

Zebra Mussels in Western Colorado

Water Resource & Agriculture Review Committee - 10/29/2025



Robert Walters
Invasive Species Program Manager
Robert.Walters@state.co.us



NOTE: This bill has been prepared for the signature of the appropriate legislative officers and the Governor. To determine whether the Governor has signed the bill or taken other action on it, please consult the legislative status sheet, the legislative history, or the Session Laws.

An Act

SENATE BILL 08-226

BY SENATOR(S) Isgar, Gibbs, Groff, Kester, Penry, Renfro, Schwartz, Shaffer, Spence, Taylor, Tochtrop, Ward, Wiens, Harvey, McElhany, and Tapia;
also REPRESENTATIVE(S) Butcher and McFadyen, Fischer, King, Buescher, Carroll T., Curry, Hodge, Labuda, McGihon, and Romanoff.

CONCERNING THE PROHIBITION OF AQUATIC NUISANCE SPECIES IN COLORADO, AND MAKING AN APPROPRIATION IN CONNECTION THEREWITH.

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. Title 33, Colorado Revised Statutes, is amended BY THE ADDITION OF A NEW ARTICLE to read:

ARTICLE 10.5 Aquatic Nuisance Species

SB 08-226 - State ANS Act

- Passed in May 2008
- Formalized State ANS Program
- (1) The general assembly hereby finds, determines, and declares that:
 - (a) Aquatic nuisance species have devastating economic, environmental, and social impacts on the aquatic resources and water infrastructure of the state;
 - (d) Therefore, the purposes of enacting this article 10.5 are:
 - (I) To implement actions to **detect, prevent, contain, control, monitor**, and, whenever possible, **eradicate** aquatic nuisance species from the waters of the state and to protect human health, safety, and welfare from aquatic nuisance species;



What are Zebra, Quagga & Golden Mussels



Limnoperna fortunei
Golden Mussel



Driessena rostriformis bugensis
Quagga Mussel



Driessena polymorpha
Zebra Mussel

Freshwater Bi-Valve
Mollusks

**Invasive
Characteristics**

- Rapid Reproduction
- Filter Feeding
- Attach with Byssal Threads



Impacts to Infrastructure

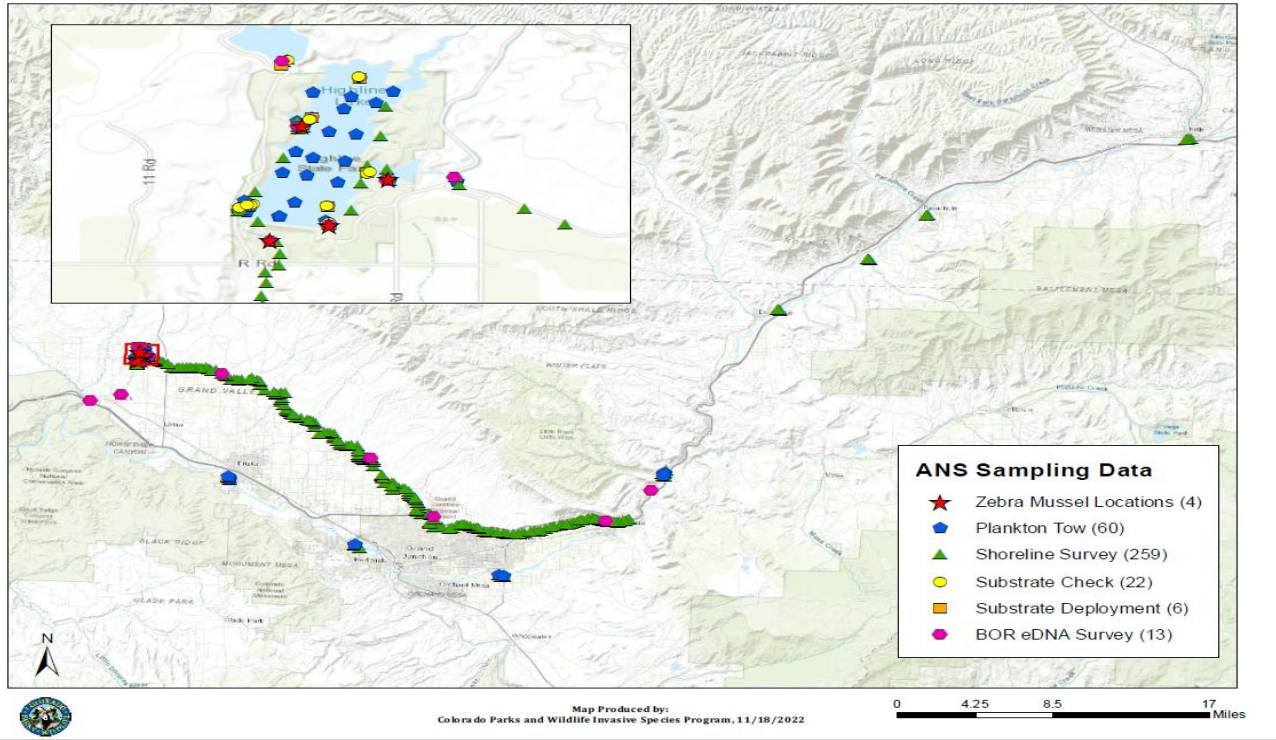
- Impede or stop the flow of water to homes, farms and power plants
- Cost millions of dollars to maintain and/or repair equipment and infrastructure
 - Preventative Control
 - Increased Maintenance
 - Monitoring
 - Unplanned Outages



Zebra Mussels At Highline Lake



2022 ANS Sampling Around Highline Lake Post Zebra Mussel Detection



- Adult Zebra Mussels Detected in Highline Lake in Fall of 2022
- Eradication Effort Attempted Winter 2022/2023
- Additional Adult Mussels Detected In Fall of 2023
- Eradication Efforts Attempted Winter 2023 – Spring 2025

