

# Idaho Invasive Species Program Update

Idaho Invasive Species Council

December 14, 2022



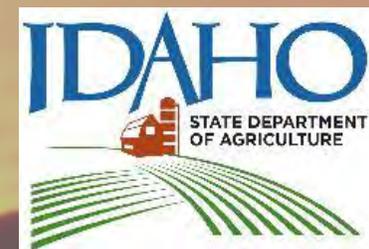
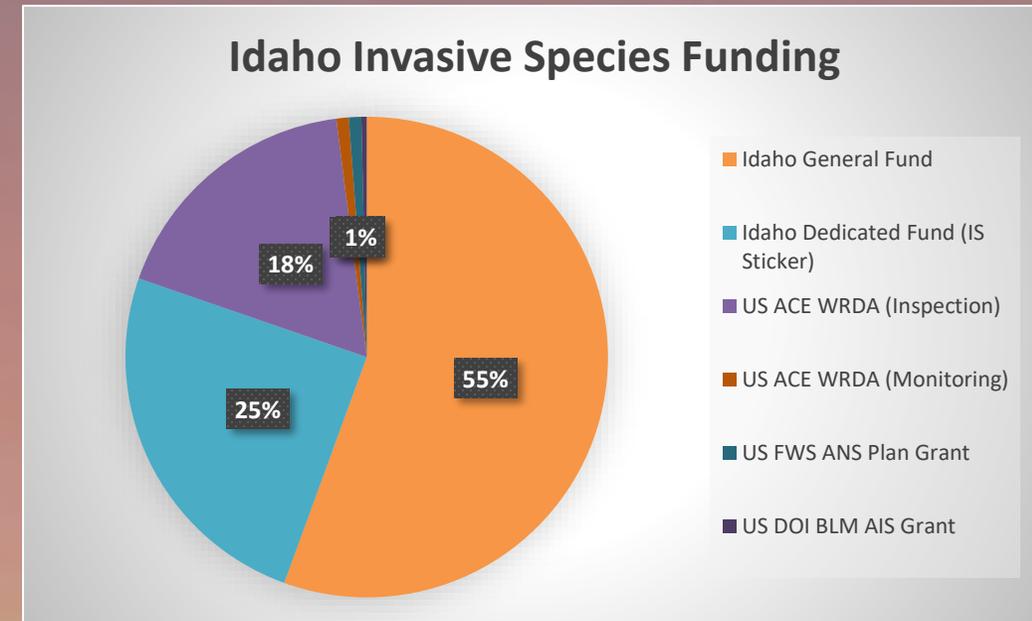
# Invasive Species Program Areas

- Prevention
  - Watercraft Inspection
- Early Detection Monitoring
  - Plankton tow
  - Adult surveys
- Management and Control
  - Active control programs
  - Rapid response planning
- Education and Outreach
  - Public campaigns
  - Partnerships



# IS Program Budget

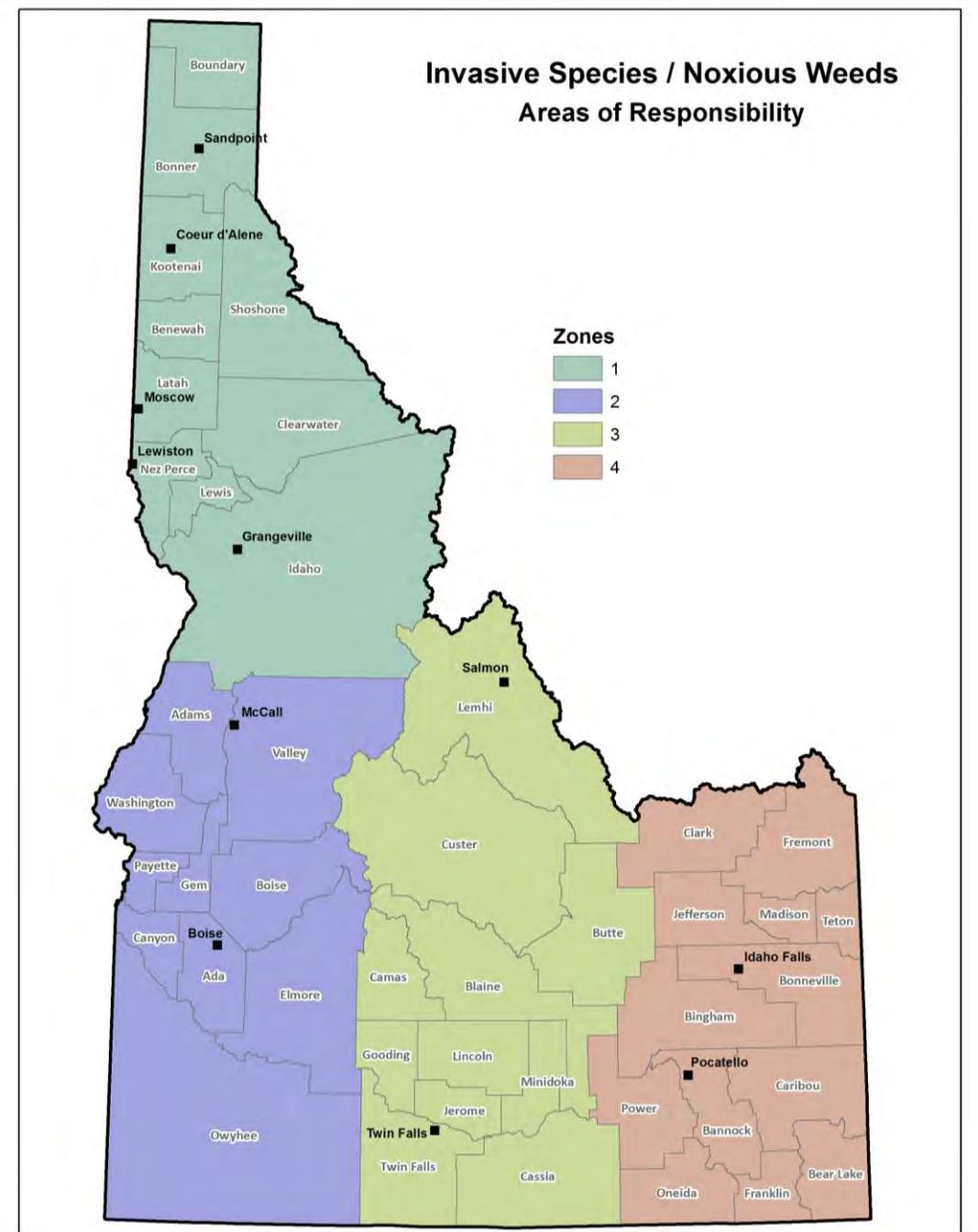
- Prior to FY18 – Invasive Species program operated on \$1.4 million/year budget, funded through the Invasive Species Sticker.
- FY18 (to current):
  - \$3,143,300 in ongoing appropriation from the General Fund
  - \$1,900,000 in one-time federal fund spending authority (USACE APC WID)
  - \$1,500,000 base spending authority from the Invasive Species Fund
  - \$600K for site improvements
  - Other federal grants
    - BLM, USFS, USFWS



# ISDA Staff Organization (Expansion)

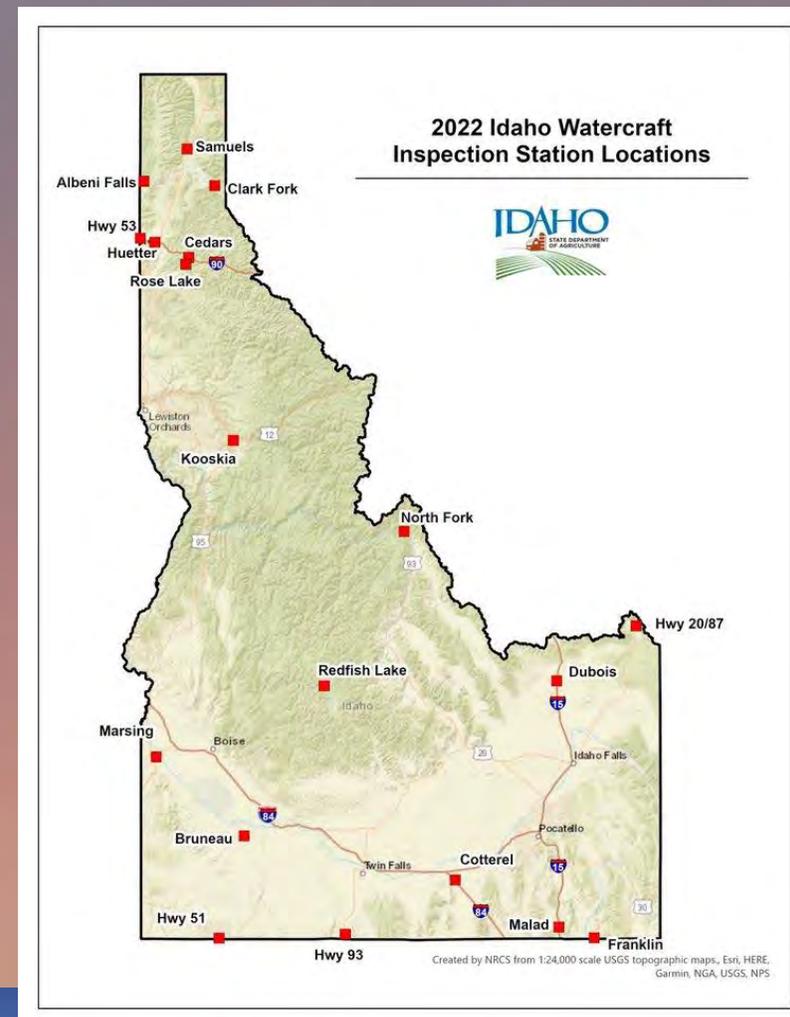
During the 2021-22 Legislative session, the Plants division was approved for 5 additional staff for the Noxious weeds and Invasive Species Programs. Those positions are working towards being filled

Region	Noxious Weeds	Invasive Species
North	Jenny Roman <i>Tech 3- Ryan Hanna</i>	Specialist- vacant <i>Tech 3- Vacant</i>
West	Bethany Muffley <i>Tech 3- Vacant</i>	Sam Kennedy
Central	Michael Cellan	Aaron Ursenbach
East	Madi Patterson <i>Tech 3- Glenn Maybe</i>	Cole Morrison <i>Tech 3- Vacant</i>
Statewide	Saul Teska- GIS	Sam Kennedy-GHMC
Section Manager	Jeremey Varley	Nic Zurfluh



# 2022 Watercraft Inspection

- **14<sup>th</sup>** Year of the inspection program
  - **102,670** inspections
  - **1,068,612** from 2009-2022
- **36** Mussel fouled watercraft
  - **17** Destined to Idaho
- **19** Inspection stations
  - **8** Local station cooperators
- Extended night operations
  - **18** Hour (6AM-midnight)
    - Malad (I-15 N), Cedars (I-90W), Jackpot (HWY 93 N)
  - **24** Hour
    - Cotterell (I-84W)
- Law enforcement support
  - Local County
  - Idaho State Police



# Inspection Station Cooperators

- Bear Lake Regional Commission
  - Garden City (Utah) & Laketown Canyon (Utah)
- Bonner Soil & Water Conservation District
  - Albeni Falls, Samuels & Clark Fork
- Bruneau River Soil & Water Conservation District
  - Bruneau & Marsing
- Franklin County
  - Franklin
- Kootenai-Shoshone Soil & Water Conservation District
  - I-90W Cedars, I-90E Huetter, Rose Lake, HWY 53
- Oneida Soil & Water Conservation District
  - I-15 N Malad
- Shoshone-Paiute Tribe
  - Duck Valley
- West Cassia Soil & Water Conservation District
  - I-84 W Cotterell
- ISDA operated stations
  - North Fork, Hwy 20/87, Hwy 93 Jackpot, Kooskia, Dubois, Redfish

**Thank you to our 2022 station cooperators!**

# Law Enforcement Support

- ▶ Boater safety and compliance
- ▶ Focused during hours of high traffic
- ▶ Inspectors contact dispatch as needed



- Idaho State Police
- Bonner County Sheriff
- Cassia County Sheriff
- Kootenai County Sheriff
- Oneida County Sheriff
- Owyhee County Sheriff



# Site Improvements

- \$600K funding for additional structures
- Higher flow decontamination units
- Earthwork (gravel/asphalt)
- Electrical utilities
- Water utilities
- Increased lighting
- Barriers
- Signage

**\*Accomplished through multiple federal, state, local, & private partnerships**



# AIS Roving Inspection Crew

- Watercraft inspection & boater education
- Primarily at high use boat launches and boating events
  - Races, expos, regattas, peak holiday weekends, etc.
- Thursday-Sunday work week
- Motorized and non-motorized users
  - Headwater launches (i.e. Boundary Creek)
- 5 regional inspection crews
  - Boise
  - Idaho Falls
  - Post Falls
  - Twin Falls
  - Sandpoint



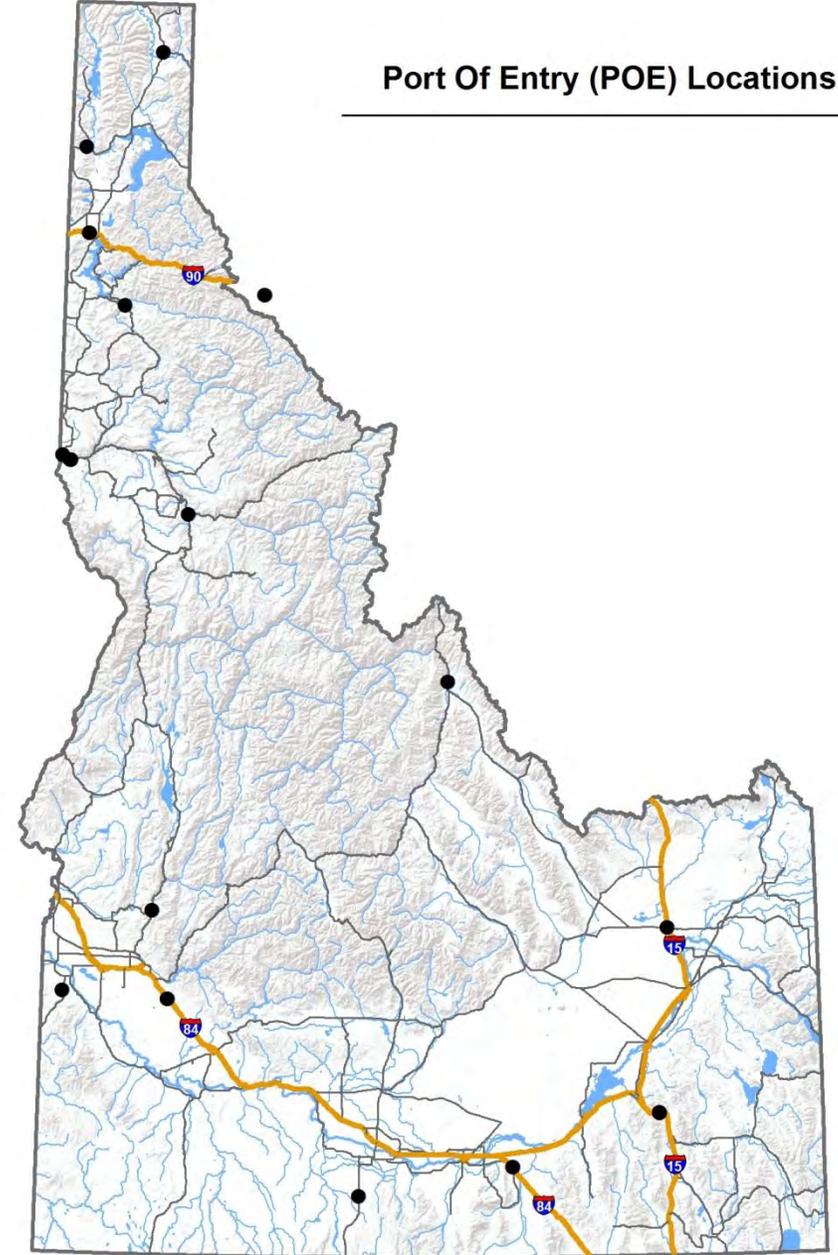
# Idaho Transportation Department Port of Entry (POE)

- Commercially Hauled Vessels are inspected for mussels at POE
- ISDA receives oversize load permits for water related equipment
- Customs & Border Protection also inspecting
  - Notify ISDA staff if mussels are found



Cotterell I-84 POE

## Port Of Entry (POE) Locations



Weeds on Watercraft?

582

Law Enforcement Returned

1,792

From Infested Water

2,015

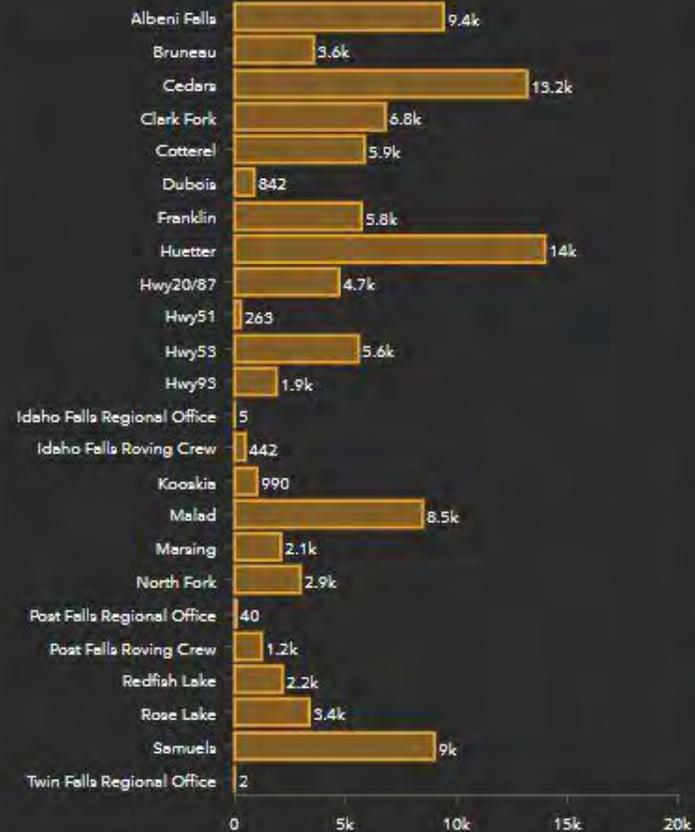
Total Hotwashed Watercraft

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

2022: <https://idaho.maps.arcgis.com/apps/dashboards/c312df191f8d4692a407c06dccd4044f>

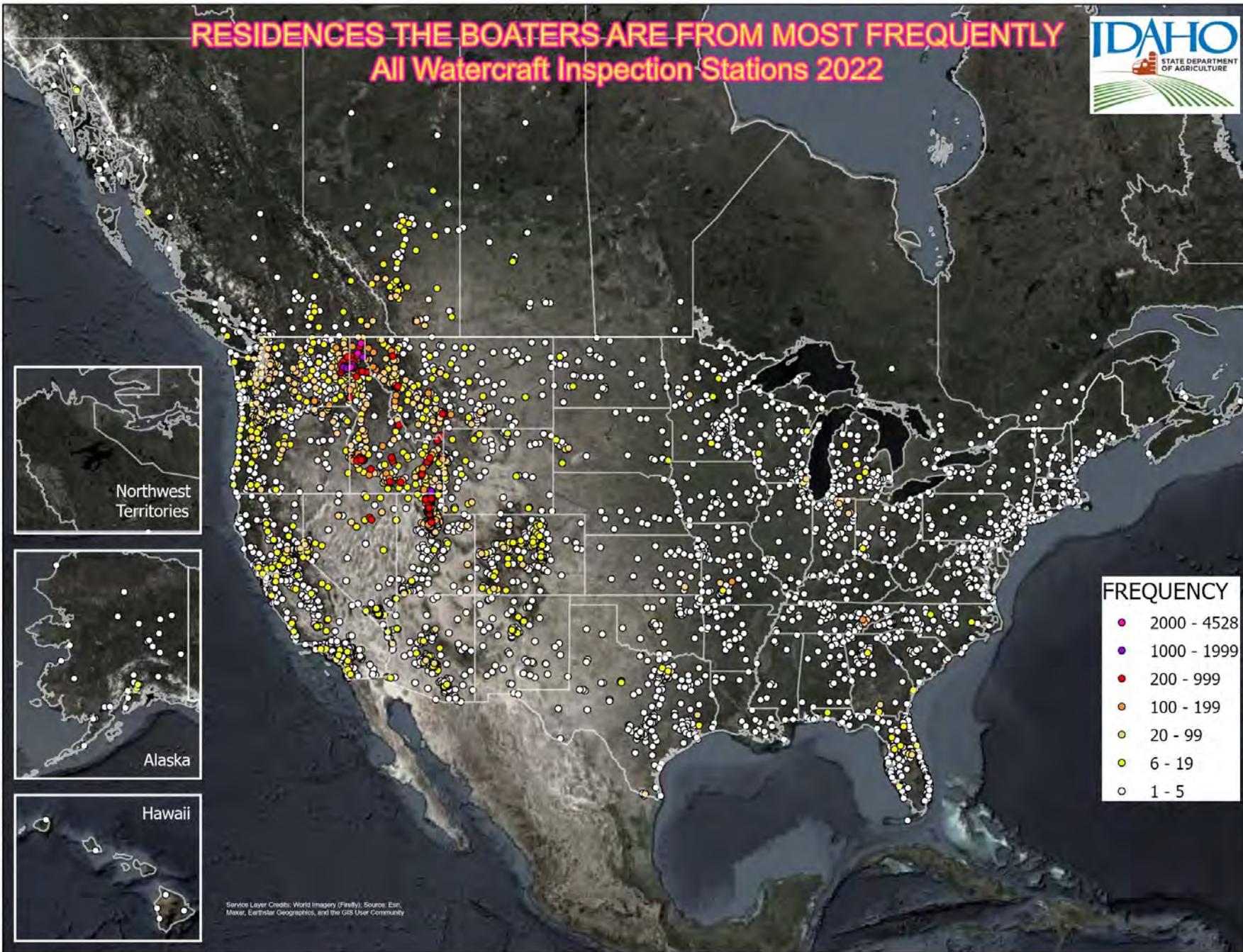
2021: <https://www.arcgis.com/apps/dashboards/9693b01dcd65409aaaf7ecb06da57c93>

2020: <https://idaho.maps.arcgis.com/apps/opstdashboard/index.html#/ad679c90ae9f4979a49013985d28da8a>

2019: <http://idaho.maps.arcgis.com/apps/opstdashboard/index.html#/91aa2987ab5542b08523d6a9056697d2>

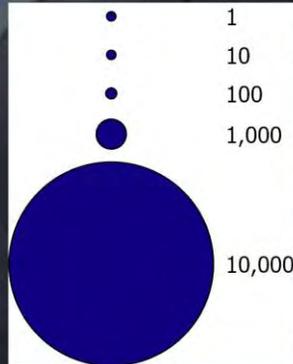
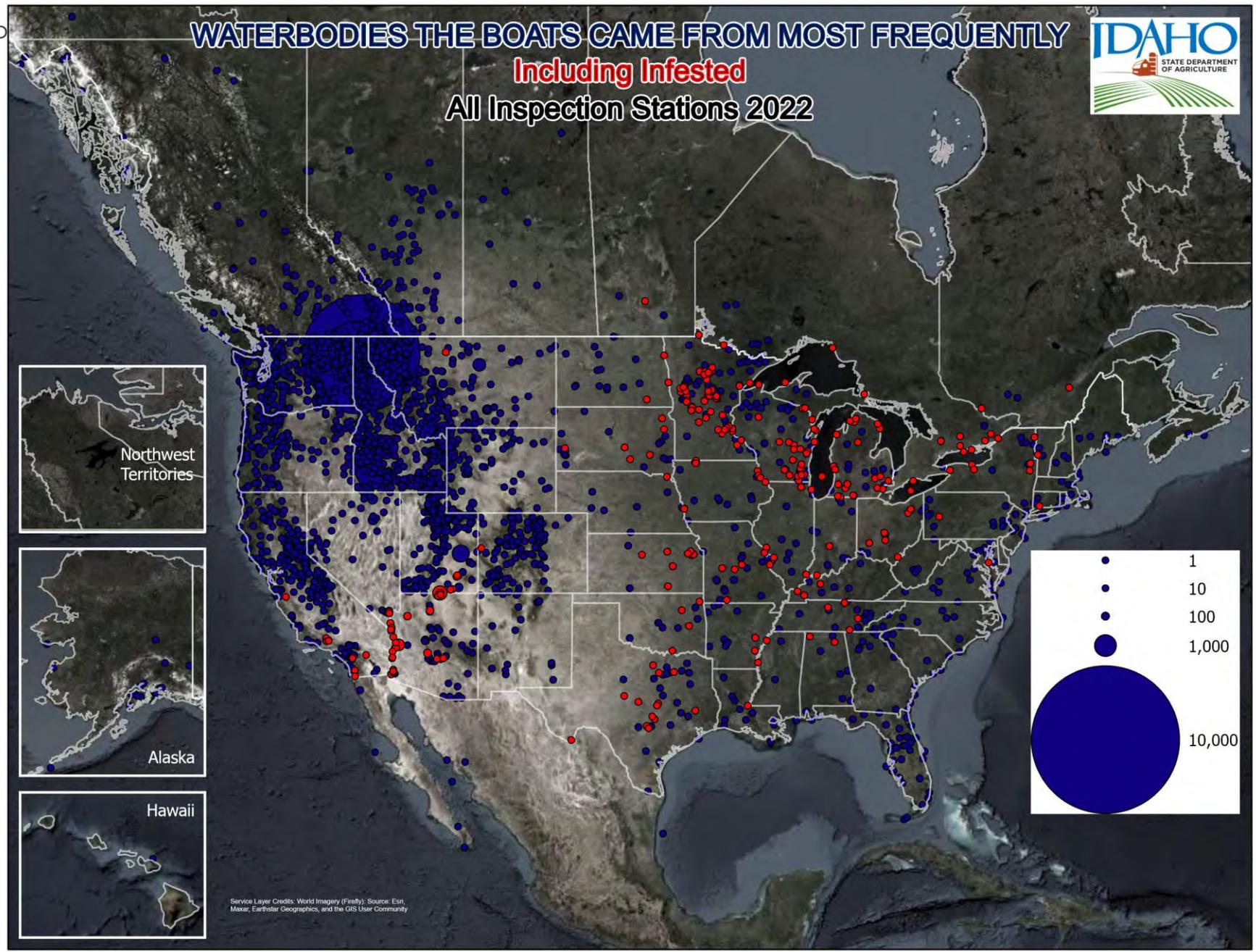
# RESIDENCES THE BOATERS ARE FROM MOST FREQUENTLY

## All Watercraft Inspection Stations 2022



# WATERBODIES THE BOATS CAME FROM MOST FREQUENTLY

**Including Infested**  
All Inspection Stations 2022



Service Layer Credits: World Imagery (Firefly); Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

# 2022 Watercraft Inspection Data

Top 10 Waterbodies Previously Visited (Non-infested & Infested)

Previous Waterbody and State	COUNT
Pend Oreille Lake, Idaho	7360
Coeur d'Alene Lake, Idaho	5627
Priest Lake, Idaho	3229
Coeur d'Alene River, Idaho	2695
C.J. Strike Reservoir, Idaho	1559
Pend Oreille River, Idaho	1415
Hauser Lake, Idaho	1172
Redfish Lake, Idaho	1142
Roosevelt Lake, Washington	1017
Hayden Lake, Idaho	978

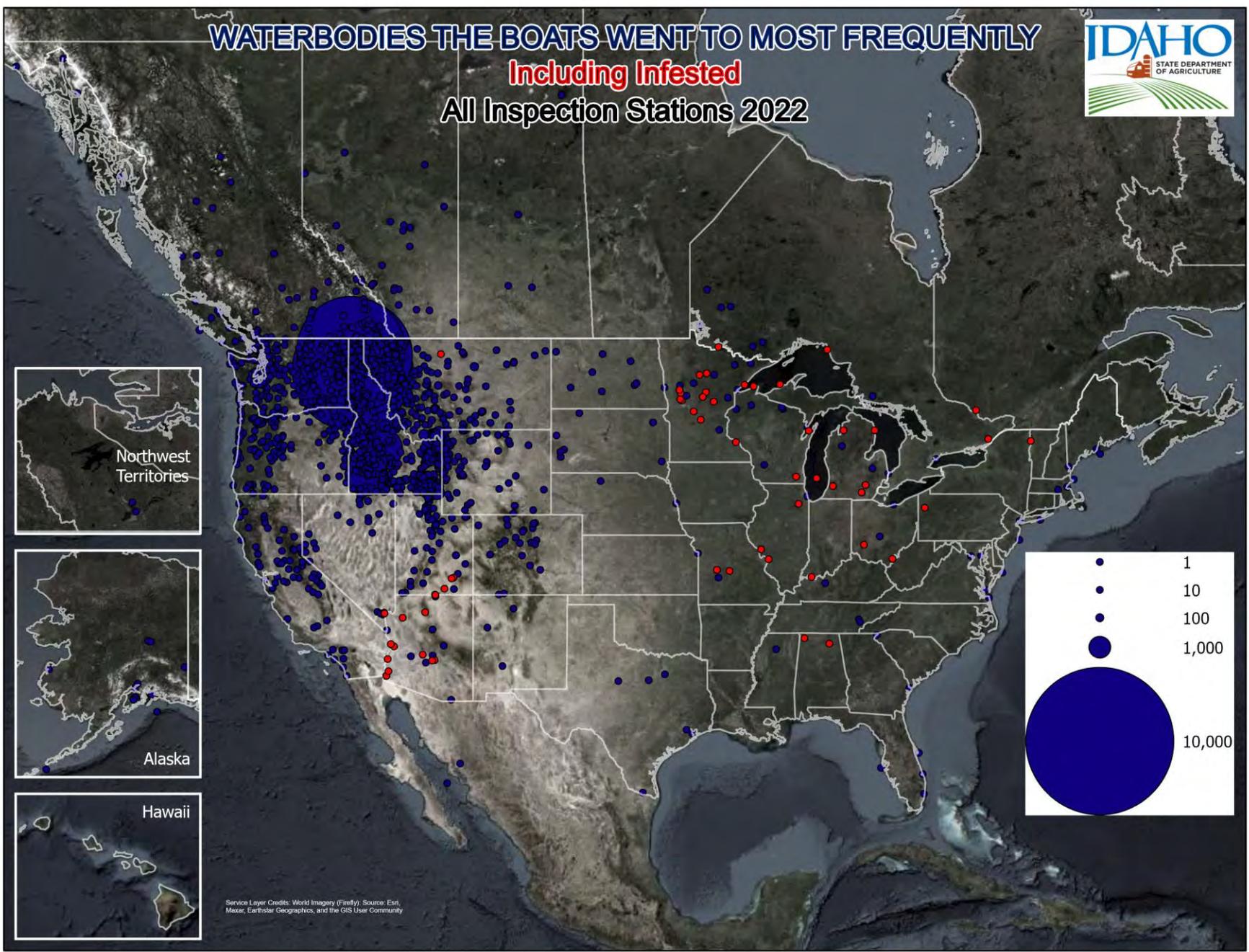
Previous Waterbody and State	COUNT
Powell Lake, Utah	521
Havasu Lake, Arizona	315
Powell Lake, Arizona	88
Pleasant Lake, Arizona	80
Colorado River - Grand Canyon, Arizona	67
Colorado River (location not specified), Arizona	65
Mead Lake, Nevada	63
Mead Lake, Arizona	40
Mohave Lake, Arizona	39
Colorado River - Parker, Arizona	38

Where has your boat been?

