



# Building A Shared Legacy Against Invasive Species in the US Arctic

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## IN ALASKA OUTDOOR RECREATION GENERATES:

**\$7.3  
BILLION**  
IN CONSUMER  
SPENDING ANNUALLY



**72,000**  
DIRECT  
JOBS



**\$2.3  
BILLION**  
IN WAGES AND  
SALARIES



**\$337  
MILLION**  
IN STATE AND LOCAL  
TAX REVENUE





#FishingForAlaska

**Alaskan fisheries  
account for 60% of US  
commercial fisheries production**

Photo Credit: Copper River Salmon





Foundation for Alaska's rich cultural traditions





# Our challenge



Rats



Orange Hawkweed



Dreissenid Mussels



European Green Crabs



# Partnerships and Plans

ARIAS step-down plan for the U.S. – February 2019



# I. Inspire urgent and effective action

- **Communication Plan Goal:**
  - A shared framework that includes objectives, target audiences, strategies, timelines, roles, and measures of success.
  - Vision: “preserve the wild and free nature of Alaska through an inspired public that are active participants in preventing the spread and introduction of invasive species.”
- **Key Audiences:**
  - Educators
  - Outdoor Gear Retailers and Recreationist
  - Tourism Companies
  - Legislators
  - Pet owners and gardeners

# I. Communication continued

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- Objectives - Target audiences will:
  - understand and be motivated;
  - identify species;
  - know how to respond;
  - prevent the introduction/spread; and
  - feel confident they are not a vector.





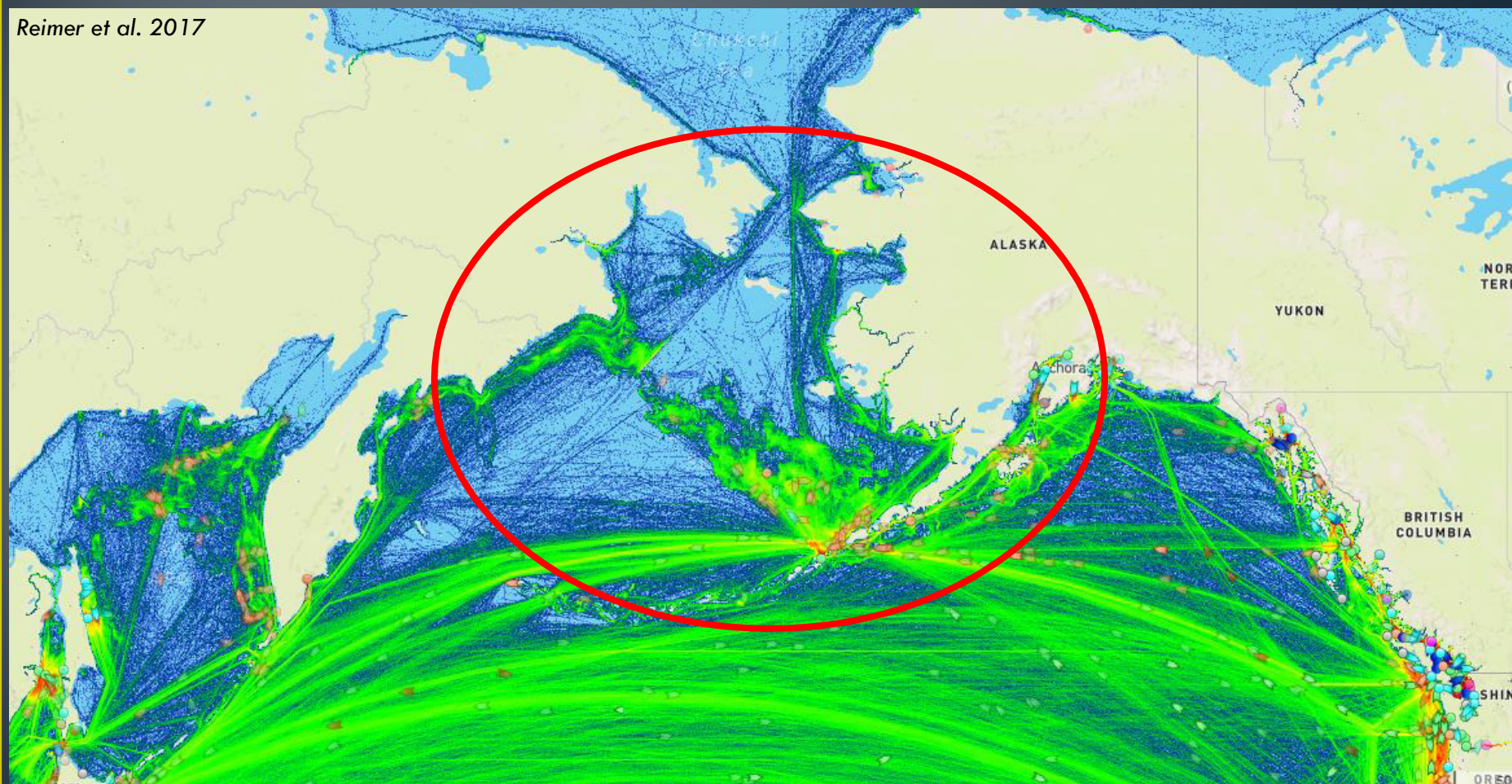
# II. Improve the knowledge base - Vector and Habitat Suitability Analyses



