

Chicago Sanitary and Ship Canal – Electric Barriers

Asian Carp Monitoring Fact Sheet

Electrofishing

Overview:

Electrofishing is a monitoring tool that uses a pulsed direct current electric field, emitted from a boat mounted generator powered pulser to temporarily stun fish. The fish can then be collected via dip net to allow biologists the opportunity to identify species.

Electrofishing is used by the Asian Carp Regional Coordinating Committee's Monitoring and Response Work Group (ACRCC-MRWG), as part of their overall monitoring plan. Electrofishing is used as a monitoring tool to survey Asian carp and native fish presence/absence, abundance, and distribution downstream of the Electric Dispersal Barrier System (EDBS). The objective of the sampling is to determine the risk to and effectiveness of the barriers by both Bighead and Silver Carp and to assess impacts to the native fish communities where Asian carp are present. Electrofishing is also used in conjunction with other tools, such as nets, to increase catch efficiencies or clear fish from a particular area of concern. Electrofishing is also used above the EDBS in an interagency effort twice each year for the presence/absence of Asian carp.

The Chicago District Corps supports the ACRCC-MRWG below the barriers in the Lockport, Brandon Road and Dresden Island navigational pools, specifically in the Chicago Sanitary and Ship Canal, Illinois and Michigan Canal, Des Plaines River, and Kankakee River. The Chicago District also supports electrofishing monitoring upstream of the EDBS within the Chicago Area Waterways.

Electrofishing results in either a visual sighting or capture of an Asian carp, both of which are considered detections in the monitoring and response plan.

Scope:

USACE electrofishing efforts are focused on areas within the vicinity of the Lockport Lock and Dam and the EDBS ranging from River Mile (RM) 271.5 to RM 305. Surveys may occur as early as March and as late as December in support of multiple monitoring and response projects within the monitoring plan.

Additional electrofishing will be conducted throughout the Chicago Area Waterway System (CAWS) as directed in the monitoring plan or contingency response plan by the following state and federal governmental agencies: USACE (Chicago District), Illinois Dept. of Natural Resources, and U.S. Fish and Wildlife Service (La Crosse, WI; Columbia, MO; and Carterville, IL).

Results:

No Asian carp have been detected above the barriers to date using electrofishing. Periodic reporting of combined interagency electrofishing efforts are posted online at www.asiancarp.us.



Illinois River Bighead Carp (top) and Silver Carp (bottom)



Electrofishing below the Brandon Road Lock and Dam

Benefits to continued monitoring:

Electrofishing continues to be a key monitoring tool in determining fishery population abundance and composition within the CAWS and Illinois Waterway. Monitoring field data helps determine the nature of downstream populations, monitors for the presence of Asian carp above the barriers and inform analysis of the effectiveness of the barriers.

Authority:

The Water Resources Development Act of 2007, Section 3061, Chicago Sanitary and Ship Canal Dispersal Barriers Project, Illinois, authorized this project.

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