# WATERBODIES THE BOATS WENT TO MOST FREQUENTLY

Including Infested

## All Inspection Stations 2022



Service Layer Credits: World Imagery (Trimble), Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

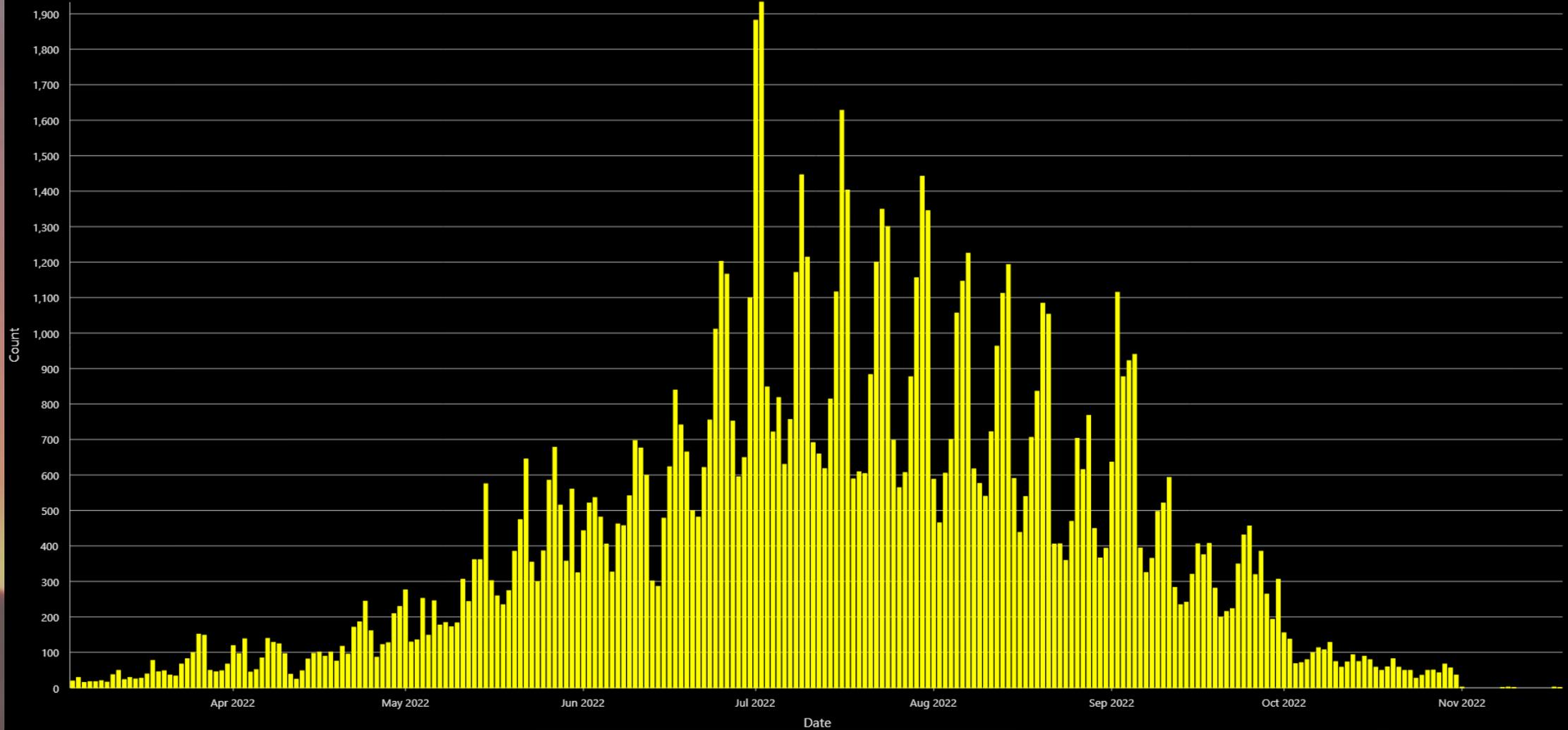
# 2022 Watercraft Inspection Data

## Top 10 Destination

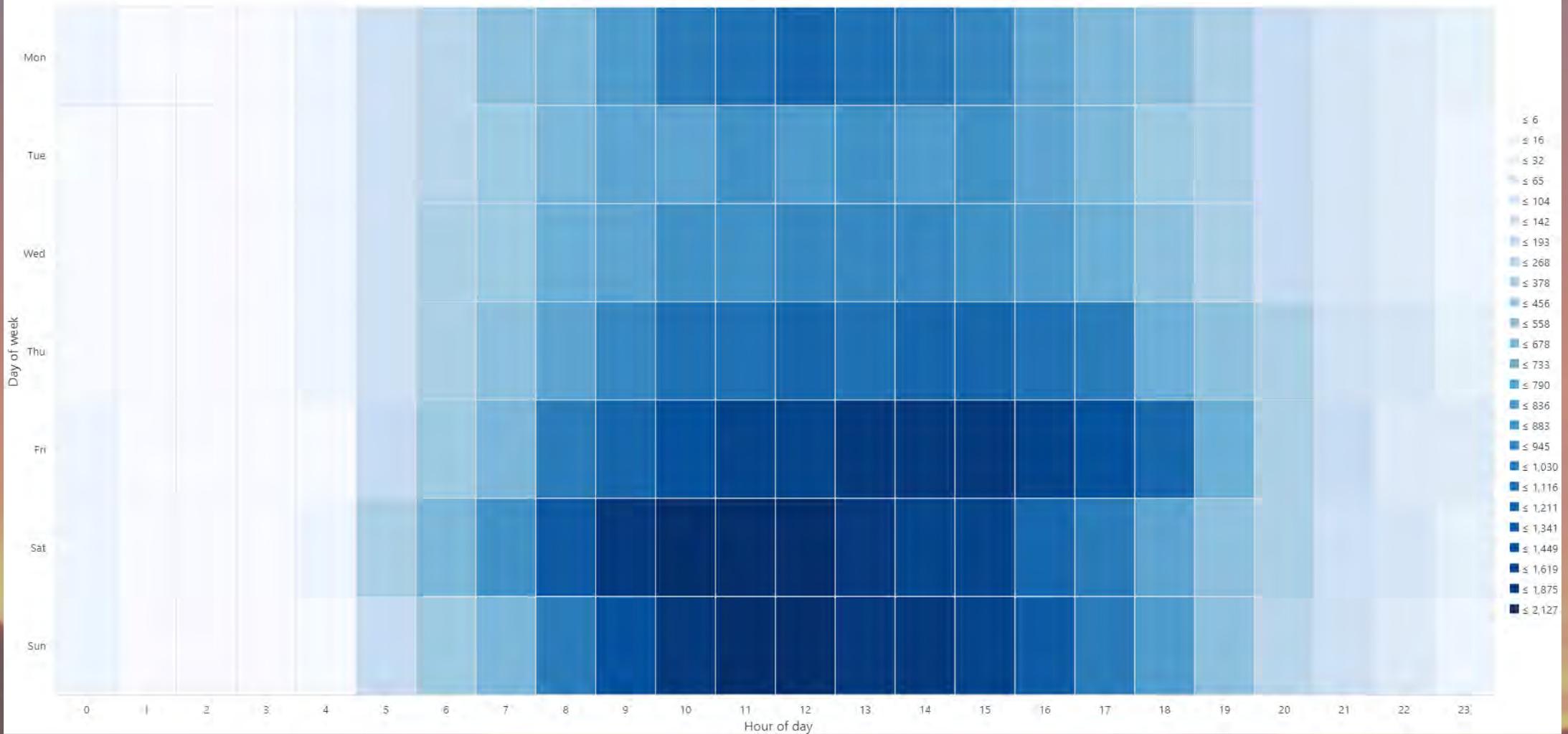
Destination Waterbody and State	COUNT
Coeur d'Alene Lake, Idaho	7577
Pend Oreille Lake, Idaho	6982
Priest Lake, Idaho	6784
Redfish Lake, Idaho	2377
C.J. Strike Reservoir, Idaho	2366
Hauser Lake, Idaho	1481
Pend Oreille River, Idaho	1473
Island Park Reservoir, Idaho	1421
Coeur d'Alene, Idaho	1287
Oneida Narrows Reservoir, Idaho	1127

Where is your boat going?

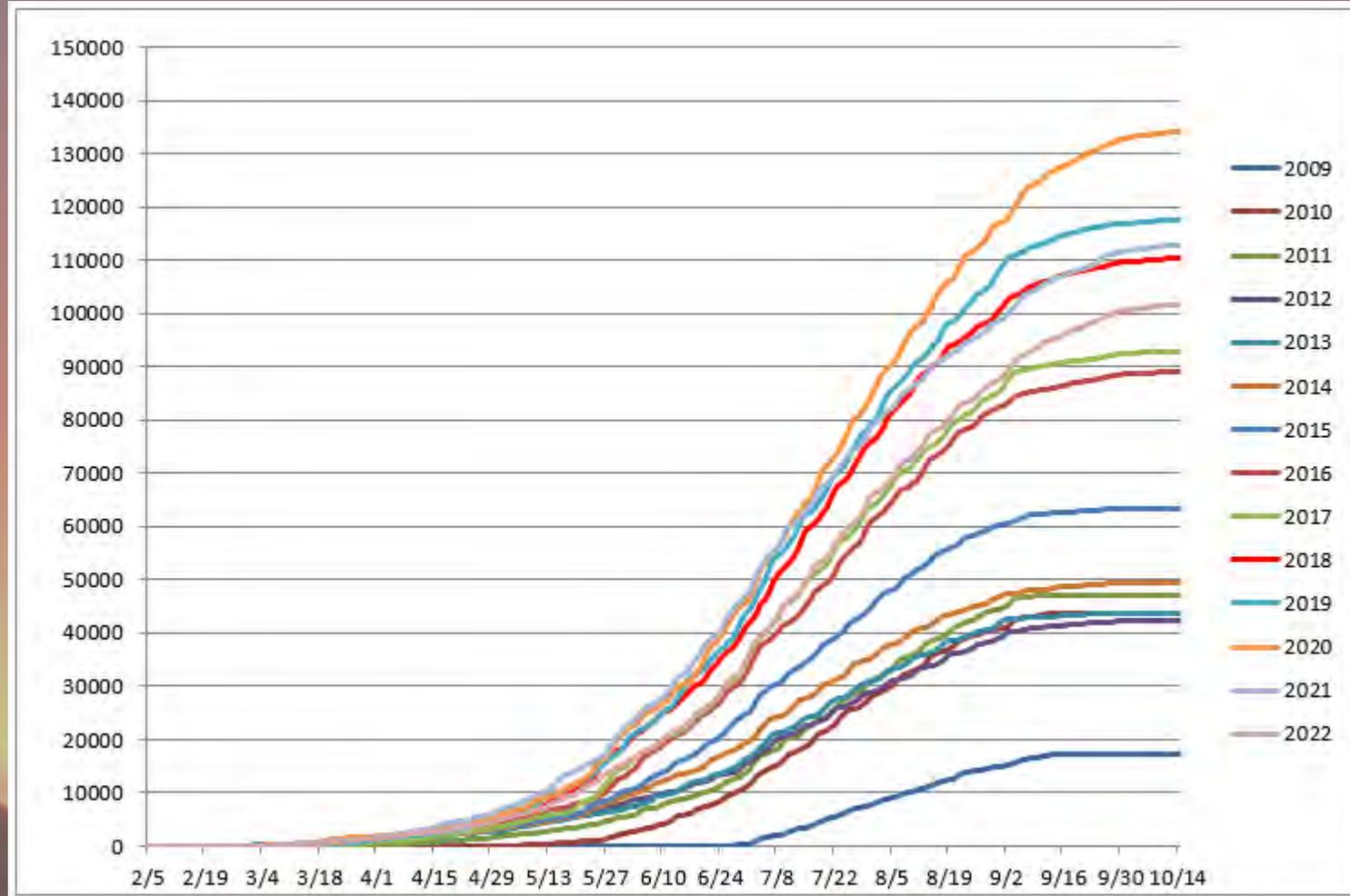
Number of Watercraft Inspections by date - All Stations



Number of Watercraft Inspections by Day of Week and Hour of Day - All Stations



# Idaho Inspections 2009-2022



# Western AIS Watercraft Inspection Station Viewer

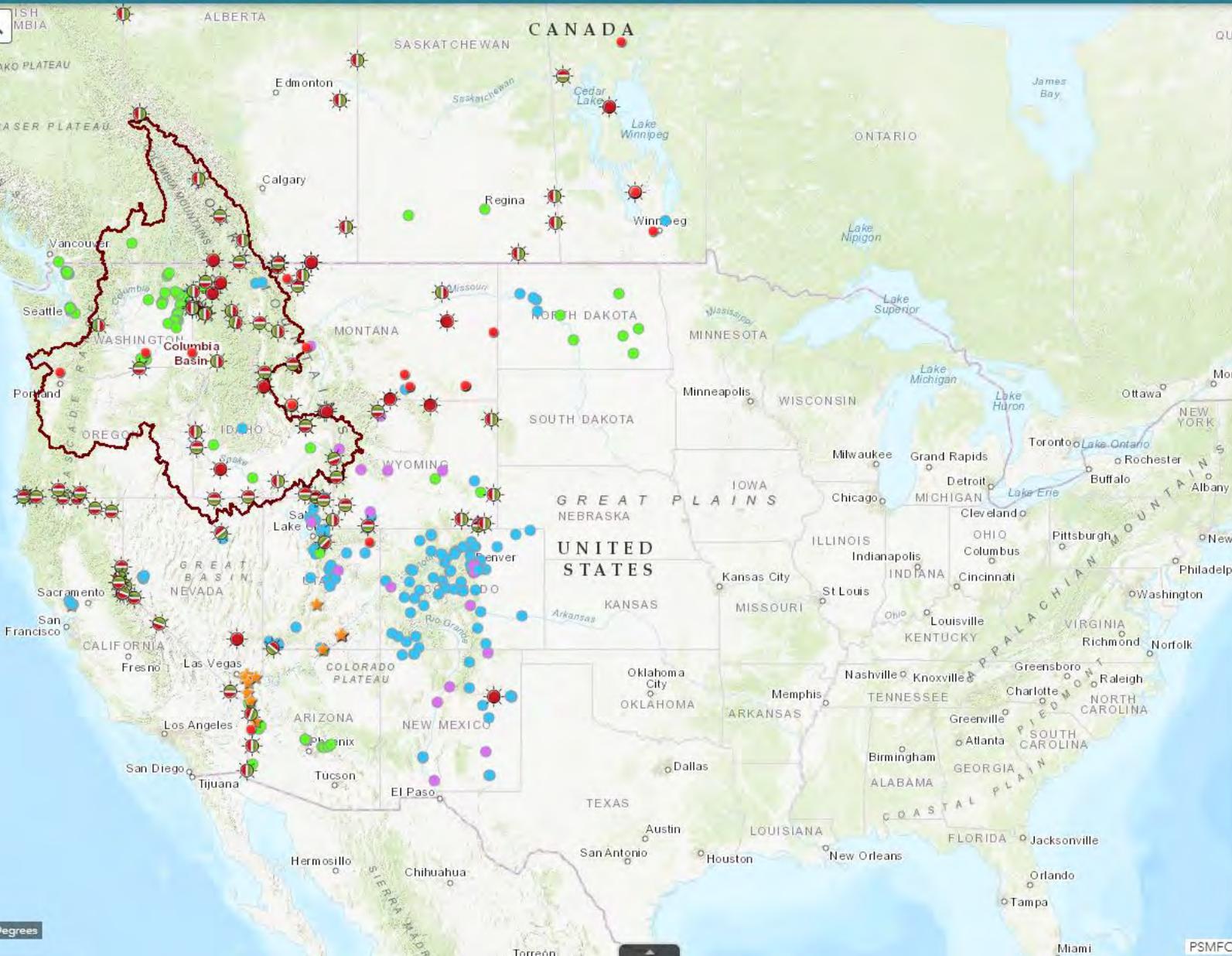
a planning tool for Western AIS Coordinators

Aquatic Invasive Species Program

Find address or place



ISH MBIA



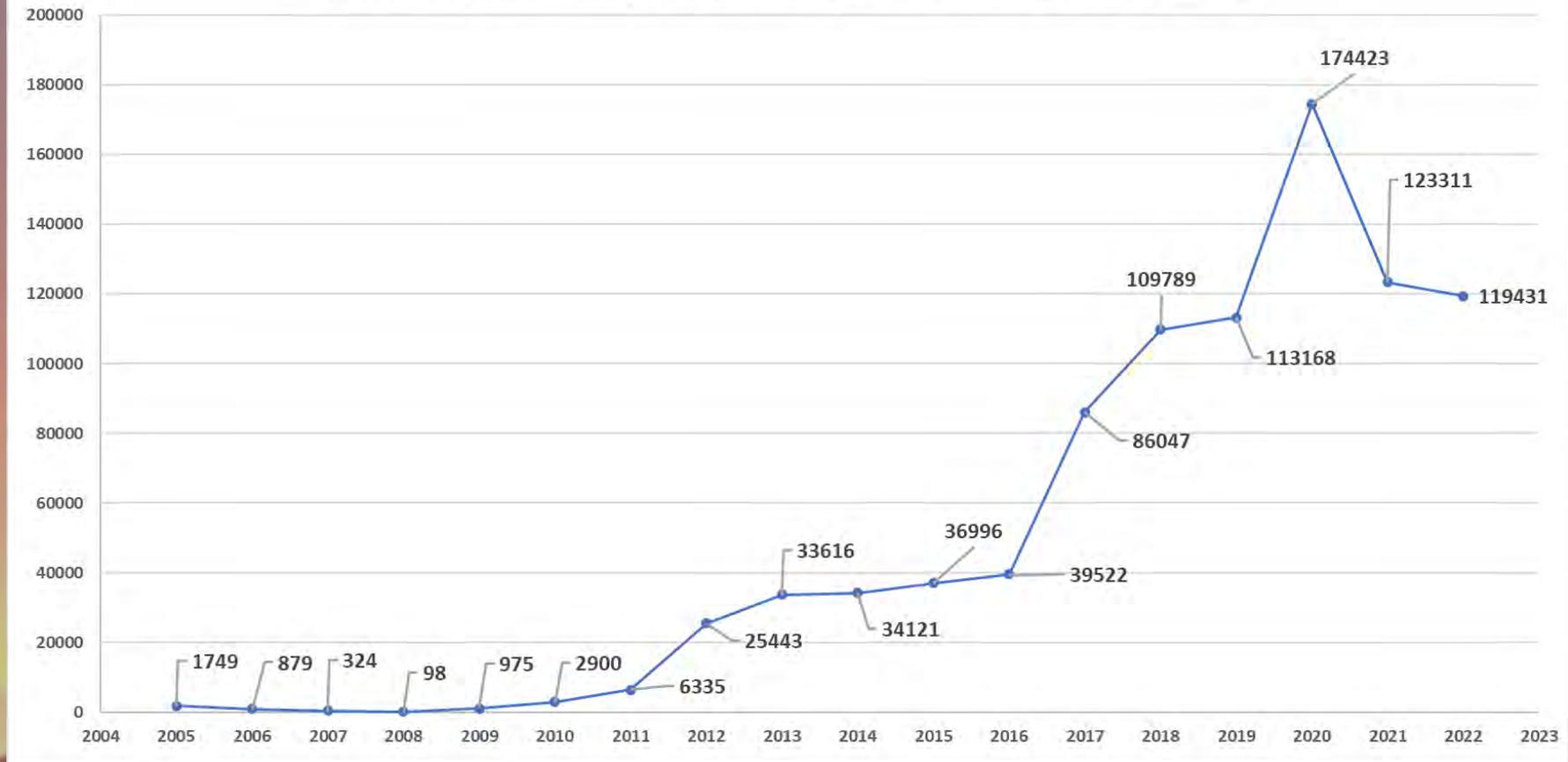
### Legend

- Highway Watercraft Inspection Stations (public view)**
  - Highway station (single direction)
  - Highway station (both directions)
  - Highway station (directionality not established)
- Waterbody and Source Watercraft Inspection Stations (public view)**
  - Waterbody station
  - Roving
  - Source Decontamination Station
  - Office location
- Columbia Basin Watershed Boundary**
  - Columbia Basin Boundary



# Montana

## Watercraft Inspections By Year -- 2005-2022



# Oregon

Year	Inspections	Quagga/Zebra Mussel	Other Bio-fouling
2010	2,852	0	19
2011	3,614	5	73
2012	4,675	18	32
2013	7,441	17	228
2014	11,490	17	193
2015	12,953	12	269
2016	16,825	17	284
2017	21,026	16	283
2018	28,190	11	354
2019	26,875	16	384
2020	23,043	12	264
2021	19,747	11	228
2022	14,293	6	303
<b>AIS Totals</b>	<b>193,024</b>	<b>158</b>	<b>2,914</b>



# British Columbia

BY THE NUMBERS	2021	2022
TOTAL WATERCRAFT INSPECTED	33,300	22,100
NUMBER OF PEOPLE INTERACTED WITH TO PROMOTE CLEAN, DRAIN, DRY	61,600	36,400
HIGH-RISK INSPECTIONS	244	122
DECONTAMINATION ORDERS ISSUED	100	66
QUARANTINE ORDERS ISSUED	18	29
MUSSEL-FOULED WATERCRAFT	17	13

# Washington

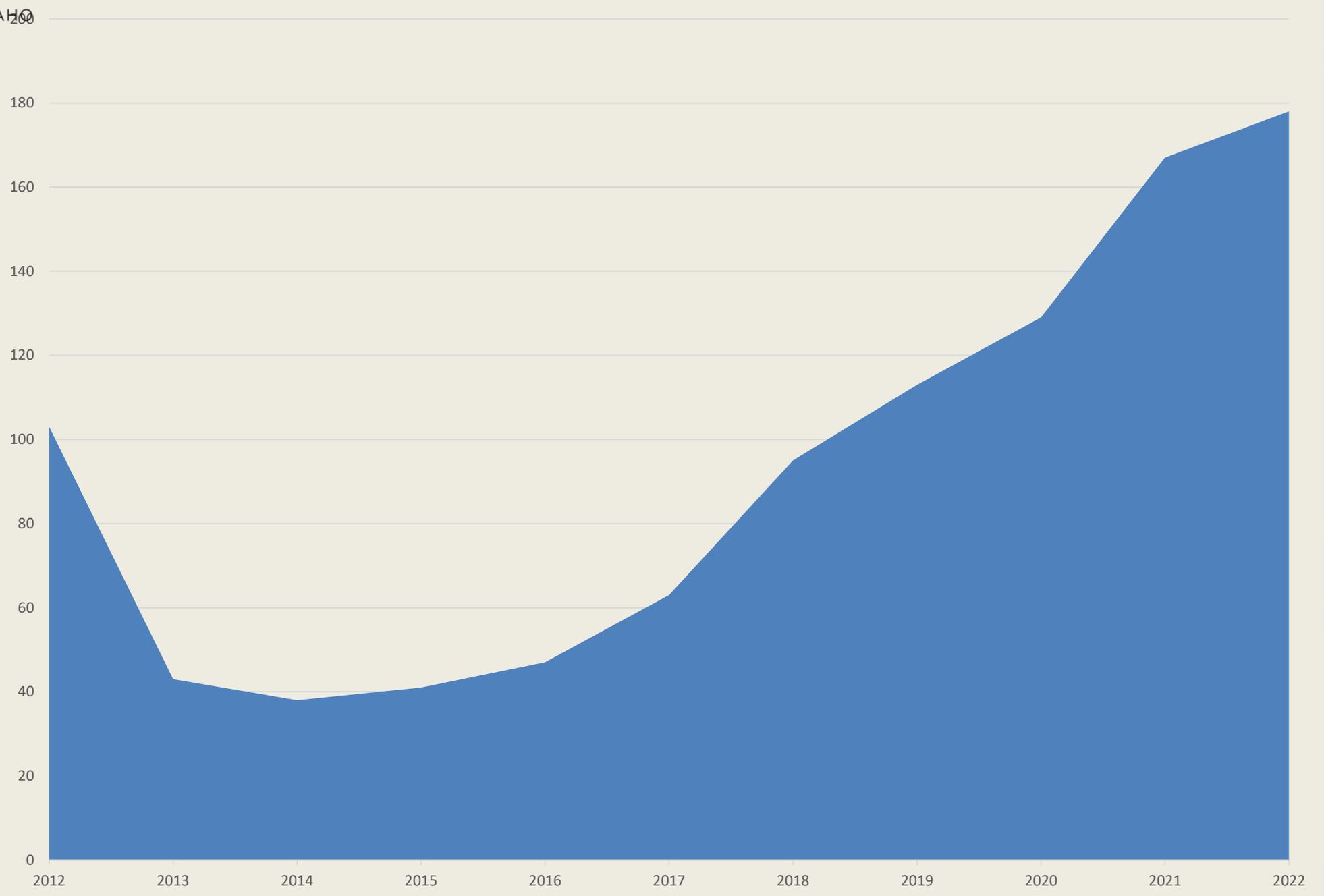
<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Operational Days	Operational Days	Operational Days	Operational Days
559	532	940	1236
# of Watercraft	# of Watercraft	# of Watercraft	# of Watercraft
32,502	31,651	55,812	51,551
Mussel boats	Mussel boats	Mussel boats	Mussel boats
16	23	39	24



INVASIVE  
SPECIES

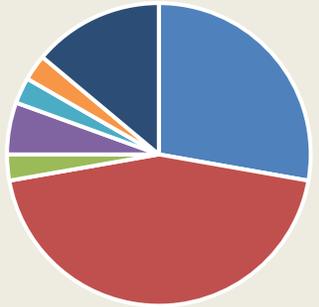
OF IDAHO

Dreissenid-infested boats intercepted by WY, MT, OR, ID, and WA, 2012-2022



# 2022 Mussel Fouled Watercraft

2022 Mussel Fouled Watercraft Inspection Station



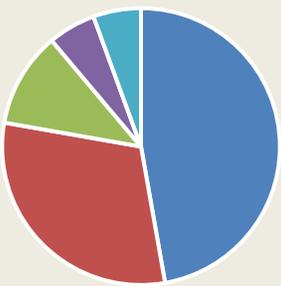
- Malad
- Cedars
- Cotterell
- Hwy 93
- Huetter
- Clark Fork
- ISDA Staff

2022 Mussel Fouled Watercraft Origin



- Great Lakes & Midwest
- Lake Powell
- Lake Havasu
- Canyon Lake
- Lake Mohave
- Lake Pleasant
- Lake Mead
- Unknown