Colorado River & Government Highline Canal Veliger Sampling - 07/01 - 07/15

2024 Overall Veliger Findings

Government Highline Canal

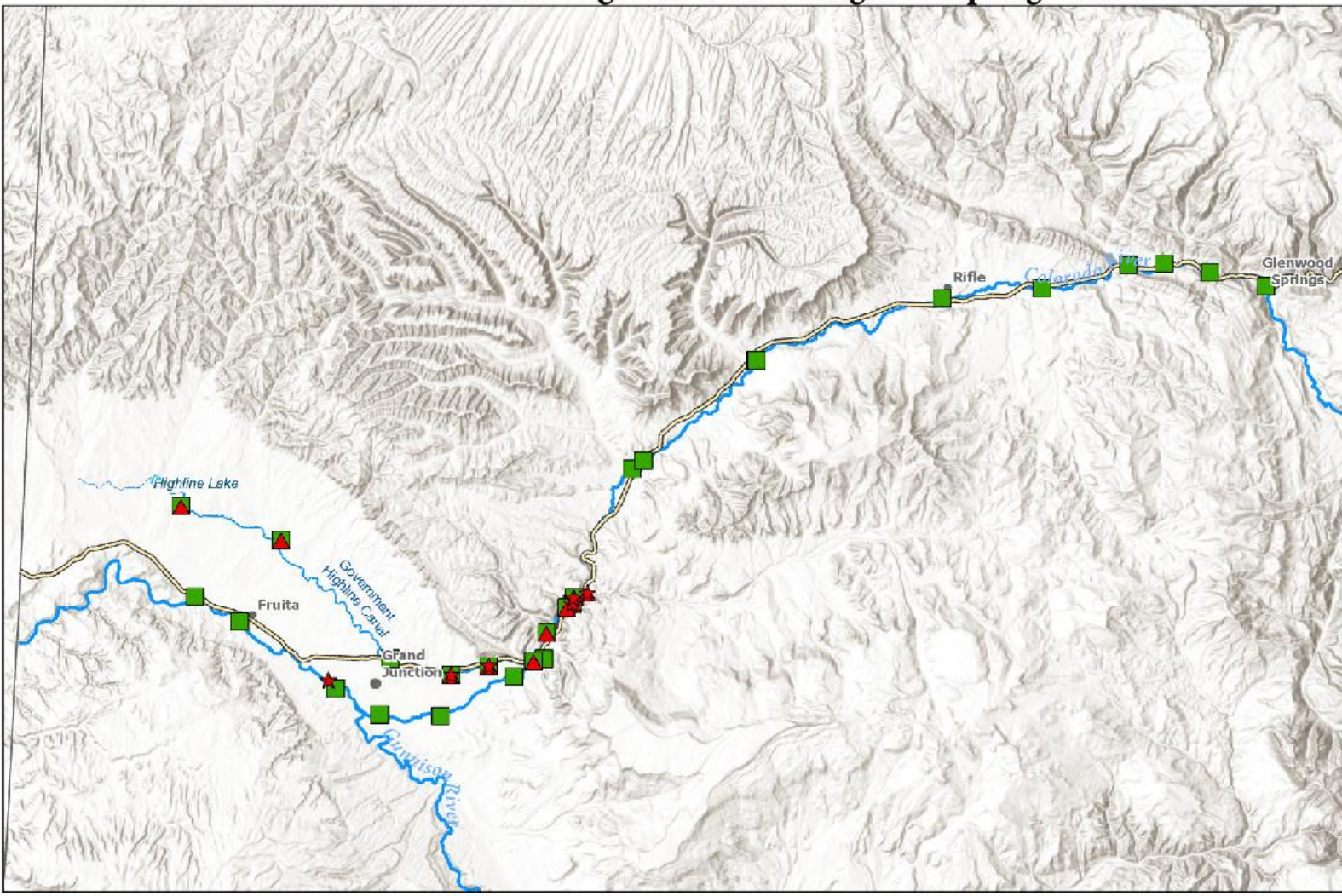
- Train Tracks – 07/01
- Distributing Co. - 07/01
- 35 Rd – 07/08

Colorado River

- Beaver Tail Pull-Off – 07/08
- Canal Diversion Upstream – 07/08
- Blue Heron Boat Ramp – 07/14
- Beaver Tail Pull-Off – 07/15

Government Highline Canal & Colorado River are Considered “Positive”.

