

Stream Restoration

The Sierra Club Iowa Chapter supports restoring Iowa's streams and rivers to their natural state.

Iowa's draft 2022 Section 303(d) list of impaired waters contains 594 water bodies with 783 impairments (which are commonly known as pollutants). The vast majority of impairments are caused by pollution from industries, wastewater treatment plants and agriculture. Bringing Iowa's water bodies into compliance with water quality standards will ensure that the waters are safe for swimming, provide safe drinking water and that they provide habitat for wildlife.

Over the past century, changes in agriculture have increased soil erosion with the soil entering Iowa's rivers and waterways. Soil particles can carry pollutants. Also, soil silts the rivers and streams, destroys habitat for fish and other wildlife and reduces water quality.

Heavy applications of commercial fertilizer and manure have resulted in an over-abundance of nitrogen and phosphorus entering Iowa's water bodies leading to poor water quality and a loss of fish habitat.

Flooding has become a significant concern across the state. Changing weather patterns have resulted in heavy rains and significant flooding year after year. Wetlands, which act as a sponge to absorb floodwaters, have been filled and drained. Streams have been channeled contributing to the destruction of wetlands.

River and waterway improvements

The Iowa Chapter supports the following initiatives:

- Funding for the implementation of the Iowa Department of Natural Resources' Water Quality Improvement Plans. The plans include goals that were developed for impaired waters such as planting and restoring buffer strips along streams, planting grass waterways in fields and planting cover crops.
- Continued funding to write Water Quality Improvement Plans for all impaired waters.
- Additional funding support for wetland restoration. Most of Iowa's wetlands have disappeared due to agriculture or development. Wetlands help filter precipitation into the aquifers.

Wetlands also slowly release water into rivers and streams helping to maintain the integrity of stream banks. Iowa must protect, restore or mitigate these areas to replace what we have lost since the early 1900s. Furthermore, when tile lines drain into a wetland, the wetland acts as a filter to remove agriculture pollutants from the water resulting in less pollution entering Iowa's streams and rivers.



Wapsipinicon River

- Requiring wetlands protection, banning filling and destruction of wetlands, expanding and restoring wetlands and banning stream straightening (channelization).
- Retaining Iowa's current wetland laws.
- Prohibiting building on and filling in the 100- and 500-year floodplain. Floods damage low-lying buildings so the structures need to be removed as well as any fill placed on the building site. Floodplain property needs to remain as green space and stream buffer.
- Funding an aggressive water monitoring program to determine where pollution enters the water bodies in the state, accompanied by an aggressive enforcement action to encourage compliance with pollution discharge permits (NPDES permits) for point-sources and aggressive education for non-point sources. Each watershed should be assigned water quality standards to track progress of restoring water quality.
- Legislating an effective practices requirement to reduce nutrients (nitrogen and phosphorus) in Iowa's waters.
- Eliminating any stringency clause in Iowa law that prevents the state from adopting water protection rules that are more stringent than federal rules.
- Passing legislation to effectively regulate discharges from animal feeding operations to protect Iowa's waters.
- Funding for the testing of fish in Iowa's waters for toxics. A number of water bodies in Iowa are currently under fish consumption advisories because the levels of toxins (such as PCBs and mercury) are so high that consumption of those fish poses a health risk. The Department of Natural Resources' goal is to test fish in each lake in Iowa every 10 years and each river every 5 years. Funding levels need to be increased so that the DNR can meet that goal. Iowans need to know that the fish they catch and eat are not exposing them to toxins.



Maquoketa River

Prioritization

The Iowa Chapter considers the following to be the top three priorities:

- Restoring and maintaining water quality;
- Restoring and maintaining wetlands;
- Funding an aggressive water monitoring program to establish a baseline, monitor water quality loss to trigger corrective actions and assess water quality improvements as projects are undertaken.

The Iowa Chapter believes the following criteria need to be implemented to meet these goals:

- Giving priority to water bodies that are so impaired that they impact public health. For example, the Raccoon and Des Moines Rivers have carried so much nitrate that the surface water did not meet EPA drinking water standards. The Des Moines Water Works has been forced to operate expensive nitrate-removal equipment, to switch to an alternate, less contaminated water source and to request a reduction in lawn watering by its customers.
- Giving priority to projects in watersheds with completed Water Quality Improvement Plans over projects where no Plan has been prepared.

Defining Iowa's river investment goals

The Iowa Chapter supports the following goals:

- No loss of existing wetlands in Iowa.
- Wetlands restoration along all rivers and streams in Iowa.
- No further channelization of streams and rivers in Iowa.
- A buffer protecting every stream and river.
- Terminating all construction in the 100- and 500-year floodplains.
- Written and approved Water Quality Improvement Plans within two years of placement on the Impaired Waters List.
- Implementation of a Water Quality Improvement Plan within one year from the date the Plan was approved for all impaired waters.
- Removal of impaired waters from the Impaired Waters List within five years of the date the Water Quality Improvement Plan was approved.
- Significant reduction of nitrate and phosphorus levels in all surface waters in Iowa throughout the year, with nitrates reaching levels below 10mg/L, by 2025.
- Implementation of an enforceable, regulatory, non-point source program to reduce nitrogen and phosphorus in the water.
- Testing fish by the Department of Natural Resources in each of Iowa's lakes every 10 years and each river every five years will be fully funded. Additional funding for follow-up testing in those waters where the toxin levels are close to the thresholds will be made available.
- Funding levels will allow the Department of Natural Resources to test water quality, to educate the public on improving water quality, and to enforce the laws.



Turkey River

Measuring Iowa's river and stream improvements

The Iowa Chapter supports tracking the following metrics:

- Measuring the increased number of wetland acres protected, the number of acres of wetlands that are restored each year, and the total acres of wetlands in the state.
- Measuring the number of miles of new buffers that are installed each year and the total miles of buffers installed.
- Measuring the number of increased acres of new grass waterways and the total acres of grass waterways.
- Measuring the number of acres of cover crops planted each year.
- Monitoring implementation of Iowa's nutrient reduction strategy and its effectiveness by measuring the water quality of each watershed throughout the year.
- Monitoring the percentage of rivers tested each year for fish carrying high levels of toxins.
- Measuring the number of Impaired Waters, the number of Water Quality Improvement Plans written, the number of past-due plans, the number of Plan projects that have begun, the number of Plans that are past-due in initiating projects, the number of Impaired Waters removed from the list, the number of Impaired Waters with missed target dates for improved water quality and were removed from the list.