

January 19, 2026

House Environment & Energy Committee
P.O. Box 40600
Olympia, WA 98504-0600

RE: Support for [HB 1652](#) Reducing environmental impacts associated with the operation of certain ocean-going vessels.

House Environment & Technology Committee,

As scientists dedicated to conducting research and advancing knowledge about Washington State's marine and aquatic environments, we urge you to pass **HB 1652** *Reducing environmental impacts associated with the operation of certain ocean-going vessels*.

Ships calling on ports in Washington State must use fuel with a sulfur content no greater than 0.10% to remain emissions-compliant [1]. However, ships can bypass this regulation and continue to use the less expensive but more polluting heavy fuel oil by using exhaust gas cleaning systems, better known as scrubbers, to "scrub" heavy fuel oil's highly acidic sulfur oxides, heavy metals, and other pollutants out of the exhaust. Nearly 82% of scrubbers dump the polluted scrubber discharge directly into the ocean and inland waterways [2], including the Salish Sea, Puget Sound, Columbia River, and Gray's Harbor, threatening water quality, public health, and marine economies. This bill would require ocean-going ships to use low-sulfur fuels in Washington State, thereby reducing air pollution and eliminating the toxic contaminants from scrubber discharges in the marine environment and inland waterways.

Scientific Basis for Action

- **Ecological Impacts:** The heavy metals and polycyclic aromatic hydrocarbons (PAHs) present in scrubber discharges can be absorbed and ingested by marine life throughout state waters [3]. A scrubber discharge concentration of just 0.0001% can negatively impact reproduction and development in zooplankton [4]—microscopic animals that are critical prey for forage fish and juvenile salmon. These contaminants accumulate within organisms and persist and multiply as they move up the food chain. In addition to pollutants, the highly acidic scrubber discharges exacerbate ocean acidification throughout Washington State's waterways [5]. Without this legislation, endangered orca and salmon will face threats from this growing source of marine contamination.

- **Human Health Impacts:** Ships burning heavy fuel oil with scrubbers release more black carbon than those using low-sulfur fuels, worsening health issues like asthma, cardiovascular disease, and cancer [6]. Further, Washington residents and visitors are at risk for ingesting the heavy metals and PAHs that accumulate in marine animal tissues as they sit down for their next seafood meal.

California has successfully required low-sulfur fuels for over a decade, demonstrating that compliance is both feasible and effective. We, the undersigned scientists, strongly support HB 1652. By passing this bill, Washington can be a leader in applying sound science to policy, protecting the state’s water and air quality.

Sincerely,

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Salish Sea Strategy and Engagement
Manager
Friends of the San Juans

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Executive Director (retired)
U.S. Marine Mammal Commission

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Emeritus Professor
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Peter S. Ross, Ph.D.
Senior Scientist
Raincoast Conservation Foundation

[1] The American Club. (December 30, 2014). "[Circular No. 39/14 – North American ECA and New Fuel Sulfur Content Requirements.](#)" American Club. [2] IMO Uptake of Alternative Fuels [webpage](#), page 9. [3] Defenders of Wildlife. (2017). [Connecting the Dots: Orcas, Salmon and Toxic Chemicals in the Salish Sea.](#) [4] Evaluation, control and Mitigation of the EnviRonmental impacts of shippinG Emissions (EMERGE) (2022). "[Report on scrubber water whole effluent toxicity testing, at different geographical regions.](#)" [5] International Council on Clean Transportation (ICCT). (2022). [Air emissions and water pollution discharges from ships with scrubbers.](#) [6] Clean Air Fund (2025). [Tackling Black Carbon: How to Unlock Fast Climate and Clean Air Benefits.](#) London: Clean Air Fund.