

Scioto River (upper) Watershed Draft TMDL Report

The Clean Water Act requires Ohio EPA to prepare a cleanup plan for watersheds that do not meet water quality goals. The cleanup plan, known as a total maximum daily load (TMDL) report, specifies how much pollution must be reduced from various sources and recommends specific actions to achieve these reductions.

Where is the upper Scioto River watershed?

A watershed is the land area that drains into a body of water. The upper Scioto River watershed is located in north central Ohio in Hardin, Marion, Logan, Union, Allen and Auglaize counties. This 661 square mile watershed area is home to more than 83,000 people and encompasses all or part of 13 municipalities. The watershed is primarily cropland with about eight percent being developed. Topography is generally flat and soils poorly drained and subsurface drainage is widely used.

Approximately 42,000 people in the Marion area are directly served by surface water withdrawn from the Little Scioto River and the Scioto River and blended with groundwater. Treatment capacity is roughly 9.1 million gallons per day, but average production is 6.74 million gallons per day.

There are 41 wastewater facilities with individual permits for municipal and industrial discharges having a combined design discharge capacity exceeding 25 million gallons per day.

How does Ohio EPA measure water quality?

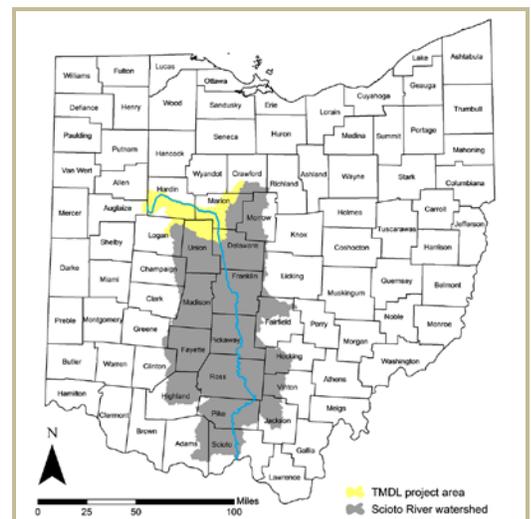
Ohio is one of the few states to measure the health of its streams by examining the number and types of fish and aquatic insects in the water. An abundance of fish and insects that tolerate pollution is an indicator of an unhealthy stream. A large number of insects and fish that are sensitive to pollution indicate a healthy stream.

In 2009 and 2011, biological, chemical, and physical data were collected in the watershed by Ohio EPA scientists. The watershed's conditions were compared with state water quality goals to determine which streams are impaired, and how much needs to be done to restore good stream habitat and water quality.

What is the condition of the upper Scioto River watershed?

Aquatic life uses were evaluated to meet all quality criteria at 42 percent of the sites, while 32 percent only met some of the criteria and 26 percent met none. Only seven percent of the sites evaluated for recreation uses met criteria.

High bacteria concentrations from sources such as improperly functioning septic systems and manure were most responsible for the impaired recreation uses. Excessive amounts of fine sediment on the streambeds, poor habitat, and elevated concentrations of nutrients and organic substances were the primary causes of aquatic life use impairments. Sources of these stressors were mostly drainage from agricultural lands, including channel maintenance, and wastewater collection and treatment systems.



