

2023 ISDA Invasive Species Update

Organization and Operations

INVASIVE
SPECIES OF IDAHO



THE IDAHO STATE DEPARTMENT OF AGRICULTURE

DIVISION OF PLANT INDUSTRIES

INVASIVE SPECIES

Nic Zurfluh

NOXIOUS WEEDS

Jeremey Varley

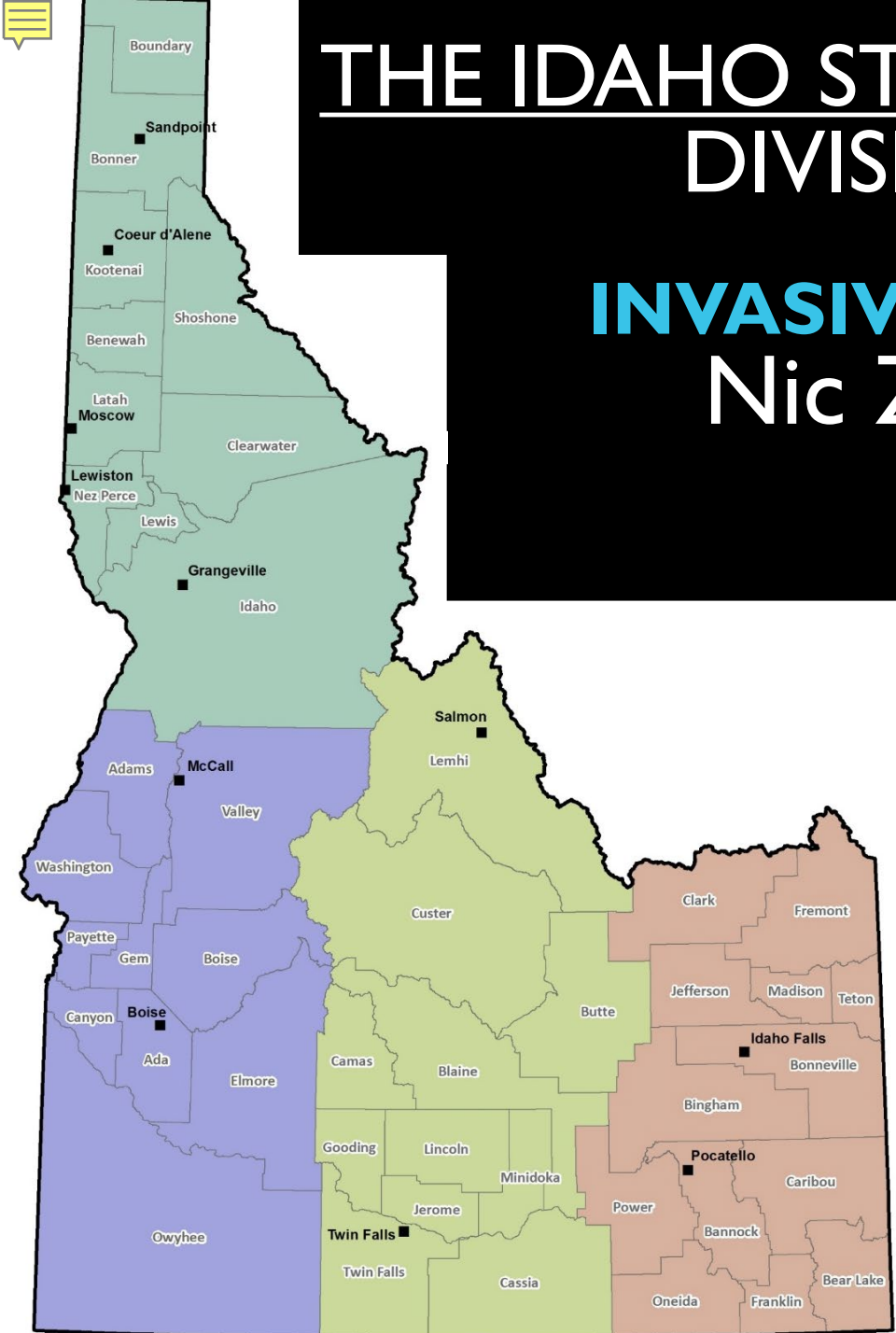
PROGRAM SPECIALISTS AND TECHNICIANS

Dr. Paul Rhoades & Vacant
Jenny Romans & Ryan Hanna

Sam Kennedy
Bethany Muffley & Mark Devey

Madi Patterson, Michael Cellan

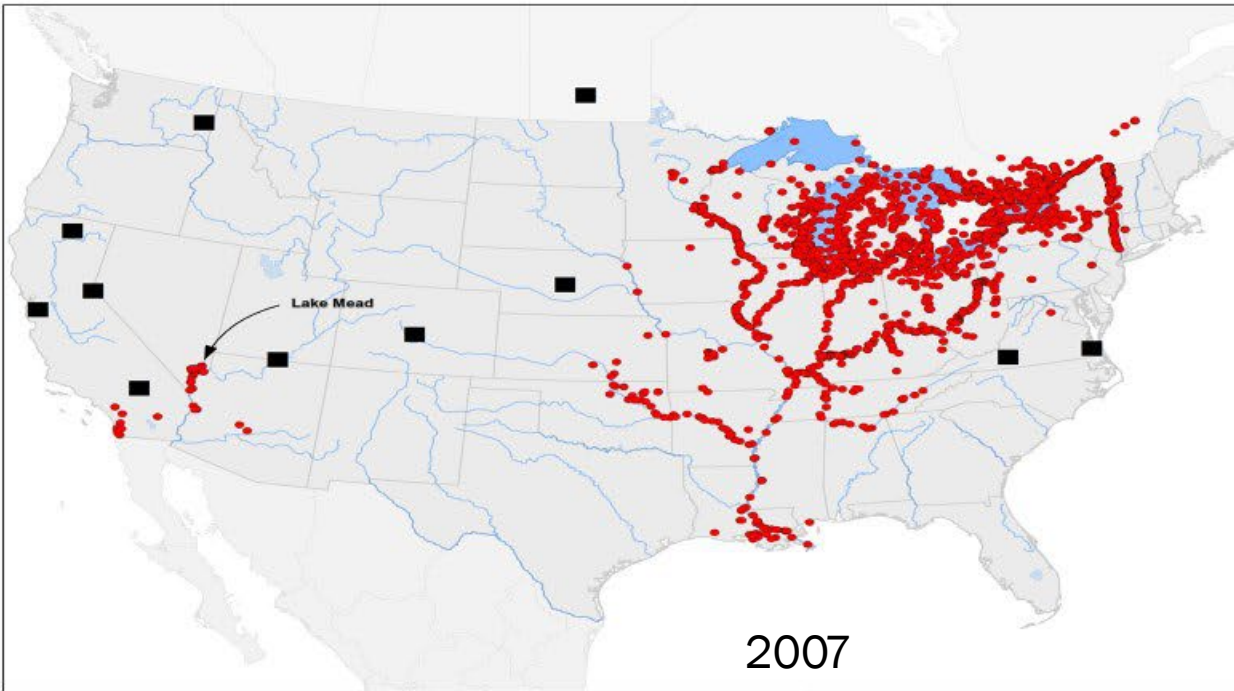
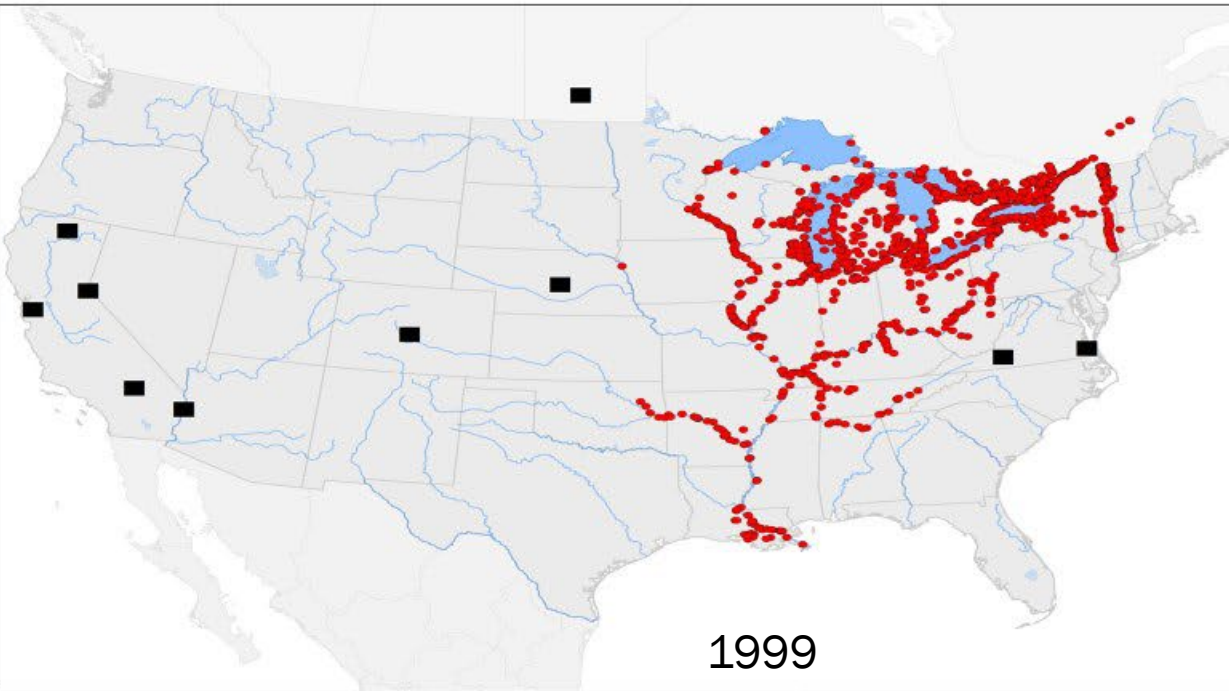
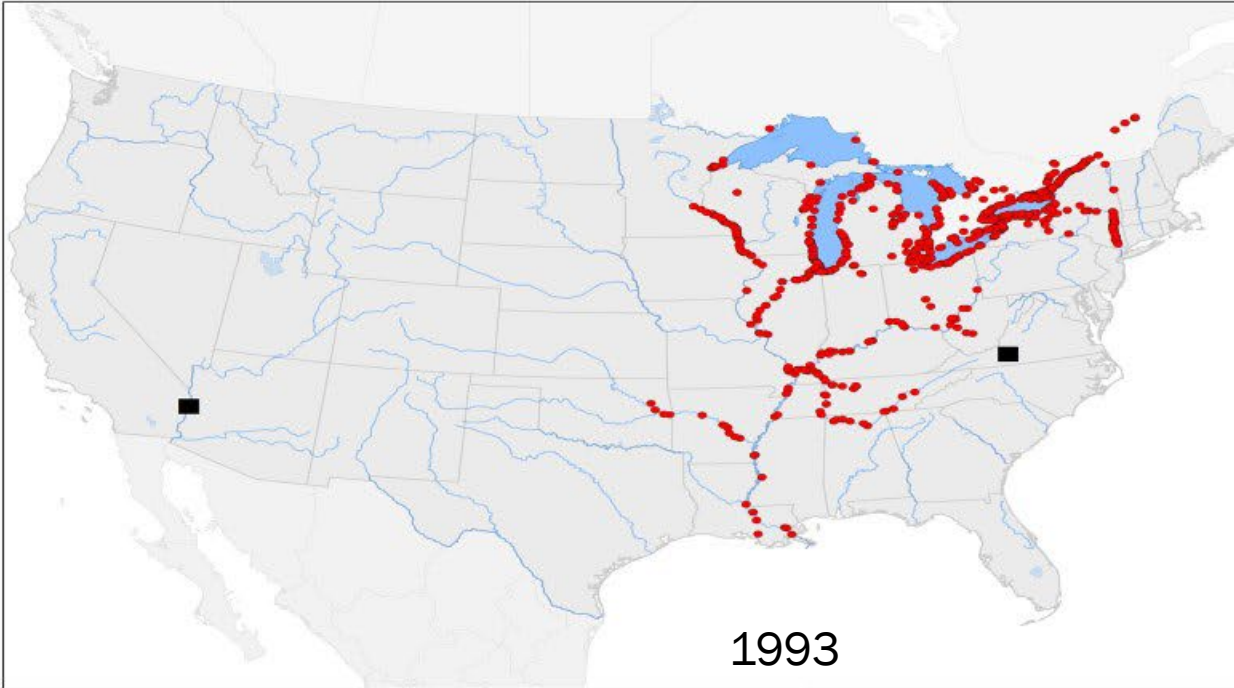
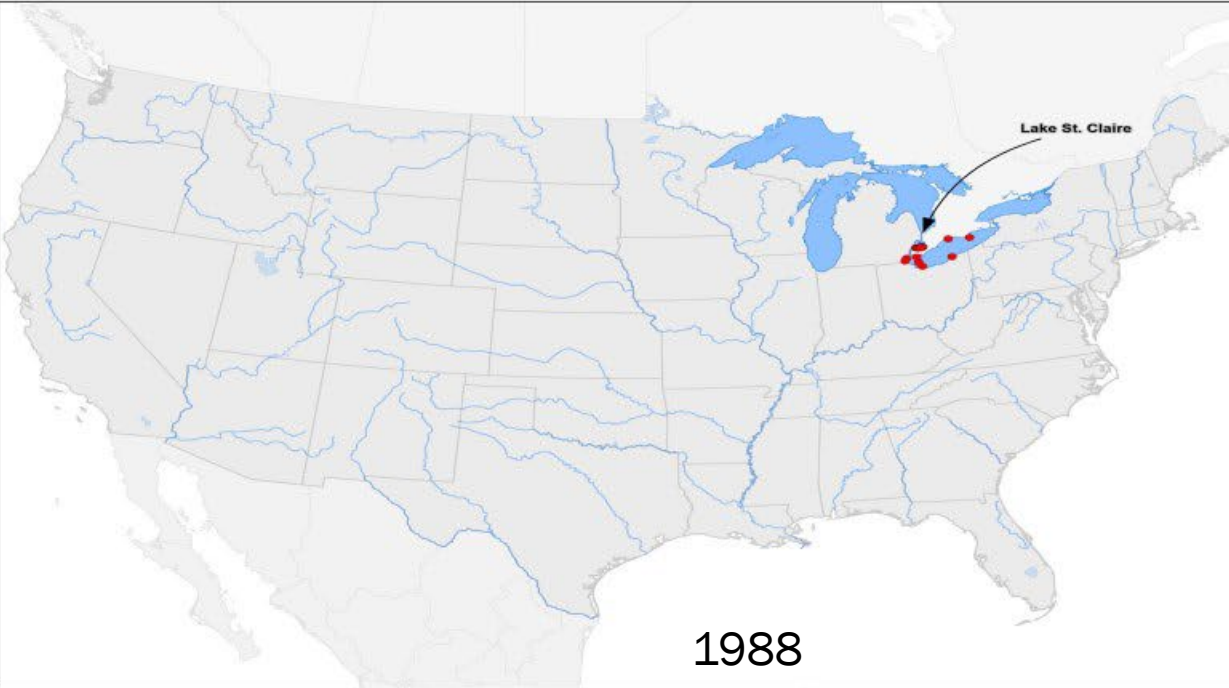
Cole Morrison & Abbie Broersma
Vacant & Glenn Mabey



Quagga and Zebra Mussels

- Disrupt Water Delivery and Drainage.
- Impact Power Generation and Increase Utility Costs.
- Damage Fisheries and Aquatic Habitat.
- Degrade Water Quality.
- Impact Recreation and Tourism.
- Estimated \$114 Million impact if Idaho becomes infected.





El Dorado, KS, Zebra Mussels 2003



El Dorado, KS, Zebra Mussels 2006



Zebra and Quagga Mussel Sightings Distribution

Dreissena polymorpha and *Dreissena bugensis*



Zebra Mussel
Species Profile



Quagga Mussel
Species Profile

- Zebra mussel occurrences
- Quagga mussel occurrences
- Zebra or quagga mussels eradicated
- Zebra or quagga mussels failed



**KNOW
MORE.** **KKCO 11**
KKCO11NEWS.com

MUSSELS CONCERN AT HIGHLINE PARK

So what are we doing about it?

Prevention and Early Detection





Spaces or hyphens
should appear here.

