Oregon Department of Environmental Quality

January xx, 2017

Oregon Environmental Quality Commission Meeting

Rulemaking Action Item No. XX

**Ballast Water Management 2016**

****This file contains the following documents:****

* **EQC Staff Report**
* **Draft rules – redline/strikethrough**
* **Draft rules – no markup**
* **Supporting documents**

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| DEQ recommendation to the EQC |

DEQ recommends that the Environmental Quality Commission adopt the proposed rules in Attachment A as part of Chapter 340 of the Oregon Administrative Rules.

## YOU WILL POPULATE MOST OF THE STAFF REPORT DOCUMENT BY COPYING THE SAME-NAMED SECTIONS FROM THE RULEMAKING NOTICE DOCUMENT.

## Insert the following sections from published NOTICE after the Recommendation section.

* Overview – include *Request for Other Options.*
* Freeform title
* Statement of need
* Rules affected, authorities, supporting documents
* Fees
* Statement of fiscal and economic impact
* Federal relationships
* Land use

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| Overview |

## Short summary

**Ballast Water Rules**

DEQ proposes the Oregon Environmental Quality Commission (EQC) approve the proposed ballast water management rule amendments. These amendments would further enhance DEQ’s ability to prevent the transport and introduction of aquatic invasive species (AIS) from commercial shipping activities to state waters, thereby protecting Oregon from potentially harmful economic and environmental impacts. The proposed rule amendments are in response to recent changes in federal regulations and aim to ensure adequate AIS prevention strategies for Oregon ports.

The proposed rules establish greater protection for Oregon water resources and aquatic ecosystems in two ways. First, the rules close a management gap associated with residual ballast water and sediments in empty ballast tanks that represents a risk for introducing aquatic invasive species when vessel operators must ballast and subsequently de-ballast from empty ballast tanks while in state waters. Second, the rules address concerns that recent federal regulatory changes will replace a strategy that has proven to be highly protective for low-salinity ports (like those in Oregon) with reliance upon first generation shipboard treatment technologies that under some circumstances could be less protective of Oregon ports. Specifically, the rule would retain ballast water exchange requirements for a subset of vessel arrivals that represent a high-risk for introducing AIS to Oregon.

Under current state rules, vessel operators are no longer required to conduct ballast water exchange practices following implementation of federal discharge standards that generally require use of new shipboard treatment technology. The proposed rules would retain ballast water exchange requirements, in addition to meeting federal treatment requirements, for high-risk voyages that had sourced ballast from low-salinity environments. The EPA established a policy to retain ballast water exchange (a.k.a. ‘exchange plus treatment’) under the National Vessel General Permit as a strategy to protect freshwater ports from further damages by AIS, but only required this management model for voyages entering the Great Lakes. Retaining ballast exchange for high-risk voyages would serve as an important interim strategy to protect Oregon’s low-salinity ports during a significant transition that depends upon the reliability of new technologies that have lacked rigorous testing. As proposed, the rule would be repealed after eight years unless DEQ and the EQC determine that technology reliability and efficacy of federal shipboard treatment policies remain inadequate. In the event that these rules are adopted by Oregon, it is anticipated that Washington Department of Fish and Wildlife will seek to adopt comparable rules for vessels operating in the Columbia River.

The proposed rules do not involve fees, additional equipment requirements or significant administrative efforts in order to comply. Therefore, under normal operating circumstances, these rules will not have any significant negative economic impacts, either direct or indirect.

**DEQ Noise Regulations**

This rulemaking includes a second element. As an administrative action intended to improve the clarity of its rules, DEQ has included rulemaking on a second topic in this rulemaking. This action involves DEQ’s noise control regulations, found at OAR 340 division 35.

In 1991 the Oregon Legislature withdrew all funding for implementing and administering DEQ’s noise regulations. (See OAR 340-035-0110.) DEQ therefore ended its noise control program, although the noise control regulations remain in effect. In response to budget reductions, DEQ no longer conducts a noise control program or enforces the noise control regulations. DEQ has no funding or program to respond to noise complaints, to provide advice about noise issues or to interpret the noise regulations. Local governments may choose to enforce the noise regulations.

The changes DEQ is proposing for the noise regulations are purely administrative to make it easier for the public to access information about these rules. These changes do not indicate any change in DEQ policy or practice concerning the noise regulations. DEQ still does not have a noise control program or have funding or the ability to enforce, apply or interpret the noise regulations, or to investigate noise issues or complaints.

The noise control regulations refer to a number of tables and external documents. Currently, those documents are not published with the official version of the rules on the Oregon Secretary of State web page. Instead, DEQ maintains those documents on its own web site.

In this rulemaking DEQ is asking the EQC to approve amendments to the noise regulations that only incorporate directly into the rules the tables and documents the rules already refer to. This will make it easier for users of these rules to find the information they need to interpret and apply the rules. It will also relieve DEQ from the cost and responsibility of maintaining these documents on its web site.

This rule change does not change any content or wording of the noise control regulations. There is no change in the meaning, effect, or application of these rules. There is also no negative fiscal impact to any person or entity from this rule change.

DEQ will therefore ask the EQC to approve these proposed amendments to the division 35 noise control regulations.

