

# Investments in Statewide Invasive Species Management Programs in Alaska: 2007-2011

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# Outline

- Initiation of study
- Problem statement
- Research objectives
- Methods
- Research findings
- Recommendations



# How the project came about?

- Workshop - Alaska Invasive Species Working Group (March 2010)
  - Experts from HI, WA, CA, BC, D.C.
  - Priorities and actions
    - *Economic Impact Study*

Presentations and report:

[http://www.alaskasealife.org/New/research/mis\\_workshop.php](http://www.alaskasealife.org/New/research/mis_workshop.php)



# Research Objectives

- Estimate statewide investments, 07-11
- Analyze funding structure
- Collect AK-specific cost data for management actions
- Develop bioeconomic decision support tool for select invasive species
  - Quantitative risk & decision analysis

watch my 2<sup>nd</sup> talk ...



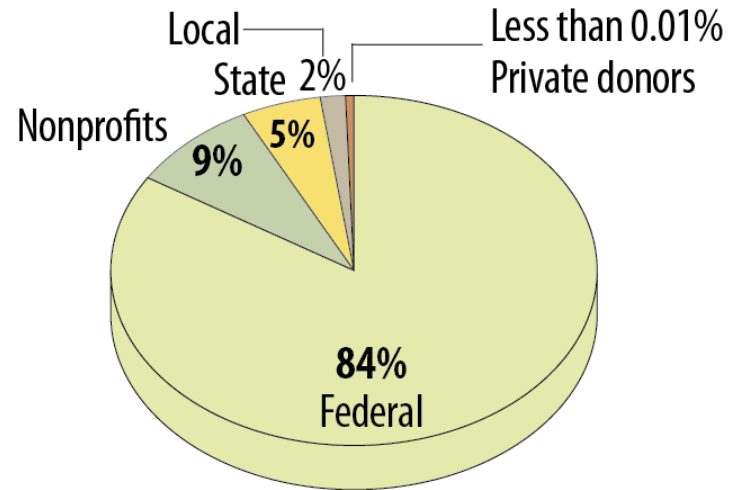
# Methods

- Stakeholder census survey (2007-2011):
  - federal, state, tribal, non-profit, local, private
- Data collection: Nov 2011-Mar 2012
- Variables:
  - Overall budget, payroll, employment, equipment, supplies, volunteers, funding dispersal, action type, species type, location, etc.
- 112 agency contacts, 64 organizations (75% response)



