MONITORING AND RESPONSE WORK GROUP
MONTHLY ACTIVITY UPDATES
MAY 2025

MULTIPLE AGENCY MONITORING OF THE ILLINOIS RIVER

IL DNR/USFWS

May 2025 Highlights

The agencies did not submit an update.

CONTRACTED COMMERCIAL FISHING BELOW THE ELECTRIC DISPERSAL BARRIER

IDNR

Introduction

Contracted Commercial Fishing Below the EDBS uses contracted commercial fishers to reduce invasive carp abundance and monitor for changes in range in the Des Plaines River and upper Illinois River downstream of the EDBS. By decreasing invasive carp abundance, we anticipate reduced migration pressure towards the barrier, lessening the chances of invasive carp gaining access to upstream waters in the CAWS and Lake Michigan. Monitoring for upstream expansion of invasive carp should help identify changes in the leading edge, distribution, and relative abundance of invasive carp in the IWW. The "leading edge" is the furthest upstream location where multiple Bighead Carp or Silver Carp have been captured with conventional sampling gears during a single trip or where individuals of either species have been caught in repeated sampling trips to a specific site. Trends in catch data over time may also contribute to understanding invasive carp population abundance and movement between and among pools of the IWW.

Dresden Island	**May 2025**
Yards of Net	2,400
Bighead Carp	0
Grass Carp	1
Silver Carp	8
Invasive Carp Caught	9
Invasive Carp Dresden Above I55	0
Invasive Carp Dresden Below I55	9
Invasive Carp Rock Run	0
IC/1000 yards	3.75

Marseilles	**May 2025**
Yards of Net	6,500
Bighead Carp	26
Grass Carp	0
Silver Carp	476
Invasive Carp Caught	510

IC/1000 yards	78.5
Invasive Carp Pounds	7,347

Starved Rock	**May 2025**
Yards of net	16,400
Bighead Carp	8
Grass Carp	29
Silver Carp	3,434
Invasive Carp Caught	3,471
IC/1000 yards	211.7
Invasive Carp Pounds	22,499

SEASONAL INTENSIVE MONITORING IN THE CAWS

IL DNR

Introduction

The SIM is a planned intensive surveillance of the CAWS upstream of the EDBS, conducted twice annually. These events are planned for the spring season (weeks of May 12th and 19th) and the fall season (Weeks of September 29th and October 6th). The SIM deploys fixed and random site monitoring. This project includes standardized monitoring with pulsed-DC electrofishing gear and contracted commercial fishers. Along with maintaining the spatial coverage upstream of the EDBS, each SIM event will provide extra sampling focus on a unique location in the CAWS. SIM provides a spatially and temporally adequate assessment of the relative abundance and distribution of invasive carp in the CAWS upstream of the EDBS.

IDNR, INHS, USACE, USFWS, and contracted netters sampled the North Shore Channel, North and South Branches of the Chicago River, Chicago River, Chicago Sanitary and Ship Canal, Cal-Sag Channel, Little Calumet River, Calumet River, and Lake Calumet.

May 2025 Highlights

Overall:

- 0 Bighead Carp, 1 Grass Carp, and 0 Silver Carp were observed or collected

Commercial Seine:

- Contracted commercial fisher along with assisting agency biologists completed 4 800-yards commercial seines hauls (3,200 yards) in Lake Calumet

Commercial gill netting:

- Contracted fishers along with assisting agency biologists set 46.4 miles of gill net (408 sets) at fixed and random sites

Electrofishing:

- Agency biologists completed 70 hours (280 transects) of electrofishing as fixed and random sites.

BARRIER MAINTENANCE AND FISH SUPPRESSION

IL DNR, USACE

Introduction

U.S. Army Corps of Engineers (USACE) operates three electric dispersal barriers (Barrier 1, Barrier 2A, and Barrier 2B) for aquatic invasive species in the Chicago Sanitary and Ship Canal (CSSC), collectively referred to as the EDBS. USACE has operated electric barriers in the CSSC since 2002. Over the years, several operational and procedural improvements have been implemented to improve the effectiveness and continuously deliver an uninterrupted flow of electricity to the water to deter fish.

