

Kentucky Asian Carp Removal Efforts Need Funding

Asian carps include 4 fish species which were brought into the United States in the 1970's: grass, bighead, silver, and black carp. They were imported to help control algae and micro-invertebrates in extremely fertile aquaculture rearing ponds and sewage treatment ponds. They were also used as a food product for ethnic populations living throughout the United States. Bighead and silver carp escaped from the rearing ponds within weeks after being stocked, and by the year 2000, it was clear that they were very successfully recruiting throughout the Mississippi River basin. Their diets include the very bottom of the aquatic food chain, and the prolific carps outcompete every fish species in Kentucky for these same foods during some period of their life cycles. Additionally, silver carp are skittish fish and can leap more than 10 feet out of the water when perturbed by noises. They often leap into boaters and skiers causing injuries and breaking expensive gear and equipment.

Bighead and silver carp are beginning to dominate in Kentucky and Barkley lakes and threaten a tourism economy valued over \$1.2 billion annually in Kentucky and Tennessee. Tourism is already declining in the two reservoirs, and fish conditions are worsening, likely due to the overabundance of the invasive carps. Below both of the reservoirs are tailwaters that are extremely popular fisheries, and every year more and more fishing guides have quit taking clients to the tailwaters because of the Asian carp numbers.

Commercial fishing is the only viable method available to control the Asian carp numbers and attempt to stop their range expansion. Therefore, Kentucky's EEC and DFWR have been working hard to help entice new fish processing businesses locate in Western Kentucky. In 2013, KDFWR held the first commercial freshwater fishing tournament and it targeted Asian carp. The tournament brought Kentucky a huge amount of media coverage and was a complete success. After that tournament, three new fish processing businesses were started in Kentucky and are working together with commercial fishers. As a result, over 2 million pounds of Asian carp were removed from Kentucky waters in 2016 alone; a good start. KDFWR created special, more liberal commercial harvest regulations to increase Asian carp harvest potential. We have partnered with the USFWS, TWRA, USACE, and the USGS to conduct research and removal efforts in the two reservoirs. We have partnered with Kentucky State Parks to create a large parking lot for trucks below Kentucky Dam and to place a commercial grade flake ice machine available to Asian carp fishers at no cost. Finally, we created a \$0.05 per pound subsidy to help incentivize Asian carp commercial fishermen. However, much more is needed to help our industry which is providing hope and helping us control and remove Asian carp.

The KDFWR has worked hard not only to get fish processing businesses interested, but also to educate Congress to the fact that Asian carp are devastating Kentucky's aquatic resources and tourism industry centered on recreational fishing and boating. Since 2011, KDFWR has sent a delegate as part of the 28 Mississippi River Basin states (MICRA) to educate congressional legislators and their staffs in Washington D.C. about the Asian carp issues outside of Illinois. KDFWR has participated in three Congressional briefings and one Congressional panel hearing in the past three years. The early Congressional visits resulted in 2014 amendments to Water

Resource and Development Act (WRDA), which provided funding for research, Asian carp removal, and to deter movement of recruiting populations of Asian carp up the Ohio River.

Our efforts in D.C. has made Congress well aware of Asian carp issues in Kentucky, and now it is time to emphasize the need for significant funding for the Tennessee and Cumberland River basins. The federal government has spent over \$200 million to keep Asian carp out of the Great Lakes (Great Lakes Resource Initiative (GLRI)). However, very little funding other than that provided by KDFWR and the TWRA has been available to control Asian carp numbers in Kentucky and Barkley lakes and prevent population establishment up the Tennessee and Cumberland river systems. The KDFWR and TWRA do not have the resources to control Asian carp numbers or expansion. Illinois is currently attempting to increase their funding in order to promote marketing, fishing effort, fish transportation, and assist processors increase their capacity for Asian carp products. The effort has support from its governor and bi-partisan Congressional support, as does all Asian carp related effort. Kentucky needs to follow Illinois' lead and reach out to Congress with legislative block-grant language that would provide a minimum of \$5 million annually for 5 years. The funding would be used as follows:

