Aquatic Invasive Species District Newsletter

In This Issue:

Know the Native
Westslope Cutthroat Trout

The Westslope Cutthroat Trout (oncorhynchus clarkii lewisi) is one of two native trout species in the state, and Montana's state fish. Named for the red slashes by the lower jaw, this trout species can grow from 6 to 16 inches long and historically ranged across the Northwest from Idaho into British Columbia.

As water temperatures rise, the westslope cutthroat habitat range shrinks. This along with the introduction of other trout species that cutthroats compete and hybridize with has led to a population decline. They are now listed as a species of concern.

eDNA Sampling with FLBS

Environmental DNA (eDNA) is DNA that has been shed by an organism, for example, hair, skin cells, and scat. EDNA can be found anywhere in the environment. To collect eDNA from a water body, a filtering net is dragged through the water capturing organic material into a small cage. That small amount of water is then put into a tube and sent to the lab. In the lab they conduct a polymerase chain reaction (PCR) test to reveal if the shed DNA from the desired or undesired species is present in that sample. This can indicate if the species is or isn't present at the sample site. Learn more on eDNA from the Flathead Lake Biological Station (FLBS) here!

This summer we were able to conduct one round of eDNA sampling in addition to our usual invasive mussel veliger sampling. Phil Matson from the FLBS joined our crew at Holland Lake for a beautiful morning on the boat. We have not gotten our results back yet, but we will update you next month!

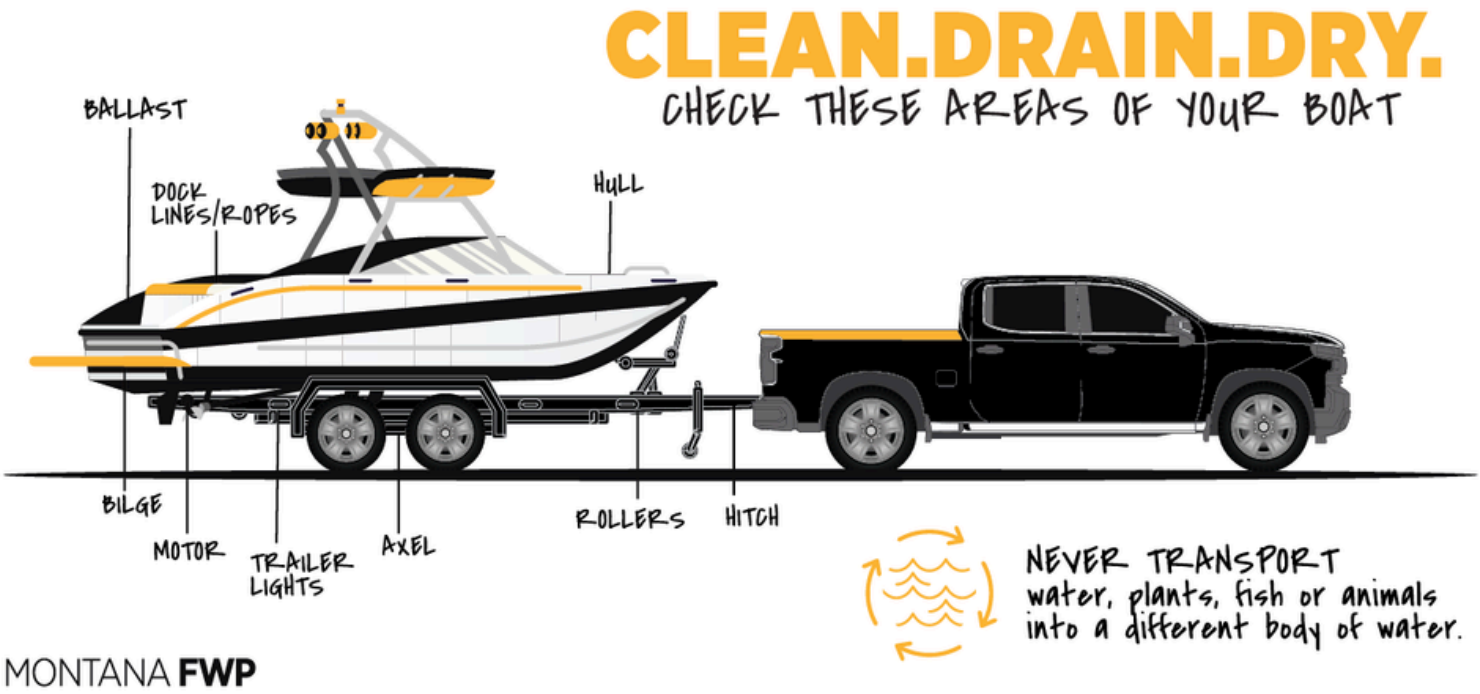
Watercraft Inspection Station Update September 2025 Review:

Clearwater Junction Station

- 2,608 watercrafts were inspected throughout the month of September
- 40 standing water decontaminations
- 3 plant decontaminations
- 59 total decontaminations
- 26625 total inspections at Clearwater in 2025

Montana Inspection Stations

- Over 97,000 inspections conducted across Montana
- 36 mussel fouled boats intercepted across Montana



ISDA Begins Third Chelated Copper Treatment to Combat Quagga Mussels in Snake River

On September 30, the Idaho State Department of Agriculture (ISDA) launched its third treatment using the chelated copper product Natrix in the Snake River near Twin Falls Dam. This action follows the continued detection of quagga mussels in the area—an invasive species first identified in the Snake River in 2023. Quagga mussels are notorious for clogging irrigation infrastructure, as the state with the fifth-largest irrigated land area in the U.S., Idaho could face significant economic and operational impacts from a widespread infestation. Previous treatments have successfully reduced mussel populations; full eradication has not yet been achieved. Encouragingly, this year's pre-treatment survey showed a 51% reduction in the infested area, shrinking from 7.2 miles in 2024 to 3.5 miles in 2025.

