



# CALIFORNIA'S MARINE INVASIVE SPECIES PROGRAM

CALIFORNIA STATE LANDS COMMISSION • MARINE ENVIRONMENTAL PROTECTION DIVISION



Jeremy Bishop

## California's Management Requirements for Ballast Water and Biofouling

### ***Which vessels are subject to California's ballast water and biofouling management requirements?***

Vessels that arrive at a California port, are 300 gross registered tons or more, and are carrying or capable of carrying ballast water.

## BEST MANAGEMENT PRACTICES

### **Vessel Best Management Practices To prevent uptake and release of nonindigenous species**

The master, owner, operator, or person in charge of a vessel must do ALL of the following to minimize the release of nonindigenous species into California waters:

1. Discharge only the minimal amount of ballast water essential for operations
2. Minimize ballast water discharge and uptake in marine sanctuaries, marine preserves, marine parks, or coral reefs
3. Minimize or avoid uptake of ballast water in:
  - a) Areas with known infestations of nonindigenous organisms and pathogens
  - b) Areas near a sewage outfall
  - c) Areas for which the vessel has been informed of the presence of a toxic algal bloom
  - d) Areas of poor tidal flushing or high turbidity
  - e) Periods of darkness when bottom dwelling organisms may rise up in the water column
  - f) Areas where sediments have been disturbed (e.g., near dredging operations)
4. Clean ballast tanks regularly in mid-ocean waters, in port, or during drydock
5. Rinse anchors and anchor chains when retrieving



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### 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.



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### Vessels arriving from **WITHIN** the PCR and carrying ballast water sourced from **WITHIN** the PCR.

**What are California's ballast water management requirements for vessels arriving at a California port from a port within the PCR and carrying ballast water sourced from a location within 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, Commission or U.S. Coast Guard approved method of management
- Discharge to an approved reception facility (none currently exist)
- Exchange ballast water in near-coastal waters more than 50 NM from land and at least 200 meters deep:
  - Empty refill method: 100% volumetric replacement
  - Flow through method: 300% volumetric replacement
- Under extraordinary circumstances where a ballast water management option is not practicable, a vessel may perform a ballast water exchange within an area agreed to by the Commission in consultation with the U.S. Coast Guard

*NOTE: Vessels do not need to manage ballast water that is sourced and discharged at the same port within the PCR. The following port regions/port complexes are considered a single "port":*

- All areas in the San Francisco Bay area east of the Golden Gate Bridge, including the Ports of Stockton and Sacramento
- The Ports of Los Angeles and Long Beach and the El Segundo offshore marine oil terminal

### Ballast Water Management Safety

If the master, operator, or person in charge of a vessel determines that a ballast water management practice would threaten the safety of the vessel, its crew, or its passengers due to adverse weather, vessel design limitations, equipment failure, or other extraordinary conditions, then the vessel is not required to conduct ballast water management. In this circumstance, the vessel shall take all feasible measures that do not compromise the safety of the vessel to minimize the discharge of ballast water containing nonindigenous species.



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### BIOFOULING

#### Biofouling Management Requirements

##### *When is a vessel subject California's biofouling management requirements?*

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

##### *What are California's biofouling management requirements?*

- If a vessel is using an antifouling coating, the antifouling coating should not be aged beyond its effective coating lifespan, as documented in the vessel's Biofouling Management Plan
- If the antifouling coating is aged beyond the effective coating lifespan, the Biofouling Management Plan shall document how biofouling will be managed after the expected coating lifespan is exceeded. All management actions should be documented in the Biofouling Record Book (See "Reporting and Recordkeeping Requirements" Info Sheet)
- If a vessel is not using an antifouling coating, the Biofouling Management Plan shall document how biofouling will be managed in the absence of an antifouling coating. All management actions should be documented in the Biofouling Record Book



Photos courtesy of California State Lands Commission



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## California's Management Requirements for Ballast Water and Biofouling

### Niche Area Management

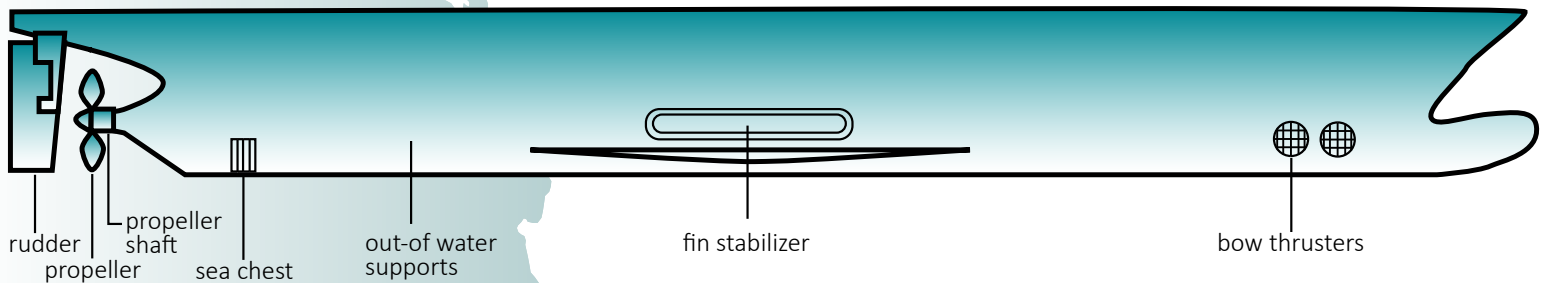
#### What are niche areas?