## Brief history

Oregon first established ballast water management regulations in 2001 to prohibit commercial vessels from discharging ballast to state waters unless the discharge meets specified management criteria. The primary ballast management practice available to mariners has been mid-ocean ballast water exchange. This strategy replaces ballast originally sourced from distant coastal and nearshore port environments (representing a high-risk for transporting AIS) with lower-risk water sourced from the open ocean. Ballast exchange reduces the risk of transporting non-indigenous species from other freshwater ports to Oregon’s freshwater ports in two important ways: by significantly reducing the number of near-shore organisms in discharged ballast (propagule pressure) and by causing high mortality to any remaining freshwater or brackish organisms in the tanks via osmotic shock. In addition to other management options, such as retaining ballast while in port or using a municipal water supply, using a U.S. Coast Guard (USCG) approved shipboard ballast water treatment system is also identified as an acceptable management method. However, until recently, technology was still in development and the USCG had not established numerical standards or technology certification criteria to guide implementation of treatment–based strategies. In recent years Oregon has been closely monitoring the development of ballast discharge standards at state, federal and international levels to determine whether state-specific discharge standards are necessary, or whether the adoption of federal standards is adequately protective of Oregon waters.

In 2009, the Oregon Legislature clarified authority for the EQC to adopt by rule standards and procedures to minimize the risk of introducing AIS from ballast discharged to state waters (HB 2714). Moreover, the Legislature created the Shipping Transport of Aquatic Invasive Species Task Force (STAIS). STAIS represents a range of stakeholders and makes recommendations to the state on matters related to ballast water management for commercial vessels transiting Oregon waters.

Based on developments at the international and federal level, STAIS recommended in 2010 that Oregon wait for final determination of federal ballast water discharge standards before deciding whether state specific discharge standards are necessary. At that time, federal authorities were considering whether to adopt standards for the numerical limits on living organisms in discharged ballast comparable to those California established in 2007 or the considerably less protective standards established by the International Maritime Organization’s (IMO) 2004 Ballast Water Management Convention.

The 2012 USCG final rule on ballast water management established numeric standards for discharging living organisms in ballast discharge by adopting the less protective standards established by the IMO. The United States Environmental Protection Agency (EPA) also adopted the less protective IMO standards within the 2013 NPDES Vessel General Permit, however, the U.S. 2nd Circuit Court of Appeals ruled in October 2015 that the EPA’s reliance on the IMO/USCG standard was arbitrary and capricious.

Of particular interest to Oregon, the EPA noted in issuing the 2013 Vessel General Permit that relying upon first generation shipboard treatment systems certified to meet the IMO/USCG standard may not represent an improvement over ballast water exchange for protecting freshwater ports from further aquatic invasive species damages. Rather, for voyages that source ballast from low-salinity environments, replacing ballast water exchange with shipboard treatment systems could increase the chance of transporting and releasing non-indigenous species that represent a high-risk for invasion to freshwater ecosystems.

To achieve an adequate protection level, the EPA proposed retaining ballast exchange requirements, in addition to imposing the new ballast treatment standards, for ocean-going vessels that enter the Great Lakes/St. Lawrence system with low-salinity water in their ballast tanks. Based upon similar concerns, DEQ submitted comments to EPA strongly encouraging the adoption of ‘exchange plus treatment’ for all freshwater harbors in the U.S, and in particular the low-salinity ports in Oregon. Unfortunately, the EPA issued the final permit with ‘exchange plus treatment’ requirements only for vessels operating in the Great Lakes. As a result of the implementation of these federal policies, USCG certified shipboard treatment systems can now be used in place of ballast water exchange to meet ballast water management requirements under OAR 340-143-0050.

In response to the federally mandated changes in ballast water management, the states of Maine, Rhode Island, New York, Minnesota and Michigan established 401 certification conditions to the 2013 EPA Vessel General Permit that require all vessels to retain ballast water exchange in addition to meeting federal discharge standards, regardless of ballast water origin salinity levels. Also, Canadian authorities announced the intention of adopting the IMO D-2 discharge standards, but with a more stringent provision that retains ballast water exchange practices for vessels discharging ballast to low-salinity harbors, including those of the Pacific Coast, such as the Fraser River.

In response to the recent changes, the DEQ has been working with the STAIS task force to evaluate efficacy of the federal discharge standards for protecting Oregon waters. Task force stakeholders sought consensus recommendations based on regional consistency with neighboring states, compatibility with federal regulations, and goals for preventing vessel-mediated AIS introductions to Oregon.

## Regulated parties

**Ballast Water**

The proposed amendments to OAR 340-143 do not change the regulated parties.

**Noise Regulations**

The noise control regulations apply to a wide range of parties that generate noise. However the proposed amendments do not change the regulated parties or the compliance requirements in any way.

## Request for other options

During the public comment period, DEQ requests public comment on whether to consider other options for achieving the rules’ substantive goals while reducing any potential negative economic impact on business resulting from the rules.

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| Optional Additional Topic from Notice |

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| Statement of Need |

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**Management of Empty Ballast Tanks**

What need would the proposed rule address?

The need to reduce the invasive species transfer risk associated with residual ballast water and sediments in ‘empty’ ballast tanks that may be used for ballasting and subsequent de-ballasting while in state waters.

How would the proposed rule address the need?

The proposed rule requires vessel operators to conduct a mid-ocean saltwater flush of empty ballast tanks that they want to use for ballasting and subsequent de-ballasting while in port.

How will DEQ know the rule addressed the need?

Mid-ocean saltwater flushing of an empty ballast tank will result in residual water salinity of at least 30 parts per thousand and thereby will significantly reduce the probability for introducing high-risk species to the low-salinity environments of Oregon ports. This minimum salinity criterion can be used for compliance verification purposes.

**Retaining Ballast Water Exchange**

What need would the proposed rule address?

There are concerns that new management practices established by federal requirements could, under some circumstances, represent a lower efficacy for preventing aquatic invasive species (AIS) transport to low-salinity ports in Oregon than current mid-ocean ballast exchange management practices.

How would the proposed rule address the need?

The rules retain ballast water exchange requirements for a subset of vessel arrivals to Oregon that represent a high risk for transporting AIS.

