

# **INITIAL STATEMENT OF REASONS**

## **TITLE 2. ADMINISTRATION**

### **DIVISION 3. STATE PROPERTY OPERATIONS**

#### **CHAPTER 1. STATE LANDS COMMISSION**

#### **ARTICLE 4.7. PERFORMANCE STANDARDS AND COMPLIANCE ASSESSMENT FOR THE DISCHARGE OF BALLAST WATER FOR VESSELS OPERATING IN CALIFORNIA WATERS**

### **GENERAL PURPOSE OF THE REGULATION**

The purpose of this proposed regulatory action is to amend existing regulations to make permanent the emergency ballast water management regulations (Emergency Regulations) that were implemented on June 16, 2025. Article 4.7 regulations contain ballast water discharge performance standards (Performance Standards), and the proposed regulation will add an extra management action for a subset of vessels discharging ballast water in California's freshwater and low-salinity (a salinity of greater than 0.5 parts per thousand (ppt) and less than 18 ppt) ports within the San Francisco Bay area from the Port of Rodeo and extending east to the ports of Sacramento and Stockton (California's Low-Salinity Ports). Salinity in ppt is a measure of dissolved salt in water, indicating the number of grams of salt per 1,000 grams of water.

The proposed amendments apply to vessels with ballast water sourced from waters with a measured salinity of less than 18 ppt and discharging at California's Low-Salinity Ports. Vessels subject to the proposed amendments are required to:

1. Measure the salinity of all ballast water sources for each ballast water tank.
2. Measure the salinity of all ballast discharges for each ballast water tank.
3. Maintain a record of salinity measurements on board the vessel.
4. Conduct ballast water exchange prior to discharging. This requirement is in addition to meeting existing California Performance Standards (Title 2, Cal. Code Regs. Section 2293).
5. Discharge ballast water at a salinity level of at or above 30 ppt.

The objective of this rulemaking is to close a gap in existing regulations that leaves freshwater and low-salinity ports highly vulnerable to ballast water-mediated species introductions (see Problem Statement below).

## PROBLEM STATEMENT

Public Resources Code section 71201, subdivision (d) declares that the purpose of the Marine Invasive Species Act (Act) is to “move the state expeditiously toward elimination of the discharge of nonindigenous species into the waters of the State or into waters that may impact the waters of the State.”

Nonindigenous species (NIS) are organisms that have been transported by humans to locations where they do not naturally or historically occur. Once established, NIS can have adverse economic, ecological, and public health consequences. The Act established the Marine Invasive Species Program to minimize NIS introductions by regulating operational and reporting requirements for oceangoing vessels arriving at the state's ports.

To implement the Act, Public Resources Code section 71201.7 provides authority to the California State Lands Commission (Commission) to adopt regulations.

The Commission found that the Emergency Regulations were necessary to address an immediate and significant threat to public health, safety, and the environment that was amplified by the discovery of golden mussels (*Limnoperna fortunei*) at the Port of Stockton in October 2024.

This discovery of the golden mussel marked the first detection of this highly invasive species in North America. The golden mussel introduction “poses a significant immediate threat to the natural ecosystems, water conveyance systems, infrastructure, agriculture, economy, and water quality throughout California and across the United States (State of California 2025).” Golden mussels thrive in freshwater and low-salinity habitats and are known to disrupt ecological balance by filtering out microscopic plants and animals essential to aquatic food webs, displacing native species, and threatening both commercial and recreational fisheries. Golden mussels jeopardize the operations of power plants, municipal water supplies, and agricultural irrigation systems by clogging water intakes and fish screens. Recreational opportunities face similar threats, as these mussels colonize docks, and watercraft, causing costly damage and environmental harm.