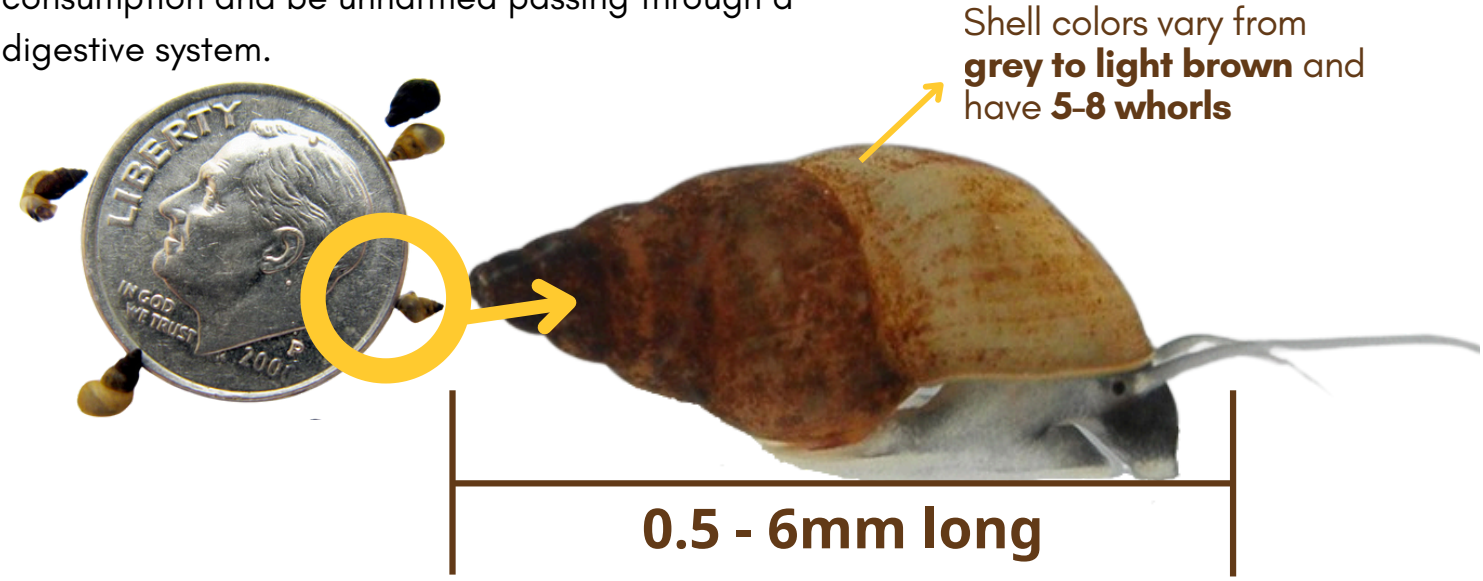
To effectively treat the Snake River, the ISDA has the challenge of keeping effective concentrations of Natrix throughout complex flow patterns; such as, dilution from spring inputs, copper sorption by organic sediments, and deep, low-flow areas that limit water exchange and hinder the distribution of the copper solution. To address these challenges, ISDA is implementing a range of targeted techniques. Gravity-metered drip boxes are being deployed near spring inputs to counteract dilution, while deep pump injection with anchored dispersion systems are being used in isolated, low-flow zones. Additionally, sediment was collected prior to treatment to evaluate copper sorption rates, allowing for site-specific application adjustments in areas with high organic content.

The current treatment is expected to conclude around October 10. Following the final application, the chelated copper solution is anticipated to dissipate downstream within three days. Read more about the ISDA 2025 Treatment Plan Here.

Invasive Species Highlight: New Zealand Mudsnail (Potamopyrgus antipodarum)

The New Zealand Mudsnail (NZMS) is an aquatic snail that can easily be overlooked due to its size. Originally from New Zealand, this snail was first detected in North America in Idaho's Snake River in 1987 and then the Madison River in Montana in 1995. Today, it inhabits several major rivers including the Madison, Jefferson, Beaverhead, Ruby, Bighorn, Missouri, and Yellowstone.

The shells of these snails average 1/8 inch in length, have five to six whorls, and vary from light brown to black in color. A single female can produce over 200 offspring annually by cloning, leading to rapid population growth. NZMS can also survive consumption and be unharmed passing through a digestive system.



Impacts:

· NZMS can outcompete or displace native bottom-dwelling species, some of which are native fish depend on for food. NZMS are not a food source for native fish due to their low nutritional value.

· Because of their high reproductive potential, NZMS can reach massive densities in some areas such as Yellowstone National Park (750,000 snails per square meter). These populations can consume a large portion of available food in streams.

· Once established in a waterbody, eradication is nearly impossible.

How to help:

· Clean, drain, and dry watercraft and irrigation equipment before each use in other water bodies

· Thoroughly wash and decontaminate equipment and boats

· Report any suspect infestations at 1- 800-TIP-MONT (1-800-847-6688)