Whatcom Boat Inspections: Using technology to build a better AIS Program

CRB Team Meeting

Portland, OR

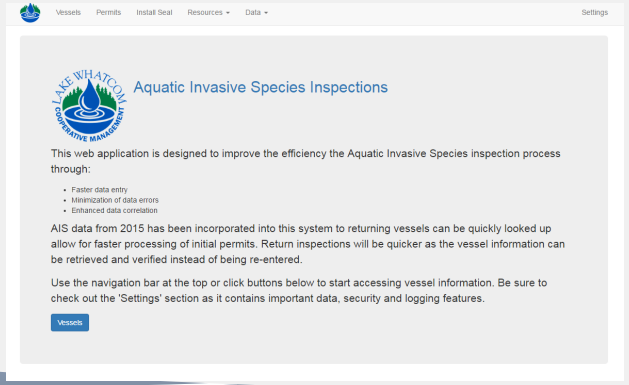
December 7, 2016

Challenges

- Scheduling
- Crew engagement
- Community outreach
- Information sharing
- **Data collection and access**

ShiftPlanning®

crowdbase



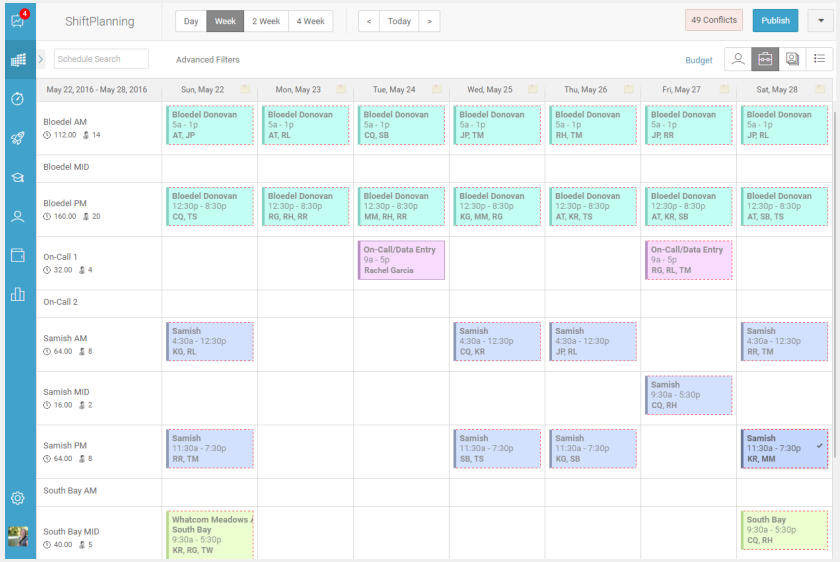
How can we use technology to overcome some of these challenges?

Scheduling

- Staff work a varied schedule at multiple sites
- Challenge: How to see and make shift changes in real time
- Solution: ShiftPlanning

Scheduling

- ShiftPlanning
  - Real-time access to schedules
  - Easily viewed on mobile devices
  - Timeclock options
  - Vacation management
  - Message board



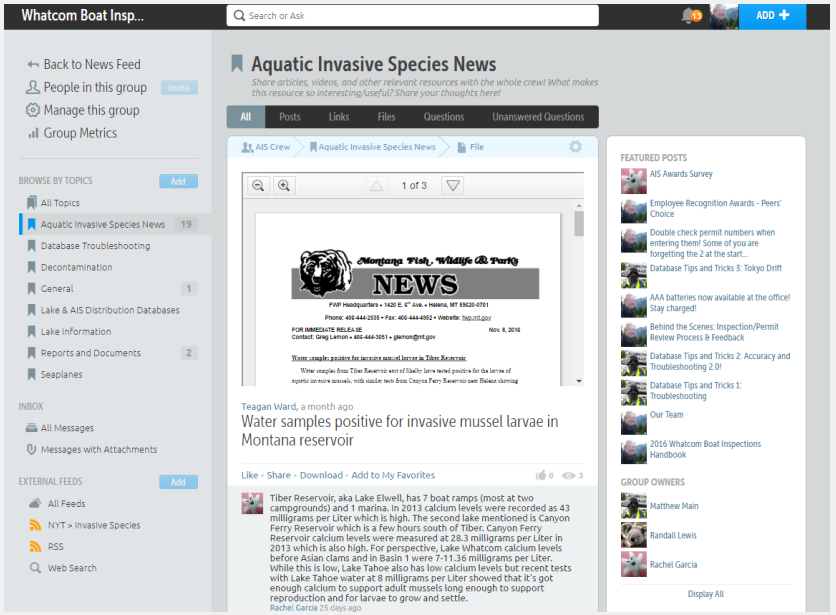
ShiftPlanning®

Crew Engagement

- There aren't always boats to inspect at the check stations
- Challenge: How to keep the crew engaged during slow periods
- Solution: Crowdbase

Crew Engagement

- Crowdbase
  - Crew portal for AIS information, news, and resources
  - Share resources with each other
  - Stay informed and engaged in AIS issues from around the globe



crowdbase

Community Outreach

- We want our community to be informed
- Challenge: How can we share our message with the community
- Solution: website and AIS Awareness Course

