



LET'S KEEP ALASKA WILD AND FREE FROM INVASIVE SPECIES

Alaskans depend on their natural surroundings for food, work, and fun. The far-reaching effects of **INVASIVE SPECIES** threaten the very resources that are fundamental to life in Alaska.

WHO WE ARE

The mission of the Alaska Invasive Species Partnership (AKISP) is to prevent, detect, and manage invasive species in Alaska by facilitating and fostering invasive species awareness, knowledge and information sharing, and collaboration among diverse stakeholders.

WHAT WE DO

We strive to provide credible and unbiased scientific information to promote better management decisions. To share the latest information, research, management practices, and technologies related to invasive species concerns affecting Alaska, we host monthly statewide virtual meetings and an annual workshop for approximately 200 participants. We manage an active social media presence and regularly coordinate outreach campaigns.

WHAT'S THE PROBLEM?

Invasive species are not native to an area and cause harm to the environment, economy, and/or health. The cumulative effects of invasive species threaten Alaska's natural resources and economy. Previous annual economic costs of invasives exceeded **\$26 billion**¹ in the United States and **\$423 billion** globally². Like groceries and gas, the cost to prevent and manage invasive species is higher today than it was in years past. But, the cost of responding to these threats must not be a reason to turn a blind eye. **BIOSECURITY** should be given the same focus and attention as national security, cyber security, or healthcare: we must invest in prevention, detection, and response to protect what we value, including Alaska fisheries, agriculture, recreation, and tourism.

¹ Crystal-Ornelas et al. 2021. NeoBiota 67: 485-510.

² IPBES 2023. <https://www.ipbes.net/IASmediarelease>

WHAT YOU CAN DO

- Allocate funding and pass legislation to create an Alaska Invasive Species Council
- Enact legislation to facilitate coordination and collaboration among state agencies on invasive species prevention and management
- Contact the AKISP Board and your local invasive species experts to learn about species causing problems in your district and how you can help address management challenges
- Support and participate in community efforts to control invasive species
- Get involved by joining AKISP monthly meetings or attending our annual workshop. To join our listserv and receive our biannual newsletter visit <https://alaskainvasives.org/>



The AKISP held its annual workshop in Sitka, November 2023, with the theme "Invaders on the Edge". This event rotates location around the state between Anchorage, Fairbanks, and a remote community. Photo: Ashley Lutto, USFWS

Thanks to collaboration among AKISP partners, Alaska has had some success managing invasive species; however, programs continue to be severely underfunded and are operating with limited staff.

