

Telemetry Workgroup of the MRWG



WESTERN
ILLINOIS
UNIVERSITY



Goals of the Telemetry Work Group

- Support modeling of management alternatives
- Conduct Electrical Dispersal Barrier evaluation
- Inform removal and contingency actions

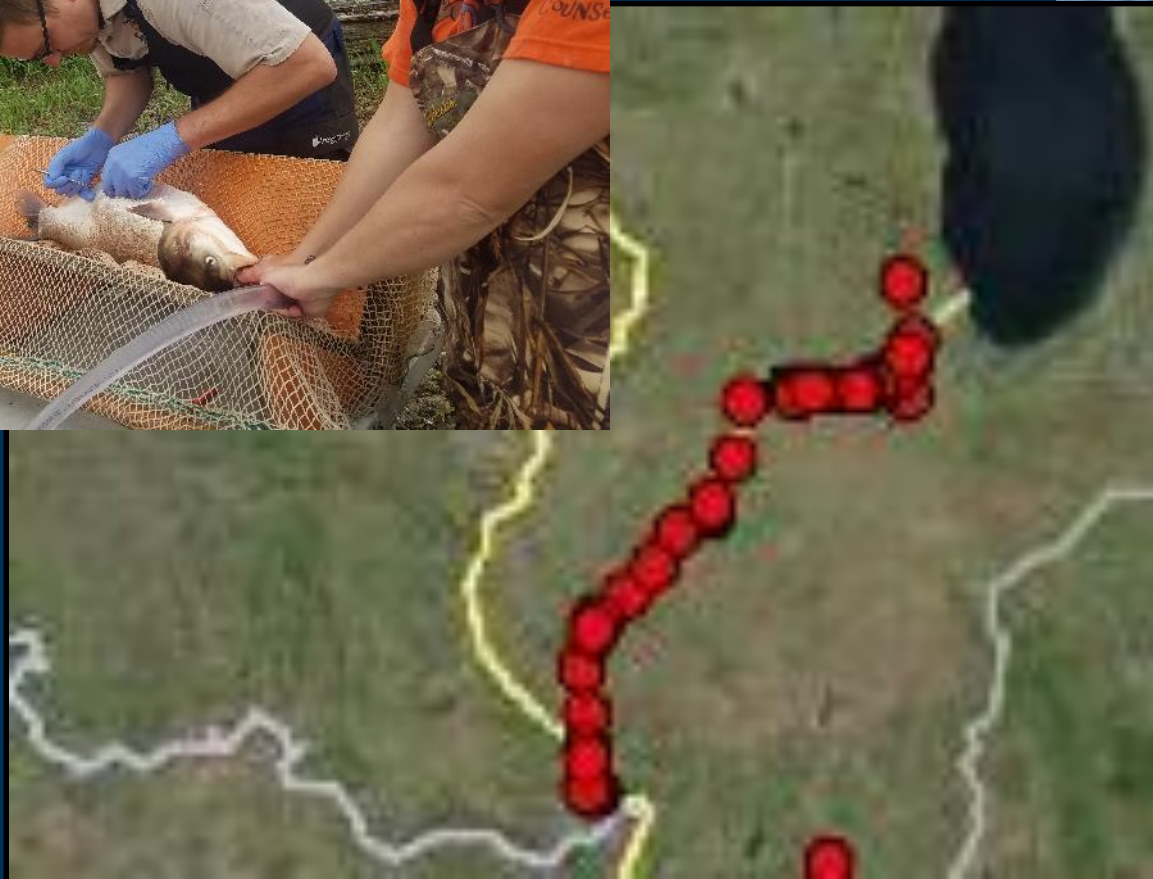


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Support modeling



Telemetry Database (Fishtracks)

The image shows a screenshot of the USGS Fishtracks web application. The main window is titled 'Upload Receiver Files' and contains a file upload section with a 'Choose Files' button and a 'No file chosen' status. Below this is a 'Notes' section with a text input field and a 'Submit' button. The background is a satellite map of the Great Lakes region with red dots indicating receiver locations. A sidebar on the left shows 'Equipment' options like 'Stations', 'Gauges', and 'Realtime Receivers'. The USGS logo and 'Fishtracks' title are visible at the top of the interface.