The golden mussel introduction is most likely linked to ballast water discharges at the Port of Stockton. Existing state regulations require vessels to meet Performance Standards that set limits on the allowable concentrations of living organisms that can be discharged in California waters. Vessels typically comply with these Performance Standards by treating ballast water with onboard ballast water treatment systems. The Performance Standards replaced earlier requirements for vessels to exchange ballast water more than 50 or 200 nautical miles from land, depending on the source of the ballast water, to reduce the concentration of living organisms discharged into California waters.

As identified in the action to promulgate the Emergency Regulations, and pursuant to Government Code section 11346.1(b), this proposed regulation(s) is necessary to prevent serious harm to the public health, safety, and welfare by

preventing additional introductions of the golden mussel and other potentially harmful NIS into California's freshwater and low-salinity environments. The proposed amendments add a requirement to conduct ballast water exchange, in addition to meeting California's existing Performance Standards, for vessels carrying fresh or low-salinity ballast water into California's freshwater or low-salinity environments. This combination of management methods reduces the likelihood of new species invasions (Briski et al., 2015; Drake et al., 2020; Bradie et al., 2023).

The Performance Standards, and onboard treatment to achieve those standards, reliably reduce the likelihood of introducing NIS from vessels discharging ballast water. The concentration of organisms allowed by Performance Standards is expected to be much lower than in exchanged ballast water.

Nonetheless, although the shift to Performance Standards was intended to more reliably and consistently reduce the likelihood of introducing NIS, the detection of the golden mussel exposed a critical gap in existing regulations. For freshwater or low salinity ballast water discharges, the addition of high salinity marine ocean water (i.e., 30 ppt or greater) during an exchange is an effective means of killing freshwater or low-salinity organisms (Briski et al., 2015; Drake et al., 2020; Bradie et al., 2023). The detection of the golden mussel highlighted that transitioning away from exchange and toward Performance Standards alone likely results in higher concentrations of living, freshwater or low-salinity organisms being discharged in ballast water than would be expected with exchange, resulting in a greater likelihood of introducing NIS in freshwater or low-salinity environments.

Vessels are readily able to comply with the proposed exchange requirement, as no new equipment is required to implement it.

Approximately 24 vessel arrivals per year would be subject to the proposed rule by discharging fresh or low-salinity ballast water into California's Low-Salinity Ports. The proposed regulations would require vessels carrying ballast water sourced from water with a measured salinity of less than 18 ppt to conduct a ballast water exchange more than 50 nautical miles from land prior to discharging at California's Low-Salinity Ports.

In addition, vessels subject to the proposed regulations would be required to measure and record the salinity of ballast water source and the salinity of ballast water discharge for each tank separately. This record of ballast water source and discharge salinity must be maintained on board the vessel.

## **SPECIFIC PURPOSE OF AMENDMENTS AND NECESSITY**

### **SECTION 2292 DEFINITIONS**

#### **Proposed amendment to Section 2292**

~~Unless the context otherwise requires, the~~ The following definitions shall govern the construction of this Article:

Specific Purpose: The purpose of this amendment is to clarify the context of the definitions in this Article.

Necessity: The text is removed to avoid referencing other contexts. The context of these definitions is to clarify and define the terms used throughout this Article.

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#### **Proposed amendment to Section 2292**

(g) "Exchange" means to replace the water in a ballast tank using either of the following methods:

(1) "Flow through exchange," which means to flush out ballast water by pumping three full volumes of near-coastal waters through the tank, continuously displacing water from the tank, to minimize the number of original coastal organisms remaining in the tank.

(2) "Empty/refill exchange," which means to pump out, until the tank is empty or as close to 100 percent empty as is safe to do so, the ballast water taken on in ports, or estuarine or territorial waters, then to refill the tank with near-coastal waters.

Specific Purpose: The purpose of this amendment is to add the existing definition of "exchange" from Public Resources Code § 71200(h) for clarity. This definition is also used in section 2282, Article 4.6 (Cal. Code Regs., tit. 2, § 2282), which sets forth definitions related to ballast water management for vessels arriving at California ports from other ports within the Pacific Coast Region.

