

## Our Illinois River — Our Illinois Heritage

The Illinois River has a long and rich history that is intertwined with the history and landscape of our state. It flows 272 miles from the confluence of the Des Plaines and Kankakee Rivers to the Mississippi River. Its headwaters drain the Chicago metropolitan area, through the Chicago, Des Plaines, DuPage, Kankakee, and Fox River systems.

Historically the river was critical for food supply, drinking water, industry and transportation. Native American tribes relied on the vast supplies of fish, and at the turn of the century the Illinois River supported a vast commercial fishing industry. It is estimated that there were more than 2000 commercial fisherman who harvested 25 million pounds of freshwater fish in 1908. The button making industry also profited from the vast mussel populations found in the Illinois. Its natural confluence with the Mississippi confluence has always made the Illinois a vital transportation corridor. Today, our river remains a vital source of drinking water, recreation, transportation, and wildlife habitat.

*“We were compelled to throw a line into the water for catfish; one we caught was of enormous size, furnishing enough meat for a supper for twenty-two men.”* Henri de Tonti - 1682

## A Great River in Great Peril

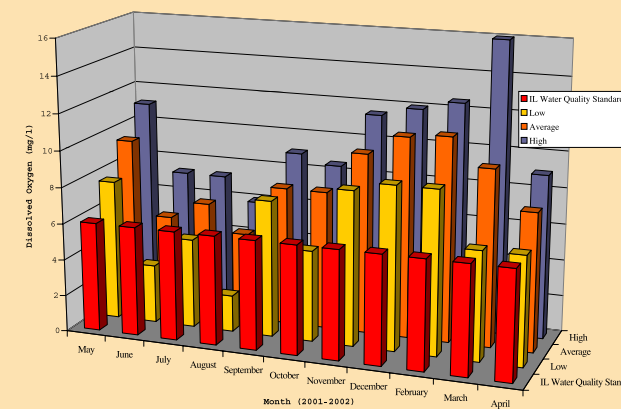
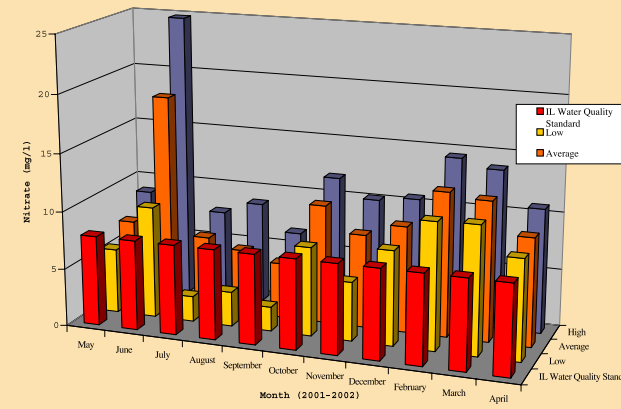
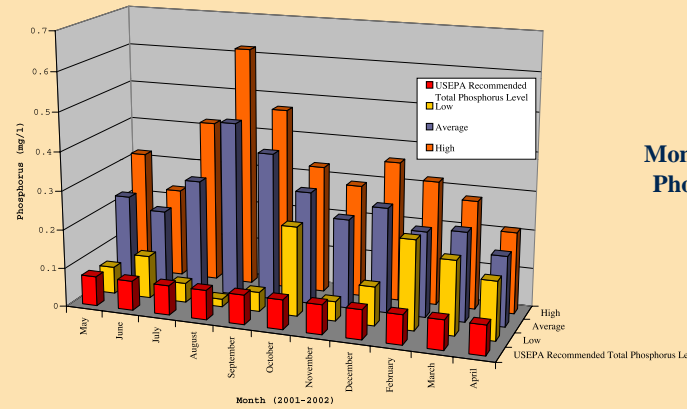
The last century was a very difficult one for the Illinois River. Industrialized agriculture and discharges of municipal and industrial wastewater dump pollution into our river each day. Physical changes to the river and its watershed, including wetlands destruction, stream channelization, levee construction, and locks and dams have hurt the river’s ability to protect, cleanse, and restore itself - so it needs our help. We can be proud that improvements in wastewater treatment and innovative efforts to reduce polluted runoff have paid off in a cleaner river. These successes give us confidence that we can finish the job and address the problems that remain.