How will DEQ know the rule addressed the need?

Vessel inspections by DEQ staff, including sampling of ballast tank water for a minimum salinity, provides opportunity to verify compliance with elements of the proposed rule, as well as other ballast management criteria. The ballast water program at DEQ currently has the capacity to inspect approximately 15% of vessel arrivals to Oregon. Inspections are prioritized for vessel arrivals that represent a higher risk for transporting AIS to Oregon waters, such as the vessel arrivals that would be subject to the proposed rule. Compliance verification sampling of vessels subject to the rule, combined with ongoing evaluation of ballast water treatment system efficacy and monitoring for new non-indigenous species in Oregon waters, will inform DEQ’s evaluation of the new rule and a determination of whether it is needed beyond the proposed expiration date in 2025.

**Noise Tables**

What need would the proposed rule address?

The rules are currently difficult for users to read, interpret and apply because the necessary information contained in tables and reference documents is not published in the same location as the rules.

How would the proposed rule address the need?

The amendments move tables and reference documents from a source that is external to the official published version of the rules and incorporates those documents into the official published version of the rules.

How will DEQ know the rule addressed the need?

The external documents will have been incorporated into the official published version of DEQ’s rules.

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| Rules affected, authorities, supporting documents |

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## **Ballast Water Rules**

## Lead division

Operations Division

## Program or activity

Ballast Water Management

## Chapter 340 action

Amend

OAR 340-143-0005, 340-143-0010, 340-143-0050

## Statutory authority

ORS 468.020, 783.620 – 783.640

## Statute implemented

ORS 783.620 – 783.640

## Legislation

## House Bill 2207 (2015)

## Other authority

Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (NANPCA - Section 1205) (codified as 16 U.S.C. § 4725)

Documents relied on for rulemaking

|  |  |
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| Document title | Document location |
| Oregon Task Force on Shipping Transport of Aquatic Invasive Species – Report to the 2015 Legislature | <http://www.deq.state.or.us/lq/cu/emergency/staistaskforce.htm> |
| EPA VGP 2013 | <http://www.epa.gov/npdes/vessels-incidental-discharge-permitting-3> |
| Transport Canada Policy Implementation Paper 2012 | <http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/ballast2016.aspx> |
| Briski, E., Gollasch, S., David, M., Linley, R. D., Casas-Monroy, O., Rajakaruna, H., & Bailey, S. A. (2015). Combining ballast water exchange and treatment to maximize prevention of species introductions to freshwater ecosystems. *Environmental science & technology*, *49*(16), 9566-9573. | <http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/ballast2016.aspx> |
| Bailey, S. A., Deneau, M. G., Jean, L., Wiley, C. J., Leung, B., & MacIsaac, H. J. (2011). Evaluating efficacy of an environmental policy to prevent biological invasions. *Environmental Science & Technology*, *45*(7), 2554-2561. | <http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/ballast2016.aspx> |
| Briski, E., Allinger, L. E., Balcer, M., Cangelosi, A., Fanberg, L., Markee, T. P. & Regan, D. H. (2013). Multidimensional approach to invasive species prevention. *Environmental science & technology*, *47*(3), 1216-1221. | <http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/ballast2016.aspx> |
| Gray, D. K., Johengen, T. H., Reid, D. F., & MacIsaac, H. J. (2007). Efficacy of open‐ocean ballast water exchange as a means of preventing invertebrate invasions between freshwater ports. *Limnology and Oceanography*, *52*(6), 2386-2397. | <http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/ballast2016.aspx> |
| Bradie, J. N., Bailey, S. A., Van Der Velde, G., & MacIsaac, H. J. (2010). Brine-induced mortality of non-indigenous invertebrates in residual ballast water. *Marine Environmental Research*, *70*(5), 395-401. | <http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/ballast2016.aspx> |
| Gollasch, S., David, M., Voigt, M., Dragsund, E., Hewitt, C., & Fukuyo, Y. (2007). Critical review of the IMO international convention on the management of ships’ ballast water and sediments. *Harmful algae*, *6*(4), 585-600. | <http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/ballast2016.aspx> |
| Ruiz, G.M, & Reid, D.L. (2007). Current State of Understanding about the Effectiveness of Ballast  Water Exchange (BWE) in Reducing Aquatic Nonindigenous Species (ANS) Introductions to the Great Lakes Basin and Chesapeake. NOAA Technical Memorandum GLERL-142. | <http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/ballast2016.aspx> |
| Simkanin, C., Davidson, I., Falkner, M., Sytsma, M., & Ruiz, G. (2009). Intra-coastal ballast water flux and the potential for secondary spread of non-native species on the US West Coast. *Marine Pollution Bulletin*, *58*(3), 366-374. | <http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/ballast2016.aspx> |

**Noise Control Regulations**

## Lead division

Operations Division

## Program or activity

Rulemaking

## Chapter 340 action

Amend

OAR 340-035-0015, 340-035-0025, 340-035-0030, 340-035-0035, 340-035-0040, 340-035-0045

Statutory Authority

ORS 467

Statutes Implemented

ORS 467, 467.030.

Documents relied on for rulemaking

None.

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| Fee Analysis |

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This rulemaking does not involve fees.

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| **Statement of fiscal and economic impact** |

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Fiscal and Economic Impact

**Ballast Water Rules**

This rulemaking amends invasive species prevention practices required of commercial vessels greater than 300 gross tons that intend to discharge ballast water while operating in state waters. Large foreign businesses own and operate the vast majority of affected vessels. The proposed rules do not involve a significant cost of compliance for these foreign businesses and are not expected to have any indirect effects on local businesses that depend on maritime commerce. As proposed, the rules affecting management of empty ballast tanks (340-143-0010) are in essence the same as preexisting federal requirements. And the ‘exchange plus treatment’ requirement is specifically tailored to only target high-risk voyages carrying low salinity ballast water – less than 11% of all vessel arrivals according to DEQ estimates.