Essential Facts

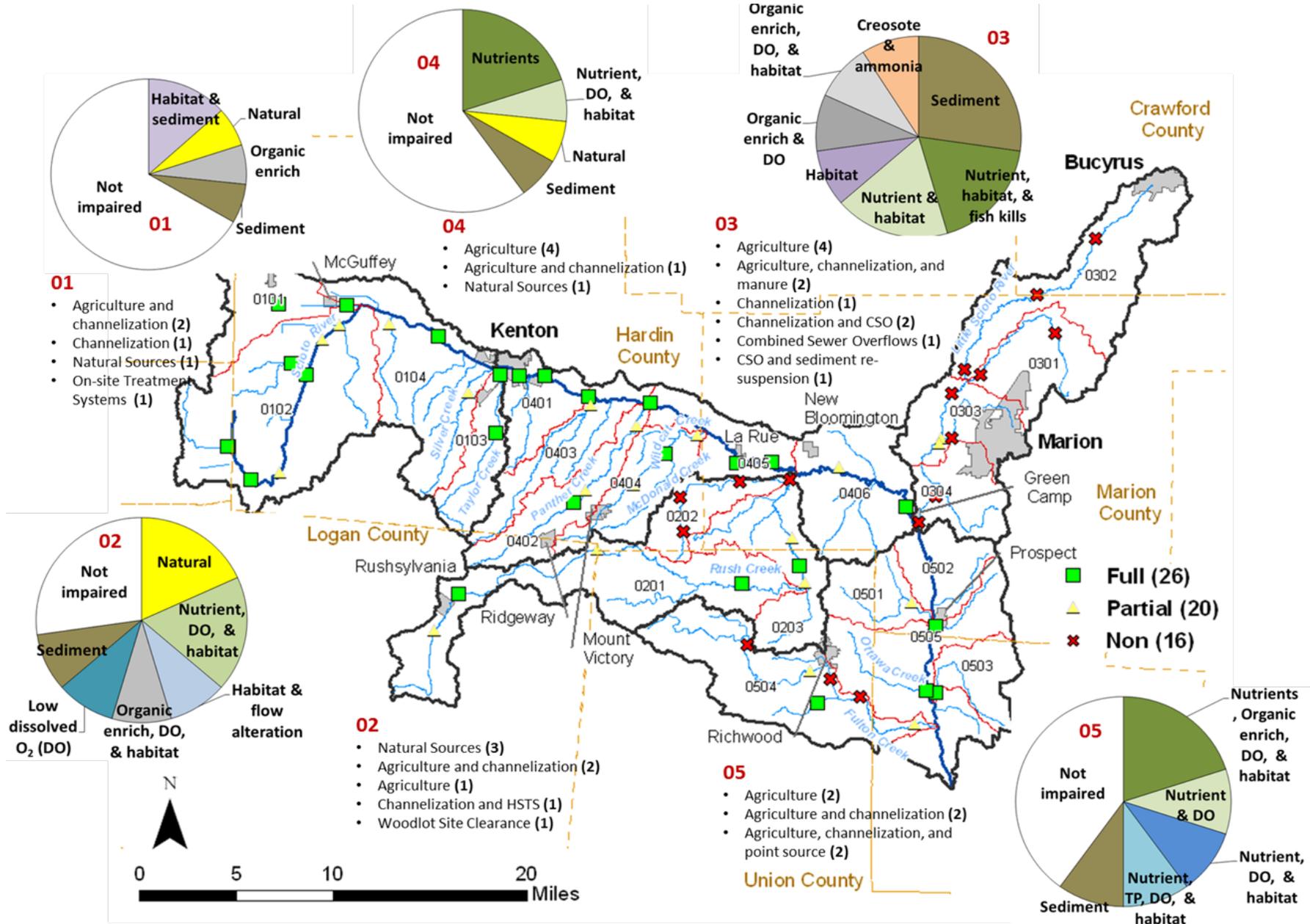
- Ohio EPA studied the watershed and found water quality problems at several locations.
- Water quality improvements can be made with practical, economical actions.
- You may review the work to date.
- Making water quality improvement depends on the participation of the watershed's residents.