May 2025 Highlights

The barriers are currently operating at the following parameters (May 1, 2025) but are subject to change:

IIA – Limited Operations due to BNSF railroad crossing interference
IIB – Narrow (34 Hz, 2.3 ms, 2000 V = 2.3 V/in) & wide (34 Hz, 2.3 ms, 750 V= ~1.0 V/in) arrays operational
Barrier I – 1D (Full water - 5 Hz, 4 ms, 400 V = ~1.0 V/in & benthic 5 Hz, 4 ms, 100V)
1N- In Standby Mode
1S- (34 Hz, 2.3 ms, 1350 V = ~2.3 V/in) operational

There were no unscheduled outages that occurred in May of 2025.

Traditional Monitoring

During the month of May, there were a total of sixteen 15-minute fixed electrofishing sites completed in Lockport and Brandon Road Pools. In Lockport Pool, 112 individuals across 12 species were captured, with the five most abundant species being Gizzard Shad (>6 in), Largemouth Bass, Channel Catfish, Common Carp, and Bluntnose Minnow. In Brandon Road Pool, 201 individuals across 15 species were captured, with the five most abundant species being Emerald Shiner, Smallmouth Bass, Gizzard Shad (<6 in), Gizzard Shad (>6 in), and Common Carp. No live or dead invasive carp were observed or captured during the month of May during USACE monitoring efforts.

SUMMARY EVALUATION OF BIO-ACOUSTIC FISH FENCE DETERRENT

USFWS, USGS

Introduction

This project will test the effectiveness of a Bio-Acoustic Fish Fence (BAFF) at deterring Silver Carp and Grass Carp from crossing the BAFF and from crossing through the Barkley Lock on the Cumberland River, KY. This sound, bubble, and light deterrent is designed to have a greater effect on invasive carp than on native species. This deterrent could be part of a multi-deterrent approach to prevent movement through a lock chamber where the lock is the only option for fish to move upstream (e.g., Brandon Road Lock and Dam) or in combination with a yet to be developed deterrent that slows passage through dam gates during open river while the BAFF deters fish from passing via the lock chamber (e.g., Starved Rock Lock and Dam).

May 2025 Highlights

The agencies stated there was no update.

INVASIVE CARP ENHANCED CONTRACT FISHING REMOVAL PROGRAM

ILDNR

Introduction

In September 2019, the Enhanced Contract Fishing Program was initiated in the Peoria Pool of the Illinois River. In 2022, the area was expanded to include the LaGrange and Alton pools. The program offers Illinois-licensed commercial fishers $.10 per pound for invasive carp caught in any of these pools and sold to fish processors or other buyers for at least $.07 per pound. To date, a total of 68 fishers have entered into contracts to catch invasive carp from these pools, with 50 currently under contract. From inception through May 2025, 29,476,855 pounds of invasive carp have been caught among all three pools. Of these total catches, 2.77% are Bighead, 87.51% are Silver, and 9.72% are Grass carp. No Black Carp have been reported as these are reported through the Black Carp Bounty Program.

May 2025 Highlights

The table below summarizes the total pounds of invasive carp caught through enhanced contract fishing.

YEAR	Total Lbs.**	Bighead	Silver	Grass
2019 *	**518,132**	**24,813**	**310,297**	**183,022**
2020	**2,882,724**	**176,195**	**1,980,175**	**726,355**
2021	**3,345,973**	**209,526**	**2,517,416**	**619,031**
2022	**5,249,161**	**200,396**	**4,615,097**	**433,669**
2023	**8,410,107**	**95,532**	**8,024,643**	**289,932**
2024	**6,336,449**	**90,865**	**5,821,067**	**424,517**
2025 Part Year	**-**	**-**	**-**	-
January	87,108	0	72,025	15,083
February	479,791	0	415,750	64,041
March	657,157	2,228	606,351	48,578
April	684,091	7,809	632,634	43,648
May	826,165	9,338	800,906	15,921
2025 Part Year Subtotal	**2,734,311**	**19,375**	**2,527,665**	**187,271**
GRAND TOTALS	**29,476,855**	**797,325**	**23,268,695**	**2,676,525**

* September 2019 program inception.

