

CA Marine Invasive Species Program

- 1999 Ballast Water Management for Control of Nonindigenous Species Act
- 2003 Marine Invasive Species Act
- Partner Agencies:







Marine Invasive Species Program Resources

- Funding
 - \$850 per vessel voyage fee for first arrival to CA
 - Fee supports Commission and partner agencies
- Commission staffing of MISP
 - Four program admin (manager, scientists)
 - Six data management/admin
 - Vessel Inspections
 - Two Marine Safety Specialists (N. and S. CA)
 - Coordinate vessel inspection process
 - 22 personnel cross-trained in marine invasive species management and oil transfer activities

2013 Biennial Report

2013 BIENNIAL REPORT ON THE CALIFORNIA MARINE INVASIVE SPECIES PROGRAM

PRODUCED FOR THE CALIFORNIA STATE LEGISLATURE

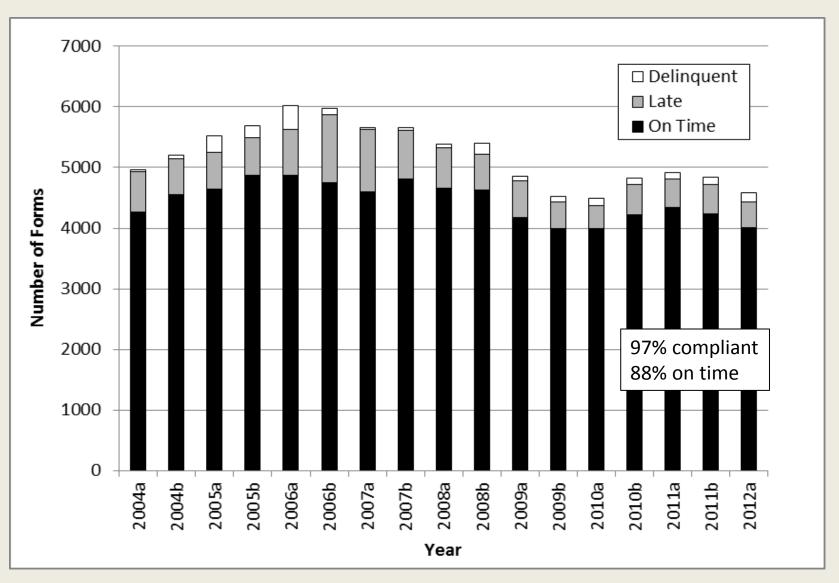
By C. Scianni, C. Brown, A. Newsom, R. Nedelcheva, M. Falkner, and N. Dobroski

> California State Lands Commission Marine Facilities Division February 2013

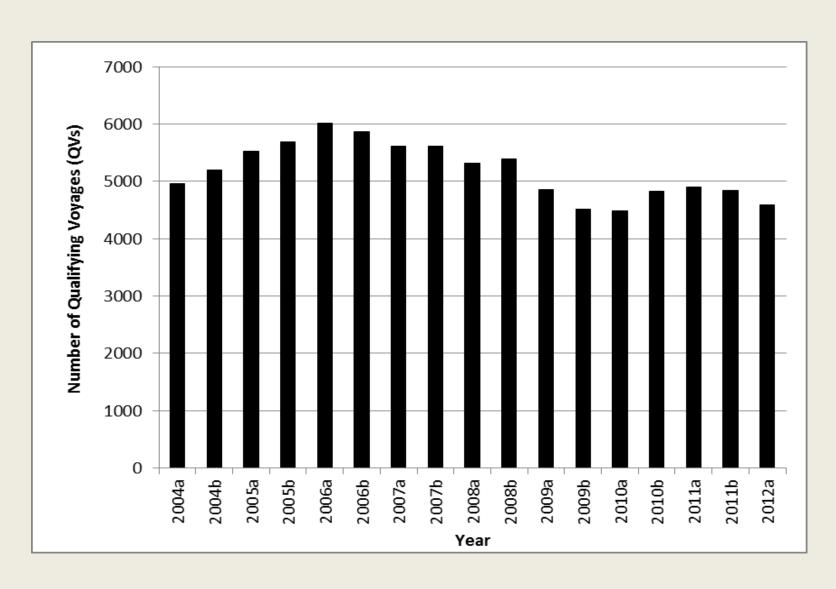
- Regulatory overview: state, federal, international
- MISP activities
- Ballast water and biofouling management data analysis
- Funded and collaborative research
- Review of scientific literature
- Looking forward

