Preventing the spread of aquatic invasive species by trailered watercraft

Project funded by U.S. Army Corps of Engineers Award W912HZ25C0044.

Today's Presenters

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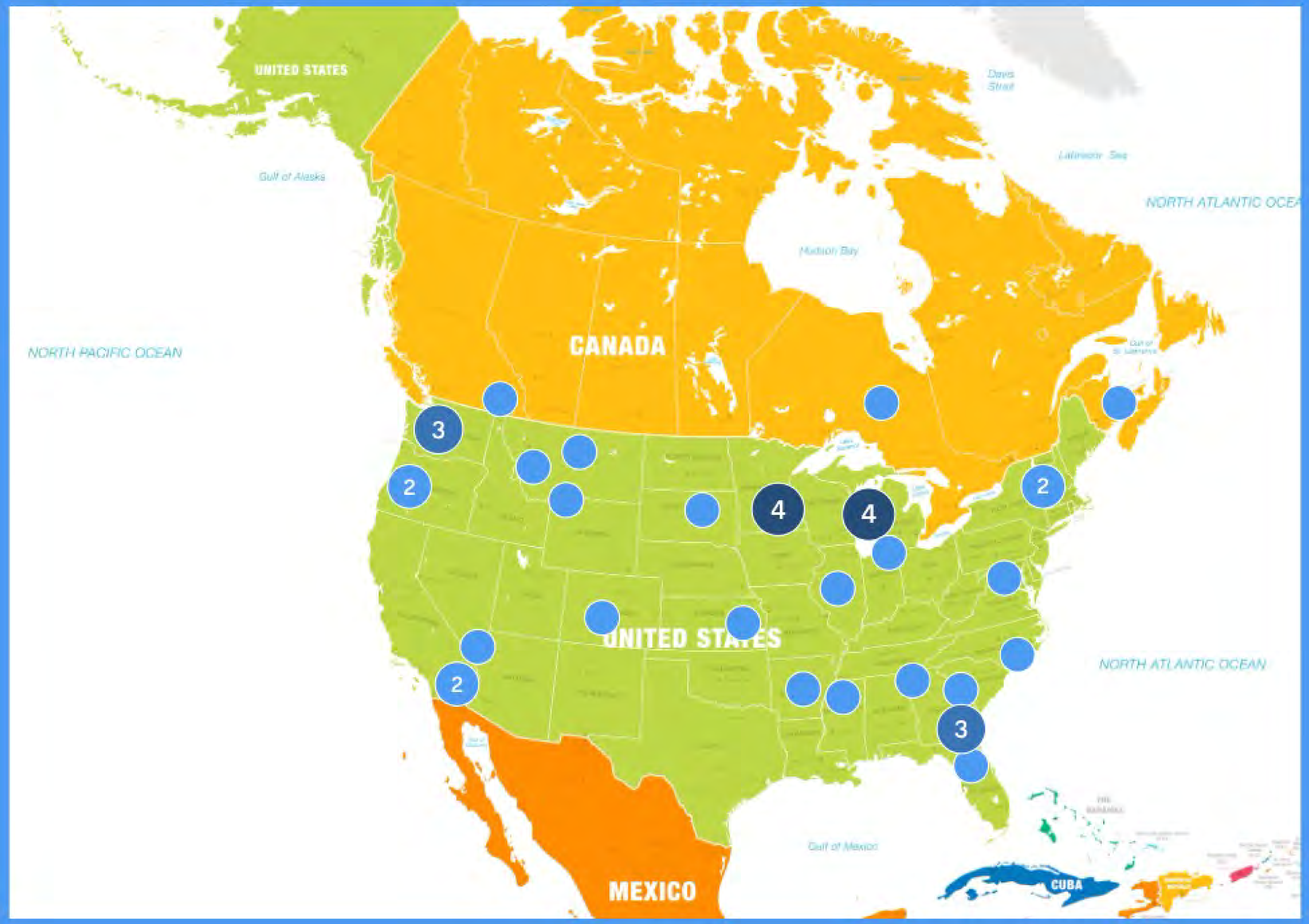
Montana Fish, Wildlife & Parks
https://fwp.mt.gov/conservation/aquatic-invasive-species/about

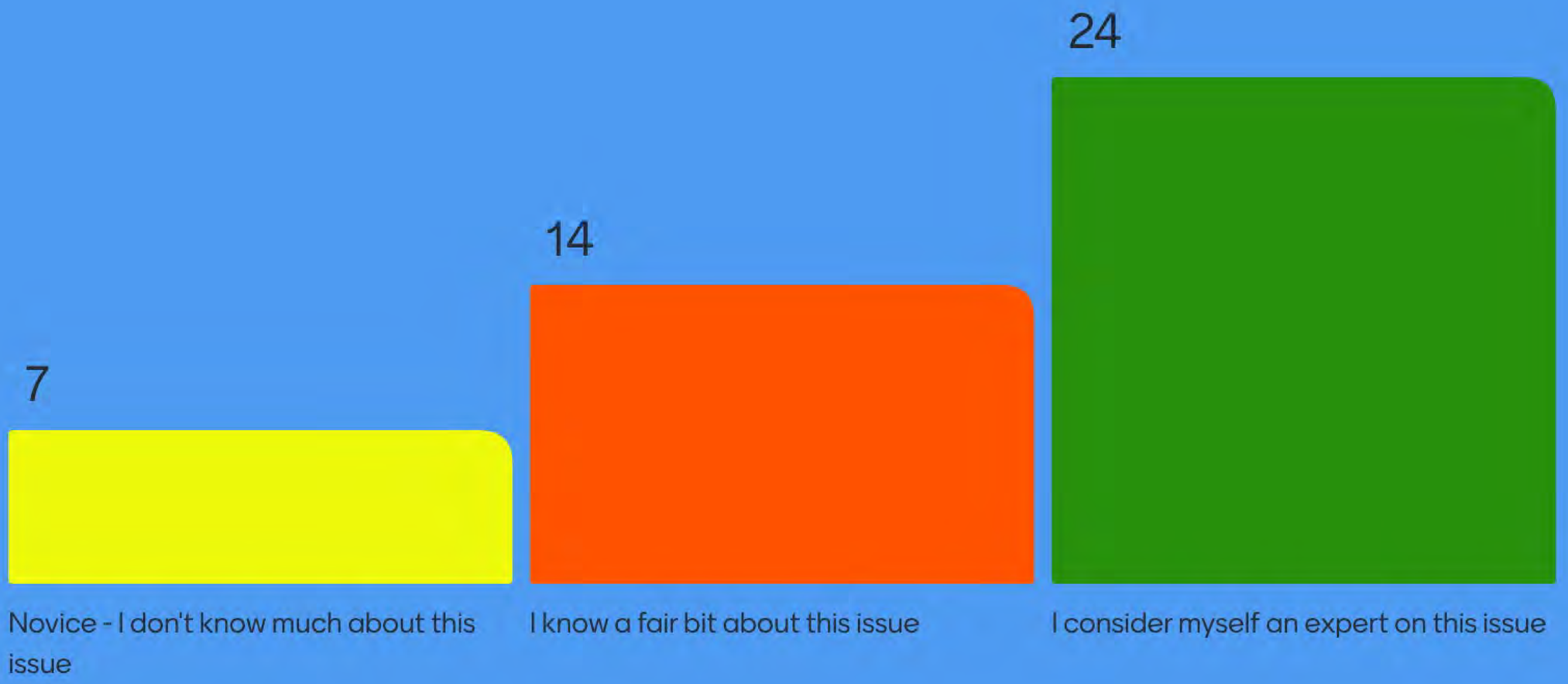
Agenda

- The **Issue**
- **Trends** in the spread of invasive mussels in the United States
- **Case studies** – Washington and Montana
- **What is being/has been done**:
  - Outreach
  - WID stations
  - Engagement with boating industry on boat/motor designs, technical standards
  - Engagement with state DOTs
  - *Call Before You Haul* hotline
  - Regulatory review – state analysis
- Project **goals and timeline**
- *Share **your thoughts and perspectives**!*
  - ***MENTI.COM 6463 3294***

Where do you live/work?



How would you describe your knowledge level regarding trailered watercraft as a pathway for aquatic invasive species?



What category best describes you?

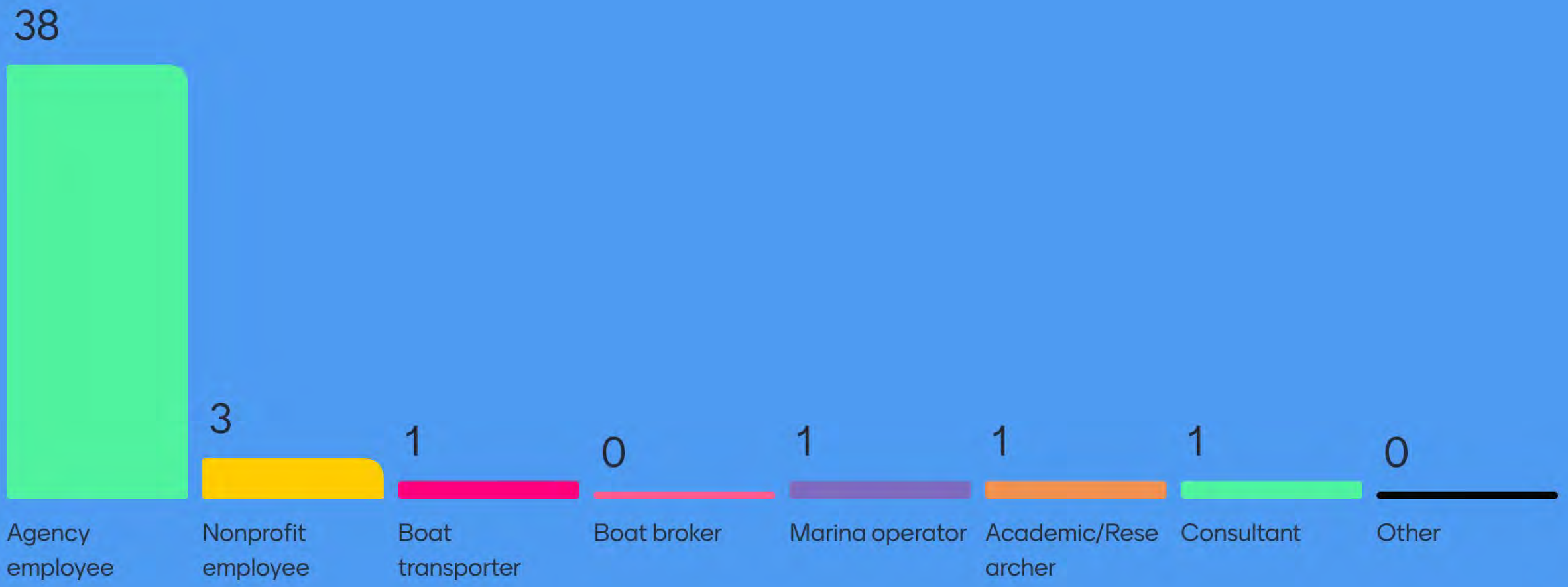


Photo credit: NPS.

The Issue

Boat Statistics*

- 85 million Americans go boating annually.
- 95% of boats on the water are less than 26 feet long - boats that can be trailered by a vehicle.
- 1.5 million Americans purchase a new or used boat annually.

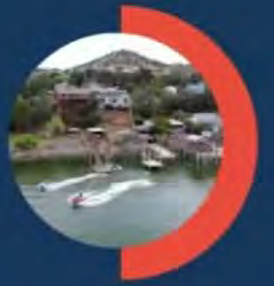
Trailered watercraft can spread aquatic invasive species – with significant economic and environmental effects.

* From National Marine Manufacturers Association and BoatU.S.

