



# 21<sup>st</sup> International Conference on Aquatic Invasive Species October 27 - 31, 2019

Watercraft Inspection and Decontamination Programs

Western Region of the United States

“Quagga D Davis”

Stephen Phillips

Pacific States Marine Fisheries Commission



# Funded By



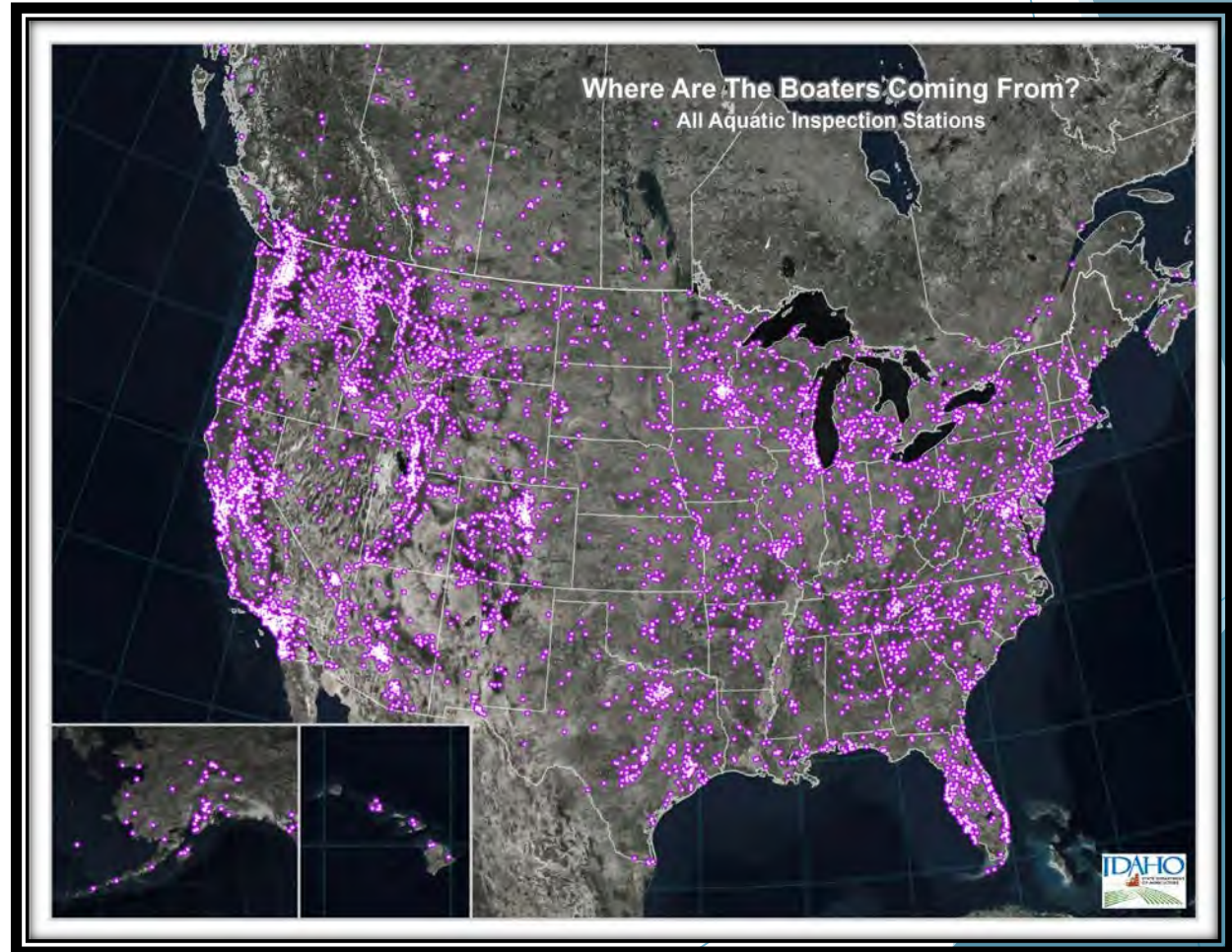
In Cooperation With





# Highest Risk Vector – Trailer-mounted Watercrafts

Implemented in early 2000's  