Necessity: This amendment is needed to define and clarify the use of the term "exchange" in Article 4.7.

#### **Proposed amendment to Section 2292, subdivision (g)**

~~(g)~~ (h) "Functionality Monitoring" means monitoring of the applicable operational performance parameters to verify that the ballast water treatment system is operating according to the manufacturers' specifications.

Specific Purpose: The purpose of this amendment is to renumber or change the letter of this subdivision to ensure consistent numbering with the addition of amendments.

This amendment is non-substantive. It does not alter any requirement, right, responsibility, condition, prescription, or other regulatory element of any California regulation, as it is a revision of subdivision numbering/lettering.

**Proposed amendment to Section 2292, subdivision (h)**

~~(h)~~(i) "Indicative Analysis" means a rapid preliminary assessment of the organism concentration in a representative sample of the ballast water volume of interest using biological, chemical, or physical parameters.

Specific Purpose: The purpose of this amendment is to renumber or change the letter of this subdivision to ensure consistent numbering with the addition of amendments.

This amendment is non-substantive. It does not alter any requirement, right, responsibility, condition, prescription, or other regulatory element of any California regulation, as it is a revision of subdivision numbering/lettering.

**Proposed amendment to Section 2292, subdivision (l)**

(l) "Near-coastal waters" means waters that are more than 50 nautical miles from land and at least 200 meters (656 feet, 109 fathoms) deep.

Specific Purpose: The purpose of this amendment is to add the definition of near-coastal waters for clarity. This is the same definition as in 2 CCR § 2282.

Necessity: This amendment is needed to make clear the same definition of "near coastal waters" applies to Article 4.7, which concerns vessels carrying, managing, and discharging ballast water. This term is included in the proposed addition to Article 4.7, section 2293, to provide clarity to vessels about the proper location to conduct a ballast water exchange.

**Proposed amendment to Section 2292, subdivision (m)**

(m) "Port" has the same meaning as "port" in Public Resources Code section 71200(n).

Specific Purpose: The purpose of this amendment is to add the definition of port for clarity. This is the same definition as in Public Resources Code § 71200.

Necessity: This amendment is needed to make clear the statutory definition of "port" applies to Article 4.7. This term is included in the proposed addition to Article 4.7, section 2293, to provide clarity to vessels on locations where the proposed amendments are applicable.

**Proposed amendment to Section 2292, subdivision (j)**

~~(j)~~(n) "Public Water System" is defined the same as in Title 40 of the Code of Federal Regulations, section 141.2 (7-1-20 Edition), which is hereby incorporated by reference.

Specific Purpose: The purpose of this amendment is to renumber or change the letter of this subdivision to ensure consistent numbering with the addition of amendments.

This amendment is non-substantive. It does not alter any requirement, right, responsibility, condition, prescription, or other regulatory element of any California regulation, as it is a revision of subdivision numbering/lettering.

#### **Proposed amendment to Section 2292, subdivision (k)**

~~(k)~~(o) "Sampling Port" means the equipment installed in the ballast water piping through which representative samples of the ballast water being discharged are extracted.

Specific Purpose: The purpose of this amendment is to renumber or change the letter of this subdivision to ensure consistent numbering with the addition of amendments.

This amendment is non-substantive. It does not alter any requirement, right, responsibility, condition, prescription, or other regulatory element of any California regulation, as it is a revision of subdivision numbering/lettering.

#### **Proposed amendment to Section 2292, subdivision (l)**

~~(l)~~(p) "System Design Limitations" or "SDLs" are the physical or operational parameters important to the proper operation of the ballast water treatment system and designed to achieve the discharge performance standards (for example, minimum and maximum flow rates, time between ballast uptake and discharge, water quality limitations, operating environmental conditions, filter pressure, or ultraviolet transmittance).

Specific Purpose: The purpose of this amendment is to renumber or change the letter of this subdivision to ensure consistent numbering with the addition of amendments.

