific pollutant source area.
- B. Design Methodology: Determination of contaminants of concern is based on previous water quality studies, effluent sampling, and/or NPDES permit applications. Multiple sampling stations upstream and downstream will be used, if appropriate. If contaminants of concern have significant seasonal or daily variation, season of the year and time of day must be accounted for in the sampling design. These studies would also require multiple

samples per site over a relatively short time frame (e.g., 6 to 8 visits over a 2 to 3 day period or 10 to 15 visits over a 2 to 3 year period).

- C. Number of Sites, Sampling Methods, Sampling Frequency, Parameters: The Missouri Department of Natural Resources conducts or contracts for 10 to 15 special studies annually. Each study has multiple sampling sites. Number of sites, sampling frequency and parameters vary greatly depending on the study.

3. Toxics Monitoring Program

Monitoring of toxics is not a separable part of the monitoring program. The fixed station network and many of our intensive studies monitor for toxic chemicals. In addition, major municipal and industrial dischargers must monitor for toxicity in their effluents as a condition of their NPDES permits.

4. Biological Monitoring Program

The Missouri Department of Natural Resources has developed a monitoring program for aquatic invertebrates that is proving very useful for characterizing the health of aquatic biological communities in Missouri. Forty-five reference streams were identified across the state during the 1990s and were used to develop criteria describing reference communities of macroinvertebrates for different ecological regions. More than 50 stream sites are sampled annually, generally chosen to support the formation of the 303(d) list and the creation of TMDLs. Sampling results and data analysis are available from a central database. A long-term objective of the program is to establish a fixed statewide network of biological monitoring stations in order to monitor large-scale trends. Fish sampling must also be a part of an effective long-term biological monitoring program.

The department contracted with the U.S. Geological Survey in 2001 to conduct a study of aquatic invertebrate communities on the Missouri River. The study, *Validation of Aquatic Macroinvertebrate Community Endpoints for Assessment of Biological Condition in the Lower Missouri River*, was published in 2005. The department sees this work as the first of several steps by which it will promote a better understanding of fish and invertebrate communities of large rivers, and ultimately the development of biological criteria for the Missouri and Mississippi rivers.

5. Fish Tissue

- A. Objective: Fish tissue monitoring can address two separate objectives. These are (1) the assessment of ecological health or the health of aquatic biota, and (2) the assessment of human health risk based on the level of contamination of fish fillets.
- B. Design Methodology: Sites were chosen based on one of the following criteria:
 - Site is believed to have water and sediment quality representative of many neighboring streams of similar size due to similarity in geology, hydrology and land use, and the absence of any known impact from a local point source or discrete nonpoint water pollution source.
 - Site is downstream of a significant point source or localized nonpoint source area.
- C. Number of Sites, Sampling Methods, Sampling Frequency, Parameters: The department and USEPA have a cooperative fish tissue monitoring program that collects whole fish composite samples at approximately 13 fixed sites once every two years. The preferred species for these sites are either carp or redhorse sucker. About 36 discretionary sites are also sampled annually for two fish fillet composite samples. One sample is of a top carnivore fish such as largemouth bass, smallmouth bass, walleye or sauger. The other sample is for a species of a lower trophic order such as catfish, carp or sucker. The Missouri Department of Conservation is a partner in this portion of the program. The Department of Natural Resources is currently beginning to integrate fish tissue plug

techniques, by which a small portion of a live fish may be sampled and analyzed for mercury.

In addition, MDC samples approximately 20 sites annually through its Fish Contaminant Monitoring Program, which began in 1984. Sites are coordinated with the Department of Natural Resources and the Department of Health and Senior Services and a wide variety of species are sampled. Both of these monitoring programs analyze for several chlorinated hydrocarbon insecticides, PCBs, lead, cadmium, mercury, and fat content.

Laboratory Analytical Support

Laboratories Used:

- USGS/DNR Cooperative Fixed Station Network: USGS Lab, Denver, Colorado
- DNR Public Drinking Water Reservoir Network: Missouri Department of Natural Resources Environmental Lab
- Intensive Surveys: varies; many are done by Missouri Department of Natural Resources Environmental Lab
- Toxicity Testing of Effluents: many commercial labs
- Biological Criteria for Aquatic Invertebrates: Missouri Department of Natural Resources Environmental Lab and University of Missouri, Columbia
- Fish Tissue: USEPA Region VII Lab, Kansas City, Kansas and miscellaneous contract labs (Missouri Department of Conservation)
- NPDES self-monitoring: commercial labs
- DNR Public Drinking Water Monitoring: Missouri Department of Natural Resources and commercial labs

Quality Assurance/Quality Control (QA/QC) Program

Missouri and Region 7 EPA have completed a Total Quality Management Plan. All environmental data generated directly by the department or through contracts funded by the department or EPA will require a quality assurance project plan (QAPP) following EPA's Guidance for Quality Assurance Project Plans (QA/G-5).

Data Storage and Management

The department retrieves raw data from the USGS database, NWIS, and numerous state, federal and municipal sources. This data is imported into the Missouri state computer system for storage and statistical analysis. The department maintains a good deal of water quality data in a number of ACCESS databases. Data in these files comes from the department's own monitoring efforts and a wide array of other public and private sources. Work is underway to create a new, integrated database that will house all of the data currently stored in the department's ACCESS databases.

Beginning in 1999, the department began linking many separate databases pertaining to water quality, other environmental data and information on regulated facilities via ACCESS software and importing this data into a GIS (ArcView) environment. The majority of the work has been completed, but new data that enters this process is received on a regular basis.

The Missouri Department of Natural Resources has developed a database that provides access to the raw data and analysis of all quantitative invertebrate sampling it has performed. This database is now available to the public online at www.dnr.mo.gov/env/esp/biologicalassessments.htm. Within the next few years, the Missouri Department of Conservation plans to have on-line access to its RAM database, as well as its fisheries and aquatic habitat database that contains community-level data. These databases are updated on an ongoing basis.

Training and Support of Volunteer Monitoring

Two volunteer monitoring programs are now generating water quality data in Missouri. The first is the Lakes of Missouri Volunteer Program (LMVP), a cooperative program between the Department of Natural Resources, the University of Missouri and volunteers who monitor lakes throughout Missouri, including Lake Taneycomo, Table Rock Lake, and several lakes in the Kansas City and St. Louis areas. In 2009, approximately 130 volunteers monitored 115 sites on 55 lakes, an increase from the 112 sites on 52 lakes monitored by volunteers in 2007. Data from this program is used by the university as part of a long-term study on the limnology of Midwestern reservoirs.

The second program involves volunteers who monitor water quality of streams throughout Missouri. The Volunteer Water Quality Monitoring Program is a cooperative project of the Department of Natural Resources, the Department of Conservation, and the Conservation Federation of Missouri and is a subset of the Missouri Stream Team Program. Since its inception in 1993, 7,304 citizens have attended 467 water quality monitoring workshops held by program staff across the state of Missouri. This has resulted in the submission of more than 17,950 separate data sheets at 3,287 Missouri stream sites. The volunteer hours spent in this endeavor total more than 340,580 hours, worth an approximate \$6,392,667.83 in added value to the state.

In fiscal year 2009, 276 new Stream Teams formed and in 2010, there were 248 new Stream Teams formed. The total number of Stream Teams has now reached 4,275. In 2009, a total of 249 citizens attended the Introductory class, while 329 attended the same workshop in 2010. After the Introductory workshop, many proceeded to attend at least one workshop for higher level training. In fiscal year 2009, 139 citizens attended the Level 1 workshops and 89 attended to date in fiscal year 2010. The number of attendees for Level 2 workshops in fiscal year 2009 and 2010 were 73 and 60 respectively. One volunteer passed the Level 3 audit in 2009, while 8 volunteers passed in 2010. In 2009, we held 1 CSI workshop was held to train 8 volunteers. In 2010, two Cooperative Stream Investigation workshops were held, training 7 volunteers. Each level of training is a prerequisite for the next higher level, as is appropriate data submission. Levels 2, 3, 4 and CSI represent increasingly higher quality assurance and quality control stringency. Data submitted by volunteers of Level 2 or above may be used by the department to establish baselines of water quality for particular streams, or to point out potential problems that are in need of further investigation. Twenty-six volunteers have received Cooperative Stream Investigation training as of July 2010. In 2009 and 2010 volunteers submitted 407 sets of macro invertebrate data, 960 sets of water chemistry data, 300 sets of visual survey data, 328 sets of stream discharge data, and 57 site selection data sheets. Wastewater and drinking water operators have also started attending in order to receive operator certification credits. To date, 155 operators have attended Stream Team training.

Data Interpretation and Communication

Missouri now uses an ACCESS database for tracking and reporting water body use attainment information. An EPA contractor, RTI, completed geo-referencing of Missouri's classified waters in 1998. The stream and lake network of the state, water quality standards information, the locations of permitted wastewater discharges and other potential pollutant sources and information describing them can now all be viewed within a GIS (ArcView) environment. The department has developed an Interactive Map View and Query tool for public use that displays a variety of geographic information at www.dnr.mo.gov/internetmapviewer/.

The department has a variety of water quality information available on its Web site, www.dnr.mo.gov. Among other items, this information includes, or will include, TMDLs, the 305(b) Report and 303(d) List, water quality information sheets for 303(d) candidate waters, and a queryable database of all of the department's electronic water quality data. This database is currently under development.

Sharing Data with the Public

Water quality data accessibility is easy. Contact the Water Protection Program for more information.

1. Requests for very general information on water quality may be made by calling 1-800-361-4827. They may be filled by the 305(b) Report, pamphlets or fact sheets. Much of this information, plus information on Missouri's 303(d) List and completed Total Maximum Daily Load (TMDL) studies, is also available on the Internet at www.dnr.mo.gov/env/wpp/wp-index.html.
2. More specific requests may require published reports or water quality data files. If the report or data was generated by the department, it can be sent to the requestor through electronic mail or regular mail (a hard copy for small reports and data files, or floppy or compact disks for larger data files). Alternatively, the requestor may visit the department office at 1101 Riverside Dr. in Jefferson City and view the files directly. If the report or data file did not originate with the department, the request may be passed on to the organization that published the report or data.

Requests for more specific water quality information, or requests to view water quality data files, should be sent to:

Missouri Department of Natural Resources
Water Protection Program
ATTN: John Ford
P.O. Box 176
Jefferson City, MO 65102-0176
Phone: (573)751-7024 Fax: (573)522-9920
E-mail: john.ford@dnr.mo.gov

Monitoring Program Evaluation

The water quality monitoring program within the department has traditionally focused on the chemical characterization of water quality in both those streams that are free of, and subject to, point source wastewater discharges. While the monitoring has been able to keep pace with our more critical point source assessment needs and has done a good job of characterizing regional water quality unimpaired by point source discharges, the size and scope of the department's monitoring has fallen far short of the state's information needs. The advent of large concentrated animal feeding operations (CAFOs) in Missouri, concern over eutrophication of our large recreational lakes and continuing urban sprawl, among other problems, have produced questions our present monitoring program is incapable of answering. This inadequacy is demonstrated, in part, by the fact that only 27 percent of Missouri's classified stream miles are considered to be monitored, while 40 percent are completely unassessed.

A water quality monitoring strategy for Missouri was completed in 2005 and was updated in 2007. This proposal provides an overview of the current monitoring program and identifies additional needs. Among the major monitoring needs identified by this strategy are biological monitoring for great rivers, large rivers, and large reservoirs, chemical and biological monitoring for wetlands, and increased surveys of unclassified streams. The program is also in the process of expanding its use of new monitoring technologies, such as continuous data sondes, and efficiencies in monitoring, such as using biological monitoring to characterize the health of a water body.

ASSESSMENT METHODOLOGY

This section describes the procedures used by the Missouri Department of Natural Resources to rate the quality of Missouri's waters.

Water quality is judged by its conformance with Missouri's Water Quality Standards. These standards were first implemented for all Missouri streams and a few large lakes in 1970 and are revised at least once every three years. These standards now list more than 22,000 miles of classified streams and 455 classified (significant, mostly public) lakes representing 291,759 surface acres of water, along with the uses for which these waters are protected. These standards also list the maximum allowable concentrations of chemicals and bacteria in these waters.

The table below lists the various uses of Missouri's waters and the portions of state waters that are protected for each use.

Table 6. Missouri Waters Protected For Various Uses.

<u>Designated Use</u>	<u>Stream Miles</u>	<u>% of Total</u>	<u>Lake Acres</u>	<u>% of Total</u>
Protection of Aquatic Life and Fish Consumption	22,708.3	100	291,597	100
Subset: Warm-Water Fishery	19,432.4	86	280,727	96
Cool-Water Fishery*	2,999.5	13	0	0
Cold-Water Fishery**	276.4	1	10,870	4
Livestock and Wildlife Watering	22,708.3	100	291,597	100
Whole Body Contact Recreation	21,780.1	96	291,597	100
Secondary Contact Recreation	7,273.6	32	233,477	80
Drinking Water Supply	3,286.5	14	99,806	34
Industrial	1,263.1	6	6,936	2
Antidegradation:				
Outstanding National Resource Waters	171.2			
Outstanding State Resource Waters	200.5***			
Total Classified Waters in Missouri	22,708.3		291,597	

*smallmouth bass, rock bass

**trout

***Outstanding State Resource Waters also include 270 acres of marsh wetlands in three locations.

Classified streams of Missouri are all permanently flowing streams or streams with permanent pools. All classified waters of the state, including significant public lakes, are classified for protection of aquatic life, livestock and wildlife watering, and fish consumption by humans. The Water Quality Standards for these uses set the maximum allowable concentrations for 93 chemicals in these waters. A subset of these waters classified for drinking water supply and groundwater has maximum allowable concentrations for an additional 75 chemicals in the standards. Waters protected for whole body contact recreation such as swimming or water skiing also have a maximum allowable bacteria standard.

Missouri's Water Quality Standards also contain narrative criteria. These standards are not numbers but general statements about the expectations for waters of the state. These standards require waters to be free of objectionable odors, color, turbidity, trash, floating materials or bottom deposits, and of conditions harmful to aquatic life such as high water temperature, low dissolved oxygen or chemical toxicity. Importantly, these standards apply not just to the classified waters but to all waters of the state, including the small intermittent streams that only carry water during and shortly after rainfall or snow melt.

The Methodology for the Development of the 2010 Section 303(d) List in Missouri, commonly referred to as Missouri's 2010 Listing Methodology Document, or LMD, describes in detail both what data may be used for assessment and what assessment methods are to be used in interpreting Missouri's Water Quality Standards to arrive at both the 2010 303(d) list and this 2010 305 (b) report. This document goes through a process of stakeholder input and review and is revised during every biennial listing cycle. Missouri's proposed 2010 303(d) list is presented as Table 14 in Appendix 1 of this report. Table 15 contains those waters which were also found to be impaired, but which already have measures in place to correct the impairment, such as a Total Maximum Daily Load (TMDL), or otherwise do not qualify for the 303(d) list. Table 16 lists those waters for which an impairment is suspected, but sufficient data does not currently exist to make an official assessment.

Table 7. Summary of Monitored and Evaluated Waters.

Degree of Use Support	Evaluated Stream Miles	Monitored Stream Miles	Total Stream Miles Assessed	Evaluated Lake Acres	Monitored Lake Acres	Total Lake Acres Assessed
Fully Supporting All Assessed Uses	7,127.6	2,835.2	9,962.8	22,921	95,564	118,485
Impaired For One or More Uses	471.6	3,300.2	3,7701.8	29	140,085	140,114
TOTAL ASSESSED	7,599.2	6,165.4	13,734.6	22,950	235,649	258,599
TOTAL UNASSESSED			8,973.7			32,998

Monitored waters are those waters for which sufficient water quality data for an assessment has been collected in the past five years. Approximately 27 percent of all classified stream miles and 81 percent of all classified lake acres are considered to be monitored.

Evaluated waters are those waters which have not been adequately monitored in the past five years. Either older data is available that is still considered representative of present conditions, or they have geology and land use similar to nearby monitored waters and their water quality assessment is assumed to be the same as those nearby monitored waters. Thirty-three percent of all classified stream miles and eight percent of all classified lake acres are considered to be evaluated.

Unassessed waters are those waters that are not monitored directly and do not have nearby monitored waters with similar geology and land use. Thus, these represent the classified waters in the state for which we are unable to make an accurate assessment of their compliance with water quality standards and Clean Water Act goals. Forty percent of classified stream miles fall into this category. Eleven percent of classified lake acres are considered to be unassessed.

ADDITIONAL INFORMATION ON MISSOURI LAKES

Summary Statistics

Information on beneficial use attainment in classified lakes is given in Tables 1 and 2. The acreages of classified lakes not fully supporting beneficial uses by major source category are as follows:

Point Sources	90,385 acres
Nonpoint Sources	154,980 acres
Hydromodification	308 acres

Background

Missouri's definition of significant lakes corresponds to the Department of Natural Resources list of classified lakes and includes lakes that fall into one of the following three categories: (1) small public drinking water reservoirs; (2) large multi-purpose reservoirs; and (3) reservoirs or lakes with important recreational values.

It should be noted that Missouri has only a few naturally occurring lakes, these being primarily depressions or old oxbows on the Missouri or Mississippi River floodplain. Most classified lakes in the state are man-made reservoirs. In addition, high acidity is not a problem in Missouri lakes due to the high amounts of calcium carbonate found in the geology.

Trophic Status

Eutrophication is a natural process that occurs in lakes involving the gradual filling of the lake over time accompanied by increasing aquatic plant growth. This concept also encompasses the enrichment of lakes and reservoirs by addition of nitrogen and phosphorus from human activity. This additional nutrient load causes increased aquatic plant growth, predominantly of phytoplankton, which causes lake water to be greener and more turbid.

The trophic state of a lake typically refers to the total nitrogen or phosphorus concentration in the lake or the amount of algae or other aquatic plants present in the lake. Oligotrophic lakes are clear with few nutrients and very little aquatic plant growth. Mesotrophic, eutrophic and hypereutrophic are terms referring respectively to lakes with increasing levels of nutrients and aquatic plant growth. Trophic state is an important way to characterize lakes because it relates directly to such factors as lake clarity, which is greater in oligotrophic and mesotrophic lakes, and fish production, which tends to be greater in eutrophic lakes.

The method presently used by the state to determine trophic status was derived from the work by Wetzel, R.G., 1975; "Limnology", Table 14-11; and from Vollenweider, R.A. and J.J. Kerekes, 1980; EPA440/5-81-010; "Restoration of Lakes and Inland Waters". The criteria are shown in the table below.

Table 8. Definition of Trophic Classification.

Trophic Class	Chlorophyll-A (µg/L)	Total Phosphorus (µg/L)
Oligotrophic	<3	<10
Mesotrophic	3-10	10-30
Eutrophic	11-56	31-100
Hypereutrophic	>56	>100

Summary results of studies conducted by the University of Missouri between 1989 and 2007 on trophic status of Missouri lakes follow.

Table 9. Trophic Status of Selected Missouri Lakes and Reservoirs.

<u>LAKE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>YEARS OF RECORD</u>	<u>SECCHI</u> ¹	<u>TP</u> ²	<u>TN</u> ³	<u>CHL-A</u> ⁴	<u>TROPHIC STATE</u> ⁵
<u>GLACIAL PLAINS</u>								
*Allaman Lake	Clinton	24, 56 N, 30W	8	1.2	40	645	15	E
Baring C.C. Lake	Knox	26, 63N, 12W	9	1.3	28	938	20	E
Bean Lake	Platte	12/14, 54N, 37W	1	0.1	264	1,658	144	HE
Belcher Branch L.	Buchanan	8/17, 55N, 34W	5	1.1	34	512	13	E
Bethany Lake #2	Harrison	27, 64N, 28W	11	1.3	33	713	11	E
Big Lake	Holt	18/19, 61N, 39W	1	0.2	328	2,508	166	HE
Bilby Ranch Lake	Nodaway	13/24, 64N, 38W	10	1.1	51	955	36	E
Blind Pony Lake	Saline	SE18, 49N, 22W	14	0.6	90	1,275	43	E
Bowling Green L.	Pike	29, 53N, 2W	20	1.9	24	522	8	M
Brookfield Lake	Linn	33, 58N, 19W	18	1.2	23	636	9	M
*Busch W.A. #16	St. Charles	35/36, 46N, 2E	1	1.8	26	594	14	E
*Busch W.A. #37	St. Charles	27, 46N, 2E	3	1.2	28	485	7	M
Cameron Lake #3	DeKalb	9, 57N, 30W	1	0.5	86	1,125	13	E
Cameron Lake #4 (Grindstone)	DeKalb	5, 57N, 30W	1	0.4	196	1,753	22	HE

Charity Lake	Atchison	32, 66N, 41W	3	1.5	39	615	17	E
Lake Contrary	Buchanan	26, 57N, 36W	6	0.3	365	3,060	194	HE
Crystal Lake	Ray	32, 53N, 29W	2	0.6	82	918	34	E
*Daniel Boone L.	Shelby	31/32, 58N 12W	2	0.2	187	1,424	38	HE
*Dean Lake	Chariton	3, 54N, 21W	1	0.1	382	2,110	5	HE
Deer Ridge Community Lake	Lewis	18, 62N, 8W	20	1.1	43	770	16	E
Edina Lake	Knox	12, 62N, 12W	11	0.7	72	1,291	29	E
Edwin A. Pape L.	Lafayette	20, 48N, 24W	12	0.6	83	1,078	30	E
Ella Ewing Lake	Lewis	21, 64N, 10W	9	0.6	90	1,376	34	E
Elmwood City L.	Sullivan	35, 63N, 20W	10	0.8	58	789	20	E
Forest Lake	Adair	14, 62N, 16W	20	1.3	24	412	6	M
Fox Valley Lake	Clark	27, 66N, 8W	9	2.2	20	610	8	M
Green City Lake	Sullivan	NE16, 63N, 18W	8	0.6	82	1,068	28	E
Hamilton Lake	Caldwell	15, 57N, 28W	11	0.8	61	968	14	E
*Happy Holler L.	Andrew	8/17, 60N, 34W	3	0.9	70	1,049	53	E
Harrison Co. Lake	Harrison	17/30, 65N, 28W	10	0.8	64	1,074	41	E
Hazel Creek Lake	Adair	31, 64N, 15W	13	1.3	28	603	8	M
Henry Sever Lake	Knox	14, 60N, 10W	20	0.9	56	1,066	19	E
Higginsville Lake	Lafayette	9, 49N, 25W	20	0.6	99	1,272	25.1	E
Hunnewell Lake	Shelby	25, 57N, 9W	20	1.0	44	801	20.4	E
*Indian Creek Lake	Livingston	15/27, 59N, 25W	5	1.7	23	630	12	M
Jamesport City L.	Daviess	22, 60N, 26W	2	0.9	114	993	27.8	E
Jamesport Community Lake	Daviess	20, 60N, 26W	3	0.4	146	1,996	135	HE
*Jo Shelby Lake	Linn	36, 57N, 22W	4	0.9	70	1,101	40	E
King City New Reservoir	Gentry	E28, 61N, 32W	2	0.8	65	983	16.8	E
King Lake	DeKalb	12/13, 60N, 32W	7	0.2	213	1,794	21	HE
Kraut Run Lake (Busch W.A. #33)	St. Charles	23, 46N, 2E	20	0.5	100	1,120	63	HE
La Belle Lake #2	Lewis	NE 16, 61N, 9W	5	0.8	66	1,430	51	E
Lancaster City L.	Schuyler	23, 66N, 15W	5	0.8	66	1,430	51.1	E
La Plata L. (New)	Macon	14, 60 N, 14W	4	1.3	26	790	13.8	E
Lawson City Lake	Ray	31, 54N, 29W	3	0.8	36	958	29	E
Limpp Lake	Gentry	29, 62N, 32W	3	0.4	117	1,681	80	E
Lincoln Lake	Lincoln	8, 49N, 1E	20	2.3	17	434	5.1	M
Little Dixie Lake	Callaway	26, 48N, 11W	21	0.6	66	829	23	E
Long Branch Lake	Macon	18, 57N, 14W	21	0.7	52	864	16	E
Macon Lake	Macon	17, 57N, 14W	13	0.8	52	890	29	E
Maple Leaf Lake	Lafayette	4, 48N, 26W	7	1.1	40	846	22	E
Marceline City L.	Chariton	14, 56N, 19W	13	0.8	112	1,149	41	E
Marceline Res.	Linn	28, 57N, 18W	3	0.7	133	1,438	41	E
Lake Marie	Mercer	36, 66N, 24W	10	2.7	15	445	4	M
Mark Twain Lake	Ralls	26, 55N, 7W	21	1.1	73	1,333	17	E

Maysville L. (N)	DeKalb	33, 59N, 31W	11	0.6	194	1,331	47	HE
Maysville L. (SE)	DeKalb	3, 58N, 31W	1	0.9	68	853	26	E
Memphis Reservoir	Scotland	14, 65N, 12W	12	0.6	79	1,244	47	E
Milan Lake South	Sullivan	2/12, 62N, 20W	11	1.1	42	694	13	E
Monroe City L. B	Monroe	30, 56N, 7W	11	0.5	86	1,143	35	E
Mozingo Lake	Nodaway	19, 65N, 34W	10	1.4	31	850	21	E
Nehai Tonkayea L.	Chariton	11, 55N, 18W	10	1.8	18	418	3	M
Nodaway Lake	Nodaway	20, 65N, 35W	10	0.8	42	1,010	21	E
†Old Kings Lake	Lincoln	NW Surv. 1817	1	0.3	278	1,573	80	HE
Lake Paho	Mercer	25, 65N, 25W	11	0.8	48	841	14	E
*Philips Lake	Boone	32, 58N, 12W	2	1.2	38	716	16	E
Pony Express Lake	DeKalb	33, 58N, 31W	12	0.8	67	1,057	32	E
*Prairie Lake	St. Charles	Surv. 1790	1	0.7	98	790	12	E
*Prairie Slough	Lincoln	2/12, 51N, 2E	1	0.2	231	2,495	72	HE
Ray County Lake	Ray	13, 52N, 28W	3	0.4	158	1,969	134	HE
Rocky Fork Lake	Boone	31, 50N, 12W	8	1.9	23	546	7	M
Rocky Hollow L.	Clay	33, 53N, 30W	10	1.2	67	842	31	E
Rothwell Lake	Randolph	NE/SE3, 53N, 14W	3	1.2	52	858	30	E
Lake St. Louis	St. Charles	Surv. 54	9	0.5	86	1,171	29	E
Lake Ste. Louise	St. Charles	NW Surv. 929	3	1.1	31	513	6	M
*Santa Fe Lake	Macon	5, 60N, 14W	2	1.2	48	959	44	E
Savannah Lake	Andrew	7, 59N, 35W	3	1.2	41	880	19	E
Shelbina Lake	Shelby	20, 57N, 10W	11	0.6	97	1,054	37	E
Lake Showme	Scotland	15, 65N, 12W	1	1.1	42	995	26	E
Smithville Lake	Clay	13, 53N, 33W	20	1.0	33	842	17	E
Spring Lake	Adair	10/11, 61N, 16W	9	1.2	35	533	9	E
Sterling Price Lake	Chariton	17, 53N, 33W	10	0.6	105	1,466	78	HE
Sugar Creek Lake	Randolph	16, 54N, 14W	10	0.8	55	757	26	E
Sugar Lake	Buchanan	27, 55N, 37W	6	6	0.2	333	2,524	HE
*Swan Pond	Lincoln	Surv. 1732	1	0.3	345	1,658	126	HE
Thomas Hill Res.	Randolph	24, 55N, 16W	13	0.7	53	773	14	E
Thunderhead Lake	Putnam	15, 66N, 19W	12	0.8	50	971	17	E
Unionville Res.	Putnam	27, 66N, 19W	13	0.6	95	1,207	39	E
Vandalia Lake	Pike	12, 53N, 5W	12	1.0	74	994	38	E
Lake Viking	Daviess	9, 59N, 28W	20	1.4	27	516	10	M
Wakonda Lake	Lewis	13/14, 60N, 6W	6	0.8	95	1,186	51	E
Watkins Mill Lake	Clay	22, 53N, 30W	20	0.9	40	629	17	E
Waukomis Lake	Platte	17, 51N, 33W	10	1.7	25	593	14	E
Weatherby Lake	Platte	15, 51N, 34W	3	2.0	20	403	5	M
Whiteside Lake	Lincoln	S Surv. 1686	3	2.4	20	627	6.4	M
Willow Brook L.	DeKalb	4, 58N, 31W	5	0.7	82	1,161	50	E
Worth County L.	Worth	29/32, 65N, 32W	3	0.6	74	1,413	50.7	E

OSAGE PLAINS

Amarugia								
Highlands Lake	Cass	10, 43N, 32W	9	1.0	51	657	12	E
Atkinson Lake	St. Clair	6, 37N, 28W	20	0.5	76	1,013	38	E
Blue Springs Lake	Jackson	3, 48N, 31W	6	1.0	36	557	18	E
Bushwhacker Lake	Vernon	27, 34N, 32W	5	1.4	30	622	16	E
Butler Lake	Bates	14, 40N, 32W	5	0.7	67	941	33	E
Cat Claw Lake	Jackson	NW14, 47N, 31W	2	0.2	127	863	4	E
Coot Lake	Jackson	SW22, 47N, 31W	2	0.7	50	857	10	E
Cottontail Lake	Jackson	NSW14, 47N, 31W	2	0.2	140	946	15	E
*Four Rivers CA L.	Vernon	4, 37N, 31W	1	1.0	34	460	7	M
Gopher Lake	Jackson	NW23, 47N, 31W	2	0.4	94	777	17	E
Harmony								
Mission Lake	Bates	15, 38N, 32W	9	1.1	51	840	24	E
Harrisonville								
City Lake	Cass	26, 46N, 31W	9	0.8	52	951	19	E
Hazel Hill Lake	Johnson	28, 47N, 26W	9	0.7	53	1,048	36	E
Holden City Lake	Johnson	29, 46N, 28W	7	0.7	47	934	16	E
Jackrabbit Lake	Jackson	SENE15, 47N, 31W	2	0.2	168	783	14	HE
Lake Jacomo	Jackson	11, 48N, 31W	9	1.3	34	574	19	E
Lamar Lake	Barton	32, 32N, 30W	12	0.8	83	1,017	49	E
Lone Jack Lake	Jackson	11/14, 47N, 30W	3	1.7	28	646	17	E
Longview Lake	Jackson	20, 47N, 32W	9	0.8	36	746	12	E
Lotawana Lake	Jackson	29, 48N, 30W	9	1.4	33	680	19	E
Montrose Lake	Henry	33, 41N, 27W	11	0.3	190	1,268	62	HE
Nell Lake	Jackson	15/22, 47N, 31W	2	0.6	68	834	10	E
North Lake	Cass	28, 45N, 31W	20	0.7	101	1,021	44	E
Odessa Lake	Lafayette	15, 48N, 28W	3	1.4	39	853	22	E
Prairie Lee Lake	Jackson	27, 48N, 31W	9	0.8	56	903	26	E
Raintree Lake	Cass	6, 46N, 31W	20	0.7	56	901	14	E
Spring Fork Lake	Pettis	21, 44N, 21W	12	0.6	159	1,141	48	E
Lake Tapawingo	Jackson	34, 49N, 31W	8	1.2	36	788	32	E
*Tebo Lake	Pettis	7/12, 44N, 22W	6	2.8	18	609	4	M
Winnebago Lake	Cass	9, 46N, 31W	10	0.9	50	842	20	E

OZARK BORDER

*Ashland Lake	Boone	19, 46N, 11W	1	0.6	119	1,684	--	HE
*Bella Vista Lake	Cape Girardeau	2/11, 32N, 13E	8	1.5	23	524	10	M
*Bennitt Lake	Howard	2, 51N, 14W	2	1.2	26	611	12	E
Binder Lake	Cole	36, 45N, 13W	18	1.0	56	782	26	E
*Boutin Lake	Cape Girardeau	15, 32N, 14E	8	1.6	25	622	11	M
Creve Coeur Lake	St. Louis	20, 46N, 5E	8	0.3	152	1,064	58	HE

*Dairy Farm L. #1	Boone	34, 49N, 14W	3	0.5	207	1,793	86	HE
*Dairy Farm L. #3	Boone	35, 49N, 14W	3	0.4	543	2,062	86	HE
*D.C. Rogers Lake	Howard	3, 50N, 16W	11	1.2	33	542	9	M
*Eureka Lake	St. Louis	NE31, 44N, 4E	1	0.8	48	830	14	E
Fayette Lake #2	Howard	4, 50N, 16W	9	0.9	52	833	24	E
Lake Forest	Ste. Genevieve	36, 38N, 7E	10	1.3	43	649	22	E
Lake Girardeau	Cape Girardeau	9, 30N, 11E	8	0.9	62	896	42	E
Glover Spring Lake	Callaway	13, 47N, 9W	7	1.2	67	863	22	E
Goose Creek Lake	St. Francois	26, 38N, 6E	11	2.3	14	388	4	M
Jennings Lake	St. Louis	8, 46N, 7E	1	0.7	78	682	18	E
Manito Lake	Moniteau	8/9, 44N, 17W	9	0.6	96	1,025	19	E
Lake Northwoods	Gasconade	33, 43N, 5W	12	1.2	24	448	5	M
Perry County								
Community Lake	Perry	22, 35N, 10E	9	0.8	87	1,035	46	E
Lake Pinewoods	Carter	7, 26N, 3E	6	1.4	33	712	17	E
Pinnacle Lake	Montgomery	24, 47N, 5W	6	2.7	22	454	5	M
Simpson Park Lake	St. Louis	16, 44, 5E	1	0.7	111	987	32	HE
Timberline Lake	St. Francois	23, 38N, 4E	11	4.2	9	294	2	O
Lake Tishomingo	Jefferson	5, 41N, 4E	11	1.9	22	490	6	M
*Tri-City								
Community Lake	Boone	24, 51N, 12W	10	0.8	57	865	20	E
Tywappity Lake	Scott	8, 29N, 13E	8	0.8	56	1,079	44	E
Wanda Lee Lake	Ste. Genevieve	2, 37N, 7E	10	1.3	56	577	26	E
Lake Wappapello	Wayne	3, 26N, 3E	20	0.9	37	522	24	E
Lake Wauwanoka	Jefferson	1, 40N, 4E	12	3.1	13	557	2.6	O

OZARK HIGHLANDS

Austin Lake	Texas	30, 29N, 11W	10	1.6	22	545	8	M
Ben Branch Lake	Osage	14/15, 44N, 8W	3	2.0	19	648	16	M
*Bismarck Lake	St. Francois	19, 35N, 4E	9	1.5	26	422	11	M
Bull Shoals Lake	Taney	13, 21N, 17W	8	2.2	18	360	8	M
*Lake Capri	St. Francois	30, 37N, 4E	20	4.7	7	290	2	O
*Lake Carmel	St. Francois	18, 37N, 4E	12	2.8	10	311	3	O
Clearwater Lake	Reynolds	6, 28N, 3E	20	1.9	14	220	6	M
Council Bluff Lake	Iron	23, 35N, 1E	20	3.2	8	229	2	O
Crane Lake	Iron	33, 32N, 4E	9	1.3	14	239	4	M
Fellows Lake	Greene	22, 30N, 21W	20	2.7	13	356	5	M
Fourche Lake	Ripley	22, 23N, 1W	11	3.4	10	245	3	O
Fredericktown								
City Lake	Madison	6, 33N, 7E	10	0.7	66	753	33	E
Harry S. Truman L.	Benton	7, 40N, 23W	20	1.2	45	844	17	E
Indian Hills Lake	Crawford	23, 39N, 5W	12	1.0	36	640	18	E
Lake Killarney	Iron	1, 33N, 4E	8	0.8	62	613	28	E

*Lafitte Lake	St. Francois	28, 37N, 4E	1	4.4	6	320	2	O
*Little Prairie Lake	Phelps	21, 38N, 7W	20	1.1	28	481	9	M
Loggers Lake	Dent	10, 31N, 3W	8	3.1	10	224	4	M
Lower Taum								
Sauk Lake	Reynolds	33, 33N, 2E	9	2.1	12	196	34	M
Mac Lake (Ziske)	Dent	NE17, 34N, 5W	8	1.7	23	566	19	E
*Lake Marseilles	St. Francois	29, 37N, 4E	11	3.6	10	350	2	O
McCormick Lake	Oregon	8/9, 25N, 4W	2	3.2	6	112	1	O
McDaniel Lake	Greene	26, 30N, 22W	19	1.4	33	467	17	E
*Miller Lake	Carter	1, 27N, 1E	10	1.5	20	493	7	M
Monsanto Lake	St. Francois	20, 36N, 5E	10	2.2	10	378	2	O
Noblett Lake	Douglas	25, 26N, 11W	7	2.6	17	243	4	M
Norfork Lake	Ozark	14, 21N, 12W	6	1.7	23	631	6	M
Lake of the Ozarks	Miller	19, 40N, 15W	17	2.0	30	605	15	E
Peaceful Valley L.	Gasconade	25, 42N, 6W	12	1.3	37	842	29	E
Pomme de Terre L.	Hickory	2, 36N, 22W	21	1.7	29	571	16	E
*Pomona Lake	Howell	26, 26N, 9W	1	--	50	605	10	E
Ripley Lake	Ripley	10, 23N, 1E	7	1.7	28	719	21	E
Roby Lake	Texas	3, 32N, 11W	9	2.1	17	427	5	M
Shawnee Lake	Dent	NW17, 34N, 5W	8	1.8	26	553	20	E
Lake Shayne	Washington	25, 37N, 3E	19	2.9	7	273	1	O
Sims Valley Lake	Texas	17, 27N, 8W	9	1.1	26	498	13	M
Lake Springfield	Greene	20, 61N, 16W	8	0.9	59	1,005	20	E
Stockton Lake	Cedar	15, 34N, 26W	21	2.8	14	457	7	M
Sunnen Lake	Washington	4, 37N, 1E	13	2.7	13	282	4	M
Table Rock Lake	Stone	22, 22N, 22W	16	3.3	11	397	5	M
Lake Taneycomo	Taney	8, 23N, 20W	7	3.3	23	787	3	M

SOUTHEASTERN LOWLANDS

Big Oak Tree SP L.	Mississippi	14, 23N, 16E	2	0.6	44	530	12	E
Upper Big Lake	Mississippi	25, 27N, 16E	2	0.3	339	2,050	181	HE

¹Secchi depth (m)

²Total Phosphorus (µg/L)

³Total Nitrogen (µg/L)

⁴Chlorophyll A (µg/L)

⁵Trophic State: O=Oligotrophic, M=Mesotrophic, E=Eutrophic, HE=Hypereutrophic

*Unclassified Lake

†Classified as Stream

Trophic status correlates strongly with physiographic regions of the state. In agricultural northern and western Missouri, most lakes of known trophic state are eutrophic, while in the Ozarks and Ozark Border regions, trophic states are more equally divided between eutrophic and either mesotrophic or oligotrophic lakes. Most known hypereutrophic lakes are in glaciated northern Missouri, while nearly all oligotrophic lakes are in unglaciated, highly weathered Ozark terrain.