Validation
Sticker



INVASIVE SPECIES STICKER

Price:

- Sticker included with Idaho Boat Registration (no additional sticker needed)
- \$30 Out of State
- \$7 Non-Motorized

Inspection
Prevention
Education



STICKER REQUIREMENTS

ALL Motorized

**ALL Non-Motorized
Hard Side/ Rigid
Vessels**

**ALL Inflatables 10' in
Length or Larger**

**ONLY EXCEPTION
Non-Motorized
Inflatables Less Than
10' in Length**

INVASIVE SPECIES/NOXIOUS WEEDS PROGRAM

Idaho State Department of
Agriculture

2270 Old Penitentiary Road
P.O. Box 790 Boise, Idaho
83701-0790

<http://invasivespecies.idaho.gov/>

Public Outreach

CALL BEFORE YOU HAUL
1-844-311-4873

States have requirements for commercially hauled watercraft. If you are transporting a boat to Washington, Oregon, Idaho, or Montana, **Call Before You Haul** to avoid costly delays.

You Provide . . .

- Waterbody origin
- Travel route
- Time frame
- Destination
- Hauler and boat owner contact info
- Last waterbody
- Est. time out of water

What Happens After You Call?
The destination state will contact you to ensure your boat is inspected, and if necessary, decontaminated, before or upon arrival to its destination.

Why is This Important?
Call Before You Haul prevents unnecessary delays for you and your customers and ensures you will not be violating state or federal laws pertaining to unlawful transport of invasive species.

Prevent Delays
Aquatic invasive species hitchhike on boats, trailers, and motors in both visible and hidden locations. Trained professionals will inspect and certify your boat to prevent costly delays.

OVERSIZE LOAD

Scan me!

A commercial trucking company, or hauler, may be held legally responsible for violations of state law and the federal Lacey Act if a company driver is intercepted hauling a vessel infested with quagga or zebra mussels. Boat brokers may also be held liable if the broker contracts with an independent contractor to haul a contaminated watercraft across state lines. Save yourself costly delays - **Call Before You Haul** to ensure your destination state can provide you with the services needed to inspect your cargo. One toll-free call notifies all four western states.



Dreissena polymorpha Zebra Mussel

Dreissenidae, the freshwater mussel family



Diagnostic Characteristics

- Small freshwater bivalve with a triangular shape
- Striped and zig-zag shell with colors that vary from dark to light to none
- Stable flattened ventral side; will sit flat, unlike the Quagga Mussel
- Byssal threads protrude from shell

Background

- Native to the Black, Caspian, and Azov seas; Introduced into the Great Lakes through ballast water
- Usually found attached to objects in the water by means of byssal threads
- Clogs water systems and other infrastructure
- Efficient filter feeders (1 liter of water per day)
- Competes for food with other species
- Invades other waterways via watercraft
- Alter fish habitat
- Increases power, food, and recreational costs

Photo Credit:

1354035 - Amy Benson, U.S. Geological Survey, Bugwood.org

1265051 - Amy Benson, U.S. Geological Survey, Bugwood.org

5411907 - Craig Casemeci, Michigan Sea Grant, Bugwood.org

1299199 - Randy Westbrook, Invasive Plant Control, Inc., Bugwood.org

ZEBRA MUSSEL

Dreissena polymorpha

Dreissenidae, the freshwater mussel family

Amy Benson, U.S. Geological Survey, Bugwood.org

FACTSHEET INFORMATION

Summary of Invasiveness

- Zebra mussels have been identified as the most aggressive freshwater invader worldwide.
- These mussels are so successful due to their prolific reproduction. Once introduced, they can reproduce to the point that their biomass is 10 times the biomass of native species.
- Attaches to substrate and infrastructure in prolific numbers via byssal threads.

Diagnostic Characteristics

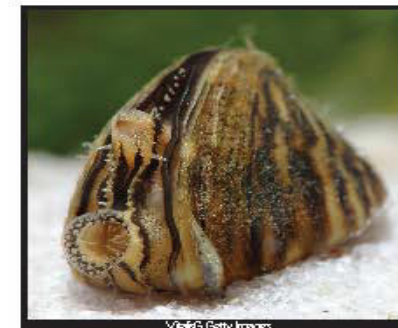
- Small freshwater bivalve with a triangular shape.
- Striped and zig-zag shell with colors that vary from dark to light to none.
- Stable flattened ventral side; allowing it to sit flat, unlike Quagga mussels.
- Byssal threads protrude from shell.

Introduction and Movement

- Native to the Black, Caspian, and Azov seas. Introduced to the Great Lakes in the 1980's via ballast water.
- Has spread across the nation to the point that only 5 states are free of suspect or confirmed infestation.
- Spreads easily to new areas via watercraft and water related construction equipment.

Prevention Strategy

- To prevent accidental introductions, ensure that your watercraft and water related equipment is thoroughly cleaned, drained, and dry.
- When passing inspection stations during their hours of operations, make sure to stop for an inspection and decontamination.
- After visiting waters that are out of state, especially states with infested waters, ensure that your boat has been inspected or allowed dry time of at least 30 days prior to launching in Idaho waters.
- Always Remember To: **CLEAN > DRAIN > DRY**



Visuals/Getty Images



Craig Casemeci, Michigan Sea Grant, Bugwood.org



California Department of Fish and Game, CDFG, Bugwood.org

Species Compendium: <https://www.cabi.org/isc/datasheet/85295>.

FOR ADDITIONAL INFORMATION, PLEASE VISIT: [INVASIVESPECIES.IDAHO.GOV](https://www.invasivespecies.idaho.gov)
TO REPORT INVASIVE SPECIES IN IDAHO, PLEASE CALL 1-877-338-8676.



