



WELCOME

Asian Carp Management and Control in the Ohio River and Upper Mississippi River Basins



In coordination with

Representative Mike Kelly (PA-3rd)
Representative Rick Nolan (MN-8th)





Today's Speakers

- Mr. Greg Conover
 - U.S. Fish and Wildlife Service, MICRA Coordinator
 - Intro on Asian Carp Management and Control in the Mississippi River Basin
- Mr. Nick Frohnauer
 - Minnesota Department of Natural Resources
 - Upper Mississippi River Invasive Carp Partnership
- Mr. Ron Brooks
 - Kentucky Department of Fish and Wildlife Resources
 - Ohio River Basin Asian Carp Partnership
- Mr. Aaron Woldt
 - U.S. Fish and Wildlife Service, Deputy ARD Fisheries, Midwest Region
 - Asian carp deterrent efforts in the Ohio River and Upper Mississippi River
- Mr. Bill Taylor
 - Fishing League Worldwide, Senior Director of Tournament Operations
 - Asian carp impacts on recreational fishing tournaments and associated economies



Asian Carp Management and Control in the Mississippi River Basin

Greg Conover
U.S. Fish and Wildlife Service
MICRA Coordinator



'Management and Control Plan for Bighead, Black, Grass, and Silver Carps in the United States'

National Approach

- National Plan developed in 2007
 - > 70 state, federal, industry, academic, and non-governmental partners
- Established 7 common goals
 - 131 recommended strategies/actions
- Foundation for geographically focused, sub-basin Asian carp control strategy frameworks
 - Strategic detection, prevention, and control actions in support of national plan



Asian Carp Regional Coordinating Committee



- Ohio River Fisheries Management Team
- Upper Mississippi River Conservation Committee
- Mississippi Interstate Cooperative Resource Association

Asian Carp Management Outside the Great Lakes

WRRDA and Asian Carp Prevention (PL 113-121, June 2014)

- Direction from Congress to the U.S. Fish and Wildlife Service on Asian carp prevention and control in Upper Mississippi River (UMRB) and Ohio River (ORB) basins
 - Submit annual report to Congress on AC prevention and expenditures in UMRB/ORB
 - Lead a collaborative multiagency effort to slow the spread of Asian carp in UMRB/ORB
 - Mississippi Interstate Cooperative Resource Association (MICRA)



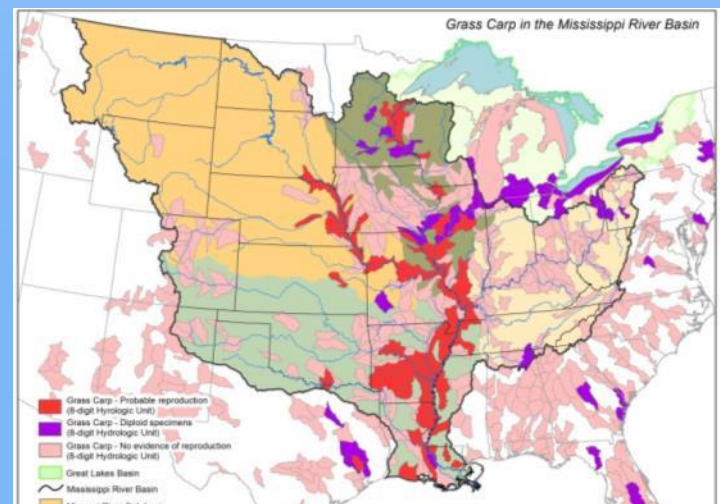
Collaborative Inter-Agency Asian Carp Management

- USFWS base appropriations for Asian carp actions outside the Great Lakes beginning in FY2015
 - Limited to Upper Mississippi and Ohio River basins
- MICRA basin-wide coordination of high-priority management strategies in ORB and UMRB
 - 2017 Monitoring and Response Plan
 - Annual interim summary reports
 - www.asiancarp.us
- Collaboration and leveraging between UMRB/ORB and Great Lakes Asian carp partnerships

USFWS Asian Carp Funding for Outside the Great Lakes

FY	USFWS	ORB*	UMRB*
2015	\$2.4 M	\$400 K	\$400 K
2016	\$2.6 M	\$500 K	\$500 K
2017	\$3.1 M	\$600 K	\$600 K
2018	\$4.8 M	\$1.15 M	\$1.05 M

* USFWS base appropriations passed directly to state partners via grant/agreement.