- 1) Immediate increase in harvest effort to remove significantly more Asian carp from Kentucky and Barkley lakes and their tailwaters. This will be accomplished by providing a \$0.05-\$0.10 per-pound subsidy to commercial fishermen. A "Fish House" system has been developed which would provide new and additional current fishermen with selling opportunities. The subsidy would augment that effort until market prices increase. Cost for the subsidy would be \$500,000 per year (5-10 million pounds annually). It will be necessary to implement a monitoring framework to provide Congress with annual reports concerning the use of the block grant. Typically, this includes monitoring reporting removal effort, researching extent of populations in and above Kentucky and Barkley lakes, and contract fishing in areas where Asian carp numbers are low to accomplish the monitoring/removal work. The Tennessee and Cumberland river systems represent a single sub-basin area of the Mississippi River, and Kentucky, Tennessee, Mississippi, and Alabama have prepared a detailed management plan which would guide this important work. The cost per year for this effort would be approximately \$2 million.
- 2) Immediately purchase netting and equipment needed to use the "modified, unified" Chinese method of harvest brought to the United States by the USGS and successfully tested and implemented in an Illinois and Missouri reservoir. Wild Asian carp have been harvested almost to extinction in China, and if it works there, we should try to modify the system so that it works here where we must be more careful with unintended harvest of sport and threatened fish species. Initially, approximately \$2 million would be prioritized for nets, boats and equipment to test the Unified methods and others as they are introduced. Boats for larger-scaled harvest need to be equipped with capability to hold 10,000 - 20,000 pound of fish, provide high speed net sets, ice making capability for slush in fish compartments, hydraulic net retrievers, and braille for lifting fish from compartments to transportation trucks.
- 3) Immediately provide additional flake ice machine for traditional commercial fishermen and transportation trucks provided by fish buyers and locate it on the Lake Barkley side of the two reservoirs. \$250,000

- 4) Augment or create a local and interstate fish transportation system that will expand its reach from Illinois to Louisiana in order to ensure consistent product availability to the processors. \$3 million for trucks, totes, forklifts (telehandlers), cold rooms, sorting tables, mis. equipment, flake ice machines for each location.
- 5) Build on current research that indicates a new acoustic fish barrier system placed below lock chambers that will deter over 90% of Asian carp movement up through locks and dams on the two river systems. This will help protect 11 other recreationally important reservoirs on the two rivers and keep Asian carp from becoming reproductively established. If system is successful, will initially need at least 4 barriers in Tennessee and Cumberland rivers. Approximate cost = \$2 million each (\$8 million total)
- 6) Contract with professional marketing services to build up market demand for Asian carp commensurate with increasing harvest levels. Approximately \$200,000 annually.

The dollar amounts provided are estimates only. The amounts will vary annually by funding available and extent that the states can provide staff for oversight and research for the sub-basin effort. Immediate focus will need to be on Kentucky and Barkley lakes. Expanding the scope of this effort will depend upon success of reducing carp numbers in the two reservoirs initially, how quickly we can procure BAFF systems to deter Asian carp away from lock chambers, the level of success with experimental systems, and our ability to interact with other states to increase the number of locations in which those systems can be deployed. Longer-term goals for this and other funds procured in the future should be used to expand this effort so that all of the Mississippi River states struggling with Asian carp issues can be brought into the scope of this effort. Only by incorporating this type of effort will we ever begin to control Asian carp expansion, reduce numbers, and protect multi-billion dollar tourism industries and important ecosystems.

Illinois has received tens of millions of dollars to keep Asian carp out of the Great Lakes, The 13 reservoirs located along the Tennessee and Cumberland rivers have an economic value likely very similar, if not more, than the Great Lakes (\$7.5 billion). Tourism associated with Kentucky and Barkley lakes and worth over \$1.2 billion to Tennessee and Kentucky are tremendously threatened RIGHT NOW by Asian carp. Resort owners, fishing guides, local businesses, and thousands of Kentucky and Tennessee anglers are extremely angry and concerned about the fact that Kentucky and Tennessee are unable to do more, and they are threatening to take their expensive boats to Washington D. C. to protest Congress which has all but ignored the southern states. Recreational anglers and boaters are changing their vacation, fishing and boating plans to go to other destinations; a potentially huge economic impact to Kentucky and Tennessee. Now is the time for Kentucky and Tennessee to reach out to their governors and powerful congressional members for federal assistance. This is truly becoming an economic disaster to the two states, and other southern states will soon need act. Now is the time that Congress can provide a legislative block grant to assist to the two river basins. Time is running out.