2022 Mussel Fouled Watercraft Destination

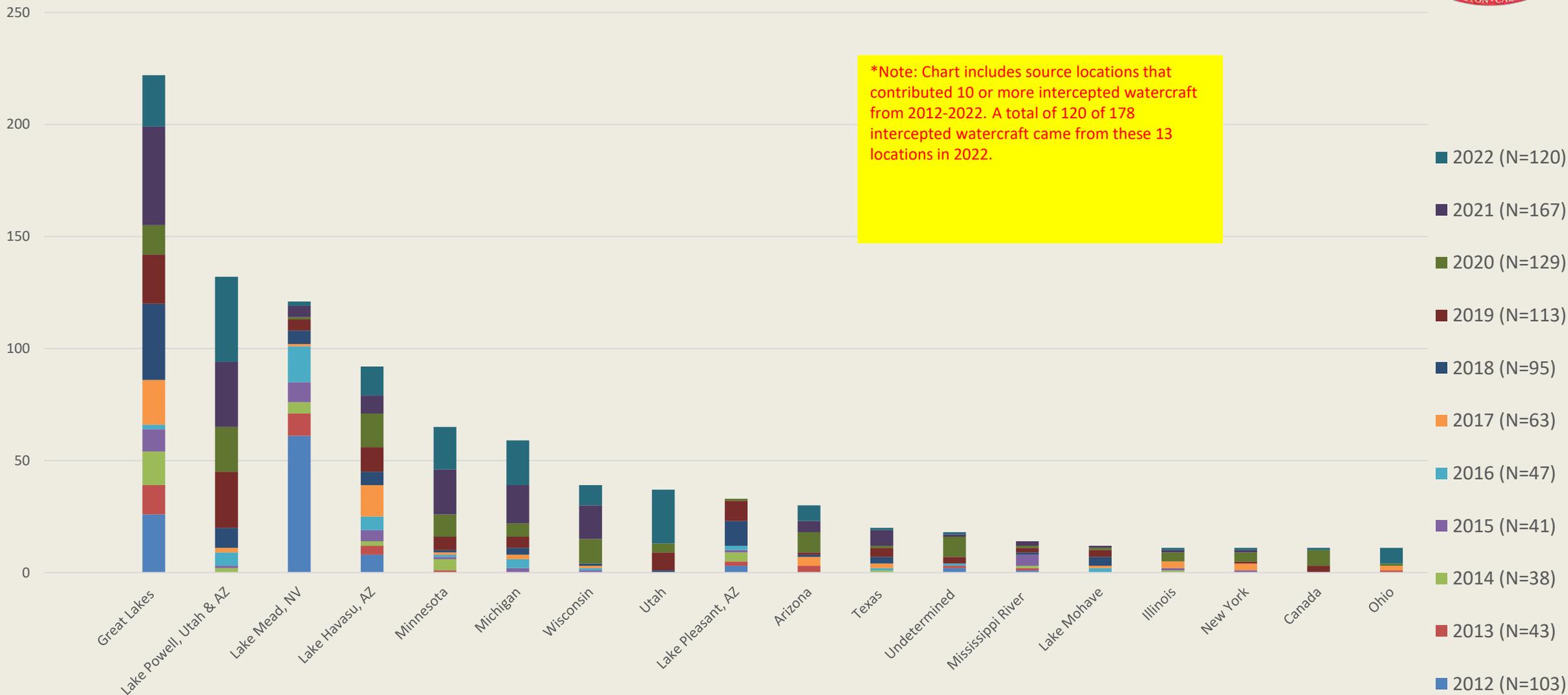


- Idaho
- Washington
- Montana
- British Columbia
- Oregon

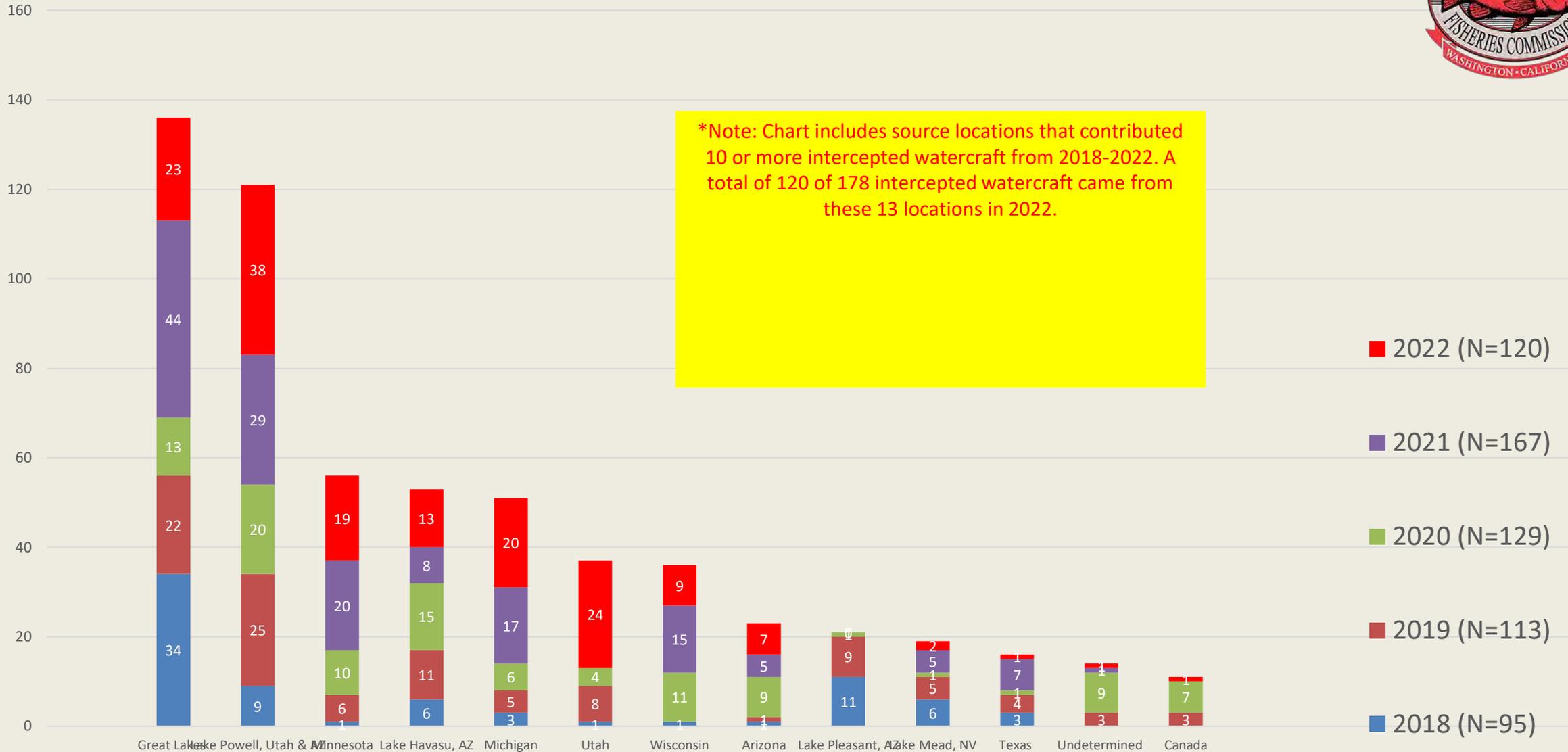


# Watercraft Inspection and Decontamination by Source

## States that had 10 or more intercepted watercraft in Washington, Idaho, Montana, Oregon, and Wyoming 2012-2022

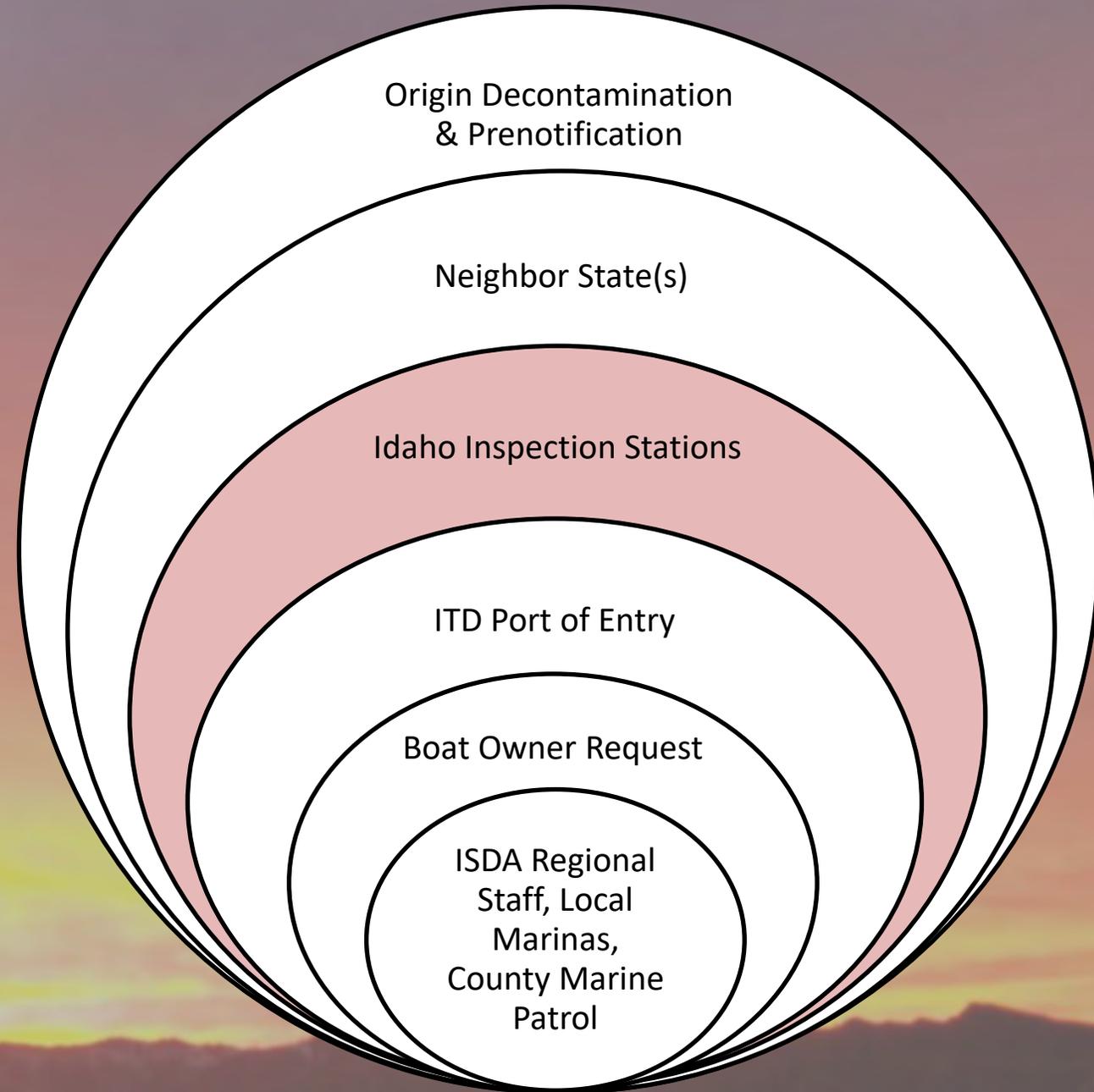


Watercraft Inspection and Decontamination by Source  
 Source of watercraft\* intercepted in Oregon, Washington, Montana, Wyoming, and Idaho  
 2018-2022



# Watercraft Inspection in the West

- Several “nets” provide coverage for Idaho and Columbia River Basin
- Minimum inspection protocol standards
- Regional networking
  - Neighbor State(s)
  - Regional Database
  - Transportation permits
- NEW “Call Before You Haul” program
- Information passed on to inspection station(s) & managers
- ISDA online decontamination request form
- **Decontamination may be appropriate at destination**



# Lake Powell Boat- 5/2/2022



# CALL BEFORE YOU HAUL

## 1- 844-311-4873 (toll free)

Call to avoid costly and timely delays while transporting boats across state lines!

### Haul Clean, Drained, and Dry Boats



# 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.

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.



Scan me!

## NEWS

Oregon State Marine Board  
**Boat Oregon**



#### Media Contacts:

Lisa DeBruyckere, PSMFC Consultant

[lisad@psmfc.org](mailto:lisad@psmfc.org)

Rick Boatner, ODFW AIS Coordinator

Ashley Massey, OSMB Public Information Officer

Phone: (503) 371-5939

Phone: (503) 947-6308

Phone: (971) 707-2396

For Immediate Release

Date: Tuesday, January 11, 2022

### New Program Aims to Prevent Aquatic Invasive Species Spread

The Pacific States Marine Fisheries Commission (PSMFC) initiated a new program to prevent delays during the transport of watercraft destined for the states of Washington, Oregon, Idaho, and Montana. The program, "Call Before You Haul," provides a toll-free phone number boat transporters can call prior to transporting watercraft from outside the Pacific Northwest to one of the aforementioned states. The program is currently being piloted in 10 states and is intended to be expanded to all states in 2022.



By calling the toll-free number, **1-844-311-4873**, prior to hauling, and providing some basic information about the watercraft being transported, the destination state representative will reach out to boat transporters and provide them with information to facilitate and expedite the watercraft inspection process, and if needed, decontaminate. Proactively arranging watercraft inspections can prevent costly and timely delays at inspection stations, or if boat transporters are intercepted hauling an infested vessel by law enforcement. All four states are communicating with one another and working with one of the four states will expedite transport across two or more Pacific Northwest states.

All Pacific Northwest states have regulations that make it illegal to transport aquatic invasive species (dead or alive) within their respective states, including penalties up to, and including, a no bond felony. Much of the ongoing spread of aquatic invasive species (AIS) to inland waters throughout North America can be attributed to the overland movement of watercraft that can be towed on trailers or atop vehicles. Invasive species can be carried in bilge water, live wells, and bait buckets as well as on boat and motor exteriors and trailers. Every time a boat is transported overland after use in an aquatic waterway, there is the possibility that it will transfer aquatic invasive species to new waterways.

In addition to reaching out to boat transport companies, PSMFC is working with state representatives in 10 states (as part of the pilot program) to notify them of the availability of this information available on their permitting websites.





Western States and Provinces Best Management Practices to Comply with State/Provincial Laws and Prevent the Spread of Aquatic Invasive Species

Prevent Delays and Reduce Costs Associated with Transporting, Buying, and Selling Boats

Aquatic invasive species, such as zebra and quagga mussels, pose a threat to the economy and natural resources of western states and provinces. In addition, fines and costly delays associated with transporting boats with aquatic invasive species can affect you and others in the recreational boating industry.

In an effort to prevent the spread of aquatic invasive species, the Pacific States Marine Fisheries Commission, U.S. Fish and Wildlife Service, Western Regional Panel, and others are making information on state laws and best management practices available to boat haulers, auctioneers, marinas, manufacturers, and brokers to make it easy to comply with state, provincial and federal laws, prevent costly delays in transporting or selling boats, and help reduce the spread of aquatic invasive species.

A few key facts you should know:

**It's the Law!**

A U.S. federal law, called the Lacey Act, makes it illegal to transport invasive species regulated by federal or other jurisdictional laws into the U.S. and across state and international borders. In addition, the western states and provinces have enacted legislation to reduce the spread of aquatic invasive species. Businesses and individuals have been cited for transporting boats into and through western states and provinces with invasive mussels attached, resulting in costly fines and significant delays.

**CLEAN, DRAIN, DRY**

If you follow these three simple steps, your chances of experiencing any delays or fines associated with transporting or selling a boat are minimized. A Clean, Drained, and Dry boat has no plants or animals attached and is not carrying water in its wells,

ballast, or engine. Most states have drain plug laws – any boat out of water should have a pulled drain plug.



**Communication Prevents Delays**

The western state and provincial AIS coordinators know the laws and regulations for their jurisdictions, and they're available to assist you by informing you of their laws and providing you with any other tools and information you need to successfully transport a boat, or sell/auction a boat, particularly those coming from water bodies infested with aquatic invasive species. Contact any western state or provincial AIS coordinator via our website:

<https://www.westernais.org/watercraft>



**Boat Haulers - Call Before You Haul**

Here's what you can do to comply with state laws and help prevent the spread:

Access our website

<https://www.westernais.org/watercraft> to become familiar with information about moving a boat between states or from one water body to another.

If you are transporting a boat:

- **CLEAN** the boat – Remove all plants, animals, and mud, and thoroughly wash everything, especially FROM all crevices and other hidden areas. Inspect the plumbing system for hitchhikers!
- **DRAIN** the boat – Eliminate all water before leaving the area, including wells, ballast, and engine cooling water. Pull the drain plug!
- **DRY** the boat.
- **ALWAYS CONTACT** the destination state or province to understand the laws and regulations that jurisdiction has for boats coming from other states. To minimize travel delays and ensure compliance with laws, an inspection of your watercraft will be scheduled in your destination state.

An online map of regional watercraft inspection stations, and contact information for AIS coordinators in the western states and Canadian provinces is available at <https://www.westernais.org/watercraft>.

**Boat Auctioneers, Sellers and Brokers**

Never sell a dirty boat. Period. When you do sell a boat, ensure you comply with the best management practices described in this brochure. Any boat you sell should be clean, drained, and dry so that the buyer does not unknowingly purchase, transport, and/or launch a dirty boat – and so that you help protect the boating industry and your livelihood. Do everything possible to ensure the individual that purchases the boat you auction, sell, or broker is aware of the information in this brochure. You have a vested interest in seeing that your boat buyer has a positive experience from the time he/she purchases a boat through to the time that boat launches in its destination waters.



## ANS Alert: Watercraft traveling from Lake Mojave towards Lake Bothel, WA



robert.walters@state.co.us

To: lloyd.knight@agri.idaho.gov; rick.j.boatner@odfw.oregon.gov; Allen.Pleus@dfw.wa.gov; glenn.dolphin@boat.oregon.gov; nicholas.zurfluh@isda.idaho.gov; mschoffstall@ndow.org; Pamela.Taylor@dfw.wa.gov **+21 others**



Mon 6/6/2022 5:59 PM

 WatercraftMovementNotice....  
172 KB

A watercraft is heading from Lake Mojave towards Lake Bothel, WA with an anticipated arrival date of 6/6/2022

Watercraft Type: Commercial - Used

Watercraft Make: Custom Weld

Watercraft Model: Na

Registration Number: na

Owner:

Taylor Intaphan

na, NV 89032

425-482-7600

This is a Call Before You Haul notification for a 24 foot Custom Weld being shipped by Tetra Tech from Lake Mojave, NV to Bothel, Washington. The estimated time out of the water is 15 days. It is unknown how long the watercraft was in Lake Mojave. L. DeBruyckere

[Click Here To View The Inspection](#)

 Reply

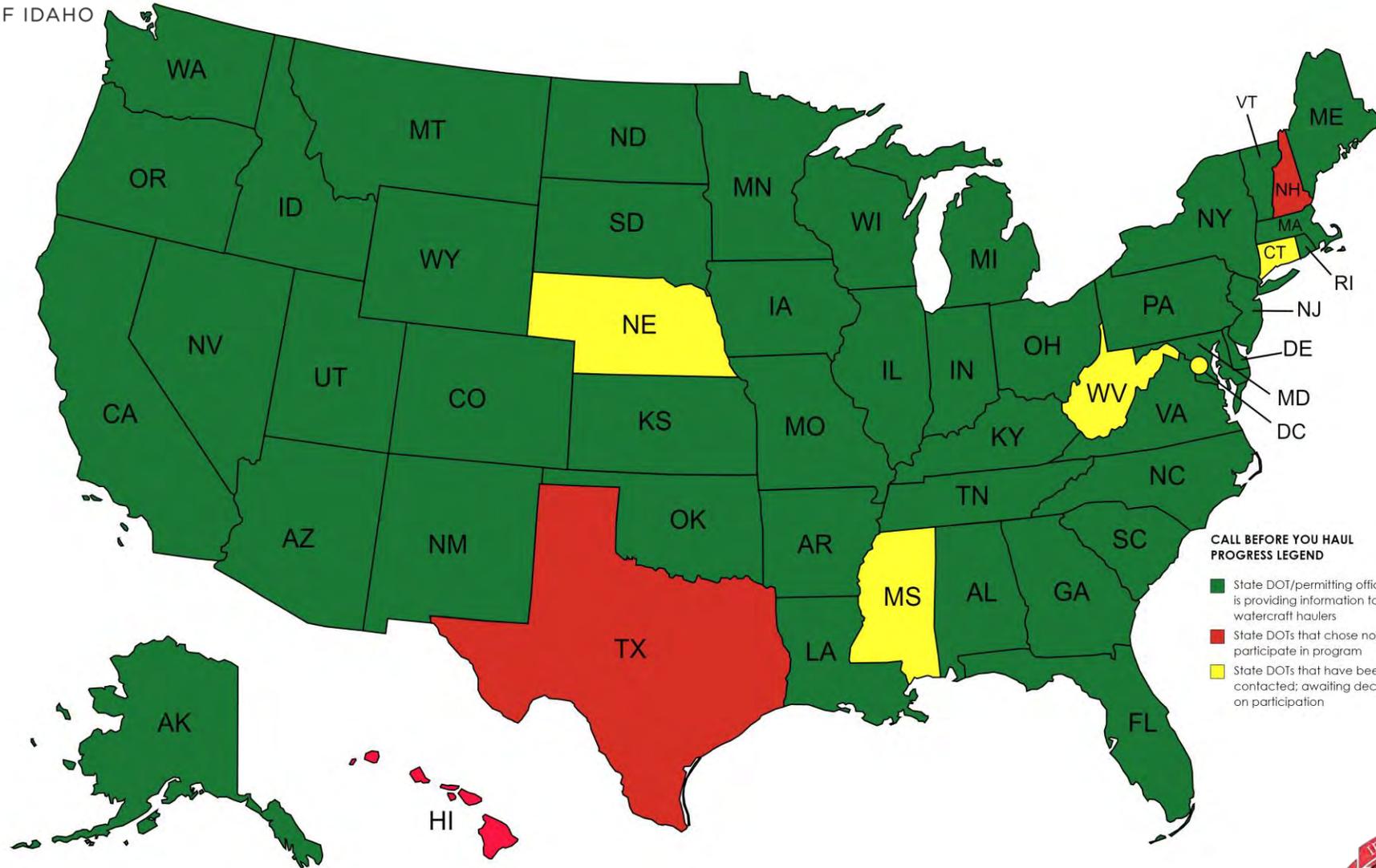
 Reply all

 Forward



INVASIVE  
SPECIES

OF IDAHO



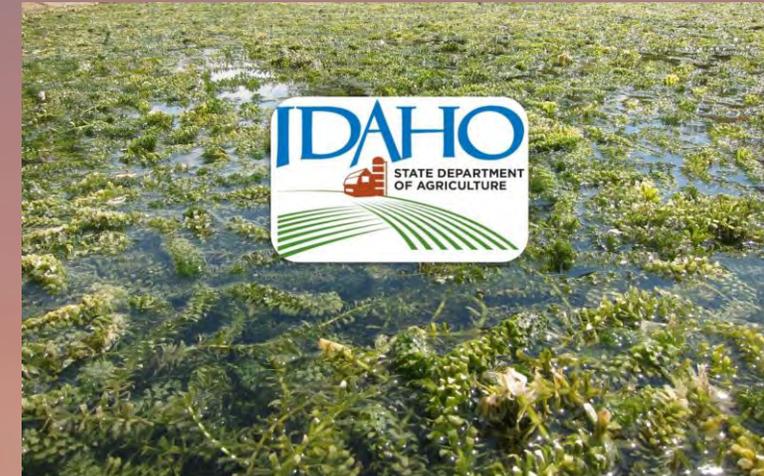
CALL BEFORE YOU HAUL  
PROGRESS LEGEND

- State DOT/permitting office is providing information to watercraft haulers
- State DOTs that chose not to participate in program
- State DOTs that have been contacted; awaiting decision on participation



# 2022 Early Detection Monitoring

- 13<sup>th</sup> year of monitoring in Idaho
- No Quagga/Zebra Mussel detections!
- ESRI Survey123 data form (Android or iOS)
- Focused survey blitz strategy to manage workload
- Assistance from partners (Idaho Power, Tribes, Lemhi County & others)
- Activate Idaho rapid response plan if detection occurs



Idaho Waterways Survey  
A Standard Operating Procedure for Aquatic Plants & Invasive Species



# 2022 Early Detection Monitoring

## Veliger Monitoring (microscopy)

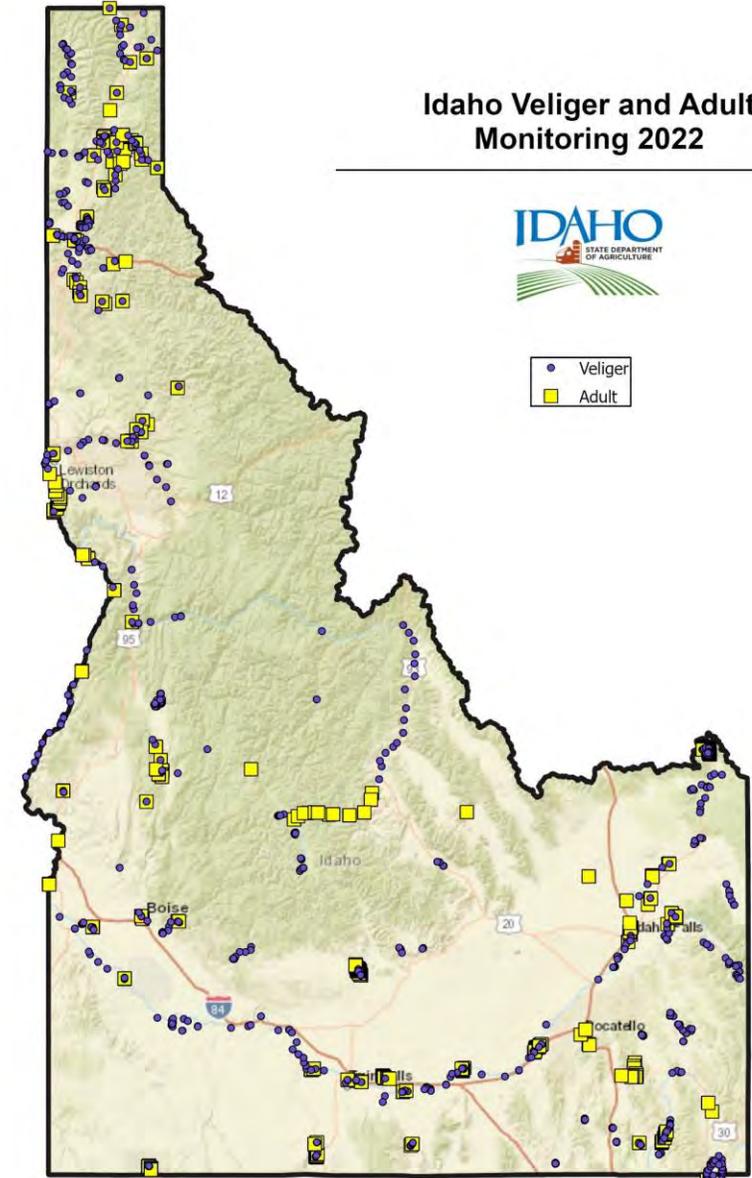
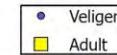
- **1,650** plankton samples collected from **80** waterbodies)
  - Multiple sample events, bi-weekly, per waterbody
  - Priority overnight shipment
  - 2 week turnaround for lab analysis

## Adult Monitoring (visual)

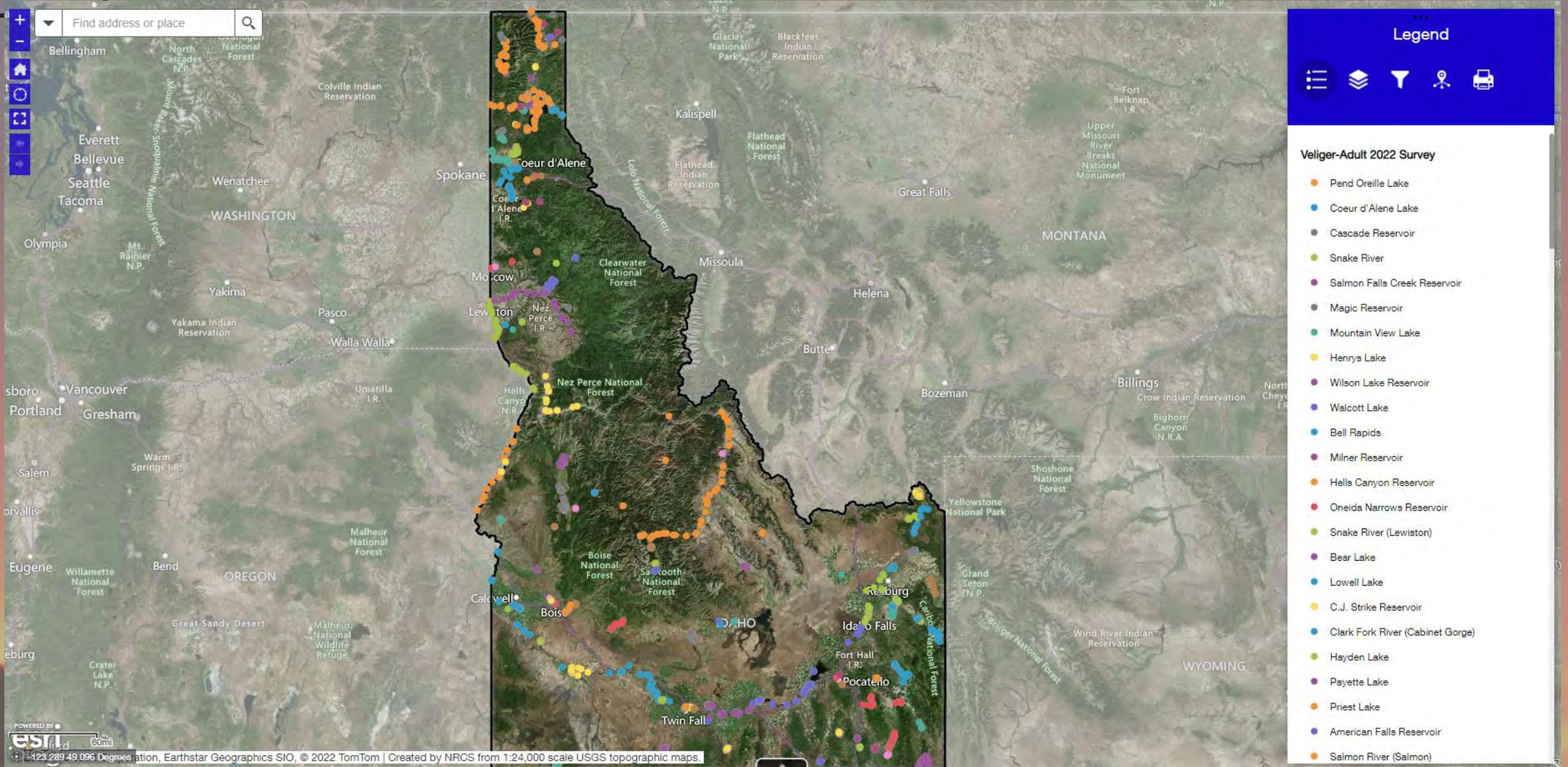
- **~1,500** surveys conducted
- Reservoir drawdown, substrate and benthic grab sampling

Shift monitoring focus for aquarium dump sites (moss ball)

## Idaho Veliger and Adult Monitoring 2022



# INVASIVE SPECIES OF IDAHO



https://idaho.maps.arcgis.com/apps/webappviewer/index.html?id=389c51a8948b4bdfa51f135dc2d045a6

Find address or place

Sandpoint Station  
Sandpoint Amtrak

95  
95  
95

Highway 95  
Railroad Ave  
Railroad Dr  
Bridge St

Veliger-Adult 2022 Survey

Veliger-Adult 2022 Survey

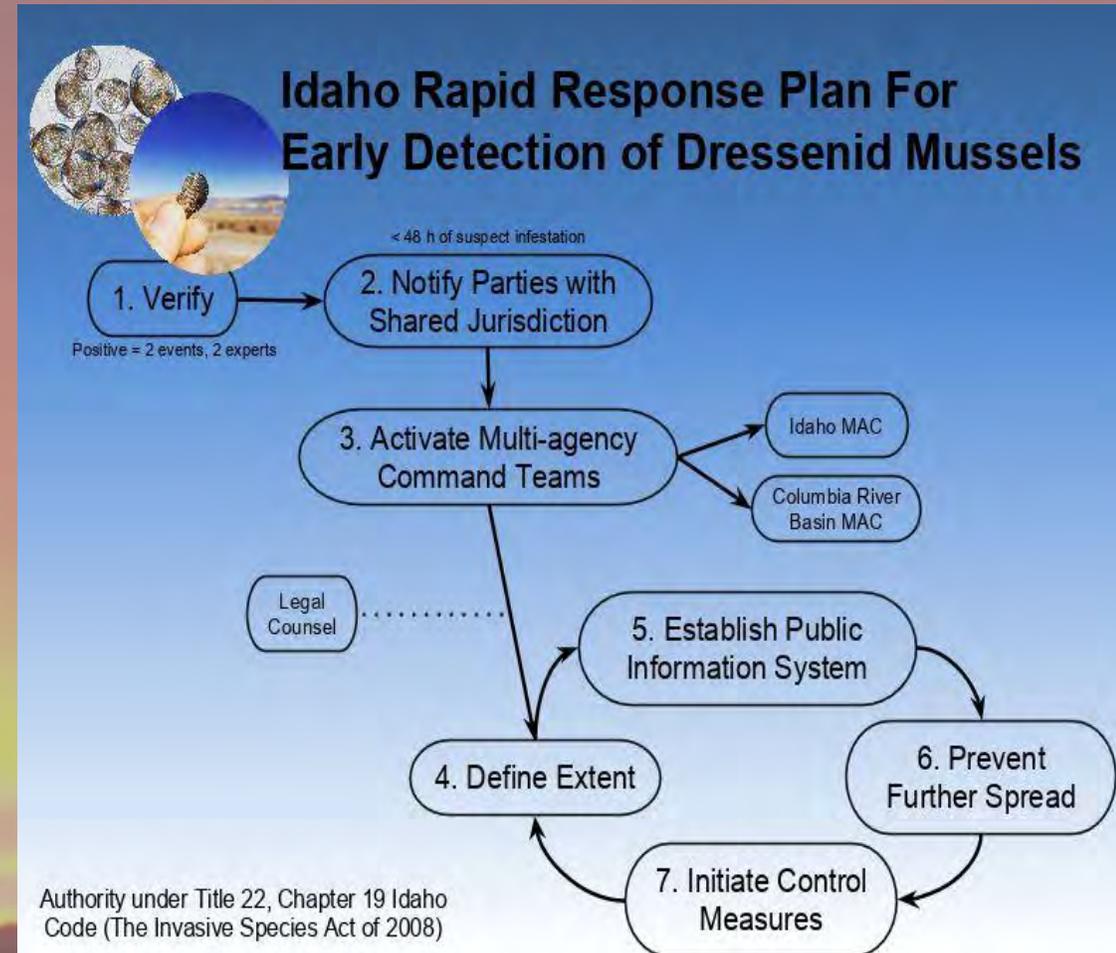
Date	9/9/2022, 2:29 PM
Sample Location	Windbag Marina
Waterbody	Pend Oreille Lake
Inspector Name	PCvitanich
Which Survey are you conducting?	Adult
Tow Length	
Number of Tows	
Number of Samples	
Tow Type	
Temperature 1 Meter	
Temperature 2 Meter	
Temperature 3 Meter	
Temperature 4 Meter	
Zoom to	...