Economic, Environmental, and Social Effects of AIS

DISRUPTED FOOD CHAIN THAT NEGATIVELY AFFECTS FISHERIES AND OTHER WILDLIFE

REDUCTION IN PROPERTY VALUES



INCREASED COSTS TO MAINTAIN DOCKS AND RAMPS

BEACHES AND SHORELINE WITH SHARP SHELLS

LOSS OF REVENUE TO NEARBY COMMUNITIES

INCREASED COSTS AND MAINTENANCE FOR CLOGGED, FOULED, OR CONTAMINATED WATER DELIVERY INFRASTRUCTURE

FISHING TOURNAMENT AND BOATING RESTRICTIONS

ENCRUSTED BOATS AND ENGINES THAT ARE COSTLY TO MAINTAIN

Current (20 July 2025) distribution of:

Top left: Zebra mussel *(Dreissena polymorpha)*.
Top right: Golden mussel (*Limnoperna fortunei*)
Bottom right: Quagga mussel (*Dreissena bugensis*)

Trends in Trailered Watercraft Interceptions 2012-2024
(ID, MT, OR, WA, WY)

- **Total interceptions**
- **Regional source** of intercepted watercraft
- **Interceptions** from
  - the U.S. **Southwest Region**
  - the U.S. **Midwest Region**

Legend

Highway Watercraft Inspection Stations (public view)

- Highway station (single direction)
- Highway station (both directions)
- Highway station (directionality not established)

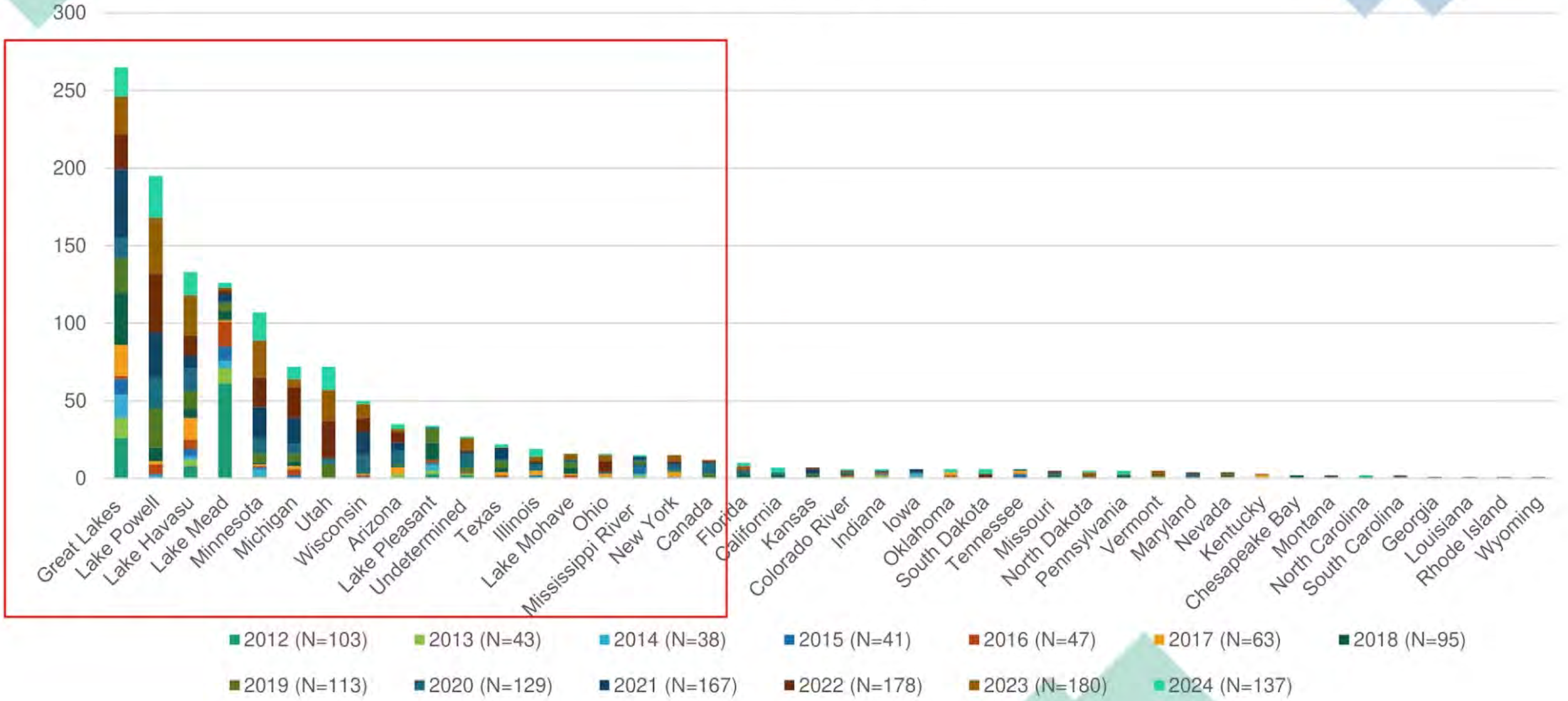
Waterbody and Source Watercraft Inspection Stations (public view)

- Waterbody station
- Roving
- Source Decontamination Station
- Office location

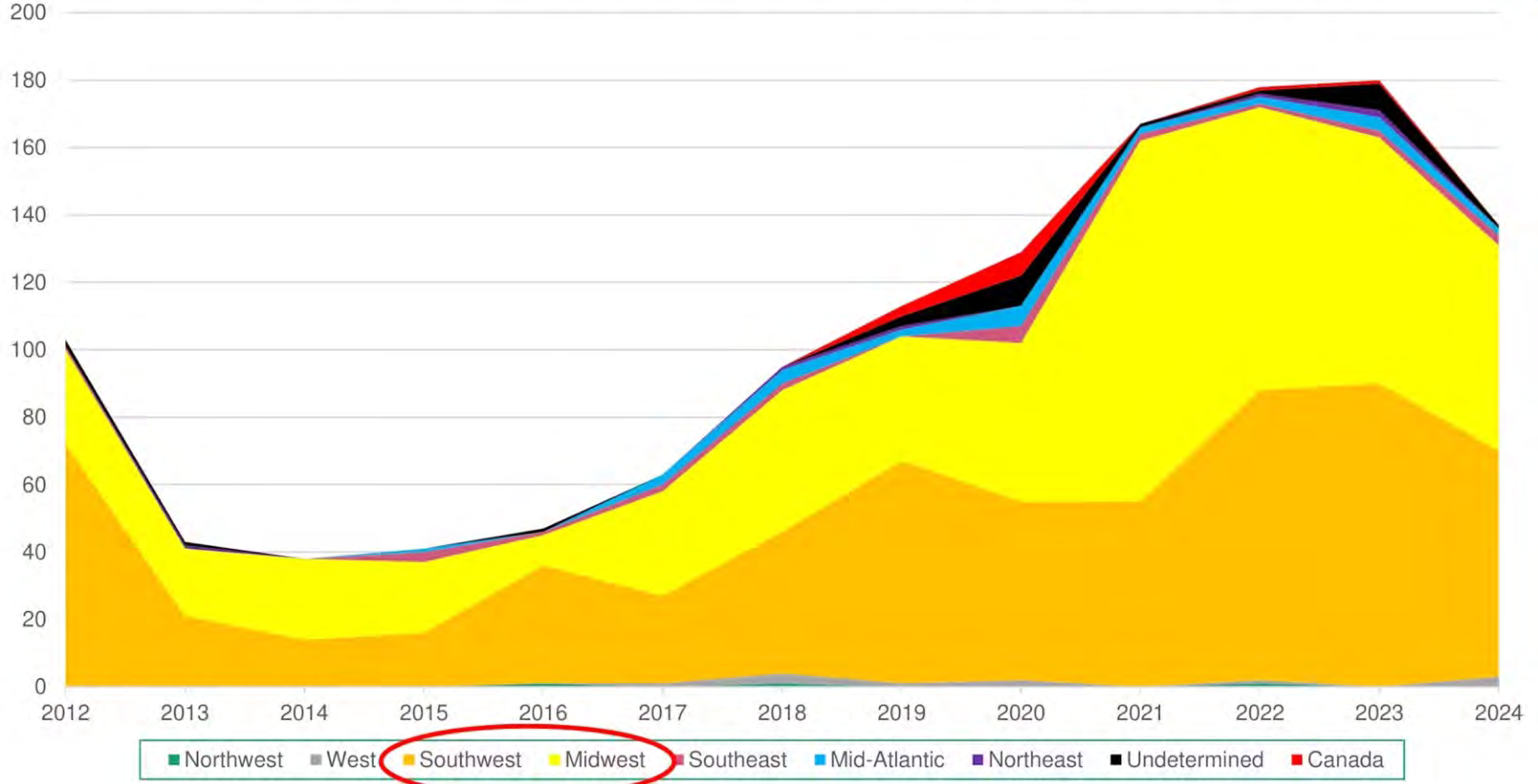
Columbia Basin Watershed Boundary

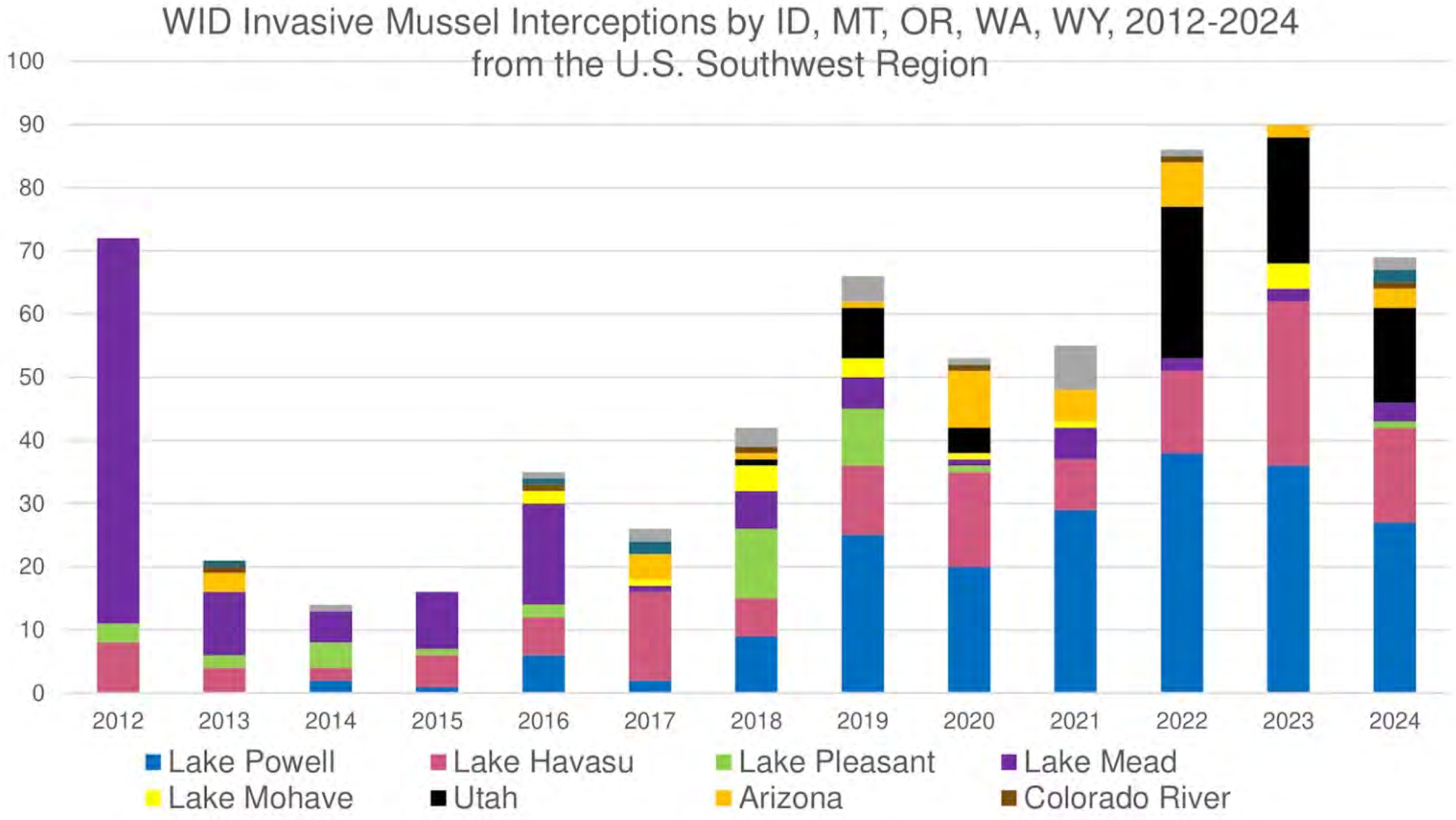
- Columbia Basin Boundary

Watercraft Inspection and Decontamination Invasive Mussel Interceptions by Source
2012-2024
ID, MT, OR, WA, WY