## Who Pays to Manage Invasive Species in Alaska?

**Total Spending, 2007-2011: \$29 Million • Average Annual Spending: \$5.8 Million**

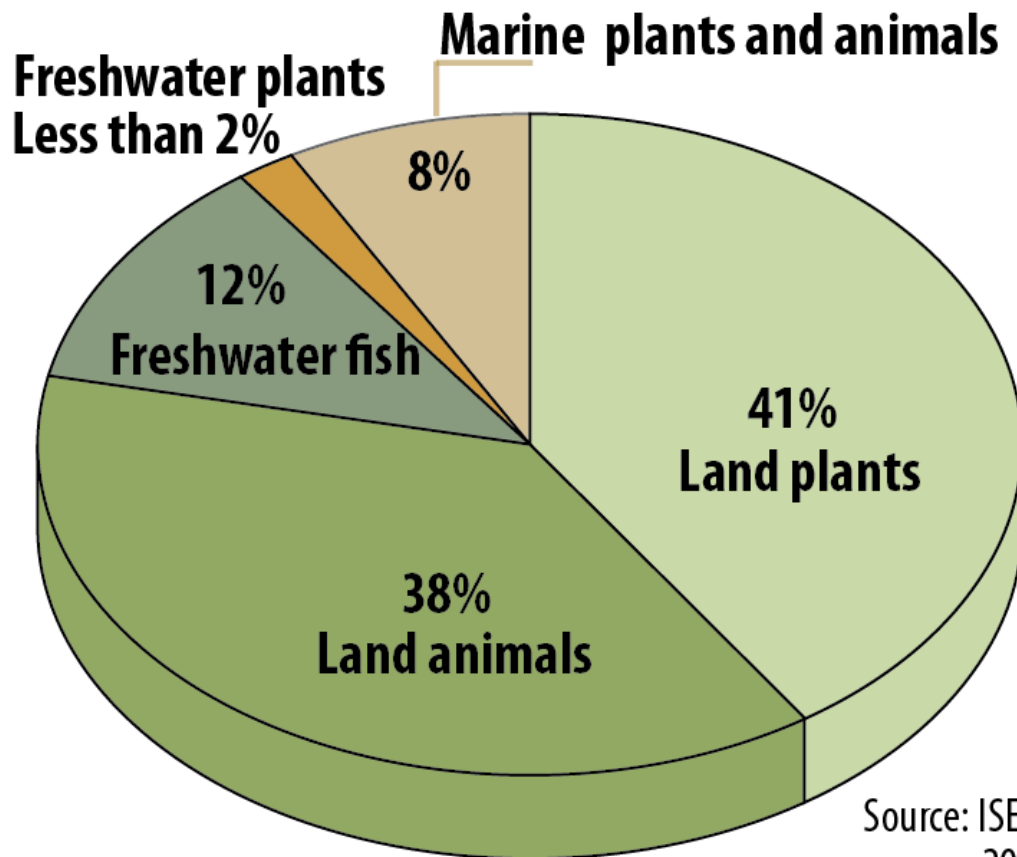


Source: ISER/Alaska Sealife Center survey, 2011-2012

	<b>5-yr mean</b>
U.S. Fish and Wildlife Service	1,648,000
U.S. Department of Agriculture	1,509,000