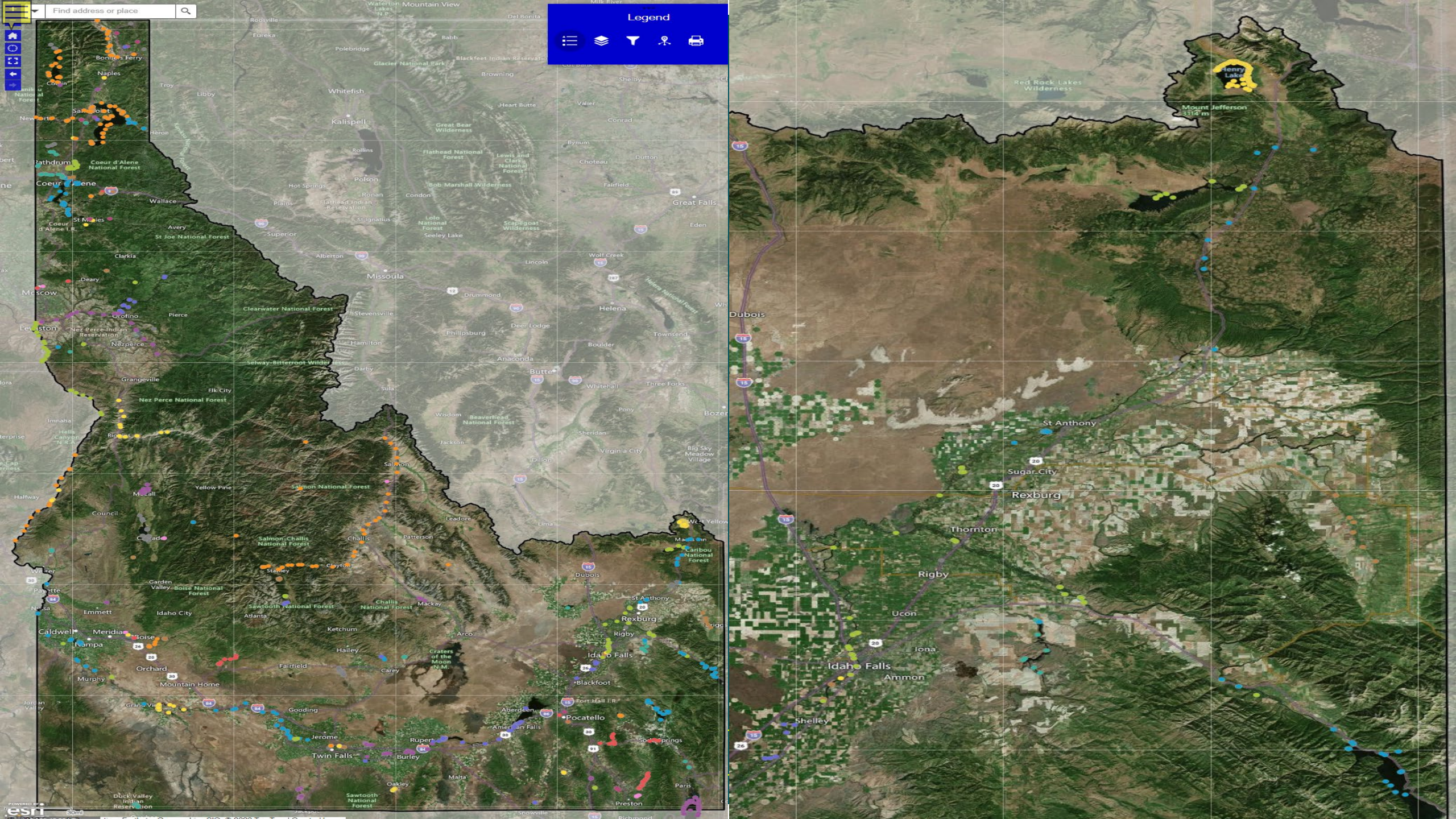
Invasive Species





NAME	Samples																
	Priority	ISDA	Sample	to	Total	Early	Late	Early	Late	Early	Early		Late	Early	Late	Early	Late
		Sampling	events	collect	Samples	May	May	June	June	July	Late July	August	August	Sept	Sept	Early Oct	
Alexander Res	High	ISDA East	2	3	6					X			X				
American Falls Res	Critical	ISDA East	7	6	42			X	X	X	X	X			X	X	
Ashton Reservoir	Moderate	ISDA East	2	3	6												
Bear Lake	Critical	ISDA East	7	6	42			X	X	X	X	X			X	X	
Blackfoot Reservoir	High	ISDA East	4	4	16			X	X	X	X						
Chesterfield Res	Critical	ISDA East	4	4	16		X		X						X	X	
Daniels Res	Critical	ISDA East	4	4	16			X		X					X	X	
Deep Creek Res	High	ISDA East	4	3	12			X	X	X	X						
Devils Creek Reservoir	Moderate	ISDA East	3	3	9			X	X	X							
Fish Creek Res	Moderate	ISDA East	2	3	6				X	X							
Gem Lake	High	ISDA East	6	4	24				X	X	X	X			X	X	
Glendale Res	Critical	ISDA East	3	4	12				X		X	X					
Henrys Fork (Snake River)	Moderate	ISDA East	3	4	12			X			X			X			
Henrys Lake	Critical	ISDA East	5	6	30				X	X	X				X	X	
Island Park Reservoir	High	ISDA East	5	4	20				X	X	X				X	X	
Lamont Reservoir	New	ISDA East	2	3	6												
Little Wood River Res	Moderate	ISDA East	2	4	8				X	X							
Mackay Res	Moderate	ISDA East	2	3	6				X	X							
Oneida Narrows	Critical	ISDA East	4	5	20				X	X					X	X	
Palisades Reservoir	High	ISDA East	6	5	30				X	X	X	X			X	X	
Rire Res	High	ISDA East	4	3	12				X	X	X						
Stone Res	High	ISDA East	2	3	6					X	X						
Teton River	Moderate	ISDA East	3	4	12				X				X				
Treasureton Reservoir	New	ISDA East	2	3	6			X			X	X	X				
Twin Lake Res	Critical	ISDA East	3	4	12			X		X	X						
					387												





Big Springs Henry's Fork 2023 Survey Plan

The goal of this float is to inventory high traffic reaches of the river that have not been recently surveyed. The survey is not intended to take more than a single day. This is a tentative float plan – in person scouting needs to be completed prior to finalizing.

The heavily floated portion the Henry's Fork near Big Springs takes about 3 hours and is about 4.2 river miles. The main put-in is at the USDA Forest Service (USFS) Big Springs Boat Launch (44.49718, -111.27173). The take-out is at the HWY 20 bridge (44.50117, -111.33604) near Mack's Inn (4169 North Hwy 20, Island Park, Idaho 83429). There is potential to put-in 0.9 miles further upstream at Big Springs (44.49977, -111.25546) or take out at the USFS Upper Coffee Pot Campground (44.49153, -111.36603) 1.7 miles downstream from the HWY 20 bridge.

Potential hazards:

- Wildlife known to be in the [area](#)
- Yellow Stone Branch Line bridge below the USFS launch looks low (Fig 2)
- Coffee Pot Campground is the last access point before the Coffee Pot Rapids and the canyon [stretch](#)
- Shallow spots are noted through this [stretch](#)



Figure 1. Map showing the stretch of Henry's Fork to potentially be floated.



Figure 2. RSX at USFS Big Springs Launch

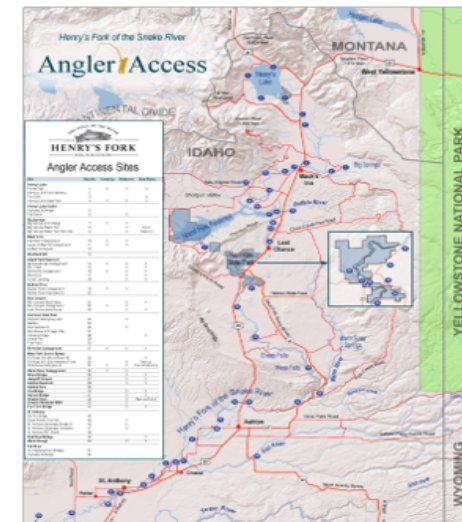
Henry's Fork – Big Springs Float

Options: (these estimates are based off the draw and measure tool in Google Earth)

- Bigs Springs Bridge at Johnny Sack's/ FS Campground to Boat Launch (~0.9 miles)
- Big Springs Bridge at Johnny Sack's/ FS Campground to HWY 20 (~5.1 miles)
- Big Springs Bridge at Johnny Sack's/ FS Campground to McCrea Bridge (~11.5 miles)
 - o Stretch at/ near Coffeepot FS CG narrows as banks become much steeper. Still rated a 1-3 on American Whitewater.
 - o Found info stating that no boats are allowed in these rapids – you must take out at Coffee Pot Campground there are kayaks going through though.
 - o Could take out at Coffee Pot CG as an alternative?
- Big Springs Bridge at Johnny Sack's/ FS Campground to Coffee Pot Campground (~6.9 miles)

Notes:

- Travel time from Pocatello to:
 - o Big Springs Bridge at Johnny Sack's/FS Campground ~ 132min
 - o Big Springs Boat Launch ~ 133min
 - o HWY 20 ~ 124min
 - o McCrae Bridge ~ 125min



Didn't find much for other online resources/outfitter routes and things. One place I found to rent but last year for reserving floats and gear [were](#) in 2021.

