

An aerial photograph of a forest stream, showing a narrow, winding waterway with white rapids and surrounding dense green vegetation. The stream flows from the top right towards the bottom left, with some rocky patches visible in the water.

# **Emerging Invasive Species Concerns and Solutions in Alaska**

**Emily Reed**

**Regional Invasive Plant Coordinator  
Southeast Alaska Watershed Coalition**



# **Southeast Alaska Watershed Coalition**







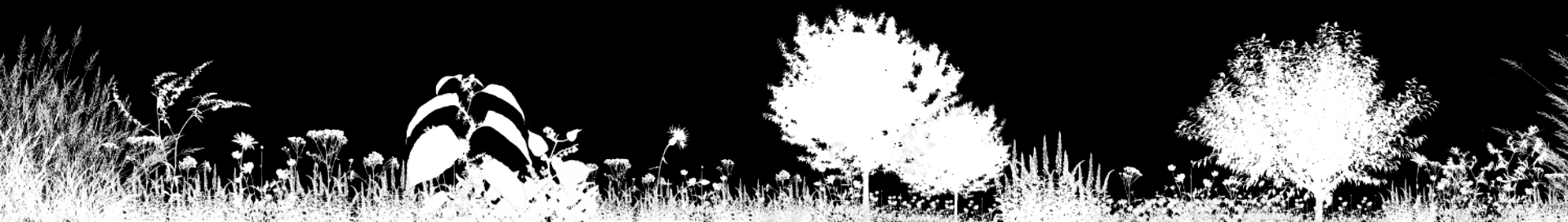
Panel: Grass Mix 1

✓	04/21/2022	Timothy	100,000 BAU	Prick	3/30,3+
✓	04/21/2022	Orchard	100,000 BAU	Prick	40/45,4+
✓	04/21/2022	Sweet Vernal	100,000 BAU	Prick	40/45,4+
✓	04/21/2022	Meadow Fescue	100,000 BAU	Prick	25/45,4+
✓	04/21/2022	June (KY Blue)	100,000 BAU	Prick	25/45,4+
✓	04/21/2022	Redtop	100,000 BAU	Prick	20/50,4+
✓	04/21/2022	Rye, Perennial	100,000 BAU	Prick	25/45,4+





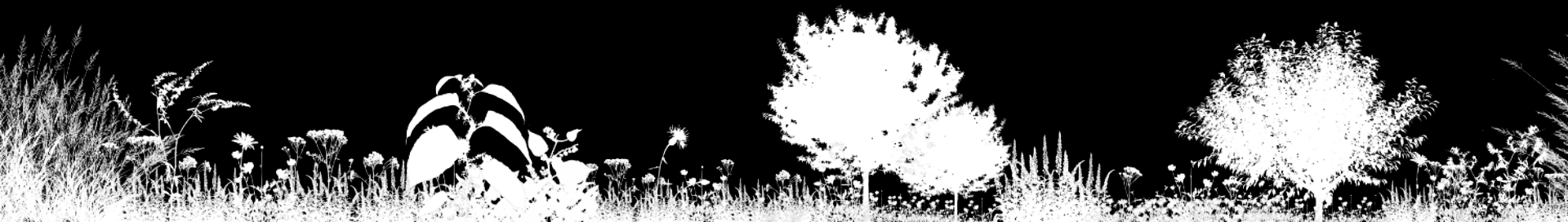
# What makes a non-native species **INVASIVE?**





**Invasive species** means a  
**nonnative species** whose  
introduction does or is likely to  
cause **economic** or  
**environmental harm** or **harm to**  
**human health**

*Alaska Administrative Code Title 5, section 92.990*





# BIOSECURITY IMPACTS

Human Health

Animal Health

Infrastructure

Military Readiness

Forest Health

Salmon Habitat



*Tiger Mosquito*



# BIOSECURITY IMPACTS

Human Health

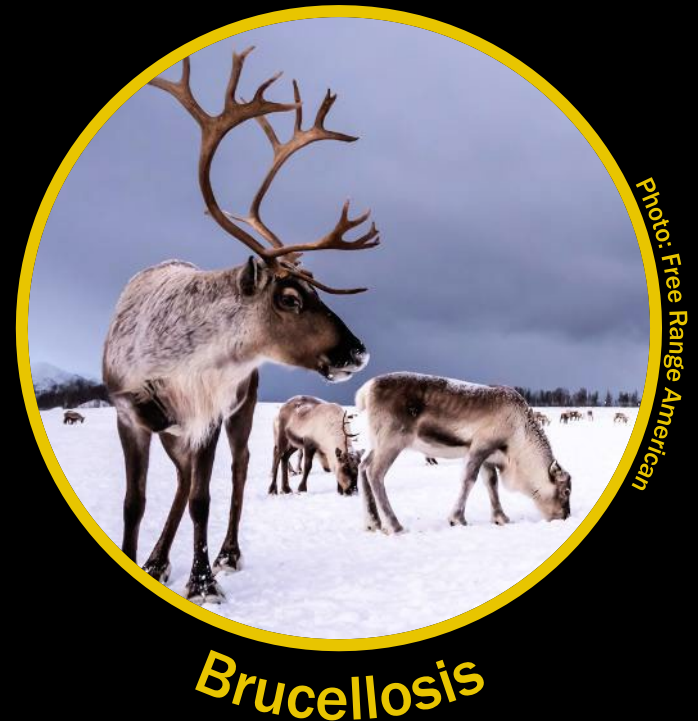
**Animal Health**

Infrastructure

Military Readiness

Forest Health

Salmon Habitat





# BIOSECURITY IMPACTS

Human Health

Animal Health

**Infrastructure**

Military Readiness

Forest Health

Salmon Habitat



# BIOSECURITY IMPACTS

Human Health

Animal Health

Infrastructure

**Military Readiness**

Forest Health

Salmon Habitat



*Pigeon*



# BIOSECURITY IMPACTS

Human Health

Animal Health

Infrastructure

Military Readiness

**Forest Health**

Salmon Habitat



*Rusty Tussock Moth*

# BIOSECURITY IMPACTS

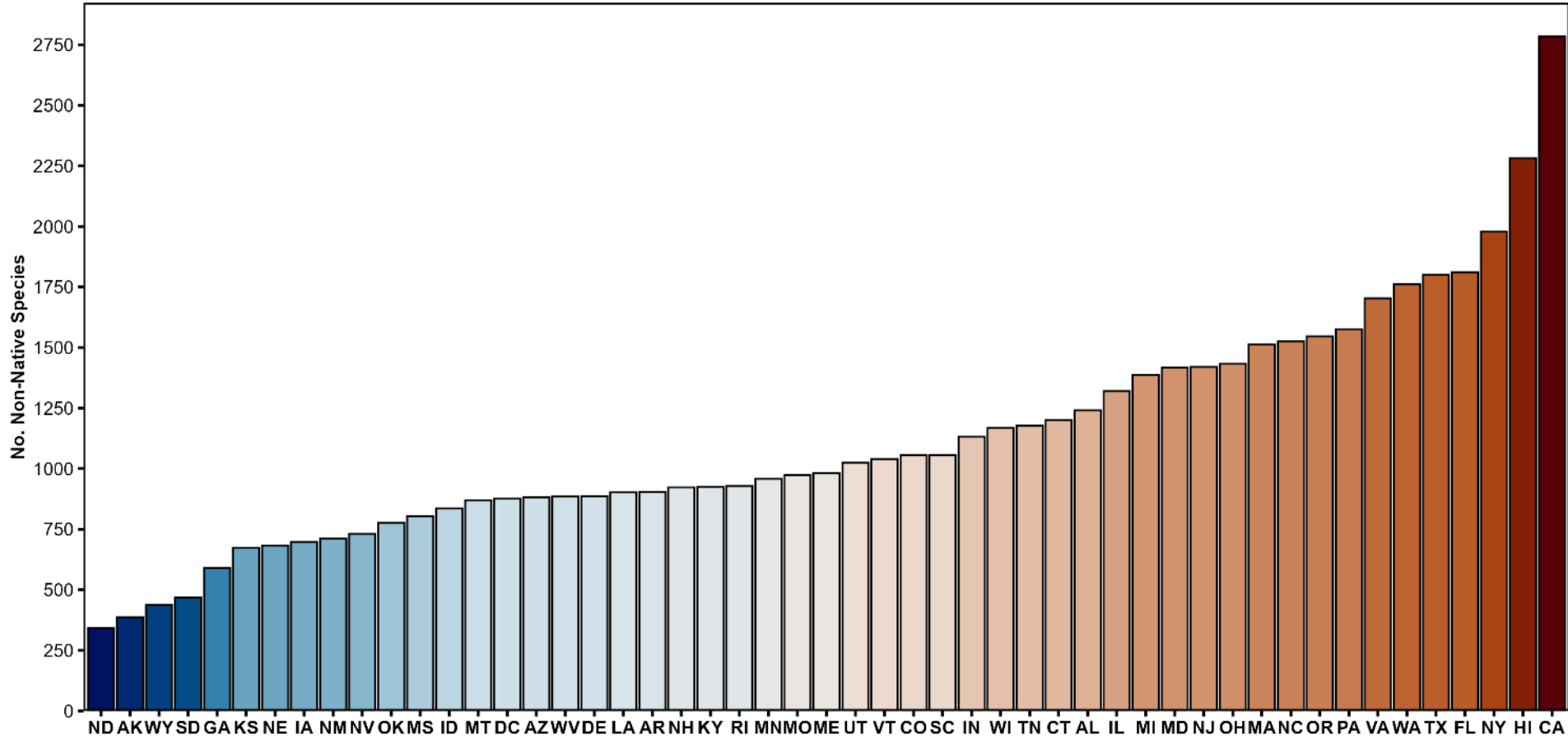
Human Health  
Animal Health  
Infrastructure  
Military Readiness  
Forest Health  
**Salmon Habitat**