Nonindigenous Aquatic S
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Whatcom Boat Inspection
whatcomboatinspections.com
Apps
COB.ORG
COB Staff Central
Outlook Web Access
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Other bookma
Take the AIS Awareness Course today to receive a $10 discount on your AIS Permit
MORE
Whatcom
Boat Inspections
Home
Boat Inspections
Do Your Part
AIS 101
FAQs
CLEAN
DRAIN
DRY
YOUR BOAT
LEARN ABOUT AIS
Aquatic Invasive Species are hard to control once they are established
We need your help to protect Whatcom County waters. Together, we can stop the spread of aquatic invasive species and protect our environment, our drinking water supply, and our way of life.

Whatcom Boat Inspections

Aquatic Invasive Species
Awareness Course

Take the Online Course Today: www.whatcomboatinspections.com

Information Sharing

- How can we share our inspection results with the community?
- Solution: ESRI Story Map and online annual reports

Information Sharing

- ESRI Story Map
  - Share boater survey information with the public
    - where are boaters coming from?
    - where are they going?
    - what risk do they pose to our local waters?

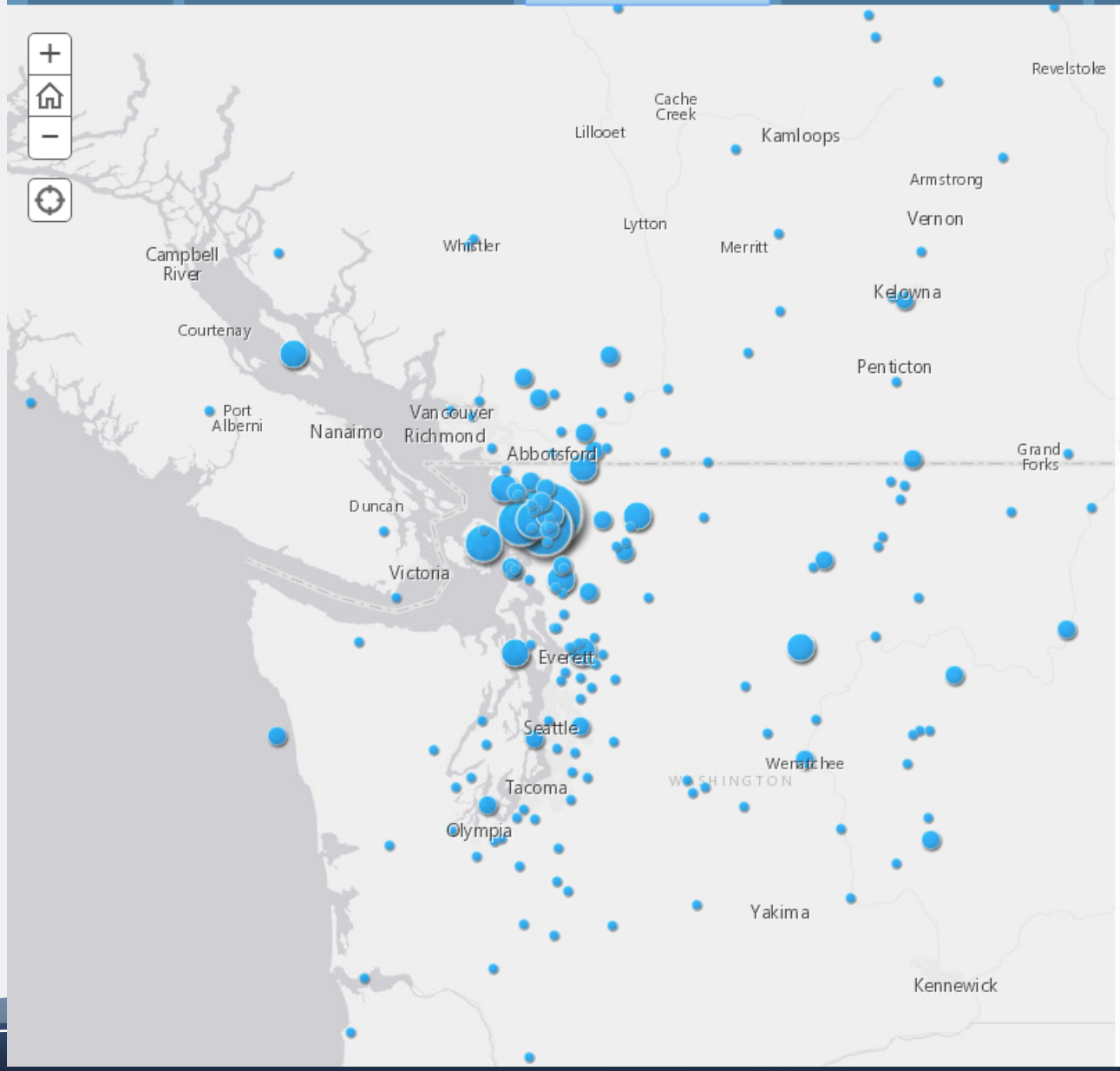
http://whatcomboatinspections.com/2016-story-map

Protecting Lake Whatcom & Lake Samish from Aquatic Invas

A story map

Whatcom Boat Inspections

Introduction | Home Residence of Boat Owners | Last Water Body Visited | Previous Water Bodies Visited | Mussel Infested Water Bodies



Last Water Body Visited

Have you visited a lake that has invasive species in it already? Invasive species can easily move from one water body to another by hitchhiking on boats, kayaks, float planes, docks, trailers, and anything else that has been in contact with water.