** No Black carp reported.

USFWS ILLINOIS WATERWAY HYDROACOUSTICS

USFWS

Introduction

The purpose of USFWS hydroacoustic monitoring in the upper Illinois Waterway (IWW) is to enhance invasive carp management by reporting spatial and temporal patterns of fish abundance. Hydroacoustic data aids operation, maintenance, and response at the electric dispersal barrier system (EDBS). Density and distribution data enhance targeted harvesting efforts throughout navigational pools. Consistent hydroacoustic data collection allows managers to annually assess the risk of further upstream spread of invasive carp. Hydroacoustic estimates of length and depth of targets, along with corresponding telemetric data, allow managers to make inferences about possible fish species identified as targets. Targets detected across replicate surveys may identify the same target. USFWS hydroacoustic barrier surveys are conducted monthly, and pool scans are conducted annually in the fall. Additional barrier and pool scans can be conducted upon request. Further details regarding the methods of data collection and use of hydroacoustic data can be provided upon request.

May 2025 Highlights

The results of the mobile hydroacoustic fish surveys are presented below:

- Hydroacoustic barrier scan on May 5th, 2025, identified a total of 3 targets (1 target within the EDBS and 2 targets immediately downstream of the barrier). An average of 1 ± 1 target was detected during the three replicate surveys. The mean target length was 14.5 inches ± 1.4 inches.
- Figure 1 shows the average targets detected across all three replicate surveys.
- No hydroacoustic pool scans were completed in the month of May.

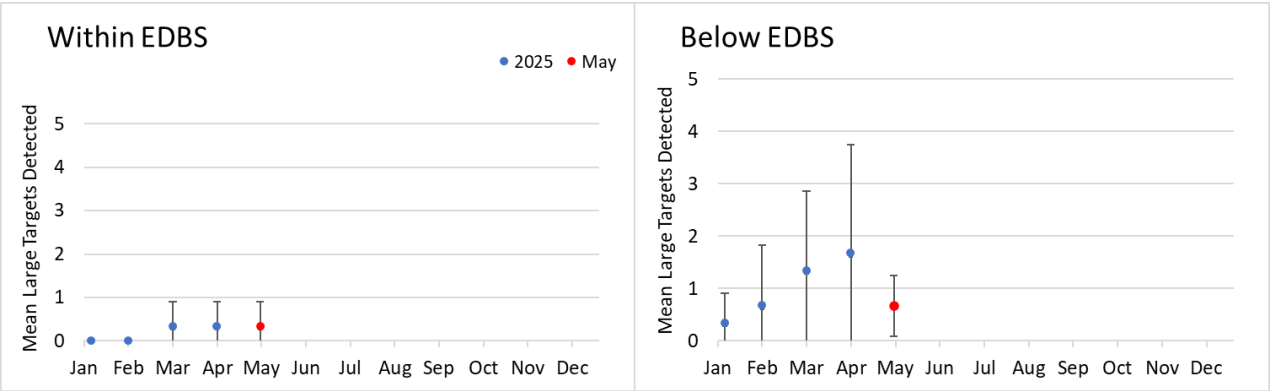

Figure 1. Comparison of the mean and standard deviation for three replicate surveys from the current mobile surveys with previous surveys from 2025.

SUPPORT FOR EARLY DETECTION OF INVASIVE CARP IN THE UPPER ILLINOIS WATERWAY

USFWS Wilmington

Introduction

The purpose of U.S. Fish and Wildlife Service (USFWS) Wilmington Substation's early detection monitoring (EDM) is to detect juvenile and adult invasive carp (Bighead, Silver, Black, and Grass Carp) at the invasion front. A combination of traditional boat electrofishing, electrified dozer trawling, mini-fyke netting, and gill netting are used in main-channel border, side-channel, and backwater habitats in the Marseilles, Dresden Island, Brandon Road, and Lockport Pools of the upper Illinois Waterway (IWW), and lower Kankakee River. Rarefaction analysis is performed annually to ensure an extremely high probability that sampling efforts are detecting any changes in invasive carp population status. The application of fishing gears across pools and habitats, utilizing fixed and random sites, is assessed annually based on the results of this analysis. The USFWS Great Lakes EDM Program is an adaptive management tool focused on invasive species detection.