Alaska Sustainable Salmon Fund	385,000
National Oceanic and Atmospheric Administration	270,000
National Park Service	216,000
Alaska Department of Fish and Game	186,000
Bureau of Land Management	156,000



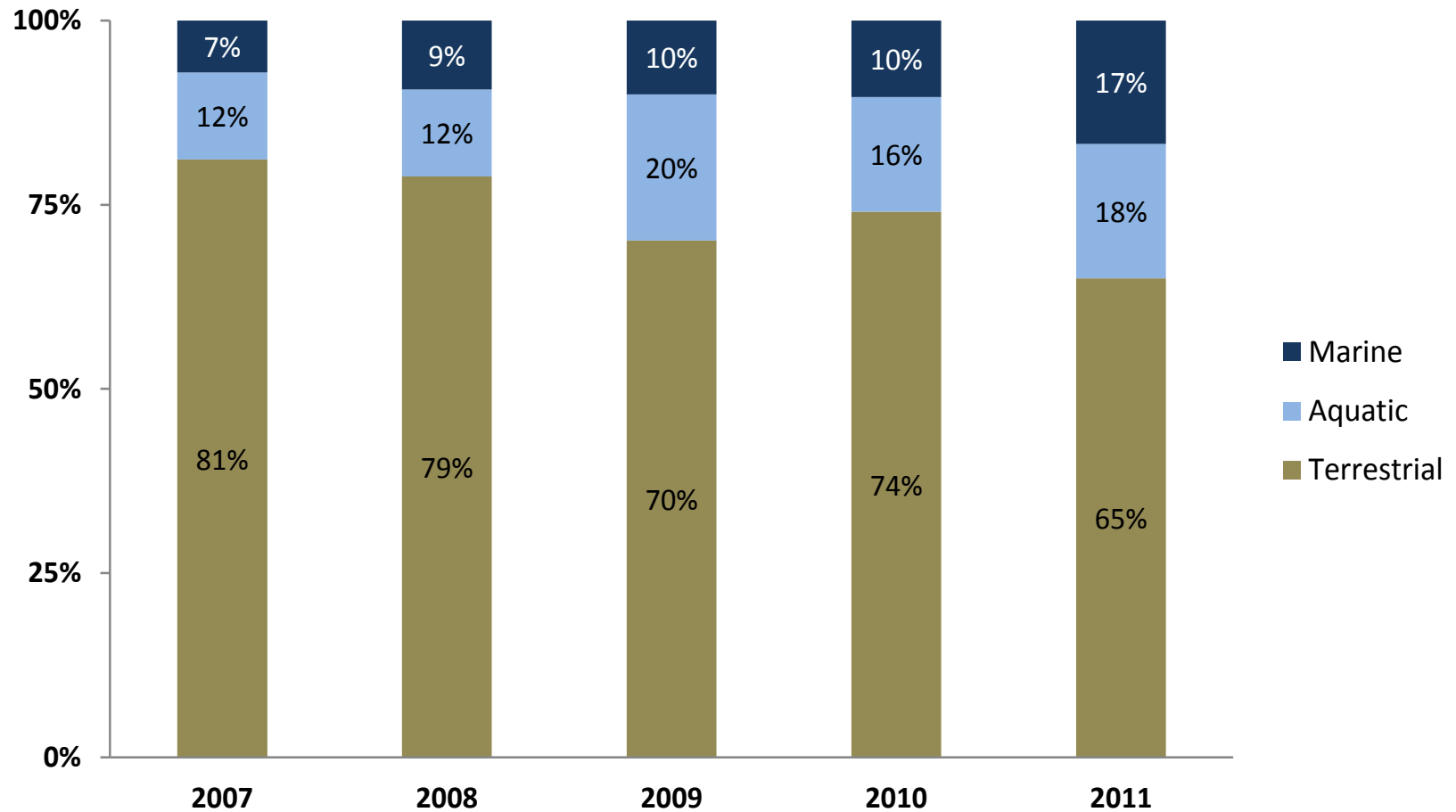
## Distribution of Spending to Manage Invasive Species in Alaska, By Type, 2007-2011



