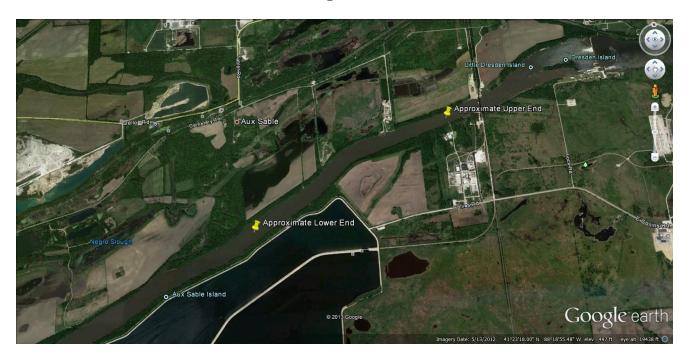
May Summary

Bottom Line: Monitoring occurred in the CAWS and upper Illinois Waterway upstream and downstream of the Dispersal Barrier. NO BIGHEAD OR SILVER CARP were reported captured or observed upstream of the Barrier, nor were any found in new locations downstream of the Barrier.

On May 22 IDNR Asian Carp Crew members Blake Ruebush and John Ziegler observed silver carp spawning activity on the Marseilles Pool downstream of the Dresden Island Lock and Dam (see attached map and photo). After this initial sighting crews from SIU and INHS responded immediately to the sighting area capturing data from this event. SIU crews preformed hydroacoustic scans in the immediate area, while INHS crews responded by pulling ichthyoplankton tows in the spawning area and downstream. Also IDNR crews preformed visual reconnaissance surveys in the Dresden Island Pool downstream of Brandon Road Lock and Dam. No spawning was observed in the Dresden Island Pool. Crews will maintain elevated research and observations in the Marseilles Pool collecting data from this event.





Fixed and Random Site Sampling Upstream of the Dispersal Barrier

Site 1: Lake Calumet

Site 2: Little Calumet River

Site 3: Chicago Sanitary and Ship Canal near Western Ave. and South Branch Chicago River

Site 4: North Branch Chicago River and

North Shore Channel

Site 5: North Shore Channel

Area 1: Lake Calumet Connecting Channel and Calumet River above O'Brien Lock

Area 2: Calumet-Sag Channel

Area 3: Chicago Sanitary and Ship Canal, Western Ave. to Dispersal Barrier

Area 4: North Shore Channel, North Branch Chicago River and Chicago River

One crew from the USFWS completed 30 15-minute electrofishing runs at five fixed sites (7.5 hours total) and 16 15-minutes runs at randomly selected locations in the four random site areas upstream of the Dispersal Barrier (4 hours total) during the week of April 30 – May 2. This was to complete the fixed and random electrofishing originally scheduled earlier in April that had been postponed due to unsuitable conditions. Additionally, one crew from the USFWS completed 30 15-minute electrofishing runs at five fixed sites (7.5 hours total) and 16 15-minutes runs at randomly selected locations in the four random site areas upstream of the Dispersal Barrier (4 hours total) during the week of May 21 – May 23.

Two contracted commercial fishing crews and assisting IDNR biologists set 3.1 miles of net (27 sets) at the five fixed sites and 2.3 miles of net (20 sets) at random sites upstream of the Barrier during the week of April 30 – May 1. Two contracted commercial fishing crews and assisting IDNR biologists set 3.1 miles of net (27 sets) at the five fixed sites and 2.2 miles of net (19 sets) at random sites upstream of the Barrier during the week of May 14 – May 15. Two contracted commercial fishing crews and assisting IDNR biologists set 3.1 miles of net (27 sets) at the five fixed sites and 2.2 miles of net (19 sets) at random sites upstream of the Barrier during the week of May 28

 May 29. No Bighead or Silver Carp were reported captured or seen above the Barrier

Fixed and Random Site Sampling Downstream of the Dispersal Barrier

Site A: Lockport Pool – Lockport Lock and Dam to Electric Barrier

Site B: Brandon Road Pool – Brandon Road Lock and Dam to Lockport Lock and Dam

Site C: Dresden Island Pool – I-55 Bridge to Brandon Road Lock and Dam **Site D:** Marseilles Pool – Rt. 47 Bridge (Morris) to Dresden Lock and Dam