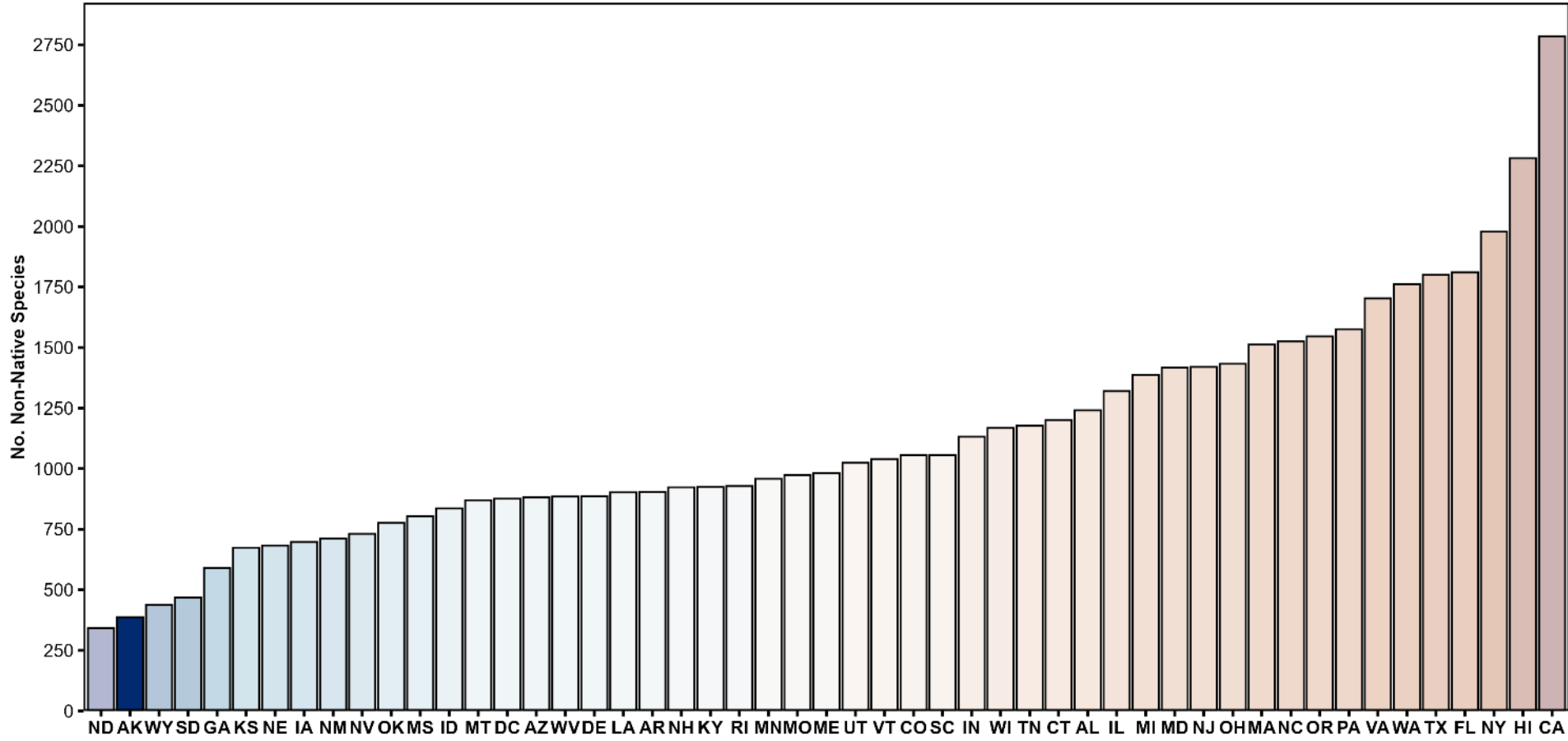
# Invasive Species in the US

iNaturalist: Observed Non-Native Species



# Invasive Species in the US

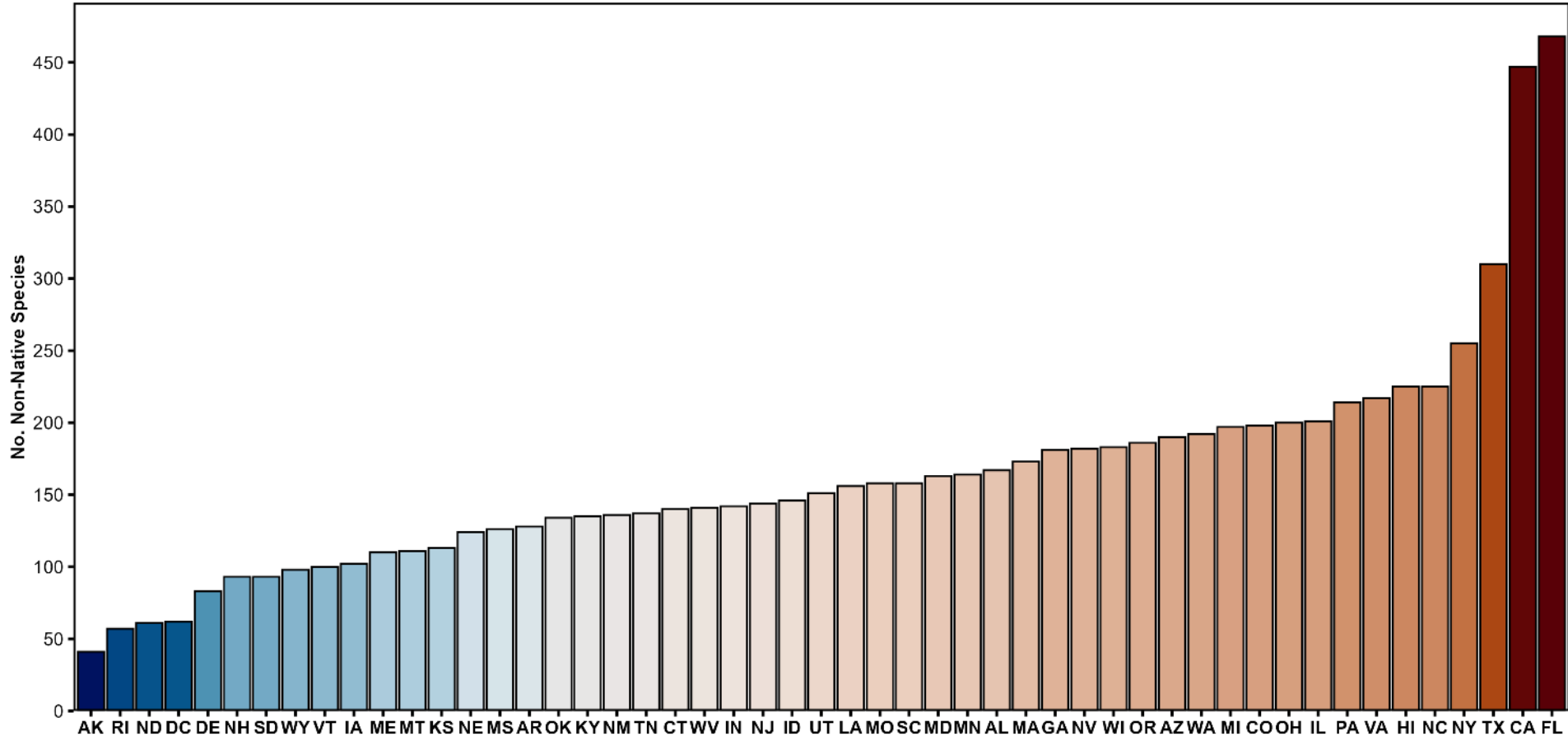
iNaturalist: Observed Non-Native Species





