

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 a small waterfall or rapid section in the center. The surrounding forest is lush and green, with some areas showing more dense foliage and others showing more open ground or different types of trees.

Emerging Invasive Species Concerns and Solutions in Alaska

Emily Reed

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

Southeast Alaska Watershed Coalition



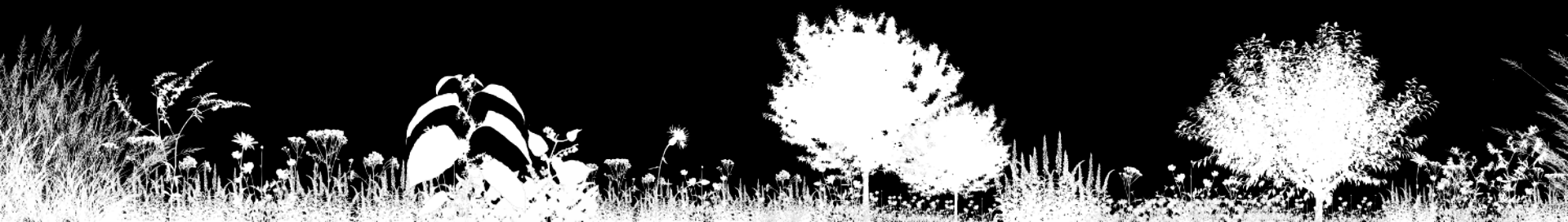


Panel: Grass Mix 1

✓	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+

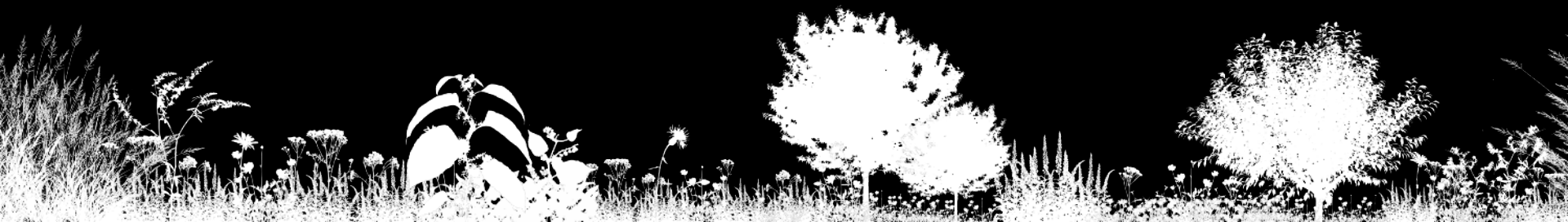


What makes a non-native species **INVASIVE?**



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

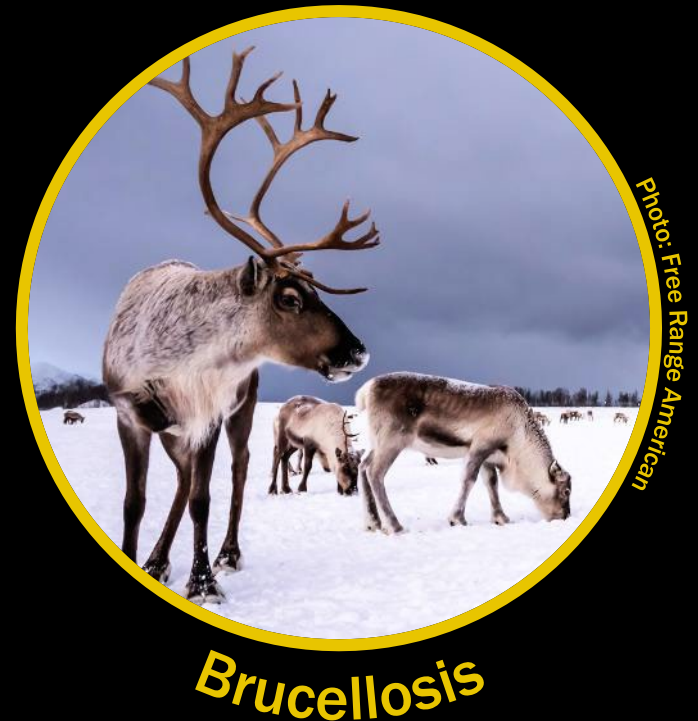
Animal Health

Infrastructure

Military Readiness

Forest Health

Salmon Habitat



BIOSECURITY IMPACTS

Human Health

Animal Health

Infrastructure

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Forest Health

Salmon Habitat



Photo: Japanese Knotweed Solutions Ltd

Knotweed

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

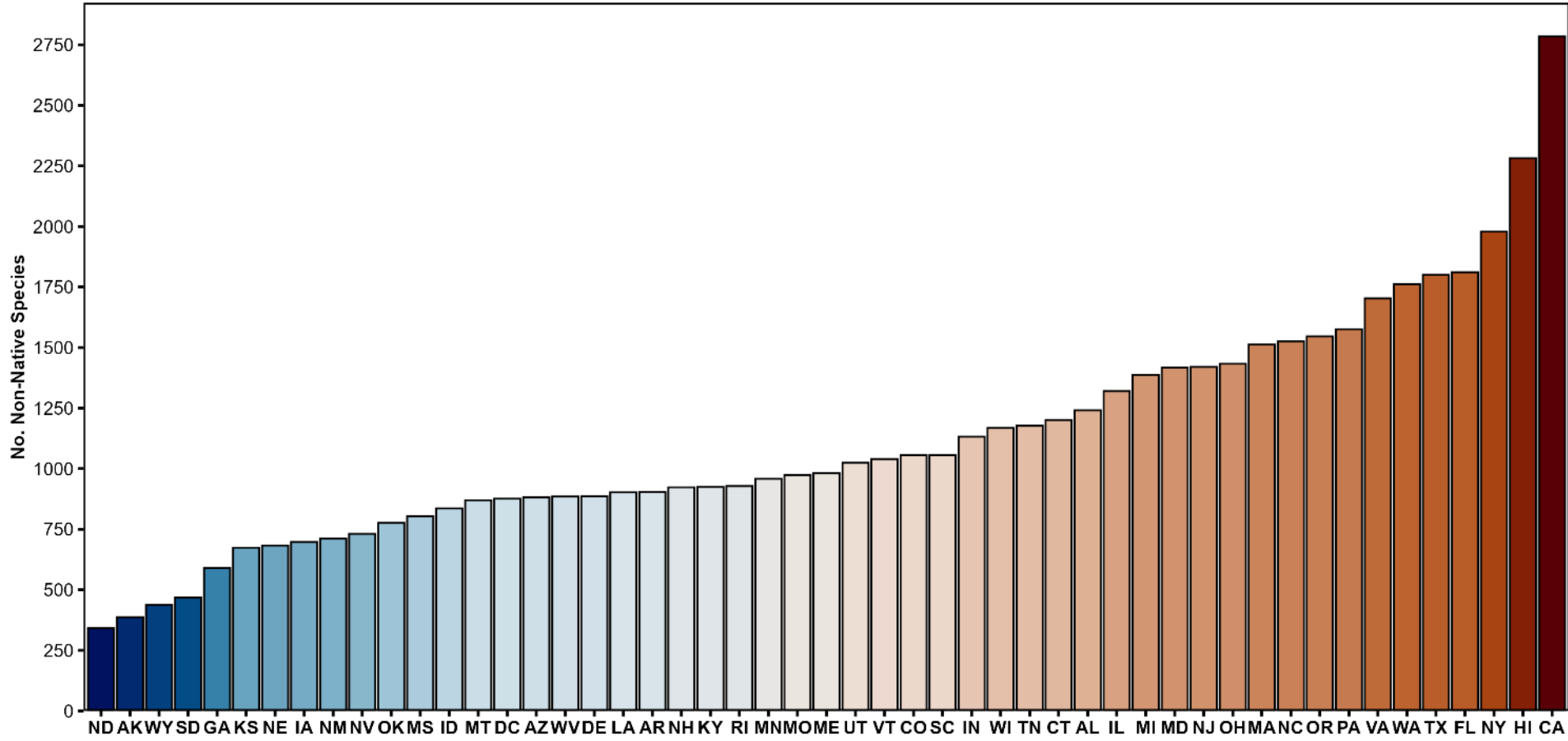
BIOSECURITY IMPACTS

Human Health
Animal Health
Infrastructure
Military Readiness
Forest Health
Salmon Habitat



