

CONTROL BALLAST WATER TO PREVENT ECONOMIC LOSS

EMILY WONG
EMILYVWONG1
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Aquatic invasive species are introduced through the ballast waters of vessels. If left unaddressed, these species can cause ecosystem and economic damage approximating at least \$200 million in losses per year. Mitigation measures can prevent these losses but they must be addressed as soon as possible.



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IMPACTS TO ALASKAN WATERS

With increasing vessel traffic along the coastline of Alaska, the region is at risk of receiving invasive species through the ballast water of vessels that travel from West Coast or foreign ports. Approximately 54 million metric tonnes of ballast water is discharged in Alaska.¹ The United States Coast Guard currently has mandatory regulations that apply to all vessels with ballast tanks entering U.S. waters after operating outside the Exclusive Economic Zone. These vessels are required to:

- (1) conduct ballast water exchange in waters 200 nautical miles or greater from shore
- (2) retain the ballast water, or
- (3) use an alternative USCG approved BWM method to discharge the water.

Nevertheless, more stringent policies must be implemented as many vessels entering Alaskan ports do not actually conduct any of the above regulations due to the fact that coastwise trades are exempt.¹ These exempt vessels discharge 86% of all discharged ballast water and many non-native species are still introduced into Alaskan waters despite the regulations.

INVASIVE SPECIES TRANSFER CONSEQUENCES



ENVIRONMENTAL

- Native species can be outcompeted by invasive species and even driven to extinction
- Reduction in species richness and biodiversity
- Entire ecosystems can be damaged or lost if nothing stops the growth of the invader²



SOCIAL

- Microorganisms that are harmful to human health can be transferred
- Examples include viruses and bacteria that cause cholera³



ECONOMIC

- Invasive species can reduce the growth of economically-valuable native species
- Physical damage can occur such as biofouling
- Expensive and difficult to eradicate invaders
- Approximately at least \$200 million in losses per year in addressing invasive species¹

POLICY RECOMMENDATIONS

MANDATORY BALLAST WATER MANAGEMENT FOR ALL VESSELS

Implement mandatory ballast water exchange and treatment procedures for all vessels entering Alaskan ports. Each vessel should also submit a ballast water reporting form for record-keeping and future research.

NEW MEASURES FOR EXEMPT VESSELS

Coastwise trade vessels or vessels in which conducting a ballast water exchange is unsafe or infeasible can continue to apply for exemption but must conduct an alternative water treatment or discharge to the ballast water treatment facility. Otherwise, discharge is not permitted.

TAKE ACTION NOW

As global warming increases, organisms that were once unable to endure the cold temperatures of Alaska may now be able to. Management has to happen immediately in order to reduce invasive species.

References

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Audience Contacts

U.S. Coast Guard Marine Safety Centre
Commanding Officer (MSC)
msc@uscg.mil

Catherine Gockel
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue N.W.
Mail Code: 4504T
Washington, DC 20460
gockel.catherine@epa.gov