Niche areas are hotspots for extensive communities of biofouling organisms. Niche areas that need to be managed include: Sea chests, sea chest gratings, bow and stern thrusters, bow and stern thruster gratings, fin stabilizers and recesses, out-of-water support strips, propellers and propeller shafts, and rudders.

#### How must biofouling in niche areas be managed?

Biofouling in the niche areas (see list above) must be managed using one or more practices that are appropriate for the vessel and its operational profile as determined by the owner, operator, master, or person in charge of the vessel. Niche area management practices must be described in the Biofouling Management Plan and completed actions must be documented in the Biofouling Record Book.

Figure 1. Vessel Niche Areas that are required to be managed.



### Requirement for Vessels that Experience Extended Residency Periods

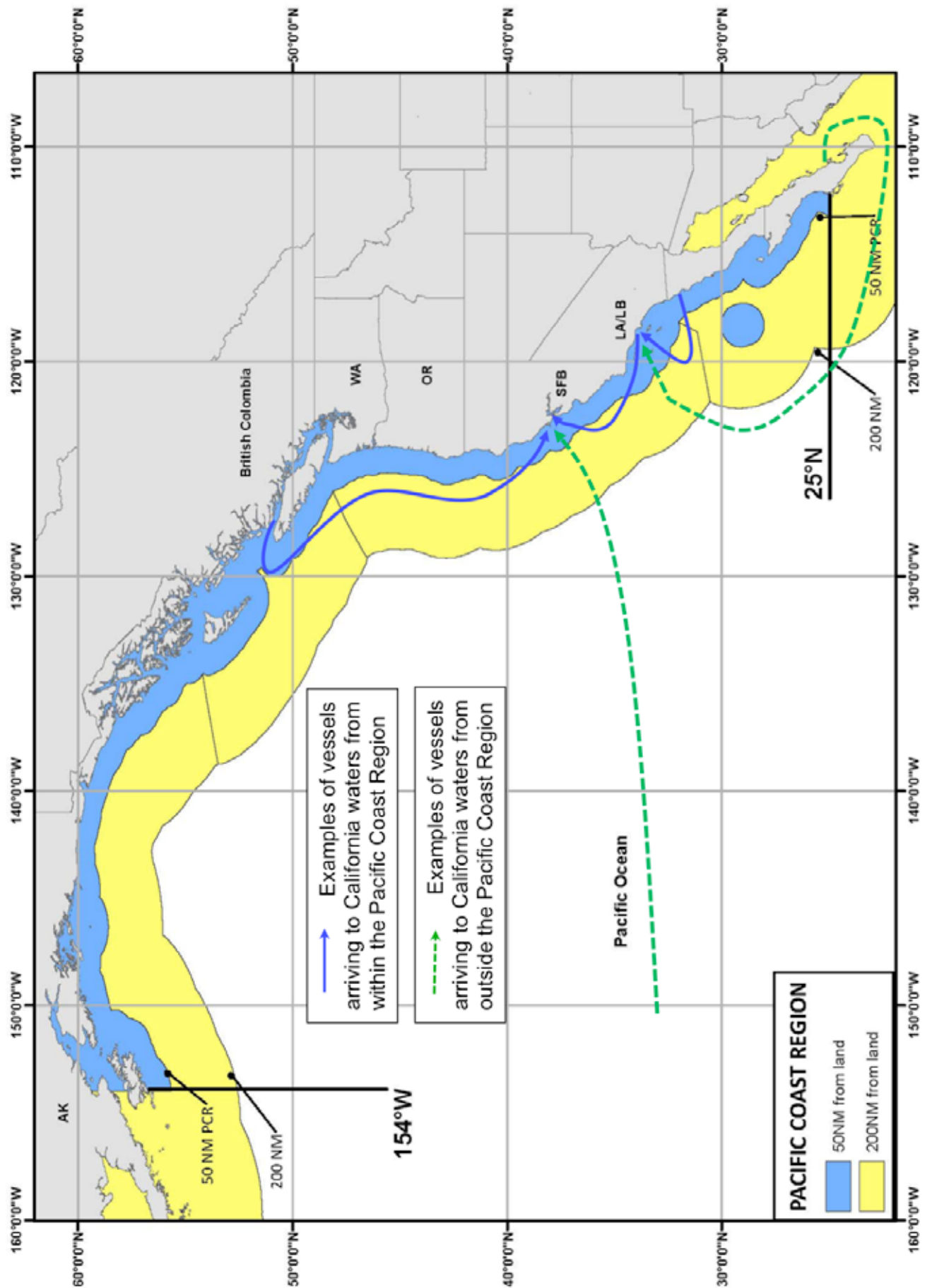
#### What is an Extended Residency Period?

An Extended Residency Period is when a vessel remains in one port for 45 days or longer.

#### What are the requirements for vessels experiencing an Extended Residency Period?

The master, owner, operator or person in charge of the vessels that experiences an Extended Residency Period must manage biofouling in the niche areas in a manner that it consistent with the niche area management practices described in the Biofouling Management Plan. Any activities conducted to manage biofouling on niche areas, or any wetted surface, shall be documented in the Biofouling Record Book.

# PACIFIC COAST REGION



Examples of vessels arriving to California waters from within the Pacific Coast Region

Examples of vessels arriving to California waters from outside the Pacific Coast Region

**PACIFIC COAST REGION**  
 50NM from land  
 200NM from land