REPORT TO THE TWENTY-FOURTH LEGISLATURE
REGULAR SESSION OF 2007

ON

THE IMPLEMENTATION OF ACT 134, SESSION LAWS OF HAWAII 2000

PREPARED BY
STATE OF HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES

IN RESPONSE TO
SECTION 18.3 of ACT 160, SESSION LAWS OF HAWAII 2006

HONOLULU, HAWAI'I
NOVEMBER 2006

REPORT ON
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PURPOSE

This report is submitted in compliance with Section 18.3 of Act 160, Session Laws of Hawaii (SLH) 2006, which requests the Department of Land and Natural Resources (DLNR) to report to the Legislature on actions related to its past and present efforts to implement Act 134, SLH 2000 (Part III of Chapter 187A, Hawaii Revised Statutes (HRS), Alien Aquatic Organisms).

BACKGROUND

National Perspective

Everyday around the World, alien aquatic organisms are being transported in ballast tanks and on the hulls of vessels and other floating platforms from one location to another. Since the late 1980's, the Great Lakes region of the United States (U.S.) has been negatively impacted by invasions of the zebra mussel (*Dreissena polymorpha*). It was the zebra mussel invasion in the U.S., and harmful alien aquatic organisms impacting other countries, that created the awareness for a need to begin regulating ballast water discharges.

In 1990, Congress enacted the Non-indigenous Aquatic Nuisance Prevention and Control Act (NANPCA). NANPCA established the U.S. Coast Guard's (USCG) regulatory jurisdiction over ballast water management. In 1996, NANPCA was amended to the National Invasive Species Act (NISA), mandating continuation of the Great Lakes mandatory ballast water management program and designated the USCG responsible for establishing a voluntary ballast water management program for all ships entering other U.S. ports.

In 2002, in a report to Congress, the USCG stated that the compliance percentage for the voluntary ballast water management program was low and not effective enough to provide an accurate assessment of the effectiveness of the voluntary ballast water management program. In 2003, NISA was amended again to strengthen the ballast water management program in the U.S. and was renamed the National Aquatic Invasive Species Act (NAISA). NAISA mandated that the USCG's voluntary ballast water management program be made mandatory for all U.S. ports. Congress enacted NAISA and in July 2004, the USCG established its mandatory ballast water management program for U.S. waters. The program is currently in effect and requires all vessels entering U.S. ports to submit a ballast water report.

Hawaii Perspective

Alien aquatic organism introductions through ballast water and the fouling on vessel hulls to Hawaii are not new. Bishop Museum has conducted surveys throughout the State. Three

hundred forty-three (343) marine alien species introductions to Hawaii have been documented. Of these, 287 are marine invertebrates, 24 are marine macro algae and 20 are fish.

In 1997, the Hawaii State Legislature, through Act 237, authorized DLNR to establish an Alien Aquatic Organism Task Force (AAOTF). Membership of the Task Force included representatives from state and federal agencies, private shipping and boating industries, the scientific community, and non-government organizations. The Task Force was charged with the responsibility to develop a comprehensive plan for preventing the introduction and dispersal of alien aquatic organisms found in ballast water and on the hulls of vessels, into State waters.

In December of 1997, the AAOTF presented a final report of their discussions and recommendations to the Legislature. The recommendations were to: 1) Develop inspection protocols for the USCG to use when inspecting ballast tanks and hulls, 2) Adopt the voluntary ballast water exchange guidelines developed by the International Maritime Organization (IMO), 3) Continue support of ongoing studies related to the impacts of alien aquatic organisms in Hawaiian waters, 4) Include ballast water and hull fouling issues in DLNR and the Department of Agriculture (DOA) education and information programs, and 5) Designate a 'lead agency' to be responsible for promulgating administrative rules to address ballast water and hull fouling issues. The AAOTF was not extended by the Legislature and it disbanded in 1998.

In response to the 1998 AAOTF's final report, the Legislature established Act 134, Session Laws of 2000, which subsequently became Chapter 187A, Part III, HRS, Alien Aquatic Organisms. Section 187A-32, HRS, designated DLNR as the lead agency for preventing introductions and carrying out the eradication of alien aquatic organisms through the regulation of ballast water discharges and hull fouling. It also gave DLNR the authority to: 1) Re-establish an interagency task force to address concerns relating to alien aquatic organisms, and 2) Adopt administrative rules, including penalties, to carry out the intent of this law, but this mandate was unfunded. Within DLNR, the Division of Aquatic Resources (DAR) was designated responsible. DAR explored sources for funding and submitted grant proposals for funds to support initial efforts to meet the legislative mandate.

Milestones in Developing a Comprehensive Ballast Water and Hull Fouling Program for the State of Hawaii:

2001 - 2002

Establish, recruit and hire project coordinator with responsibilities to provide administrative support for the, soon to be re-established, AAOTF as well as oversee the activities for the initial development of a State Comprehensive Ballast Water and Hull Fouling Alien Aquatic Organism Prevention Program.

