

# Marine Invasive Species Program Vessel Inspections

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Marine Invasive Species Program

Marine Environmental Protection Division

California State Lands Commission



# Impacts of non-native invasive species...

## Environmental Impacts

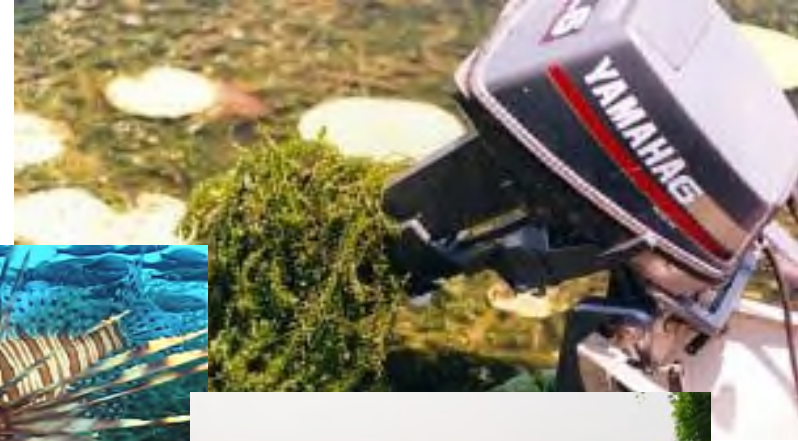
- 2nd leading cause of native species' global biodiversity loss

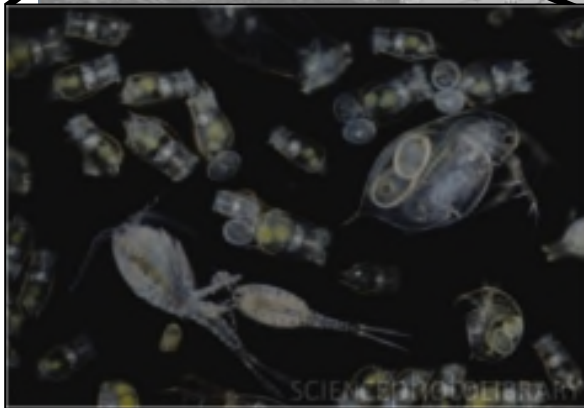
## Economic Impacts

- Global Cost = \$1.4 trillion
- U.S. = \$138 billion (International Congress on Bioinvasions 2009)