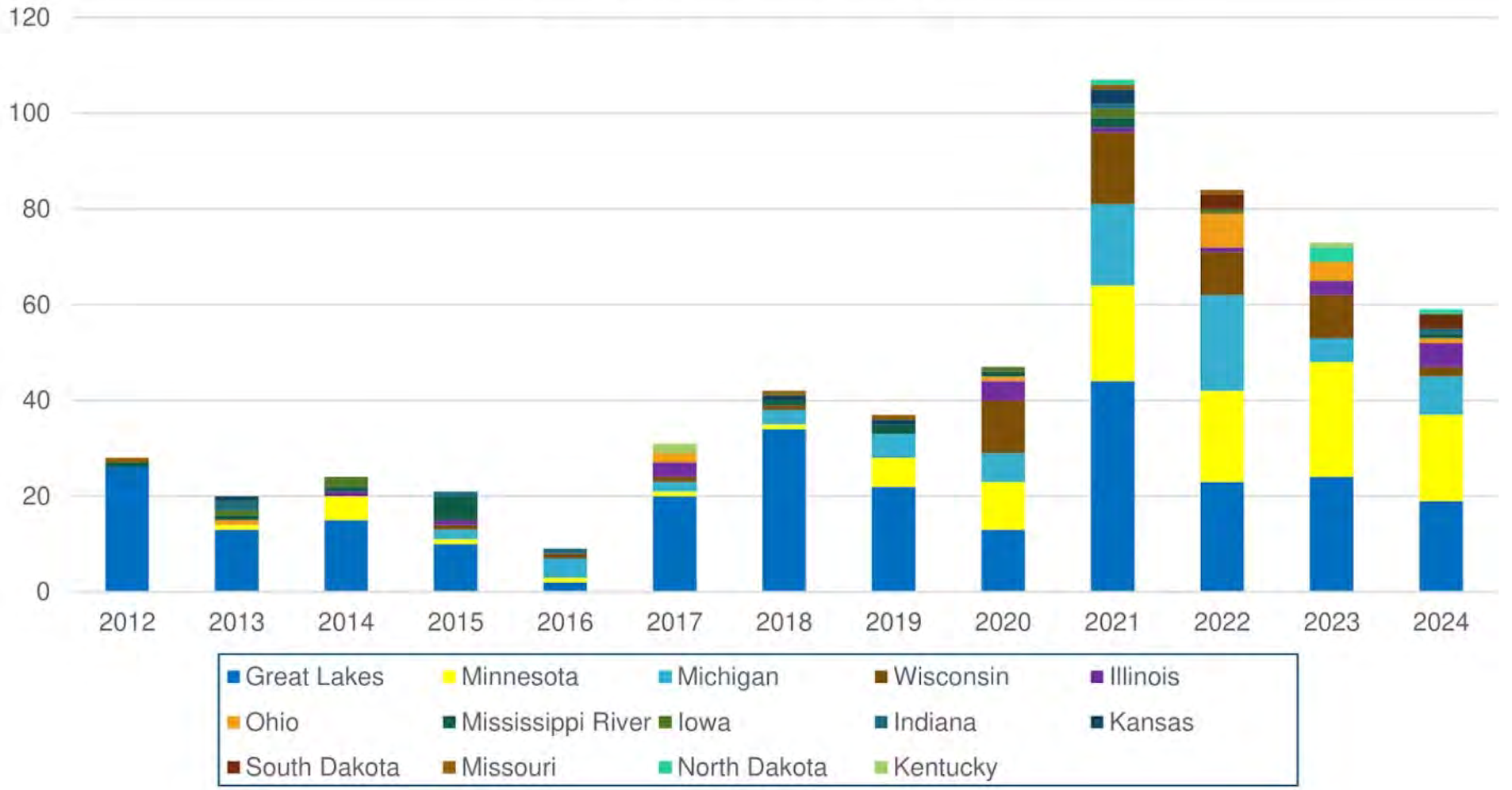


Watercraft Inspection and Decontamination by Source - U.S. Regions, 2012-2024
Source of Watercraft Intercepted w/ Invasive Mussels in ID, MT, OR, WA, WY




WID Invasive Mussel Interceptions by ID, MT, OR, WA, WY, 2012-2024
from the U.S. Southwest Region
100
90
80
70
60
50
40
30
20
10
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
Lake Powell
Lake Havasu
Lake Pleasant
Lake Mead
Lake Mohave
Utah
Arizona
Colorado River

WID Mussel Interceptions by ID, MT, OR, WA, WY, 2021-2024 from the U.S. Midwest Region



What challenges prevent the transport of Clean, Drain, Dry aquatic conveyances (e.g., trailered watercraft, barges, etc.)?

cost

Time

Lack of equipment at boat launches or marinas

Legislation

Resources to enforce

Still a lack of knowledge, awareness and understanding of the issue

Time

Lack of care.

What challenges prevent the transport of Clean, Drain, Dry aquatic conveyances (e.g., trailered watercraft, barges, etc.)?

Resources	Equipment	Legislation and ability to act	Human error (missing things during inspections)
Interagency interaction	Education	Authority	Lack of decontamination stations

What challenges prevent the transport of Clean, Drain, Dry aquatic conveyances (e.g., trailered watercraft, barges, etc.)?

Lack of enforcement ability

Willful ignorance

Not as important as other fish & game issues (poaching, safety)

limited state funds

Lack of awareness, lack of caring

Knowledge of invasive and low sense of danger

Manque de ressources no enough ressources

Lack of law enforcement, cost, time, hard to staff someone during all day light hours, overnight transport occurs

What challenges prevent the transport of Clean, Drain, Dry aquatic conveyances (e.g., trailered watercraft, barges, etc.)?

Still a lack of knowledge, understanding, and awareness of the issue

Lack of knowledge

Lack of CDD resources, staff, equipment, funding

Cost legislation perming issues

There are a lot of boats and lakes! Hard to get them all

Resources

very little space to establish decontamination stations

Formation & education

What challenges prevent the transport of Clean, Drain, Dry aquatic conveyances (e.g., trailered watercraft, barges, etc.)?

Beyond infrastructure, the time required to properly clean drain dry is impossible at a lot of launches that are busy and not built for efficiency.

knowledge of invasive and low sense of danger

Lack of mandatory Inspection/Decon Station across the Country. Need Nation wide Laws

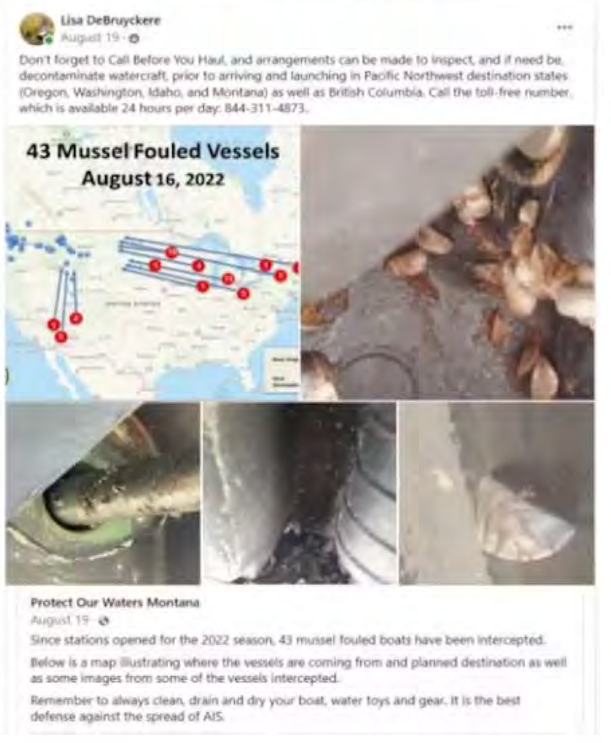
Consistency of programs across NA

Adequate funding

Steps Taken to Date to Address the Issue

STOP AQUATIC HITCHHIKERS!™
Be A Good Steward.
Clean. Drain. Dry.
StopAquaticHitchhikers.org

Social Media Engagement



Trucking Associations Outreach

- Ask to distribute via the News section of their websites, listservs, and social media
  - Truckstop.com
  - OOIDA – Owner-Operator Independent Drivers Assns (131,303 followers on Facebook)
  - National Association of Small Trucking Companies (13,000 companies w/more than 156,000 units)
  - American Trucking Assn
  - State Trucking Associations
    - Michigan Trucking Assn
    - Illinois Trucking Assn
    - Arizona Trucking Assn
    - Minnesota Trucking Assn
    - Ohio Trucking Assn
    - Wisconsin Motor Carriers Assn
    - Nevada Trucking Assn
    - Indiana Motor Truck Assn
    - Utah Trucking Assn

Call Before You Haul

Protect Our Waters from Aquatic Invasive Species

Clean, Drain, Dry - Safeguarding Waterways Starts with You

Aquatic invasive species (AIS) threaten ecosystems, economies, and recreational waterways. The Call Before You Haul program helps prevent the spread of AIS by ensuring all watercraft hauled are Clean, Drain, Dry.

What is Call Before You Haul?

Launched in December 2021 by the Pacific States Marine Fisheries Commission, Call Before You Haul is a 24/7 toll-free hotline, 1-844-311-4873, designed for watercraft haulers. It simplifies compliance and helps ensure boats are inspected, decontaminated (if needed), and legally transported across state and international borders.

How it Works:

1. **Call the Toll-Free Number** 1-844-311-4873: Haulers provide details about the watercraft's source and destination.

2. **Inspection Coordination:** The destination state or province is notified to arrange an inspection, and if necessary, decontamination.

3. **Stay Compliant:** Haulers avoid fines, delays, and the spread of aquatic invasive species by adhering to state and federal laws.

Why It Matters:

- **It's the Law:** States and provinces mandate compliance with AIS regulations.
- **Protect the Environment:** AIS disrupts ecosystems, harms native species, and degrades water quality.
- **Prevent Economic Losses:** The boating, tourism, and recreation industries depend on healthy waterways.
- **Trailered Watercraft Are Key Vectors:** One-third of invasive mussel-infested boats intercepted in the Pacific Northwest are commercially hauled.
- **Support Industry Growth:** Clean, Drain, Dry practices protect haulers, dealers, and buyers alike.

Easy Steps to Prevent AIS Spread:

1. **Clean:** Remove all plants, animals, and mud from boats and trailers.
2. **Drain:** Empty all water from wells, ballast, and engines, and pull the drain plug.
3. **Dry:** Ensure the boat is thoroughly dry before transport.

Learn more about AIS prevention and inspection requirements at westernais.org.

Call Before You Haul AnswerNet Hotline

2,433 calls into hotline

Significant reduction of calls not relative to purpose of hotline since start of program

Extensive social media engagement with boat transporters

Extensive engagement with state departments of transportation and AASHTO

***Note:** 2023 was the first full year that boat transporters have access to information about *Call Before You Haul* in advance of purchasing their annual interstate hauling permits.

Call Before You Haul is a condition on the Wisconsin DOT permit.