Noise Table Rules

This rulemaking makes no wording or substantive change to DEQ’s noise regulations and therefore has no fiscal impact on any person or entity.

Statement of Cost of Compliance

**State and federal agencies**

Ballast Water Rules

This rulemaking will not require additional resources for the Department of Environmental Quality, nor other state or federal agencies.

Noise Table Rules

This rulemaking makes no wording or substantive change to DEQ’s noise regulations and therefore has no fiscal impact on any person or entity.

**Local governments**

Ballast Water Rules

These rules would not impose a negative economic impact on local governments. Rather, these rules are intended to protect the general public by preventing the introduction of aquatic invasive species which have caused devastating economic impacts for public and private sector entities in other regions of the country.

Noise Table Rules

This rulemaking makes no wording or substantive change to DEQ’s noise regulations and therefore has no fiscal impact on any person or entity.

**Public**

Ballast Water Rules

These rules would not impose a negative economic impact on the general public. Rather, these rules are intended to protect the general public by preventing the introduction of aquatic invasive species, which have caused devastating economic impacts for public and private sector entities in other regions of the country.

Noise Table Rules

This rulemaking makes no wording or substantive change to DEQ’s noise regulations and therefore has no fiscal impact on any person or entity.

**Large businesses - businesses with more than 50 employees**

Ballast Water Rules

DEQ does not anticipate any significant economic impact for large businesses operating in Oregon as a result of the proposed rules. The proposed rules do not impose fees or require the use or installation of new equipment or management practices for regulated vessels. For those vessel operators that the proposed rule revisions affect, cost of compliance may involve a minor increase in operational costs of shipboard treatment systems if a bypass option is not available for initial uptake of ballast water, prior to conducting mid-ocean ballast exchange.

Noise Table Rules

This rulemaking makes no wording or substantive change to DEQ’s noise regulations and therefore has no fiscal impact on any person or entity.

**Small businesses – businesses with 50 or fewer employees**

Ballast Water Rules

DEQ does not anticipate any significant economic impact as a result of the proposed rules. DEQ’s state ballast water management regulations establish a minimum vessel size criteria of less than 300 gross tons with ballast tanks and exemptions for commercial fishing vessels so that no small businesses are subject to these rules. Moreover, the proposed rules do not establish fees or require new operational practices to manage ballast water. Therefore, under normal operational conditions, the rules would not impose significant economic impacts, either directly or indirectly, on any small businesses.

Noise Table Rules

This rulemaking makes no wording or substantive change to DEQ’s noise regulations and therefore has no fiscal impact on any person or entity.

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| a. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule. | This rulemaking has no fiscal impact on small businesses. |
| b. Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule. | N/A |
| c. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule. | N/A |
| d. Describe how DEQ involved small businesses in developing this proposed rule. | N/A |

## How DEQ involved small businesses in developing this rule

## Ballast Water Rules

## Large companies headquartered outside of Oregon own greater than 95% of the vessels ORS 783.620 through 783.640 regulate. There are a limited number of local businesses that operate regulated vessels, and those that do (ocean going tug and barge operations) have more than 50 employees. To incorporate a broader perspective on potential economic impacts to other non-regulated businesses, DEQ relied on advisory committee members representing the general maritime industry for Oregon ports. This included representatives from the Port of Portland, the Columbia River Steamship Operators Association, Sause Brothers Ocean Towing, and the Western States Petroleum Association.

Noise Table Rules

This rulemaking makes no wording or substantive change to DEQ’s noise regulations and therefore has no fiscal impact on any person or entity.

## Documents relied on for fiscal and economic impact

None.

## Advisory committee

DEQ appointed an advisory committee.

As ORS 183.33 requires, DEQ asked for the committee’s recommendations on:

* Whether the proposed rules would have a fiscal impact,
* The extent of the impact, and
* Whether the proposed rules would have a significant impact on small businesses and complies with ORS 183.540.

The committee reviewed the draft fiscal and economic impact statement and its findings are stated in the approved minutes dated 29 February 2016.

did not provide or request additional data to support or refute DEQ’s finding of no significant direct or indirect economic impacts. The committee determined the proposed rules would not have a significant adverse impact on small businesses in Oregon.

## **Housing cost**

Ballast Water Rules

As ORS 183.534 requires, DEQ evaluated whether the proposed rules would have an effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. DEQ determined the proposed rules would have no effect on the development costs because the rules only affect commercial vessels discharging ballast water that had been sourced from outside state water and the changes to regulations do not impose significant changes in operational costs or investment.

Noise Table Rules

As ORS 183.534 requires, DEQ evaluated whether the proposed rules would have an effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. DEQ determined the proposed rules would have no effect on the development costs because the changes to the noise rules are administrative only and have no substantive effect.

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| Federal relationship |

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## **Ballast Water Rules**

## Relationship to federal requirements

ORS 183.332, 468A.327 and OAR 340-011-0029 require DEQ to attempt to adopt rules that correspond with existing equivalent federal laws and rules unless there are reasons not to do so.

To address risks associated with empty ballast tanks, the proposed rules (OAR 340-143-0010) adopt management requirements that are substantively equivalent to federal requirements established under section 2.2.3.6.3 of the 2013 EPA NPDES Vessel General Permit. Adopting these requirements under Oregon law would facilitate compliance verification inspections and enforcement by DEQ staff. These are functions that EPA generally does not have current capacity for conducting for vessel arrivals to Oregon waters.