Lake Mead Quagga in 2007



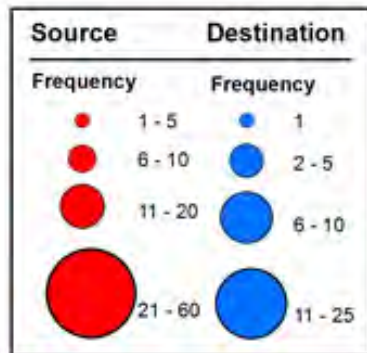
Source: Idaho Dept. Ag./S.Cox

# Fouled Watercraft Interceptions

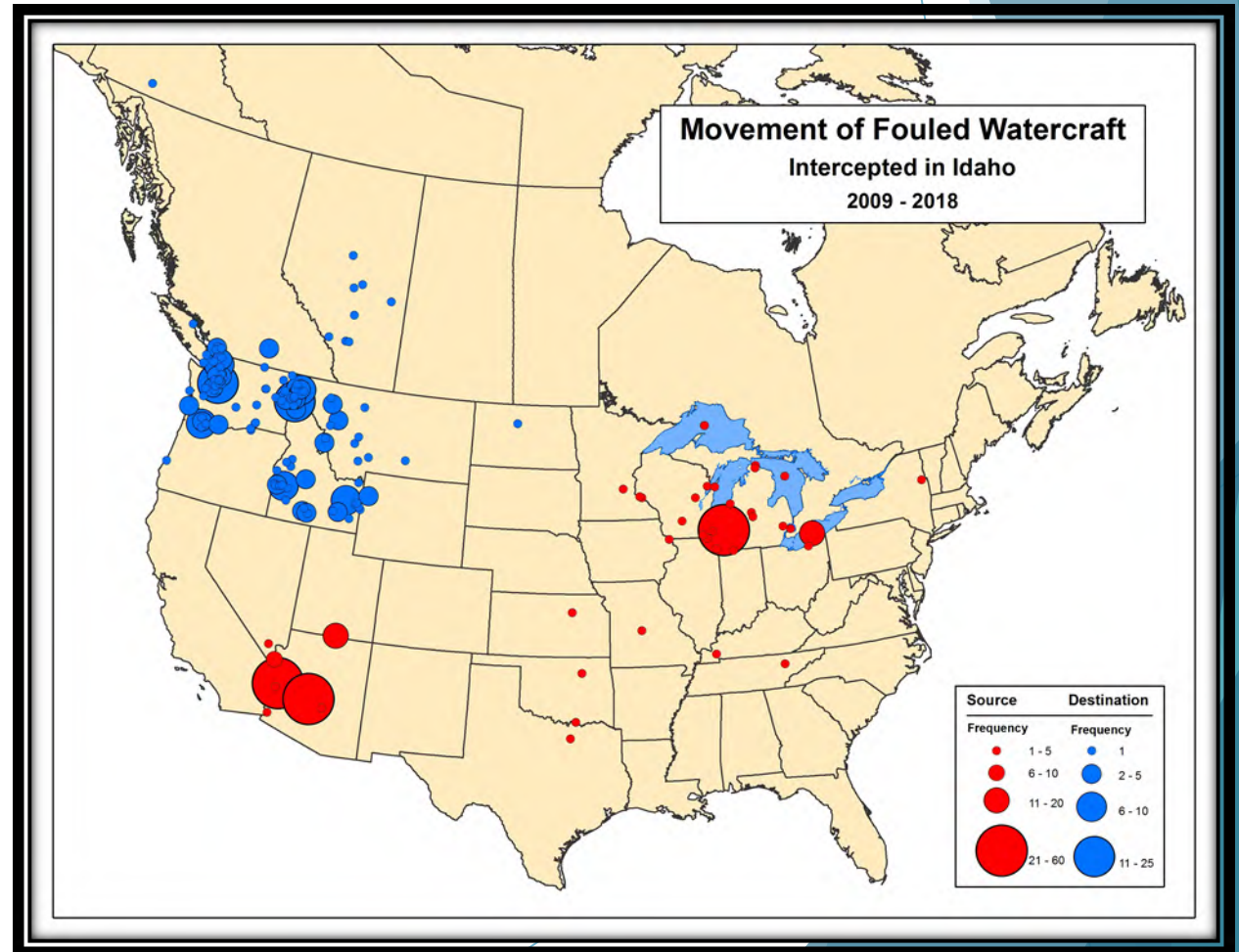


**Red** is Frequency  
where they were from

**Blue** is the Destination  
where they were going



Source: Idaho Dept. Ag./S.Cox

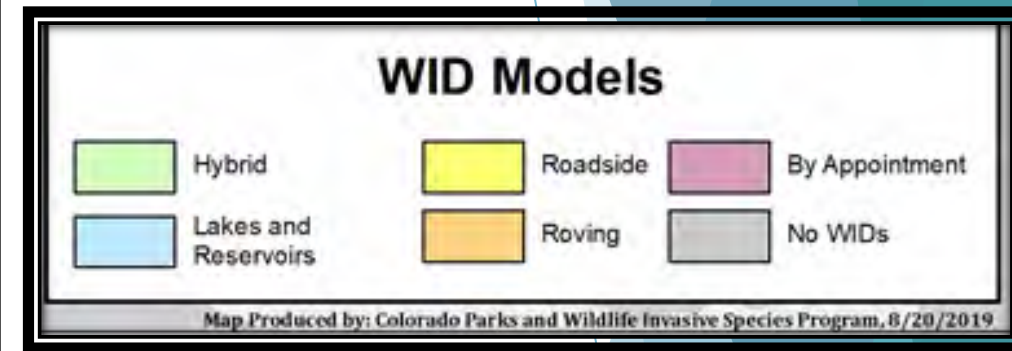




# Watercraft Inspection Station Models



Port of Entry  