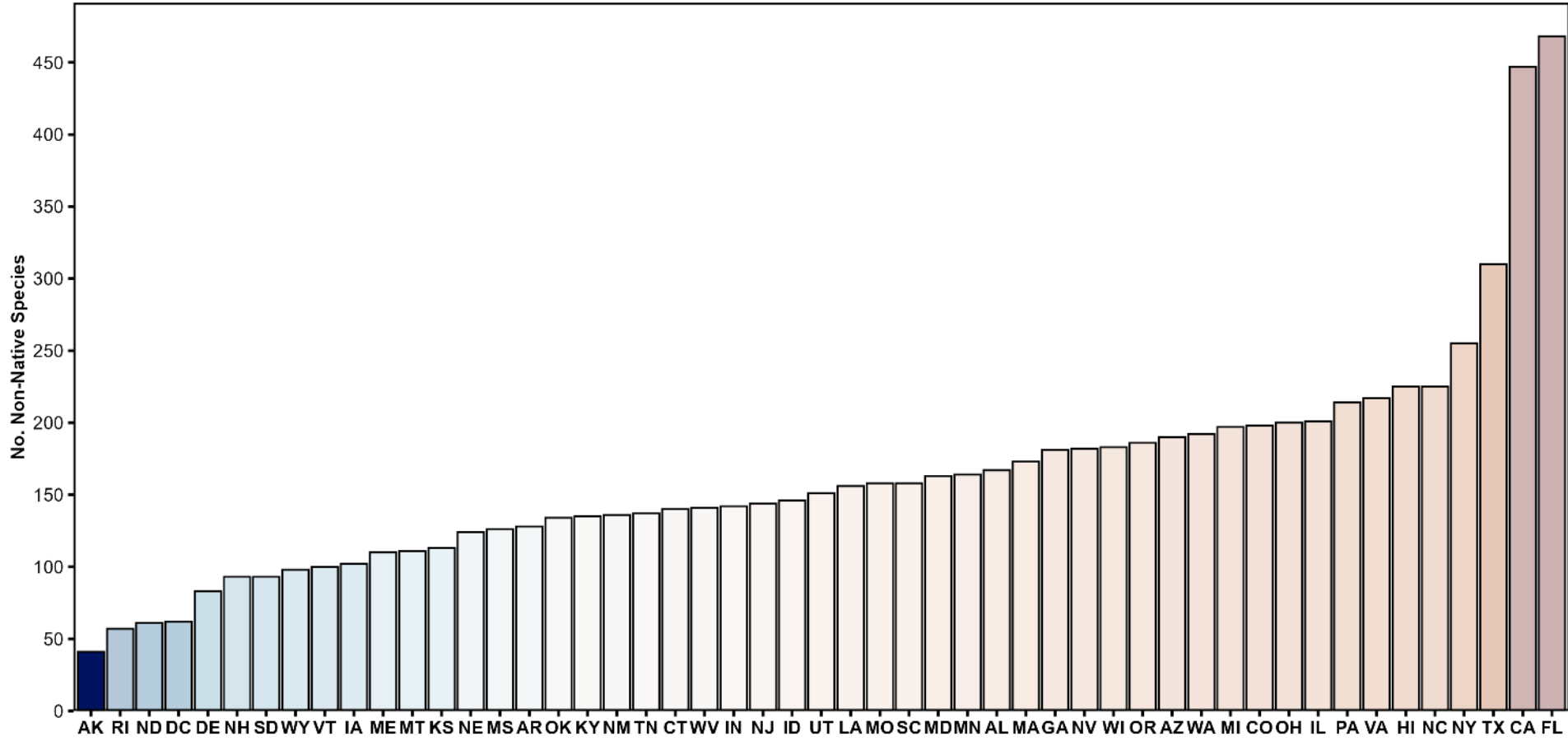
# Invasive Species in the US

USGS Non-Indigenous Aquatic Species



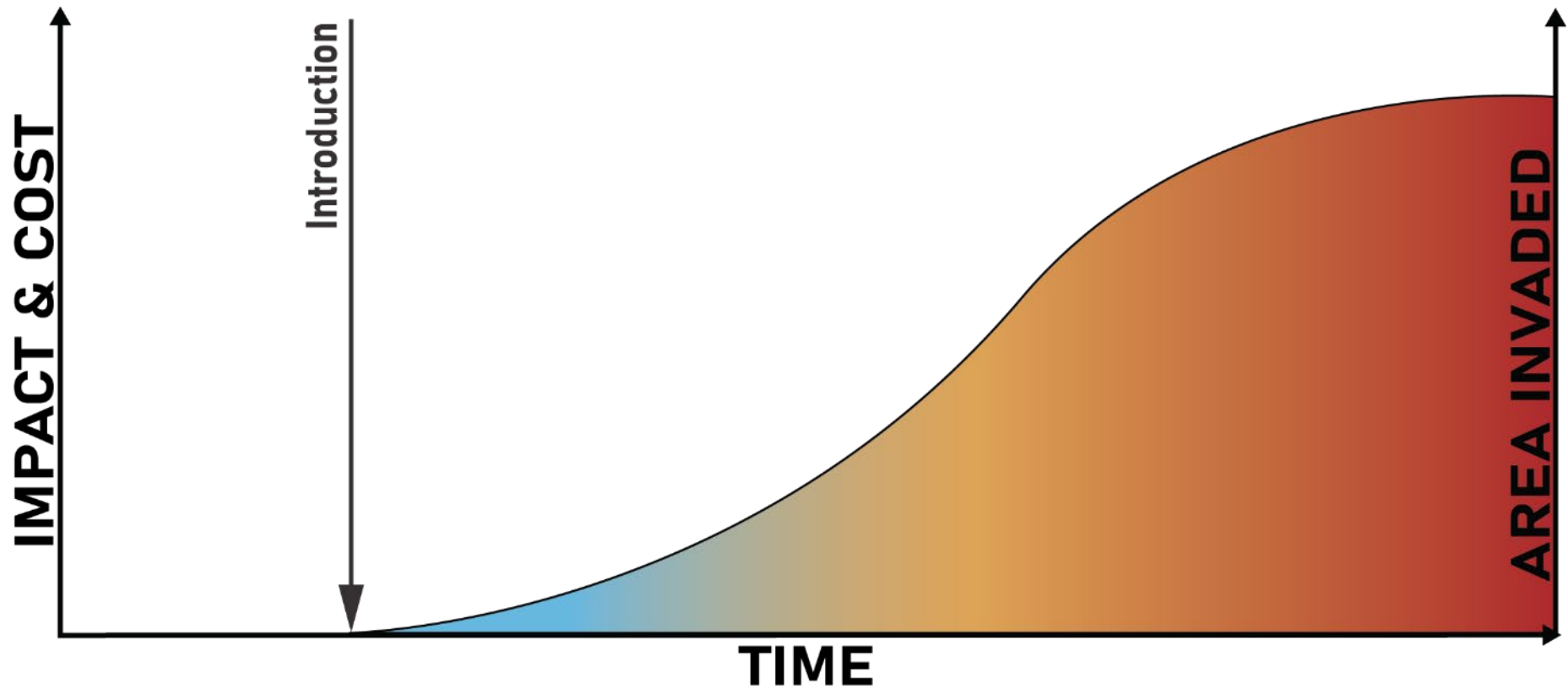
# Invasive Species in the US

USGS Non-Indigenous Aquatic Species

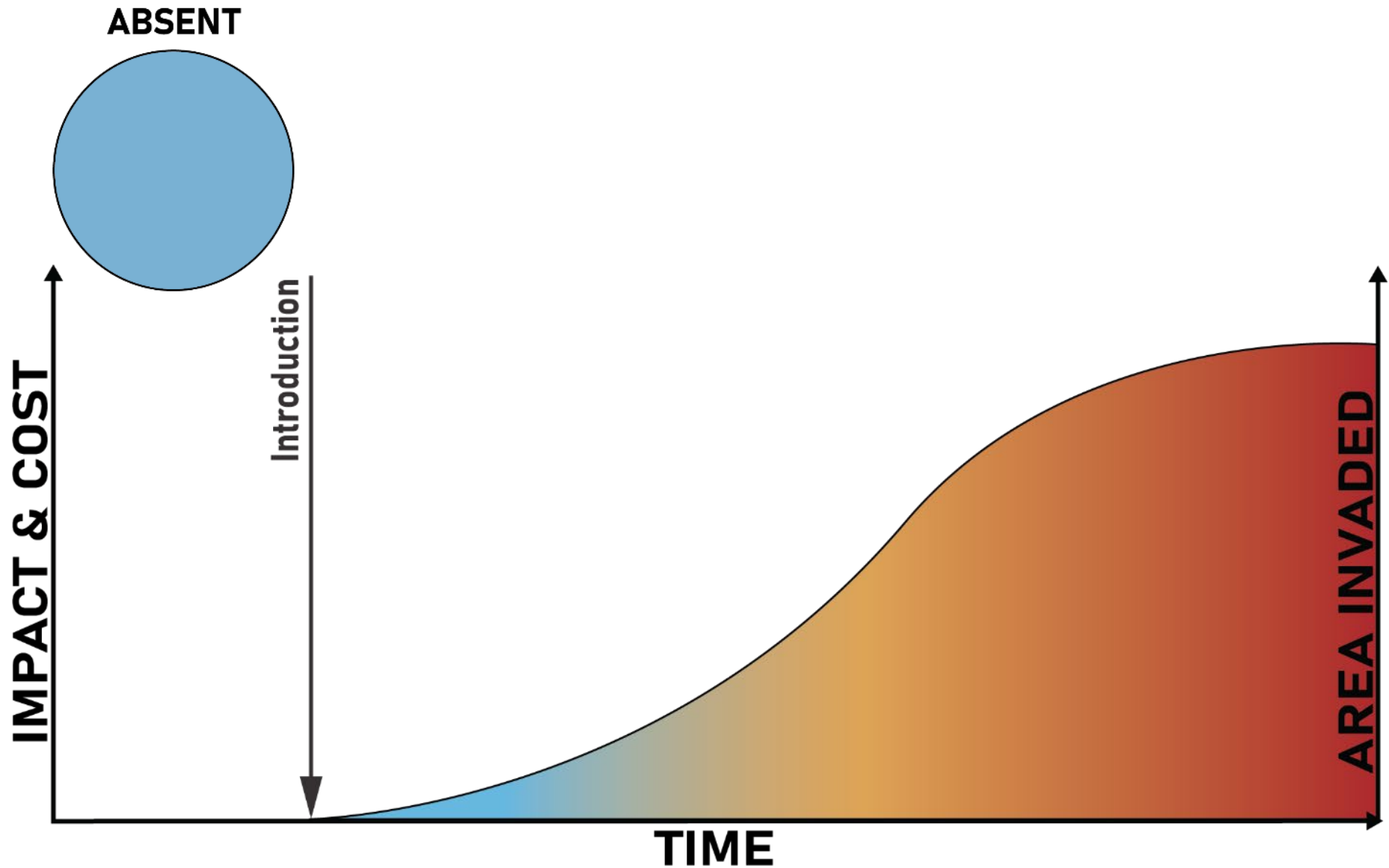




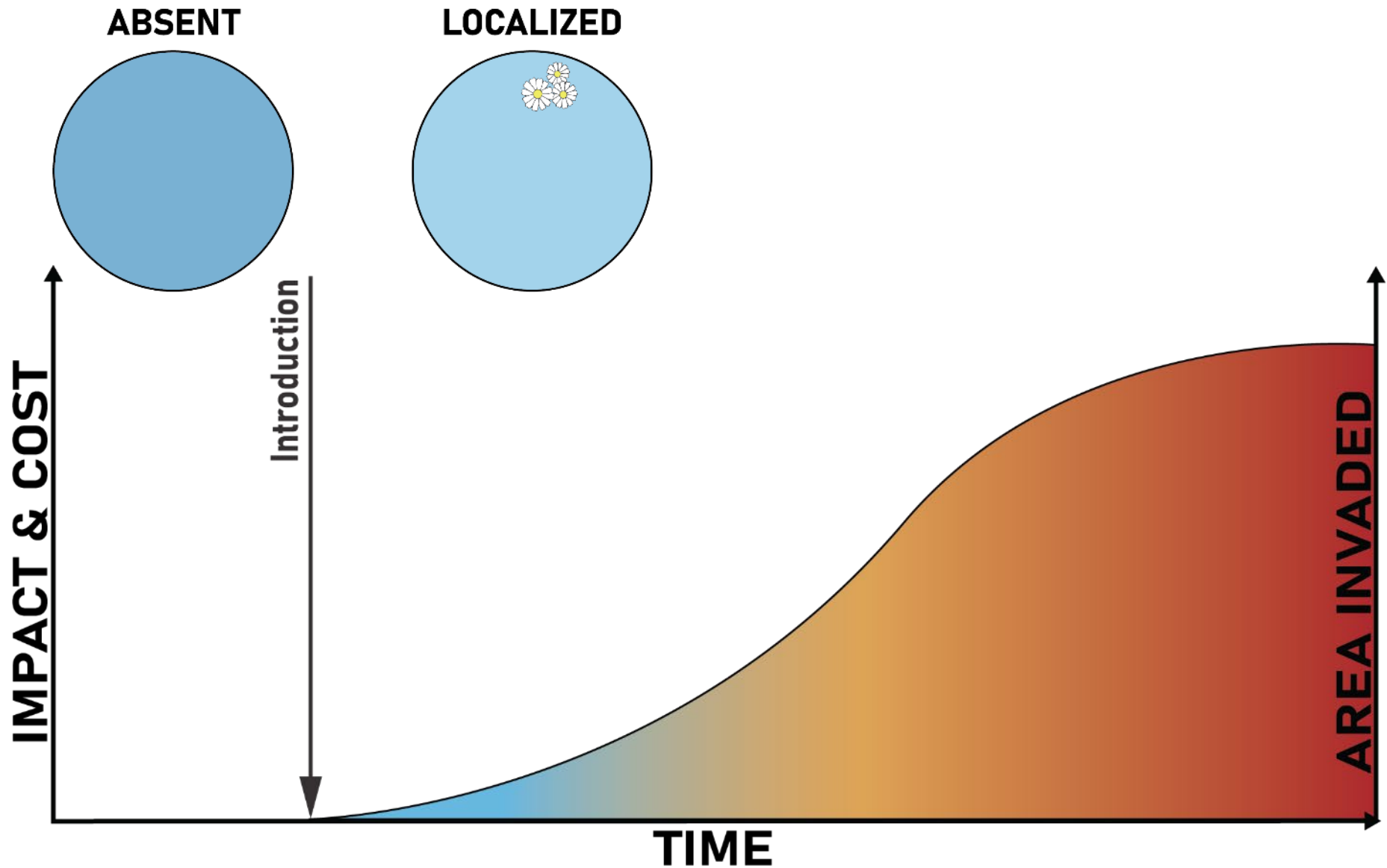
# STAGES of INVASION



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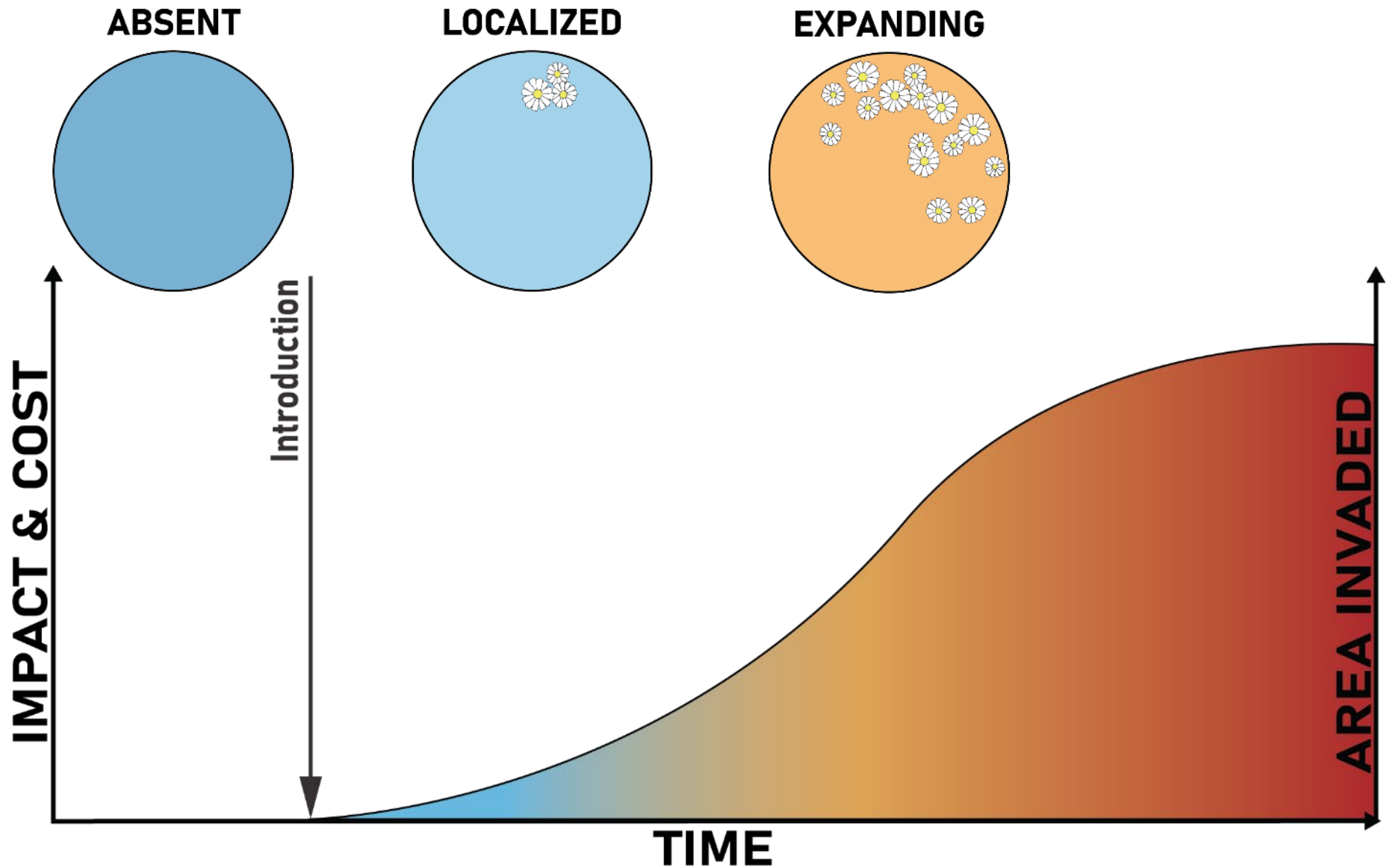