## Taking Responsibility To Protect Our River

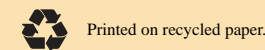
The Sierra Club, Heart of Illinois Group, started its Water Sentinel project in 2001, using volunteers to collect water samples each month for a year on a 33.6 mile stretch of the river which extends from the city of Lacon to Peoria. The samples were then tested for pollution in hopes of learning what problems remain on the river, and how they can be cleaned up so that future generations will know a safer, healthier Illinois River.

## Our Findings - A River Choking on Nutrient Pollution

All graphs reflect the range of sites, which extended from the city of Lacon to Peoria.



Unless otherwise noted, all photos are courtesy of Jason Lindsey [www.perceptivevisions.com](http://www.perceptivevisions.com)



Sierra Club testing clearly shows that the Illinois River is suffering from an overload of nutrient pollution. We detected consistent problems with the levels of nitrates, phosphorus and dissolved oxygen in the river. These findings indicate major potential problems for wildlife, recreation, and drinking water.



## How Nutrient Overload Hurts the Illinois River

Both phosphorus and nitrates are nutrients that occur naturally at low concentrations. In large concentrations these nutrients encourage the excessive growth of algae. Large algae blooms deplete levels of dissolved oxygen, which fish and other aquatic life need to survive. Excess nitrates in drinking water have been linked to methemoglobinemia or “blue-baby syndrome”.

In our tests, we found phosphorus levels above those recommended for healthy waters seven months out of the eleven sampled. Six times we found levels of nitrates higher than the drinking water standard. And four times we found levels of dissolved oxygen below the level the state considers necessary to support healthy wildlife.

## Where the Pollution Comes From

Nitrates and phosphorus enter our river from sewage treatment plants and as runoff from urban yards and farm fields.

Unlike other states, Illinois does not regulate phosphorus pollution from sewage plants. For nitrate, Illinois only has a simple drinking water standard. To make water this polluted safe to drink, expensive nitrate removal processes are necessary. Fish and other wildlife aren’t so lucky.



## Our River, Our Responsibility

The Illinois River is the backbone of the communities located along its banks. It is a source of drinking water and a recreational outlet for Illinois families. If the Illinois River is to survive the 21st century and become healthy habitat and reliable drinking water once more, we will all need to do our part.

The **Illinois Environmental Protection Agency**, which enforces the Clean Water Act in our state, must step up its efforts to protect the Illinois, and:

- **Prepare and Implement an Effective Cleanup Plan for the Illinois River**

The Clean Water Act requires that a cleanup plan, or Total Maximum Daily Load study is required for any water that is not meeting water quality standards, including the Illinois. The goals of a TMDL are to determine what problem pollutants are, what capacity the river has to absorb them without harm (or, the total maximum daily load it can assimilate), how much pollution the river is currently carrying, where it is coming from, and, most importantly, how to reduce the pollution to tolerable levels.

- **Set Limits on Phosphorus Pollution**

Our testing clearly demonstrates that nutrient pollution is causing major impairments in water quality. However, there are no limits on nutrient discharges to our waterways. Other states have moved to address these problems by establishing a water quality standard for phosphorus, in particular, and requiring controls for nutrients where problems exist. Illinois should follow these examples as quickly as possible.

The **State of Illinois** should also continue to pursue the Illinois Rivers 2020 plan to help farmers reduce runoff by conserving wildlife habitat.

The **federal government** can do its part by dropping plans for major lock and dam expansions, which will increase turbidity problems in the water, by acquiring habitat and floodplain along the river, and by maintaining clean water safeguards.

**Citizens** living in the Illinois River watershed can help in many ways. Farmers can set aside highly erodible lands for conservation, establish buffer strips along waterways, and reduce the amount of harmful fertilizers and pesticides applied to their crops. All landowners can consider native vegetation for a beautiful, low-maintenance garden that will attract wildlife and keep pollution out of the water. We can all be active citizens, who voice support for clean water policies at the local, state, and federal level.



For more information on Sierra Club's efforts to clean up Illinois' rivers, lakes, and streams, and how you can help see: <http://www.illinois.sierraclub.org>

For more information on the Sierra Club Water Sentinels project in the Peoria area, please call 309-637-1393 or check our website: <http://watersentinelshome.insighthb.com>



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**Sierra Club, Heart of Illinois Group  
Water Sentinels Project**