

# Wisconsin's Aquatic Invasive Species Program...how are we doing and where are we going?

Presented by

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WDNR Aquatic Invasive Species Coordinator

# AIS Report Card

<b>AIS Management Plan Goals</b>	<b>Score</b>	<b>Comments</b>
AIS Prevention – keeping AIS out of Wisconsin		
AIS Containment – keeping AIS from moving in Wisconsin		
AIS Control – minimizing the impact of AIS on Wisconsin		

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AIS Prevention – keeping AIS out of Wisconsin		Numerous pathways to consider; ballast water, internet sales, transient boaters/anglers, etc.
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AIS Containment – keeping AIS from moving in Wisconsin		Various prevention activities; Information and education, CBCW, Water Guards, Publications, etc.
AIS Control – minimizing the impact of AIS on Wisconsin		Aquatic herbicides, DASH units, mechanical harvesting, PL Biocontrol

# How do AIS get into Wisconsin?

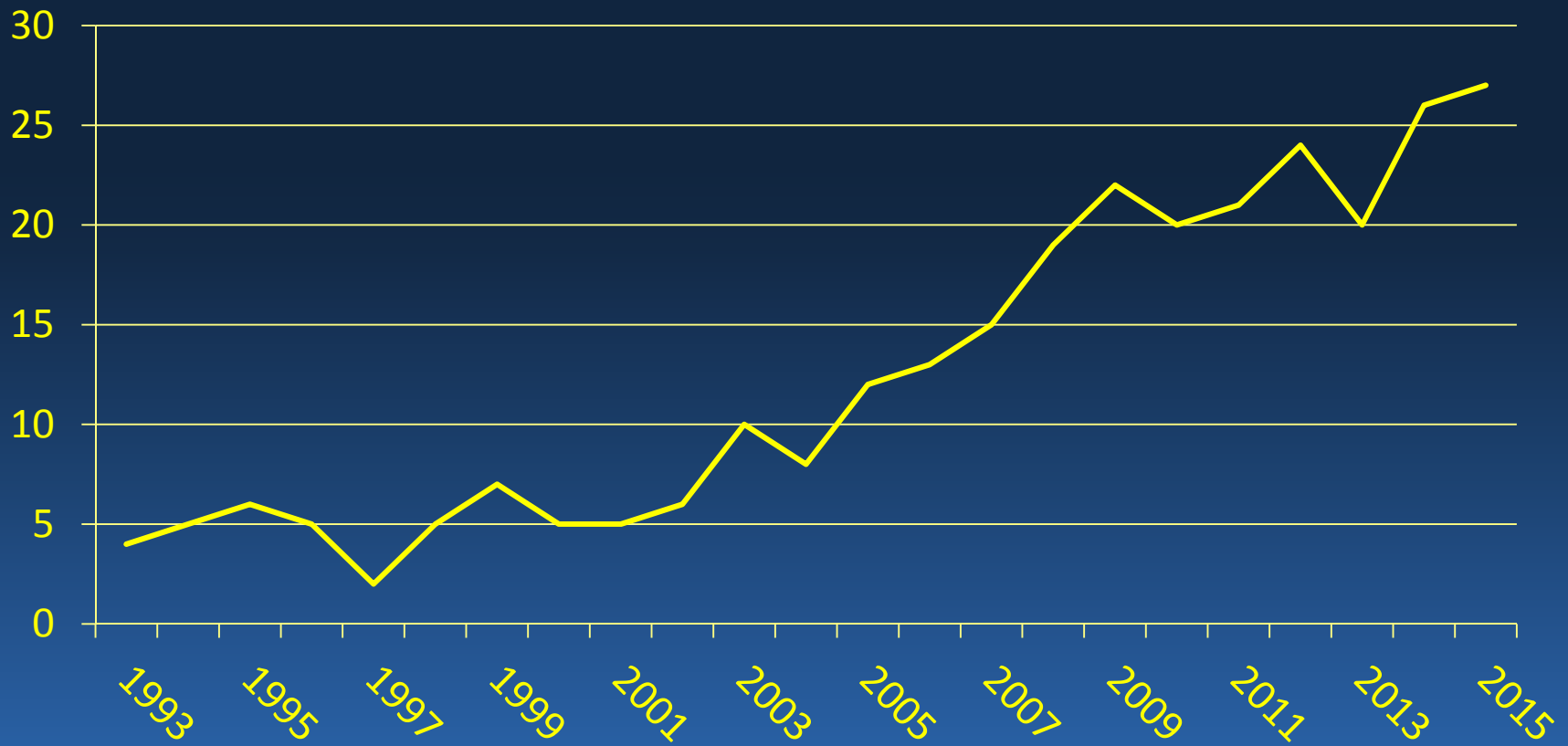
Pathway	Example
Public Activities: Recreational & Service Providers	Boating, fishing, diving, etc.
Field Activities	Monitoring, control work, agency field work
Construction & Roadside Maintenance	Construction, ground transportation, mowing, roadside plantings
Maritime Commerce	Ballast water, hull, anchor, superstructure fouling
Organisms in Trade	Pets/aquaria, shoreline habitat restoration, online, plant release, classroom specimens
Commercial fishing, Fish mgmt., Aquaculture	Equipment, live bait, aquaculture facilities, charter fishing/guides, live food fish
Dams, Canals, and Diversions	Lift locks, canals, dredging, dam removal