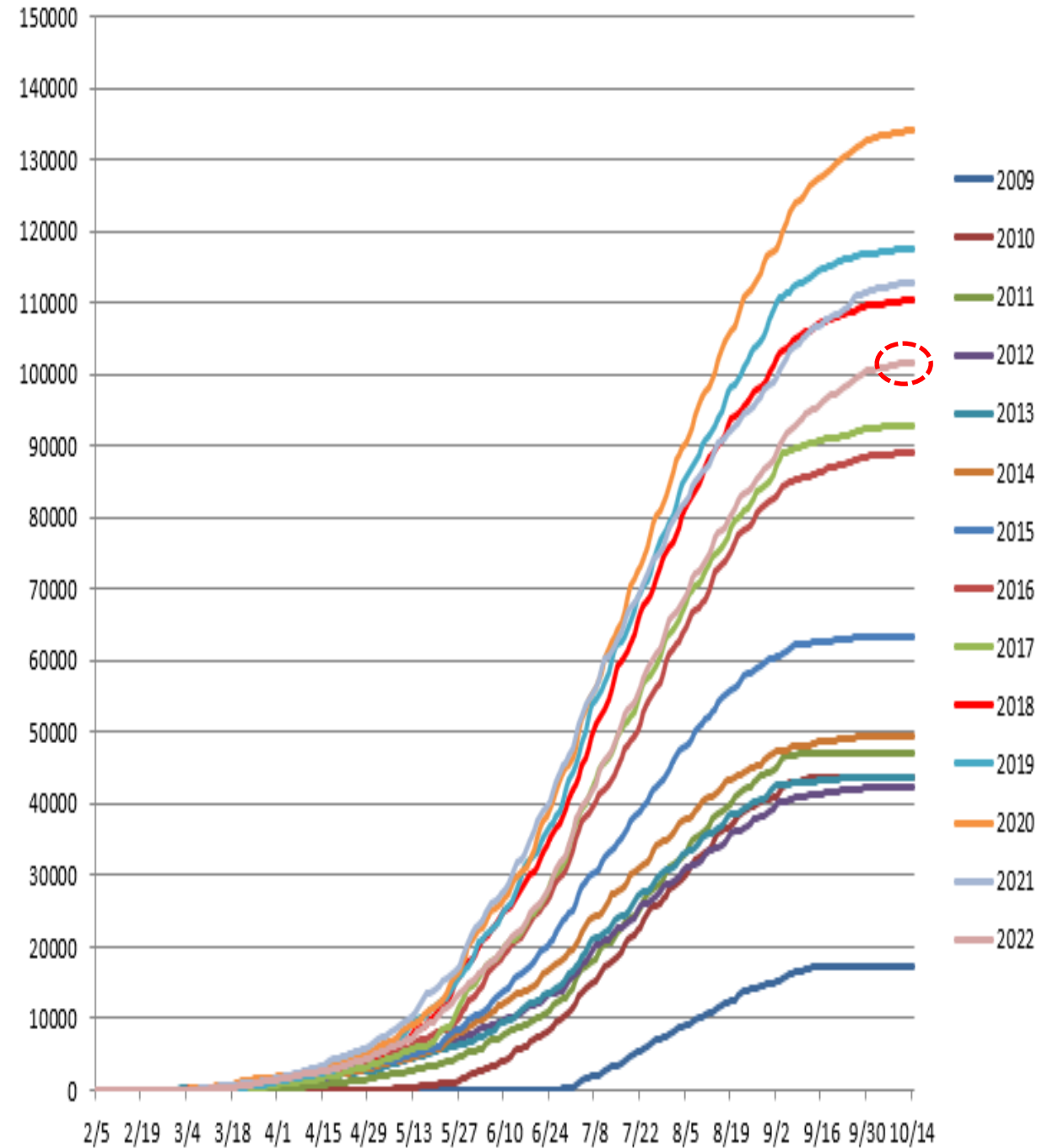
<https://www.henrysfork.org/access-sites-maps>

USGS Data:

2022 Idaho Watercraft Inspection Station Locations



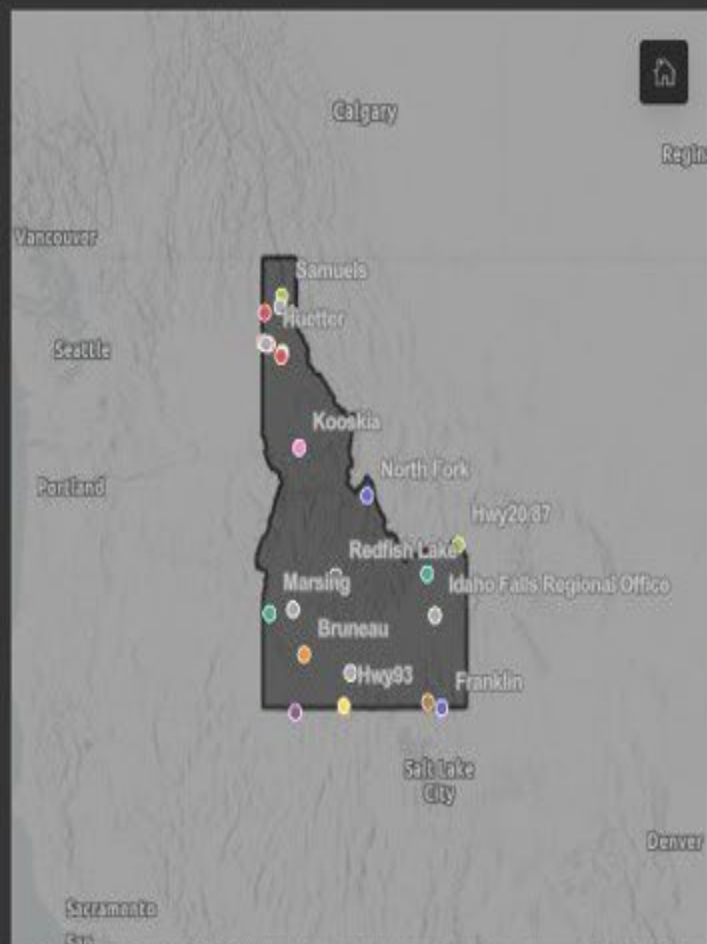
Created by INRCS from 1:24,000 scale USGS topographic maps, Esri, HERE, Garmin, NGA, USGS, NPS





Weeds on Watercraft?

582



Law Enforcement Returned

1,792

From Infested Water

2,015

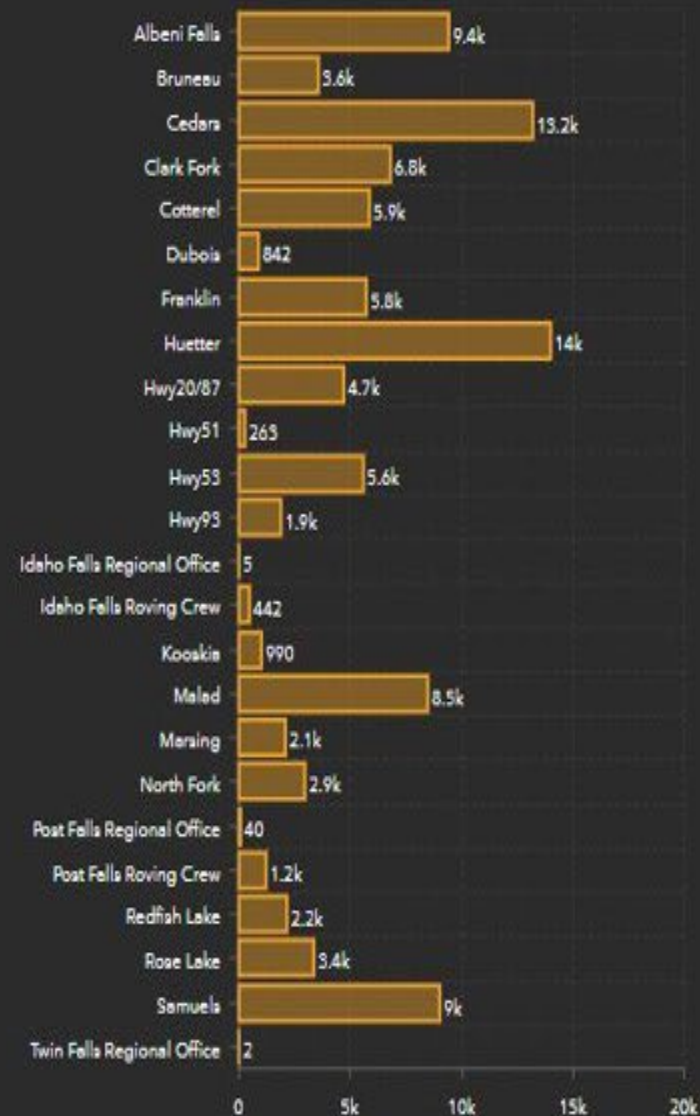
Total Hotwashed Watercraft

665

Total Watercraft Inspected

102,670

Inspections by Station



Inspections From Fouled Waters

Inspection Station = Hwy93
Date and Time = Thu Nov 17 2022 07:08:00
GMT-0800 (Pacific Standard Time)
Watercraft Type = Fishing Boat
Days in Water = 2
Days out of Water = 21
Name of Waterbody = Pleasant Lake Arizona
Destination State = Washington

Inspection Station = Twin Falls Regional Office
Date and Time = Tue Nov 08 2022 10:25:00
GMT-0800 (Pacific Standard Time)
Watercraft Type = Fishing Boat
Days in Water = 20
Days out of Water = 9
Name of Waterbody = Mohave Lake Nevada
Destination State = Idaho

Inspection Station = Hwy93
Date and Time = Mon Oct 31 2022 15:50:00
GMT-0700 (Pacific Daylight Time)
Watercraft Type = Race Boat
Days in Water = 7
Days out of Water = 3
Name of Waterbody = Colorado River - Parker Arizona
Destination State = Oregon

Inspection Station = Hwy93
Date and Time = Mon Oct 31 2022 15:45:00
GMT-0700 (Pacific Daylight Time)
Watercraft Type = Fishing Boat
Days in Water = 20

YOUR HELP IS NEEDED!