Upper Mississippi River Overview

Nick Frohnauer

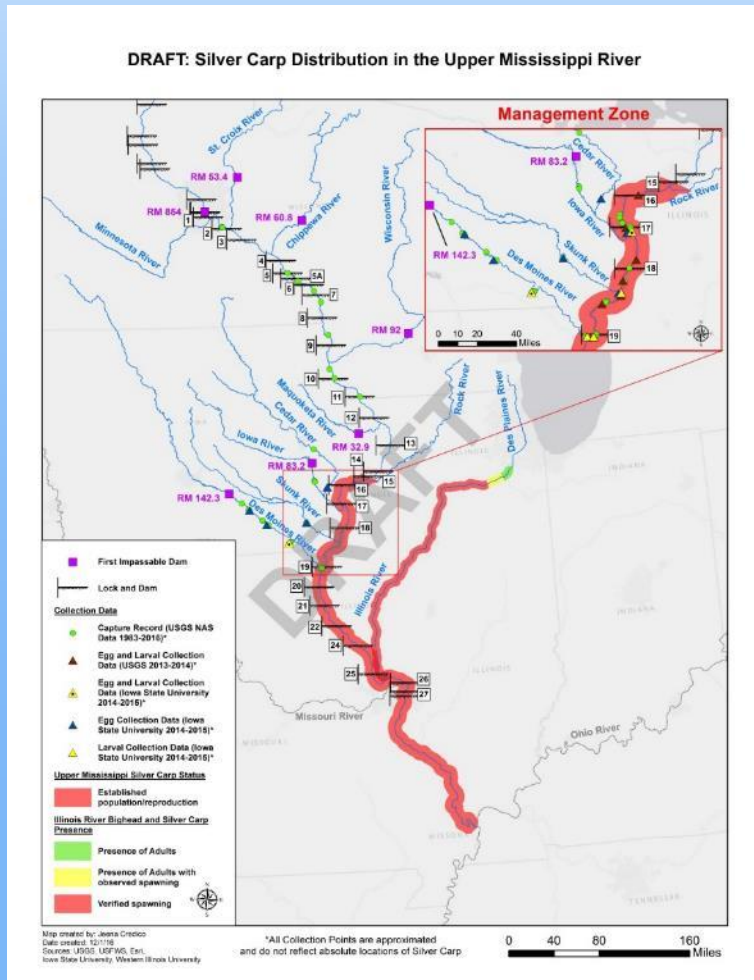
Upper Mississippi Invasive Carp Representative

Minnesota Department of Natural Resources



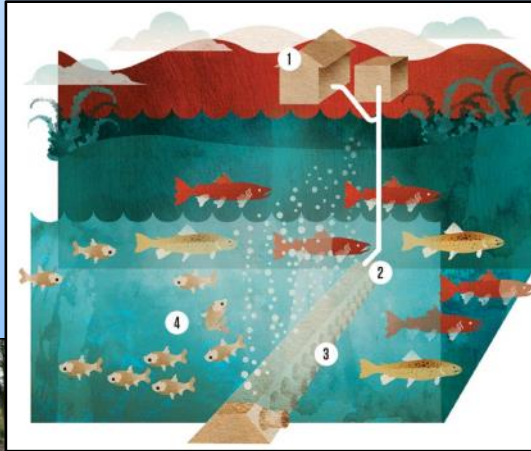
UMR – Strategy Development

- Developed by the UMR Asian Carp Workgroup
- Creation of a management zone
- Prevent upstream movement of fish on either end
- Reduce population in the zone