# AIS tracked in Wisconsin

Banded Mystery Snails (BMS)	Round Goby (RGOBY)	Java Waterdrop (JWD)
Chinese Mystery Snails (CMS)	Rusty Crayfish (RUSTYC)	New Zealand Mudsnail (NZMS)
Curly leaf Pondweed (CLP)	Western Mosquito Fish (WMF)	Quagga Mussel (QM)
Eurasian Water Milfoil (EWM)	Yellow Iris (YIRIS)	Red Swamp Crayfish (RSC)
Flowering Rush (FR)	Zebra Mussel (ZM)	Silver Carp (SCARP)
Freshwater Jellyfish (FJ)		Spiny Naiad (SNAIAD)
Hybrid Milfoil (HM)	Asiatic Clam (AC)	Spiny Waterflea (SWF)
Japanese Hops* (JH)	Bighead Carp (BH)	Starry Stonewort (SSW)
Japanese Knotweed (JK)	Brittle Water nymph (BN)	Water Hyacinth (WH)
Japanese Mystery Snail (JMS)	Faucet Snail (FS)	Water Lettuce (WL)
Phragmites* (PHRAG)	Fishhook Waterflea (FH)	Yellow Floating Heart (YFH)
Purple Loosestrife (PL)	Giant Hogweed (GHW)	 Restricted
Rainbow Smelt (RSMELT)	Grass Carp (GC)	 Prohibited