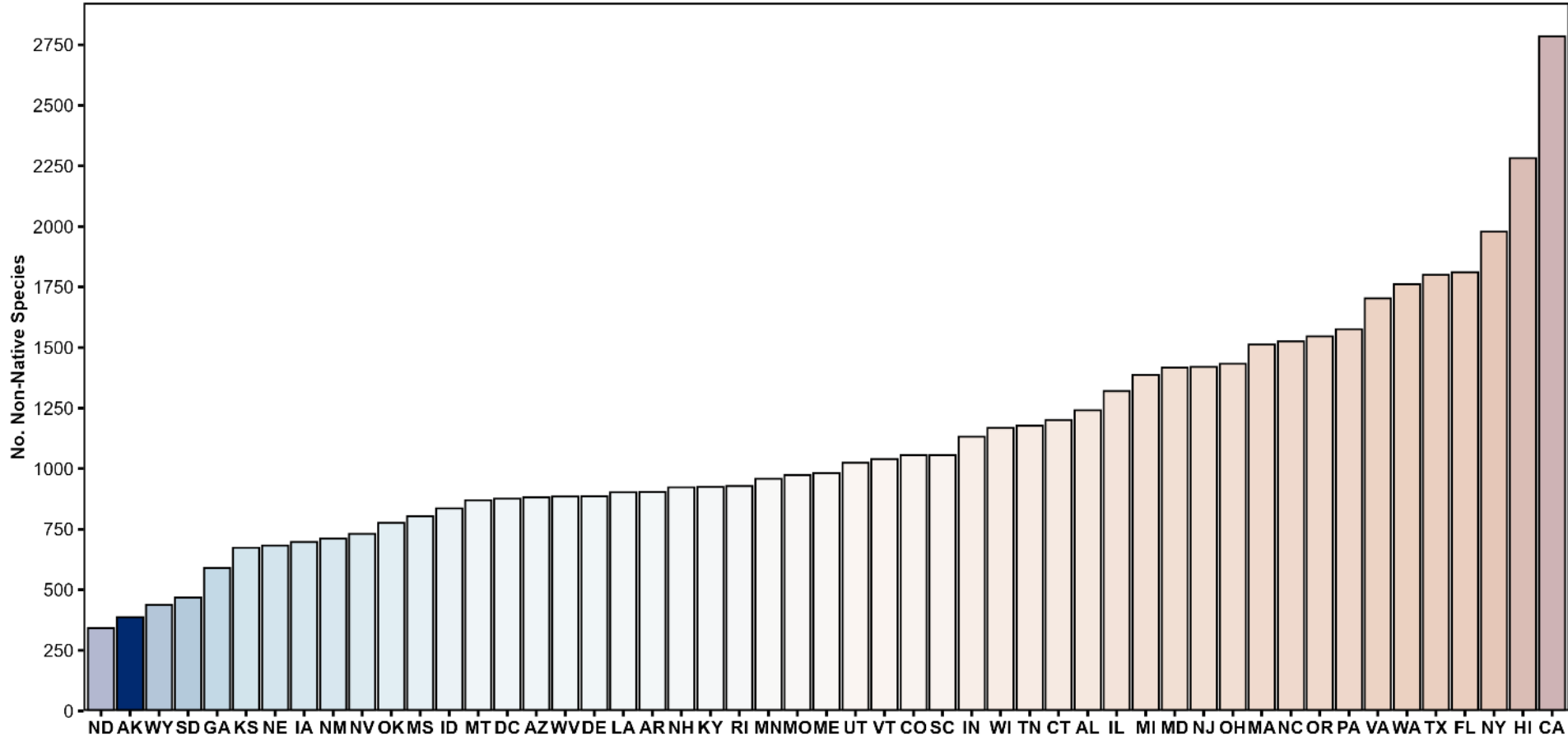
Invasive Species in the US

iNaturalist: Observed Non-Native Species



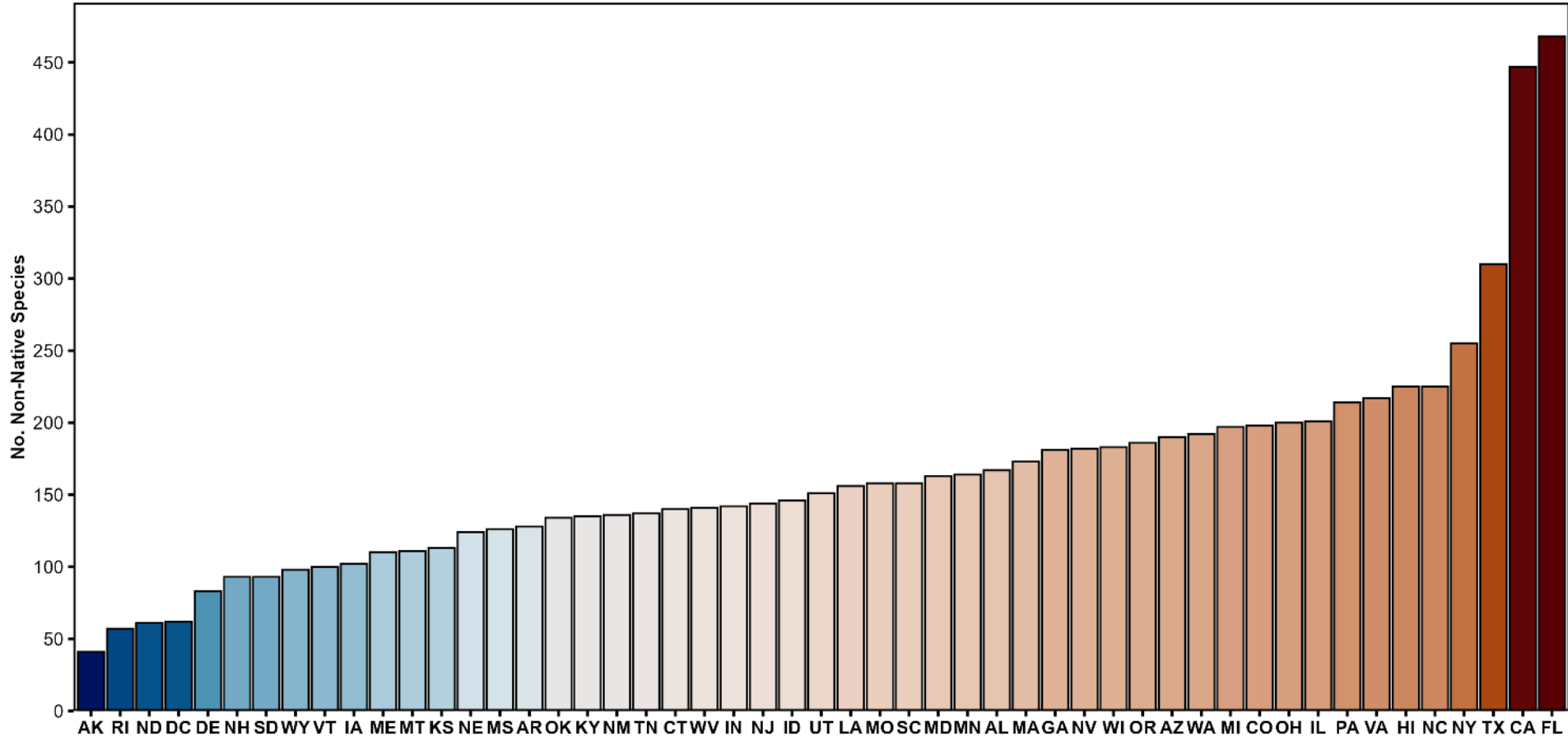
Invasive Species in the US

iNaturalist: Observed Non-Native Species



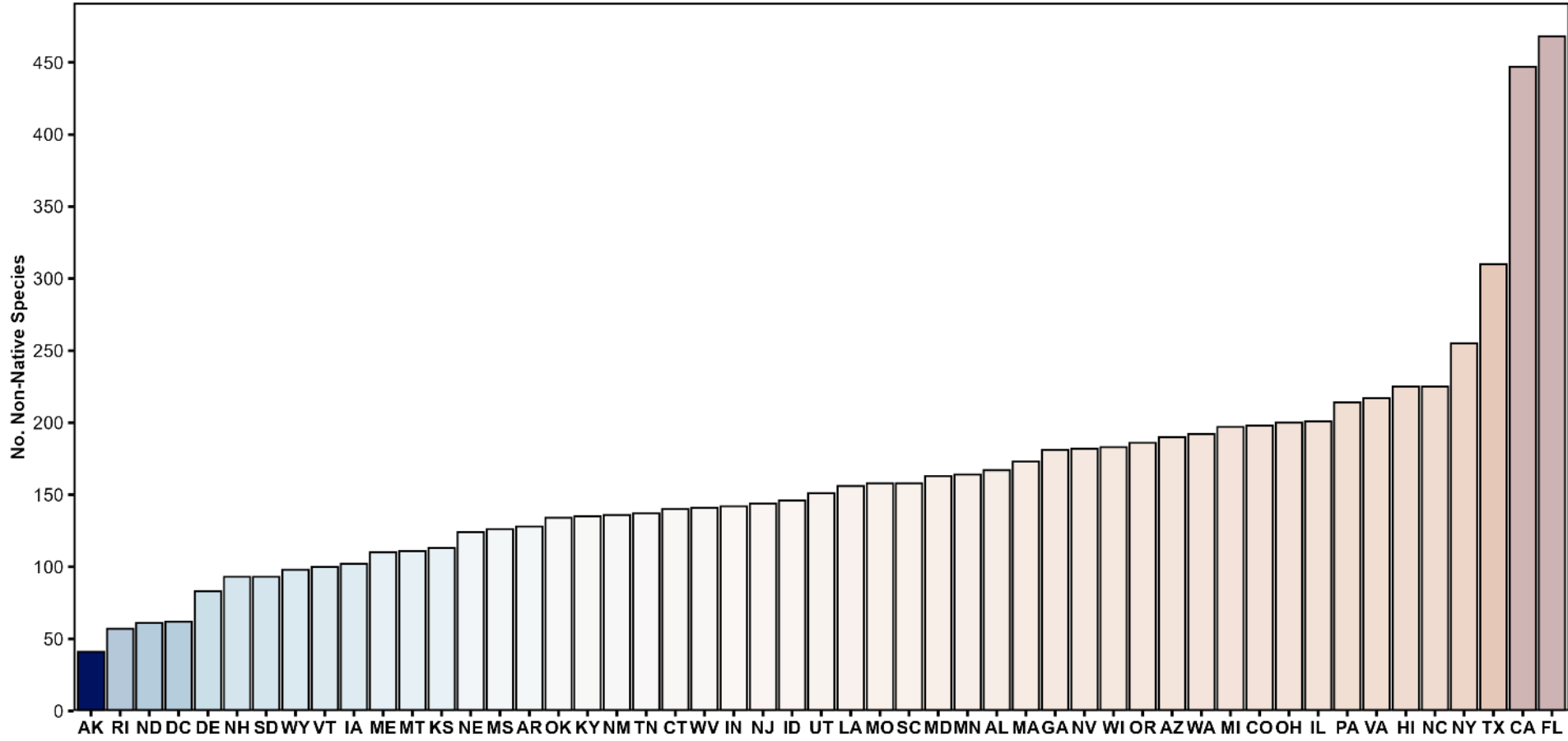
