



DEPARTMENT OF
ECOLOGY
State of Washington

Activity and Funding Report

Spill Prevention, Preparedness, and Response Program

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**Activity and
Funding Report**

*Spill Prevention, Preparedness, and
Response Program*

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Washington State Department of Ecology

Olympia, Washington

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Executive Summary

Every year, 20 billion gallons of oil move through Washington State via vessel, rail, pipeline, and road (Washington State Department of Commerce, 2019; Washington State Department of Commerce, 2020; Washington State Department of Ecology, 2020l). The safe delivery, storage, and transportation of oil is a priority for Washington.

The state's population is growing rapidly in response to a prosperous economy, which largely depends upon high quality natural resources. The large volumes of oil transported through Washington every day mean the risk of a spill is always present. A large spill would have devastating impacts to many sectors of the economy, the vitality of communities, and sensitive resources and wildlife that are already threatened by a diminished capacity to resist impacts from severe disturbances like oil spills. We must continue to protect Washington's environment, communities, and economy from the disastrous effects of a spill.¹

As the risk for spills in Washington has changed over time, the Department of Ecology's Spill Prevention, Preparedness, and Response Program (Spills Program) has adapted while maintaining alignment with the agency's mission, statutory authority, and responsibility to carefully sustain funding. Today, the program's level of service and high standards for prevention, preparedness, and response are a model for the nation. The low spill rate from the oil handling industry is directly due to the industry's investment, our efforts to work with federal partners, and a commitment from the community to invest together in response. The program's work, as outlined in this report, demonstrate the Legislature's commitment to protect Washington from an oil spill.

This report provides the Legislature with a comprehensive inventory of the Spills Program's activities, funding sources, funding challenges, and recommendations for providing a funding source for the program into the future.

Legislative direction

In 2018, the Washington State Legislature passed the Strengthening Oil Transportation Safety Act (E2SSB 6269, Wa. 2018). Section 104 of the Act directs Ecology to provide an Activity and Funding Report to the Legislature by July 1, 2020. The Act states the following:

The department of ecology shall provide a report to the legislature by July 1, 2020, on the following: (1) A description of activities conducted by the department's oil spill program that are expected to continue after fiscal year 2019, and activities that are not expected to continue after fiscal year 2019; (2) recommendations regarding potential sources of funding for the department's oil spill program; (3) recommendations regarding the allocation of funding from the taxes established in RCW 82.23B.020 among various state

¹ While not discussed in this report, the emergence of COVID-19 at the beginning of 2020 has affected and will have an impact on how oil is moved in Washington State. Towards the mid-to-later months of 2020, Ecology will have a better understanding of this shift in supply and demand.

agencies, including whether funding should be discontinued or reduced for any agency; and (4) a forecast of the department's oil spill program funding needs after fiscal year 2019. (p. 6)

Methods

In preparing this report, Ecology reviewed and incorporated laws (Revised Code of Washington), rules (Washington Administrative Code), and proposed legislation related to funding solution attempts applicable to the program since 1989. Staff members provided firsthand expertise, experience, context, and review of information.

Section 104(3) of Engrossed Second Substitute Senate Bill (E2SSB) 6269 requires information specific to other agencies that receive funding from the Oil Spill Administration Tax (OSAT). We collaborated with each of these agencies through email, in-person meetings, and phone calls. Ecology's fiscal data regarding biennial appropriations, fund balances, revenue history, and funding forecasts are also included.

We reviewed new funding solutions as well as past solutions considered during previous legislative sessions. We analyzed the feasibility of each funding option in terms of implementation costs, pros and cons, and equitability.

The program worked with tribes and stakeholders by providing them with opportunities to discuss and provide feedback on potential report contents during FY 2020.

Program activities

The Legislature directs Ecology's Spills Program to focus on preventing, preparing for, and responding to oil spills from the largest oil handlers on Washington State waters. Oil spills are prevented from occurring through inspections of vessels, facilities, and oil transfers. Our preparedness work is focused on responding to worst-case spills from the major oil handling industry sectors. When a spill does occur, the program responds in a rapid, aggressive, and well-coordinated manner. For more information about the program's activities, refer to Chapter 2.

Agencies supported by the Oil Spill Administration Tax

In addition to the Spills Program, the OSAT revenue supports relevant work in four other agencies. The Washington Department of Fish and Wildlife (WDFW) and the Emergency Management Division (EMD) of Washington's Military Department (WMD) receive direct appropriations from the Oil Spill Prevention Account (OSPA) to which OSAT revenue is deposited. Washington Sea Grant (WSG) is managed by the University of Washington and receives OSPA funding through an interagency agreement with Ecology. The National Guard (Guard) of WMD receives direct revenue from the OSAT and a direct spending appropriation in the OSPA.

The WDFW Oil Spill Team (Spill Team) supports Ecology’s Spills Program by specializing in the protection of fish, wildlife, and habitat from oil spills. Washington Sea Grant’s Small Oil Spill Prevention Education Program focuses on providing information and tools to small vessel operators and facilities, and commercial and recreational boaters and boating facilities, including ports and marinas, to prevent small oil spills from occurring. The EMD assists Local Emergency Planning Committees (LEPCs) in the development and annual review of their local emergency response plans. The Guard developed and maintains their “just in time” (JIT) training program, which provides guidance for volunteer management, hazardous materials training, and bridging the gap between the Emergency Operations Center (EOC) and the Incident Command System (ICS). For more information about each agency’s activities, refer to Chapter 4.

Forecast funding needs after fiscal year 2019

Funding for the Spills Program is largely reliant on tax revenue. The OSAT and the OSRT, two of the main fund sources for the program, have not been adjusted since 1998 (ESHB 2096, Wa. 1997).² Originally, the OSAT and OSRT only applied to vessels importing crude oil and petroleum products. In 2015 and 2018, rail and pipeline became subject to the OSAT and OSRT (ESHB 1449, Wa. 2015; E2SSB 6269, Wa. 2018). This revenue source has not kept pace with inflation, increased operating costs, fund transfers to other agencies, and new legislatively directed work (Expenditure Limit Committee, 2019; Washington State Department of Ecology, 2019h).

At the beginning of the 2019-21 biennium, the 2021-23 biennium ending OSPA fund balance was projected to face a shortfall of \$2,500,000 and a \$7,400,000 shortfall by the end of 2023-25, if no funding solution was provided and current appropriations were maintained (Washington State Department of Ecology, 2019a).³

Conclusions and recommendations

Current funding for the Spills Program has been unsustainable and leaves Washington State vulnerable to a significant spill. Over time, revenue from the OSAT was supplemented by funds from the Oil Spill Response Account (OSRA) and the Model Toxic Control Act (MTCA) accounts. Heavy reliance on the MTCA accounts has provided the majority of funds for the past 10 years. Multiple one-time fund transfers and new requirements on the program from the Legislature have required Ecology to propose multiple funding fixes in legislation. In order to continue to strive towards our legislative mandate of zero spills, the program has been exploring sustainable funding solutions, which are described in Chapter 6 and briefly described below.

² Effective date of tax change July 1, 1997, but not officially enacted by the Department of Revenue (DOR) until 1998.

³ Based on Department of Revenue June 2019 revenue forecast and the 2019-21 enacted operating budget.

2020 Enacted funding solution

During the 2020 legislative session, the Legislature implemented a multi-step solution in the enacted 2020 supplemental operating budget to address current oil spill response costs in the OSRA and to stabilize the OSPA long term (Washington State Department of Ecology, 2019a). This solution included an ongoing fund shift from the OSPA to the MTCA-OP, which should stabilize the OSPA long term, if no new work is required. There were also a series of one-time maneuvers to replenish the OSRA cash balance, including providing one-time contingency funding should a significant oil spill take place in FY 2021, and restoring a portion of the Equipment Cache Grant program utilized to cover costs from the 2019 Olympias Brewery Transformer Spill response. Solution elements are described in Chapter 6.

Future recommendations

As stated above, the 2020 enacted funding solution covers the OSPA base revenue need until the 2027-29 biennium and supports the OSRA fund balance through the 2019-21 biennium. If additional resources are needed to maintain existing work or new legislative priorities evolve before the 2027-29 biennium, alternate funding solutions may be proposed. Additionally, they should also be considered if a significant oil spill occurs before the OSRA fund balance has reached a stable level. These alternative solutions include changes to the OSAT and OSRT to capture inflationary costs and adjustments to export tax credits. Ecology is currently working on agency request legislation for the 2021 legislative session to modify the limit at which the OSRT tax is active. These recommendations are summarized in Chapter 8.

Other agencies supported by the OSAT

The OSAT provides funding to four other agencies. Each agency is seeking additional funding in future bienna or continuation of current funding. Details of each agency's recommendation for future funding is provided in Chapter 4.

Spills Program's path forward

This report outlines a comprehensive inventory of the Spills Program's activities, funding sources, funding challenges, and recommendations for providing a funding source for the program into the future. As the risk for spills in Washington change over time, Ecology and other agencies focused on spill prevention, preparedness, and emergency response work, continue to adapt to ensure we continue to protect the environment, communities, and economy from the disastrous effects of a spill.

During the 2020 legislative session, Ecology's budget request was enacted by the Legislature. Over time, the program may require additional resources as new legislative priorities emerge or a significant spill occurs. During that time, Ecology will evaluate the future recommendations proposed in this report and determine the appropriate funding solution.

Chapter 1: Oil Movement in Washington

Washington is a major oil refining state with about 20 billion gallons of oil transported through each year by vessel, rail, pipeline, and road (Washington State Department of Commerce, 2019; Washington State Department of Commerce, 2020; Washington State Department of Ecology, 2020). To mitigate the risks and consequences of an oil spill, it is important for Ecology to have a strong program with robust prevention requirements, comprehensive contingency planning standards, and a capacity for rapid, aggressive, and well-coordinated responses. We continue to innovate and lead the nation in oil spill prevention, preparedness, and response by addressing the evolving risks associated with transporting oil through Washington.

This means improved public safety, better protection for environmental resources, and reduced risk of impact to the state's economy from an oil spill. In a cost benefit analysis from 2006, Ecology estimated a large oil spill in Washington could cost the state \$10,800,000,000 and 165,000 lost jobs (Etkin, 2004; Washington Office of Financial Management, 2002; Washington State Department of Ecology, 2004).⁴

Washington is a primary West Coast destination for international shipping and trade. With 75 port districts, the state has the largest public port system in the world, handling seven percent of exports and six percent of imports for the nation (Washington Ports, n.d.). Both crude and refined oil products move through Washington via three main modes of transit: vessel, rail, and pipeline. Figure 1 shows the routes of oil transportation modes (vessel, rail, and pipeline) in Washington. Figure 2 shows the amount of oil movement by volume (gallons) each year by the same three modes (see Appendix A for more information).

⁴ In 2019, the California Department of Fish & Wildlife completed the [California Oil Spill Response Study](#), which estimates that the range of costs have increased for an oil spill depending on multiple factors such as type of oil, location, and amount of oil spilled. Washington State recognizes the need to evaluate the cost of sub-surface impacts from spills in the next update of Ecology's cost benefit analysis, which has been placed on hold due to the state's COVID-19 response.



