Recent Progress and Updates from the California Marine Invasive Species Program



Prevention First September 10, 2008

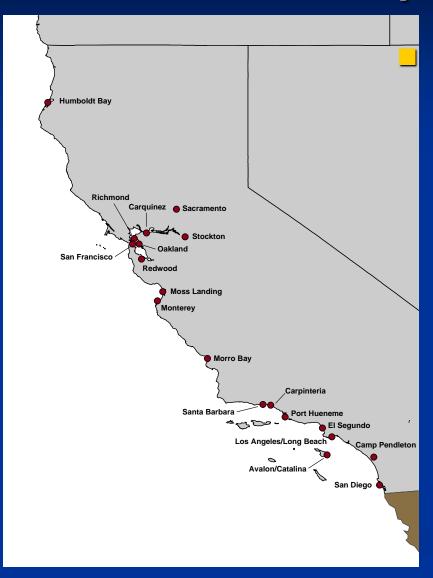


California's Marine Invasive Species Program: Legislative Directives

Marine Invasive Species Act (2003)

- Management of ballast water while in CA waters
- Report management practices
- Submit to compliance inspections
- Submit Fee (Marine Invasive Species Control Fund)
- Develop & recommend performance standards
- Assess risk from vessel fouling
- Support/Fund research
- Conduct biological surveys
- Compile and analyze data

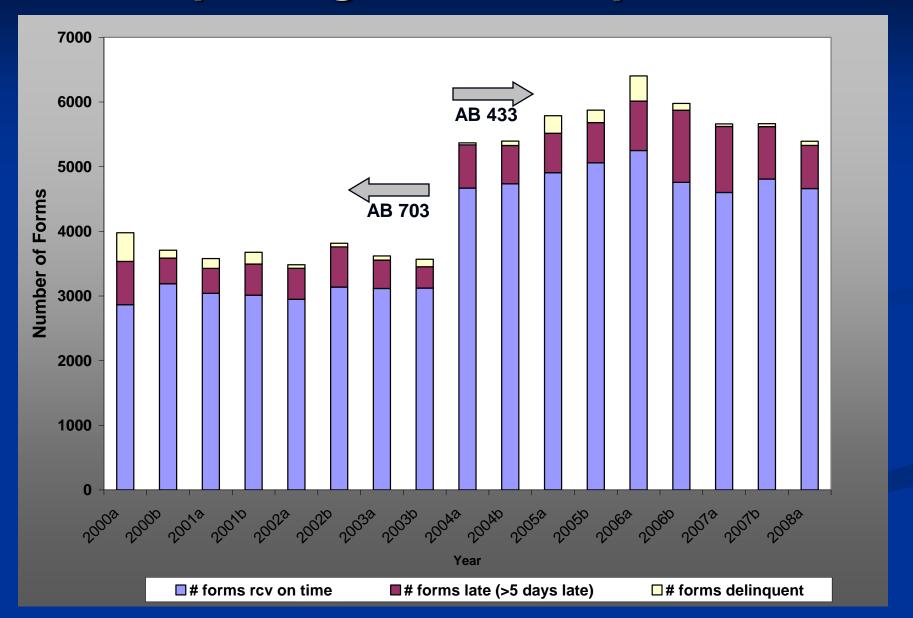
Ballast Water Reporting Requirements



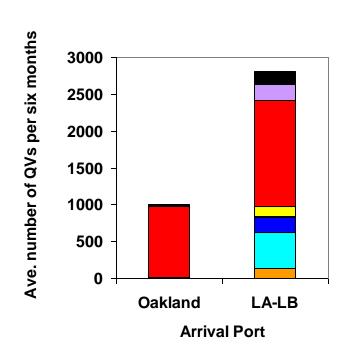
Submit a ballast water reporting form for each port or place of call in CA