Controlling Pollution in Lakes

In Missouri, agriculture is considered the primary source of nonpoint source pollution, although urban areas represent a very significant source, as do abandoned mine lands. The department works to implement effective and appropriate Best Management Practices in the watersheds of impaired lakes and reservoirs.

In-lake management techniques that were previously funded under Section 314 can now be funded under Section 319 in the context of an appropriate Nonpoint Source (NPS) project. Several in-lake management techniques are eligible for Section 319 funding, including water level drawdown, shading and sediment covers, biological controls such as fish or insects, and planting or harvesting of aquatic plants.

In addition, the department conducts and helps fund monitoring on lakes throughout Missouri. This includes statewide lake assessments and volunteer lake monitoring that is now funded through Section 319. For example, the University of Missouri-Columbia's Statewide Lake Assessment Program evaluates approximately 100 lakes each year. The program began collecting annual samples in 1989, with some samples taken as far back as 1978.

The 319 program supplies grants to improve lakes, such as projects that provide information and education. The department also works with several watershed groups on a regular basis. There are at least 67 watershed groups in Missouri. These groups work to educate and inform residents and landowners in their watershed about techniques they can use to minimize nonpoint source pollution.

The department's Soil and Water Conservation Program also helps Missouri's agricultural landowners conserve soil and water resources through several incentive programs, which are funded by a statewide sales tax. These programs include the Cost-Share Program, Loan Interest-Share Program and Agricultural Nonpoint Source Special Area Land Treatment Program (AgNPS SALT). Practices offered for cost-share reduce soil erosion by a variety of methods that may include increasing crop residue, improving vegetation, diversion or containment of water to facilitate slower release, protection of stream bank and forested areas from livestock, and reduction of wind erosion. Cost-share and other incentives are also available through the Natural Resources Conservation Service. AgNPS SALT projects focus on decreasing agricultural nonpoint source pollution and usually encompass watersheds averaging 50,000 acres in size. There are 45 active SALTs. Of the 55 that have been completed, five focused primarily on protecting lakes in the watershed. The Missouri Department of Conservation also has programs and information to help Missourians manage private lakes.

Total Maximum Daily Loads also help to reduce pollution in Missouri lakes and reservoirs. The program began in 1999 and as of July 7th 2010, 186 TMDL studies have been completed. Seven of these were for lakes, and focused primarily on reducing nonpoint source pollution entering the lake. Appendix II shows the proposed schedule to complete needed TMDLs.

STATUS OF WETLANDS

Originally about 4.8 million acres in Missouri (10.7 percent of the land surface of the state) were wetlands. Today, it is estimated that only about 113,000 acres remain. Several state and federal agencies have recognized the need to preserve and enhance our remaining wetlands.

The department's Water Resources Center administers the State Wetlands Conservation Plan, which encourages the protection and restoration of wetlands and provides technical assistance to other agencies involved in wetland issues. With the help of state and federal agencies, the department has completed several projects, including studies assessing urban wetlands, identifying types of wetlands through image analysis, determining the hydrology of Missouri riparian wetlands, and an assessment of specific wetland mitigation sites. Currently the department and its partners are working to locate small headwater wetlands in agricultural areas and establish a dollar value for wetlands under past, present and future conditions.

The Missouri Department of Conservation currently has 12 large, intensively managed wetlands, consisting of approximately 26,000 acres. From 1998 to 2003, MDC purchased 23,186 acres of wetlands and restored an additional 32,662 acres.

In 1994, the U.S. Fish and Wildlife Service began the process of acquiring land from willing sellers in the Missouri River floodplain for a national wildlife refuge called Big Muddy. The project authorizes the purchase of up to 60,000 acres in 25 to 30 units between Kansas City and St. Louis. The refuge consists of 11,153 acres of land in nine units as of April 2010. Although access is limited at some units, all are publicly accessible. The refuge focuses on restoring several kinds of riverine and floodplain habitat, allowing lands to interact naturally with the river and act as seasonal wetlands.

The Natural Resources Conservation Service Wetlands Reserve Program, begun in 1992, purchases easements of wetlands and provides funds for restoration of those wetlands. There are presently 851 easements covering 124,790 acres in place in Missouri.

Together MDC, USFWS and NRCS have protected more than 140,000 acres of wetlands through easements or purchases, restored more than 43,000 acres, and enhanced more than 41,000 acres in Missouri.

Four websites providing information on Missouri's wetlands and efforts to restore wetlands are given below:

www.dnr.mo.gov/env/wrc/wetlands.htm
www.mdc.mo.gov/landown/wetland/wetmng
www.nrcs.usda.gov/programs/wrp/states/mo.html
www.fws.gov/midwest/BigMuddy/

The following website provides access to the Missouri Resource Assessment Partnership (MoRAP) program which calculated the figure of 113,000 wetland acres in Missouri. It is a sum of two categories of land cover, "Swamp" and "Marsh and Wet Herbaceous Vegetation". The relatively small total may be the result of a stricter definition of these categories than is necessary to put land under easement.

www.cerc.usgs.gov/morap/Projects.aspx?ProjectId=2

CHAPTER 4. GROUNDWATER ASSESSMENT

BACKGROUND

Less than half of Missourians rely on groundwater as the source of their drinking water. Groundwater is the major source of drinking water in the Ozarks and the Southeast Lowlands for both public and private supplies. The cities of St. Joseph, Independence, Columbia, and St. Charles use groundwater from the alluvial aquifer of the Missouri River. In the plains region of the state, many small communities are able to obtain adequate water from shallow alluvial wells near rivers or large creeks, and many individual households still rely on the shallow upland aquifer even though it yields only very small amounts of water.

In the Ozarks, groundwater yields are usually large and of excellent quality, as witnessed by the fact that unlike cities in other areas of the state, many municipalities pump groundwater directly into their water supplies without treatment. However, the geologic character of the Ozarks that supplies it with such an abundance of groundwater, namely its ability to funnel large amounts of rainfall and surface runoff to the groundwater system, can present problems for groundwater quality. This is because much surface water flows directly to groundwater through cracks, fractures or solution cavities in the bedrock, with little or no filtration. Contaminants from leaking septic tanks or storage tanks, or surface waters affected by domestic wastewater, animal feedlots and other pollution sources can move directly into groundwater through these cavities in the bedrock.

As in the Ozarks, groundwater in the southeast lowlands is abundant and of good quality. Unlike in the Ozarks, contaminants are filtered by thick deposits of sand, silt and clay as they move through the groundwater system. Because of this, while shallow groundwater wells are subject to the same problems with elevated levels of nitrate or bacteria as are found locally in the Ozark aquifer and can also have low levels of pesticides, deep wells are generally unaffected by contaminants.

Shallow groundwater in the plains of northern and western Missouri tends to be somewhat more mineralized and to have taste and odor problems due to high levels of iron and manganese. Like shallow wells in the southeast lowlands, wells in this part of the state can be affected by nitrates, bacteria or pesticides.

In urban areas, alluvial aquifers of large rivers such as the Missouri and the Meramec that serve water supplies have occasionally been locally contaminated by spills or improper disposal of industrial or commercial chemicals.

WELL CONSTRUCTION AND GROUNDWATER QUALITY

Well water quality is greatly influenced by well construction. Public drinking water wells and many private wells are deep, and properly cased and grouted. These wells rarely become contaminated. However, many private wells are shallow or not properly cased. These wells can be easily contaminated by septic tanks, feedlots or chemical mixing sites near the well. Studies in Missouri have shown that two-thirds of wells contaminated by pesticides are less than 35 feet deep. The three most common problems in private wells are bacteria, nitrate and pesticides. Groundwater studies in Missouri indicate that about 30 percent of private wells occasionally exceed drinking water standards for bacteria, 30 percent for nitrate and about five percent for pesticides. State regulations include standards for construction and wellhead protection for all new wells.

MAJOR POTABLE AQUIFERS IN MISSOURI

The locations of the major aquifers providing drinkable water in Missouri are described below. The unconfined aquifers are those under water table conditions (the pressure at the water table is the atmospheric pressure). These unconfined aquifers tend to yield greater amounts of water, but are also more easily contaminated by activities occurring at the land surface. In confined aquifers, the upper level of the saturated zone is restricted so that the pressure level is greater than normally exists at that level of saturation. Confined aquifers are generally recharged more slowly than unconfined aquifers but are better protected from surface contaminants.

Glacial Till Aquifer

This aquifer covers most of Missouri north of the Missouri River. Glacial till is an unsorted mixture of clay, sand and gravel, with occasional boulders and lenses of sand or gravel. Loess, fine wind-blown silt deposits four to eight feet in depth, cover the till on the uplands. In places, the till is underlain by sorted deposits of sand or gravel. Although this aquifer is unconfined, surface water infiltrates very slowly and groundwater yields are very small. In scattered areas the till has buried old river channels that remain as large sand or gravel deposits that contain much more groundwater than the till. Some households rely on this aquifer for drinking water, but it is generally inadequate as a source for municipal water supply.

Alluvial Aquifer

Alluvial aquifers are the unconfined aquifers on the floodplains of rivers and are of Quaternary age. In Missouri, the largest of these aquifers lie along the Missouri and Mississippi rivers, reaching their widest extent in the southeast lowlands, where they extend as far as 50 miles west of the Mississippi River. Many small communities north of the Missouri River use the alluvial aquifers of nearby streams for their drinking water supply, and the Missouri River alluvium supplies the cities of St. Joseph, Independence and Columbia and sections of St. Charles County. In the southeast lowlands, most private water supplies and about 45 percent of people served by public water supplies use water from the alluvial aquifer. Agricultural

irrigation consumes about five times more water in this area of Missouri than does domestic water use. All agricultural irrigation water is drawn from the alluvial aquifer.

Wilcox-McNairy Aquifer

These two aquifers lie beneath much of the alluvial aquifer of the southeast lowlands. They are in unconsolidated or loosely consolidated deposits of marine sands and clays of Tertiary and Cretaceous age. Except where the McNairy aquifer outcrops in the Benton Hills and along Crowley's Ridge, these aquifers are confined. They yield abundant amounts of good quality water, and they provide the water for 55 percent of people served by public supplies. In the southeastern part of this region, the deeper of these aquifers, the McNairy, becomes too mineralized to be used for drinking water supply. These two aquifers appear to be unaffected by contaminants of human origin.

Ozark-St. Francois Aquifer

This aquifer covers most of the southern and central two-thirds of Missouri. It is composed of dolomites and sandstones of Ordovician and Cambrian age. Most of the aquifer is unconfined. This aquifer is used for almost all public and private drinking water supplies in this area of Missouri. Exceptions would include supplies in the St. Francois Mountains, such as Fredericktown and Ironton, where the aquifer has been lost due to geologic uplift and erosion, and in Springfield, where demand is so heavy that groundwaters are supplemented with water from three large reservoirs and the James River.

Yields and water quality are typically very good, but in many areas, the bedrock is highly weathered, contains many solution cavities, and can transmit contaminated surface waters into the groundwater rapidly with little or no filtration. Where the confined portion of the aquifer is overlain only by the Mississippian limestones of the Springfield aquifer, the confined Ozark aquifer continues westward for 80 miles or more as a potable water supply, serving the communities of Pittsburg, Kansas and Miami, Oklahoma. However, where it is also overlain by less permeable Pennsylvanian bedrock, the confined Ozark becomes too mineralized for drinking within 20 to 40 miles.

The unconfined Ozark-St. Francois aquifer is susceptible to contamination from surface sources. Increasing urbanization and increasing numbers of livestock are threats to the integrity of portions of this valuable aquifer.

Springfield Aquifer

This aquifer covers a large portion of southwestern Missouri. It is composed of Mississippian limestones that are, particularly in the eastern portion of the aquifer, highly weathered. The aquifer is unconfined and surface water in many areas is readily transmitted to groundwater. Urbanization and livestock production affect this aquifer. Elevated nitrates and bacterial contamination are common problems in groundwaters of the Springfield aquifer.

GROUNDWATER QUALITY SUMMARY TABLES

Table 10 lists the major sources of groundwater contamination in Missouri, major contaminants, and reasons why these sources are the most important. Table 11 summarizes groundwater quality problems at hazardous waste sites. Table 12 provides information on levels of nitrate, pesticides and other toxic organics in public drinking water wells in a particular Missouri aquifer. Table 13 gives the present status of Missouri's groundwater protection strategy.

Table 10. Major Sources of Groundwater Contamination.

Contaminant Source	10 Highest Priority Sources (X) ¹	Significant Risk Factors ²	Contaminants ³
Agricultural Activities			

Agricultural chemical facilities			
Animal feedlots			
Drainage wells			
Fertilizer applications	X	A,C,D,E	a
Irrigation practices			
Pesticide applications	X	A,B,C,D,E	b
Storage and Treatment Activities			
Land application	X	A,D,E	a,c
Material stockpiles			
Storage tanks (above ground)			
Storage tanks (underground)	X	A,B,C,D,E	d
Surface impoundments			
Waste piles			
Waste tailings			
Disposal Activities			
Deep injection wells			
Landfills			
Septic systems	X	A,D,E	a,c
Shallow injection wells			
Other			
Hazardous waste generators			
Hazardous waste sites	X	A,B,C,D	b,e,f,g
Industrial facilities	X	A,B,C,E	a,h,i,j
Material transfer operations			
Mining and mine drainage	X	A,E	f
Pipelines and sewer lines			
Salt storage and road salting			
Salt water intrusion	X	C	k
Spills	X	A,B,C,E	b,d,e,h
Transportation of materials			
Urban runoff			
Other sources (please specify)			
Other sources (please specify)			

¹Not in priority order.

²A. Human health or environmental toxicity risk
B. Size of population at risk

D. Number and/or size of contaminant sources
E. Hydrogeologic sensitivity

C. Location of sources relative to drinking water sources

- | | |
|--|----------------------|
| ³ a. Nitrate | g. Radionuclides |
| b. Organic Pesticides | h. Ammonia |
| c. Pathogens (Bacteria, Protozoa, Viruses) | i. Pentachlorophenol |
| d. Petroleum Compounds | j. Dioxin |
| e. Halogenated Solvents | k. Salinity/Brine |
| f. Metals | |

Table 11. Groundwater Contamination Summary.

Hydrogeologic Setting: All Aquifers
Data Reporting Period: 2008-2009

Source Type	Number of sites	Number of sites that are listed and/or have confirmed releases	Number with confirmed groundwater contamination	Contaminants*	Number of site investigations (optional)	Number of sites that have been stabilized or have had the source removed (optional)	Number of sites with corrective action plans (optional)	Number of sites with active remediation (optional)	Number of sites with cleanup completed (optional)
NPL	25	25	25	1		-	-	-	-
CERCLIS (non-NPL)	30	30	30	1		-	-	-	-
DOD/DOE	284	35	32	1,2,3,4	31	41	53	11	33
LUST	3,612	244	67	3	61	369	-	1068	369
RCRA Corrective Action	95	95	57	1,2,3,4	52	42	30	29	19
Underground Injection	19	19	19	1,3	19		19	19	
State Sites	856	856	387	1,2,3,4	847	575	575	49	575
Nonpoint Sources									
Other (specify)									

NPL: NPL - National Priority List , DOE- Department of Energy ; DOD- Department of Defense; CERCLIS - Comprehensive Environmental Response, Compensation, and Liability Information System; LUST - Leaking Underground Storage Tanks; RCRA - Resource Conservation and Recovery Act.

Underground Injection - includes sites where chemicals were injected into groundwater as part of approved remediation plan.

*Contaminants: 1- VOAs, SVOAs, Solvents, PCBs, Dioxin, PAHs, Herbicides, Pesticides, Metals, Explosives

2- VOAs, PCBs, Pesticides, Dioxin, Metals, Radionuclides, SVOCs, etc.

3- BTEX, TPH, MTBE, PAHs, Metals, SVOA

4- Creosote, Pentachlorophenol, Organic Solvents, Chlorinated Solvents, Petroleum, Asbestos

Table 12. Aquifer Monitoring Data.

Hydrogeologic Setting: Mississippi Embayment

Data Reporting Period: 2004-2010

Data below are from 45 randomly selected wells that draw from this aquifer. Samples were collected from the well head.

Name of Supply	NO3N (mg/L)	Hard (mg/L)	Ar (µg/L)	Pb (µg/L)	Cl (µg/L)	Cu (µg/L)	Cr (µg/L)	Zn (µg/L)	Other Detected Contaminants
Arbyrd	0.2	8	<MRL	<MRL	61.8	<MRL	<MRL	6.39	
Bernie	<MRL	156	<MRL	<MRL	15.3	<MRL	<MRL	13.7	TTHM (µg/L) 7.3
Bloomfield	<MRL	87.9	1.37	<MRL	7.73	18.7	<MRL	6.65	TTHM (µg/L) 2.21
Butler Co. PWSD 2	<MRL	77.3	<MRL	<MRL	139	3.66	<MRL	7.66	Total Radium (PCI/L) 0.8
Campbell	<MRL	20.2	<MRL	<MRL	60.5	<MRL	<MRL	4.42	Total Radium (PCI/L) 0.7, TTHM (µg/L) 3.22
Cardwell	0.07	8.24	<MRL	<MRL	57	<MRL	<MRL	<MRL	TTHM (µg/L) 8.5
Caruthersville	<MRL	23.3	<MRL	<MRL	6.24	<MRL	<MRL	<MRL	TTHM (µg/L) 3.68
Charleston	<MRL	95.6	1.8	<MRL	<MRL	<MRL	<MRL	11	Total Haloacetic Acids (µg/L) 11.7, TTHM (µg/L) 18.3
Clarkton	0.23	23.1	<MRL	<MRL	45.5	<MRL	<MRL	<MRL	
Crowley Ridge Menonite Church & School	11.9	29.3	<MRL	<MRL	7.58	<MRL	<MRL	33.8	TTHM (µg/L) 56.4
Dexter	<MRL	180	<MRL	1.61	47.7	6.14	<MRL	<MRL	Total Radium (PCI/L) 2.3, Dibromoacetic Acid (µg/L) 3.56, TTHM (µg/L) 22.8
Dudley	<MRL	209	1.04	<MRL	28.1	<MRL	<MRL	26.3	Bromoform (µg/L) 4.48, Chloroform (µg/L) 22.1, Dibromochloromethane (µg/L) 35.6, Total Haloacetic Acids (µg/L) 25.2
Dunklin Co. PWSD 1	<MRL	37.3	<MRL	<MRL	92.8	<MRL	<MRL	1.84	Total Radium (PCI/L) 0.4
Dunklin Co. PWSD 2	<MRL	6.04	1.71	<MRL	5.34	37.4	3.38	<MRL	
Dunklin Co. PWSD 3 South	<MRL	11.1	<MRL	<MRL	14.6	28.8	1.79	<MRL	O-Xylene (µg/L) 1.31, Xylene, Meta And Para (µg/L) 3.24
East Prairie	<MRL	111	1.63	<MRL	<MRL	8.51	<MRL	14.3	TTHM (µg/L) 1.9
Essex	<MRL	160	<MRL	<MRL	193	72.2	<MRL	10.4	Total Radium (PCI/L) 3.6, Dibromoacetic Acid (µg/L) 0.95, TTHM (µg/L) 5.4

Name of Supply	NO3N (mg/L)	Hard (mg/L)	Ar (ug/L)	Pb (ug/L)	Cl (ug/L)	Cu (ug/L)	Cr (ug/L)	Zn (ug/L)	Other Detected Contaminants
Fisk	<MRL	284	<MRL	<MRL	20.5	29.8	1.54	21.1	Total Radium (PCI/L) 0.3, Bromodichloromethane (µg/L) 14.1, Bromoform (µg/L) 3.68, Chloroform (µg/L) 9.79, Dibromochloromethane (µg/L) 14.6, O-Xylene (µg/L) 0.67, Total Haloacetic Acids (µg/L) 1
Gideon	<MRL	21.8	<MRL	1.24	47.2	<MRL	<MRL	9.17	Total Radium (PCI/L) 0.2
Hayti	<MRL	24.8	<MRL	<MRL		7.17	1.57	13.7	TTHM (µg/L) 3.89
Holcomb	<MRL	18.9	<MRL	2	43	11.4	<MRL	13.4	
Holland	<MRL	77.6	<MRL	1.64		24.9	<MRL	37	Total Radium (PCI/L) 2.2, Chloroform (µg/L) 0.57
Hornersville	0.06	6.48	8.82	<MRL	5.75	1.28	<MRL	6.28	
Kennett	<MRL	6.62	<MRL	<MRL	6.3	13.6	3.28	7.08	Total Haloacetic Acids (µg/L) 9.4, TTHM (µg/L) 11.6
Malden	<MRL	29.9	<MRL	<MRL	9.03	4.72	<MRL	6.94	
Marston	<MRL	175	<MRL	<MRL	16.6	3.25	<MRL	2.15	Bromochloroacetic Acid (µg/L) 3.41, Dichloroacetic Acid (µg/L) 6.74, Trichloroacetic Acid (µg/L) 4.94, TTHM (µg/L) 36.8
Matthews	<MRL	103	<MRL	<MRL	7.78	13.5	<MRL	3.63	Bromodichloromethane (µg/L) 2.44, Bromomethane (µg/L) 0.11, Chloroethane (µg/L) 0.14, Chloroform (µg/L) 7.63, Dibromochloromethane (µg/L) 0.52, Vinyl Chloride (µg/L) 0.67
Merryweather Meadows	<MRL	72.4	7.81	1.25	1.18	20.9	<MRL	15.5	Total Radium (PCI/L) 1
Neelyville	<MRL	206	<MRL	<MRL	5.06	17.8	<MRL	13	Bromochloroacetic Acid (µg/L) 3.6
Nestle Purina Petcare Company	<MRL	69.7	1.75	<MRL	3.84	2.13	<MRL	530	
New Madrid Co. PWSD 5	<MRL	19.7	<MRL	<MRL	159	3.08	2.03	<MRL	Total Radium (PCI/L) 1.5, Dibromoacetic Acid (µg/L) 1.5, TTHM (µg/L) 1.4
Oran	0.52	19.1	<MRL	<MRL	19.9	15.7	<MRL	3.87	Total Radium (PCI/L) 0.7
Parma	<MRL	166	<MRL	1.14	12.1	52.9	1.17	15.5	Total Radium (PCI/L) 2.6, Trichloroacetic Acid (µg/L) 1.85, TTHM (µg/L) 15.1
Pemiscot Co. Con PWSD 1	<MRL	12.8	<MRL	<MRL		7.14	<MRL	3.66	Dichloromethane (µg/L) 0.55, TTHM (µg/L) 5.68

Name of Supply	NO3N (mg/L)	Hard (mg/L)	Ar (ug/L)	Pb (ug/L)	Cl (ug/L)	Cu (ug/L)	Cr (ug/L)	Zn (ug/L)	Other Detected Contaminants
Qulin	<MRL	73.7	<MRL	1.43	141	4.06	<MRL	30.8	Total Radium (PCI/L) 0.7, TTHM (µg/L) 3.47
Risco	0.52	102	<MRL	<MRL	337	3.03	<MRL	17.3	Total Radium (PCI/L) 4.2
Senath	0.1	5.23	1.08	<MRL	40.7	3.85	2.39	2.29	
Sikeston	<MRL	190	<MRL	<MRL	14	1.03	<MRL	7.22	Bromodichloromethane (µg/L) 1.18, Chloroform (µg/L) 1.19, Dibromochloromethane (µg/L) 0.72, Trichloroacetic Acid (µg/L) 1.66
Steele	<MRL	25	<MRL	1.03		5.5	<MRL	10.6	
Stoddard Co. PWSD 1	<MRL	215	<MRL	<MRL	108	1.19	<MRL	9.83	Total Radium (PCI/L) 3.4, Dibromoacetic Acid (µg/L) 2.54, TTHM (µg/L) 26.2
Stoddard Co. PWSD 3	<MRL	223	2.03	<MRL	24.6	28.1	<MRL	19.8	Bromodichloroacetic Acid (µg/L) 4.66, Dibromoacetic Acid (µg/L) 1.75, Trichloroacetic Acid (µg/L) 3.5, TTHM (µg/L) 11.1
Stoddard Co. PWSD 5	<MRL	252	<MRL	<MRL	15	14.2	<MRL	11	Total Radium (PCI/L) 0.3, Bromochloroacetic Acid (µg/L) 3.6, Dibromoacetic Acid (µg/L) 2.39, TTHM (µg/L) 8.32
Vaughns Gaslite Village	1.77	38.5	<MRL	1.22	22.3	116	1.32	50.4	
Wardell	0.05	14.1	<MRL	<MRL		5.92	1.3	4.75	
Wyatt	<MRL	258	<MRL	<MRL	7.95	7.22	<MRL	14.3	Total Radium (PCI/L) 4.1, Bromochloroacetic Acid (µg/L) 2.94, Dichloroacetic Acid (µg/L) 4.75, O-Xylene (µg/L) 0.65, Trichloroacetic Acid (µg/L) 3.91, TTHM (µg/L) 15.4

Table 13. Summary of Groundwater Protection Programs.

Program or Activities	Check (X)	Implementation Status	Responsible State Agency
Active SARA Title III Program	X	Fully Established	MDPS/SEMA
Ambient Groundwater Monitoring System		N/A	
Aquifer Mapping and Characterization	X	Continuing Effort	DNR
Aquifer Vulnerability Assessment		N/A	
Comprehensive Data Management System		N/A	
EPA-Endorsed Core Comprehensive State Groundwater Protection Program (CSGWPP)		N/A	
Groundwater Best Management Practices	X	Continuing Effort	DNR
Groundwater Classification		N/A	
Groundwater Discharge Permits	X	Fully Established	DNR
Groundwater Legislation	X	Developed	DNR
Groundwater-Level Observation Network	X	Fully Established	DNR
Groundwater Monitoring at Sanitary Landfills	X	Fully Established	DNR
Groundwater Quality Standards	X	Fully Established	DNR
Interagency Coordination for Groundwater Protection Initiatives	X	Fully Established	DNR
Nonpoint Source Controls	X	Continuing Effort	DNR
Pesticide State Management Plan	X	Developed	MDA
Pollution Prevention Program	X	Continuing Effort	DNR
Resource Conservation and Recovery Act (RCRA) Primacy	X	Fully Established	DNR
State RCRA Program Incorporating More Stringent Requirements Than RCRA Primacy	X	Fully Established	DNR
State Septic System Regulations	X	Fully Established	MDHSS
State Superfund	X	Fully Established	DNR
Underground Injection Control Program	X	Fully Established	DNR
Underground Storage Tank Installation Requirements	X	Fully Established	DNR
Underground Storage Tank Permit Program		NA	
Underground Storage Tank Remediation Fund		NA	
Vulnerability Assessment for Drinking Water/ Wellhead Protection	X	Fully Established	DNR
Well Abandonment Regulations	X	Fully Established	DNR
Wellhead Protection Program (EPA-Approved)	X	Fully Established	DNR
Well Installation Regulations	X	Fully Established	DNR

MDPS/SEMA: Missouri Department of Public Safety, State Emergency Management Agency

MDA: Missouri Department of Agriculture

MDHSS: Missouri Department of Health and Senior Services

Notes:

Active SARA Title III Program: This program is administered by the Missouri Department of Public Safety, State Emergency Management Agency.

Ambient Groundwater Monitoring System: There is no system per se. The state has participated in several opportunities to monitor ambient groundwater, such as impact analyses following the floods of 1993.

Aquifer Mapping and Characterization: The Water Resources Center participates in aquifer mapping. No present systematic activity is done, although these activities may be conducted in concert with hazardous substance release investigations. The department's Public Drinking Water Branch is currently working with the Water Resources Center to perform aquifer monitoring and characterization to delineate which aquifer zones are responsible for the highest concentration of radionuclides. In addition, the U.S. Geological Survey has done considerable work on aquifer characteristics.

Aquifer Vulnerability Assessment: The department does not have a specific program in place, but the department's Water Resources Center collects groundwater supply data and performs resource assessments.

Comprehensive Data Management System: None.

EPA-Endorsed Core Comprehensive State Groundwater Protection Program: No formal program has been established.

Groundwater Best Management Practices: Some BMPs are established as part of the Nonpoint Source Management Plan. The Soil and Water Conservation Program also provides cost-share to help agricultural landowners install BMPs on their land.

Groundwater Classification: There is no classification system at this time, although it has been proposed in the past.

Groundwater Discharge Permits: Underground Injection Control permits are issued jointly by the department's Division of Geology and Land Survey and Water Protection Program.

Groundwater Legislation: The Cave Resources Act and Clean Water Law deal directly with groundwater. Other laws, such as the Dead Animal Disposal Statute, prescribe protections for groundwater. There is no comprehensive groundwater protection statute per se.

Groundwater-Level Well Observation Network: Established in 1951, this network is operated by the department's Water Resources Center and currently consists of 75 wells.

Groundwater Monitoring at Sanitary Landfills: The department's Solid Waste Management Program oversees monitoring at sanitary landfills.

Groundwater Quality Standards: Standards have been established as part of state water quality standards.

Interagency Coordination for Groundwater Protection Initiatives: Opportunities for monthly coordination are provided through the Water Quality Coordinating Committee.

Nonpoint Source Controls: The nonpoint source management program provides guidance for voluntary controls. In addition, the department's Soil and Water Conservation Program provides cost-share for soil and water conservation.

Pesticide State Management Program: A general pesticide and water quality management plan was prepared by the Missouri Department of Agriculture in conjunction with the Missouri Department of Natural Resources. The plan addresses both groundwater and surface water, and has been concurred with by EPA.

Pollution Prevention Program: The department uses outreach and assistance to educate Missourians on pollution prevention.

Resource Conservation and Recovery Act (RCRA) Primacy: RCRA is administered by the department's Hazardous Waste Program.

State RCRA Program Incorporating More Stringent Requirements than RCRA Primacy: Requirements are administered by the department's Hazardous Waste Program.

State Septic System Regulations: Regulations are administered by the Department of Health and Senior Services.

State Superfund: This program is administered by the department's Hazardous Waste Program, and provides for a state registry of confirmed abandoned hazardous waste disposal sites.

Underground Injection Control Program: The program is administered by the department's Division of Geology and Land Survey.

Underground Storage Tank Installation Requirements: Requirements are administered by the department's Hazardous Waste Program.

Underground Storage Tank Permit Program: Tanks are required to be registered but not permitted.

Underground Storage Tank Remediation Fund: The department does not have an underground storage tank remediation fund, but does have a similar fund called the Petroleum Storage Tank Insurance Fund. It was initially established to provide underground storage tank owners and operators with assistance in meeting state and federal financial responsibility requirements. It has since been amended, broadening eligibility and expanding benefits.