Figure 1: Oil transportation modes (vessel, rail, and pipeline) in Washington

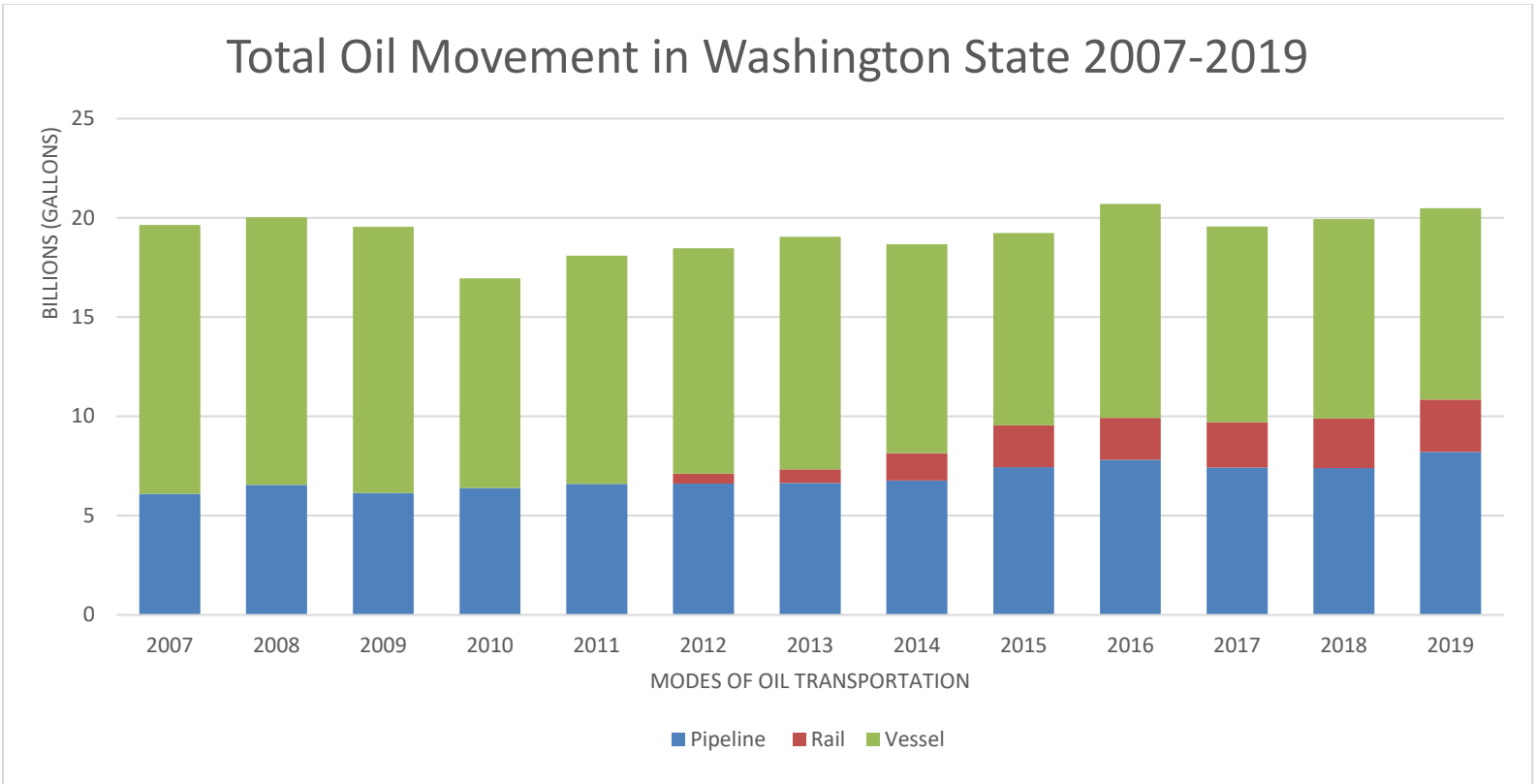


Figure 2: Oil movement by volume (gallons) by vessel, rail, and pipeline in Washington each year (Washington State Department of Commerce, 2020; Washington State Department of Ecology, 2020)⁵

⁵ This includes oil of any kind including crude oil, petroleum, gasoline, fuel oil, diesel oil, oil sludge, oil refuse, biological oils, and blends for cargo only. This does not include fueling transfers.

Oil product type: Crude oil

Washington is the center for crude oil refining in the Pacific Northwest and the fifth largest refinery state in the nation (United States Energy Information Administration, 2018).

Washington’s five crude oil refineries receive crude oil from Alaska, North Dakota, Oregon, Canada, and various foreign ports. These current facilities are:

- Phillips 66, Ferndale – constructed 1954
- Andeavor, Anacortes – constructed 1955
- Shell Puget Sound, Anacortes – constructed 1957
- U.S. Oil & Refining, Tacoma – constructed 1957
- British Petroleum (BP), Cherry Point – constructed 1971

From the 1950s to the early 2000s, vessels delivered over 85 percent of crude oil to refineries, and the Trans Mountain Pipeline (TMP) from Canada delivered about 15 percent. When Alaska North Slope (ANS) crude oil production began to decline, refineries increased deliveries from the TMP. In 2011, the supply percentages shifted to 75 percent by vessel and 25 percent by pipeline (Washington State Department of Ecology, 2019e; Washington State Department of Ecology, 2019m). Rail transport increased significantly after 2011. This demonstrated a shift in transportation mode preferences leading to changes in risk for Washington. Table 1 shows the average volume of crude oil delivered to Washington refineries by vessel, the TMP, and rail between 2007 and 2011, for 2012, and 2019.

Table 1: Volume (gallons) of crude oil transported per year by vessel, the Trans Mountain Pipeline, and rail (Washington State Department of Ecology, 2019m; Washington State Department of Ecology, 2020e; Washington State Department of Ecology, 2020l, Washington State Department of Ecology, 2020n)

Years	Vessel volume (gallons) per year average	Trans Mountain Pipeline volume (gallons) per year average	Rail volume (gallons) per year average
2007 – 2011	6,519,621,000	1,840,226,000	N/A
2012	6,310,948,000	2,075,554,000	N/A
2019	3,588,459,000	3,113,288,000	2,651,927,000

Note: Crude oil by rail started in 2012. Reporting volume data to Ecology began October 1st of 2016.

Oil product type: Refined petroleum products

Gasoline, diesel, and jet fuel represent the majority of refined petroleum products distributed throughout the state by ship, barge, road, and through pipelines (Washington State Department of Commerce, 2013). Ecology estimates about 50 percent of all refined products produced by refineries in the state is used for in-state consumption, while about 50 percent is exported.⁶ These percentages can vary slightly year to year based on the economy and other market factors. The U.S. Energy Information Administration (EIA) reported in 2017 that Washington’s in-state consumption of petroleum products was 6,300,000,000 gallons (United States Energy Information Administration, 2017).

The Renewable Energy Group (REG) Grays Harbor biodiesel refinery was constructed in 2006 and produces 100,000,000 gallons per year of biodiesel fuels (Renewable Energy Group, 2019). REG receives and delivers their petroleum products by vessel or rail.

Oil and refined petroleum products may be transferred over and near water multiple times before reaching a final point of sale. Each transfer is a point of potential risk of a spill. Ecology’s jurisdiction is aligned to these transfer points with scaled levels of regulation to prevent and prepare for potential spills.

Mode of transport: Vessels

Refined petroleum product is also moved by tank vessel and barge within the state and is exported to other states and countries. Barges move the product from the refineries to various locations in Puget Sound, including Point Wells, Harbor Island in Seattle, and Tacoma. From these locations, product can be blended and transferred again over water and supplied to other vessels or transferred into trucks and further distributed over the roads. Barges also move refined product up the Columbia River to a distribution center near Pasco, or from Pasco downstream to Portland or Vancouver if needed.

The United States and Canada share the Strait of Juan de Fuca for vessel transits. Each year, thousands of vessels transit in and out of these shared waterways (see Table 2).

Table 2: Vessel traffic through the Strait of Juan de Fuca in 2019 (Washington State Department of Ecology, 2020m)

Waterway	Cargo and passenger vessels	Tank vessels	Tank barges	Articulated tug barges (ATBs)
Number of transits to Washington and Canada ports via the Strait of Juan de Fuca	4,281	532	N/A	N/A

⁶ Based on Ecology’s Advance Notice of Transfer Data System and Department of Revenue tax collection data.

Waterway	Cargo and passenger vessels	Tank vessels	Tank barges	Articulated tug barges (ATBs)
Number of transits to Washington via the Strait of Georgia, Haro Strait, and Rosario Strait	617	26	N/A	N/A
Number of transits to Washington via the Strait of Juan de Fuca, Strait of Georgia, Haro Strait, and Rosario Strait	N/A	N/A	195 ⁷	296 ⁸

Vessel traffic trend highlights

- The number of individual tank ships transiting the Strait of Juan de Fuca into Washington State from 2007 to 2017 has remained fairly consistent (Washington State Department of Ecology, 2020m). However, due to a decrease in ANS crude oil and an increase in rail and pipeline shipments of crude, the number of entering transits each individual tank ship makes has been decreasing (Washington State Department of Ecology, 2020m). For example, in 2009, a Trans-Alaskan Pipeline System (TAPS) trade tanker company had five vessels moving crude from Alaska to Washington and each of these five tankers made approximately 21 entering transits. In 2018, this same company had four vessels and each vessel made approximately 11 entering transits.
- Similarly, since 2011, the number of individual cargo and passenger vessels entering Washington has remained fairly consistent, while the number of entering transits has decreased (Washington State Department of Ecology, 2020m). This could be due in part to an increase in the size, and thus the carrying capacity, of the vessels.
- During the 2007-2008 economic recession, global trade volumes plummeted (Washington State Department of Ecology, 2019k). Although cargo and passenger vessel traffic to Canada has risen to exceed the numbers prior to the economic recession, the number of cargo and passenger vessel entering transits bound for Washington ports has stayed consistently below the 2008 numbers.
- Tank ship traffic to Canadian ports increased in 2007 when improvements were made to the TMP. Since then, tank ship traffic has remained fairly consistent, with a rather significant jump in 2018 (Washington State Department of Ecology, 2020m).
- The waterways (see Table 2 for waterways specific to articulated tug barges (ATBs)) began seeing ATB traffic starting in 2010. These ATBs support barge traffic and may

⁷ This table shows the number of entering transits into Puget Sound. Most tank barge transits are between Puget Sound locations, which are not included in the table. In 2019, there were 3,749 tank barge transits within Puget Sound (Washington State Department of Ecology, 2020m).

⁸ This table shows the number of entering transits into Puget Sound. Most ATB transits are between Puget Sound locations, which are not included in the table. In 2019, there were 1,027 ATB transits within Puget Sound (Washington State Department of Ecology, 2020m).

have taken the place of some smaller product tank ships in coastal trade (Washington State Department of Ecology, 2019k).