Wisconsin Department of Transportation
Bureau of Highway Maintenance
Oversize/Overweight Permit Unit (608) 266-7320

NOT A VALID PERMIT

Single Trip OS/OW to Transport

Boat

Permit # SS220251062783

Associated Permit # AA220251062301

EFFECTIVE: 01/25/2022 through 01/30/2022

Carrier: TEST CARRIER WISDOT-1
Address: TEST LANE EAST 2 WEST 5
MADISON, WI 53706
(608) 555-1234

USDOT # 6333
Permit Fee: $0.00
Issued Date/Time: 1/25/2022 2:23:10PM
Issued By: DOTERL
Sent By: Email: EDWARD.LALOR@DOT.WI.GOV
Carrier Email: EDWARD.LALOR@DOT.WI.GOV

Insurance must be in effect during all the applicant's operations authorized under this permit.

License/State	VIN	Type	Year/Make	Unit #
35784/WI	1111111111111111	Truck-Tractor	2022/JEEP	
666666666666/MN	2222222222222222	Semi-Trailer	2020/AMC	

Overall Dimensions

PU Length: 22' 0" Towed Unit Length: 40' 0" Load Length: 40' 0" Width: 12' 0" Height: 14' 0"
Gross Weight: 80000 Overweight: N Length: 70' 0"
Load Quantity: ONE

ROUTE DESCRIPTION

Origin: BAY BEACH RD, GREEN BAY Destination: MN BORDER

ANALYZED ROUTE

From: I-43 MP BROWN 189.51 To: MINNESOTA
Route: START ON I-43 NB AT MP BROWN 189.51, I-41 SB, US-10 WB, I-39 NB, US-10 WB, I-94 WB, END ON I-94 AT MP ST. CROIX 0.00(STATE BORDER OF MINNESOTA)

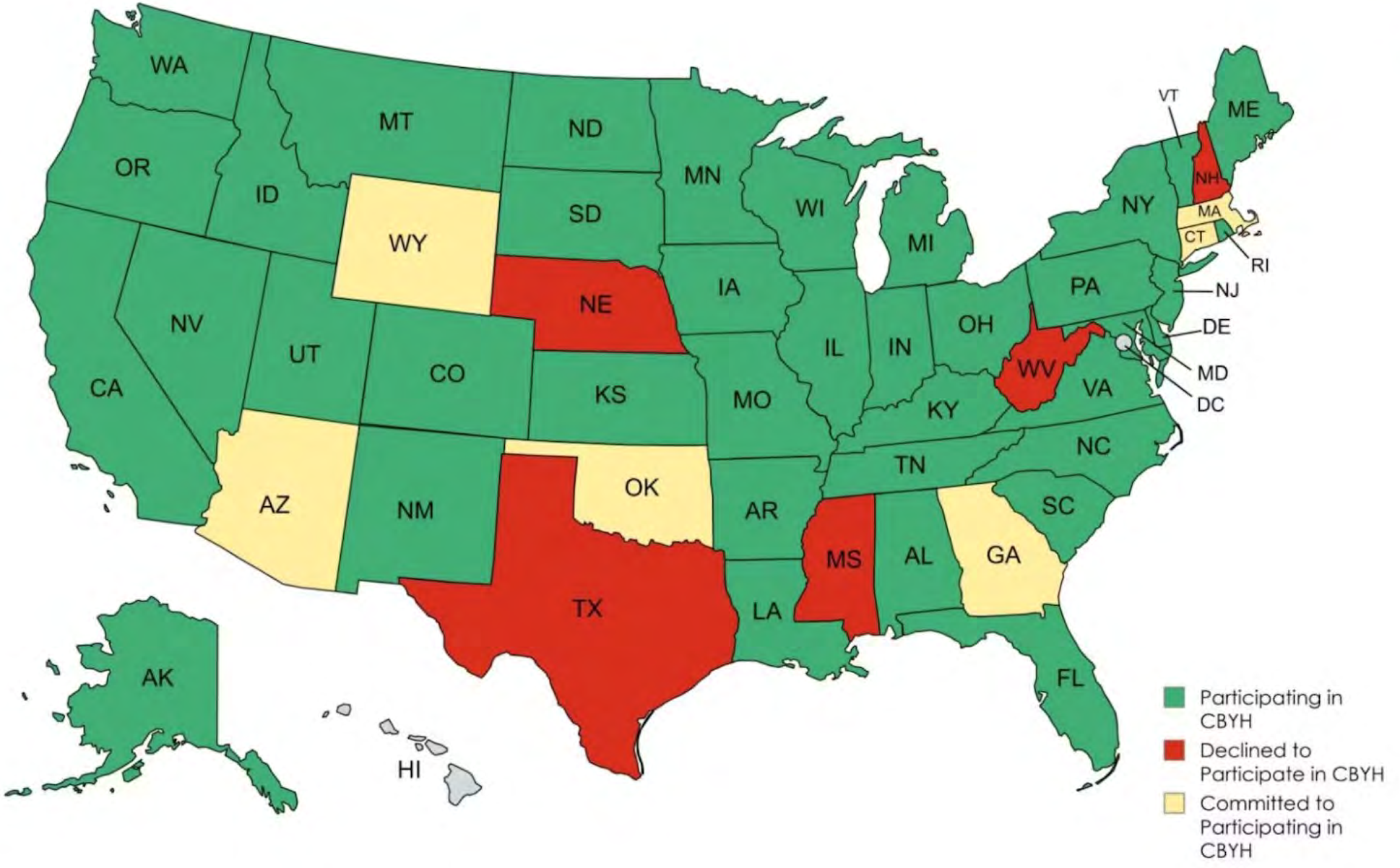
CONDITIONS

- **Call Before You Haul**: If this watercraft is destined for Washington, Oregon, Idaho, or Montana, carrier must contact The Pacific States Marine Fisheries Commission (PSMFC) to make arrangements to have your watercraft inspected and if need be, decontaminated. This program aims to prevent aquatic invasive species spread. Toll-free number 1-844-311-4873 prior to hauling. https://www.westernais.org/watercraft
- Carrier shall obtain & attach all required Condition Sheets, Trans Rules, & Forms as stated below. These can be obtained at https://wisconsindot.gov/osowforms
- If any portion of route uses county, town and/or local roadways, check with local authorities to assure adequate vertical and width clearance.
- This permit authorizes movement only on the Interstate and state highways shown in the route. Carrier must obtain permission from local authorities for all other roadways to be used on the Trips route of travel.
- ESCORT VEHICLE(S): When escort vehicle(s) are required, use of portable electronic devices by drivers of the escort vehicle(s) and the escorted vehicle is restricted to support voice communication specific to the escort operation.
- Subject to conditions on MV2605, which must be attached.

ROUTE RESTRICTIONS

- Informational Restriction on Route: US-10 From: CLARK County Log 118.00 To: CLARK County Log 118.52 Reason: CONNECTING HIGHWAY (LOCAL AUTHORITY HAS JURISDICTION) Comment: CITY OF NEILLSVILLE SCHEDULED FROM 1/1/2022 UNTIL FURTHER NOTICE

Not Valid For Travel.


WA
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AL
OH
WV
GA
FL
SC
NC
VA
PA
NY
VT
NH
ME
MA
CT
RI
NJ
DE
MD
DC
AK
HI
Participating in CBYH
Declined to Participate in CBYH
Committed to Participating in CBYH

The Bottom Line

If the ***Call Before You Haul*** program is successful, it will help protect all states and provinces from the introduction and spread of aquatic invasive species via the trailered watercraft pathway.

Pacific States Marine Fisheries Commission
ALASKA · CALIFORNIA · HAWAII
IDAHO · OREGON · WASHINGTON

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

What would you like state DOTs to do to support the transport of Clean, Drain, Dry boats?

Continue to educate

Model permit condition language harmonized regionally or natuonally

Provide decon services at DOT major truck stops

Enforcement capacity, conduct inspections at weigh stations

Éducation and formation

Public outreach

Articles in State DNR magazines, more advertising

I'm not sure state DOTs are the limiting factor

What would you like state DOTs to do to support the transport of Clean, Drain, Dry boats?

Work with natural resource agencies

Greater outreach efforts

Reduction in fees for participants

Messaging, signage, installation of signs, permitting locations, highlight where available locations occur

give a more sense of danger and add it to the boat license test

Eduction and inspections

Enhanced checkpoints, more rigorous inspections

Second on the weigh station.

What would you like state DOTs to do to support the transport of Clean, Drain, Dry boats?

Communicate with DNR's

Demonstrate any willingness to share information with haulers (or with TPWD) -- Texas

Public Service announcements to general population

Make it mandatory for permits so all are required to do inspections and decontaminations

No fees here on Havasu

The Spokane Tugboat Interception: Why Hydropower Can't Afford Mussels

Why preventing mussel establishment is critical to protecting the Pacific Northwest's energy and water systems.

Justin Bush
Aquatic Invasive Species
Division Manager

Washington Department of FISH & WILDLIFE

A Perfect Storm for Spread

- Origin: Lake Michigan — high-density infestation area.
- Vessel type: Tugboats/barges often move between inland waterways
- Mussels can survive up to 30 days out of water (longer in cool temperatures).
- Barges, tugs and aquatic construction equipment can bypass traditional recreational boater outreach and compliance inspections — requiring targeted engagement with truckers, haulers, construction and shipping companies.

A Region Built on Clean, Flowing Water

- Columbia–Snake River system = one of the largest renewable energy sources in the U.S.
- Mussels clog intakes, cooling systems, and gates
- Example costs:$1.2M/year for one Great Lakes facility
- WA estimate: > $100 M/year if infested
- Impacts beyond power: irrigation, hatcheries, navigation locks

Pacific hydropower plants, symbolized by generation in megawatt-hour.
📷: *Source: Synapse Energy Economics, Inc*

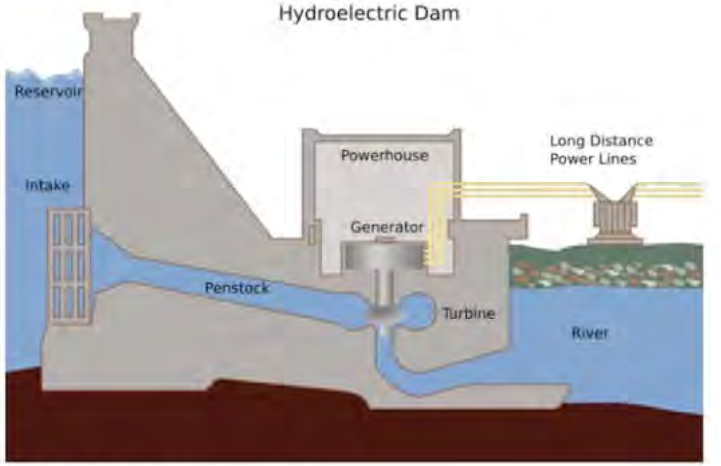
Invasive mussels fouling a penstock gate at Davis Dam.
📷: U.S. Bureau of Reclamation

Coho salmon in Eagle Creek, a tributary of the Columbia River.
📷: Washington recreation and Conservation Office

From Mussel to Megawatt Loss

- Hydropower downtime = lost revenue + repair costs
- Example: $620K annual revenue loss + $145K added labor from biofouling at one U.S. Army Corps of Engineers facility).
- Examples: In 2018, golden mussels caused an estimated $120 million in impacts to Brazil's electricity sector.