Roving  
Highway  
Ramp-side  
Seasonal  
Temporary  
Permanent



# Oregon

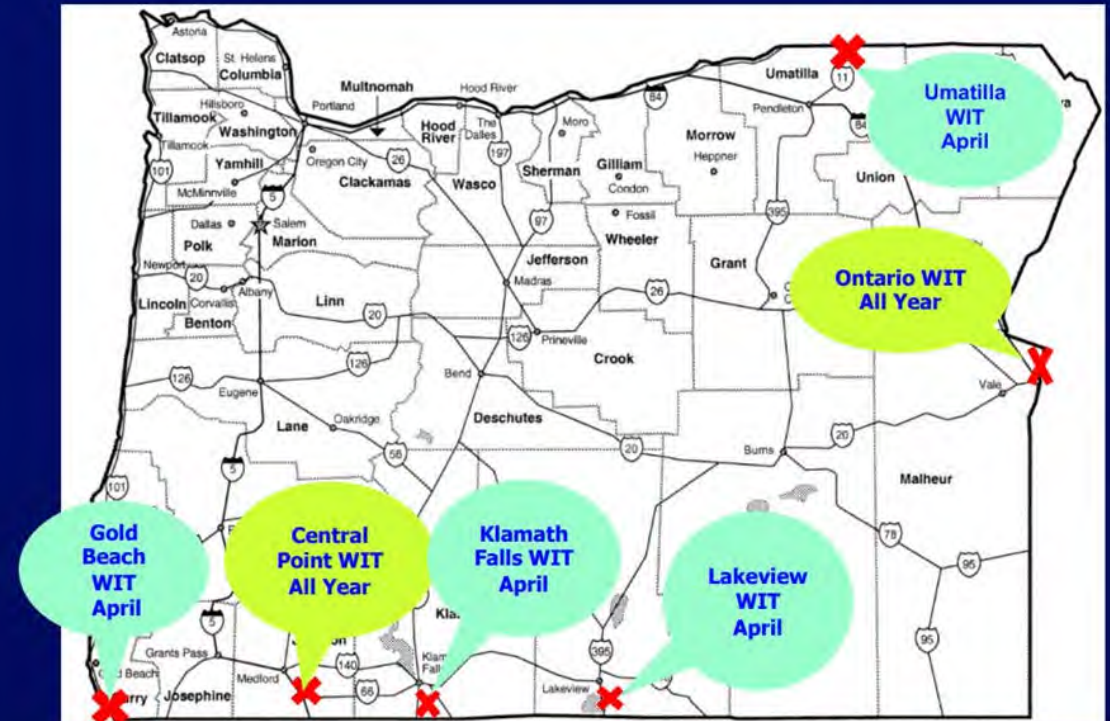


## ■ Six Watercraft Inspection Stations

- I-5 Ashland Port-of-Entry (Central Point)
- I-84 Ontario Rest Area (Ontario)
- Hwy 97 Midland Rest Area (Klamath Falls)
- Hwy- 101 Brookings Port-of-Entry (Gold Beach)
- I-82 Umatilla Port- of Entry (Umatilla)
- Hwy 79 Burns