Source: ISER/Alaska Sealife Center survey, 2011-2012

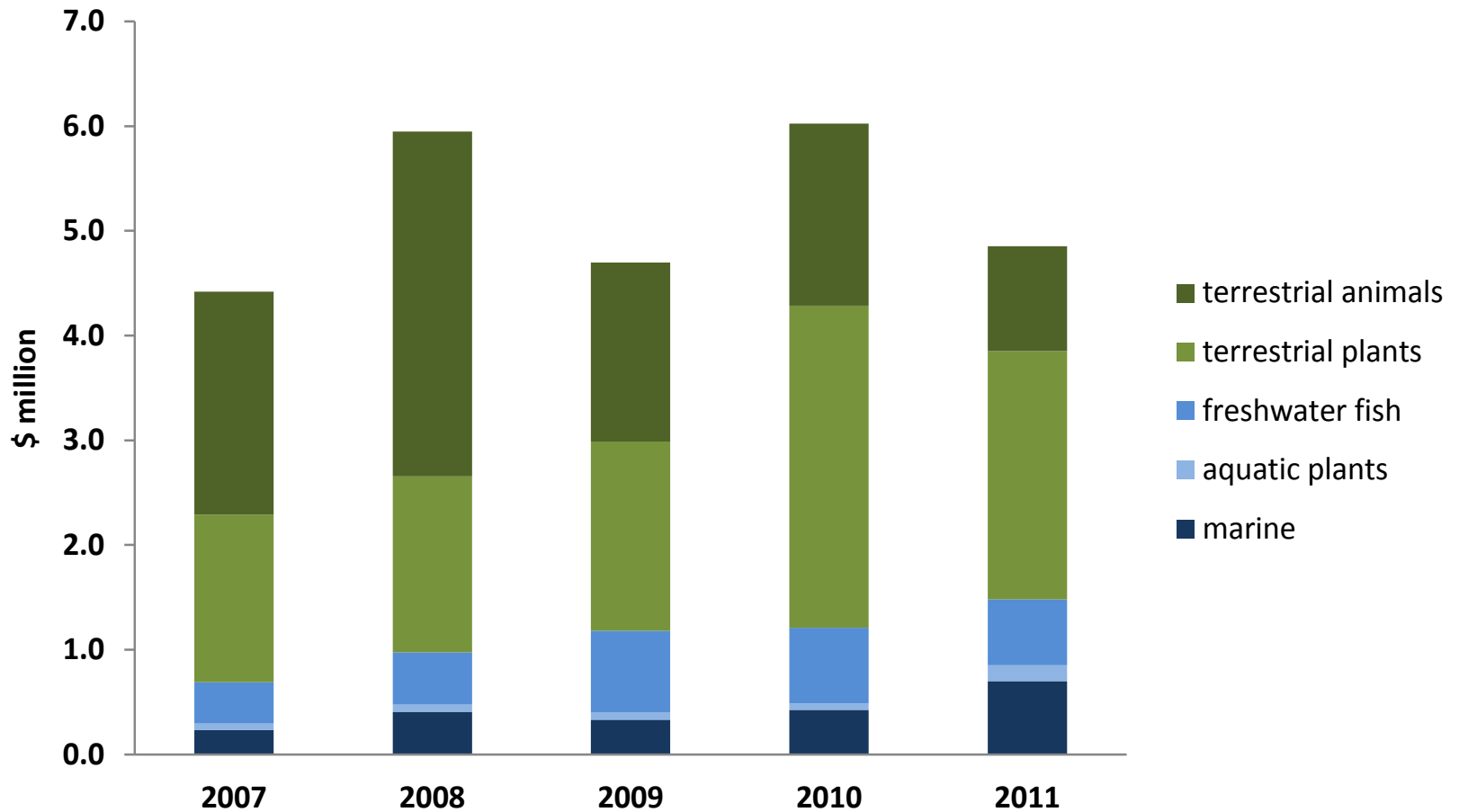


## Proportion of total annual funding by ecosystem

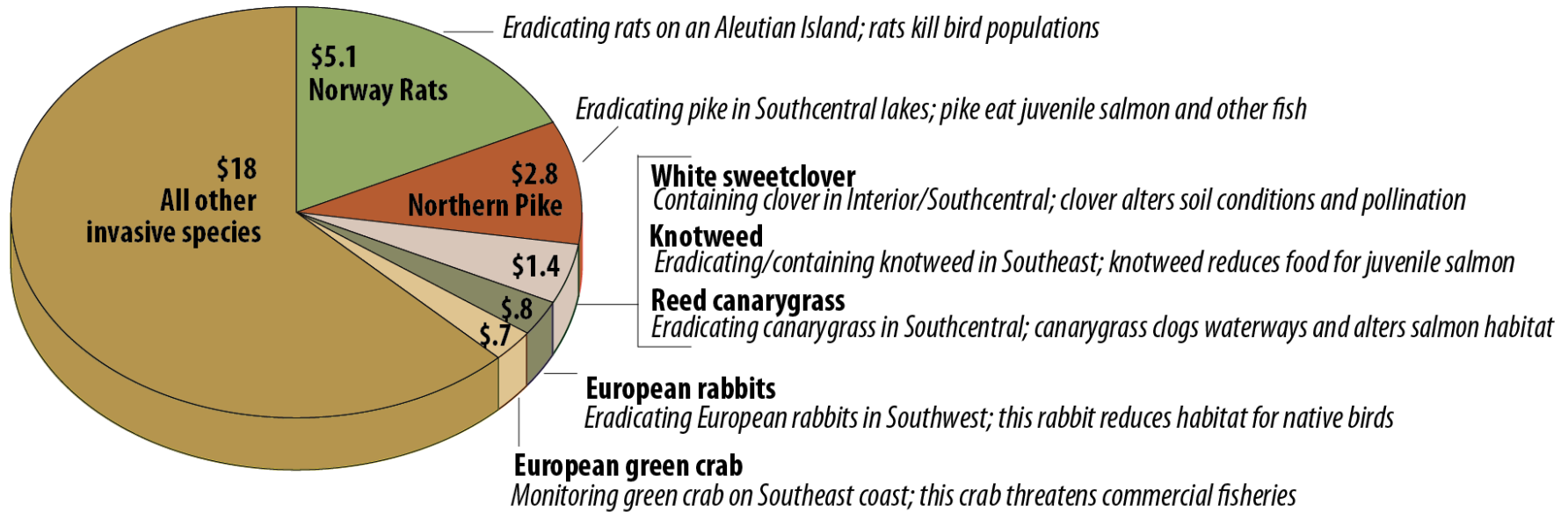




## Total annual budgets by species type



## What Were the