This amendment is non-substantive. It does not alter any requirement, right, responsibility, condition, prescription, or other regulatory element of any California regulation, as it is a revision of subdivision numbering/lettering.

#### **Proposed amendment to Section 2292, subdivision (m)**

~~(m)~~(q) "Vessel" has the same meaning as in Section 71200, Public Resources Code, subdivision (r).

Specific Purpose: The purpose of this amendment is to renumber or change the letter of this subdivision to ensure consistent numbering with the addition of amendments.

This amendment is non-substantive. It does not alter any requirement, right, responsibility, condition, prescription, or other regulatory element of any California regulation, as it is a revision of subdivision numbering/lettering.

## **SECTION 2293 PERFORMANCE STANDARDS FOR BALLAST WATER DISCHARGES**

### **Proposed amendment to Section 2293 subdivision (b)**

(b) This subdivision applies only to vessels arriving at ports in the San Francisco Bay area east of, and including, the port of Rodeo, extending to the Ports of Stockton and Sacramento.

Specific Purpose: The purpose of this amendment is to provide the geographic rules that determine the applicability of this regulation.

Necessity: This amendment is necessary to define the geographic areas where vessels would be subject to the proposed management action in subdivision (b)(2). These are the areas in California with waters that are consistently less than 18 ppt salinity.

### **Proposed amendment to Section 2293 subdivision (b)(1)**

(b)(1) The master, operator, or person in charge of a vessel subject to this subdivision must measure and record the salinity and maintain a record on board the vessel of the salinity measurements for:

Specific Purpose: The purpose of this amendment is to require vessels subject to subdivision (b) to measure and record the salinity of the ballast water based on the conditions in subdivisions (b)(1)(A) and (b)(1)(B). It also requires vessels to maintain a salinity measurement record on board the vessel.

Necessity: Measuring salinity of the ballast water is necessary to determine if a vessel is subject to the ballast water source salinity requirements in subdivision (b)(2). These measurement records are needed to enable Commission staff to determine if the vessel arrival is subject to subdivision (b)(2) or meets the salinity discharge requirements in subdivision (b)(2)(B).

### **Proposed amendment to Section 2293 subdivision (b)(1)(A)**

(A) Any ballast water source for each ballast water tank.

Specific Purpose: The purpose of this amendment is to require vessels subject to subdivision (b) to measure and record the salinity of the ballast water sourced for each tank.

Necessity: Measuring salinity of the ballast water source for each ballast water tank is needed to enable vessels to determine if the vessel, and which tanks, are subject to the ballast water source salinity requirements in subdivision (b)(2).

### **Proposed amendment to Section 2293 subdivision (b)(1)(B)**

(B) Discharged ballast water for each ballast water tank.

Specific Purpose: The purpose of this amendment is to require vessels subject to subdivision (b) to measure and record the salinity of the ballast water discharged for each tank. It also will require vessels to maintain a record of the salinity measurement.

Necessity: Measuring the salinity of discharges from each tank of a vessel is needed to determine if vessels meet the ballast water discharge salinity requirements in (b)(2)(B) of this subdivision.

#### **Proposed amendment to Section 2293 subdivision (b)(2)**

(b)(2) The master, operator, or person in charge of a vessel with ballast water sourced from waters with a measured salinity of less than 18 parts per thousand must, in addition to meeting the ballast water discharge performance standards incorporated in subdivision (a):

Specific Purpose: The purpose of this amendment is to provide the salinity rules that determine the applicability of this regulation.

Necessity: This regulation is needed to define the vessels that are subject to (b)(2) of this subdivision (i.e., vessels with ballast water sourced from waters with a measured salinity less than 18 ppt).

#### **Proposed amendment to Section 2293 subdivision (b)(2)(A)**

(b)(2)(A) Conduct a ballast water exchange in near-coastal waters; and

Specific Purpose: The purpose of this amendment is to specify a management action required of vessels subject to subpart (b)(2).

