

High Value of WDFW’s Ballast Water Management Program

The primary purpose of a ballast water management program is to protect our aquatic resources from invasive species by reducing the volume of unmanaged ballast water. Unmanaged ballast water is the volume which has not undergone open sea exchange, treatment, or other management method that prevents the introduction and spread of aquatic invasive species. The proposed shipping vessel fee under consideration in HB 1429 and SB 5303 of the 2017 Washington State legislature is needed to continue this program.

Washington State at High Risk from Ballast Water Impacts and Costs

- The costs of aquatic invasive species carried in ballast water is in the billions of dollars per year nationally with impacts to the environment such as the whole ecosystem change of the Great Lakes, natural resource economies such as recreational boating and hydropower transmission, and potential for impacts to human health from diseases and parasites.
- Washington State has a compelling interest in managing ballast water as federal protections have lagged in both protective and timely regulatory implementation and our state would ultimately bear the brunt of irreversible aquatic invasive species impacts and costs.

Washington State Management Fills Large Federal Gaps in Ballast Water Protection

- Nationally, unmanaged ballast water discharge constituted **43%** or 121.2 million metric tons (Mmt) of the overall discharge of 282.2Mmt in 2015¹. That volume of unmanaged discharge would fill a train stretching almost halfway around the world.
- The 2015 Washington State average of **14%**² is an invasive species risk reduction of over 3 times less than the national average of 43%. (see Figure 1)
- Nationally, the volume of unmanaged ballast water has **continued to increase** since the federal program began mandatory ballast water exchange requirements in 2004³. (see Figure 2)

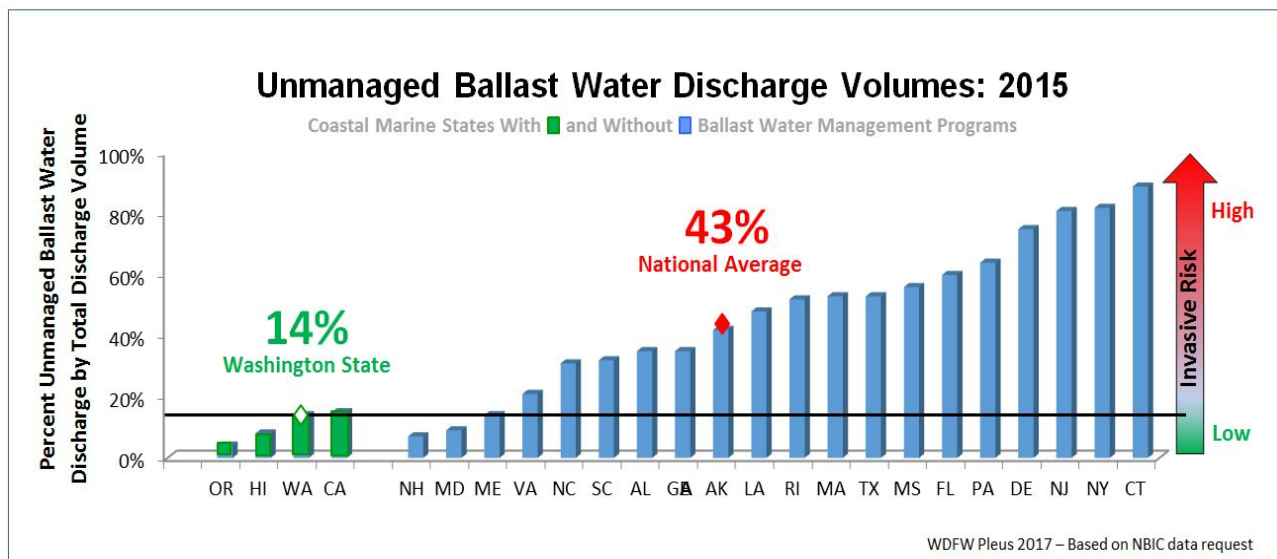


Figure 1. Comparison of percent unmanaged ballast water discharge by total discharge volume in 2015 and by coastal marine states with and without ballast water management programs based on NBIC data. Black horizontal line extends 14% Washington State average for comparison with other state values.

