



What are Aquatic Invasive Species?

Aquatic invasive species (AIS) are non-native plants and animals that impact water bodies and wetlands. They are species for which a local ecosystem's native species have no defense mechanisms or for which they cannot compete against for food and shelter. They may start as a nuisance, but can have disastrous long-term effects. AIS can be transported on any type of watercraft, trailers, and angler's waders, bait buckets and equipment. Some AIS can find their way into interior compartments and watercraft ballasts, and others can "hitchhike" from one water body to another by attaching themselves to surfaces. All AIS are of concern for Montana waterways, but zebra mussels pose the greatest current threat in Montana.

Once established, AIS can destroy waterways. Invasive mussels, for instance, reproduce so rapidly that their sharp shells blanket shorelines so that footwear must be worn to avoid cutting one's feet. They attach themselves to water circulation systems on watercraft, overheating and destroying motors. Decaying mussels also release an unpleasant odor that permeates the air and water. They reproduce rapidly adhering to any stable surface. If established on water intake pipes, they can cause system failures and expensive clean-ups. In the United States, zebra mussels have cost the power industry several billion dollars, and have impacted industries, businesses, and communities for several billion dollars as well. Although mussels tend to dominate the news, additional threats come from a variety of invasive plants, fish, and pathogens.

History has shown us that zebra mussels quickly clog water intake pipes, impact hydroelectric facilities, and their sharp shells compromise recreational pursuits. Their voluminous filter feeding dramatically alters the food web and overtime degrades water quality. A zebra mussel infestation in a lake that serves as a municipal water supply could result in drinking water intake pipes becoming plugged with mussels. The water cooling system in boat motors can become encrusted with mussels, and could spread across our docks, and our children's feet could be cut as they wade barefoot into the lake. Our lakes' fisheries and overall water quality could forever be changed. All of these things would cause indirect consequences to the local economy due to boating and recreation restrictions or closures. And there would be a great loss in property value to homeowners on and near these lakes. These are but a few of the numerous consequences of AIS infestations we've seen throughout the U.S.

Invasive Mussels in Montana

Until November 2016, Montana was one of a few remaining western states void of invasive mussels. But in 2016, Montana Fish, Wildlife & Parks (FWP) reported that Tiber Reservoir, east of Shelby, Montana tested positive for zebra mussel larvae. They also reported that Canyon Ferry near Helena had suspect results. On November 30th, 2016 Governor Bullock issued an executive order declaring a statewide natural resource emergency that included the deployment of an interagency rapid response team to tackle the emerging issue. On December 1st, 2016 the state took further action by issuing emergency orders restricting the launch and removal of boats from Tiber Reservoir and Canyon Ferry. Glacier National Park and the Blackfeet Indian Reservation placed moratorium closures to boating, and the U.S. Fish & Wildlife Service closed Jessup Mill Pond outside of Creston in response to the zebra mussel threat. 2017 ushered in a new paradigm for the public's interaction with Montana waters. Since then, FWP has led the charge in protecting state waters from AIS. Many resource management agencies and diverse partners have joined FWP to provide an increasingly aggressive and successful program. UCLN is an extension of these efforts, bringing new citizen scientists into the fight against AIS.