Future vessel traffic trend highlights

In the *Report of Vessel Traffic and Vessel Traffic Safety: Strait of Juan de Fuca and Puget Sound Area*, Ecology forecasts the following vessel traffic trends (Washington State Department of Ecology, 2019k):

- There will be an increase in tank ship traffic in the Salish Sea when the Trans Mountain Pipeline System and Expansion Project (TMESP) is fully completed.
- Currently, tank ship traffic to Washington ports has been slowly declining. However, there is the potential for increase if Washington refineries expand product types, or if new export terminals are constructed.
- Tank barge transits within the Puget Sound and Salish Sea are expected to remain consistent, as they have for the last five years.
- As Canada continues to expand their container port capacity, the number and size of containerships bound for Canadian ports will continue to increase.
- Washington ports have also made improvements to handle the larger containerships now in operation from Asia to the U.S. Although individual containership transit numbers are not expected to increase, Washington port's container throughput is expected to increase.
- Canada has several new bulk-cargo ports and plans for improvements to several more. These developments are expected to increase traffic for general cargo and bulk ships heading to Canada.
- Although Washington ports currently have no plans for additional log or grain terminals, some of the bulk ships servicing Canada are expected to partially load in Washington ports and finish loading at Canadian ports. This may lead to some additional traffic within Puget Sound and the Salish Sea.
- For passenger vessels, the increase in vessel size appears to be consistent with the increase in passengers. There is no anticipation of an increase in the number of large passenger vessels entering for Canadian or Washington ports.

Mode of transport: Pipelines

Pipelines transport the majority of refined products moved in Washington State. In 2019, about 8,201,591,000 gallons of oil (crude and refined product) moved through pipeline (Washington State Department of Commerce, 2020; Washington State Department of Ecology, 2020). This volume represents 40 percent of all oil (crude and refined product) moved as cargo in Washington State. Over 70 percent of oil moved through pipelines is refined product delivered to

in-state distribution terminals or to Oregon through the Olympic Pipeline (OPL). The other 30 percent is crude oil moving to Washington's refineries.

In 2019, the OPL moved 2,881,852,000 gallons of refined products down the I-5 corridor to Washington distribution terminals (Washington State Department of Commerce, 2020). OPL supplies the Seattle-Tacoma International Airport and several terminals where product is then transferred to tanker trucks to distribute locally. OPL is also a supplier for Oregon and the Portland International Airport. Ecology estimates about 1,428,000,000 gallons a year are transported to Oregon by the OPL (Washington State Department of Commerce, 2020; Washington State Department of Ecology, 2019g).

Phillips 66 and Tesoro Logistics Pipelines in eastern Washington import the majority of fuel supplies for the eastside of the state (about 778,451,000 gallons in 2019) (Washington State Department of Commerce, 2020). Joint Base Lewis-McChord and the Grant County International Airport (formerly the Larson Air Force Base near Moses Lake) are supplied fuel by pipeline.

Trans Mountain Pipeline System and Expansion Project

In 2014, the Canada Energy Regulator (formally known as the National Energy Board (NEB)) recommended approval of the Trans Mountain Pipeline Expansion Project (TMEP). Build out of the TMEP is significant to residents of Washington State, as it will increase the number of laden tank ships transiting the Salish Sea from Vancouver, British Columbia, by about one per day (Trans Mountain, n.d.). Vessels transiting through Washington waters without stopping in a U.S. port are not required to comply with Ecology's contingency planning standards. This places Washington waterways at higher risk of a spill, as certain prevention and preparedness measures may not be in place or may not be well coordinated with requirements already in place in Washington.

Ecology played a role in the TMEP review process and was the only regulatory agency from the U.S. to formally provide the Canada Energy Regulator recommendations for establishing the highest comparable spill prevention and response standards equal to or greater than Washington State standards during the environmental review. They approved the pipeline in 2016 with 157 conditions (Trans Mountain, 2016). A Federal Court of Appeal in Canada overturned approval in 2018. The TMEP had a re-evaluation period during which the Canada Energy Regulator re-approved the project in 2019.⁹ Final approval of the TMEP was announced June 18, 2019 and construction began soon after.

Mode of transport: Rail

As vessel deliveries continued to decline, Washington refineries began ordering Bakken crude oil from North Dakota, transported to the refineries by rail. Rail transport increased significantly

⁹ Ecology intervened in [2016](#) and [2018](#). Both provided the Canada Energy Regulator additional evidence to consider before moving forward with the review and approval process.

after 2011, which prompted the 2015 Legislature to pass Engrossed Substitute House Bill (ESHB) 1449. This Oil Transportation Safety Act included Advance Notice of Oil Transfer (ANT) requirements from facilities receiving crude oil by rail and biannual notice requirements from pipelines transporting crude oil through Washington. Ecology can now share information regarding volumes and frequency of crude oil by rail and pipeline with local emergency response agencies to help prepare for and respond to potential spills. From this Act, Ecology also required contingency plans for rail transporting oil in bulk.

In 2019, crude oil to Washington refineries shifted again. Overall, about 37 percent of crude oil (not including refined product) is delivered by vessel, 34 percent by pipeline, and 29 percent by rail (Washington State Department of Commerce, 2020; Washington State Department of Ecology, 2020). The properties and volumes of crude oil transported by rail influenced the passage of Engrossed Substitute Senate Bill (ESSB) 5579 in 2019. This Act expands ANT requirements for crude oil by rail and establishes limits on vapor pressure of crude oil by rail loaded or unloaded by facilities in Washington. Shortly after the passage of ESSB 5579, the State of North Dakota and Montana submitted an application to the Pipeline and Hazardous Materials Safety Administration (PHMSA) to determine whether federal law preempts the provisions of ESSB 5579. PHMSA determined federal preemption of Washington's law in May 2020. Washington State is considering its legal options in light of this decision. As of this report's publication, a decision has not been submitted. During the 2019 legislative session, Engrossed Substitute House Bill (ESHB) 1578 passed, which also expands ANT requirements for crude oil by rail and reporting standards for pipelines transporting crude oil through Washington.

Chapter 2: Program Activities

The Legislature established Ecology’s Spills Program in the early 1990s after several major oil spills in Washington and around the nation. We work with tribes and stakeholders to reduce risks and prevent spills, to adequately plan and prepare for spills, and to mount a rapid, aggressive, and well-coordinated response when they occur. The regulatory framework we operate in requires that we share responsibilities with the federal government. The state has authority to complement the work of its federal partners by addressing the peculiarities of Washington’s waters. This is done with intention — as directed by the Legislature — to ensure maximum benefit to the people of Washington.

Legal authority

The Revised Code of Washington (RCW) directs all program work and mandates consistency with federal law (Wash. Rev. Code § 90.56.070, 1991). Under the RCW, there are six chapters describing Ecology’s authority for spill prevention, preparedness, and response work. Under the Washington Administrative Code (WAC), there are 12 applicable rule chapters explaining how Ecology exercises statutory authority to implement the law.

Table 3 provides an overview of the program’s regulatory authority within each program activity area. Appendix C shows the percentage of work spent by the program’s staff within each sector, including regulated and non-regulated entities.

Table 3: Regulatory authority of the Spills Program

Entity	Prevention Plans	Operation Manuals	Training Programs	Contingency Plans	Inspections	Other
Refineries and oil handling terminals Defined as: Class 1 facilities include any refinery and marine oil handling terminal that transfers oil in bulk from a tank vessel or pipeline.	Yes	Yes	Yes	Yes	Yes	Advance Notice of Oil Transfer Pre-booming/alternative measures Annual oil spill drills
Mobile facilities (trucks) transferring to and from non-recreational vessels Defined as: Class 2 facilities include any mobile facility such as tank trucks and portable tankers.	No	Yes	Yes	Yes	Yes	Oil transfer inspections Advance Notice of Oil Transfer Pre-booming/alternative measures Oil spill drills
Other facilities transferring to non-tank commercial vessels Defined as: Class 3 facilities include any non-recreational marina, boatyard, and marine fueling outlet transferring oil to non-recreational vessels with an oil capacity of 10,500 gallons or more.	No	No	No	No	Yes	Oil transfer inspections Advance Notice of Oil Transfer Pre-booming/alternative measures
Marinas Defined as: Class 4 facilities include any marina, boatyard, and marine fueling outlet transferring oil to non-recreational vessels with an oil capacity of less than 10,500 gallons.	No	No	Yes	No	Yes	Semi-annual transfer summaries Annual inspection

Entity	Prevention Plans	Operation Manuals	Training Programs	Contingency Plans	Inspections	Other
Tank vessels Defined as: Vessels that carry oil in bulk as cargo, such as articulated tug barges, tank barges, and tank ships.	No (federally pre-empted, 2000 SCOTUS decision)	No	No	Yes	No*	*Only for oil transfer and bunkering inspections, and VBAP/ECOPRO audits Advance Notice of Oil Transfer Pre-booming/alternative measures Financial responsibility Vessel emergency reporting Annual oil spill drills
Non-tank vessels \geq 300 gross tons Includes: Cargo ships and passenger vessels with a fuel capacity of at least 6,000 gallons, and fishing vessels.	No	No	No	Yes	Yes	Oil transfer, bunkering, and substantial risk inspections Financial responsibility Vessel emergency reporting Annual oil spill drills
Other vessels < 300 gross tons	No	No	No	No	No*	*Only for oil transfer inspections
Pipeline	No	No	No	Yes	No	UTC has inspection authority Annual oil spill drills Semi-annual crude oil movement summaries
Railroad	No	No	No	Yes	No	Annual oil spill drills Advance Notice of Oil Transfer (applies to facilities receiving the rail cargo, not the railcar/railroad itself)
On-highway tanker trucks	No	No	No	No	No	N/A
Military	No	No	No	Yes	No	Two U.S. Navy facilities in the state Annual oil spill drills
Aircraft/airport	No	No	No	No	No	N/A
Residential	No	No	No	No	No	N/A

Prevent oil spills from vessels and oil handling facilities

We conduct prevention activities to support Washington’s goal of zero spills (Wash. Rev. Code § 90.56.005, 2015). It is more cost-effective to prevent a spill than to conduct response, cleanup, and restoration afterward. Prevention work includes inspections of vessels, facilities, and oil transfers as well as review and approval of operations manuals, prevention plans, pre-booming, safe and effective threshold determination reports, and training and certification programs for oil handling facilities. We manage voluntary programs for tank vessels, conduct risk assessments for vessels and rail operations, and engage with the maritime community.

Inspections of Class 1 facilities: Refinery and marine oil handling terminals



Figure 3: Andeavor oil refinery in Anacortes, a Class 1 facility

There are 23 Class 1 facilities in Washington, including six refineries. Their combined annual throughput is approximately 19 billion gallons of oil (Washington State Department of Commerce, 2020; Washington State Department of Ecology, 2020).¹⁰ These Class 1 facilities are located in the Bellingham area, Anacortes, Seattle, Tacoma, Port Angeles, Grays Harbor, Vancouver, and the Tri-Cities area.

¹⁰ This number is less than the total amount of oil moved through Washington each year, as it does not include fueling transfers.

Ecology verifies compliance with oil handling facility rules through inspections. During inspections, Ecology reviews records and documents, spill prevention equipment and procedures, transfer containment and recovery equipment and procedures, and training and certification programs (Wash. Admin. Code § 173-180-035, 2006; Wash. Rev. Code § 90.56.50, 1991).

Oil transfers can occur at regulated facilities (Class 1, 2 or 3), between vessels at anchor or between vessels at the pier (Wash. Admin. Code § 173-180, 2007; Wash. Admin. Code § 173-184, 2006). Oil transfer operations involve moving oil over water from one type of facility (Class 1, 2, or 3) to another and are a high risk for a spill. The Legislature extends authority to Ecology to monitor and inspect oil transfers to ensure compliance with oil handling regulations (Wash. Rev. Code § 88.46.160, 2004; Wash. Rev. Code § 88.46.165, 2006; Wash. Rev. Code § 88.46.167, 2018).