## 2019 Watercraft Inspection Stations



Source: Rick Boatner, ODFW



# Idaho

Idaho - Began 2009

Over 720,000 Inspections

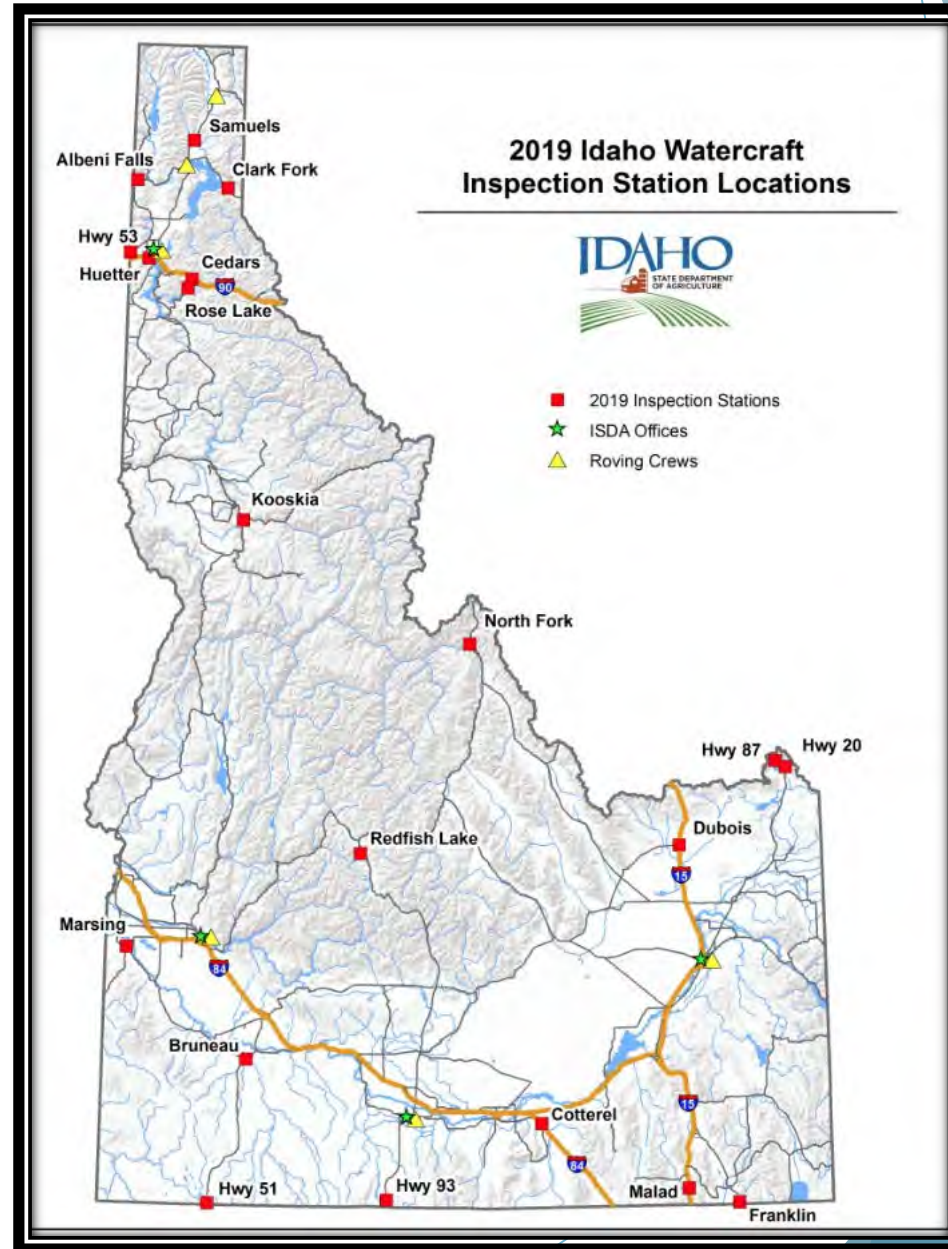
2019 Inspections - 117,862

20 Inspection stations

Extended Season

Extended Hours

Source: Idaho Dept. Ag./S.Cox



# Regional Objective

Course designed for those who are implementing Watercraft Inspection and/or Decontamination programs for their respective agencies, organizations or businesses.

