

May 11, 2022

Senator Dick Durbin
Senator Tammy Duckworth

Dear Senator Durbin and Senator Duckworth:

I am writing on behalf of the Illinois Beaver Alliance in support of the Animal Welfare Institute's proposal for funding of a national Nonlethal Beaver Conflict Mitigation Program.

Illinois used to be a quarter wetlands before European trappers arrived and trapped all the beavers. Rivers looked completely different; instead of straight blue lines, they were complex river-wetland corridors that meandered, looped around, and braided. Once the beavers were gone, the rivers became cut off from their floodplains. Settlers dug drainage ditches and laid drainage tiles to quickly and efficiently move water off the land into local streams and rivers. Soon much of the Illinois landscape—once peppered with depressions that retained water—was dry for farming and other development. As a result, we as a society have "environmental amnesia" about what and how healthy rivers—and beaver populations—are supposed to look like and function.

Beaver-created wetlands provide many beneficial ecosystem services for people, fish, and wildlife. These services include:

- Protecting and improving water quality. Beaver ponds remove agricultural runoff (nitrogen and phosphorus fertilizer) and nutrients from stormwater and wastewater from streams and rivers through biochemical processes. Beaver ponds also capture and filter out sediment. Wetland plants and algae bind and remove toxins such as lead, arsenic, copper, cadmium, mercury, and selenium from the water.
- Increasing biodiversity and creating fish and wildlife habitats. In nature, the stability and health of an ecosystem is closely tied to its biodiversity. Biodiversity refers to the number of different species present. The more diverse a community of plants and animals is, the better it is able to adapt and adjust to changes. As a keystone species, beavers create habitat that supports multiple other species of fish, birds, amphibians, and other mammals.
- Sequestering carbon. Wetlands sequester carbon from the atmosphere through plant
 photosynthesis and by acting as sediment traps for runoff. Carbon is held in the living
 vegetation as well as in litter, peats, organic soils, and sediments.
- Storing floodwater. Due to climate change, our region is already getting more rain than was the case historically. Rain events are becoming more frequent and more intense but of a shorter duration. Our stormwater infrastructure is simply not designed and sized to handle the amount of rainfall we are receiving, so we will see increased flooding in the



- future. A recent study of the Milwaukee River watershed demonstrated that beaver dams upstream reduced flooding downstream.
- Protecting against drought, including boosting food and water supplies for livestock in arid regions. By building dams, digging channels and changing small streams into broad wetland areas, beaver dams have the secondary effect of keeping plants green and lush, even during periods of drought. The channels the beavers dig act like a little drip irrigation system running through entire riparian areas.

While beavers can cause flooding problems,properly designed, installed, and maintained, modern management tools such as flow devices, beaver deceivers, exclusion fencing, etc., are effective at preventing beaver damage and ultimately less expensive than the continuous cycle of trapping and killing beavers. We can keep culverts clear and prevent beaver dams from flooding infrastructure without lethal methods of control. Nearly every road culvert can be protected from beavers in a cost-effective, long-term, environmentally friendly and humane manner. Beavers build dams for protection from predators, but sometimes these dams can cause flooding issues for people. When this occurs the size of the beaver pond can often be controlled to prevent flooding damage to human property with a well-designed Flexible Pond Leveler pipe system. Which beaver control method is best depends upon the site. Installers use several different designs that are customized for each site. Important considerations include: type and size of the culvert, road bed elevation, seasonal water flows, stream topography, fish and wildlife passage, and habitat.

The State of Illinois spends millions of dollars each year on its nutrient loss reduction strategy, and we still are not meeting our goals. With our massive nutrient loss problems, the State of Illinois cannot afford to turn our backs on this free, nature-based solution, when a simple paradigm shift on how to manage beaver conflicts would provide so many environmental and economic benefits.

I am attaching a brochure and powerpoint presentation about partnering with beavers in Illinois, as well as language I recently submitted to the Illinois State Water Planning Task Force about the importance of beaver habitat.

Sincerely,

Rachel Schick Siegel
President, <u>Illinois Beaver Alliance</u>