When arriving at an inspection station at Lake Whatcom or Samish, inspectors will ask you where and when your watercraft was last in the water. If the watercraft has been in an infested water body in the last 30 days, it is then considered a high risk. High risk watercraft are washed with high temperature water to kill any organisms that may be present.

For more information visit
http://whatcomboatinspections.com

Last Water Body Visited 2016

Total Boats

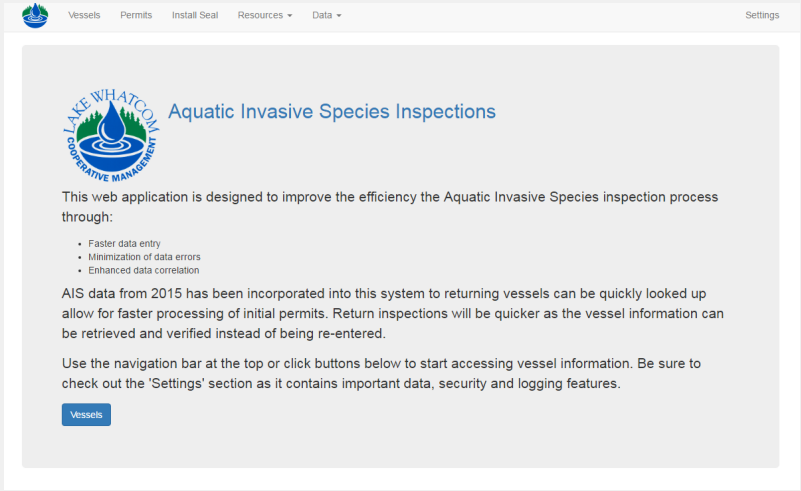
- > 1,750 To 4,840
- > 870 To 1,750
- > 250 To 870

Data Collection

- Data collection and access challenges:
  - Handwriting legibility
  - Data entry errors
  - Data entry lag time
  - No access in real time
  - Repetitive for boaters
- Solution: Inspection Web Application

Inspection Web Application

- More efficient inspections
- Access to real-time data
- Real-time risk assessment
- Waterbody database
- Minimize handwriting errors
- Minimize staff time spent entering data
- Reduce paper usage
- Boat profile picture



More time to do other things….like MONITORING!!

Inspection Risk Assessment

- Risk Score
  - Vessel Acquisition
  - Vessel Features
  - Vessel Origin
  - Waterbody History
  - Inspection Results

Vessel Acquisition

- Is the watercraft brand new?
- Was the watercraft recently purchased?
- Does the owner know the history of use for this vessel?

Vessel Features

- Ballast Tanks
- Live/Bait Wells

Vessel Origin

- Is the boat from out of state?
  - Vessel Registration
  - Trailer License Plate

Waterbody History

- Where and when was the watercraft last in the water?
- Are there aquatic invasive species of concern present in that waterbody?
- Where was the watercraft used in the past?

Waterbody Database

- Waterbodies are assigned a risk score ahead of time
- This is used in the risk calculation
- Where waterbody located
- How many vessels have been there
- AIS Risk

Inspection Results

- Was the vessel clean, drained, and dry?
- Was there standing water present?
- Was the boat dirty/crusty/slimy?
- Was there any visible vegetation or AIS that had to be removed?

The Risk Calculation

All of these scores are added up to create an AIS Risk Score for the vessel and inspection.

LOW RISK = <10 Points **MEDIUM RISK = 10-19 Points** **HIGH RISK = >19 Points**

When dealing with a higher risk boat, get another inspector or two to assist you. If the boat is **high risk**, you should contact a supervisor/lead. No situation is the same so you will need to use this tool and your observations at the scene to determine what the best course of action is.

Score	Details
5 - LOW RISK	Last Waterbody has or is suspected to have AIS (+5)

Score	Details
12 - MEDIUM RISK	Out of State Registration - NV (+2) Last Waterbody is new or doesn't yet have AIS risk data (+5) History includes waterbody that has or is suspected to have Zebra/quagga mussels (+5)

Score	Details
27 - HIGH RISK	Out of State Registration - NV (+2) Last Waterbody has or is suspected to have Zebra/quagga mussels (+20) History includes waterbody that has or is suspected to have Zebra/quagga mussels (+5)

Examples:

- Existing vessel
- New vessel
- Activity charts
- Waterbody database

- https://staff.cob.org/apps/ais/SitePages/home.aspx
- https://staff.cob.org/training/ais/SitePages/home.aspx

Questions?

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LAKE WHATCOM COOPERATIVE MANAGEMENT