# STAGES of INVASION

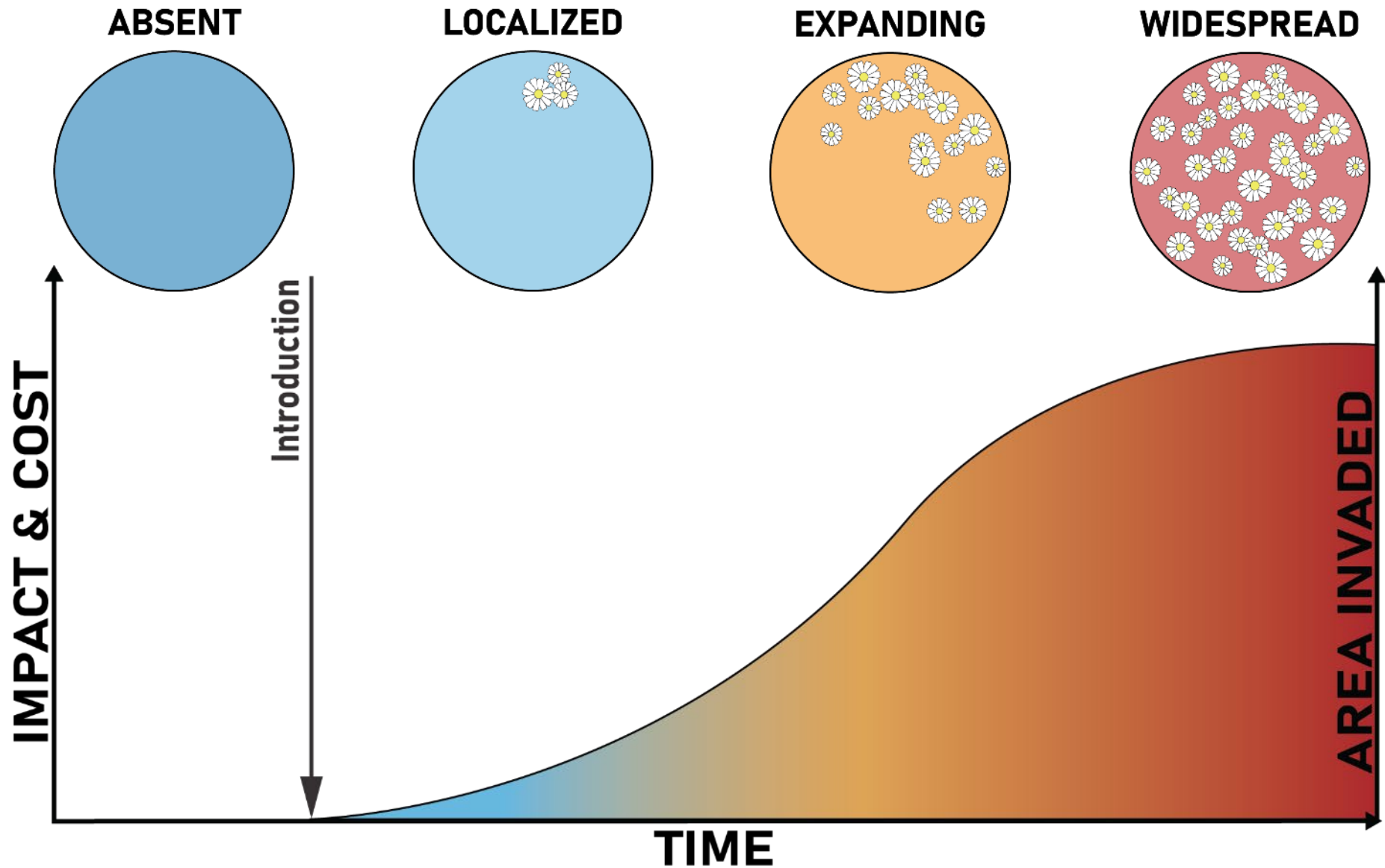




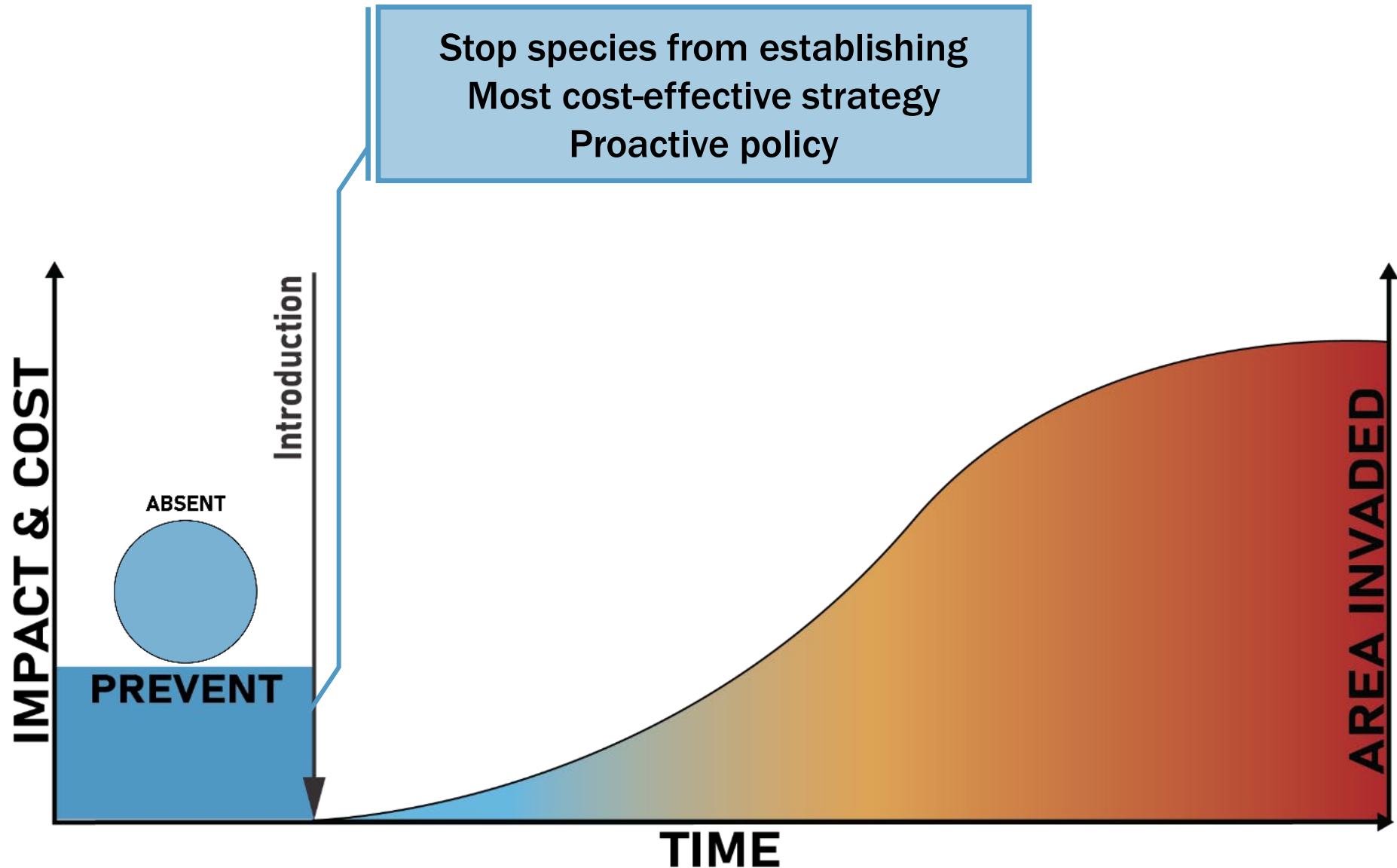
# STAGES of INVASION



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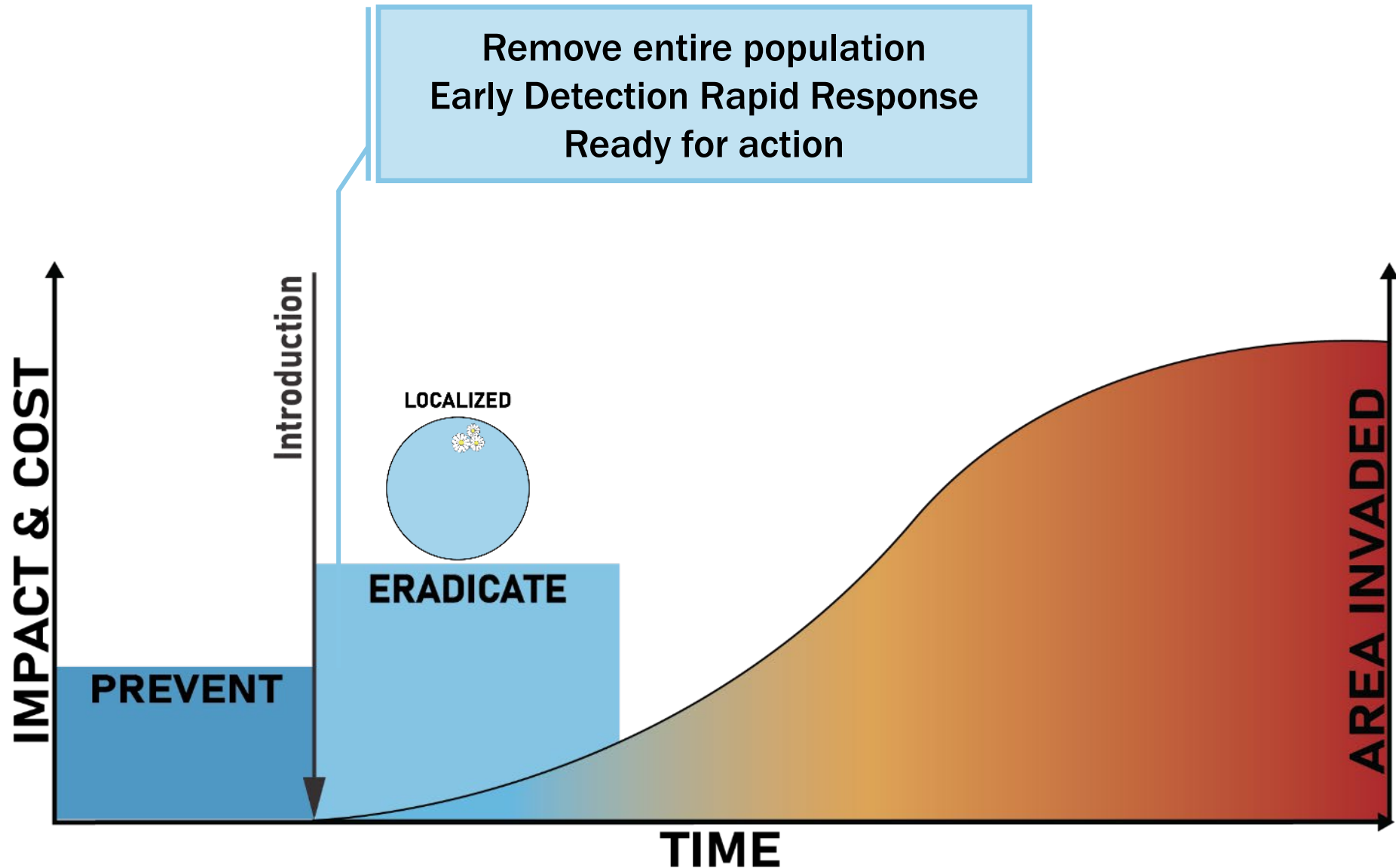


