

California's Marine Invasive Species Program

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MARINE INVASIVE SPECIES PROGRAM

MARINE ENVIRONMENTAL PROTECTION DIVISION

CALIFORNIA STATE LANDS COMMISSION

APRIL 11, 2018



Topics of Discussion

2017 Summary Statistics

Newly Implemented Regulations

Updated Outreach Materials

Focus on Prevention

Enforcement

Database Upgrades

Funded Research

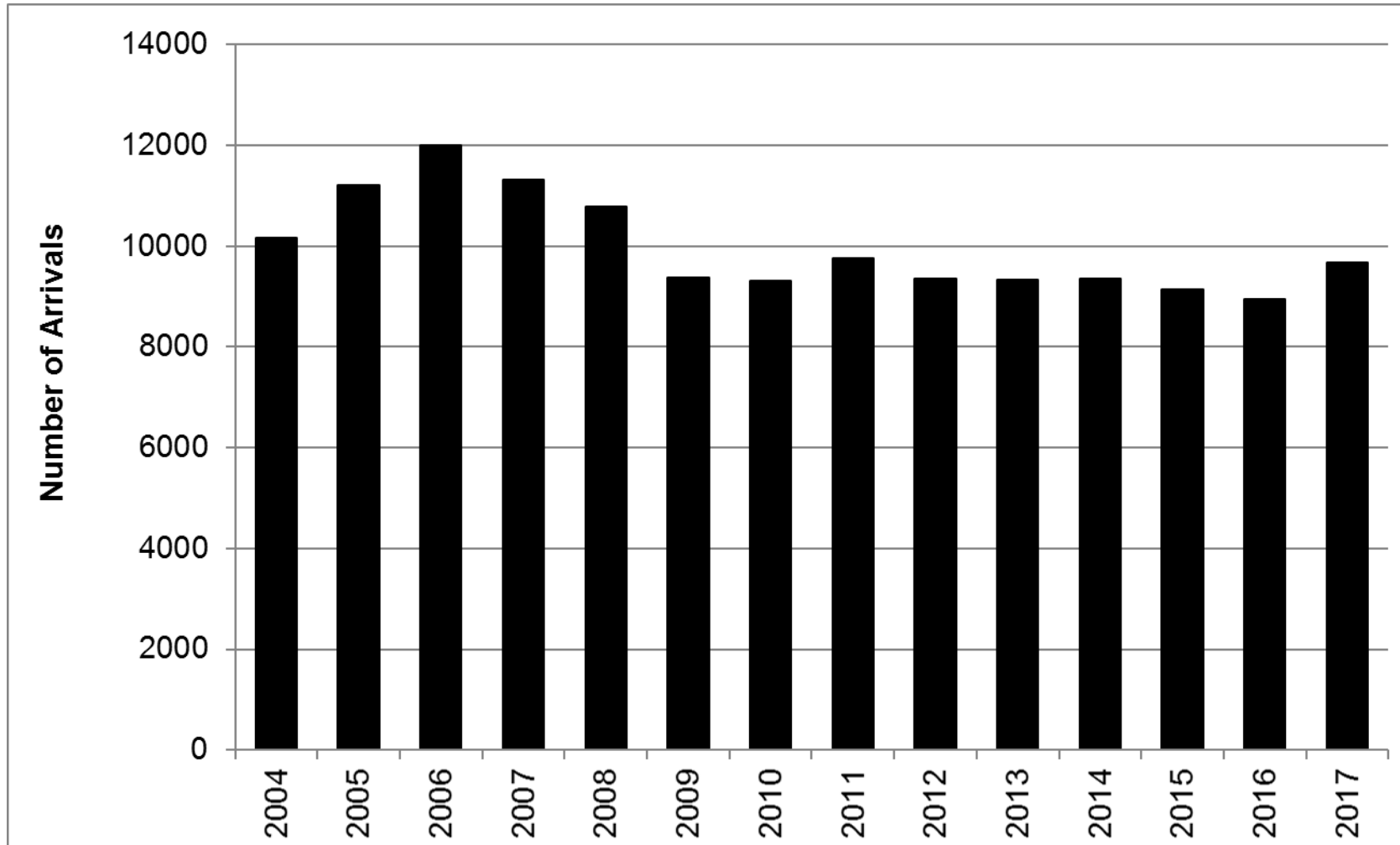
Upcoming Projects



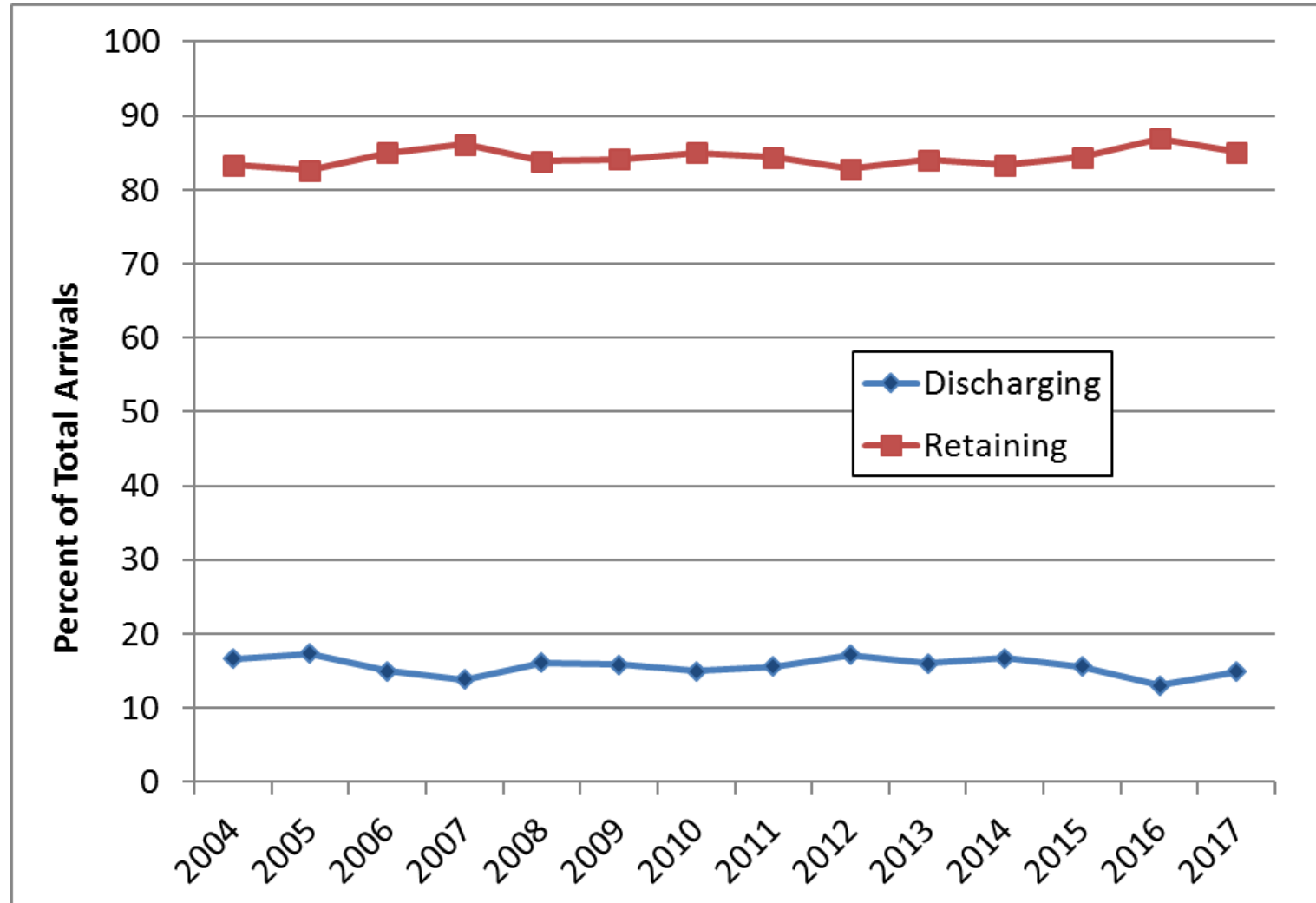
2017 Summary Statistics



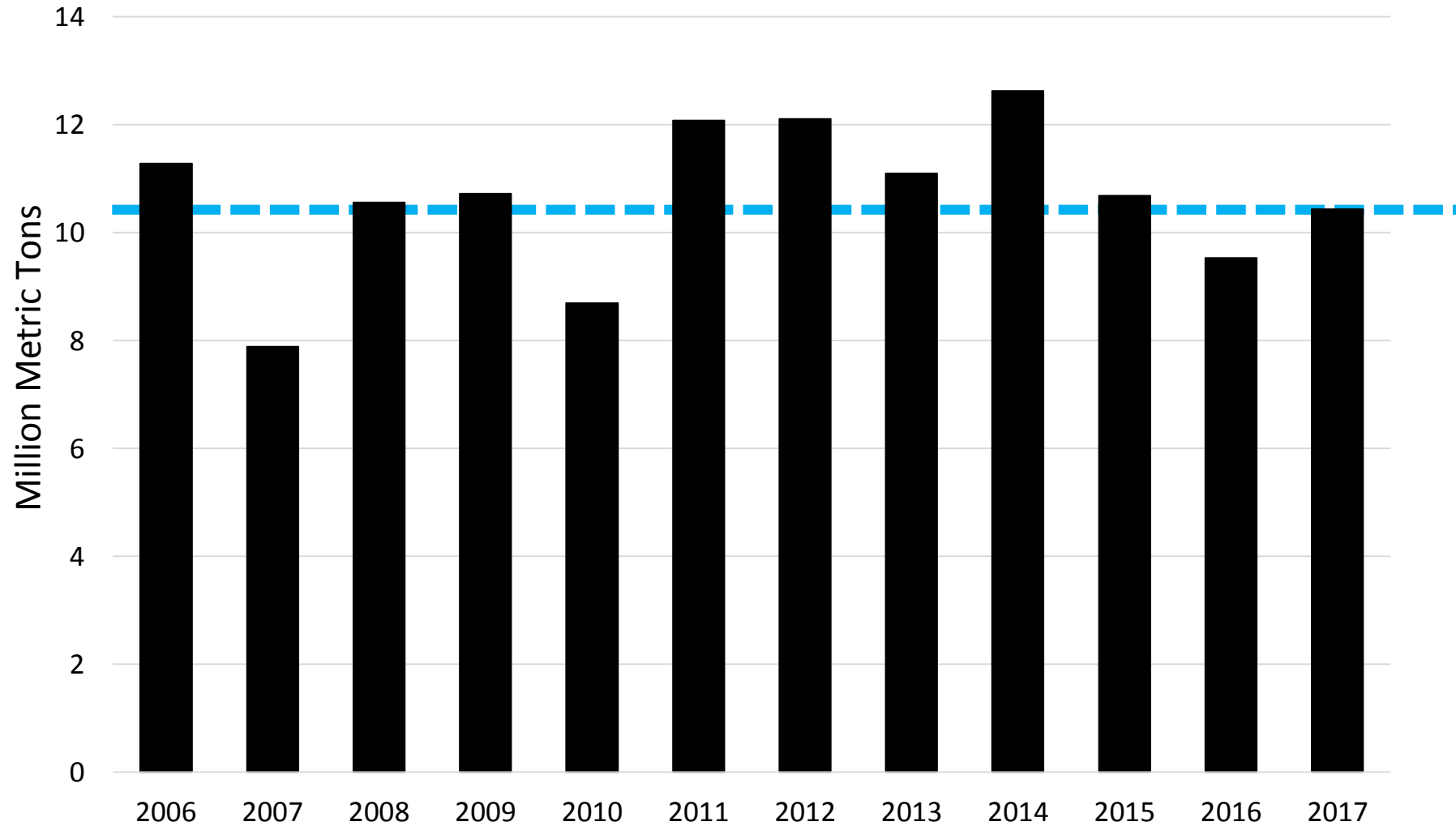
Vessel Arrivals at CA Ports