Necessity: The proposed requirement to exchange ballast water sourced from water less than 18 ppt salinity with near-coastal ballast water is needed to decrease the likelihood of aquatic invasive species introductions. The exchange of fresh or low-salinity ballast water with saltier open ocean water is effective at eliminating organisms sourced from fresh or low-salinity waters. The combination of the ballast water exchange and ballast water treatment to meet the California Performance Standards substantially reduces the likelihood of new species invasions (Briski et al., 2015; Bradie et al., 2023).

#### **Proposed amendment to Section 2293 subdivision (b)(2)(B)**

(b)(2)(B) Ensure that the salinity of discharged ballast water is equal to or greater than 30 parts per thousand.

Specific Purpose: The purpose of this amendment is to ensure that a ballast water exchange was completed and that discharged ballast water is equal to or greater than 30 ppt salinity.

Necessity: The proposed regulation is needed to decrease the likelihood of aquatic invasive species introductions by ensuring that the ballast water exchange required by Section 2293 subdivision (b)(2)(A) was performed. A salinity of 30 ppt or greater is the typical salinity of ocean water.



## **ECONOMIC IMPACT ASSESSMENT**

The proposed regulatory action requires qualifying vessels to conduct near-coastal ballast water exchange in addition to complying with the existing California Performance Standards. Commission staff has determined that the proposed regulations will have no significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states.

### **Evidence Supporting No Significant Adverse Economic Impact On Business**

Most vessel owners that operate in California are international companies and not California businesses. The affected industry consists mainly of non-California based international businesses. These regulatory amendments will not affect the ability of California businesses to compete with other states and will not make it more costly for California businesses to produce goods and services here.

There are no expected economic impacts from the proposed requirements for subject vessels to measure and record the salinity of ballast water. Measuring the salinity of ballast water will likely impose a minimal burden on vessels subject to the proposed regulations. Salinity can either be measured directly through the use of various water quality instruments or can be calculated by converting the temperature and specific gravity (or density) of water using a formula. Measuring the ballast water density, which is typically measured as specific gravity, is standard practice for cargo operations on board commercial vessels, including vessels subject to these proposed amendments (Reid 2006).

For the requirement to conduct a ballast water exchange, the annual overall economic impact of the ballast water exchange regulation is estimated as an approximate range between \$13,368 and \$176,472. This economic impact range is based on the estimated cost to complete a ballast water exchange for small vessels (defined as vessels with a dead weight tonnage (DWT) from 467 to 9,999) and large vessels (defined as 200,000 DWT or more). Deadweight tonnage is a measure of a ship's total weight carrying capacity. Although the Marine Invasive Species Act and its regulations define a "vessel" based on gross registered tons (GRT), the vessel size ranges used to develop the estimated cost to complete a ballast water exchange is based on DWT because DWT is used by the authors of the source material<sup>1</sup>. Both GRT (based on volume) and DWT (based on weight) are measurements of a ship's carrying capacity, and there is not a direct conversion between the two units.

These estimated costs are based on forecasted additional cumulative energy costs for all vessels that would be subject to the requirements annually. The overall cumulative cost impact is a product of the range of estimated costs to perform an exchange multiplied by the number of vessels expected to be subject to the proposed regulation. Using arrival data from 2021 through 2024, Commission staff estimates an average of 24 arrivals per year (covering 15 vessel

owners) would be required to perform a ballast water exchange because of the proposed rulemaking.

The cost to operate auxiliary pumps to complete a ballast water exchange is equal to the fuel consumption (F) needed to operate the pumps multiplied by the fuel costs. F is estimated by multiplying the estimates of auxiliary power to run ballast pumps and the estimates for Specific Fuel Consumption.

Below is a description of the equation and the estimates for determining F needed to conduct a ballast water exchange for small and large vessels.