Proposed rules to retain ballast water exchange practices for a subset of high-risk vessel arrivals (340-143-0050) would add requirements additional to those in federal requirements for vessels calling on Oregon waters. Instead of being able to forego ballast water exchange practices once a vessel is equipped with a federally approved shipboard treatment system, vessels undertaking high-risk voyages would be required to carry out ballast exchange, in addition to meeting numeric discharge standards. The rules are substantively equivalent, however, to federal requirements established under section 2.2.3.7 of the 2013 EPA NPDES Vessel General Permit. That provision requires vessels entering the Great Lakes to retain ballast water exchange practices.

## What alternatives did DEQ consider if any?

In addition to a ‘no-action’ alternative, DEQ also considered adopting a state specific ballast water discharge standard that is more protective than what has been established by federal regulations. For example, California’s ballast water discharge standard is roughly 100x more stringent than the federal standard.

In dealing with regulated parties that are mobile entities operating in many jurisdictions, there are many challenges associated with adopting a state-specific discharge standard that is more protective than a federal standard. Besides determination of technology availability to meet the higher standard, it would also likely involve additional equipment investments for vessel operators beyond the federal requirement.

In contrast, the proposed rule is compatible within the framework of implementing federal discharge standards but does not require any additional equipment or technological investments. Rather, it simply requires that under some voyage conditions, vessel operators are required to conduct ballast exchange, the same management practice that has been required for the past 15 years, in addition to meeting the new federal discharge standards.

In order to adequately protect Oregon waterways from aquatic invasive species introductions, the proposed rules were modeled after the existing regulations that EPA developed for protecting the Great Lakes. Scientific studies have shown that the ‘exchange plus treatment’ strategy is highly effective at protecting freshwater ports from the economic, ecological and human health threats that can be associated with aquatic invasive species. DEQ, in consultation with stakeholders, determined that the strategy adopted for protecting the Great Lakes, and similarly adopted by states of MI, MN, MA, NY, and RI, will be a sufficiently protective strategy for the predominantly low-salinity ports of Oregon.

In the absence of additional prevention strategies targeting high-risk voyages, studies suggest that the new technology based strategies required under federal regulations could, under some circumstances, represent an increased threat for aquatic invasive species compared to ballast water exchange. Therefore, DEQ rejected the ‘no-action’ alternative.

**Noise Regulations**

## Relationship to federal requirements

The proposed amendments make no substantive changes to the rules and therefore do not conflict with or duplicate federal requirements.

## What alternatives did DEQ consider if any?

DEQ did not consider any alternatives because the proposed amendments do not make any substantive changes to the rules.

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| Land Use |

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## Land-use considerations

In adopting new or amended rules, ORS 197.180 and OAR 340-018-0070 require DEQ to determine whether the proposed rules significantly affect land use. If so, DEQ must explain how the proposed rules comply with state wide land-use planning goals and local acknowledged comprehensive plans.

Under OAR 660-030-0005 and OAR 340 division 18, DEQ considers that rules affect land use if:

* The statewide land use planning goals specifically refer to the rule or program, or
* The rule or program is reasonably expected to have significant effects on:
  + Resources, objectives or areas identified in the statewide planning goals, or
  + Present or future land uses identified in acknowledged comprehensive plans

To determine whether the proposed rules involve programs or actions that affect land use, DEQ reviewed its Statewide Agency Coordination plan, which describes the DEQ programs that DEQ determined significantly affect land use. DEQ considers that its programs specifically relate to the following statewide goals:

**Goal Title**

5 Open Spaces, Scenic and Historic Areas, and Natural Resources

6 Air, Water and Land Resources Quality

9 Ocean Resources

11 Public Facilities and Services

16 Estuarial Resources

Statewide goals also specifically reference the following DEQ programs:

* Nonpoint source discharge water quality program – Goal 16
* Water quality and sewage disposal systems – Goal 16
* Water quality permits and oil spill regulations – Goal 19

## Determination

DEQ determined that these proposed rules do not affectland use under OAR 340-018-0030 or DEQ’s State Agency Coordination Program.

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| Stakeholder and public involvement |

Insert information from NOTICE here

* ~~Advisory committee~~
* ~~EQC involvement~~
* ~~Public notice~~

CHANGE FROM FUTURE TO PAST TENSE

## Advisory committee

## Background

DEQ convened the Ballast Water Rulemaking 2016 advisory committee. The committee included representatives from local and regional maritime industry entities, advocacy groups, research institutions, and state, regional and federal agencies. The committee met four times between December 2015 and March 2016, and held a fourth meeting in October 2016 during the final open public comment period. The committee’s web page is located at: <http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/ballast2016.aspx>

The committee members were:

|  |  |
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| Name | Representing |
| Mark Sytsma, Chair | Portland State University |
| Jas Adams | Willamette University, State Marine Board |
| Michelle Hollis | Port of Portland |
| Frank Holmes | Western States Petroleum Association |
| Ross McDonald | Sause Bros |
| Hans Meere | EGT, LLC |
| Fred Myer | Port of Portland |
| Amanda Hanson | Lower Columbia River Estuary Partnership |
| Kate Mickelson | Columbia River Steamship Operators Association |
| Dick Vander Schaaf | The Nature Conservancy |
| Travis Williams | Willamette Riverkeeper |
| Rick Boatner | OR Dept. Fish and Wildlife |
| Nicole Dobroski | CA State Lands Commission |
| Robyn Draheim (Alt: Craig Rowland) | U.S. Fish and Wildlife Service |
| Michael Pearson | U.S. Coast Guard |
| Allen Pleus | WA Dept. Fish and Wildlife |

## Meeting notifications

To notify people about the advisory committee’s activities, DEQ:

* Sent GovDelivery bulletins, a free e-mail subscription service, to the following lists:
  + On 10/5/16 and 1/12/16 DEQ sent notice to members of the Shipping Transport of Aquatic Invasive Species Task Force subscribers to describe how to sign up for advisory committee meeting notices, and
  + People who signed up for the advisory committee bulletin.
* Added advisory committee announcements to DEQ’s calendar of public meetings at [DEQ Calendar](http://oregon.gov/deq/Pages/Events.aspx).
* On 1/13/16, 2/17/16, and DEQ provided news release statements announcing advisory committee meeting details
* On 1/13/16 and 2/17/16 DEQ provided notice of meetings and links to committee information through postings on Facebook and Twitter.

