2023 Early Detection Zebra and Quagga Mussel Monitoring Program Update

Jesse Schultz Lead Prevention Biologist Aquatic Invasive Species Unit Columbia River Basin Team Meeting June 6, 2023



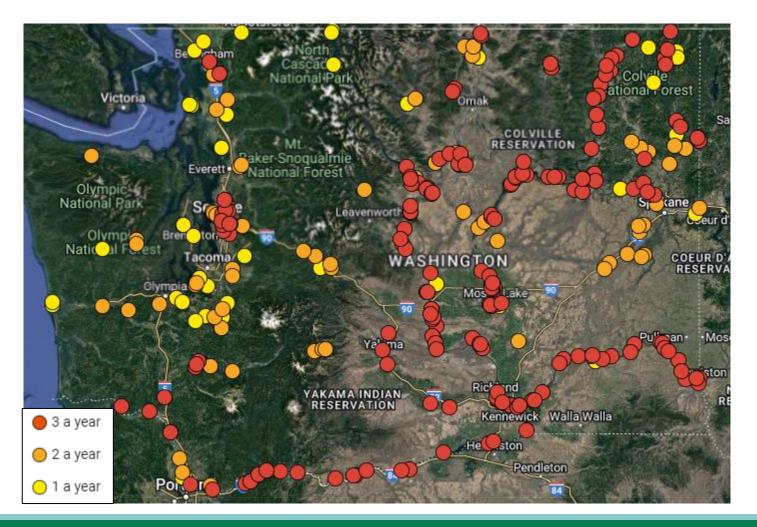


Partners	Water Body Common Name
Chelan County PUD	Lake Entiat
Confederated Tribes of the Colville Reservation	Lake Roosevelt, Rufus Woods Lake, and Kettle River
Douglas County PUD	Lake Pateros
Grant County PUD	Priest Rapids Lake and Wanapum Lake
Seattle City Light	Boundary Reservoir
Snohomish County PUD	Spada Lake
Spokane Tribe of Indians	Lake Roosevelt
U.S. Bureau of Reclamation	Lake Roosevelt



2023 High-Risk Early Detection Monitoring Sites

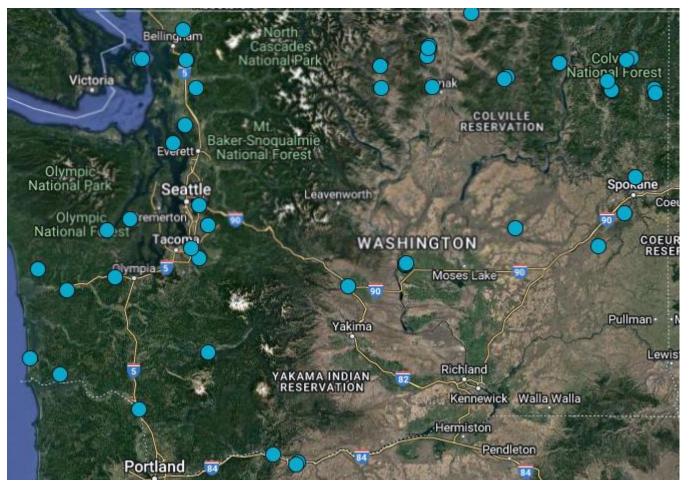
(124 water bodies and 304 sites)





2023 Low-Risk Early Detection Monitoring Sites

(49 sites withing 48 waterbodies once every 2 or 3 years)





Sampling Methods

(field season May-November)

High-Risk Sites

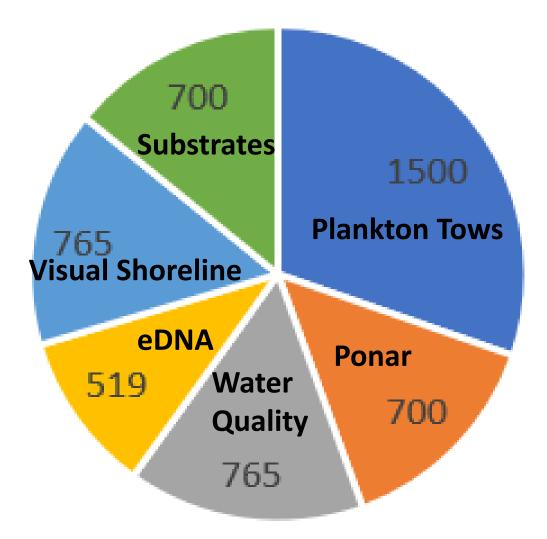
- Horizontal and vertical plankton net tows
- Artificial substrates/collection plates
- Visual and tactile shoreline
- Water quality
- Dissolved calcium
- Environmental DNA (eDNA)
 - Only 3 a year sites
- Petite Ponar grab sampler
- AIS signage installed

Low-Risk Sites

- Visual and tactile shoreline
- Water quality
- Dissolved calcium
- AIS signage installed
- Other sample methods if site allows



2023 Forecast





2023 Analysis



Plankton tows (weekly)

- Steve Wells
- Cameron Lange

eDNA (monthly)

• WDFW Genetics Lab Dr. Lisa Crosson

Dissolved calcium (monthly)

 Eastern Washington University Professor Carmen Nezat



AIS Signage



Protect Your Waters From Aquatic Invasive Species



STOP THE SPREAD OF INVASIVE NORTHERN PIKE



This site is at risk for invasion by northern pike. Northern pike pose a significant threat to Washington salmon and steelhead.

IF CAUGHT DO NOT RELEASE

Photograph and report to the Washington Department of Fish and Wildlife

1-888-WDFW-AIS

fishpgm@dfw.wa.gov invasivespecies.wa.gov/report-a-sighting/



- Each sign installed at site
- Signs are not installed without property manager's permission



WDFW ZQM Teams

(2-person team and a boat)



May 1 – November 15

–Olympia (western WA)–Spokane (eastern WA)

-Ephrata (central WA)

Show me the money

- –July 1 range reallocation
- -July 1 cost of living increase
- -Permanent career seasonal
- -\$25 an hour



In Progress

- –Instructional sampling videos
 - All 6 sampling methods
 - Videos will be implemented into our protocols
 - Produced by WDFW Public Affairs
 - Public version for Facebook, Instagram, and Twitter





Questions?



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Department of Fish and Wildlife