Data submission tool

*Interactive map of stationary and real-time receivers**

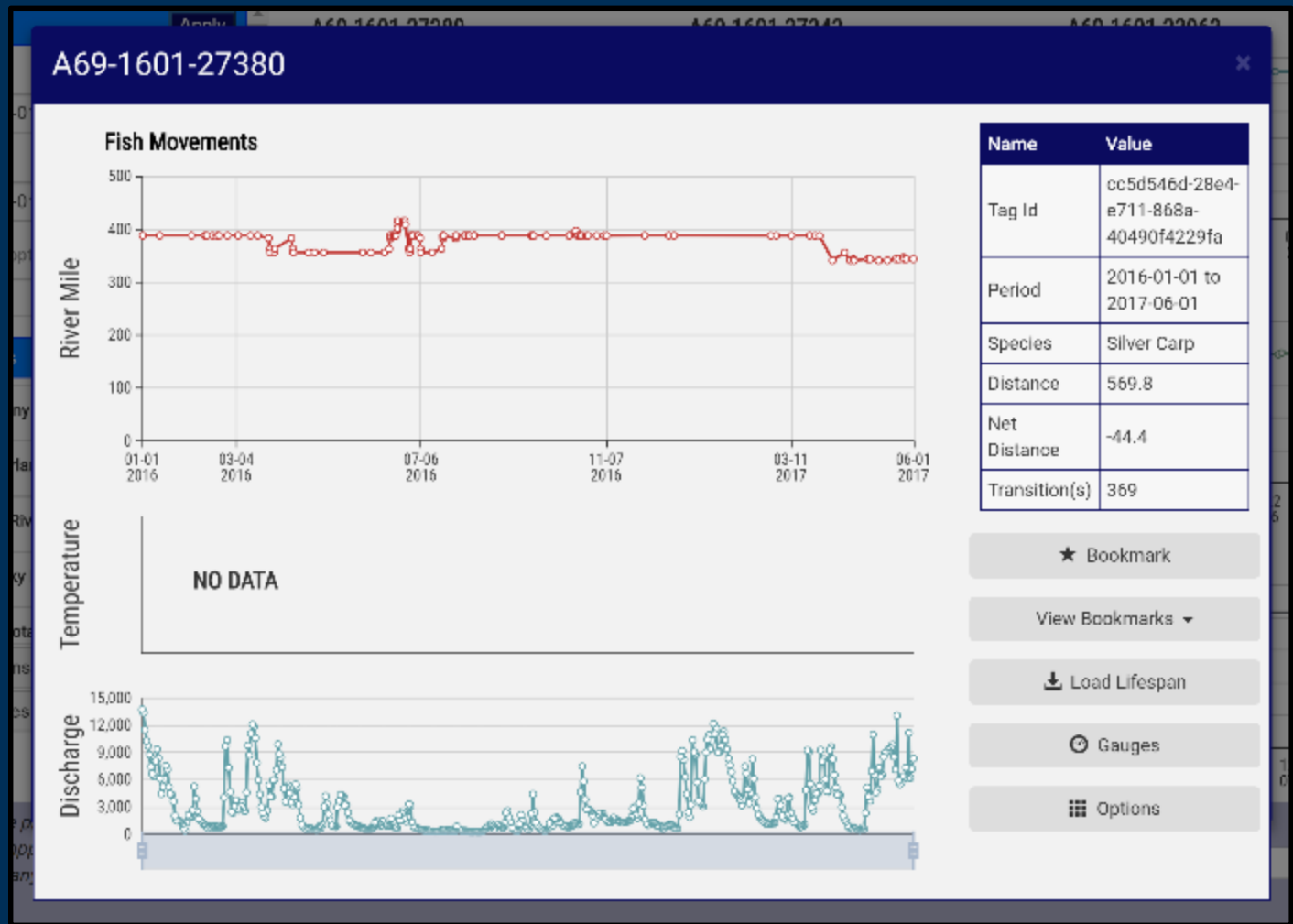
Telemetry Database (Fishtracks)