Begin efforts to re-establish the AAOTF. The AAOTF was given responsibilities to investigate and discuss issues and concerns related to alien aquatic organism introductions to Hawaii. They developed recommendations that would be provided to the DAR for consideration in development of a comprehensive Ballast Water and Hull

Fouling Program for the State. Members of the interagency task force representing the federal government were the USCG, National Marine Fisheries Service, Environmental Protection Agency, Fish and Wildlife Service, and the Navy. DLNR, the Department of Health, (DOA), the Department of Transportation (Harbors Division), and the Department of Business, Economic Development, and Tourism represented the state agencies. Representing the scientific community were the Bishop Museum, University of Hawaii, and the Kewalo Marine Laboratory. The shipping industry was well represented with members from Matson, Horizon Lines, Young Brothers, Waldron Steamship, Sause Brothers, Pacific Shipyard and the NorthWest CruiseShip Association. Finally, Hawaii Audubon Society and the Nature Conservancy represented the non-government organizations on the Task Force.

Initial discussions and efforts tackled by members of the AAOTF were numerous; which vessels would be subject to regulations being developed, was there someplace in the State that could be used as a quarantine site for emergencies and violators; what should a ballast water management plan for Hawaii look like, would it be different from the USCG ballast water management plan or should it mirror it?

The AAOTF also developed recommendations that they felt would enhance the State's Ballast Water and Hull Fouling Alien Aquatic Organism Prevention Program during its development (*Appendix 1*).

2003 - 2004

The AAOTF convened a 2-day workshop on hull fouling in February 2003. Ashley Coutts of the Cawthorne Institute, New Zealand and Dr. Oliver Floerl of the National Institute of Water and Atmospheric Research, New Zealand were invited to conduct the workshop. Both scientists were colleagues of AAOTF member, Scott Godwin formerly with the Bishop Museum, currently with the Hawaii Institute of Marine Biology. All three scientists have been actively working on alien aquatic organism introductions from ballast water for over 10 years and more recently have turned their attention to addressing the issues surrounding introductions through fouling on vessel hulls. The New Zealand scientists provided background information about the problems and management programs for addressing alien aquatic organism introductions that have been developed in New Zealand. They provided insight into the challenges New Zealand faced as management strategies for minimizing alien aquatic organism introductions from ballast water and hull fouling into their country were being developed. DAR and the AAOTF hoped that some of the management strategies developed in New Zealand could be adapted to meet Hawaii's situation.

A draft memorandum of agreement (MOA) between DLNR and the USCG was developed. Initially the idea and purpose behind the MOA was primarily for facilitating the exchange of information between the two agencies and also for educational opportunities. While the draft MOA was being reviewed by the USCG's legal office, DAR project staff were invited to accompany the USCG 1) On shore side follow-up ballast water related investigations, 2) The ballast water examination portion of the shore side vessel examination, and 3) To observe the procedures for sampling ballast tanks.

DAR met again with the USCG in June 2006. At this meeting the USCG determined that a formal MOA with DLNR for the original intent; to facilitate exchange of information and share educational opportunities would not be necessary. However, it was determined that a formal MOA between the two agencies should be established if and when the two agencies considered cooperative enforcement efforts.

2005 - 2006

To date, the most significant accomplishment has resulted from the collaborative efforts of DAR and the AAOTF to develop and complete a draft proposal for administrative rules to implement Phase I (the ballast water portion) of the comprehensive prevention program for the State of Hawaii. The final draft proposal for administrative rules has been forwarded to the AG's for a final review and signature.

On going efforts:

Hull Inspections

DAR project staff worked collaboratively with the Aquatic Invasive Species (AIS) Response Team to assist the NWHIMNM alien aquatic species consultant to conduct both pre and post vessel hull inspections on 1) Vessels requesting to travel to the pristine waters of the NWHIMNM and 2) Vessels and/or platforms from foreign ports that periodically arrive in Hawaii unscheduled and request entry to Hawaii's harbors.

Workshops

DAR has also participated in several workshops; 1) The technical advisory group (TAG) discussions organized by the State Land Commission, State of California to investigate and develop recommendations for managing hull fouling on commercial vessels for the California State legislature and 2) MARPOL (Marine Pollution) enforcement workshop, addressing various aspects of vessel examination, sponsored by the USCG.

Conferences

Conferences and workshops are venues where people with common interests and expertise can come together to share their knowledge and experiences. Because of the benefits provided by these venues, when the resources were available, DAR sent staff to attend and make presentations at conferences; both national and international, about the challenges, efforts and advances being made in Hawaii to address minimizing alien aquatic organism introductions through ballast water and hull fouling.

There has been a shift to focus on prevention rather than eradication. At the eradication stage, the alien organism is alreay introduced, established and is displaying its invasiveness. Many countries and states have already made this program shift and have established or are developing management programs that highlight protocols that focus on prevention by minimizing alien introductions through the ballast water an hull fouling vectors.

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