Vulnerability Assessment for Drinking Water/Wellhead Protection: Assessments are administered by the Department's Water Protection Program. A vulnerability assessment of Missouri drinking water to chemical contamination was conducted and implemented in 1991.

Well Abandonment Regulations: Regulations are administered by the department's Division of Land Geology and Land Survey.

Wellhead Protection Program (EPA-approved): This program is administered by the department's Water Protection Program.

Well Installation Regulations: Regulations are administered by the department's Water Protection Program.

For more information, call the Department of Natural Resources at (573)751-1300.

Appendix I
Impaired or Potentially Impaired Waters of Missouri

Table 14. 2010 Missouri Section 303(d) List,
As Approved by the Missouri Clean Water Commission,
November 3, 2010

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County	Comment
2010	Atkinson Lake	7234	L1	434.0	434.0	Ac.	Chlorophyll	Rural NPS	1	2,3,4			38.0068	-94.0473	St. Clair	1
2010	Atkinson Lake	7234	L1	434.0	434.0	Ac.	Phosphorus	Rural NPS	1	2,3,4			38.0068	-94.0473	St. Clair	1
2002	Bear Cr.	0115U-01	U	2.0	n/a	Mi.	Unknown	Unknown	1G		40.1585	-92.5644	40.1436	-92.5374	Adair	2
2008	Bee Fk.	2760	C	8.7	8.7	Mi.	Lead (S)	Fletcher Mine	1	2,4	37.4426	-91.0915	37.4598	-90.9851	Reynolds	2
2006	Bee Fk.	2760	C	0.9	8.7	Mi.	Lead (W)	Fletcher Mine	1	2,4	37.4426	-91.0915	37.4438	-91.0758	Reynolds	1
2008	Bee Fk.	2760U-01	U	0.3	n/a	Mi.	Lead (S)	Fletcher Mine	1G		37.4415	-91.0942	37.4426	-91.0915	Reynolds	1,5
2006	Belcher Branch Lake	7365	L3	42.0	42.0	Ac.	Mercury(T)	Atmospheric Dep.	1G	2,4,5	39.5895	-94.7344	39.5828	-94.7318	Buchanan	1
2010	Bethany Lake	7109	L3	78.0	78.0	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4,5			40.3131	-94.0310	Harrison	1
2008	Big Bottom Cr.	1746	C	0.5	1.5	Mi.	Ammonia	Lake Forest WWTP	1	4	37.9561	-90.2084	37.9615	-90.2087	Ste. Genevieve	1
2006	Big Bottom Cr.	1746	C	1.3	1.5	Mi.	Low D.O.	Lake Forest WWTP	1	4	37.9561	-90.2084	37.9698	-90.2022	Ste. Genevieve	1
2008	Big Bottom Cr.	1746	C	1.3	1.5	Mi.	Org. Sediment	Lake Forest WWTP	1	4	37.9561	-90.2084	37.9698	-90.2022	Ste. Genevieve	2
2006	Big Cr.	0444	P	1.0	31.5	Mi.	Ammonia	Bethany WWTP	1	2,3,4	40.2554	-94.0618	40.2464	-94.0694	Harrison	1
2006	Big Cr.	0444	P	6.0	31.5	Mi.	Low D.O.	Bethany WWTP	1	2,3,4	40.2554	-94.0618	40.2057	-94.0774	Harrison	1
2010	Big Cr.	2916	P	3.0	34.1	Mi.	Cadmium (S)	Mill tailings (Aban.)	1	2,4,5	37.4745	-90.6872	37.4555	-90.6853	Wayne/Iron	1
2010	Big Cr.	2916	P	3.0	34.1	Mi.	Lead (S)	Mill tailings (Aban.)	1	2,4,5	37.4745	-90.6872	37.4555	-90.6853	Wayne/Iron	1
2010	Big Cr.	2916	P	3.0	34.1	Mi.	Metals (S)	Mill tailings (Aban.)	1	2,4,5	37.4745	-90.6872	37.4555	-90.6853	Wayne/Iron	1
2006	Big Otter Cr. Trib.	1225	C	1.0	1.0	Mi.	Low D.O.	Unknown	1	2,4	38.2054	-93.7188	38.2148	-93.7278	Henry	1
2010	Big Piney R.	1578	P	4.0	7.8	Mi.	Low D.O.	Unknown	1	2,3,4,5	37.1188	-92.1011	37.1561	-92.0644	Texas	1

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County	Comment
2006	Big R.	2080	P	18.6	81.3	Mi.	Cadmium (S)	Mill tailings (Aban.)	1G	2,4,7	37.8722	-90.5885	37.9676	-90.5339	St. Francois	1
2006	Big R.	2080	P	18.6	81.3	Mi.	Zinc (S)	Mill tailings (Aban.)	1G	2,4,7	37.8722	-90.5885	37.9676	-90.5339	St. Francois	1
2010	Bilby Ranch Lake	7368	L3	95.0	95.0	Ac.	Chlorophyll	Rural NPS	1	2,4,5			40.3499	-95.1322	Nodaway	1
2010	Binder Lake	7185	L3	127.0	127.0	Ac.	Chlorophyll	Urban/Rural NPS	1	2,4,5			38.6021	-92.3013	Cole	1
2010	Binder Lake	7185	L3	127.0	127.0	Ac.	Phosphorus	Urban/Rural NPS	1	2,4,5			38.6021	-92.3013	Cole	1
2008	Black R.	2784	P	39.0	39.0	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,3,4,5,6	37.1353	-90.7720	36.8256	-90.4224	Wayne/Butler	1
2006	Blackberry Cr.	3184	C	3.5	6.5	Mi.	Chloride	Asbury PP	1	2,4	37.3279	-94.5707	37.2877	-94.5618	Jasper	1
2008	Blackberry Cr.	3184	C	3.5	6.5	Mi.	Sulfate Chloride	Asbury PP	1	2,4	37.3279	-94.5707	37.2877	-94.5618	Jasper	1
2006	Blue R.	0417	P	4.4	4.4	Mi.	Bacteria	Urban NPS	2	1,4,5,7	39.1007	-94.4896	39.1304	-94.4694	Jackson	2
2006	Blue R.	0418	P	9.4	9.4	Mi.	Bacteria	Urban NPS	2	1,4,5,7	39.0158	-94.5200	39.1007	-94.4896	Jackson	1
2006	Blue R.	0419	P	7.7	7.7	Mi.	Bacteria	Urban NPS	2,5	1,4	38.9571	-94.5592	39.0158	-94.5200	Jackson	1
2006	Blue R.	0421	C	12.0	12.0	Mi.	Bacteria	Urban NPS	2	1,4,5	38.8504	-94.6080	38.9571	-94.5592	Jackson	2
2006	Bobs Cr.	0035	C	3.5	14.2	Mi.	Low D.O.	Lincoln Co. WWTF	1	2,4	38.9861	-90.8701	38.9761	-90.8208	Lincoln	1
2006	Bonne Femme Cr.	0750	P	7.8	7.8	Mi.	Bacteria	Rural NPS	2	1,4	38.8357	-92.3047	38.7915	-92.3798	Boone	1
2002	Bourbeuse R.	2034	P	136.7	136.7	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,3,4,5,6	38.1322	-91.5983	38.3991	-90.8990	Phelps/Franklin	1
2002	Brush Cr.	1371	P	4.7	4.7	Mi.	Low D.O.	Humansville WWTP	1	2,4	37.7874	-93.5831	37.8316	-93.6276	Polk/St. Clair	1
2002	Brush Cr.	1371	P	4.7	4.7	Mi.	Org. Sediment	Humansville WWTP	1	2,4	37.7874	-93.5831	37.8316	-93.6276	Polk/St. Clair	2
2010	Brush Cr.	1372	C	5.5	5.5	Mi.	Low D.O.	Unknown	1	2,4	37.7373	-93.5385	37.7876	-93.5834	Polk	1
2006	Burgher Branch	1865	C	1.5	1.5	Mi.	Low D.O.	Unknown	1	4	37.9434	-91.7457	37.9320	-91.7262	Phelps	1
2006	Busch Lake #35	7057	L3	51.0	51.0	Ac	Mercury (T)	Atmospheric Dep.	1G	4,5	38.7132	-90.7318	38.7199	-90.7235	St. Charles	1
2010	Busch Lake #37	7056U	U	34.0	34.0	Ac	Mercury (T)	Atmospheric Dep.	1G				38.7133	-90.7916	St. Charles	1
2006	Capps Cr.	3234	P	5.0	5.0	Mi.	Bacteria	Rural NPS	2	1,3,4,5,6	36.8835	-94.0261	36.8884	-94.0935	Barry	1
2010	Castor River	2288	P	7.5	7.5	Mi	Bacteria	Rural NPS	2	1,4,5,6	37.1481	-90.0710	37.1056	-90.0022	Bollinger	1
2008	Cedar Cr.	0737	C	7.0	37.4	Mi	Unknown	Unknown	1G	2,4	39.0265	-92.1391	38.9524	-92.1517	Callaway	1
2010	Cedar Cr.	1344	P	10.0	31.0	Mi.	Low D.O.	Unknown	1	2,4,5,6	37.6741	-93.9082	37.7572	-93.8754	Cedar	1

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County	Comment
2008	Cedar Cr.	1344	P	10.0	31.0	Mi.	Unknown	Unknown	1G	2,4,5,6	37.6741	-93.9082	37.7572	-93.8754	Cedar	1
2010	Cedar Cr.	1357	C	16.2	16.2	Mi.	Low D.O.	Unknown	1	2,4	37.5312	-93.9866	37.6741	-93.9082	Cedar	1
2008	Cedar Cr.	1357	C	16.2	16.2	Mi.	Unknown	Unknown	1G	2,4	37.5312	-93.9866	37.6741	-93.9082	Cedar	1
2006	Center Cr.	3203	P	12.8	26.8	Mi.	Cadmium (S)	Mill tailings (Aban.)	1G	2,4,5,6,7	37.1755	-94.4549	37.1508	-94.6172	Jasper	1
2006	Center Cr.	3203	P	12.8	26.8	Mi.	Cadmium (W)	Mill Tailings (Aban.)	1	2,4,5,6,7	37.1755	-94.4549	37.1508	-94.6172	Jasper	1
2006	Center Cr.	3203	P	12.8	26.8	Mi.	Lead (S)	Mill tailings (Aban.)	1G	2,4,5,6,7	37.1755	-94.4549	37.1508	-94.6172	Jasper	1
2006	Center Cr.	3203	P	12.8	26.8	Mi.	Zinc (S)	Mill tailings (Aban.)	1G	2,4,5,6,7	37.1755	-94.4549	37.1508	-94.6172	Jasper	1
2006	Center Cr.	3203	P	26.8	26.8	Mi.	Bacteria	Rural NPS	2	1,4,5,6,7	37.1044	-94.316	37.1508	-94.6172	Jasper	1
2008	Center Cr.	3210	P	21.0	21.0	Mi.	Bacteria	Rural NPS	2	1,4,5,6,7	37.0370	-94.0753	37.1053	-94.3090	Newton/Jasper	1
2010	Center Cr.	3214	P	4.9	4.9	Mi.	Bacteria	Rural NPS	2	1,4,5,6,7	37.0445	-94.0435	37.0370	-94.0753	Lawrence/Newton	1
1998	Chariton R.	0640	P	40.0	111.0	Mi.	Bacteria	Rural NPS	2	1,4,5,6	40.5886	-92.7145	39.3130	-92.9580	Putnam/Chariton	1
2006	Chat Cr. ^B	3168	C	1.0	2.1	Mi.	Cadmium (W)	Baldwin Park mine	1	2,4	36.9755	-93.7145	36.9783	-93.7315	Lawrence	1
2006	Chat Cr. ^B	3168	C	1.0	2.1	Mi.	Lead (S)	Mill Tailings (Aban.)	1G	2,4	36.9755	-93.7145	36.9783	-93.7315	Lawrence	1
2006	Chat Cr. ^B	3168	C	1.0	2.1	Mi.	Zinc (S)	Mill Tailings (Aban.)	1G	2,4	36.9755	-93.7145	36.9783	-93.7315	Lawrence	1
2006	Clear Cr.	1333	P	28.2	28.2	Mi.	Low D.O.	Unknown	1	2,4	37.8228	-94.1102	37.9953	-93.9362	Vernon/St.Clair	1
2006	Clear Cr.	1336	C	22.3	22.3	Mi.	Low D.O.	Unknown	1	2,4	37.6960	-94.2262	37.8228	-94.1102	Vernon	1
2006	Clear Cr.	3238	P	11.1	11.1	Mi.	Bacteria	Rural NPS	2	1,4	36.9422	-93.9997	36.9354	-94.1495	Barry/Newton	1
2002	Clear Cr.	3239	C	3.5	3.5	Mi.	Nutrients	Monett WWTP	G	2,4	36.9204	-93.9490	36.9422	-93.9997	Barry/Newton	7
2006	Clear Fk.	0935	P	3.0	25.8	Mi.	Low D.O.	Knob Noster WWTP	1	2,4	38.7702	-93.5928	38.7906	-93.5914	Johnson	2
2002	Clearwater Lake	7326	L2	1635.0	1635.0	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4,5	37.1921	-90.7786	37.1353	-90.7721	Reynolds/Wayne	1
1994	Coldwater Cr.	1706	C	4.0	6.9	Mi.	Low D.O.	Unknown	1	2,4	38.8135	-90.2908	38.8129	-90.2369	St. Louis	1
2008	Coldwater Cr.	1706	C	6.9	6.9	Mi.	Bacteria	Urban NPS	2	1,4	38.8135	-90.2908	38.8321	-90.2192	St. Louis	1
2006	Coldwater Cr.	1706	C	6.9	6.9	Mi.	Chloride	Urban NPS	1	2,4	38.8135	-90.2908	38.8321	-90.2192	St. Louis	1
2010	Coon Cr.	0132	C	11.8	11.8	Mi.	Low D.O.	Unknown	1	4	39.3993	-92.3843	37.9747	-92.3019	Randolph/Monroe	1
2010	Coon Cr., Trib to	0133	C	2.0	2.0	Mi.	Low D.O.	Unknown	1	4	39.4247	-92.3935	34.4442	-92.3690	Randolph	1
2006	Courtois Cr.	1943	P	2.6	32.0	Mi.	Lead (W)	Viburnum 29 Mine	1	2,4,5	37.7647	-91.0711	37.7931	-91.0588	Washington	2

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County	Comment
2006	Courtois Cr.	1943	P	2.6	32.0	Mi.	Metals*** (S)	Viburnum 29 Mine	1G	2,4,5	37.7647	-91.0711	37.7931	-91.0588	Washington	1
2006	Courtois Cr.	1943	P	2.6	32.0	Mi.	Metals*** (W)	Viburnum 29 Mine	1G	2,4,5	37.7647	-91.0711	37.7931	-91.0588	Washington	1
2006	Creve Coeur Cr.	1703	C	3.8	3.8	Mi.	Low D.O.	Unknown	1	2,4	38.6702	-90.4921	38.7091	-90.4878	St. Louis	1
2006	Creve Coeur Cr.	1703	C	3.8	3.8	Mi.	Bacteria	Urban NPS	2	1,4	38.6702	-90.4921	38.7091	-90.4878	St. Louis	1
2006	Creve Coeur Cr.	1703	C	3.8	3.8	Mi.	Chloride	Urban NPS	1	2,4	38.6702	-90.4921	38.7091	-90.4878	St. Louis	1
2006	Crooked Cr.	1928	P	3.5	3.5	Mi.	Cadmium (S)	Buick Smelter	1G	2,4	37.6987	-91.1599	37.7142	-91.2049	Dent/Crawford	2
2006	Crooked Cr.	1928	P	3.5	3.5	Mi.	Cadmium (W)	Buick Smelter	1	2,4	37.6987	-91.1599	37.7142	-91.2049	Dent/Crawford	1
2006	Crooked Cr.	1928	P	3.5	3.5	Mi.	Lead (S)	Buick Smelter	1G	2,4	37.6987	-91.1599	37.7142	-91.2049	Dent/Crawford	2
2008	Crooked Cr.	1928U-01	U	5.2	n/a	Mi.	Cadmium (W)	Buick Smelter	1G		37.6492	-91.1341	37.6987	-91.1599	Iron/Dent	1
2010	Crooked Cr.	1928U-01	U	5.2	n/a	Mi.	Copper (W)	Buick Smelter	1G		37.6492	-91.1341	37.6987	-91.1599	Iron/Dent	1
2006	Current R.	2636	P	124.0	124.0	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,4,5,6	37.3766	-91.5471	36.4988	-90.8023	Shannon/Ripley	1
2006	Dardenne Cr.	0219	P1	7.0	7.0	Mi.	Low D.O.	Unknown	1	2,4,5	38.8261	-90.6032	38.8612	-90.5367	St. Charles	1
2010	Dardenne Cr.	0221	P	16.5	16.5	Mi.	Low D.O.	Unknown	1G	2,4,5	38.7361	-90.7857	38.8270	-90.6024	St. Charles	1
2006	Dardenne Cr.	0222	C	8.5	8.5	Mi.	Low D.O.	Unknown	1	2,4	38.7289	-90.8919	38.7362	-90.7856	St. Charles	1
2006	Dark Cr.	0690	C	9.1	9.1	Mi.	Low D.O.	Unknown	1	2,4	39.5158	-92.5855	39.4399	-92.6302	Randolph	1
2002	Deer Ridge Lake	7015	L3	39.0	39.0	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4,5	40.1747	-91.8276	40.1807	-91.8276	Lewis	1
2008	Des Moines R.	0036	P	31.3	31.3	Mi.	Bacteria	Mult. Pt.& NPS	2	1,4,5	40.6138	-91.7283	40.3809	-91.4226	Clark	1
2006	Ditch # 36	3109	P	7.8	7.8	Mi.	Low D.O.	Unknown	1	2,4	36.2730	-89.9928	36.1729	-90.0220	Dunklin	1
2006	Dousinbury Cr.	1180	P	3.9	3.9	Mi.	Bacteria	Rural NPS	2	1,4	37.5745	-92.9317	37.5958	-92.9801	Dallas	1
2008	Dry Branch	3189	C	10.2	10.2	Mi.	Bacteria	Rural NPS	2	1,4	37.2514	-94.2221	37.2929	-94.3591	Jasper	1
2006	Dutro Carter Cr.	3569	P	0.6	1.5	Mi.	Low D.O.	Rolla SE WWTP	1	2,4	37.9321	-91.7260	37.9318	-91.7170	Phelps	1
2006	Dutro Carter Cr.	3569	P	0.9	1.5	Mi.	Low D.O.	Unknown	1	2,4	37.93062	-91.74032	37.9321	-91.7260	Phelps	1
2010	East Fk. Crooked R.	0372	P	19.9	19.9	Mi.	Low D.O.	Unknown	1	2,4	39.4461	-93.9493	39.2957	-93.8924	Ray	1

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2006	East Fk. Grand R.	0457	P	28.7	28.7	Mi	Bacteria	Rural NPS	2	1,3,4,5,6	40.4943	-94.3120	40.1973	-94.3602	Worth/Gentry	2
2008	East Fk. Locust Cr.	0608	P	16.7	16.7	Mi	Bacteria	Mult. Pt.& NPS	2	1,4	40.1662	-93.1193	40.0440	-93.1735	Sullivan	1
2008	East Fk. Locust Cr.	0610	C	0.4	15.7	Mi	Bacteria	Pt.& NPS	2	1,4	40.2172	-93.1066	40.2120	-93.1062	Sullivan	1
2008	East Fk. Locust Cr.	0610	C	15.3	15.7	Mi.	Bacteria	Rural NPS	2	1,4	40.3632	-93.0867	40.2172	-93.1066	Sullivan	1
2008	East Fk. Locust Cr.	0610	C	15.3	15.7	Mi.	Low D.O.	Rural NPS	1	2,4	40.3632	-93.0867	40.2172	-93.1066	Sullivan	1
2006	East Fk. Medicine Cr.	0619	P	43.8	43.8	Mi.	Bacteria	Rural NPS	2	1,4	40.5804	-93.3340	40.1021	-93.3755	Putnam/Grundy	1
2006	East Fk. Tebo Cr.	1282	C	1.0	14.5	Mi.	Low D.O.	Windsor SW WWTP	1	2,4	38.5142	-93.5346	38.5005	-93.5297	Henry	1
2006	Eaton Branch	2166	C	0.9	1.2**	Mi.	Cadmium (S)	Mill tailings (Aban.)	1G	2,4	37.8676	-90.6055	37.8711	-90.5919	St. Francois	1
2006	Eaton Branch	2166	C	0.9	1.2**	Mi.	Cadmium (W)	Mill tailings (Aban.)	1	2,4	37.8676	-90.6055	37.8711	-90.5919	St. Francois	1
2006	Eaton Branch	2166	C	0.9	1.2**	Mi.	Lead (S)	Mill tailings (Aban.)	1G	2,4	37.8676	-90.6055	37.8711	-90.5919	St. Francois	1
2006	Eaton Branch	2166	C	0.9	1.2**	Mi.	Zinc (S)	Mill tailings (Aban.)	1G	2,4	37.8676	-90.6055	37.8711	-90.5919	St. Francois	1
2006	Eaton Branch	2166	C	0.9	1.2**	Mi.	Zinc (W)	Mill tailings (Aban.)	1	2,4	37.8676	-90.6055	37.8711	-90.5919	St. Francois	1
2006	Eleven Point R.	2597	P	11.4	11.4	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,4,5	36.7983	-91.3384	36.7393	-91.2209	Oregon	1
2008	Eleven Point R.	2601	P	22.3	22.3	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,4,5	36.8274	-91.5855	36.7984	-91.3386	Oregon	1
2006	Elm Branch	1283	C	3.0	3.0	Mi.	Low D.O.	Unknown	1	2,4	38.5164	-93.5126	38.5006	-93.5294	Henry	1
2006	Fishpot Cr.	2186	P	3.5	3.5	Mi.	Low D.O.	Unknown	1	2,4	38.5592	-90.5255	38.5470	-90.4976	St. Louis	1
2008	Fishpot Cr.	2186	P	3.5	3.5	Mi.	Bacteria	Urban NPS	2	1,4	38.5592	-90.5255	38.5470	-90.4976	St. Louis	2
2006	Flat River Cr.	2168	C	5.0	10.0	Mi.	Cadmium (W)	Mill tailings (Aban.)	1	2,4	37.8395	-90.5267	37.8920	-90.4999	St. Francois	1
2010	Forest Lake	7151	L1	580.0	580.0	Ac.	Chlorophyll	Rural NPS	1	2,3,4			40.1700	-92.6577	Adair	1
2010	Forest Lake	7151	L1	580.0	580.0	Ac.	Nitrogen	Rural NPS	1	2,3,4			40.1700	-92.6577	Adair	1
2010	Forest Lake	7151	L1	580.0	580.0	Ac.	Phosphorus	Rural NPS	1	2,3,4			40.1700	-92.6577	Adair	1
2008	Foster Br.	0747U-01	U	0.5	n/a	Mi.	Ammonia	Ashland WWTP	1		38.7634	-92.2550	38.7574	-92.2501	Boone	1
2006	Fowler Cr.	0747	C	6.0	6.0	Mi.	Low D.O.	Unknown	1	2,4	38.7683	-92.2209	38.7133	-92.2170	Boone	1
2008	Fox R.	0038	P	42.0	42.0	Mi.	Bacteria	Rural NPS	2	1,4,5	40.6070	-91.9161	40.3714	-91.5884	Clark	1
2010	Fox Valley	7008	L3	89.0	89.0	Ac.	Phosphorus	Rural NPS	1	2,4,5			40.4970	-91.7658	Clark	1

Year	Lake Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County	Comment
2010	Foxboro Lake	7382	L3	22.0	22.0	Ac.	Mercury(T)	Atmospheric Dep.	1G	2,4,5			38.3828	-91.3404	Franklin	1
2002	Frisco Lake	7280	L3	5.0	5.0	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4	37.9553	-91.7664	37.9555	-91.7684	Phelps	1
2002	Gasconade R.	1455	P	264.0	264.0	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,3,4,5	38.6745	-91.5484	37.2120	-92.5182	Gascon./Wright	1
2010	Goose Cr., Trib.	1420	C	3.0	3.0	Mi.	Bacteria	Rural NPS	2	1,4	37.1362	-93.7022	37.1613	-93.6677	Lawrence	1
2002	Grand Glaize Cr.	2184	C	4.0	4.0	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,4	38.5713	-90.4696	38.5528	-90.4634	St. Louis	1
2008	Grand Glaize Cr.	2184	C	4.0	4.0	Mi.	Bacteria	Urban NPS	2	1,4	38.5713	-90.4696	38.5528	-90.4634	St. Louis	1
2006	Grand Glaize Cr.	2184	C	4.0	4.0	Mi.	Chloride	Urban NPS	1	2,4	38.5713	-90.4696	38.5528	-90.4634	St. Louis	2
2010	Grand Glaize Cr.	2184	C	4.0	4.0	Mi.	Low D.O.	Urban NPS	1	2,4	38.5713	-90.4696	38.5528	-90.4634	St. Louis	1
2006	Grand R.	0593	P	56.0	56.0	Mi.	Bacteria	Rural NPS	2	1,3,4,5,6	39.7406	-93.5322	39.3855	-93.1075	Livin./Chariton	1
2006	Gravois Cr.	1712	P	2.3	2.3	Mi.	Bacteria	Urban NPS	2	1,4	38.5408	-90.2990	38.5481	-90.2719	St. Louis	2
2008	Gravois Cr.	1712	P	2.3	2.3	Mi.	Chloride	Urban NPS	1	2,4	38.5408	-90.2990	38.5481	-90.2719	St. Louis	1
2006	Gravois Cr.	1713	C	6.0	6.0	Mi.	Low D.O.	Unknown	1	2,4	38.5472	-90.3482	38.5408	-90.2990	St. Louis	2
2006	Gravois Cr.	1713	C	6.0	6.0	Mi.	Bacteria	Urban NPS	2	1,4	38.5472	-90.3482	38.5408	-90.2990	St. Louis	2
2006	Gravois Cr.	1713	C	6.0	6.0	Mi.	Chloride	Urban NPS	1	2,4	38.5472	-90.3482	38.5408	-90.2990	St. Louis	1
2006	Grindstone Cr.	1009	C	1.5	2.5	Mi.	Bacteria	Unknown	2	1,4	38.9287	-92.2930	38.9277	-92.3220	Boone	1
2010	Grindstone Res.	7384	L1	173.0	173.0	Ac.	Chlorophyll	Rural NPS	1	2,3,4			39.7744	-94.2946	DeKalb	1
2010	Grindstone Res.	7384	L1	173.0	173.0	Ac.	Nitrogen	Rural NPS	1	2,3,4			39.7744	-94.2946	DeKalb	1
2010	Grindstone Res.	7384	L1	173.0	173.0	Ac.	Phosphorus	Rural NPS	1	2,3,4			39.7744	-94.2946	DeKalb	1
2010	Harrison County Lake	7386	L1	280.0	280.0	Ac.	Chlorophyll	Rural NPS	1	2,3,4			40.3980	-94.0869	Harrison	1
2010	Harrison County Lake	7386	L1	280.0	280.0	Ac.	Phosphorus	Rural NPS	1	2,3,4			40.3980	-94.0869	Harrison	1
2008	Hazel Creek Lake	7152	L1	453.0	453.0	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,3,4			40.2996	-92.6291	Adair	1
2010	Hazel Creek Lake	7152	L1	453.0	453.0	Ac.	Chlorophyll	Rural NPS	1G	2,3,4			40.2996	-92.6291	Adair	1
2010	Hazel Hill Lake	7387	L3	62.0	62.0	Ac.	Chlorophyll	Rural NPS	1	2,4,5			38.8456	-93.7768	Johnson	1

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County	Comment
2008	Heath's Cr.	0848	P	21.0	21.0	Mi.	Low D.O.	Unknown	1	2,4	38.9054	-93.2155	38.9218	-93.0189	Pettis	1
2006	Hickory Cr.	3226	P	4.9	4.9	Mi.	Bacteria	Rural NPS	2	1,4	36.8524	-94.3260	36.8938	-94.3707	Newton	1
1998	Hinkson Cr.	1007	P	7.6	7.6	Mi.	Unknown	Urban Runoff	1G	2,4,5	38.9285	-92.3398	38.9220	-92.4140	Boone	1
2006	Hinkson Cr.	1008	C	18.8	18.8	Mi.	Bacteria	Urban NPS	2	1,4	39.0709	-92.2170	38.9285	-92.3398	Boone	1
1998	Hinkson Cr.	1008	C	6.3	18.8	Mi.	Unknown	Urban NPS	1G	2,4	38.9630	-92.2953	38.9285	-92.3398	Boone	1
2010	Honey Cr.	3169	P	16.5	16.5	Mi.	Bacteria	Rural NPS	2	1,4	37.0359	-93.6546	37.0792	-93.8618	Lawrence	1
2010	Honey Cr.	3170	C	2.7	2.7	Mi.	Bacteria	Rural NPS	2	1,4	37.0068	-93.6338	37.0359	-93.6546	Lawrence	1
2008	Horse Cr.	1348	P	27.7	27.7	Mi.	Low D.O.	Unknown	1	2,4,6	37.6442	-94.0779	37.7657	-93.8840	Cedar	1
2010	Horse Cr.	1348	P	27.7	27.7	Mi.	Unknown	Unknown	1G	2,4,6	37.6442	-94.0779	37.7657	-93.8840	Cedar	1
2002	Hough Park Lake	7388	L3	10.0	10.0	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4	38.5425	-92.1831	38.5403	-92.1831	Cole	1
2002	Indian Cr.	0420	C	3.4	3.4	Mi.	Bacteria	Mult. Pt.& NPS	2	1,4,7	38.9385	-94.6082	38.9525	-94.5627	Jackson	1
2006	Indian Cr.	0420	C	3.4	3.4	Mi.	Chloride	Urban NPS	1	2,4,7	38.9385	-94.6082	38.9525	-94.5627	Jackson	1
2010	Indian Cr.	1747	C	3.6	3.6	Mi.	Low D.O.	Unknown	1	2,4	37.9516	-90.1644	37.9747	-90.1995	St. Genevive	1
2006	Indian Cr.	1946	P	1.9	1.9	Mi.	Lead (W)	Viburnum 29 Mine	1	2,4	37.7419	-91.0843	37.7649	-91.0711	Washington	1
2002	Indian Cr.	1946	P	1.9	1.9	Mi.	Metals*** (W)	Viburnum 29 Mine	1G	2,4	37.7419	-91.0843	37.7649	-91.0711	Washington	1
2010	Indian Cr.	1946	P	1.9	1.9	Mi.	Zinc (W)	Viburnum 29 Mine	1	2,4	37.7419	-91.0843	37.7649	-91.0711	Washington	1
2006	Indian Cr.	3256	P	5.0	30.8	Mi.	Bacteria	Rural NPS	2	1,4,5,6	36.7947	-94.2318	36.7593	-94.2721	Newton	1
2010	Indian Cr.	3256	P	5.0	30.8	Mi.	Unknown	Unknown	1	2,4,5,6	36.7947	-94.2318	36.7593	-94.2721	Newton	1
2006	Indian Cr., Trib	3663	C	0.3	0.3	Mi.	Lead (W)	Viburnum 29 Mine	1	2,4	37.7590	-91.0798	37.7596	-91.0751	Washington	1
2006	Indian Cr., Trib	3663	C	0.3	0.3	Mi.	Zinc (W)	Viburnum 29 Mine	1	2,4	37.7590	-91.0798	37.7596	-91.0751	Washington	1
2008	Indian Creek Lake	7389	L3	185.0	185.0	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4,5	39.9173	-93.6996	39.8968	-93.6955	Livingston	1
2008	Jordan Cr.	3374	P	3.8	3.8	Mi.	Unknown	Unknown	1	2,4	37.2193	-93.3098	37.1968	-93.3520	Greene	1
2010	Kiefer Cr.	3592	P	1.2	1.2	Mi.	Bacteria	Urban NPS	2	1,4	38.5531	-90.5502	38.5486	-90.5346	St. Louis	1
2002	Knob Noster S.P. Lakes, Lake Buteo	7196	L3	10.0	24.0	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4	38.7464	-93.5791	38.7491	-93.5822	Johnson	1
2010	Kraut Run Lake	7056	L3	164.0	164.0	Ac.	Chlorophyll	Rural NPS	1	2,4			38.7336	-90.7627	St. Charles	1
2010	Kraut Run Lake	7056	L3	164.0	164.0	Ac.	Phosphorus	Rural NPS	1	2,4			38.7336	-90.7627	St. Charles	1
2010	La Belle Lake No.2	7023	L1	98.0	98.0	Ac.	Chlorophyll	Rural NPS	1	2,3,4,5			40.0912	-91.9000	Lewis	1