Invasive Species in the US

USGS Non-Indigenous Aquatic Species

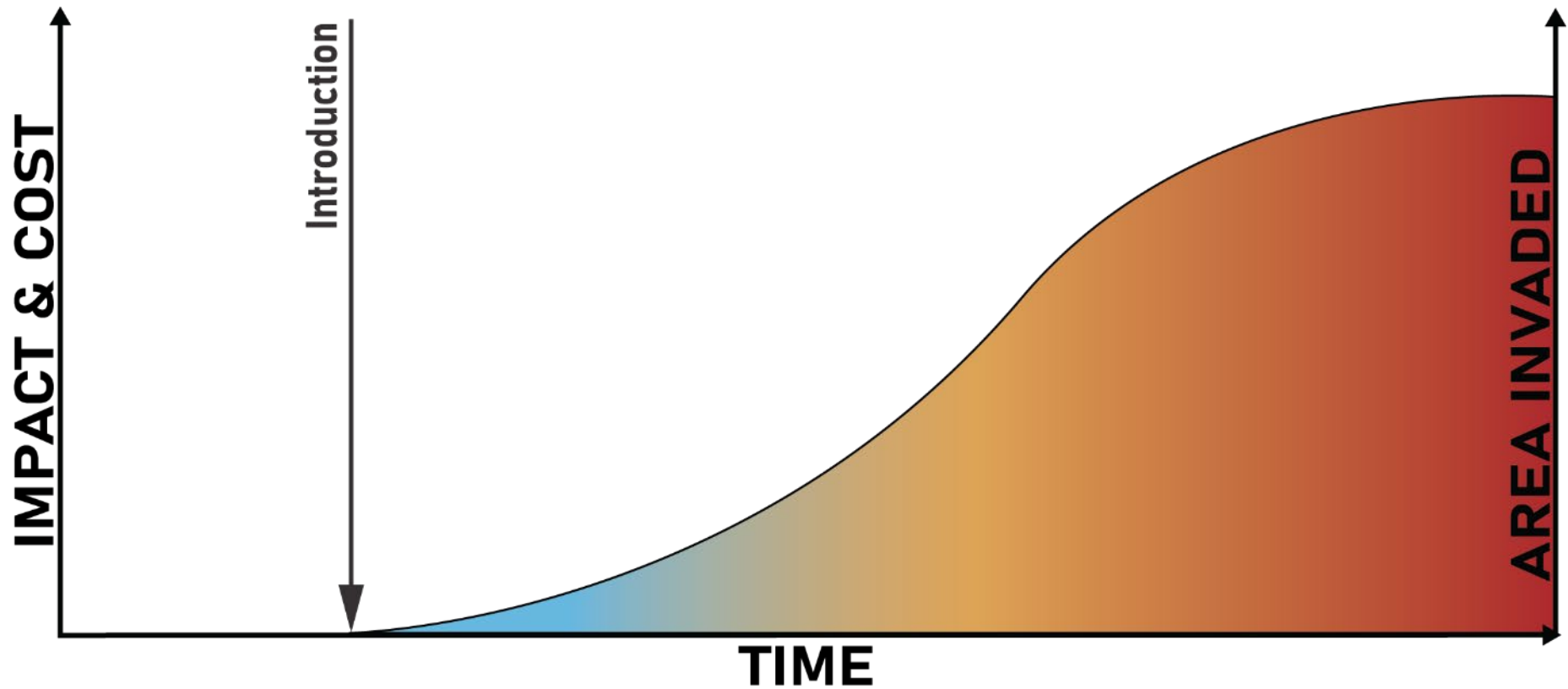


Invasive Species in the US

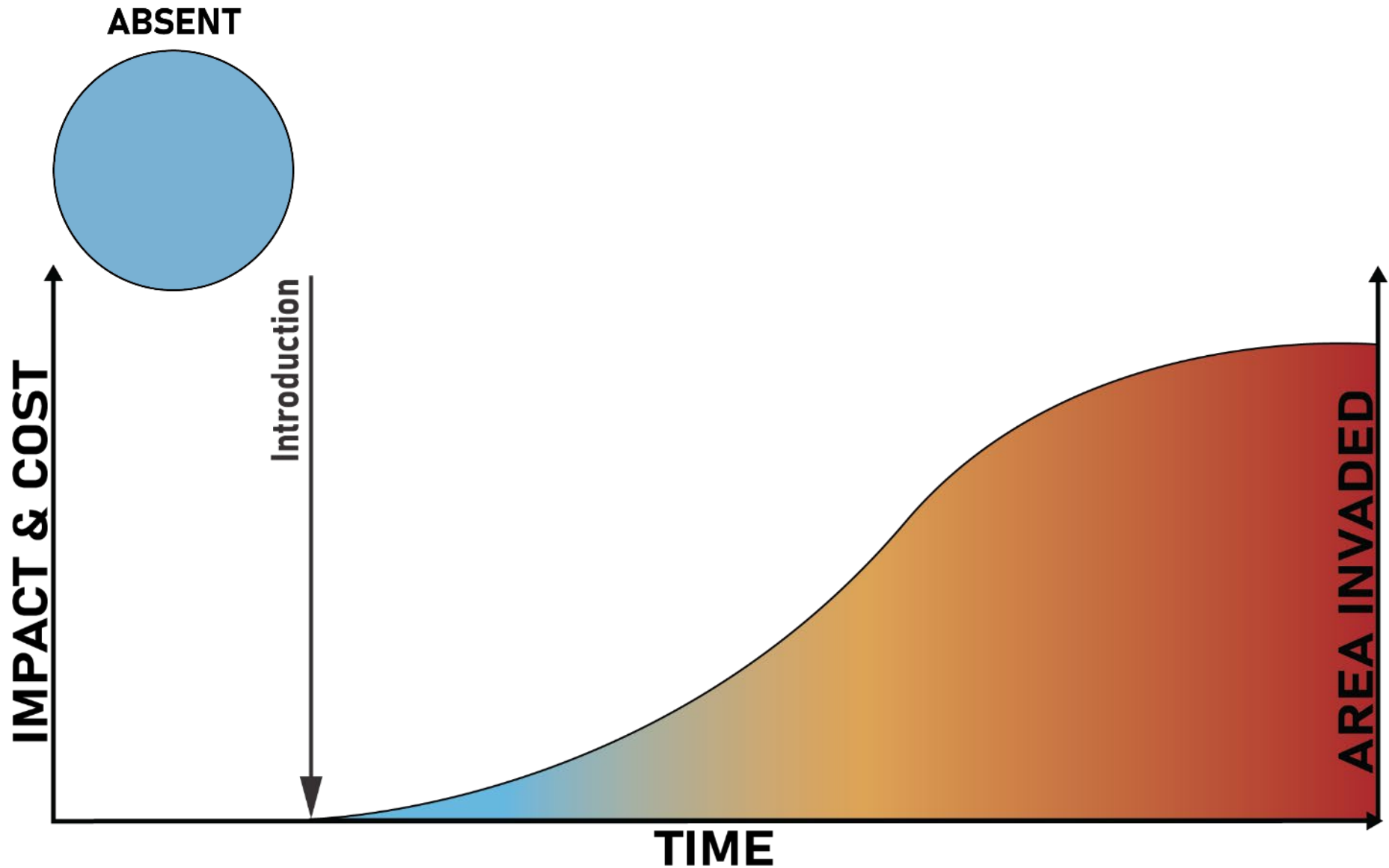
USGS Non-Indigenous Aquatic Species



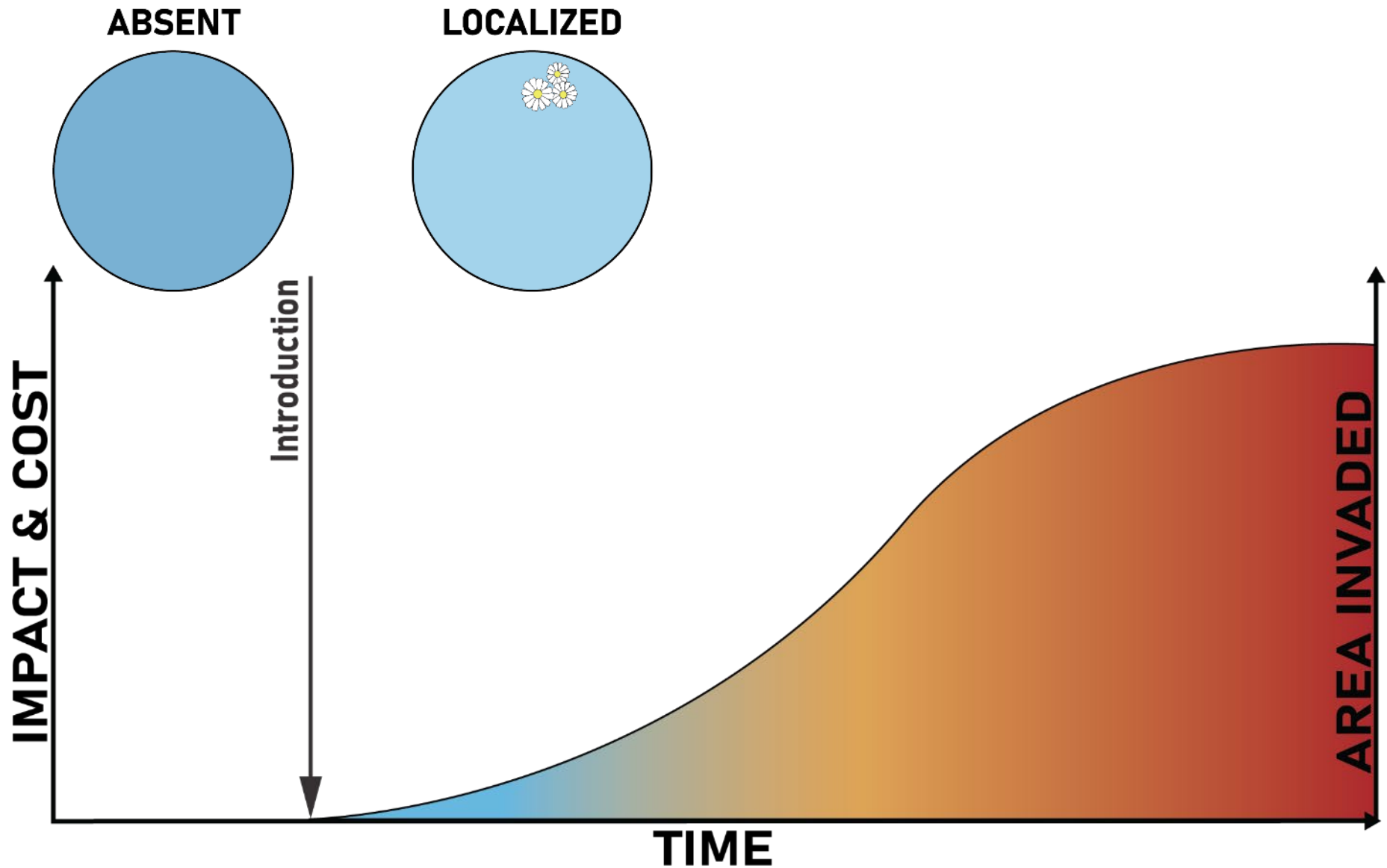