No Adult Mussels Found



Map Produced by:
Colorado Parks and Wildlife Invasive Species Program 10/1/2024

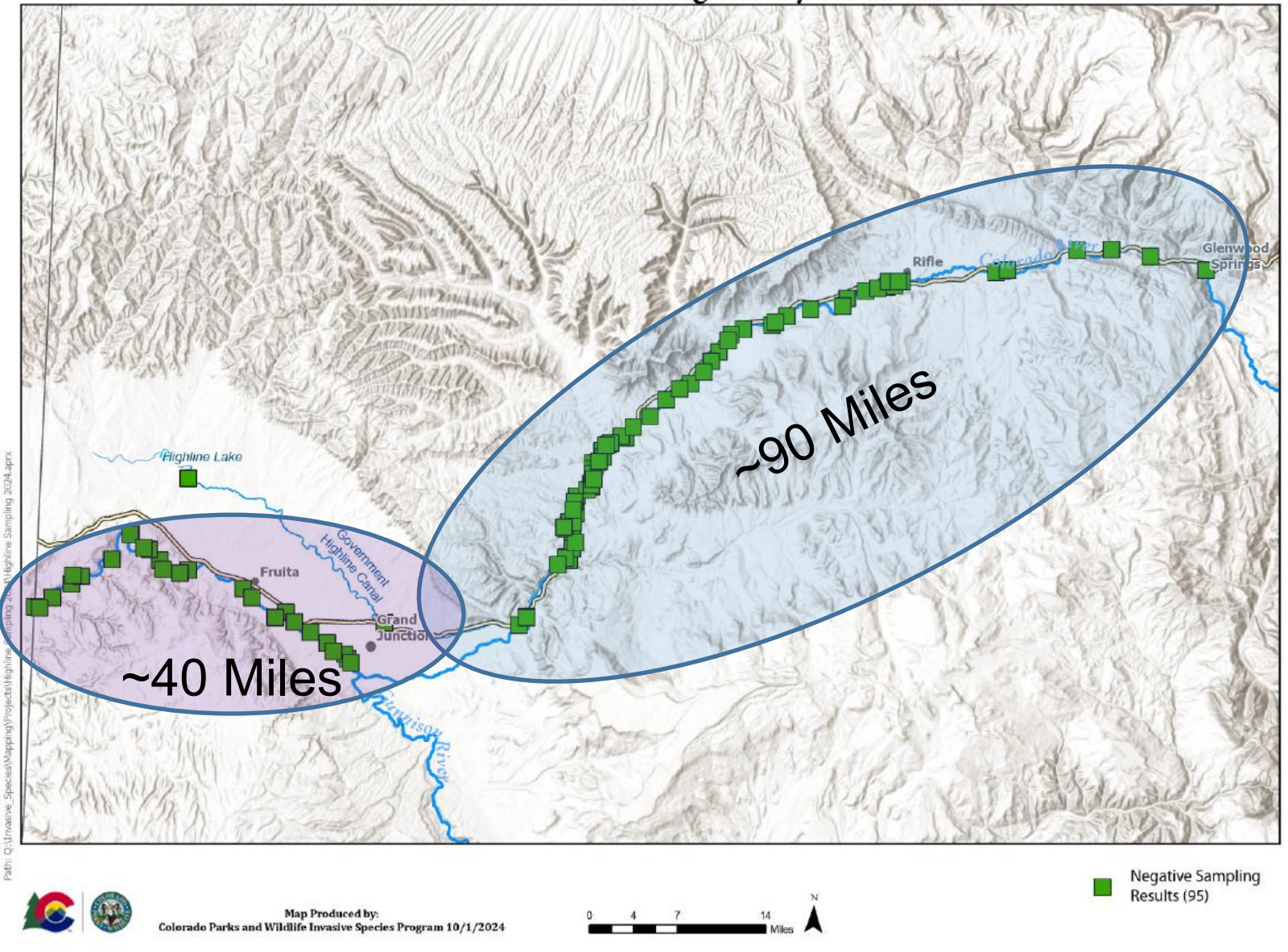


- ★ Veliger Locations (7)
- ▲ eDNA Positive (15)
- Negative Sampling Results (40)



Colorado River Sampling Following July Detections

- 2 Rafting Trips
- Weekly Sampling De Beque -> Grand Junction
- Sampling of Canals, Private Ponds, Etc.
- Sampling in upstream reservoirs
- Samples in Grand Junction Area
 - 450+ by CPW
 - No positives via microscopy after 07/15.
 - 8 by Water Entities
 - All Negative via qPCR
 - Additional Sampling by BOR





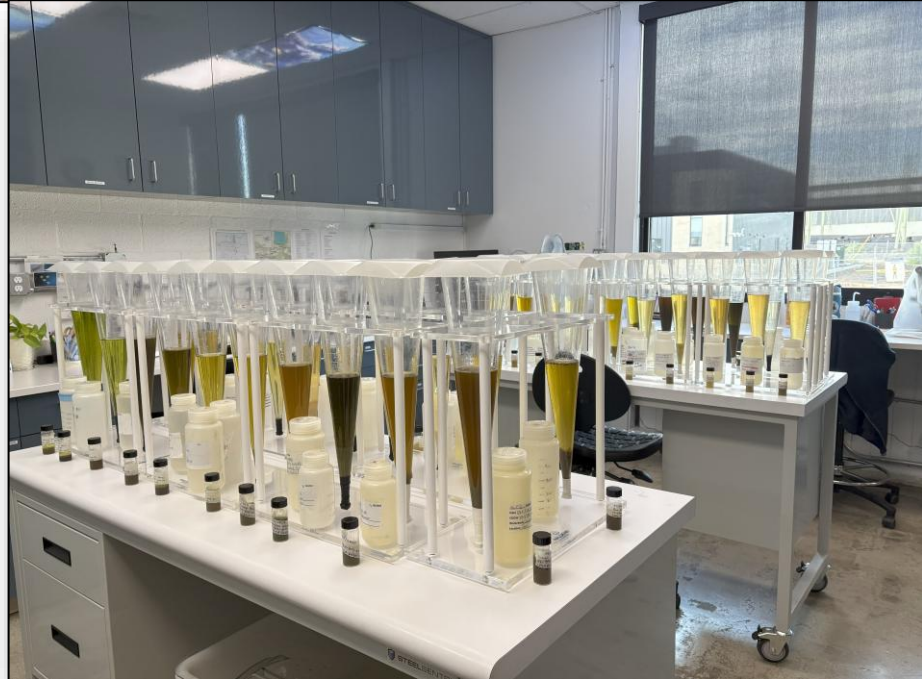
First Draft: January 22, 2025

Last Update: March 16, 2025

Grand Valley Invasive Mussel Management Plan

- Developed in partnership w/ private, local, county, state and federal partners
 - Monthly meetings facilitated by CPW
- Topics Covered Include Roles & Responsibilities as they pertain to:
 - Education
 - Sampling
 - Communication
 - Containment
 - Mitigation