## Risk to Human Health

- Pathogens
- Bioaccumulation

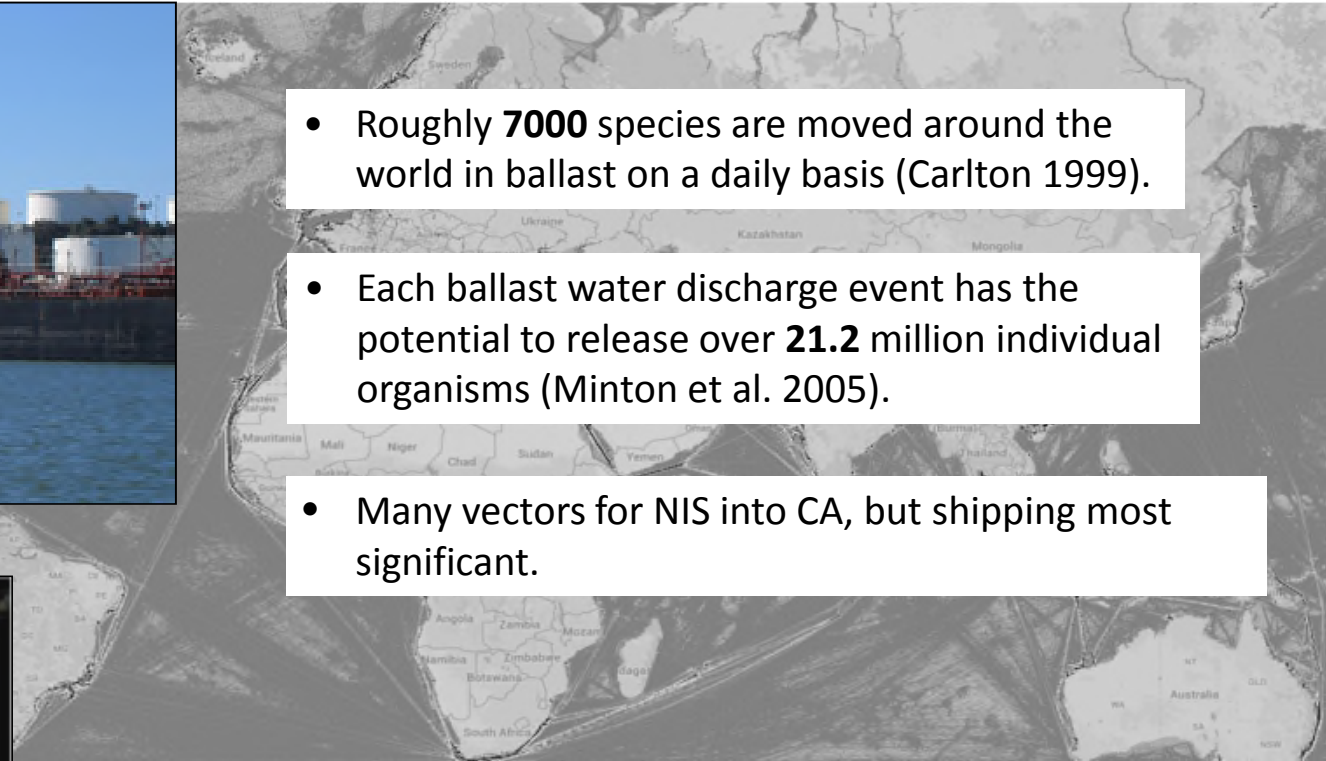




- Roughly **7000** species are moved around the world in ballast on a daily basis (Carlton 1999).

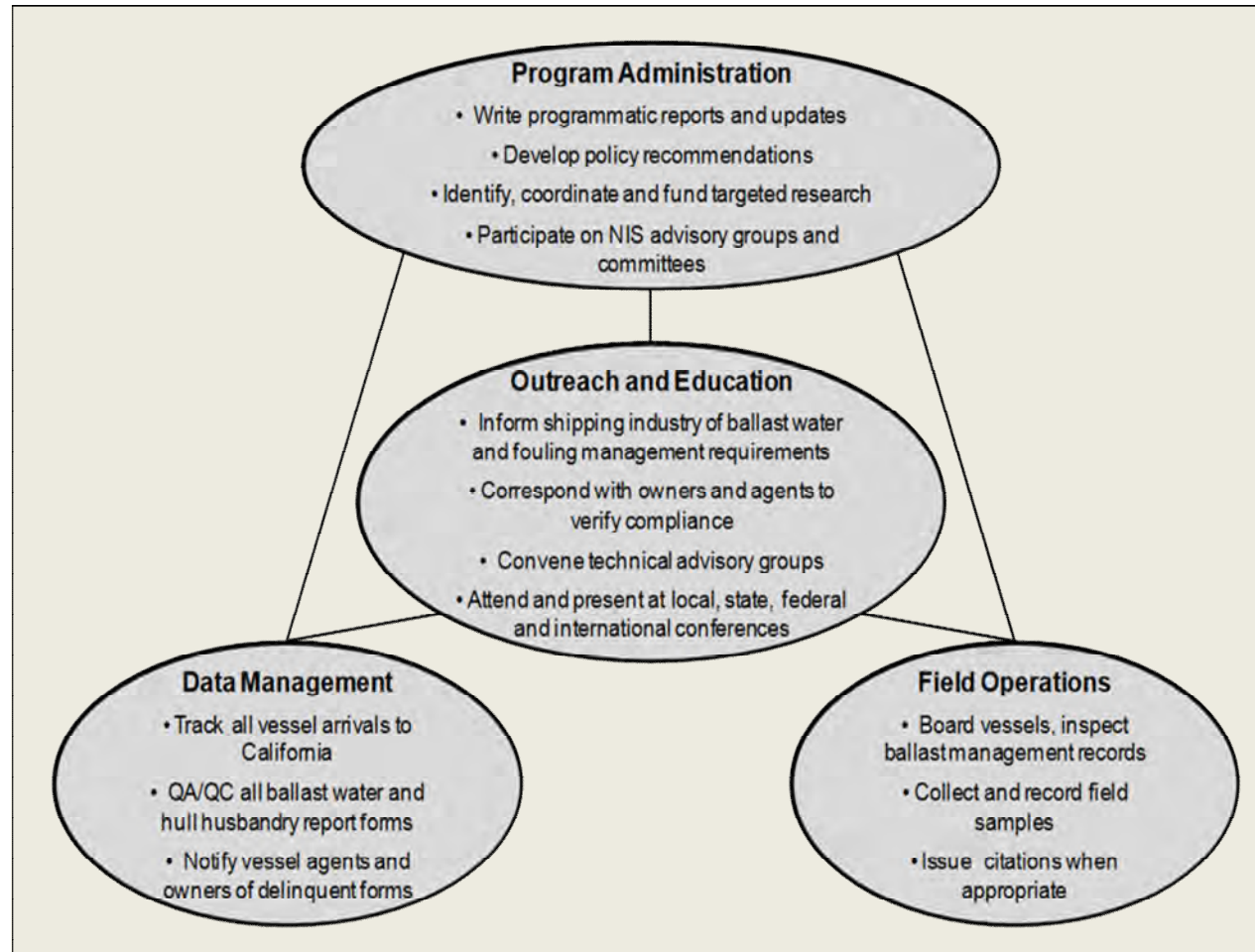
- Each ballast water discharge event has the potential to release over **21.2** million individual organisms (Minton et al. 2005).

