

SJR

10

FISCAL NOTE

STATE OF ALASKA
1992 LEGISLATIVE SESSION

No. 1

Bill Version: SJR 10

Revision Date: _____

Department Affected: (S) Publish Date: 4-17-92

Title: Relating to discharge of ballast water.

BRU: _____

Sponsor: Zharoff

Component: _____

Requestor: _____

COMPONENT SERIAL NO.

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EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0

CAPITAL						
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REVENUE FUND SOURCE:						
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FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER FUND SOURCE:						
TOTAL	0	0	0	0	0	0

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

Estimate of current year impact: None

Changes in CS SJR 10 (RES) have no fiscal impact. This fiscal note is appropriate.

ANALYSIS: (Attach a separate page if necessary.)

4/16/92 /date TCO /Comte Aide (initial)

Resolution requests the U.S. Coast Guard to take action on ballast water issue. No fiscal impact on the state government.

Prepared By: Terry Otness, Committee Aide

Phone: 465-3743

Division: Senate Resources Committee

Date: 4/15/92

Approved by Commissioner: Sen. Lloyd Jones

Agency: Alaska State Senate

Date: 4/15/92



SENATOR FRED F. ZHAROFF

ALASKA STATE LEGISLATURE

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DURING SESSION:

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DISTRICT N

ALASKA PENINSULA • ALEUTIAN CHAIN • BRISTOL BAY • KODIAK ISLAND • LAKE CLARK/LAKE ILIAMNA • PRIDLOF ISLANDS • SHUMAGIN ISLANDS

MEMORANDUM

TO: Representative Cliff Davidson
Chairman
House Resources Committee

FROM: Senator Fred F. Zharoff

DATE: May 5, 1992

RE: Senate Joint Resolution No. 10 - "Relating to the discharge of ballast water by vessels entering the waters of Alaska."

RESOLUTION SUMMARY: SJR 10 requests the U.S. Coast Guard to adopt regulations that would protect Alaska's ecosystem from the introduction of exotic marine organisms.

SJR 10 is a reintroduced version of SJR 59, which expired in the House Rules Committee upon adjournment in 1990.

PREVIOUS ACTION: Moved out of the Senate Resources Committee on April 17 (4 DP). Passed the State Senate 18-0 on April 24.

FISCAL IMPACT: No financial expenditures required by the Alaska state government.

RESOLUTION BACKGROUND: SJR 10 is based on a resolution adopted in 1989 by the Pacific Fisheries Legislative Task Force (made up of fisheries-oriented legislators from Alaska, California, Idaho, Oregon and Washington).

The resolution is aimed at a national problem - the introduction of exotic species through the discharge of ballast water. In many locations throughout the United States -- in particular, California and the Great Lakes region -- foreign marine species have overwhelmed native species, creating serious environmental problems and widespread destruction. The most dramatic example of this is the zebra mussel, which -- through its rapid reproductive capability and ability to clog up water intake and discharge systems -- has caused millions of dollars worth of damage in the Great Lakes basin.

To the best of our knowledge, Alaska has been spared this problem. However, the potential threat exists, particularly

in regard to the introduction of exotic marine organisms from northern Asia and Siberia.

ATTACHED BACKUP INFORMATION:

1. Resolution adopted by the Pacific Fisheries Legislative Task Force.
2. Historical overview on ballast water discharge and the invasion of exotic species.

RESOLUTION

89-10

INTRODUCED ORGANISMS FROM BALLAST WATER

(2)



WHEREAS, west coast sport and commercial fisheries are resources of great economic and recreational importance; and

WHEREAS, these resources are threatened by the introduction of aquatic organisms from foreign ports brought in by means of the ballast water of freighters and tankers; and

WHEREAS, in recent years several planktonic and benthic organisms have arrived and become established, at least one of which is suspected to have caused a great decline in the abundance of an important striped bass food organism in California's Sacramento-San Joaquin Estuary; and

WHEREAS, exotic eel grass brought in through ballast water has created problems in Humboldt Bay and estuaries along the Pacific Coast; and

WHEREAS, similar introductions have probably occurred or will occur at other estuarine and coastal ports all along the west coast and they already have occurred in the Great Lakes with consequent harm to Great Lakes fisheries.

NOW, THEREFORE, BE IT RESOLVED that to protect native fisheries and ecosystems of the Pacific Coast States, the Pacific Fisheries Legislative Task Force urges the U.S. Coast Guard to adopt a regulation prohibiting the dumping of ballast water originating in foreign ports in any west coast river, estuary, bay or coastal area. Such ballast water should be dumped at sea and exchanged for open ocean water prior to entry into State waters; and

BE IT FURTHER RESOLVED that this resolution be forwarded to the Commandant of the U.S. Coast Guard, the Secretary of the Treasury, the Secretary of Commerce and the respective Congressional Delegation of the Pacific Fisheries Legislative Task Force states.