# Marine Vectors

Commercial boating traffic in the North Pacific (2015).

Reimer et al. 2017





# Bering Sea Habitat Suitability – *Carcinus maenas* (European Green Crab)

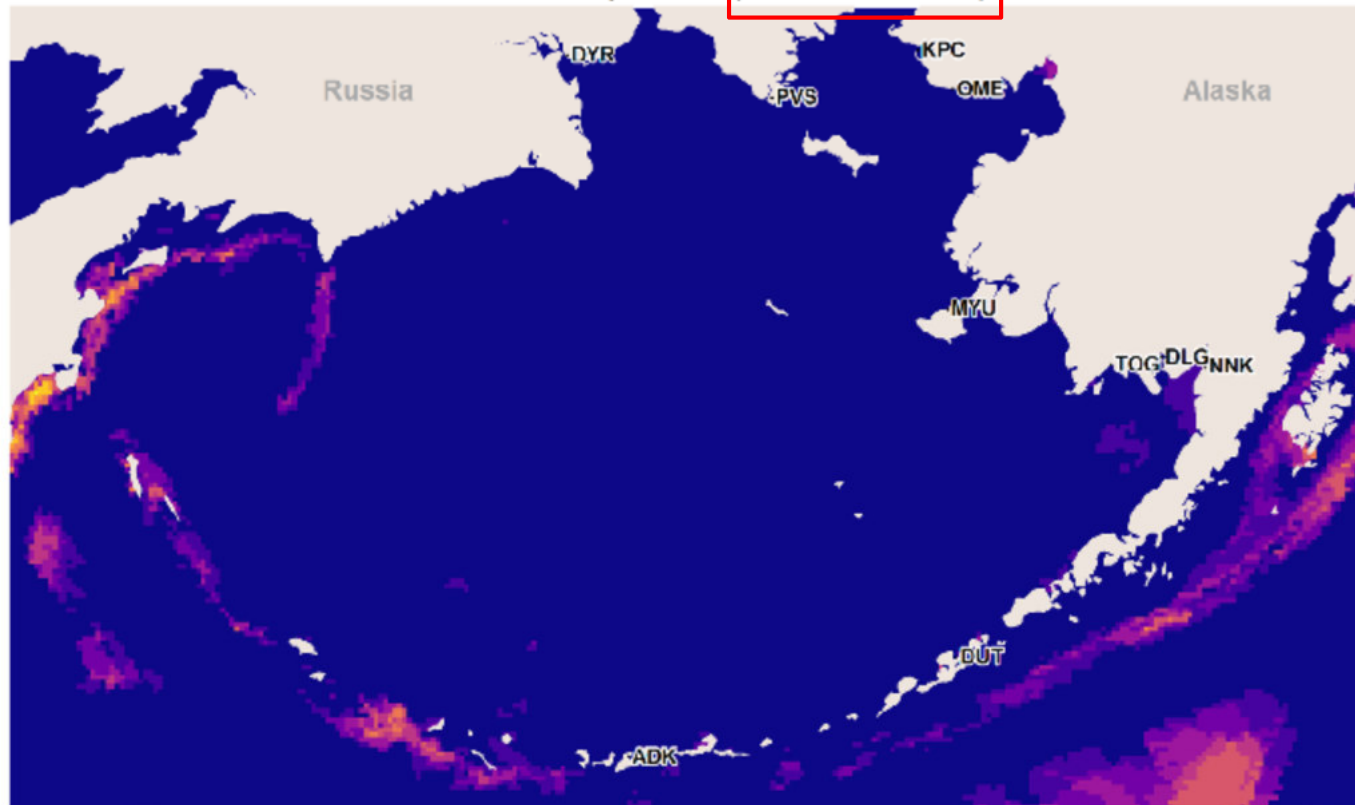
Reimer et al. 2017

## Limited reproductive habitat

Requires 6-9 weeks

0 10 weeks

*Carcinus.maenas* Reproduction (model: MIROC 2003-2013)