BALLAST WATER MANAGEMENT Photo courtesy of Smithsonian Environmental Research Center

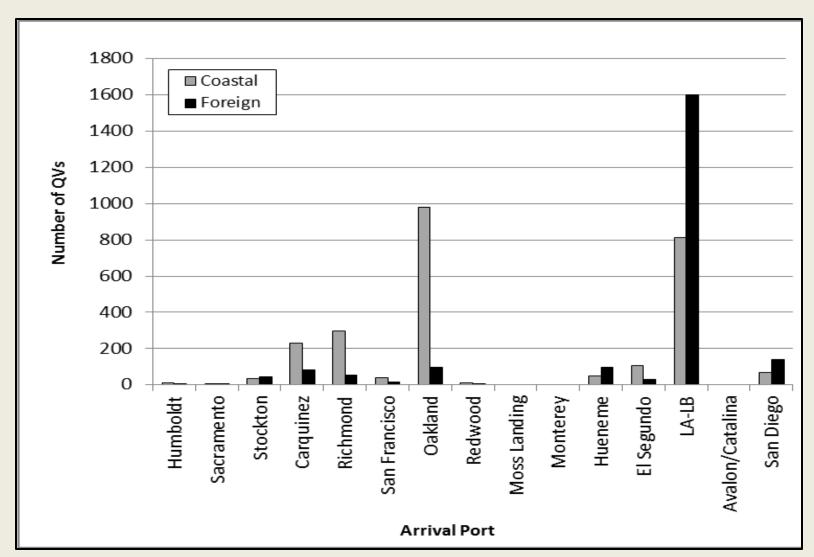
BW Reporting Form Compliance



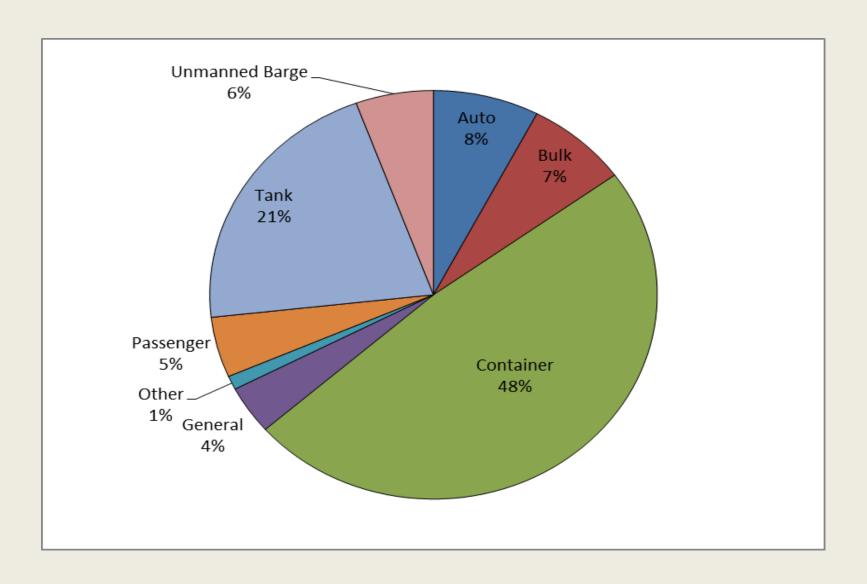
Qualifying Arrivals



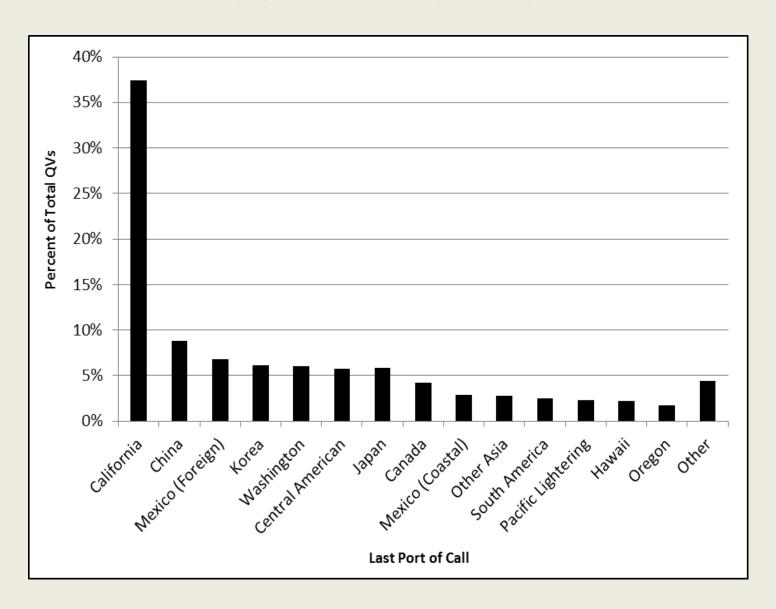
Arrivals by Port



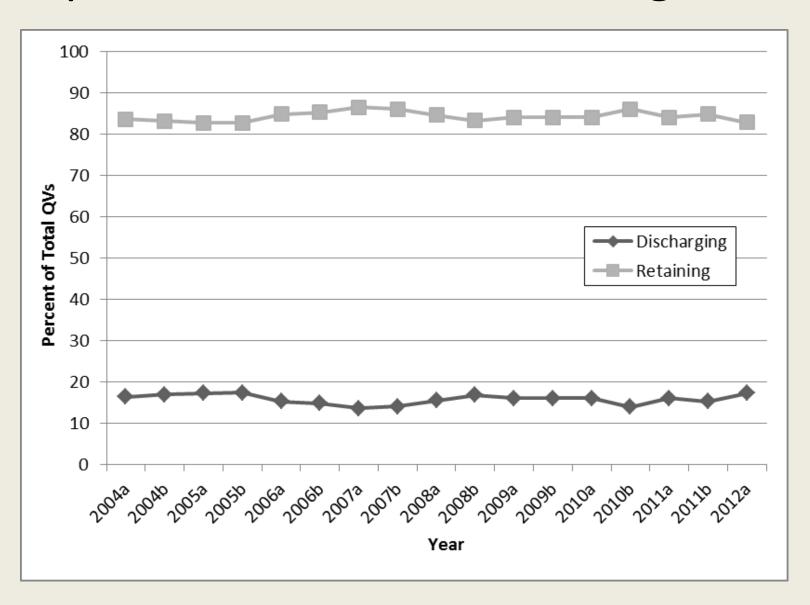
Arrivals by Vessel Type



Last Port of Call



