



Regional Implementation of Canada's Federal Aquatic Invasive Species Regulations – Prairies

International Conference on
Aquatic Invasive Species
October 27-31, 2019
Montreal, Quebec





2015: Federal AIS Regulations

- Key prohibitions developed to enable AIS Managers to control the spread of AIS
 - Prohibits the importation, possession, transportation, release, and introduction of listed species
- Key tools to allow managers to control existing / new AIS populations
 - Allows for the creation of fishing licenses to target AIS
 - Allows the use of deleterious substances (pesticides) to control AIS
- Enforcement Tools
 - Allows for the creation of quarantine / containment zones
 - Notify the public that AIS are present in a waterbody
- Species List
 - 6 species (Grass Carp, Silver Carp, Black Carp, Bighead Carp, Zebra/Quagga Mussels) with national restrictions
 - 90+ species with regional restrictions





2015 – 2017: Resource & Implementation Gap

- No resources (staff, training, funds) to implement the new Regulation
- DFO Science continued providing AIS content, but no active management of AIS using Regs

Federal 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.**”*
- Allow for a nationally coordinated program that implements the full AIS Management Cycle at a small scale.
 - Coordination, leveraging
 - Regional priority setting for actions
 - Implement and enforce regulations



Implementing a New Program

- With new resources come new expectations
- “4 Pillar” approach to program implementation
- Implementing and enforcing the AIS Regulations was identified as a key deliverable





The Challenge Facing the AIS National Core Program

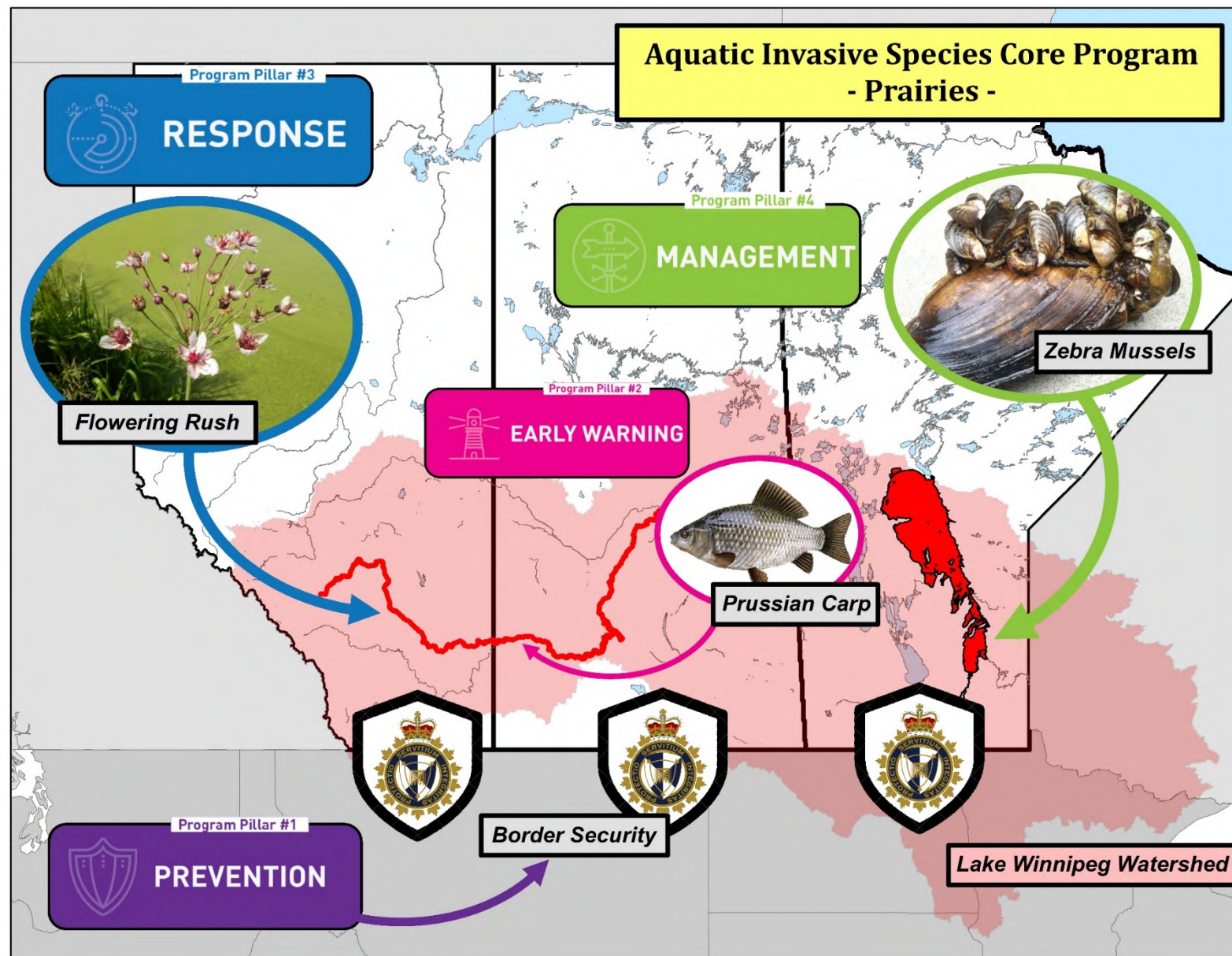
- Each DFO Region empowered with a small team, covering an area from “large” to “extremely large”
- Full “4 Pillar” implementation would be challenging
- Look to make the biggest impact using our small footprint
- DFO introspective: Where can management make the biggest impact?