STAGES of INVASION



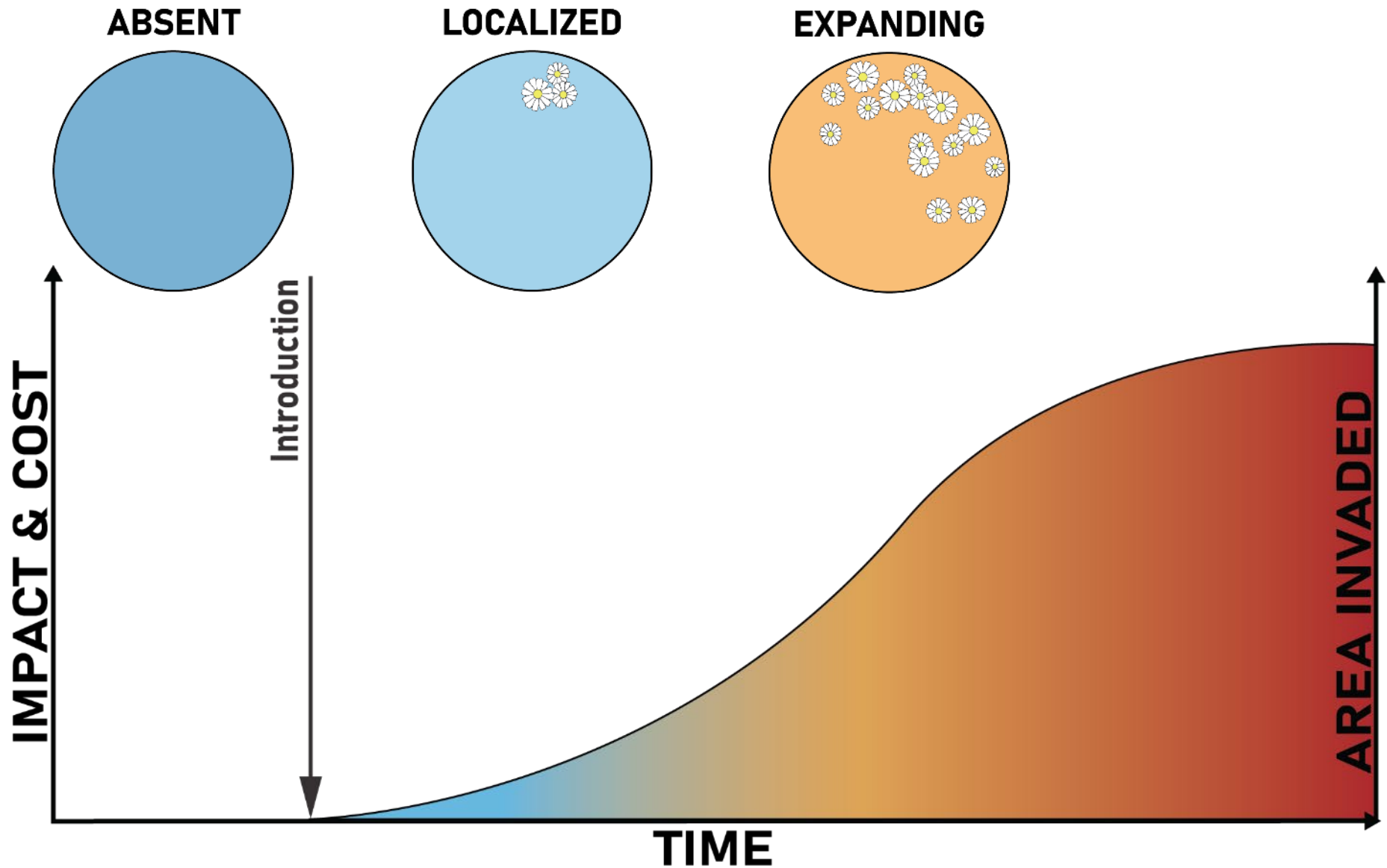
STAGES of INVASION



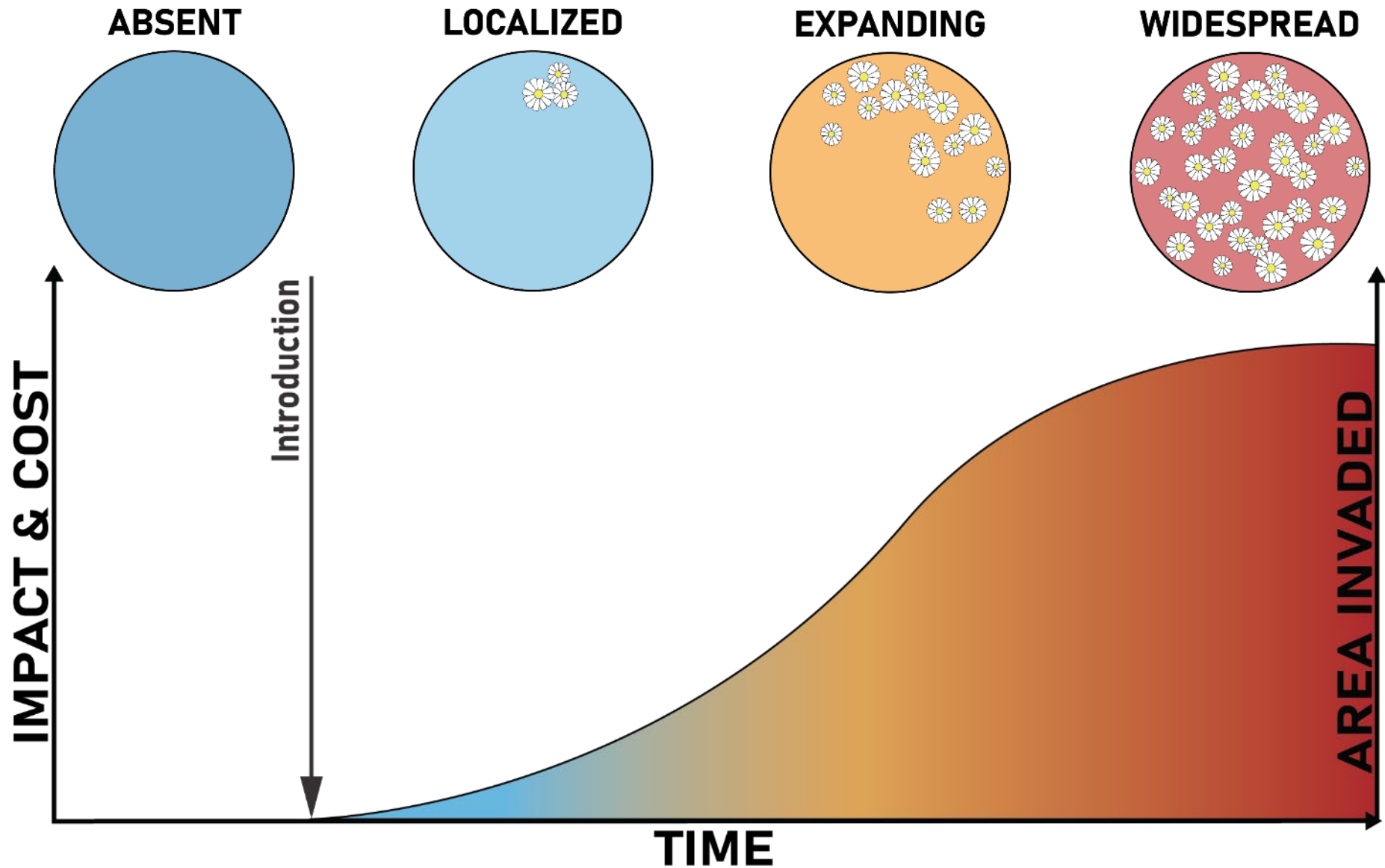
STAGES of INVASION



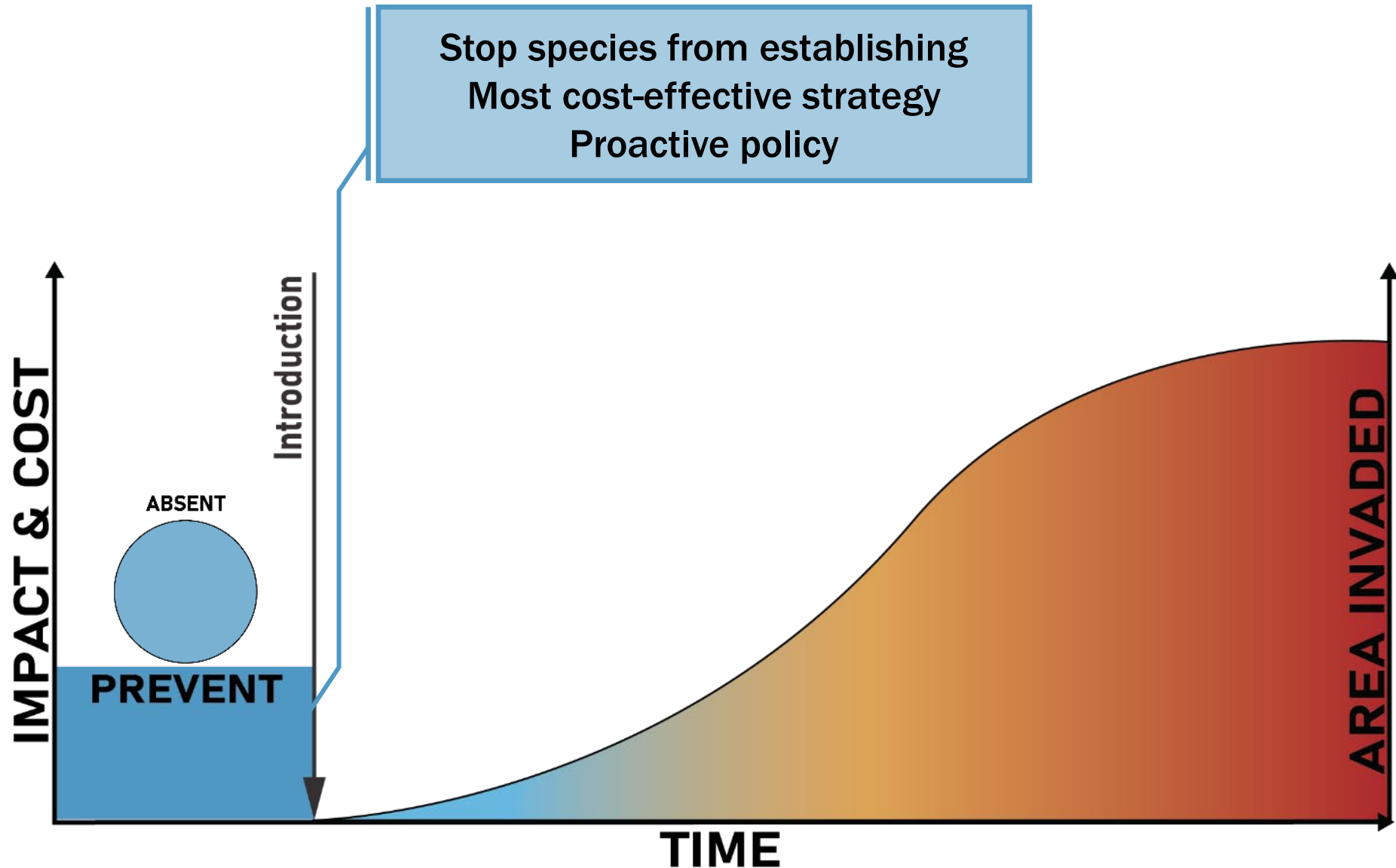
STAGES of INVASION



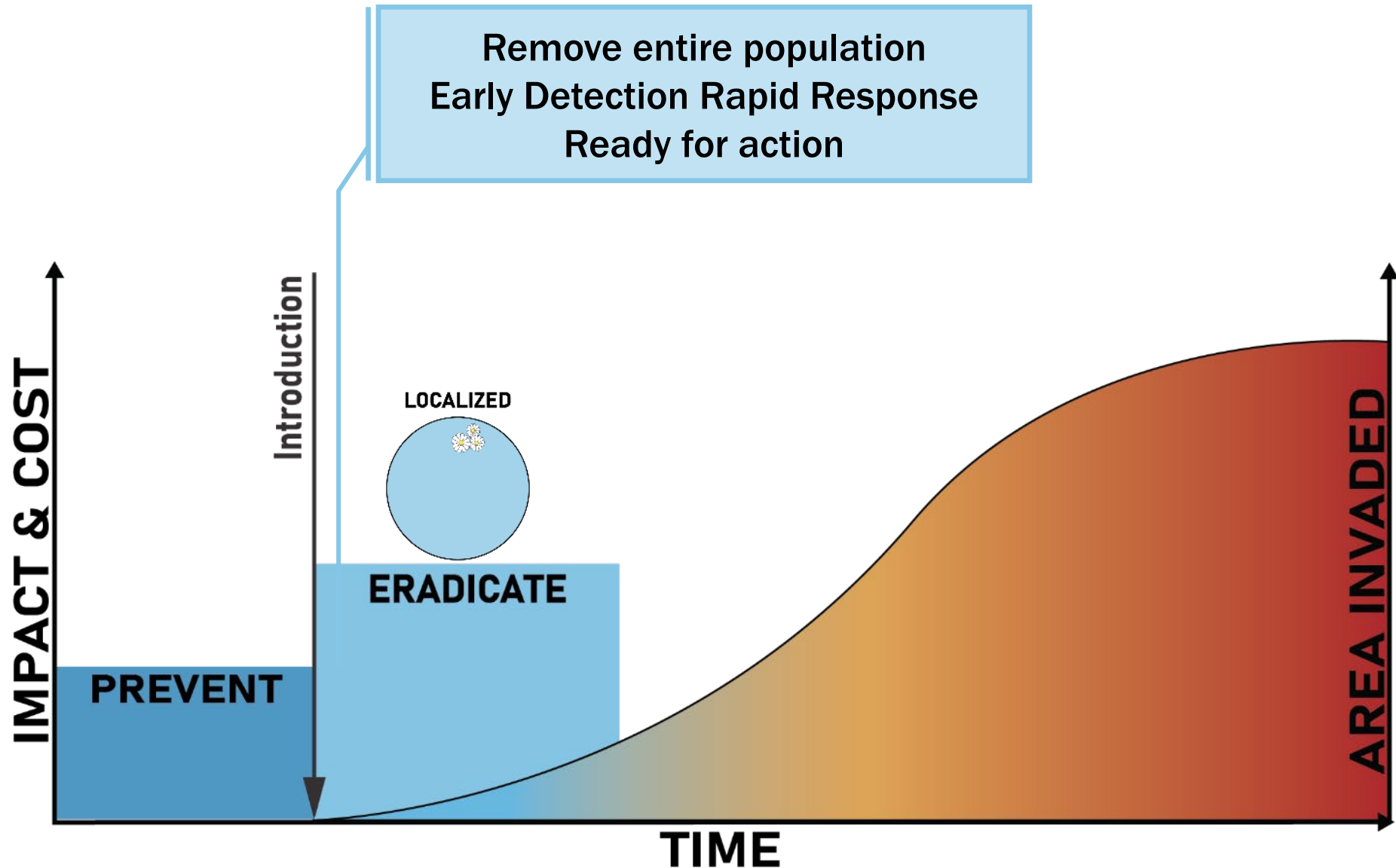