POWERED BY esri

116.54348279 Degrees longitude, © 2022 Maxar, ©CNES (2022) Distribution Airbus DS, © 2022 TomTom | Created by NROCS from 1:24,000 scale...

# Idaho Rapid Response

- Idaho Rapid Response Plan
  - Aligns with regional state plans
  - Aligns with Columbia River Basin Interagency Plan
  - Focuses on verification and communication
  - Learning from other states' experiences
- 2022 rapid response exercise
  - Wildhorse Reservoir, NV
  - October 4<sup>th</sup> & 5<sup>th</sup>, 2022
  - Invasive Species Action Network (facilitator)
  - Pacific States Marine Fisheries Commission
  - <https://www.westernais.org/rapid-response>



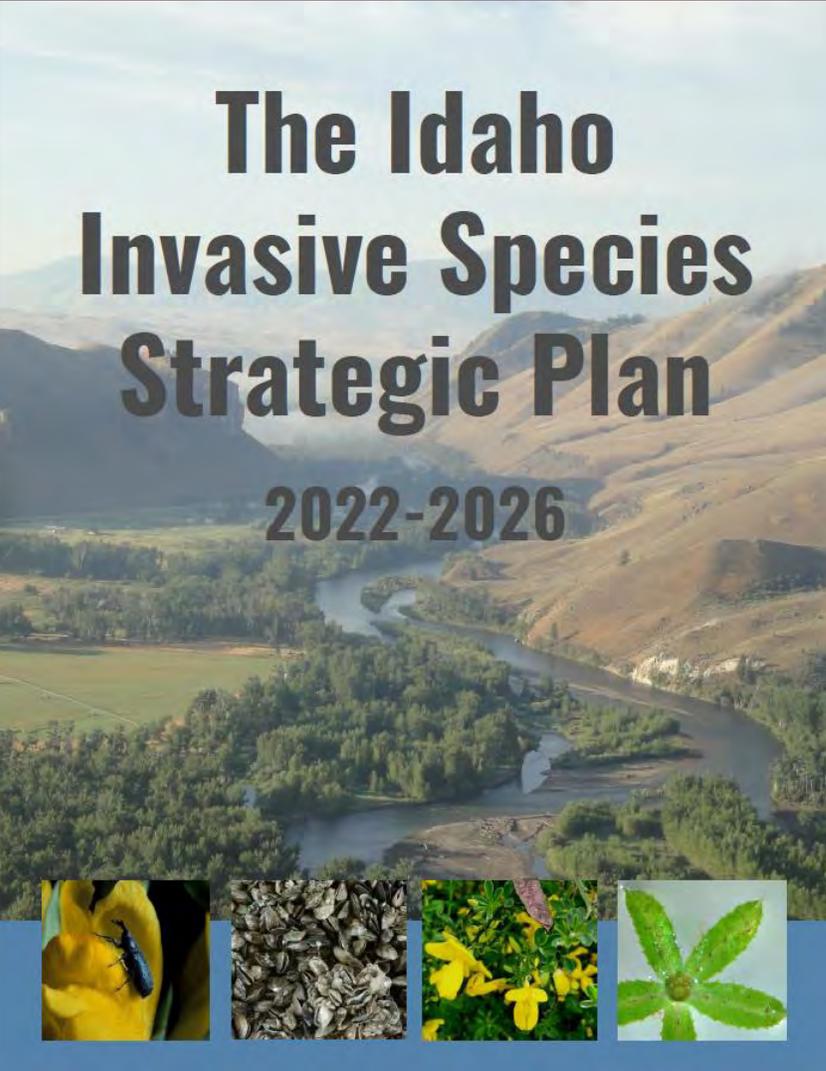
# Regional Meetings & Coordination

- Pacific Northwest Economic Region (PNWER)
- Columbia River Basin Team (CRB)
- Western Regional Panel (WRP)
- Western Invasive Species Coordinating Effort (WISCE)
- Western Governors' Association (WGA)
- Regional Conference Calls
- Lakes Commission(s)



# Strategic Plan

- Newly revised plan ready for review.
- 2022-2026
- Available online at [invasivespecies.idaho.gov](https://invasivespecies.idaho.gov)



## The Idaho Invasive Species Strategic Plan 2022-2026



# Until next time....



Nic Zurfluh  
Section Manager- Invasive Species  
Coordination and Outreach  
Idaho State Department of Agriculture  
208.332.8686 office  
208.334.2283 fax  
208.631.9574 cell  
[nicholas.zurfluh@isda.idaho.gov](mailto:nicholas.zurfluh@isda.idaho.gov)  
[invasivespecies.idaho.gov](http://invasivespecies.idaho.gov)

KEEP IDAHO IDAHO.  
CLEAN, DRAIN, DRY YOUR BOAT.

Hells Canyon, Fall 2022



# Grasshopper & Mormon Cricket Program

2022 Season

# New Program Coordinator

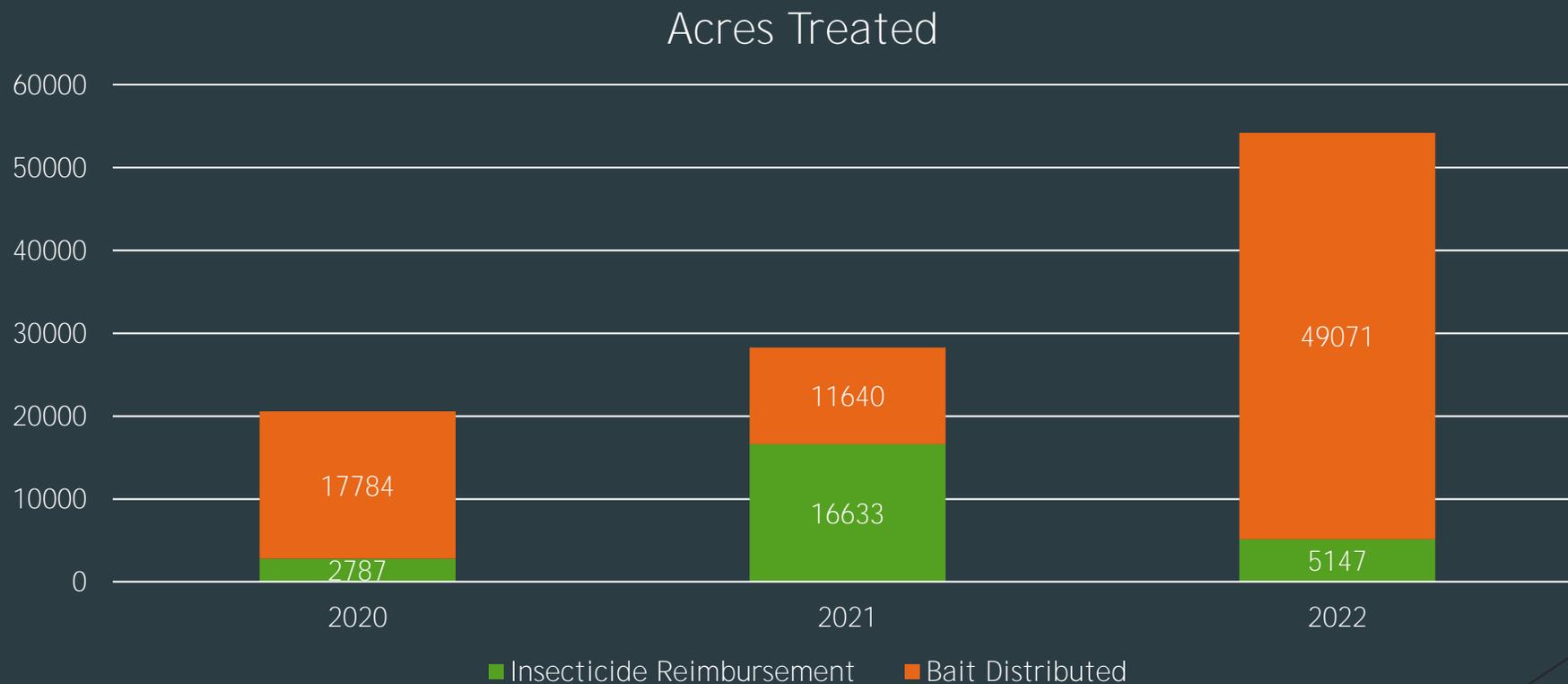
Sam Kennedy has been with the ISDA since July of 2021. They spent a year in the Plants Division as the Invasive Species/Noxious Weeds Technician III and became the Invasive Species Specialist and Grasshopper Mormon Cricket Program Coordinator in September of 2022.



# 2022: Year in Review

- ▶ 22 Counties with 178 Landowner Requests for Assistance (2021: 276 LRs)
  - ▶ Elmore County: 33
  - ▶ Owyhee County: 32
  - ▶ Oneida County: 28
- ▶ 19 Total Reimbursement Requests (2021: 22 Total)
  - ▶ 5,147 Acres (\$56,641.00) total for Reimbursed Treatments (2021: 16,633.2 acres, \$151,980.45)
- ▶ 129,440 lbs of Bait distributed (2021: 114,200 lbs)
- ▶ Highway Treatments (2021: 42 miles)
  - ▶ Hwy 51: 12 miles treated ROW

# Carbaryl Bait and Landowner Reimbursement Totals



# Historical 5% Carbaryl Bait Usage

Carbaryl Bait Distributed





# NOXIOUS WEED UPDATE

2022 Noxious Weed End of Year  
Review

# 2022 ISDA NOXIOUS WEEDS EOY REVIEW

EDRR Update

- Aquatic
- Terrestrial

ISDA Noxious Weed Control Projects

NWFFS Update

Noxious Weed Distribution Project

Outreach/Education



Turkish Thistle, *Carduus cinereus*

## EDRR UPDATE

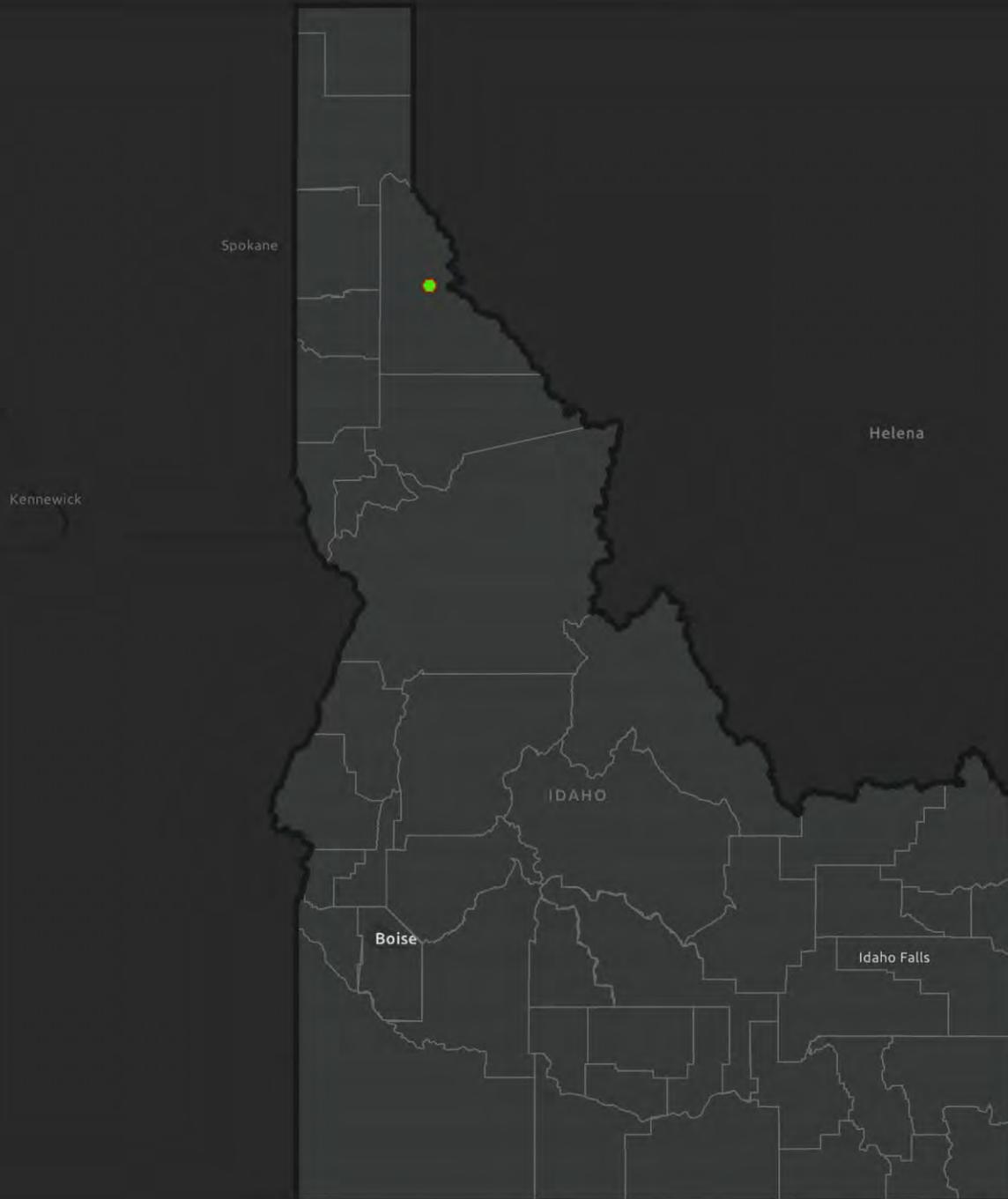
- 10 Terrestrial Species Listed
  - +1 Species Temporarily Listed in 2022
- 11 Aquatic Species Listed