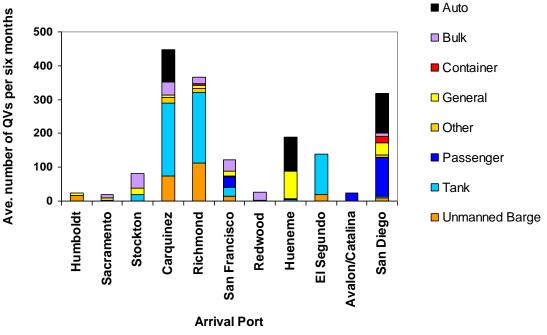


Reporting Form Compliance

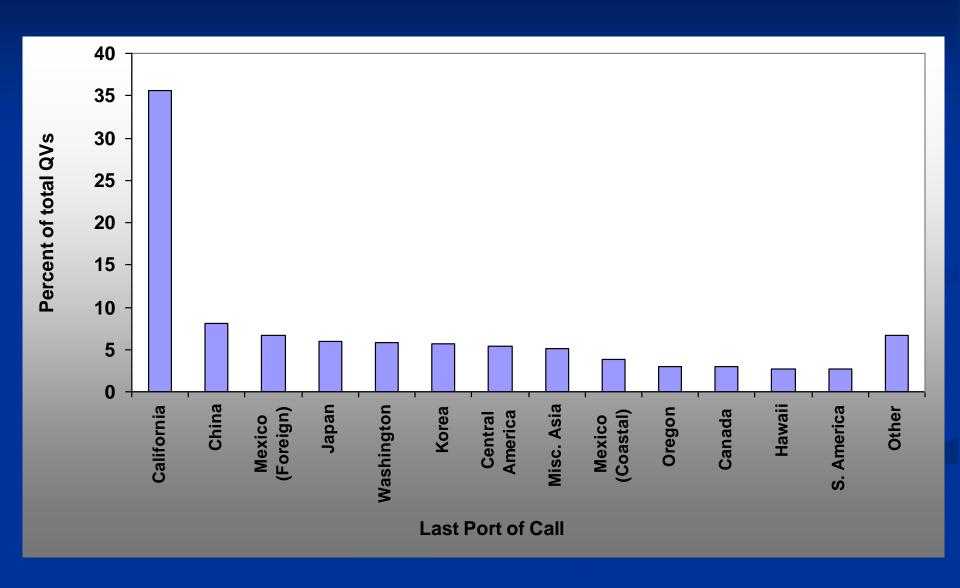


Average Number of Arrivals to CA Ports by Vessel Type

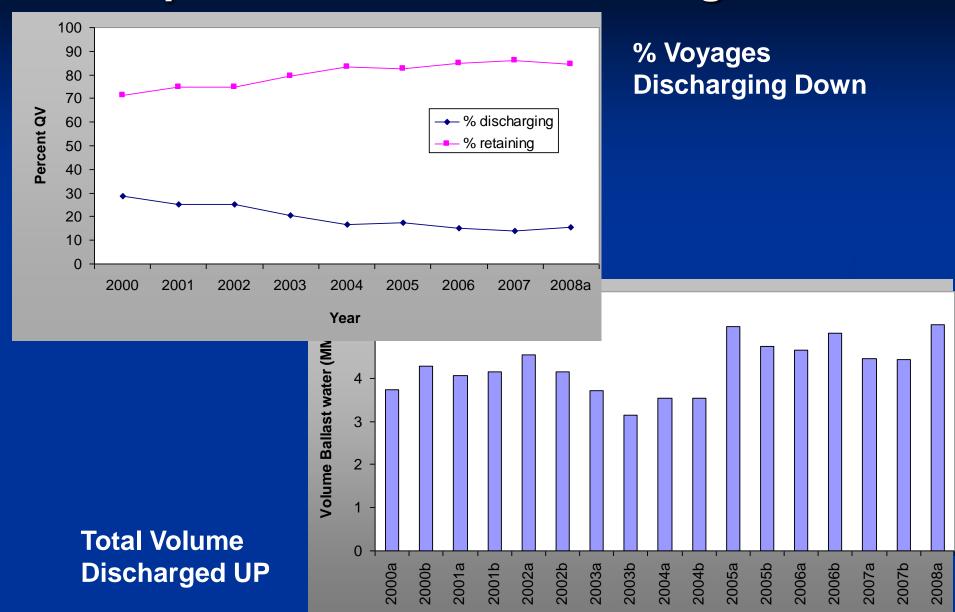




Last Port of Call

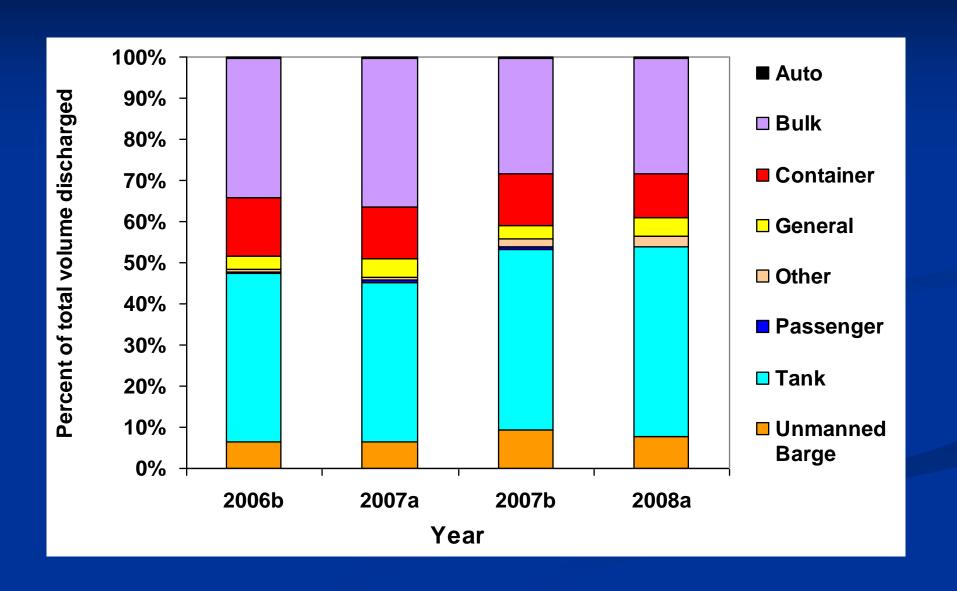


Reported Ballast Water Management



Year

