



# PACIFIC STATES DATA SHARING “PAC-DA-SH” Updates

LINA CEBALLOS-OSUNA

In collaboration with WA, OR and HI

*Pacific Ballast Water Group* | APRIL 2024

California State  
Lands Commission



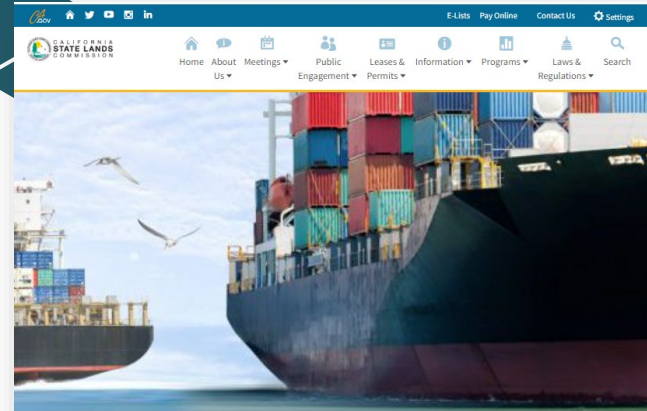
# OBJECTIVES

## **DATA SUMMARY INTERACTIVE DASHBOARD**

- Data sharing between Pacific States (CA, WA, OR, HI)
- Publish data for public use
- Share resources and skills
- Increase collaboration
- Identify data issues and program improvement opportunities

# CALIFORNIA DATA SUMMARIES

- Since Nov 2022
- MISP Dashboard Hub-ArcGIS
- Published on MISP website



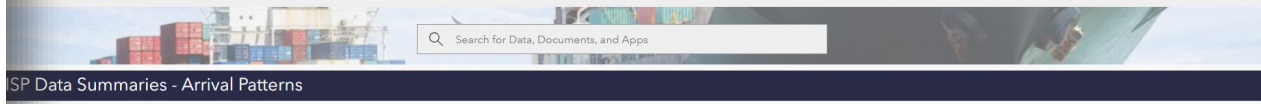
The Marine Invasive Species Program is a world-leading program that reduces the risk of aquatic nonindigenous species introduction into California's waters. We strive to accomplish this goal through:

- The development, implementation, and enforcement of innovative vessel biofouling and vessel ballast water management strategies and policies.
- Use of the best available technology and peer-reviewed science.
- Partnerships with stakeholders to improve awareness of invasive species issues and assess program efficacy.

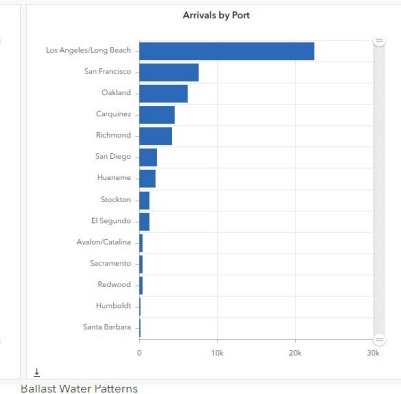
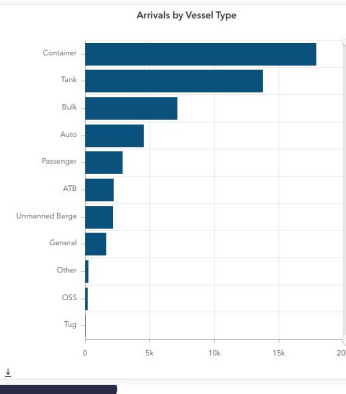
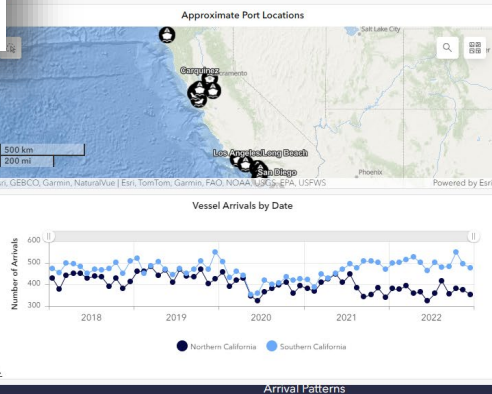
The Marine Invasive Species Program works to prevent new species introductions by implementing vessel ballast water and biofouling management requirements that are authorized by the Marine Invasive Species Act (MISA).