Crews from IDNR, USFWS, and USACE completed 48 15-minute electrofishing runs at fixed locations (12 hours total) and 48 15-minute runs at randomly selected locations (12 hours total) in the Lockport, Brandon Road, Dresden Island, and Marseilles pools downstream of the Barrier. No Bighead Carp were reported captured or seen in the Lockport, Brandon Road, or Dresden Island pools. During fixed site electrofishing,

16 silver carp were captured in the Marseilles pool during the month of May. No bighead carp were captured in the Marseilles pool while electrofishing.

Two contracted commercial fishing crews and assisting IDNR biologists set 5.45 miles of net (48 sets) at the four fixed sites and 5.91 miles of net (52 sets) at random sites within the four pools downstream of the barrier. One bighead carp was captured in the Dresden Island pool during the week of April 29 at a random site. No bighead or silver carp were captured during the week of May 13. One bighead carp was captured at a fixed site in the Dresden Island pool and one silver carp was captured at a fixed site in the Marseilles pool during the week of May 28.

Crews from IDNR set and pulled hoop nets (6' diameter) in Lockport, Brandon Road, Dresden Island, and Marseilles pools downstream of the barrier during the weeks of April 29 and May 20. Hoop nets were fished for two net nights, totaling to 16 net nights per pool during the month of May (64 total net nights). No bighead or silver carp were captured in hoop nets in the Lockport or Brandon Road pools. During the week of April 29, two bighead carp and 26 silver carp were captured in one hoop net in the Marseilles pool. During the week of May 20, one bighead carp and one silver carp were captured in a hoop net near Treats Island in the Dresden Island pool.

IDNR crews set and pulled minnow fyke nets in Lockport, Brandon Road, Dresden Island, and Marseilles pools downstream of the barrier during the weeks of April 29 and May 20. Minnow fyke nets were fished for one net night, totaling to 8 net nights per pool during the month of May (32 total net nights). No bighead or silver carp were captured in minnow fyke nets.

Rock Run Rookery Preserve Lake

Contracted commercial fishing crews were allowed to fish the Rock Run Rookery Preserve Lake in Will County by the Will County Forest Preserve. The 84 acre lake is located on the west side of the Illinois River and just North of Interstate 55. The lake is connected to the river with a shallow ditch. In the month of May contracted fisherman netted three days showing a general decline catches. Below is a quick summary of activities in the Preserve Lake since sampling was initiated in the lake.

QUICK SUMMARY:		
Number of Days Fished	9	days
Number of Net Crews	25	crew-days
Miles of Nets Fished	20.0	Miles
Number of Bighead Carp	706	Fish
Number of Silver Carp	60	Fish
Number of Grass Carp	3	Fish
Number of Asian Carp (AC)	769	Fish
Tons of AC Harvested	7.2	Tons
CPUE: Number of Asian Carp/ 1,000 yards net	22	Fish

Barrier Defense

Barrier defense was conducted the weeks of the 6th and 20th during the month of May. The 2013 Barrier Defense commercial fishing resumed the Week of March 11. Seventeen barrier defense weeks have been schedule for 2013. Below is a quick summary of the activities for 2013.

QUICK SUMMARY:		
Number of Days Fished	20	days
Number of Net Crews	100	crew-days
Miles of Nets Fished	98.6	Miles
Number of Bighead Carp	4597	Fish
Number of Silver Carp	11270	Fish
Number of Grass Carp	87	Fish
Number of Asian Carp (AC)	15954	Fish
Tons of AC Harvested	93.4	Tons
CPUE: Number of Asian Carp/ 1,000 yards net	92	Fish

Fish Behavior Study at the Barrier

May 7th USFWS-Carterville performed SONAR scans of the dispersal barrier before and after the temporary outage caused by monthly backup generator testing. On May 20th USFWS-Carterville performed SONAR scans of the barrier before and after the primary operating barriers were switched from Barrier IIB to IIA.