Filters	Station	Contact Date	Latitude	Longitude	Rivermile	River Name	Pool
Start Date <input type="text" value="2018-06-01"/>	OHIO RIVER AT WATER TOWER AT LOUISVILLE, KY	6/5/2018 6:34:33 AM	38.28109999	-82.70222	601	Ohio River	McAlpine
End Date <input type="text" value="2018-08-22"/>	OHIO RIVER AT WATER TOWER AT LOUISVILLE, KY	6/5/2018 6:36:18 AM	38.28109999	-82.70222	601	Ohio River	McAlpine
Tag Code (optional) <input type="text" value="7"/>	OHIO RIVER AT WATER TOWER AT LOUISVILLE, KY	6/5/2018 6:41:13 AM	38.28109999	-82.70222	601	Ohio River	McAlpine
Rivers <input checked="" type="checkbox"/> Allegheny River <input checked="" type="checkbox"/> Cumberland River <input checked="" type="checkbox"/> Illinois River <input checked="" type="checkbox"/> Kentucky River <input checked="" type="checkbox"/> Minnesota River	OHIO RIVER AT WATER TOWER AT LOUISVILLE, KY	6/5/2018 6:46:32 AM	38.28109999	-82.70222	601	Ohio River	McAlpine
<input checked="" type="checkbox"/> Stations <input checked="" type="checkbox"/> Species	OHIO RIVER AT WATER TOWER AT LOUISVILLE, KY	6/5/2018 6:51:37 AM	38.28109999	-82.70222	601	Ohio River	McAlpine
	OHIO RIVER AT WATER TOWER AT LOUISVILLE, KY	6/5/2018 6:56:20 AM	38.28109999	-82.70222	601	Ohio River	McAlpine
	OHIO RIVER AT WATER TOWER AT LOUISVILLE, KY	6/5/2018 7:01:22 AM	38.28109999	-82.70222	601	Ohio River	McAlpine

