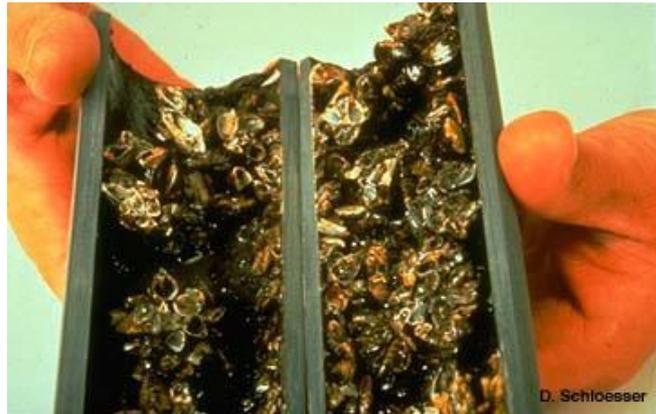




Fisheries and Oceans Canada Aquatic Invasive Species (AIS) Funding Update



Becky Cudmore, AIS Program
Fisheries and Oceans Canada



Threats around Canada

West coast:

- Largemouth Bass
- Smallmouth Bass
- New Zealand Mud Snail
- Northern Pike
- Pumpkinseed
- Yellow Perch
- **Spartina**
- Salt-meadow Cordgrass
- **Tunicates**
- **Green Crab**
- Eurasian Water Milfoil
- Parrotfeather
- Purple Loosestrife
- Yellow Flag-iris
- Chinese Mitten Crab
- Zebra and Quagga mussels
- Snakehead



Arctic:

- No confirmed AIS
- More work needed to establish baseline
- Potential AIS Threats: New shipping routes, Green Crab, tunicates, Japanese Ghost Shrimp

East coast:

- **Tunicates**
- **Green Crab**
- Smallmouth Bass
- Oyster Thief
- Zebra and Quagga mussels
- Chain Pickerel
- Coffin Box
- Japanese Skeleton Shrimp
- Chinese Mitten Crab

Central Canada:

- **Zebra and Quagga mussels**
- **Prussian Carp**
- Tench
- Eurasian Water Milfoil
- Snakehead
- Water Soldier
- Round Goby
- Killer Shrimp
- Rusty Crayfish
- Sea Lamprey
- **Asian carps**
- European Water Chestnut



AIS Program Management Cycle



- Science – research
- Outreach/Education
- Surveillance, Detection
- Response
- Management, Risk Mitigation



