

California's Ballast Water Management and Control Program  
Progress Report – September 200009/19/00  
W 9777.234M. Falkner  
G. Gregory)**EXECUTIVE SUMMARY**

Starting January 1, 2000, the Ballast Water Management for Control of Nonindigenous Species Act of 1999 (Act) established a statewide, multi-agency program to prevent or reduce the introduction and spread of nonindigenous aquatic species (NAS) into the state waters under the direction of the California State Lands Commission (CSLC) in consultation with other state and federal agencies. The total budget is \$6.67 million over four years, and includes an inspection and monitoring program under the CSLC, biological surveys to determine the extent of NAS introductions in state waters, conducted by California Department of Fish and Game (CDFG), the evaluation of alternatives to mid-ocean exchange, conducted by State Water Resources Control Board (SWRCB), and the collection of a fee by Board of Equalization (BOE). Funding for the Program is through the assessment of a \$400 fee for each qualifying voyage. While the program had some initial problems with fee payment and report submittal, compliance rates have improved dramatically.

**BACKGROUND**

On October 8, 1999, California's Governor signed Assembly Bill 703, creating the Ballast Water Management for Control of Nonindigenous Species Act, which became effective on January 1, 2000. The Act addresses a problem that has become all the more urgent as international commerce increases resulting in a corresponding increase in the speed with which NAS are being introduced. The introduction of NAS has created ecological, operational, and engineering disasters in many areas of the United States and worldwide. Non-indigenous aquatic species are commonly reported in San Francisco, Los Angeles, San Diego and many smaller harbors and embayments throughout California.

The California Legislature recognized the significance of the problem and established, through passage of the Act, a state program that addresses the issue by making ballast water management mandatory. The law applies to all U.S. or foreign vessels that enter California waters after operating outside the U.S. Exclusive Economic Zone (EEZ). Vessels must either conduct a mid-ocean exchange of ballast water or retain all ballast water on board the vessel. The program also assesses the current condition of the marine environment and evaluates alternative methodology for controlling NAS introduction.

The Act established a statewide multi-agency program with the intent to control the introduction and spread of NAS in the waters of the State. Responsible agencies identified in the law include the CSLC, CDFG, SWRCB and the BOE. Each agency required to work in cooperation with the others in developing re

research into the extent of current invasions, and potential long-term solutions to the problem of NAS introductions.

The staff of the CSLC is responsible for developing and implementing the ballast water inspection and monitoring program and evaluating the effectiveness of the Act. The CSLC's program includes the establishment of a fee schedule for vessels operating in California waters, collection of vessel-specific ballast water management data, field inspection of ballast water and sediments from vessels, synthesis and analysis of monitoring and inspection information to evaluate the effectiveness of the program, and enforcement of the law, through the imposition of administrative civil penalties.

The CDFG, Office of Oil Spill Prevention and Response (OSPR) is responsible for conducting research to determine the location and extent of NAS population in coastal and estuarine waters of the state. The SWRCB is responsible for conducting studies to evaluate alternatives for treating and otherwise managing ballast water to prevent the introduction and spread of NAS into the waters of the state. Finally, the BOE is responsible for the collection and deposition of fees into the "Exotic Species Control Fund", which will pay for the statewide programs.

## **CURRENT STATUS**

### Shipping Patterns

From January 1 through August 31, 2000, 4,570 qualifying voyages, by 1,650 different vessels, have entered California ports. Nearly 50% of these vessel calls are container vessels, 13% each are tank and bulk vessels, with general cargo, auto carriers and passenger vessels each constituting approximately 10% of the vessel calls. Nearly 45% of the vessel calls identify a last port of call (LPOC) as Far East ports such as Japan, China, and the Koreas. Twenty percent of the vessel calls originated from Pacific North American ports in Canada and Mexico, while 13% called at a South American port prior to arriving in California.

Nearly 4.6 million metric tons of ballast water was discharged into California ports between January 1 and August 31, 2000. Nearly 50% of those vessels discharging ballast in California originated from Far East ports. Interestingly, over 30% came from Mexican ports.

### Compliance

Under Section 71205(a), ship agents, along with the master, owner, operator or person in charge, are responsible for submitting the ballast water reporting form for each voyage prior to the vessel leaving the first port of call in California. Letters were sent to nearly 80 ship agents in December 1999 explaining their responsibility under the new law. During the first three months of the program, the staff of the MFD sent "Letters of Concern" to several of these agents. However, compliance with the reporting

requirements during that time was less than 60% statewide and several large ship agents had compliance rates less than 50%.