Dense colonies of zebra mussels can clog intake pipes.
📷: Marrone Bio Innovations



📷: Wikipedia Commons

From Interception to Prevention

- Tugboat case shows commercial/industrial vessel risk
- Hydropower and other critical infrastructure must be a prevention priority
- Sustained inspections, rapid response, and outreach to shipping/trucking sectors
- One miss could mean hundreds of millions in annual losses

	2021	2022	2023	2024	2025
Watercraft Inspected	55,812	51,942	58,618	54,790	55,772
Mussel Fouled Watercraft	39	25	25	13	17

Questions

Justin Bush
Aquatic Invasive Species (AIS)
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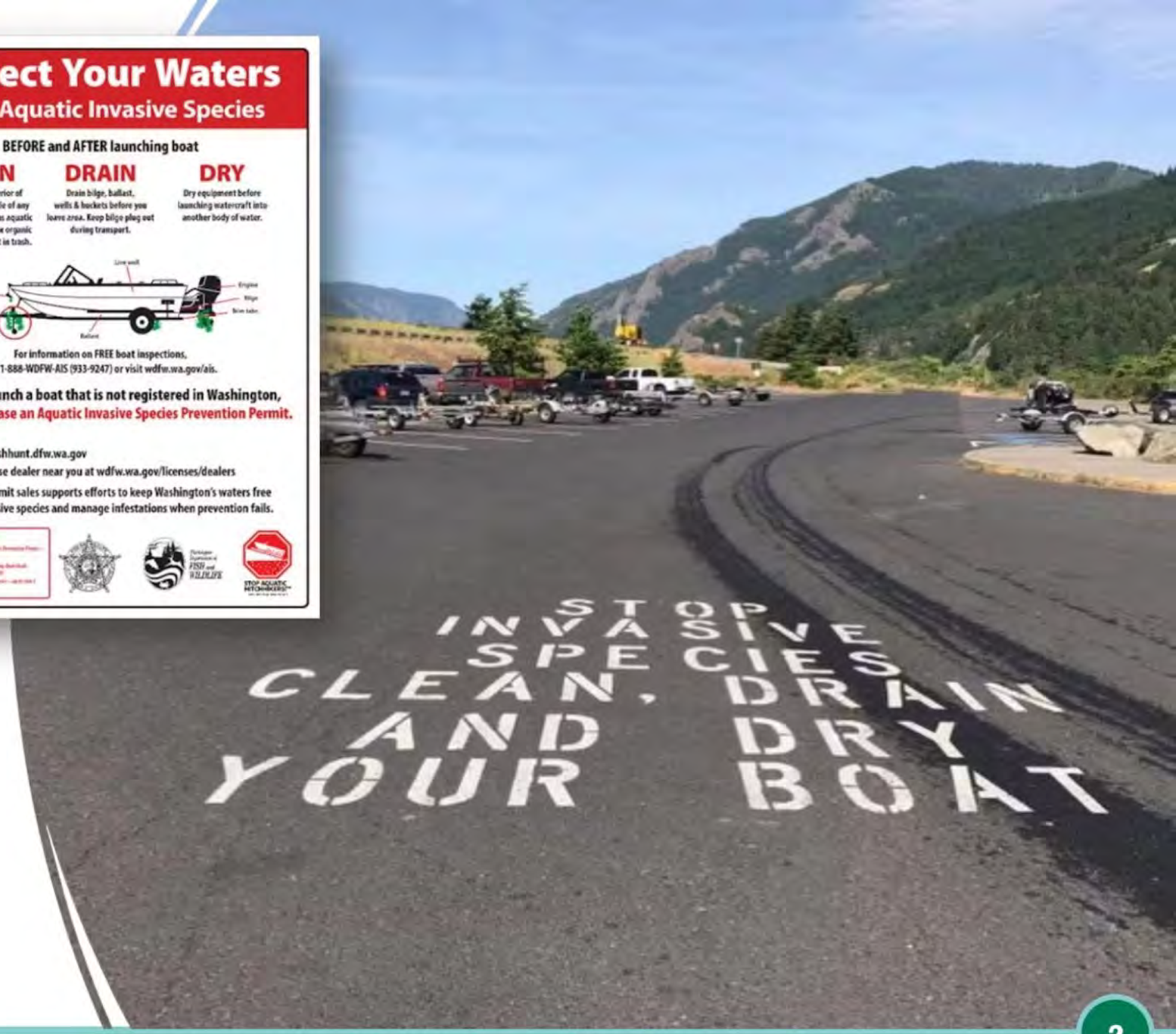
Justin.Bush@dfw.wa.gov
564-669-9481

State of Washington
Department of Fish and Wildlife
wdfw.wa.gov/ais
1-888-WDFW-AIS



AIS Prevention Program

Examples of Recently Purchased Used Watercraft

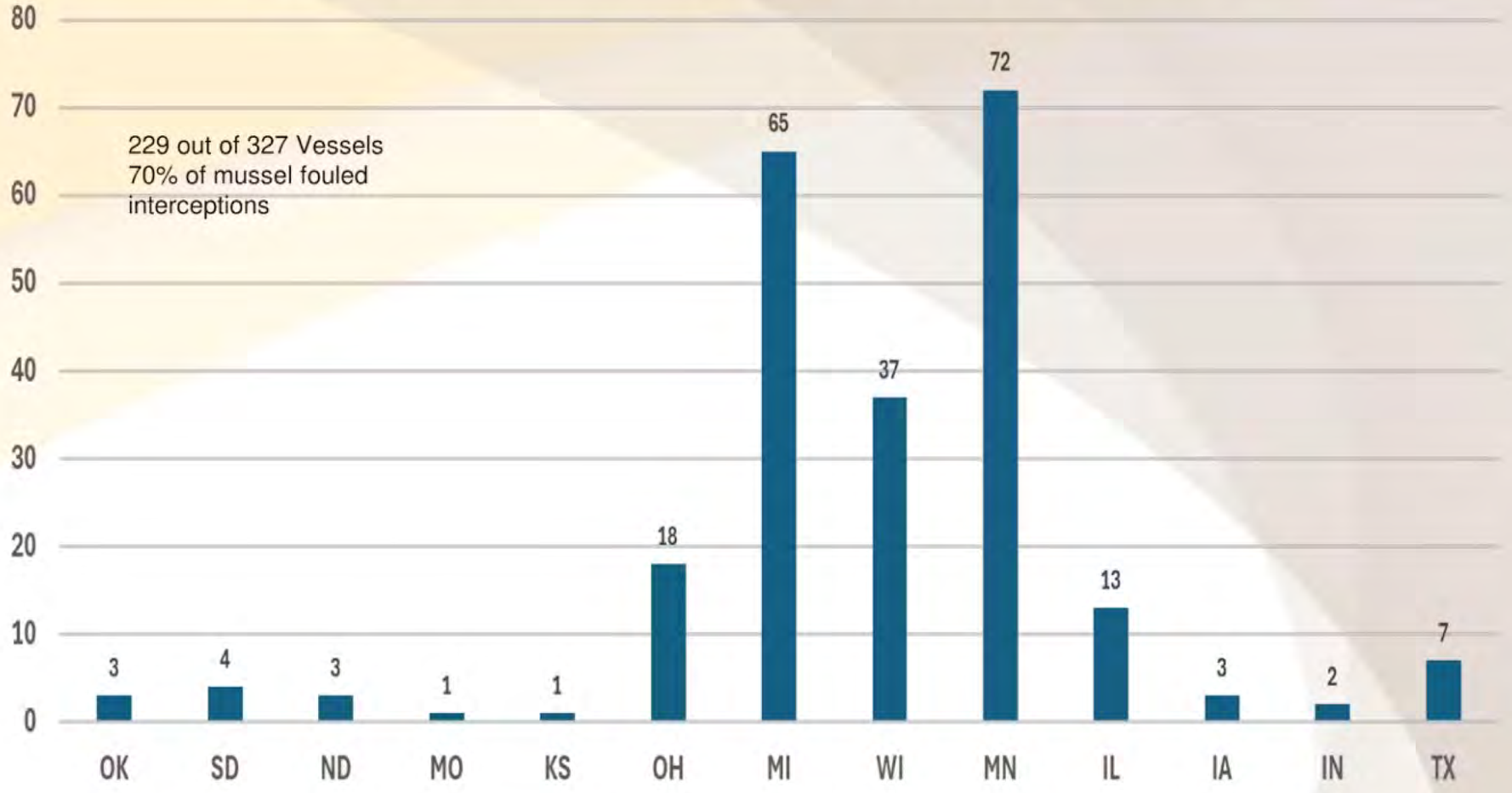
Intercepted with Aquatic Invasive Species at Montana Inspection Stations

22 May 2025: Broadus WID station: Mussel-fouled ski boat heading to Big Fork, MT. Mussels found around motor and gimbal. Boat recently purchased in NY and last launched in Lake Cayuga 8 months ago. Transported by new owner.

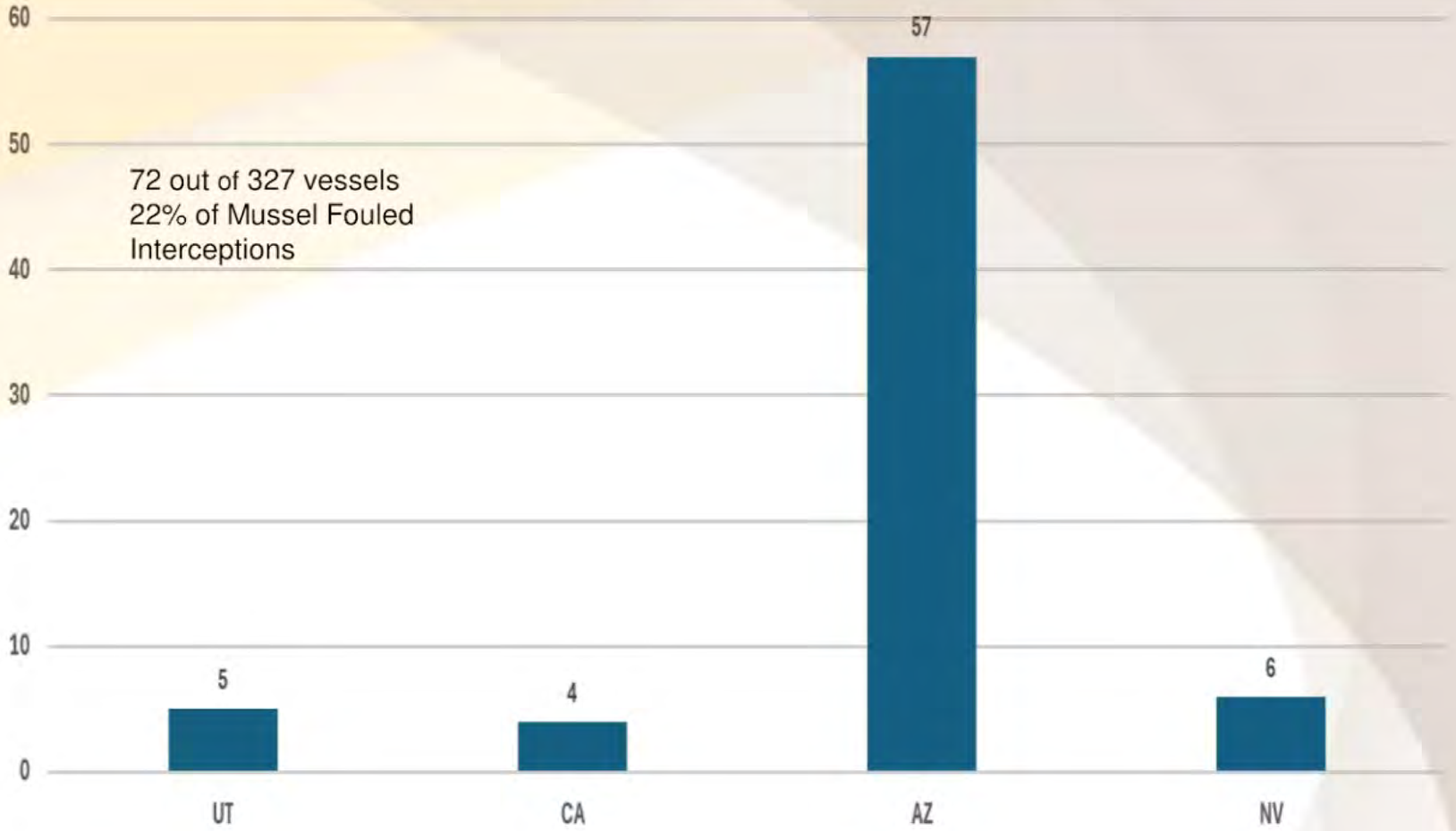
8 May 2025: Wibaux WID station: Mussel-fouled wake boat headed to Idaho Falls, ID. Boat was last in Lake Minnetonka, MN 5 days ago. Live mussels were found along the swim platform, engine, prop shaft, propeller, and trim tabs. Recent purchase. Owner picked up boat in MN and was transporting home.