UMR– Integrated Pest Management



■ Deterrents

- Acoustic
- Flow Modification

■ Mass Removal

- Commercial Fishing
- Targeted, Specialized Netting

■ Additional Actions

- Microparticles
- Habitat Manipulation





Monitoring, Control/Removal, Telemetry, and Commercial Harvest in the Ohio River

Ron Brooks

Kentucky Department of Fish and Wildlife Resources

Director, Fisheries Division

Past MICRA Chairman

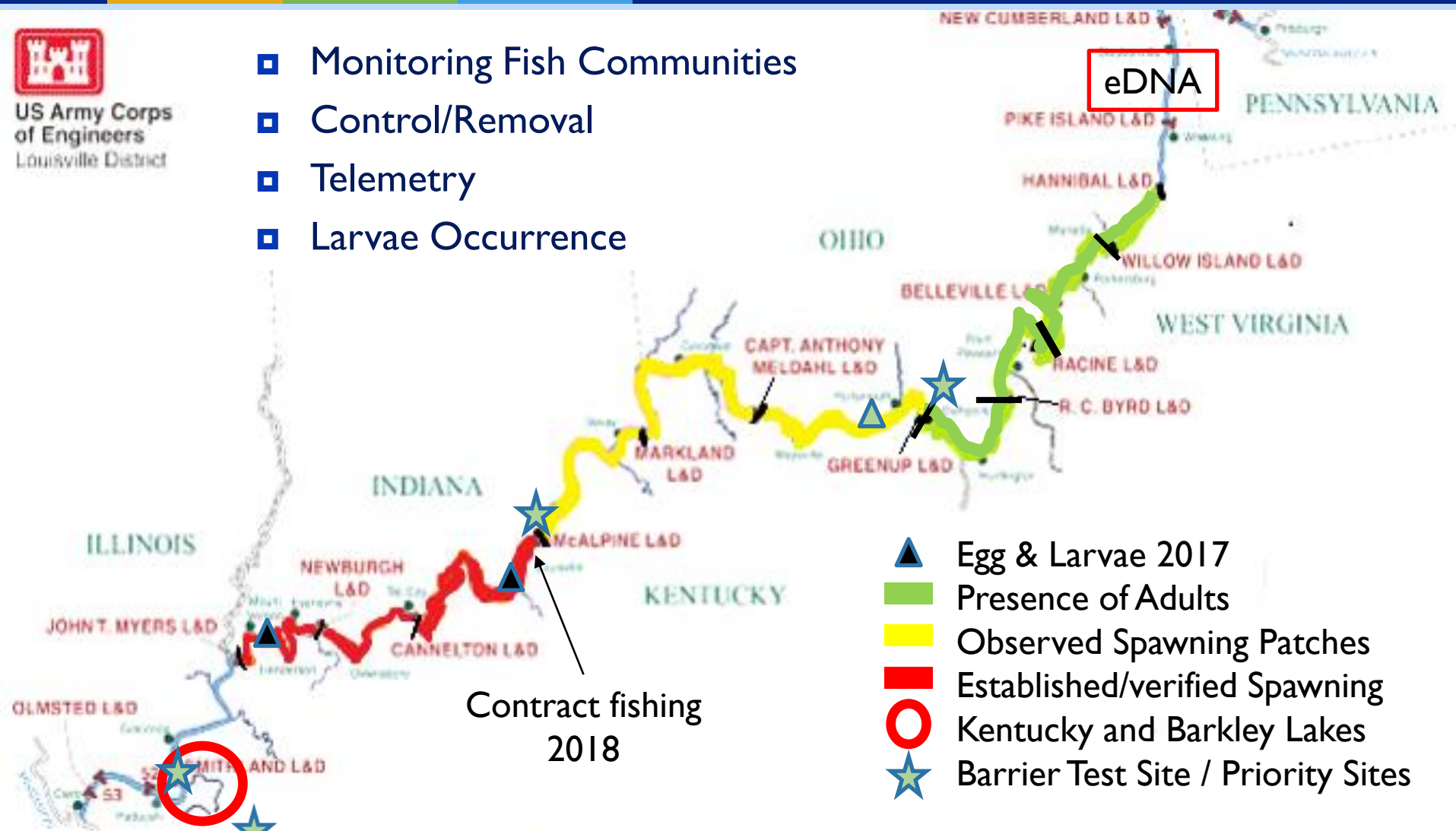


Ohio River Basin Asian Carp Effort (600 River Miles)



