

California's Marine Invasive Species Program

Pacific Ballast Water and Biofouling Group | April 29, 2025

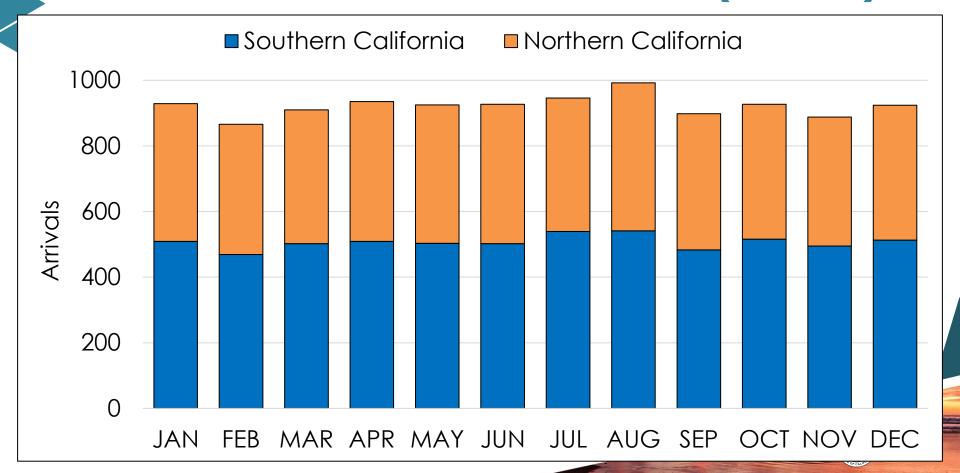


TOPICS

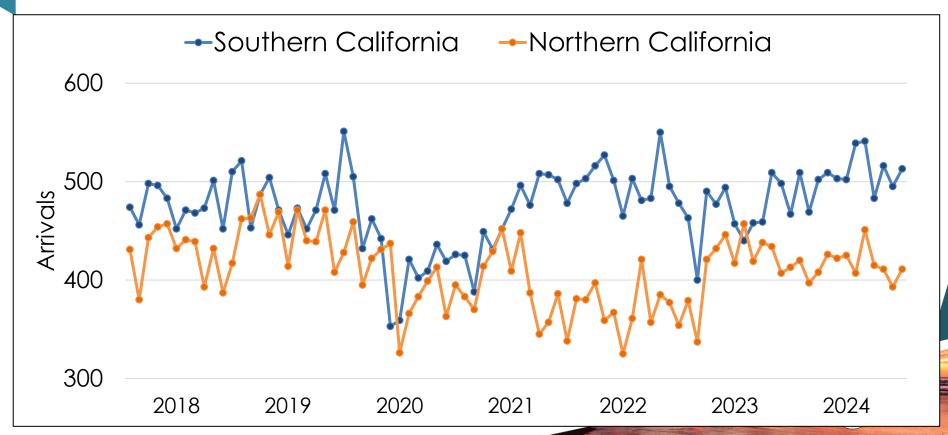
- Vessel Statistics
- MISP Enforcement
- MISP Updates



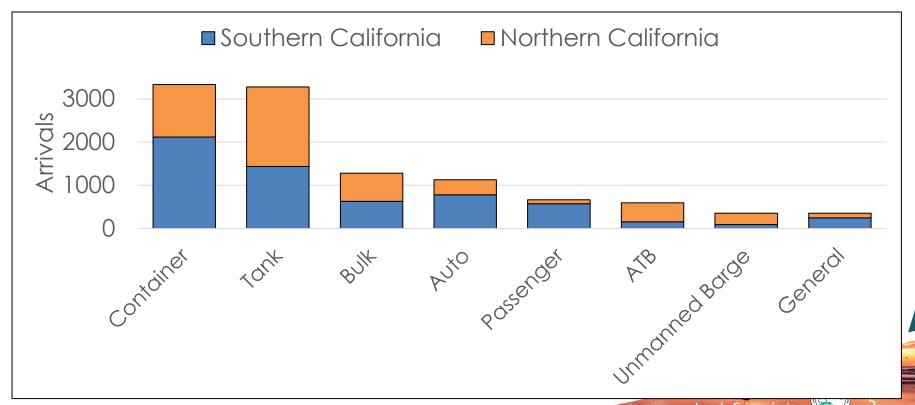
2024 Vessel Statistics – Arrivals (11,067)

