

BEST PRACTICES



Meet Puddles—The Invasive Mussels Detective!

Zebra & quagga mussels are a species of mollusk invasive throughout the United States. They have a devastating impact on water quality, aquatic habitat and native species. These mussels reside in calm, freshwater environments, attaching themselves to hard surfaces, such as boat propellers, docks, and dams where they reproduce in great numbers. Due to their sheer quantity, zebra & quagga mussels are known to regularly destroy important water infrastructure (such as pipes and filters). They also crowd out native species, disrupting food chains and ecosystems. In a state where 70.2 % of our energy comes from hydropower, the introduction of these invasive mussels into our waterways can have catastrophic impacts on our state's power production systems. Introduced zebra and quagga mussels cost the state and its residents millions of dollars each year.



Where did they come from?

Native to Eurasia, zebra and quagga mussels were first introduced to the Great Lakes in the 1980's, arriving in the hulls and bilge water of ships. Since then, these invasive mussels have made their way across the United States. Their spread has mostly been assisted by unaware water recreationists. With adults that are only a couple of centimeters long and larvae invisible to the human eye, these hitchhikers are easy to miss. Zebra and quagga mussels not only attach to boats, but trailers, kayaks, paddles, lifejackets, and fishing/hunting gear as well. If it makes contact with infested water, there is the potential to transfer these invasives to other waterways. In the right conditions, zebra and quagga mussels can live up to several weeks out of water! More than enough time for you to unknowingly travel home or between lakes with these dangerous hitchhikers.

Stop the spread!

Along Washington State's borders, checkpoints are set up by the Washington Department of Fish and Wildlife (WDFW). Officers check boats and other watercraft for aquatic invasives and help get rid of them. Since 2019, WDFW has employed Puddles, a highly trained Jack Russell terrier mix that works alongside her handler, Sergeant Pam Taylor, inspecting watercrafts coming into the state for invasive zebra and quagga mussels. While human officers can only inspect watercraft through sight and touch, Puddles uses her sense of smell to locate zebra and quagga mussels. She can smell the microscopic larvae of zebra and quagga mussels and complete an inspection in

the fraction of the time it would take human officers alone. During an inspection, Puddles will circle the watercraft and if she smells zebra or quagga mussels, she will signal to Sgt. Taylor. Using canines to search for invasive mussel species has proven to be more efficient and accurate than humans. Unfortunately, Puddles is only one dog and there are thousands of watercraft in Washington State. That is why it is so important that we all do our part.

What can you do?

- **Clean, Drain, Dry** your watercraft between water bodies. This should be done at the site of your last water entry to keep invasives contained.
- Stop at inspection stations to have your watercraft inspected for invasive species and have invasives removed. Puddles might even be there to inspect your watercraft!
- Drain motor, bilge, livewell, and other water containing devices before leaving water access.
- Dry everything for at least five days OR decontaminate with high pressure water (120°F).
- Anglers, dispose of unwanted bait, worms, and fish parts in the trash. When keeping live bait, drain bait containers and replace with spring or dechlorinated tap water. Never dump live fish or other organisms from one water body into another.

To learn more, visit WISC—Washington Invasive Species Council at invasivespecies.wa.gov.

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