WIT I - Inspection

WIT II - Inspection/Decontamination

WIT III - Train The Trainer

Advanced Decontamination





# Purpose of Curriculum

To provide Procedures which have been proven to reduce the spread of AIS through a risk-based prevention and containment program.



Student Training Curriculum for Watercraft  
Inspectors and Decontaminators  
to Prevent and Contain the Spread of  
Aquatic Invasive Species in the U.S.A.



Version 2 – Updated February 1, 2016



# Training Components

## Student Curriculum

### Introduction and Western AIS Programs

Purpose

### Zebra/Quagga and Other AIS Biology

Life Cycle and Vectors

### Watercraft Anatomy and Risk Assessment

Identify low/high risk vessels

### Inspection Procedures

NO Mud, Plant, Animals or Water

### Decontamination Procedures

KILL and Remove





# Watercraft Inspection Training

## WIT I

### WIT I - Inspector

Entrance/Exit Inspections

Prevention/Containment

HIGH Risk Inspections

Step By Step Procedures

How to inspect and why we  
Need to educate boaters on



## Clean, Drain & Dry!!



# Watercraft Inspection and Decontamination WIT/WID II



## High Risk Inspection Scenarios

- ❖ Visible signs
- ❖ Recent location history

## Triggers for Decontamination

Dry time not sufficient  
Been in infested water last 30 days  
Visible AIS or vectors  
Standing Water  
Plant  
Bait





