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Invasive Mussel Defence Program



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Prevention: Invasive Mussel Program

Roadside Inspections -highway inspection stations at key entry points into the Province from the US and Alberta (CVSE, CBSA, MOTI, COS, Fisheries guardians)

Education/Outreach to the boating community on Clean Drain and Dry messaging to prevent AIS spread (ISCBC, regional ISC, MOTI, Parks Canada)

Early Detection Monitoring -ZQM veliger monitoring in BC lakes (ENV & FLRNO staff, regional ISC)

Collaboration— with other agencies and jurisdictions





Prevention:

Controlled Alien Species Regulation BC *Wildlife Act* and *Federal Fisheries Act – Aquatic Invasive Species Regulation*

Schedule 4 Prohibited Species (Alive or Dead):

- Prohibited to possess, breed, transport or release

Family Dreissenidae

Zebra Mussel



Quagga Mussel



Conrad's false mussel





Auxiliary Conservation Officer Designations

- Regulation and additional authorities gives our auxiliary Conservation Officers the powers to:
 - Conduct mandatory roadside inspections,
 - Conduct mandatory boat decontaminations,
 - Issue 30 day quarantine periods, and
 - Issue Warning tickets





Outreach & Education

- Partnering with Invasive Species Council of BC and regional invasive species groups on:
 - Promoting Clean, Drain, Dry message
- Reaching out to commercial haulers, boat brokers, auctions houses
- Providing training to other enforcement agencies such as RCMP, Fisheries Officers, Fisheries Guardians, and Natural Resource Officers
- Working with international boating events (e.g. Melges 24 International Sailing Event in Kelowna)





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2016 Invasive Mussel Program Expansion