FOR A QUICKER BOAT INSPECTION:

- ✓ **Remove Cover & Tarps**
- ✓ **Lower Motor**
- ✓ **Pull Bilge Plug**
- ✓ **Operate Ballast Pumps**
- ✓ **Open Internal Compartments**

- **Anchor Compartments**
- **Storage Compartments**
- **Live Wells**

**THANKS FOR HELPING PROTECT
IDAHO'S WATER!**

INVASIVE
SPECIES
OF
IDAHO

CLEAN & DRAIN & DRY



IDAHO STATE DEPARTMENT OF AGRICULTURE WATERCRAFT INSPECTION STATION PERFORMANCE FORM

DATE: _____ INSPECTION LOCATION: _____ ISDA INSPECTOR: _____

INSPECTION TYPE: DRIVE THROUGH (BOAT) _____ ON-SITE (NO BOAT) _____

WATERCRAFT INSPECTORS: _____

Inspection requirements	Yes	No	N/A
Traffic signs and cones placed in accordance to specifications			
Watercraft inspectors aware/Manning station			
Watercraft inspectors display acceptable image/Wearing vests			
Contact initiated/Safety instructions(engine off/brake on)			
Explanation of procedure/Spreading C-D-D message			
Used tablet/Entered responses in tablet			
Determined risk factors to complete appropriate inspection			
Followed low risk inspection protocols (if no, explain below)			
Followed high risk inspection protocols (if no, explain below)			
Ensured boat was dry/Owner asked to pull plug			
Accessed the bottom hull of the watercraft			
Obtained appropriate consent for vessel entry/Hotwash			
Inspected for vegetation			
Documented vegetation-other organisms found on watercraft			
Displayed good attitude toward boater/Thanked them			
Stamped passport/Issued inspection certificate			
Ensured safety before/During vehicle departure			
Entered required final inspection data into tablet			
Was inspection data synched to Boise while on site?			

NOTES:

ISDA Signature: _____

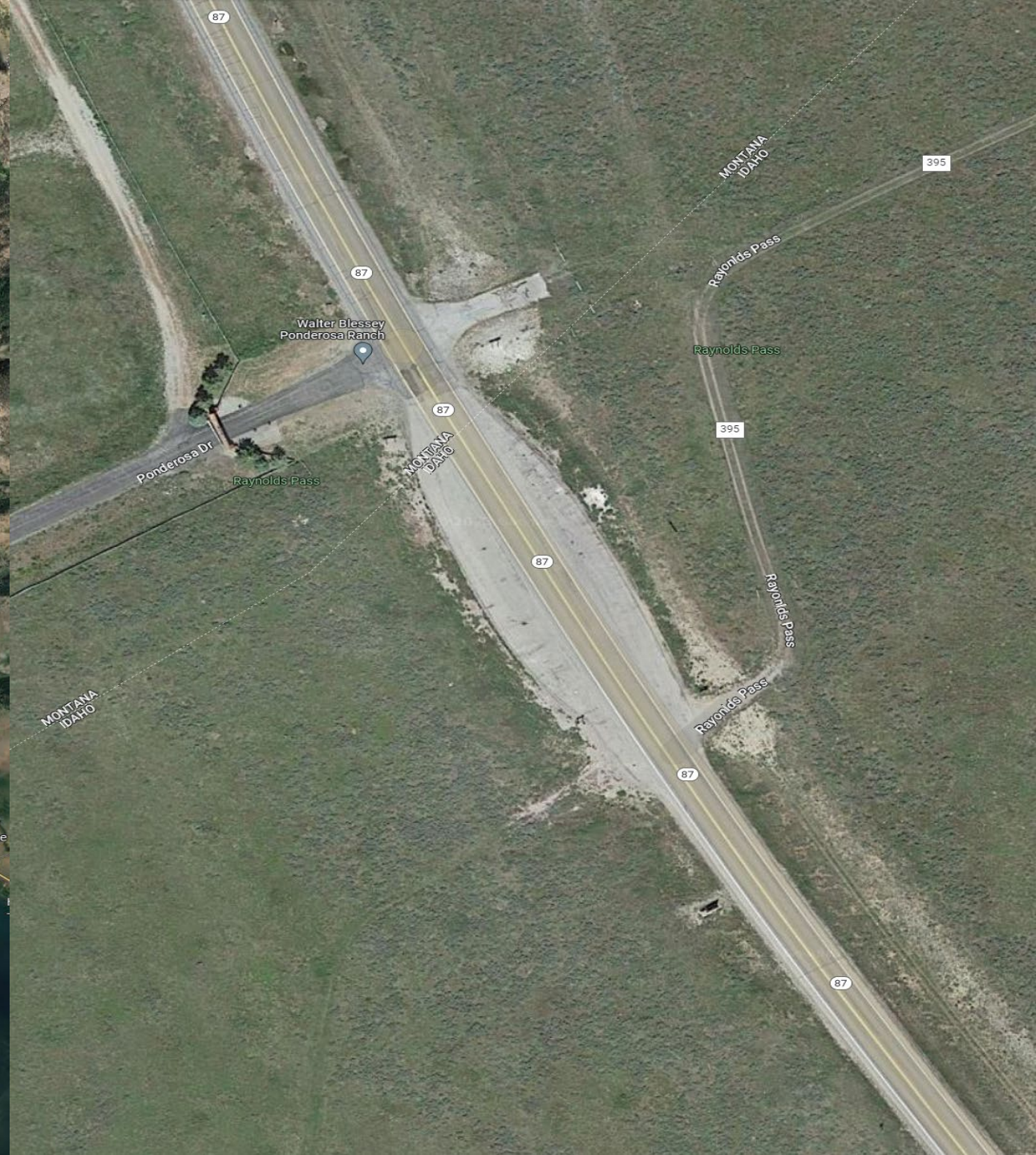
Date: _____

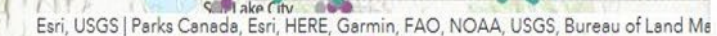
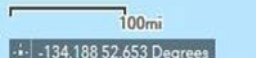
White: Station

Canary: ISDA

Pink: Station Contractor

	Boat Part/Location	Quick Connect Attachment
Exterior	Hull	
	Trailer	
	PFDs, anchor, paddle	
Propulsion System	Gimbal	 
	Engine	
Interior or	Ballast tanks	  
	Live well/Bait well	
	Bilge	

