

# **California State Lands Commission**

## **Emergency Rulemaking Action for:**

### **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**

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### **I. Notice of Proposed Emergency Rulemaking Action**

Government Code section 11346.1(a)(2) requires an agency adopting an emergency regulation to provide notice of the proposed action to all individuals who have requested notice of regulatory actions, except in cases of immediate and serious harm where delay would conflict with the public interest. This notice, which must include the specific language of the proposed regulation and the agency's finding of emergency, must be sent at least five working days before the proposed emergency regulation is submitted to the Office of Administrative law (OAL). Upon submission, Government Code section 11349.6 requires OAL to

allow a five-calendar-day public comment period, unless delaying action would be inconsistent with the public interest.

The California State Lands Commission (Commission) proposes to amend regulations under Chapter 1 of Division 3 of Title 2 of the California Code of Regulations. The proposed amendments would require vessels with ballast water sourced from waters with a measured salinity of less than 18 parts per thousand (ppt; i.e., 18 grams of salt per kilogram of water) to conduct ballast water exchange prior to discharging at California's fresh and brackish water. This requirement is in addition to meeting existing California ballast water discharge performance standards (Performance Standards; Title 2, Cal. Code Regs. Section 2293).

Due to the recent discovery of the invasive golden mussel (see Section II, Finding of Emergency), this action is necessary to address the urgent risk of nonindigenous species (NIS) introductions and protect California's fresh and brackish water ecosystems. Freshwater is any water that has a measured salinity of less than 0.5 ppt. and brackish water is any water that has a measured salinity of less than marine water and more than freshwater. This action aligns with regulations adopted (40 C.F.R. § 139.10(g)), but not yet implemented, by the U.S. Environmental Protection Agency (EPA) under the authority of the Vessel Incidental Discharge Act (VIDA; Title IX within S.140, the Frank Lobiando Coast Guard Reauthorization Act of 2018).

## **II. Finding of Emergency**

### **Existence of Emergency**

The Commission finds that this emergency action is necessary to address an immediate and significant threat to public health, safety, and the environment amplified by the discovery of golden mussels (*Limnoperna fortunei*) at the Port of Stockton in October 2024. This marks the first detection of this highly invasive species in North America. The introduction of golden mussels into California's waterways poses a severe and unprecedented threat to the state's fresh and brackish water ecosystems (U.S. Fish and Wildlife Service 2024). Golden mussels thrive in fresh and brackish water 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, watercraft, and beaches, causing costly damage and environmental harm.

The introduction of golden mussels 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 at or beyond 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.

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

While the shift to Performance Standards was intended to more reliably and consistently reduce the likelihood of introducing NIS, the detection of the freshwater golden mussel exposed a critical gap in existing regulations.

For fresh or brackish ballast water discharges, the addition of high salinity marine ocean water (i.e., 30 parts per thousand) during an exchange is an effective means of killing fresh or brackish water organisms (Briski et al., 2015; 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, fresh or brackish water organisms being discharged in ballast water than would be expected with exchange, resulting in a greater likelihood of introducing NIS in fresh or brackish water environments.

### **Need for Proposed Emergency Regulations**

Pursuant to Government Code section 11346.1(b), this emergency 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 fresh and brackish water environments. The recent introduction of the golden mussel exposed the significant vulnerability of these environments to ballast water-mediated species introductions.

The proposed regulations will close the gap in existing regulations that created this vulnerability by adding the requirement to conduct a ballast water exchange, in addition to meeting the Performance Standards, for vessels carrying fresh or brackish ballast water into California's fresh or brackish water environments. This combination of management methods reduces the likelihood of new species invasions (Briski et al., 2015; Bradie et al., 2023). Approximately 24

vessel arrivals per year discharge fresh or brackish ballast water into California's fresh or brackish water ports and would need to comply with the proposed rule. The proposed regulations require vessels carrying ballast water sourced from a location with a measured salinity of less than 18 parts per thousand to conduct a ballast water exchange at or beyond 50 nautical miles from land prior to discharging at California's fresh or brackish water ports, specifically, ports in the San Francisco Bay area east of, and including, the port of Rodeo, extending to the Ports of Stockton and Sacramento. The vessels must also continue to meet existing Performance Standards, which, as noted above, typically involves on board ballast water treatment. Vessels are readily able to comply with the proposed exchange requirement, as no new equipment is required to implement it.

A regular rulemaking effort will likely take eight to twelve months. Without this emergency regulatory action immediately implementing this additional management requirement, approximately 16 to 24 additional vessels over the eight-to-twelve-month period (i.e., two arrivals per month) will discharge higher risk fresh or brackish ballast water into these vulnerable environments, perpetuating the likelihood of new NIS introductions. A single discharging vessel can introduce a new species, so an elongated eight-to-twelve-month process will allow many more vessels to discharge higher risk ballast water. The controls in the proposed regulations are stronger and more comprehensive than the existing regulations and are needed to reduce the likelihood of species introductions and protect California's fresh and brackish water ecology, waterways, and infrastructure from irreversible damages.

### **Finding of Emergency Not Based Upon Expediency, Convenience, or Speculation**

In 2022, the Commission began implementing Performance Standards equivalent to the federal standards to reduce the likelihood of species introductions. Additionally, in 2018, the federal Vessel Incidental Discharge Act (VIDA) was signed into law, requiring the EPA to adopt Performance Standards for ballast water and other discharges and the U.S. Coast Guard (USCG) to adopt implementing regulations. The EPA and the USCG were directed to adopt their respective regulations sequentially, each within a two-year timeline. The EPA adopted their regulations under authority granted in VIDA in October 2024, approximately four years after their statutory deadline to complete this action. Once the USCG adopts their implementing regulations, all vessels with fresh or brackish ballast water that will discharge in California's fresh or brackish water environments will be required to conduct ballast water exchange in addition to complying with the federal Performance Standards. These federal regulations

are similar to the Commission's proposed emergency regulations but will not become effective until the USCG completes their rulemaking, likely no sooner than the fall of 2026.