STAGES of INVASION



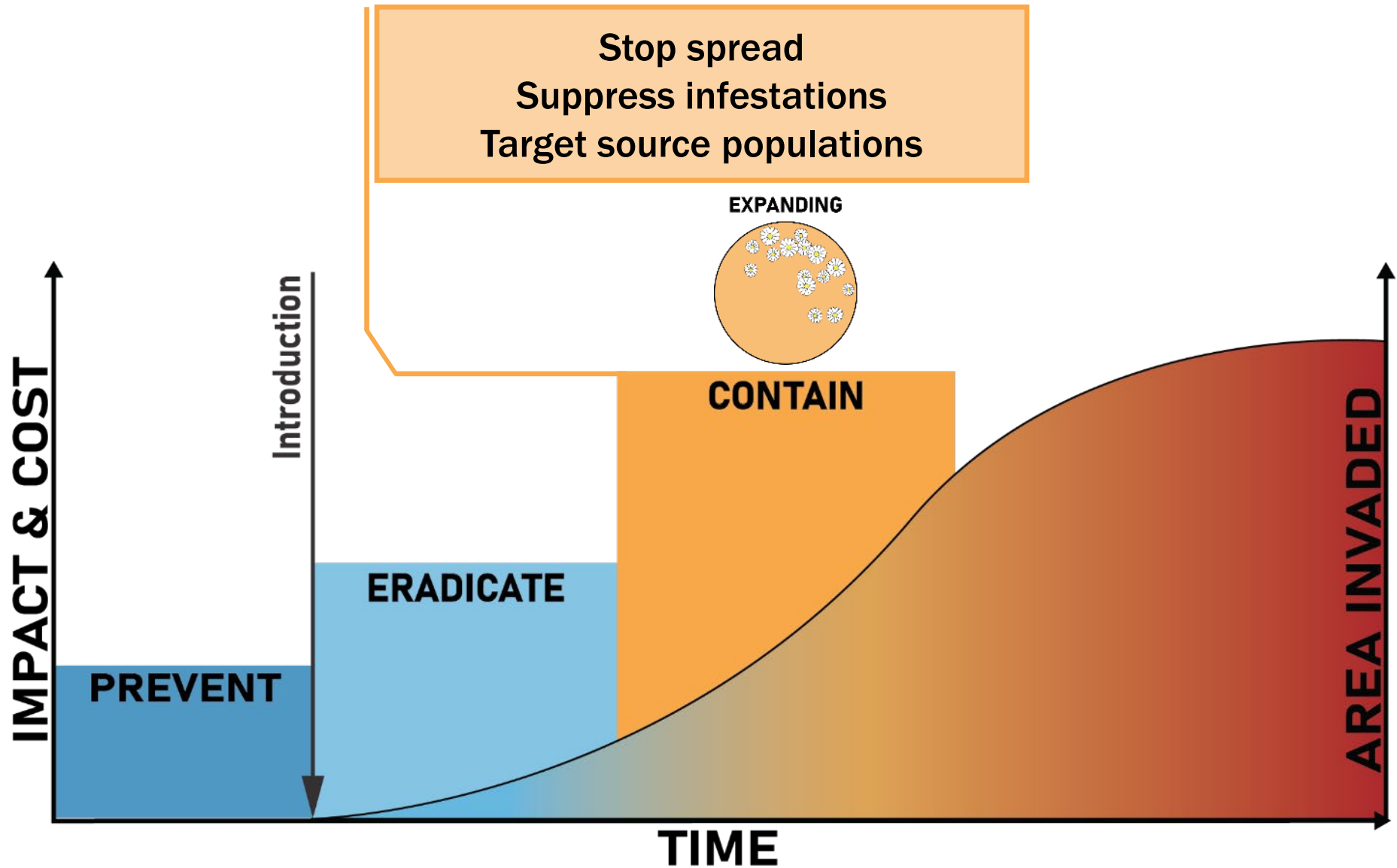
PREVENTION



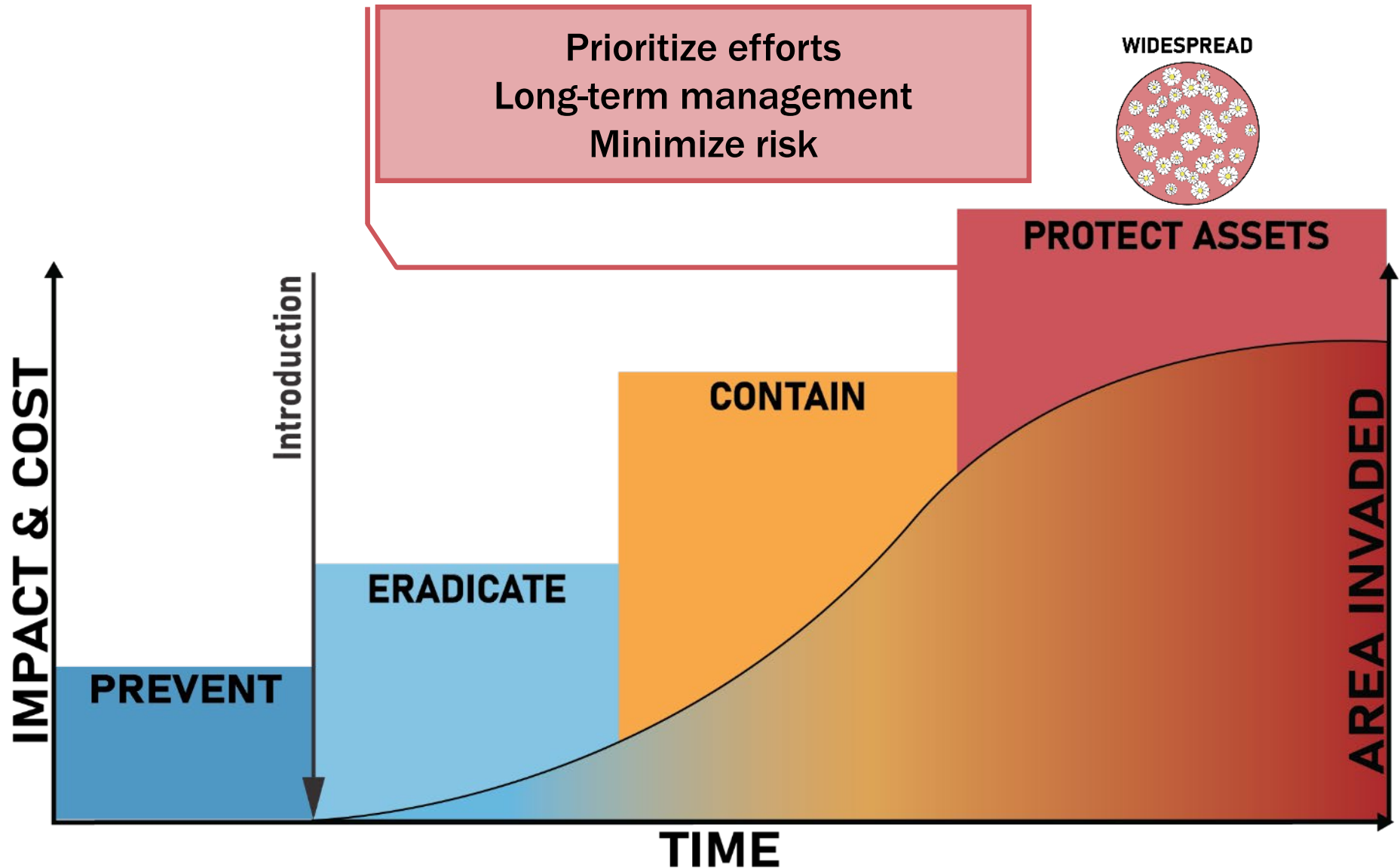
ERADICATION



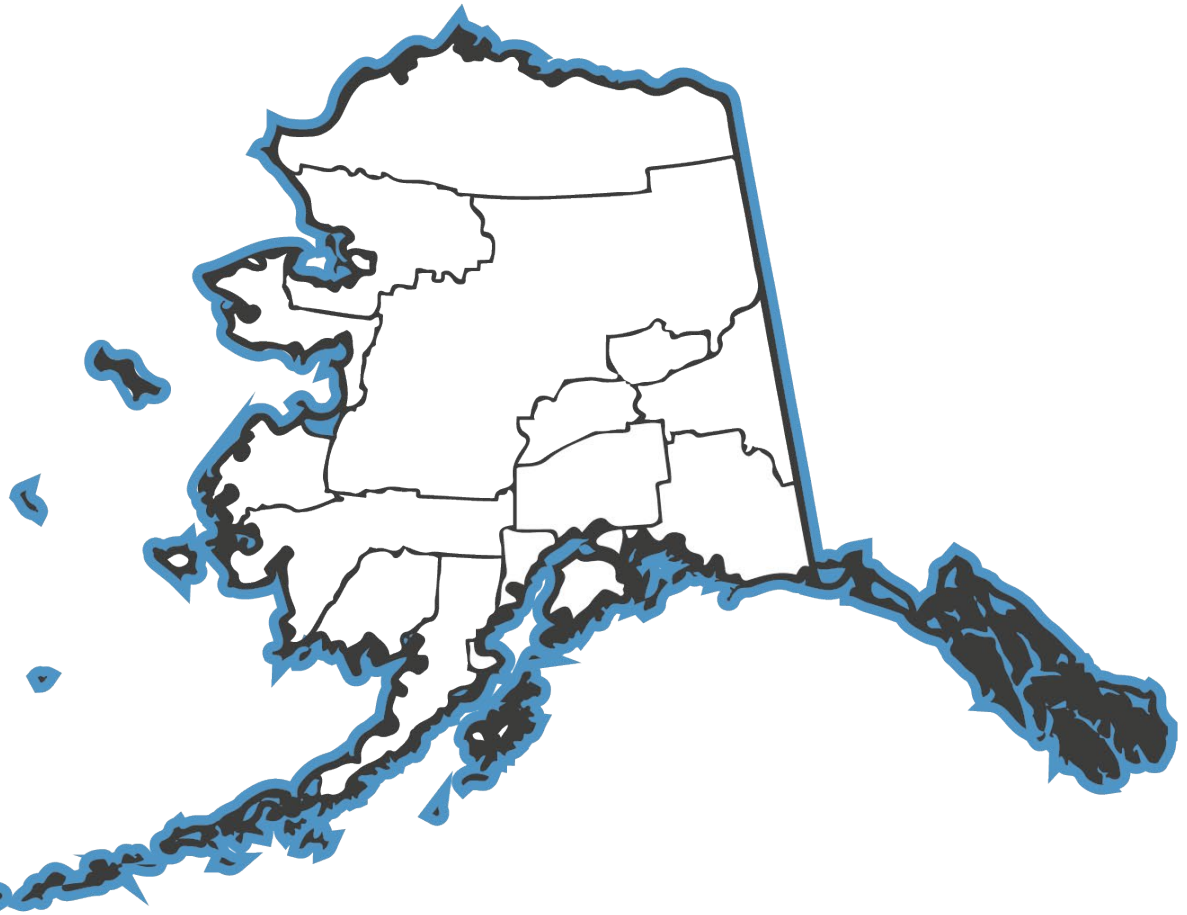
CONTAINMENT



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

.....