BALLAST WATER AND THE INVASION OF EXOTIC SPECIES
A Brief Historical Review: 1868 - 1990

James T. Carlton
Maritime Studies Program, Williams College - Mystic Seaport Museum
Mystic, Connecticut 06355

A Chronological Summary of the Some of the Events and Concerns
Relative to Ballast Water:

- 1868 Grantham (1868) describes the design of double-bottom tank systems for water ballast in iron ships
- 1880 Lloyd's Register begins in 1880 (but not before) noting types and capacities of water ballast tanks
- 1896 "Probably most cargo steamers in these days are fitted with some means of carrying water as ballast..." (Walton, 1896)
- 1900 Fulton and Grant (1900) suggest that the European shore crab Carcinus maenas was introduced to Australia by ballast water
- 1908 Ostenfeld (1908) suggests that the Asian diatom Odontella (Biddulphia) sinensis may have been introduced to the North Sea in 1903 by ballast water
- 1933 Peters describes the introduction of the mitten crab Eriocheir sinensis, sometime before 1912, from Korea or China to Germany
- 1968-
1978 Extensive literature discussions on the role of ballast water in exchanging marine organisms through the Panama Canal (reviewed by Carlton, 1985, p. 319)
- 1973 Medcof and Scribner (1975) provide first detailed report of living organisms in ballast water, based upon samples of a ship arriving from Japan to New South Wales, Australia
- 1973 "Resolution 18": "Research into the Effect of Discharge of Ballast Water Containing Bacteria of Epidemic Diseases" passed by the International Conference on Marine Pollution (including the International Convention for the Prevention of Pollution from Ships)
- 1976-
1977 CSIRO (Australia) biologists sample bulk cargo carriers coming from Japan to Western Australia (see Williams et al., 1988)
- 1980 Environment Canada commissions ballast water study at Montreal, to sample 55 merchant vessels in the summer and fall; published as Bio-Environmental Services (1981)

- 1980-
1982 Ballast water investigations commence at the Woods Hole Oceanographic Institution, Woods Hole, based upon experimental studies using oceanographic research vessels, and upon bulk bulk cargo traffic arriving at US ports (J. T. Carlton and colleagues)
- 1985 Publication of review monograph by Carlton (1985)
- 1986 Ballast water investigations commence in Coos Bay, Oregon, at the University of Oregon Institute of Marine Biology, based upon bulk cargo vessel traffic from Japan to Pacific Northwest (J. T. Carlton and colleagues)
[Sea Grant funded, 1987-1988, 1989-1991]
- 1987 Publication of monograph on introductions of non-indigenous marine organisms by ballast water and other vectors into Australia, by Hutchings, van der Velde, and Keable (1987)
- 1987 CSIRO (Australia) scientists re-commence sampling of bulk cargo vessels inbound from Japan (Dr. G. Hallegraeff, of CSIRO Division of Fisheries, Hobart)
- 1987 Revision of Water Quality Agreement between Canada and the United States assigns responsibility (under Annex 6) for studying the ballast water issue and possible solutions to the US and Canadian Coast Guards
- 1988 Publication of paper on ballast water as a mechanism of introduction of exotic species in Australia by Williams et al. (1988).
- 1988 Great Lakes Fishery Commission meeting in Toledo, Ohio, (May) considers issue and questions of ballast water release in the Great Lakes
- 1988 "Recommendation No. 1" of the International Council for the (June) Exploration of the Sea's "Working Group on Introductions and Transfers of Marine Organisms" formulated and sent to ICES for consideration at Plenary Session in October 1988
- 1988 Canada and U.S. raise the issue of Great Lakes introductions (Sept) via ballast water at the London meeting of the Marine Environment Protection Committee of the UN's International Maritime Organization (IMO).
- 1989
March Congressmen Davis and Hertel introduce a House of Representatives bill "to direct the Secretary of Transportation to report on methods available to control the influx of exotic species into the Great Lakes"

1989 [continued]

- May Canadian Coast Guard Voluntary Guidelines on ballast water exchange go into effect in Great Lakes (compliance begins in April)
- Aug Mandatory guidelines on ballast water exchange go into effect in Australia; suspended soon thereafter
- Aug "Resolution 89-10" passed by Pacific Fisheries Legislative Task Force, "Introduced Organisms from Ballast Water", urging US Coast Guard to prohibit non-exchanged ballast water release
- Sept American Fisheries Society's Introduced Fishes Section passes Resolution at Annual Meeting (Alaska) on control of ballast water discharges
- Oct New York Congressman Nowak introduces House of Representatives Bill 3403 "to require that vessels exchange their ballast water entering the Great Lakes" [legislation pending, February 1990]
- Oct Ballast Water Monitoring Workshop, sponsored by the Great Lakes Fishery Commission, at St. Catherines, Ontario
- Dec House of Representatives bill 2459 passes, calling for US Coast Guard to produce report on ballast water management strategies by June 1990 (Bill authored by Michigan Congressmen Robert Davis and Dennis Hertel)

1990

- Jan Senator F.F.Zharoff submits "Senate Joint Resolution No.59" to State of Alaska legislature "Relating to the discharge of ballast water by vessels entering the waters of Alaska" (and the organisms therein)
- Feb Voluntary guidelines on ballast water exchange go into effect in Australia (February 1)
- Feb Ballast Water Monitoring Workshop II, sponsored by the Great Lakes Fishery Commission, at Toronto, Ontario (8-9 February)
- Feb Exotic Species and the Shipping Industry Workshop, sponsored by the International Joint Commission and the Great Lakes Fishery Commission, at Toronto, Ontario (28 Feb, 1-2 March)