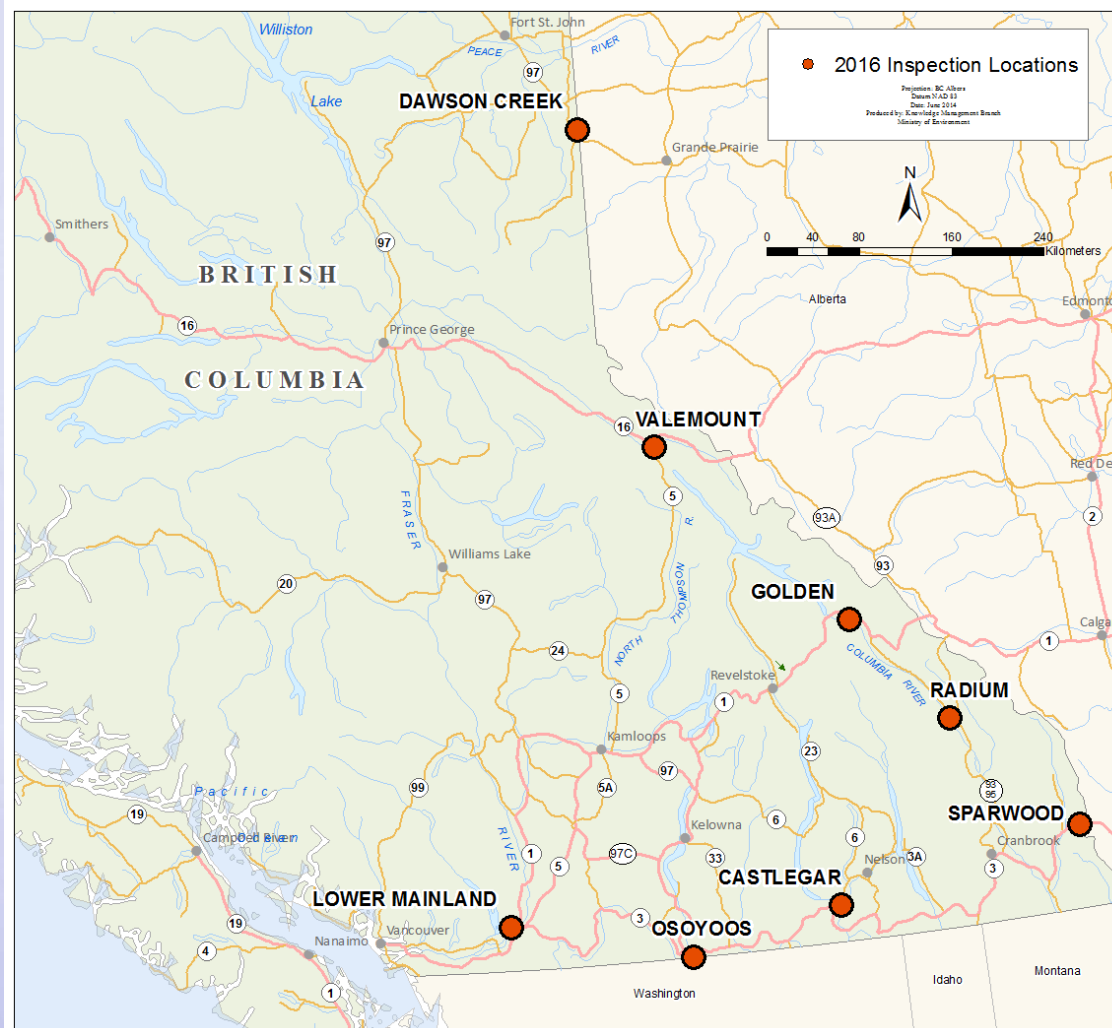


2015 Pilot Season vs. 2016 Expanded Season

	2015	2016
Type of Inspection Stations	Roving (~ 30 locations)	Permanent (8 primary locations)
Number of Auxiliary Conservation Officers	12	33*
Inspection Crews with Mobile Decontamination Units	6	8
Level of Coverage	5 days/week & 7hrs/day, June-October	7 days/week & 10hrs/day, April to September/October

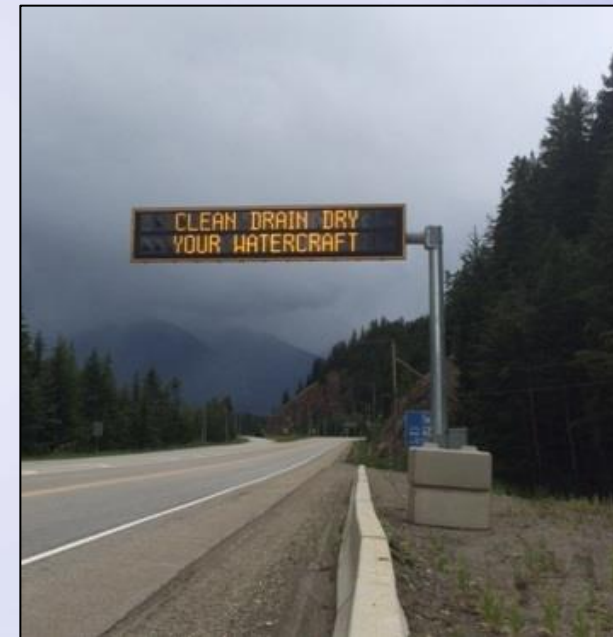


Inspection Station Coverage for 2016





New in 2016 – Improved Signage





New in 2016 - Marketing

- Internal marketing campaign including:
 - New mobile friendly website:
www.gov.bc.ca/invasivemussels
 - Facebook ad campaign
- Partnering closely with Invasive Species Council of BC on outreach/education of Clean, Drain, Dry message

Government of British Columbia
Sponsored · *

Stop the Spread of Invasive Mussels.

**CLEAN
DRAIN
DRY**

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Boaters Beware
Invasive Mussels are threatening BC Waters. Do your part to prevent the spread of invasive species. Clean, drain and dry your watercraft before transporting it.

WWW2.GOV.BC.CA [Learn More](#)



