



U.S. Army Corps
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Get the FAQs: Fish Tracking Project in the Manistique River Area



What is this project all about?



During the summer of 2015, U.S. Army Corp of Engineers (USACE) will be tagging and tracking the movement of fish in the lower Manistique River.

By tracking these fish, these agencies hope to learn where the fish are most likely to come into contact with PCBs, a chemical that can affect human health when fish that contain these chemicals are eaten too often.

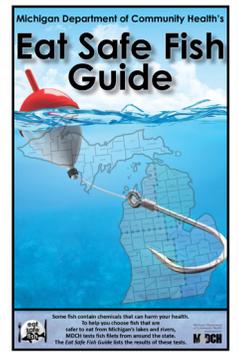
The PCBs get into the fish when the fish eat small creatures (called macroinvertebrates) that live in the contaminated sediment - which is the mud and muck found on the bottom of the river.

PCBs in Fish

These chemicals have been in the environment for a long time and are found in many places - not just the Manistique River area.

These chemicals will not cause tumors or deformities in fish. They will not change the flavor or the look of the meat of the fish. However, these chemicals can sometimes cause health problems in people who eat too many of the fish that contain this chemical.

The Michigan Department of Community Health (MDCH) tests the filets of fish from around the state, calculates how often they can be eaten safely, and publishes the results in the *Eat Safe Fish Guides*. All of the MDCH fish consumption guidelines are set to make sure you don't eat too many of these chemicals, too often. You can learn more about this at www.michigan.gov/eatsafefish or by calling 1-800-648-6942.



If PCBs are in many places, why is this area being studied?

The Manistique River area has been selected because it is a fairly small area to study. It is also a site where the location and amount of contaminated sediment is already well known. This makes it an easy place to try out some new scientific methods that could benefit other areas with similar problems in the future.

It is hoped that the information collected will help to more easily locate areas where fish are being contaminated, here and at other sites. This way, work can be targeted to take care of the most polluted sediments and limit the amount of chemicals that can get into the fish in the future.



Manistique River and Lake Michigan

How will this project affect use of the river and harbor for recreation?

This study will not affect boating or fishing areas. Receivers on poles will be placed in certain locations both in the river and bay, but they will be outside of navigational channels and fishing areas.

The study partners do request that people avoid the areas around the receiver poles, though. The equipment is sensitive and set in specific locations to ensure that the entire area is covered, so they don't miss the movement of the fish.

Climbing on the poles or tampering with the recording equipment could result in the loss of useful information for the study.

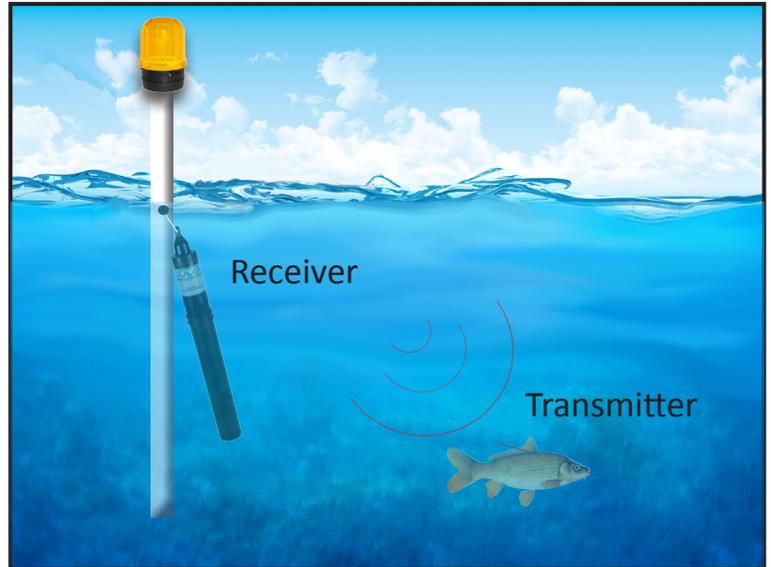
What will the study equipment do?

Receivers

The receivers listen for signals from the special tags that will be put into a small number of fish from the river. The equipment can only receive signals from the fish tags. They cannot receive any other type of radio or GPS transmission.

Transmitters (Fish Tags)

The fish tags transmit a signal that is picked up by the special receiver. As the fish move around the area, the information will be saved by the receiver and then reviewed by scientists to see where the fish are moving, when, and how long they are staying in certain areas.



How long will this project last?

In the summer of 2015, 25 carp will be tagged with a special transmitter and planted into the river. These fish will be tracked over the summer by receivers mounted on poles or other existing structures in the Manistique River and near the harbor mouth in Lake Michigan. At the end of the season, the fish will be collected again and tested at a laboratory to see what amount of PCBs they have in their body and in which areas they spent the most time.

How will this information be used?

The information will be used to help understand where the fish are feeding, living, and being exposed to PCBs. This information will also be compared with what is already known about the contaminated sediment in the area. This will help the scientists determine if tracking the fish is a good way to find chemical hot spots on the bottoms of lakes and rivers. This information can be used to target clean-up efforts to limit future chemical exposures to fish.

Questions about the project?

Please contact the U.S. Army Corp of Engineers:

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The other partners on this project are: the U.S. Environmental Protection Agency (EPA), Michigan Department of Environmental Quality (MDEQ), EA Science and Technology, and Lotek.