# AIS History

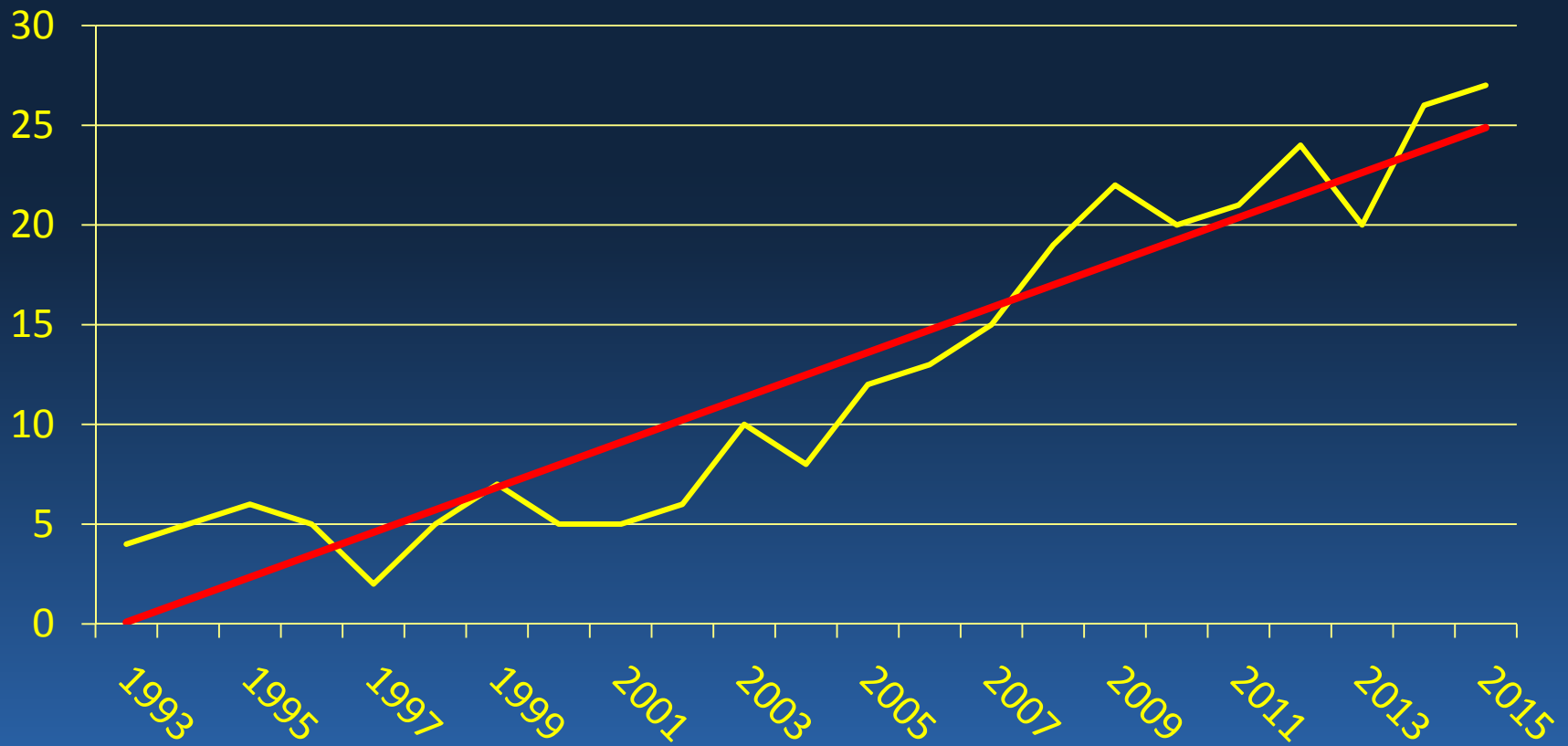
No. of AIS Detected Per Year





# AIS History

No. of AIS Detected Per Year



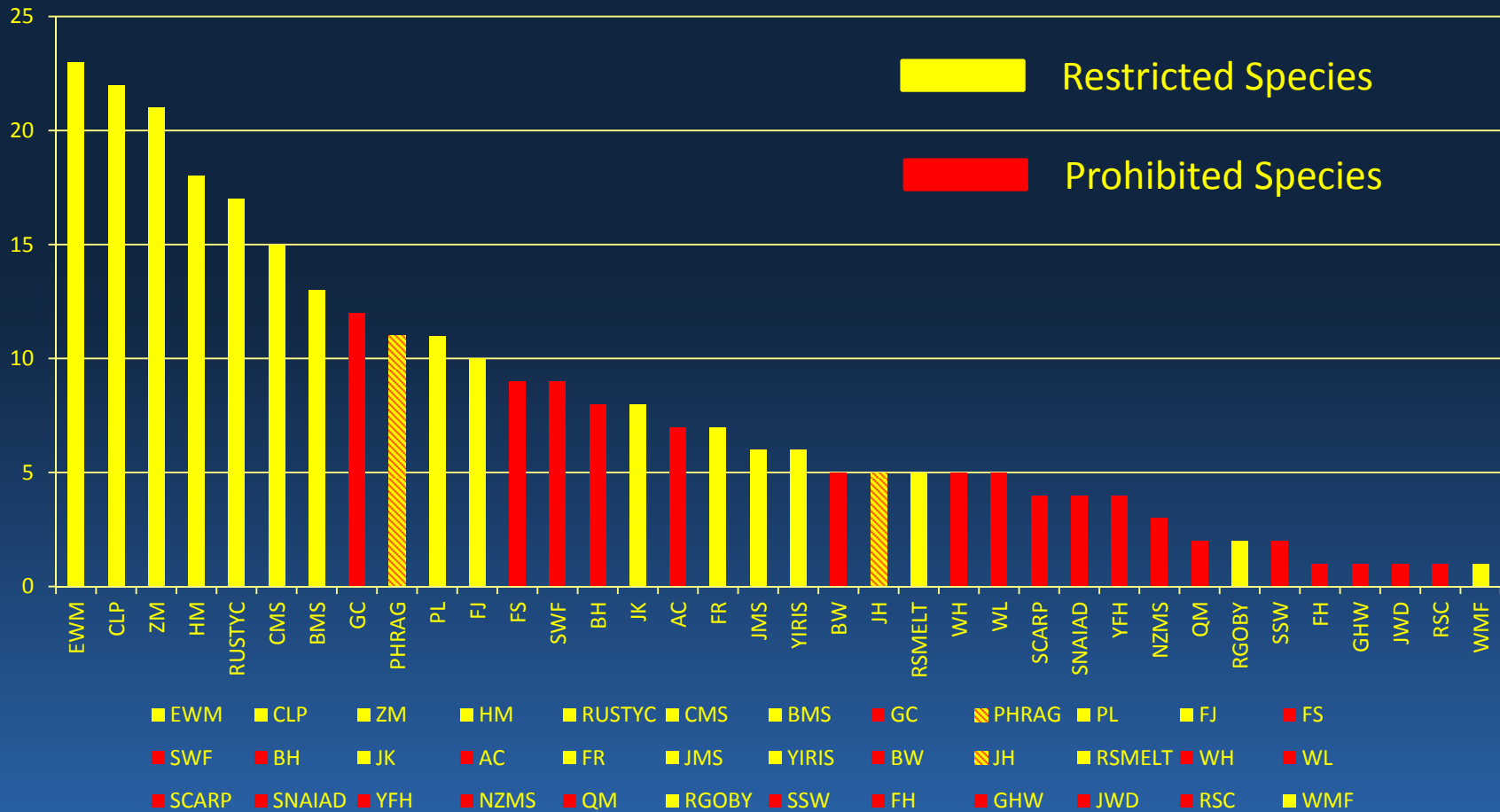
# AIS History

No. of AIS Detected Per Year



