

Fish Sampling Shows Early Signs of River Recovery

Former Velsicol Chemical Plant

St. Louis, Michigan

June 2014

Fish you can catch

State and federal environmental experts have studied a wide variety of fish samples over the years, including most of the fish you like to catch.

Channel catfish



White sucker



Northern pike



Bluegill sunfish



Crappie



Largemouth bass



The cleanup of the Pine River, done over the past several years by the U.S. Environmental Protection Agency and the Michigan Department of Environmental Quality, has helped reduce the amount of pollution in fish. Concentrations of dichlorodiphenyltrichloroethane (DDT) in common carp, for example, have decreased approximately 98% in fish caught downstream of the old Velsicol Chemical facility.

This is good news for Pine River anglers, but the cleanup is not complete and fish continue to have some contamination. The Michigan Department of Community Health advises no consumption of fish from the stretch of river downstream of the Alma dam. One goal of the cleanup project is to make all the fish safe to eat without restriction. EPA is currently conducting sampling on other parts of the river to determine whether additional cleanup work is necessary.

Studies on Pine River fish show the cleanups are working. Health experts check contamination levels in smallmouth bass and common carp because of their places in the Pine River ecosystem. Smallmouth bass are a top level predator and a favored sport fish. Carp are bottom-feeders and come in contact with the mud at the bottom of the Pine River. These two fish have been collected from three areas downstream of the old chemical facility: the St. Louis Impoundment, the reach from near the high school athletic fields to McGregor Road and near the confluence with the Chippewa River. Smallmouth bass and carp also have been caught upstream near Alma.

The fish and where they were caught provide a good picture of the trends in DDT levels in fish from the Pine River. Those trends show lower DDT concentrations in the fillets of common carp at all locations downstream of the chemical plant. The biggest improvement appears to be in fish from the St. Louis Impoundment following the 2000 to 2006 cleanup.

Lower DDT levels can also be seen in the fillets of smallmouth bass. Again, the 2000 to 2006 cleanup and the ongoing work in the river appear to have had the most positive effect on fish from the St. Louis Impoundment.

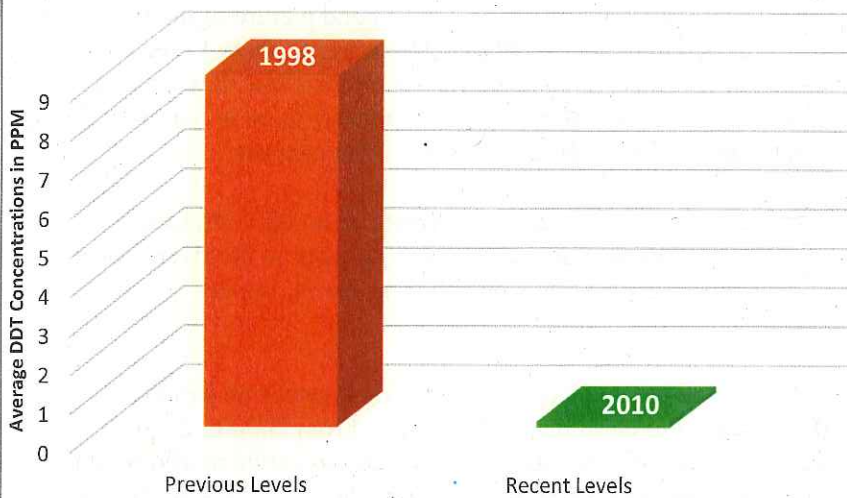
Since 1998, EPA and MDEQ have been working together on a multi-million-dollar project to clean up the Pine River. From 2000 to 2006, workers removed over 600,000 cubic yards of contaminated mud from the lower and middle basins of the St. Louis Impoundment. EPA and MDEQ have pumped and treated over 2.7 million gallons of contaminated water from the site to further protect the river, and they are still cleaning up contaminated groundwater.



The Pine River green bordered area indicates the sediment cleanup. Fish sampling took place along the entire river.

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(1998 - 2006 EPA Completes Sediment Clean-up)



Samples taken from smallmouth bass filets. On average DDT concentrations in smallmouth and carp have shown 98% reductions.

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