# PREVENTION

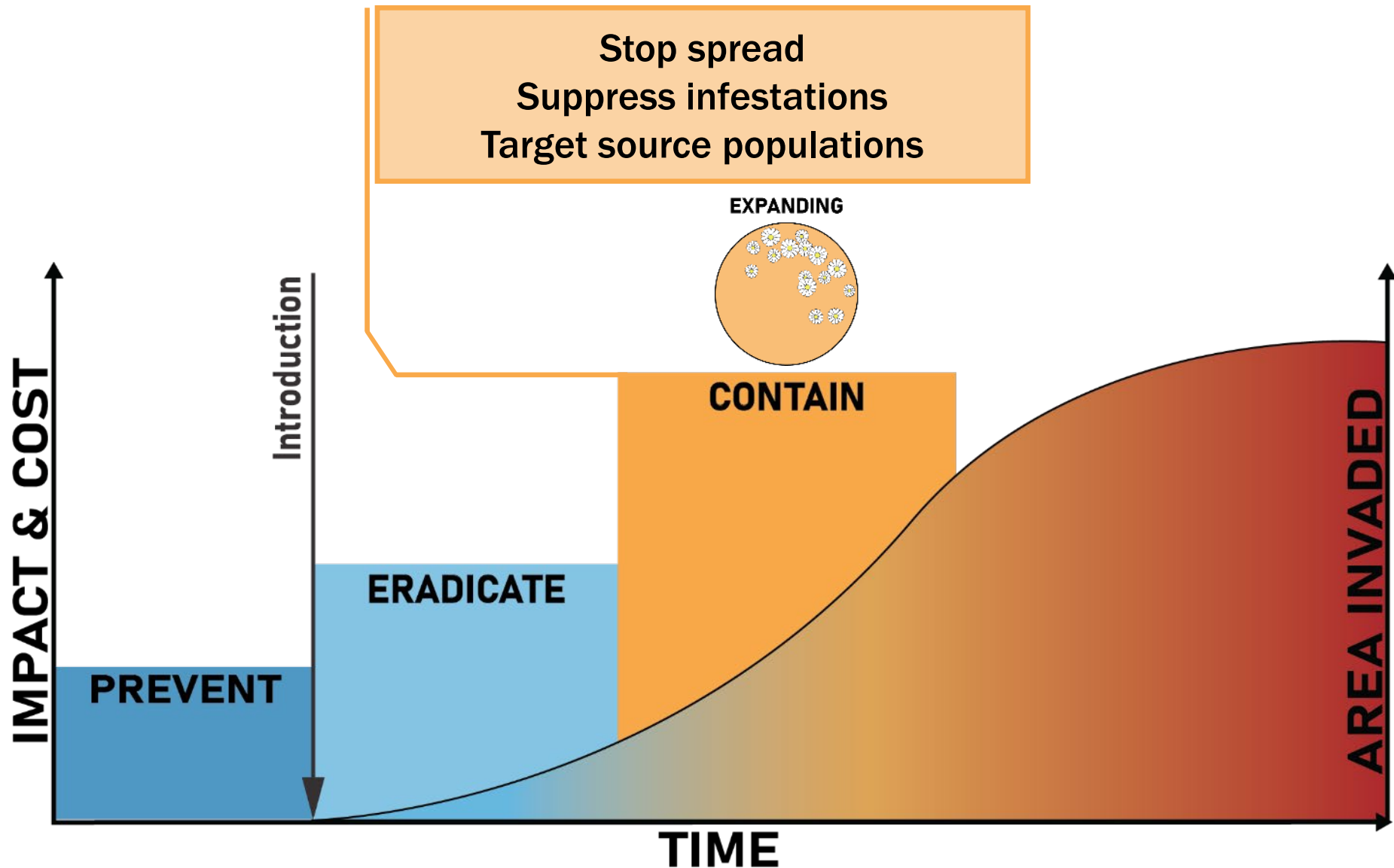




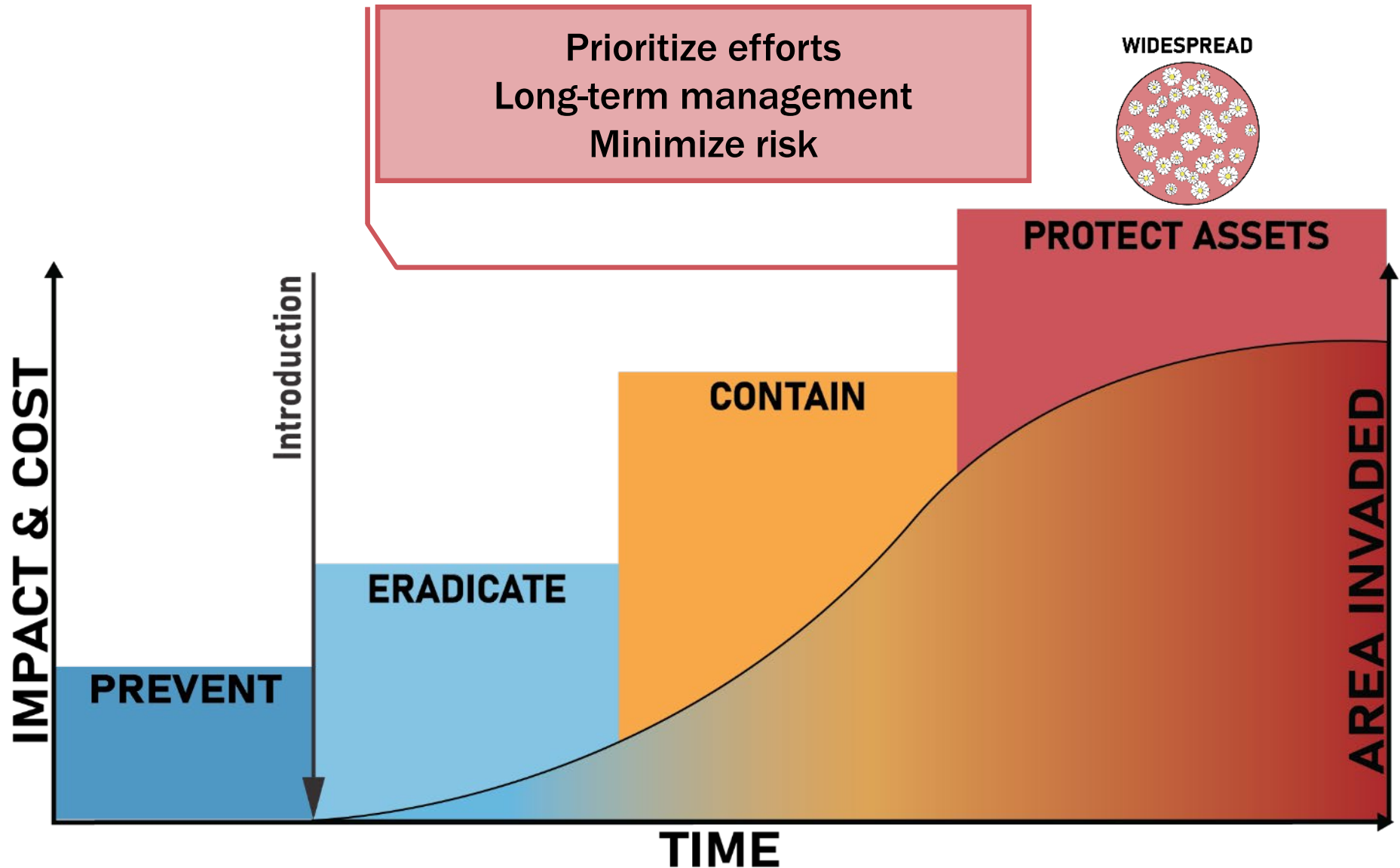
# ERADICATION



# CONTAINMENT

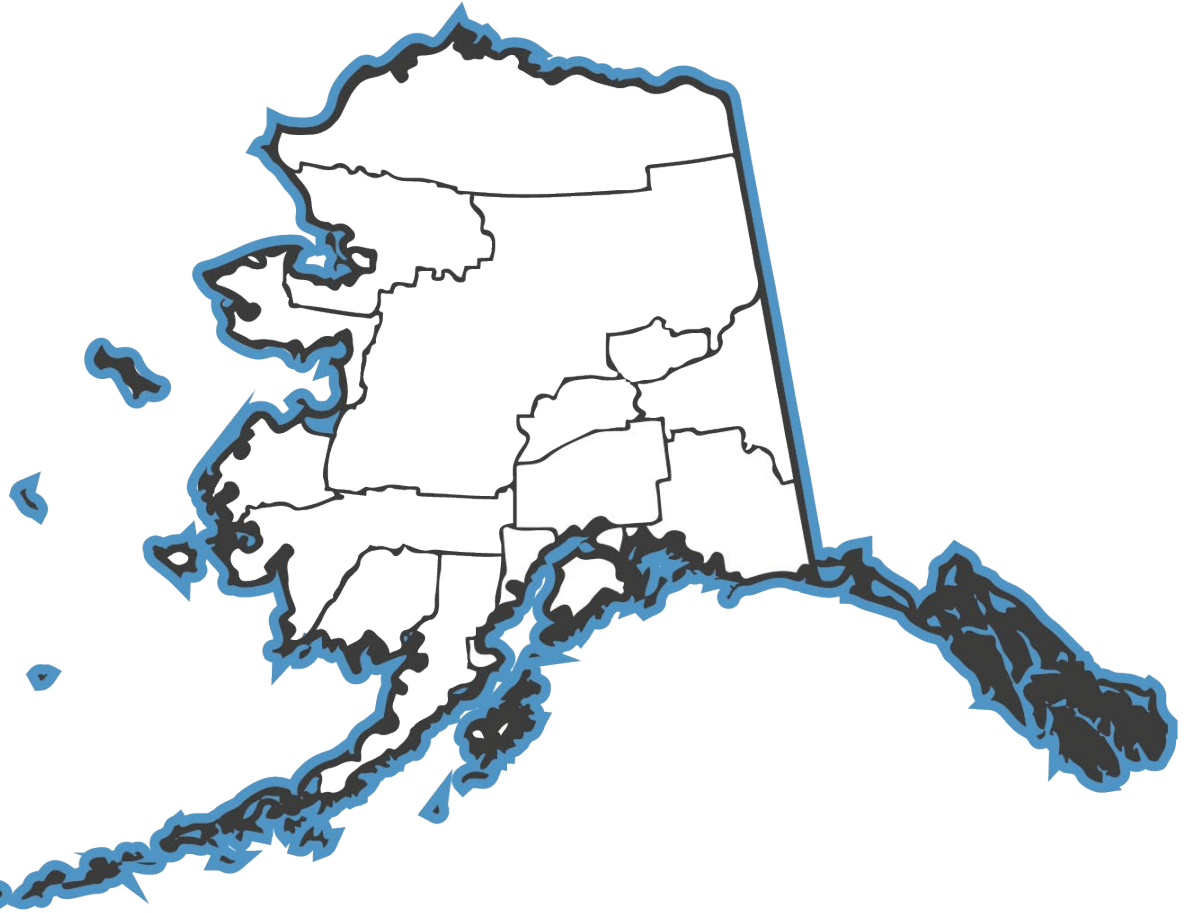


# PROTECTION





# PREVENT





# Zebra & Quagga Mussels





# Zebra & Quagga Mussels

**Damage infrastructure**

**Impair power & water facilities**

**Reduce fish populations**

.....

**Spread and reproduce quickly**

**Difficult and costly to remove**

.....