In 2018, the Legislature provided Ecology additional funding to begin conducting oil transfer inspections at anchorage locations in order to have more focused reviews of oils that may submerge or sink in water (ESSB 6032, Wa. 2018).



Figure 4: View as Ecology inspector approaches a vessel at-anchor to conduct an oil transfer inspection

Inspections of Class 4 facilities: Marinas that fuel non-recreational vessels

The Spills Program inspects Class 4 facilities annually to ensure compliance with regulatory standards (Wash. Admin. Code Chapter 173-180, 2007). These inspections support spill prevention and response through evaluation of the condition and status of oil transfer equipment, response and recovery equipment, training records, and spill notification information. Inspectors discuss issues found during the inspection. They may follow up with letters to facility owners or operators detailing significant inspection findings.

Class 4 facilities are required to report volume and type of oil transferred to non-recreational vessels on a semiannual basis (Wash. Admin. Code Chapter 173-180, 2007). In 2018, Washington's 77 Class 4 facilities reported transferring over 4,000,000 gallons of gasoline and almost 7,000,000 gallons of diesel.

Substantial risk vessel inspections

RCW 88.46.050 authorizes Ecology to screen cargo and passenger vessels to determine potential oil spill risk. Specifically, Ecology determines if a vessel poses a “substantial risk” of harm to public health, safety, or the environment. Based on this screening process, Ecology inspectors will board vessels, as allowed by the vessels on a voluntary basis, to ensure concerns are addressed and Washington State guidance on accepted industry standards are understood and implemented.



Figure 5: Ecology's inspectors on a vessel inspection

Voluntary compliance programs

Tank vessels (which include tank ships, tank barges, and articulated tug barges (ATBs)) can participate in the Voluntary Best Achievable Protection (VBAP) or Exceptional Compliance Program (ECOPRO) programs. These voluntary programs are designed to reduce the probability of an oil spill in state waters by identifying areas where operators can improve the company's environmental safety beyond existing regulations. The ECOPRO standards exceed the VBAP

standards, allowing companies to continue to improve environmental safety standards as is attainable.

Plan review

In addition to inspections, Ecology reviews and approves facility operations manuals, prevention plans, safe and effective threshold determination reports, and training and certification programs.

- An operations manual is a reference guide for appropriate equipment and procedures to transfer oil in a safe, consistent, and preventative way (Wash. Rev. Code § 90.56.230, 1991).
- Prevention plans evaluate the risk of an oil spill and propose specific measures for reducing or eliminating the particular risks. These plans are living documents that are continually updated as new technologies and risks emerge, and incorporate lessons learned from actual spills (Wash. Rev. Code § 90.56.200, 2015; Wash. Rev. Code § 90.56.300, 2003; Wash. Rev. Code § 90.56.310, 2000).
- Safe and effective threshold determination reports establish weather conditions and circumstances when it is not safe and effective to pre-boom a transfer operation.
- Training and certification programs ensure facility employees are fully trained to all aspects of the above documents to include the hazards of oil and oil spills, safe facility operations, and spill response and notification procedures (Wash. Rev. Code § 88.46.040, 2000).

Review of these documents ensures compliance with regulatory requirements and state standards (Wash. Rev. Code § 90.56.220, 1991). Table 4 demonstrates the number of plans reviewed each year.

Table 4: Plans reviewed for preventative measures

Type of Plan	Number Reviewed
Operations Manuals	46
Prevention Plans	23
Safe and Effective Threshold Determination Reports	23
Training and Certification Programs	46

Advance notice of oil transfer and crude oil movement

State law requires Advance Notice of Oil Transfer (ANT) over water and notification of crude oil received by facilities by rail and biannual notice from pipelines transporting crude oil through the state (Wash. Rev. Code § 88.46.160, 2004; Wash. Rev. Code § 88.46.165, 2019; Wash. Rev. Code § 90.56, 1990). Facilities and vessels receiving and transferring oil enter ANT information into a secured database. The USCG also uses the ANT system to view facility and vessel transfers.

Data for crude oil via rail provides Ecology and emergency responders with information to help better prepare for a spill that may occur. Tribal and local emergency responders can access data through a secure means to assist in developing response plans, and have awareness of the volumes, types, and routes of oil moved through their local jurisdiction. The movement of crude oil through pipelines is reported by facilities to Ecology every six months (Wash. Rev. Code § 90.56.565, 2015).

Quarterly reports on aggregated crude oil movement is available to the public. Knowing the movement of crude oil through Washington is important to help identify changes in oil spill risk, which allows emergency responders to better prepare for a potential incident. The passage of Engrossed Substitute House Bill (ESHB) 1578 and Engrossed Substitute Senate Bill (ESSB) 5579 expand reporting standards for both rail and pipeline, to allow for consistent information from each mode.

Risk assessments and maritime engagement

The Spills Program conducts vessel and rail traffic risk assessments, as directed and funded by the Legislature, to provide the Governor, the Legislature, tribes, stakeholders, and the public with timely and relevant information about current and potential future oil spill risks. The assessments also recommend measures that could reduce risks (E2SSB 6269, Wa. 2018). In addition, the program also produces the annual [*Vessel Entries and Transits for Washington Waters*](#) (VEAT) report, which provides the public with detailed information about commercial vessel traffic in Washington waters. The first VEAT report was published in 1994, and its 27th edition was published in 2020 (Washington State Department of Ecology, n.d.-e).

Small spill prevention

While the program oversees the cleanup of all sizes of spills in Washington regardless of spill volume and source, under state law, prevention and preparedness work is required to focus on regulating entities handling and transporting larger quantities of oil. Through preventative measures, the program aims to reduce spills from large oil handling operations. However, the majority of spills to water in Washington State are less than 25 gallons. Between 2008 and 2018, 76 percent of reported non-oil spills and 92.4 percent of reported oil spills were less than 25 gallons (see Table 5).

Table 5: Number of spills to water between 2008 and 2018

Type of Spill	0-25 gallons	25-100 gallons	100-1000 gallons	1000+ gallons	Total
Non-oil	1,818	147	174	254	2,393
Percentage of non-oil	76%	6%	7%	11%	100%
Oil	6,827	384	151	26	7,388
Percentage of oil	92.4%	5.2%	2%	0.4%	100%
Total	8,645	531	325	280	9,781
Percentage total	88.4%	5.4%	3.3%	2.9%	100%

The majority of incidents usually result from smaller sources of oil such as recreational vessels, small fishing vessels, residences, and roadway vehicles. Table 6 shows the total number of oil and non-oil incidents by each sector during 2019 (see Appendix C for a definition of each sector). These spills are outside of the scope of authority directed by the Legislature, except for response work. Ecology is required to respond to *all* types of spills. However, Washington Sea Grant’s Small Oil Spill Prevention Education Program focuses on preventing smaller spills from commercial and recreational boaters and boating facilities. This includes ports and marinas (see Chapter 4 for more information). WSG’s program fills an aspect of prevention work that Ecology does not have authority to regulate. We regulate entities that have the potential to spill the largest amounts of oil.

Table 6: Total oil and non-oil incidents by sector for 2019 (Washington State Department of Ecology, 2020j)

Sectors	Total number of oil and non-oil incidents
Other vessel	484
Road / vehicle	276
Facility (other)	241
Residential	32
Non-tank vessel	12
Military	8
Oil terminal	7
Tank ship	6
Railroad	3
Refinery	2
Pipeline	2
Tanker trucks	2

Sectors	Total number of oil and non-oil incidents
Aircraft / airport	2
Tank barge	1

Prepare for aggressive response to oil and hazardous material incidents

The program focuses on preparing for responses to worst-case oil spills from the major oil handling industry sectors. By preparing for worst-case oil spills, the state is also prepared for spills of all sizes.

Oil spill contingency plans

When a spill occurs, oil begins to spread immediately. The speed with which responders can reach a spill, along with other factors (tide, current, oil type, and weather), affect the results of the response. Washington’s contingency plan requirements are developed to strategically locate pre-staged equipment and personnel for fast response times. The program is directed to review oil spill contingency plans developed by industry and approve these plans for five-year intervals. Contingency plans are required for tank vessels and large commercial non-tank vessels 300 gross tons or more, such as cargo ships, passenger vessels, and larger fishing vessels (Wash. Rev. Code § 88.46.060, 2018). Contingency plans are also required from facilities, which includes refineries, oil terminals, pipelines, railroads, and mobile facilities (trucks) that transfer oil to or from a regulated vessel (Wash. Rev. Code § 90.56.210, 2018; Wash. Rev. Code § 90.56.270, 1991). Table 7 demonstrates the total number of contingency plans reviewed and approved by the Spills Program within each entity. For example, each entity, such as a facility, will only have one contingency plan.

Table 7: Number of contingency plans reviewed and approved by the Spills Program within each entity

Entity	Number
Vessel	5
Facility	16
Pipeline	4
Rail	7
Mobile facility (fuel trucks)	24
Nonprofit “umbrella” plans	2
Facility, tank barge, pipeline integrated plan	1
Facility and pipeline integrated plan	2

Contingency plans contain details on spill risks, safety, notification procedures, personnel, resources at risk from spills, and cleanup methods for on water as well as submerged oil. RCW 90.56.250 requires the program to maintain an up-to-date list of all contingency plans and equipment needed and available to respond to spills. Ecology meets this requirement through our website and the Worldwide Response Resource List (WRRL), which is an inventory of response equipment voluntarily provided and maintained by industry and others.

Oil spill drills

The Spills Program is required to implement an oil spill drill program to verify efficacy and improve contingency plans (Wash. Rev. Code § 88.46.068, 2006; Wash. Rev. Code § 90.56, 1990). The drill program incorporates components from the National Preparedness guidelines, including testing early notification, spill management teams, familiarity with the Incident Command System, equipment deployment, and assessing and mitigating response for protection of sensitive resources.

Plan holders conduct no fewer than three drills annually. We assist the plan holder with drill design, participate in drills, and provide a written evaluation documenting the lessons learned and potential areas for improvement. A drill exercise provides the opportunity to work through a hypothetical oil spill utilizing the company contingency plan, the Northwest Area Contingency Plan (NWACP), and geographic response plans (GRPs).

Drill exercises strive to incorporate tribes, agencies, and stakeholders potentially affected by the oil spill or that provide local expertise to aid in response efforts. This includes local emergency response managers who provide firsthand knowledge regarding multiple aspects of the impacted community. Figure 6 provides an example of collaboration with partners for oil spill drill exercises.



Figure 6: Tacoma Fire Department participates in fire and oil spill drill exercise at SeaPort Sound Refinery

We have the authority to conduct unannounced drills, providing assessment and feedback for response time, available equipment, and personnel (Wash. Rev. Code § 88.46, 1991; Wash. Rev. Code § 90.56.260, 1990).

Drill exercises are a major component of continuous improvement in the cycle of preparedness planning and have evolved over the years to address lessons learned. Recently, new requirements were adopted for a large-scale equipment deployment drill. Once every three years, Ecology holds a large-scale drill involving multiple contingency plan holders and all primary response contractors. This allows us to verify the state’s overall ability to respond should simultaneous spills occur. As of 2018, drills must also include scenarios with oil that may submerge or sink (Wash. Rev. Code § 88.46.220, 2018). See Figure 7 for locations in which deployment and tabletop drill exercises occurred in 2018.