# Bering Sea Habitat Suitability – *Carcinus maenas* (European Green Crab)

Reimer et al. 2017

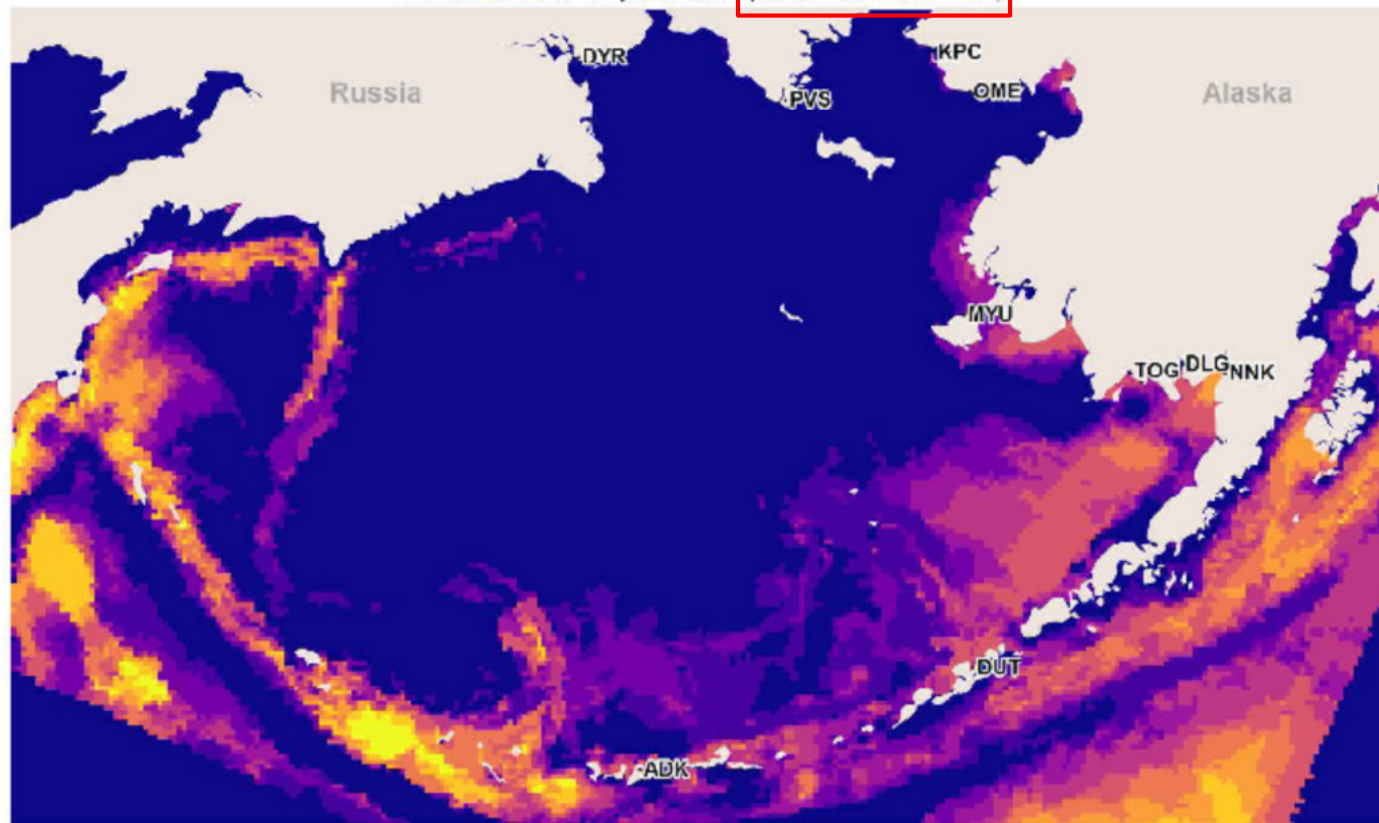
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*Carcinus.maenas* Reproduction (model: MIROC 2029-2039)