- ▶ [Marine Invasive Species Program Home](#)
  - ▶ [MISP Reporting Portal](#)
  - ▶ [Info for Vessels Arriving at CA Ports](#)
- Information & Resources
- ▶ [MISP Terms & Partners](#)
  - ▶ [Reports, Research, & Presentations](#)
  - ▶ [Data Summaries](#)

## Marine Invasive Species Program Hub



## MISP Data Summaries - Arrival Patterns



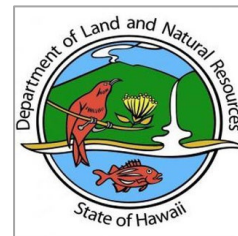
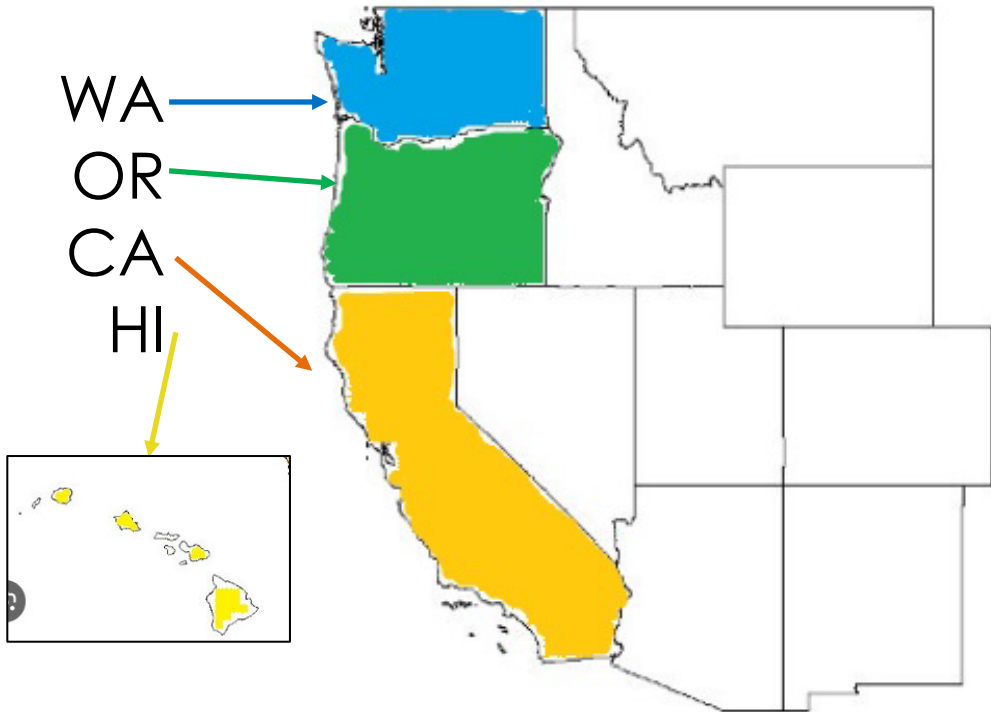
## DATA SUMMARIES



# PACIFIC STATES DATA SHARING

## “PAC-DA-SH”

WA  
OR  
CA  
HI



# “SIMPLE” PROCESS



Each state extracts data, cleans it up and send it to CA quarterly.

CA merges and formats data for consistency

Upload to ArcGIS Dashboard hosted by CA

Publish on PSMFC website

# PACDASH - Pacific States Data Sharing

A collaboration between CALIFORNIA - OREGON - WASHINGTON - HAWAII

## INSTRUCTIONS:

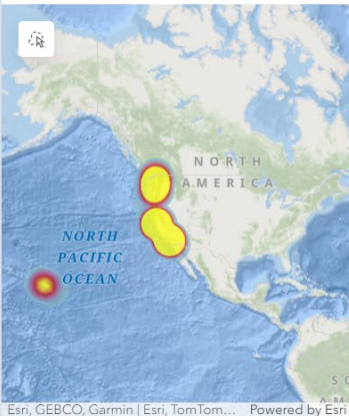
Use the arrow in the middle left of the screen to expand filtering options.

In addition to the filtering options, you can also interact with the maps and the charts to visualize specific data subsets.

To reset applied filters, click a blank area of the chart where a selection has been made.