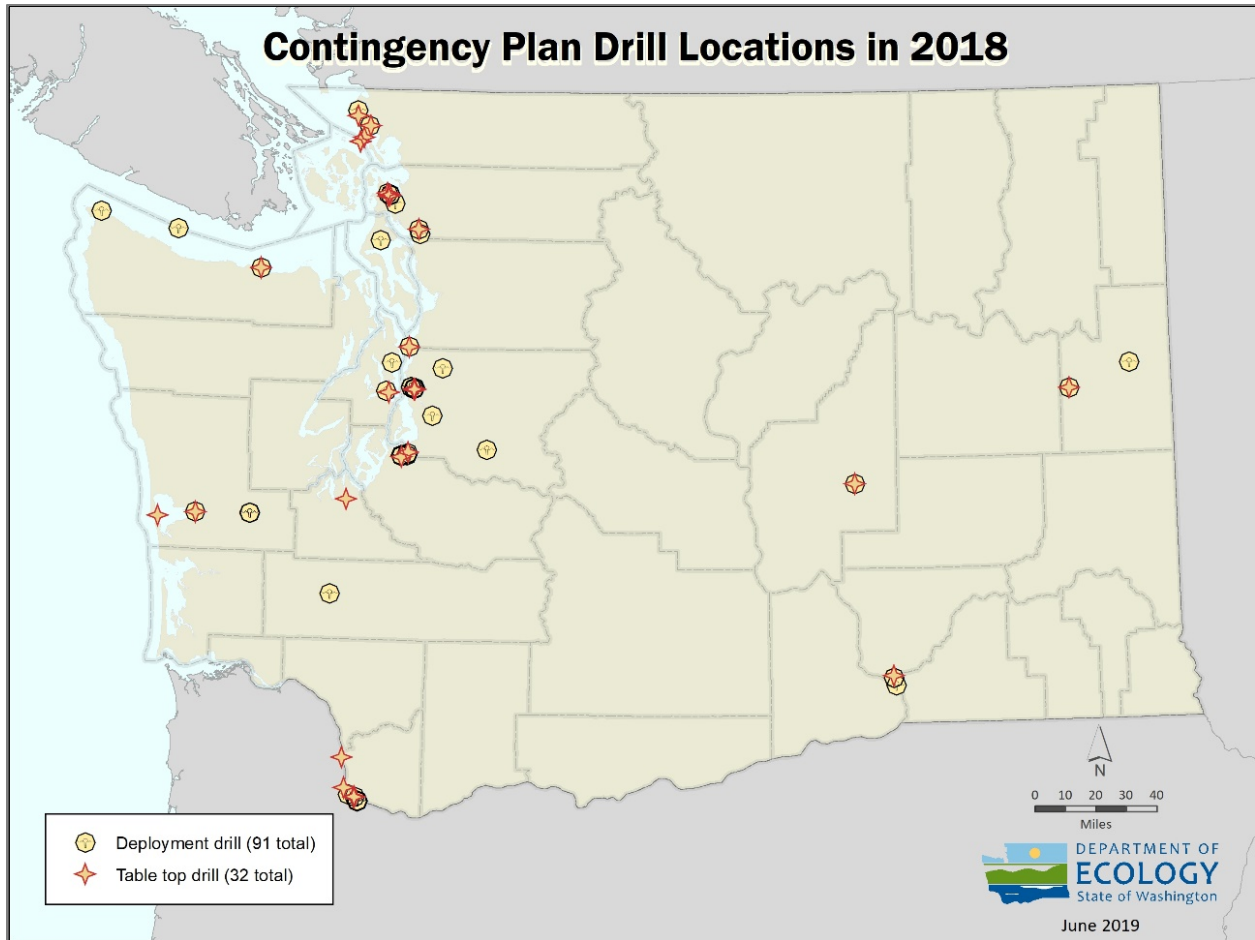


Figure 7: Contingency plan drill locations for both deployment and tabletop exercises that occurred in 2018 (Washington State Department of Ecology, 2019d)

Area and regional plans

Ecology participates in the Northwest Area Contingency Plan (NWACP) as mandated by the National Contingency Plan (NCP) and RCW 90.56.060. The NWACP is a contingency plan for the entire Pacific Northwest, which includes Washington, Oregon, and Idaho. It is signed by the states as well as the USCG and the Environmental Protection Agency (EPA). One comprehensive plan allows for collaboration across tribal, local, state, federal, and other organizations.

Geographic response plans

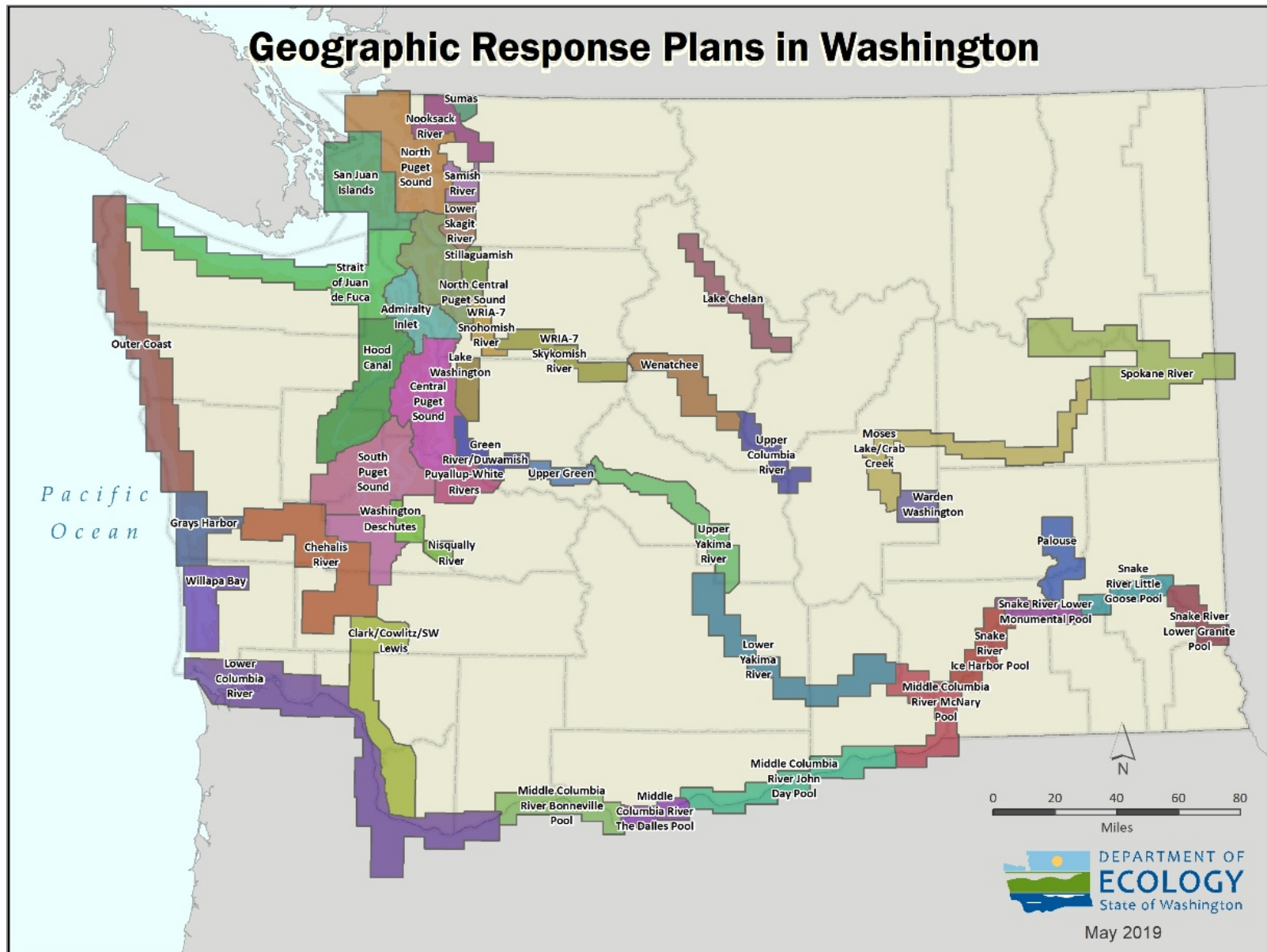
Sensitive environmental, cultural, and economic resources are at risk from a spill. Oil spill plans are required to contain information regarding shellfish resources, fisheries, and natural resources that could be impacted by a spill. Geographic response plans (GRPs) are written to meet this requirement. GRPs pre-determine areas of risk from spills and prioritize shore-based response tactics to minimize inevitable damages. These strategies are developed in collaboration with natural resource experts, trained response personnel, industry, and community members. Tribal,

federal, state, and local partners, ports, and environmental organizations also participate in the development and maintenance of them.



Figure 8: Ecology employee conducting GRP fieldwork on Blair Waterway in Tacoma

The NWACP includes all GRPs (see Figure 9 for areas in Washington that have a GRP). Between 2015 and 2017, the program expanded the number of GRPs by adding 17 and updating 23 existing ones to focus on rail and pipeline oil shipments (Washington State Department of Ecology, 2019f).



Southern Resident Killer Whale protections

On March 14, 2018, Governor Jay Inslee signed Executive Order 18-02 directing state agencies to take several immediate actions to benefit Southern Resident Killer Whales (SRKW). Ecology was directed to create a curriculum proposal to improve and increase the number of trainings for people with vessels in the whale watching industry to volunteer and assist in the event of an oil spill. The curriculum will increase capacity to deter whales away from an oil spill and avoid exposure. Ecology worked with the Washington Department of Fish and Wildlife (WDFW) Spill Team to the [Curriculum Plan for a Killer Whale Deterrence Program](#).

Primary response contractors and equipment maintenance

Primary response contractors (PRCs) are companies or cooperatives with equipment and trained personnel to respond to oil spills. A PRC must be able to provide response equipment and personnel 24 hours a day, seven days a week, and be on scene within an hour of the spill notification. PRCs assist contingency plan holders, continually update and maintain equipment, and participate in drill programs. PRC applications are submitted and approved by Ecology to be cited in contingency plans.

All response equipment is inspected and maintenance procedures are reviewed by Ecology under Chapter 173-182 WAC. Currently, there are 11 PRCs approved in Washington State (Washington State Department of Ecology, n.d.-c). Beginning in 2020, Ecology will expand this application and approval process to spill management teams and wildlife response providers. Figure 10 shows spill location and size between July of 2015 and June of 2019. These locations are overlaid with response equipment locations from the WRRL.

The investments in equipment made through the years is driven by review of best achievable protection (BAP) by identifying through lesson learned from spills, drills, studies, inquiries, surveys, or analyses appropriate for the consideration of new technologies.