**High Costs: \$300–\$500 million  
per year in Great Lakes**

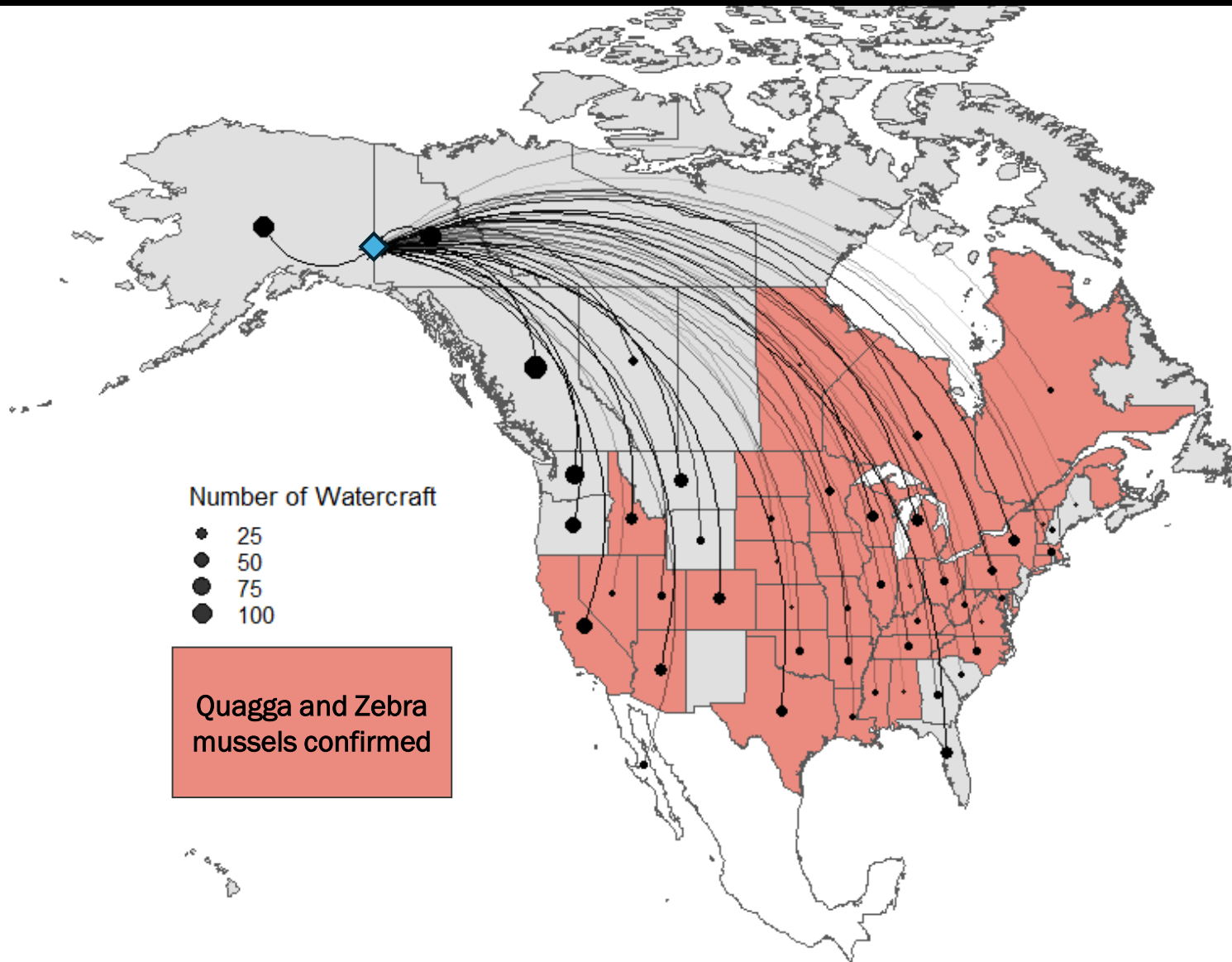
Utah Division of Wildlife Resources



US Army Corps. Of Engineers



# Zebra & Quagga Mussels



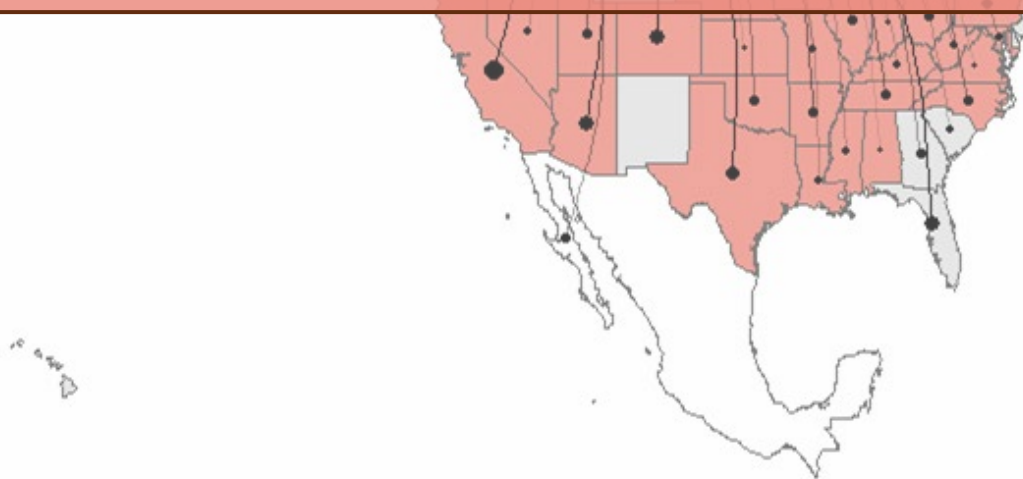
Reported Last State of Use for Watercraft Inspected at the Alcan Port of Entry (2024)



# Zebra & Quagga Mussels



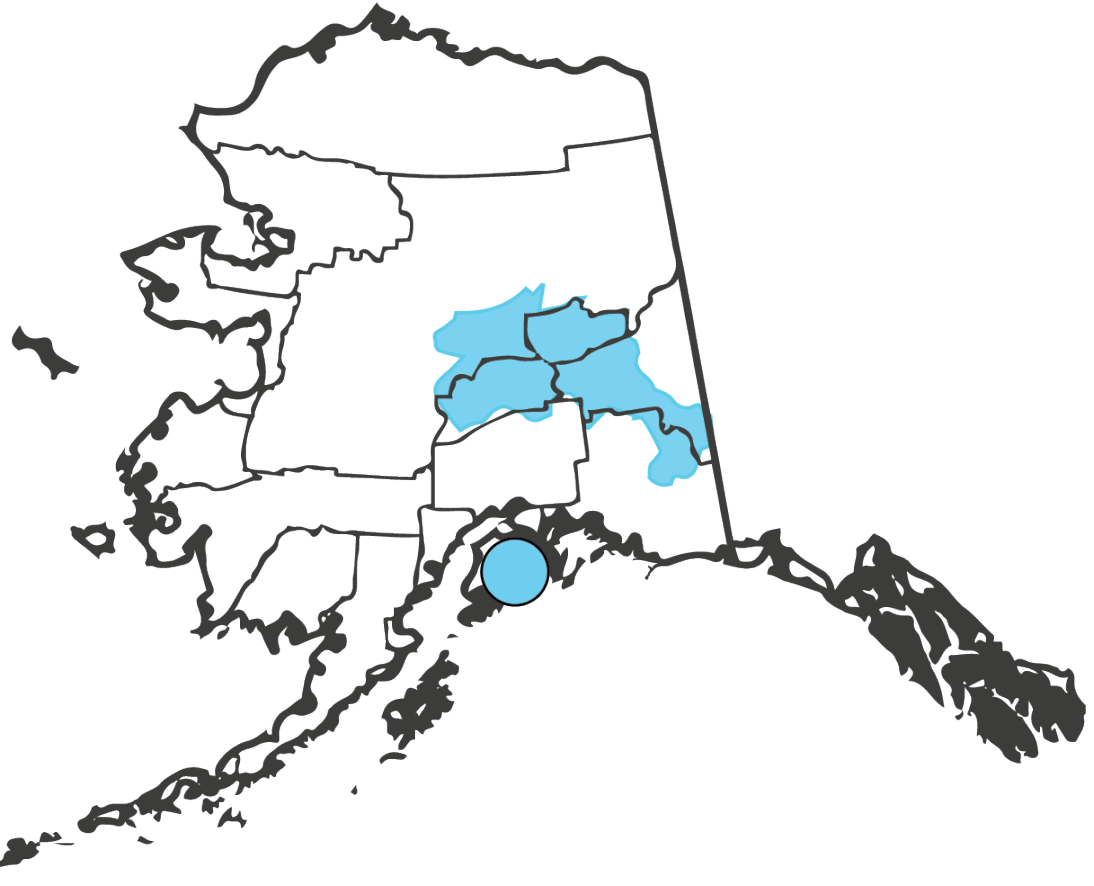
**Annually, more than 1,000 watercraft from outside enter Alaska through multiple unprotected / not monitored ports of entry**



Reported Last State of Use for Watercraft Inspected at the Alcan Port of Entry (2024)



# ERADICATE/CONTAIN





# ELODEA





# ELODEA

**Clog waterways**

**Decrease water quality**

**Threaten salmon habitat**

.....

**Regrow from small fragments**

**Difficult and costly to remove**

.....

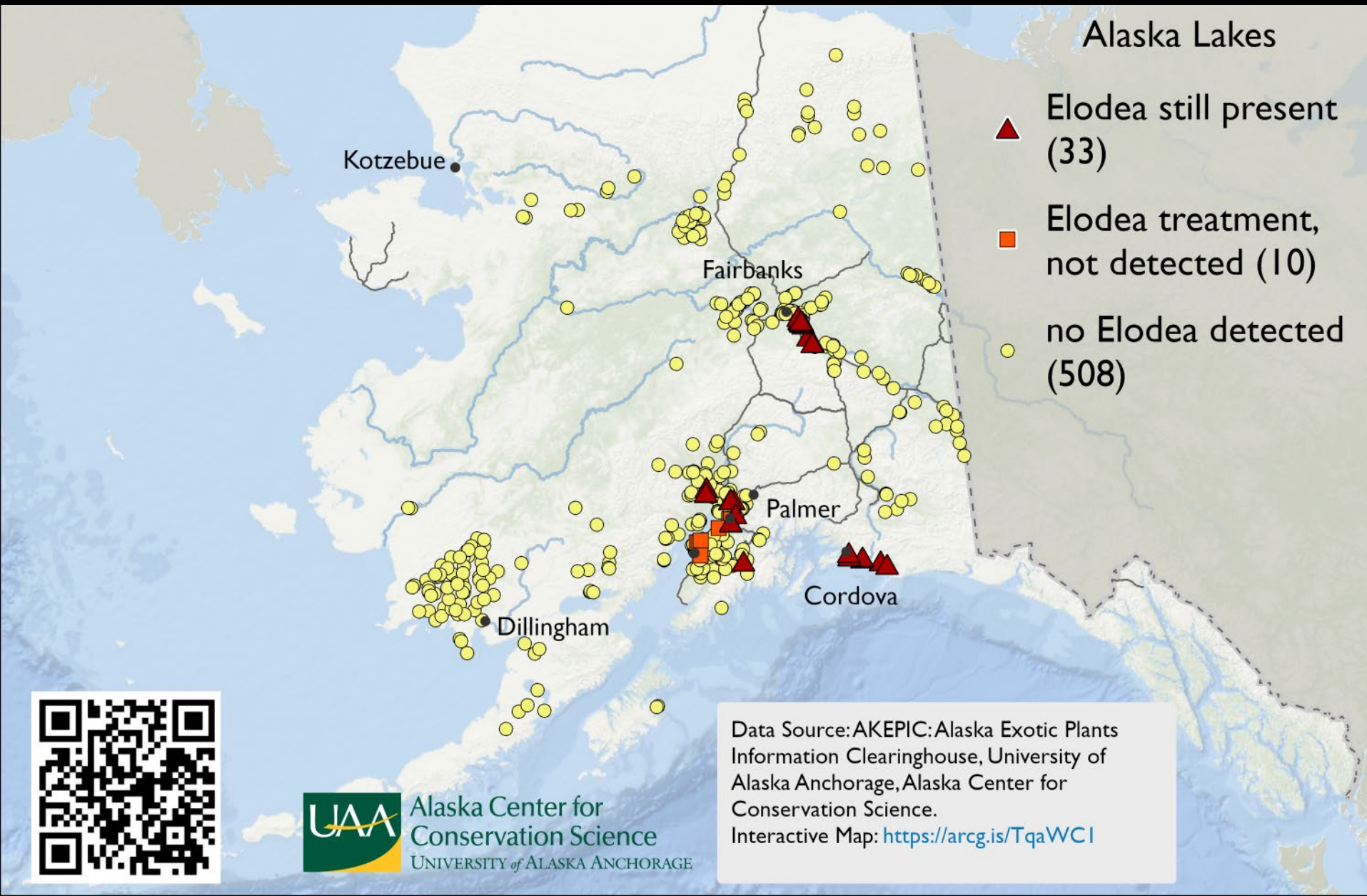
**Potential to reduce revenue by est.  
\$97 million annually.** (Schwoerer et al.  
2019)