US Army Corps of Engineers
Louisville District

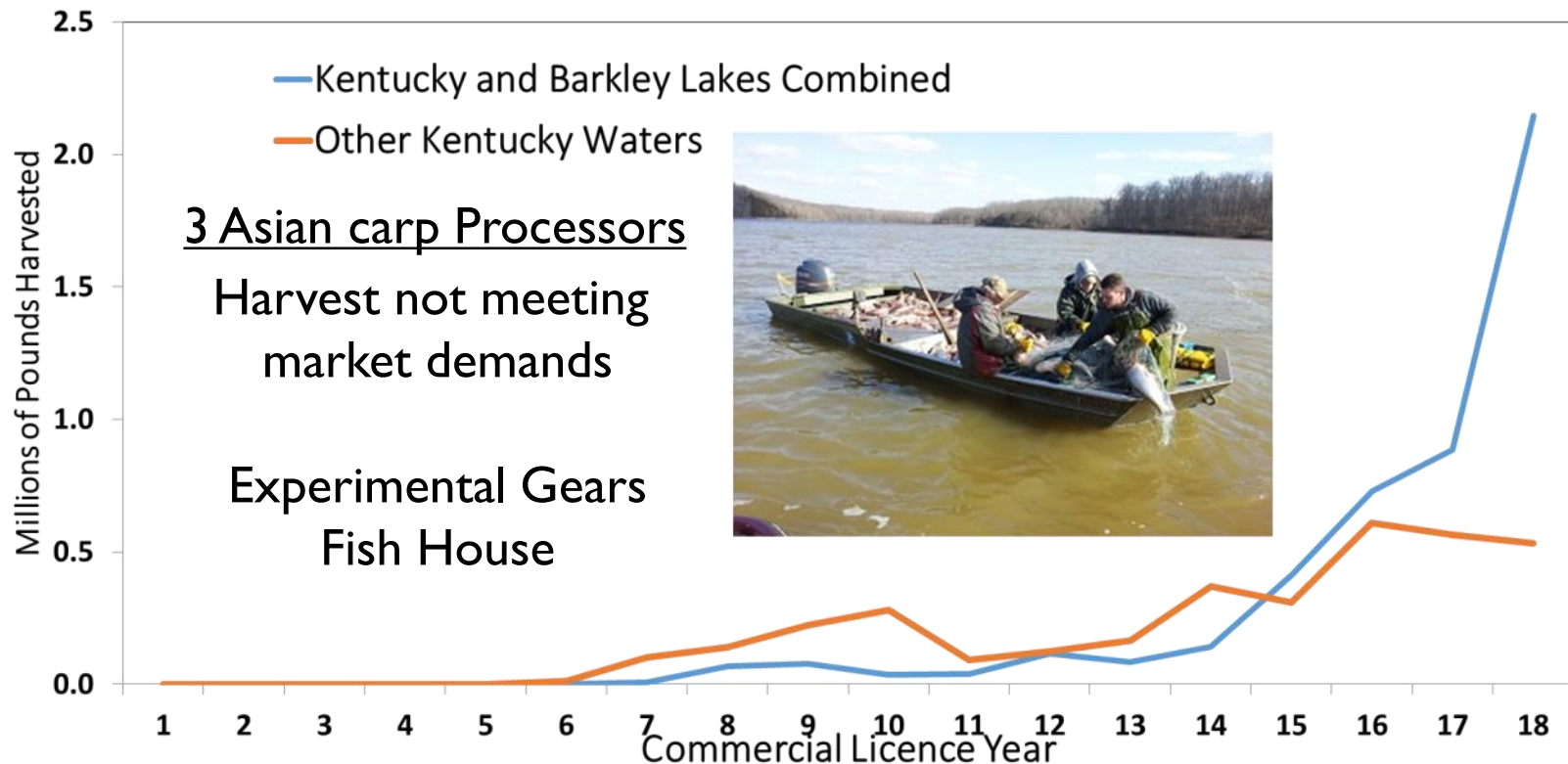
- Monitoring Fish Communities
- Control/Removal
- Telemetry
- Larvae Occurrence