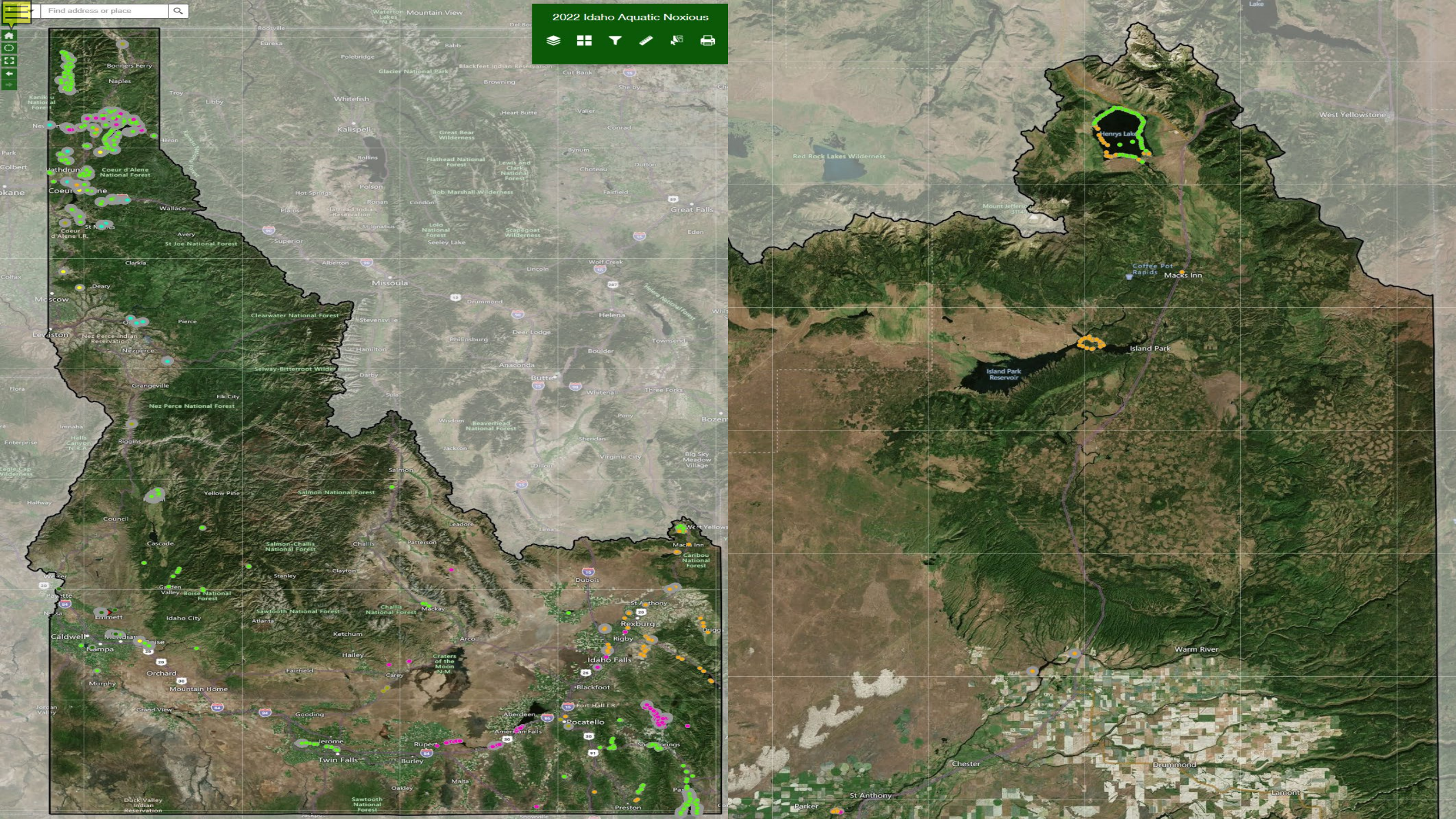


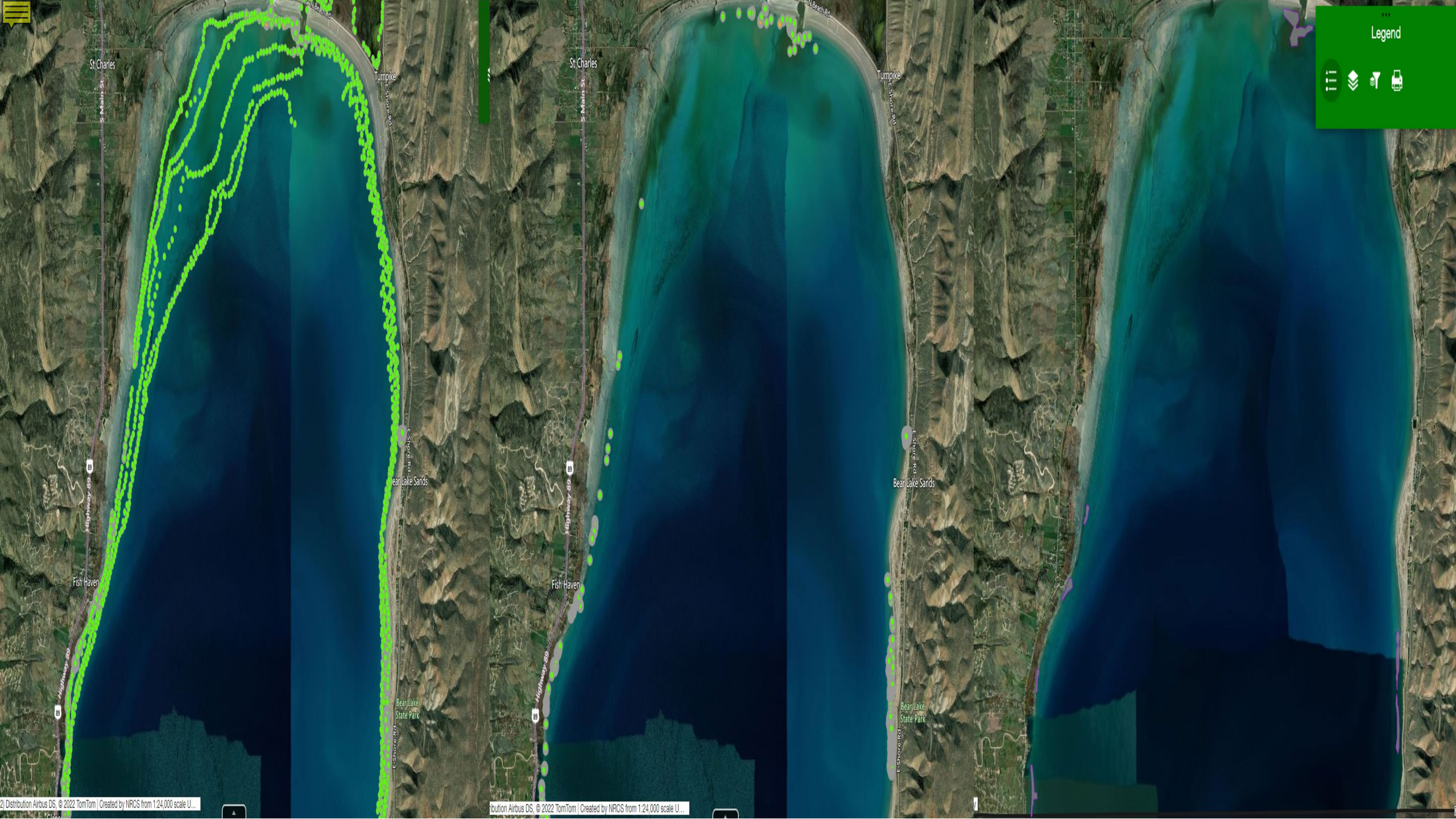




Noxious Weeds











2022 Idaho Aquatic Noxious Weed Surveys Dashboard

Filter Options

All filter criteria will be applied if more than one filter is used.