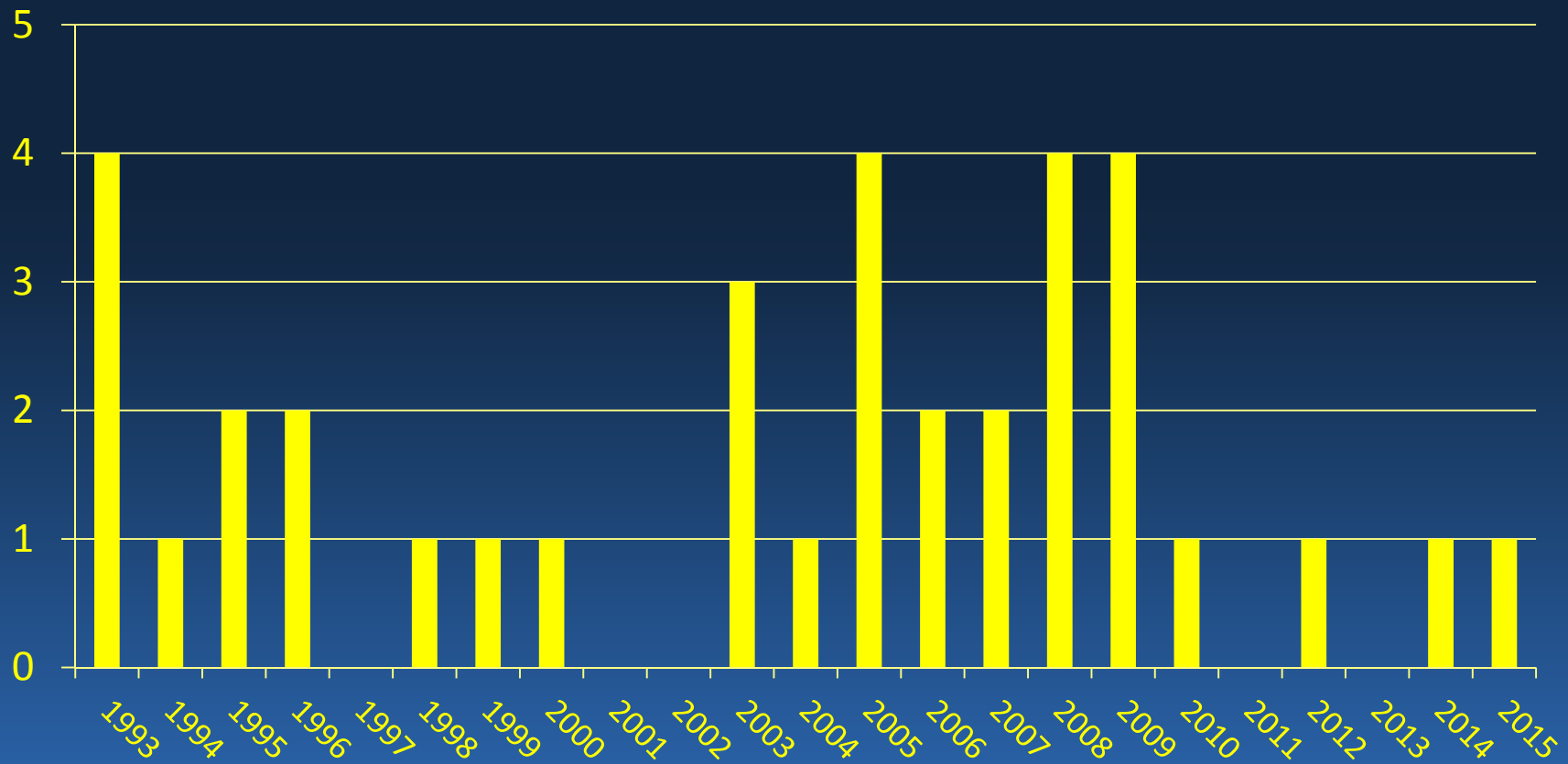
# AIS – Number of Years Detected

(1993 – 2015)



# AIS History

## Number of New AIS Detected

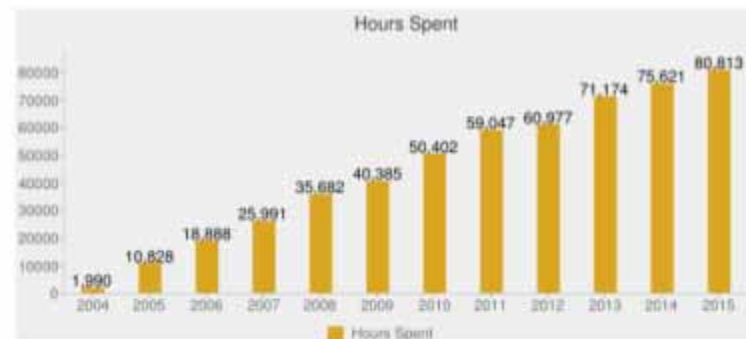
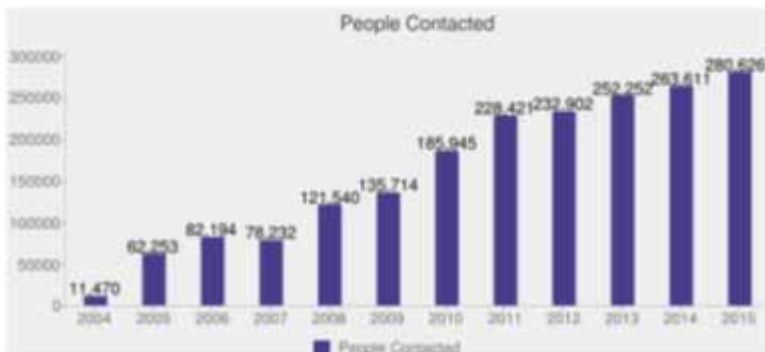
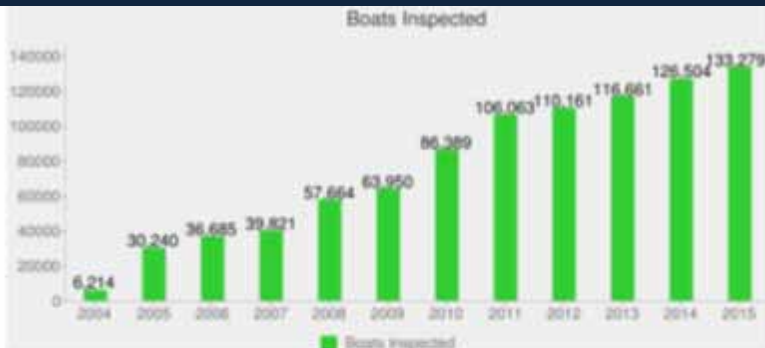


