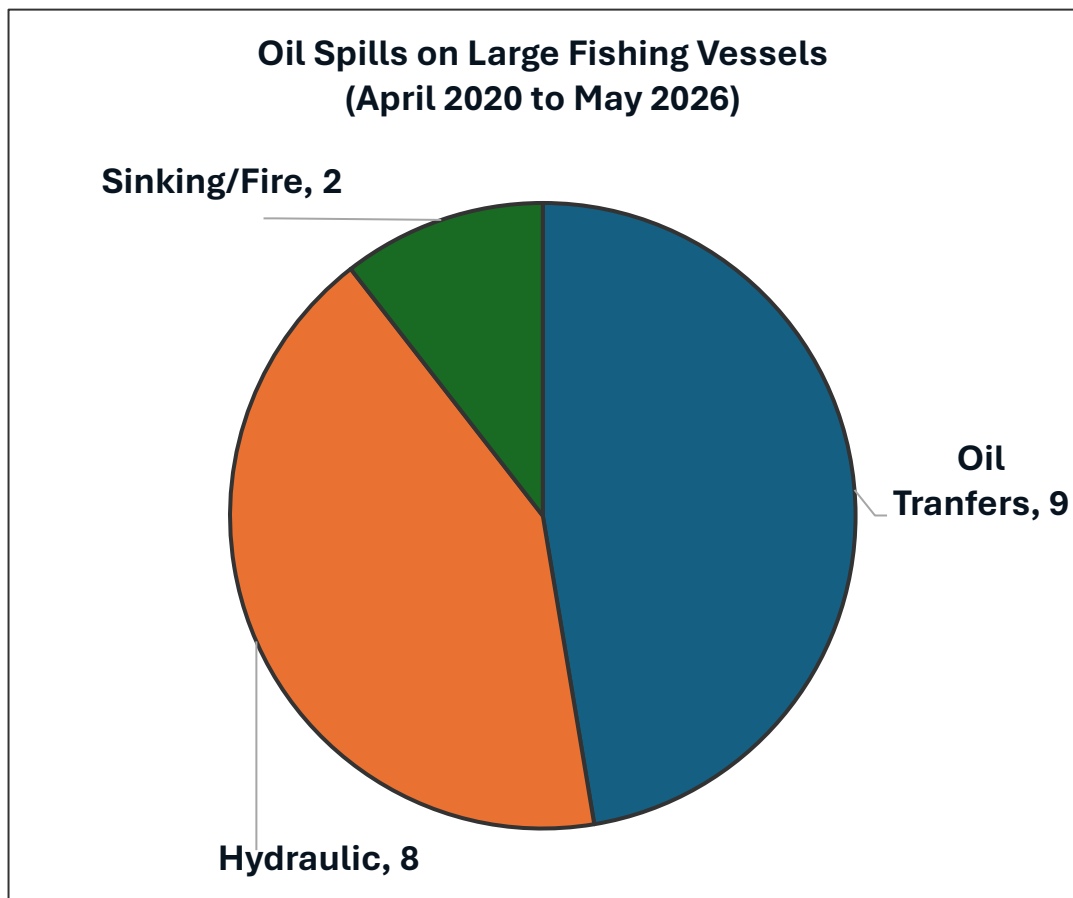


Oil spills from large fishing vessels (over 300 GT) in Washington State from April 2020 to May 2026

The Washington State Department of Ecology investigates oil spills to develop spill prevention recommendations. This focus sheet reviews the causes of the 19 oil spills from large fishing vessels that occurred from April 2020 to May 2026, and provides recommendations on how to prevent similar spills.

