

Prevent and respond to the introduction of marine invasive species

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The Challenge

History shows that it is significantly less expensive and more effective to prevent or rapidly respond to introductions of invasive species than to control and eradicate them once they have become established. The goal of this strategy is to 1) prevent the introduction of new high-priority, high-risk invasive species to marine waters; 2) rapidly respond when new priority invasive species are detected; 3) stop invasive species already here from spreading to other locations; and 4) completely eliminate them as soon as possible, wherever possible.

Accomplishing these goals requires the following elements:

- A forum to provide policy-level planning and direction for regional invasive species efforts and coordination, collaboration, and information sharing among federal, state, tribal, local, and private partners
- Education and outreach that increases awareness of the invasive species problem and offers solutions
- A Puget Sound Basin early detection and rapid response system
- Prevention efforts that target the highest risk pathways, such as hull fouling and ballast water.
- Maintained or enhanced programs to control, contain, or eradicate existing infestations
- Asking and answering research questions that fill critical information gaps

Relationship to recovery targets

Control of invasive species in the marine environment is primarily related to achievement of biological recovery targets for shellfish beds, eel grass acres, resident killer whales, and wild Chinook abundance.

B8. Prevent and respond to the introduction of marine invasive species.

B8.1 Prevent and rapidly respond to the introduction and spread of marine invasive species.

Capacity to support the Invasive Species Council

A key element of this strategy is maintaining capacity to support the Washington Invasive Species Council's role to provide outreach and policy-level planning, direction, coordination, and information sharing among member agencies and stakeholders. This provides structure and infrastructure for coordinated efforts to prevent and manage invasive species. The Washington Invasive Species Council serves as the forum for providing coordinated policy-level planning and direction on invasive species. Major funding sources include the Vessel Response Account and contributions from member agencies.

Sound-wide detection and rapid response system

A second element is to develop and implement a basin-wide detection and rapid response system to address invasive species risks. This enables early detection of - and rapid response to - invasive species in the Puget Sound Basin before becoming they become established and widespread. Related ongoing

programs include Spartina surveys and some tunicate surveys with citizen scientists. One existing funding source is the Aquatic Lands Enhancement Account (ALEA).

Reduce potential risks from hull fouling and ballast water discharges

A third element is minimizing the risks associated with hull fouling and ballast water discharges, two significant pathways for the introduction and spread of marine invasive species. A related ongoing program is the State ballast water inspection and compliance program. The state general fund is the primary resource contributor.

On-going efforts to contain, control, and eradicate existing infestations of invasive species

A fourth element of this strategy is to support and enhance ongoing efforts to prevent introductions of invasive species and stop their spread. Ongoing programs include Spartina eradication and tunicate management (not funded after FY2010-2011). Funding is derived primarily from ALEA.

Performance Objectives for Ongoing Programs

[Placeholder for a description of the main related ongoing programs, if any, their performance objectives. The goal is to clearly describe what ongoing programs are already in place and what they are already doing to help protect/recover Puget Sound to put the NTAs in context. For this strategy, ongoing programs include:

- WA state ballast water program, US EPA national vessel general permit for ballast water discharges, and U.S. Coast Guard ballast water standards
- Washington State Department of Agriculture's regional Spartina eradication program]

Performance metric:

Near-Term Actions

B8.1 NTA 1: The Recreation and Conservation Office will secure on-going funding for Council coordinator.

Performance metric: done or not; coordinator hired or not

B8.1 NTA 2: The Recreation and Conservation Office will implement key recommendations for the Puget Sound, as identified by the Invasive Species Council, which will prevent the introduction and spread of priority invasive species.

Performance metric:

B8.1 NTA 3: The Recreation and Conservation Office and WDFW will provide and strengthen invasive species outreach to engage stakeholders, close pathways, build community support, and maintain coordination and collaboration among partners.

Performance metric:

B8.1 NTA 4: The Invasive Species Council will expand baseline assessment to include all 50 of the Council's priority invasive species.

Performance metric: done or not; number of priority species included

B8.1 NTA 5: The Invasive Species Council will conduct a risk assessment of the full range of invasive species pathways in the Puget Sound Basin.

Performance metric: done or not

B8.1 NTA 6: The Invasive Species Council and PSP will build and oversee an early detection/monitoring program for priority invasive species in Puget Sound marine waters.

Performance metric: done or not

B8.1 NTA 7: The Recreation and Conservation Office will enhance capacity for response by creating an emergency response fund available to state, local, and tribal governments and developing an MOU among agencies responsible for invasive species response.

Performance metric: complete or not; funded or not

B8.1 NTA 8: WDFW will develop and implement a hull fouling management strategy for recreational, commercial, and international shipping pathways.

Performance metric: done or not; implemented or not; number of inspections? Other activities as described in the strategy.

B8.1 NTA 9: WDFW will assess effectiveness of open sea exchange and treatment in meeting ballast water standards

Performance metric: study done or not

B8.2 Answer key invasive species research questions and fill information gaps.

Key Questions: How invaded is the Puget Sound Basin? What is the full extent of the problem and level of risk? Use this information as a means to develop future, more targeted, strategies.

This strategy provides a strong scientific basis for managing a serious threat to the Puget Sound Basin and its ecological health, understanding the effects of climate change on the spread and distribution of invasive species in freshwater and terrestrial ecosystems, and targeting specific pathways and species for management. Organizations that will play a role in answering these questions include the Puget Sound Science Panel and Puget Sound Institute.

Performance Objectives for Ongoing Programs

[Placeholder for a description of the main related ongoing programs, if any, their performance objectives. The goal is to clearly describe what ongoing programs are already in place and what they are already doing to help protect/recover Puget Sound to put the NTAs in context.]

Near-Term Actions

B8.2 NTA 1: The Recreation and Conservation Office and PSP will identify key areas and ecosystems in the Puget Sound for invasive species monitoring.

Performance metric: done or not

B8.2 NTA 2: The Recreation and Conservation Office and PSP will conduct a risk assessment to assess environmental and economic impacts of invasive species in the Puget Sound Basin and incorporate short-term climate change considerations.

Performance metric: done or not

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