- Many vectors for NIS into CA, but shipping most significant.





## Marine Invasive Species Program



## Onboard Inspections

- The Commission is mandated to inspect at least 25% of all CA arrivals
- Check Ballast Water Logs/Management Plan, verify exchange locations, test ballast salinity, perform outreach



# Inspection Checklist

Vessel: \_\_\_\_\_ IMO# \_\_\_\_\_ Date: \_\_\_\_\_

## Marine Invasive Species Inspection Checklist

Referenced regulations (Articles) are within the California Code of Regulations under Title 2, Division 3, Chapter 1

Yes = Y, No = N, Not Applicable/Available = N/A

### BALLAST WATER RECORDKEEPING & PAPERWORK

- Are the IMO ballast management guidelines on board? *PRC 71205(c)(1)(D)(iii)*
- Does the vessel have a current California Ballast Water Information Packet? If not, provide one. This is NOT a violation.
- **Ballast Water Management Plan**
  - Is it vessel specific? *PRC 71204(h)*
  - Is it detailed enough so master/PIC can follow the ballast management strategy? *PRC 71204(h)*
  - Does it include information on crew training on implementing the ballast water management plan (Who, When received)? *PRC 71204(i)*
  - Are personnel responsible for carrying out the ballast water management plan knowledgeable about the ship-specific ballast management strategy and the ballast water BMP's? *PRC 71204(i)*
- **Ballast Water Log** *PRC 71205(d)*
  - Is it separate from ballast water reporting forms?
  - Does it go back 2 years?
  - Does it outline ballast water management for each tank separately?
  - Includes each ballast water movement (transfer, uptake, discharge, exchange)?
- **Ballast Water Reporting Forms** *PRC 71205*
  - Correct form (USCG form, OMB #1625-0069) *PRC 71205(a)(2)*
  - Onboard records go back 2 years *PRC 71205 (c)(2)*
  - Submitted prior to arrival for each California port of call *PRC 71205 (a)(1)*
  - Completed properly (Esp. Section 5. Provide assistance/instruction if needed)

### BALLAST WATER DISCHARGE

Is the vessel discharging ballast water at any time during this port call? (If YES, review the accepted Ballast Water Management Options on the next page, as necessary.)