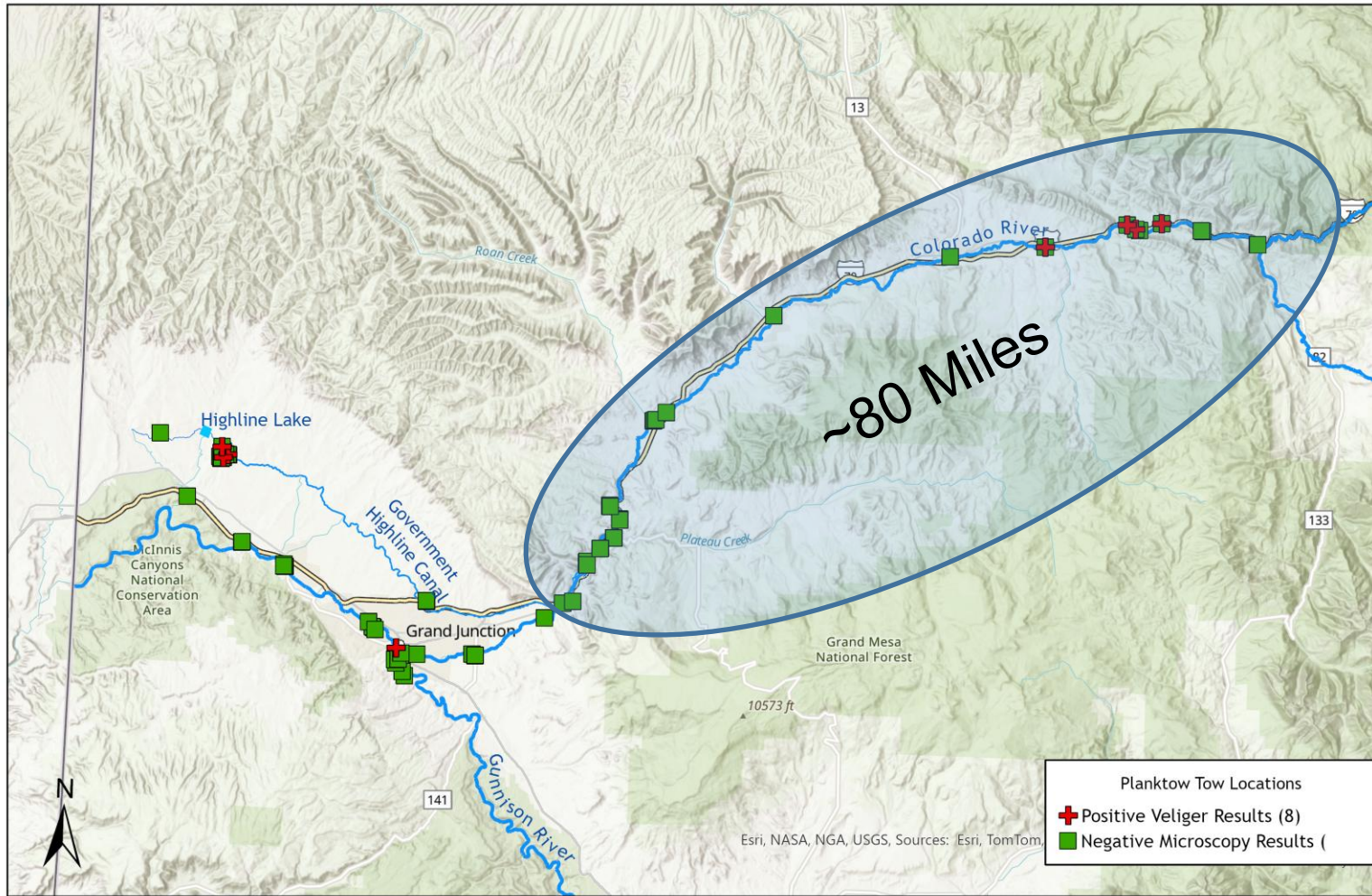


Increasing CPW's Sampling Capacity

- New Early Detection & Rapid Response Specialist
 - Hired October 2024
 - Dedicated Monitoring Crew in Grand Junction Area
 - Increased ANS Lab Capacity
 - Expansion of in house qPCR capacity.
-
- Plan For Weekly Sampling on Colorado River in 2025
 - Ability to have those samples processed on a weekly basis.



2025 Colorado River Sampling Locations



Colorado River Findings April – June 2025

Suspect eDNA results @
New Castle Boat Ramp in
Late April – May.

Colorado River Veligers

- Grand River Park – 06/09
- New Castle Boat Ramp 06/16
- Silt Boat Ramp – 06/16
- Dinosaur Boat Ramp – 06/16
- Dike Road Island – 06/18
- Butterfly Pond Inlet – 06/18

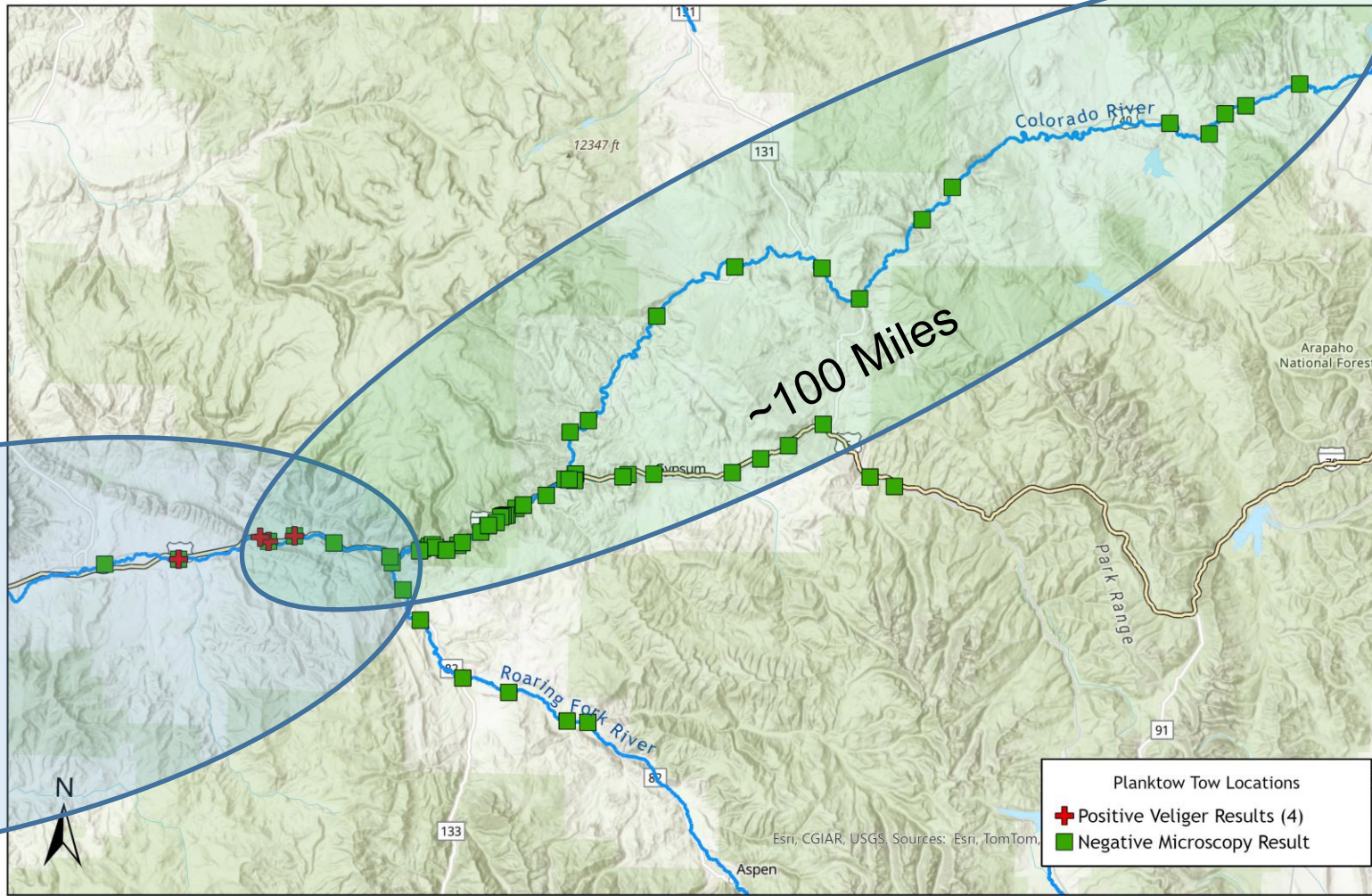
Colorado River from
Glenwood Springs to State
Line Considered "Positive"



Map Produced by:
Colorado Parks and Wildlife Invasive Species Program, 09/12/2025



2025 Colorado River Sampling Locations



Colorado River Veliger Sampling Following June Detections

Colorado River

- Granby Dam → Glenwood Springs
- Shoshone Power Plant
- No veligers confirmed upstream of confluence of Colorado River & Roaring Fork

Eagle & Roaring Fork

- No veligers found



Map Produced by:
Colorado Parks and Wildlife Invasive Species Program, 09/12/2025