May 2025 Highlights

- One hundred twenty-seven Silver Carp (604 mm – 998 mm TL [Total Length]) and 2 Grass Carp (1012 mm – 1112 mm TL) were captured in the Marseilles Pool during May 2025.
- One Silver Carp (912 mm TL) was captured in the Dresden Island Pool during May 2025.
- No small-bodied (< 153 mm TL) invasive carp were captured by EDM in May 2025.
- No large-bodied (≥ 153 mm TL) invasive carp were captured outside their known range by EDM in May 2025.

Table one summarizes the USFWS invasive carp EDM from May 2025 for each pool monitored under the project.

Table 1. Summary of USFWS EDM effort during May 2025.

-	Marseilles	Dresden Island	Kankakee	Brandon Road	Lockport
Electrofishing Effort (hours)	5.04	3.75	3.75	2.5	2.25
Electrofishing Sites	20	15	15	10	9
Dozer Trawl Effort (hours)	0.92	0.93	1.25	0	0
Dozer Trawl Sites	11	11	15	0	0
Mini-fyke Effort (net nights)	19.41	0	14.10	0	0
Gill Net Effort (yards)	0	0	0	0	0
Gill Net Sites	0	0	0	0	0
Small Carp Captured	0	0	0	0	0
Large Carp Captured	129	1	0	0	0
Species Richness	54	28	45	9	8
Total Catch	1343	449	1120	38	46
Most Abundant Species	Emerald Shiner	Emerald Shiner	Spotfin Shiner	Smallmouth Bass	Gizzard Shad

MONITORING INVASIVE CARP REPRODUCTION IN THE ILLINOIS WATERWAY

INHS

Introduction

This project monitors for invasive carp reproduction in the IWW and major tributaries (Kankakee, Fox, Vermilion, Mackinaw, Spoon, and Sangamon rivers). Ichthyoplankton sampling will be conducted to assess the extent, timing, and magnitude of invasive carp reproduction in the IWW, monitor for Black Carp reproduction, and quantify relationships between invasive carp adult abundance, reproductive output, and recruitment. Samples will be collected from late April through October, with more frequent sampling effort during periods when temperature and flow conditions are considered optimal for invasive carp spawning.

May 2025 Highlights

INHS conducted monitoring for invasive carp reproduction from the Brandon Road to Alton pools during every week of May. Water temperatures in the Illinois River rose to over 22°C by mid-May. Low numbers of large-diameter eggs were collected in the LaGrange and Alton Pools during the second week of May. A cold front during the third week of May resulted in water temperatures declining sharply. Widespread rainfall during this week resulted in a modest rise in water levels in the lower Illinois River and in tributaries, but water temperatures falling below 18°C across the majority of the IWW appears to have restricted invasive carp spawning activity. Large-diameter eggs were only observed in the Alton Pool at this time, where water temperatures remained above 18°C. Sample processing and identification of fish eggs and larvae is ongoing. Monitoring for invasive carp reproduction will occur weekly until mid-July and bi-weekly thereafter, except when river conditions warrant more frequent sampling. Occurrences of invasive carp eggs or larvae, particularly upstream of the Starved Rock Lock and Dam, will be reported as soon as this information is available.

DES PLAINES RIVER AND OVERFLOW MONITORING

USFWS

May 2025 Highlights

The agencies did not submit an update.