Watercraft Inspection Data 2016

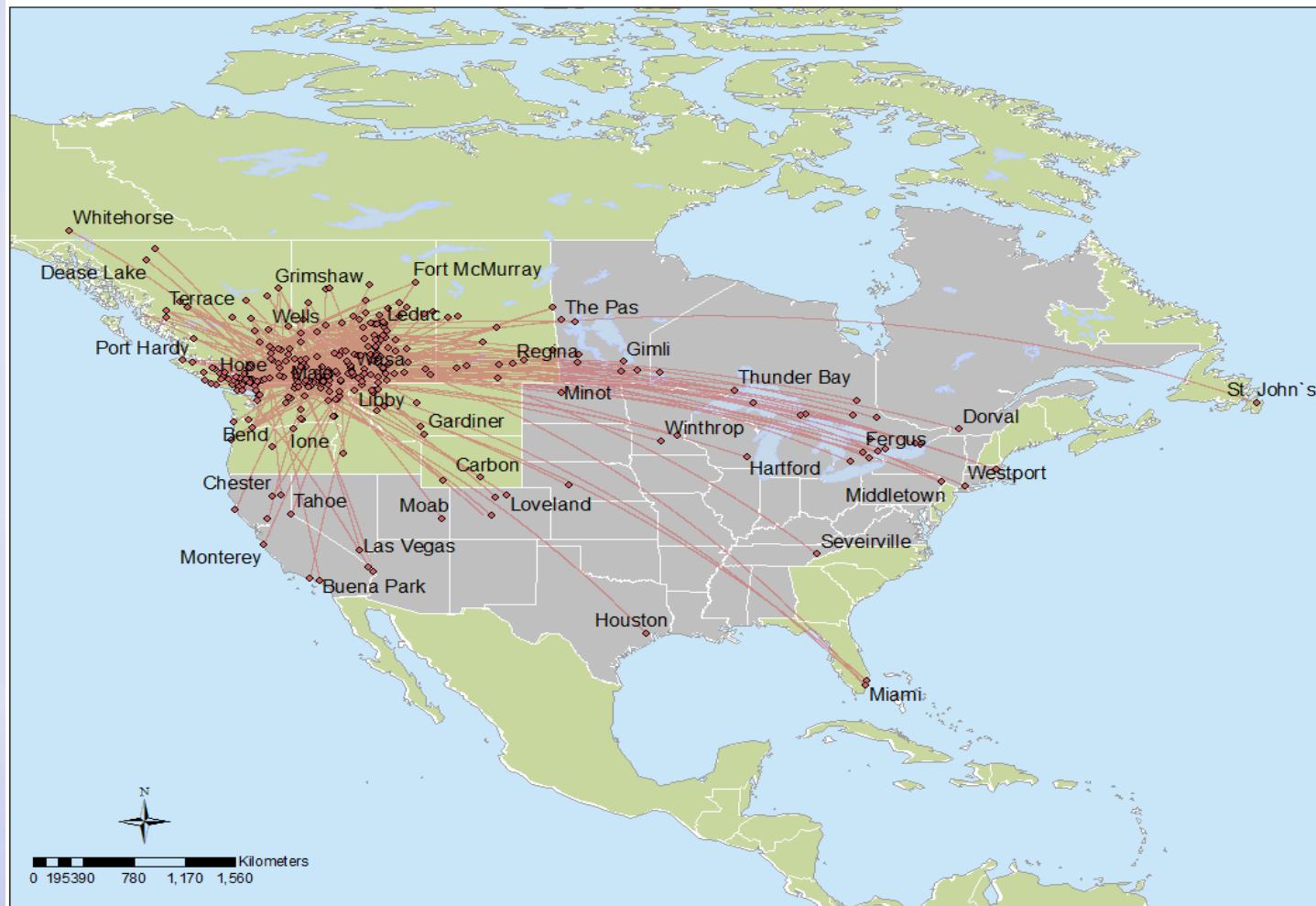
	2015	2016 *
Total Watercraft inspected	4,350	~24,500
Number of people interacted with	~10,000	~49,200
Watercraft from high risk jurisdiction	70	686
Mussel fouled boats (adults and/or larvae)	15	17

*These are not final numbers for the 2016 season as data analysis is still underway.