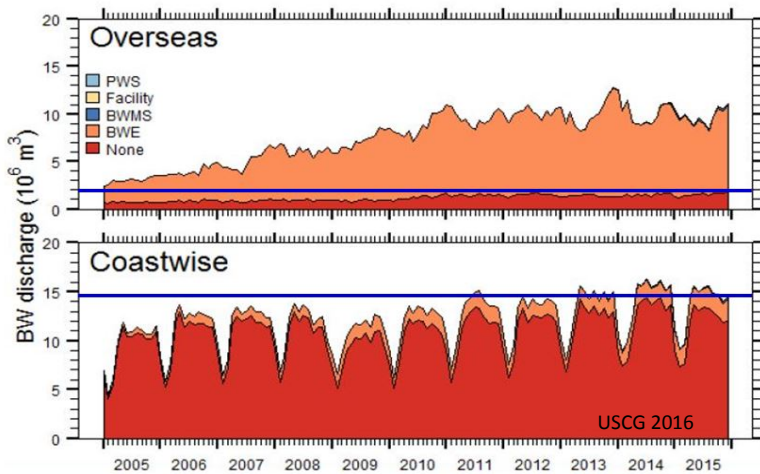


Figure 2. Trend in ballast water discharges nationally from 2005 to 2015 by overseas and coastwise voyages and by managed (PWS = public water supply; Facility = onshore treatment; BWMS = treatment by a ballast water management system; BWE = ballast water exchange) and unmanaged (None) volumes. Blue horizontal line added to facilitate observation of relative increases in unmanaged volumes over time.

Strong Federal/State Ballast Water Partnerships Required to Protect Our Waters

- Ballast water regulation enforcement comprises less than **1%** of their vessel inspection protocols⁴ as compared to state programs which are **100%** focused on ballast water enforcement.
- USCG records show a **low enforcement priority** for ballast water management requirements as compared to Washington State alone⁵. (see Figure 3) State programs fill gap.
- Serious treatment system reliability and effectiveness concerns will require “all hands” to effectively address. According to the USCG, of the 58 “accepted” foreign type-approved treatment systems for use in US waters, **70%** lacked any quality control, **50%** lacked any independent verification, and **80%** lacked any scale-up to ship volume capacities⁶.
- Transition to treatment will be long and complex. Vessels will be required to develop and implement new and comprehensive management plans, which will require significant new USCG resources to assist and enforce compliance⁷. Will require significant state resource help to implement effectively.
- Based on these facts, there is **no known evidence** to support USCG and EPA priority or capacity to effectively implement and enforce any ballast water management method now or in the future without using cost-effective State support or appropriating large new Federal resources.

BWM Enforcement Element	USCG: National (2004-2013 avg/yr)	USCG: Puget Sound Sector (2004-2013 avg/yr)	WA State: Puget Sound Sector (2012-2013 avg/yr)
Inspections	6,800	218	171
# Compliance Violations	97	1	380

Figure 3. Comparison of average annual USCG and Washington State enforcement actions over time by USCG national, USCG Puget Sound Sector, and Washington State Puget Sound Sector inspections. USCG enforcement of ballast water regulations is only addressed during vessel inspections after the vessel has arrived at a port, whereas WA State enforcement is comprehensive of both pre- and post-arrival compliance violations to prevent noncompliant discharges before they occur.

References:

¹Minton et al. 2016. Status and trends of ballast water management in the United States: Eighth biennial report (Part 2) of the National Ballast Information Clearinghouse (January to December 2015). Draft

²National Ballast Information Clearinghouse 2016. NBIC Online Database. Electronic publication, Smithsonian Environmental Research Center & United States Coast Guard. Available from <http://invasions.si.edu/nbic/search.html>; searched 16 December 2016.

³USCG Ballast Water presentation - September 2016: available at <https://homeport.uscg.mil/myca/portal/ep/channelView.do?channelId=-18366&channelPage=%2Fep%2Fchannel%2Fdefault.jsp&pageTypeld=13489>

⁴USCG Port State Control Examiner Job Aid DCN: MPS-JA-TCY-PSCE(1) #34 of 115 job tasks available at https://www.uscg.mil/hq/cacvc/cvc2/psc/job_aid_pqs/JobAid_PSCE.pdf

⁵USCG Sector Puget Sound. 2014. Data provided to WDFW by request.

⁶USCG Ballast Water presentation – February 2016: no longer available online at <https://homeport.uscg.mil/myca/portal/ep/channelView.do?channelId=-18366&channelPage=%2Fep%2Fchannel%2Fdefault.jsp&pageTypeld=13489>

⁷USCG RADM Thomas Jan 17, 2017 Marine Commons post: <http://www.namepa.net/newsletter-articles/ballast-water-uscg>