# What Does A Decontamination Consist Of?

Hot Water to Kill

Low pressure to flush

High pressure to remove

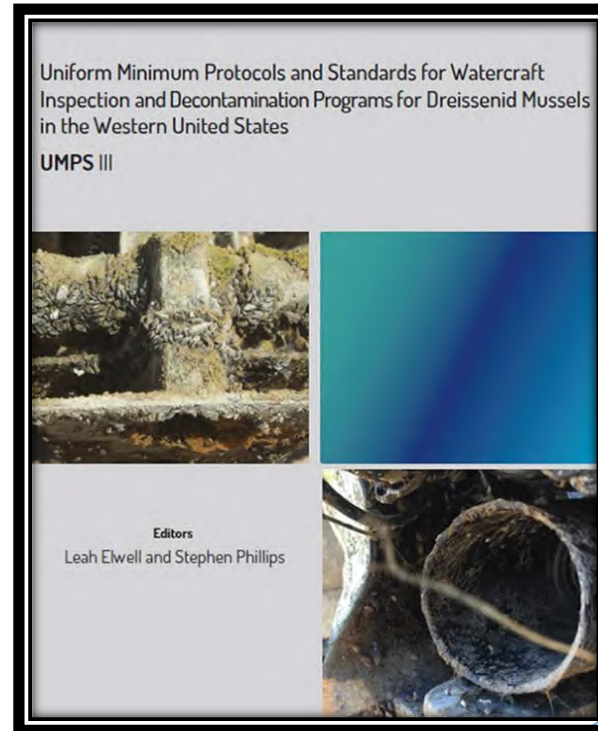
Based on Scientific Research

60° C / 140° F for 10 seconds

*Morse, 2009*

35° C / 95° F kills veligers

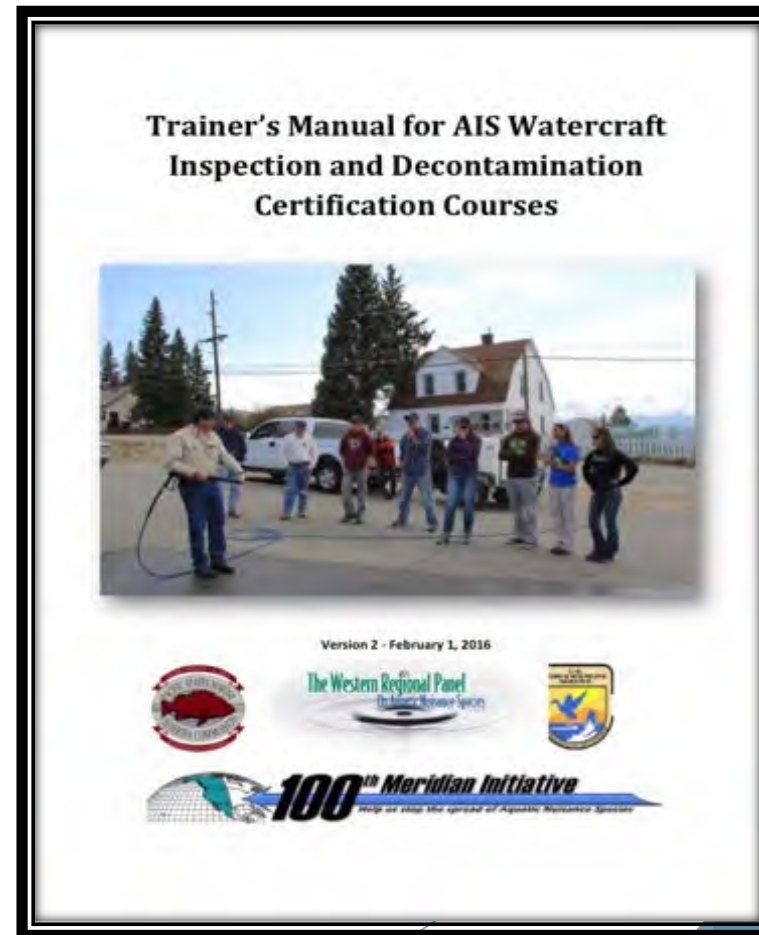
*Craft and Myrick, 2011*



# WIT III Train The Trainer

Provides consistent guidance for trainers to train adults!

- Training Methods
- Preparing for Class
- Guidance By Chapter
- Presentation Tips
- Quality Assurance Measures
- Additional Resources





# Advanced Decontamination

Advanced skills and knowledge on various complex watercraft systems and propulsion types

Effective flushing methods with attachments tools



# Education and Outreach

Education and Outreach are the **MOST** important thing to provide to the boating public.

Each inspection is an opportunity to educate the boater and change behavior by teaching them!