# AIS Prevention

(Keeping AIS out of Wisconsin)

Pathway	AIS
Public Activities: Recreational & Service Providers	Rusty crayfish, Rainbow smelt, Starry stonewort, New Zealand Mud snail
Field Activities	New Zealand Mud snail, Spiny Water flea
Construction & Roadside Maintenance	Phragmites, Purple Loosestrife
Maritime Commerce	Round Goby, Asiatic clam, Spiny Water flea
Organisms in Trade	Western mosquito fish, Water lettuce, Water Hyacinth, Flowering Rush
Commercial fishing, Fish mgmt., Aquaculture	Asian carps, Banded mystery snail, Red Swamp crayfish
Dams, Canals, and Diversions	Rainbow smelt

# AIS Containment



# AIS Containment

- 2011 – 2015 AIS monitoring was conducted specifically to examine the question of AIS containment or spread.
- Results indicated that the rate of spread is staying the same in Wisconsin.

# Your boating and fishing experience

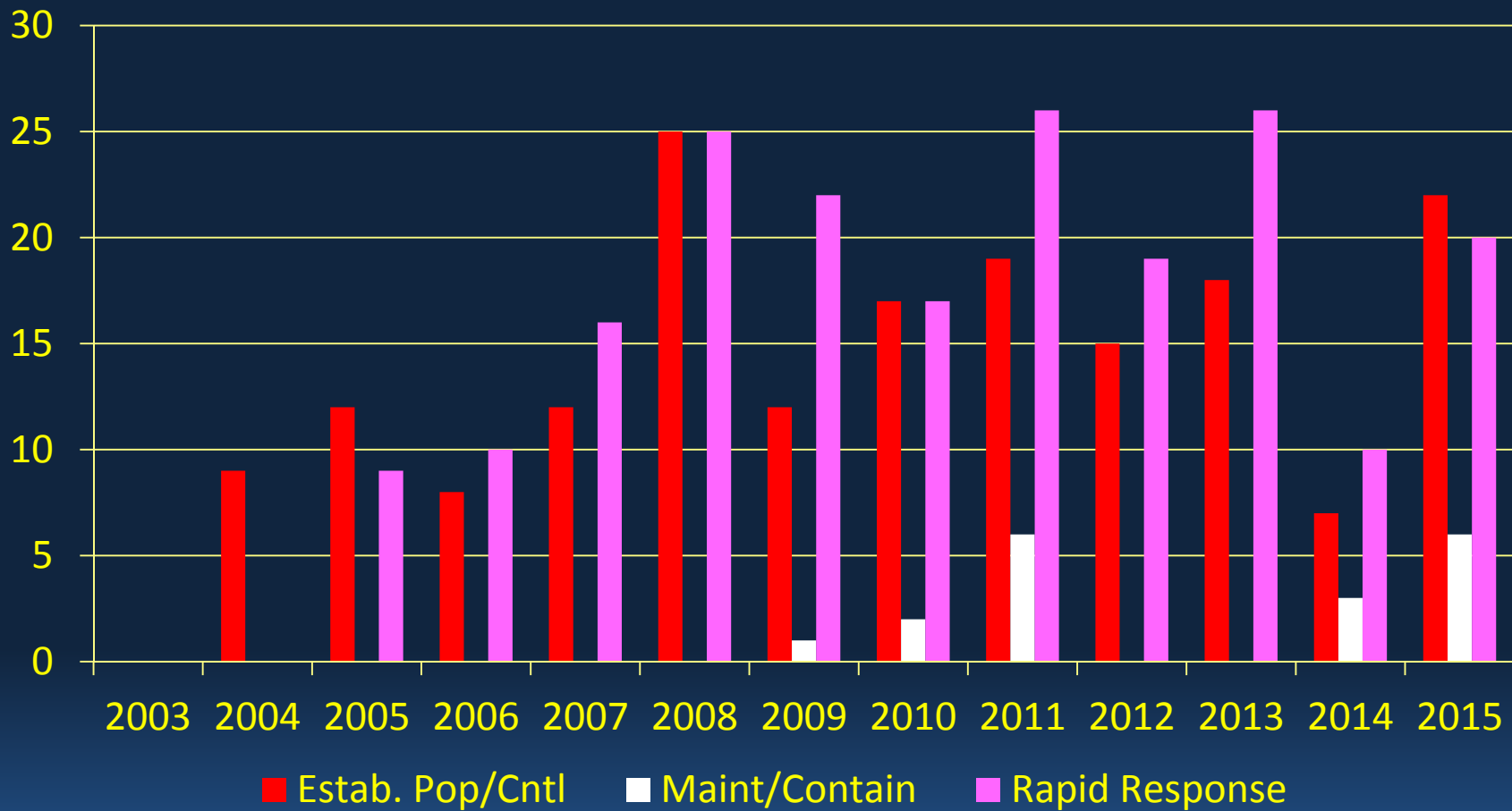
## (2013 Boater/Angler Survey)

