



Missouri Department of Natural Resources

## Total Maximum Daily Load Information Sheet

### Wyaconda River

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#### Water Body Segment at a Glance:

**County:** Lewis  
**Nearby Cities:** Wayland  
**Length of impairment:** 8.0 miles  
**Pollutant:** Manganese  
**Source:** Natural source

**Note: This river was deleted from the 2004/2006 303(d) List because the criterion for manganese has been removed from Missouri's Water Quality Standards.**

**Water Body Removed from List:** Sept. 27, 2007



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#### Description of the Problem

##### Beneficial uses of Wyaconda River

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life
- Protection of Human Health (Fish Consumption)
- Whole Body Contact Recreation – Category B
- Secondary Contact Recreation
- Drinking Water Supply

##### Use that was listed as impaired

- Drinking Water Supply is listed as impaired because of manganese; however, the river is not used as a source for public drinking water supplies.

##### Standards that apply

There is **no longer** a criterion in the Missouri Water Quality Standards (10 CSR 20-7.031) for manganese. The standard used to be 50 µg/L as the maximum amount of manganese allowed for Drinking Water Supplies. This was an aesthetic standard that sought to protect a water supply against possible taste, odor and laundry staining problems caused by excessive amounts of manganese. Exceedence of that standard was not a threat to human health.

##### Background Information and Water Quality Data

The Missouri Public Drinking Water Standards include manganese as a secondary contaminant. Manganese can be removed from drinking water supplies and is removed when necessary. The

Department of Natural Resources is unaware of any facility that currently uses the impaired section of the Wyaconda River as a drinking water supply.

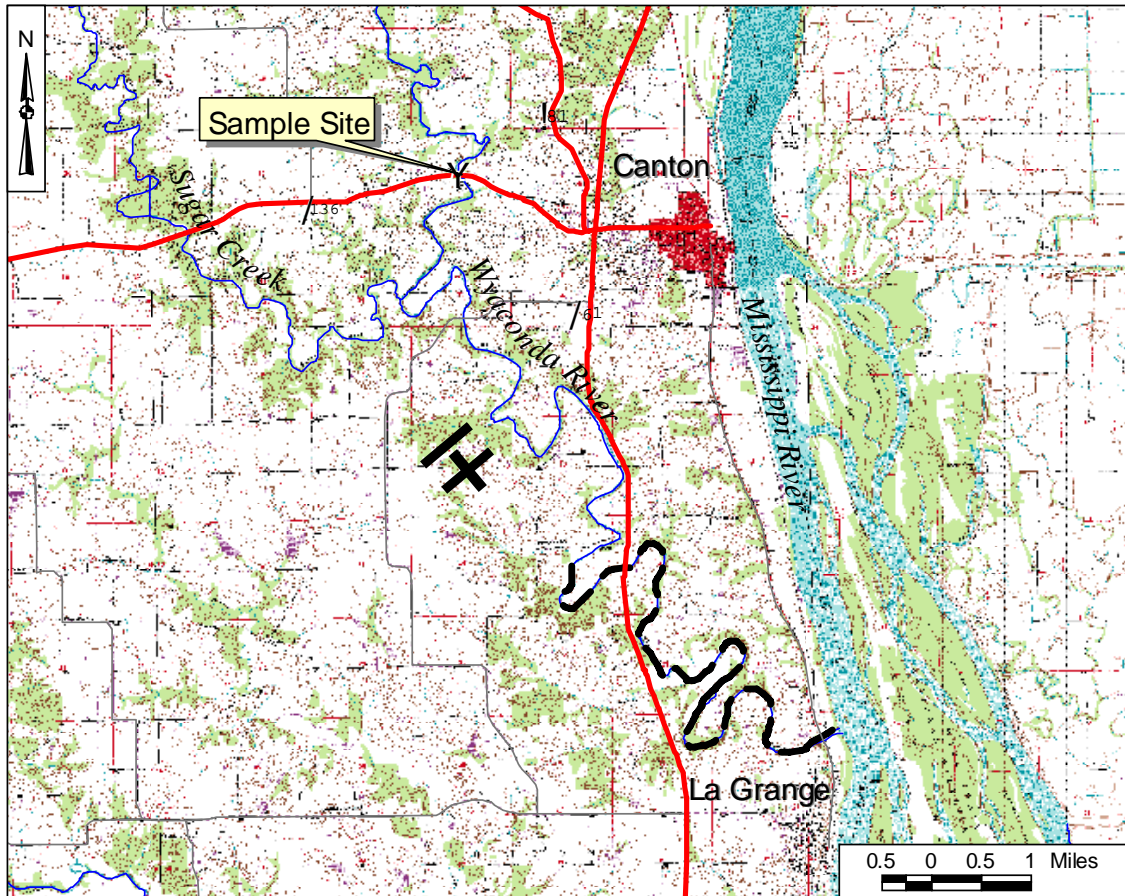
Monitoring of the Wyaconda River near Canton, Missouri, from 2000 through 2002 has shown an average level of dissolved manganese of 178 µg/l. The city of Canton does not use the Wyaconda River as their water supply, but rather uses alluvial wells near the Mississippi River.

There are no known significant man-made sources of manganese in this watershed. The source of the manganese is believed to be from baseflow groundwater. In dry periods, much of the river's flow will be baseflow groundwater with a higher concentration of manganese because there is less dilution from precipitation. Several other streams in Northeastern Missouri also have elevated levels of dissolved manganese and the similar stream characteristics.

Manganese does not present any human health hazards, but can be responsible for offensive taste and appearance in drinking water, if it is present. However, drinking water supplies can remove manganese if necessary in the finished water sold to customers. The Missouri Clean Water Commission voted to remove manganese and iron from the list of impairments to drinking water sources since they do not cause health problems, do not adversely affect aquatic life and can be removed by drinking water treatment facilities. That action took effect Dec. 31, 2005 and the U.S. Environmental Protection Agency removed this river from the 2004/2006 303(d) List Sept. 27, 2007.

A map of the formerly impaired segment may be found on the next page.

## Wyaconda River in Lewis County, Missouri, with Sampling Site



--- Formerly listed segment      → Direction of flow

**For more information call or write:**  
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