# Quality Assurance



Ensure consistency of WID Protocols across jurisdictions

Provide support to field stations

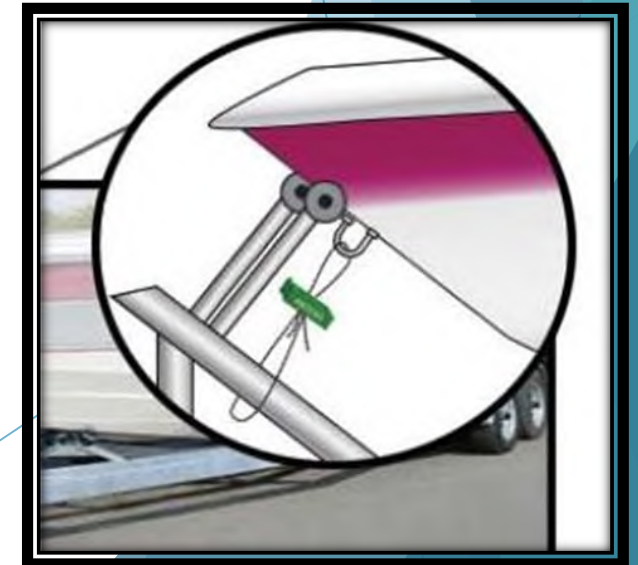
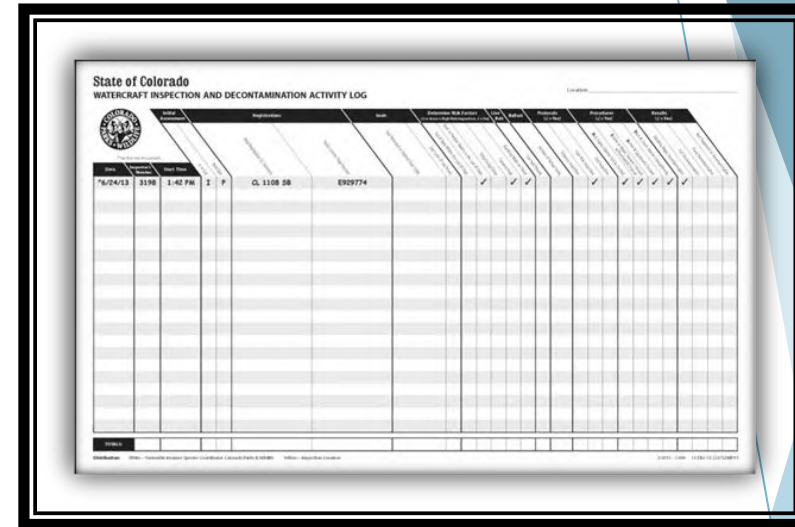
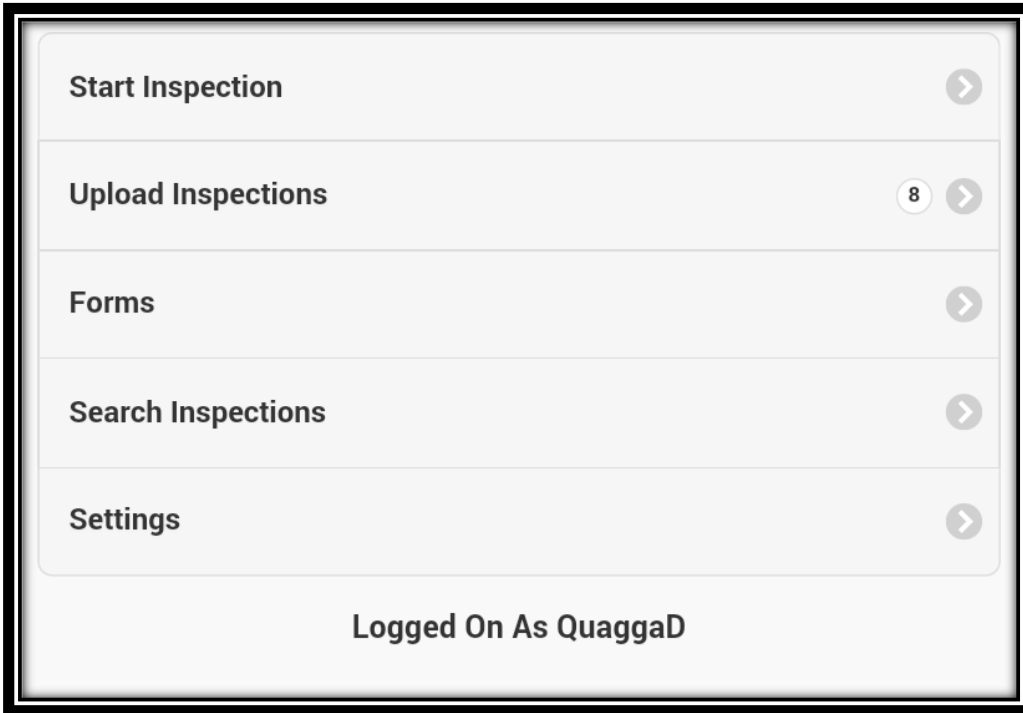
Secret Shopper Evaluations

On the Job Training

Customer Service Evaluations



# Boater movement Information in “real time”





# Challenges

- ▶ Staffing, Funding and Housing
  - Seasonal
  - Soft \$\$
  - Remote Locations
- ▶ Consistent Messaging and Protocols
  - Different triggers for “High Risk” inspections
    - ▶ Decontaminations or Dry Time



## BOATS CONSIDERED “HIGH-RISK” TO THE STATE OF IDAHO

- Boats that have been in mussel-infested states recently (within the last 30 days).
- Watercraft coming from another state (especially commercially hauled boats).
- Boats that show a lot of dirt, grime, or slime below the waterline.
- Boats that have standing water on board.



