

Clean Water

starts with you

The DNR tests waters throughout Iowa to make sure they are meeting state water quality standards. Those standards are in place to protect drinking water, aquatic life and recreational uses, like swimming. When a stream or lake doesn't meet those standards, the stream or lake is placed on the state's impaired waters list. The DNR then creates a plan which outlines ways Iowans can help improve the water quality in their community's lakes and streams.

DNR needs your input

Every Iowan needs the help of their fellow citizens and watershed groups to improve water quality in their community. If you or your group would like to meet with a DNR staff member to discuss water quality, please contact Chris Van Gorp at (515) 281-4791 or Chris.VanGorp@dnr.state.ia.us



For more information on water quality improvement plans, please visit www.iowadnr.com/water/watershed/

Volga River

Pollutant: *Bacteria*

Pollution Sources: *Human and animal waste material*



The Volga River needs your help. As you'll read below, the DNR is putting together a plan outlining the river's problems and possible solutions. But it's up to you to make sure those solutions are put into effect. A cleaner Volga River depends on you.

What's wrong with the Volga River?

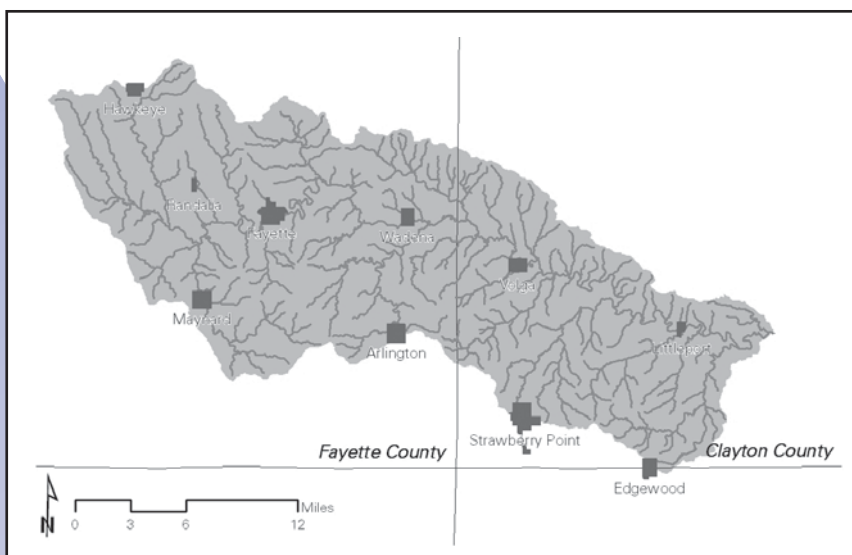
Pollution from human and animal waste, also known as fecal matter, keeps the river from meeting its state-designated standards. Untreated waste from these sources can carry disease-causing microorganisms, called pathogens, into the water. These pathogens can make people sick.

Testing for E. coli bacteria levels can indicate if there may be fecal matter and disease-causing pathogens present in the water.

The impaired segment of the Volga River begins near the bridge crossing in the city of Volga and runs downstream to the river's mouth where it flows into the Turkey River.

This 27-mile segment is located entirely in Clayton County, but receives water from portions of land in both Clayton and Fayette counties. The total watershed size (the area of land that drains into the river) is 406 square miles.

However, it's necessary to improve water quality in the entire watershed to maintain clean water in the river along the impaired segment.



The map to the left shows the Volga River watershed shaded in gray.

A watershed is an area of land that drains into a body of water. In this case, all land shaded in gray drains into the Volga River.

What is causing the problem?

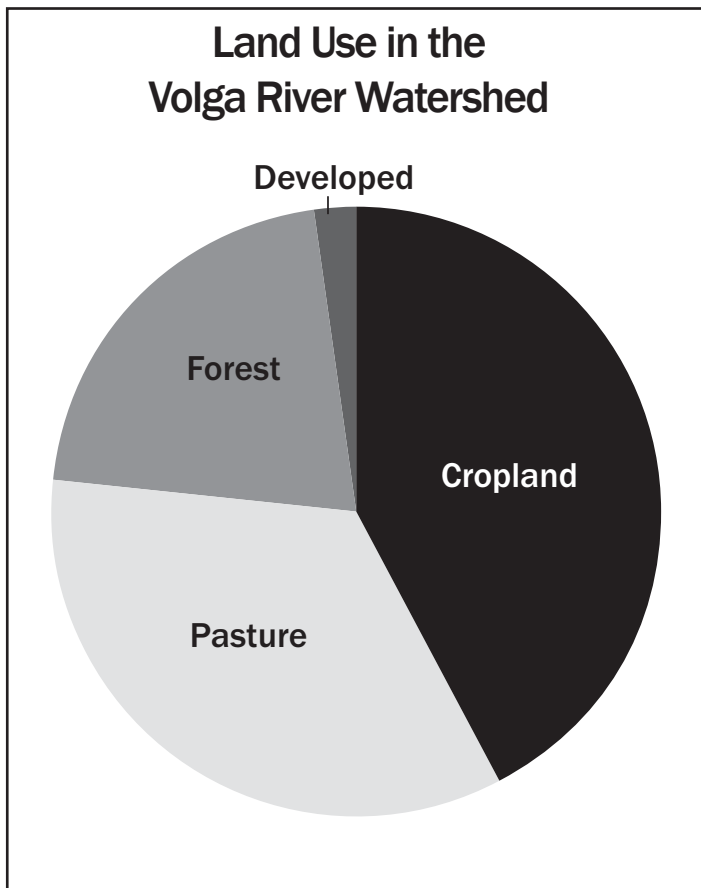
Most pollution in the Volga River watershed comes from nonpoint sources, or sources that are not easily traced back to a specific “point,” like a wastewater treatment or industrial plant.

In the Volga River watershed, nonpoint sources include areas used to land-apply manure, feedlots and pastures, and improperly connected or failing septic systems. Rainwater and snowmelt can wash waste from livestock (confined and pastured), pets, and wildlife into the river.

To reduce the amount of fecal matter reaching the river, changes in waste and land management will be needed. It will take time to make these changes and to see the effects.

What can be done to improve the Volga River?

The ultimate goal is to improve water quality and remove the river from the state’s impaired waters list. To do that, sources of human and animal waste need to be cleaned up in the watershed.



Using research results and with the help of the public, the DNR has developed a water quality improvement plan (also known as a TMDL, or total maximum daily load). The plan will help reduce the amount of pollutants reaching the Volga River. A water quality improvement plan is a suggestion to local communities on how they can work for cleaner water in their area.

To meet water quality improvement goals, there needs to be an 97 percent reduction in pollution from surface runoff, or pollutants that are washed off the land and into the river during a rainfall. There must also be a 85 percent reduction in the amount of constant pollution, such as leaking septic systems and cattle in streams.

While the DNR has done the background research and can provide technical and funding assistance, it is ultimately up to the watershed residents and businesses to take action and clean up the river.

The DNR has suggested the following conservation practices for the Volga River watershed:

- ◆ Control livestock manure runoff from feedlots and pastures
- ◆ Follow manure application guidelines and control runoff from crop fields
- ◆ Limit cattle access to streams and explore other water sources for cattle
- ◆ Find and replace improperly connected or failing septic systems. Up to 65 percent of septic systems in the watershed are estimated to be failing and draining to the impaired segment of the river.

What's Next

By helping the DNR create the water quality improvement plan for the Volga River, you're helping form the game plan for cleaning up the river. When it's time to take that plan and put it into action, the DNR can offer some technical and funding assistance. But a cleaner Volga River depends on you.