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2010	La Belle Lake No.2	7023	L1	98.0	98.0	Ac.	Phosphorus	Rural NPS	1	2,3,4,5			40.0912	-91.9000	Lewis	1
2010	Lac Capri	7297A	L3	112.0	112.0	Ac.	Chlorophyll	Urban NPS	1	2,4,5			37.8982	-90.6277	St. Francois	1
2010	Lac Capri	7297A	L3	112.0	112.0	Ac.	Nitrogen	Urban NPS	1	2,4,5			37.8982	-90.6277	St. Francois	1
2010	Lake Jacomo	7101	L3	998.0	998.0	Ac.	Chlorophyll	Urban NPS	1	2,4,5			38.9931	-94.3085	Jackson	1
2010	Lake of the Ozarks, Niangua Arm	7205	L2	7600.0	59520.0	Ac.	Phosphorus	Rural NPS, Urban Point Sources	1	2,4,5	37.9644	-92.8069	38.0824	-92.7636	Camden	1
2010	Lake of the Ozarks, Osage Arm	7205	L2	38920.0	59520.0	Ac.	Nitrogen	Rural NPS, Urban Point/NPS	1	2,4,5	38.2617	-93.4036	38.2025	-92.6272	Camden/Benton	1
2002	Lake of the Woods	7436	L3	3.0	3.0	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4			38.9696	-92.2393	Boone	1
2008	Lake of the Woods	0419U-01	U	7.0	n/a	Ac.	Mercury (T)	Atmospheric Dep.	1G		38.9942	-94.5172	38.9959	-94.5206	Jackson	1
2010	Lake Springfield	7312	L3	293.0	293.0	Ac.	Chlorophyll	Urban/Rural NPS	1	2,4,5,7			37.1117	-93.2629	Greene	1
2010	Lake Springfield	7312	L3	293.0	293.0	Ac.	Nitrogen	Urban/Rural NPS	1	2,4,5,7			37.1117	-93.2629	Greene	1
2010	Lake Springfield	7312	L3	293.0	293.0	Ac.	Phosphorus	Urban/Rural NPS	1	2,4,5,7			37.1117	-93.2629	Greene	1
2010	Lake St. Louis	7054	L3	444.0	444.0	Ac.	Mercury (T)	Atmospheric Dep.	1	2,4			38.8013	-90.7652	St. Charles	1
2002	Lake Ste. Louise	7055	L3	71.0	71.0	Ac.	Bacteria	Urban NPS	2	1,4			38.8000	-90.7908	St. Charles	1
1994	Lake Taneycomo	7314	L2	308.0	2118.6	Ac.	Low D.O.	Table Rock Dam	1	2,3,4,5	36.5954	-93.3092	36.6345	-93.2172	Taney	1
2010	Lake Taneycomo	7314	L2	2118.6	2118.6	Ac.	Nitrogen	Urban/Rural NPS, Urban Point Sources	1	2,3,4,5	36.5956	-93.3103	36.6586	-93.1243	Taney	1
2010	Lake Wappapello	7336	L2	8200.0	8200.0	Ac.	Chlorophyll	Rural NPS	1	2,4,5	37.0004	-90.3943	36.9318	-90.2823	Wayne	1
2010	Lake Wappapello	7336	L2	8200.0	8200.0	Ac.	Nitrogen	Rural NPS	1	2,4,5	37.0004	-90.3943	36.9318	-90.2823	Wayne	1
2010	Lake Wappapello	7336	L2	8200.0	8200.0	Ac.	Phosphorus	Rural NPS	1	2,4,5	37.0004	-90.3943	36.9318	-90.2823	Wayne	1
2010	Lake Winnebago	7212 ¹	L3	272.0	272.0	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4,5			38.8182	-94.3562	Cass	1
2006	Lamine R.	0847	P	64.0	64.0	Mi.	Bacteria	Unknown	2	1,4,5,6	38.6684	-92.9535	38.9805	-92.8499	Morgan/Cooper	1
2008	Lat. #2 Main Ditch	3105	P	11.5	11.5	Mi.	Temperature	Channelization	1	2,4	36.7878	-89.9260	36.6288	-89.9399	Stoddard	1

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2006	Lat. #2 Main Ditch	3105	P	11.5	11.5	Mi.	Low D.O.	Unknown	1	2,4	36.7878	-89.9260	36.6288	-89.9399	Stoddard	1
2008	Little Beaver Cr.	1529	C	3.3	3.5	Mi.	Inorg. Sediment	Smith S&G	1G	2,4	37.9362	-91.8349	37.9046	-91.8593	Phelps	1
2006	Little Dry Fk.	1863	P	1.0	5.2	Mi.	Low D.O.	Rolla SE WWTP	1	2,4	37.9387	-91.7112	37.9446	-91.6983	Phelps	1
2006	Little Dry Fk.	1864	C	0.6	4.7	Mi.	Low D.O.	Rolla SE WWTP	1	4	37.9318	-91.7170	37.9387	-91.7112	Phelps	1
2008	Little Dry Fk.	1864	C	3.9	4.7	Mi.	Low D.O.	Unknown	1	4	37.876	-91.7153	37.9318	-91.7170	Phelps	1
2006	Little Drywood Cr.	1325	P	20.5	20.5	Mi.	Low D.O.	Unknown	1	2,4	37.6977	-94.3942	37.8628	-94.4016	Vernon	1
2010	Little Drywood Cr.	1326	C	15.6	15.6	Mi.	Low D.O.	Unknown	1	2,4	37.6048	-94.3626	37.6977	-94.3942	Barton/Vernon	1
2010	Little Lost Cr.	3279	P	5.8	5.8	Mi.	Bacteria	Rural NPS	2	1,4	36.8614	-94.5419	36.8395	-94.6181	Newton	1
2006	Little Muddy Cr., Trib	3490	C	1.0	1.0	Mi.	Chloride	Tyson Foods	1	2,4	38.7669	-93.3037	38.7732	-93.2912	Pettis	1
2006	Little Muddy Cr., Trib	3490	C	1.0	1.0	Mi.	Color	Tyson Foods	G	1,2,4	38.7669	-93.3037	38.7732	-93.2912	Pettis	1
2006	Little Niangua R.	1189	P	20.0	43.8	Mi.	Low D.O.	Unknown	1	2,4,5	37.8406	-93.0014	38.0092	-93.0923	Dallas/Camden	1
2008	Little Osage R.	3652	C	23.6	23.6	Mi.	Bacteria	Rural NPS	2	1,4	37.9918	-94.6140	37.9844	-94.3884	Vernon	2
2006	Locust Cr.	0606	P	36.4	91.7	Mi.	Bacteria	Rural NPS	2,5	1,3,4	40.5831	-93.1409	40.2074	-93.1653	Putnam/Sullivan	1
2010	Lone Elm Hollow	3216U	U	1.4	n/a	Mi.	Metals	Mill tailings (Aban.)	1G		37.0942	-94.5258	37.1099	-94.5300	Jasper	1
2010	Long Branch	0857	C	6.0	6.0	Mi.	Low D.O.	Mult. Pt.& NPS	1	2,4	38.7028	-93.5619	38.7152	-93.5005	Johnson/Pettis	1
2002	Long Branch	0857	C	6.0	6.0	Mi.	Unknown	Unknown	1G	2,4	38.7028	-93.5619	38.7152	-93.5005	Johnson/Pettis	3
2006	Long Branch Cr.	0696	C	2.0	14.8	Mi.	Low D.O.	Atlanta WWTP	1	2,4	39.8980	-92.4932	39.8764	-92.4900	Macon	1
2002	Longview Lake	7097	L2	853.0	853.0	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4,5	38.8804	-94.4899	38.9228	-94.4684	Jackson	1
2006	Lost Cr.	3278	P	8.5	8.5	Mi.	Bacteria	Rural NPS	2	1,4,5	36.8913	-94.5067	36.8397	-94.6180	Newton	1
2006	Main Ditch	2814	C	10.0	13.0	Mi.	Temperature	Channelization	1	2,4,6	36.7297	-90.3960	36.5900	-90.4207	Butler	1
1994	Main Ditch	2814	C	1.0	13.0	Mi.	Ammonia	Poplar Bluff WWTP	1	2,4,6	36.7297	-90.3960	36.7160	-90.3960	Butler	1
2006	Main Ditch	2814	C	1.0	13.0	Mi.	pH	Poplar Bluff WWTP	1	2,4,6	36.7297	-90.3960	36.7160	-90.3960	Butler	1
2010	Maline Cr.	1709	C	0.6	0.6	Mi.	Low D.O.	Urban NPS	1	4	38.7366	-90.2265	38.7269	-90.2146	St. Louis	1
2010	Manito Lake	7198	L3	77.0	77.0	Ac.	Phosphorus	Rural NPS	1	2,4,5			38.5916	-92.8070	Moniteau	1

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2010	Manito Lake	7198	L3	77.0	77.0	Ac.	Nitrogen	Rural NPS	1	2,4,5			38.5916	-92.8070	Moniteau	1
2010	Maple Slough Ditch	3140	C	18.2	18.2	Mi.	Low D.O.	Unknown	1	2,4	36.9059	-89.4014	36.6583	-89.4550	Miss/New Madrid	1
2010	Marceline New Lake	7136	L1	200.0	200.0	Ac.	Chlorophyll	Rural NPS	1	2,3,4			39.6622	-92.9965	Chariton	1
2010	Marceline New Lake	7136	L1	200.0	200.0	Ac.	Nitrogen	Rural NPS	1	2,3,4			39.6622	-92.9965	Chariton	1
2010	Marceline New Lake	7136	L1	200.0	200.0	Ac.	Phosphorus	Rural NPS	1	2,3,4			39.6622	-92.9965	Chariton	1
2002	Mark Twain Lake	7033	L2	18132.0	18132.0	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,3,4,5	39.4801	-91.9393	39.5244	-91.6440	Monroe/Ralls	1
2010	Mark Twain Lake	7033	L2	18132.0	18132.0	Ac.	Nitrogen	Rural NPS	1	2,3,4,5	39.4801	-91.9393	39.5244	-91.6440	Monroe/Ralls	1
1994	Marmaton R.	1308	P	35.7	35.7	Mi.	Low D.O.	Unknown	1	2,4,6	37.8517	-94.5896	37.9994	-94.3181	Vernon	2
2010	McDaniel Lake	7236	L1	218.0	218.0	Ac.	Chlorophyll	Rural NPS	1	2,3,4			37.2947	-93.3140	Greene	1
2010	McDaniel Lake	7236	L1	218.0	218.0	Ac.	Phosphorus	Rural NPS	1	2,3,4			37.2947	-93.3140	Greene	1
2006	McKay Park Lake	7399	L3	6.0	6.0	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4	38.5588	-92.1955	38.5614	-92.1977	Cole	1
2002	McKenzie Cr.	2786	P	2.5	6.0	Mi.	Low D.O.	Piedmont WWTP	1	2,4	37.1388	-90.7069	37.1094	-90.7173	Wayne	1
2006	Meramec R.	1841	P	76.0	76.0	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,3,4,5	38.2073	-91.0949	38.4726	-90.6188	Franklin/Jefferson	2
2008	Meramec R.	2183	P	22.8	22.8	Mi.	Lead (S)	Mill tailings (Aban.)	1G	2,3,4,5,7	38.5463	-90.4956	38.3888	-90.3429	St. Louis	1
2010	Meramec R.	2183	P	22.8	22.8	Mi.	Bacteria	Pt Source, Urban/Rural NPS	2	2,3,4,5,7	38.5463	-90.4956	38.3888	-90.3429	St. Louis	1
2008	Meramec R.	2185	P	15.7	15.7	Mi.	Lead (S)	Mill tailings (Aban.)	1G	2,3,4,5,7	38.4718	-90.6177	38.5463	-90.4956	St. Louis	1
1994	Miami Cr.	1299	P	19.6	19.6	Mi.	Low D.O.	Unknown	1	2,4	38.2950	-94.4513	38.1452	-94.3354	Bates	1
2006	Middle Fk. Grand R.	0468	P	27.5	27.5	Mi	Bacteria	Rural NPS	2	1,4,5,6	40.5402	-94.3511	40.2144	-94.3893	Worth/Gentry	1
2010	Middle Fk. Salt River	0121	P	24.8	58.1	Mi.	Low D.O.	Unknown	1	2,3,4,5,6	39.6590	-92.3669	39.5418	-92.2003	Macon/Monroe	1
2010	Middle Indian Cr.	3262	C	3.5	3.5	Mi.	Unknown	Unknown	1	2,4	36.8067	-94.1719	36.8144	-94.1203	Newton	1
2008	Middle Indian Cr.	3263	P	2.2	2.2	Mi.	Bacteria	Rural NPS	2	1,4	36.8062	-94.1721	36.8182	-94.2036	Newton	1
2010	Middle Indian Cr.	3263	P	2.2	2.2	Mi.	Unknown	Unknown	1	2,4	36.8062	-94.1721	36.8182	-94.2036	Newton	1

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2010	Missouri R.	0226	P	184.5	184.5	Mi.	Bacteria	Unknown	2	1,3,4,5,6,7	40.5844	-95.7671	39.1164	-94.6083	Atchison/Jackson	1
2008	Missouri R.	1604	P	104.5	104.5	Mi.	Bacteria	Unknown	2	1,3,4,5,6,7	38.6761	-91.5477	38.8057	-90.1177	Gasconade/St. Charles	1
2010	Moberly Rothwell Lake	7165	L3	22.0	22.0	Ac.	Chlorophyll	Urban NPS	1	2,4			39.4183	-92.4618	Randolph	1
2010	Mozingo Lake	7402	L1	898.0	898.0	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,3,4			40.3488	-94.7807	Nodaway	1
2010	Mozingo Lake	7402	L1	898.0	898.0	Ac.	Chlorophyll	Rural NPS	1	2,3,4			40.3488	-94.7807	Nodaway	1
2006	Muddy Cr.	0853	P	39	62.2	Mi.	Chloride	Mult Pt. Sources	1	2,4	38.6837	-93.4803	38.8464	-93.0563	Pettis	1
2006	Muddy Cr.	0853	P	1.0	62.2	Mi.	Color	Tyson Foods	G	1,2,4	38.7521	-93.2772	38.8464	-93.0563	Pettis	1
2008	Muddy Cr.	0853	P	62.2	62.2	Mi.	Unknown	Unknown	1G	2,4	38.7718	-93.2745	38.7677	-93.2573	Pettis	1
2006	Mussel Fork Cr.	0674	C	29.0	29.0	Mi.	Bacteria	Rural NPS	2	1,3,4	40.2071	-92.8880	39.8450	-92.8382	Sullivan/Macon	1
2006	Niangua R.	1170	P	56.0	56.0	Mi.	Bacteria	Rural NPS	2	1,4,5	37.4459	-92.9195	37.7341	-92.8615	Webster/Dallas	1
2006	No Cr.	0550	P	28.7	28.7	Mi.	Bacteria	Rural NPS	2	1,4	40.1772	-93.4470	39.8875	-93.5700	Grundy/Livin.	1
2010	No Cr.	0550	P	28.7	28.7	Mi.	Low D.O.	Unknown	1	2,4	40.1772	-93.4470	39.8875	-93.5700	Grundy/Livin.	1
2002	Noblett Lake	7316	L3	26.0	26.0	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4	36.9119	-92.0929	36.9080	-92.1032	Douglas	1
2010	Nodaway Lake	7076	L3	73.0	73.0	Ac.	Chlorophyll	Rural NPS	1	2,4,5			40.4264	-94.8577	Nodaway	1
2010	Nodaway Lake	7076	L3	73.0	73.0	Ac.	Nitrogen	Rural NPS	1	2,4,5			40.4264	-94.8577	Nodaway	1
2010	Nodaway R.	0279	P	59.3	59.3	Mi.	Bacteria	Unknown	2	1,4,5,6	40.5759	-95.0217	39.9018	-94.9671	Nodaway	1
2006	North Fk. Cuivre R.	0170	C	10.0	10.0	Mi.	Low D.O.	Unknown	1	2,4	39.2434	-91.2423	39.1689	-91.1854	Pike	1
2006	North Fk. Cuivre R.	0170	C	10.0	10.0	Mi.	Bacteria	Unknown	2	1,4	39.2434	-91.2423	39.1689	-91.1854	Pike	2
2008	North Fk. Spring R.	3186	P	17.4	17.4	Mi.	Bacteria	Rural NPS	2	1,4,5	37.2881	-94.3703	37.2684	-94.5352	Barton	1
2006	North Fk. Spring R.	3188	C	55.9	55.9	Mi.	Low D.O.	Lamar WWTP & NPS	1	2,4	37.3257	-94.0304	37.2881	-94.3703	Dade/Jasper	1
2008	North Fk. Spring R.	3188	C	55.9	55.9	Mi.	Bacteria	Rural NPS	2	1,4	37.3257	-94.0304	37.2881	-94.3703	Dade/Jasper	1
2006	North Fk. Spring R.	3188	C	1.0	55.9	Mi.	Ammonia	Lamar WWTP	1	2,4	37.481	-94.2925	37.4792	-94.2803	Barton	1
2008	North Indian Cr.	3260	P	5.2	5.2	Mi.	Bacteria	Rural NPS	2	1,4	36.8380	-94.1720	36.7949	-94.2320	Newton	1
2010	North Lake	7218	L3	19.0	19.0	Ac.	Chlorophyll	Rural NPS	1	2,4,5			38.6870	-94.3580	Cass	1

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2010	North Lake	7218	L3	19.0	19.0	Ac.	Phosphorus	Rural NPS	1	2,4,5			38.6870	-94.3580	Cass	1
2010	North Moreau Cr.	0942	P	11.6	47.9	Mi.	Low D.O.	Unknown	1	2,4,5	38.6023	-92.6930	38.5911	-92.5752	Moniteau	1
2010	Odessa Lake	7093	L1	87.0	87.0	Ac.	Chlorophyll	Rural NPS	1	2,3,4,5			38.9711	-93.9901	Lafayette	1
2010	Odessa Lake	7093	L1	87.0	87.0	Ac.	Nitrogen	Rural NPS	1	2,3,4,5			38.9711	-93.9901	Lafayette	1
2010	Old Mines Cr., Trib.	2114	C	0.9	1.5	Mi.	Sediment	Mill tailings (Aban.)	1	2,4	38.0691	-90.7281	38.0784	-90.7373	Washington	1
2010	Osage R.	1031	P	10.0	81.9	Mi.	Total Diss. Gas	Bagnell Dam	1	2,4,5,6	38.2034	-92.6246	38.2056	-92.5289	Miller	1
2010	Osage R.	1293	P	45.5	45.5	Mi.	Low D.O.	Rural NPS	*	*	38.0552	-94.1606	38.0381	-93.7249	Vernon/St. Clair	1
2006	Panther Cr.	1373	C	9.7	9.7	Mi.	Low D.O.	Unknown	1	2,4	37.7949	-93.5259	37.8342	-93.6332	St.Clair/Polk	1
2006	Pearson Cr.	2373	P	2.0	8.0	Mi.	Bacteria	Mult. Pt.& NPS	2	1,4	37.1871	-93.2009	37.1635	-93.1965	Greene	1
1996	Pearson Cr.	2373	P	2.0	8.0	Mi.	Unknown	Unknown	1G	2,4	37.1871	-93.2009	37.1635	-93.1965	Greene	1
2010	Petite Saline Cr.	0785	P	21.0	21.0	Mi.	Low D.O.	Unknown	1	2,4,5	38.9132	-92.7394	38.8765	-92.4800	Cooper/Moniteau	1
2008	Phillips Lake	1003U-01	U	32.0	n/a	Ac.	Mercury (T)	Atmospheric Dep.	1G		38.9006	-92.2899	38.897	-92.2938	Boone	1
2006	Pickle Cr.	1755	P	7.8	7.8	Mi.	pH	Atmospheric Dep.	1	2,4	37.8083	-90.2914	37.8371	-90.2036	Ste. Genevieve	1
2008	Pike Cr.	2815	C	1.3	6.0	Mi.	Temperature	Channelization	1	2,4,6	36.7350	-90.4130	36.7296	-90.3961	Butler	1
2010	Pike Cr.	2815	C	1.3	6.0	Mi.	Low D.O.	Unknown	1	2,4,6	36.7350	-90.4130	36.7296	-90.3961	Butler	1
2006	Piper Cr.	1444	P	5.3	5.3	Mi.	Unknown	Unknown	1G	2,4	37.6004	-93.4042	37.6794	-93.4054	Polk	1
2010	Platte R.	0312	P	142.2	142.4	Mi.	Bacteria	Unknown	2	1,3,4,5,6	40.5714	-94.5292	39.2683	-94.8369	Worth/Platte	1
2006	Pole Cat Slough ^A	3120	P	12.6	12.6	Mi.	Low D.O.	Unknown	1	2,4	36.2320	-90.0649	36.0987	-90.1595	Dunklin	1
2010	Pomme de Terre Lake	7238	L2	7820.0	7820.0	Ac.	Chlorophyll	Rural NPS	1	2,4			37.9004	-93.3195	Hickory	1
2010	Pomme de Terre Lake	7238	L2	7820.0	7820.0	Ac.	Nitrogen	Rural NPS	1	2,4			37.9004	-93.3195	Hickory	1
1998	Pond Cr.	2128	C	1.0	1.0	Mi.	Inorg. Sediment	Barite Tailings Pond	1G	2,4	37.9516	-90.6820	37.9648	-90.6760	Washington	2
2006	Red Oak Cr.	2038	C	10.0	10.0	Mi.	Low D.O.	Owensville WWTP	1	2,4	38.2972	-91.4997	38.3574	-91.3749	Gasconade	1
2006	Red Oak Cr., Trib	3360	P	0.5	0.5	Mi.	Low D.O.	Owensville WWTP	1	2,4	38.3442	-91.4485	38.3405	-91.4404	Gasconade	1
2006	Red Oak Cr., Trib.	3361	C	0.9	1.9	Mi.	Low D.O.	Owensville WWTP	1	4	38.3475	-91.4589	38.3442	-91.4485	Gasconade	1
2006	Red Oak Cr.,	3361	C	1.0	1.9	Mi.	Low D.O.	Urban/Rural	1	4	38.3502	-91.4781	38.3475	-91.4589	Gasconade	1

	Trib.							NPS								
Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County	Comment
2006	Renfro Cr. ^E	0743	C	1.5	1.5	Mi.	Low D.O.	Unknown	1	2,4	39.0263	-92.1113	39.0218	-92.1310	Callaway	1
2010	Richland Creek	0884	C	6.2	10.0	Mi.	Low D.O.	Unknown	1	4	38.4659	-92.8939	38.5425	-92.9058	Morgan	1
2010	River des Peres	1710 ²	P	2.6	2.6	Mi.	Low D.O.	Unknown	1	4	38.5597	-90.2829	38.5329	-90.2608	St. Louis	1
2006	River des Peres	1710 ²	P	2.6	2.6	Mi.	Chloride	Urban NPS	1	4	38.5597	-90.2829	38.5329	-90.2608	St. Louis	1
2006	River des Peres	1710U-01 ²	U	2.5	n/a	Mi.	Chloride	Urban NPS	1G		38.5870	-90.3131	38.5597	-90.2829	St. Louis	1
2010	Sadler Br.	3577	C	0.8	0.8	Mi.	Low D.O.	Unknown	1	2,4	37.7908	-93.6111	37.7999	-93.6118	Polk	1
2010	Salt Cr.	0594	C	14.9	14.9	Mi.	Low D.O.	Unknown	1	2,4	39.5514	-93.0986	39.4632	-93.1641	Livin./Chariton	1
2002	Salt R.	0091	P	29.0	29.0	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,3,4,5,6	39.5652	-91.5708	39.5218	-91.2027	Ralls/Pike	1
2008	Salt R.	0091	P	29.0	29.0	Mi.	Low D.O.	Rereg. Dam	1	2,3,4,5,6	39.5652	-91.5708	39.5218	-91.2027	Ralls/Pike	1
2002	Sandy Cr.	0652	C	3.0	3.0	Mi.	Unknown	Unknown	1G	2,4	40.5037	-92.8466	40.4996	-92.8131	Putnam	2
2008	Scroggins Br.	2916U-01	U	0.5	n/a	Mi.	Cadmium (W)	Glover Smelter site	1G		37.4829	-90.6968	37.4790	-90.6884	Iron	1
2008	Scroggins Br.	2916U-01	U	0.5	n/a	Mi.	Zinc (W)	Glover Smelter site	1G		37.4829	-90.6968	37.4790	-90.6884	Iron	1
2006	Shaw Branch	2170	C	1.2	1.2	Mi.	Cadmium (S)	Federal AML	1G	2,4	37.8335	-90.5171	37.8478	-90.5171	St. Francois	1
1998	Shibboleth Br.	2120	C	3.0	3.0	Mi.	Inorg. Sediment	Mill tailings (Aban.)	1G	2,4	38.0075	-90.7079	38.0209	-90.6639	Washington	2
2010	Shibboleth Br.	2120	C	3.0	3.0	Mi.	Lead (S)	Mill tailings (Aban.)	1G	2,4	38.0075	-90.7079	38.0209	-90.6639	Washington	1
2010	Shibboleth Br.	2120	C	3.0	3.0	Mi.	Zinc (S)	Mill tailings (Aban.)	1G	2,4	38.0075	-90.7079	38.0209	-90.6639	Washington	1
2008	Shoal Cr.	3222	P	41.1	41.1	Mi.	Bacteria	Rural NPS	2	1,3,4,5,6	36.8917	-94.0977	37.0328	-94.6179	Newton	1
2006	Shoal Cr.	3231	C	5.0	5.0	Mi.	Low D.O.	Unknown	1	2,4	36.6741	-93.9768	36.7289	-94.0129	Barry	2
2006	Sni-a-bar Cr.	0399	P	36.6	36.6	Mi.	Low D.O.	Unknown	1	2,4,5	38.9427	-94.1665	39.1405	-93.9688	Jackson/Lafayette	1
2006	South Blackbird Cr.	0655	C	5	13.0	Mi.	Ammonia	Unknown	1	2,4	40.4286	-92.9564	40.4165	-92.8886	Putnam	2
2010	South Davis Cr.	0913	C	4.6	4.6	Mi.	Low D.O.	Unknown	1	2,4	38.9496	-93.8763	38.9715	-93.8257	Lafayette	1
2006	South Fabius R.	0071	P	80.6	80.6	Mi.	Bacteria	Rural NPS	2	1,4,6	40.1473	-92.1452	39.8991	-91.5057	Knox/Marion	1
1994	South Fk. Salt R.	0142	C	17.9	40.1	Mi.	Low D.O.	Unknown	1	2,3,4	39.0498	-91.8401	39.1900	-91.8753	Callaway/Audrain	1
2006	South Grand R.	1249	P	66.8	66.8	Mi.	Bacteria	Rural NPS	2	1,4,5	38.6675	-94.5318	38.3318	-93.8014	Cass/Henry	1

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County	Comment
2008	South Indian Cr.	3259	P	8.7	8.7	Mi.	Bacteria	Rural NPS	2	1(CDF),4	36.7483	-94.1291	36.7949	-94.2320	McDonald/Newton	1
1994	Spring Cr. ^D	1870 ³	P	4.5	18.0	Mi.	Low D.O.	Salem WWTP	1	4	37.6554	-91.5383	39.6979	-91.5686	Dent	1
1998	Spring Cr. ^D	1870 ³	P	4.5	18.0	Mi.	Org. Sediment	Salem WWTP	1G	4	37.6554	-91.5383	39.6979	-91.5686	Dent	2
2006	Spring R.	3160	C	61.7	61.7	Mi.	Bacteria	Rural NPS	2	1,4,5,6,7	37.1210	-93.8959	37.1946	-94.6182	Lawrence/Jasper	1
2010	Spring R.	3164	P	8.8	8.8	Mi.	Bacteria	Rural NPS	2	1,4,5,6,7	37.0591	-93.8374	37.1210	-93.8959	Lawrence	1
2010	Spring R.	3165	P	11.9	11.9	Mi.	Bacteria	Rural NPS	2	1,4,5	36.9394	-93.7751	37.0591	-93.8374	Lawrence	1
2006	St. John's Ditch	3138	P	15.3	15.3	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,4	37.0539	-89.5591	36.6108	-89.4467	Scott/New Madrid	1
2006	St. John's Ditch	3138	P	15.3	15.3	Mi.	Bacteria	Urban/Rural NPS	2	1,4	37.0539	-89.5591	36.6108	-89.4467	Scott/New Madrid	1
2006	Stevenson Bayou	3135	C	6.4	6.4	Mi.	Low D.O.	Unknown	1	2,4	36.9372	-89.2579	36.7632	-89.3373	Mississippi	1
2006	Stockton Branch	1361	C	1.0	3.6	Mi.	Low D.O.	Stockton WWTP	1	2,4	37.7082	-93.7889	37.7171	-93.7867	Cedar	1
2010	Stockton Lake	7235	L2	23680.0	23680.0	Ac.	Chlorophyll	Urban/Rural NPS	1	2,3,4			37.6914	-93.7655	Cedar	1
2010	Stockton Lake	7235	L2	23680.0	23680.0	Ac.	Nitrogen	Urban/Rural NPS	1	2,3,4			37.6914	-93.7655	Cedar	1
2006	Straight Fk.	0959	C	2.5	6.0	Mi.	Chloride	Versailles WWTP	1	2,4	38.4446	-92.8506	38.4758	-92.8494	Morgan	1
2006	Straight Fk.	0959	C	2.5	6.0	Mi.	Low D.O.	Versailles WWTP	1	2,4	38.4446	-92.8506	38.4758	-92.8494	Morgan	1
2008	Strother Cr.	2751	P	2.1	6.0	Mi.	Lead (S)	Buick Mine	1G	2,4	37.5948	-91.0472	37.6051	-91.0167	Iron	1
2010	Strother Cr.	2751	P	2.1	6.0	Mi.	Lead (W)	Buick Mine	1G	2,4	37.5948	-91.0472	37.6051	-91.0167	Iron	1
2008	Strother Cr.	2751	P	2.1	6.0	Mi.	Nickel (S)	Buick Mine	1G	2,4	37.5948	-91.0472	37.6051	-91.0167	Iron	1
2006	Strother Cr.	2751	P	2.1	6.0	Mi.	Zinc (S)	Buick Mine	1G	2,4	37.5948	-91.0472	37.6051	-91.0167	Iron	1
2010	Strother Cr.	2751	P	2.1	6.0	Mi.	Zinc (W)	Buick Mine	1G	2,4	37.5948	-91.0472	37.6051	-91.0167	Iron	1
2008	Strother Cr.	2751U-01	U	1.0	n/a	Mi.	Arsenic (S)	Buick Mine	1G		37.5881	-91.0602	37.5948	-91.0472	Reynolds/Iron	1
2008	Strother Cr.	2751U-01	U	1.0	n/a	Mi.	Lead (S)	Buick Mine	1G		37.5881	-91.0602	37.5948	-91.0472	Reynolds/Iron	1
2008	Strother Cr.	2751U-01	U	1.0	n/a	Mi.	Nickel (S)	Buick Mine	1G		37.5881	-91.0602	37.5948	-91.0472	Reynolds/Iron	1
2006	Strother Cr.	2751U-01	U	1.0	n/a	Mi.	Zinc (S)	Buick Mine	1G		37.5881	-91.0602	37.5948	-91.0472	Reynolds/Iron	1
2006	Sugar Cr.	0686	P	6.8	6.8	Mi.	Low D.O.		1	2,4	39.4747	-92.4804	39.4613	-92.5558	Randolph	1
2010	Sugar Lake (Lewis and Clark State	7067	L3	403.0	403.0	Ac.	Bacteria	Unknown	2	1,4,5	39.5433	-95.0582			Platte/Buchanan	1

	Park)															
Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County	Comment
2002	Table Rock Lake, White River Arm	7313	L2	17240.0	17240	Ac.	Chlorophyll	Urban/Rural NPS, Urban Point Sources	1	2,4,5	36.4994	-93.7539	36.5955	-93.3109	Barry/Taney	8
2002	Table Rock Lake, White River Arm	7313	L2	17240.0	17240	Ac.	Nitrogen	Urban/Rural NPS, Urban Point Sources	1	2,4,5	36.4994	-93.7539	36.5955	-93.3109	Barry/Taney	8
2002	Table Rock Lake, James, Kings and Long Cr. Arms	7313	L2	25860.0	25860	Ac.	Nutrients	Urban/Rural NPS, Urban Point Sources	2	2,4,6					Barry/Taney	2
2008	Thompson R.	0549	P	5.0	70.6	Mi.	Bacteria	Rural NPS	2	1,3,4,6	40.5769	-93.8011	40.5433	-93.8159	Harrison	1
2010	Todd Cr.	0316	C	5.7	9.9	Mi.	Low D.O.	Unknown	1	4	39.3120	-94.7079	39.3534	-94.6645	Platte	1
1998	Town Br.	3822	P	1.0	2.5	Mi.	Organic Sediment	Bolivar WWTP, Unknown	1G	2,4	37.6166	-93.3901	37.6299	-93.3833	Polk	6
2006	Town Br.	3822	P	2.5	2.5	Mi.	Unknown	Unknown	1G	2,4	37.6004	-93.4045	37.6297	-93.4504	Polk	1
2006	Troublesome Cr.	0074	C	41.3	41.3	Mi.	Low D.O.	Unknown	1	2,4	40.1209	-92.0422	39.9046	-91.6701	Knox/Marion	1
2010	Truitt Cr.	3175	C	6.4	6.4	Mi.	Bacteria	Rural NPS	2	1,4	37.1866	-93.7941	37.1240	-93.8532	Lawrence	1
2006	Turkey Cr.	3216	P	7.7	7.7	Mi.	Cadmium (S)	Mill tailings (Aban.)	1G	2,4	37.1061	-94.5066	37.1249	-94.6178	Jasper	1
2006	Turkey Cr.	3216	P	7.7	7.7	Mi.	Cadmium (W)	Mill tailings (Aban.)	1	2,4	37.1061	-94.5066	37.1249	-94.6178	Jasper	1
2008	Turkey Cr.	3216	P	7.7	7.7	Mi.	Lead (S)	Mill tailings (Aban.)	1G	2,4	37.1061	-94.5066	37.1249	-94.6178	Jasper	1
2008	Turkey Cr.	3216	P	7.7	7.7	Mi.	Zinc (S)	Mill tailings (Aban.)	1G	2,4	37.1061	-94.5066	37.1249	-94.6178	Jasper	1
2006	Turkey Cr.	3216	P	7.7	7.7	Mi.	Bacteria	Rural NPS	2	1,4	37.1061	-94.5066	37.1249	-94.6178	Jasper	1
2008	Turkey Cr.	3217	P	6.1	6.1	Mi.	Cadmium (S)	Mill tailings (Aban.)	1G	2,4	37.0755	-94.4270	37.1061	-94.5066	Jasper	1
2008	Turkey Cr.	3217	P	6.1	6.1	Mi.	Lead (S)	Mill tailings (Aban.)	1G	2,4	37.0755	-94.4270	37.1061	-94.5066	Jasper	1
2008	Turkey Cr.	3217	P	6.1	6.1	Mi.	Zinc (S)	Mill tailings (Aban.)	1G	2,4	37.0755	-94.4270	37.1061	-94.5066	Jasper	1
2008	Turkey Cr.	3217	P	6.1	6.1	Mi.	Bacteria	Rural NPS	2	1,4	37.0755	-94.4270	37.1061	-94.5066	Jasper	1
2006	Turkey Cr.	3282	P	2.4	2.4	Mi.	Cadmium (W)	Mill tailings (Aban.)	1	2,4	37.9233	-90.5482	37.9549	-90.5569	St. Francois	1
2006	Turkey Cr.	3282	P	2.4	2.4	Mi.	Lead (W)	Mill tailings	1	2,4	37.9233	-90.5482	37.9549	-90.5569	St. Francois	2

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	(Aban.) Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County	Comment
2010	Turkey Cr.	3282	P	1.2	2.4	Mi.	Low D.O.	Mult. Pt.& NPS	1	2,4	37.9233	-90.5482	37.9383	-90.5526	St. Francois	1
2006	Turkey Cr.	3282	P	1.2	2.4	Mi.	Zinc (W)	Mill tailings (Aban.)	1	2,4	37.9233	-90.5482	37.9383	-90.5526	St. Francois	1
2010	Turnback Cr.	1414	P	19.9	19.9	Mi.	Bacteria	Rural NPS	2	1,4,5	37.1884	-93.6853	37.2944	-93.7656	Lawrence/Dade	1
2010	Unionville Lake	7154	L3	74.0	74	Ac.	Phosphorus	Rural NPS	1	2,4			40.5005	-93.0243	Putnam	1
2006	Warm Fk. Spring R.	2579	P	1.2	13.8	Mi.	Bacteria	Unknown	2	1,4,5,6	36.5131	-91.5251	36.4990	-91.5275	Oregon	1
2006	Watkins Cr.	1708	C	1.4	1.4	Mi.	Bacteria	Urban NPS	2	1,4	38.7680	-90.1907	38.7736	-90.1757	St. Louis	2
2006	Watkins Cr.	1708	C	1.4	1.4	Mi.	Chloride	Urban NPS	1	2,4	38.7680	-90.1907	38.7736	-90.1757	St. Louis	1
2010	Weatherby Lake	7071	L3	185.0	185.0	Ac.	Nitrogen	Rural NPS	1	2,4,5			39.2286	-94.7023	Platte	1
2006	Weldon R.	0560	P	43.4	43.4	Mi.	Bacteria	Rural NPS	2	1,4	40.5794	-93.6108	40.1031	-93.6484	Mercer/Grundy	1
1998	West Fk. Black R.	2755	P	32.3	32.3	Mi.	Nutrients	Unknown	G	1,2,4	37.5233	-91.2254	37.4465	-90.8520	Reynolds	2
2008	West Fk. Black R.	2755	P	1.3	32.3	Mi.	Lead (S)	West Fk. Mine	1G	2,4	37.4900	-91.1069	37.4972	-91.0872	Reynolds	1
2006	West Fk. Drywood Cr.	1317	C	8.1	8.1	Mi.	Low D.O.	Unknown	1	2,4	37.6858	-94.6174	37.7144	-94.5494	Vernon	1
2010	West Fk. Locust Cr.	0613	C	17.0	17.0	Mi.	Low D.O.	Unknown	1	2,4	40.3056	-93.2675	40.1391	-93.2160	Sullivan/Linn	1
2002	West Fk. Locust Cr.	0613	C	17.0	17.0	Mi.	Unknown	Unknown	1G	2,4	40.3056	-93.2675	40.1391	-93.2160	Sullivan/Linn	1
2006	West Fk. Medicine Cr.	0623	P	39.8	39.8	Mi.	Bacteria	Rural NPS	2	1,4	40.5804	-93.4257	40.1021	-93.3755	Mercer/Grundy	1
2006	West Fk. Medicine Cr.	0623	P	20.0	39.8	Mi.	Unknown	Unknown	1G	2,4	40.5800	-93.4257	40.1024	-93.3755	Mercer/Grundy	1
1994	West Fk. Niangua R.	1175	P	2.0	7.0	Mi.	Low D.O.	Marshfield WWTP	1	2,4	37.3659	-92.915	37.3897	-92.9320	Webster	1
2010	West Fk. Sni-a-Bar Cr.	0400	P	9.0	9.0	Mi.	Low D.O.	Unknown	1	2,4	38.9389	-94.2460	38.9724	-94.1730	Jackson	4
2008	Whetstone Cr.	1504	P	12.2	12.2	Mi.	Low D.O.	Rural NPS	1	2,4	37.1893	-92.3644	37.3120	-92.3909	Wright	1
2010	Whetstone Cr.	1505U	U	0.6	n/a	Mi.	Ammonia	Mountain Grove Lagoon	1G		37.1438	-92.2669	37.1474	-92.2755	Wright	1
2010	White Oak Cr.	3182	C	18.0	18.0	Mi.	Bacteria	Rural NPS	2	1,4,6	37.2604	-93.9457	37.1693	-94.1275	Lawrence/Jasper	1
2010	Williams Cr.	3171	P	1.0	1.0	Mi.	Bacteria	Rural NPS	2	1,4	37.1086	-93.8806	37.1113	-93.8916	Lawrence	1
2010	Williams Cr.	3172	P	8.5	8.5	Mi.	Bacteria	Rural NPS	2	1,4	37.0936	-93.7647	37.1086	-93.8806	Lawrence	1

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County	Comment
2010	Willow Br.	3280	P	2.2	2.2	Mi.	Bacteria	Rural NPS	2	1,4	36.9129	-94.5025	36.8933	-94.5260	Newton	1
2006	Willow Fk.	0955	C	6.8	6.8	Mi.	Low D.O.	Unknown	1	2,4	38.6371	-92.8210	38.6113	-92.7359	Moniteau	1
2006	Willow Fk., Trib.	0956	C	0.5	0.5	Mi.	Low D.O.	Unknown	1	4	38.6308	-92.7681	38.6274	-92.7636	Moniteau	1
1998	Wilsons Cr.	2375	P	14.0	14.0	Mi.	Unknown	Point/Urban NPS	1	2,4	37.2244	-93.3455	37.0684	-93.4007	Greene/Christian	1
2006	Wilsons Cr.	2376	P	1.0	14.0	Mi.	Bacteria	Urban/Rural Nonpoint	2	1,4	37.1474	-93.3735	37.1368	-93.3805	Greene	1
2006	Wolf Cr.	2879	C	8	8.0	Mi.	Low D.O.	Unknown	1	2,4	37.7954	-90.3839	37.7284	-90.4062	St. Francois	1
1998	Wyaconda New Lake	7009	L1	9.0	9.0	Ac.	Atrazine	Rural NPS	3	1,2,4,5			40.3990	-91.9083	Clark	1

* Presumed uses. Due to an oversight, this water body is currently not listed in state WQ standards and no beneficial uses designated.