24 April 2025: Anaconda WID station: Mussel fouled tugboat traveling from Lake Michigan to Puget Sound, WA. Live zebra mussels on hull and motor and fouled with barnacles, indicating time spent in salt water. Boat was out of the water for 2 days and mussels were viable. Commercially hauled. Boat passed inspection station - wardens intercepted and returned to the station. Recent purchase and private transport.

Mussel Fouled Vessels 2017 - 2025 Intercepted in MT from the Midwest



Mussel Fouled Vessels 2017 - 2025 Intercepted in MT from the Southwest

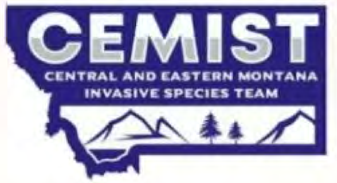


QAQC in the Prevention Program

1) Many Partners working together
2) WID Mobile movement notices
3) Call before you haul
4) Secret shopper
5) MDT movement notices
6) 3 – Roving Site leads QAQC
7) On call supervisor 24/7
8) QAQC on data – looking at data for consistency with protocols and laws
9) Bi-weekly QAQC meetings with Western and Eastern Montana partners
10) Review by site leads and supervisors on sealed boats

Partnerships

FLATHEAD LAKE
BIO STATION
UNIVERSITY OF MONTANA



WESTERN MONTANA
Conservation
Commission

Whitefish Lake
INSTITUTE

What challenges do state/provincial agencies face addressing AIS on aquatic conveyances (e.g., trailered watercraft, barges, etc.)?

Insufficient resources

Funding

Lack of interstate collaboration (ex. Montana & Wisconsin/Minnesota etc.)

lack of resources

Enforcement capacity

Inadequate staff and resources to operate year-round and address non-traditional conveyances

Adequate coverage

funding

What challenges do state/provincial agencies face addressing AIS on aquatic conveyances (e.g., trailered watercraft, barges, etc.)?

Concertation

Enforcement

Lack of Legal authority

Funding. Lack of AIS laws

Resources

Staffing

Public awareness

Funding

What challenges do state/provincial agencies face addressing AIS on aquatic conveyances (e.g., trailered watercraft, barges, etc.)?

Weigh stations located too far in state

Legislation, funding, not working with partners, lack of enforcement capacity, need to work year round.

Cost, lack of resources, lack of communication/collaboration

Having the boat manufacturer industry be more proactive in designing lower risk boats

Overlap in jurisdiction/responsibility

Staffing. Maybe do a citizen science thing like adopt a stream

Lack of WIT authority, lack of enforcement interest/capacity

Differences in laws across state lines

What challenges do state/provincial agencies face addressing AIS on aquatic conveyances (e.g., trailered watercraft, barges, etc.)?

Enforcement

Public water laws,
thousands of water bodies,
private and public accesses,
focus on promoting
personal responsibility

State Legal Analysis to Improve Transport Requirements

Inventory of State CDD Requirements

Purpose:

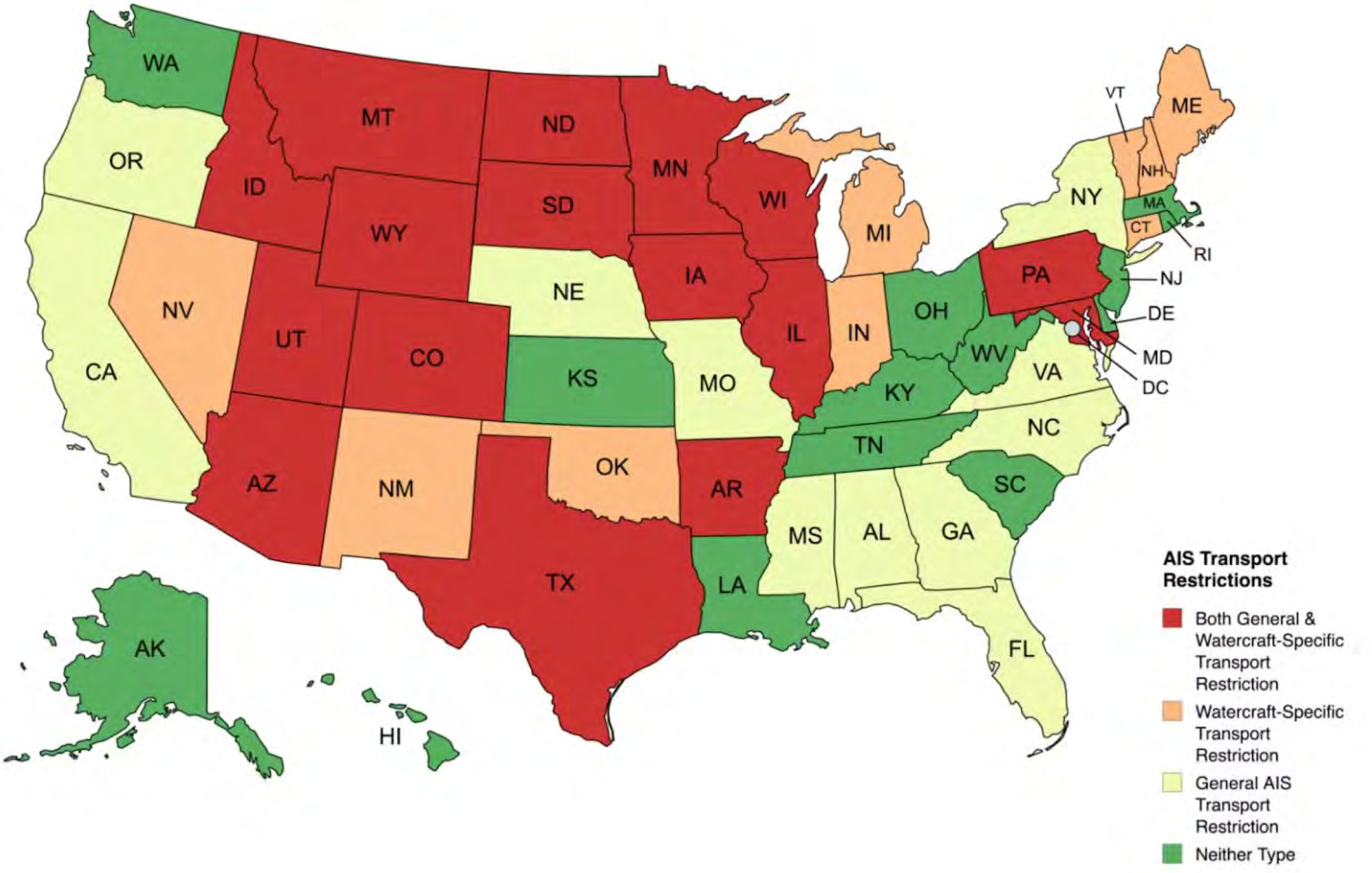
- Determine the extend of state "Clean, Drain, Dry" policy adoption
- Identify gaps in the legal framework

Compiled data on several aspects of AIS laws and regulations:

- Express requirements to clean, drain, or dry
- General prohibition on transport of AIS regardless of mode (e.g., car, seaplane)
- Specific prohibition on transport of AIS via watercraft

Majority of states (36) have some sort of transport restriction.

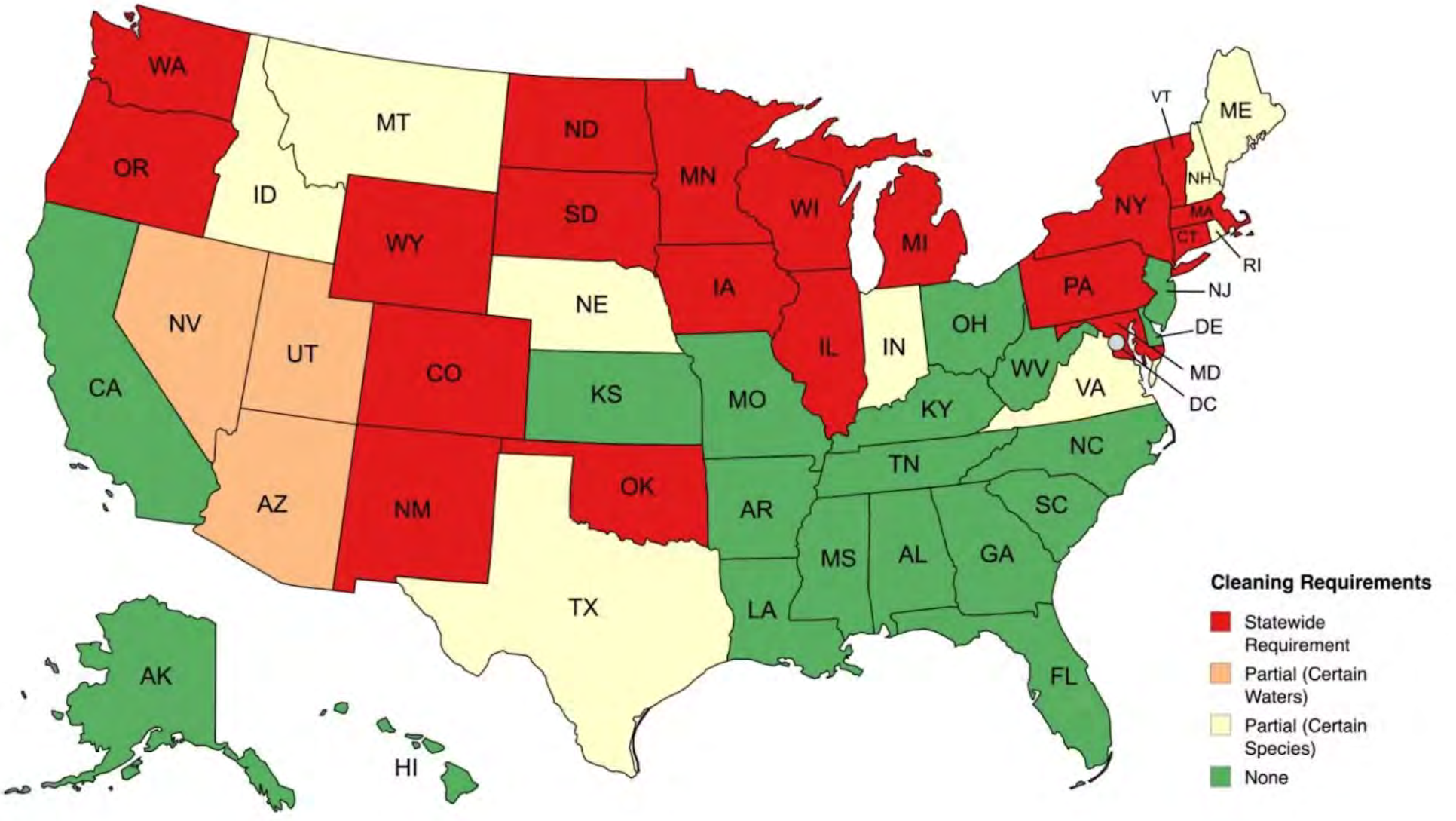
25 states have watercraft-specific restrictions which are more expressly connected to CDD policy.



Clean = Express language in law or regulation requiring removal of all visible organic material, including animal, plants, and mud.