% Discharge Volume by Vessel Type and Year

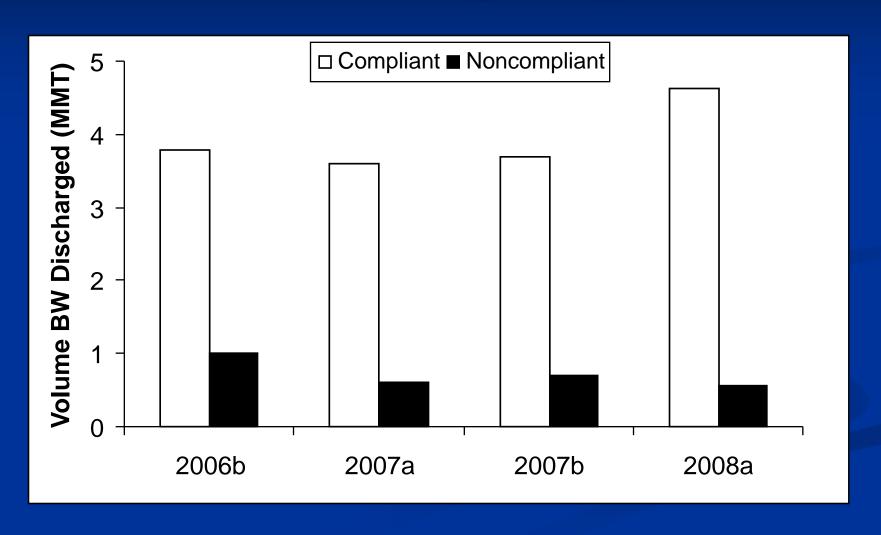


Compliance

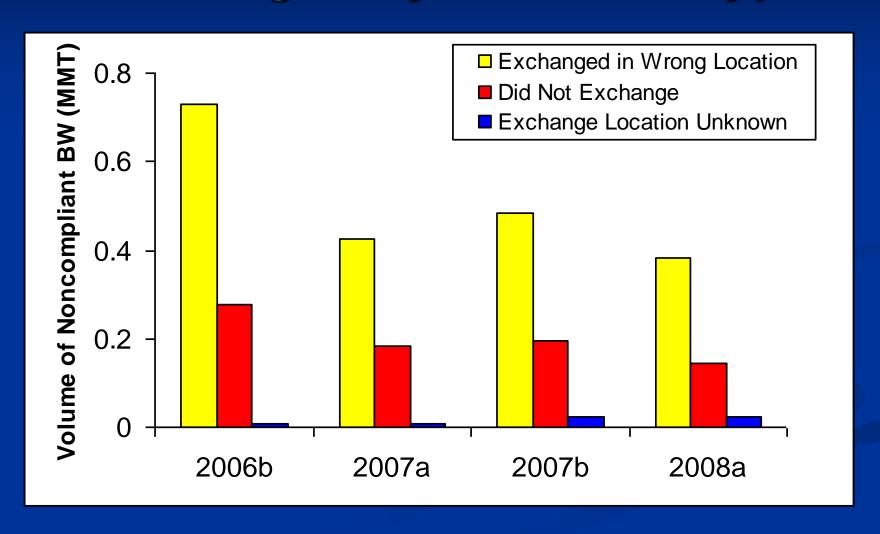
Between July 2006 and June 2008:

- Noncompliant BW discharges have decreased 45%
- More than 135 million metric tons* of ballast water was carried into CA state waters
 - * = ~54,000 Olympic swimming pools