** Only 0.9 miles of this stream remains after the creation of the Leadwood tailings pond.

*** Metals are believed to be the pollutant based on analysis of invertebrate community.

^A Water Body name was changed from "Ditch to Buffalo Ditch" to "Pole Cat Slough" in the latest standards revision.

^B Water Body name was changed from "Douger Branch" to "Chat Cr." in the latest standards revision.

^C Water Body name was changed from "Schuman Park Lake" to "Frisco Lake" in the latest standards revision.

^D Water Body name was changed from "Spring Br." to "Spring Cr." in the latest standards revision.

^E Water Body name was changes from "Cedar Cr. Trib.to" in latest standards revision.

¹ Water Body ID number was changed from "7217" to "7212" in the latest standards revision.

² Water Body ID number was changed from "1711" to "1710" in the latest standards revision.

³ Water Body ID number was changed from "3708" to "1870" in the latest standards revision.

Key to List

Yr= Year this water body/pollutant was added to the 303(d) List

WBID= unique water body identification number

I Size: Size of impaired portion of water body

WB Size: Size of the entire water body

CL= water body classification in state water quality standards: P= permanently flowing waters, C= intermittent streams, L1= Drinking water lakes, L2= large multi-purpose lakes, L3= other recreational lakes

Pollutants = reason the water is impaired. Cd=Cadmium, Ni= Nickel, Pb= Lead, Zn = Zinc, SO4 = sulfate, Cl= chloride, FC = fecal coliform bacteria, NVSS = non-volatile (mineral) suspended solids, D.O. = dissolved oxygen, pH= degree of acidity or alkalinity of water, Hydromod.= Hydromodification, which is typically related to the operation of dams. (W) pollutant is in the water, (S) pollutant is in the sediment, (T) pollutant is in fish tissue. If none of these three options are shown, the pollutant is in the water.

Sources = the pollutant source causing the impairment. WWTP= wastewater treatment plant, PP= Power Plant, Unk.= Unknown, Aban. = Abandoned, Atmospheric Dep. = Atmospheric deposition (primarily rainfall), Mult.= Multiple, NPS= Non-point source, Pt.= Point Source, Rereg. Dam= Reregulation Dam - a low dam downstream of a larger hydroelectric dam.

IU = Impaired Beneficial Use(s). Those beneficial uses, assigned to this water in state water quality standards, that are not being met due to water pollution.

OU= Other Beneficial Use(s). Those beneficial uses assigned to this water in state water quality standard, that are not affected by the pollution.

Use codes for IU and OU columns are: G= General Criteria, 1G = General criteria pertaining to protection of aquatic life, 1= Protection of aquatic life, 2 = Whole Body Contact Recreation (swimming), 3= Public Drinking Water Supply, 4 = Livestock and Wildlife Watering, 5= Secondary Contact Recreation (Fishing and Boating), 6= Irrigation, 7= Industrial Water

Lat U = Latitude of upstream end of impaired water body (in decimal degrees)

Long U = Longitude of upstream end of impaired water body (in decimal degrees)

Lat D = Latitude of downstream end of impaired water body (in decimal degrees)

Long D = Longitude of downstream end of impaired water body (in decimal degrees)

County U/D = County the impaired segment is in. If the impaired segment is in more than one county, the county of the upstream and downstream ends of the impaired segment are given.

Comment: 1= 2010 Assessment indicates impairment; 2= assessment shows existing data insufficient to show "good cause" for de-listing; 3= Biological data does not support de-listing; 4= TMDL only addressed Lake Lotawana WWTP; 5=pollutant changed from "toxicity";6= formerly part of Piper Cr. WBID 1444; 7= includes Low DO as pollutant; 8= pollutant previously listed as "nutrients".

Table 15. Other Waters Rated As Impaired and Believed to Be Impaired

The following list includes other classified waters in Missouri found to be impaired both by applying the Methodology for the Development of the 2010 Section 303(d) List in Missouri and the best professional judgment of the department. Included in this list are waters with approved TMDLs, waters where sufficient pollution control measures are in place, waters which are impaired by measures other than discrete pollutants, and other waters which were not approved for 303(d) listing by the Clean Water Commission.

Waterbody Name	WBID	Size (Miles)	County	Pollutant	Source
2nd Nicholson Cr.	1319	6	Barton	SO4+CL	Coal AML
Big Otter Cr., Trib.	1225	1	Henry	pH	Aban. Coal Slurry Pond
Big R.	2074	55.6	Jefferson	Lead	Mill tailings (Aban.)
Big R.	2080	55.0	St. Fran./Jefferson	Inorg. Sediment	Mill tailings (Aban.)
Big R.	2080	44.1	St. Fran./Jefferson	Lead (S)	Mill tailings (Aban.)
Big R.	2080	48.7	St. Fran./Jefferson	Lead (T)	Mill tailings (Aban.)
Brushy Cr.	1592	3	Texas	Low D.O.	Houston WWTP
Buffalo Ditch	3118	3.0	Dunklin	Low D.O.	Kennett WWTP
Clear Cr.	3239	3.5	Barry/Newton	Low D.O.	Monett WWTP
Dardenne Cr.	0221	16.5	St. Charles	Unknown	Unknown
Douger Branch	3168	1	Lawrence	Zinc (W)	Baldwin Park mine
Dry Auglaize Cr.	1145	1	Laclede	Low D.O.	Unknown
Dry Auglaize Cr.	1145	3	Laclede	Unknown	Unknown
E. Brush Cr.	811	3	Moniteau	Low D.O.	Unknown
E. Fk. Black R.	2737	0.5	Reynolds	Hydromod.	Impoundment
Elkhorn Cr.	189	2.5	Montgomery	Low D.O.	Montgomery City NE WWTP
Flat River Cr.	2168	6.0	St. Francois	Lead (S)	Mill tailings (Aban.)
Flat River Cr.	2168	6.0	St. Francois	Lead (T)	Mill tailings (Aban.)
Flat River Cr.	2168	5.0	St. Francois	Lead (W)	Mill tailings (Aban.)
Flat River Cr.	2168	4.0	St. Francois	Inorg. Sediment	Mill tailings (Aban.)
Flat River Cr.	2168	5.0	St. Francois	Zinc (W)	Mill tailings (Aban.)
Flat River Cr., Trib	2168U-01	0.3	St. Francois	Zinc (W)	Mill tailings (Aban.)
Gabriel Cr.	883	3	Morgan	Low D.O.	Stover Lgns and Unknown
Grand R.	430	7.3	Gentry	Aq. Habitat	Channelization
Grand R.	593	11.3	Livings/Chariton	Aq. Habitat	Channelization
Jacks Fk.	2681	7	Shannon	Bacteria	Eminence WWTP/X-Country TR
Joyce Cr.	3233	5	Barry	Bacteria	Rural NPS
L. Beaver Cr.	1529	3.3	Phelps	Low D.O.	Rolla SW WWTP
L. Lindley Cr.	1438	3	Dallas	Unknown	Unknown
L. Sac R.	1381	29	Greene/Polk	Bacteria	Urban/Rural NPS
Little Osage R.	3652	23.6	Vernon	Low D.O.	Unknown
Locust Cr.	606	18	Putnam/Sullivan	Aq. Habitat	Rural NPS
Locust Cr.	606	5	Chariton	Aq. Habitat	Channelization
M. Fk. Tebo Cr.	1284	3	Henry	SO4+CL	Coal AML
M. Fk. Tebo Cr., Trib.	1288	3.5	Henry	SO4+CL	Coal AML

Waterbody Name	WBID	Size (Miles)	County	Pollutant	Source
Main Ditch	2814	2	Butler	Low D.O.	Poplar Bluff WWTP
Main Ditch	2814	10	Butler	Low D.O.	Unknown
McKenzie Cr.	2787	1	Wayne	Low pH	Natural
Monegaw Cr.	1234	2	St. Clair	SO4+CL	Aban. Coal Mine Land
Mound Branch	1300	8.9	Bates	Low D.O.	Unknown
N. Fabius R.	56	13.2	Clark/Lewis	Aq. Habitat	Channelization
N. Fk. Salt R.	110	6.1	Shelby	Aq. Habitat	Channelization
Osage R.	1031	10	Miller	Hydromod.	Bagnell Dam
Piney Cr.	2614	0.2	Oregon	Chlorine	Alton WWTP
Pogue Cr.	3232	2.5	Barry	Bacteria	Rural NPS
S. Fabius R.	71	4.2	Lewis/Shelby	Aq. Habitat	Channelization
Saline Cr.	2859	1.7	Madison	Nickel (W)	Madison Mine
Shaw Branch	2170	1.0	St. Francois	Inorg. Sediment	Federal AML
Shaw Branch	2170	1.2	St. Francois	Lead (S)	Federal AML
Shoal Cr.	3230	13.5	Barry/Newton	Bacteria	Rural NPS
St. Francis R.	2835	8.7	St. Francois	Low D.O.	Unknown
Stinson Cr.	710	11.9	Callaway	Org. Sediment	Fulton WWTP
Stinson Cr.	710	11.9	Callaway	Low D.O.	Unknown
Sugar Cr.	686	1.2	Randolph	pH	Coal AML
Trace Cr.	2850	0.8	Madison	Low pH	Natural
Turkey Cr.	3216	7	Jasper	Zn T(W)	Mill tailings (Aban.)

Table 16. Other Potentially Impaired Waters

The following waters are those for which there is some indication that an impairment to some designated use may exist, but the current data or information indicating the impairment do not meet the data requirements set out by Missouri's Section 303(d) Listing Methodology. The Department will make an effort to conduct further monitoring on these waters in order to determine defensibly whether or not these impairments actually exist.

A large number of these potential impairments are ascribed to rural nonpoint sources. However, it should be noted that some of these problems, particularly low dissolved oxygen levels, may be due to natural conditions of the waters that are incompletely understood at this time. The department is currently studying baseline dissolved oxygen levels in small streams in regions of concern, which will help in the future to better distinguish natural stream conditions from anthropogenic impairments.

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Ackerman Ditch	2809	13.00	Mi.	Habitat Degradation
Agee Cr.	334	4.50	Mi.	Habitat Degradation
Anderson Br.	874	1.00	Mi.	Habitat Degradation
Apple Cr.	1799	44.00	Mi.	Unknown
Arapahoe Cr.	282	8.00	Mi.	Habitat Degradation
Ash Ditch	3141	6.00	Mi.	Habitat Degradation
Ash Ditch	3142	8.00	Mi.	Habitat Degradation
Ash Slough Ditch	3042	17.00	Mi.	Habitat Degradation
Asher Cr.	1383	7.00	Mi.	Low Dissolved Oxygen, Bacteria
Back Cr.	2880	3.00	Mi.	Low Dissolved Oxygen
Bagby Br.	684	1.50	Mi.	Habitat Degradation
Baker Br.	1294	2.00	Mi.	Habitat Degradation
Barber Cr.	622	7.50	Mi.	Habitat Degradation
Barkers Cr.	1209	12.50	Mi.	Temperature, pH
Barkers Cr., Trib.	1211	1.00	Mi.	pH
Basin Fk.	867	12.70	Mi.	Habitat Degradation
Basin Fk., Trib.	3795	2.40	Mi.	Habitat Degradation
Basin Fk., Trib.	3522	2.30	Mi.	Habitat Degradation
Bay De Charles, Trib.	6	3.00	Mi.	Habitat Degradation
Bean Br.	148	7.00	Mi.	Habitat Degradation
Bear Cr.	8	2.50	Mi.	Habitat Degradation
Bear Cr.	9	6.00	Mi.	Habitat Degradation
Bear Cr.	57	16.00	Mi.	Habitat Degradation
Bear Cr.	115	33.00	Mi.	Habitat Degradation
Bear Cr.	193	15.00	Mi.	Habitat Degradation
Bear Cr.	272	7.00	Mi.	Habitat Degradation
Bear Cr.	416	4.00	Mi.	Habitat Degradation
Bear Cr.	601	8.00	Mi.	Habitat Degradation
Bear Cr.	933	8.00	Mi.	Habitat Degradation
Bear Cr.	1220	7.00	Mi.	Habitat Degradation
Bear Cr.	1253	10.00	Mi.	Habitat Degradation
Beaver Br.	3265	2.00	Mi.	Zinc (Sediment)
Beaver Dam Cr.	145	5.00	Mi.	Habitat Degradation
Beaver Dam Cr.	2621	8.00	Mi.	Habitat Degradation
Beaver Dam Cr.	3548	5.00	Mi.	Habitat Degradation
Beaver Dam Cr., Trib.	3549	0.70	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Beaver Dam Cr., Trib.	3550	0.80	Mi.	Habitat Degradation
Bee Br.	667	6.00	Mi.	Habitat Degradation
Bee Br.	3501	0.50	Mi.	Habitat Degradation
Bee Br.	3545	4.30	Mi.	Habitat Degradation
Bee Br.	3645	5.80	Mi.	Habitat Degradation
Bee Cr.	137	4.50	Mi.	Habitat Degradation
Bee Cr.	273	21.00	Mi.	Habitat Degradation
Bee Cr., Trib.	274	2.00	Mi.	Habitat Degradation
Bee Tree Lake	7309	9.00	Ac.	Mercury (Fish Tissue)
Beecham Cr.	3642	0.90	Mi.	Habitat Degradation
Beef Br.	3224	2.50	Mi.	Cadmium, Zinc (Sediment)
Belew Cr.	2179	6.60	Mi.	Low Dissolved Oxygen
Ben Branch Lake	7186	45.00	Ac.	Mercury (Fish Tissue)
Big Cr.	634	24.00	Mi.	Habitat Degradation
Big Cr.	638	1.50	Mi.	Habitat Degradation
Big Cr.	1257	10.00	Mi.	Habitat Degradation, Lead (Sediment)
Big Cr.	2673	27.00	Mi.	Low Dissolved Oxygen
Big Cr.	207	10.00	Mi.	Habitat Degradation
Big Deer Cr.	1276	4.00	Mi.	Habitat Degradation
Big Lead Cr.	180	5.00	Mi.	Habitat Degradation
Big Muddy Cr.	461	9.00	Mi.	Habitat Degradation
Big Muddy Cr.	462	8.00	Mi.	Habitat Degradation
Big Muddy Cr.	441	11.00	Mi.	Habitat Degradation
Big No Cr.	553	4.00	Mi.	Habitat Degradation
Big R.	2074	55.60	Mi.	Lead, Cadmium (Sediment)
Big Rock Cr.	464	3.00	Mi.	Habitat Degradation
Big Rock Cr.	465	3.00	Mi.	Habitat Degradation
Billy Cr.	659	5.00	Mi.	Habitat Degradation
Billy'S Br.	124	8.00	Mi.	Habitat Degradation
Bitterroot Cr.	1312	2.50	Mi.	Habitat Degradation
Black Cr.	111	19.00	Mi.	Habitat Degradation
Black Cr.	112	15.00	Mi.	Habitat Degradation
Black Cr.	3309	6.00	Mi.	Habitat Degradation
Black Jack Cr.	917	4.00	Mi.	Habitat Degradation
Black R.	2769	45.00	Mi.	Mercury (Fish Tissue)
Black River Ditch	2807	10.00	Mi.	Habitat Degradation
Blackwater R.	891	76.00	Mi.	Atrazine, Sediment
Blackwater R., Trib.	3537	1.10	Mi.	Habitat Degradation
Blackwater R., Trib.	3541	0.70	Mi.	Habitat Degradation
Blackwater R., Trib.	3543	0.50	Mi.	Habitat Degradation
Blackwater R., Trib.	3544	1.70	Mi.	Habitat Degradation
Blue Ditch	3146	6.00	Mi.	Habitat Degradation
Blue Ditch	3147	5.00	Mi.	Habitat Degradation
Blue Spring Slough	2775	10.00	Mi.	Habitat Degradation
Blue Springs Cr.	1852	4.00	Mi.	Iron
Bluestem Lake	7370	15.00	Ac.	Mercury (Fish Tissue)
Bois Brule Cr.	1042	9.00	Mi.	Chloride

