



**UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration**

*National Marine Fisheries Service
P.O. Box 21668
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September 9, 2003

MEMORANDUM FOR: Dorn Carlson
Office of Oceanic and Atmospheric Research

FROM: *For* James W. Balsiger *James W. Balsiger*
Administrator, Alaska Region

SUBJECT: Ballast Water Management

The Alaska Region of NOAA Fisheries supports the U.S. Coast Guard's proposed rule to adopt a mandatory Ballast Water Management Program for U.S. Waters. Substantial economic and ecological damage has occurred throughout the United States as a result of the introduction and spread of nonindigenous species (NIS) through the discharge of ballast water from ships.

Background

Under the proposed rule the Coast Guard is proposing to convert the existing voluntary Ballast Water Management (BWM) Program into a mandatory program. The mandatory program would require all vessels equipped with ballast water tanks entering U.S. waters after operating outside the U.S. Exclusive Economic Zone (EEZ) to employ one of four ballast water management practices: (a) prior to discharging ballast water in U.S. waters, perform complete ballast water exchange in an area no less than 200 nautical miles from any shore; (b) retain ballast water onboard the vessel; (c) prior to the vessel entering U.S. waters, use an alternative environmentally sound method of ballast water management that has been approved by the Coast Guard; or (d) discharge ballast water to an approved reception facility. However, ballast water exchange is likely to be the most used practice.

The proposed rule has an exemption which states "A vessel would not be required to deviate from its voyage, or delay the voyage, in order to conduct a ballast water exchange." Thus a vessel that could not use one of the four practices identified above, due to a voyage that does not take it into waters 200 nautical miles or greater from shore for a sufficient length of time, and/or due to safety concerns, would not be prohibited from discharging its ballast water in areas other than the Great Lakes and the Hudson River.

Alaska Region Comments

Due to a high volume of vessel traffic, Alaska bodies of water such as Cook Inlet, Dutch Harbor,



Prince William Sound and Southeast Alaska are at risk of NIS introductions (ADF&G 2002) from commercial fishing and recreation vessels, fishing tanker and cargo vessels, and passenger ships. To date, NIS impacts have been low. However, Alaska is certainly vulnerable to NIS introduction, and impacts to the state's economy could be significant if a viable threat makes a stronghold. Alaska's commercial and recreational fisheries depend upon the pristine and natural quality of the state's aquatic ecosystems to support a significant portion of the economy (ADF&G 2002).

Very few studies have been conducted on NIS in high latitudes like Alaska. In 1997, a pilot study was initiated by the Prince William Sound Regional Citizens's Advisory Council (PWSRAC) in partnership with the US Fish & Wildlife Service, NOAA's Sea Grant program, Alyeska Pipeline Service Co., and the University of Alaska Fairbanks. The 1997 pilot study showed that plankton are abundant and diverse in the arriving ballast water and that some are not indigenous to Prince William Sound. Further, the consultants doing the study concluded that Prince William Sound is at risk of invasion (PWSRAC 2003). The study was extended to provide further insights into the content and management of ballast water.

In 2000, the results of three years of study revealed that at least 15 different types of organisms were being carried in tanker ballast to Port Valdez. These organisms range from a form of kelp that is native to southeast Alaska (used in herring roe harvest), to a soft shell clam that was originally indigenous to the East Coast of the US and introduced to the West Coast in the 19th century (Planet Ark 2000). The study showed that most of the NIS in Prince William Sound are from San Francisco Bay and Long Beach, California (Planet Ark 2000). These ports have been impacted by NIS such as the European green crab.

We note that open ocean ballast water exchange may not be the solution to the problem identified. Given the current design, ballast tanks cannot be pumped dry. This allows a portion of the original ballast water and the organisms it contains to remain in the tanks and be mixed with exchange water. Open ocean ballast water exchange is also not fully effective because of the survival of some forms of NIS (e.g., euryhaline organisms, resting life stages, viruses and other pathogens).

Much of the ship traffic that transits Alaskan waters never travels more than 200 miles offshore. In addition, while the Port of Valdez does have a ballast water treatment plant, the primary purpose of this plant is for the treatment of oily water ballast from tankers. Any type of operation that would be used to target the elimination of living organisms from ballast water at this plant would be detrimental to the bacteria responsible for eliminating hydrocarbons in the ballast water. It is likely that vessels in Alaska would discharge their ballast water at port, and make an entry in the ballast water report form to comply with the proposed rule, and the introduction of NIS would remain a risk.

Alaska Region Recommendations

Ballast water management programs must be scientifically based and the implementing regulations should be environmentally valid with appropriate economic consequences for violations. Monitoring and enforcement will be key to the success of any type of ballast water management program. The first and second of the three “Related Projects” described in the proposed rule appear to be taking steps to address penalties and methodologies to set standards evaluate discharges from ballast water treatment systems.

Additional incentives should be provided to vessel owners and port management to install experimental ballast treatment technology. The third “Related Project” addressed in the proposed rule partially addresses this by encouraging the installation and testing of ballast water treatment technologies on board vessels. Local port or harbor management authorities also need to take a role in protecting their waters and need incentives to provide for ballast water treatment facilities to address NIS issues. Please contact Jeanne Hanson (907-271-3029) if you have questions regarding these comments.

References

Alaska Department of Fish and Game. Alaska Aquatic nuisance Species Management Plan, Juneau, Alaska October 2002.

<http://www.pwsrca.org/projects/nis.html>

<http://www.planetark.org/dailynewsstory.cfm?newsid=6122>

cc: F-Dean Wilkinson