Ballast Water Management



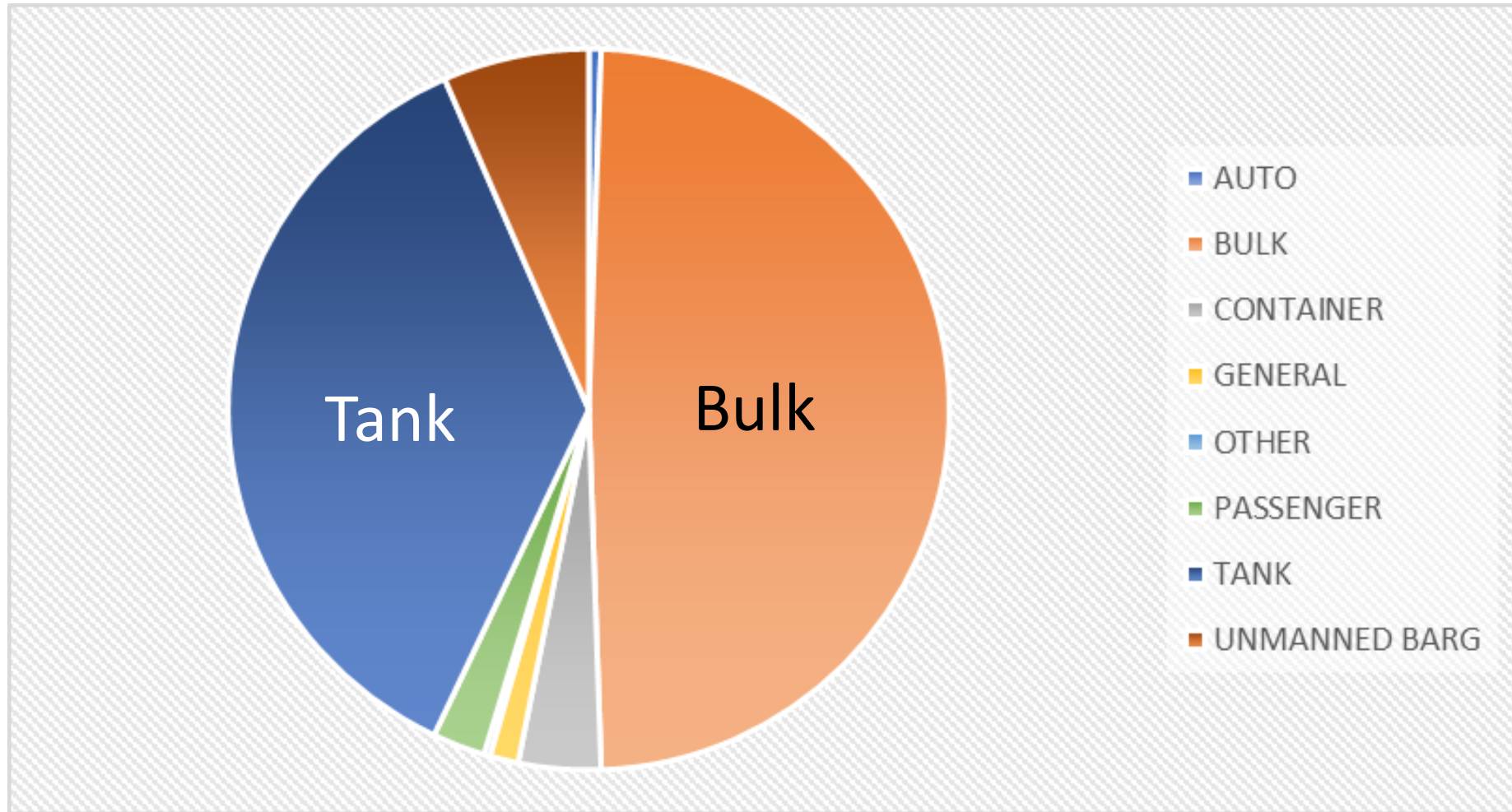
Ballast Water Discharge



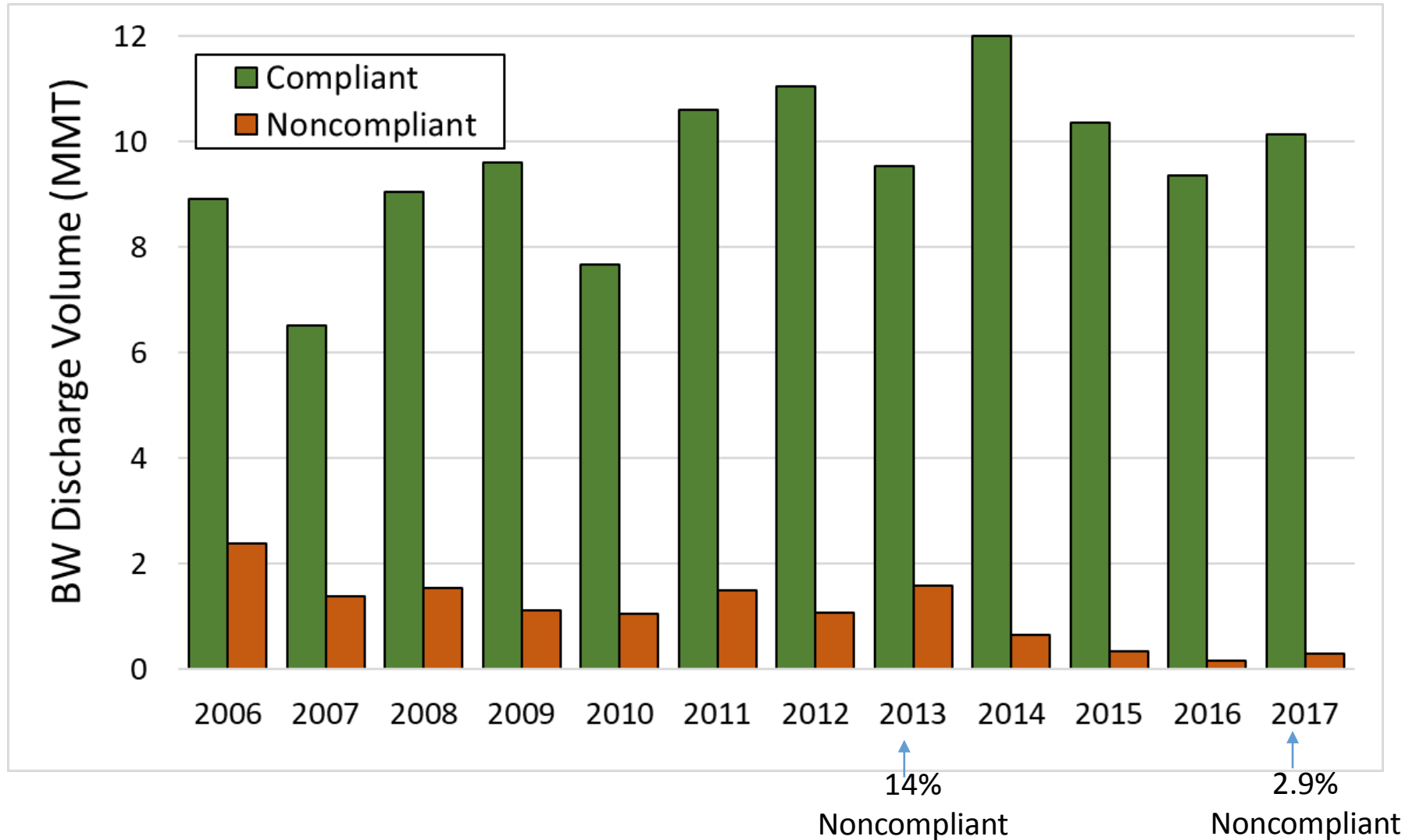
- Avg. = ~10.6 MMT per year



2017 Discharge by Vessel Type



Compliant vs. Noncompliant



Vessel Inspections

	2014	2015	2016	2017
Total Arrivals	9345	9065	9164	9678
Total Inspected	2442	2373	2313	2296
Percent Inspected	26%	26%	25%	24%
Violations	72	56	37	47
Violation rate	0.77%	0.62%	0.40%	0.49%



Newly Implemented Regulations



ARTICLE 4.5 - Marine Invasive Species Control Fund Fee

Title 2, California Code of Regulations section 2271

- Balance of the Marine Invasive Species Control Fund determined to be insufficient to fund the MISP into the future
- Fee increased from \$850 to \$1,000 per qualifying voyage arrival
- Implemented - April 1, 2017



ARTICLE 4.9 - Marine Invasive Species Act Enforcement and Hearing Process

Title 2, California Code of Regulations section 2299.01 et seq.