Source Location of All Watercraft Inspected

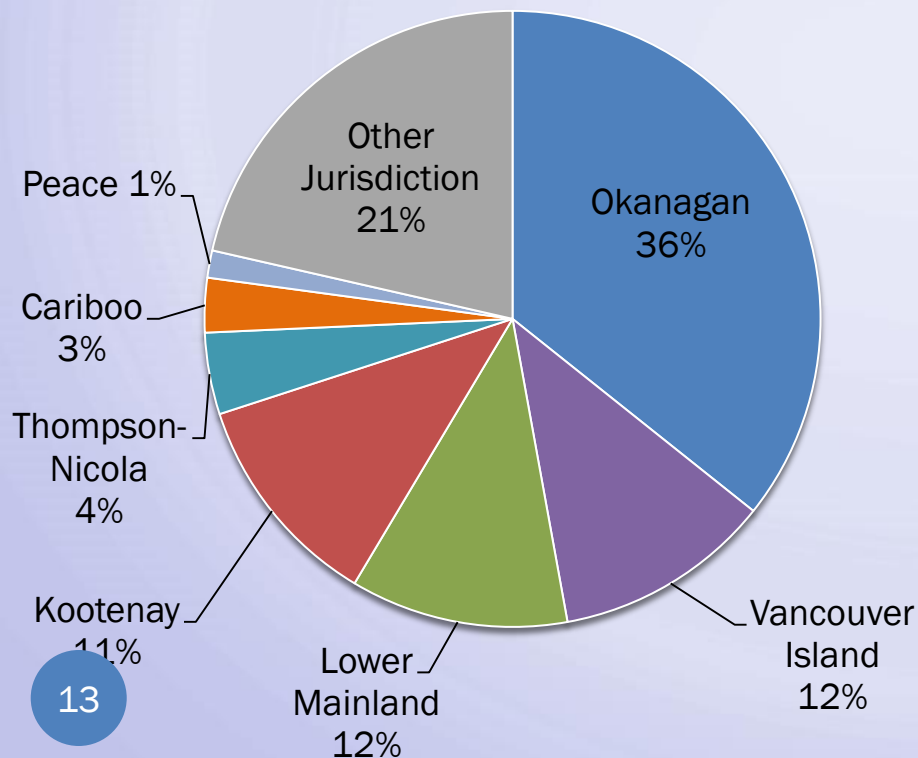
- 2015: Boats from 33 different jurisdictions
- 2016: Boats from 55 different jurisdictions



