#9 Raccoon River

THREAT: Factory farms and agricultural pollution

PHOTO: GARRETT HALL

STATE:
Iowa

AT RISK:
Clean drinking water, recreation, wildlife habitat

SUMMARY

Iowa's Raccoon River, which provides drinking water to 500,000 people in Iowa's capital city, Des Moines, has become increasingly contaminated by upstream factory farms and industrial agriculture. In 2020, pollution-fueled outbreaks of toxic algae combined with climate change-driven drought conditions pushed the city's drinking water utility to the brink of a crisis for several weeks. Iowa's state agencies have refused to appropriately regulate pollution from factory farms. The U.S. Environmental Protection Agency must step in and investigate, monitor and enforce factory farm pollution violations in the absence of state action.

THE RIVER

Nearly 31 miles long, the Raccoon River in west-central Iowa is part of the Mississippi River watershed. The watershed is largely rural, but includes portions of Iowa's capital city, Des Moines, and several smaller towns. The river serves as a drinking water supply for more than 500,000 people in Des Moines. The river is an important source of recreation for local communities, where activities including swimming, canoeing, birding and fishing are popular. Several beloved water trails have been developed along all three major tributaries of the Raccoon River, and there are plans to expand recreational use on the river within the city of Des Moines.

In some locations, bluffs along the river reach 30 to 40 feet high and expose glacial till deposited 12,000 years ago as the ice sheets retreated from Iowa. The North Raccoon is home to a population of Topeka shiner, a federally endangered species of minnow. The watershed contains several tracts of rare oak savanna ecosystem, often described as the transition zone between prairie and woodland environments. Oak savanna was once one of the most common ecosystems in the Midwest, but is now exceedingly rare, with less than 0.1% of the original ecosystem remaining. In the Raccoon River watershed, this increasingly imperiled habitat provides nesting grounds to nearly one-third of Iowa's 200 species of breeding birds.

The Raccoon River watershed was historically home to the Oceti Sakowin and Ioway peoples. The Meskwaki Tribe also inhabited land in the southeast portion of the watershed.

THE THREAT

The Raccoon River is polluted by more than 750 factory farms that confine thousands of animals and their waste. This waste is spread on fields, often at rates that exceed the soil's ability to absorb it. It then runs off into rivers and streams where it contributes to a water crisis of epic proportions.

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PHOTO: KATHRYN GAMBLE

Iowa relies on a voluntary strategy to reduce agricultural pollution of lakes and rivers. This strategy is fundamentally inadequate and has failed spectacularly. The corporate agribusiness industry with the help of Iowa's government has enabled factory farms to expand at an increasingly rapid rate — Iowa adds between 300 and 600 factory farms every year.

Meanwhile, downstream the Des Moines Water Works (DMWW) and other utilities use the Raccoon River as a source of drinking water. Nitrates, which are notoriously difficult to remove and are extremely toxic, especially to babies and pregnant women, are often found in the river at levels that far exceed the Environmental Protection Agency's legal limit. In 1991, the DMWW constructed one of the world's largest nitrate removal facilities in order to provide safe drinking water to people in Des Moines. The cost of this facility — $4.1 million — was ultimately borne by ratepayers rather than the factory farm and agribusiness interests responsible for the nitrate pollution. In 2017, DMWW ratepayers paid another $15 million to double the size of the facility. Private wells that provide drinking water to families throughout the Raccoon River watershed are also frequently contaminated with levels of nitrates that exceed safe drinking water standards. There are often no alternative clean and safe drinking water supplies for the owners of these contaminated wells.

In 2020, climate change-fueled drought conditions led to historically low water levels in both the Des Moines and Raccoon Rivers. These low-flow conditions, along with record levels of agricultural pollution, resulted in potentially deadly toxic algae outbreaks in both rivers, and there was significant concern that DMWW would not be able to meet demand for water in Des Moines. While mandatory restrictions were ultimately avoided, DMWW had to utilize water from storage wells and an emergency reservoir as the primary drinking water supply for several weeks.

Toxic algal outbreaks and factory farm runoff also limit people's ability to safely recreate on the river. Farther downstream, this pollution contributes to a growing hypoxic zone in the Gulf of Mexico where the commercial fishing industry pays the price for Iowa's water pollution crisis.

WHAT MUST BE DONE

The EPA must conduct a study of factory farm runoff from fields in Iowa. The agency has previously acknowledged that such runoff is the biggest source of factory farm pollution by far, but it is not monitored at all by Iowa's Department of Natural Resources. EPA must also immediately ramp up its Concentrated Animal Feeding Operation (CAFO) inspections and enforcement actions in the Raccoon River watershed. Factory farms should be required to invest in state-of-the-art technology to treat animal waste, instead of relying on antiquated techniques that hide the problem (e.g., spreading waste on fields). These initiatives will advance efforts to spur new EPA rules as well as stronger state-level permitting.

With the election of President Biden and the appointment of a new EPA Region 7 Administrator, a timely opportunity exists to call on EPA to finally address the increasing levels of factory farm pollution in the Raccoon River watershed through research, improved regulations and consistent enforcement.

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TAKE ACTION:

AmericanRivers.org/RaccoonRiver2021