Kentucky and Barkley Lakes Commercial Harvest of Asian Carp



Kentucky and Barkley Lakes Commercial Harvest of Asian Carp





Deterrent Efforts in the Ohio River and Upper Mississippi River Basins

Aaron Woldt

U.S. Fish and Wildlife Service

Deputy ARD Fisheries, Midwest Region





Asian Carp Control Efforts

Acoustic Deterrents

- Both bighead and silver carp are highly sensitive to underwater sound pressure.
- Different types of acoustic deterrent signals and arrays are being tested on Asian carp in laboratory and pond settings.
- The most effective to date appears to be a bioacoustic fish fence (BAFF) which combines sound and compressed air to deter silver and bighead carp.
- Implementation of large-scale, 'proof-of-concept' field tests are being planned for early 2019 and 2020 in the ORB and UMRB at strategic passage points in the river selected in consultation with partners.

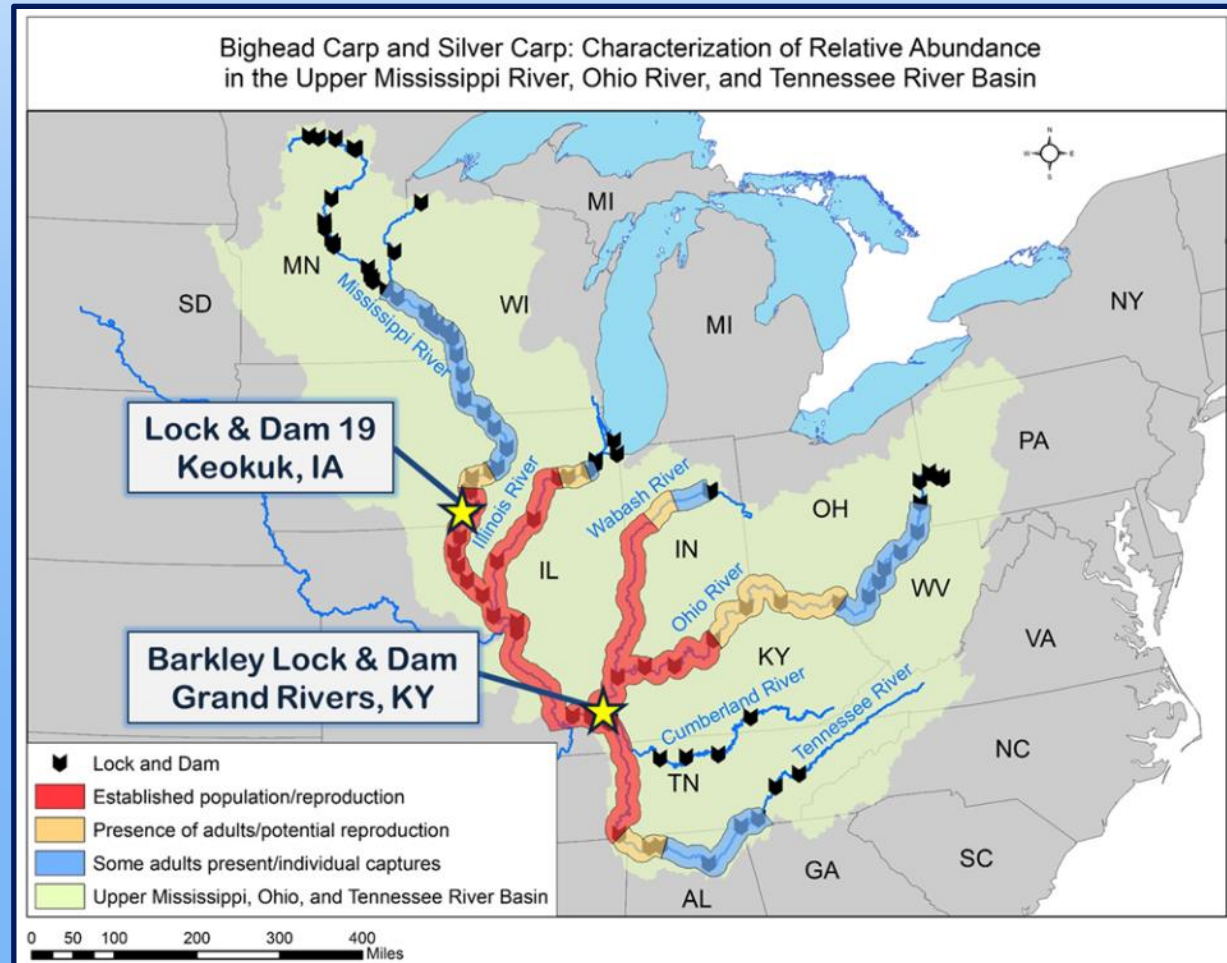


Asian Carp Control Efforts

Acoustic Deterrents

Field Test Sites

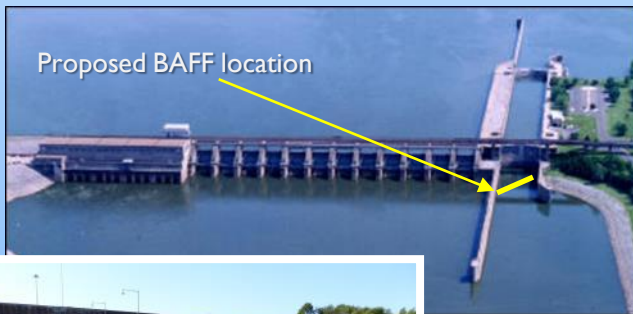
- Direction from Congress to USFWS in the FY18 Budget to implement deterrents for Asian carp in the UMRB and ORB.
- Test site locations build on recommendations by the UMRB and ORB partnerships to implement acoustic deterrents at strategic locations.
 - Fish passage only through lock
 - Established population of Asian carp
 - Monitoring infrastructure in place



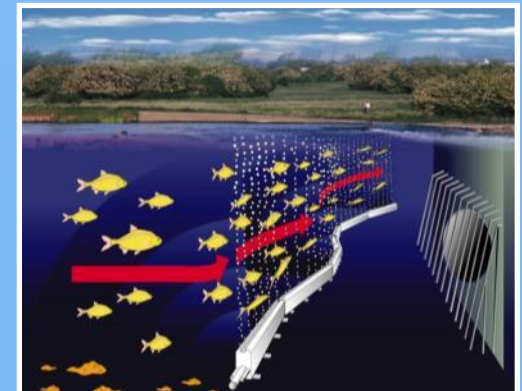
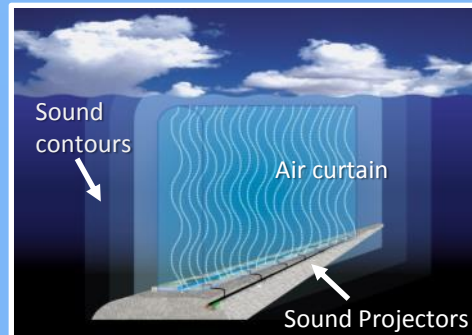
Asian Carp Control Efforts

Acoustic Deterrents

Barkley Lock and Dam, Grand Rivers, KY – ORB Test Site



- Deployed equipment to sit on river bed.
- Barges to pass over the top of system.
- Possible option to trap or remove carp.
- Installation would be required to minimize navigation traffic impacts.