Commission staff expected the federal equivalent of the proposed regulations to become effective under the original timeline set forth in VIDA (i.e., December 2022). The delay in federal implementation of this requirement (at least four years) left this gap open. The Commission's proposed regulations will close this gap.

### **III. Informative Digest**

#### **Policy Overview**

The recent discovery of golden mussels highlights the necessity for more protective regulations to further reduce the likelihood of introducing NIS from a fresh or brackish water source port to California's fresh or brackish water ports (i.e., Stockton, Sacramento, and the typically brackish water terminals east of, and including, Rodeo).

This emergency rulemaking is needed to protect California's environment and the health and safety of the people 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.

The proposed emergency regulation is consistent and compatible with existing ballast water regulations.

#### **Existing Laws and Regulations**

The worldwide regulation of ballast water discharges from commercial shipping vessels to prevent species introductions has shifted from managing ballast water through ballast water exchange to using ballast water treatment systems to meet Performance Standards. California's Performance Standards (Cal. Code Regs., tit. 2, § 2293, subd. (a)(1)), implemented by the Commission, are the same as the existing federal Performance Standards implemented by the USCG (33 C.F.R. § 151.2030) and the EPA (Vessel General Permit Section 2.2.3.5).

In addition to the Performance Standards that are currently being implemented in California and at the national level, the EPA and the USCG are working towards implementing regulations authorized in VIDA. This federal act is discussed above.

California has clear requirements in Section 71204 of the Public Resources Code that require vessels operating in state waters to minimize the uptake and release of nonindigenous species through ballast water. The proposed emergency amendments align seamlessly with Public Resources Code section 71204 and existing federal requirements (USCG (33 CFR 151.2030) and EPA (2013 Vessel General Permit Section 4.4.3.7).

**Whether the Proposed Action Differs Substantially from an Existing Comparable Federal Regulation or Statute.**

The existing federal Performance Standards implemented by the USCG (33 CFR 151.2030) and 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 fresh and brackish water ports to complete a ballast water exchange in addition to meeting Performance Standards. In contrast, VIDA will require equivalent ballast water management, but as noted above, the VIDA regulations will not be implemented until the fall of 2026 or later.

**Whether the Proposed Regulation is Inconsistent or Incompatible with Existing State Regulations.**

Aside from the Commission's existing regulations, there are no other California regulations for ballast water management. The proposed regulations are not inconsistent or incompatible with any other state regulation.

## **IV. Impact of Regulatory Action**

**Does the Proposed Emergency Regulation Impose a Mandate on Local Agencies or School Districts?**

The proposed emergency regulation is for the regulation of commercial shipping vessels and does not impose a mandate on local agencies or school districts. No local agency or school district is required to undertake new activities that would necessitate reimbursement, nor are there other nondiscretionary costs or savings imposed on local agencies. Rather, it reinforces the Marine Invasive Species Program activities, which currently include compliance monitoring and enforcement functions.

**Estimate of the Cost or Savings to any State Agency, Local Agency, or in Federal Funding to the State.**

The proposed emergency regulatory action requires qualifying vessels to conduct near-coastal ballast water exchange in addition to complying with existing Performance Standards. In practice, this action leverages the Commission's ongoing ballast water management oversight and does not, by

itself, impose new mandates that would directly generate additional costs or savings for the Commission or other state agencies. The Commission does not anticipate any impact on federal funding to the state resulting from the proposed rulemaking.

## **V. Technical, Theoretical, and Empirical Studies, Reports or Similar Documents Relied Upon**

Bradie, J., Rolla, M., Bailey, S. A., & MacIsaac, H. J. 2023. Managing risk of nonindigenous species establishment associated with ballast water discharges from ships with bypassed or inoperable ballast water management systems. *Journal of Applied Ecology*, 60(1), 193–204. <https://doi.org/10.1111/1365-2664.14321>

Briski, E., S. Gollasch, M. David, R.D. Linley, O. Cases-Monroy, H. Rajakaruna, and Bailey, S.A. 2015. Combining ballast water exchange and treatment to maximize prevention of species introductions to freshwater ecosystems. *Environmental Science and Technology*, 49, 9566-9572.

Commission (California State Lands Commission). 2018. 2018 Assessment of the Efficacy, Availability, and Environmental Impacts of Ballast Water Treatment Technologies for use in California Waters. Produced for the California State Legislature.

Keller, R. P., Drake, J. M., Drew, M. B., and Lodge, D. M. 2011. Linking environmental conditions and ship movements to estimate invasive species transport across the global shipping network. *Diversity and Distributions*, 17, 93-102.

U.S. Fish and Wildlife Service. 2024. Golden Mussel (*Limnoperna fortunei*) Ecological Risk Screening Summary. November 8, 2024. [https://www.fws.gov/sites/default/files/documents/2024-11/ecological-risk-screening-summary-golden-mussel\\_0.pdf](https://www.fws.gov/sites/default/files/documents/2024-11/ecological-risk-screening-summary-golden-mussel_0.pdf)

## **VI. Authority**

Authority: Public Resources Code sections 71201.7, and 71205.3

Reference: Public Resources Code sections 71200, 71201.7, 71204, and 71206