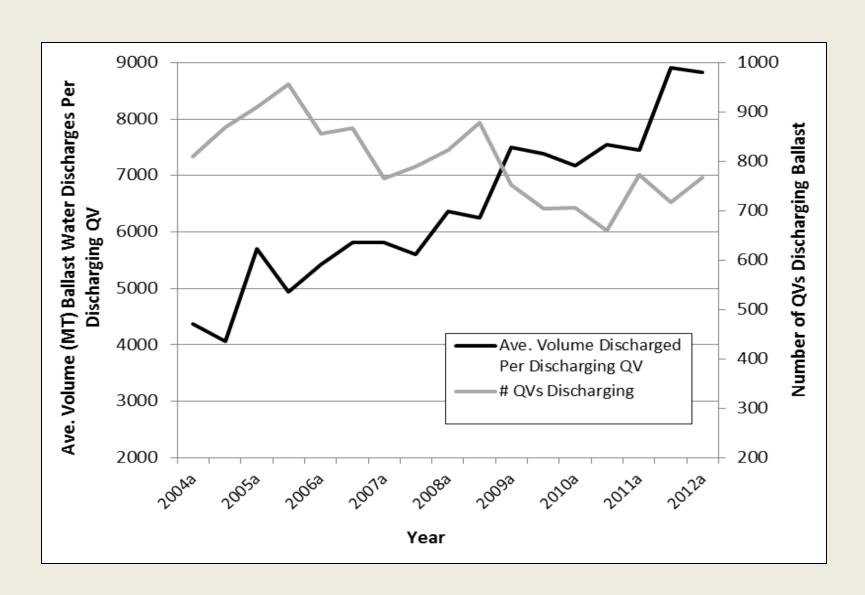
Reported Ballast Water Management



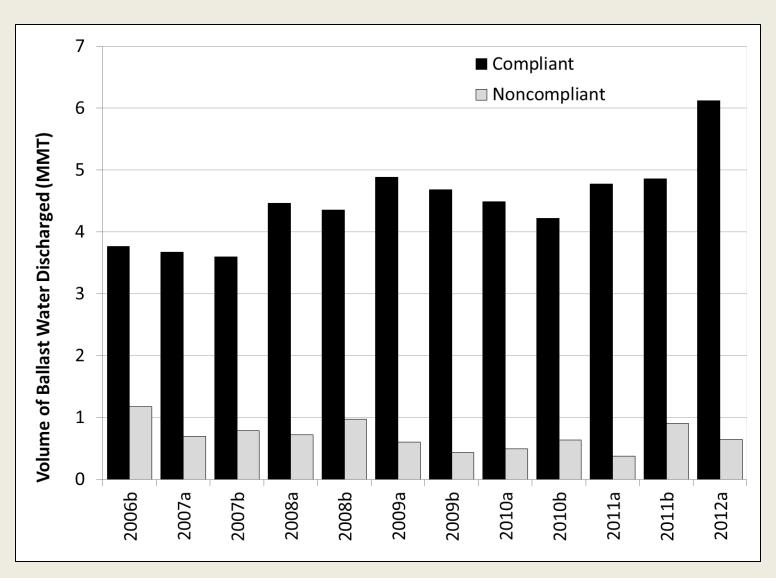
Type of Vessels Discharging

Vessel Type	Avg # of QVs Per 6 Month Period	Avg # Discharging Per 6 Month Period	% Discharging
Auto	358	5	1.4%
Bulk	345	174	50.4%
Container	2269	136	6.0%
General	179	31	17.3%
Other	51	6	11.8%
Passenger	224	35	15.6%
Tank	989	248	25.1%
Unmanned Barge	263	75	28.5%