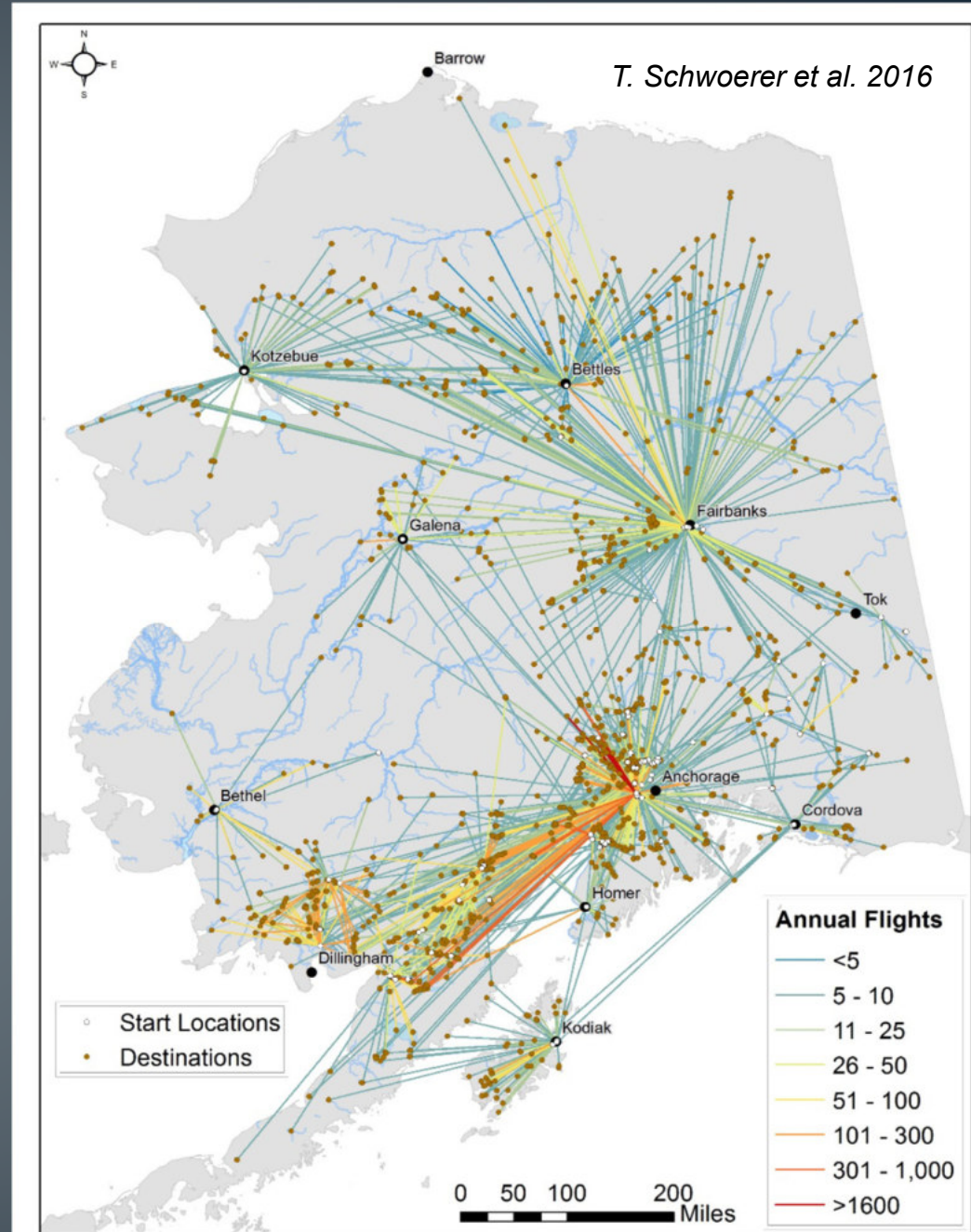




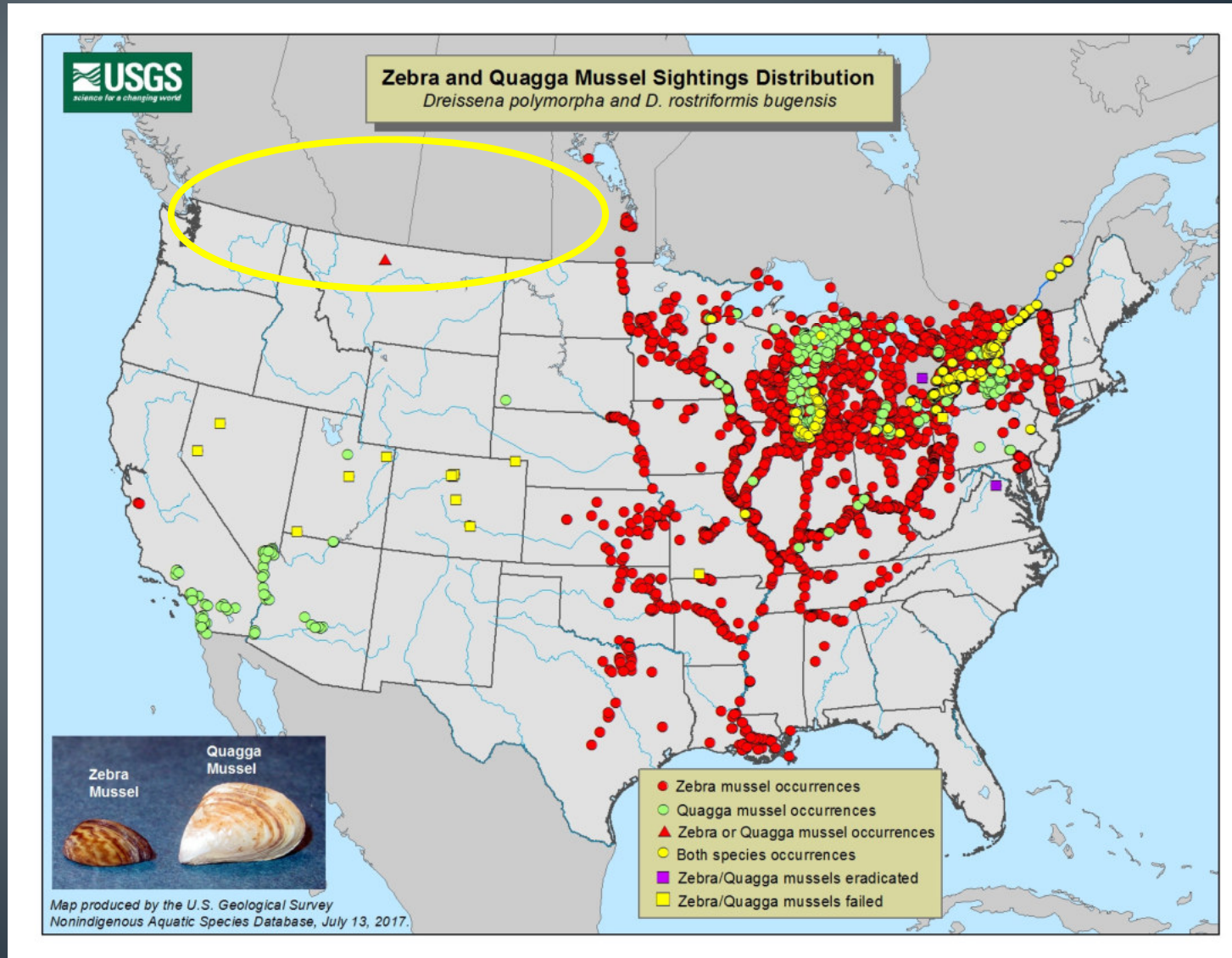
# Freshwater Vectors

- Aquariums
- Floatplanes
- Boats
- Fishing equipment

*Elodea* spp.



### III. Undertake Prevention and Early Detection/Rapid Response Initiatives





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- Invasive Species Inspections and Decontamination
  - Alcan Highway Port of Entry (U.S. – Canada Border)
    - Three years of pilot work
    - ~50% of watercraft from high risk states
    - > 25% of watercraft not inspected in route
  - Next Steps
    - Expand local efforts
    - Work with Marine Highway system
    - Outreach



**STOP AQUATIC  
HITCHHIKERS!**

Be A Good Steward. Clean. Drain. Dry.  
[StopAquaticHitchhikers.org](http://StopAquaticHitchhikers.org)



**“We have a unique opportunity in the Arctic. We can act now – decisively - to prevent and mitigate the adverse impacts of invasive alien species that plague much of the rest of the world...”** Arctic Invasive and Alien Species Strategy and Action Plan 2017

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