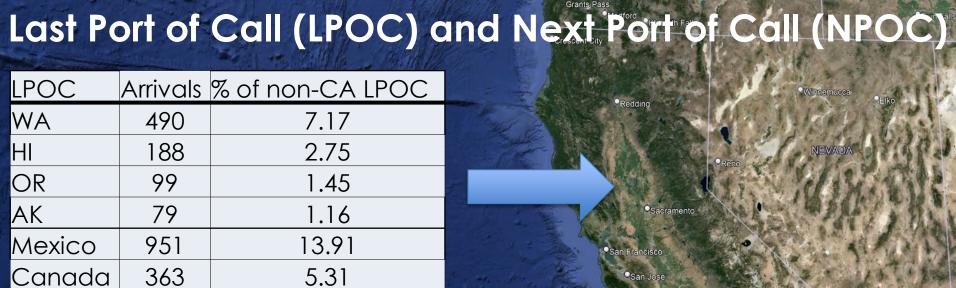


Vessel Statistics Monthly Arrivals 2018-2024



2024 Vessel Statistics Arrivals by Vessel Type





NPOC	Arrivals	% of non-CA NPOC
WA	432	6.15
HI	361	5.14

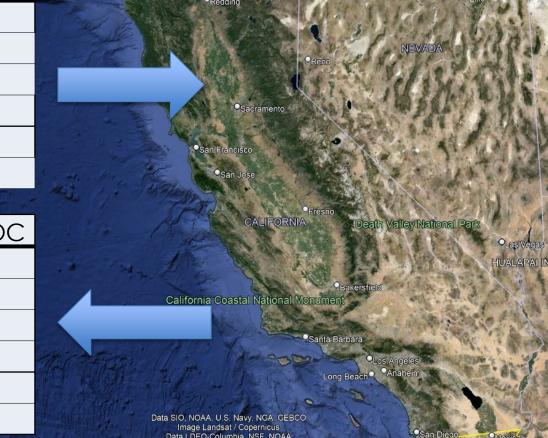
HI 361 5.14

OR 199 2.83

AK 127 1.81

Mexico 847 12.06

Canada 331 4.71





Grants Pass

Data SIO, NOAA, U.S. Navy, NGA, GEBCO Image Landsat / Copernicus

Source	BW Discharge Volume (MT)	% of non-CA
300100	DVV DISCHAIGE VOIDITIE (IVIT)	Discharge Volume
WA	238,507	3.46
OR	80,686	1.17
AK	87,265	1.27
H	54,100	0.79
Mexico	1,263,582	18.34
Canada	91,959	1.33

ALIFORNIA Death Valley National Pari Santa Barbara

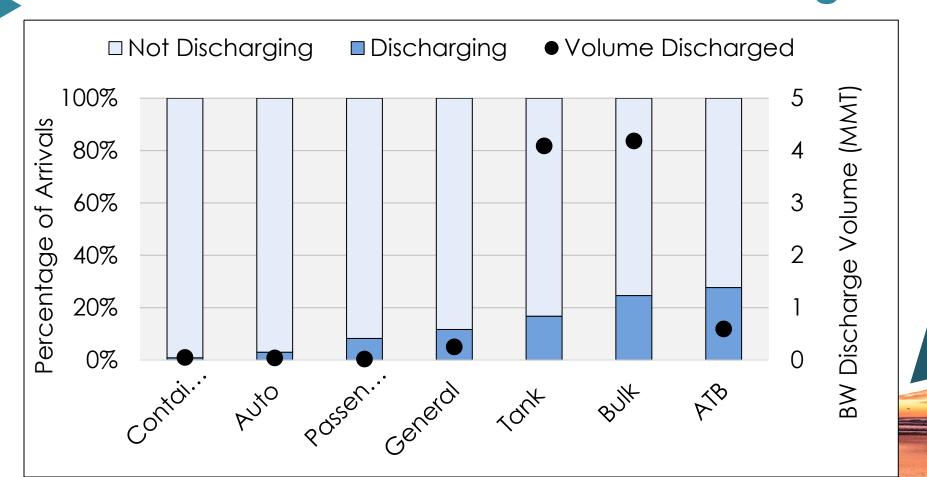
Last 10 ports visited

Location	% of Last 10 Ports within Location
WA	1.96
HI	0.68
OR	0.51
AK	0.49
Mexico	4.84
Canada	2.31