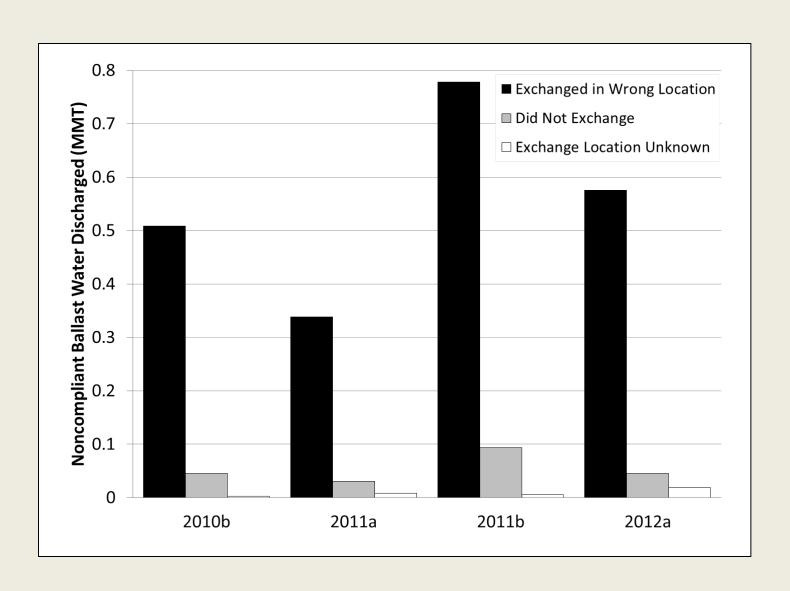
Per vessel discharge volume increasing

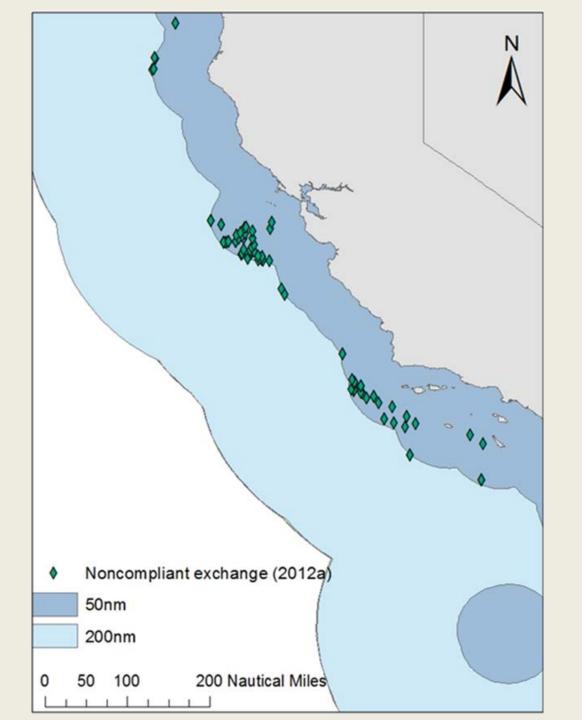


BW Discharge Compliance

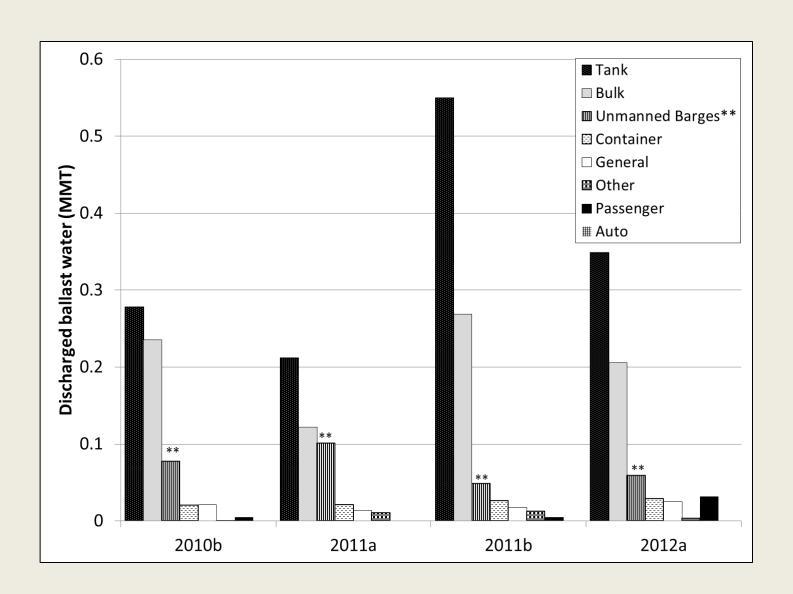


Non-Compliant Discharges





Discharge of high risk ballast water



Performance Standards

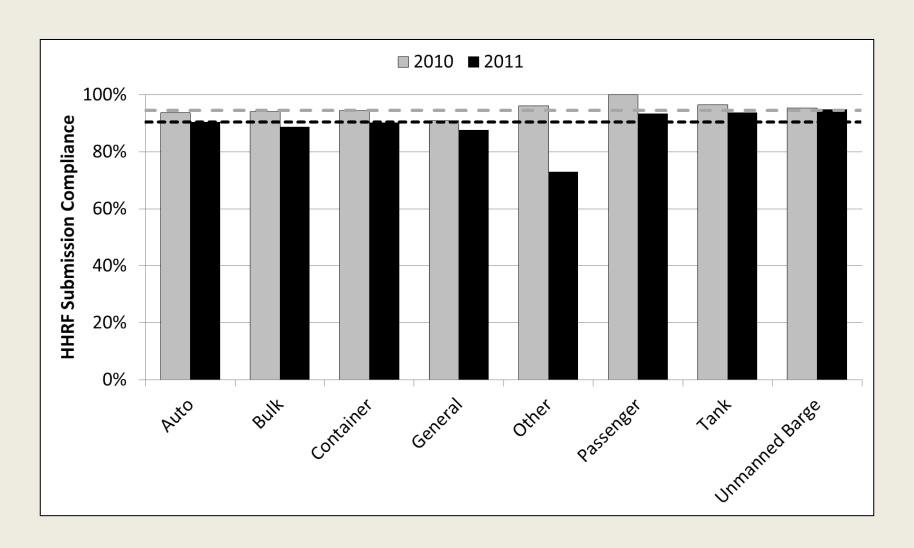
- Treatment technology assessment report
 - In revision
 - Targeting June Commission meeting
- Compliance assessment protocols (Article 4.7)
 - Temporarily on hold
- Shore-based reception and treatment facilities
 - Developing RFP for feasibility study
- Working with Commissioners and stakeholders to develop comprehensive plan for implementation



MISP Biofouling Management Timeline

- 2003 Marine Invasive Species Act
- 2005 Workshop and TAG meetings
- 2006 Legislative Report
- 2006 Voluntary hull husbandry survey
- 2007 Assembly Bill 740
 - Hull Husbandry Reporting Form (HHRF)
 - Continue funding biological research
 - Develop regulations by 2012

HHRF Submission Compliance



Funded Research

- Moss Landing Marine Laboratories (Dr. Nick Welschmeyer)
 - Plankton bulk viability analysis
- The Glosten Associates
 - Ballast water sampling tool
- Smithsonian Environmental Research Center
 - Biofouling (quantity, quality, extent, parasitism...)
- APL
 - Installation of NEI treatment system on APL England

Looking Forward

- Improve compliance targeted outreach and enforcement
- Performance standards implementation and compliance assessment
- Shore-based treatment feasibility study
- Hull husbandry data analysis, dissemination
- Biofouling research
- Biofouling regulations
- MOUs with regional/international partners