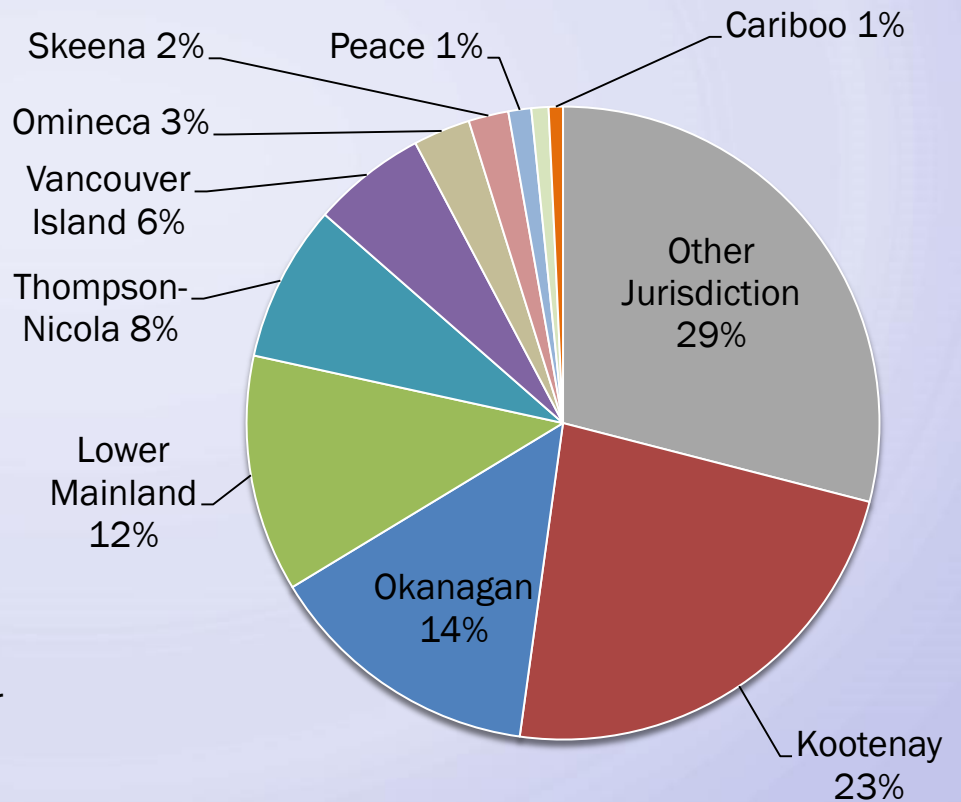


Destination of High Risk Watercraft

2015 Data



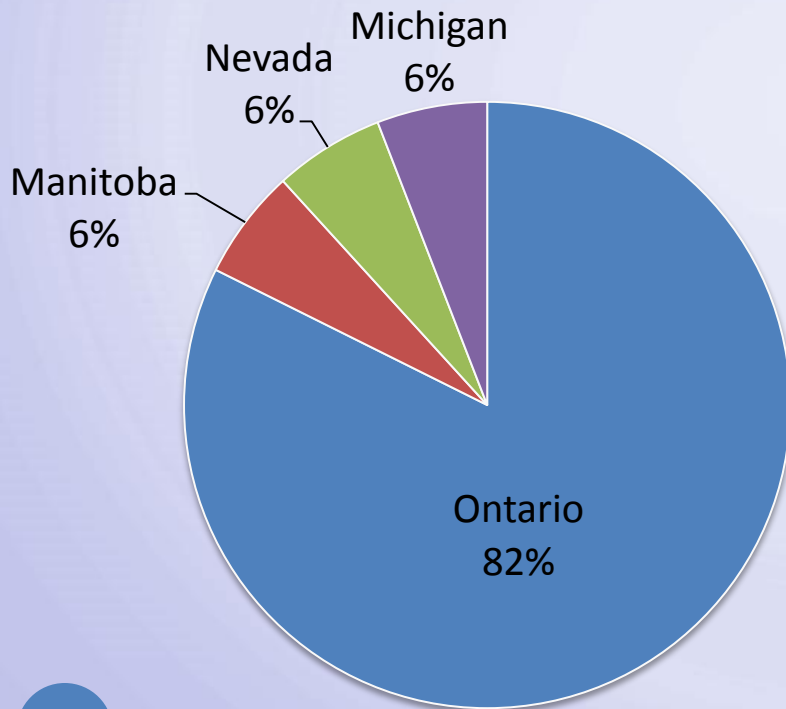
2016 Data



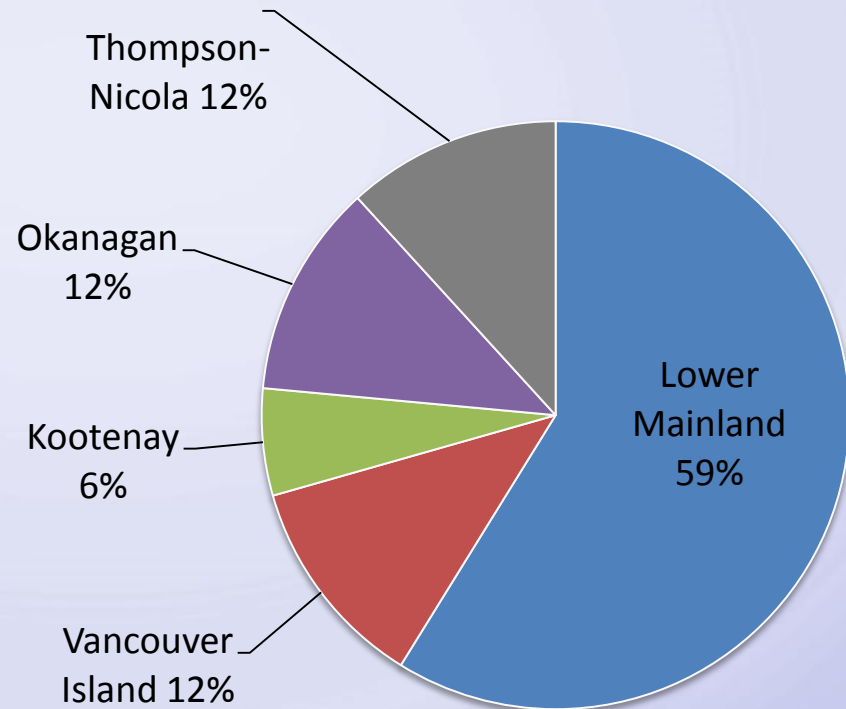


2016 Mussel Fouled Watercraft

Origin of Mussel Fouled Boats



Destination of Mussel Fouled Boats





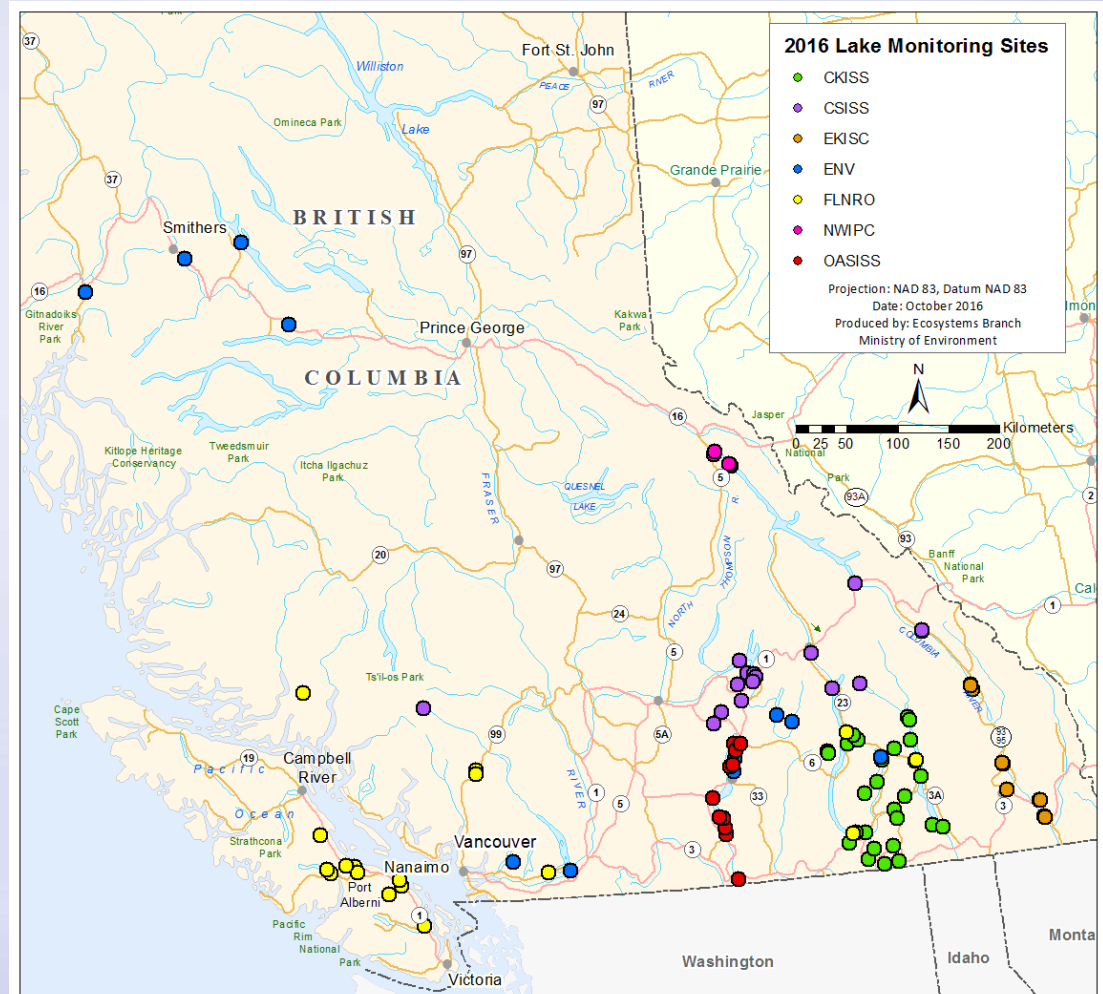
2016 Compliance and Program Effectiveness

- Average compliance across all inspection stations was 81% and up by 9% from the 2015 average of 72%.
- A total of 46 tickets and 36 warnings were issued to motorists for failing to stop at an inspection station.
- A total of 408 people voluntarily stopped at inspection stations without a boat to get more information about AIS.
- 62% of people that stopped at the inspection station had previous knowledge of Clean, Drain, Dry or Aquatic Invasive Species.



2016 Lake Monitoring

- 170 samples from 61 lakes have been collected to date.
- 90 samples analyzed – all negative for invasive mussel veligers.
- Samples collected by partnering agencies including OASISS and other regional groups and Ministry staff.





2016 Lessons Learned

- 107 high risk boats were intercepted in April and May showing the importance of opening stations on April 1st.
- 2016 data shows the continued threat from the east with 82% of mussel fouled boats coming from Ontario.
- Provide more information on website for boaters bringing boats into BC.
- Continued coordination with international boating events taking place in BC.
- Continuing to work with the western provinces to streamline watercraft inspection and decontamination protocols.



Highlights in 2016

- Average compliance at inspection stations was up by 9% from 2015 at 81% for 2016.
 - BC's program and legislation is being taken seriously by the international boating industry.
 - Night inspection trial on Aug 24th at the Golden station. Open from 10pm-5am and 3 boats came through, none were from a high risk jurisdiction.
 - New mobile friendly website and bi-weekly media updates through COS
- 18 Ministry of Transportation & Infrastructure social media blog





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Weird and Wonderful Watercraft





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QUESTIONS?