0 5 10 20 30 40 Miles



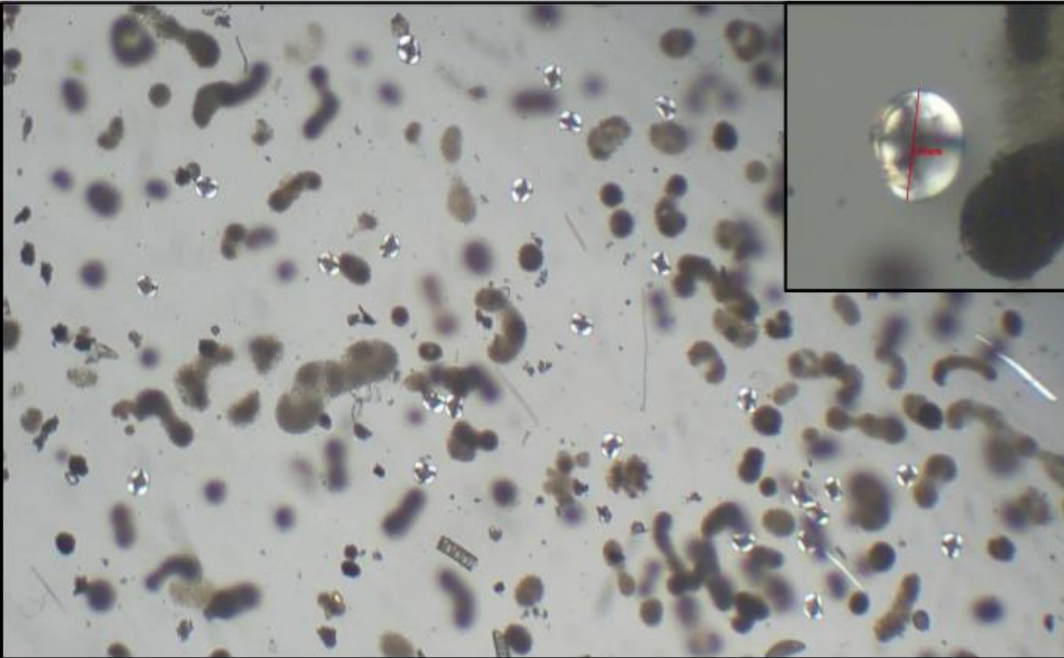
Private Lake Findings

Large Population of Adult Mussels Found in Private Lake in Eagle County – 07/03

- Pond is 13 Surface Acres in Size
- Farthest Upstream Detection
- Significant Risk To Downstream Water Users

2 culverts that were potentially allowing outflow were removed from the lake on 07/06

- Cooperation w/ Landowner is critical.



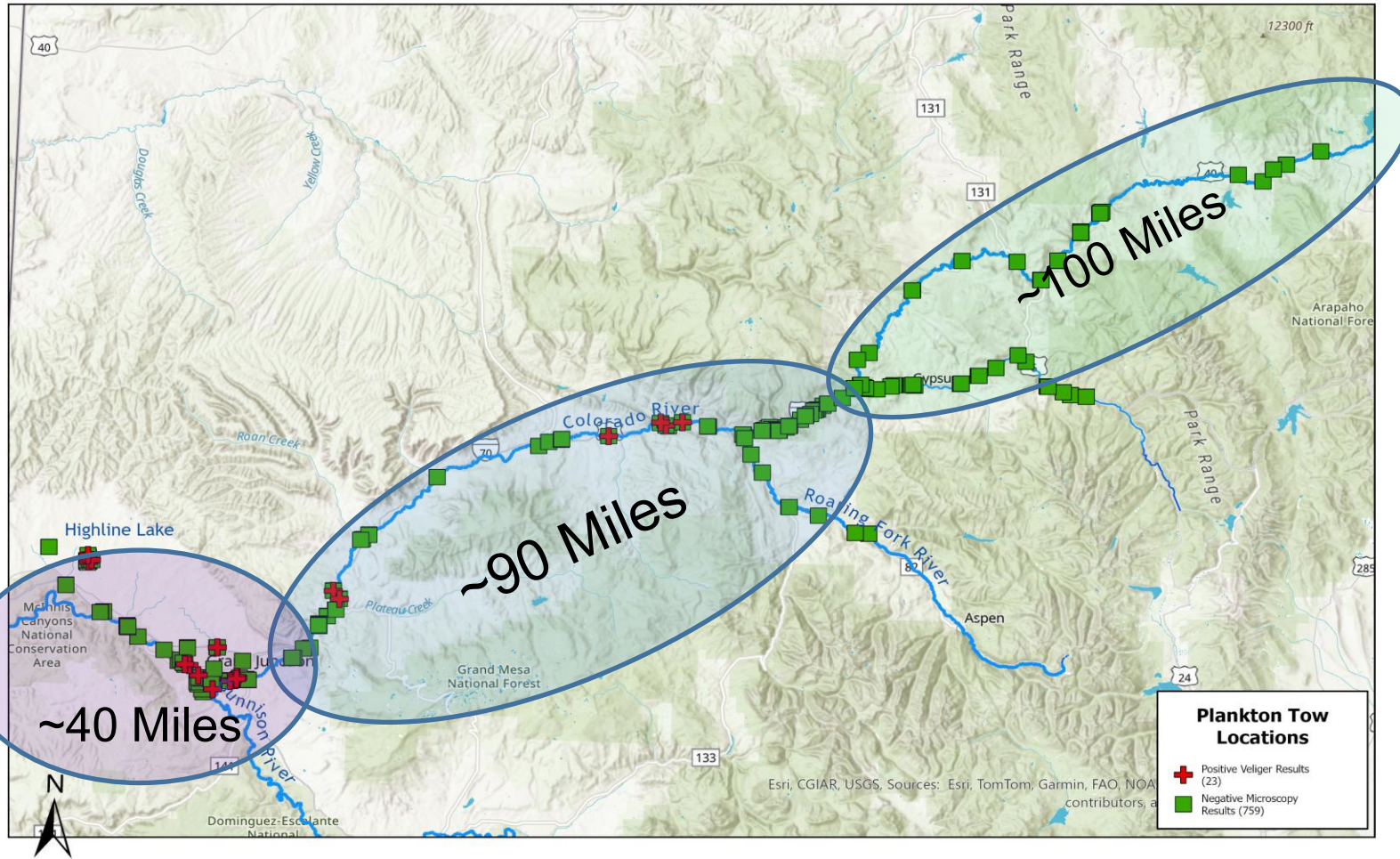


Private Lake Treatment

Treatment began on
08/25

- Utilizing Earthtec QZ
- .2 - .4 mg/L Cu
- Maintained Concentrations for 30+ Days
- Water temperatures ranged between 20°C and 21°C
- Initial results very promising.