 - 98% of that water was managed in compliance with the law (either through retention or legal exchange and subsequent discharge)

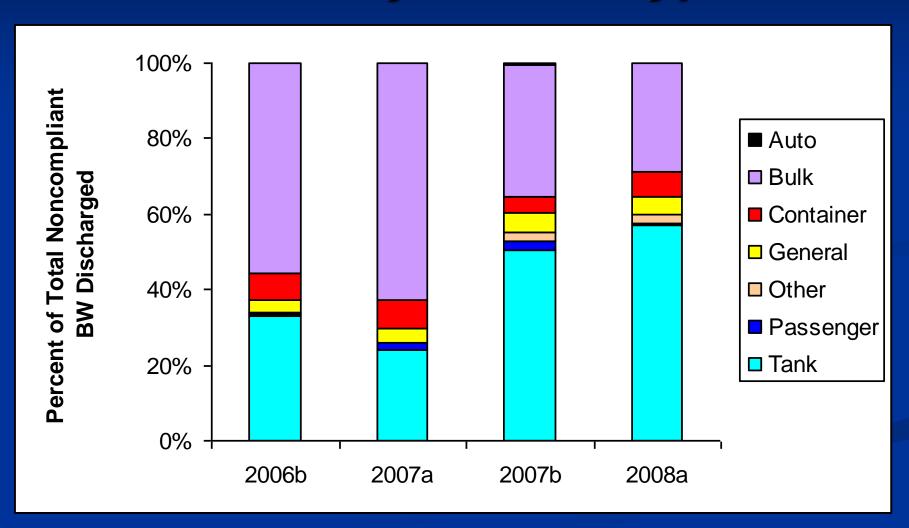
Compliant and Noncompliant Ballast Water Discharged by Year



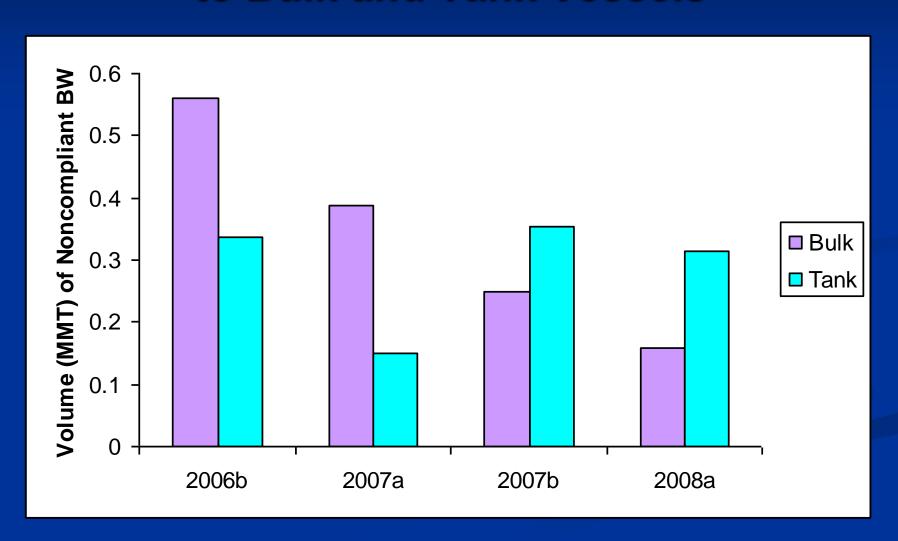
Volumes of Noncompliant Water Discharged by Violation Type