SUMMARY OF THE TELEMETRY SUPPORT FOR THE SEICARP MODEL

USFWS

Introduction

This project provides support for the inter-agency telemetry array deployed in the Illinois River basin. The 2025 plan of work for USFWS includes placing 150 acoustic transmitters in Silver Carp and Bighead Carp across the Peoria, Starved Rock, and Marseilles Pools. Fifty of these tags will be deployed in bigheaded carps in Marseilles Pool to support detection efforts by agency partners outside USFWS. USFWS maintained 18 receivers across the Peoria and Starved Rock Pools in 2024. In 2025, two additional receivers will be added to Starved Rock Pool. The data gained from the additional tagged fish and additional receivers will improve the accuracy of MRWG modeling work, allowing improved estimates of current levels of exploitation and bolstering estimates of large-scale pool-to-pool movement.

May 2025 Highlights

Agency stated there were no updates for May 2025.

TELEMETRY MONITORING PLAN

USACE

May 2025 Highlights

The agencies did not submit an update.

ALTERNATE PATHWAY SURVEILLANCE IN ILLINOIS – LAW ENFORCEMENT

IL DNR

Introduction

This project provides enforcement of laws enacted to prevent the expansion and/or introduction of AIS within the waters of the State of Illinois and jurisdictions throughout the Great Lakes basin. The IL DNR Invasive Species Unit (ISU) specializes in more closely regulating water-related industries that are likely to be a source of future introductions or expansion of AIS into state waters. Industries include sport and commercial fishing, aquaculture, fish transportation, bait, pet, aquarium, fish stocking, and live food markets.

May 2025 Highlights

ISU cited the owners of three separate aquarium/pond supply companies for illegally selling and shipping live aquatic invasive plant species into Illinois. The businesses received IDNR aquatic invasive species regulations in 2024. Many outbreaks of aquatic invasive species are linked to the aquarium trade. The aquatic plant species targeted in the enforcement initiative are on the Great Lakes St. Lawrence Governors and Premiers' Least Wanted Aquatic Invasive Species List. Brazilian elodea and Parrot feather were the two products sold despite website claims the products wouldn't be sold or shipped to prohibited states.

INVASIVE CARP POPULATION MODELING TO SUPPORT AN ADAPTIVE MANAGEMENT FRAMEWORK

USGS, USFWS

Introduction

This project will develop objective, data-driven models to inform decisions concerning invasive carp control efforts in the Illinois River. This project supports ongoing modeling efforts to provide recommendations about the magnitude and spatial allocation of fishing effort and deterrent barriers to reduce the risk of Silver Carp and Bighead Carp introduction and establishment in the Great Lakes.

May 2025 Highlights

The modeling work group has received feedback from all coauthors for the manuscript describing the expansion of the SEICarP model to include Pool 26 of the Mississippi River and intend to begin the USGS review process. In addition, the modeling work group completed an update of the length-based Bayesian (LBB) model used to estimate the ratio of fishing to natural mortality for the Upper Illinois River and is examining the use of a length-based spawning potential ratio (LBSPR) to determine if results suggest similar patterns in the trajectory of the Upper Illinois River invasive carp population.

INVASIVE CARP STOCK ASSESSMENT IN THE ILLINOIS RIVER

IL DNR

May 2025 Highlights

The agencies did not submit an update.

BLACK CARP BOUNTY PROGRAM

ILDNR

Introduction

In 2015, the Black Carp Bounty Program was created to increase the number of black carp specimens made available for research to provide improved information on the status and characteristics of these carp in the Mississippi River and its tributaries. Knowledge of black carp geographic distribution, population characteristics, and diet are needed to inform development of management strategies to control black carp abundance, impacts, and further range expansion.

Nearly all black carp detected in the Mississippi River and tributaries are caught and reported by commercial fishers, largely due to the difficulty in sampling black carp in large rivers and limited agency and university sampling efforts focused on this species. The Black Carp Bounty Program was created to provide a reward of $100 per fish to provide incentive for commercial fishers to target black carp in the wild, report any black carp that they catch to agency biologists, and donate the fish for black carp research.

May 2025 Highlights

The table below summarizes the total number of Black carps caught since transition of the program from Southern Illinois University to IDNR to Tetra Tech.

Month	# of Fish
2023 *	11
2024	116
2025 Part Year	
January	10
February	6
March	4
April	9
May	20
2025 Subtotal	49
GRAND TOTALS	176

* Records start July 1, 2023.