Total Sampling Effort



Ongoing Monitoring of Colorado River System

Colorado River

- Granby Dam → Glenwood Springs
- Shoshone Power Plant

Eagle & Roaring Fork

- No veligers found

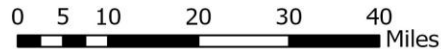
Lakes & Reservoirs

- Continued sampling in upstream reservoirs
- Continued sampling of statewide lakes & reservoirs
- No mussels found

*Majority of samples evaluated via both microscopy and qPCR



Map Produced by:
Colorado Parks and Wildlife Invasive Species Program, 10/24/2025





Pond outlet & mussels found in East-West Lake (above)



Mussels found in the river

Adult Mussels Found in Grand Junction

East-West Lake (50 Acres)

Lake water is return flow from Grand Valley Canal. No surface water recreation. Shoreline fishing only.

- 08/13 – Suspect veliger confirmed
- 09/02 – Adult zebra mussels found
- 09/15 – Lake isolated from canal & Colorado River System (Thanks BOR!)

Colorado River

- 09/02 – Adult zebra mussels found in river at the pond outlet
- CPW does not intend to treat the main stem of the Colorado River



Mesa County Fairgrounds Irrigation Pond

Small (.07 Acre) Irrigation Pond

- Sampling Requested by Mesa County
- No Public Access
- Serves Over 100 Irrigation Zones

Adult and Veliger Stage Zebra Mussels Identified by CPW

Treatment of the pond was implemented in partnership with Orchard Mesa Irrigation District, Mesa County & CPW.

- Goal = Minimize Impact on Irrigation





Containment Program at Highline Lake & Mack Mesa

Highline Lake Re-Opened to Motorized Boating in 2025

New ANS Station With Capacity to Decontaminate Multiple Watercraft

All Exiting Trailed & Motorized Watercraft Decontaminated

- >1,800 Decontaminations In 2025

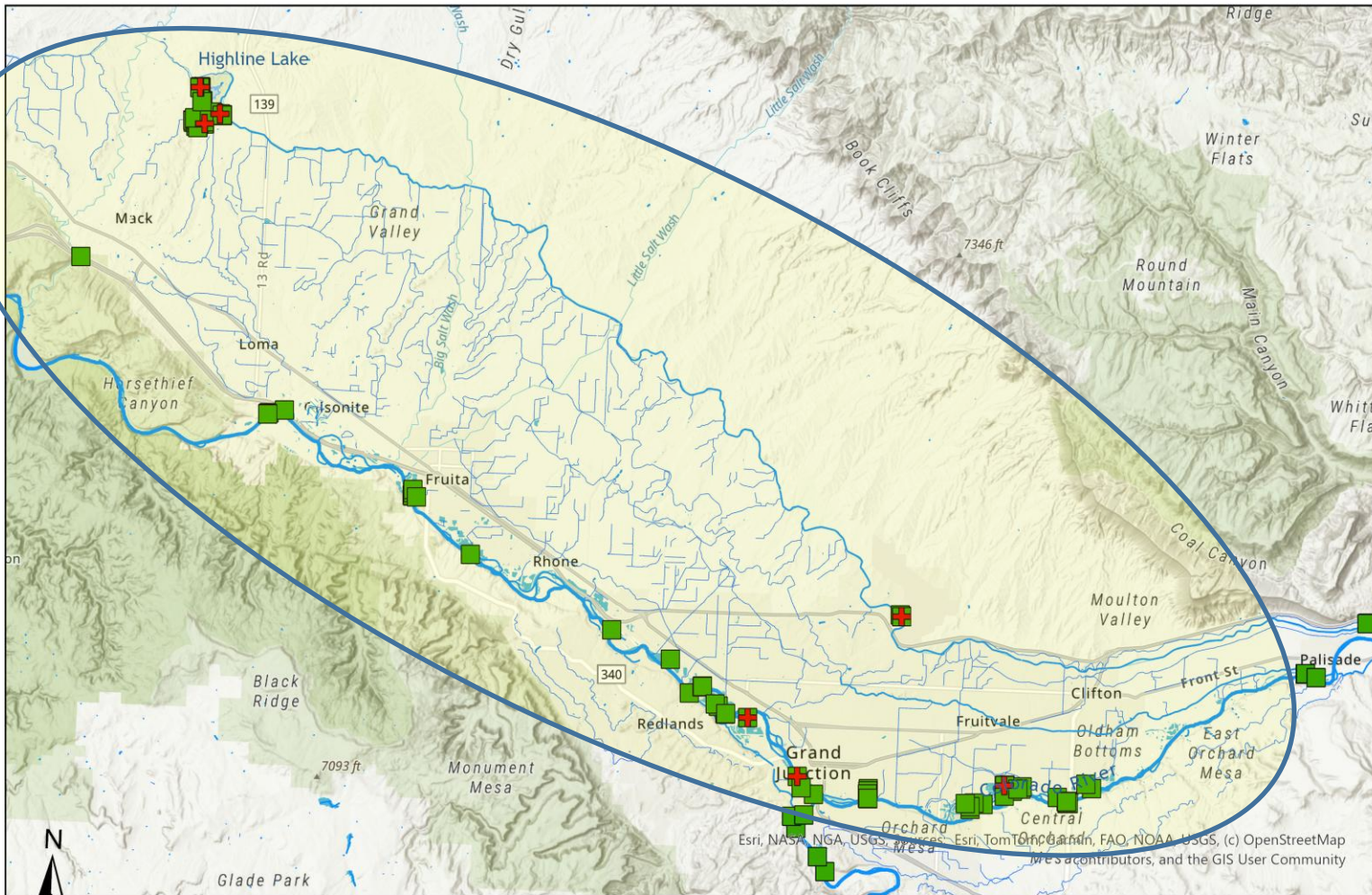
16 Mussel Fouled Watercraft Intercepted Prior to Launch (#2 in State)

Planning To Install First In-State Decontamination Dip Tank at Highline For 2026 Season

- ~\$1,200,000 Installation
- 65/35 Cost Share w/ Army Corps of Engineers



2025 Grand Valley Water



Early Detection Priorities Moving Forward

- Continued Monitoring of the Colorado River and Associated Canal Systems

Colorado River Blitz

Coordinated by CPW

- 75 Participants Representing 10 Different Entities
- CPW, Bureau of Reclamation, City of Grand Junction, Eagle County, Mesa County, Orchard Mesa Irrigation District, Roaring Fork Conservancy, State of Utah, US Fish & Wildlife