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Bois Brule Ditch	1782	4.00	Mi.	Habitat Degradation
Bois Brule Ditch, Trib.	1783	2.00	Mi.	Habitat Degradation
Bois Brule Ditch, Trib.	1784	1.00	Mi.	Habitat Degradation
Bois Brule Ditch, Trib.	1785	1.00	Mi.	Habitat Degradation
Bones Br.	1301	5.50	Mi.	Habitat Degradation
Bonhomme Cr.	1701	2.00	Mi.	Chloride
Bradley Cr.	931	1.50	Mi.	Habitat Degradation
Brawley Cr.	3424	3.00	Mi.	Habitat Degradation
Brewer Lake Ditch	3153	4.50	Mi.	Habitat Degradation
Bridge Cr.	66	7.00	Mi.	Habitat Degradation
Bridge Cr.	70	13.00	Mi.	Habitat Degradation
Bridge Cr.	635	1.50	Mi.	Habitat Degradation
Brush Cr.	3794	2.00	Mi.	Habitat Degradation
Brush Cr.	69	4.00	Mi.	Habitat Degradation
Brush Cr.	106	5.00	Mi.	Habitat Degradation
Brush Cr.	107	4.00	Mi.	Habitat Degradation
Brush Cr.	276	8.00	Mi.	Habitat Degradation
Brush Cr.	408	3.00	Mi.	Habitat Degradation
Brush Cr.	563	4.50	Mi.	Habitat Degradation
Brush Cr.	574	5.00	Mi.	Habitat Degradation
Brush Cr.	672	22.50	Mi.	Habitat Degradation
Brush Cr.	1207	4.00	Mi.	Habitat Degradation
Brush Cr.	1238	1.50	Mi.	Habitat Degradation
Brush Cr.	3298	6.00	Mi.	Habitat Degradation
Brush Cr., Trib.	1208	1.00	Mi.	Habitat Degradation
Brushy Cr.	3785	0.50	Mi.	Habitat Degradation
Brushy Cr.	336	11.00	Mi.	Habitat Degradation
Brushy Cr.	377	7.00	Mi.	Habitat Degradation
Brushy Cr.	395	2.00	Mi.	Habitat Degradation
Brushy Cr.	438	5.00	Mi.	Habitat Degradation
Brushy Cr.	531	5.00	Mi.	Habitat Degradation
Brushy Cr.	3500	1.50	Mi.	Habitat Degradation
Brushy Cr.	859	3.00	Mi.	Low Dissolved Oxygen
Brushy Cr.	1593	4.00	Mi.	Low Dissolved Oxygen
Bryants Cr.	22	13.50	Mi.	Habitat Degradation
Buck Br.	3187	6.00	Mi.	Habitat Degradation, E. coli
Buffalo Cr.	3539	2.10	Mi.	Habitat Degradation
Buffalo Ditch	3119	3.00	Mi.	Habitat Degradation
Bull Cr.	2423	17.50	Mi.	Low Dissolved Oxygen
Buncomb Br.	3542	1.50	Mi.	Habitat Degradation
Burr Oak Cr.	363	2.00	Mi.	Habitat Degradation
Burris Fk.	968	11.50	Mi.	Low Dissolved Oxygen
Bynum Cr.	709	4.50	Mi.	Sediment
Cache River Ditch	3009	7.00	Mi.	Habitat Degradation
Camp Br.	866	7.50	Mi.	Habitat Degradation
Camp Br.	1258	13.00	Mi.	Habitat Degradation
Camp Br.	1296	6.00	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Camp Br.	3324	3.00	Mi.	Habitat Degradation
Camp Br., Trib.	3518	1.00	Mi.	Habitat Degradation
Camp Br., Trib.	3519	1.00	Mi.	Habitat Degradation
Camp Br., Trib.	3520	0.70	Mi.	Habitat Degradation
Camp Cr.	894	5.00	Mi.	Habitat Degradation
Campbell Cr.	491	1.50	Mi.	Habitat Degradation
Campbell Cr.	629	5.50	Mi.	Habitat Degradation
Cane Cr.	2833	6.00	Mi.	Habitat Degradation
Cane Creek Ditch	2820	7.00	Mi.	Habitat Degradation
Caney Cr.	3051	11.50	Mi.	Habitat Degradation
Castile Cr.	322	32.00	Mi.	Habitat Degradation
Castile Cr., Trib.	323	1.00	Mi.	Habitat Degradation
Castor River Diversion Channel	2273	13.00	Mi.	Habitat Degradation
Cato Slough	3081	1.50	Mi.	Habitat Degradation
Cato Slough	3082	4.00	Mi.	Habitat Degradation
Cave Spring Br.	3162	1.00	Mi.	E. coli
Cave Spring Cr.	1272	1.00	Mi.	Habitat Degradation
Cedar Cr.	861	3.00	Mi.	Habitat Degradation
Chapman Br.	476	1.50	Mi.	Habitat Degradation
Chariton R., Old Channel	649	7.50	Mi.	Habitat Degradation
Chariton R., Old Channel	665	2.00	Mi.	Habitat Degradation
Chariton R., Old Channel	694	14.50	Mi.	Habitat Degradation
Chariton R., Old Channel	695	11.00	Mi.	Habitat Degradation
Chariton R., Trib.	648	1.50	Mi.	Habitat Degradation
Cheese Cr.	3301	5.60	Mi.	Habitat Degradation
Chesapeake Cr.	1421	3.00	Mi.	Sediment
Clammer Br.	1235	1.00	Mi.	Habitat Degradation
Clark Br.	676	8.00	Mi.	Habitat Degradation
Clear Cr.	7	3.00	Mi.	Habitat Degradation
Clear Cr.	117	5.00	Mi.	Habitat Degradation
Clear Cr.	292	12.00	Mi.	Habitat Degradation
Clear Cr.	433	6.00	Mi.	Habitat Degradation
Clear Cr.	889	5.50	Mi.	Habitat Degradation
Clear Cr.	1206	2.00	Mi.	Habitat Degradation
Clear Cr.	1259	4.00	Mi.	Habitat Degradation
Clear Cr.	388	4.00	Mi.	Inconclusive Invert Data
Clear Cr.	390	14.20	Mi.	Inconclusive Invert Data
Clear Cr., Trib.	3797	1.30	Mi.	Habitat Degradation
Clear Cr., Trib.	393	2.00	Mi.	Habitat Degradation
Clear Cr., Trib.	3297	1.00	Mi.	Habitat Degradation
Clear Cr., Trib.	3633	1.50	Mi.	Habitat Degradation
Clear Fk.	936	7.00	Mi.	Habitat Degradation
Clear Fk.	935	25.80	Mi.	Low Dissolved Oxygen
Clear Fork, Trib.	3431	1.60	Mi.	Habitat Degradation
Clear Fork, Trib.	3432	0.80	Mi.	Habitat Degradation
Clear Fork, Trib.	3433	0.50	Mi.	Habitat Degradation
Coal Cr.	572	2.00	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Coal Cr.	1214	3.00	Mi.	Habitat Degradation
Coldwater Cr.	1271	3.00	Mi.	Habitat Degradation
Cole Cr.	225	5.00	Mi.	Habitat Degradation
Comstock Cr.	1322	1.00	Mi.	Habitat Degradation
Comstock Cr.	1323	5.00	Mi.	Habitat Degradation
Contrary Cr.	269	10.00	Mi.	Habitat Degradation
Contrary Cr.	1458	1.50	Mi.	Habitat Degradation
Contrary Cr.	1459	3.50	Mi.	Habitat Degradation
Cooley Lake	7090	300.00	Ac.	Unknown
Coon Cr.	187	13.00	Mi.	Habitat Degradation
Coon Cr.	208	9.00	Mi.	Habitat Degradation
Coon Cr.	3194	8.00	Mi.	Habitat Degradation
Coon Cr.	3496	4.90	Mi.	Habitat Degradation
Coon Cr.	3191	7.00	Mi.	Habitat Degradation
Coon Cr., Trib.	3497	0.50	Mi.	Habitat Degradation
Coon Cr., Trib.	3498	1.40	Mi.	Habitat Degradation
Coopers Cr.	1222	6.50	Mi.	Habitat Degradation
Coopers Cr., Trib.	1223	2.00	Mi.	Habitat Degradation
Cotton Wood Cr.	671	3.00	Mi.	Habitat Degradation
Cottontail Lake	7379	27.00	Ac.	Temperature
Cottonwood Cr.	410	3.00	Mi.	Habitat Degradation
Cottonwood Cr.	527	3.50	Mi.	Habitat Degradation
Cottonwood Cr.	548	2.00	Mi.	Habitat Degradation
Cottonwood Cr.	3651	3.00	Mi.	Habitat Degradation
Cow Br.	247	5.00	Mi.	Habitat Degradation
Cow Cr.	895	1.00	Mi.	Habitat Degradation
Crabapple Cr.	365	1.50	Mi.	Habitat Degradation
Crabapple Cr.	536	3.50	Mi.	Habitat Degradation
Craven Ditch	2816	11.00	Mi.	Habitat Degradation, Low Dissolved Oxygen
Crawford Cr.	1254	5.00	Mi.	Habitat Degradation
Crooked Cr.	116	22.00	Mi.	Habitat Degradation
Crooked Cr.	188	3.50	Mi.	Habitat Degradation
Crooked Cr.	330	2.50	Mi.	Habitat Degradation
Crooked Cr.	333	3.00	Mi.	Habitat Degradation
Crooked Cr.	551	2.00	Mi.	Habitat Degradation
Crooked Cr.	3307	3.10	Mi.	Habitat Degradation
Crooked Cr.	3434	5.30	Mi.	Habitat Degradation
Crooked R.	376	6.50	Mi.	Habitat Degradation
Crooked R.	371	53.50	Mi.	Habitat Degradation, E. coli
Cuivre R.	151	9.00	Mi.	Low Dissolved Oxygen
Cypress Cr.	443	15.50	Mi.	Habitat Degradation
Cypress Ditch #1	2616	9.00	Mi.	Habitat Degradation
Cypress Ditch Lateral	2981	8.00	Mi.	Habitat Degradation
Cypress Ditch Lateral	2982	6.00	Mi.	Habitat Degradation
Dan R.	2808	2.50	Mi.	Habitat Degradation
Dardenne Cr.	221	16.5	Mi.	Unknown
Davis Cr.	255	3.50	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Davis Cr.	907	25.00	Mi.	Habitat Degradation
Davis Cr.	144	5.00	Mi.	Habitat Degradation, Low Dissolved Oxygen
Davis Cr.	912	11.40	Mi.	Low Dissolved Oxygen
Davis Cr. Ditch	253	6.50	Mi.	Habitat Degradation
Davis Cr., Trib.	254	3.00	Mi.	Habitat Degradation
Dead Oak Cr.	539	1.00	Mi.	Habitat Degradation
Deepwater Cr.	1215	8.00	Mi.	Habitat Degradation
Deepwater Cr.	1217	12.00	Mi.	Habitat Degradation
Deer Cr.	1213	0.50	Mi.	Habitat Degradation
Dicks Cr.	320	7.00	Mi.	Habitat Degradation
Dicks Fk.	3197	2.00	Mi.	Habitat Degradation
Dillon Cr.	268	4.00	Mi.	Sediment
Ditch #1	2974	10.00	Mi.	Habitat Degradation
Ditch #1	2987	6.00	Mi.	Habitat Degradation
Ditch #1	2988	2.00	Mi.	Habitat Degradation
Ditch #1	3028	2.50	Mi.	Habitat Degradation
Ditch #1	3045	17.00	Mi.	Habitat Degradation
Ditch #1	3048	3.00	Mi.	Habitat Degradation
Ditch #1	3052	4.00	Mi.	Habitat Degradation
Ditch #1	3116	6.00	Mi.	Habitat Degradation
Ditch #1	3117	3.00	Mi.	Habitat Degradation
Ditch #1	3050	86.00	Mi.	Habitat Degradation, Mercury
Ditch #10	2998	3.50	Mi.	Habitat Degradation
Ditch #10	2999	2.50	Mi.	Habitat Degradation
Ditch #10	3139	2.50	Mi.	Habitat Degradation
Ditch #101	3083	3.00	Mi.	Habitat Degradation
Ditch #104	3043	12.50	Mi.	Habitat Degradation
Ditch #11	2986	6.00	Mi.	Habitat Degradation
Ditch #110	3073	2.50	Mi.	Habitat Degradation
Ditch #17	3078	7.00	Mi.	Habitat Degradation
Ditch #2	2618	8.00	Mi.	Habitat Degradation
Ditch #2	2991	4.50	Mi.	Habitat Degradation
Ditch #2	3018	4.00	Mi.	Habitat Degradation
Ditch #2	3104	17.00	Mi.	Habitat Degradation
Ditch #2	2617	2.00	Mi.	Habitat Degradation, Low Dissolved Oxygen, Bacteria
Ditch #22	2772	7.00	Mi.	Habitat Degradation
Ditch #23	2773	6.00	Mi.	Habitat Degradation
Ditch #24	3062	12.00	Mi.	Habitat Degradation
Ditch #24	3074	3.00	Mi.	Habitat Degradation
Ditch #25	3068	1.00	Mi.	Habitat Degradation
Ditch #25	3072	2.50	Mi.	Habitat Degradation
Ditch #251	3038	44.00	Mi.	Habitat Degradation, Mercury
Ditch #258	3039	10.00	Mi.	Habitat Degradation
Ditch #258	3040	5.00	Mi.	Habitat Degradation
Ditch #259	3011	26.00	Mi.	Habitat Degradation, Mercury
Ditch #26	3070	3.00	Mi.	Habitat Degradation
Ditch #26	3071	1.00	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Ditch #27	3069	4.50	Mi.	Habitat Degradation
Ditch #287	3067	5.00	Mi.	Habitat Degradation
Ditch #290	3088	10.00	Mi.	Habitat Degradation
Ditch #290	3089	5.00	Mi.	Habitat Degradation
Ditch #293	3098	2.00	Mi.	Habitat Degradation
Ditch #3	2972	2.00	Mi.	Habitat Degradation
Ditch #3	2973	0.50	Mi.	Habitat Degradation
Ditch #3	2994	1.50	Mi.	Habitat Degradation
Ditch #3	3019	7.50	Mi.	Habitat Degradation
Ditch #3	3100	19.00	Mi.	Habitat Degradation
Ditch #30	3075	4.50	Mi.	Habitat Degradation
Ditch #33	3065	11.00	Mi.	Habitat Degradation
Ditch #33	3066	2.00	Mi.	Habitat Degradation
Ditch #34	3061	4.50	Mi.	Habitat Degradation
Ditch #34	3064	9.00	Mi.	Habitat Degradation
Ditch #35	3063	9.00	Mi.	Habitat Degradation
Ditch #36	3110	2.00	Mi.	Habitat Degradation
Ditch #4	2995	1.50	Mi.	Habitat Degradation
Ditch #4	3020	3.00	Mi.	Habitat Degradation
Ditch #4	3046	9.50	Mi.	Habitat Degradation
Ditch #4	3047	4.00	Mi.	Habitat Degradation
Ditch #4	3099	14.00	Mi.	Habitat Degradation
Ditch #41	3090	5.00	Mi.	Habitat Degradation
Ditch #42	3091	18.50	Mi.	Habitat Degradation
Ditch #5	2996	1.00	Mi.	Habitat Degradation
Ditch #5	3015	2.00	Mi.	Habitat Degradation
Ditch #6	2997	1.00	Mi.	Habitat Degradation
Ditch #6	3022	16.50	Mi.	Habitat Degradation
Ditch #6	3024	4.50	Mi.	Habitat Degradation
Ditch #6	3096	7.00	Mi.	Habitat Degradation
Ditch #6	3097	22.00	Mi.	Habitat Degradation
Ditch #66	3036	2.00	Mi.	Habitat Degradation
Ditch #66	3049	25.00	Mi.	Habitat Degradation, Mercury
Ditch #7	3013	3.00	Mi.	Habitat Degradation
Ditch #7	3095	6.00	Mi.	Habitat Degradation
Ditch #79	3035	9.50	Mi.	Habitat Degradation
Ditch #8	3094	20.50	Mi.	Habitat Degradation
Ditch #80	3029	0.50	Mi.	Habitat Degradation
Ditch #81	3102	24.00	Mi.	Habitat Degradation, Mercury
Ditch #84	3103	6.00	Mi.	Habitat Degradation
Ditch #9	3092	6.00	Mi.	Habitat Degradation
Ditch #9	3093	2.50	Mi.	Habitat Degradation
Ditch To Black R.	2770	11.00	Mi.	Habitat Degradation
Ditch To Black R.	2776	11.00	Mi.	Habitat Degradation
Ditch To Black R.	2777	12.00	Mi.	Habitat Degradation
Ditch To Ditch #1	2975	1.00	Mi.	Habitat Degradation
Ditch To Ditch #1	3054	4.50	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Ditch To Ditch #1	3055	6.00	Mi.	Habitat Degradation
Ditch To Ditch #1	3056	6.00	Mi.	Habitat Degradation
Ditch To Ditch #101	3084	2.00	Mi.	Habitat Degradation
Ditch To Ditch #2	2619	1.50	Mi.	Habitat Degradation
Ditch To Ditch #3	3021	2.00	Mi.	Habitat Degradation
Ditch To Ditch #5	3014	2.00	Mi.	Habitat Degradation
Ditch To Ditch #6	3023	1.50	Mi.	Habitat Degradation
Ditch To Pike Cr.	2819	3.00	Mi.	Habitat Degradation
Ditler Br.	3296	2.00	Mi.	Habitat Degradation
Dog Cr.	510	5.00	Mi.	Sediment
Double Br.	1298	6.00	Mi.	Habitat Degradation
Douglas Br.	3648	4.30	Mi.	Habitat Degradation
Doxies Cr.	679	9.00	Mi.	Habitat Degradation
Dry Auglaize Cr.	1144	32.00	Mi.	Bacteria
Dry Br.	1406	2.00	Mi.	Low Dissolved Oxygen, Ammonia
Dry Cr.	940	3.00	Mi.	Habitat Degradation
Drywood Cr.	1314	30.00	Mi.	Habitat Degradation
Duck Cr.	689	5.50	Mi.	Habitat Degradation
Duck Cr.	1210	2.00	Mi.	Habitat Degradation
Dudley Main Ditch	2977	7.00	Mi.	Habitat Degradation
Dudley Main Ditch	2978	0.50	Mi.	Habitat Degradation
Duncan Cr.	1311	2.00	Mi.	Habitat Degradation
Dutchtown Ditch	2193	10.00	Mi.	Habitat Degradation
Duval Cr.	3199	7.00	Mi.	Habitat Degradation
Dyer Rock Cr.	3438	5.90	Mi.	Habitat Degradation
East Bear Cr.	934	1.00	Mi.	Habitat Degradation
East Br.	1264	12.00	Mi.	Habitat Degradation
East Branch Crawford Cr.	1255	9.00	Mi.	Habitat Degradation
East Branch Elkhorn Cr.	288	3.00	Mi.	Habitat Degradation
East Branch Squaw Cr.	257	4.00	Mi.	Habitat Degradation
East Cow Cr.	896	2.00	Mi.	Habitat Degradation
East Cr.	1265	7.00	Mi.	Habitat Degradation
East Cr., Trib.	1266	1.00	Mi.	Habitat Degradation
East Ditch #1	3107	22.00	Mi.	Habitat Degradation
East Ditch #1	3108	3.00	Mi.	Habitat Degradation
East Fork Bee Br.	3644	1.50	Mi.	Habitat Degradation
East Fork Big Cr.	446	21.00	Mi.	Habitat Degradation
East Fork Big Cr.	447	19.00	Mi.	Habitat Degradation
East Fork Big Muddy Cr.	463	2.00	Mi.	Habitat Degradation
East Fork Chariton R.	697	11.00	Mi.	Habitat Degradation
East Fork Chariton R.	682	48.50	Mi.	Habitat Degradation, Sulfate
East Fork Crooked R.	373	8.00	Mi.	Habitat Degradation
East Fork Crooked R., Trib.	374	5.00	Mi.	Habitat Degradation
East Fork Drywood Cr.	1320	10.00	Mi.	Low Dissolved Oxygen
East Fork Fishing R.	386	11.50	Mi.	Inconclusive Invert Data
East Fork Grand R.	467	6.50	Mi.	Habitat Degradation
East Fork Honey Cr.	555	8.00	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
East Fork Little Tarkio Cr.	249	16.50	Mi.	Habitat Degradation
East Fork Locust Cr.	3706	3.60	Mi.	Low Dissolved Oxygen
East Fork Lost Cr.	497	9.00	Mi.	Habitat Degradation
East Fork Postoak Cr.	932	13.00	Mi.	Habitat Degradation
East Fork Postoak Cr., Trib.	3428	2.00	Mi.	Habitat Degradation
East Fork Postoak Cr., Trib.	3429	2.00	Mi.	Habitat Degradation
East Fork Postoak Cr., Trib.	3768	3.90	Mi.	Habitat Degradation
East Fork Salt Pond Cr.	909	3.00	Mi.	Habitat Degradation
East Fork Shoal Cr.	398	2.00	Mi.	Habitat Degradation
East Fork Sni-A-Bar Cr.	3440	7.00	Mi.	Habitat Degradation
East Fork Sni-A-Bar Cr.	402	9.40	Mi.	Habitat Degradation, Low Dissolved Oxygen
East Fork Sni-A-Bar Cr., Trib.	3441	4.60	Mi.	Habitat Degradation
East Fork Sni-A-Bar Cr., Trib.	3442	3.00	Mi.	Habitat Degradation
East Fork Walnut Cr.	688	1.50	Mi.	Habitat Degradation
East Yellow Cr.	597	32.00	Mi.	Habitat Degradation
Edmondson Cr.	414	1.50	Mi.	Habitat Degradation
Edmondson Cr., Trib.	415	2.50	Mi.	Habitat Degradation
Eight Mile Cr.	1262	12.00	Mi.	Habitat Degradation
Elk Br.	3493	2.10	Mi.	Habitat Degradation
Elk Br., Trib.	3798	0.20	Mi.	Habitat Degradation
Elk Chute Ditch	3030	11.00	Mi.	Habitat Degradation
Elk Cr.	603	4.00	Mi.	Habitat Degradation
Elk Cr.	604	8.00	Mi.	Habitat Degradation
Elk Cr.	3546	1.50	Mi.	Habitat Degradation
Elk Fk.	858	6.00	Mi.	Habitat Degradation
Elk Fk.	1278	4.50	Mi.	Habitat Degradation
Elk Fork Salt R.	130	6.00	Mi.	Habitat Degradation
Elk Fork Salt R.	131	31.00	Mi.	Habitat Degradation
Elk Fork, Trib.	3503	2.50	Mi.	Habitat Degradation
Elk R.	3246	21.50	Mi.	Nickel (Sediment)
Elkhorn Cr.	287	8.00	Mi.	Habitat Degradation
Elm Cr.	620	3.00	Mi.	Habitat Degradation
Elm Cr.	645	8.00	Mi.	Habitat Degradation
Elm Grove Br.	331	4.00	Mi.	Habitat Degradation
Elm Spring Br.	3227	1.00	Mi.	E. coli
Fassnight Cr.	3427	2.00	Mi.	Habitat Degradation
Fassnight Cr.	3370	4.00	Mi.	Inconclusive Invert Data
Fellows Lake	7237	820.00	Ac.	Mercury (Fish Tissue)
Femme Osage Cr.	1605	5.50	Mi.	Mercury (Fish Tissue)
Finney Cr.	902	1.00	Mi.	Habitat Degradation
Finney Cr.	903	1.50	Mi.	Habitat Degradation
Fire Br.	375	5.00	Mi.	Habitat Degradation
Fire Prairie Cr.	3412	14.10	Mi.	Habitat Degradation
First Cr.	318	4.00	Mi.	Habitat Degradation
Fish Br.	143	3.00	Mi.	Habitat Degradation
Fish Lake Ditch	3131	6.50	Mi.	Habitat Degradation
Fish Trap Slough	3006	15.00	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Fishing R.	383	26.00	Mi.	Inconclusive Invert Data
Flagstaff Cr.	915	4.00	Mi.	Habitat Degradation
Flat Cr.	129	10.00	Mi.	Habitat Degradation
Flat Cr.	892	4.50	Mi.	Habitat Degradation
Flat Cr.	864	23.70	Mi.	Mercury (Fish Tissue)
Flat Cr.	865	21.80	Mi.	Mercury (Fish Tissue)
Flat Cr., Trib.	3508	2.10	Mi.	Habitat Degradation
Flat Cr., Trib.	3509	2.30	Mi.	Habitat Degradation
Flat Cr., Trib.	3511	1.50	Mi.	Habitat Degradation
Flat Cr., Trib.	3516	1.10	Mi.	Habitat Degradation
Flat Cr., Trib.	3517	1.00	Mi.	Habitat Degradation
Flat Cr., Trib.	3523	3.50	Mi.	Habitat Degradation
Flat Cr., Trib.	3524	0.90	Mi.	Habitat Degradation
Flat Cr., Trib.	3528	1.00	Mi.	Habitat Degradation
Flat Cr., Trib.	3529	2.10	Mi.	Habitat Degradation
Flat Cr., Trib.	3530	3.50	Mi.	Habitat Degradation
Fletchall Cr.	471	3.50	Mi.	Habitat Degradation
Florida Cr.	289	6.00	Mi.	Habitat Degradation
Floyd Cr.	114	3.00	Mi.	Habitat Degradation
Fly Cr.	3636	6.10	Mi.	Habitat Degradation
Fountain Farm Br.	3657	1.80	Mi.	Sediment, Lead (Sediment)
Fox Cr.	583	7.00	Mi.	Habitat Degradation
Fox R.	37	12.00	Mi.	Atrazine
Fredricktown City Lake	7328	158.00	Ac.	Lead
Galbreath Cr.	135	4.50	Mi.	Habitat Degradation
Gallinipper Cr.	1226	1.00	Mi.	Habitat Degradation
Gallinipper Cr.	1227	1.00	Mi.	Habitat Degradation
Gans Cr.	1004	5.00	Mi.	Low Dissolved Oxygen
Garrison Fk.	407	5.00	Mi.	Habitat Degradation
Gees Cr.	590	13.00	Mi.	Habitat Degradation
Gillum Cr.	1307	2.50	Mi.	Habitat Degradation
Glendale Fk.	3202	4.00	Mi.	Habitat Degradation
Goose Cr.	456	2.00	Mi.	Habitat Degradation
Goose Cr.	532	3.50	Mi.	Habitat Degradation
Goose Pond Ditch	3086	4.00	Mi.	Habitat Degradation
Goose Pond Ditch, Trib.	3087	1.00	Mi.	Habitat Degradation
Gopher Lake	7383	42.00	Ac.	Temperature
Grand R., Old Channel	512	14.00	Mi.	Habitat Degradation
Grand R., Old Channel	513	3.50	Mi.	Habitat Degradation
Grand R., Old Channel	517	2.50	Mi.	Habitat Degradation
Grand R., Old Channel	625	1.50	Mi.	Habitat Degradation
Grand R., Old Channel	628	4.00	Mi.	Habitat Degradation
Grand R., Old Channel	630	5.00	Mi.	Habitat Degradation
Granddaddy'S Cr.	1216	1.00	Mi.	Habitat Degradation
Grantham Cr.	478	2.00	Mi.	Habitat Degradation
Grassy Cr.	72	17.50	Mi.	Habitat Degradation
Grassy Cr.	3538	2.40	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Greer Br.	850	5.50	Mi.	Habitat Degradation, Low Dissolved Oxygen
Greer Cr.	1176	1.50	Mi.	Low Dissolved Oxygen
Greys Lake	233	5.00	Mi.	Habitat Degradation
Grindstone Cr.	493	17.00	Mi.	Habitat Degradation
Grindstone Cr.	502	16.00	Mi.	Habitat Degradation
Grindstone Cr., Trib.	504	1.00	Mi.	Habitat Degradation
Grove Cr.	321	3.00	Mi.	Habitat Degradation
Grove Cr.	3204	2.00	Mi.	Lead, Zinc (Sediment)
Guinns Cr.	23	0.50	Mi.	Habitat Degradation
Hackberry Br.	3650	3.70	Mi.	Habitat Degradation
Half Moon Bayou	3017	3.00	Mi.	Habitat Degradation
Harding Cr.	1273	2.00	Mi.	Habitat Degradation
Harless Cr.	1270	2.00	Mi.	Habitat Degradation
Harviell Ditch (#3)	2615	16.00	Mi.	Habitat Degradation
Hayden Cr.	2165	3.00	Mi.	Lead (Sediment)
Hayzlett Br.	285	2.00	Mi.	Habitat Degradation
Hazel Cr.	642	5.00	Mi.	Habitat Degradation
Headwater Diversion Channel	2196	20.00	Mi.	Habitat Degradation
Heaths Cr., Trib.	3532	3.50	Mi.	Habitat Degradation
Heaths Cr., Trib.	3533	2.00	Mi.	Habitat Degradation
Heaths Cr., Trib.	3534	1.10	Mi.	Habitat Degradation
Heaths Cr., Trib.	3535	0.50	Mi.	Habitat Degradation
Heaths Cr., Trib. To Trib.	3536	1.00	Mi.	Habitat Degradation
Henry Cr.	870	1.70	Mi.	Habitat Degradation
Henry Cr.	3525	4.50	Mi.	Habitat Degradation
Henry Cr., Trib.	3801	1.20	Mi.	Habitat Degradation
Hess Cr., Trib.	3802	0.70	Mi.	Habitat Degradation
Hickory Br.	596	6.00	Mi.	Habitat Degradation
Hickory Cr.	186	6.00	Mi.	Habitat Degradation
Hickory Cr.	308	1.00	Mi.	Habitat Degradation
Hickory Cr.	335	2.00	Mi.	Habitat Degradation
Hickory Cr.	490	3.00	Mi.	Habitat Degradation
High Cr.	229	5.50	Mi.	Habitat Degradation
High Cr., Trib.	232	2.00	Mi.	Habitat Degradation
High Creek Ditch	228	4.50	Mi.	Habitat Degradation
Highly Cr.	307	3.00	Mi.	Habitat Degradation
Hightower Cr.	3646	4.40	Mi.	Habitat Degradation
Hillers Cr.	728	11.00	Mi.	Low Dissolved Oxygen
Hog Cr.	660	5.00	Mi.	Habitat Degradation
Hogan's Fk.	3425	5.80	Mi.	Habitat Degradation
Hogan's Fork, Trib.	3426	2.30	Mi.	Habitat Degradation
Holland Br.	350	2.00	Mi.	Habitat Degradation
Holtzclaw Cr.	351	2.00	Mi.	Habitat Degradation
Honey Cr.	42	7.00	Mi.	Habitat Degradation
Honey Cr.	338	5.00	Mi.	Habitat Degradation
Honey Cr.	509	6.00	Mi.	Habitat Degradation
Honey Cr.	888	2.00	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Honey Cr.	919	8.00	Mi.	Habitat Degradation
Honey Cr.	1251	8.00	Mi.	Low Dissolved Oxygen
Honey Cypress Ditch	3121	15.00	Mi.	Habitat Degradation
Hoover Cr.	127	7.00	Mi.	Habitat Degradation
Horse Cr.	1351	25.00	Mi.	Low Dissolved Oxygen
Horse Fk.	354	4.00	Mi.	Habitat Degradation
Horseshoe Cr.	3413	5.80	Mi.	Low Dissolved Oxygen
Hubble Cr, Old Channel	3053	2.50	Mi.	Habitat Degradation
Huff Cr.	306	1.50	Mi.	Habitat Degradation
Huffstetter Lateral	3101	12.00	Mi.	Habitat Degradation
Hunnewell Lake	7029	228.00	Ac.	Mercury (Fish Tissue)
Hurricane Br.	435	1.50	Mi.	Habitat Degradation
Hurricane Cr.	632	4.00	Mi.	Habitat Degradation
Imboden Fk.	2741	5.00	Mi.	Unknown
Indian Br.	432	3.00	Mi.	Habitat Degradation
Indian Camp Cr.	212	5.00	Mi.	Low Dissolved Oxygen
Indian Cr.	62	3.50	Mi.	Habitat Degradation
Indian Cr.	104	3.50	Mi.	Habitat Degradation
Indian Cr.	171	17.00	Mi.	Habitat Degradation
Indian Cr.	477	3.00	Mi.	Habitat Degradation
Indian Cr.	573	4.00	Mi.	Habitat Degradation
Indian Hills Lake	7288	326.00	Ac.	Mercury (Fish Tissue)
Iowa Ditch	234	3.00	Mi.	Habitat Degradation
Irvins Br.	494	3.00	Mi.	Habitat Degradation
Irwin Cr.	558	6.00	Mi.	Habitat Degradation
Ishmael Br.	1964	1.50	Mi.	Metals
Island Cr.	485	6.00	Mi.	Habitat Degradation
Jacobs Br.	3223	1.00	Mi.	Lead, Zinc (Sediment)
James Bayou	3128	3.50	Mi.	Habitat Degradation
James Bayou	3129	5.50	Mi.	Habitat Degradation
James R.	2347	28.00	Mi.	Mercury (Fish Tissue)
Jamesport Community Lake	7105	30.00	Ac.	Mercury (Fish Tissue)
Jenkins Cr.	286	6.00	Mi.	Habitat Degradation
Jenkins Cr.	3207	2.50	Mi.	E. coli
Joachim Cr.	1719	28.00	Mi.	Unknown
Johns Br.	184	1.00	Mi.	Habitat Degradation
Jones Cr.	3205	7.00	Mi.	E. coli
Jordan Br.	275	3.00	Mi.	Habitat Degradation
Jordan Cr.	329	1.00	Mi.	Habitat Degradation
Jordan Cr.	911	3.50	Mi.	Habitat Degradation
Jowler Cr.	3571	8.90	Mi.	Habitat Degradation
Keeney Cr.	384	4.00	Mi.	Habitat Degradation
Kettle Cr.	516	1.00	Mi.	Habitat Degradation
Kimsey Cr.	262	1.00	Mi.	Habitat Degradation
Kimsey Cr.	263	3.50	Mi.	Habitat Degradation
Kimsey Cr.	264	6.00	Mi.	Habitat Degradation
Kings Valley	3255	2.00	Mi.	Nickel (Sediment)

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Kinnemore Ditch	3122	13.00	Mi.	Habitat Degradation
Kitten Cr.	1334	4.00	Mi.	Habitat Degradation
Knob Cr.	1303	6.50	Mi.	Habitat Degradation
Koen Cr.	2171	1.00	Mi.	Lead (Sediment)
Kyle Cr.	3195	8.00	Mi.	Habitat Degradation
Ladies Br.	1332	7.00	Mi.	Habitat Degradation
Lake Cr.	359	4.00	Mi.	Habitat Degradation
Lake Cr.	431	9.50	Mi.	Habitat Degradation
Lake Cr.	875	5.00	Mi.	Habitat Degradation
Lake Cr.	3527	10.00	Mi.	Habitat Degradation
Lake Cr., Trib.	876	1.50	Mi.	Habitat Degradation
Lake Cr., Trib.	3514	4.00	Mi.	Habitat Degradation
Lake Slough	2774	13.00	Mi.	Habitat Degradation
Lakewood Lake	7100	107.00	Ac.	Mercury (Fish Tissue)
Landon Br.	1329	3.00	Mi.	Habitat Degradation
Larry Cr.	507	1.00	Mi.	Habitat Degradation
Lateral #2	3025	2.00	Mi.	Habitat Degradation
Lateral #2 Main Ditch	3106	3.00	Mi.	Habitat Degradation
Lateral #27	3027	6.00	Mi.	Habitat Degradation
Lateral #27	3033	3.00	Mi.	Habitat Degradation
Lateral #4	3149	3.00	Mi.	Habitat Degradation
Lateral Ditch	3008	2.00	Mi.	Habitat Degradation
Lateral Ditch	3010	6.00	Mi.	Habitat Degradation
Lateral Ditch #1	3114	4.00	Mi.	Habitat Degradation
Lateral Ditch #2	3113	3.00	Mi.	Habitat Degradation
Lateral Ditch #37	3007	5.00	Mi.	Habitat Degradation
Lead Cr.	179	6.00	Mi.	Habitat Degradation
Lead Cr.	178	1.00	Mi.	Habitat Degradation
Leeper Cr.	624	8.00	Mi.	Habitat Degradation
Lewis Slough	235	2.00	Mi.	Habitat Degradation
Lick Cr.	256	4.50	Mi.	Habitat Degradation
Lick Cr.	150	8.50	Mi.	Habitat Degradation, Fecal coliform
Lick Creek Ditch	2980	16.00	Mi.	Habitat Degradation
Lick Fk.	514	6.00	Mi.	Habitat Degradation
Lick Fk.	515	9.00	Mi.	Habitat Degradation
Lick Fk.	3439	8.90	Mi.	Habitat Degradation
Lick Fk.	1024	8.00	Mi.	Sediment
Lincoln Cr.	280	7.00	Mi.	Habitat Degradation
Lincoln Cr., Trib.	281	1.00	Mi.	Habitat Degradation
Linn Cr.	41	3.00	Mi.	Habitat Degradation
Little Black R.	2620	25.00	Mi.	E. coli
Little Blackwater Cr.	922	6.00	Mi.	Habitat Degradation
Little Blue R.	424	4.00	Mi.	Habitat Degradation
Little Bonne Femme Cr.	1003	9.00	Mi.	Low Dissolved Oxygen
Little Brush Cr.	673	7.00	Mi.	Habitat Degradation
Little Chariton R.	678	13.50	Mi.	Habitat Degradation
Little Clear Cr.	1340	4.00	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Little Clear Cr., Trib.	1341	1.00	Mi.	Habitat Degradation
Little Coon Cr.	3192	4.00	Mi.	Habitat Degradation
Little Cr.	452	8.00	Mi.	Habitat Degradation
Little Cr.	923	3.00	Mi.	Habitat Degradation
Little Crooked Cr.	118	3.50	Mi.	Habitat Degradation
Little Dardenne Cr.	223	4.00	Mi.	Inconclusive Invert Data
Little Deer Cr.	1277	3.00	Mi.	Habitat Degradation
Little Drywood Cr., Trib.	3649	1.10	Mi.	Habitat Degradation
Little East Fork Locust Cr.	609	9.00	Mi.	Habitat Degradation
Little Fabius R.	79	21.50	Mi.	Habitat Degradation
Little Fox R.	40	4.50	Mi.	Habitat Degradation
Little Fox R.	39	17.00	Mi.	Habitat Degradation
Little Horseshoe Cr.	3690	3.00	Mi.	Habitat Degradation
Little Hurricane Cr.	633	1.00	Mi.	Habitat Degradation
Little Lead Cr.	181	4.00	Mi.	Habitat Degradation
Little Monegaw Cr.	1232	4.00	Mi.	Habitat Degradation
Little Muddy Cr.	440	3.00	Mi.	Habitat Degradation
Little Muddy Cr.	559	5.50	Mi.	Habitat Degradation
Little Muddy Cr.	856	7.30	Mi.	Color
Little Muddy Cr., Trib.	3489	2.00	Mi.	Habitat Degradation
Little Muddy Cr., Trib.	3491	2.90	Mi.	Habitat Degradation
Little Mussel Cr.	675	3.00	Mi.	Habitat Degradation
Little No Cr.	552	4.00	Mi.	Habitat Degradation
Little North Fork Spring R.	3200	13.00	Mi.	Habitat Degradation
Little North Fork Spring R., Trib.	3201	1.00	Mi.	Habitat Degradation
Little Osage R.	1310	6.30	Mi.	Habitat Degradation
Little Osage R.	3674	16.00	Mi.	Habitat Degradation
Little Otter Cr.	120	4.00	Mi.	Habitat Degradation
Little Otter Cr.	526	3.00	Mi.	Habitat Degradation
Little Platte R.	315	10.50	Mi.	Habitat Degradation
Little Platte R.	352	19.00	Mi.	Habitat Degradation
Little R.	562	7.00	Mi.	Habitat Degradation
Little R., Old Channel	3041	39.50	Mi.	Habitat Degradation
Little Shaver Cr.	863	4.90	Mi.	Habitat Degradation
Little Shoal Cr.	651	8.00	Mi.	Habitat Degradation
Little Shoal Cr.	3325	3.00	Mi.	Habitat Degradation
Little Sni-A-Bar Cr.	403	5.00	Mi.	Habitat Degradation
Little Sni-A-Bar Cr.	404	7.00	Mi.	Habitat Degradation
Little St. Francis R.	2854	27.70	Mi.	Low Dissolved Oxygen, Nickel, Lead (Sediment)
Little Sugar Cr.	3249	11.00	Mi.	Nickel (Sediment)
Little Tabo Cr.	409	7.00	Mi.	Habitat Degradation
Little Tarkio Cr.	250	14.50	Mi.	Habitat Degradation
Little Tarkio Cr., Old Channel	260	6.00	Mi.	Habitat Degradation
Little Tarkio Cr., Old Channel	261	8.00	Mi.	Habitat Degradation
Little Tarkio Ditch	251	5.50	Mi.	Habitat Degradation
Little Tavern Cr.	1076	11.00	Mi.	Bacteria
Little Tebo Cr.	1205	4.50	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Little Tebo Cr., Trib.	3295	1.50	Mi.	Habitat Degradation
Little Tebo Cr., Trib.	3304	1.00	Mi.	Habitat Degradation
Little Third Fork Platte R.	328	20.00	Mi.	Habitat Degradation
Little Walnut Cr.	662	2.50	Mi.	Habitat Degradation
Little Walnut Cr.	938	3.00	Mi.	Habitat Degradation
Little Whitewater Cr.	2229	21.00	Mi.	Inconclusive Invert Data
Little Wyaconda R.	52	6.00	Mi.	Habitat Degradation
Little Wyaconda R.	53	4.00	Mi.	Habitat Degradation
Littleby Cr.	147	15.00	Mi.	Habitat Degradation
Log Cr.	533	7.00	Mi.	Habitat Degradation
Logan Cr.	2632	5.50	Mi.	Bacteria
Long Br.	139	29.00	Mi.	Habitat Degradation
Long Br.	243	3.00	Mi.	Habitat Degradation
Long Br.	340	11.50	Mi.	Habitat Degradation
Long Br.	488	5.00	Mi.	Habitat Degradation
Long Br.	677	7.00	Mi.	Habitat Degradation
Long Br.	1843	4.00	Mi.	Habitat Degradation
Long Br.	3430	0.80	Mi.	Habitat Degradation
Long Br. Grove Br.	3531	2.00	Mi.	Habitat Degradation, Low Dissolved Oxygen
Long Br., Trib.	3502	0.50	Mi.	Habitat Degradation
Long Branch Lake	7171	2430.00	Ac.	Mercury (Fish Tissue)
Long Cr.	535	3.00	Mi.	Habitat Degradation
Long Cr.	669	4.00	Mi.	Habitat Degradation
Long Grove Br.	851	0.90	Mi.	Habitat Degradation
Lost Cr.	495	22.00	Mi.	Habitat Degradation
Lost Cr.	643	5.00	Mi.	Habitat Degradation
Lotts Cr.	466	10.00	Mi.	Habitat Degradation
Loutre R.	1633	13.50	Mi.	Low Dissolved Oxygen
Lumpkin Cr.	425	0.50	Mi.	Habitat Degradation
Mace Cr.	267	6.00	Mi.	Habitat Degradation
Main Ditch	3026	11.50	Mi.	Habitat Degradation
Main Ditch	3115	6.00	Mi.	Habitat Degradation
Main Ditch	3112	24.00	Mi.	Habitat Degradation
Main Ditch #8	3031	19.00	Mi.	Habitat Degradation
Main Ditch #8	3032	12.00	Mi.	Habitat Degradation
Malaruni Cr.	10	1.00	Mi.	Habitat Degradation
Malone Cr.	2277	6.50	Mi.	Habitat Degradation
Marlin Cr.	3485	2.00	Mi.	Habitat Degradation
Marlin Cr.	852	3.50	Mi.	Habitat Degradation, Low Dissolved Oxygen
Marlowe Cr.	474	5.50	Mi.	Habitat Degradation
Marlowe Cr.	475	1.00	Mi.	Habitat Degradation
Marrowbone Cr.	508	11.00	Mi.	Habitat Degradation
Marrowbone Cr.	511	11.00	Mi.	Habitat Degradation
Marshalls Cr.	1221	9.50	Mi.	Habitat Degradation
Martin Cr.	570	5.00	Mi.	Habitat Degradation
Mass Cr.	302	2.00	Mi.	Habitat Degradation
Massey Cr.	1267	6.00	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Massey Cr., Trib.	1268	3.00	Mi.	Habitat Degradation
May Br.	3540	3.50	Mi.	Habitat Degradation
Mccarty Cr.	1338	9.60	Mi.	pH
Mcelroy Cr.	231	2.00	Mi.	Habitat Degradation
Mcgee Br.	3510	3.70	Mi.	Habitat Degradation
Mcguire Br.	324	5.00	Mi.	Habitat Degradation
Mckenzie Cr.	3643	4.00	Mi.	Habitat Degradation
Mckill Cr.	1324	2.00	Mi.	Habitat Degradation
Mckill Cr.	1321	2.00	Mi.	pH
Mclean Cr.	31	3.50	Mi.	Habitat Degradation
Medicine Cr.	616	30.50	Mi.	Habitat Degradation
Melton Cr.	3637	2.00	Mi.	Habitat Degradation
Meramec R.	1841	76.00	Mi.	Mercury (Fish Tissue)
Merrills Br.	84	3.00	Mi.	Habitat Degradation
Miami Cr.	1302	11.50	Mi.	Habitat Degradation
Middle Big Cr.	3415	2.00	Mi.	Low Dissolved Oxygen
Middle Branch Squaw Cr.	258	3.00	Mi.	Habitat Degradation
Middle Cr.	567	5.00	Mi.	Habitat Degradation
Middle Fabius R.	63	57.00	Mi.	Habitat Degradation, Atrazine
Middle Fork Black R.	2744	15.00	Mi.	Nickel (Sediment)
Middle Fork Chariton R.	691	24.50	Mi.	Habitat Degradation
Middle Fork Chariton R.	698	15.00	Mi.	Habitat Degradation
Middle Fork Grand R.	472	2.50	Mi.	Habitat Degradation
Middle Fork Grand R., Trib.	473	2.00	Mi.	Habitat Degradation
Middle Fork Lost Cr.	496	7.00	Mi.	Habitat Degradation
Middle Fork Salt R.	123	49.00	Mi.	Habitat Degradation, Low Dissolved Oxygen
Middle Fork Salt R., Trib.	125	1.00	Mi.	Habitat Degradation
Middle Fork Tebo Cr., Trib.	1285	1.00	Mi.	Habitat Degradation
Middle Fork Tebo Cr., Trib.	1286	0.50	Mi.	Habitat Degradation
Middle Fork Tebo Cr., Trib.	1287	0.50	Mi.	Habitat Degradation
Middle Fork Tebo Cr., Trib.	1289	1.00	Mi.	Habitat Degradation
Middle Tarkio Cr.	245	10.00	Mi.	Habitat Degradation
Mill Cr.	265	10.00	Mi.	Habitat Degradation
Mill Cr.	266	1.00	Mi.	Habitat Degradation
Mill Cr.	301	9.50	Mi.	Habitat Degradation
Mill Cr.	529	1.00	Mi.	Habitat Degradation
Mill Cr.	2124	2.00	Mi.	Habitat Degradation
Mill Cr.	3311	3.00	Mi.	Habitat Degradation
Mill Cr.	159	5.00	Mi.	Habitat Degradation, Low Dissolved Oxygen
Mill Cr., Trib.	303	1.00	Mi.	Habitat Degradation
Milligan Cr.	134	8.00	Mi.	Habitat Degradation
Mineral Cr.	3422	4.30	Mi.	Habitat Degradation
Mineral Cr., Trib.	3423	1.00	Mi.	Habitat Degradation
Mingo Ditch	2983	16.00	Mi.	Habitat Degradation
Mississippi R.	3152	124.50	Mi.	PCB, Chlordane
Mississippi R.	4000	5.00	Mi.	PCB, Chlordane
Mississippi R.	1707	195.50	Mi.	PCB, Chlordane