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DFO's Regulatory Programs & AIS

- DFO reviews 1,000s of in-water development projects every year to ensure fish & fish habitat are respected
 - Reviews under the *Fisheries Act* and *Species at Risk Act*
- From rip-rap installation to hydro-electric dams, in-water projects can have AIS consequences
 - Removal of barriers, connecting waterbodies (Sea Lamprey, Rainbow Trout)
 - Movement of in-water equipment (Zebra Mussels, Aquatic Plants & Inverts)
 - Release of listed AIS in fish rescues (Prussian carp, Goldfish)
- DFO's AIS Core Program can limit consequences by providing regulatory advice





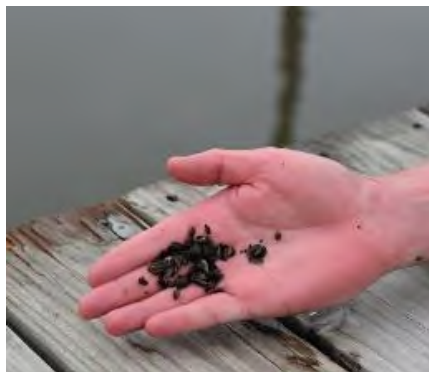
Focusing the AISR Prohibitions

- The *Aquatic Invasive Species Regulations* prohibit the following..:
- Importation
 - Don't bring listed AIS into Canada
- Possession
 - Don't possess listed AIS in Canada
- **Transportation**
 - Don't transport listed AIS in Canada
- **Release**
 - Don't release AIS in Canada
- **Introduction of non-indigenous species**
 - Don't introduce non-indigenous species into Canada (applies to all species)



AIS Regulatory Integration

- **Historically** – Inconsistent review of AIS elements
 - Mitigation of AIS risks not fully realized
 - No subject matter experts to provide advice
 - AIS not identified by either DFO or applicant
 - DFO tools did not highlight existing AIS populations
- **Goal:** Add AIS as an element of all in-water project reviews, focusing on the prohibitions around transportation and release
- **First Step:** Determine how the AIS Core Program will interact with other regulatory programs