- Fuel consumption (F, kilograms (kg)) = auxiliary power (AP, kilowatts (kW)) multiplied by Specific Fuel Consumption (SFC, kilograms per kW hour (kg/kWh)).

$$F = AP \text{ (kW)} \times SFC \text{ (kg/kWh)}$$

- AP estimates: The AP to run ballast pumps is estimated to be 375 kW for a small vessel and 1300 kW for a large vessel (IMO 2020)
- SFC estimates: The SFC is estimated at 0.175 for smaller vessels and 0.2 for larger vessels multiplied by hours (h) to exchange ballast tanks, which is estimated at 12h for the smaller vessels and 40h for the larger vessels (ABS 1999).

Based on the equation and estimates, the estimated F is a range between 787.5 kg (small vessels) and 10,400 kg (large vessels) per ballast water exchange.

The estimate for the cost of fuel is based on the price of marine gasoil (MGO) in Los Angeles on March 21, 2025, which was \$707 per metric ton, or \$0.707 per kg (Interg8 Fuels 2025).

The estimated cost to complete a ballast water exchange is \$557 for small vessels (\$0.707 per kg multiplied by 787.5 kg) and \$7,353 for larger vessels (\$0.707 per kg multiplied by 10,400 kg).

The cost of the requirements is insignificant compared to the current costs of operating a vessel at California ports. For example, the average partial cost of a container vessel calling at the Port of Los Angeles, including dockage and pilotage fees, is about \$58,061. This estimate includes an average port call length of 4.5 days and a container vessel about 150,000 gross registered tons in size (PMSA 2023). The overall average cost is likely higher, as there are other fees associated with the total costs of a port call, but Commission staff could not obtain reliable values, and they are not included in this estimate.

**Potential cost impacts on representative persons or businesses are summarized below and are categorized by the major provisions of the proposed regulations.**

(A) The creation or elimination of jobs within the State of California

Analysis: Businesses will incur costs to comply with the requirements. However, Commission staff expects that because these costs will be relatively minimal, they are unlikely to result in the creation or elimination of jobs.

Conclusion: The proposed regulation will have no impact on the creation or elimination of jobs within the State of California.

(B) The creation of new businesses or the elimination of existing businesses within the State of California

Analysis: Commission staff does not expect the regulations to create or eliminate any businesses because the regulations are not expected to have a significant impact on existing maritime shipping industry business activities. Vessels can perform ballast water exchange without any additional equipment and may incur minimal costs relative to the current cost of operating in California ports.

Conclusion:

- The proposed regulation will have no impact on the creation of new businesses within the State of California.
- The proposed regulation will have no impact on the elimination of businesses within the State of California.

(C) The expansion of businesses currently doing business within the State of California

Analysis: These regulation amendments are not expected to affect the expansion of businesses currently doing business within the State of California. As discussed above, the potential costs of the proposed regulations remain low in comparison to typical costs of doing business in the maritime shipping industry.

Conclusion: The proposed regulations will have no impact on the expansion of businesses currently conducting businesses within the State of California.

(D) Benefits of the regulations to the health and welfare of California residents, worker safety, and the State's environment

Analysis: The proposed regulation amendments do not make changes to existing worker safety requirements and therefore should not have a significant positive or negative impact on worker safety within the State of California.

The proposed ballast water management regulations will strengthen protection of California's natural ecosystems and water infrastructure from the impacts of new species introductions. These protections will benefit the health and welfare of California residents and the State's environment.

Conclusion: The proposed regulations will have no impact upon worker safety within the State of California but will benefit California residents and the State's environment.

## Small Business Impacts

Commission staff believes there are no small businesses that would be subject to the proposed regulations because the regulated community consists of shipping businesses that generate too much revenue to qualify as small businesses. Thus, the likely impact on small businesses would be insignificant.

## TECHNICAL, THEORETICAL, AND/OR EMPIRICAL STUDY, REPORTS, OR DOCUMENTS RELIED UPON

ABS. 1999. Advisory Notes on Ballast Water Exchange Procedures.