More Information or Comments

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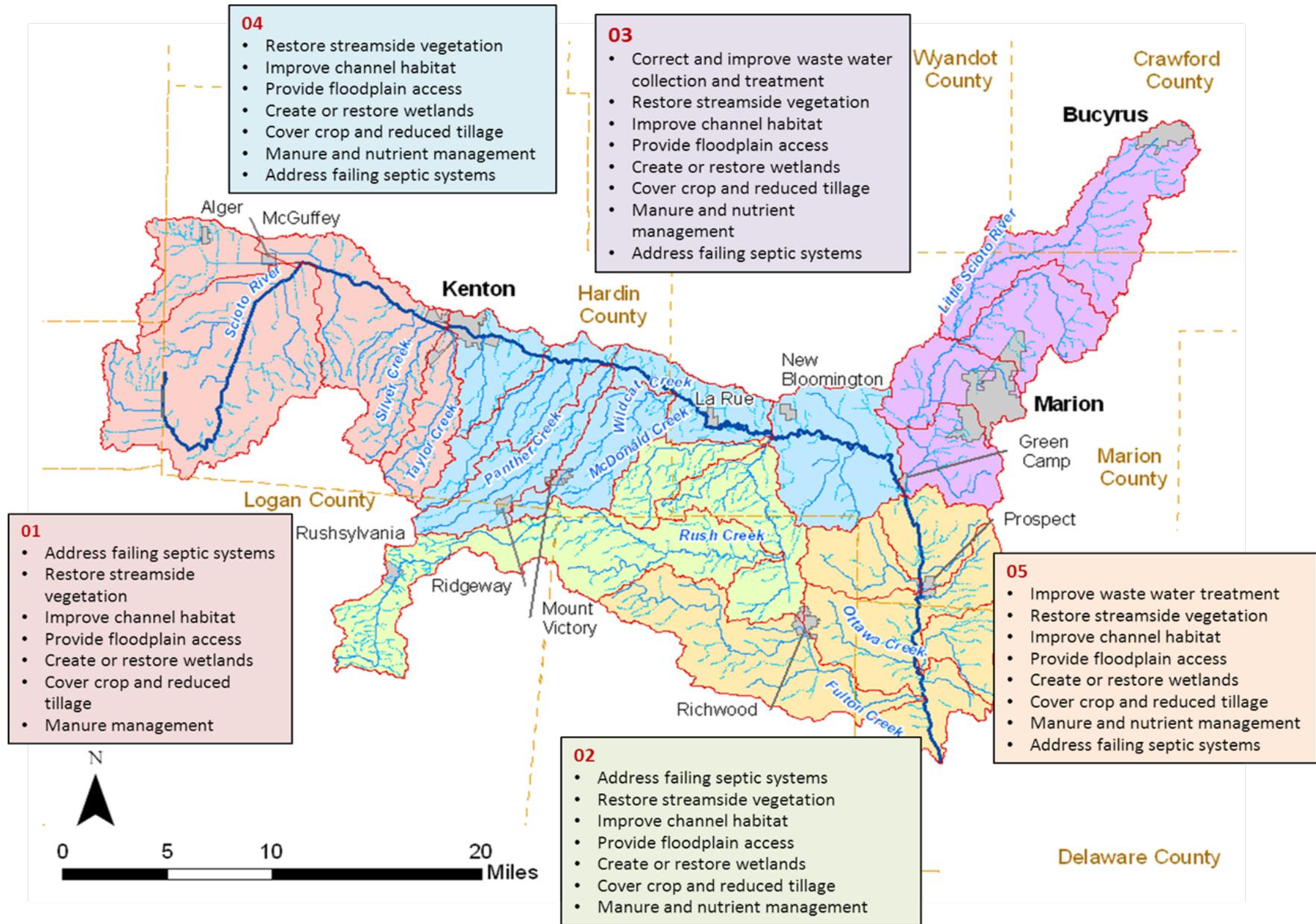
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What are the problems?



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How can the problems be fixed?



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What actions are needed to improve water quality?

There are a variety of reasons why streams in the upper Scioto River watershed fail to meet water quality goals, so several types of actions are needed to improve and protect the watershed.

The recommendations focus on reducing pollutant loads and/or increasing the capacity of the streams to better handle the remaining pollutant loads. Sources of water quality problems that should receive focus for water quality improvements include:

- Home septic systems
- Wastewater collection and treatment systems
- Cropland drainage

Who can improve the situation?

Implementation of this report's recommendations will be accomplished by federal, state and local partners, including the voluntary efforts of landowners.

Ohio EPA will issue permits to point source dischargers (wastewater treatment plants) that are consistent with the findings of this TMDL report. Likewise, the combined sewer system in the City of Marion will be improved to substantially reduce the amount of sewage overflows by following a state approved control plan.

The Ohio Department of Natural Resources has programs dedicated to abating pollution from certain agricultural practices; promoting soil, water and wildlife conservation; and dealing with storm water and floodplain protection. County agencies often work with state and federal partners to administer federal and state assistance programs to people in their counties. Several such programs are available to address home septic system upgrades and agricultural and urban conservation practices.

A watershed action plan was developed collaboratively between local conservation and health agencies, governments and citizens aimed at addressing water quality issues within the upper Scioto River watershed. Additional funding may come available for agricultural conservation practices through provisions in the Farm Bill for buffer strips, wetlands and other land conservation practices.

Where can I learn more?

The Ohio EPA report containing the findings of the watershed survey, as well as general information on TMDLs, water quality standards, 208 planning, permitting and other Ohio EPA programs, is available at epa.ohio.gov/dsw/tmdl/index.aspx.

How can I comment on the draft report?

The draft TMDL report is available for public review at epa.ohio.gov/dsw/tmdl/SciotoRiver.aspx from July 3 through August 4, 2014. Comments should be sent to the address in the box on the first page. After considering comments, Ohio EPA will submit a final document to U.S. EPA for approval.

What are the most important "fixes" in the watershed?

- ◆ **Reduce bacteria, nutrient and organic loading from poorly functioning septic systems**
 - Identify systems that are in need of improvement through inspection and/or monitoring
 - Provide education and assistance to system owners
- ◆ **Reduce pollutant loading from wastewater treatment systems**
 - Implement plans to reduce or eliminate overflows from wastewater collection systems
 - Improve the quality of wastewater effluent through increased treatment
- ◆ **Reduce pollutant loading from cropland drainage**
 - Use cover cropping and reduced tillage to protect soil surfaces and bind pollutants
 - Manage fertilization, manure handling and drainage practices to minimize loss of pollutants