Purpose: To establish policies and procedures CSLC shall undertake in assessing and commencing administrative enforcement actions pursuant to CA Public Resources Code section 71216 and the steps the cited party shall take to address the actions.

- Implemented - July 1, 2017



ARTICLE 4.9 - Marine Invasive Species Act Enforcement and Hearing Process

1. Class 1 (operational)

Severity of Violation	Max Penalty Per Tank
Minor	\$5,000
Moderate	\$10,000
Major I	\$20,000
Major II	\$27,500

2. Class 2 (administrative) – Max penalty \$10,000

- Vessel fails to properly maintain required documents on board (e.g. ballast water handling log, ballast water management plan)

3. Class 3 (administrative) – Max penalty \$1,000

- Vessel fails to submit required reporting forms (e.g. Ballast Water Management Report)



ARTICLE 4.8 - Biofouling Management to Minimize the Transfer of Nonindigenous Species from Vessels Arriving at California Ports

Title 2 California Code of Regulations section 2298.1 et seq.

- Applicability
- Biofouling Management Plan
- Biofouling Record Book
- Annual Vessel Reporting Form
- Biofouling Management for Wetted Surfaces
- Extended Residency Periods
- Propeller Cleaning
- Alternatives
- Emergency Exemptions



Effective October 1, 2017



OLD

Hull and Dry
Reporting Form

Annual Treatment
Technology Form

Supplemental
Treatment Technology
Form

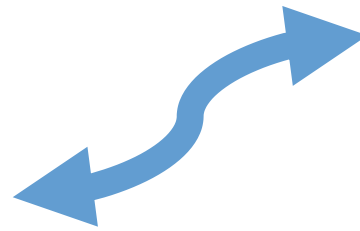
60 days prior to a request




NEW

Annual Vessel
Reporting Form

24 hours in advance
of 1st Arrival to CA per
calendar year



Annual Vessel Reporting Form



STATE OF CALIFORNIA – STATE LANDS COMMISSION
MARINE INVASIVE SPECIES PROGRAM ANNUAL VESSEL REPORTING FORM
SLC 600.12 (Revised 08/17)
Public Resources Code Sections 71201.7, 71205

Vessel Name:	
Official / IMO Number:	
Responsible Officer's Name and Title:	
Date Submitted (Day/Month/Year):	

1. Does the vessel have a ballast water treatment system installed?

Yes ☐ IF "YES" Complete sections 1 and 2

No ☐ IF "NO" Complete section 1 only

Section 1: Hull Husbandry Maintenance and Operational Information

2. Since delivery, has this vessel ever been removed from the water for maintenance?

Yes ☐ No ☐

a. If Yes, enter the date and location of the most recent out-of-water maintenance.

Last date out of water (Day/Month/Year):

Port or Position: Country:

b. If No, enter the delivery date and location where the vessel was built:

Delivery Date (Day/Month/Year):

Port or Position: Country:

3. Were the submerged portions of the vessel coated with an anti-fouling treatment or coating during the out-of-water maintenance or shipbuilding process listed above?

Yes, full coat applied ☐

Yes, partial coat ☐ Date last full coat applied (Day/Month/Year):

No coat applied ☐ Date last full coat applied (Day/Month/Year):

Official / IMO Number

When is this required?

- As of October 1, 2017
- 24 hours in advance of the first California port arrival of each calendar year