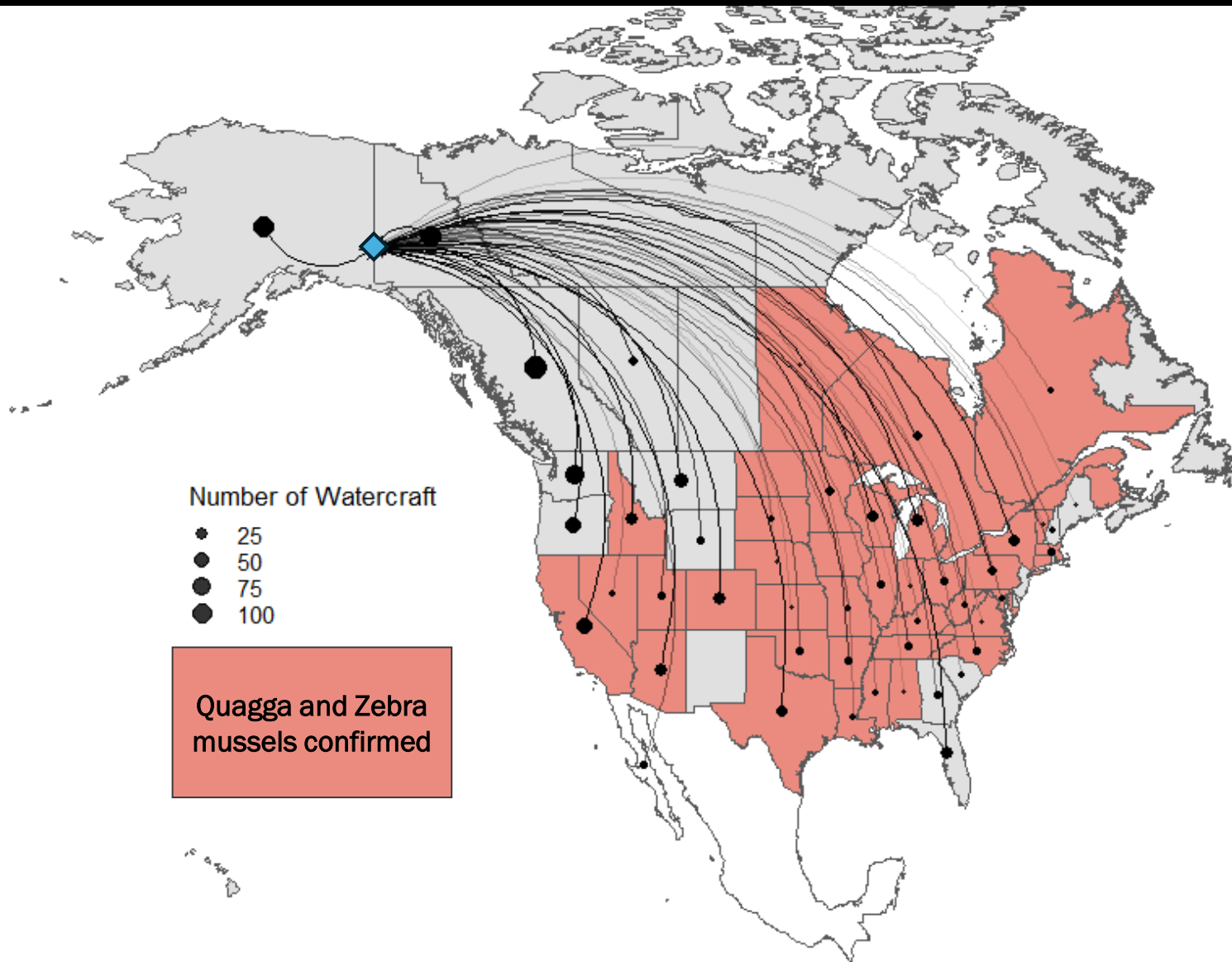
**High Costs: \$300–\$500 million
per year in Great Lakes**

Utah Division of Wildlife Resources



US Army Corps. Of Engineers

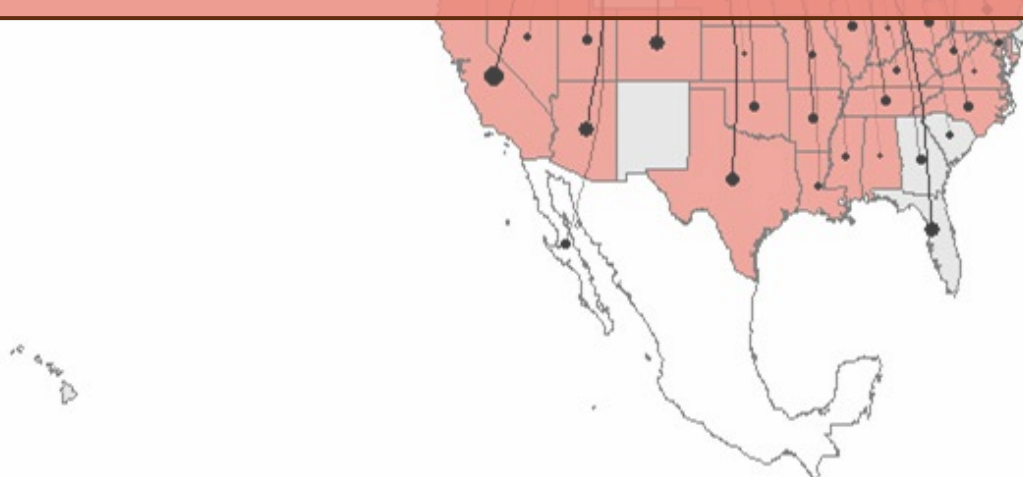
Zebra & Quagga Mussels



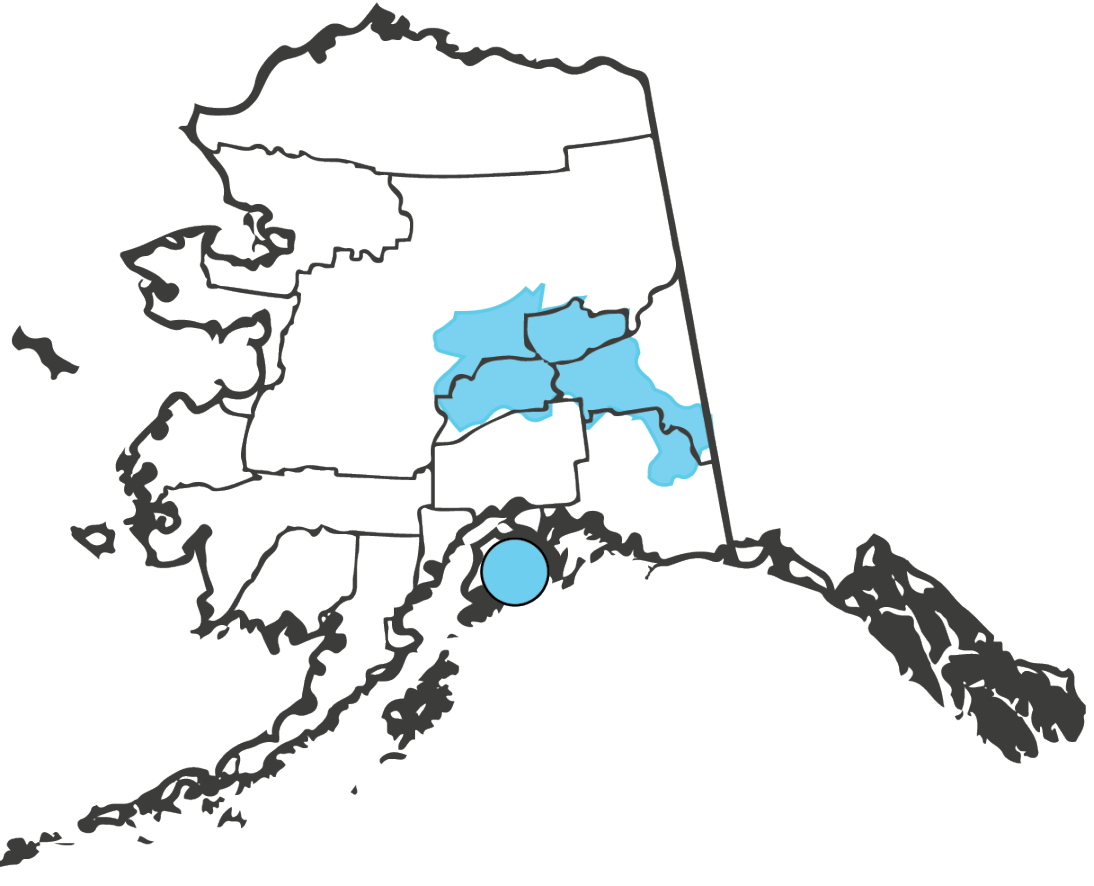
Reported Last State of Use for Watercraft Inspected at the Alcan Port of Entry (2024)



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



ERADICATE/CONTAIN



ELODEA



ELODEA

Clog waterways

Decrease water quality

Threaten salmon habitat

.....