[https://ww2.eagle.org/content/dam/eagle/rules-and-guides/current/other/18\\_ballastwaterexchangeprocedures/pub18\\_ballastwater\\_op.pdf](https://ww2.eagle.org/content/dam/eagle/rules-and-guides/current/other/18_ballastwaterexchangeprocedures/pub18_ballastwater_op.pdf)

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Pacific Merchant Shipping Association (PMSA). 2023. West Coast Trade Report. <https://static1.squarespace.com/static/65c511cb0e45ff412eec4118/t/66d8acb12861b45c32ab7a97/1725476020634/PMSA+West+Coast+Trade+Report+-+June+2023.pdf>

Reid, D. F. 2006. Conversion of Specific Gravity to Salinity for Ballast Water Regulatory Management. National Oceanic and Atmospheric Administration, Great Lakes Environmental Research Laboratory, Ann Arbor, MI. <https://repository.library.noaa.gov/view/noaa/11066>

State of California. 2025. Golden Mussel Response Framework. California Department of Fish and Wildlife, California State Parks, California Department of Water Resources, California State Lands Commission, California Department of Food and Agriculture, California State Water Resources Control Board, United States Bureau of Reclamation, and United States Fish and Wildlife Service. April 15, 2025. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=231231&inline>

## **REASONABLE ALTERNATIVES**

The Commission considered two reasonable alternatives to the proposed amendments. However, both alternatives were determined to be less effective in carrying out the purpose of the proposed regulation amendments.

The first alternative (Alternative 1) considered was a broader approach that would require all discharging arrivals at all California ports to exchange ballast water in addition to meeting the ballast water discharge performance standards. Alternative 1 is not preferred because the costs would be applied to all discharging vessels at all California ports, even those vessels that are discharging at ports that are not California's Low-Salinity Ports.

The second alternative (Alternative 2) considered was a more geographically-specific approach that would apply only to vessel arrivals that discharge ballast water at the Port of Stockton. This approach was not preferred because the protection against introductions of freshwater and low-salinity organisms, like the golden mussel, afforded by this alternative, would not apply to other ports in the San Francisco Bay area from the Port of Rodeo east to the Port of Sacramento.

## **SPECIFIC TECHNOLOGY OR EQUIPMENT**

The proposed regulation does not mandate the use of specific technology or equipment.

## **EFFORTS TO AVOID UNNECESSARY DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS**

The existing federal Performance Standards implemented by the United States Coast Guard (USCG, 33 CFR 151.2030) and the Environmental Protection Agency (EPA, 2013 Vessel General Permit Section 4.4.3.7) differ substantially from the proposed regulations because they do not require vessels arriving at California's ports in the San Francisco Bay area east of, and including, the port of Rodeo, extending to the Ports of Stockton and Sacramento to complete a ballast water exchange in addition to meeting Performance Standards. However, the EPA adopted regulations that will require all vessels discharging ballast water that is less than 18 ppt salinity into California waters that are less than 18 ppt to conduct ballast water exchange in addition to complying with the federal Performance Standards. These federal regulations are similar to the Commission's proposed regulations but will not become effective until the USCG completes a rulemaking to implement EPA's regulations, likely no sooner than the fall of 2026.

The proposed state regulations requiring an exchange are authorized by statute. Section 71204 of the Public Resources Code requires vessels operating in state waters to minimize the uptake and release of NIS through ballast water through specified actions. The proposed amendments align seamlessly with Public Resources Code section 71204.

The cost of the proposed regulations is minimal relative to the average operating costs of a typical vessel subject to the regulations. This minimal cost is justified by the benefits of the proposed regulations to public health and the environment. The discovery of the golden mussel in October 2024 in California highlights the necessity for more protective regulations to further reduce the likelihood of introducing NIS from a low salinity port to California's Low-Salinity Ports. The proposed ballast water management regulations will strengthen protection of California's natural ecosystems and water infrastructure from the impacts of new species introductions.