Ashley Lutto, USFWS

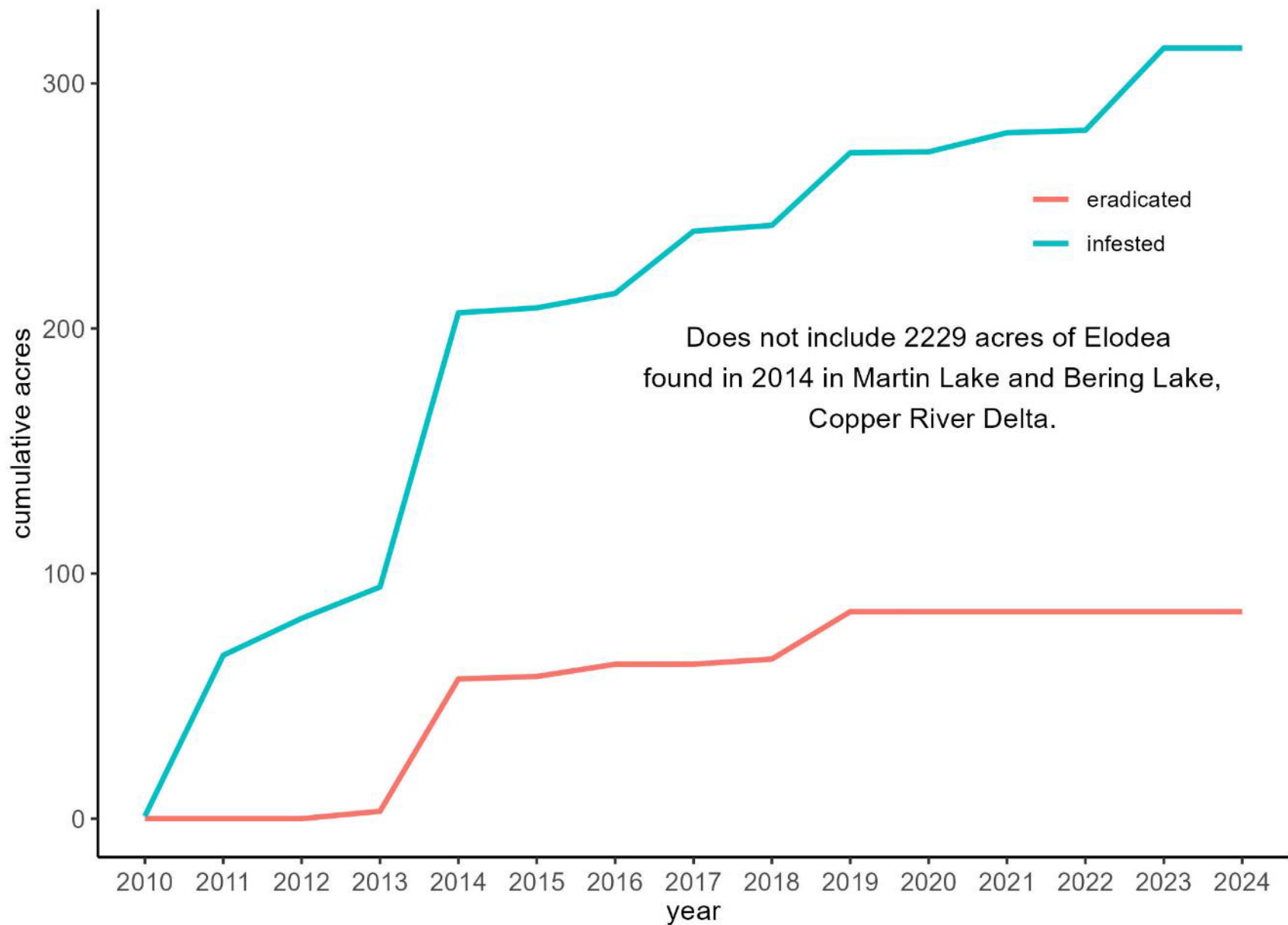




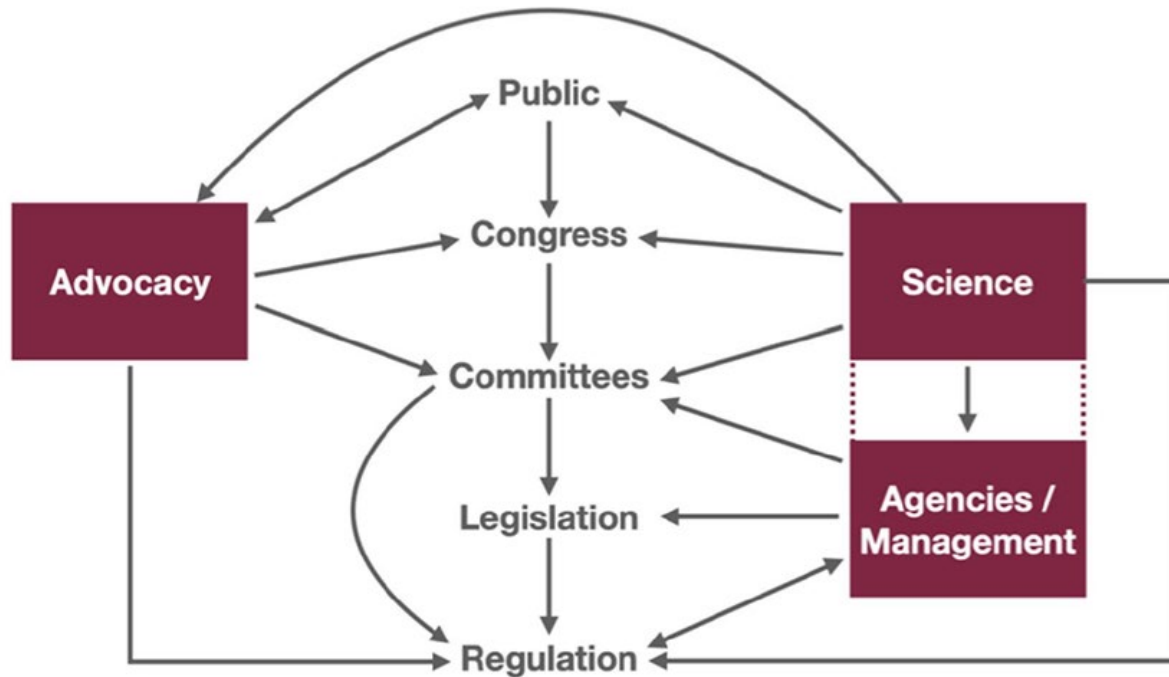
# ELODEA



# ELODEA



# Action on Invasive Species



# State Policies

**Effective: June 11, 2008**

West's F.S.A. § 369.251

369.251. Invasive nonnative plants; prohibitions; study; removal; rules

**Effective: July 1, 2019**

Ga. Code Ann., § 27-3-24

§ 27-3-24. Hunting of feral hogs

## **§19-16A-1. Short title.**

This article shall be known as the "West Virginia Pesticide Control Act of 1990".

Ark. Admin. Code 007.10.33-XI

007.10.33-XI. VECTOR AND RODENT CONTROL.

N.C.G.S.A. § 113-292

§ 113-292. Authority of the Wildlife Resources Commission in regulation of inland fishing and the introduction of exotic species

S.C. Code of Regulations R. 27-5

27-58. Asian Longhorned Beetle Quarantine.

Regs. Conn. State Agencies § 22-84-5g

Sec. 22-84-5g. Regulation of firewood transported into and within Connecticut



# Example: Montana Mussel Program

## Montana Aquatic Invasive Species Boat Inspections - 2024 Season

### AIS Mussels Fouled Boats

42

Statewide Total

\*Data does not filter by month

### High Risk Boats

37,913

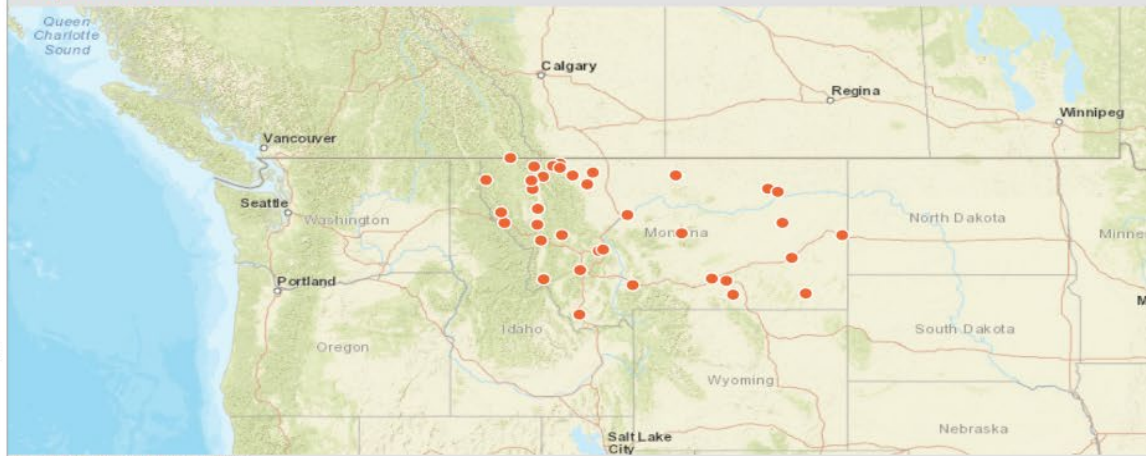
\*Boats last launched in states with known AIS infestations

### Total Watercraft Inspections

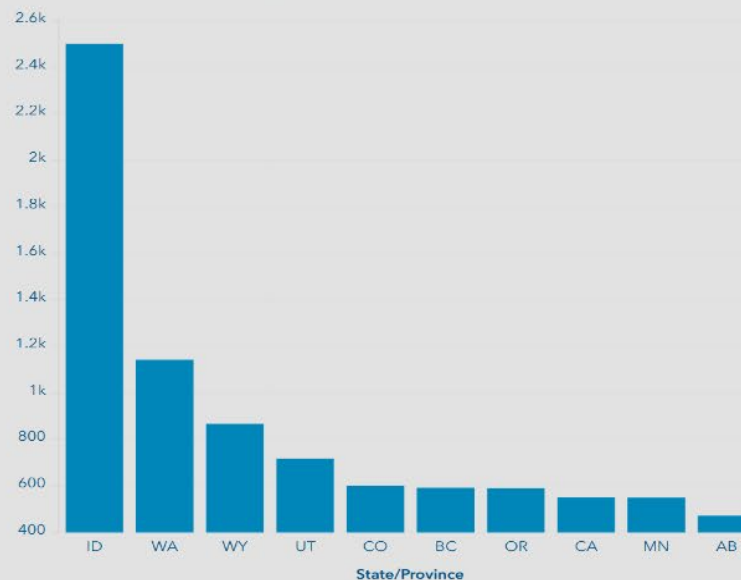
100,064

updated every Monday afternoon

### Inspection Station Locations



### Out-of-State Boats Inspected



### AIS Fouled Boats

#### Inspection Station - Anaconda

Date: 10/23/2024, 4:00 PM  
Water Last Launched: Lake Michigan  
State of Origin: IL

#### Inspection Station - Anaconda

Date: 10/23/2024, 4:00 PM  
Water Last Launched: Lake Michigan  
State of Origin: IL

#### Inspection Station - Hardin

Date: 10/14/2024, 4:00 PM  
Water Last Launched: Lake Michigan  
State of Origin: WI

#### Inspection Station - Wibaux

Date: 10/11/2024, 4:00 PM  
Water Last Launched: Lake Michigan  
State of Origin: MI

#### Inspection Station - Anaconda

Date: 10/7/2024, 4:00 PM  
Water Last Launched: Lake Oahe  
State of Origin: SD

\*Data does not filter by month

# National & Regional Coordination

# NISC

NATIONAL INVASIVE SPECIES COUNCIL



# Coordination

## Alaska Invasive Species Partnership



The AKISP is an informal affiliation of interested individuals representing agencies, organizations, and members of the public.