State law varies regarding when boaters must take action:

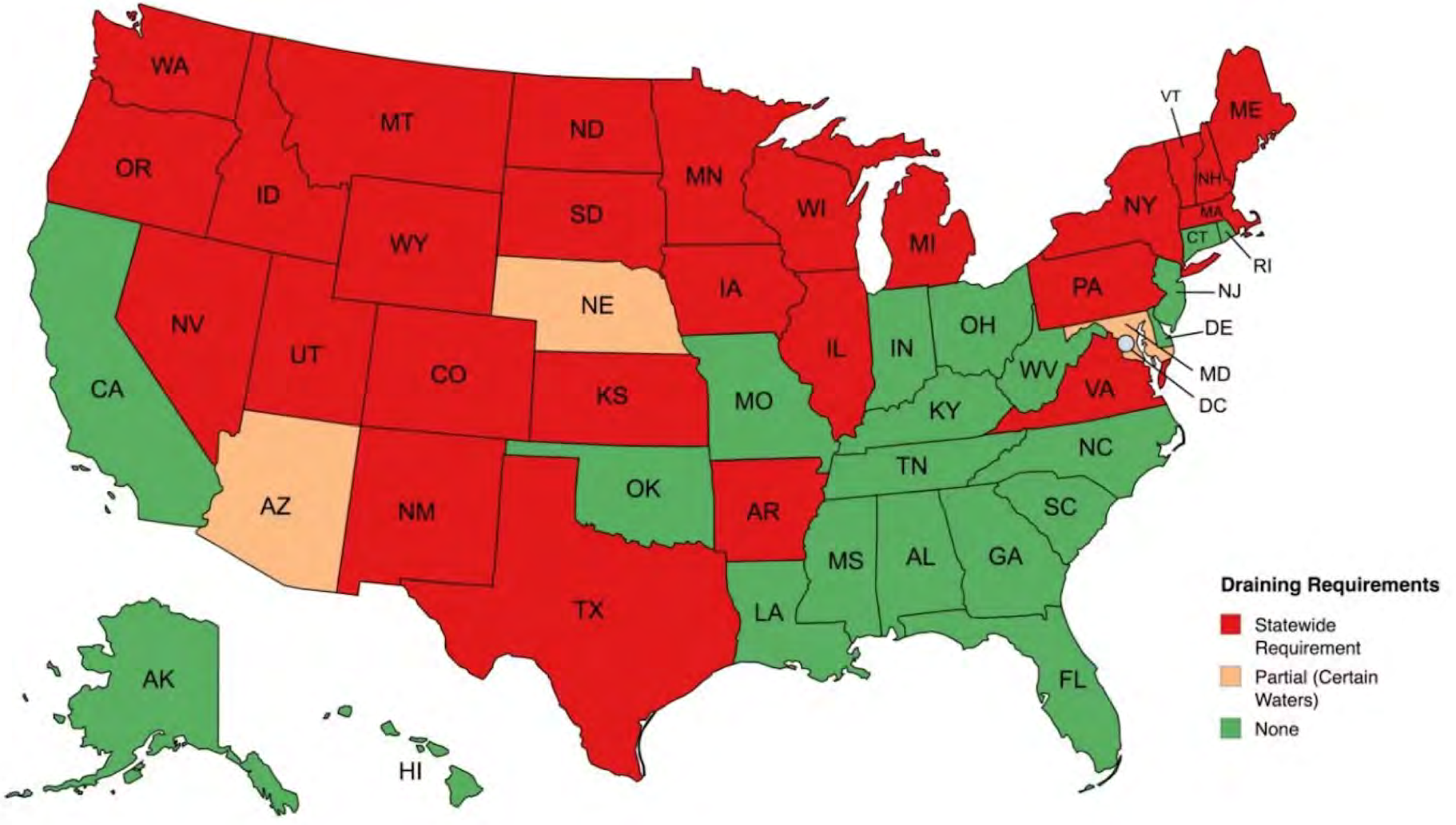
- Launch
- Removal
- Transport



Drain = Express language in law or regulation requiring boaters to drain water from watercraft

State drainage laws use more consistent language regarding desired behavior.

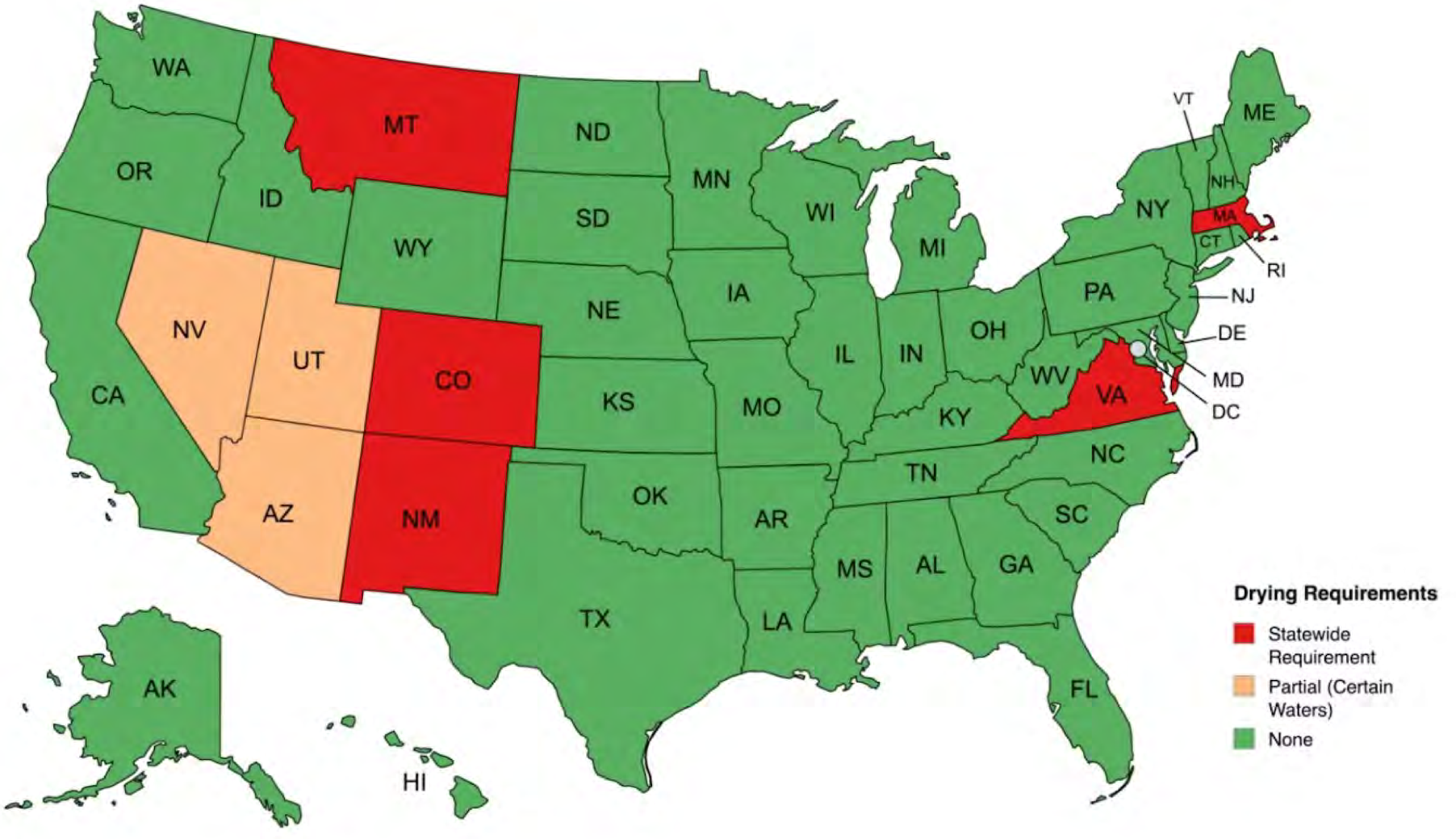
- Most refer to removal of plugs or other barriers



Dry = Express language in law or regulation requiring the drying of watercraft and compartments

Very few states have express requirements for drying

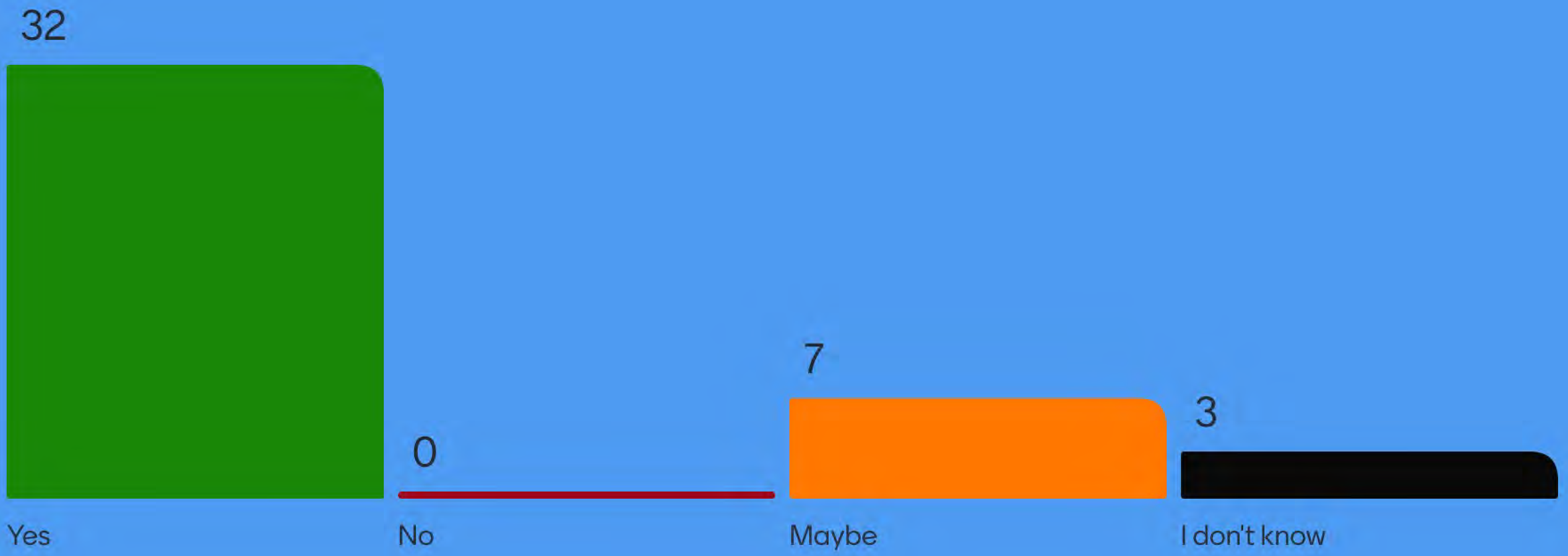
Maybe considered unnecessary if state has a draining requirements, as that facilitates drying.



In the Works . . . A *Clean Watercraft Transport* Law . . .

- Directives to federal agencies to use consistent messaging, require clean watercraft at water bodies they manage, encourage states to adopt clean watercraft regulations, cooperate with states to enforce clean watercraft violations, etc.
- Mandate drain plugs removed during transport.
- Enforcement implemented by all enforcement entities.
- In the United States, use the original interpretation of Title 18 of the Lacey Act as a model – classifying a non-clean boat as similar to an injurious species and prohibit transport across state lines. In Canada . . .
- **Collaboration and cooperation across state and provincial lines**

Could you support a national law that mandates all aquatic conveyances (e.g., trailered watercraft, barges) be hauled Clean, Drain, Dry?



What else can "we" do to ensure aquatic conveyances (e.g., trailered watercraft, barges, etc.) are hauled Clean, Drain Dry?

Grant funding to source point marinas or launches in infested areas nationally

Engage social media/youtube influencers more

Unified National, international, provincial and state mandatory requirements of permits and inspections and decontamination.

Use behavior change strategies to promote the adoption and consistent practice of AIS prevention practices

Larger and more effective comms strategy

work with state clean marina programs

Creat stronger relationships between the different regions

Closer scrutiny of small personal watercrafts such as kayaks and SUPs.

What else can "we" do to ensure aquatic conveyances (e.g., trailered watercraft, barges, etc.) are hauled Clean, Drain Dry?

Funding to support agencies to implement these programs

Mass media and citizen science volunteers like adopt a stream to help at check stations

Advocate for a national mandate

Mandatory decontamination of watercraft leaving infested federal waterbodies — mead powell

Reaching out to Spanish speaking users

More states need Law Enforcement Officers whose dedicated focus is on AIS (seems a few do, we have only a few LEOs with any interest/willingness)

Control access to waterbodies to facilitate inspection and decontamination

fishing youtubers promote it

What else can "we" do to ensure aquatic conveyances (e.g., trailered watercraft, barges, etc.) are hauled Clean, Drain Dry?