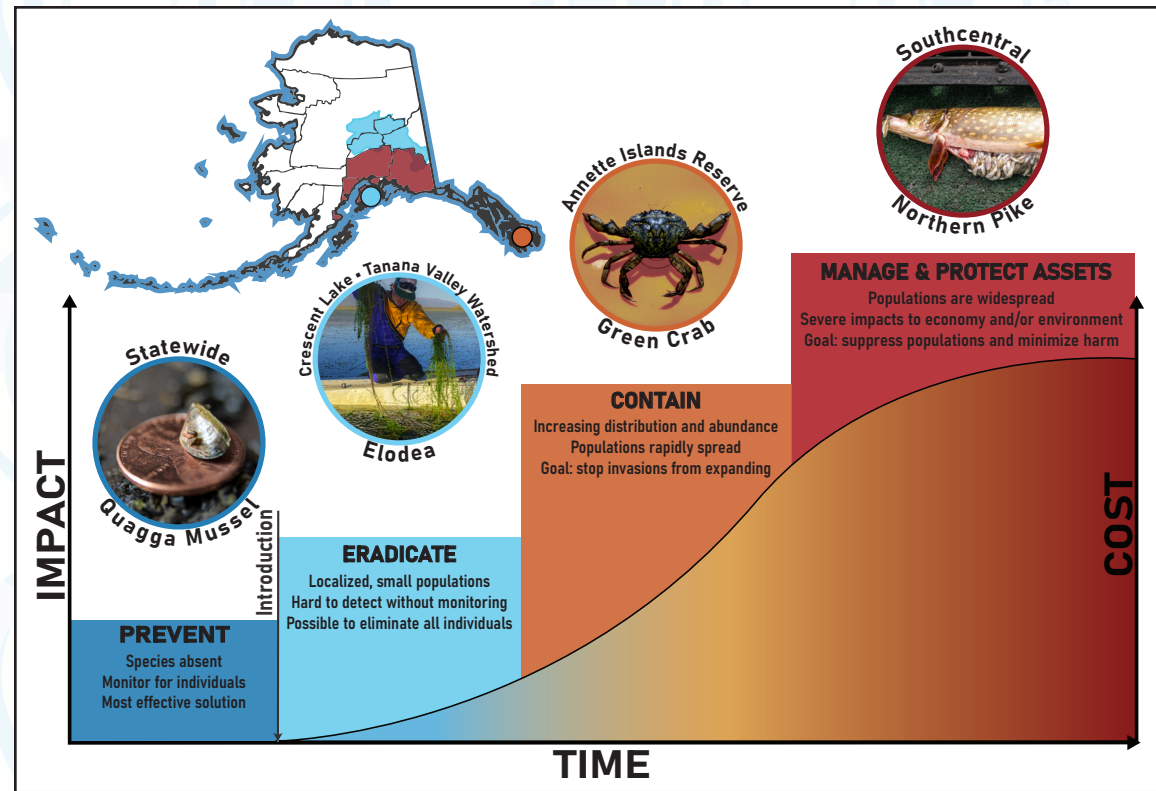
CASE EXAMPLE: ELODEA IN THE MAT-SU BOROUGH

The aquatic invasive plant Elodea was discovered in Alexander Lake in 2014. Initially sparse, it rapidly spread, including to nearby Sucker Lake, thanks to its easy dispersal by boats and floatplanes.

Elodea's aggressive growth disrupts native plants, harms fish habitat, and blocks movement of boats and floatplanes. In 2019, agencies collaborated to restrict floatplane traffic in the infested lakes to prevent further spread and then secured grants to apply herbicide in both lakes.

Despite initial success, Elodea was subsequently found in Big Lake, which resulted in limited personnel and resources diverted to the new infestation in a high use lake. In the absence of continued treatment, a resurgence of Elodea in Alexander and Sucker lakes occurred.

Today, Elodea covers both lakes and is spreading downstream into Alexander Creek. This example highlights how limited resources delay action, hindering invasive species management. Yet, eradication remains feasible in several Alaska water bodies.



The invasion curve illustrates the increasing impacts and costs of invasive species over time and options for management at each stage of the invasion. Alaska is currently dealing with invaders at each stage of the invasion curve. Photos courtesy of ADF&G.

AQUATIC ASSETS NEED ATTENTION

A lack of resources is currently impeding the state's ability to respond to the spread of Elodea, on-going management of invasive northern pike in Southcentral, and the new European green crab infestation in Southeast Alaska.

The impacts from looming invasive species, such as zebra and quagga mussels, can be prevented in Alaska if surveillance, decontamination, and early detection efforts are adequately funded. Rapid response activities focused on southern Southeast Alaska can help prevent green crabs from destroying eelgrass nursery habitat. Early detection, monitoring, and functional eradication

methods to contain populations of invasive green crabs will reduce the impacts to areas where they occur and un-invaded areas. With additional resources to respond to new invasions and address management of existing invasive species, we can protect salmon fisheries and minimize degradation of aquatic habitats.

Alaska was once considered safe from invasive species, but times have changed. **Establishing a state invasive species council** would provide additional financial and administrative support to address invasions. You can help keep Alaska wild and free of invasive species.

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HOW DO INVADERS MOVE?

Invasive species are a threat to Alaska food security, recreation, and economic viability. Common means of transporting people, goods, and services to and around Alaska can be vectors of invasive species.

In freshwater, watercrafts and floatplanes can transport zebra and quagga mussels and Elodea, an invasive aquatic weed. A recent study by economists at the University of Alaska estimated potential damages from Elodea to the sockeye salmon fishery in Alaska at \$159 million dollars per year³.

On land, gravel pits, roadside brushing, and construction equipment can transport seeds of invasive plants, such as white sweetclover, along miles of roadsides. The nursery trade can deliver and sell invasive ornamental plants, including popular bird cherry trees. The ADNIR Alaska Community Forest Program has awarded over \$325,000 in grants to eradicate bird cherry trees in Southcentral and Southeast Alaska from 2020 to 2023.

Along the coast, commercial ships can disperse invasive crabs and sea squirts across continents in

³ Schwoerer et al. 2019. *Journal of Ocean and Coastal Economics* 6:2.

ballast water and on hulls. Mariculture equipment transported from out of state can be a haven for invasive parasites and hitchhiking organisms.

Even some unwanted pets can become invasive when released. Recently, ADF&G eradicated a population of spawning goldfish from Cuddy Pond in Anchorage, some as long as a woman's size 8 Xtratuf boot. In Fairbanks, Elodea was likely introduced into Chena Slough when dumped from an aquarium, then quickly spread.

PREVENTION continues to be the first and best line of defense against invasive species. It is also the most **COST-EFFECTIVE** way to limit introductions.

When prevention doesn't work, **EARLY DETECTION** is critical, followed by **RAPID RESPONSE** to control or remove the species. Whenever possible, **ERADICATION** is the best-case scenario. If that is infeasible, long-term **MANAGEMENT** of the population is often the next step. The goal is always to limit harm to environmental, cultural, and economic resources.



The USFWS, in coordination with US Customs & Border Protection and ADF&G, maintains a seasonal watercraft inspection and decontamination station at the Alcan Land Port of Entry, located on the Alaska-Yukon border, to intercept boats and other conveyances infested with zebra and quagga mussels or other aquatic invasive species. Thousands of boats have entered Alaska via this checkpoint in recent years with over half not inspected prior to arriving⁴.

⁴ Schwoerer et al. 2023. *Marine Policy* 148:105448 Photo: Ashley Lutto, USFWS