Physical Surveys of Colorado River from Granby -> Westwater, Utah, Roaring Fork, and Eagle Rivers

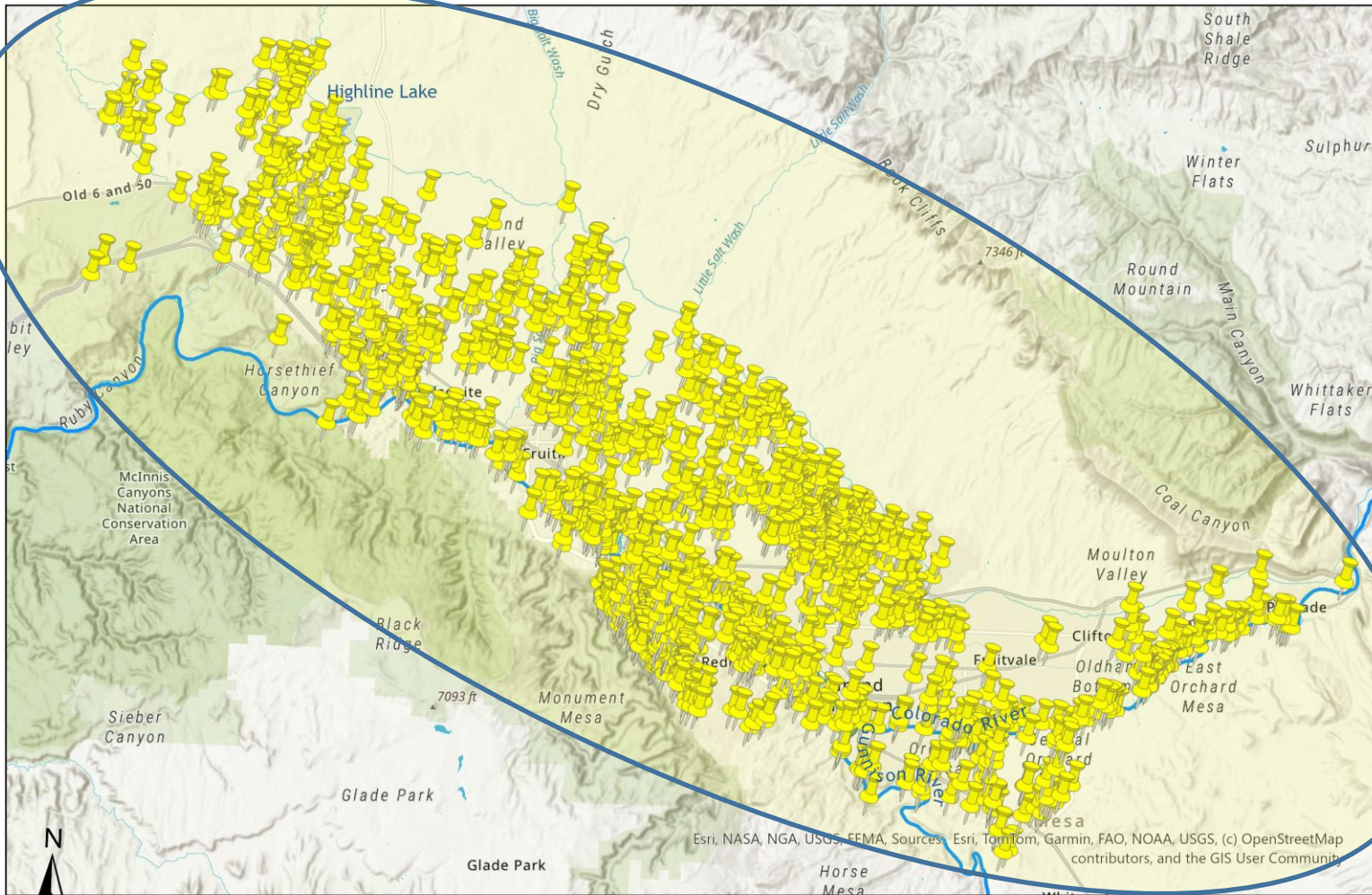
Occurring Today!



Map Produced by:
Colorado Parks and Wildlife Invasive Species Program, 09/12/2025



2025 Grand Valley Water



Early Detection Priorities

Grand Valley is a highly agricultural area.

- Vast network of canals, ditches, and washes moving Colorado River Water.
- Many private waterbodies including HOA Ponds, Golf Courses, Etc.

Early Detection:

- Work with federal and local partners to sample as many Grand Valley ponds/lakes/etc. as we can in the fall of 2025 and through 2026.
- 1000+ Potential Sites Identified



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Addressing Risk w/ Non-Motorized Users

Outreach & Education @ River Access Points

- 7,036 Face-To-Face Educational Contacts
- 5,103 Of Those w/ Colorado River Users
 - 95% September Users Aware of ANS (+15% Compared to May)



Non-Motorized Gear Cleaning Stations

- Limited Access To Cleaning Stations A Primary Reason Users Do Not Clean Gear
- 50 Stations Deployed Statewide
- 90% September Colorado River Users Clean Gear After Every Use (+31% Compared to May)

Oh, SHELL NO

Colorado's peach crop could be impacted by Aquatic Nuisance Species (ANS)

TAKE ACTION
Be a Pain in the ANS




cpw.info/PainInTheANS

Botón de traducción disponible en el sitio web.



Oh, SHELL NO

Colorado's beer industry could be impacted by Aquatic Nuisance Species (ANS)

TAKE ACTION
Be a Pain in the ANS




cpw.info/PainInTheANS




Botón de traducción disponible en el sitio web.



Oh, SHELL NO

Colorado's drinking water could be impacted by Aquatic Nuisance Species (ANS)

TAKE ACTION
Be a pain in the ANS

Oh, Shell No! Information Campaign

Oh, Shell No!