Most Expensive Species to Manage, 2007 - 2011? (In Millions of Dollars)

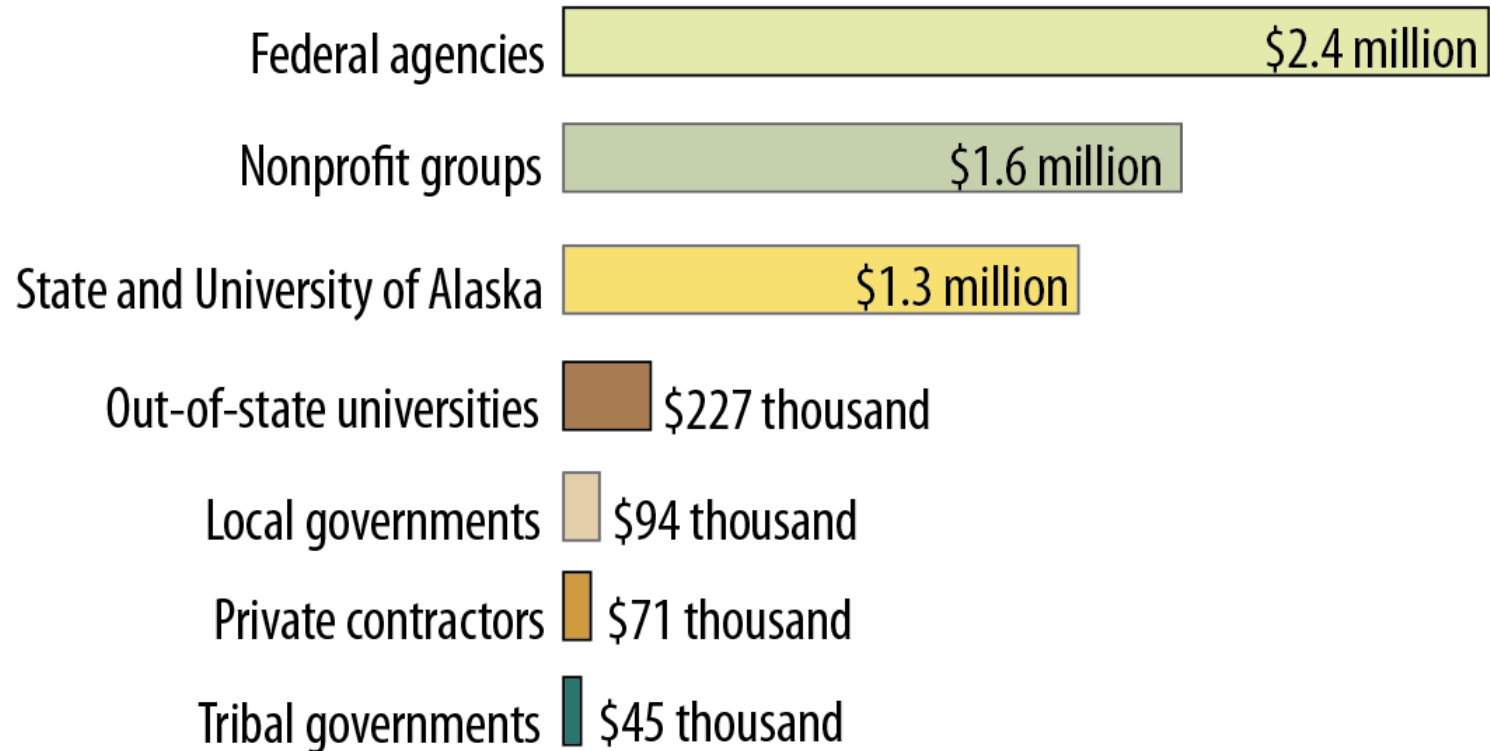


Source: ISER/Alaska Sealife Center survey, 2011-2012



## Who Carries Out the Work?

(Annual Average Spending, 2007 - 2011: \$5.8 Million)

