

What is an Aquatic Nuisance Species?

The Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 defines an Aquatic Nuisance Species (ANS) as a non-indigenous species that:

- threatens the diversity or abundance of native species; or
- threatens the ecological stability of infested waters; or
- threatens the commercial, agricultural, aquacultural or recreational activities dependent on such waters

Asian Carp

Bighead and silver carp are voracious eaters. They consume plankton, algae and other microscopic organisms, stripping the food web of key sources. An adult Asian carp is capable of eating almost half of its body weight each day. Juveniles can eat up to 120 percent of their body weight each day.

Asian carp can grow to large sizes: Adult bighead carp can weigh over 100 pounds, though the average size is around 40 pounds.

Silver carp, nicknamed the “jumping fish” or “flying carp,” may land in boats, damage property and injure people.

USACE is committed to preventing Asian carp from becoming established in the Great Lakes through a four-pronged strategy.

About the U.S. Army Corps of Engineers

The USACE mission is to provide vital public engineering services in peace and war to strengthen our nation's security, energize the economy and reduce risks from disasters. The Corps offers technical and construction support to more than 100 countries and maintains 926 coastal, Great Lakes and inland Harbors.

The Chicago District is responsible for water resources development in the Chicago metropolitan area, an area of about 5,000 square miles with a population of about nine million. The district is involved in a variety of projects stemming from flood-risk management, coastal storm damage reduction, navigation, ecosystem restoration, emergency management and interagency and international support.

For more information about the Chicago District, please visit www.lrc.usace.army.mil or call the public affairs office at 312-846-5330.

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Great Lakes and Mississippi River Interbasin Study:

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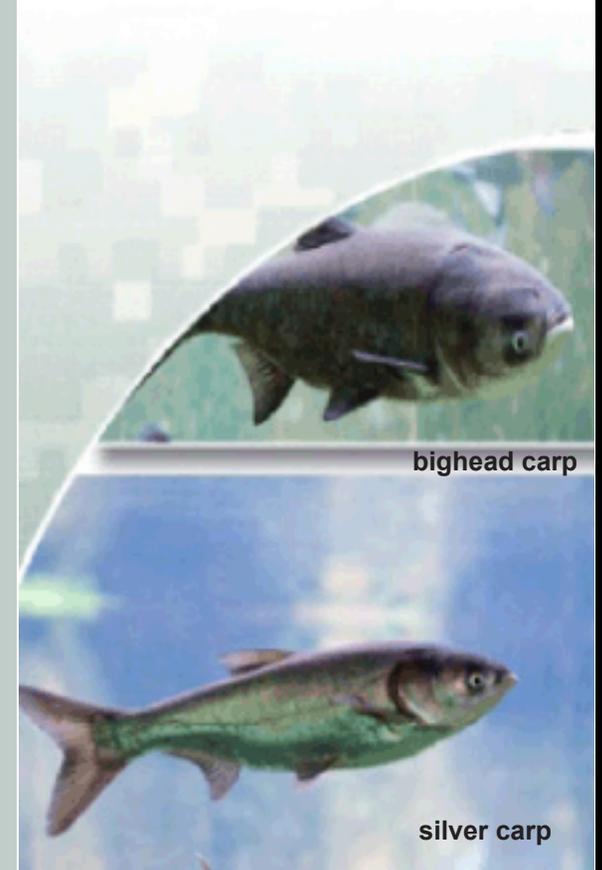


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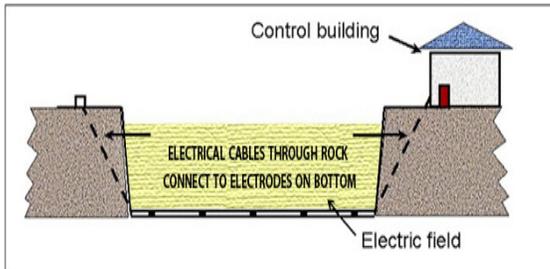
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The Electric Dispersal Barriers

The Electric Dispersal Barriers deter Asian carp and other aquatic nuisance species establishment in the Great Lakes via the Chicago Sanitary and Ship Canal (CSSC).

The barriers, located approximately 25 miles from Lake Michigan and within a 1,500-foot section of the CSSC, are formed of steel electrodes that are secured to the bottom of the CSSC. The electrodes are connected to a raceway, consisting of electrical connections to a control building. Equipment in the control building generates a DC pulse through the electrodes, creating an electric field in the water that discourages fish from crossing.



The Demonstration Barrier has been operational since 2002. Barrier IIA was placed into full-time operation in 2009, and Barrier IIB was placed into full-time operation in 2011. In 2013, USACE begins construction of permanent Barrier I, authorized by Congress as an upgrade of the Demonstration Barrier.

Efficacy Study

USACE is studying the effectiveness of the barriers through analyzing various technical, environmental and biological factors. The interim study reports are available on the Chicago District's ANS Portal at www.lrc.usace.army.mil/Missions/CivilWorksProjects/ANSPortal.aspx.

GLMRIS

In the Great Lakes and Mississippi River Interbasin Study (GLMRIS), USACE is evaluating a range of options and technologies, collectively known as "ANS controls," to prevent the transfer of aquatic nuisance species, including Asian carp, between the Great Lakes and Mississippi River basins by aquatic pathways. The study is organized into two focus areas. The Chicago Area Waterway System, Focus Area 1, represents the only continuous connections between the Great Lakes and Mississippi River basins. Focus Area 2 encompasses the 18 other potential connections along the 1,500 mile-long basin divide.



Specific Tasks of GLMRIS:

- Inventory current and forecast future conditions within the study area
- Identify aquatic pathways that may exist between the Great Lakes and Mississippi River basins
- Inventory current and future potential aquatic nuisance species
- Analyze possible ANS controls to prevent ANS transfer, to include hydrologic separation of the basins
- Analyze the impacts each ANS control may have on significant natural resources and existing and forecasted uses of the lakes and waterways within the study area
- Analyze mitigation measures for impacted waterway uses and significant natural resources
- Develop a report to provide Congress and other stakeholders with an analysis of potential ANS control alternatives.

Monitoring



USACE works with other agencies to monitor the CSSC to determine the location and abundance of Asian carp in the area, using traditional and non-traditional methods.

Monitoring consists of traditional netting, emitting an electric current from a boat and netting the stunned fish (electrofishing), extracting genetic material from water samples to identify the presence of Asian carp DNA in an area (eDNA), observing real-time fish behavior from an underwater acoustic camera (DIDSON) and tracking tagged fish through underwater stationary and mobile receivers (telemetry).

Asian Carp Regional Coordinating Committee

USACE is a member of the Asian Carp Regional Coordinating Committee (ACRCC), which is an interagency task force made up of federal, state and local agencies working together to prevent Asian carp from establishing populations in the Great Lakes.

For information on the ACRCC and to view the Control Strategy Framework, visit www.asiancarp.us.