When you go fishing or boating how often do you...?	1 = Never, 5 = Always
Remove plants and animals for boat and equipment before leaving the landing?	4.53
Drain water from the boat before leaving the landing?	4.78
Drain water from the motor before leaving the landing?	3.78
Drain water from the live well before leaving the landing?	4.31
Drain water from a bucket or other container before leaving the landing?	3.95
Transport your catch away from a water body using a live well, bucket or other container filled with water?	2.08
Put your catch on ice when you leave a water body?	2.85
Add lake or river water to your minnow container?	2.22
Use leftover live bait minnows on a different water body?	1.47



# AIS Grants

(2003 – 2016)



# AIS Control

- The color of Wisconsin wetlands has changed.
- Phragmites has been pushed away from critical lake rich areas of the state.
- Eurasian Water Milfoil continues to be our focus for long-term effective control.
- From hand pulling to DASH to whole lake treatments, aquatic plant management has evolved significantly in the last 10 years.
- New species (SSW) causes us great concern.

Where are we headed?

# Idaho's Invasive Species Boat Check Stations - 2009-2013

The Idaho State Department of Agriculture has placed inspection stations on major highways at or near the Idaho state line. These stations inspect all watercraft entering the state looking for Quagga and Zebra Mussels, as well as other aquatic invasive species. The following maps showcase some of the data collected during those inspections during the first 5 years of the program.

Residence Destination Previously Visited Risk to Idaho

## Home Residence of Boaters 2010-2013

### Boating Traffic - Home?

Watercraft owners travel long distances to recreate. Whether they know it or not, they can potentially be transporting non-native aquatic invasive species as they recreate.

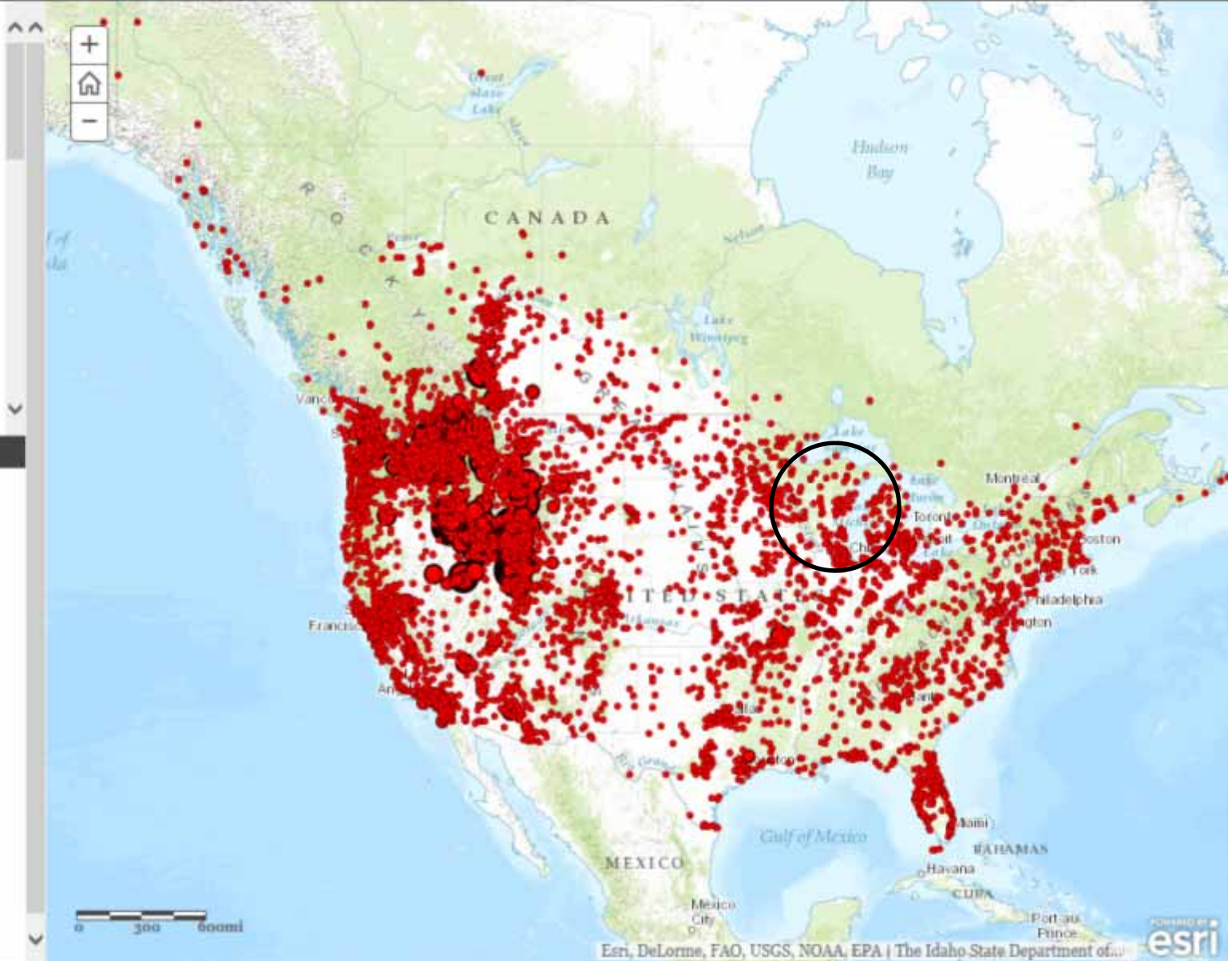
Invasive plants and animals threaten native species and interfere with municipal, commercial and agricultural water supply and distribution, and recreational activities. In their native environments, populations