Increase funding opportunities for marinas and harbors

Regulations/laws that focus on the source, fines and enforcement that make non-compliance untenable .

Harsher penalties for non-compliance

Address the barriers as to why people don't clean.

Improved consistency/transparency from manufacturers on decontamination

Wasn't able to sign on and vote in time for the last one but would have voted "no". I don't think Alaska has the infrastructure or resources to make changes like that.

National mandate needs national funding!

Work with outdoor and boating companies to help inform them. Could help advertise on company websites and stores. Boat companies could make easier to clean boats.

What else can "we" do to ensure aquatic conveyances (e.g., trailered watercraft, barges, etc.) are hauled Clean, Drain Dry?

Free beer for decons

Project Goals and Objectives

Protecting Columbia River Basin: A Research Project to Inform Call Before You Haul Strategies to Reduce the Interstate Transport of Dreissenid- and AIS-Infested Water Conveyances

- Kickoff webinar (today)
- Direct mail engagement
- Document key issues and challenges to hauling *Clean, Drain, Dry* watercraft
- Focus groups and workshops
- Meet with boat haulers, DOTs administering OS/OW permits, inspectors at WID stations, marinas in the Lower Colorado River and Great Lakes regions
- Host national webinar to share what was learned in tasks 4 and 5
- Identify key roles of entities involved in the AIS-watercraft transport pathway; actions to suppress interstate transport of AIS, USACE roles
- Monitor implementation of project
- Host a webinar to share results, implemented steps, and next steps
- Final report

Table Edit Get directions Zoom to

Marina: Seagull Marina LLC

Address: 1400 Lake Street, Two Rivers, WI 54241

Phone number: (920) 794-7533

Water Body: Lake Michigan

Latitude and Longitude: 44.145561 , -87.566002

Number of slips: 98

Website: https://www.seagullmarina.com/

Email: marina@seagullmarina.com

Public [PU] or Private [PR]: PU

Marinas in the Great Lakes and Lower Colorado River Regions - 669

What challenges do marinas face ensuring boats leaving marinas are Clean, Drain, Dry?

It's not viewed as their job to do it

Capacity for enforcement

Decontaminations take time and that costs money

Staff

Resources and tools to do it

Coming and going may be on short notice

Staffing levels.

They are not typically able to enforce

What challenges do marinas face ensuring boats leaving marinas are Clean, Drain, Dry?

Enforcement

Good safety practises

Customers may not want to pay to have it done

Overtaxed already, no capacity

Lack of clear profit incentive

Clean Drain Dry stewards typically only work 6-6, meaning anyone leaving after 6 is not inspected/deconned

Language barriers

Not knowing when the boats are leaving, concerns that including any requirements in lease agreement for decon before leaving might make them less competitive with neighboring marinas

What challenges do marinas face ensuring boats leaving marinas are Clean, Drain, Dry?

They don't want to inconvenience their patrons

They might be on lakes with AIS already. They don't have a protection incentive.

Maybe marinas need a template for how it might work at their site

short notice and stingy customer

Knowledge of AIS

Résulta review

Staff and resources, grants for profit businesses are typically not encouraged by state agencies

It has been effective when the river controlling authority (uninfested lakes) has written into marina leases that all entering boats must be inspected by river authority before launch

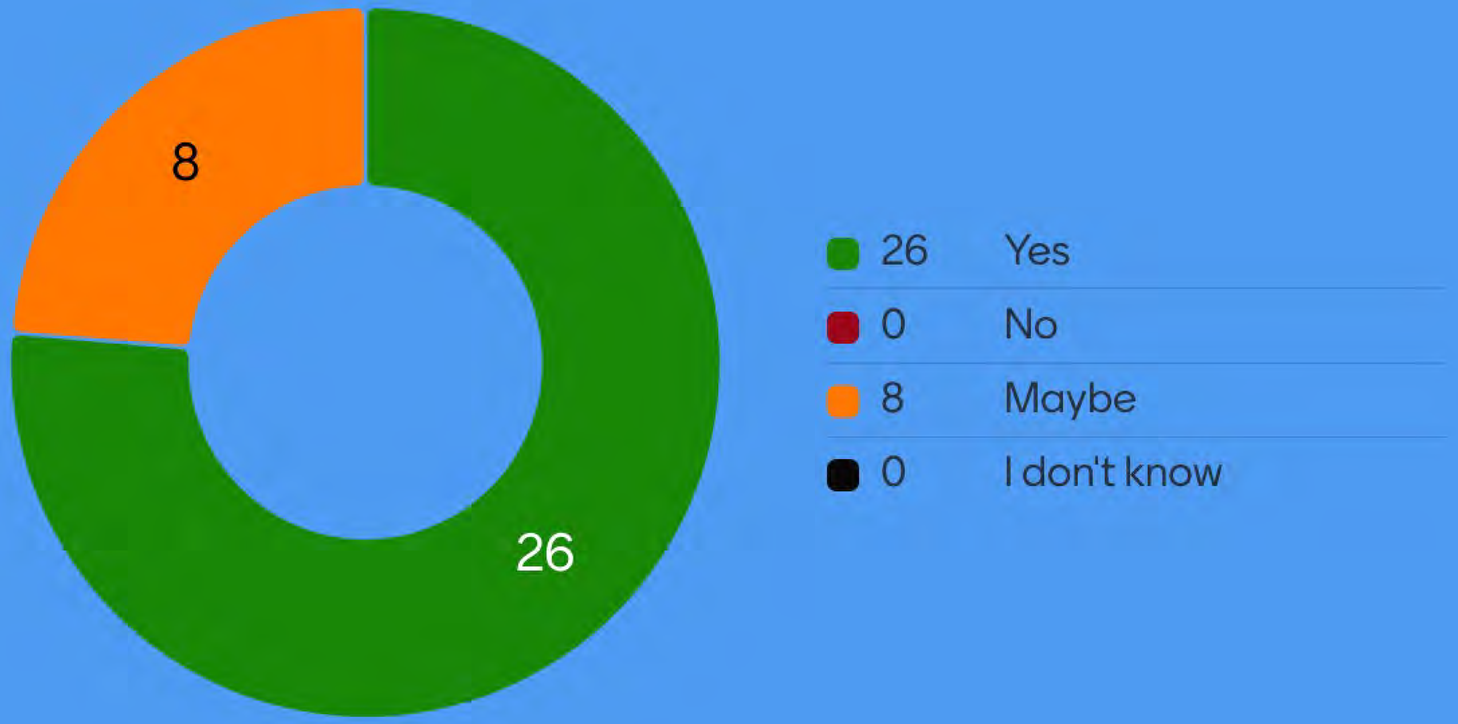
What challenges do marinas face ensuring boats leaving marinas are Clean, Drain, Dry?

Yes should be in contract. Working with their local AIS programs could impact their income, short sighted because long term impacts worse

Draft Language for Marinas to Include in Slip Leases and/or Rules/Regulations

All watercraft and associated gear must be *Clean, Drain, and Dry* before and after launching a vessel and in accordance with state and local law. Lessees are responsible for abiding by all current watercraft regulations, including mandatory inspections and decontaminations for aquatic invasive species.

Do you support asking marina operators to add language to slip leases and/or marina rules mandating boaters Clean, Drain, Dry?



What else can marinas do to ensure boats are Clean, Drain, Dry before launch and prior to transport?

Train their staff on AIS

Mandatory CDD classes as part of marina fees

Let's be clear about what boats might be highest risk to limit the number that need cleaned. Like boats being sold.

Provide stimulus (incentive) and not punishment for being "Clean, Drain, Dry"

Be part of WID stations of all boats coming and going in their marina

Add inspection responsibilities to their existing staff (or likely hire an additional staff person to help with this)

If they have a marine repair shop onsite (or who they could partner with), incorporate decon fees into lease fee and facilitate appointment scheduling at beginning/end of lease

Supportive informal education (conversations, etc.)

What else can marinas do to ensure boats are Clean, Drain, Dry before launch and prior to transport?

Often times, Marinas require appointments, CDD boats are often on an as needed basis which are challenging to schedule

Collaboration with expert and more ressources for éducation

Outreach with slid removal date requirements

Cost, loss of sale. Partner with their local AIS program

Lack of knowledge about ANS and where to find on boat

Takes longer to sell it if it has to do CDD for full time

Boat Sellers

- 1.5 million Americans purchase a new or used boat annually.
- Some new boats are tested in waters with AIS.
- Boats are purchased new from one region and hauled to another region.

Draft Language on Transporting Clean, Drain, Dry Watercraft

Transport Only Clean, Drain, Dry Boats

Aquatic invasive species pose an ongoing threat to native species, the economy, recreation, and human health and safely. Many aquatic invasive species - including plants, fish, and mussels - are accidentally transported by trailered boats. By following these few simple steps before you transport your boat, you can help prevent the spread of aquatic invasive species, protect the environment, and abide by state and federal laws that prohibit the interstate transport of some invasive species.

- **Clean** all aquatic plants, animals and mud from your boat, motor or trailer and discard in the trash. Rinse, scrub or pressure wash, as appropriate away from storm drains, ditches or waterways. Lawns, gravel pads, or self-serve car washes are best.
- **Drain** your motor, live well, bilge and internal compartments on land before leaving the waterbody. For paddle boats, drain by inverting or tilting the craft, opening compartments and removing seats if necessary. Rinse or flush under flooring, at inflation chamber joints or other areas that can trap mud and debris.
- **Dry** your boat between uses if possible. Leave compartments open and sponge out standing water. Find a place that will allow the anchor line to dry.
- **Pull the plug prior to transport!**

What challenges do boat brokers/sellers have that hinder their ability to ensure boats are Clean, Drain, Dry prior to sale or transport?

Time and money

Lack of time

Lack of awareness of issue

time

An easy way to do it

Time/money/equipment

Wake boats--may be launched for testing and then fully draining is difficult

Brokers often don't have a physical location to ensure it is done.

What challenges do boat brokers/sellers have that hinder their ability to ensure boats are Clean, Drain, Dry prior to sale or transport?

May be handled by state registration agencies, anyone who owns a boat may sell it

Personal responsibility on the owner

Time , profit margins

Shared vision / invasives

Boat owners should be held accountable

Boats aren't designed well for inspection and decons

When boats are registered make it a mandatory visual like some states do with cars

Cost, lack of education

What challenges do boat brokers/sellers have that hinder their ability to ensure boats are Clean, Drain, Dry prior to sale or transport?

Not a priority

What else could boat brokers/sellers do to ensure boats sold are Clean, Drain, Dry?

Offer as a complimentary service to increase sales/buyer experience

Outreach information on websites, pamphlets on site

Educate new owners of impacts of AIS

law like food transportation law

Not all sellers sell boats that have been in water so should think about providing them general info at point of sale

Broker sellers have a fine if it's not

Expert guidance

disclaimers on craigslist boating page and/or other reseller sites?

What else could boat brokers/sellers do to ensure boats sold are Clean, Drain, Dry?

Have a clear history of where the boat came from

Brokers should perform service prior to sale

A standard of costs for the services

Agreements with manufacturers for CDD before shipment to broker

Make sure to remind boat owner to inspect boats before recreating. Boater history and services provided before sale.

require verification of CDD as part of sale

Could a decon reimbursement process be developed for brokers/marinas in the great lakes region?

Used boats are difficult-- develop relationships with storage locations (for drying) and decon locations and ensure boats are off the water and decon done before buyer viewings

Next Steps

- Share information about project to Great Lakes and Lower Colorado River organizations, businesses, and agencies.
- Identify key challenges to transporting *Clean, Drain, Dry* watercraft as well as potential solutions.
    - Focus groups
    - Site visits
- Share and obtain feedback, refine recommendations.

Contact Lisa DeBruyckere @ lisad@createstrat.com