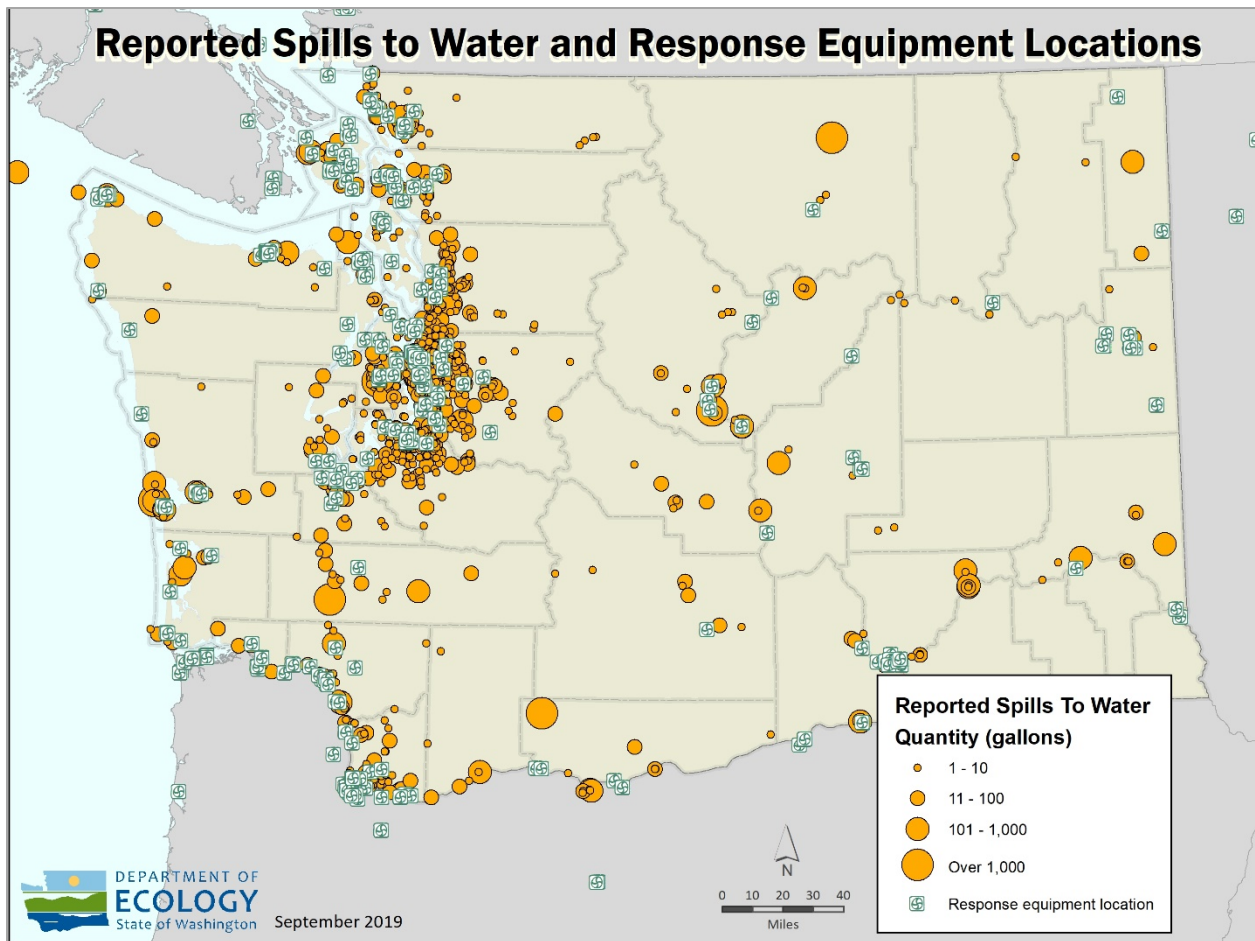


Figure 10: Map of oil spills July 2015 to June 2019 and locations of response equipment from the Worldwide Response Resource List

Volunteer coordination system and vessels of opportunity

Volunteers are a crucial part of preparedness, helping communities recover from disasters or damages. The program developed a volunteer coordination system to register volunteers (Wash. Rev. Code § 88.46.210, 2011). Working with WDFW, USCG and Focus Wildlife, we provide annual oil safety and awareness training to wildlife volunteers in the region. To date, we have 1,500 volunteers registered in the system.

Additionally, RCW 88.46.190 required Ecology to establish a regulation to help improve the effectiveness of the volunteer vessels of opportunity (VOO) system. While this system includes vessel operators who volunteer to be available to support an oil spill response, regulation by Ecology is required for the oversight and management of the VOO system. This program intends to pre-identify, and in some cases pre-equip, and train vessel operators who volunteer to respond. Employing VOO and boat crews to assist in emergency response can help communities recover during a period of disruption. Using the local knowledge that vessel operators possess greatly helps with a response.



Figure 11: Vessels of Opportunity and National Response Corporation (NRC) contractor training with Taylor Shellfish in 2019

Financial responsibility

Chapter 88.40 RCW established that companies must demonstrate their ability to pay for the costs and damages of a spill, up to a specified monetary level. All vessels transporting and facilities handling oil and hazardous substances into Washington must demonstrate financial responsibility. In Washington, financial responsibility is based on the type of vessel or facility and the total capacity for storage of product. To date, Ecology has not established a regulatory level of financial responsibility for oil handling facilities nor a Certificate of Financial Responsibility Program (CFRP) to verify financial responsibility for vessel companies and oil handling facilities.

Under RCW 88.40.020, vessel companies can demonstrate financial responsibility through Protection and Indemnity Club membership documents. However, rulemaking would be required to fully implement the law with regard to oil handling facilities. Currently, the program does not have the ability to verify financial responsibility. Additional resources would be required to complete rulemaking for facility financial responsibility and implement a program for verification. See Chapter 7 for more information.

Incident Management Team and the Crisis Management Team

Management of significant spills require multiple expertise and resources. Most significant spill incidents are managed by a collaborative group of response partners including tribal, local, state, and federal governments along with the responsible party. Ecology trains program staff to manage significant spills focusing on key positions on the Incident Management Team (IMT) that support the response. The IMT ensures state resources, policies, and interests are protected during spills. These teams have participated in numerous field responses and many annual drills to maintain a level of readiness and qualification. In addition, the program maintains an internal Crisis Management Team (CMT) that helps support the response in the field including managing

internal communication to Ecology’s management team and other key tribes and stakeholders, resource management, and reviews broad policy ramifications that may result from a spill. Ecology is poised to support but not fully sustain a significant oil spill response, assuming that other agencies will also provide support.

Rapidly respond to and clean up oil and hazardous material spills

We respond to oil and hazardous substance spills in a rapid, aggressive, and well-coordinated manner 24 hours a day, seven days a week. Throughout Washington, there are six regional/field offices providing response to spills in Bellevue, Bellingham, Olympia, Spokane, Union Gap, and Vancouver. It is Ecology’s responsibility to safeguard the public and emergency responders, to conduct cleanup and oversight of cleanup activities, to coordinate rescue and rehabilitation of wildlife, and to inform the public, tribes, and stakeholders about response activities (Wash. Rev. Code § 90.56.020, 1991).

Oil and hazardous substance spills include:

- Oil as defined by RCW 90.56.010:
 - “Oil of any kind that is liquid at twenty-five degrees Celsius and one atmosphere of pressure and any fractionation thereof, including, but not limited to, crude oil, bitumen, synthetic crude oil, natural gas well condensate, petroleum, gasoline, fuel oil, diesel oil, biological oils and blends, oil sludge, oil refuse, and oil mixed with wastes other than dredged spoil.”
- Hazardous substances are defined as any of the following:
 - Pollution or polluting matter as defined by RCW 90.48.020.
 - Hazardous substance as defined by 40 CFR 302.4.
 - Hazardous material as defined by 49 CFR 172.101 and 49 CFR 173.
 - Hazardous substance as defined by Chapter 70.105D RCW and WAC 173-340-200.
 - Dangerous waste, extremely hazardous waste, hazardous household substance, hazardous substance, hazardous waste, acute hazardous waste, special waste, state-only dangerous waste, and moderate-risk waste as defined by RCW 70.105D.010 and Chapter 173-303 WAC.
 - Extremely hazardous substance as defined by EPCRA, 42 U.S.C. Chapter 116.
 - Radionuclides.

Spill notifications

Ecology receives about 4,000 incident reports annually (see Figure 12 for the percentage of spill materials reported) (Washington State Department of Ecology, 2020b). While not all reported incidents warrant a field response in which responders are deployed to the scene, all responses are addressed either as technical assistance or referrals to other Ecology programs. For field response consideration, we have developed screening criteria for prioritizing which spills receive a field response. These criteria include:

- Ecology response requested by tribal, local, state, or federal.
- Significant public health and/or environmental impacts, regardless of the spill quantity.
- Potential for significant public health and/or environmental impacts, regardless of the spill quantity.
- Spills which are not stabilized or controlled.
- Ecology will be directing, managing, or overseeing significant cleanup actions or activities.
- 25 gallons or more of oil spilled to water, or the significant potential of 25 gallons or more impact to water.
- Oil or hazardous substances spill occurring at an Ecology regulated oil handling facility, from covered or commercial vessel, or from rail.
- The spill is newsworthy, potentially newsworthy, or important to tribes and stakeholders.

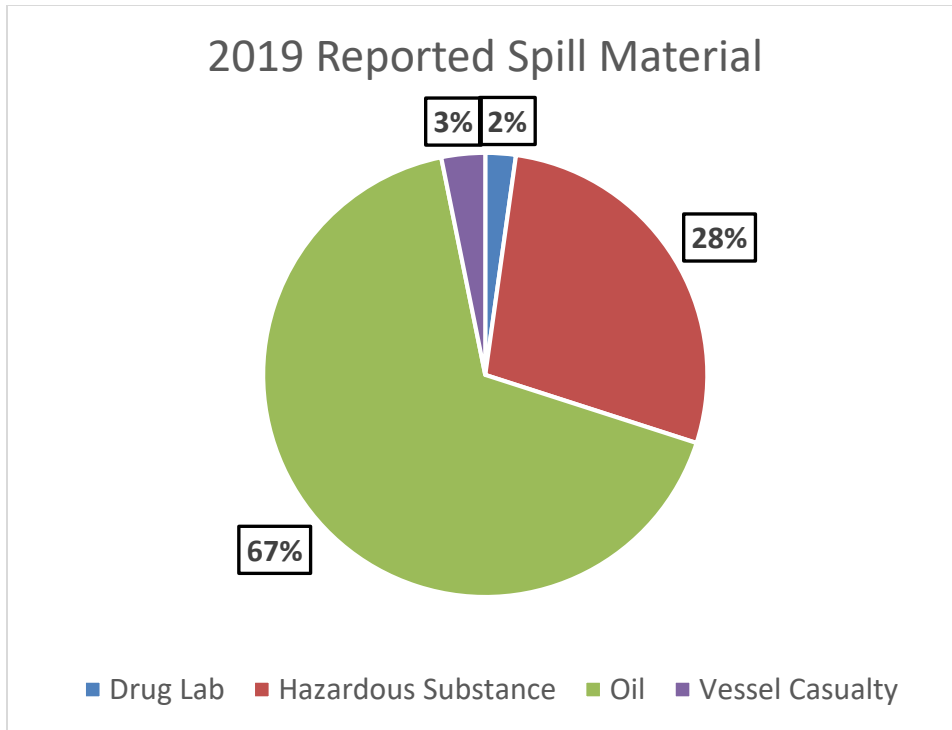


Figure 12: 2019 Reported spill material by number of incident types

Hazardous substances

Ecology has responsibility under RCW 69.50.511 to identify, clean up, and dispose of suspected hazardous substances at illegal drug manufacturing facilities. Typically, this work is performed with program response staff at the request of law enforcement response partners. Ecology has responded to thousands of illegal methamphetamine laboratories, marijuana grow operations, butane hash oil extraction facilities, MDMA (3,4-methylenedioxymethamphetamine) labs, fentanyl production facilities, DMT (dimethyltryptamine) labs, and psychedelic mushroom production facilities. Ecology also responds to a wide range of incidents including, but not limited to, chemical releases, motor vehicle accidents, grounded vessels, and train derailments.