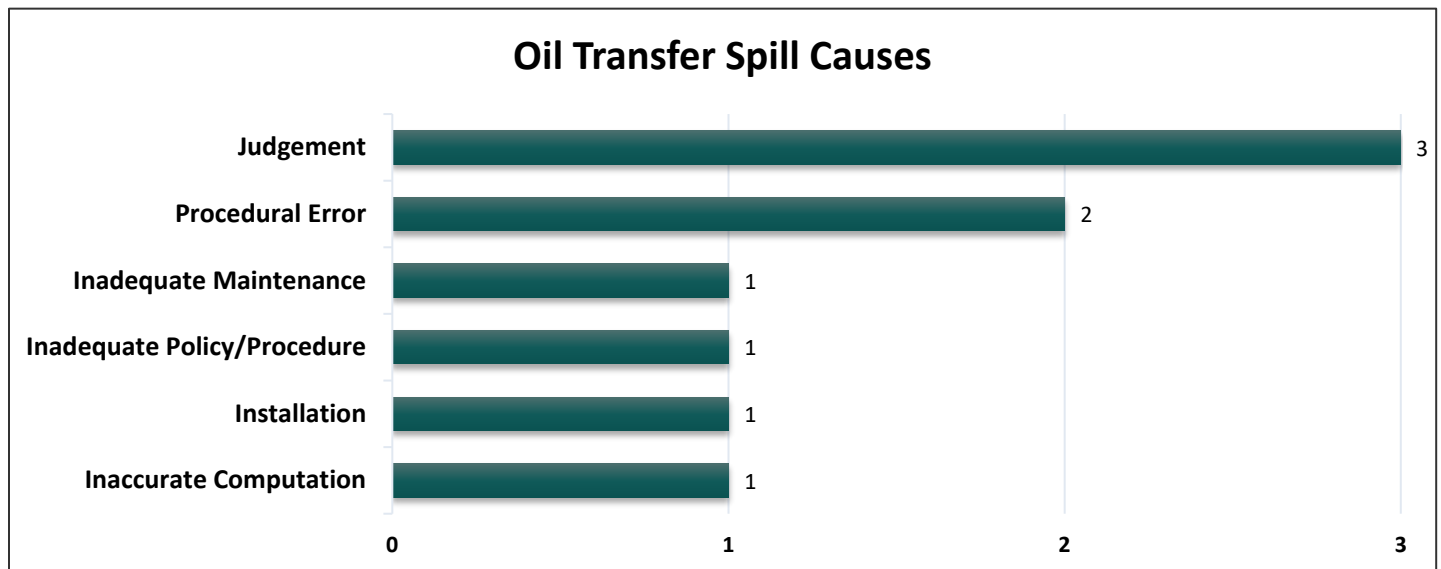
6-year review of spills from large fishing vessels

There were 19 oil spills from large fishing vessels into Washington waters from April 2020 to May 2026. Most of the spills happened in the Seattle area (14), followed by Tacoma (4), and Bellingham (1). Out of these 19 spills, nine occurred during oil transfers, eight stemmed from hydraulic system use, and the remaining two resulted from a vessel fire and a dockside sinking.



Oil transfer spills

Investigations show that poor judgment and skipping procedures caused most oil transfer spills on large fishing vessels. Incorrect calculations, inadequate policies, and poor maintenance also contributed to spills.



Oil transfer spill example

In one local incident, a fishing vessel was receiving fuel from a tanker truck when a crew member spotted fuel spilling from a main deck tank vent. The crew halted the transfer, but roughly three gallons overflowed the containment area, ran down a scupper, and spilled into the water. The investigation showed that the immediate cause of the oil spill was procedural error. The Chief Engineer did not ensure that the valve to the starboard day tank was closed before fueling as required by federal rules, state rules, and the vessel's pre-fueling checklists. As a result, the day tank became completely full of fuel, causing fuel to overflow into the vents fixed containment.



Sorbent pads used to clean up soiled diesel.

Oil transfer spill prevention – General recommendations

- Develop ship-specific internal fuel-transfer procedures and an accompanying checklist.
- Verify the accuracy of the vessel's sounding tables. Sounding tables should include calculations for vessel trim.
- Label the valves in the fuel-oil transfer system so it's easy to correctly identify them. The labels should match the systems line diagram.
- Label each tank vent so everyone knows exactly which tank it serves.
- If a fuel metering system is used, ensure it is calibrated to verify accuracy.
- Share lessons learned from spills with the entire fleet.

