

# It's time to act on invasive carp



SF 2037 / HF 2389

For decades invasive carp (silver, bighead, black and grass carp) have been working their way up the Mississippi River toward Minnesota. Hundreds have been caught in the state so far, but they are not reproducing here yet. We have a small window of time to prevent a total takeover of our waterways if we act now.

Invasive carp outcompete native fish for food and space, leading to a decline in ecosystem diversity and water quality in rivers where they are established. Silver carp can even injure boaters when they jump out of the water, decimating recreation and tourism.

We have new solutions to prevent invasive carp from taking over our waterways. We must implement them now.

## Time is running out

In Minnesota, invasive carp have been recorded in the Mississippi River as far north as the Twin Cities metro and in the St. Croix and Minnesota rivers. Invasive carp captures in Minnesota have increased in recent years. DNR reports 18 captures in 2019, 83 in 2020 and 71 in 2021. In 2022, a tagged silver carp traveled 35 miles upstream in a single day to Lock and Dam 5.

While DNR reports that reproductive activity is still further downstream outside of Minnesota waters, carp populations often explode unexpectedly. Nobody knows when our stretch of the river will reach a tipping point of no return.

We have only a small window of time to stop invasive carp before they start reproducing in Lake Pepin, the metro Mississippi, the St. Croix and Minnesota rivers, and other treasured waterways.

## Prevention only, no cure

There is no “cure” for invasive carp. Once these species dominate an ecosystem, government agencies spend millions of dollars trying to mitigate the damage with limited success. Tourism and recreation suffer as boating becomes dangerous and fishing conditions turn poor.

The much more effective and cost-efficient option is to prevent carp from reaching as much of Minnesota as possible.

## Solutions at hand

Invasive carp prevention and management requires the use of several tools and tactics. Right now, the Minnesota Department of Natural Resources doesn't have enough funding to implement the right strategies at a sufficient scale.

The bill will fund these strategies:

- Installation of a deterrent system at Lock and Dam 5 to block upstream movement;
- Adjustments to lock gates to improve deterrent efficacy;
- Expansion of fish surveys, tracking and removal programs;
- Ecosystem resiliency efforts for native fish; and
- Continued research.

**Deterrent could help  
Lock and Dam 5 block  
99%  
of invasive carp  
from traveling upstream**

With this additional funding, the DNR can address this threat with a multi-pronged approach that will prevent invasive carp from taking over Minnesota's waterways and protect native fish and recreation.

## Deterrent systems

While no deterrent system is 100% effective in stopping invasive carp, one promising option is to install a "bio-acoustic fish fence" (BAFF) that uses sound and bubbles to deter carp from traveling through the lock chamber at Lock and Dam 5, located roughly 10 miles upstream of Winona. We know carp are swimming right below this dam in increasing numbers. Lock and Dam 5 is our best option for blocking carp because of its design and location.

Dr. Peter Sorensen of the University of Minnesota has studied the feasibility and efficacy of a BAFF at Lock and Dam 5 with promising findings. His research suggests that a BAFF (combined with the other strategies above) could help the dam block 99 percent of invasive carp from traveling upstream. This would keep carp from reaching population levels large enough for reproduction in upstream waterways for decades to come.

## Integrated prevention tactics

In addition to a deterrent system, carp management must include expanding programs for fish tagging and removal, strengthening the resilience of our native ecosystems, and continuing research.

Lock structures already present a partial barrier to native fish and invasive carp passage. No matter the deterrent system used, we should explore opportunities to enhance

native fish passage at lock and dam structures. This could improve native fish populations above and beyond current conditions. A well-designed deterrent system could block virtually all carp while making native fish more resilient to the many threats they are facing.

The DNR works closely with federal and other state agencies on projects that respond to the threat of invasive carp, but more funding is needed to expand that work to ensure we adequately protect our state.



Photos courtesy of Invasive Carp Regional Coordinating Committee.

### Contact:

Colleen O'Connor Toberman, Land Use & Planning Director  
ctoberman@fmr.org 651.222.2193 x29