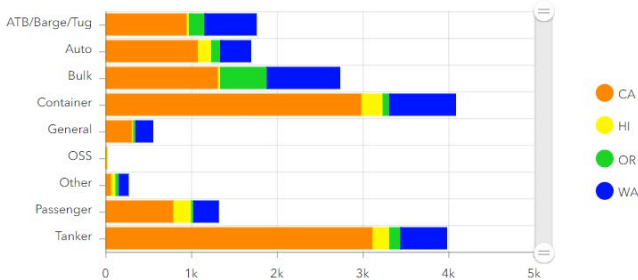
To download the data, click the arrow icon at the

## 2023 - Arrivals



Arrivals Ballast Water

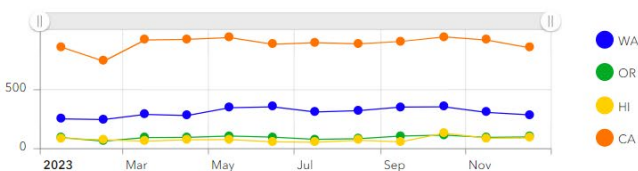
## 2023 - Arrivals by Vessel Type



Last update: 5 seconds ago

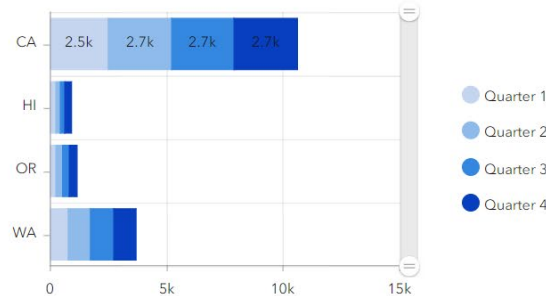
Arrivals Ballast Water Discharged

## 2023 - Monthly Arrivals



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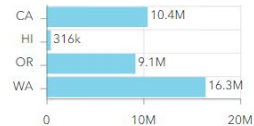
## 2023 - Arrivals by State



Last update: 8 seconds ago

Arrivals by State Arrivals by Port

## Ballast Water Discharged by State (MT)



Last update: 8 seconds ago

Total Ballast Water Discharged

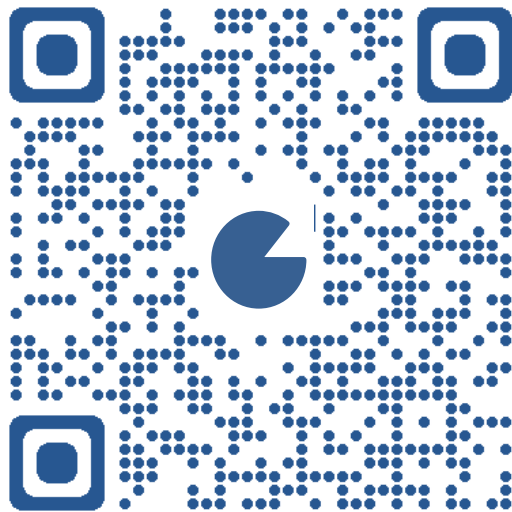
 **36.1M**

(Metric Tons)

- Arrival Patterns
- Ballast Water Patterns
- Downloadable files

- Vessel type
- Port
- State

# PACIFIC STATES DATA SHARING DASHBOARD



PACDASH

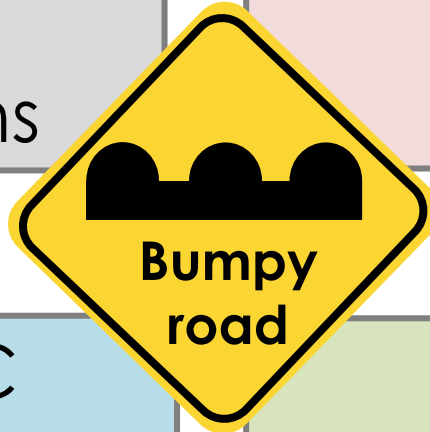
# DATA ISSUES

Data access and  
database limitations

Resources  
limitations

Different QAQC  
processes

Different  
requirements





# WHAT'S NEXT:

Data extraction  
at State level

- Improve data quality
- Identify “fixable” issues
- Compatibility of databases
- Improve QA processes

Merging

- Streamline sharing process
- Minimal clean up

Add more data

- Connectivity patterns - LPOC
- Compliance data
- Risk – Environmental similarity



PACDASH

# THANK YOU & QUESTIONS

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