### EGEND

#### Home Residence of Boaters

Zip Code (region) Frequency 2010-2013

- 1 - 50
- 51 - 100
- 101 - 500
- 501 - 1000
- 1001 - 5000
- 5001 - 13036



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- Residence
- Destination
- Previously Visited
- Risk to Idaho

## Destination of Watercraft 2009-2013

### Boating Traffic - Destination?

Where are all the boats heading? As the map shows, people are taking their watercraft long distances throughout North America.

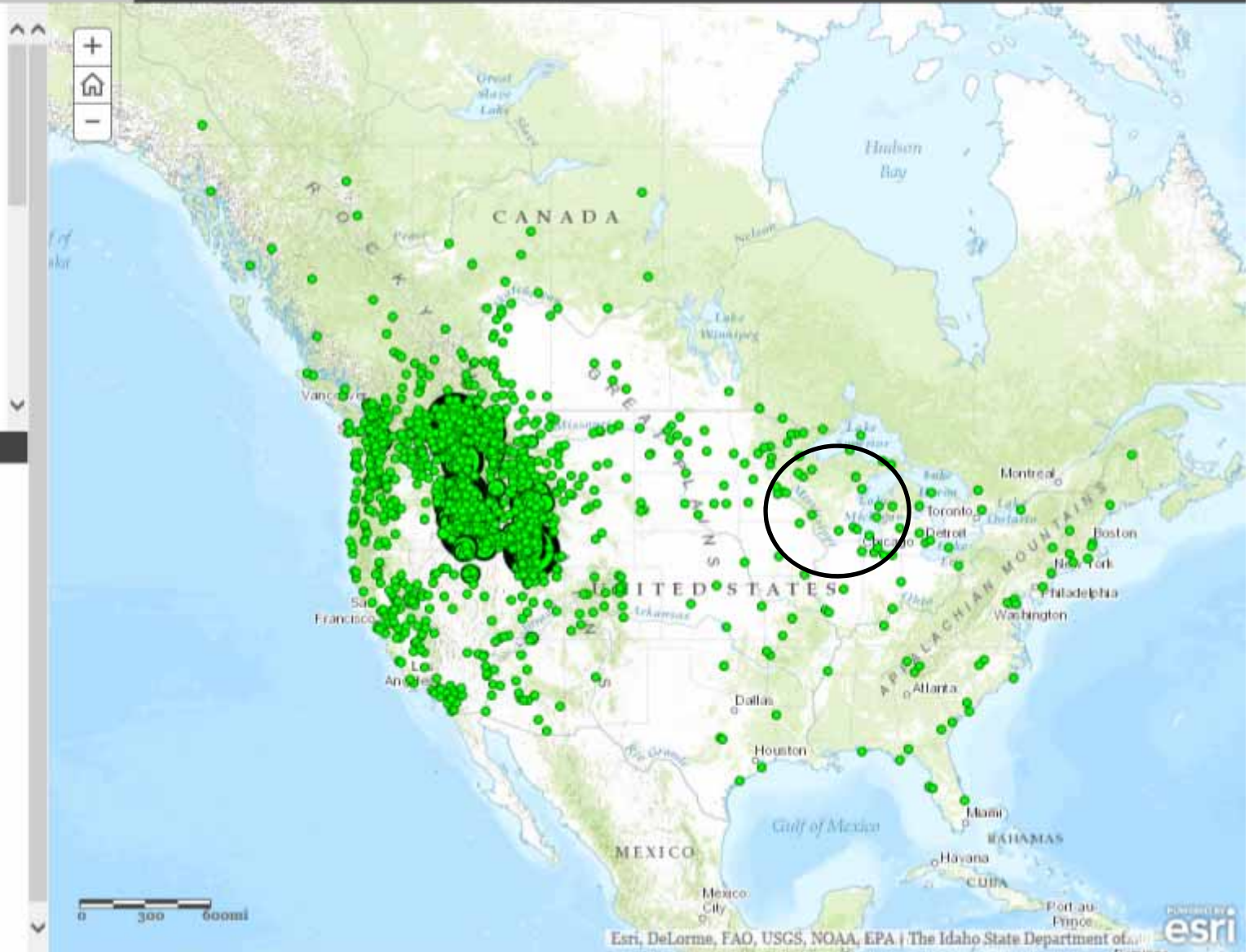
The Idaho State Department of Agriculture's road inspection stations provide a level of protection by educating the boating public on the issues of invasive species. Specifically the inspection stations teach the "Clean, Drain, Dry" protocol.