Equipment grants and trainings

In 2007, Ecology received one-time funding for oil spill response equipment and training grants. \$1,450,000 in equipment was provided to 99 locations throughout the state and training was provided to over 1,000 first responders. This equipment has been used successfully over 100 times across Washington to contain oil spills, minimize environmental damage, and reduce cleanup costs. In 2015, the Oil Transportation Safety Act (Engrossed Substitute House Bill 1449) directed the program to permanently develop and implement a hazardous substances, and firefighting equipment and training grant program. In 2016, the program awarded \$777,000 in grants for oil and hazardous substances equipment.

By providing grant opportunities, Ecology is building capacity for local communities that are not fully equipped or trained to respond to a spill. Currently, there is response equipment staged

where oil is moved and near entities regulated by Ecology. The purpose of the equipment grant locations is to fill the gaps in between.

A workgroup comprised of emergency first responders, oil spill response organizations, the oil and rail industries, and all businesses that receive liquid bulk crude oil, collaborate to review grant proposals and prioritize funding for applicants with the greatest need, and where the most benefits will be realized. The workgroup considers the timeframe of the project completion, financial need, risk level of impact from a spill, how well the equipment can be maintained by the applicant over the years, coordination with other response agencies, and how the equipment will mitigate risk of harm to the community and environment (Washington State Department of Ecology, 2018a).

Equipment grants and training programs are available to federally recognized tribal governments, local governments, counties, cities, municipalities, ports, public utility districts, special purpose districts, and state agencies. To be prepared to respond to a spill and properly use the equipment at any time, all response personnel and relevant parties must have continual response and safety training (Wash. Admin. Code Chapter 296-824, 2017).

During the 2017-19 biennium, Ecology provided \$3,100,000 in grant funding to 33 different entities including the city of Mukilteo, San Juan County Emergency Management, Stevenson Public Works, West Pierce Fire and Rescue, and the Swinomish Tribe (Washington State Department of Ecology, n.d.-a). Funding provided radios, response boats, safety and air monitoring equipment, and firefighting foam and absorbent materials.

Restore public natural resources damaged by oil spills (Natural Resource Damage Assessment)

The Spills Program also assesses the damage caused by an oil spill to determine the best course of action for restoration. Initial methodology for Natural Resource Damage Assessments (NRDA) was established in 1989 by Substitute House Bills (SHB) 1853 and 1854. A year later, the NRDA program for Washington was established. Updates to the NRDA rule in 2012 clearly defined the Resource Damage Assessment (RDA) committee (which determines impact of the spill and appropriate restoration projects), screening process, compensation determination, and terminology.

A NRDA is conducted for spills of oil when 25 gallons or more reaches waters of the state. This work is conducted concurrently with cleanup and response activities (Wash. Admin. Code § 173-183-220, 1992). The responsible party for the spill is liable for any damages the spill has caused (Wash. Rev. Code § 90.48.142, 1991; Wash. Rev. Code § 90.56.370, 2011). The responsible party pays for the restoration project by paying directly for a specific project or through payments to the Coastal Protection Account (CPA).

The RDA Committee is an interagency group that is responsible for determining fair compensation for damages to Washington's resources (Wash. Rev. Code § 90.48.366, 2011);

Wash. Rev. Code § 90.48.367, 1991). The RDA Committee is composed of six state trustee agencies. A member of the program's staff is the chair of the committee.

During a spill, Ecology is responsible for notifying natural resource trustees, collecting information about the spill to identify the responsible party, and determining the potential impact to state publicly owned resources (Wash. Rev. Code § 90.48.368, 2007). The Committee Chair brings this information to the RDA Committee for damage assessment consideration (Wash. Rev. Code § 90.56.370, 2011). To help assess resource damages caused by a spill, the RDA Committee seeks input from federal trustee agencies as well as tribal governments on a case-by-case basis (Wash. Admin. Code § 173-183-230, 2013).

Restoration projects

During a spill, land, water, and sediment may be contaminated. This contamination can affect wildlife, habitat, recreational areas, cultural and historical resources, and livelihoods. The responsible party is required to compensate the citizens of Washington for natural resource damages to public lands. The ultimate goal of NRDA is to restore injured resources to their pre-spill condition. This can be accomplished through funding, planning, and implementing a restoration project, or by paying a monetary claim based on the calculated damages, which is then deposited into the CPA (see section titled "Coastal Protection Account" for projects funded through this account) (Wash. Rev. Code § 90.48.368, 2007). If a spill affects private property, third parties have the authority to sue to recover damages to privately owned resources or loss of personal livelihood (Wash. Rev. Code § 90.56.370, 2011).

The type of project implemented depends on the type of spill that occurred. Work can include planting native trees, restoring riparian areas, constructing storm water infiltration systems, invasive species removal, and salmon enhancement projects.

The first project was approved in 1996 with 52 currently underway or completed, totaling over 600 acres of habitat restored (Figure 13) (Washington State Department of Ecology, n.d.-b; Washington State Department of Ecology, 2019).

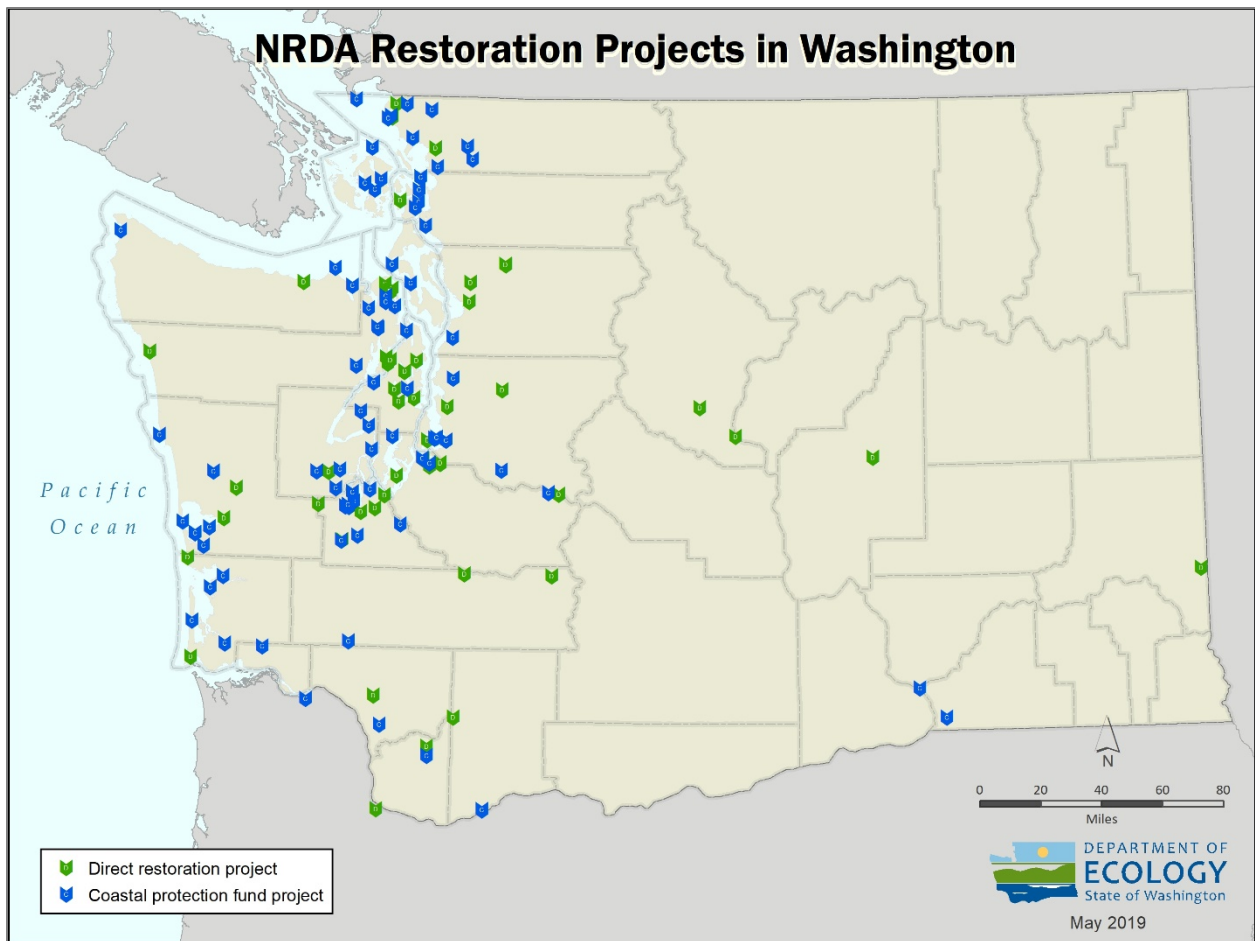


Figure 13: Restoration projects in Washington

Some projects are ongoing, but need additional funding to be successful. For example, the RDA Committee recently approved a project proposal to fund \$200,000 of the \$500,000 purchase of 11.5 acres in the California Creek Estuary (Bowers & Epperson, 2017). The Whatcom Land Trust, the project partner, will place a conservation easement on the property and transfer ownership to the local parks district, protecting the estuary from residential and commercial development in perpetuity.

Coastal Protection Account

Any natural resource damages collected by Ecology through the compensation schedule are deposited into the CPA. Instead of directly funding a restoration project, the responsible party makes a deposit into the CPA, which provides funding for projects related to improving environmental, recreational, archaeological, and aesthetic resources (see Chapter 5 for more information). The CPA grant process is managed by Ecology’s Spills and Shorelands programs.¹¹ The Steering Committee for the CPA, which includes the same members as the RDA Committee, determines how the funds are used. There are about 80 restoration projects

¹¹ The Shorelands & Environmental Assistance Program is not discussed in this report.

completed or currently underway that are funded by this account (Washington State Department of Ecology, 2019c).

Similar to restoration projects funded by a responsible party, restoration projects funded by the CPA vary in scope and type. There are generally four types of restoration projects including removal of manmade structures, habitat restoration and invasive species removal, land acquisition, and recreational facility enhancements (Washington State Department of Ecology, 2019c; Washington State Department of Ecology, 2019I).

Project examples

McMurphy Creek

In 2015, a fire at a Winlock warehouse resulted in an oil spill on Olequa Creek, creating a five to seven mile dead zone for fish and aquatic wildlife (Johnson, 2015). Through the NRDA process, WDFW was provided with \$10,000 to improve McMurphy Creek, a tributary of Olequa Creek (Washington State Department of Ecology, n.d.-d). Through this funding, two privately owned fish barriers were removed on McMurphy Creek, allowing for restoration of 1.6 miles of fish habitat (Washington State Department of Ecology, n.d.-d).

Allison Springs

Similarly, the Allison Springs Estuary Restoration project received funding for the removal of manmade structures such as culverts, berms, bulkheads, buildings, and debris. Removing these structures opened fish passages, improving habitat of the estuary. This project is important because this estuary is home to juvenile salmon.