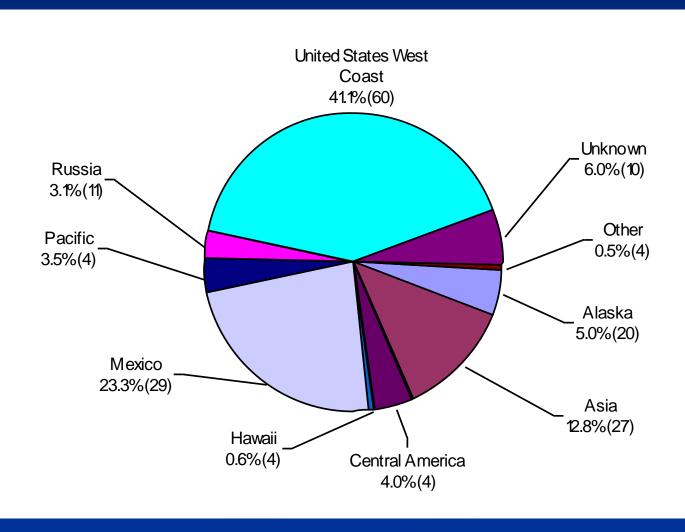
Proportion of Noncompliant Water by Vessel Type



Volume of Noncompliant Discharges Attributable to Bulk and Tank Vessels



Source of Noncompliant Ballast Water



Marine Invasive Species Program: Recent Activities



Assembly Bill 740 (2007) amends Marine Invasive Species Act

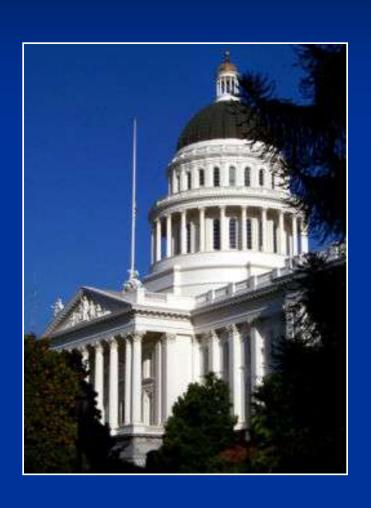


- ✓ Collect, compile and analyze hull husbandry data (in progress)
- ✓ Adopt Hull Husbandry Reporting Form via Regulations (in progress)



✓ Adopt regulations managing vessel fouling (January 2012)

Assembly Bill 497 (2006) The Ecosystem Protection Act



- ✓ Adopt Regulations on Performance Standards (October 2007)
- ✓ Review the Efficacy, Availability and Environmental Impacts of Available Technologies (December 2007, update in progress)
- ✓ Develop Treatment Technology Testing Guidelines and Compliance Verification Protocols (in progress)

Funded Technology Development and Research

CSLC - Matson Navigation

Installation of treatment technology on the ITB *Moku Pahu*

CSLC - APL

Installation of treatment technology onboard the APL England

CSLC - Glosten/CMA

Dockside technology research & testing facility

CSLC – Portland State University II Assessing the risk of invasions from

commercial vessel hull fouling

CSLC - Smithsonian Environmental Research Center

Ballast water exchange verification/BEAM



Looking Forward

- ✓ Biennial Report January 2009
- ✓ Technology Review Report January 2009
- ✓ Senate Bill 1781/Assembly Bill 169 (Fall 2008)
 - ✓ Technology testing guidelines (Fall 2008)
- ✓ Compliance verification protocols (Spring 2009)
 - ✓ More Research