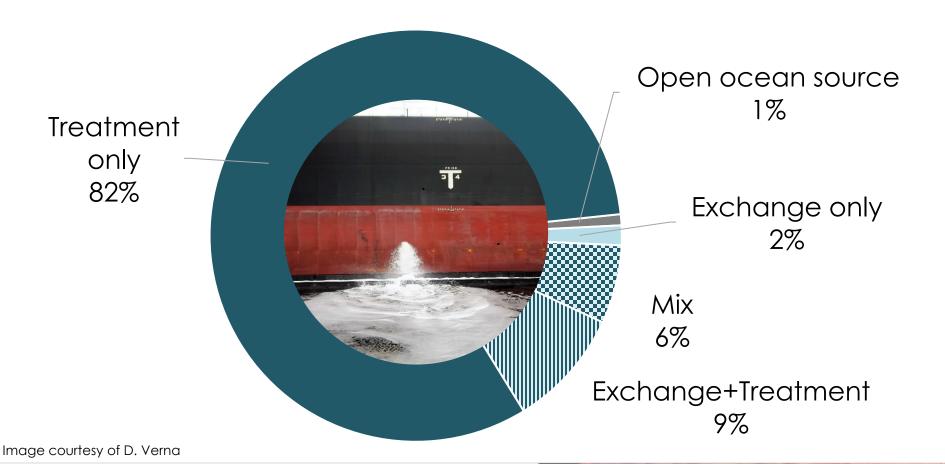


Grants Pass

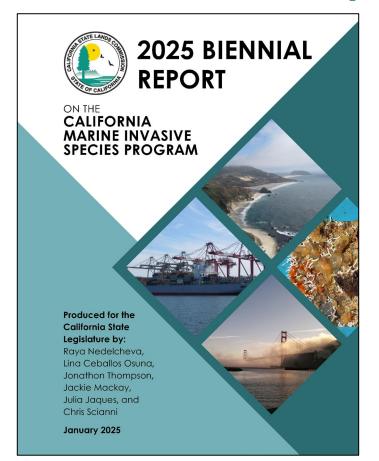
2024 Vessel Statistics – Ballast Discharge



2024 Ballast Water Management Strategies



2025 Biennial Report to the CA Legislature



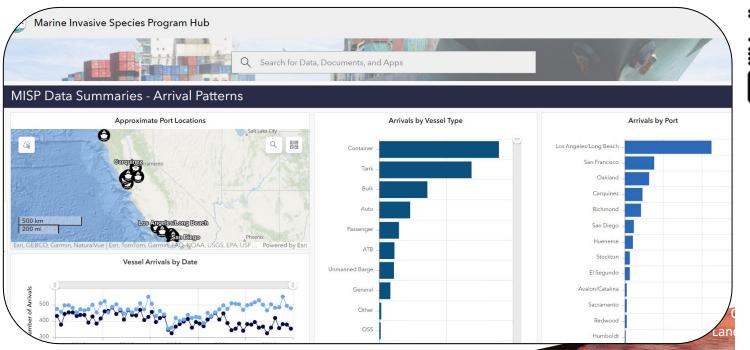
2025 Biennial Report

- Covers 2022-2023
- Vessel traffic data
- Ballast water and biofouling management data
- Vessel inspection and compliance data
- Program activities and accomplishments



Public Data Dashboards

- Updated quarterly
- Current year and historical data



CA Data **PacDASH**

2024 MISP Enforcement: Assessing Compliance



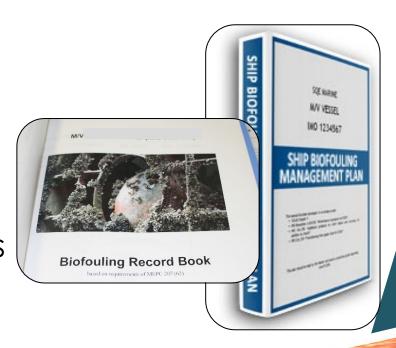


2024 MISP inspections:

- 17.4% of all arrivals
- 22.7% of inspectable arrivals

MISP Enforcement – 2024 Highlights

- Ballast Water violations:
 - 35 recordkeeping
 - 167 reporting
 - 8 BWTS-related
- Biofouling violations:
 - 113 recordkeeping
 - 112 60-day grace periods
 - 1 Notice of Violation
 - 61 reporting



Ballast Water Sampling







MISP Updates



California State
Lands Commission

ASSUMPTIONS	REALITIES
Golden mussels were introduced via ballast water	Most likely ballast water

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We know when the introduction occurred	Introduction date is unknown
We can determine which vessel is responsible	Not possible (unknown introduction date)
Introduction was result of noncompliance	Not necessarily; ballast water management ≠ sterilization

Regulatory Changes – Amend <u>Article 4.7</u> Via Emergency Rulemaking

What: Require ballast water exchange for vessels with fresh or brackish ballast water and intending to discharge in California's fresh or brackish water ports

When: Approved by Commission in February, not final until Office of Administrative Law process is complete

Why: To apply high saline ocean water as a biocide to supplement ballast water treatment



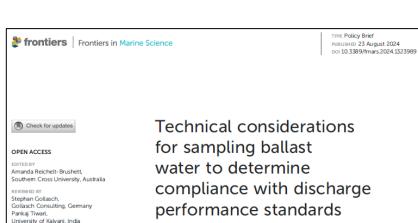
Regulatory Changes – Amend <u>Article 4.9</u> Enforcement Regulations

What: Include violations of biofouling management requirements and ballast water discharge performance standards

When: Plan to release for public comment very soon

Why: Set up transparent process for assessing penalties for biofouling and ballast water discharge performance standards violations

2024 Peer-Reviewed Publications



Stephen Loiacono ¹⁸, Lina Ceballos-Osuna², Chris Scianni² and Christopher W. Brown¹

¹Golden Bear Research Center, California State University, Maritime Academy, Vallejo, CA, United States, ²Marine Invasive Species Program, California State Lands Commission, Sacramento, CA, United States

https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2024.1323989/full

All MISP peer-reviewed publications:

https://www.slc.ca.gov/marine-invasive-species-program/peer-reviewed-journal-publications/

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MISP IN NUMBERS 2000-2024



25 YEARS





242 Million metric tons of ballast water discharged















www.slc.ca.gov

THANK YOU & QUESTIONS