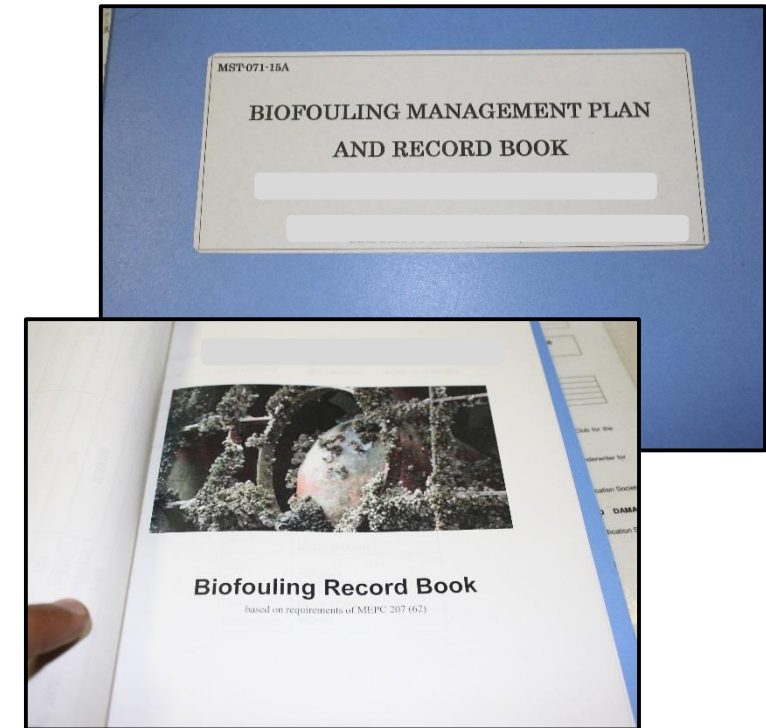
Biofouling Management Plan and Biofouling Record Book

When are they required?

- Existing vessels: After first regularly scheduled out-of-water maintenance on or after January 1, 2018
- New vessels: Upon delivery on or after January 1, 2018
- 60-day grace period

What is required?

- Describe biofouling management strategy
- Document biofouling management actions



Extended Residency Periods

When is this required?

- Existing vessels: After first regularly scheduled out-of-water maintenance on or after January 1, 2018
- New vessels: Upon delivery on or after January 1, 2018

What is required?

- Manage biofouling in the niche areas in a manner consistent with Biofouling Management Plan
- All biofouling management activities must be documented in the Biofouling Record Book



Updated Outreach Materials



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California's Management Requirements for Ballast Water and Biofouling

BALLAST WATER

PACIFIC COAST REGION DEFINITION
All coastal waters (within 200 nautical miles [NM] of land) on the Pacific Coast of North America east of 154 degrees W longitude and north of 25 degrees N latitude, excluding the Gulf of California. (Public Resources Code section 71200(k)).
A map is included on page 6.



Vessels arriving from OUTSIDE of the Pacific Coast Region (PCR) or carrying ballast water sourced from OUTSIDE of the PCR.

What are California's ballast water management requirements for vessels arriving at a California port from a port outside of the PCR or carrying ballast water sourced from outside of the PCR?

The master, operator, or person in charge of a vessel shall employ at least one of the following ballast water management practices:

- Retain all ballast water (no discharge)
- Use an alternative, environmentally sound, California State Lands Commission (Commission) or U.S. Coast Guard approved method of management
- Discharge to an approved reception facility (none currently exist)
- Exchange ballast water in mid-ocean waters more than 200 NM from land and at least 2,000 meters deep:
 - Empty refill method: 100% volumetric replacement
 - Flow through method: 300% volumetric replacement
- Under extraordinary circumstances, a vessel may perform a ballast water exchange within an area agreed to by the Commission in consultation with the U.S. Coast Guard at or before the time of request
- Discharge ballast water at the same location where the ballast water originated. It must be demonstrated that the water was not mixed with ballast water taken on in an area other than mid-ocean waters. Same location means an area within one NM of the berth or within the recognized breakwater of a California port.

Updated: 9/28/2017



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Reporting and Recordkeeping Requirements

General Reporting Information

Which vessels are subject to reporting and recordkeeping requirements?
Vessels that arrive at a California port, are 300 gross registered tons or more, and are carrying or capable of carrying ballast water

Submit required forms and reports to:
Email: BWForm@slc.ca.gov
Fax: 562.499.6444
Online submission: <https://misp.io>

Copies and instructions of the required forms and reports can be found at:
www.slc.ca.gov/Programs/MISP_Reporting.html

REPORTING

Ballast Water Management Report

California requires that vessels submit the U.S. Coast Guard Ballast Water Management Report (OMB No. 1625-0069)