## Committee discussions

In addition to the recommendations described under the Statement of Fiscal and Economic Impact section above, the committee devoted a significant proportion of its time to discussing the ballast exchange plus treatment proposal. The advisory committee, as well its precursor the 2014 Task Force on Shipping Transport of Aquatic Invasive Species) played an instrumental role in identifying a solution that is practicable within the broad framework of global shipping but also locally tailored to address targeted threats to local resources. Specifically, the committee guided the determination to adopt an ‘exchange plus treatment’ model based off of the EPA Vessel General Permit for the Great Lakes, rather than more stringent models that have been adopted or proposed in other jurisdictions. Generally, committee members representing maritime industry interests believed that the ‘exchange plus treatment’ strategy proposed here only needs to be required of voyages representing a high-risk for introducing AIS to Oregon waters which is approximately 10.7% of arrivals and does not need to be applied to all vessel operators discharging ballast. Some other jurisdictions have adopted this strategy.

Although regional consistency is an important guiding objective for most advisory committee members, the committee was recognized that the predominance of low-salinity ports in Oregon compared to neighboring states provides greater incentive for Oregon to take the initiative to first establish a model regulatory solution for these circumstances. Both Washington, for the Columbia River, and California, for the Sacramento River, have suggested that they will be looking to adopt rules that are substantively comparable to what has been developed for this rulemaking effort.

Moreover, the committee’s participation was important in developing detailed exemptions that will make the regulations more adaptable to rapidly evolving shipboard treatment technologies.

In order to facilitate further discussion and full transparency with all stakeholders, DEQ convened a fourth meeting on 10 October during the final open public comment period. This meeting provided an opportunity for DEQ to identify revisions to the proposed rules that were being considered based on comments received during earlier public comment periods, and for all stakeholders to identify their support or concerns. In particular, the advisory committee was able to further discuss individual members positions on the BWE+BWT proposal and specific elements related to defining criteria, exemptions, sunset date, and regional coordination with neighboring states. In addition, DEQ was able to present results from a re-analysis of anticipated vessel arrivals that would be affected by the proposed rule (at the request of industry representatives during the second public comment period), using updated and more robust data sets that had recently become available. These results showed that an estimated 8.8% of vessels arrivals to Oregon may be subject to the BWE+BWT requirement: less than the 10.7% estimated in earlier analyses. It is also important to note that the modeled data used for the updated analysis is highly conservative in estimating which San Francisco Bay ports may have low-salinity conditions where uptake of ballast may be subject to the proposed rule. As a result, the percentage of vessels affected is likely to be less than 8.8%.

Meeting minutes and recordings are available by request from DEQ or from the advisory committee webpage at: <http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/ballast2016.aspx>

## **EQC prior involvement**

DEQ shared general information with EQC about this rulemaking proposal in the monthly Director’s Report for the August 2016 EQC meeting in Boardman, Oregon.

DEQ did not present additional information specific to this proposed rule revision.

## **Public Notice**

DEQ provide notice of the Notice of Proposed Rulemaking with Public Hearing by:

* Filing with Secretary of State for publication in the May 1, 2016 *Oregon Bulletin*
* Posting notice on the rulemaking web page: [Ballast Water 2016 Rulemaking Web Page](http://www.oregon.gov/deq/RulesandRegulations/Pages/2015/ballast2016.aspx)
* Emailing 7566 interested parties on the Agency Rulemaking, DEQ Public Notices and Ballast Water Management mailing lists through GovDelivery
* Issuing a press release
* Emailing the following key legislators:
  + Sen Edwards (as Chair of Environment and Natural Resources Committee)
  + Rep Witt (as Chair of Agriculture and Natural Resources Committee)
  + Sen Roblan (as 2014/15 legislative liaison to STAIS task force)
  + Rep McKeown (as 2014/15 legislative liaison to STAIS task force)

In addition, notice of subsequent re-opening of public comment periods in June and September were provided by:

* Posting notice on the rulemaking web page: [Ballast Water 2016 Rulemaking Web Page](http://www.oregon.gov/deq/RulesandRegulations/Pages/2015/ballast2016.aspx)
* Emailing 7566 interested parties on the Agency Rulemaking, DEQ Public Notices and Ballast Water Management mailing lists through GovDelivery
* Issuing a press release

## **Request for other options**

During the public comment period, DEQ requested public comment on whether to consider other options for achieving the rules’ substantive goals while reducing the rules’ negative economic impact on business. This document includes a summary of comments and DEQ responses.

## **Public hearings and comment**

DEQ held one public hearing. DEQ received no public comments at the hearing. Later sections of this document include a summary of the 49 comments received during the open public comment period, DEQ’s responses, and a list of the commenters. Original comments are on file with DEQ.