Regrow from small fragments

Difficult and costly to remove

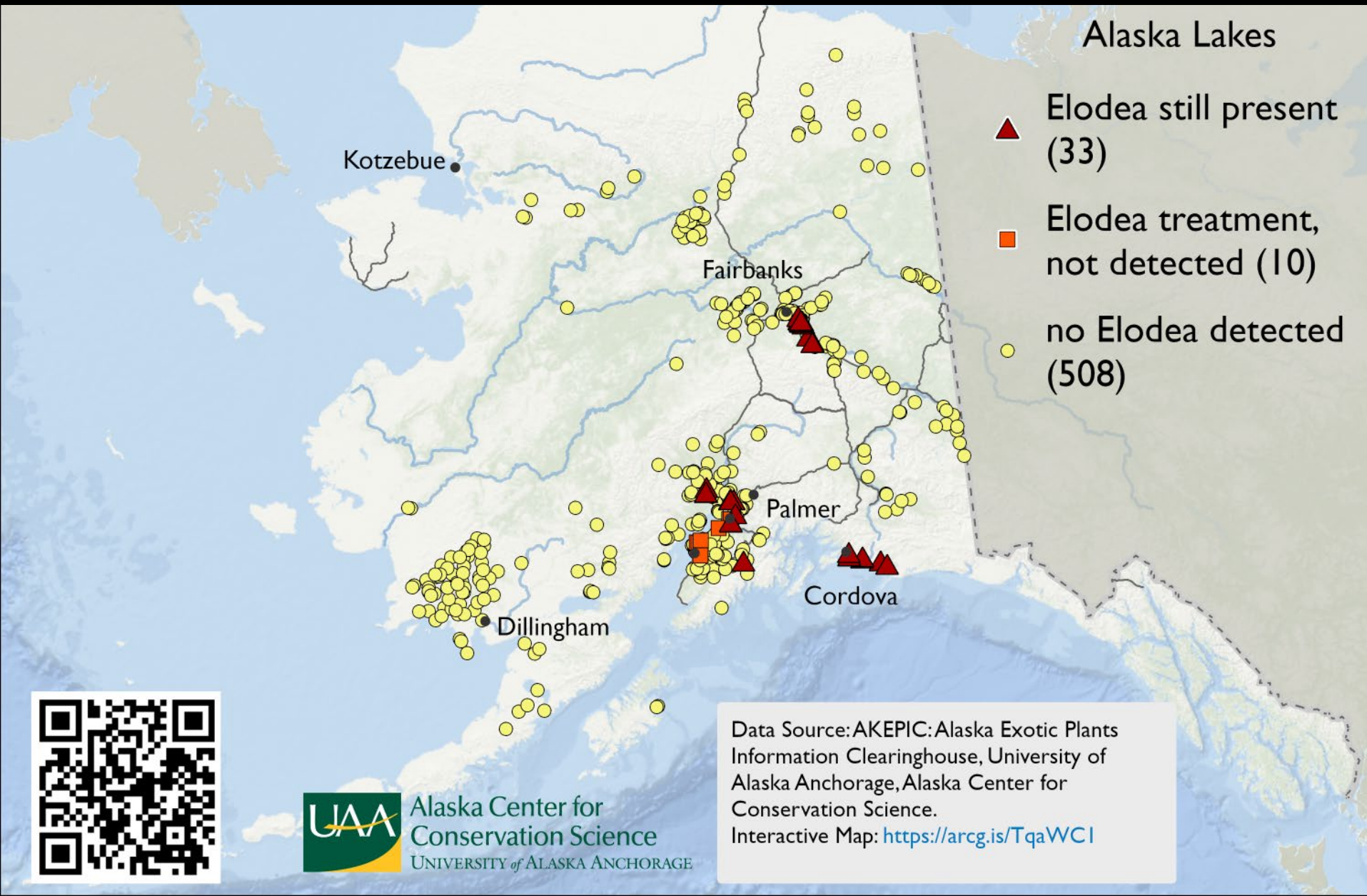
.....

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

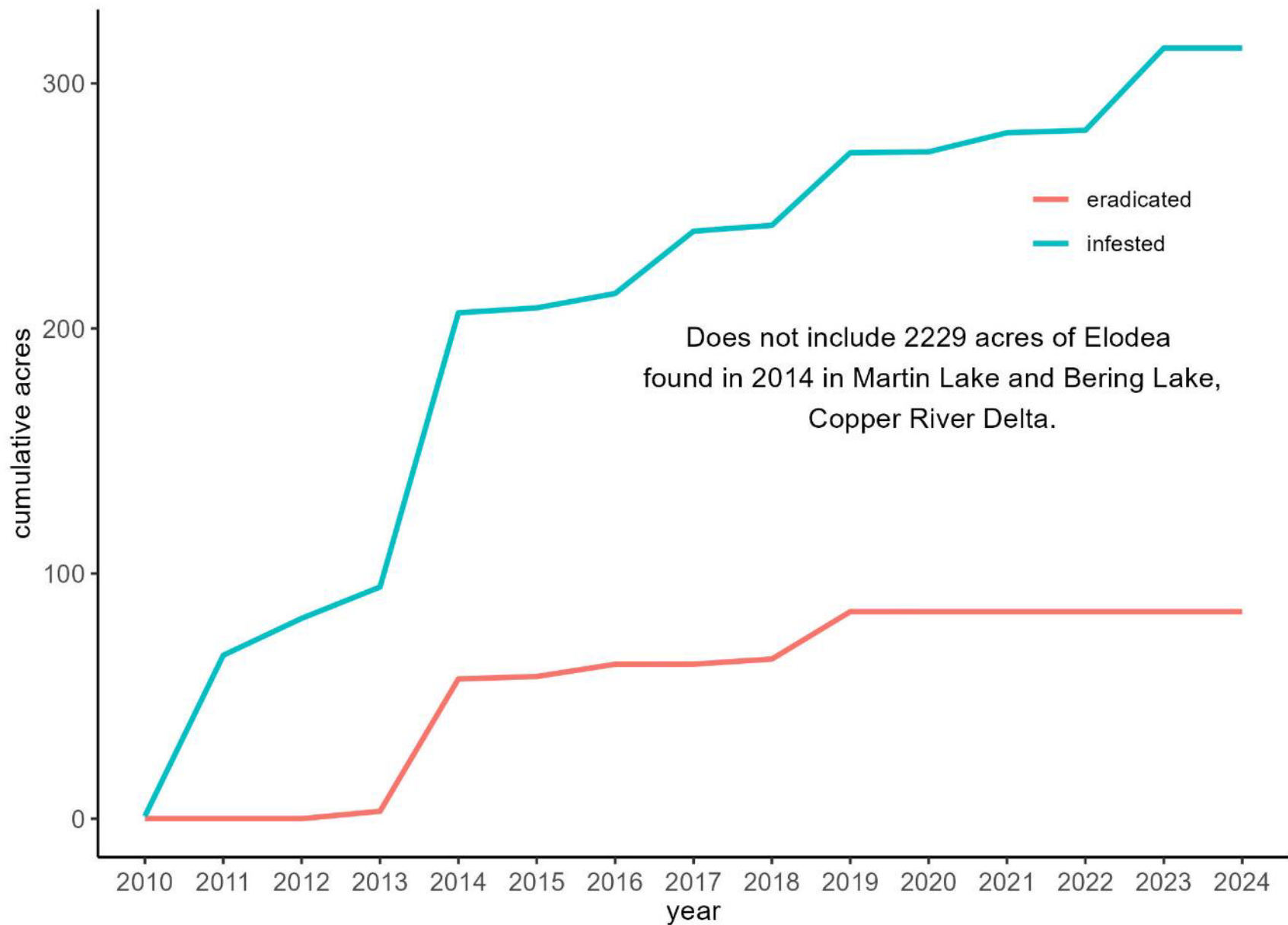
Ashley Lutto, USFWS



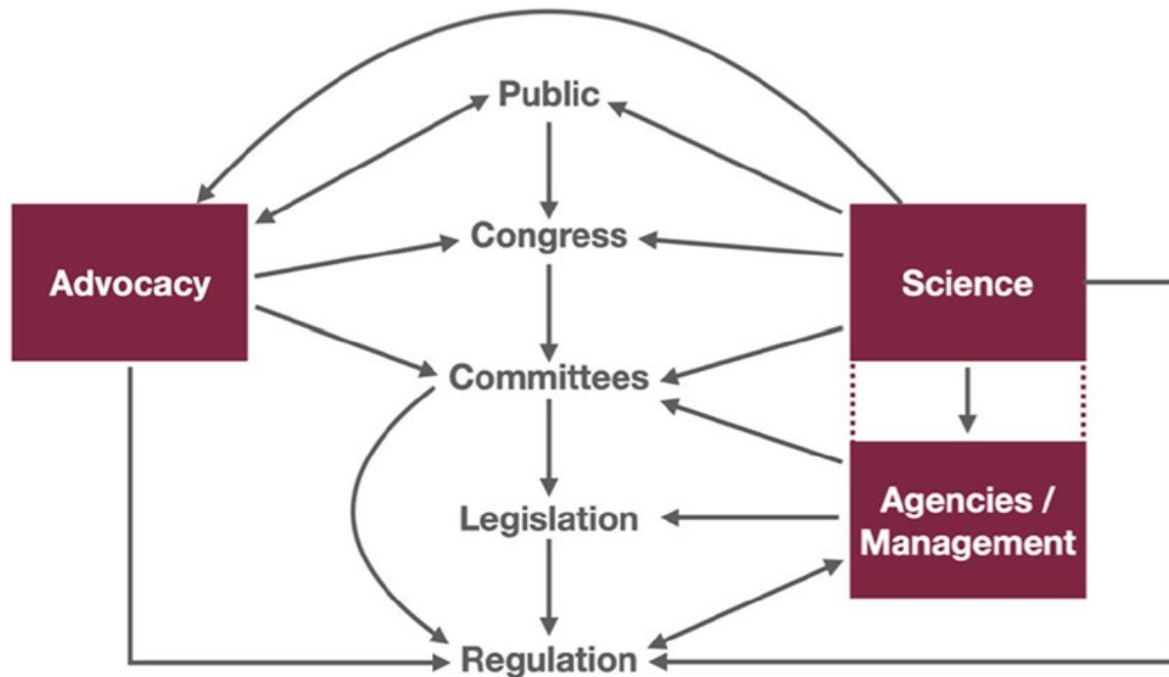
ELODEA



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

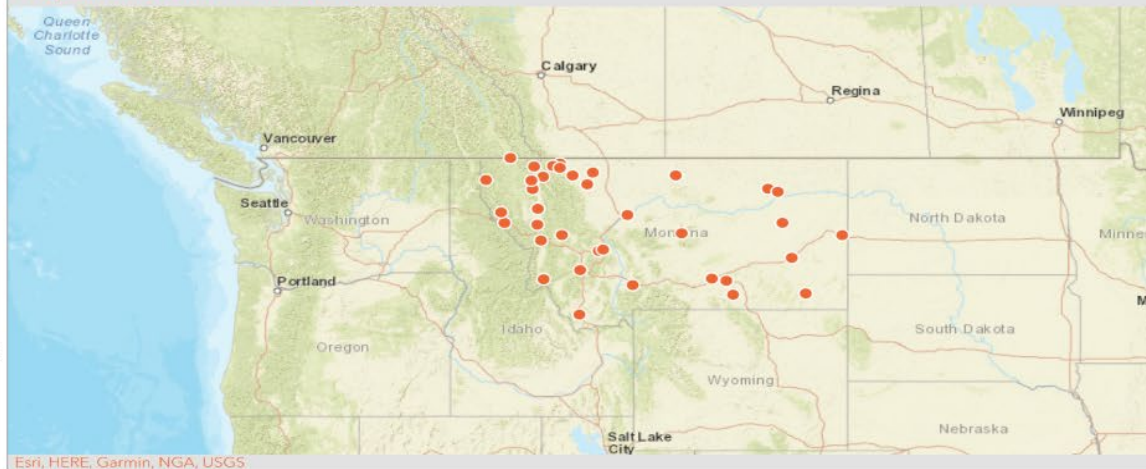
*Boats last launched in states with known AIS infestations