# Aquatic Invasive Species Network

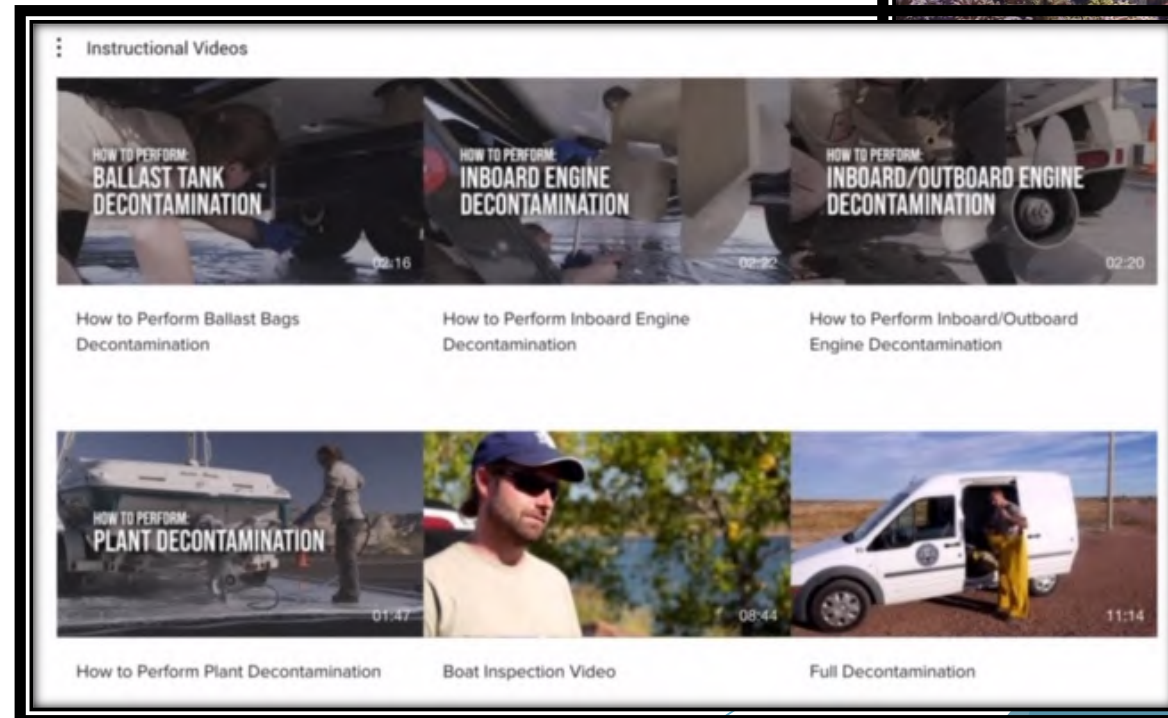
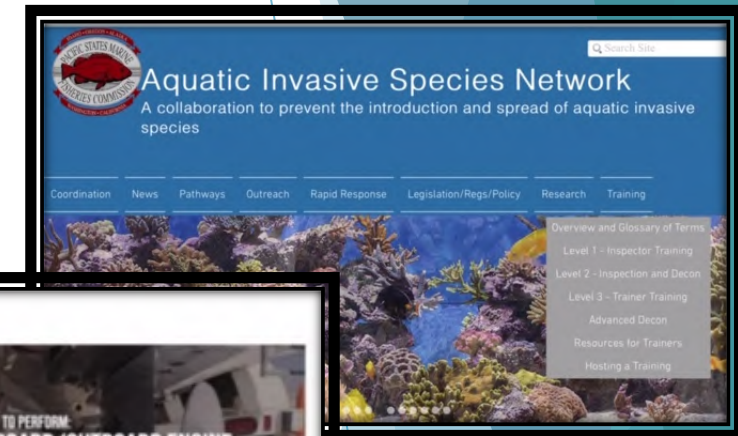
<https://www.westernais.org/>

UMPS III - Uniform Minimum Protocols and Standards

Lake Tahoe's Boat Book for Inspectors

Instructional Videos -

- Boat Inspection
- Decontamination
- Decon Units
- Sample Collections
- Plant Decontamination





# Thank You

## Questions??



Lake Mead Quagga Updates



Lake Mead Quagga

*"Quagga D" Davis*

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**702-236-3814**

Watercraft Inspection Training  
program

<http://www.westernais.org/>

*See training Tab*