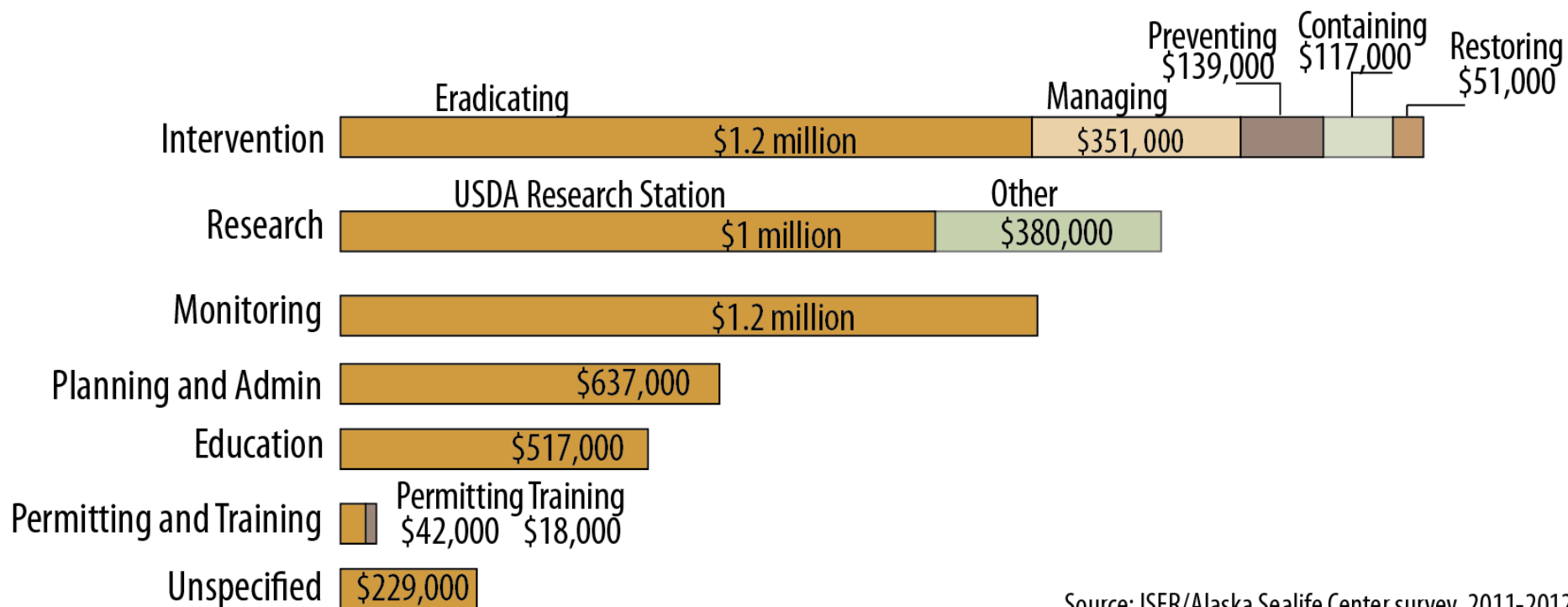


Source: ISER/Alaska Sealife Center survey, 2011-2012



## Estimated Annual Spending, by Type of Action

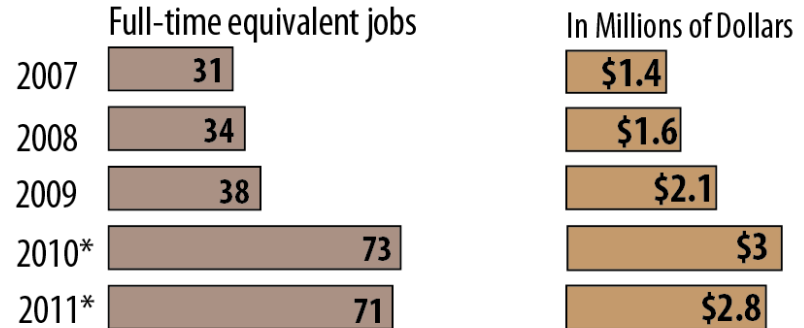
(Annual Average, 2007 - 2011)