Despite the initial outreach letter to all agents and the focused letters of concern to "problem" agents, compliance during the second quarter of the year was still unsatisfactory. Beginning in May 2000, enforcement letters were sent to nine ship agents for violations of Section 71205(a). These agents all had significant numbers of non-compliant vessels and had received at least one "letter of concern" during the preceding quarter. Additionally, staff referred one case to the DFGs Office of Spill Prevention and Response for further enforcement action. Staff met with eight of the nine shipping companies between June and August 2000. Because of those meetings, all the ship agents initiated procedures designed to improve compliance and further enforcement action has been suspended at this time. The subsequent submission of outstanding forms has resulted in an overall compliance of 87%.

### Inspections

The two CSLC MFD Field Offices have boarded and inspected approximately 25% of the qualifying voyages during the first eight months of the Program. Inspections have been conducted on over 650 different vessels. Each vessel is boarded, paperwork is evaluated, tanks are sampled for compliance and educational material is provided to the ship crew. A report, summarizing the results of the inspection, is provided to the vessel crew. The majority (75%) of those vessel boarded comply with the law. Violations noted are primarily associated with administrative components of the law (incomplete ballast water management plans, no IMO guidelines on board, etc.). Less than 5% of the violations noted during inspections are associated with the required mid-ocean exchange of ballast water. Of these 5%, over 80% are passenger vessels coming from Mexican ports. The CSLC is working with these vessels to identify alternative exchange zones and or management techniques that will ensure compliance with the law in an environmentally sound manner.

### Outreach/Education

Communication among the maritime industry, CSLC and other regulating entities is vital to the success of the California program. Staff has initiated several outreach and educational programs in the past eight months to improve communication among the stakeholders. For example, an updated ballast water web page is found on the CSLC web page. Information on the law, new regulations, and synopsis of meetings, notification of upcoming meetings, and links to other related web pages can be accessed easily. Staff, in conjunction with state and federal agencies and the maritime industry, has participated in or hosted over 10 workshops/conferences on ballast water management in the past eight months.

Beginning in July 2000, the staff initiated a monthly email procedure to notify the maritime industry of vessels that have not submitted the required ballast water report forms. This procedure has been well received by the industry and has resulted in a

steady improvement in compliance. The compliance rate for the months of July and August are over 90%.

Finally, the formation, in January 2000, of a Technical Advisory Group (TAG) made up of members of the maritime industry and state agencies has proved beneficial in determining an appropriate fee amount and addressing issues related specifically to the implementation of the California law. The TAG meets quarterly to assess the effectiveness of the Program and the status of the Fund.

### Partnerships

CSLC is finalizing a Cooperative Agreement with the U.S. Coast Guard to streamline our respective programs. Our goals are to reduce duplicative inspections; data share at the regional and national level and cooperate in research programs addressing new verification techniques and ballast water treatment technology. We are also active members in several ballast water related groups, such as the Pacific Ballast Water Group, Ballast Outreach Advisory Team, and the Pacific Ballast Water Pilot Project. Participants work toward consistent ballast water management regulations on a regional level while sharing data and evaluating alternative exchange zones off shore and feasible treatment technologies.

### Future Plans

CSLC staff is working with passenger vessel companies, state agencies and the scientific community to identify potential alternative exchange zones within 200 nautical miles of land. Several companies have joined forces to develop a study plan that would evaluate the biological organisms and ocean current patterns in areas off the Baja California Coast. Working with CDFG and the U.S. Coast Guard, CSLC will evaluate the study plan and final results to determine if the proposed area is an appropriate alternative exchange zone for vessels coming into California waters from Mexican ports.

CSLC staff is also working with the technology development sector to identify potential ballast water treatment systems. CSLC is facilitating the transfer of information among the technology development and maritime industries and the state and federal agencies. Recently CSLC was awarded a grant for our proposal titled "West Coast Regional Applied Ballast Management Research and Demonstration Project" from the U.S. Fish and Wildlife Service and National Sea Grant Foundation. Our Project proposes to evaluate and install a shipboard ballast water treatment system on a qualified "volunteer" vessel. The vessel would then participate in Washington State's Ballast Water Pilot Program, where the real-time effectiveness of the treatment technology will be evaluated.