USACE completed 5 electrofishing runs between the barriers from the Demonstration barrier to Barrier IIB during the month of May. Each trip resulted in numerous fishes less than 4 inches captured within crevices along the canal walls. A total of 26 common carp larger than 12 inches total length were also removed from between the barriers. It is assumed that these fish entered from the upstream direction and passed over the demonstration barrier. Many of these fish were captured during or immediately after a drawdown event resulting in peak flows over 3 ft/sec.

Telemetry Monitoring Project

During the week of 6 May, 2013, crews from SIUC collected discharge measurements with the acoustic doppler current profiler (ADCP) near Sheehan Island in the Starved Rock pool and near Morris in the Marseilles pool. These crews also worked with IL DNR and state-contracted commercial fishermen to jaw tag Asian carp in the Materials Services pits (92 bighead carp, 36 hybrid Asian carp, and 148 silver carp) and Sheehan Island (43 bighead carp, 9 hybrid Asian carp, and 211 silver carp). Crews implanted transmitters into 38 Asian carp collected in the Rock Creek Rookery. Twenty-eight of those fish were transported and released at the confluence of the Kankakee and Des Plains Rivers. Also during this week, Dr. David Glover assisted the USFWS with remote sensing surveys at the electric barrier.

During the weeks of 13 May, 20 May, and 27 May, 2013, crews from SIUC continued hydroacoustic target strength work with assistance from the USFWS. Collection of fish occurred from the Big Muddy River, Crab Orchard National Wildlife Refuge, and Horseshoe Lake. To date, target strength measurements and air bladder volumetric data have been collected from 411 fish, including silver, bighead, common, and grass carp, as well as smallmouth and bigmouth buffalo.

On May 23 and 24, Dr. David Glover and Marybeth Brey conducted a remote sensing survey with hydroacoustic and side-scan sonar equipment in the Marseilles pool to help document the spawning of Asian carp. They also conducted some telemetry tracking of acoustically tagged Asian carp using a Vemco VR100 hydrophone, relocating five acoustically tagged fish in the Materials Services pits.

USACE completed mobile tracking from the Worth boat ram on the Cal-Sag Channel downstream to the Marseilles Lock from 22 through 28 May. VR2W receivers were downloaded system wide as well and data is still being analyzed. No detections were made upstream of the barriers. Mobile tracking indicated tagged Asian carp to have traveled into the upper Marseilles and Dresden Island pools which corresponded to reports of spawning in that same time frame. Additionally, tagged Asian carp have been detected moving back into the Rock Run Rookery from their release point

downstream at Big Basin Marina. Further details will follow once a full analysis of the data is complete.

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Gear Comparison and Larval fish and Productivity Sampling

INHS staff was able to complete gear comparison work on the two CAWS sites (Western and Obrien) the week of April 29-May 3. Several species were caught in these locations; however no Asian carp were captured or observed. Larval fish and productivity sampling was completed April 29-May 3, May 13-17, and May 29-June 5. May 24th supplemental sampling took place in the Brandon Road, Marseilles and Starved Rock Pools in response to IDNR's observations of spawning silver carp. Larval fish and eggs were collected in the Dresden Pool, Brandon Road Pool, and the CAWS. Picking/counting of samples is currently underway. Larval fish and eggs have not yet been identified to species.

Ontario Ministry of Natural Resources - Asian Carp Surveillance Program

Great Lakes Surveillance

- The Lake Erie Management Unit's regular sampling programs are under way including
 - A full Port Officer presence in the commercial fishery
 - Commercial catch sampling program
 - In late April-early May, LEMU trawled in the Central and West Basins of Lake Erie for yellow perch.
 - April-early May tagging of walleye caught by electrofishing in the Sydenham River, a tributary to Lake St. Clair.
 - No Asian Carp have been detected through these activities to date.
- MNR began eDNA surveillance in mid-May in 6 tributaries to Lake St. Clair and the Detroit River (total 33 samples). Sites target suitable habitats in tributaries identified in the DFO Ecological Risk Assessment on Bigheaded Carps. Analysis of the samples is pending.
- MNR's surveillance activities are being conducted in coordination with the DFO.

Alternate Pathway Surveillance in Illinois - Law Enforcement

• May - Continuing surveillance and active investigations.