Our goal is to heighten ***awareness*** of the problems associated with non-native invasive species and to bring about greater statewide ***coordination***, ***cooperation*** and ***action*** to halt the introduction and spread of these invasive species.

# Coordination

## Alaska Invasive Species Partnership



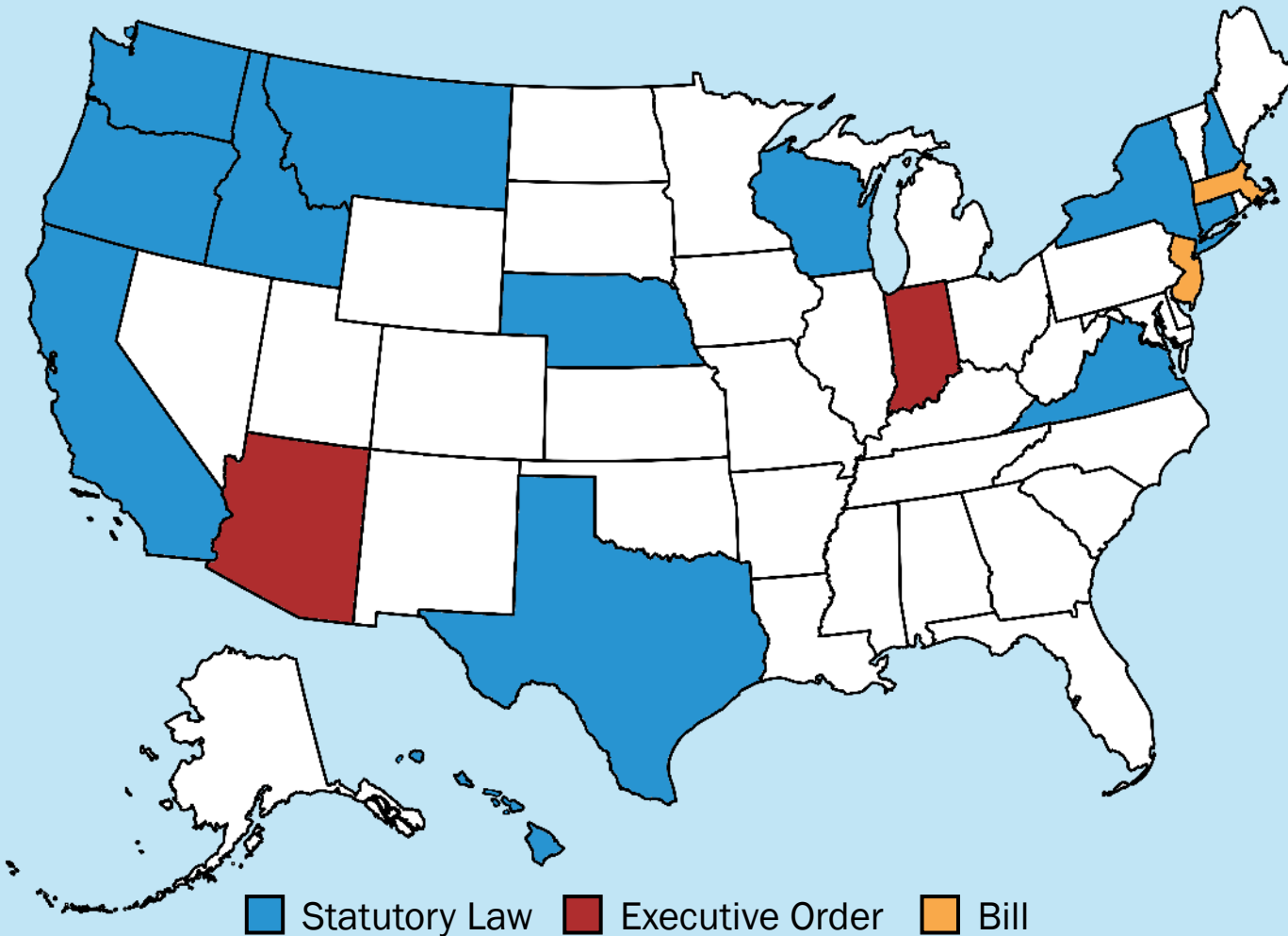
Alaska Exotic Plant Information Clearinghouse

Alaska Invasive Plant Ranking System

Alaska Aquatic Invasive Species Clearinghouse

Annual Workshops

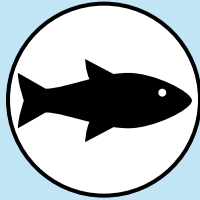
# State Invasive Species Councils





# State Invasive Species Councils

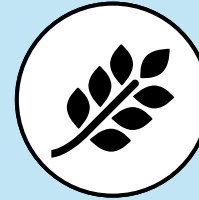
Fish & Game



Transportation



Agriculture



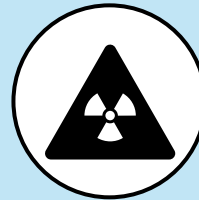
Natural  
Resources



Economic  
Development



Environmental  
Quality

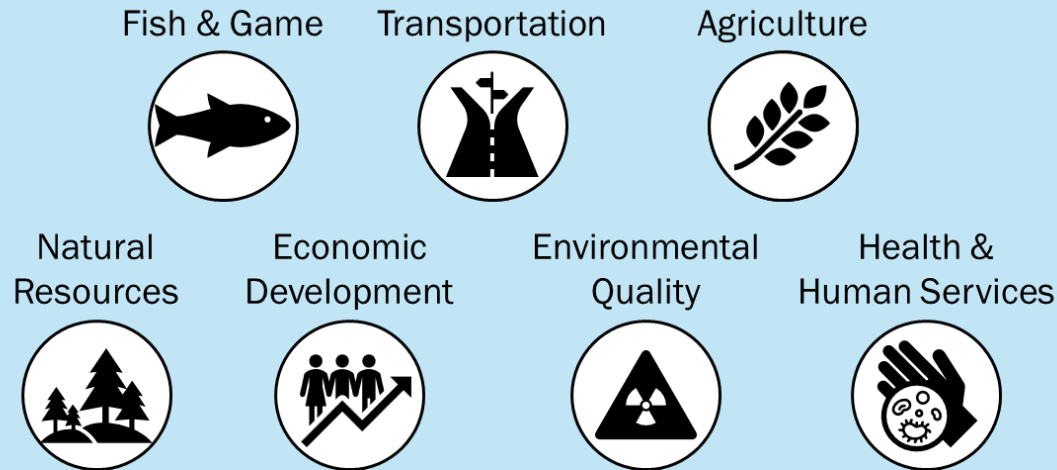


Health &  
Human Services



***Non-state members:*** county/municipal governments, industry, non-profits, large landowners, Universities, Tribal Governments, interest groups

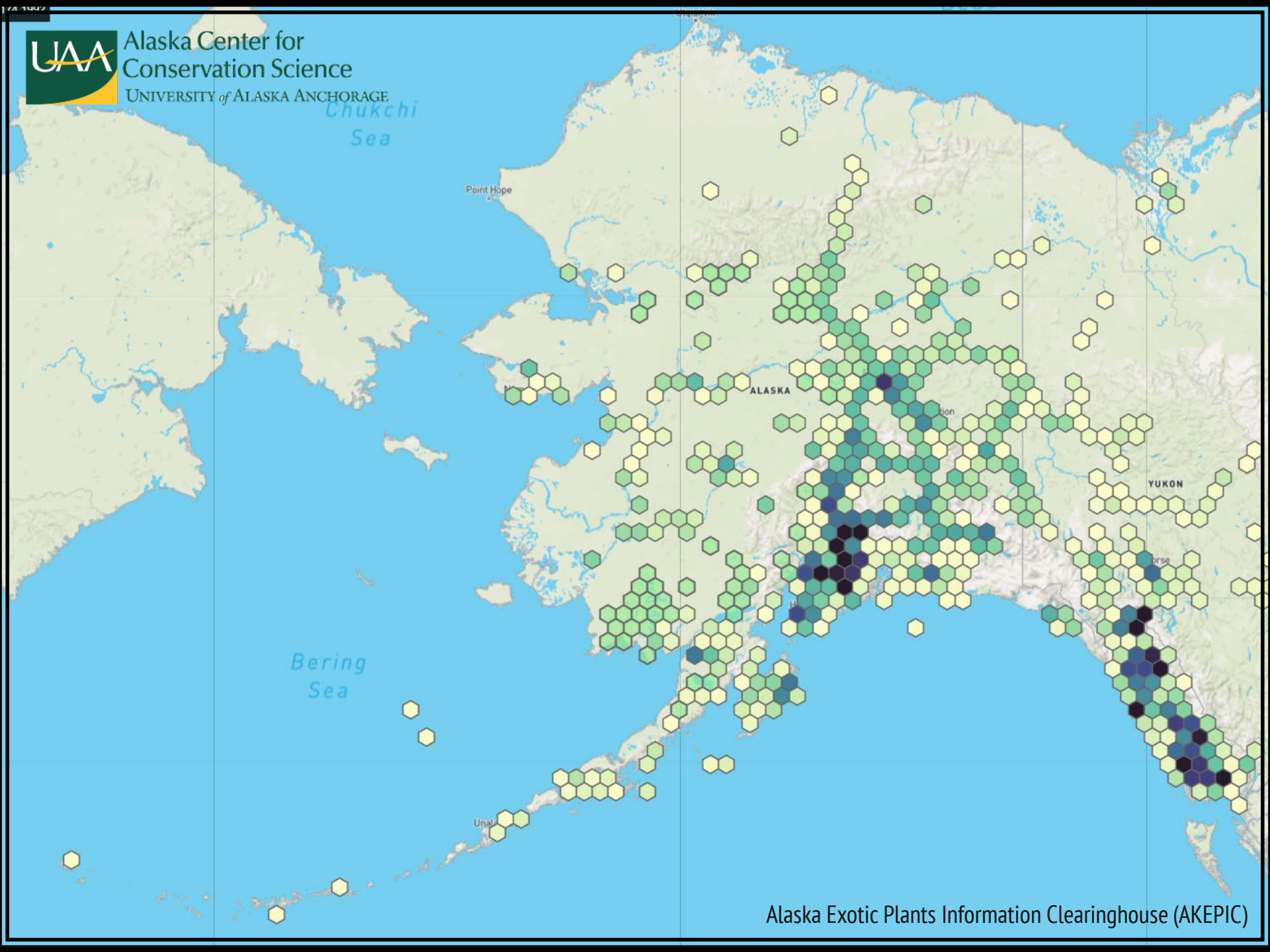
# State Invasive Species Councils



Accountability  
Transparency  
Coordination  
Authority  
Responsiveness  
Efficiency



Alaska Center for  
Conservation Science  
UNIVERSITY of ALASKA ANCHORAGE



# Acknowledgements

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**Tammy Davis**, Alaska Department of Fish & Game

**Alaska Invasive Species Partnership**

**Southeast Alaska Watershed Coalition**

**Representative Himschoot**

**Senator Dunbar**





# Questions?

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AKISP: [akisboard@gmail.com](mailto:akisboard@gmail.com)