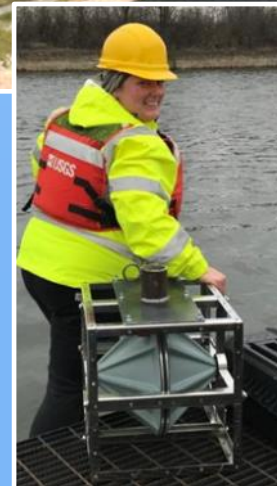
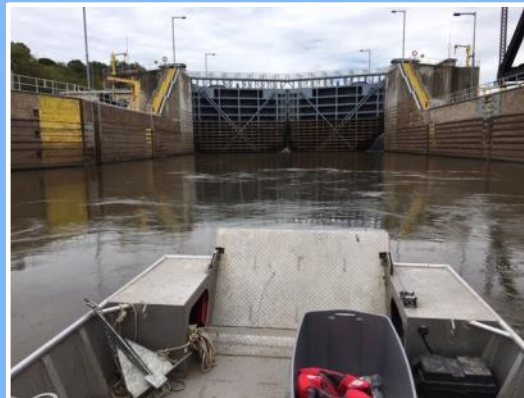
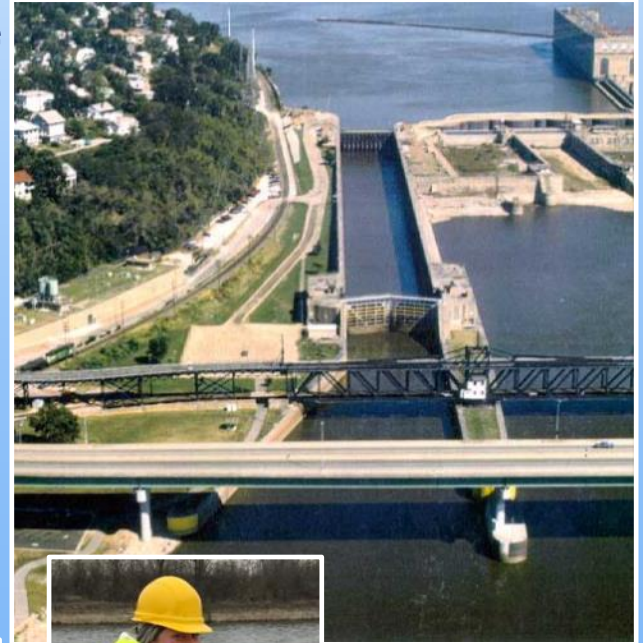




Asian Carp Control Efforts Acoustic Deterrents

Lock and Dam 19, Keokuk, IA – UMRB Test Site

- FWS, USGS, USACE, Iowa DNR, and IL DNR conducting feasibility for installation of acoustic system in 2020.
- Deterrent technology will be developed by USGS UMESC and USACE ERDC.
- Baseline site data collected this year.
- Sound propagation modeling and signal refinement into FY19.





Impacts on Recreational Fishing and Local/Regional Economies

Fishing League Worldwide (FLW)

Bill Taylor, Senior Director of Tournament Operations

Dave Washburn, Vice President of Operations





Fishing League Worldwide

- FLW was founded on the shores of Kentucky Lake in Marshall County, KY, in 1979.
- Today, we are the world's largest tournament fishing organization operating more than 300 bass tournaments annually in nine countries.
- Multiple tournaments throughout the upper Mississippi River
- 17 tournaments were held in Kentucky this year, 11 of which were on Kentucky Lake and Lake Barkley
- The combined economic impact of these 17 events is estimated at \$7.9 million, and that is threatened by the infestation of Asian carp.



Potential for Widespread Ecologic and Economic Impacts

- The carp have already disrupted the food chain on Kentucky Lake and Lake Barkley.
 - Threadfin shad, once abundant prey for gamefish, including black bass, are almost non-existent in the lakes now. That means there is less forage for juvenile gamefish.
 - Continued unchecked, this will be disastrous for the lakes and the communities that depend upon them.
 - 11 reservoirs on the Tennessee River alone at risk to Asian carp
- Impact goes beyond tournaments - Tourism, which the economies of all the counties surrounding these lakes depend upon, is in serious jeopardy.
 - Recreational fishing in Kentucky alone is a \$1.1 billion per year industry that supports more than 10,000 jobs and generates nearly \$60 million per year in state and local taxes.
 - This will drop significantly if Asian carp are not brought under control.
- Problem goes beyond Tennessee and Cumberland Rivers – National



National Issue That Requires National Attention

- Piecemeal approach – Great Lakes, Upper Mississippi River, Ohio River – is not effective.
 - Much of the Asian carp problem is not being addressed
 - Must address the full scope of the problem to be effective
- Need to fund implementation of the National Asian Carp Plan to put the same effort behind protecting Kentucky Lake, Lake Barkley and the entire Tennessee River and Mississippi River valleys.
- Please act before it is too late. This is a national problem and the nation's 47.2 million anglers, who spend \$36 billion annually to pursue their sport, are counting on you.



Thank you!

Questions?