### LEGEND

#### Destination of Watercraft 2009-2013

Frequency 2009-2013

- 1 - 50
- 51 - 100
- 101 - 500
- 501 - 1000
- 1001 - 5000
- 5001 - 22513



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- Residence
- Destination
- Previously Visited
- Risk to Idaho

## Previously Visited Locations 2010-13

### Boating Traffic - Visited?

Have you visited a lake that has invasive species in it already? Unfortunately invasive species are moving from water body to water body by hitchhiking on boats, float planes, docks, trailers, and anything else that sits in the water.

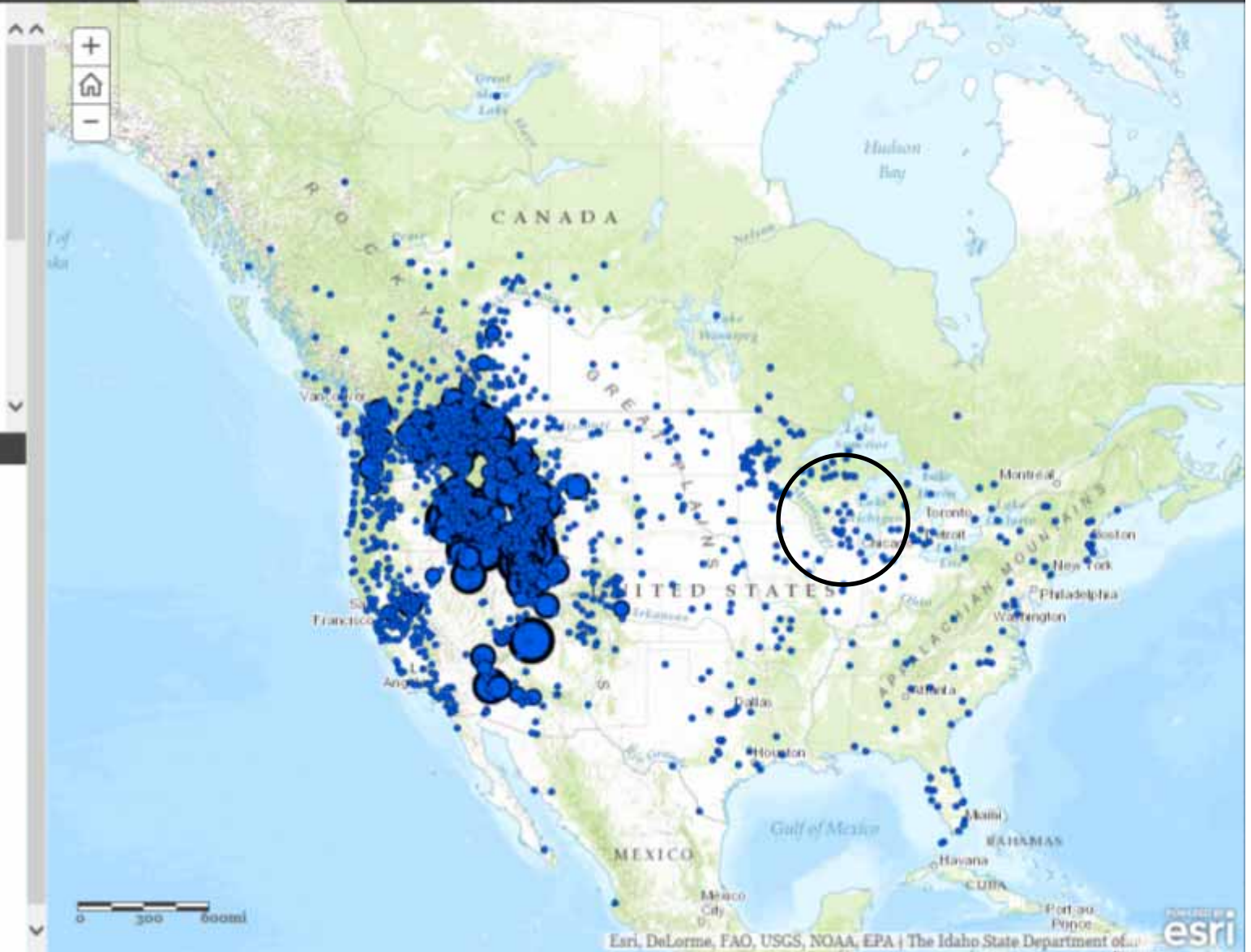
The Idaho State Department of Agriculture is interested in where you have been before you launch in Idaho. As part of the inspection process, watercraft owners explain the water bodies they have visited

### LEGEND

#### Previous Visited Water 2010-2013

Frequency 2010-2013

- 1 - 50
- 51 - 100
- 101 - 500
- 501 - 1000
- 1001 - 5000
- 5001 - 14036



# AIS - where are we headed?

- Refocus on pathways
  - Organisms in trade (OIT)
  - Update our Strategic Plan
- Stay the course on education and outreach
- Expand AIS partnership to include neighboring states
- Respond faster to new infestations
- Develop more control techniques

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“What’s the biggest room in your house? The room for improvement!”

Do you have a question?