Filter by Date

All Dates

Filter by Waterbody

All Waterbodies

Filter by Target Species Density

All Target Species Densities

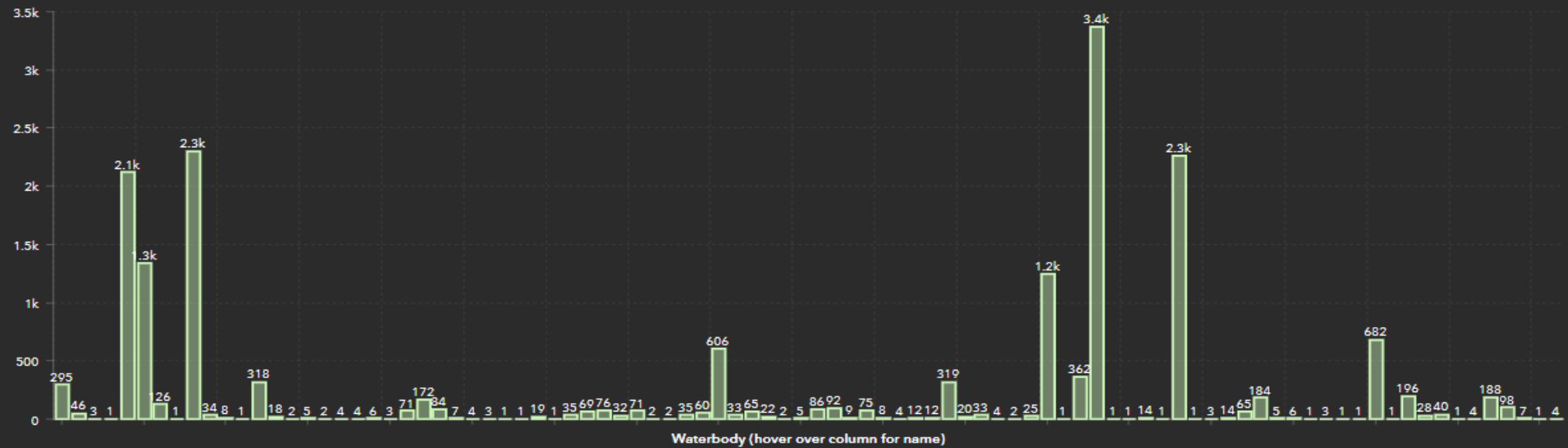
Filter by Target Species

All Target Species

Filter by Additional Species Found

All Additional Listed Species Found

Surveys by Waterbody



Aquatic Surveys Conducted

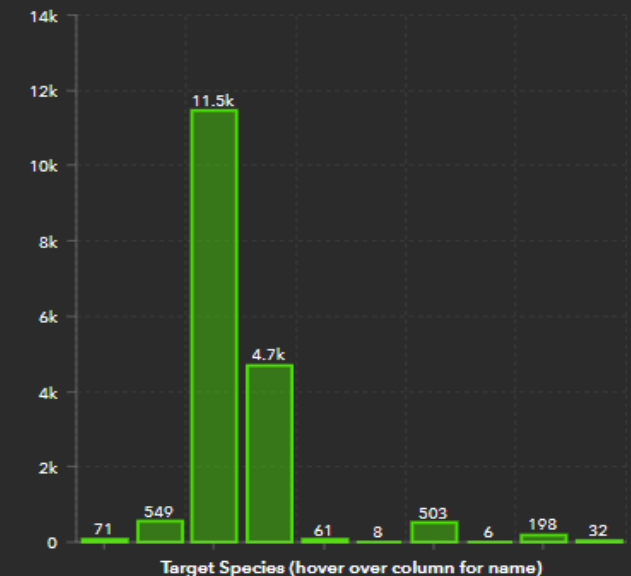
17,611

Surveys with Positive Detections

4,189

Idaho Aquatic Noxious Weed Target Species Only

Surveys by Target Species



Surveys where Additional Species Found

402

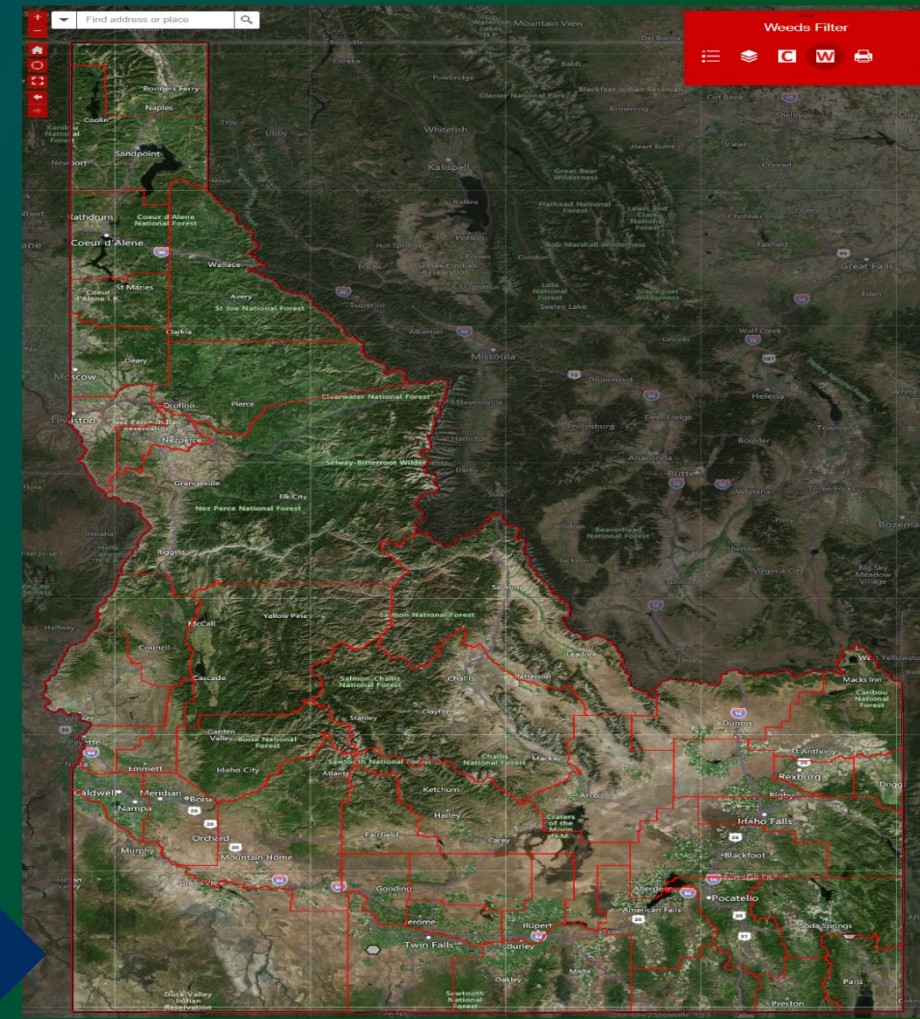
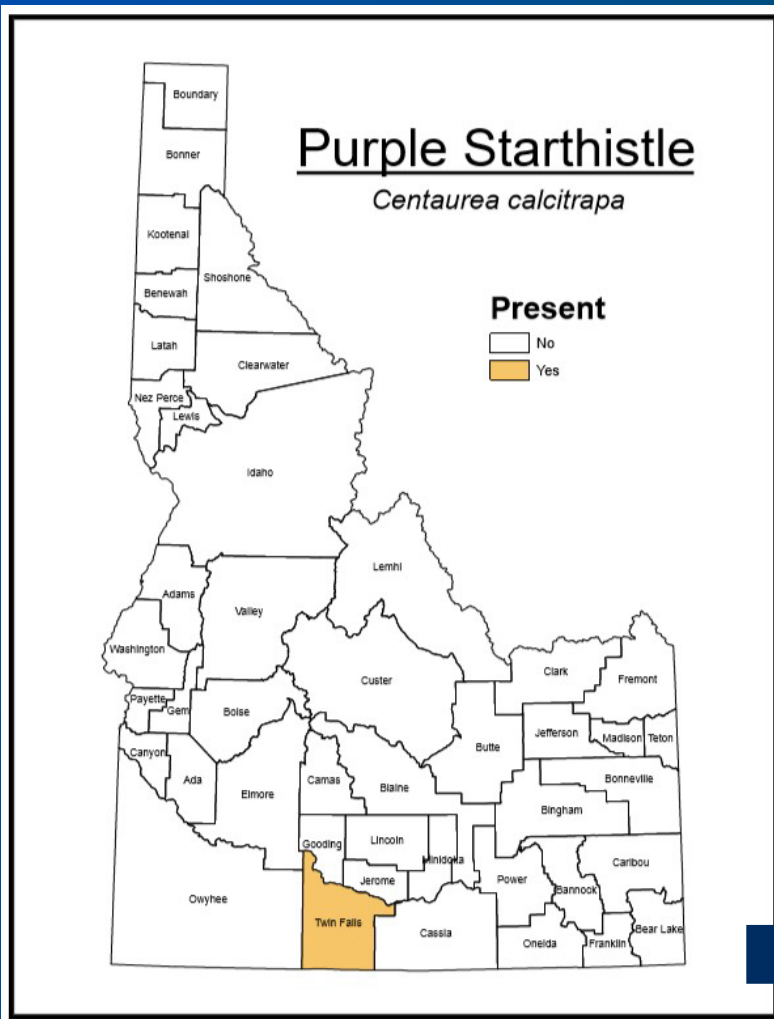
surveys where additional listed, non-target species found

Average Depth of Survey (in meters)

1.846



Idaho Distribution Mapping





Other parts of our program



Grasshoppers and Mormon Crickets



Other Invasive Species

- Many other invasive species are handled on a case by case basis.
- Work with partners to manage problem species.
- Outreach is key!



Questions?



THANK YOU!

Cole D Morrison

Phone

208-316-0578

Email

Cole.Morrison@isda.Idaho.gov

INVASIVE
SPECIES OF IDAHO