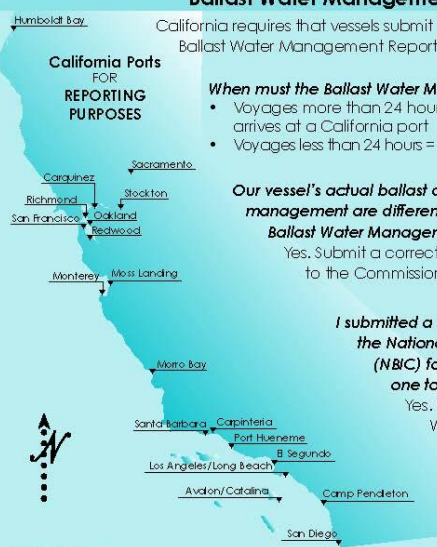
When must the Ballast Water Management Report be submitted?

- Voyages more than 24 hours = At least 24 hours before the vessel arrives at a California port
- Voyages less than 24 hours = Prior to departing the port of departure

Our vessel's actual ballast discharge and/or ballast water management are different than what was submitted on the Ballast Water Management Report. Should we re-submit?
Yes. Submit a corrected Ballast Water Management Report to the Commission with the updated information.

I submitted a Ballast Water Management Report to the National Ballast Information Clearinghouse (NBIC) for this voyage. Do I also have to submit one to California?
Yes. Vessels must submit a separate Ballast Water Management Report to the Commission. A Ballast Water Management Report submitted to NBIC is NOT forwarded to California.

California Ports FOR REPORTING PURPOSES



Updated: 9/28/2017

www.slc.ca.gov



Focus on Prevention

Pre-arrival risk assessment process

- Prioritization of arrivals based on risk
 - High, Medium, Low
- Timely review of submitted BWMR and AVRF
 - Plot BW exchange coordinates of discharging vessels in Google Earth/GIS
- Contact vessels if potential violation is detected
- Target for inspection

Stay tuned for Jonathan Thompson's talk on Thursday!



Enforcement Actions

(To date since July 1, 2017)

Date of Violation	Vessel Type	Code Violation	Method of Detection	No. Tanks	Violation	Max Penalty	Status
Q3 2017	Bulk	PRC § 71204.3	Inspection	12	10 (moderate), 2 (minor)	\$110,000	Complete
Q3 2017	Bulk	PRC § 71204.3	Inspection	21	7 (Major I), 14 (Moderate)	\$280,000	In progress
Q3 2017	Bulk	PRC § 71204.3	Inspection	2	1 (Moderate), 1 (minor)	\$15,000	Complete
Q3 2017	Bulk	PRC § 71204.3	Inspection	17	8 (Major I), 9 (minor)	\$205,000	In progress
Q3 2017	Container	2 CCR § 2284	GIS	2	2 (Major II)	\$55,000	In progress
Q1 2018	Passenger	PRC § 71204.3	GIS	7	5 (Major I), 2 (minor)	\$120,000	In progress

4 additional enforcement actions pending Executive approval



Database Upgrades

Enhanced functionality

- Semi-automated prioritization of arrivals
- Tagging vessels subject to biofouling regulations
- Track method of violation detection (GIS, vessel inspection)

Cloud-based

- New opportunities for data sharing

AND...



Online Form Submittal: MISP.IO



<https://misp.io>

- Ballast Water Management Report
- Annual Vessel Reporting Form



Funded Ballast Water Research

Shore-based ballast water treatment feasibility study

- Delta Stewardship Council (Project manager)
- Glosten Associates (Contractor)

Enumerating viruses in ballast water

- Michigan State University

Invasive zooplankton of California estuaries

- Washington State University

Historical shipping patterns in San Francisco Bay Estuary and links to NIS transport

- Smithsonian Environmental Research Center



Funded Biofouling Research

Vessel biofouling and invasions: evaluating biofouling introduction risks under lay-up conditions in marine systems

- Smithsonian Environmental Research Center

Assessing role of copper tolerance in biofouling invasion risk

- San Jose State University



What's Next?

2018 Assessment of the Efficacy, Availability, and Environmental Impacts of Ballast Water Treatment Technologies in California Waters

2019 Biennial Report on the California Marine Invasive Species Program

Amendments to enforcement regulations (Article 4.9)

- Incorporate biofouling management regulations

Weighted risk assessment process



Thank you!

For more information:

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