Oil transfer spill prevention – Actions prior to each transfer:

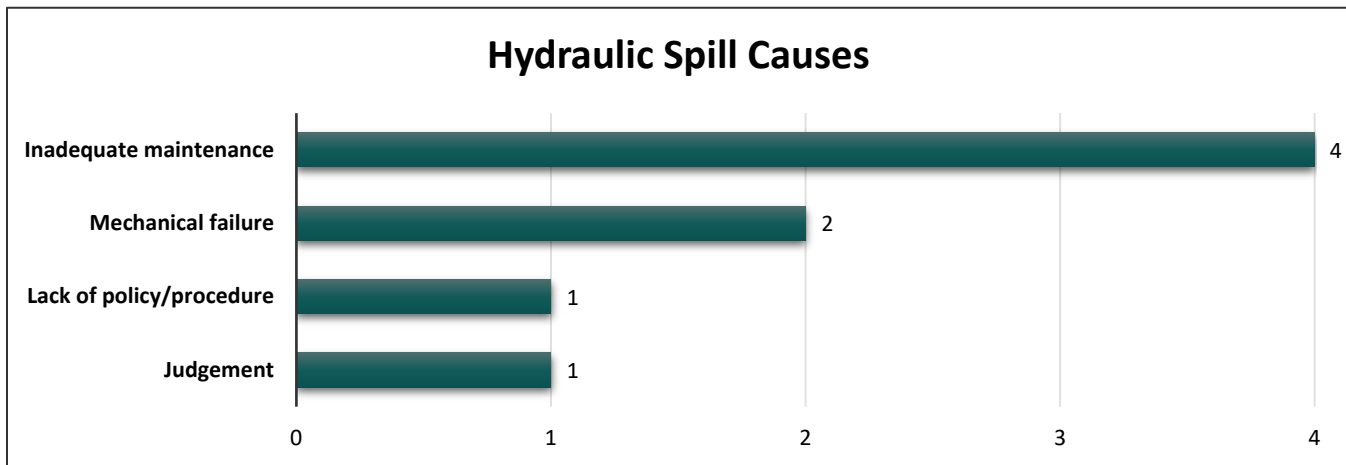
- Complete pre-fueling checklists and the Declaration of Inspection (DOI); do not sign an item on the DOI until it is discussed/verified.
- Ensure the vessel has up-to-date tank soundings.
- Ensure crew is rested prior to the transfer and maintain up-to-date work-hour records.
- Ensure all personnel involved in bunkering operations understand their specific duties. The tank sounder must have the tank stop-sounding information readily available, and a deck rover should monitor the tank vents for any signs of tank overflow.
- Verify the line-up of the transfer system before starting the transfer.
- Verify that the tank high level alarms are working properly.
- Block freeing ports and scuppers to prevent spilled oil from reaching the water.
- At the bunker connection, ensure the flange is clean, a new gasket is installed, and all flange bolts are in good condition and properly tightened.
- Ensure all fuel-oil tank vent containment areas are free of debris.
- Mechanically plug fuel-oil tank vent fixed containment, including the vents for every tank in the fuel oil system. Use vent bags for containment when tank vents do not have fixed containment.
- Inform the bridge when the transfer begins.

Oil transfer spill prevention – Actions during each transfer:

- Continuously sound the tanks receiving fuel and actively monitor all other tanks in the transfer system. Excessive trim or list can affect the accuracy of sounding tables or sight glasses.
- Monitor the transfer rate and compare it to the planned rate. If there is a discrepancy, immediately investigate.

Hydraulic spills

High pressure makes hydraulic systems prone to oil spills from burst hoses and fittings. Investigations reveal that poor maintenance and mechanical failure are the primary cause of these incidents, followed by poor judgment and lack of policy/procedure.



Hydraulic spill example

One local spill took place when a fishing boat was docked for maintenance. A deckhand used a deck crane to unload a pallet. A high-pressure hydraulic hose burst, spraying oil off the ship and into the water. The vessel crew could not verify the hose's age because they relied only on visual inspections rather than a routine replacement schedule. This incident marked the vessel's second crane hose failure and spill within two years.

Hydraulic spill prevention

- Regularly inspect the hydraulic system, paying close attention to any oil leaks. Remove hose protective sleeves during inspections so you can fully view the outer condition of the hose.
- When inspecting hoses, pay close attention to areas with tight hard bends, since these spots can create internal stress and lead to cracking on the outer cover.
- Fix or replace leaking components right away to prevent failures.
- Establish a hose-replacement schedule that follows the manufacturers' recommendations for when hoses should be replaced.
- Wrap exposed hydraulic fittings with anti-corrosion petrolatum tape.



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To request an ADA accommodation, email ecyadacoordinator@ecy.wa.gov, call 360-407-6831, or dial 711 to call through the Washington Telecommunications Relay for services like text telephone (TTY). Visit ecology.wa.gov/ADA for more accessibility information.