Total Watercraft Inspections

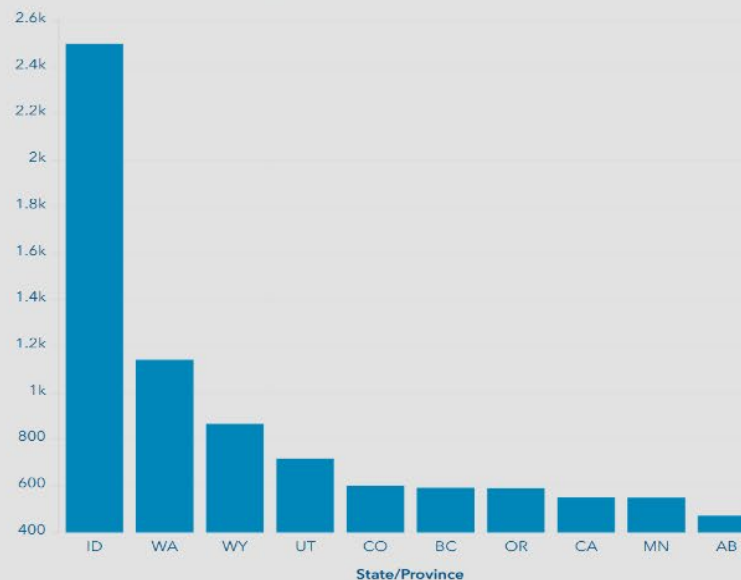
100,064

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



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



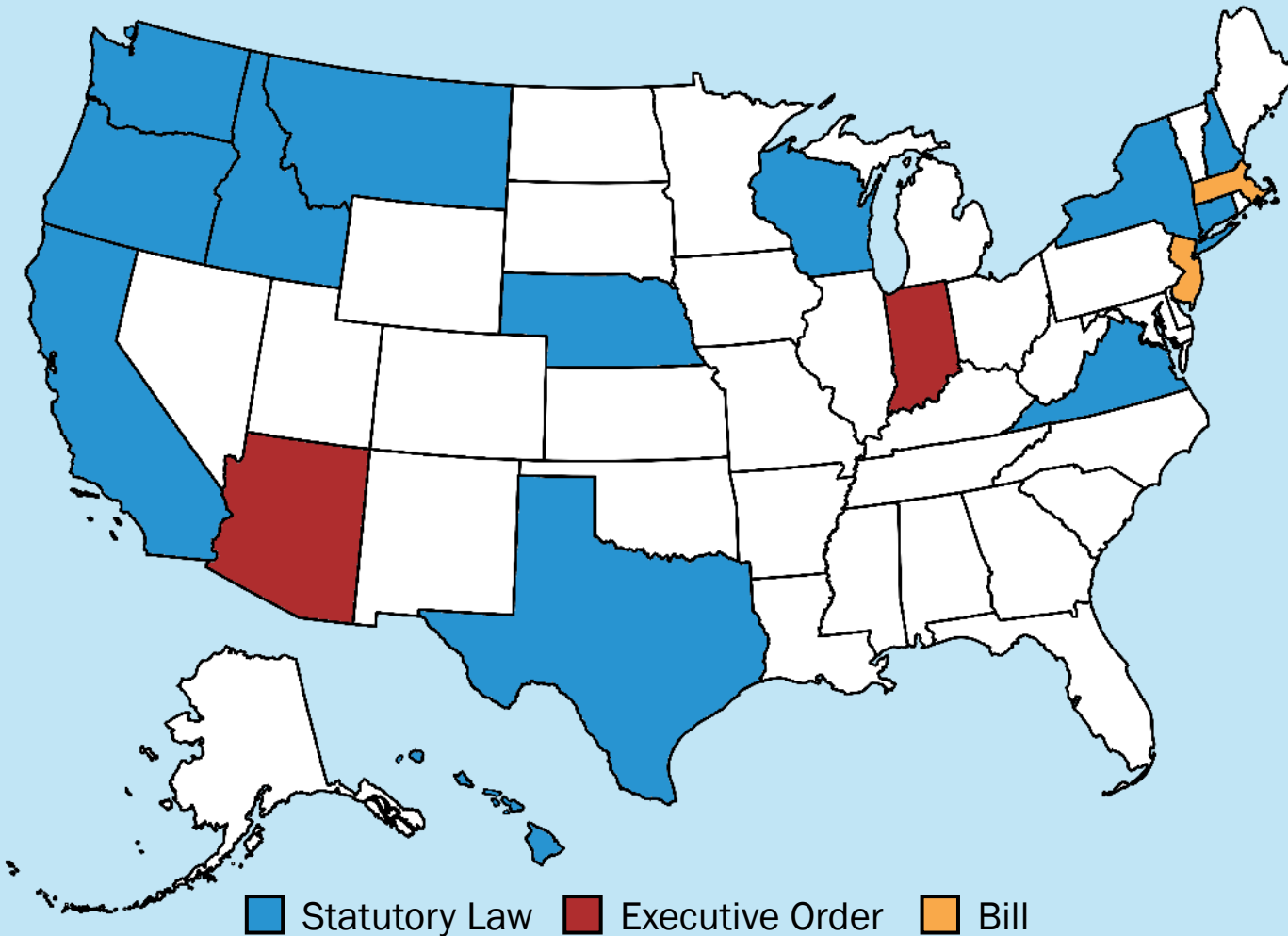
Alaska Exotic Plant Information Clearinghouse

Alaska Invasive Plant Ranking System

Alaska Aquatic Invasive Species Clearinghouse

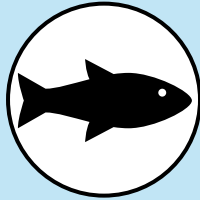
Annual Workshops

State Invasive Species Councils



State Invasive Species Councils

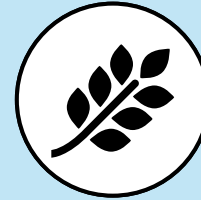
Fish & Game



Transportation



Agriculture



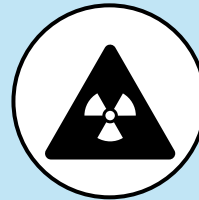
Natural
Resources



Economic
Development



Environmental
Quality

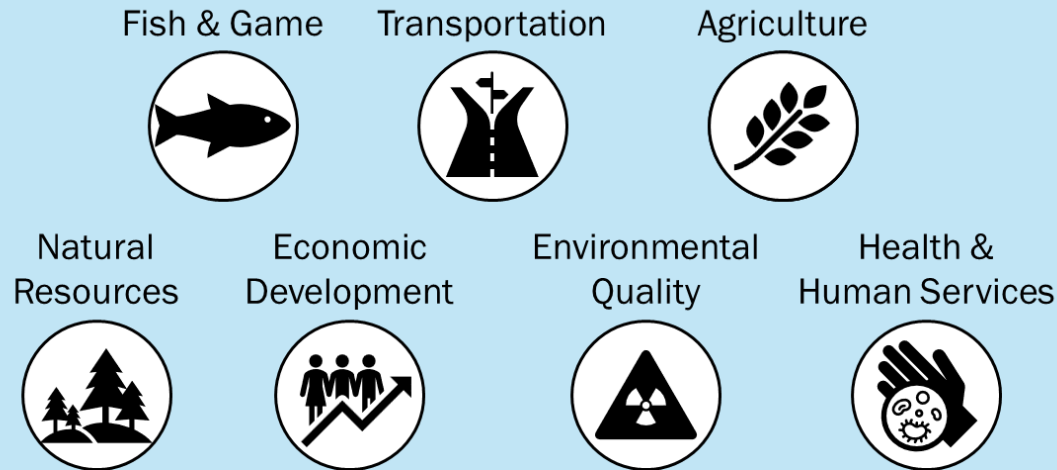


Health &
Human Services



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

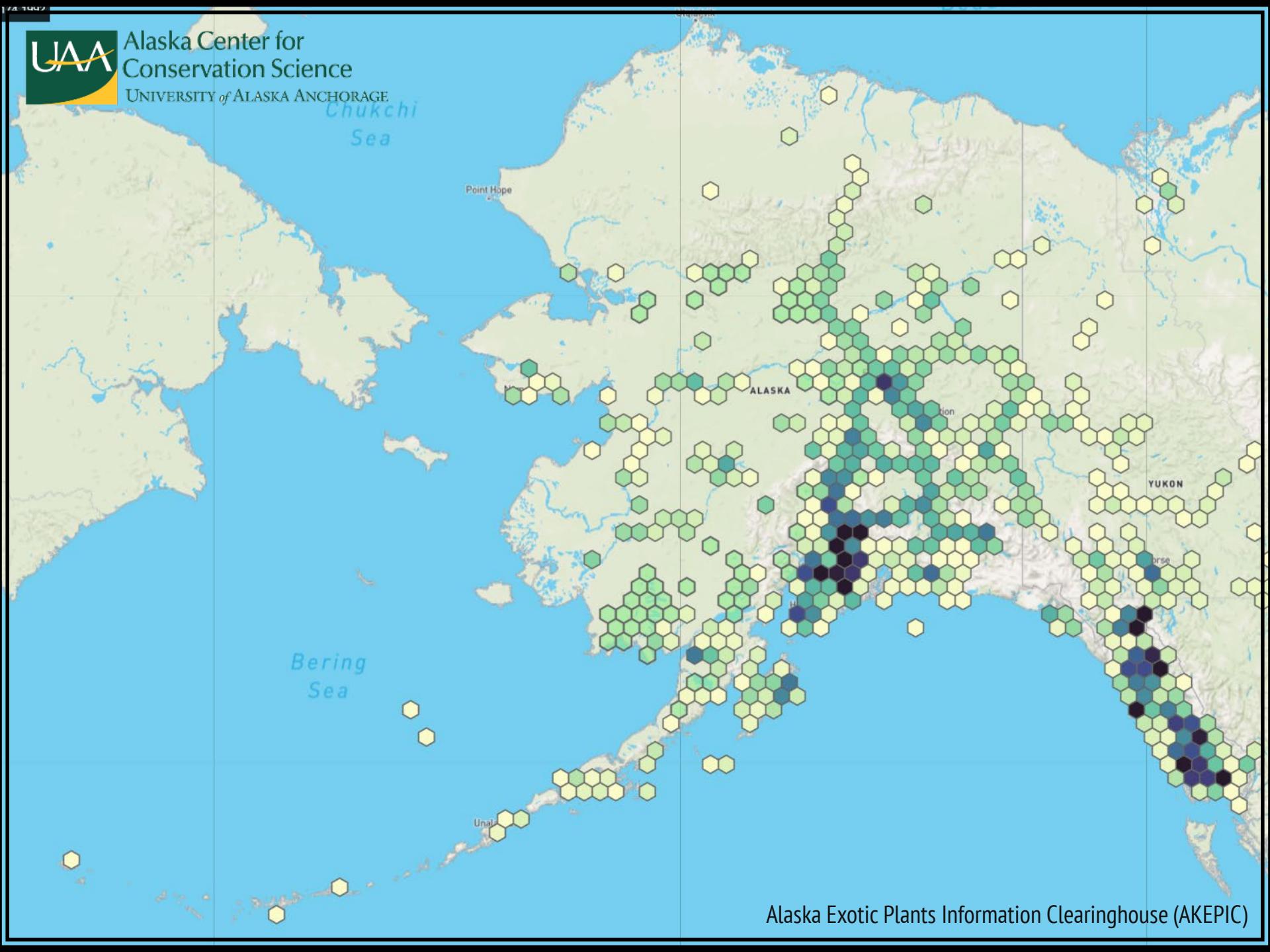
State Invasive Species Councils



Accountability
Transparency
Coordination
Authority
Responsiveness
Efficiency



Alaska Center for
Conservation Science
UNIVERSITY of ALASKA ANCHORAGE



Acknowledgements

Dr. Tobias Schwoerer, International Arctic Research Center

Danielle Verna, Prince William Sound Regional Citizens' Advisory Council

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