# GOATSRUE *GALEGA OFFICINALIS*

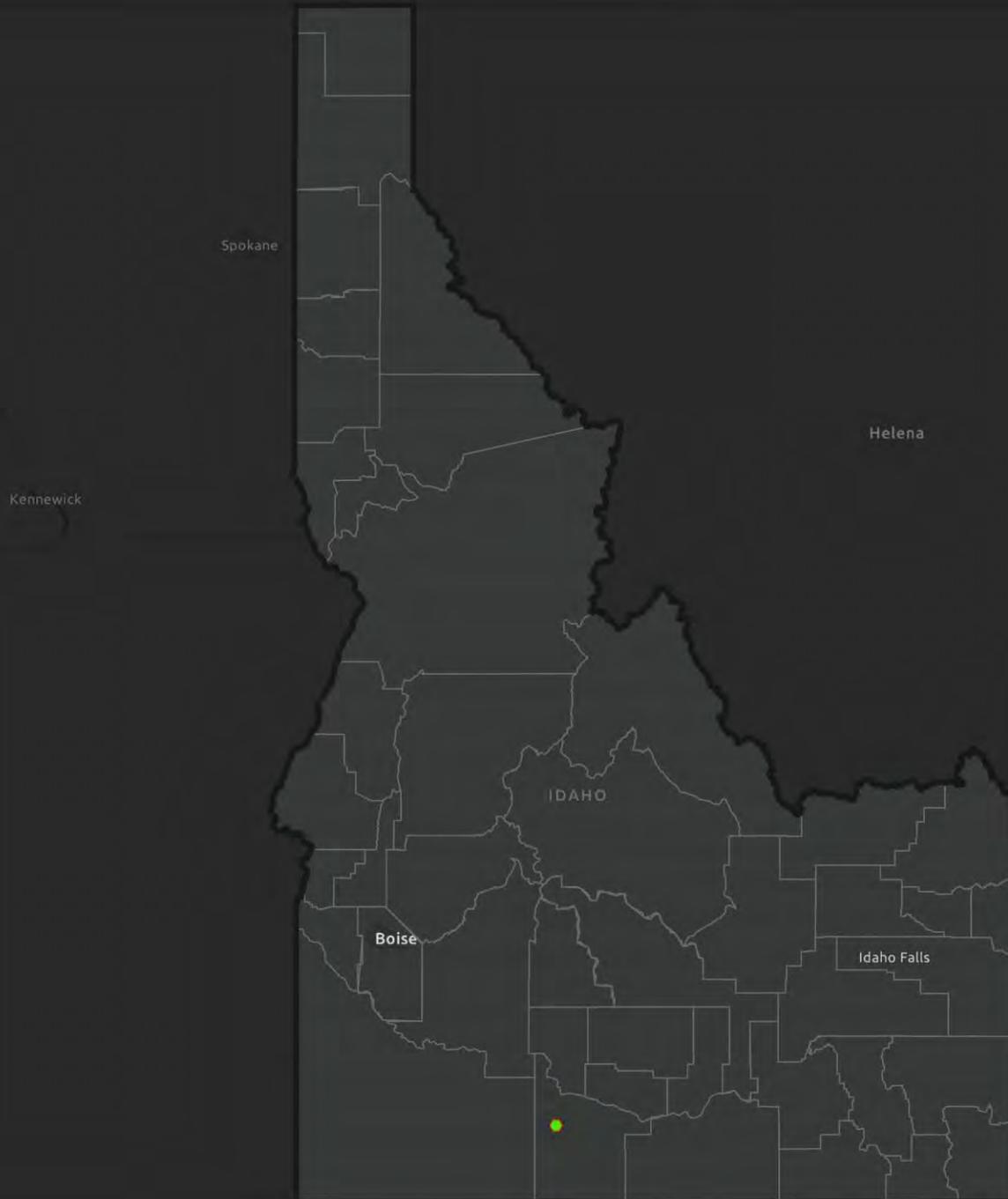


Esri, HERE, Garmin, FAO, NOAA, USGS, EPA

# POLICMAN'S HELMET *IMPATIENS GLANDULIFERA*

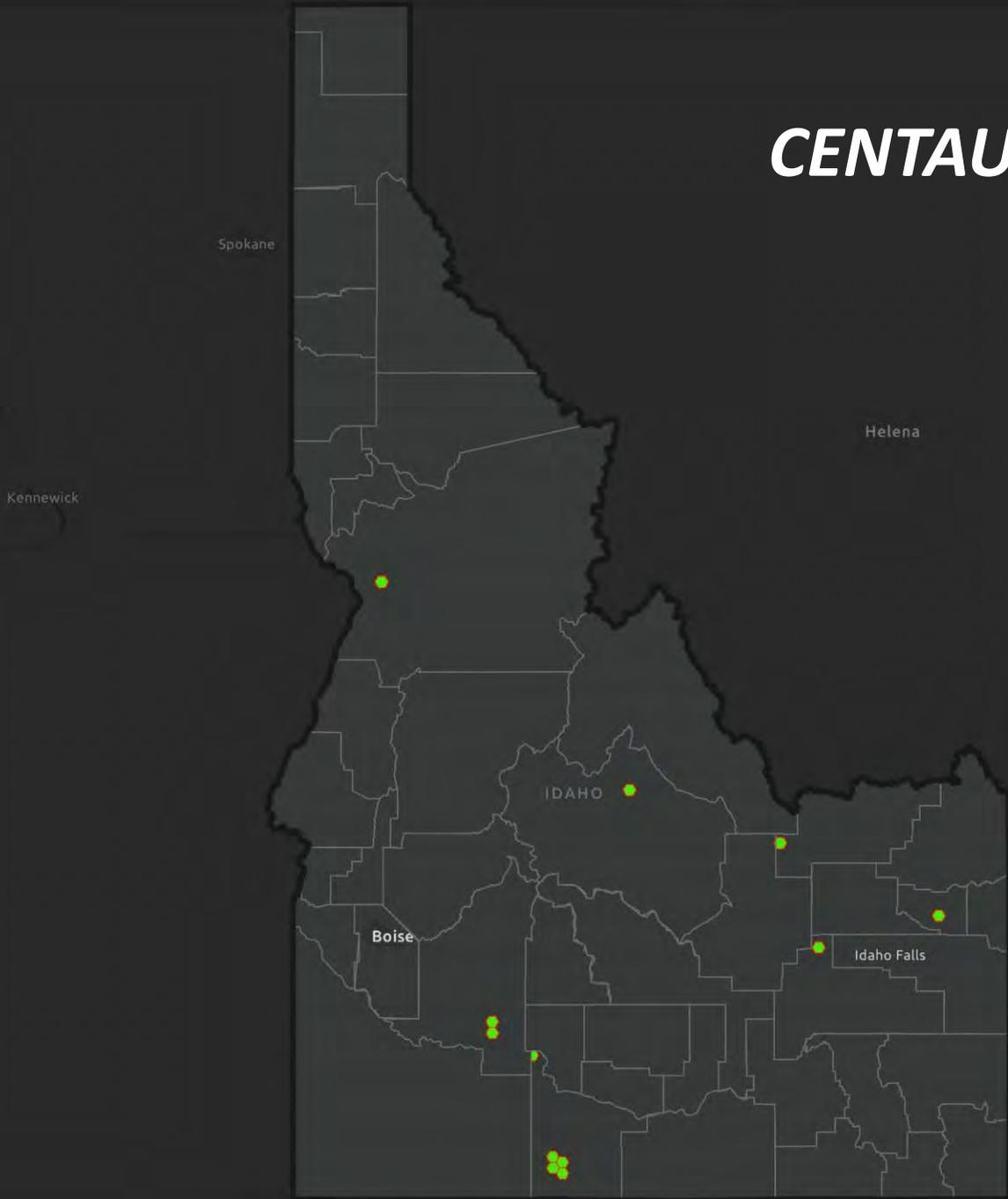


# PURPLE STARHISTLE *CENTAUREA CALCITRAPA*



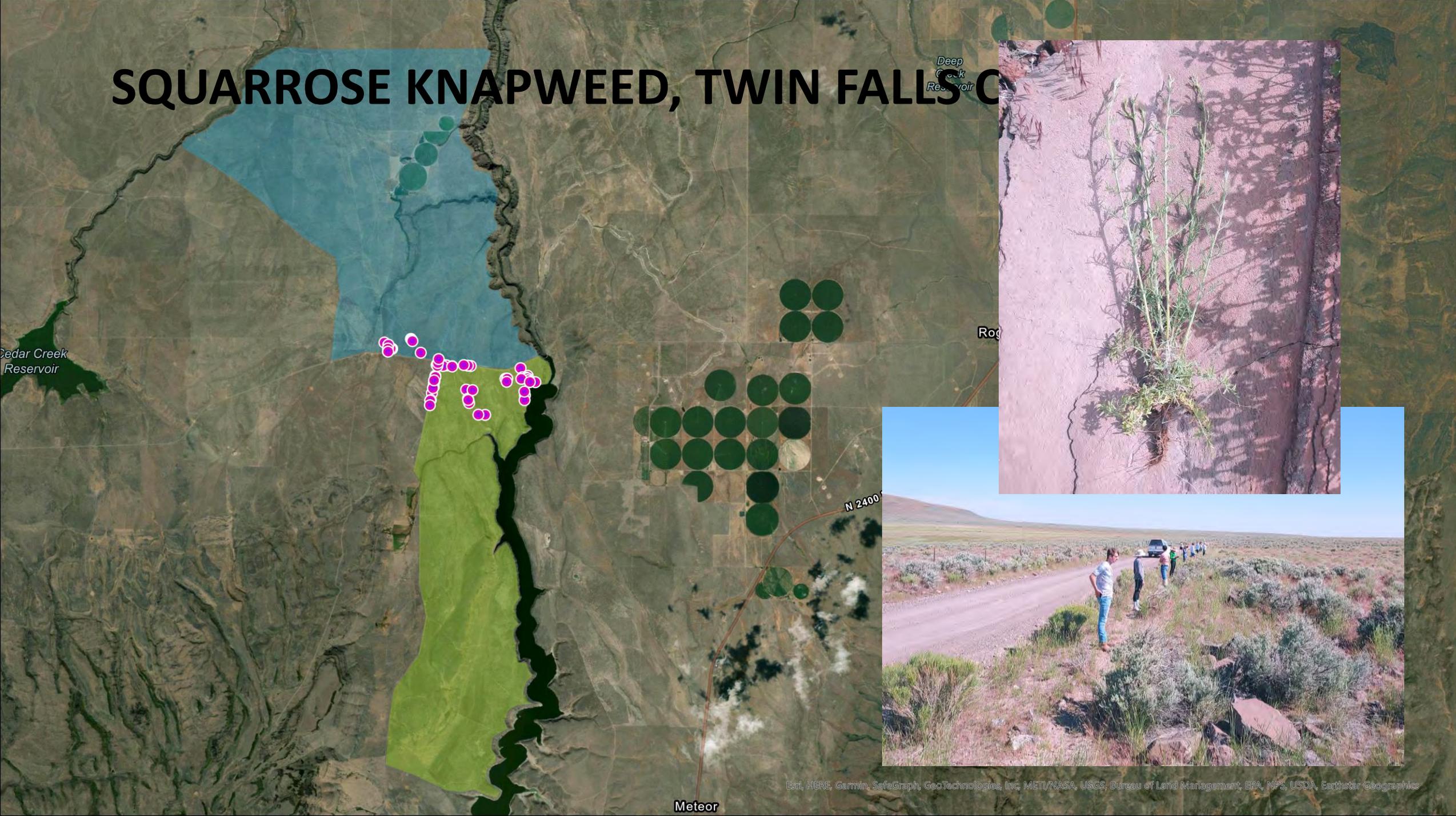
# SQUARROSE KNAPWEED

*CENTAUREA VIRGATA SPP. SQUARROSA*

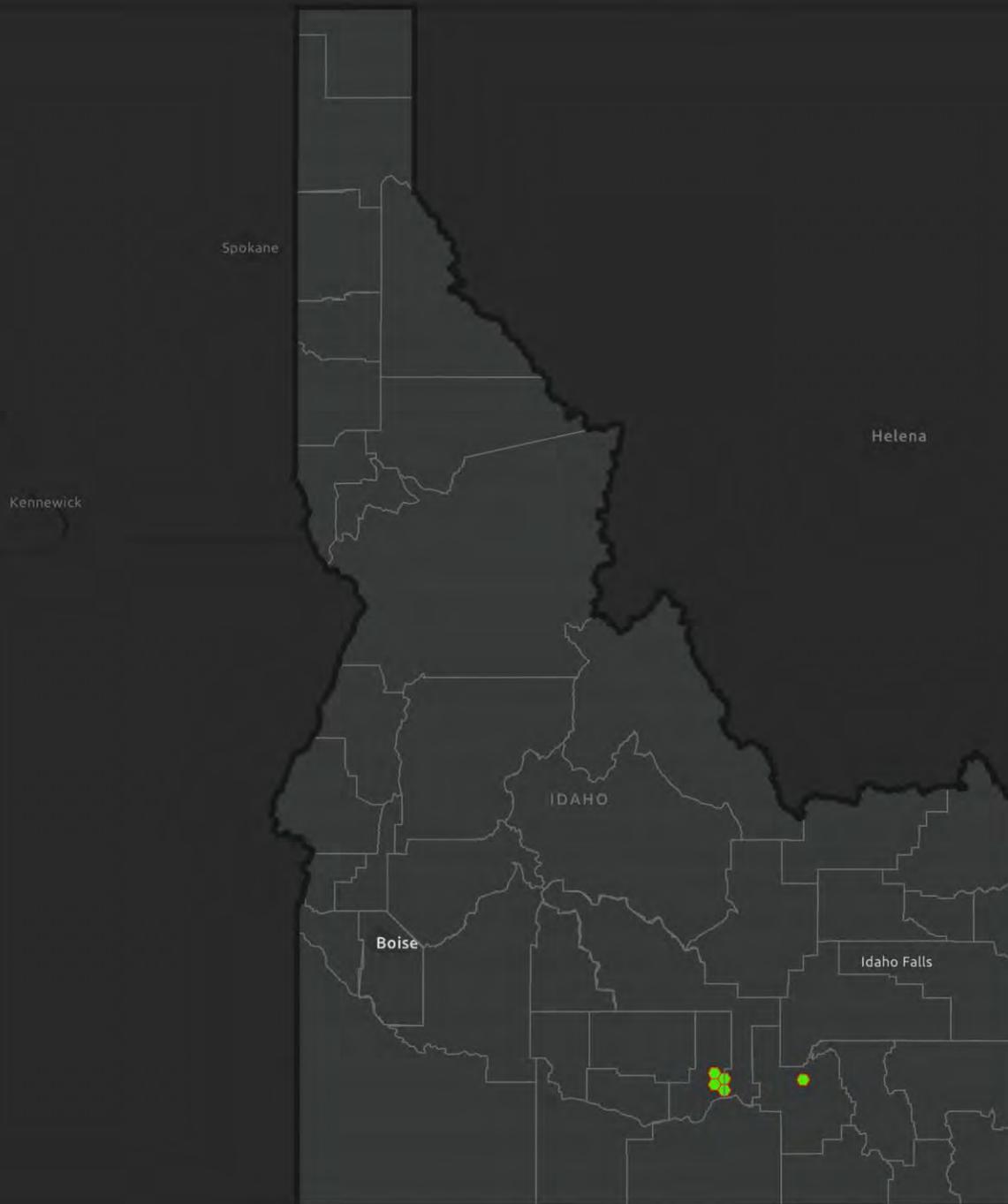


Esri, HERE, Garmin, FAO, NOAA, USGS, EPA

# SQUARROSE KNAPWEED, TWIN FALLS CO

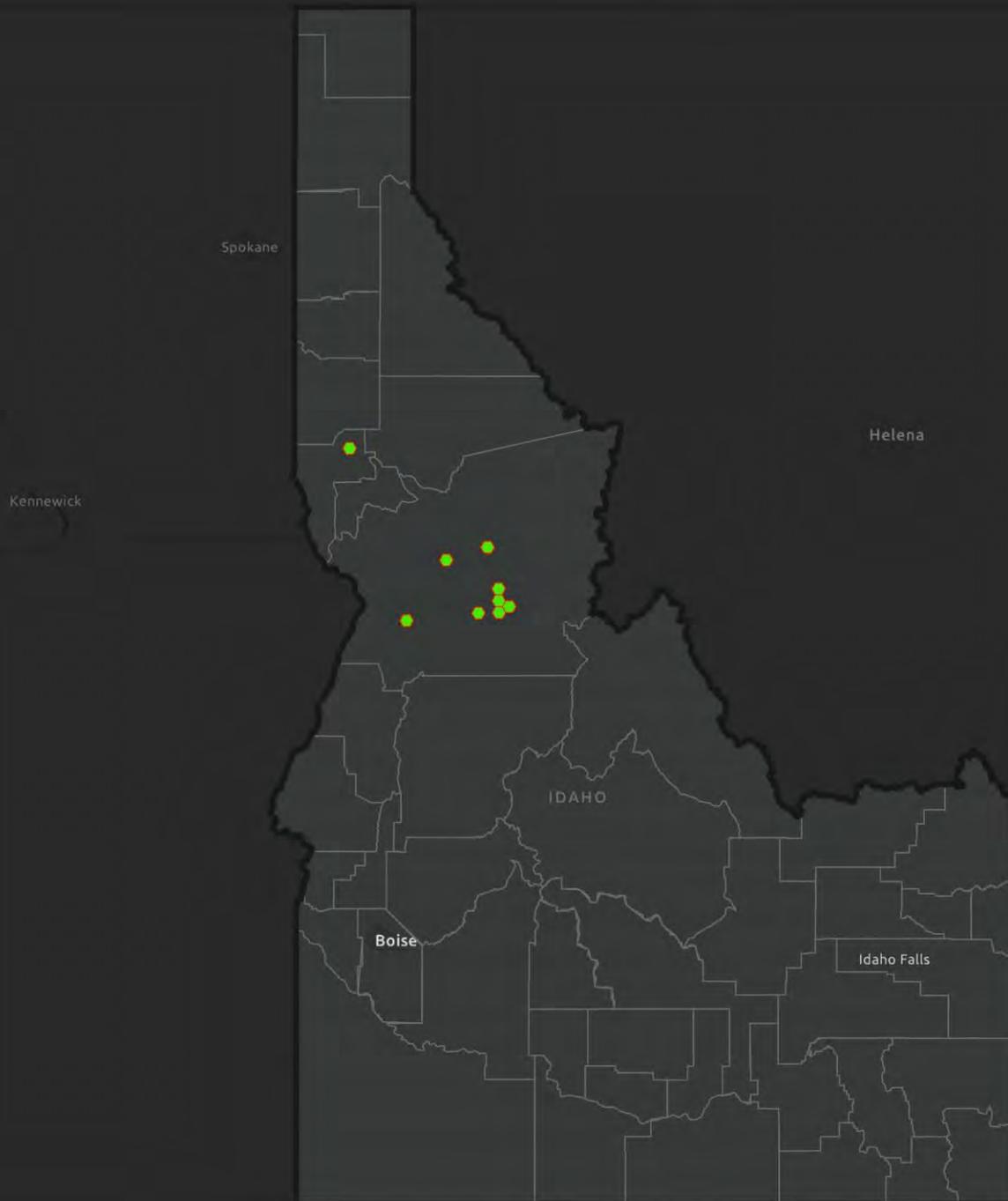


# SYRIAN BEANCAPER *ZYGOPHYLLUM FABAGO*

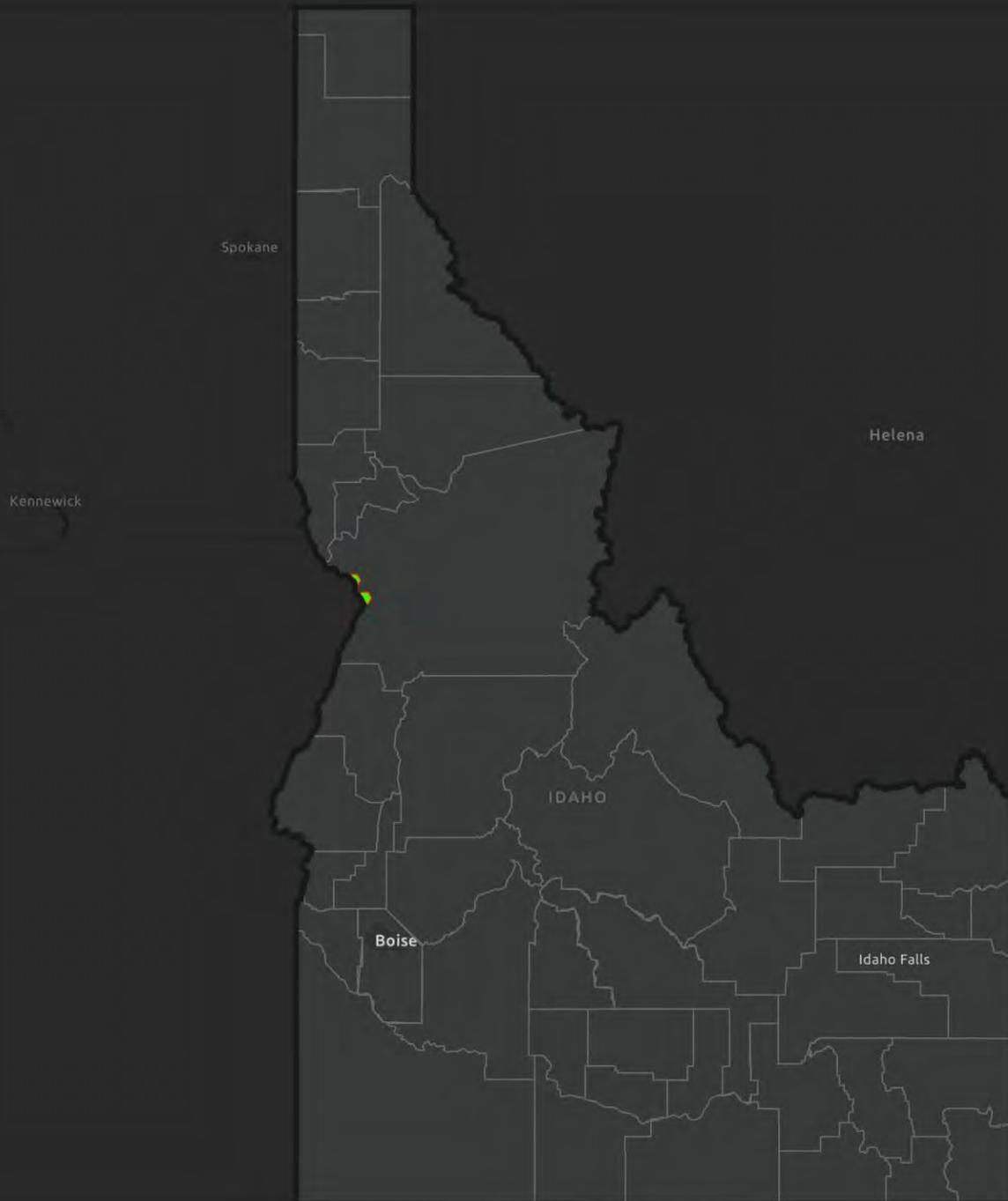


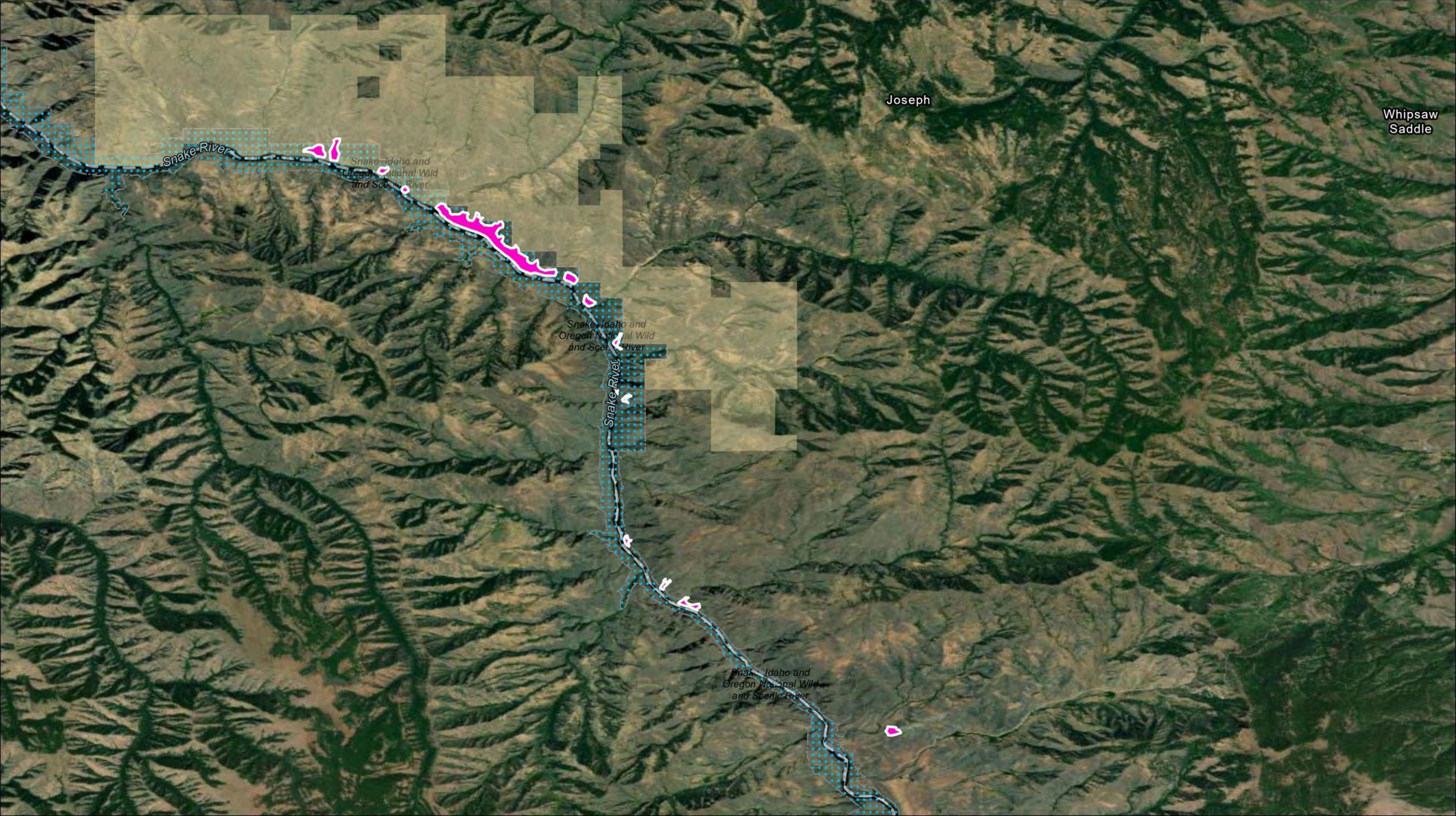
# TALL HAWKWEED

## *HIERACIUM PILOSELLOIDES*



# TURKISH THISTLE *CARDUUS CINEREUS*





Joseph

Whipsaw  
Saddle

Snake River

Snake, Idaho and  
Oregon National Wild  
and Scenic River

Snake, Idaho and  
Oregon National Wild  
and Scenic River

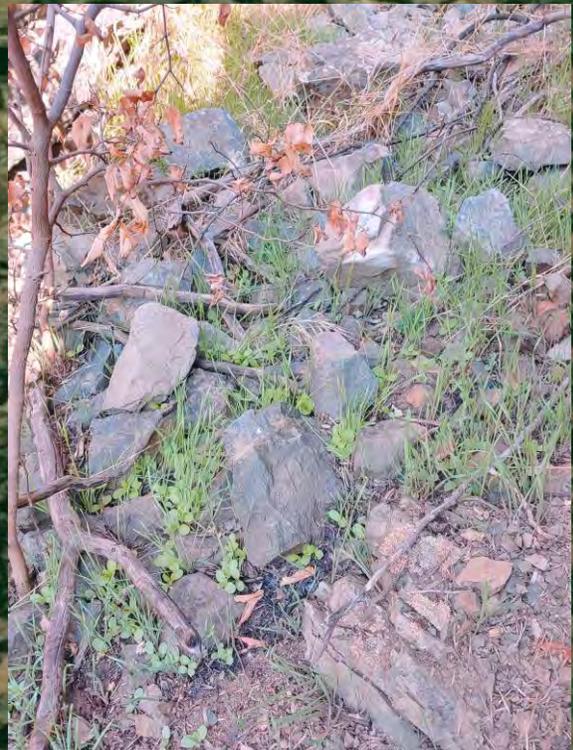
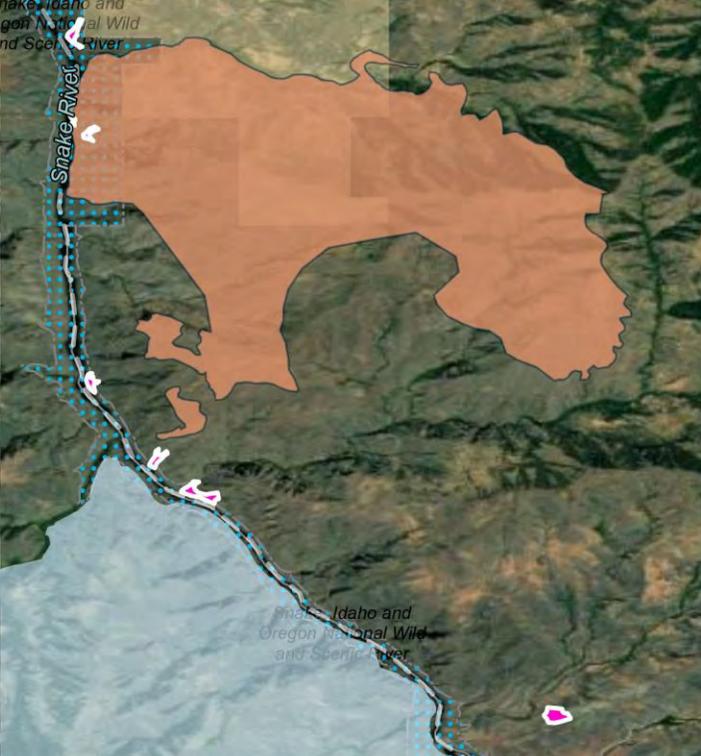
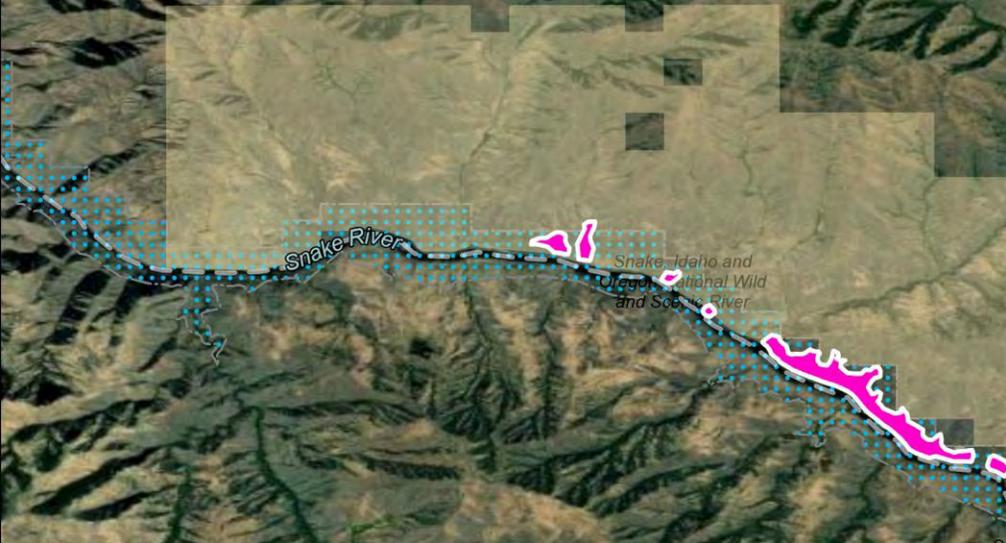
Snake River

Snake, Idaho and  
Oregon National Wild  
and Scenic River

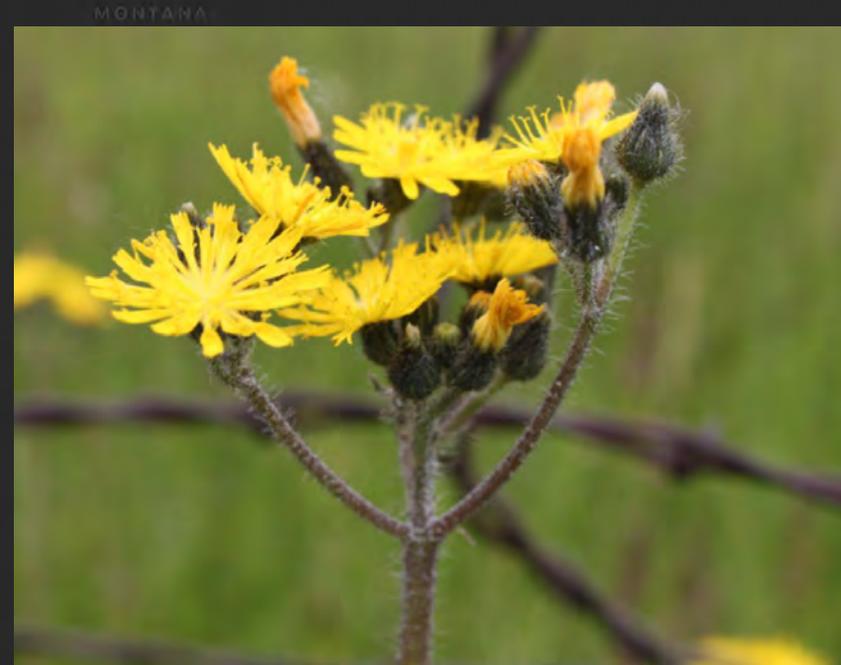
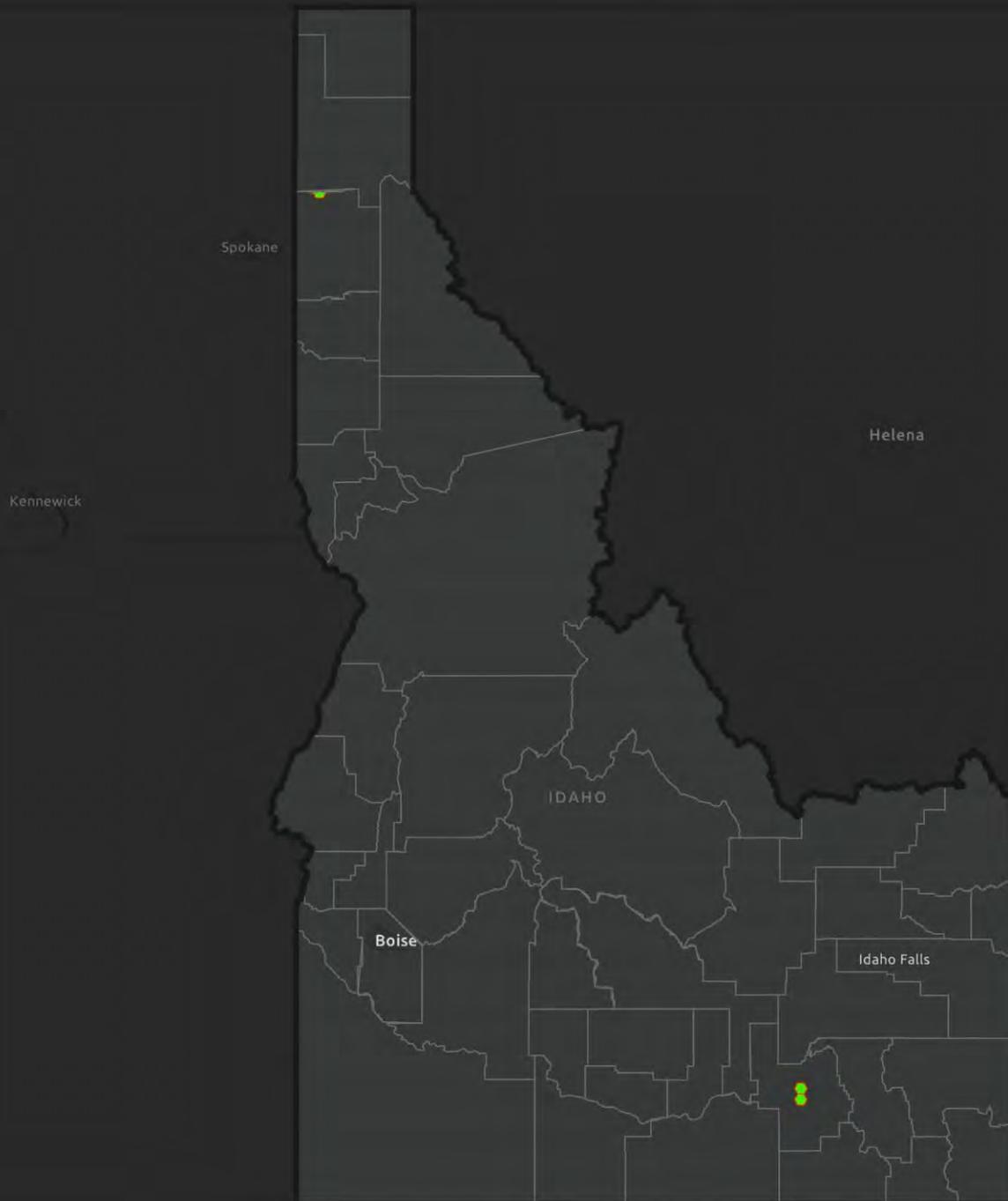


Joseph

Whipsaw Saddle

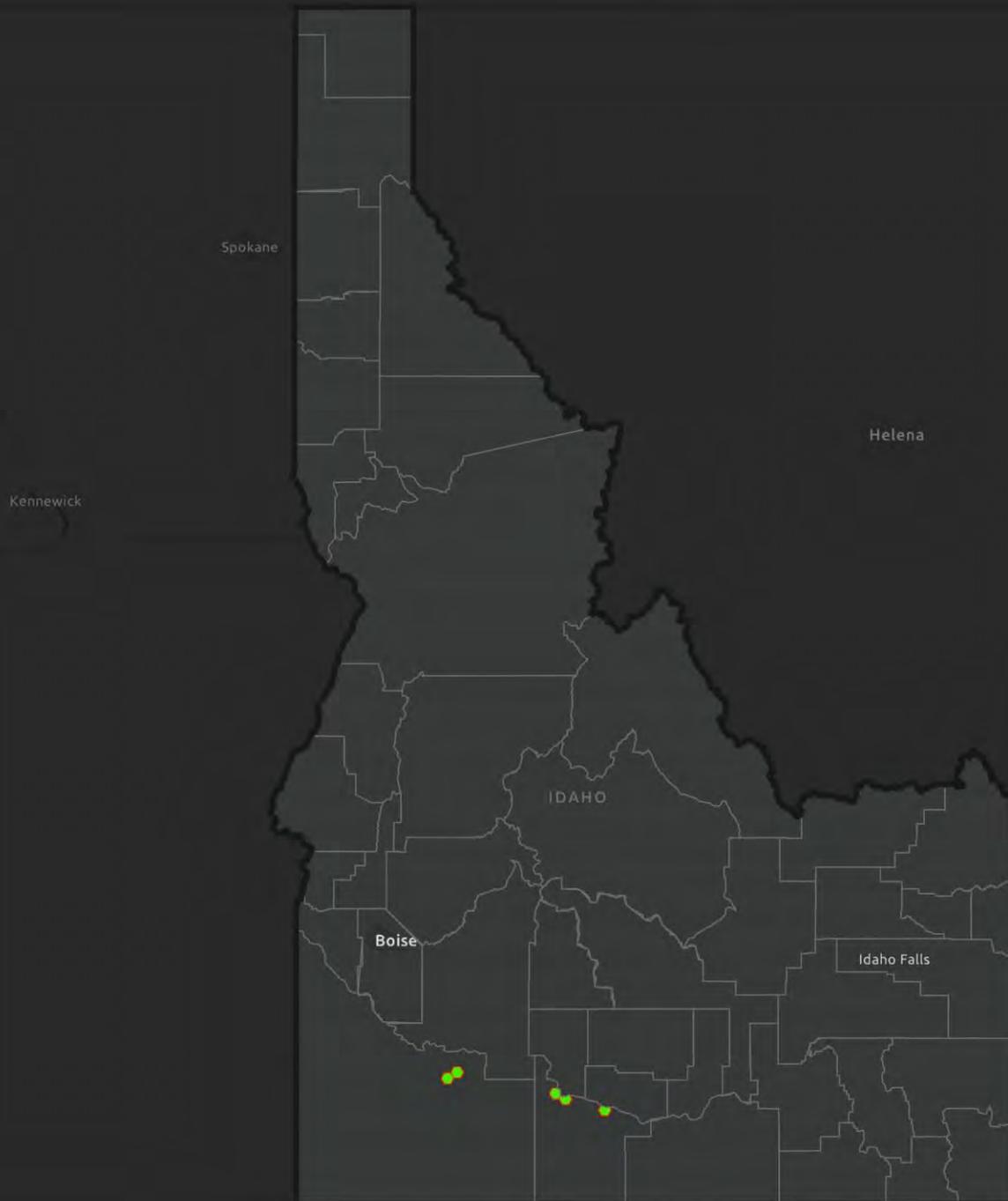


# YELLOW DEVIL HAWKWEED *HIERACIUM GLOMERATUM*



# HYDRILLA

## *HYDRILLA VERTICILLATA*



# **COGON GRASS** ***IMPERATA CYLIDRICA***

First Report in Ada County and New Temporary Listing in 2022



# BACKGROUND & IDENTIFICATION



- Native to Southeast Asia and was first introduced to the United States accidentally in the Southeast via packing material in the early 1900s
- Intentionally introduced for erosion control and livestock forage
- Cogon Grass is ranked as the seventh worst weed (USDA-APHIS 2003) with approximately 1250 million acres worldwide
- Is a Federal Noxious Weed

# BACKGROUND & IDENTIFICATION



- Readily infests agricultural, forest, urban, and natural areas
- Grows and spreads easily along road edges and in disturbed sites
- Unpalatable as a forage and is unusable as a host plant by native animals
- Fires can help to further propagate and lead to further spread of the species

# BACKGROUND & IDENTIFICATION



cogon grass (*Imperata cylindrica*)

EDD Maps  
find • map • track

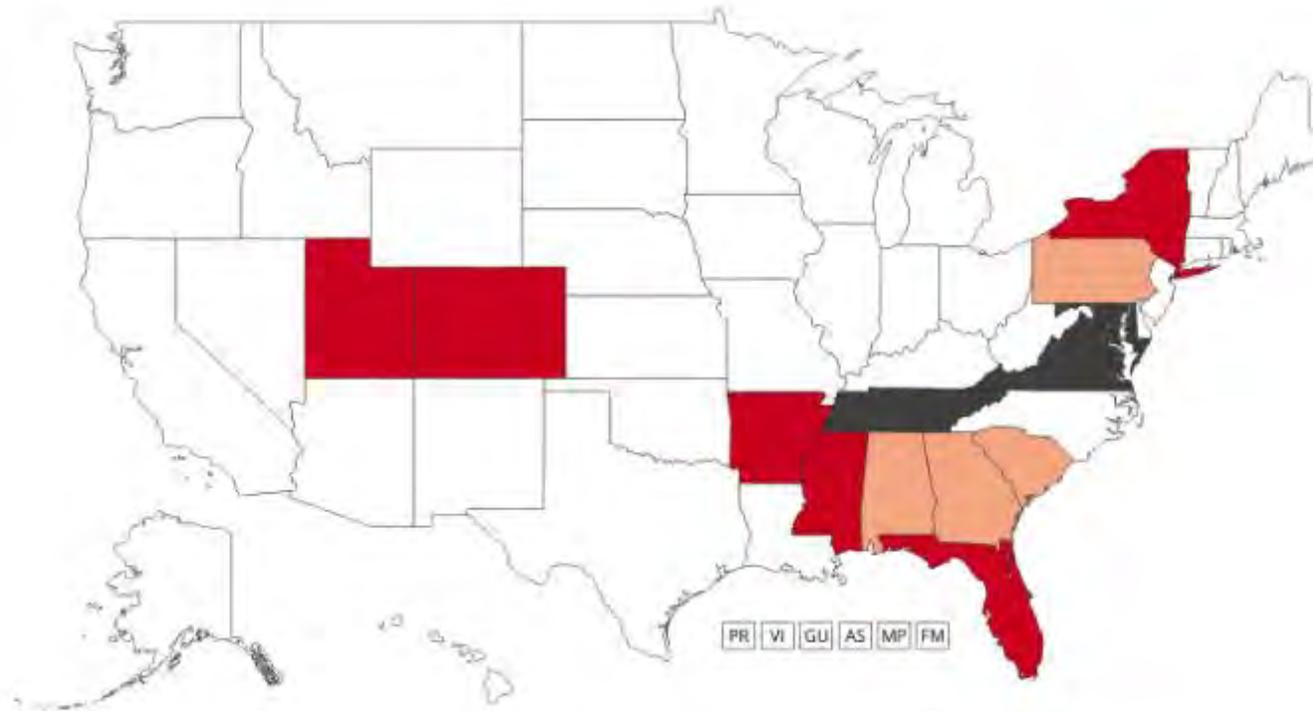


Legend  
No Data  
Species Reported

# BACKGROUND & IDENTIFICATION



cogongrass (*Imperata cylindrica*)  
This species is included on 2 national laws.



