

Preventative measures key in keeping AIS out of lake

What would a zebra mussel infestation in Whitefish Lake look like? Imagine the cost to you if the city's drinking water intake pipe in Whitefish Lake became plugged with mussels.

Imagine the time and expense to you if the water cooling system in your boat motor becomes encrusted. Imagine scraping mussels off your dock. Imagine children's feet getting cut if they tried to wade barefoot into the lake. Imagine a forever changed fishery with a greater potential for algal blooms and decreased water quality. Imagine the indirect consequences to small businesses in Whitefish due to boating and recreation restrictions or closures. Imagine the loss of property value to homeowners on and near the lake.

These aren't red flag scare tactics but a few of the numerous plausible consequences gleaned from case studies around the U.S. Since zebra mussels like to attach to hard surfaces and each other, they 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 degrades water quality.

Montana had been one of a few remaining western states

void of this invasive species. But, in early November, the Montana Department of Fish, Wildlife and Parks reported that Tiber Reservoir, east of Shelby, tested positive for zebra mussels. FWP reported that Canyon Ferry near Helena had suspect results. Since that time, additional samples from the Milk River downstream of Nelson Reservoir and the Missouri River upstream of Townsend also returned suspect results. On Nov. 30, Gov. Steve 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 Dec. 1, the state took further action by issuing emergency orders restricting the launch and removal of boats from Tiber Reservoir and Canyon Ferry.

Already, Glacier National Park and the Blackfoot Indian Reservation have placed a moratorium closure to boating, and the U.S. Fish and Wildlife Service has closed Jessup Mill Pond outside of Creston in response to the zebra mussel threat.

What's being done in Whitefish to address this issue? The good news is that Whitefish is perhaps the most progressive community in the

state of Montana in addressing aquatic invasive species issues. Since 2013, the Whitefish Lake Institute has drafted and implemented the Whitefish AIS management plan that the Whitefish City Council has approved and funded. Each year, there are various tasks that are completed for early detection, monitoring and prevention.

Examples of tasks include the Whitefish City Beach watercraft inspection station and early detection monitoring of zebra mussels from environmental DNA (eDNA) analysis. We are waiting for our 2016 summer and fall eDNA samples to be analyzed by the laboratory. On Dec. 1, WLI collected additional eDNA samples on Whitefish Lake due to the increased threat. These samples have also been submitted for analysis.

Since 2011, WLI has partnered with FWP to coordinate, administer, and train volunteers for the Northwest Montana Lakes Volunteer Monitoring Network. That program collects water quality and AIS early detection samples from over 40 lakes in northwest Montana. That early detection sampling includes looking for the microscopic juvenile "veliger" stage of zebra mussels.

We are looking to up our

game in 2017. Due to the generosity of the Joe and Cindy Gregory family, we are nearing completion of constructing an official watercraft inspection station at City Beach that will open in 2017. The city of Whitefish Parks and Recreation is also creating efficiencies to staffing and management of City Beach. Carla Belski from the city and I recently received upper level training at Lake Mead (ground zero for zebra mussels in the west) for boat inspection and decontamination methods.

Certainly, WLI's 2017 AIS management plan proposal to City Council will be adaptive in addressing the increased threat to our lake and community. The obvious gap for Whitefish Lake has been the lack of an inspection station at State Park. WLI is working with FWP and the Montana Department of Natural Resources and Conservation to coordinate and implement a watercraft inspection there in 2017. Additionally, WLI will consult with all of our partners and contractors including; FWP, DNRC, Flathead Basin Commission, University of Montana, AquaTerra Solutions, and Hanson Environmental before we optimize a plan for Whitefish in 2017.

I have spoken to some mem-

bers of the public who are convinced that the lake will one day have zebra mussels and question the cost of preventative methods. Once again, case studies from around the U.S. tell us that prevention efforts, even if they only delay an infestation, are financially merited compared to the on-going, exponentially higher, annual costs of attempting to mitigate the effects of zebra mussels or other AIS. This perspective also does not factor lost revenue to local business.

With all that we do to prevent the spread of zebra mussels and other AIS to Whitefish Lake, there is no perfect tool or set of tools in our toolbox to totally eliminate the AIS threat. That's why we need your help to clean, drain and dry your watercraft and equipment after each use. 2017 will certainly usher in a new paradigm for the public's interaction with Montana waters. It's time for you to take an active role in this issue by spreading the word, talking to your elected officials, and supporting local and statewide AIS prevention efforts.

Mike Koopal is the founder and executive director of the Whitefish Lake Institute.