## **Presiding Officers’ Record**

### **Hearing 1**

Meeting location: Portland, OR

Meeting date and time: May 18, 2016; 3-5 pm

Presiding Officer: Rian vanden Hooff

The presiding officer convened the hearing, summarized procedures for the hearing, and explained that DEQ was recording the hearing. The presiding officer asked people who wanted to present verbal comments to sign the registration list, or if attending by phone, to indicate their intent to present comments. The presiding officer advised all attending parties interested in receiving future information about the rulemaking to sign up for GovDelivery email notices.

As Oregon Administrative Rule 137-001-0030 requires, the presiding officer summarized the content of the rulemaking notice.

DEQ added all names and affiliations of hearing participants who presented testimony to the commenter section of this staff report. The commenter list includes a cross reference to the hearing number. DEQ added all written and oral comments presented at each hearing to the summary of comments and agency responses section of this staff report.

|  |
| --- |
| Summary of comments and DEQ responses |

Forty-nine individual comments were received from 17 commenters during the open public comment periods. The comments have been organized into 11 categories, with cross references to the commenter number (identified in a table in the next section). DEQ’s response follows the summary. Original comments are on file with DEQ.

~~Select one option below~~

~~DEQ did not change the proposed rules in response to comments.~~

**~~DEQ changed the proposed rules in response to comments described in the response sections below.~~**

1. **Comment 1** Response to DEQ proposal to mitigate high-risk ballast water discharge by retaining ballast water exchange management practices, in addition to the use of ballast water treatment systems required under new federal ballast water discharge standards.

DEQ received comments in this category from all 16 commenters.

Commenters #1,2,3,5,6,7,8,9,10,11,12,13, and 14 support the proposal that high-risk ballast discharge must continue to be managed with mid-ocean ballast water exchange practices, in addition to implementing shipboard ballast water treatment systems under federal ballast discharge standards.

Commenters #4,15, and 16 noted concerns that BWE+BWT is unwarranted at this time.

**Response:** DEQ maintains that …

1. **Comment 2** Source water criteria that determines which vessels/voyages are affected by the BWE+BWT requirement.

DEQ received comments in this category from commenters #1, 2, 3, 9, and 13.

Commenter #X and #X support the implementation of…… and further suggest that the rule should apply more broadly to ……

Commenter #X suggest that the rule is premature and unwarranted at this time. They suggest that if DEQ opts to proceed with implementing BWE+BWT requirements that it only apply to vessels……

**Response:** DEQ……maintained the proposed language……

1. **Comment 3** Criteria language that identifies locations within Oregon waters where ballast discharge may be affected by BWE+BWT requirement.

DEQ received comments in this category from commenters #1, 4, 7, 9,13, 15, and 16.

Commenters #4, 15, and 16 requested that the rule provide greater specificity for locations within state waters where vessel operators discharging ballast may be subject to the BWE+BWT requirement. Specifically, they would prefer that affected low salinity waters of the state that the rule is designed to protect be identified by specific ports and river mile marker, therein.

Commenter #1,2,9 and 13 indicate a preference for applying BWE+BWT requirements to all ballast discharge to Oregon, regardless of receiving port salinity conditions. Comments from these entities and others during the advisory committee discussions suggested that if greater specificity of rule language is necessary than it should be based on salinity conditions at the time of discharge, not on river mile markers – locations that experience wide ranging salinity variability due to tides and seasonal conditions.

**Response:** DEQ……modified…… Although the proposed rule would require BWE+BWT for ballast discharge of any ballast that had been sourced outside the region from low-salinity conditions… According to information provided to DEQ by industry representatives, discharge of ballast to Oregon waters from regulated commercial vessels occurs to low-salinity environments (i.e. < 18 parts per thousand) under almost all circumstances.

1. **Comment 4** Suggested edits that are technical or semantic in nature aimed at greater clarity of the rule revisions and are not deemed to be controversial.

DEQ received comments in this category from commenters #6, and 10.

Commenter #X and #X support the implementation of…… and further suggest that the rule should apply more broadly to ……

Commenter #X suggest that the rule is premature and unwarranted at this time. They suggest that if DEQ opts to proceed with implementing BWE+BWT requirements that it only apply to vessels……

**Response:** DEQ…… modified……

1. **Comment 5** Suggestions for edits to exemption criteria language proposed under -0050 (

DEQ received comments in this category from commenters #4, 7, and 16.

Commenter #X and #X support the implementation of…… and further suggest that the rule should apply more broadly to ……

Commenter #X suggest that the rule is premature and unwarranted at this time. They suggest that if DEQ opts to proceed with implementing BWE+BWT requirements that it only apply to vessels……

**Response:** DEQ…… has modified…….

1. **Comment 6** Requests for changes to the repeal date of BWE+BWT under -0050 (

DEQ received comments in this category from commenters #4, 15, 16.

Commenter #X and #X support the implementation of…… and further suggest that the rule should apply more broadly to ……

**Response:** DEQ……has modified the sunset date…..

1. **Comment 7** Response to DEQ proposal to adopt saltwater flushing requirements of empty ballast tanks that are comparable to federal requirements established under the 2013 EPA Vessel General Permit.

DEQ received comments in this category from commenters #3, 5, 6, 7, 12, 13.

Commenter #X and #X support the implementation of…… and further suggest that the rule should apply more broadly to ……

**Response:** DEQ has maintained the rule as proposed.

1. **Comment 8** Suggestions that failure to establish regulations comparable to -0050() in neighboring jurisdictions may result in economic competitive disadvantages for some Oregon port facilities.

DEQ received comments in this category from commenters #4, 5 and 15.

Commenter #4 and 15 suggest that the rule is premature and unwarranted at this time. They suggest that if DEQ opts to proceed with implementing BWE+BWT requirements that it only apply to vessels……

Commenter #5 notes that WDFW is …..