**Legend**

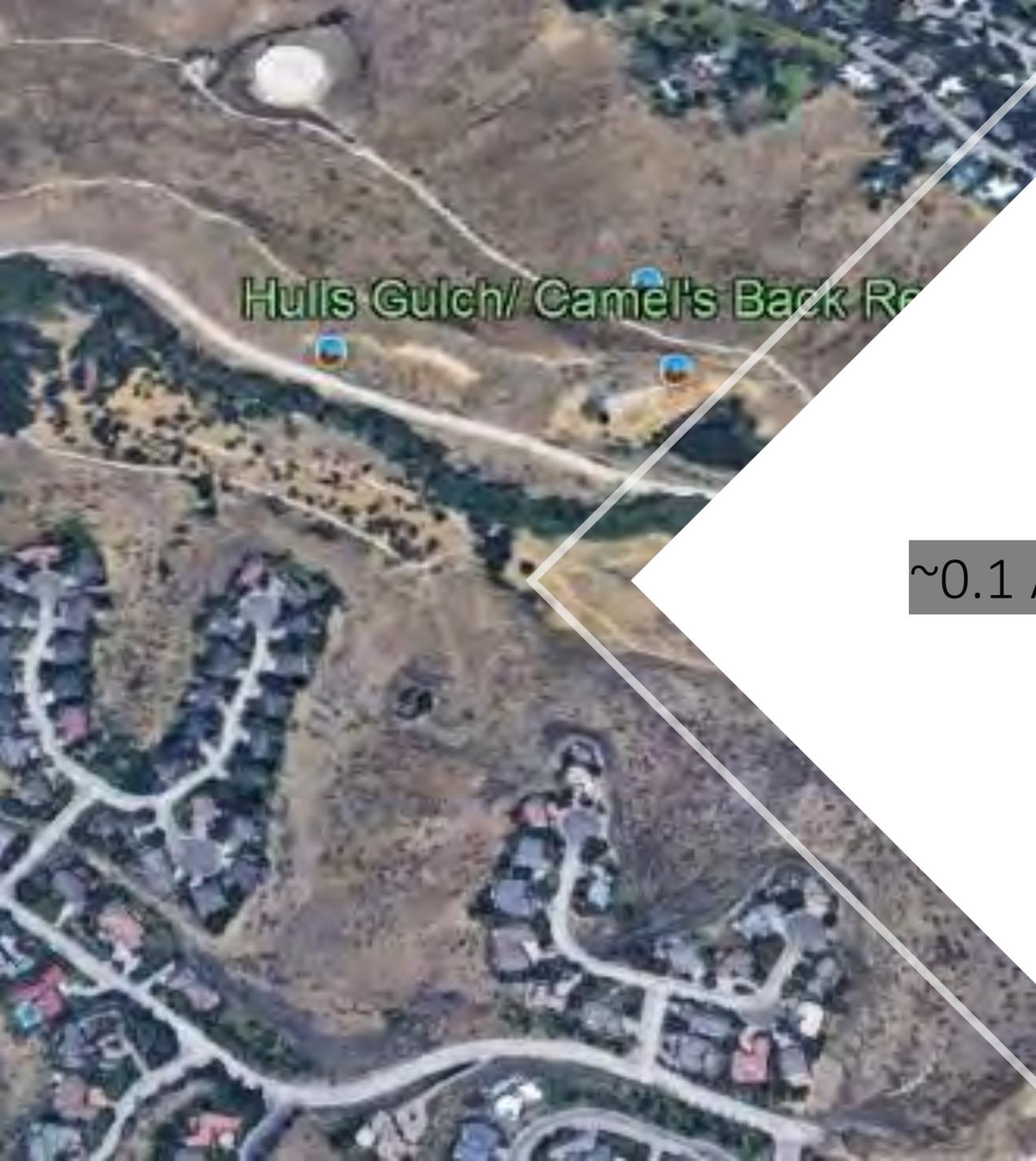
- State List only
- State Law only
- Both State List and State Law
- Excluded on other sources
- Not Listed

# BACKGROUND & IDENTIFICATION



- Perennial, colony-forming Plant
- Reproduces by seed, can produce up to 3,000 per seed head; Also, vegetatively spreads by rhizomes (5-10ft per year)
- Grows to 3ft tall
- Leaves have an off-center and whitish midrib
- Spikelets are grouped into a large panicle with a plum-like, fuzzy structure and can look silky
- Sub Species ..*Rubra* (Red Barron, Japanese Bloodgrass) Leaves will turn a deep red color in August



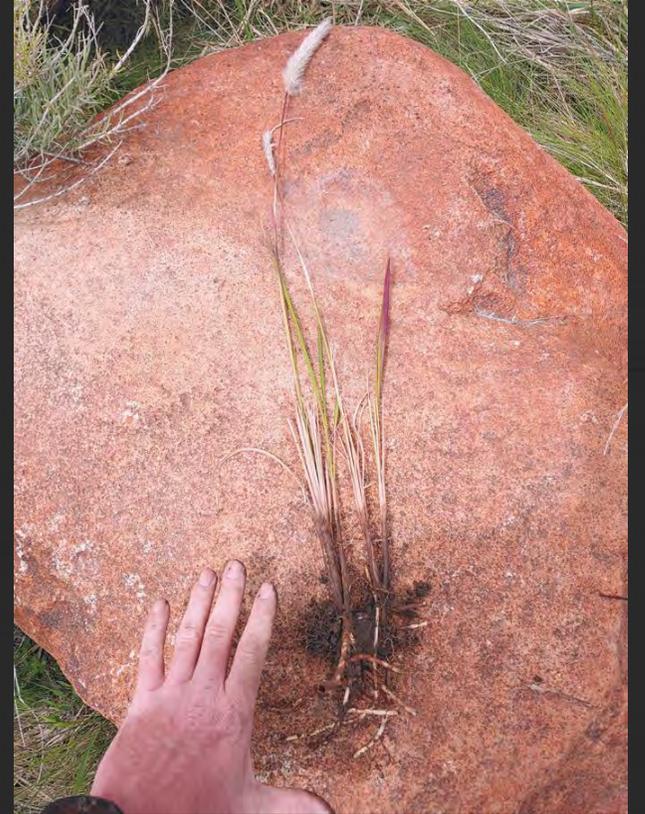
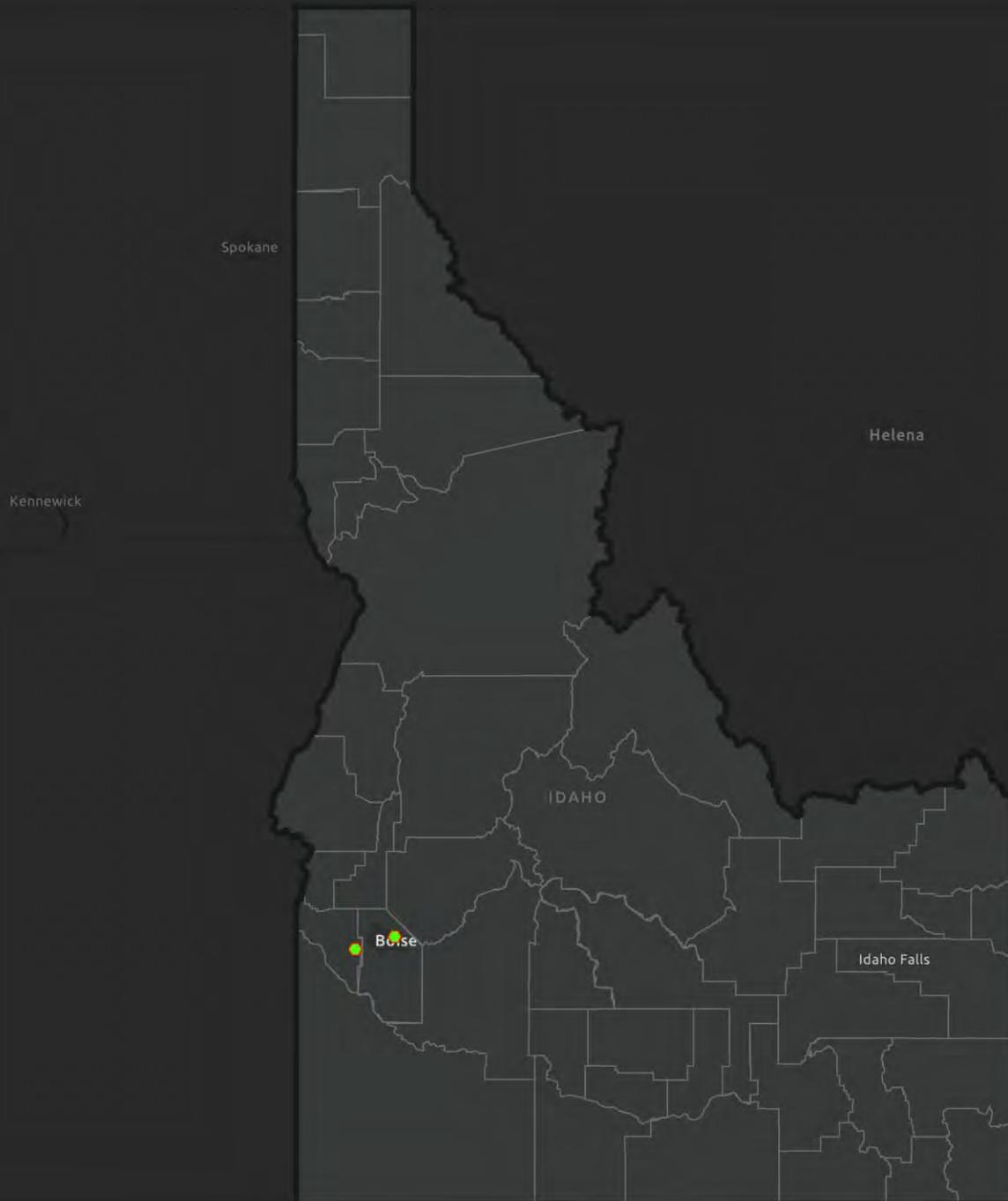


Hulls Gulch/ Camel's Back Re

~0.1 Acres



# COGON GRASS *IMPERATA CYLINDRICA*



Esri, HERE, Garmin, FAO, NOAA, USGS, EPA



# ISDA NOXIOUS WEEDS CONTROL PROJECTS



# CONTROL PROJECTS

The Aquatic Species that ISDA actively worked on either by staff directly or through contracted service providers:

- Eurasian watermilfoil
- Parrot feather milfoil
- Curly leaf pondweed
- Flowering Rush

# EURASIAN WATERMILFOIL

## Herbicide Application

---

- Hayden Lake 142.21 acres
- Pend Oreille Lake & River 42.12 acres
- Bear Lake 20.17 acres
- Priest Lake 4.92 acres



## Mechanical Removal

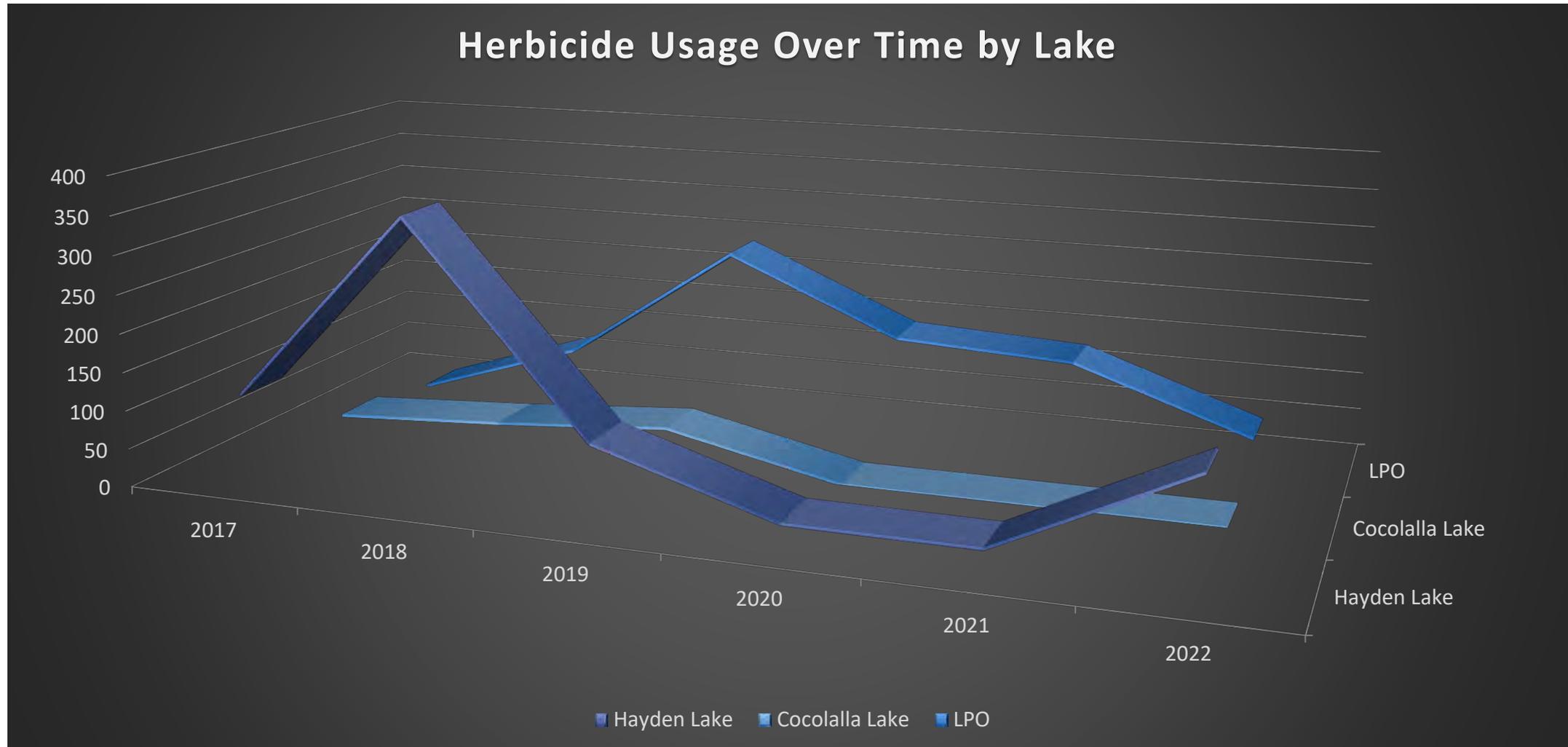
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- Blue Heart\*
- Cocolalla Lake.
- Clear Lake\*
- Hayden Lake
- Payette Lake
- Priest Lake

\*ISDA Staff



# EURASIAN WATERMILFOIL HERBICIDE TREATMENTS OVER TIME



# PARROT FEATHER MILFOIL

## Herbicide Application

---

- Emmett Area infestation- 20 acres



## Mechanical Removal

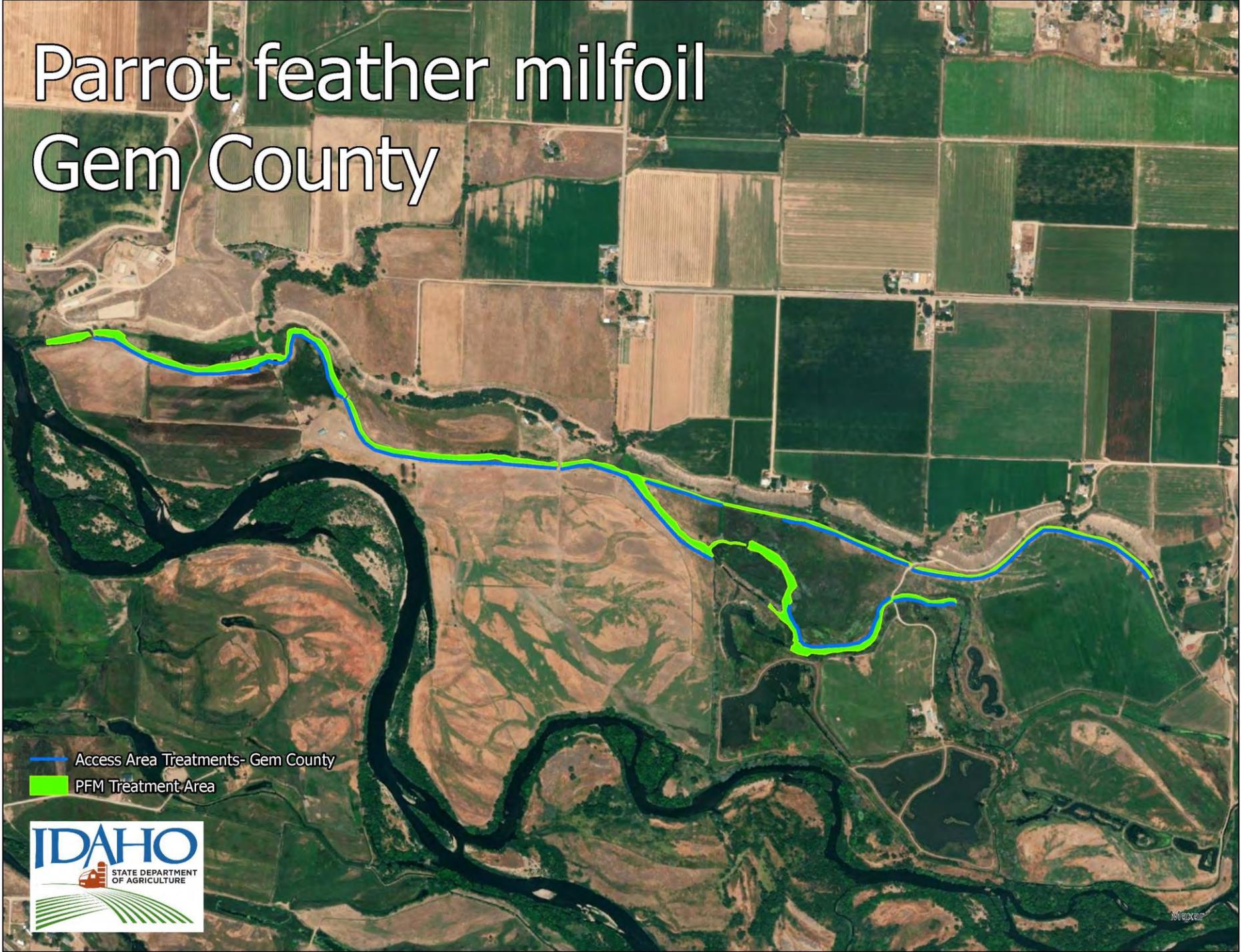
---

- Ada County areas\*
- Blue Lakes\*
- Emmet Area infestations\*

\*ISDA Staff



# Parrot feather milfoil Gem County



— Access Area Treatments- Gem County  
— PFM Treatment Area



# CURLY LEAF PONDWEED

## Herbicide Application

- Coeur d'Alene Lake- 0.4 acres



## Mechanical Removal

- Coeur d'Alene Lake



# FLOWERING RUSH

## Herbicide Application

---

- No herbicide applications made in 2022



## Mechanical Removal

---

- Blackfoot Reservoir
- Lake Pend Oreille
  - Sandpoint
  - Farragut State Park\*

\*ISDA Staff





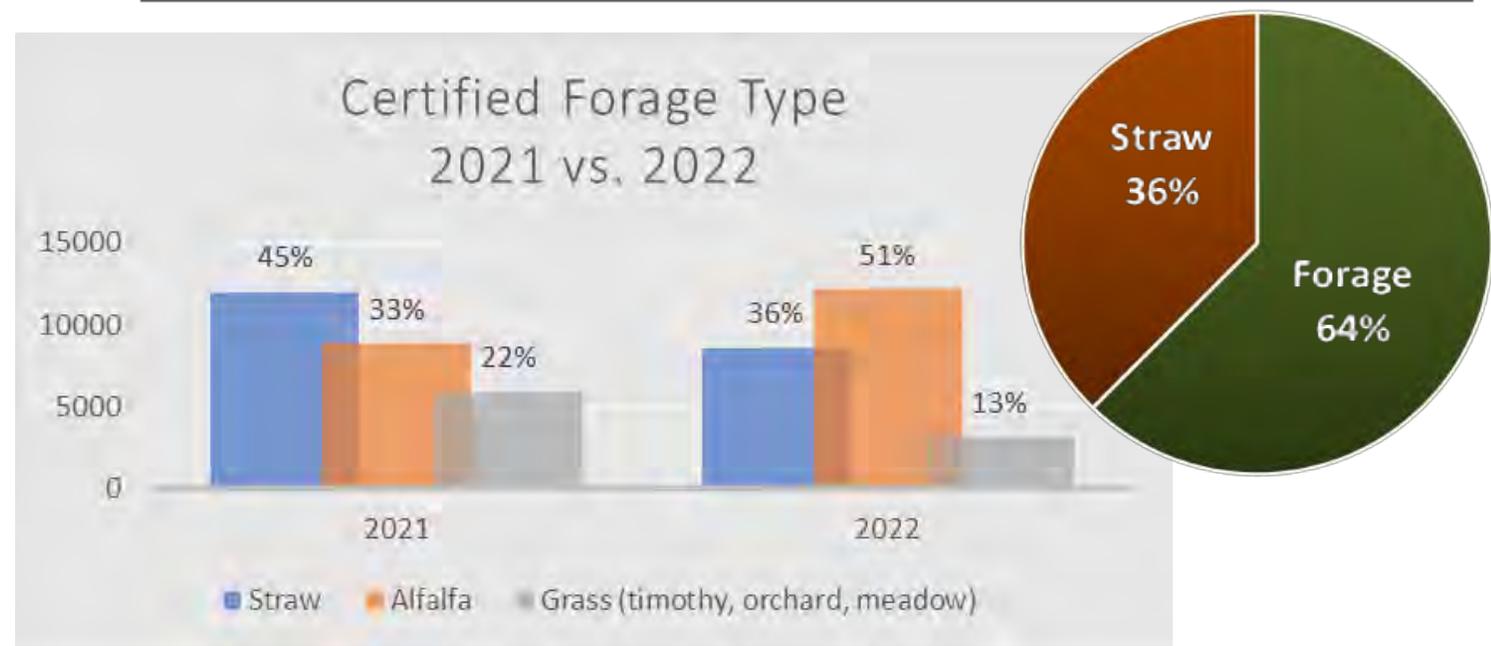
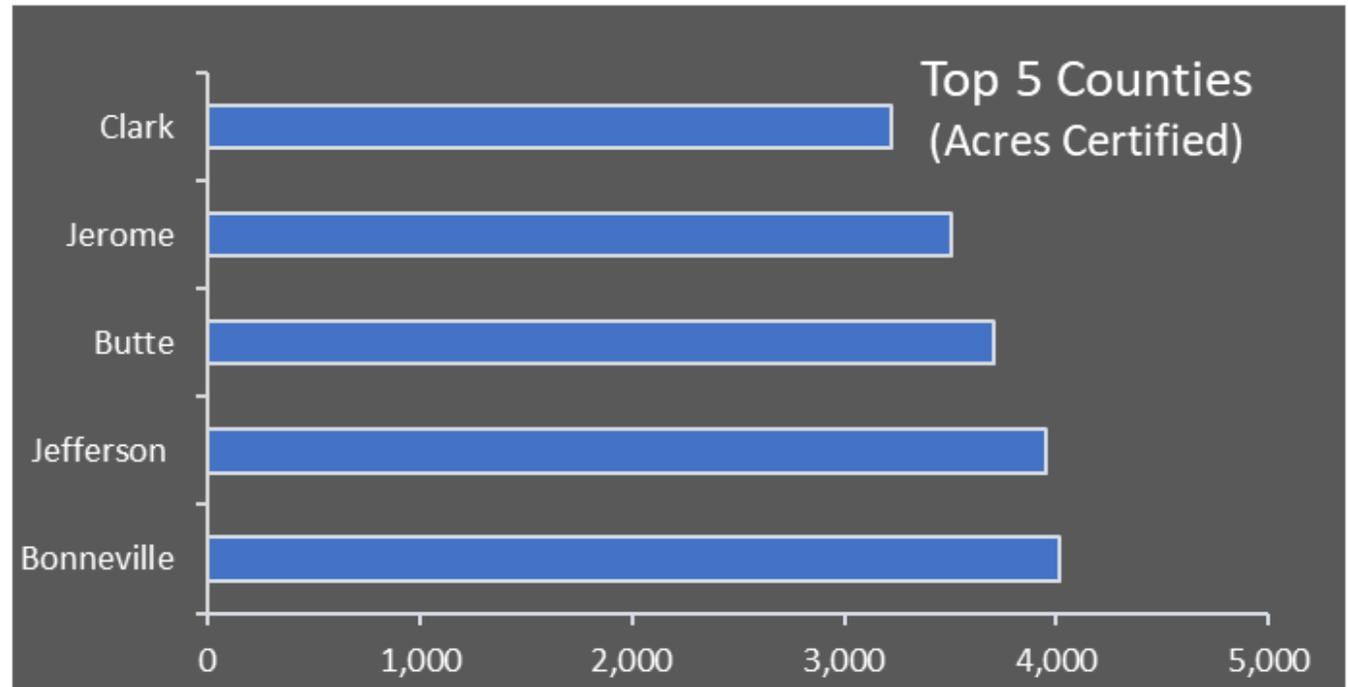
# NOXIOUS WEED FREE FORAGE

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# NOXIOUS WEED FREE FORAGE

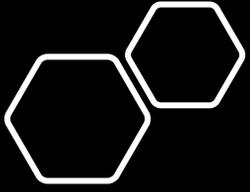
- 32 Counties participated in 2022.
- 60 Inspectors trained statewide
  - Trained to NAISMA (92 species) and Idaho (71 species) Standards.
- 99.7% acres certified to NAISMA Standard.
- 85.8% of all forage and straw was remanufactured into pellets, cubes, bagged straw and compressed bale products.
- Decrease in acres inspected over the last two seasons...
  - 2021 drought.
  - 2022 delayed growing season start.