- If vessel utilized the ballast water exchange management option:



# Inspection Data Sheet

Ballast Water Inspection Data Sheet															
Arrival Date: <b>06/23/2009</b>		Arrival Time: <b>0200</b>		Inspection Date:		Inspection Time:									
Location (Harbor or Port): <b>Carquinez (BNC 4)</b>															
Vessel: <b>TORM ANNA</b>				Call Sign: <b>OUHV2</b>											
IMO #: <b>9277735</b>			Flag: <b>Denmark</b>												
Responsible Officer (PIC):				Voyage #:											
Agent: <b>NORTON LILLY INTERNATIONAL</b>															
Owner:															
Operator:															
Type: <b>Tank</b>		Load/Discharge													
Cargo:			Gross Tonnage: <b>42,432</b>												
Last Port:			Next Port:												
BW on Board:			Units:		# of tanks in Ballast:										
Total BW Capacity (volume): <b>27,573</b>			Units:		Total # of BW tanks: <b>14</b>										
# of BW Pumps - Pumping Rates: <b>2 - 1500 M3 (x2)</b>			Exchange Method: <b>ALT</b>		Exchange Duration: <b>N/A</b>										
Inspector:			Travel Time:		Inspection Time:										
				Yes		No				Yes		No			
Violation Noted:								BW Management Plan on Board & followed?							
Ballasting:								IMO BW Guidelines on Board?							
Deballasting: (this voyage)								No. Undersight Alternative Method				<b># of tanks</b>			
No. of tanks to deballast								Alt. Method used:				<b>System name</b>			
Exchange conducted								Access to Tanks?		Top Plate	Sound Tube	Vent	Ullage Trunk	Tap	Other
No. of tanks exchanged:								Below							
								Above							
Comments:															

## List Sample Tanks

Tanks/ Holds	BW SOURCE			BW MANAGEMENT PRACTICES				BW DISCHARGES		Salinity		
	Date	Port or Lat. Long	Volume (units)	Date	EndPoint Lat. Long.	Volume (units)	% Exch	Port or Lat. Long	Volume (units)	Upper	Middle	Lower

AMBIENT WATER SAMPLE

Tank Codes: ForePeak - FP, Aftpeak - AP, Double Bottom - DB, Wing - W, Top - T, Side - S, Bottom - B, Cargo Hold - CH, Other - O





## Inspection Boarding Matrix

- Vessels arriving to CA for the first time
- Vessels with previous violations
- Vessels that have not been inspected in the past 3 months
- Vessels that have not been inspected in the past 12 months
- Vessels that are discharging