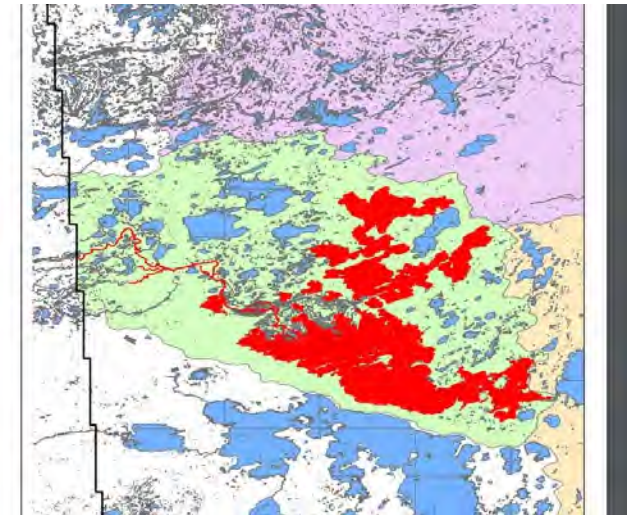
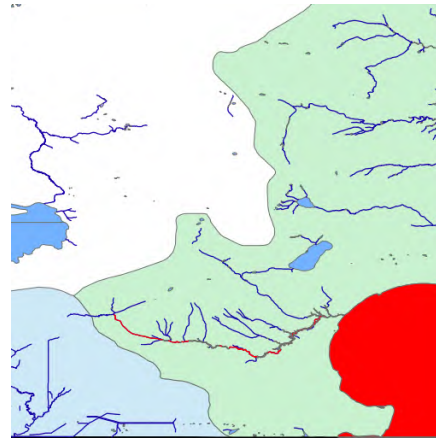
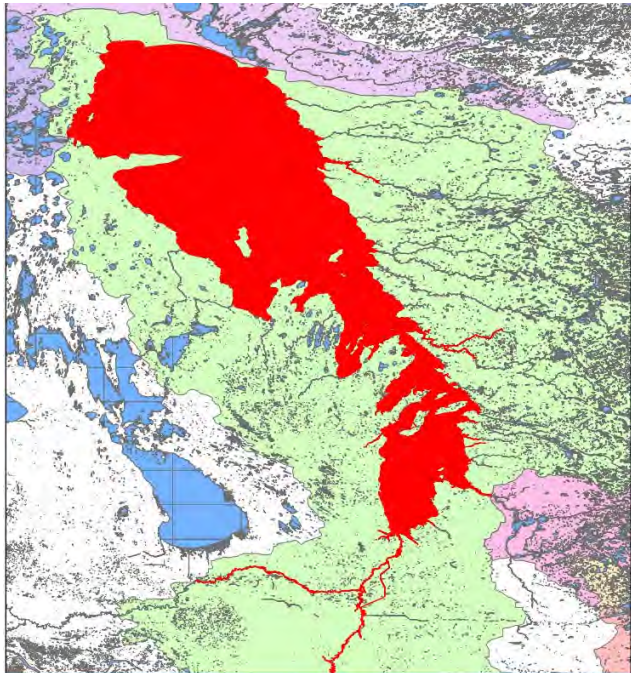
Internal Stakeholder Consultation

- Identified tools by engaging with DFO Regulators
 1. Spatial Tools (GIS): "Where are the AIS?"
 2. Standardized Advice: "How do we mitigate transport and release of AIS?"
 3. Process: "How do we request advice?"



1. Spatial Tools

- C&A covers almost 2/3rds of Canada, covers diverse ecoregions
- Spatial tools can be incorporated into existing GIS decision making systems
- Worked with Provinces on developing "AIS Management Areas"
- Incorporated partner feedback in layer development





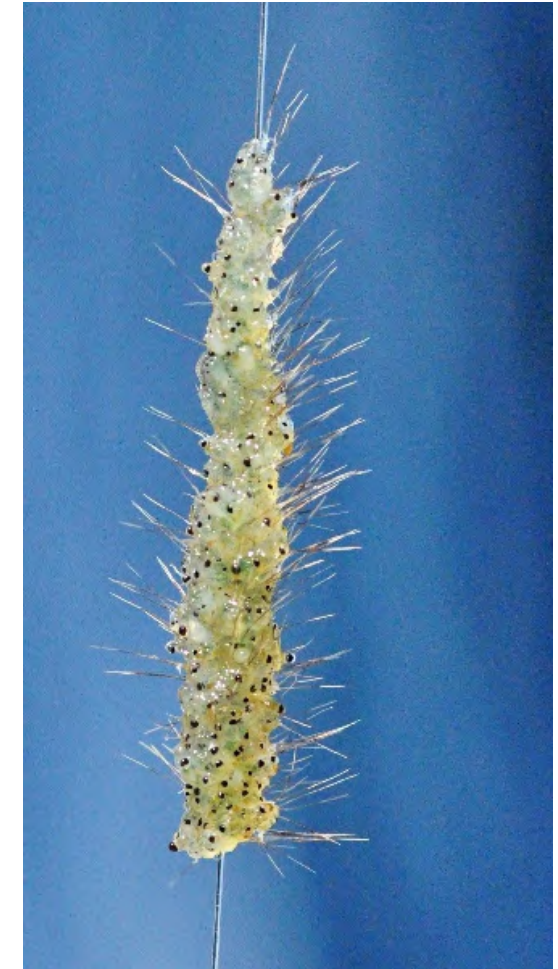
2. Standardized Advice

- Primary objective: Limit transportation & release of AIS to/from development project sites
- Regulatory Biologists want to provide sound advice
- AIS advice varies on species, project type, but some issues require standardization
- “What does Clean, Drain, Dry mean”?