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Mississippi R.	1	165.00	Mi.	PCB
Missouri R.	356	125.00	Mi.	Habitat Degradation, Chlordane, PCB
Missouri R.	701	129.00	Mi.	Habitat Degradation, E. coli, PCB
Missouri R., Trib.	411	6.00	Mi.	Habitat Degradation
Moccasin Cr.	483	2.00	Mi.	Habitat Degradation
Monegaw Cr.	1233	2.00	Mi.	Habitat Degradation
Moore Br.	1328	3.80	Mi.	Habitat Degradation
Moore Br.	1315	2.50	Mi.	Habitat Degradation
Moore Br.	1316	2.50	Mi.	Habitat Degradation
Mormon Fk.	1275	13.50	Mi.	Habitat Degradation
Moss Cr.	369	23.00	Mi.	Habitat Degradation
Moss Cr., Trib.	370	0.50	Mi.	Habitat Degradation
Mound Cr.	626	4.00	Mi.	Habitat Degradation
Mouse Cr.	426	1.00	Mi.	Habitat Degradation, Low Dissolved Oxygen
Mozingo Cr.	343	5.10	Mi.	Habitat Degradation
Mud Cr.	128	9.00	Mi.	Habitat Degradation
Mud Cr.	538	4.50	Mi.	Habitat Degradation
Mud Cr.	541	7.50	Mi.	Habitat Degradation
Mud Cr., Old Channel	547	3.00	Mi.	Habitat Degradation
Mud Cr., Trib.	544	2.00	Mi.	Habitat Degradation
Mud Cr., Trib.	545	1.00	Mi.	Habitat Degradation
Mud Cr., Trib.	546	0.50	Mi.	Habitat Degradation
Mud Creek Ditch	537	3.50	Mi.	Habitat Degradation
Mud Ditch	3124	9.00	Mi.	Habitat Degradation
Muddy Cr.	291	3.50	Mi.	Habitat Degradation
Muddy Cr.	434	3.50	Mi.	Habitat Degradation
Muddy Cr.	492	6.00	Mi.	Habitat Degradation
Muddy Cr.	607	4.50	Mi.	Habitat Degradation
Muddy Cr.	617	27.00	Mi.	Habitat Degradation
Muddy Cr.	898	9.00	Mi.	Habitat Degradation
Muddy Cr.	1309	3.00	Mi.	Habitat Degradation
Muddy Cr.	3308	3.50	Mi.	Habitat Degradation
Muddy Cr.	557	36.50	Mi.	Habitat Degradation
Muddy Cr.	3769	5.50	Mi.	Habitat Degradation
Muddy Cr., Trib.	618	2.00	Mi.	Habitat Degradation
Muddy Cr., Trib.	3488	1.30	Mi.	Habitat Degradation
Muddy Cr., Trib.	3492	1.30	Mi.	Habitat Degradation
Muddy Cr., Trib.	3494	1.00	Mi.	Habitat Degradation
Muddy Cr., Trib.	3495	1.00	Mi.	Habitat Degradation
Muddy Cr., Trib.	3499	1.80	Mi.	Habitat Degradation
Muddy Fk.	391	8.00	Mi.	Inconclusive Invert Data
Mulberry Cr.	3635	3.90	Mi.	Habitat Degradation
Mulkey Cr.	916	5.00	Mi.	Habitat Degradation
Muncas Cr.	692	3.00	Mi.	Habitat Degradation
Muncas Cr.	693	6.00	Mi.	Habitat Degradation
Narrows Cr.	126	2.00	Mi.	Habitat Degradation
Naylor Cr.	277	1.00	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Neals Cr.	2752	3.00	Mi.	Nickel, Lead (Sediment)
New #7 Chute	3157	2.00	Mi.	Habitat Degradation
New Franklin Ditch	3016	6.00	Mi.	Habitat Degradation
New Hope Cr.	392	4.20	Mi.	Habitat Degradation
Nichols Cr.	309	3.00	Mi.	Habitat Degradation
Nichols Cr., Trib.	310	1.00	Mi.	Habitat Degradation
Nishnabotna R.	227	8.00	Mi.	Habitat Degradation
Nishnabotna R., Old Channel	238	13.00	Mi.	Habitat Degradation
Nishnabotna R., Old Channel	240	3.00	Mi.	Habitat Degradation
Nishnabotna R., Trib. To Old Channel	239	1.50	Mi.	Habitat Degradation
Nishnabotna R., Trib. To Old Channel	241	2.00	Mi.	Habitat Degradation
Nodaway R., Old Channel	284	5.00	Mi.	Habitat Degradation
Nodaway R., Old Channel	294	1.00	Mi.	Habitat Degradation
Nodaway R., Old Channel	295	2.00	Mi.	Habitat Degradation
Nodaway R., Old Channel	296	1.00	Mi.	Habitat Degradation
Nodaway R., Old Channel	297	1.50	Mi.	Habitat Degradation
Nodaway R., Old Channel	298	1.00	Mi.	Habitat Degradation
Nodaway R., Old Channel	299	2.50	Mi.	Habitat Degradation
Nodaway R., Old Channel	300	4.50	Mi.	Habitat Degradation
Nodaway R., Old Channel	304	2.50	Mi.	Habitat Degradation
Nodaway R., Old Channel	305	2.50	Mi.	Habitat Degradation
Nodaway R., Old Channel	311	1.00	Mi.	Habitat Degradation
Norris Cr.	1252	4.00	Mi.	Habitat Degradation
North Blackbird Cr.	654	17.00	Mi.	Habitat Degradation
North Cut Ditch	3143	24.00	Mi.	Habitat Degradation
North Cut Ditch	3145	3.00	Mi.	Habitat Degradation
North Cut Ditch, Trib.	3144	2.50	Mi.	Habitat Degradation
North Cut Ditch, Trib.	3148	4.00	Mi.	Habitat Degradation
North Deepwater Cr.	1218	4.00	Mi.	Habitat Degradation
North Dry Sac R.	1392	3.50	Mi.	Low Dissolved Oxygen
North Fabius R.	59	1.00	Mi.	Habitat Degradation
North Fork Batts Cr.	681	1.00	Mi.	Habitat Degradation
North Fork Blackwater R.	920	10.00	Mi.	Habitat Degradation
North Fork Finney Cr.	904	3.00	Mi.	Habitat Degradation
North Fork Middle Fabius R.	65	9.20	Mi.	Habitat Degradation
North Fork Middle Fabius R.	3702	16.20	Mi.	Habitat Degradation
North Fork North Fabius R.	58	10.00	Mi.	Habitat Degradation
North Fork Salt R.	113	14.50	Mi.	Habitat Degradation
North Fork South Fabius R.	75	30.00	Mi.	Habitat Degradation
North Fork Spring R., Trib.	3196	3.00	Mi.	Habitat Degradation
North Mud Cr.	540	5.50	Mi.	Habitat Degradation
North Prong Little Black R.	2628	10.00	Mi.	Bacteria
North R.	3703	12.20	Mi.	Habitat Degradation
North R.	80	4.00	Mi.	Habitat Degradation
North R.	83	17.20	Mi.	Habitat Degradation
North R.	81	40.00	Mi.	Low Dissolved Oxygen

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
North Wyaconda R.	48	14.00	Mi.	Habitat Degradation
North Wyaconda R.	49	8.00	Mi.	Habitat Degradation
Norvey Cr.	344	9.00	Mi.	Habitat Degradation
Number 13 Elk Chute	3034	2.00	Mi.	Habitat Degradation
Old Mines Cr., Trib.	2113	1.00	Mi.	Habitat Degradation
Old Town Br.	1331	7.00	Mi.	Habitat Degradation
Old Town Br., Trib.	3647	1.30	Mi.	Habitat Degradation
Olive Br.	3504	0.80	Mi.	Habitat Degradation
One Hundred And Two R.	342	74.50	Mi.	Habitat Degradation, Atrazine
Opossum Cr.	3190	6.00	Mi.	Habitat Degradation, Low Dissolved Oxygen
Osage Fk.	1472	69.00	Mi.	Bacteria
Otter Cr.	119	33.00	Mi.	Habitat Degradation
Otter Cr.	525	2.00	Mi.	Habitat Degradation
Otter Cr.	887	3.00	Mi.	Habitat Degradation
Otter Slough	3044	7.00	Mi.	Habitat Degradation
Otter Slough Ditch	2976	4.00	Mi.	Habitat Degradation
Owens Cr.	1274	3.00	Mi.	Habitat Degradation
Owl Cr.	3572	4.60	Mi.	Habitat Degradation
Owl Cr.	2167	2.00	Mi.	Lead (Sediment)
Painter Cr.	3486	3.00	Mi.	Habitat Degradation, Low Dissolved Oxygen
Palmer Cr.	357	10.50	Mi.	Habitat Degradation
Palmer Cr.	358	2.00	Mi.	Habitat Degradation
Panther Cr.	460	5.00	Mi.	Habitat Degradation
Panther Cr.	521	3.50	Mi.	Habitat Degradation
Panther Cr.	575	2.00	Mi.	Habitat Degradation
Panther Cr.	576	7.00	Mi.	Habitat Degradation
Panther Cr.	1260	7.00	Mi.	Habitat Degradation
Panther Cr.	1295	11.00	Mi.	Habitat Degradation
Panther Cr.	2368	8.50	Mi.	Low Dissolved Oxygen
Panther Cr., Trib.	522	2.00	Mi.	Habitat Degradation
Parker Br.	1304	2.00	Mi.	Habitat Degradation
Parson Cr.	614	15.00	Mi.	Habitat Degradation
Parson Cr.	615	14.00	Mi.	Habitat Degradation
Pass Br.	900	3.00	Mi.	Habitat Degradation
Peavine Cr.	914	4.00	Mi.	Habitat Degradation
Peddler Cr.	469	1.50	Mi.	Habitat Degradation
Peddler Cr.	470	2.50	Mi.	Habitat Degradation
Pedlar Cr.	283	5.00	Mi.	Habitat Degradation
Pepper Cr.	868	2.40	Mi.	Habitat Degradation
Perche Cr.	1005	11.00	Mi.	Habitat Degradation
Pettis Cr.	3193	6.50	Mi.	Habitat Degradation
Pigeon Cr.	349	6.50	Mi.	Habitat Degradation
Pigeon Roost Cr.	109	0.50	Mi.	Habitat Degradation
Pike Creek Ditch	2813	3.00	Mi.	Habitat Degradation
Pike Slough	2817	5.00	Mi.	Habitat Degradation
Pilot Grove Cr.	439	5.00	Mi.	Habitat Degradation
Pilot Knob Cr.	2894	2.00	Mi.	Metals

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Pin Oak Cr.	926	3.00	Mi.	Habitat Degradation
Platte R., Old Channel	325	3.00	Mi.	Habitat Degradation
Platte R., Old Channel	326	1.00	Mi.	Habitat Degradation
Platte R., Old Channel	332	4.00	Mi.	Habitat Degradation
Platte R., Old Channel	341	5.00	Mi.	Habitat Degradation
Platte R., Old Channel	348	1.00	Mi.	Habitat Degradation
Plattin Cr.	1728	24.00	Mi.	Low Dissolved Oxygen
Pleasant Run Cr.	1327	6.70	Mi.	Habitat Degradation
Pointers Cr.	1460	1.00	Mi.	Habitat Degradation
Polecat Cr.	445	8.00	Mi.	Habitat Degradation
Poney Cr.	3312	3.50	Mi.	Habitat Degradation
Poney Cr.	3313	7.00	Mi.	Habitat Degradation
Postoak Cr.	928	4.00	Mi.	Habitat Degradation
Prairie Cr.	313	4.00	Mi.	Habitat Degradation
Prairie Cr., Trib.	314	1.00	Mi.	Habitat Degradation
Prairie Lee Lake	7102	150.00	Ac.	Mercury (Fish Tissue)
Pryor Cr.	3655	2.50	Mi.	Habitat Degradation
Puzzle Cr.	666	13.00	Mi.	Habitat Degradation
Raccoon Cr.	586	4.00	Mi.	Habitat Degradation
Raccoon Cr., Trib.	587	1.50	Mi.	Habitat Degradation
Ramsey Br.	2194	6.50	Mi.	Habitat Degradation
Ramsey Cr.	20	7.00	Mi.	Habitat Degradation
Ramsey Creek Diversion Channel	2343	3.00	Mi.	Habitat Degradation
Rattlesnake Cr.	520	3.00	Mi.	Habitat Degradation
Reed Cr.	3654	2.10	Mi.	Habitat Degradation
Reese Fk.	136	7.00	Mi.	Habitat Degradation
Reid Cr.	1236	1.50	Mi.	Habitat Degradation
Ricky Cr.	1237	6.00	Mi.	Habitat Degradation
Riggin Br.	347	1.50	Mi.	Habitat Degradation
Rinquelin Trail Lake	7204	30.00	Ac.	Mercury (Fish Tissue)
Roach Lake	627	2.50	Mi.	Habitat Degradation
Roaring R.	2416	7.00	Mi.	E. coli
Roberts Br.	355	1.00	Mi.	Habitat Degradation
Robinson Br.	3638	1.60	Mi.	Habitat Degradation
Robinson Cr.	3558	3.10	Mi.	Habitat Degradation
Rock Cr.	78	4.00	Mi.	Habitat Degradation
Rock Cr.	236	2.00	Mi.	Habitat Degradation
Rock Cr.	237	18.00	Mi.	Habitat Degradation
Rock Cr.	3323	3.00	Mi.	Habitat Degradation
Rocky Fk.	378	4.00	Mi.	Habitat Degradation
Rocky Fk.	1014	8.00	Mi.	Sediment
Rocky Hollow	3639	1.00	Mi.	Habitat Degradation
Rollins Cr.	382	7.00	Mi.	Habitat Degradation
Roubidoux Cr.	1512	4.00	Mi.	Low Dissolved Oxygen
Rush Cr.	3322	7.00	Mi.	Habitat Degradation
Sac R.	1398	32.50	Mi.	Bacteria
Saline Cr.	1048	12.00	Mi.	Inconclusive Invert Data

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Sals Cr.	2345	1.50	Mi.	Habitat Degradation
Sals Cr. Diversion Channel	2344	2.50	Mi.	Habitat Degradation
Salt Br.	413	4.00	Mi.	Habitat Degradation
Salt Br.	901	7.00	Mi.	Habitat Degradation
Salt Cr.	1228	3.00	Mi.	Habitat Degradation
Salt Cr., Trib.	1229	1.00	Mi.	Habitat Degradation
Salt Fk.	893	25.00	Mi.	Habitat Degradation
Salt Fk.	899	19.00	Mi.	Habitat Degradation
Salt Pond Cr.	908	3.00	Mi.	Habitat Degradation
Salt Pond Cr.	910	3.00	Mi.	Habitat Degradation
Sampson Cr.	453	13.00	Mi.	Habitat Degradation
Sampson Cr.	455	5.00	Mi.	Habitat Degradation
Sand Cr.	290	4.00	Mi.	Habitat Degradation
Sand Cr.	644	2.00	Mi.	Habitat Degradation
Sand Cr.	1290	15.00	Mi.	Habitat Degradation
Sandy Cr.	29	8.00	Mi.	Habitat Degradation
Sandy Cr.	183	6.00	Mi.	Habitat Degradation
Sandy Cr.	571	10.00	Mi.	Habitat Degradation
Sandy Cr.	652	3.00	Mi.	Unknown
Schuyler Cr.	3368	3.00	Mi.	Bacteria
Second Cr.	317	8.00	Mi.	Habitat Degradation
Sees Cr.	88	1.00	Mi.	Habitat Degradation
Sees Cr.	89	2.00	Mi.	Habitat Degradation
Sewer Br.	860	1.00	Mi.	Low Dissolved Oxygen
Shackelford Br.	385	4.00	Mi.	Habitat Degradation
Shain Cr.	450	12.00	Mi.	Habitat Degradation
Shankton Cr.	621	4.00	Mi.	Habitat Degradation
Sharpsburg Br.	87	1.50	Mi.	Habitat Degradation
Shaver Cr.	862	10.00	Mi.	Habitat Degradation
Shaver Cr., Trib.	3505	0.80	Mi.	Habitat Degradation
Shaver Cr., Trib.	3506	0.80	Mi.	Habitat Degradation
Shaver Cr., Trib.	3507	0.90	Mi.	Habitat Degradation
Sheep Cr.	530	1.00	Mi.	Habitat Degradation
Shell Br.	105	2.50	Mi.	Habitat Degradation
Shipley Slough	2971	2.50	Mi.	Habitat Degradation
Shoal Cr.	396	9.00	Mi.	Habitat Degradation
Shoal Cr.	397	6.00	Mi.	Habitat Degradation
Shoal Cr.	518	55.00	Mi.	Habitat Degradation
Shoal Cr.	528	33.00	Mi.	Habitat Degradation
Shoal Creek Ditch	519	10.00	Mi.	Habitat Degradation
Shootman Cr.	639	1.50	Mi.	Habitat Degradation
Shuteye Cr.	656	3.00	Mi.	Habitat Degradation
Shutin Cr.	2742	2.00	Mi.	Low Dissolved Oxygen
Silver Cr.	683	11.00	Mi.	Habitat Degradation
Silver Cr.	3244	2.50	Mi.	Zinc (Sediment)
Simms Cr.	1342	2.00	Mi.	Habitat Degradation
Skull Cr.	890	0.50	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Smith Fork	353	2.00	Mi.	Habitat Degradation
Smithville Lake	7077	7190.00	Ac.	Mercury (Fish Tissue)
Sni-A-Bar Cr.	401	2.00	Mi.	Habitat Degradation, Low Dissolved Oxygen
South Big Cr.	506	5.00	Mi.	Habitat Degradation
South Blackbird Cr.	655	13.00	Mi.	Ammonia
South Brush Cr.	108	2.00	Mi.	Habitat Degradation
South Cr.	3369	3.80	Mi.	Bacteria
South Deepwater Cr.	1219	1.00	Mi.	Habitat Degradation
South Flat Cr.	869	5.00	Mi.	Habitat Degradation
South Flat Cr.	3299	1.00	Mi.	Habitat Degradation
South Flat Cr., Trib.	3300	2.50	Mi.	Habitat Degradation
South Flat Cr., Trib.	3526	1.00	Mi.	Habitat Degradation
South Fork	939	14.00	Mi.	Habitat Degradation
South Fork Blackwater R.	924	14.00	Mi.	Habitat Degradation
South Fork Blackwater R., Trib.	925	3.50	Mi.	Habitat Degradation
South Fork Clear Cr.	293	6.00	Mi.	Habitat Degradation
South Fork Gees Cr.	591	2.50	Mi.	Habitat Degradation
South Fork Middle Fabius R.	67	11.00	Mi.	Habitat Degradation
South Fork Middle Fabius R.	68	13.00	Mi.	Habitat Degradation
South Fork North Fabius R.	60	11.00	Mi.	Habitat Degradation
South Fork North Fabius R., Trib.	61	3.00	Mi.	Habitat Degradation
South Fork North R.	85	6.50	Mi.	Habitat Degradation
South Fork North R.	86	3.50	Mi.	Habitat Degradation
South Fork Salt R.	141	18.00	Mi.	Habitat Degradation
South Fork Salt R., Trib.	146	0.50	Mi.	Habitat Degradation
South Fork South Fabius R.	76	5.50	Mi.	Habitat Degradation
South Fork South Fabius R.	77	12.50	Mi.	Habitat Degradation
South Fork South Grand R.	1269	10.00	Mi.	Habitat Degradation
South Fork, Trib.	3547	1.00	Mi.	Habitat Degradation
South Mud Cr.	542	3.00	Mi.	Habitat Degradation
South Wyaconda R.	50	9.00	Mi.	Atrazine
Sparrow Foot Cr.	1212	2.00	Mi.	Habitat Degradation
Spencer Cr.	224	1.50	Mi.	Habitat Degradation
Spillway Ditch	3134	13.50	Mi.	Habitat Degradation
Spring Cr.	657	18.00	Mi.	Habitat Degradation
Spring Cr.	2979	4.00	Mi.	Habitat Degradation
Spring Cr.	2602	6.00	Mi.	Low Dissolved Oxygen
Spring Fork	871	4.70	Mi.	Habitat Degradation
Spring Fork	3513	6.30	Mi.	Habitat Degradation
Spring Fork, Trib.	872	0.50	Mi.	Habitat Degradation
Spring Fork, Trib.	3515	1.60	Mi.	Habitat Degradation
Spring R., Trib.	3161	3.50	Mi.	Zinc
Squaw Cr.	252	21.00	Mi.	Habitat Degradation
St. Francis R.	2968	128.00	Mi.	Habitat Degradation
St. James Bayou	3132	6.00	Mi.	Habitat Degradation
St. James Ditch	3133	3.00	Mi.	Habitat Degradation
St. Johns Bayou	3123	4.00	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
St. Johns Ditch	3150	4.00	Mi.	Habitat Degradation
St. Johns Diversion Ditch	3125	5.00	Mi.	Habitat Degradation
St. Johns Diversion Ditch	3127	3.50	Mi.	Habitat Degradation
Stahl Cr.	3176	6.50	Mi.	E. coli
Stanley Cr.	3001	2.00	Mi.	Habitat Degradation
Sterett Cr.	1204	1.50	Mi.	Habitat Degradation
Stillcamp Ditch	2810	12.00	Mi.	Habitat Degradation
Stillhouse Br.	489	2.00	Mi.	Habitat Degradation
Stinking Cr.	700	13.00	Mi.	Habitat Degradation
Stories Cr.	2682	2.50	Mi.	Bacteria
Sugar Br.	1029	2.00	Mi.	Low Dissolved Oxygen
Sugar Cr.	43	3.50	Mi.	Habitat Degradation
Sugar Cr.	44	10.00	Mi.	Habitat Degradation
Sugar Cr.	54	7.00	Mi.	Habitat Degradation
Sugar Cr.	156	11.00	Mi.	Habitat Degradation
Sugar Cr.	270	3.00	Mi.	Habitat Degradation
Sugar Cr.	271	6.50	Mi.	Habitat Degradation
Sugar Cr.	581	8.00	Mi.	Habitat Degradation
Sugar Cr.	582	10.00	Mi.	Habitat Degradation
Sugar Cr.	641	4.00	Mi.	Habitat Degradation
Sugar Cr.	1261	9.50	Mi.	Habitat Degradation
Sweet Spring Cr.	685	11.00	Mi.	Habitat Degradation
Sweezer Cr.	699	4.00	Mi.	Habitat Degradation
Swift Ditch	3151	4.00	Mi.	Habitat Degradation
Tabo Cr.	405	11.00	Mi.	Habitat Degradation
Tabo Cr.	406	7.00	Mi.	Habitat Degradation
Tarkio R.	242	33.00	Mi.	Habitat Degradation
Tater Hill Cr.	636	8.00	Mi.	Habitat Degradation
Tater Hill Cr., Trib.	637	2.00	Mi.	Habitat Degradation
Tebo Cr.	1281	0.50	Mi.	Habitat Degradation
Tebo Cr.	1280	4.00	Mi.	Low Dissolved Oxygen
Teeter Cr.	2551	3.00	Mi.	Habitat Degradation
Tenmile Pond	3130	6.00	Mi.	Habitat Degradation
Tennessee Cr.	1263	7.00	Mi.	Habitat Degradation
Thief Cr.	646	3.00	Mi.	Habitat Degradation
Third Fork Platte R.	3704	25.00	Mi.	Habitat Degradation
Third Fork Platte R.	327	32.50	Mi.	Inconclusive Invert Data
Thompson Br.	458	1.00	Mi.	Habitat Degradation
Thompson Cr.	437	1.00	Mi.	Habitat Degradation
Thompson R., Old Channel	568	1.00	Mi.	Habitat Degradation
Thompson R., Old Channel	569	1.00	Mi.	Habitat Degradation
Thompson R., Old Channel	579	1.00	Mi.	Habitat Degradation
Thompson R., Old Channel	580	6.50	Mi.	Habitat Degradation
Thompson R., Old Channel	592	3.00	Mi.	Habitat Degradation
Thurman Cr.	3243	2.50	Mi.	Lead, Zinc (Sediment)
Tiger Fk.	82	12.50	Mi.	Habitat Degradation
Tobin Cr.	64	6.00	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Tombstone Cr.	584	1.50	Mi.	Habitat Degradation
Tombstone Cr.	585	3.00	Mi.	Habitat Degradation
Townsend Slough	3675	2.00	Mi.	Habitat Degradation
Towstring Cr.	631	8.00	Mi.	Habitat Degradation
Trail Cr.	577	6.00	Mi.	Habitat Degradation
Trail Cr.	578	5.00	Mi.	Habitat Degradation
Troublesome Cr.	73	3.50	Mi.	Inconclusive Invert Data
Truitt Cr.	3174	1.50	Mi.	Low Dissolved Oxygen
Tub Cr.	534	1.00	Mi.	Habitat Degradation
Turkey Cr.	138	2.00	Mi.	Habitat Degradation
Turkey Cr.	361	5.00	Mi.	Habitat Degradation
Turkey Cr.	362	3.50	Mi.	Habitat Degradation
Turkey Cr.	486	1.50	Mi.	Habitat Degradation
Turkey Cr.	523	2.50	Mi.	Habitat Degradation
Turkey Cr.	605	12.00	Mi.	Habitat Degradation
Turkey Cr.	647	3.00	Mi.	Habitat Degradation
Turkey Cr.	663	2.00	Mi.	Habitat Degradation
Turkey Cr.	854	3.00	Mi.	Habitat Degradation
Turkey Cr.	2985	2.50	Mi.	Low Dissolved Oxygen, Ammonia
Turkey Cr., Trib.	524	1.00	Mi.	Habitat Degradation
Turkey Cr., Trib.	664	0.50	Mi.	Habitat Degradation
Turkey Cr., Trib.	3487	0.50	Mi.	Habitat Degradation
Twomile Cr.	1313	2.00	Mi.	Habitat Degradation
Van Meter Ditch	412	4.50	Mi.	Habitat Degradation
Varney River Ditch	2969	14.00	Mi.	Habitat Degradation
Varney River Ditch	2970	8.00	Mi.	Habitat Degradation
Wades Cr.	1291	8.00	Mi.	Habitat Degradation
Wakenda Cr.	360	28.00	Mi.	Habitat Degradation
Wakenda Cr.	364	11.00	Mi.	Habitat Degradation
Wakenda Cr., Old Channel	368	3.00	Mi.	Habitat Degradation
Wakonda Lake	7002	78.00	Ac.	Lead (Fish Tissue)
Walnut Cr.	661	14.00	Mi.	Habitat Degradation
Walnut Cr.	687	2.50	Mi.	Habitat Degradation
Walnut Cr.	873	1.00	Mi.	Habitat Degradation
Walnut Cr.	918	2.00	Mi.	Habitat Degradation
Walnut Cr.	937	11.00	Mi.	Habitat Degradation
Walnut Cr.	1306	9.00	Mi.	Habitat Degradation
Walnut Cr.	3512	3.40	Mi.	Habitat Degradation
Walnut Cr.	3521	2.50	Mi.	Habitat Degradation
Walnut Cr.	3634	1.60	Mi.	Habitat Degradation
Walnut Cr.	1339	2.00	Mi.	Unknown
Walnut Fork	487	4.00	Mi.	Habitat Degradation
Wamsley Cr.	505	1.50	Mi.	Habitat Degradation
Weldon Br.	459	4.00	Mi.	Habitat Degradation
Weldon R., Old Channel	561	4.00	Mi.	Habitat Degradation
Wellson Slough	3573	5.90	Mi.	Habitat Degradation
Wellson Slough	3574	2.00	Mi.	Habitat Degradation

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
West Br.	1318	1.00	Mi.	Habitat Degradation
West Branch Crawford Cr.	1256	2.00	Mi.	Habitat Degradation
West Cow Cr.	897	4.00	Mi.	Habitat Degradation
West Ditch	3111	10.50	Mi.	Habitat Degradation
West Fork	3198	5.00	Mi.	Habitat Degradation
West Fork Bee Br.	668	7.00	Mi.	Habitat Degradation
West Fork Big Cr.	451	14.00	Mi.	Habitat Degradation
West Fork Clear Cr.	1335	9.00	Mi.	Habitat Degradation
West Fork Clear Cr., Trib.	3641	0.80	Mi.	Habitat Degradation
West Fork Crooked R.	379	5.00	Mi.	Habitat Degradation
West Fork Crooked R.	380	6.00	Mi.	Habitat Degradation
West Fork Cuivre R.	185	17.00	Mi.	Habitat Degradation
West Fork East Cr.	3310	5.00	Mi.	Habitat Degradation
West Fork Finney Cr.	905	4.50	Mi.	Habitat Degradation
West Fork Finney Cr., Trib.	906	0.50	Mi.	Habitat Degradation
West Fork Honey Cr.	556	12.50	Mi.	Habitat Degradation
West Fork Lost Cr.	499	10.00	Mi.	Habitat Degradation
West Fork Lost Cr., Trib.	500	2.30	Mi.	Habitat Degradation
West Fork Lost Cr., Trib.	501	2.00	Mi.	Habitat Degradation
West Fork Postoak Cr.	929	13.00	Mi.	Habitat Degradation
West Fork Postoak Cr., Trib.	930	1.00	Mi.	Habitat Degradation
West Fork Wakenda Cr.	366	3.00	Mi.	Habitat Degradation
West Fork Wakenda Cr.	367	6.00	Mi.	Habitat Degradation
West High Cr.	230	3.00	Mi.	Habitat Degradation
West Lick Cr.	149	3.00	Mi.	Habitat Degradation
West Locust Cr.	611	13.00	Mi.	Inconclusive Invert Data
West Muddy Cr.	564	6.50	Mi.	Habitat Degradation
West Muddy Cr.	566	7.50	Mi.	Habitat Degradation
West Muddy Cr., Trib.	565	0.50	Mi.	Habitat Degradation
West Tarkio Cr.	244	1.00	Mi.	Habitat Degradation
West Tarkio Cr.	246	10.00	Mi.	Habitat Degradation
West Yellow Cr.	599	35.00	Mi.	Habitat Degradation
West Yellow Cr.	600	14.00	Mi.	Habitat Degradation
Wheeler Cr.	503	2.00	Mi.	Habitat Degradation
Whetstone Cr.	1505	3.50	Mi.	Ammonia
White Br.	1330	3.00	Mi.	Habitat Degradation
White Cloud Cr.	345	11.00	Mi.	Habitat Degradation
White Cloud Cr.	346	9.00	Mi.	Habitat Degradation
White Oak Cr.	454	9.00	Mi.	Habitat Degradation
White Oak Cr.	1279	3.00	Mi.	Habitat Degradation
Wildcat Cr.	259	3.00	Mi.	Habitat Degradation
Wildcat Cr.	480	6.00	Mi.	Habitat Degradation
Wildcat Cr.	482	7.00	Mi.	Habitat Degradation
Wildcat Cr., Trib.	481	2.00	Mi.	Habitat Degradation
Wildcat Cr., Trib.	484	2.00	Mi.	Habitat Degradation
Wilkerson Ditch	3126	4.00	Mi.	Habitat Degradation
Williams Cr.	387	6.00	Mi.	Inconclusive Invert Data

Waterbody	WBID	Size	Units	Potential Pollutant or Condition
Willow Cr.	381	6.50	Mi.	Habitat Degradation
Willow Cr.	498	1.00	Mi.	Habitat Degradation
Willow Cr.	543	1.50	Mi.	Habitat Degradation
Willow Cr.	3653	1.90	Mi.	Habitat Degradation
Wilson Br.	3640	1.20	Mi.	Habitat Degradation
Winnegan Cr.	598	7.00	Mi.	Habitat Degradation
Winn'S Cr.	122	5.00	Mi.	Habitat Degradation
Wolf Cr., Trib.	3589	1.50	Mi.	Low Dissolved Oxygen
Wolf Hole Lateral	3136	8.00	Mi.	Habitat Degradation
Wyaconda R.	47	32.00	Mi.	Habitat Degradation
Yellow Cr.	595	25.00	Mi.	Habitat Degradation
Yellow Cr.	1230	2.00	Mi.	Habitat Degradation
Yellow Cr., Trib.	1231	1.00	Mi.	Habitat Degradation
Youngs Cr.	140	9.50	Mi.	Habitat Degradation
Zadie Cr.	448	4.00	Mi.	Habitat Degradation
Zounds Br.	479	3.00	Mi.	Habitat Degradation

Appendix II

Total Maximum Daily Load Completion Schedule

Table 17. Tentative Schedule for the Completion of Total Maximum Daily Load Studies.