- ANS impacts aren't limited to recreation / recreationists
- The campaign targets potential impacts on all citizens of Colorado.
- Produced in both English and Spanish
- Print & Digital Elements
- "Take Action - Be A Pain in The ANS"
 - Clean, Drain, Dry



Implementing HB21-1226

More Robust ANS Check Stations

- Passed in 2021
- Pilot Program 2022 - 2023
- Near full time operations at Loma & Trinidad in 2024.
- 2025
 - New Stations @ Ft. Morgan & Limon
 - 2 New Fully Commissioned ANS Investigator Positions To Increase Enforcement & Compliance
- 2026
 - Infrastructure Improvements @ Loma POE to better accommodate boats & CMV Traffic
 - 65/35 Cost Share with Army Corps of Engineers

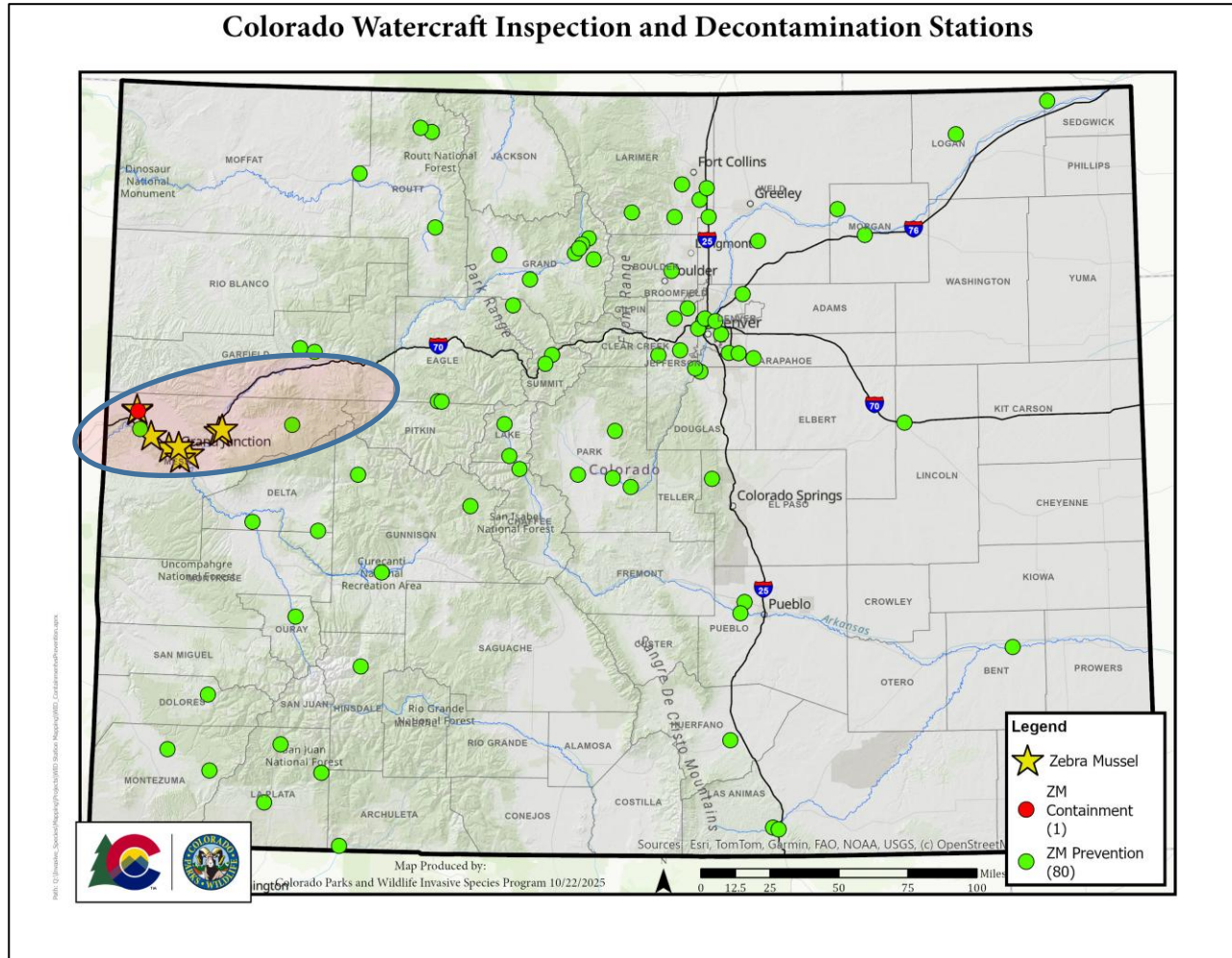
Station	Inspections	Decons	Interceptions
Loma POE	3,647	1,044	51
Trinidad POE	357	52	3
Ft. Morgan POE	1,107	163	0
Limon POE	186	20	0



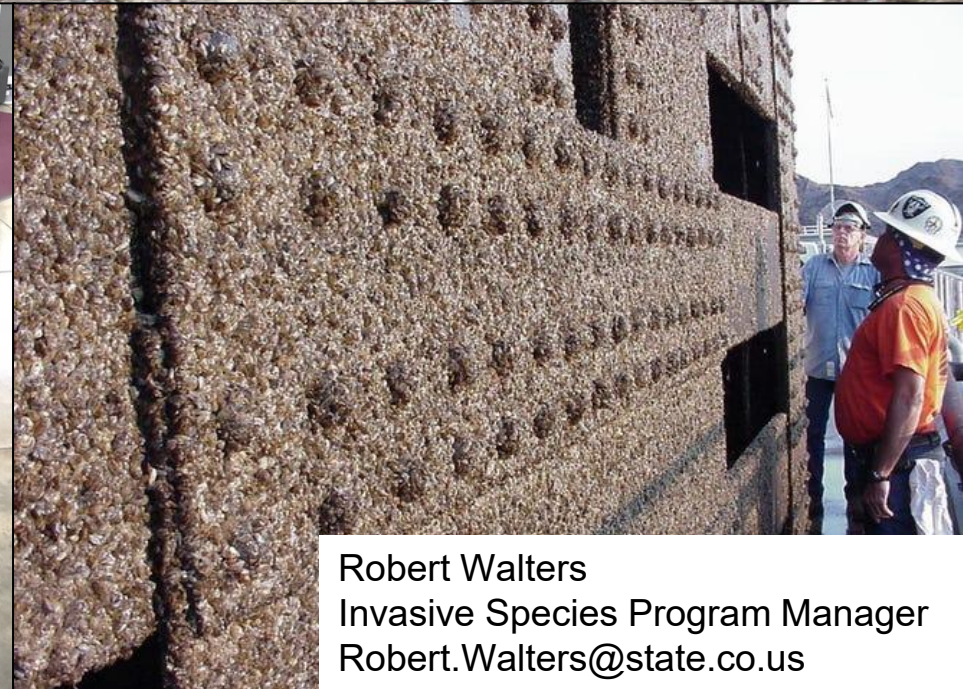
Priority #1 = Prevention

The vast majority of Colorado's waters remain free of Invasive Mussels.

- Colorado Continues To Implement One Of the Most Robust Watercraft Inspection & Decontamination Programs in the Nation
- Education, Monitoring, Containment, and Eradication are all part of the statewide ANS Management strategy.



Thank You!



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Invasive Species Program Manager
Robert.Walters@state.co.us