**Response:** DEQ……has worked in close coordination with other west coast states in the development of consistent BWM regulations since……

1. **Comment 9** Suggestions/assertions questioning whether DEQ estimates of the number of vessels/voyages affected were accurate.

DEQ received one comment in this category from commenter #4.

Commenter #X and #X support the implementation of…… and further suggest that the rule should apply more broadly to ……

**Response:** DEQ……conducted a new analysis using more robust data sources….showed decrease in number of vessels per year that would be likely to be affected. These numbers are likely to be more conservative because they included modeled salinity data for global ports that were deemed to underestimate surface salinity values at some ports in California where ballast is occasionally sourced before being discharged to Oregon waters.

1. **Comment 10** Suggestion that DEQ remove ballast water management exemptions that allow vessels transferring ballast within our ‘common water zone’ (per OAR -00xxx) to do so without conducting invasive species risk-reduction practices.

DEQ received one comment in this category from commenter #13.

Commenter #X suggest that the rule is premature and unwarranted at this time. They suggest that if DEQ opts to proceed with implementing BWE+BWT requirements that it only apply to vessels……

**Response:** DEQ…… outside the scope of this rulemaking….

1. **Comment 6** Requests for changes to the repeal date of BWE+BWT under -0050 (

DEQ received one comment in this category from commenter #13.

Commenter #X suggest that the rule is premature and unwarranted at this time. They suggest that if DEQ opts to proceed with implementing BWE+BWT requirements that it only apply to vessels……

**Response:** DEQ…… outside the scope of this rulemaking…

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| --- |
| **Commenters** |

## Comments received by close of public comment period

The table below lists 16 people, organizations, or coalitions that provided comments about the proposed rules during public comment periods that were open between 15 April and 25 May, 20 June and 08 July, and 07 September and 24 October. Original comments are on file with DEQ.

|  |  |  |  |
| --- | --- | --- | --- |
| **List of Commenters** | | | |
| **#** | **Name** | **Affiliation** | **Comment Category** |
| 1 | Mark Sytsma | Portland State University | 1,2,3 |
| 2 | Doug Heiken | Oregon Wild | 1,2 |
| 3 | Nicole Dobroski | California State Lands Commission | 1,3,7 |
| 4 | Charles Costanzo, Kate Mickelson, Mark Landauer, Fred Myer, Ross McDonald, Frank Holmes (5/24/16; 7/8/16) | American Waterways Operators, Columbia River Steamship Operators Assn., Oregon Public Ports Association, Port of Portland, Sause Bros., Western States Petroleum Association | 1,3,5,6,8,9 |
| 5 | James Unsworth | Washington Department of Fish and Wildlife | 1,7,8 |
| 6 | Allen Pleus | Washington Department of Fish and Wildlife | 1,4,7 |
| 7 | Debrah Marriot | Lower Columbia River Estuary Partnership | 1,5,7,3 |
| 8 | Kim Cox | City of Portland, Bureau of Environmental Services | 1 |
| 9 | Blaine Parker | Columbia River Inter-Tribal Fish Commission | 1,2 |
| 10 | Jas Adams | Citizen (retired DOJ) | 1,4 |
| 11 | Dorothy Shoemaker | Citizen | 1 |
| 12 | Cybele Knowles and 898 co-signatories | Center for Biological Diversity | 1,7 |
| 13 | Nina Bell and Tierra Curry | Northwest Environmental Advocates | 1,2,3,7,10,11 |
| 14 | Paul Henson | U.S. Fish and Wildlife Service | 1 |
| 15 | Charles Costanzo, Kate Mickelson, Mark Landauer, Ross McDonald, Frank Holmes (10/24/16) | American Waterways Operators, Columbia River Steamship Operators Assn., Oregon Public Ports Association, Sause Bros., Western States Petroleum Association | 1,3,6, 8 |
| 16 | Charles Costanzo | American Waterways Operators | 1,3,6 |

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| Implementation |

## **Notification**

The proposed rules would become effective upon filing on approximately DATE mmm, dd, yyyy. DEQ would notify affected parties by:

Describe Notification (PARTIES AND METHOD USED TO PROVIDE NOTICE)

## **Compliance and enforcement**

* Affected parties -Text
* DEQ staff - Text

## **Measuring, sampling, monitoring and reporting**

* Affected parties - Text
* DEQ staff - Text

## **Systems**

* Website - Text
* Database - Text
* Invoicing - Text

**Training**

* Affected parties - Text
* DEQ staff - Text

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| Five-year review ORS 183.405 |

**Requirement**

Oregon law requires DEQ to review newrules within five years after EQC adopts them. The law also exempts some rules from review. DEQ determined whether the rules described in this report are subject to the five-year review. DEQ based its analysis on the law in effect when EQC adopted these rules.

## **Exemption from five-year rule review**

The Administrative Procedures Act exempts all of the proposed rules from the five-year review because the proposed rules would amend or repeal an existing rule. ORS 183.405(4).

DELETE THIS PARAGRAPH IF NO RULES ARE SUBJECT TO FIVE YEAR REVIEW:

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| DELETE THIS SECTION WHEN DOCUMENT IS COMPLETE  Formats used in this document Arial 14 bold, Text RGB 0-73-79, Box RGB 226-221-219 |

Subsection title Ariel 11

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a. Level 3 text

b. Level 3 text

c. Last text

1. Level 2 text

* Level 1 bullet 1
  + Level 2 bullet
  + Level 2 bullet
  + Last bullet
* Level 1 bullet

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1 Footnote Times Roman 12

**WORD PROBLEM**

The extra column on the right corrects a Word error that prevents vertical alignment in last column of a Word table.

Maggie 5/1/2012

2 Footnote Times Roman 12