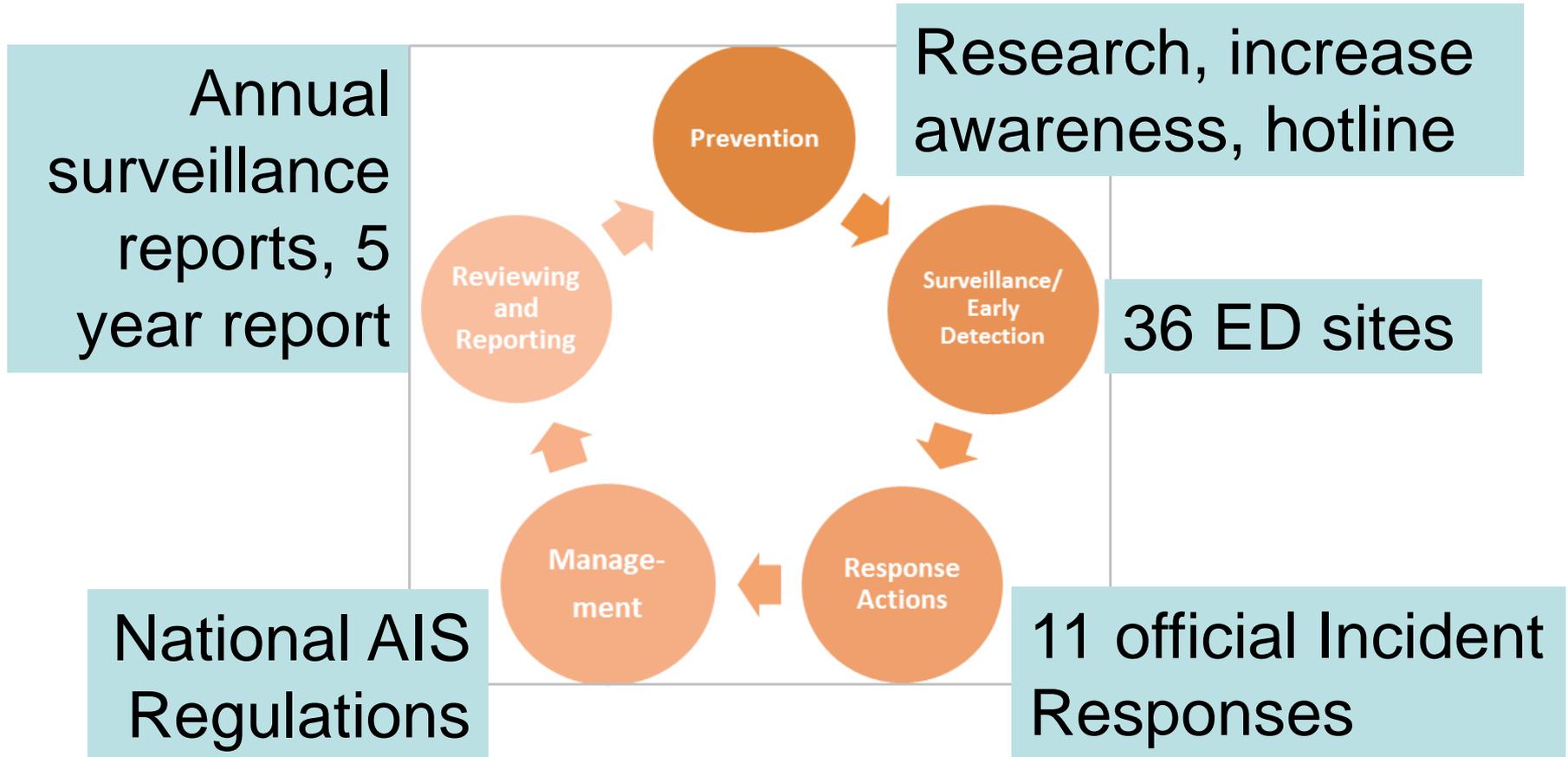
Departmental AIS Funding History

- 2005-2010: \$4M nationally (marine and fresh water)
 - Solid foundation of current status of AIS in Canada – focus on science – inventory, distribution, risk assessment, science advice for protocols, tools etc.
- 2010+: funding for AIS ‘rolled-over’ ongoing. No operational aspects beyond development of national regulations.
- 2012: Asian Carp Program (5 years)





Pilot: Asian Carp Program





Budget 2017:

- *“To prevent the introduction of aquatic invasive species, respond rapidly to the detection of new species, and manage the spread of already established aquatic invasive species, Budget 2017 proposes to provide **\$43.8 million** over five years, starting in 2017–18, to Fisheries and Oceans Canada to **continue and expand aquatic invasive species programming.**”*
- *“This will better protect our waterways and preserve our fisheries, including in the Great Lakes, the St. Lawrence River Basin and the Lake Winnipeg Basin. Canada’s efforts will help address the threats posed by such species as Asian carps and Sea Lamprey.”*
- Allow for a nationally coordinated program that implements the full AIS Management Cycle at a small scale.



Funding for:

\$43.8 million over five years:

1. National AIS **Core** Program

- National management coordination and regional operational AIS activities under Ecosystems Management

2. **Asian Carp** Program

- Great Lakes focus

3. **Sea Lamprey** Control Program

- Direct and in-kind support to meet international commitment



1. National AIS Core Program

- Team in headquarters (Ottawa) – coordination nationally and build relationships nationwide and internationally, facilitate response exercises, training, protocol development
- Regional presence across Canada – activity-based liaising with regional partners: provinces, non-governmental organizations, industry, Indigenous peoples, stakeholders, academia, etc.
- Work together on development of common goals, identify gaps, fill needs, and begin priority initiatives



2. Asian Carp Program – 2017+

- Continue early warning surveillance program at 36 sites around the Great Lakes
- Response preparedness, training, and analyses for captures of live Asian carps
- Work with partners: domestic, US, academia, stakeholders and non-governmental organizations for outreach/education, research, risk assessment and mutual aid





3. Sea Lamprey Control Program

- World's most successful AIS control program, border-blind
- Additional assessment and treatment work in more geographic areas
- Increase commitment to GLFC under a binational agreement for Sea Lamprey control, assessment and research work
- Maintain, repair, and build barrier infrastructure



Conclusions

- Ready to take lessons learned from Asian Carp Program and implement them broadly across Canada for all aquatic taxa
- Begin to operationalize the science on a small scale and prepare to build
- Regionally driven priority setting, with coordination and consistency nationally
- Partners will be key
- All hands on deck approach





Questions?



becky.cudmore@dfo-mpo.gc.ca