# NOXIOUS WEED DISTRIBUTION

A look at infestations of weeds across  
Idaho



# NOXIOUS WEED DISTRIBUTION

- ISDA is in the process of completing the 4<sup>th</sup> iteration of this project

TITLE 22  
AGRICULTURE AND HORTICULTURE

CHAPTER 24  
NOXIOUS WEEDS

22-2404. STATE POWERS. (1) The director is authorized to:

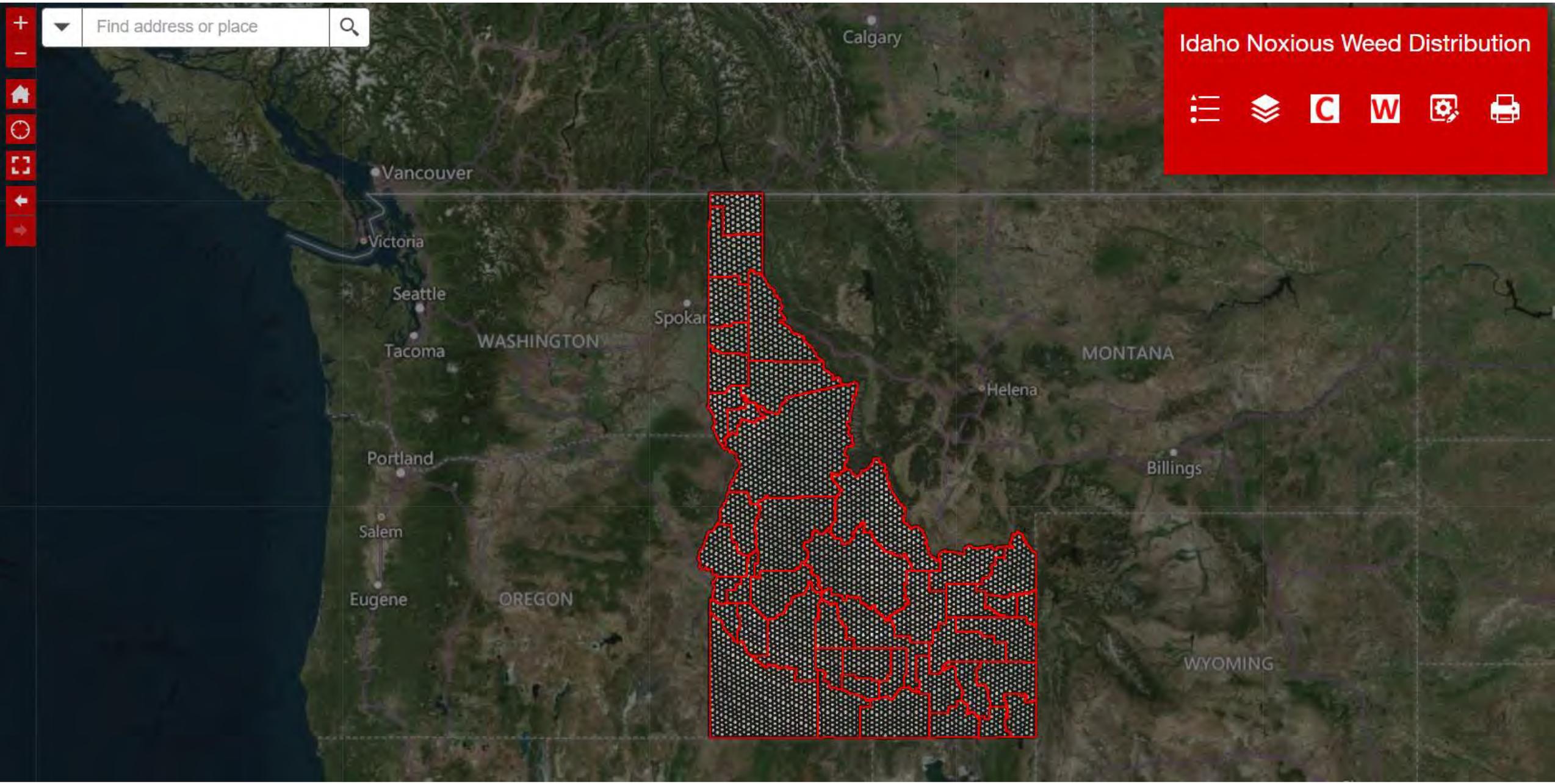
(a) Investigate the subject of noxious weeds; and

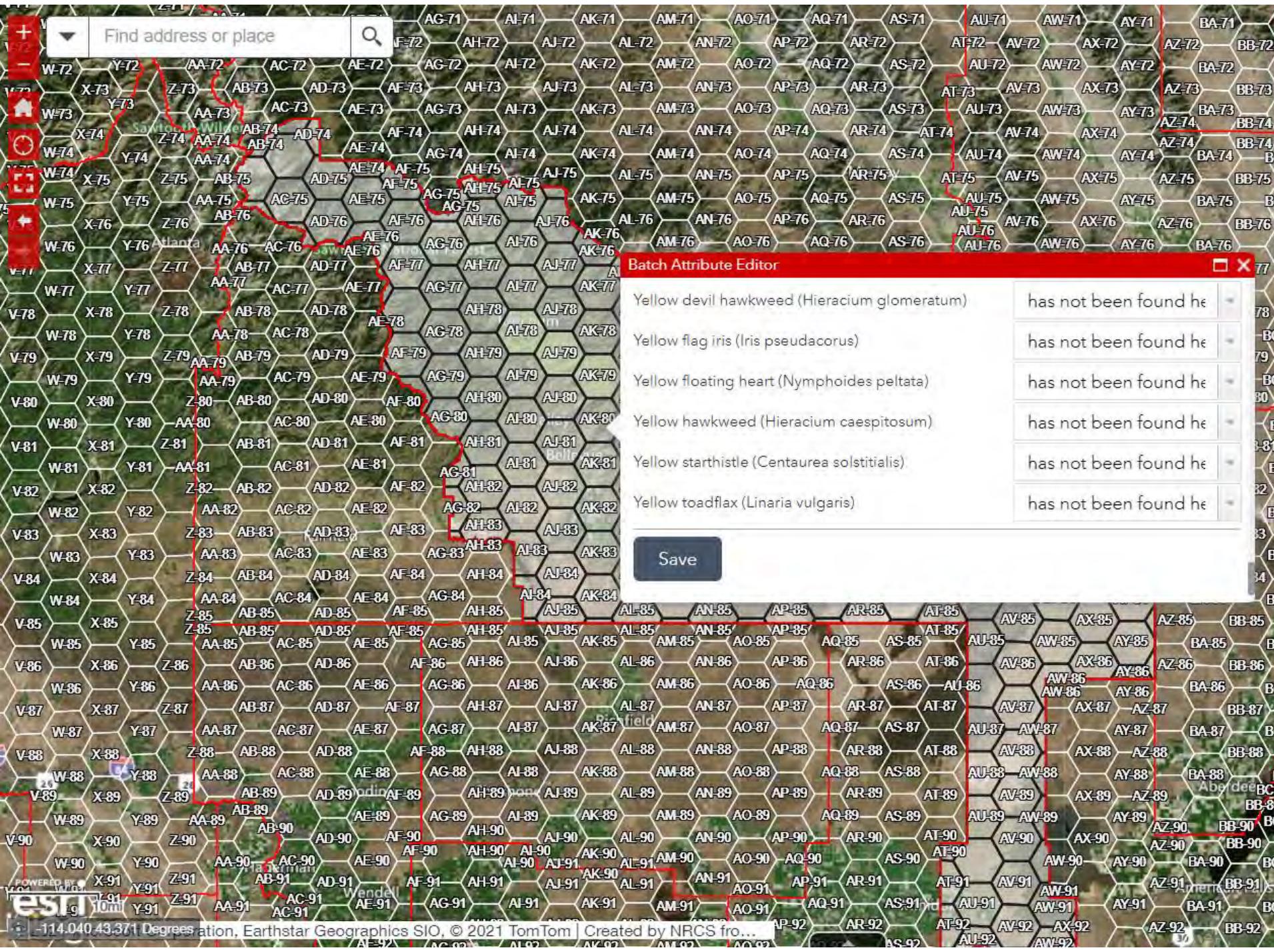
(b) Require information, annual work plans and reports from each county and from each state agency as to the presence of noxious weeds and other information relative to noxious weeds and the control thereof; and

Find address or place



### Idaho Noxious Weed Distribution





Find address or place

Batch Attribute Editor

Yellow devil hawkweed ( <i>Hieracium glomeratum</i> )	has not been found he
Yellow flag iris ( <i>Iris pseudacorus</i> )	has not been found he
Yellow floating heart ( <i>Nymphoides peltata</i> )	has not been found he
Yellow hawkweed ( <i>Hieracium caespitosum</i> )	has not been found he
Yellow starthistle ( <i>Centaurea solstitialis</i> )	has not been found he
Yellow toadflax ( <i>Linaria vulgaris</i> )	has not been found he

Save

Batch Attribute Editor

☰ ☰ C W ⚙️ 🖨️

Use one of the tools below to create a selected set of features to update. If the row is **highlighted**, the maximum number of records has been exceeded.

<input checked="" type="checkbox"/>	▼ #	Layer Name
<input checked="" type="checkbox"/>	7	Idaho Noxious Weed Distributio...

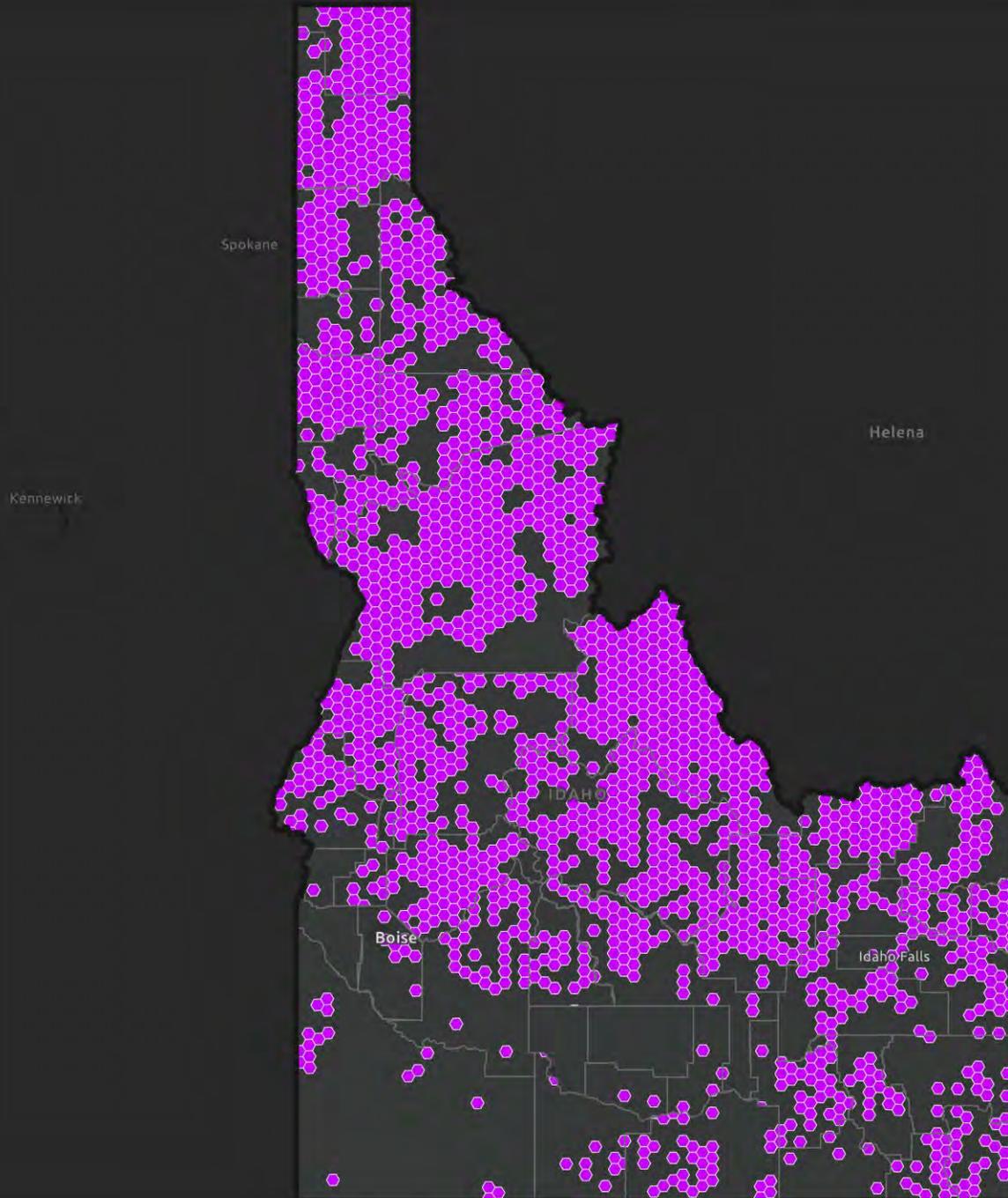


7 feature(s) selected

Clear

# Spotted Knapweed

*Centaurea stoebe*

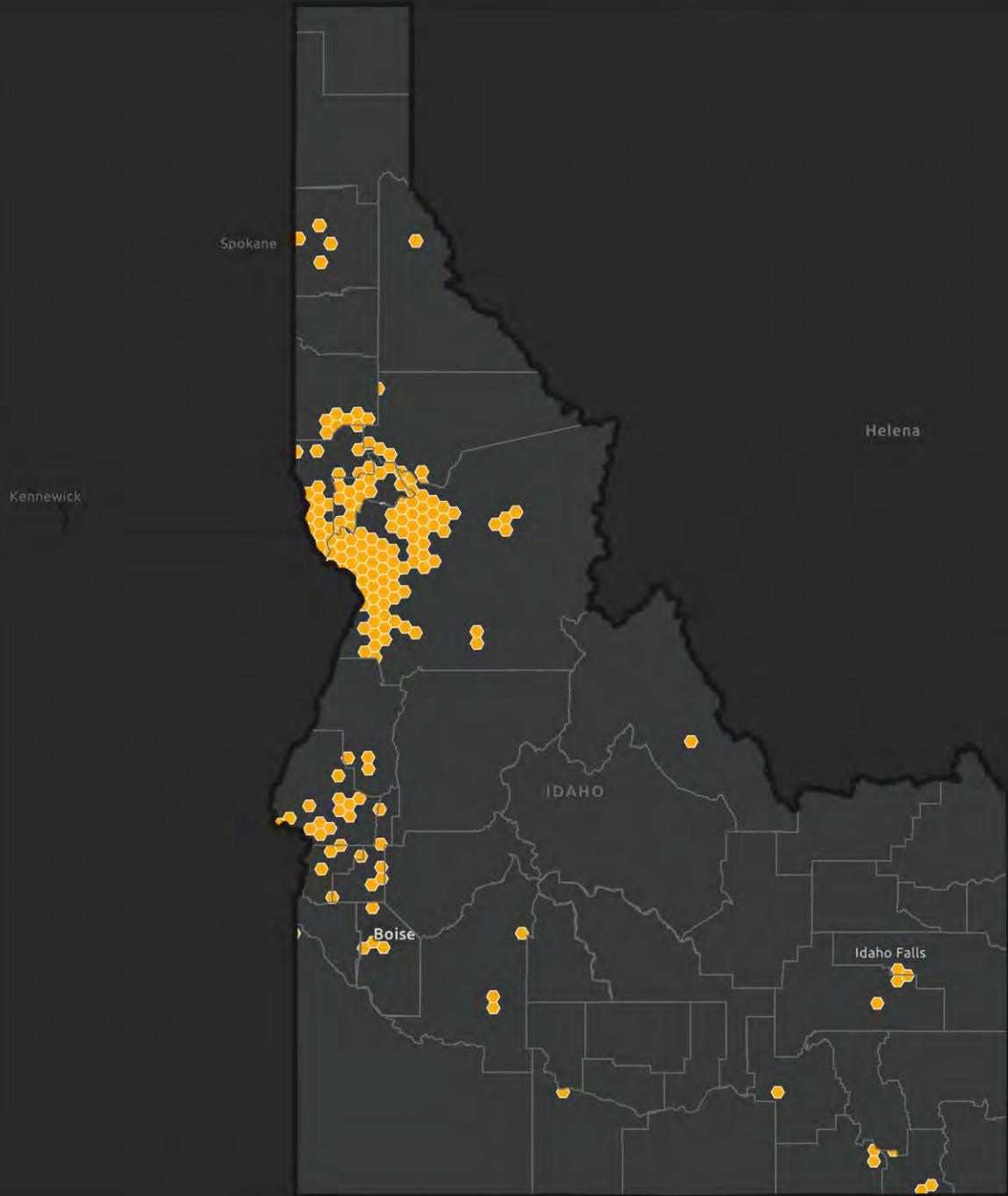


Rob Routledge, Sault College, Bugwood.org



Esri, HERE, Garmin, FAO, NOAA, USGS, EPA

# Yellow Star Thistle *Centaurea solstitialis*

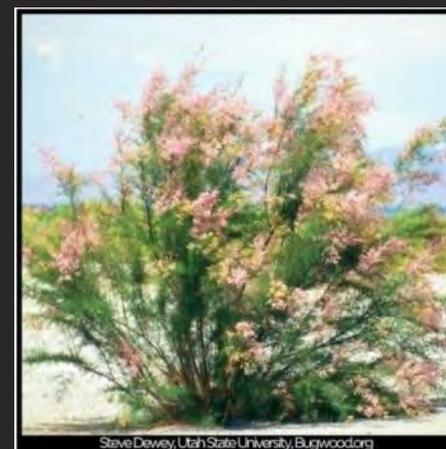
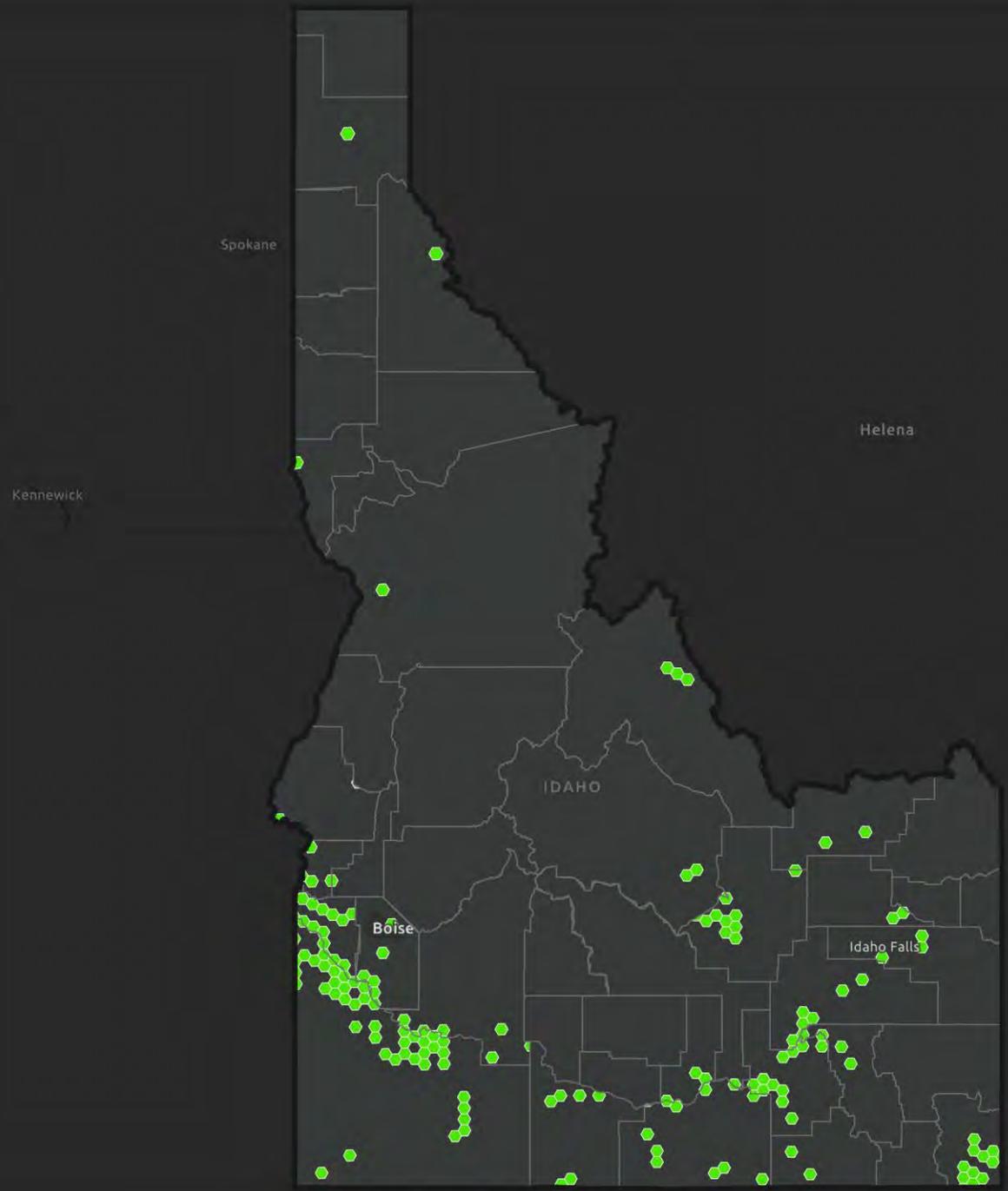


Peggy Greb, USDA Agricultural Research Service, Bugwood.org



Esri, HERE, Garmin, FAO, NOAA, USGS, EPA

# Saltcedar *Tamarix spp.*



Steve Dewey, Utah State University, Bugwood.org



Esri, HERE, Garmin, FAO, NOAA, USGS, EPA



# OXEYE DAISY

*Leucanthemum vulgare*

Asteraceae, the sunflower family

Category: Containment

## FACTSHEET INFORMATION

### Summary of Invasiveness

- Oxeye daisy is an invasive wildflower that can form dense stands in pastures and meadows, outcompeting native flora, reducing biodiversity and degrading pasture quality.
- It produces a large number of seeds and can regenerate from rhizome fragments, making control difficult.

### Description

- Perennial with numerous stems arising from base, growing up to 3 feet tall.
- Roots arise from a short, creeping rootstock with many adventitious roots. Root tips can be reddish in color.
- Basal leaves are toothed and spatula-shaped, upper leaf stalks are short and clasp the stem.
- Solitary, 1-1½ inch wide flower heads are composed of white ray and yellow disk flowers, resembling a daisy.
- Seeds are ribbed and dark brown to black.



### Introduction and Movement

- Oxeye daisy is native to Europe and western Asia and was likely introduced as a garden ornamental.
- Inhabits disturbed areas, grasslands, meadows, pastures, and roadsides.
- The plant reproduces by seed dispersal and vegetatively by rhizome, allowing it to be easily dispersed by wind, water, and grazing animals. It is also commonly found as a contaminant in grass seed and wildflower mixes.

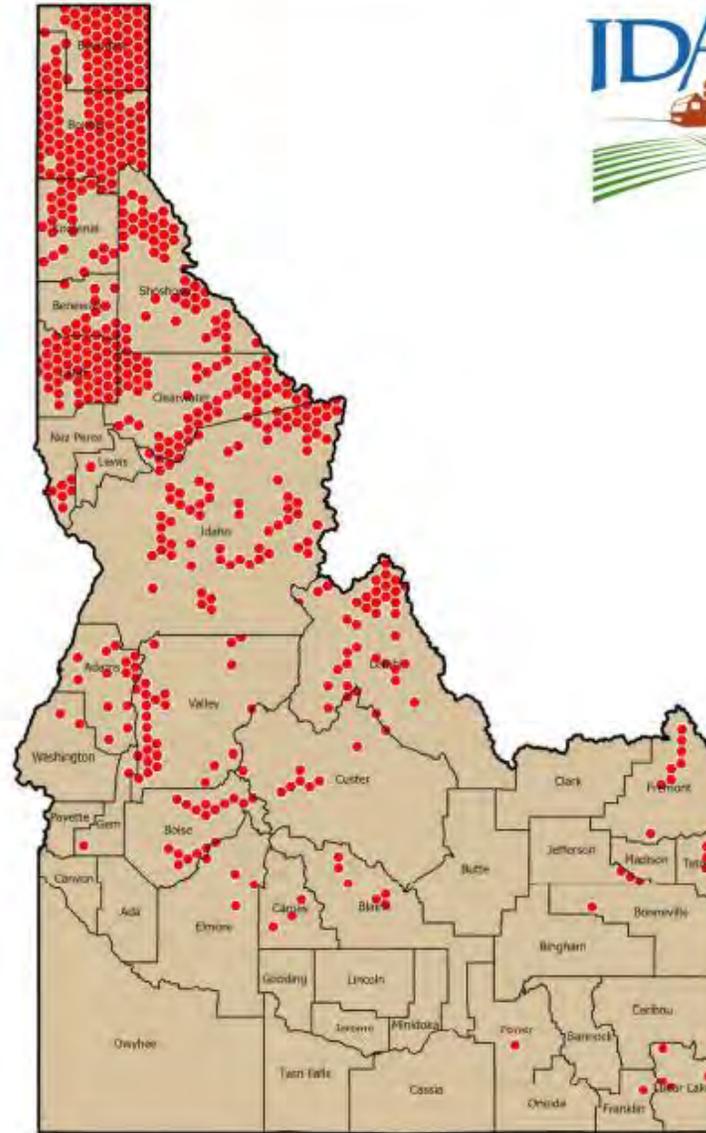
### Prevention Strategy

- To prevent accidental introductions, learn how to identify Oxeye daisy and eradicate infestations on your property.
- When gardening, always research plants before planting and purchase seeds from licensed nurseries.
- Always remove and properly dispose of all seed and plant materials on vehicles, clothing, shoes and pets before you exit or enter outdoor recreational sites.
- Always Remember To: **KNOW WHAT YOU GROW & KNOCK IT OFF!**

Sources  
 • CABI Invasive Species Compendium: <https://www.cabi.org/isc/datasheet/13357>  
 • Idaho's Noxious Weeds 9th Edition, University of Idaho:  
<http://www.extension.uidaho.edu/publishing/pdf/BUL/BUL816.pdf>.

# OXEYE DAISY

## DISTRIBUTION MAP



**KNOCK  
it OFF.**

## OUTREACH/EDUCATION

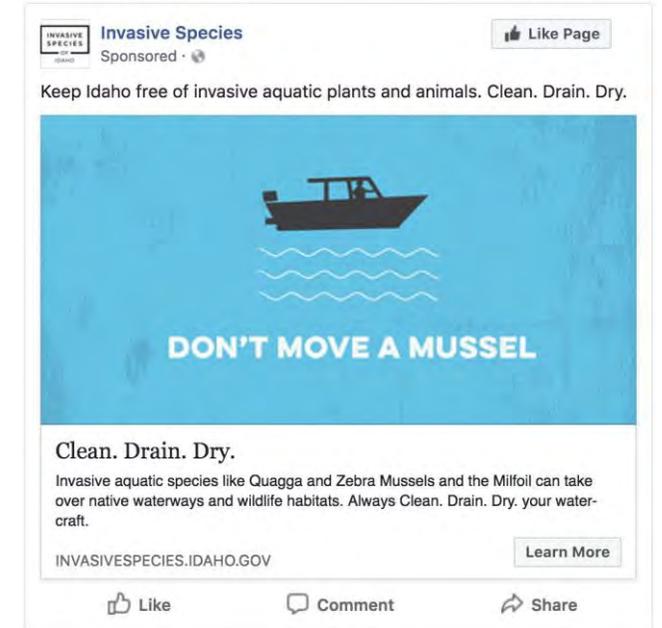
Getting the word out about  
noxious weeds

# EDUCATION AND OUTREACH

- Campaign
  - Clean, Drain, Dry
  - Know What you Grow
  - Don't Let it Loose
  - Knock it Off
  - Buy it where you burn it
- Various Pathways
  - Inspection stations
  - Cooperative partners
  - Outreach events, seminars and workshops
  - Radio
  - Website
  - Facebook
  - Banner advertisement
  - Google advertisement
  - Promotional item, brochure, sticker, etc.

## Radio (10 second)

Clean, drain and dry your boat to keep invasive species from destroying Idaho waterways. Clean. Drain. Dry. Find out more at [invasivespecies dot Idaho dot gov](http://invasivespecies.idaho.gov)





# THANK YOU

[www.invasivespecies.idaho.gov](http://www.invasivespecies.idaho.gov)

 JEREMEY VARLEY

 +1 (208) 993-0950

 [jeremey.varley@isda.idaho.gov](mailto:jeremey.varley@isda.idaho.gov)



# **Idaho Invasive Species Council Update**

**Dr. Paul Castrovillo, Entomologist  
Pest Survey and Detection Manager  
Idaho State Department of Agriculture**

**December 14, 2022**

**Boise, ID**



**What “bad bugs” are we (ISDA)  
most concerned about right  
now?**

# Japanese Beetle – A Growing Concern in the West

## What is a Japanese Beetle?

- A scarab beetle, native to Japan, found in a NJ plant nursery in **1916**
  - **JB grubs (larvae)** feed on organic matter in the soil and on the roots of grasses, including turf grass
  - **JB adults** feed on both foliage and fruit of more than 300 host plants





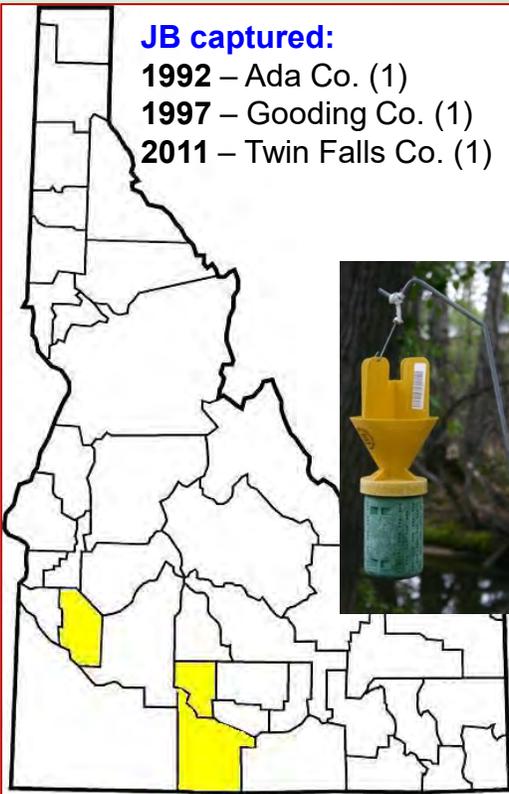
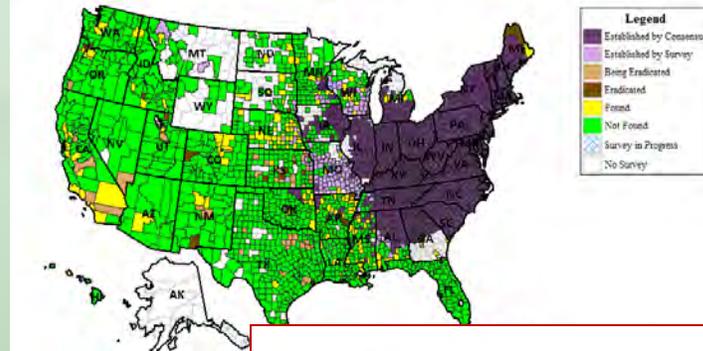
## How does it spread?