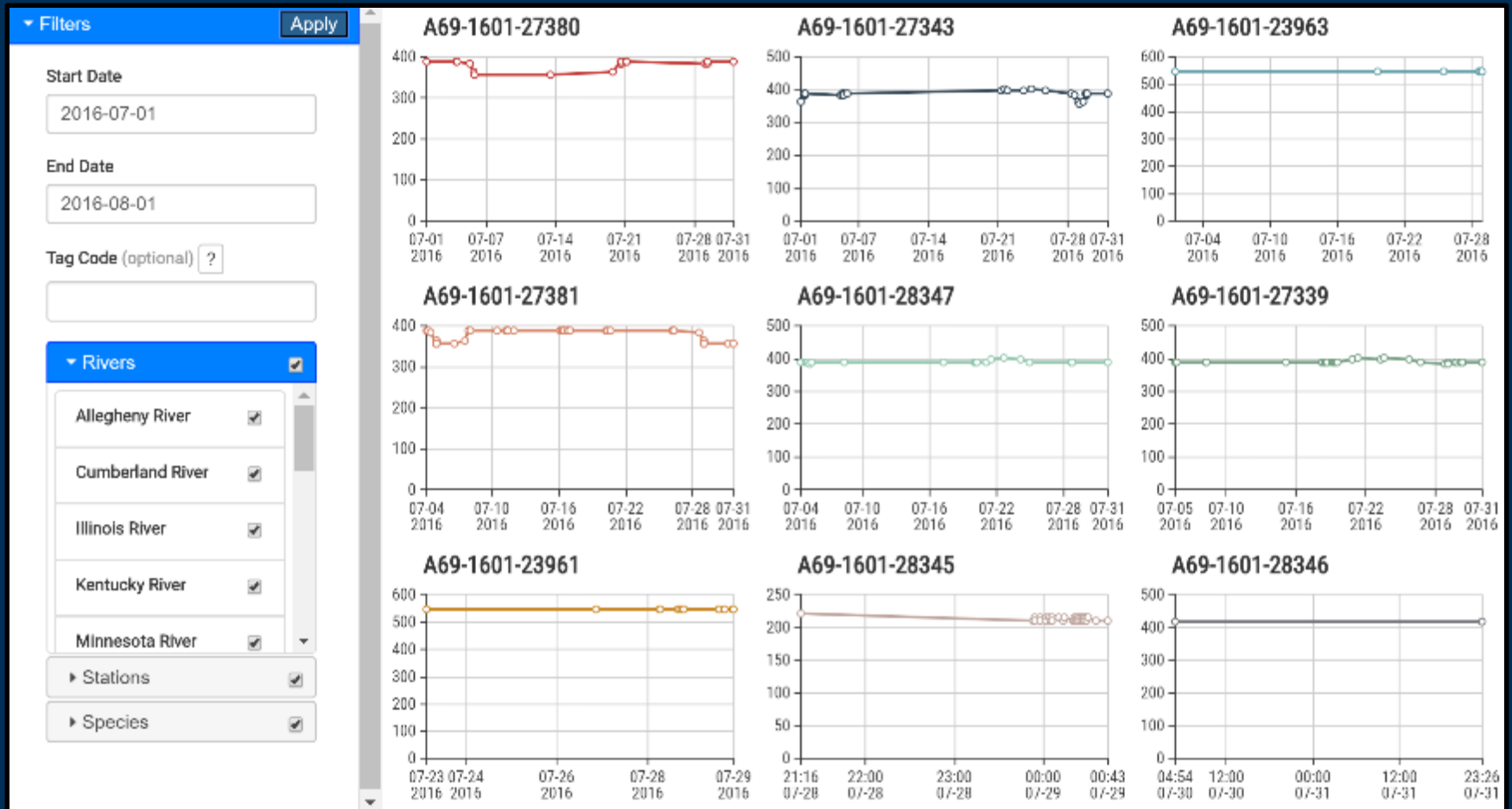
Queried records

Telemetry Database (Fishtracks)

Profiler
Tool



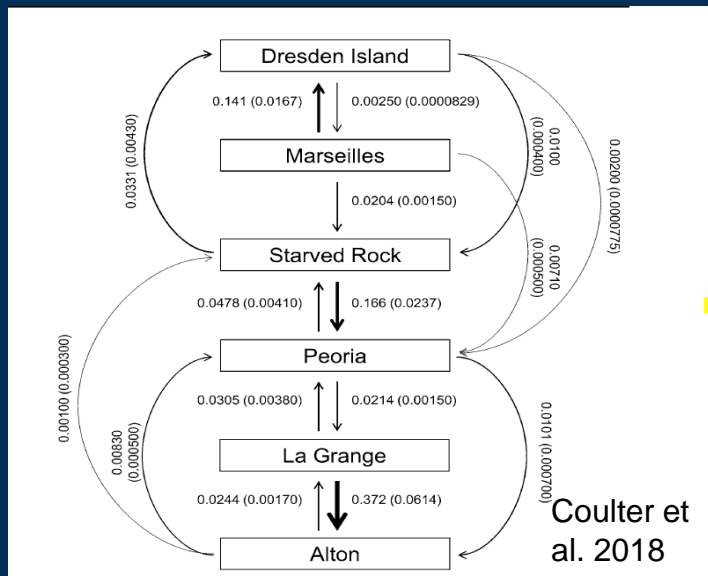
Telemetry Database (Fishtracks)



Billboard view of queried results (multiple contact records)

Support modeling

- Model emigration and immigration



SEACarP
to compare
alternatives

Pool transitions

Population model

Other SEACarP support projects

- Telemetry of small fish (USFWS)
- Improvement of the transition model (USGS)