Source: ISER/Alaska Sealife Center survey, 2011-2012

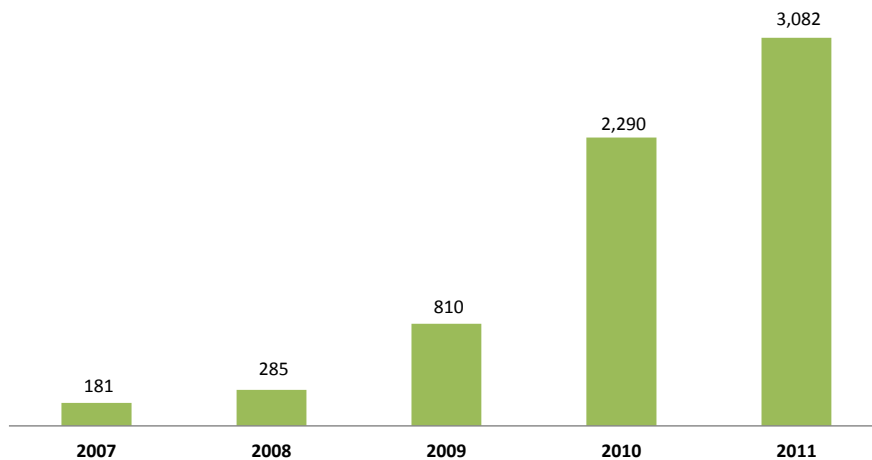


## Jobs and Payroll in Management of Invasive Species in Alaska



Source: ISER/Alaska Sealife Center survey, 2011-2012

## Volunteers

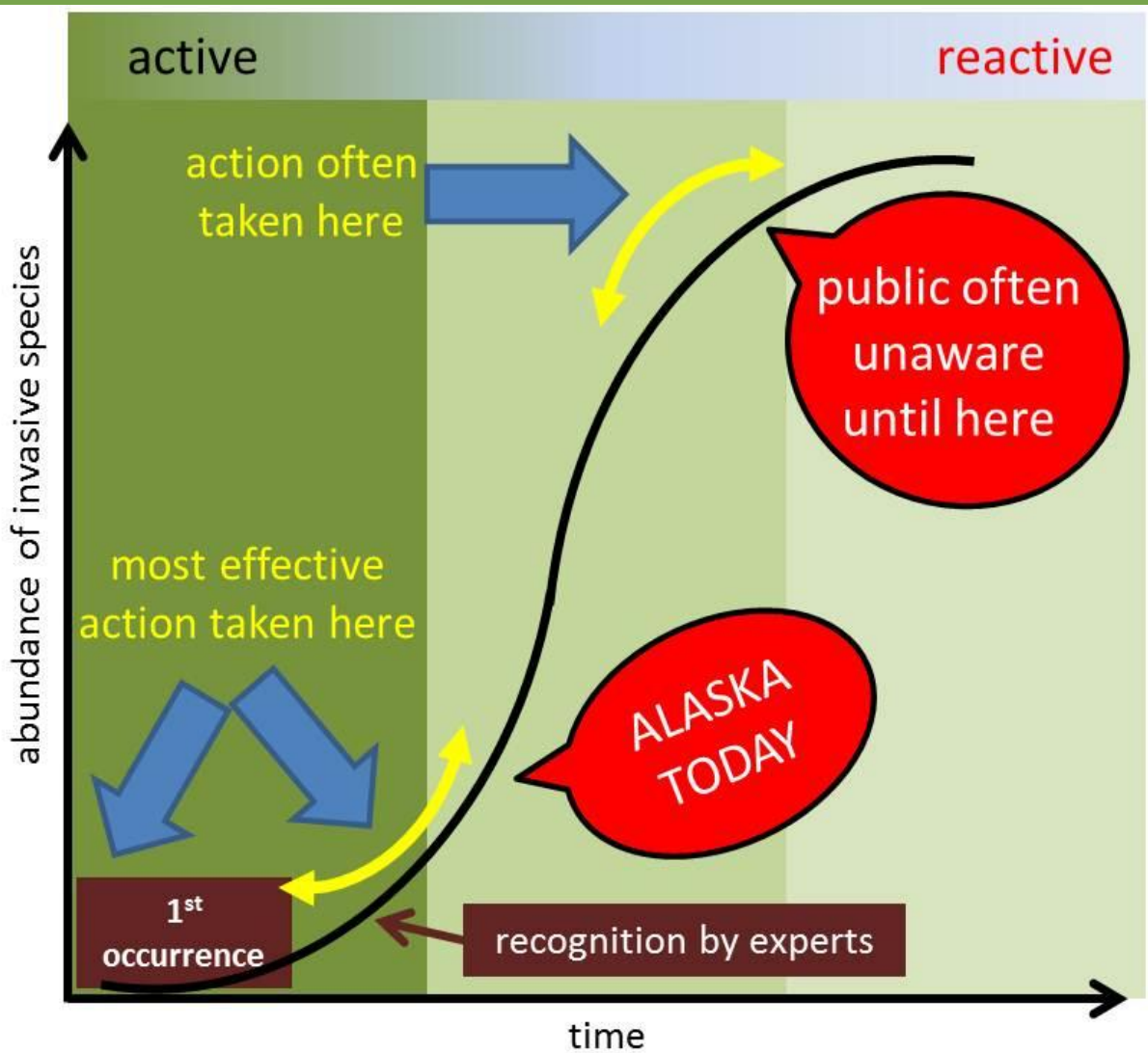


# Summary of Findings

- Federal agencies play a big role
- Species and ecosystems:
  - terrestrial plants and animals →
  - marine and aquatic ↗
- Main actions:
  - research, monitoring, eradication
- “Stimulus money”
  - driver for jobs, payroll, and volunteer effort



# Recommendations



adapted from DeVelice, 2011

- EDRR critical
- Coordination
- State's role?
- Smart decisions under budget constraints



# Many thanks!

- Matt Carlson, UAA
- Lindsey Flagstad, UAA
- Rob DeVelice, USDA F.S.
- Michael Shephard, NPS
- Funders: PWSRCAC, USFWS, OASLC, Alaska Legislative Council, BLM
- All the agencies and organizations that contributed data!