TMDL Scheduled	Water Body Name	WBID	Class	Impaired Segment Size	Classified Segment Size	From	To	County(ies)	Pollutant
2009	Bear Creek	0115U-01	U	2	n/a	near Kirksville		Adair	Unknown
2012	Bee Fork	2760	C	8.5	8.5	Mouth	30,32N,1W	Reynolds	Lead
2012	Bee Fork	2760	C	0.9	8.5	Mouth	30,32N,1W	Reynolds	Toxicity
2012	Bee Fork	2760U-01	U	0.3	n/a	n/a		Reynolds	Toxicity
2015	Belcher Branch Lake	7365	L3	55.0	55.0	08/17,55N,34W		Buchanan	Mercury (T)
2009	Big Bottom Creek	1746	C	0.5	1.9	Mouth	Lake Anne	Ste. Genevieve	Ammonia
2009	Big Bottom Creek	1746	C	1.7	1.9	Mouth	Lake Anne	Ste. Genevieve	Low D.O.
2009	Big Bottom Creek	1746	C	0.5	1.9	Mouth	Lake Anne	Ste. Genevieve	Organic Sediment
2012	Big Creek	0444	P	1.0	22	Mouth	9,63N,28W	Harrison	Ammonia
2012	Big Creek	0444	P	6.0	22	Mouth	9,63N,28W	Harrison	Low D.O.
2016	Big Otter Creek, Tributary to	1225	C	1.0	1.0	Mouth	32,40N,25W	Henry	Low D.O.
TMDL Approved	Big River	2074	P	53.0	53.0	Mouth	Sur 3166,40N,3D	Jefferson	Lead (W)
TMDL Approved	Big River	2080	P	55.0	68	Sur 3166,40N,3D	12,35N,1E	St. Fran./ Jefferson	Inorganic Sediment
TMDL Approved	Big River	2080	P	55.0	68	Sur 3166,40N,3D	12,35N,1E	St. Fran./ Jefferson	Lead (W)
2010	Big River	2080	P	18.6	68	Sur 3166,40N,3D	12,35N,1E	St. Francois	Cadmium (S)
2010	Big River	2080	P	44.1	68	Sur 3166,40N,3D	12,35N,1E	St. Fran./ Jefferson	Lead (S)
2010	Big River	2080	P	48.7	68	Sur 3166,40N,3D	12,35N,1E	St. Fran./ Jefferson	Lead (T)
2010	Big River	2080	P	18.6	68	Sur 3166,40N,3D	12,35N,1E	St. Francois	Zinc (S)
2015	Black River	2784	P	35.0	35.0	16,25N,6E	Clearwater Dam	Wayne/ Butler	Mercury (T)
2012	Blackberry Creek	3184	C	3.5	6.5	Mouth	28,30N,33W	Jasper	Chloride
2012	Blackberry Creek	3184	C	3.5	6.5	Mouth	28,30N,33W	Jasper	Sulfate Chloride
2011	Blue River	0417	P	4.0	4.0	Mouth	Guinotte Dam	Jackson	Bacteria
2011	Blue River	0418	P	9.0	9.0	Guinotte Dam	59th St.	Jackson	Bacteria

2011	Blue River	0419	P	9.0	9.0	59th St.	Bannister Rd.	Jackson	Bacteria
2011	Blue River	0421	C	11.0	11.0	Bannister Rd	State Line	Jackson	Bacteria
2011	Bobs Creek	0035	C	3.5	12.5	34,49N,2E	27,50,1E	Lincoln	Low D.O.
2011	Bonne Femme Creek	0750	P	7	7	Mouth	20,47N,12W	Boone	Bacteria
2015	Bourbeuse River	2034	P	132.0	132.0	Mouth	4,39N,6W	Phelps/ Franklin	Mercury (T)
2012	Brush Creek	1371	P	4.0	4.0	31,36N,24W	16,35N,24W	Polk/ St. Clair	Low D.O.
2012	Brush Creek	1371	P	4.0	4.0	31,36N,24W	16,35N,24W	Polk/ St. Clair	Organic Sediment
TMDL Approved	Buffalo Ditch	3118	P	3.0	18.0	State Line	11,18N,9E	Dunklin	Low D.O.
2011	Burgher Branch	1865	C	2.0	2.0	Mouth	07,37N,07W	Phelps	Low D.O.
2015	Busch W.A. #35	7057	L3	51.0	51.0	NE NE30,46N,03E		St. Charles	Mercury (T)
2013	Capps Creek	3234	P	4.0	4.0	Mouth	17, 25N,28W	Barry	Bacteria
2009	Cave Spring Branch	3245U-01	U	0.2	n/a	n/a		McDonald	Nutrients
2016	Cedar Creek	0737	C	7.0	33.0	21,46N,11W	3,49N,11W	Callaway	Unknown
2016	Cedar Creek	1344	P	10.0	27.0	Mouth	20,34N,27W	Cedar	Unknown
2016	Cedar Creek	1357	C	16.5	16.5	20,34N,27W	10,32N,28W	Cedar	Unknown
2015	Cedar Creek, Tributary to	0743	C	1.5	1.5	Mouth	14,49N,11W	Callaway	Low D.O.
2010	Center Creek	3203	P	12.8	26.0	14,28N,34W	34,28N,31	Jasper	Cadmium (S)
2010	Center Creek	3203	P	12.8	26.0	14,28N,34W	34,28N,31	Jasper	Cadmium (W)
2010	Center Creek	3203	P	12.8	26.0	14,28N,34W	34,28N,31	Jasper	Lead (S)
2010	Center Creek	3203	P	12.8	26.0	14,28N,34W	34,28N,31W	Jasper	Zinc (S)
2014	Center Creek	3210	P	22.0	22.0	34,28N,31W	23,27N,29W	Newton/ Jasper	Bacteria
2010	Chariton River	0640	P	40.0	110	Mouth	State Line	Macon/ Chariton	Bacteria
2013	Clear Creek	3238	P	9.0	9.0	Mouth	28,26N,28W	Barry/ Newton	Bacteria
2014	Clear Creek	3239	C	2.0	2.0	28,26N,28W	36,26N,28W	Barry/ Newton	Low D.O.
2014	Clear Creek	3239	C	2.0	2.0	28,26N,28W	36,26N,28W	Barry/ Newton	Nutrients
2016	Clear Creek	1333	P	15.5	15.5	7,37N,27W	10,35N,29W	Vernon/ St.Clair	Low D.O.
2016	Clear Creek	1336	C	15.0	15.0	10,35N,29W	16,34N,30W	Vernon	Low D.O.
2016	Clear Fork	0935	P	3.0	24.5	Mouth	35,45N,25W	Johnson	Low D.O.
2015	Clearwater Lake	7326	L2	1650.0	1650.0	NW NE06,28N,03E		Reynolds/ Wayne	Mercury (T)
2011	Coldwater Creek	1706	C	5.5	5.5	Mouth	Hwy. 67	St. Louis	Bacteria
2011	Coldwater Creek	1706	C	5.5	5.5	Mouth	Hwy. 67	St. Louis	Chloride
2014	Coldwater Creek	1706	C	4.0	5.5	Mouth	Hwy. 67	St. Louis	Low D.O.

TMDL Submitted	Courtois Creek	1943	P	2.6	30	Mouth	17,35N,1W	Washington	Lead (W)
TMDL Submitted	Courtois Creek	1943	P	2.6	30	Mouth	17,35N,1W	Washington	Metals(W)
2011	Creve Coeur Creek	1703	C	2.0	2.0	Creve Coeur Lk	1mi. S. of Hwy. 340	St. Louis	Bacteria
2011	Creve Coeur Creek	1703	C	2.0	2.0	Creve Coeur Lk	1mi. S. of Hwy. 341	St. Louis	Chloride
2014	Creve Coeur Creek	1703	C	--	2.0	Creve Coeur Lk	1mi. S. of Hwy. 340	St. Louis	Low DO
2012	Crooked Creek	1928	P	3.5	3.5	Mouth	33,35N,2W	Dent/ Crawford	Cadmium (S)
2012	Crooked Creek	1928	P	3.5	3.5	Mouth	33,35N,2W	Dent/ Crawford	Cadmium (W)
2012	Crooked Creek	1928	P	3.5	3.5	Mouth	33,35N,2W	Dent/ Crawford	Lead (S)
2012	Crooked Creek	1928U-01	U	5.2	n/a	n/a		Iron/ Dent	Cadmium (W)
2015	Current River	2636	P	118.0	118.0	State Line	24,31N,6W	Shannon/ Ripley	Mercury (T)
2012	Dardenne Creek	0221	P	1.5	15.0	Sur 1704,47N,4E	22,46N,2E	St. Charles	Inorganic Sediment
2012	Dardenne Creek	0222	C	4.5	6.0	22,46N,2E	22,46N,1E	St. Charles	Inorganic Sediment
2014	Dardenne Creek	0219	P1	7.0	7.0	Mouth	Sur 1704,47N,4E	St. Charles	Low D.O.
2014	Dardenne Creek	0221	P	15.0	15.0	Sur 1704,47N,4E	22,46N,2E	St. Charles	Unknown
2014	Dardenne Creek	0222	C	6.0	6.0	22,46N,2E	22,46N,1E	St. Charles	Low D.O.
2015	Dark Creek	0690	C	8	8	Mouth	34,55N,15W	Randolph	Low D.O.
2015	Deer Ridge Community Lake	7015	L3	48.0	48.0	18,62N,08W		Lewis	Mercury (T)
2014	Des Moines River	0036	P	29	29	Mouth	State Line	Clark	Bacteria
2014	Ditch #36	3109	P	7	7	Mouth	21,19N,10E	Dunklin	Low D.O.
2014	Ditch to Buffalo Ditch	3120	P	12	12	Mouth	2,18N,9E	Dunklin	Low D.O.
2010	Douger Branch	3168	C	1.0	4.5	Mouth	7,26N,25W	Lawrence	Cadmium (W)
2010	Douger Branch	3168	C	1.0	4.5	Mouth	7,26N,25W	Lawrence	Lead (S)
2010	Douger Branch	3168	C	1.0	4.5	Mouth	7,26N,25W	Lawrence	Zinc (S)
2012	Dousinbury Creek	1180	P	3.5	3.5	Mouth	17,33N,18W	Dallas	Bacteria
2014	Dry Branch	3189	C	9.0	9.0	Mouth	8,29N,30W	Jasper	Bacteria
2011	Dutro Carter Creek	3569	P	0.6	1.5	Mouth	Hwy 72	Phelps	Low D.O.
2011	Dutro Carter Creek	3569	P	0.9	1.5	Mouth	Hwy 72	Phelps	Low D.O.
2010	East Fork Black River	2737	P	0.2	17.0	Mouth	29,34N,3E	Reynolds	Hydromodification
2012	East Fork Chariton River	0682	P	48.5	48.5	Mouth	Long Br. Dam	Randolph	Sulfate
2013	East Fork Grand River	0457	P	25.0	25.0	Mouth	29,66N,30W	Worth/ Gentry	Bacteria

2013	East Fork Locust Creek	0608	P	13.0	13.0	Mouth	23,62N,20W	Sullivan	Bacteria
2013	East Fork Locust Creek	0610	C	12.6	13.0	Hwy. 6	12,64N,20W	Sullivan	Bacteria
2013	East Fork Locust Creek	0610	C	0.4	13.0	Hwy. 6	12,64N,20W	Sullivan	Bacteria
2014	East Fork Locust Creek	0610	C	12.6	13.0	Hwy. 6	12,64N,20W	Sullivan	Low D.O.
2013	East Fork Medicine Creek	0619	P	36.0	36.0	9,61N,22W	State Line	Putnam/ Grundy	Bacteria
2012	East Fork Tebo Creek	1282	C	1.0	12.0	31,43N,24W	45,44N,24W	Henry	Low D.O.
2010	Eaton Branch	2166	C	0.9	3**	Mouth	9,36N,4E	St. Francois	Cadmium (S)
2010	Eaton Branch	2166	C	0.9	3**	Mouth	9,36N,4E	St. Francois	Cadmium (W)
2010	Eaton Branch	2166	C	0.9	3**	Mouth	9,36N,4E	St. Francois	Lead (S)
2010	Eaton Branch	2166	C	0.9	3**	Mouth	9,36N,4E	St. Francois	Zinc (S)
2010	Eaton Branch	2166	C	0.9	3**	Mouth	9,36N,4E	St. Francois	Zinc (W)
2015	Eleven Point River	2597	P	10	10	18,24N,2W	36,25N,4W	Oregon	Mercury (T)
2015	Eleven Point River	2601	P	19.0	19.0	36,25N,4W	23,25N,6W	Oregon	Mercury (T)
2012	Elm Branch	1283	C	3.0	3.0	Mouth	12,43N,24W	Henry	Low D.O.
2011	Fishpot Creek	2186	P	2.0	2.0	Mouth	13,44N,05E	St. Louis	Bacteria
2014	Fishpot Creek	2186	P	2.0	2.0	Mouth	13,44N,05E	St. Louis	Low D.O.
TMDL Approved	Flat River Creek	2168	C	4.0	9.0	Mouth	21,36N,4E	St. Francois	Inorganic Sediment
TMDL Approved	Flat River Creek	2168	C	5.0	9.0	Mouth	21,36N,4E	St. Francois	Lead (W)
TMDL Approved	Flat River Creek	2168	C	5.0	9.0	Mouth	21,36N,4E	St. Francois	Zinc (W)
2010	Flat River Creek	2168	C	--	9.0	Mouth	21,36N,4E	St. Francois	Cadmium
2010	Flat River Creek	2168	C	6.0	9.0	Mouth	21,36N,4E	St. Francois	Lead (S)
2010	Flat River Creek	2168	C	6.0	9.0	Mouth	21,36N,4E	St. Francois	Lead (T)
2010	Flat River Creek, Trib	2168U-01	U	0.3	n/a	n/a		St. Francois	Zinc (W)
2010	Foster Creek	0747U-01	U	0.5	n/a	n/a		Boone	Ammonia
2010	Fowler Creek	0747	C	6	6	Mouth	13,46N,12W	Boone	Low D.O.
2014	Fox River	0038	P	27.0	27.0	Spur 136	State Line	Clark	Bacteria
2015	Gasconade River	1455	P	249.0	249.0	Mouth	6,29N,14W	Gascon./ Wright	Mercury (T)
2011	Grand Glaize Creek	2184	C	4.0	4.0	Mouth	9,44N,5E	St. Louis	Bacteria
2011	Grand Glaize Creek	2184	C	4.0	4.0	Mouth	9,44N,5E	St. Louis	Chloride
2015	Grand Glaize Creek	2184	C	4.0	4.0	Mouth	9,44N,5E	St. Louis	Mercury (T)
2013	Grand River	0593	P	60.0	60.0	Mouth	Shoal Cr.	Livin./ Chariton	Bacteria

2011	Gravois Creek	1712	P	2.0	2.0	Mouth	24,44N,6E	St. Louis	Bacteria
2011	Gravois Creek	1712	P	2.0	2.0	Mouth	24,44N,6E	St. Louis	Chloride
2011	Gravois Creek	1713	C	4.0	4.0	24,44N,6E	Hwy. 30	St. Louis	Bacteria
2011	Gravois Creek	1713	C	4.0	4.0	24,44N,6E	Hwy. 30	St. Louis	Chloride
2014	Gravois Creek	1713	C	4.0	4.0	24,44N,6E	Hwy. 30	St. Louis	Low D.O.
2010	Grindstone Creek	1009	C	1.5	1.5	Mouth	20,48N,12W	Boone	Bacteria
2015	Hazel Creek Lake	7152	L1	151.0	151.0	SW SW31,64N,15W		Adair	Mercury (T)
2016	Heaths Creek	0848	P	13.0	13.0	Mouth	27,48N,22W	Pettis	Low D.O.
TMDL Submitted	Hickory Creek	0442	C	1.5	1.5	Mouth	11,60N,28W	Daviess	Unknown
2013	Hickory Creek	3226	P	4.5	4.5	Mouth	28,25N,31W	Newton	Bacteria
TMDL Submitted	Hickory Creek, Tributary to	0589	C	1.0	1.0	Mouth	9,60N,25W	Grundy	Unknown
On or through PN	Hinkson Creek	1007	P	6.0	6.0	Mouth	Hwy 163	Boone	Unknown
On or through PN	Hinkson Creek	1008	C	6.3	18.0	Hwy 163	36,50N,12W	Boone	Unknown
2010	Hinkson Creek	1008	C	18.0	18.0	Hwy 163	36,50N,12W	Boone	Bacteria
2016	Horse Creek	1348	P	24.5	24.5	Mouth	35,34N,29W	Cedar	Unknown
2015	Hough Park Lake	7388	L3	7.0	7.0	19,44N,11W		Cole	Mercury (T)
TMDL Approved	Indian Camp Creek	212	C	--	5.0	6,47N,1E	4,47N,1W	St. Charles/ Warren	Inorganic sediment
TMDL Submitted	Indian Creek	1946	C	1.5	1.5	Mouth	17,35N,1E	Washington	Lead (W)
TMDL Submitted	Indian Creek	1946	C	1.5	1.5	Mouth	17,35N,1E	Washington	Metals*** (W)
2010	Indian Creek	0420	C	3.0	3.0	Mouth	State Line	Jackson	Bacteria
2010	Indian Creek	0420	C	--	3.0	Mouth	State Line	Jackson	Chloride
2013	Indian Creek	3256	P	5.0	26.0	Mouth	24,24N,31W	Newton	Bacteria
2015	Indian Creek Lake	7389	L3	192.0	192.0	15/27,59N,25W		Livingston	Mercury (T)
TMDL Submitted	Indian Creek, Tributary to	3663	C	0.3	0.3	Mouth	7,35N,1W	Washington	Lead (W)
TMDL Submitted	Indian Creek, Tributary to	3663	C	0.3	0.3	Mouth	7,35N,1W	Washington	Zinc (W)
2009	Jordan Creek	3374	P	3.8	3.8	29,29N,22W	13,29N,22W	Greene	Low D.O.
2009	Jordan Creek	3374	P	3.8	3.8	29,29N,22W	13,29N,22W	Greene	Unknown
2015	Knob Noster State Park Lakes (Lake Buteo)	7196	L3	10.0	24.0	29/30/46N,24W		Johnson	Mercury (T)

2015	Lake of the Woods	7436	L3	3.0	3.0	NE,02,48N,12W		Boone	Mercury (T)
2015	Lake of the Woods	0419U-01	U	7.0	7.0	n/a		Jackson	Mercury (T)
2010	Lake Ste. Louise	7055	L3	87.0	87.0	SW SW27,47N,02E		St. Charles	Bacteria
2009	Lake Taneycomo	7314	L2	1730	1730	SW NE8,23N,20W		Taney	Low D.O.
2013	Lamine River	0847	P	54.0	54.0	Mouth	13,45N,19W	Morgan/ Cooper	Bacteria
2014	Lateral #2 Main Ditch	3105	P	11.5	11.5	24,23N,10E	25,25N,10E	Stoddard	Temperature
2014	Lateral #2 Main Ditch	3105	P	11.5	11.5	24,23N,10E	25,25N,10E	Stoddard	Low D.O.
2010	Lewistown Lake	7020	L1	--	29	NW SW8,61N,8W		Lewis	Atrazine
2012	Little Beaver Creek	1529	C	3.3	4.0	36,26N,18W	17,26N,17W	Phelps	Inorganic Sediment
2011	Little Dry Fork	1863	P	1.0	5.0	Mouth	8,37N,7W	Phelps	Low D.O.
2011	Little Dry Fork	1864	C	0.6	4.5	8,37N,7W	5,36N,7W	Phelps	Low D.O.
2011	Little Dry Fork	1864	C	3.9	4.5	8,37N,7W	5,36N,7W	Phelps	Low D.O.
Postponed	Little Drywood Creek	1325	P	17.0	17.0	Mouth	13,34N,32W	Vernon	Low D.O.
2014	Little Muddy Creek, Tributary to	3490	C	0.4	0.4	Mouth	14,46N,22W	Pettis	Chloride
2014	Little Muddy Creek, Tributary to	3490	C	0.4	0.4	Mouth	14,46N,22W	Pettis	Color
2014	Little Niangua River	1189	P	43.0	43.0	Mouth	26,36N,19W	Dallas/ Camden	Low D.O.
TMDL Approved	Little Osage River	3652	C	16.0	16.0	18,37N,31W	18,37N,33W	Vernon	Low D.O.
2014	Little Osage River	3652	C	16.0	16.0	18,37N,31W	18,37N,33W	Vernon	Bacteria
2013	Locust Creek	0606	P	36.4	84.0	Mouth	State Line	Putnam/ Sullivan	Bacteria
2009	Long Branch	0857	C	4.5	4.5	06,45N,23W	09,45N,24W	Johnson/ Pettis	Unknown
2011	Long Branch Creek	0696	C	2.0	13.0	5,58N,14W	19,60N,14W	Macon	Low D.O.
2015	Longview Lake	7097	L2	930.0	930.0	04,47N,32W		Jackson	Mercury (T)
2013	Lost Creek	3278	P	8.5	8.5	State Line	14,25N,33W	Newton	Bacteria
2012	Main Ditch	2814	C	1.0	14.0	18,22N,6E	10,24N,6E	Butler	Ammonia
2012	Main Ditch	2814	C	1.0	14.0	18,22N,6E	10,24N,6E	Butler	pH
2012	Main Ditch	2814	C	10.0	14.0	18,22N,6E	10,24N,6E	Butler	Temperature
2011	Maline Creek	1709	C	1.0	1.0	Mouth	Bellefontaine Rd	St. Louis	Chloride
2015	Mark Twain Lake	7033	L2	18600	18600	26,55N,07W		Monroe/ Ralls	Mercury (T)
On or through PN	Marmaton River	1308	P	2.0	49.5	19,38N,29W	State Line	Vernon	Low D.O.
On or through PN	Marmaton River	1308	P	47.5	49.5	19,38N,29W	State Line	Vernon	Low D.O.
2015	McKay Park Lake (Sunset Lake)	7399	L3	6.0	6.0	13,44N,12W		Cole	Mercury (T)

PIL Submitted	McKenzie Creek	2786	P	2.5	6.0	Mouth	23,29N,3E	Wayne	Low D.O.
2015	Meramec River	1841	P	37.0	37.0	Big R.	Meramec State Pk.	Franklin/ Jefferson	Mercury (T)
2017	Meramec River	2183	P	22.0	22.0	Mouth	Hwy. 141	St. Louis	Lead (S)
2017	Meramec River	2185	P	15.7	26.0	Hwy. 141	Big R.	St. Louis	Lead (S)
2016	Miami Creek	1299	P	18	18	Mouth	10,40N,32W	Bates	Low D.O.
2013	Middle Fork Grand River	0468	P	25.0	25.0	Mouth	12,66N,31W	Worth/ Gentry	Bacteria
2013	Middle Indian Creek	3263	P	2.5	2.5	Mouth	16,24N,30W	Newton	Bacteria
2009	Mississippi River	1707	P	--	195.5	Ohio R.	Dam #27	Mississippi/ St. Louis	Lead
2009	Mississippi River	1707	P	--	195.5	Ohio R.	Dam #27	Mississippi/ St. Louis	Zinc
2015	Mississippi River	3152	P	124.5	124.5	State Line	Ohio R.	Miss/ Pemiscot	Mercury (T)
2013	Missouri River	1604	P	--	100.0	Mouth	Gasconade R.	St. Louis/ Gasconade	Bacteria
TMDL Approved	Mound Branch	1300	C	10.0	10.0	Mouth	13,40N,31W	Bates	Low D.O.
On or through PN	Muddy Creek	0853	P	55.0	55.0	Mouth	17,45N,23W	Pettis	Unknown
2014	Muddy Creek	557	P	--	36.5	Mouth	22,66N,23W	Grundy/ Mercer	Unknown
2014	Muddy Creek	0853	P	39.0	55.0	Mouth	17,45N,23W	Pettis	Chloride
2014	Muddy Creek	0853	P	1.0	55.0	Mouth	17,45N,23W	Pettis	Color
2013	Mussel Fork Creek	0674	C	29.0	29.0	18,58N,17W	2,62N,18W	Sullivan/ Macon	Bacteria
2012	Niangua River	1170	P	51	51	Bennett Spr Cr.	33,32N,18W	Dallas	Bacteria
2013	No Creek	0550	P	22.5	22.5	Mouth	14,62N,23W	Grundy/ Livin.	Bacteria
2015	Noblett Lake	7316	L3	26.0	26.0	25,26N,11 W		Douglas	Mercury (T)
2013	North Fork Cuivre River	170	C	--	8	24,51N,3W	28,52N,3W	Pike	Bacteria
2016	North Fork Cuivre River	0170	C	8	8	24,51N,3W	28,52N,3W	Pike	Low D.O.
2013	North Fork Spring River	3186	P	14.5	14.5	Mouth	1,29N,32W	Barton	Bacteria
2013	North Fork Spring River	3188	C	--	51.5	1,29N,32W	20,30N,28W	Barton	Ammonia
2013	North Fork Spring River	3188	C	51.5	51.5	1,29N,32W	20,30N,28W	Dade/ Jasper	Bacteria
2013	North Fork Spring River	3188	C	26.5	51.5	1,29N,32W	20,30N,28W	Barton/ Jasper	Low D.O.
2013	North Fork Spring River	3188	C	51.5	51.5	1,29N,32W	20,30N,28W	Dade/ Jasper	Unknown
2013	North Indian Creek	3260	P	5.0	5.0	24,24N,31W	36,25N,30W	Newton	Bacteria
2016	Panther Creek	1373	C	7.8	7.8	Mouth	13,35N,24W	St.Clair/ Polk	Low D.O.
2009	Pearson Creek	2373	P	2.0	8.0	Mouth	5,29N,20W	Greene	Unknown

2014	Pearson Creek	2373	P	2.0	8.0	Mouth	5,29N,20W	Greene	Bacteria
2012	Peruque Creek	0217	P	4	4	Hwy. 40/61	25,47N,1E	St. Charles	Inorganic Sediment
2012	Peruque Creek	0218	C	8.5	8.5	25,47N,1E	23,47N,1W	St. Charles	Inorganic Sediment
2015	Phillips Lake	1003U-01	U	32.0	32.0	n/a		Boone	Mercury (T)
2012	Pickle Creek	1755	P	7.0	7.0	Mouth	19,36N,7E	Ste. Genevieve	pH
2012	Pike Creek	2815	C	1.3	6.0	15,24N,6E	30,25N,6E	Butler	Temperature
2009	Piper Creek (Town Branch)	1444	P	1.0	7.5	Mouth	Hwy 83	Polk	Organic Sediment
2009	Piper Creek (Town Branch)	1444	P	7.5	7.5	Mouth	Hwy 83	Polk	Unknown
On or through PN	Pond Creek, Tributary to	2128	C	1.0	1.0	Mouth	3,37N,3E	Washington	Inorganic Sediment
2010	Red Oak Creek	2038	C	2.0	9.0	28,42N,4W	16,41N,5W	Gasconade	Low D.O.
2010	Red Oak Creek, Tributary to	3360	P	0.5	0.5	Mouth	35,42N,5W	Gasconade	Low D.O.
2010	Red Oak Creek, Tributary to	3361	C	1.5	1.5	35,42N,5W	27,42N,5W	Gasconade	Low D.O.
2011	River des Peres	1711	C	1.0	1.0	Gravois Cr.	Morgan Ford Road	St. Louis	Chloride
2011	River des Peres	1711U - 01	U	2.5	n/a	at University City		St. Louis	Chloride
2015	Salt River	0091	P	29.0	29.0	Hwy. 79	Re-Reg Dam	Ralls/ Pike	Mercury (T)
2016	Salt River	0091	P	29.0	29.0	Hwy. 79	Re-Reg Dam	Ralls/ Pike	Low D.O.
2009	Sandy Creek	0652	C	3.0	3.0	Mouth	19,66N,17W	Putnam	Unknown
2015	Schuman Park Lake	7280	L3	5.0	5.0	02,37N,08W		Phelps	Mercury (T)
2017	Scroggins Branch	2916U-01	U	0.5	n/a	n/a		Iron	Cadmium (W)
2017	Scroggins Branch	2916U-01	U	0.5	n/a	n/a		Iron	Zinc (W)
TMDL Approved	Shaw Branch	2170	C	2.0	2.0	Mouth	20,36N,5E	St. Francois	Inorganic Sediment
TMDL Approved	Shaw Branch	2170	C	2.0	2.0	Mouth	20,36N,5E	St. Francois	Lead (W)
2010	Shaw Branch	2170	C	2.0	2.0	Mouth	20,36N,5E	St. Francois	Cadmium (S)
2010	Shaw Branch	2170	C	2.0	2.0	Mouth	20,36N,5E	St. Francois	Lead (S)
TMDL Submitted	Shibboleth Creek	2120	C	3.0	3.0	14,38N,3E	21,38N,3E	Washington	Inorganic Sediment
2014	Shoal Creek	3222	P	43.5	43.5	State Line	10,25N,29W	Newton	Bacteria
2016	Shoal Creek	3231	C	4	4	12,23N,29W	Hwy. 86	Barry	Low D.O.
2014	Sni-a-Bar Creek	0399	P	32	32	Mouth	30,48N,29W	Jackson/ Lafayette	Low D.O.
2016	South Blackbird Creek	0655	C	5.0	13.0	2,64N,17W	18,65N,18W	Putnam	Ammonia
2016	South Fabius River	71	P	--	61.5	24,59N,6W	29,62N,11W	Marion/ Knox	Bacteria

2016	South Fork Salt River	0142	C	17.9	32.0	Audrain Co. Line	5,49N,4W	Callaway/ Audrain	Low D.O.
2013	South Grand River	1249	P	62.5	62.5	Mouth	02,44N,33W	Cass/ Henry	Bacteria
2013	South Indian Creek	3259	P	9.0	9.0	24,24N,31W	1,23N,30W	McDonald/ Newton	Bacteria
On or through PN	Spring Branch (Creek)	3708	P	7.4	7.4	02,34N,06W	Hwy. 32	Dent	Low D.O.
On or through PN	Spring Branch (Creek)	3708	P	7.4	7.4	02,34N,06W	Hwy. 32	Dent	Organic Sediment
2013	Spring River	3160	P	58.5	58.5	State Line	20,28N,27W	Lawrence/ Jasper	Bacteria
2013	St. Johns Ditch	3138	P	35.0	35.0	29,23N,15E	25,28N,13E	Scott/ New Madrid	Bacteria
2015	St. Johns Ditch	3138	P	35.0	35.0	29,23N,15E	25,28N,13E	Scott/ New Madrid	Mercury (T)
2014	Stevenson Bayou	3135	C	14	14	33,25N,16E	31,27N,17E	Mississippi	Low D.O.
TMDL Approved	Stinson Creek	0710	C	9.0	9.0	Mouth	16,47N,9W	Callaway	Low D.O.
TMDL Approved	Stinson Creek	0710	C	9.0	9.0	Mouth	16,47N,9W	Callaway	Organic Sediment
2012	Stockton Branch	1361	C	1.0	5.0	Mouth	4,34N,26W	Cedar	Low D.O.
PIL Submitted	Straight Fork	0959	C	2.5	6.0	6,43N,17W	36,43N,18W	Morgan	Chloride
2010	Straight Fork	0959	C	2.5	6.0	6,43N,17W	36,43N,18W	Morgan	Low D.O.
2012	Strother Creek	2751	P	2.1	7.0	Mouth	33,34N,1W	Iron	Lead (S)
2012	Strother Creek	2751	P	2.1	7.0	Mouth	33,34N,1W	Iron	Nickel (S)
2012	Strother Creek	2751	P	2.1	7.0	Mouth	33,34N,1W	Iron	Zinc (S)
2012	Strother Creek	2751U-01	U	1	n/a	n/a		Reynolds/ Iron	Arsenic (S)
2012	Strother Creek	2751U-01	U	1	n/a	n/a		Reynolds/ Iron	Lead (S)
2012	Strother Creek	2751U-01	U	1	n/a	n/a		Reynolds/ Iron	Nickel (S)
2012	Strother Creek	2751U-01	U	1	n/a	n/a		Reynolds/ Iron	Zinc (S)
2015	Sugar Creek	0686	P	5	5	Mouth	Sugar Cr. Lake Dam	Randolph	Low D.O.
2017	Sugar Creek Trib	0686U-01	U	0.2	n/a	n/a		Randolph	Nickel (W)
2014	Table Rock Lake	7313	L2	43100.0	43100.0	NW NW22,22N22W		Barry/ Taney	Nutrients
2016	Thompson River	0549	P	5.0	65.0	Mouth	State Line	Harrison	Bacteria
2016	Troublesome Creek	0074	C	34	34	15,59N,7W	5,61N,10W	Knox/ Marion	Low D.O.
2010	Turkey Creek	3216	P	7.0	7.0	State Line	35,28N,33W	Jasper	Cadmium (S)
2010	Turkey Creek	3216	P	7.0	7.0	State Line	35,28N,33W	Jasper	Cadmium (W)
2010	Turkey Creek	3216	P	7.0	7.0	State Line	35,28N,33W	Jasper	Lead (S)
2010	Turkey Creek	3216	P	7.0	7.0	State Line	35,28N,33W	Jasper	Zinc (S)

2010	Turkey Creek	3217	P	5.0	5.0	35,28N,33W	9,27N,32W	Jasper	Cadmium (S)
2010	Turkey Creek	3217	P	5.0	5.0	35,28N,33W	9,27N,32W	Jasper	Lead (S)
2010	Turkey Creek	3217	P	5.0	5.0	35,28N,33W	9,27N,32W	Jasper	Zinc (S)
2010	Turkey Creek	3282	P	2.4	2.4	Mouth	Hwy 47	St. Francois	Cadmium (W)
2010	Turkey Creek	3282	P	2.4	2.4	Mouth	Hwy 47	St. Francois	Lead (W)
2010	Turkey Creek	3282	P	1.2	2.4	Mouth	Hwy 47	St. Francois	Zinc (W)
2013	Turkey Creek	3216	P	7.0	7.0	State Line	35,28N,33W	Jasper	Bacteria
2013	Turkey Creek	3217	P	5.0	5.0	35,28N,33W	9,27N,32W	Jasper	Bacteria
TMDL Approved	Village Creek	2863	P	1.5	1.5	Mouth	5,33N,7E	Madison	Inorganic Sediment
TMDL Approved	Village Creek	2863	P	1.5	1.5	Mouth	5,33N,7E	Madison	Lead
TMDL Approved	Village Creek	2864	C	--	3.0	5,33N,7E	34,34N,7E	Madison	Inorganic Sediment
2013	Warm Fork Spring River	2579	P	1.2	12.0	State Line	25,23N,6W	Oregon	Bacteria
2011	Watkins Creek	1708	C	3.5	3.5	Mouth	Hwy. 270	St. Louis	Bacteria
2011	Watkins Creek	1708	C	3.5	3.5	Mouth	Hwy. 270	St. Louis	Chloride
2013	Weldon River	0560	P	42	42	Mouth	State Line	Mercer/ Grundy	Bacteria
2009	West Fork Black River	2755	P	1.3	31.7	Mouth	25,33N,03W	Reynolds	Lead (S)
2009	West Fork Black River	2755	P	1.3	31.7	Mouth	25,33N,03W	Reynolds	Nickel (S)
2009	West Fork Black River	2755	P	31.7	31.7	Mouth	25,33N,03W	Reynolds	Nutrients
2016	West Fork Drywood Creek	1317	C	5.5	5.5	Mouth	State Line	Vernon	Low D.O.
On or through PN	West Fork Locust Creek	0613	C	17.0	17.0	Hwy. 6	33,64N,21W	Sullivan	Unknown
2012	West Fork Medicine Creek	0623	P	40.0	40.0	9,61N,22W	State Line	Mercer/ Grundy	Unknown
2013	West Fork Medicine Creek	0623	P	40.0	40.0	9,61N,22W	State Line	Mercer/ Grundy	Bacteria
2010	West Fork Niangua River	1175	P	7	7	33,32N,18W	33,31N,18W	Webster	Low D.O.
2016	West Yellow Creek	0599	C	43	43	29,56N,19W	14,61N,19W	Sullivan/ Chariton	Low D.O.
2015	Whetstone Creek	1504	P	13.0	13.0	Mouth	21,29N,13W	Wright	Low D.O.
On or through PN	Willow Branch	0654U	U	--	0.6 (U)	Mouth	22,66N,18W	Putnam	Unknown
2014	Willow Fork	0955	C	6.5	6.5	36,45N,17W	29,45N,17W	Moniteau	Low D.O.
2014	Willow Fork, Tributary to	0956	C	0.5	0.5	Mouth	27,45N,17W	Moniteau	Low D.O.
2016	Wilson Creek	2375	P	--	18.0	Mouth	16,29N,22W	Greene	Bacteria
2009	Wilsons Creek	2375	P	18.0	18.0	Mouth	16,29N,22W	Greene	Unknown

2015	Wolf Creek	2879	C	8	8	Mouth	29,36N,6E	St. Francois	Low D.O.
2015	Wolf Creek, Tributary to	3589	C	1.5	1.5	Hwy. 32	Hwy. D	St. Francois	Low D.O.
2010	Wyaconda New Lake	7009	L1	9.0	9.0	NW NW33,65N,09W		Clark	Atrazine

(S) = pollutant in sediment

(T) = pollutant in fish tissue

(W) = pollutant in water