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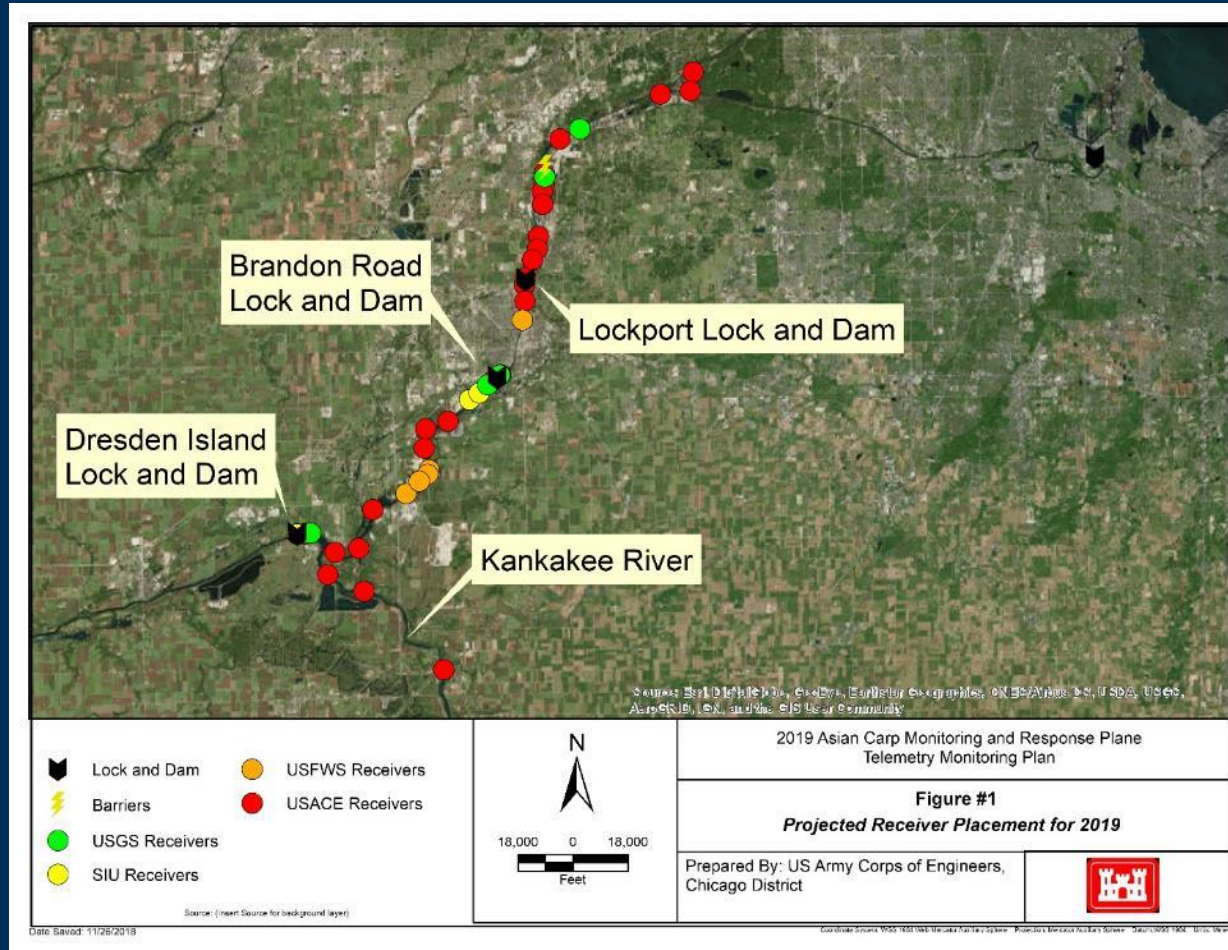
Barrier Evaluation Project Goals

- **Goal 1: Monitor the Electric Dispersal Barrier System for upstream passage of large fishes and assess risk of Bighead and Silver Carp presence (Barrier Efficacy)**
- **Goal 2: Identify lock operations and vessel characteristics that may contribute to the passage of Bighead and Silver Carp and surrogate species through navigation locks in the Upper IWW**
- **Goal 3: Evaluate temporal and spatial patterns of habitat use at the leading edge of the Bighead and Silver Carp invasion front**

Acoustic tagging targets

Release Pool/Location	Species	Spring Supplement tags	Fall Supplement tags	Total estimated tag distribution
Upper Lockport/RM300	Common Carp	0	0	0
Lower Lockport/RM292.7	Common Carp	18	18	75
Brandon Road/RM286.5	Common Carp	16	15	50
Dresden Island/RM276	Bighead and Silver	33	0	75
Total	-	67	33	200

Receiver locations



Support of the Barrier Evaluation Project

- Surrogate fish study



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Inform removal and contingency actions

- Develop satellite telemetry
- Lateral movement
- Real-time telemetry



Channel and backwater real-time stations

Backwater station



Range testing real-time receivers

Very High Power Tag



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