- **Adults crawl and fly**
- **Adults “hitchhike” (active during day – rest at night) in agricultural commodities and human transport**
- **Eggs/larvae tucked away in soil of infested nursery stock/sod**

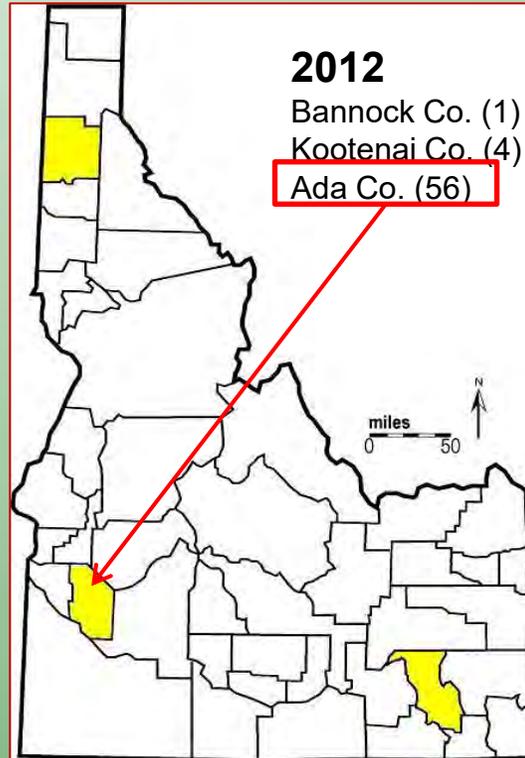


**Approx 300 JB traps monitored throughout Idaho from 1990 to 2011**

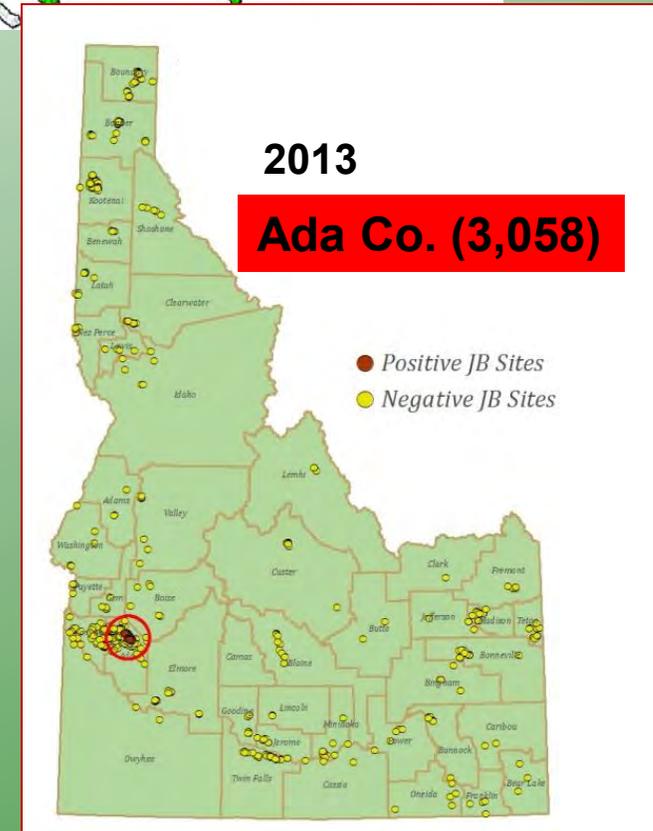
## Japanese Beetle in Boise



**Only 3 JB trapped between 1990 and 2011 – no indication of any infestations established in ID**



**56 JB collected in downtown Boise traps (Ada Co.) during 2012**

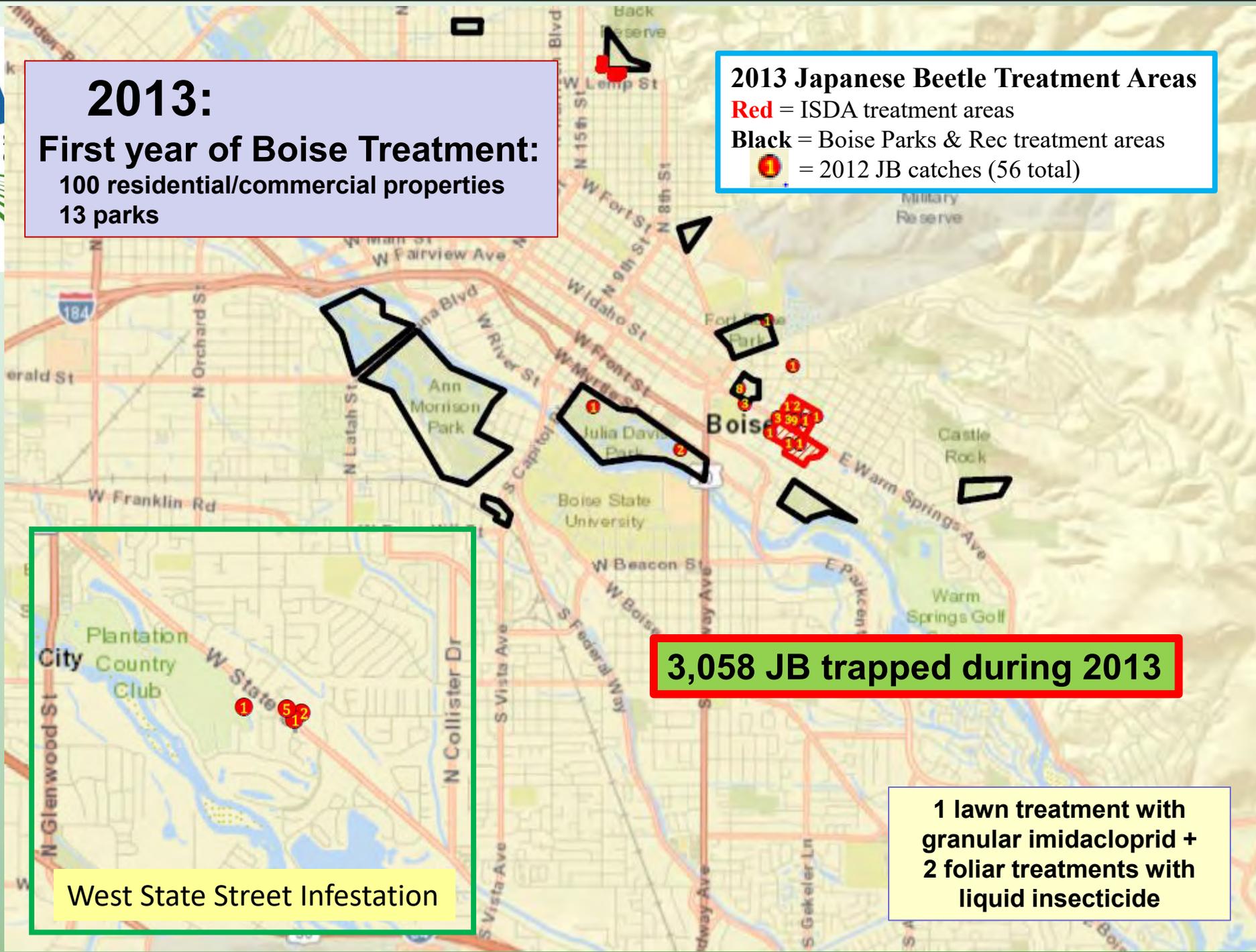


**Traps in Boise increased from 35 to 1,500 – eradication program begins**



**2013:**  
**First year of Boise Treatment:**  
100 residential/commercial properties  
13 parks

**2013 Japanese Beetle Treatment Areas**  
**Red** = ISDA treatment areas  
**Black** = Boise Parks & Rec treatment areas  
**1** = 2012 JB catches (56 total)



**3,058 JB trapped during 2013**

**West State Street Infestation**

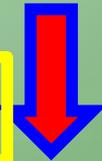
**1 lawn treatment with granular imidacloprid + 2 foliar treatments with liquid insecticide**



# 2014: What Did Our First Treatment Do?

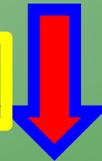
Total JB catches in all traps (treated + untreated areas):

2013: 3,058    2014: 1,283    58%



Warm Springs properties treated in 2013:

2013: 1,930    2014: 91    95%



Total for areas with JB untreated in 2013:

2013: 647    2014: 1,051    62%





# The Japanese Beetle Story in Boise (Idaho's first infestation)

Year	Treatment	# Residential/Commercial properties treated	# Parks treated	Total # JB Trapped
1990-1991	none	0	0	0
1992	none	0	0	1
1993-2011	none	0	0	0
2012	none	0	0	56
2013	granular Imidacloprid foliar Tempo/Carbaryl	100	13	3,058
2014	granular Acelepryn (May) granular Imidacloprid (July)	500	14	1,283
2015	granular Acelepryn (May) granular Imidacloprid (July)	1900	16	365
2016	granular Acelepryn (May) granular Imidacloprid (July)	850	11	128
2017	granular Acelepryn (May) granular Imidacloprid (July)	400	3	19
2018	granular Acelepryn (May) granular Imidacloprid (July)	400	3	4
2019	none	0	0	0
2020	none	0	0	0
2021	none	0	0	0
2022	none	0	0	0



# Areas in the west with recent JB infestations:

Portland, OR

Billings, MT

Salt Lake City, UT

Denver, CO

Victoria, BC

Grandview, WA

**This is why it is a GROWING concern in the West**



**JB eradicated in Boise –**

**but Idaho not “out of the woods”, yet**

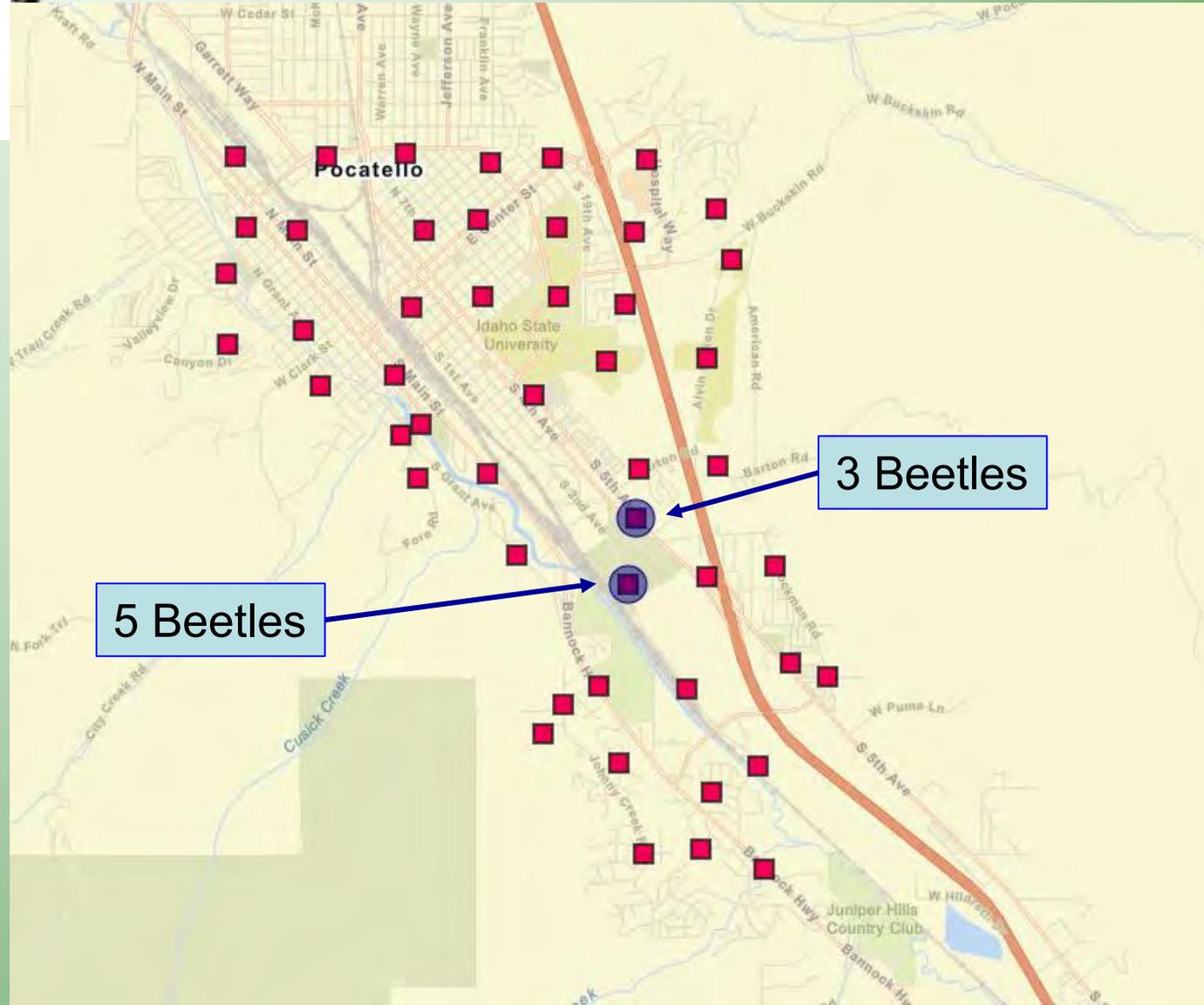


# The Japanese Beetle Story in Pocatello (appears to be Idaho's second infestation)

Year	Treatment	# Residential and Commercial properties treated	# Parks treated	Total # JB Trapped
1990-2011	none	0	0	0
2012	none	0	0	1
2013-2017	none	0	0	0
2018	none	0	0	1
2019	none	0	0	4
2020	none	0	0	7
2021	granular Acelepryn (June) granular Imidacloprid (July)	0	2	11
2022	granular Acelepryn (June) granular Imidacloprid (July)	0	2	8



# Japanese Beetle Traps and Catches in Pocatello 2022



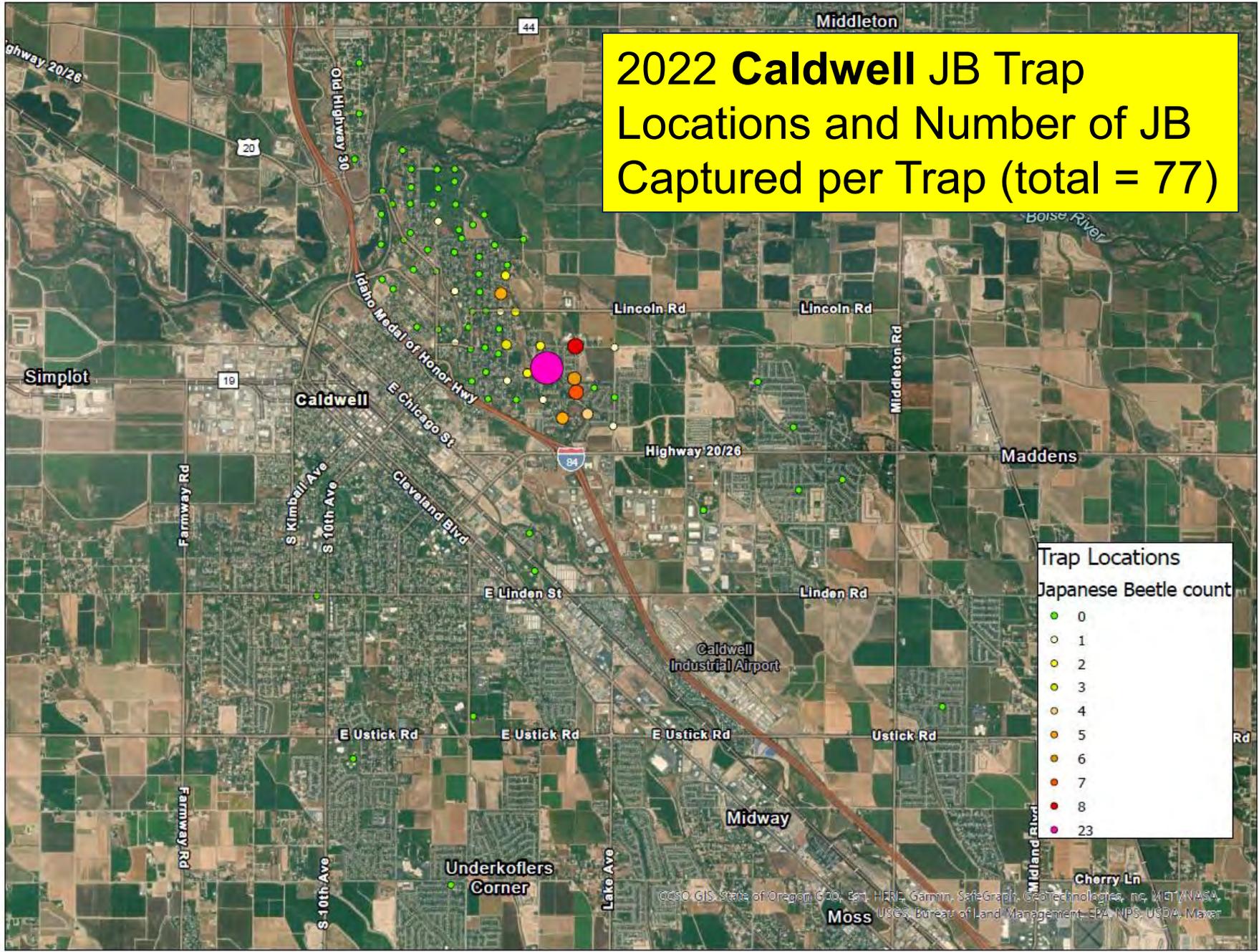


## The Japanese Beetle Story in Caldwell (appears to be Idaho's third infestation)

Year	Treatment	# Residential and Commercial properties treated	# Parks treated	Total # JB Trapped
1990-2020	none	0	0	0
2021	none	0	0	1
2022	none	0	0	77



**2022 Caldwell JB Trap Locations and Number of JB Captured per Trap (total = 77)**



Trap Locations	
Japanese Beetle count	
●	0
○	1
●	2
●	3
●	4
●	5
●	6
●	7
●	8
●	23

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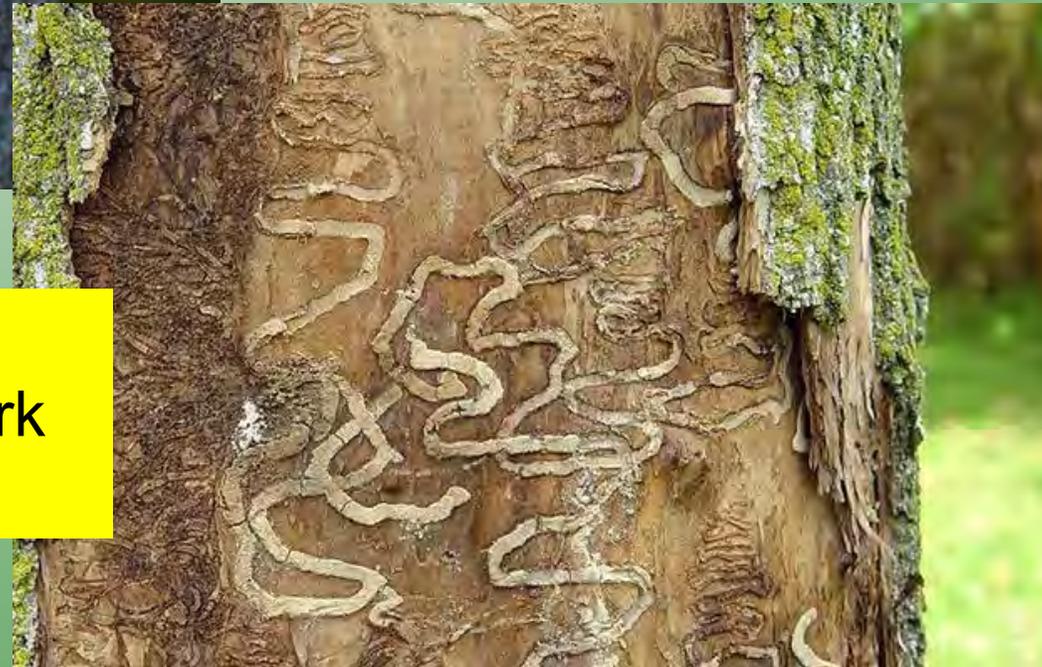
# Emerald Ash Borer



**Not found in Idaho – yet!**



# Damage it does



“Sinuous” tunnels from larval feeding between bark and heartwood

# Damage it does

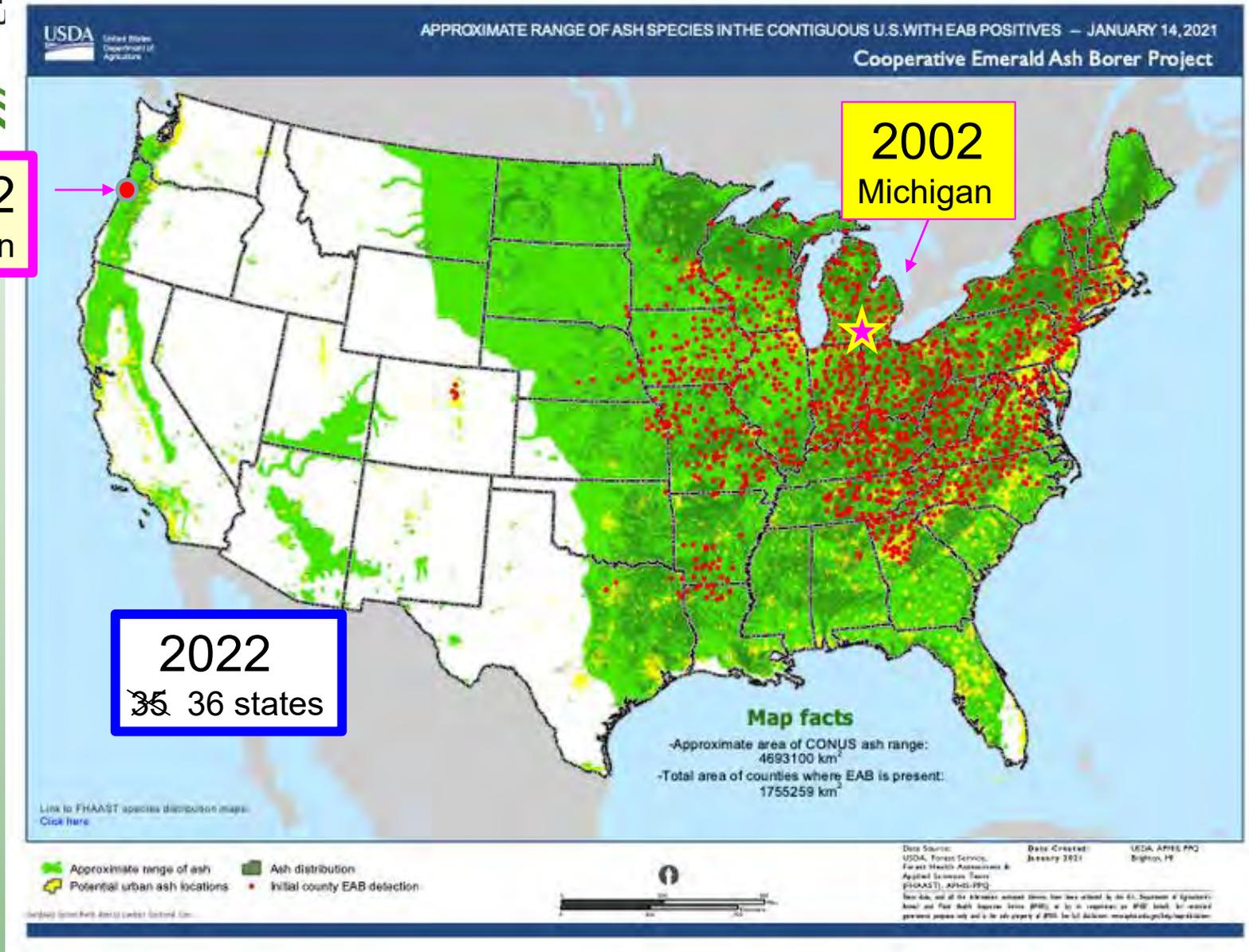


Starts with partial dieback  
and eventually total tree death

## Where (in the US) is it now?

2022  
Oregon

2022  
~~35~~ 36 states





## How does it spread?

- **Adults fly in search of ash trees on which to feed and lay eggs**
- **Larvae/pupae inside infested nursery stock**
- **Larvae/pupae inside products made from infested wood (including firewood)**



# Current Status

- January 2021 USDA deregulated EAB
- Funding for quarantine and survey to cease and future funding to be spent on research and release of biocontrol agents
- Quarantine and survey relegated to states, if interested in taking it on
- **ISDA evaluating resources and options**



# Spotted Lanternfly

First reported in Berks County, PA – Sept 2014

Native to China/India/Japan/Vietnam  
Introduced to Korea in 2006

Not found in Idaho – yet!

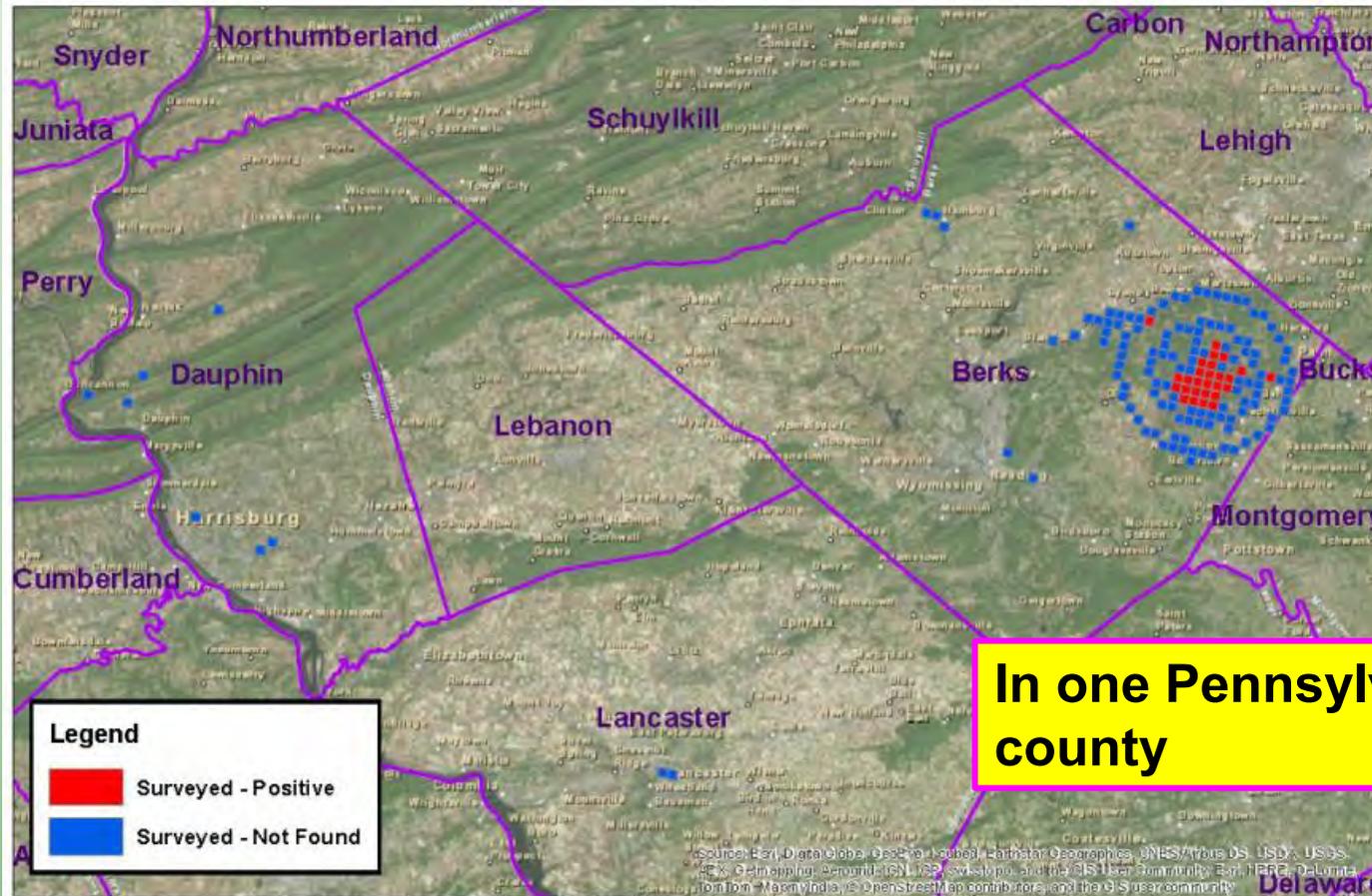


# One month after first “discovered” (2014)



## Spotted Lanternfly Detection Survey Map

Results Thru November 3, 2014



**In one Pennsylvania county**

# IDAHO

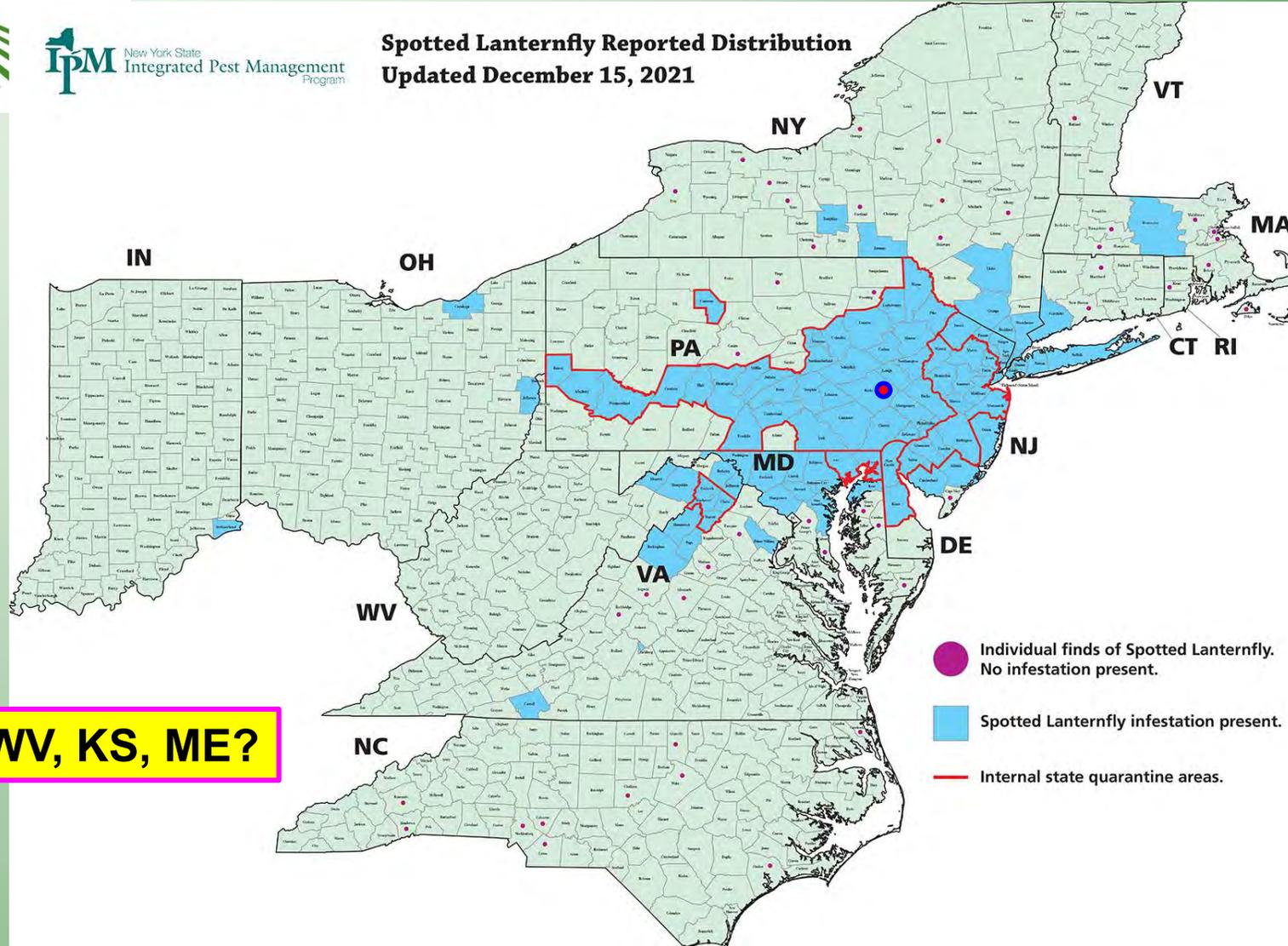


STATE DEPARTMENT  
OF AGRICULTURE



# 7 years after first “discovered”

## Spotted Lanternfly Reported Distribution Updated December 15, 2021





## How does it spread?

- **Nymphs crawl**
- **Adults jump and fly**
- **Eggs laid on any kind of stationary object – often tucked away and generally unnoticeable – many “stationary” objects do not remain stationary**



# QUESTIONS ?

[pcastroville@isda.idaho.gov](mailto:pcastroville@isda.idaho.gov)

[pcastroville@gmail.com](mailto:pcastroville@gmail.com)