Eastern Idaho Water Rights Coalition Members:

Re. Threat and - Treatment of Quagga Mussels found near Twin Falls.

From the Idaho Water Users Association

The risks are enormous, the task is arduous and the side effects are severe.

But everyone agrees it has to be done, that doing nothing would be far worse.

So with that, the Idaho Department of Agriculture began applying the product Natrix, a copper-based pesticide, to a 6-mile section of the Snake River near Twin Falls on Tuesday.

If successful, the 10-day operation will eradicate the invasive quagga mussels discovered near Centennial Waterfront Park just two weeks ago. The chemical will choke out the bivalves but also kill fish, including a small population of white sturgeon there. Aquatic plants and insects also will die but it is not expected to harm birds or mammals. The pesticide is expected to quickly dilute and not cause negative impacts downstream of the treatment area.

The guagga threat

Idaho and other states have long worked to keep quagga mussels out of their waters. The European species is prolific and has the potential for almost unthinkable impacts to native species and habitats as well as infrastructure like dams and drinking water and irrigation systems. They cling to and quickly cover hard surfaces — from river rocks to human infrastructure like concrete and pipes — in a sharp and lagged, barnacle-like armor.

Chanel Tewalt, director of the Department of Agriculture, said states and the federal government spend hundreds of millions of dollars each year dealing with quagga mussel impacts in the Great Lakes.

"That area is not well known for hydropower or irrigation, so take what that impact is and add in the complexity of hydropower generation and irrigation and that gives you a sense of how significant this could be in Idaho and the West," Tewalt said.

Paul Arrington, executive director of the Idaho Water Users Association, said allowing the mussels to establish and spread would be a scary development.

"For a water manager, this is among the worst things that can happen. These mussels, if they are not stopped, get into everything and clog everything."

Everything from irrigation infrastructure, dams, hatcheries and drinking water systems are vulnerable.

Brian Brooks of the Idaho Wildlife Federation worries about the state's famous fisheries. Quagga mussels often travel by hitching a ride on vessels, everything from inflatable paddle boards to massive ocean liners. He notes Silver Creek, where huge trout fin in spring-fed, crystal-clear water that flows lazily across the northern edge of the Snake River Plateau is just a little more than 60 miles away. It attracts thousands of anglers annually. A quagga mussel clinging to a float tube or pair of waders could easily make the hop. Drive another hour and half north and you are in the Sawtooth Mountains where destinations like Red Fish, Alturus and Petiti lakes attract paddle boarders, kayakers and motor boaters. Each of them drain into the Salmon River, home to the Columbia River's best salmon and steelhead habitat and where Endangered Species Act-protected wild fish still spawn.

"The whole Salmon River drainage is in jeopardy," he said, if the mussels become established. "Their super power is filter feeding. They take out of the water micro nutrients that are the basis of the food system for insects and up the trophic cascade for fish."

The mussels could also move with the current of the Snake River and without the help of humans and the myriad vessels. They remove dissolved oxygen, reduce algae growth and make water gin clear.

"That will fundamentally alter fish populations as we know them," said Brooks. "If we want to retain our world-class fisheries in Idaho, we should absolutely be aggressive."

Not easy

Tewalt said the operation is difficult because of the complexity of the middle Snake River. It sits in a deep gorge with limited access. The department had to airlift boats into some sections of the treatment area that spans the 6 miles from Shoshone Falls to Auger Falls. Tewalt said the river is complex. Some of it is characterized by shallow and rocky riffles. But there are also deep pools and back eddys. In places, basalt formations split the river into multiple channels. Getting the chemical distributed throughout the complex system will be key.

But it is not as complicated as it could be. Unlike the lower Snake River or Hells Canyon, the area is free of high profile threatened species like salmon and steelhead and lacks the heavy boat traffic those fish attract.

The work will be followed by months of monitoring. Tewalt said follow-up treatment may be necessary. She commended the cooperation between state, federal and local governments that made it possible for her agency to move quickly. The quaga mussel larva that launches this effort were confirmed on Sept. 18. Within 90 minutes, she said Gov. Brad Little was involved and a natural resource cabinet meeting was convened.

"The pace of this is unprecedented and the scope of the project is unprecedented," she said.

"This has been an example of how government is supposed to work," added Arrington. "Everybody who needs to be involved has been involved."

Next steps

Tewalt said the sole focus right now is the eradication project and follow-up monitoring. Brooks said the wildlife federation will be advocating for a review of the state's boat monitoring program with an eye toward expanding it. Like many states, Idaho funds boat check stations at or near points of entry into the state and near popular boating areas. All vehicles with watercraft are required to stop at the check stations where inspectors look for quagga and zebra mussels.

There is a station along U.S. Highway 12 at Kooskia. A station near Lewiston was discontinued several years ago. Washington has a station near Red Wolf Crossing Bridge at Clarkston.

Brooks said if the program needed to be expanded, everyone who benefits from keeping quagga mussels out of the state should chip in. He worries legislators who are sometimes hostile to the Idaho Fish and Game Department, may seek to pull from that budget or tack on a surcharge to fish and game licenses while not asking other water users to contribute.

"My organization will champion reassessing our invasive species check stations but that is going to require funding and we just need to make sure the funding is equitable among stakeholders who benefit from keeping quagga mussels out, not just anglers. It's ratepayers, water users, anyone who can be damaged."

Arrington said it's worth looking at and added that even without an expansion of the program, those who own boats should make sure they are doing what they can to help. He has toured many inspection stations and said it is common to see people with watercraft fail to stop.

"What I hope comes from this is the people of Idaho wakeup to the reality of what this is and maybe be more mindful of boat check stations."

More information on the effort and Idaho's guagga mussel monitoring program is available at bit.ly/3rDWxy4.

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