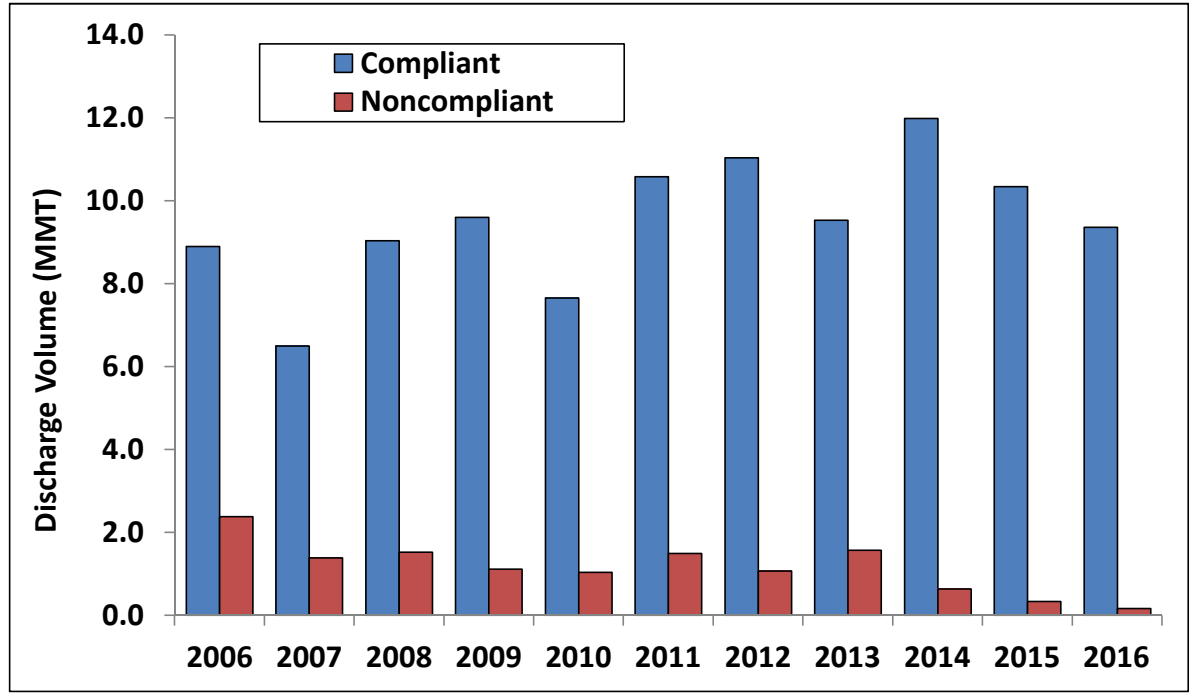
## Inspection Statistics

	2014	2015	2016
Total Arrivals	9345	9065	9164
Total Inspected	2442	2373	2313
Percent Inspected	26%	26%	25%
Violations	28	23	15



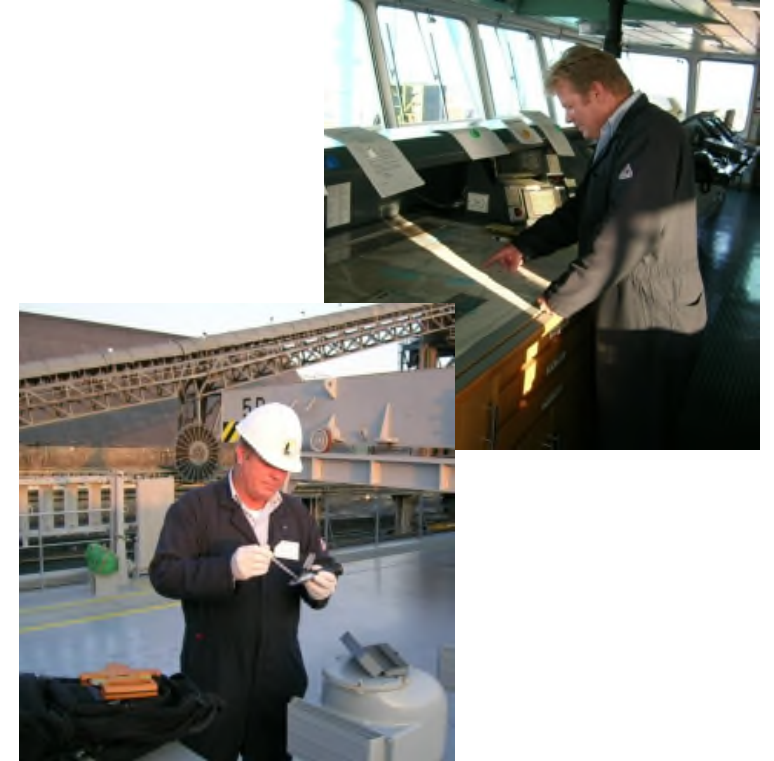
## Inspectors are Key to Compliance Success

- **Ballast Water Reporting Forms/Ballast Water Management Reports were submitted for 96% of qualifying vessel arrivals between mid 2014-mid 2016.**
- **HHRF submission compliance rate near or above 90% in each of the past seven years (2009-2015), with the highest compliance rate of 94% in 2015.**
- **Ballast Water Management**



## Improving Inspections

- Passing along California requirements to vessels
- Updating the inspection process
- Updating outreach materials





# Questions?

For more information:

[www.slc.ca.gov](http://www.slc.ca.gov)

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