3. Process

- Developed the proper bureaucratic process
- ...but made sure that colleagues knew we were a phone call away
- Available to provide input at any step in the regulatory process!





Strengths & Opportunities

STRENGTHS

- DFO Biologists eager to adopt AIS advice into projects
- More “eyes on the water” – training DFO regulators to spot AIS
- Advice available online – new DFO website will feature AIS mitigation & identification advice

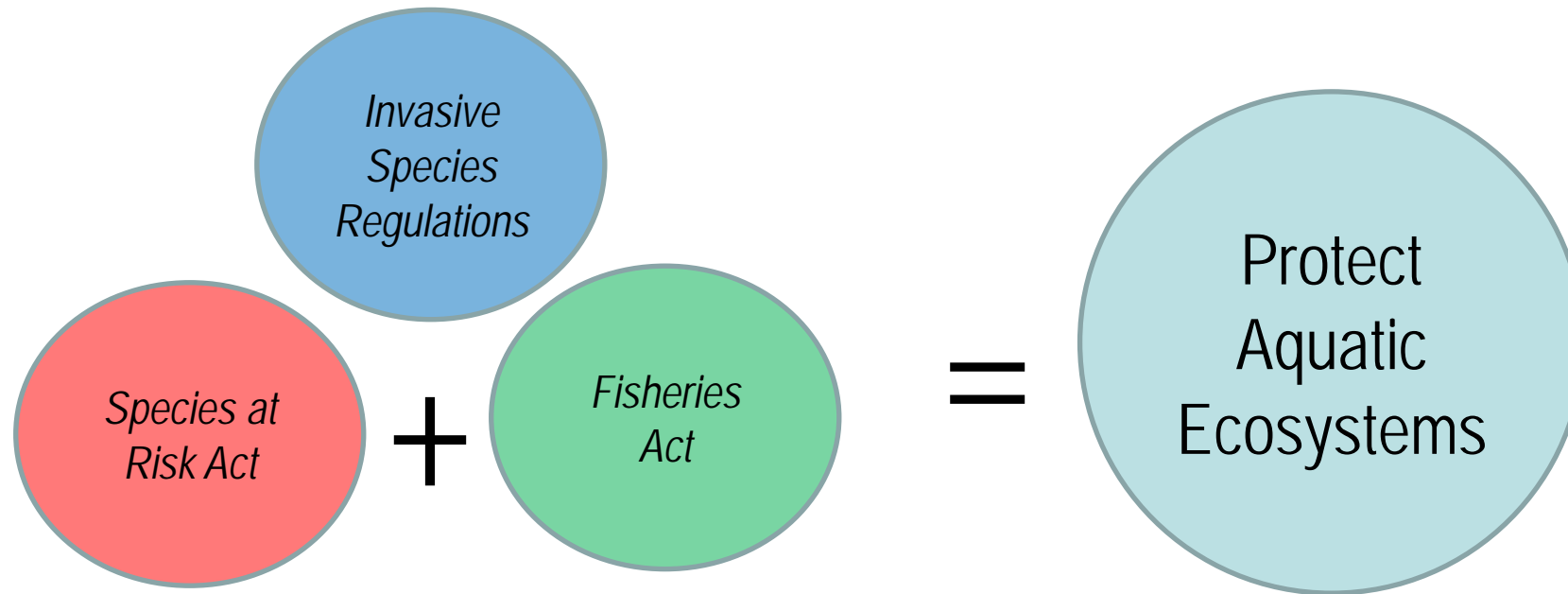
OPPORTUNITIES

- Presence / Absence data currently weak, especially for emergent species
- Need more science advice for standardized mitigation such as Clean, Drain, Dry, species specific mitigation



Summary

- Aquatic Invasive Species Regulations have powerful tools to enable AIS managers
- DFO's small AIS Core Program unable to implement a full "4 Pillar Program"
- Looked for opportunities to work with key partners (Provinces) in C&A
- Integrated AIS Regulations into DFO's broader regulatory framework





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