Washington State Parks

In 2016, the fishing trawler *Privateer* spilled more than 3,000 gallons of oil off the coast of Ocean Shores (Washington State Department of Ecology, 2017). Because of the severe tidal conditions of this area, it took 54 days for the response team to remove the fishing trawler (Washington State Department of Ecology, 2017). The responsible party for this spill worked with the RDA Committee and is now working with Washington State Parks to implement a restoration project, which is located at the center of a freshwater-forested shrub wetland and is priority habitat as part of a larger coastal dune ecosystem.

Mud Bay

The RDA Committee recently provided \$30,000 in funding for the Mud Bay, Sucia Island Salt Marsh Restoration project, which totaled nearly \$500,000. The goal is to restore salt marsh, tidal channel, and upper beach habitats for juvenile salmon and forage fish in the San Juan Islands. This funding paid for a portion of the restoration and design planning, permitting, restoration implementation, and project monitoring.

After the response

After a spill, the program conducts an investigation of the incident, determines if there are damages to natural resources, assesses penalties for damages, and recovers cost for responding.

Investigations

After a spill, the program works to determine the cause, volume, and the effectiveness of response strategies used. Ecology takes the lead on investigating the full scope of the spill (Wash. Rev. Code § 70.105D.030, 2013). This includes determining the immediate cause and contributing factors. Once completed, investigation reports are used to determine what, if any, enforcement is warranted.

After investigation, the program provides the responsible party with recommendations on how they can improve their work processes to ensure that a spill does not happen again, or at least to minimize the size and impact of any future spill. Despite the fact that these recommendations are non-binding, many responsible parties endeavor to incorporate the recommendations into best practices.

Enforcement

Ecology may civilly penalize the responsible party for an oil spill (Wash. Rev. Code § 90.48.144, 1995; Wash. Rev. Code § 90.56.320, 1990). In addition, RCW 90.56.330 provides authority to issue an additional penalty for a negligent, reckless, or intentional spill. We also have authority to issue a penalty in other instances, such as when a facility or vessel is operating without a contingency or prevention plan, however the full scope of penalties the Spills Program has authority to issue is extensive (Wash. Rev. Code § 88.46.090, 2000; Wash. Rev. Code § 90.56.310, 2000).

All penalties are credited to the CPA or the Vessel Response Account (Wash. Rev. Code § 90.48.390). Penalties are deposited into the Vessel Response Account for vessel-related incidents.¹² All other penalties are deposited into the CPA.

Penalty amounts vary based on multiple factors, including environmental and public health impacts, compliance history of the violator, volume of oil spilled, and any mitigation factors taken by the responsible party.

Cost recovery

Responsible parties are required by state law to remove any oil spilled or take actions necessary to do so, as discharge of oil and hazardous substances is illegal (Wash. Rev. Code § 90.48.080, 1987; Wash. Rev. Code § 90.56.340, 1991). Ecology bills the responsible party to recover the

¹² The Vessel Response Account was originally used to fund the Neah Bay Emergency Response Towing Vessel (ERTV). This account sunsets July 1, 2020, as the Neah Bay ERTV is now funded by industry.

cost of the response. This is referred to as cost recovery. If there is no responsible party, the program may seek cost recovery from the National Pollution Fund Center.

The cost recovery threshold is \$1,000 or more in costs.¹³ Recovered costs are deposited into the Oil Spill Response Account (OSRA) (Wash. Rev. Code § 90.56.500, 2018). All hazardous substance spills are charged to the MTCA-OP.

From FY 2010 to FY 2019, the program spent almost \$9,500,000 in responding to oil and hazardous substance spills and has recovered about 45 percent of those costs in both the Model Toxics Control Act (MTCA) accounts and the OSRA, and the recovery rate for OSRA costs alone averaged 57 percent (Washington State Department of Ecology, 2020d).¹⁴ The challenges in recovering costs are as follows:

- 2019 costs included costs related to the Olympia Brewery Transformer Spill for which the cost recovery process has not started as of the publication of this report.
- For some cases, the responsible party is unknown, not reachable, or unable to pay. Certain federal governmental organizations have sovereign immunity against state response costs, penalties, and damages to natural resources.
- When all efforts to reach the responsible party are exhausted, Ecology can seek cost recovery from the National Pollution Fund Center, but only if the response meets specific criteria:
 - The response must be related to a spill of oil or a petroleum product as defined by the federal Oil Pollution Act (OPA 90) and not contain other hazardous substances.
 - The spill must be discharged to the waters of the United States, as defined by the Environmental Protection Agency.

¹³ Ecology established a threshold to ensure administration costs of the process align with cost recovery. Ecology plans to re-evaluate this threshold.

¹⁴ Expenditures are booked by cost recovery projects and payments towards receivables booked.

Chapter 3: Spills Program Partnerships

While the program takes on a majority of the state work associated with significant spills to water, each partner has a different role in oil spill work, allowing the state to form an integrated approach.

Transboundary partnerships

Working across political and geographic boundaries is crucial to preventing, preparing for, and responding to spills. Vessels, railroads, and pipelines carry oil across such boundaries every day, introducing risk of an incident that spans tribal, international, state, and local jurisdictions.

Pacific States – British Columbia Oil Spill Task Force

Establishment of the Pacific States – British Columbia Oil Spill Task Force (OSTF) in 1989 highlighted the importance of transboundary work (Pacific States – British Columbia Oil Spill Task Force, n.d.). The Task Force formed through a Memorandum of Cooperation between the Governors of Alaska, Washington, Oregon, and California, and the Premier of British Columbia. Hawaii joined in 2001.

The *Nestucca* and *Exxon Valdez* oil spills in the late 1980s catalyzed the formation of the OSTF, which focuses on oil spill prevention, preparedness, response, and recovery. Members develop work plans outlining annual priorities and areas that need continual focus. Longer-term strategic goals of the Task Force include the following:

- Adapt to changes in oil movement and risks.
- Advance readiness and capacity to respond to oil spills.
- Deepen external partnerships to inform decision-making and expand knowledge.
- Build and enhance visibility and relevancy of the Task Force.
- Nurture organizational health.

Members meet annually to discuss project and goal progress, implement new projects, and continue to strengthen relationships with tribes and stakeholders.

Transboundary collaboration

In order to improve oil spill reduction efforts and those of our partners, in 2015 and 2016, we hosted two Salish Sea Oil Spill Risk Mitigation Workshops, both of which culminated in 225 risk mitigation measures being advanced, with efforts to put nine in place (Figure 14). These workshops provided participants with the opportunity to share ideas, work with tribes and stakeholders across multiple jurisdictions and sectors, and identify recommendations to reduce oil spill risk. Working with transboundary partners provides the opportunity to collaborate, share

lessons learned, and create consistent preparedness, prevention, and response strategies across borders.



Figure 14: 2016 Salish Sea Risk Mitigation Workshop

Salish Sea Shared Waters Forum

In 2018, the Legislature directed Ecology to establish the Salish Sea Shared Waters Forum through July of 2021 in order to improve cross-boundary coordination in waterways between Washington and British Columbia. This forum is designed to be a non-decision making entity directed under statute to increase cross-boundary knowledge and provide an open dialogue. The forum does not make recommendations or endorsements of any spill mitigation measures. Discussion topics include methods for reducing oil spill risk, navigational safety, and data sharing. Under legislative direction, Ecology is required to host one forum each fiscal year. The first forum took place in 2018 and the second was held in 2019. Ecology collaborated with the British Columbia Ministry of Environment and Climate Change Strategy. There were multiple representatives from tribes, First Nations, environmental groups, industry, and multiple levels of government present for this event. The final Forum event will be held in the second half of 2020.

Working with tribes, other agencies, and industry

By building strong relationships with tribes, and across government jurisdictions and industry sectors, we can better prepare to respond when a spill does occur. We collaborate with tribal, federal, state, and local governments, and work in partnership with nonprofit organizations and

regulated industry. See Figure 15 for an example of the multiple partners required to collaborate in oil spill exercises.



Figure 15: Participants at the Navy Region Northwest worst-case discharge oil spill exercise in 2018 (including staff from the Navy, USCG, and Ecology)

Federal partners

Our federal partners include:

- United States Coast Guard (USCG)
- Environmental Protection Agency (EPA)
- National Oceanic and Atmospheric Administration (NOAA)
- U.S. Department of Interior (DOI)
- United States Fish and Wildlife Services (USFWS)
- United States Army Corps of Engineers (USACE)
- Federal Railroad Administration (FRA)
- Pipeline and Hazardous Materials Safety Administration (PHMSA)

The USCG is Ecology’s lead federal partner for any spill that occurs in marine waters. The Coast Guard also manages the National Response Center hotline for reporting oil spills. Partnership with the Coast Guard first began in 1995 when the first USCG–Ecology Memorandum of Agreement (MOA) established roles, authorities, and partnership. We renewed and established protocols for this MOA in 2001 and again in 2007 (Memorandum of Agreement, 2001; Memorandum of Agreement, 2007). The Coast Guard Pacific Area also signed an MOU with the Pacific States – British Columbia Oil Spill Task Force in 2008.

Collaboration with other federal partners occurs mostly during drill exercises and oil spill responses. Each agency provides different expertise and jurisdiction for an oil spill, synergizing efforts to provide the most effective response.

- The EPA takes on the role of Federal State On-Scene Coordinator for inland spills.
- The USCG is the Federal State On-Scene Coordinator for marine waters.
- NOAA focuses primarily on the effects of oils and chemical spills, determining the trajectory of the spill, and the impact on endangered species.
- The USFWS provides similar expertise by identifying and protecting threatened and endangered species.

We also work with the USACE for spills from dams and dredges. In 2004, Ecology and the Corps developed response plans for the Columbia and Snake River dams after a series of spills from their facilities. A few years later, Ecology and the Corps signed a MOA to improve prevention efforts. This agreement is still in place.

Tribal partners

In the State of Washington, there are 29 federally recognized tribes as well as multiple bordering tribes with aboriginal territories in Washington. Protecting tribal lands, resources, and culture from an oil spill is a high priority. Ecology has a government-to-government relationship with tribal partners. Tribal partners work with the program in oil spill drills and spill response efforts.

Regional partners

We are a member of the Northwest Area Committee (NWAC), which is comprised of representatives from Washington, Oregon, and Idaho. The NWAC develops the Northwest Area Contingency Plan (NWACP) for member states. One comprehensive plan allows for collaboration across tribal, local, state, and federal governments, and other organizations. The plan also serves as the statewide master contingency plan as mandated by RCW 90.56.060.

We also collaborate with the Oregon Department of Environmental Quality (DEQ) Emergency Response Program. Oregon's program is responsible for working with other agencies as well as industry to prevent and respond to oil and hazardous substance spills.

In Idaho, we work primarily with the EPA. However, most of the work with Oregon and Idaho stems from involvement in the NWAC and development of geographic response plans (GRPs).

State partners

Our state partners include:

- Department of Natural Resources (DNR)
- Washington Department of Fish and Wildlife (WDFW)

- Washington State Department of Health (DOH)
- Washington State Parks and Recreation Commission (Commission)
- Department of Archaeology and Historic Preservation (DAHP)
- Washington Sea Grant (WSG)
- Utilities and Transportation Commission (UTC)
- Washington State Military Department (WMD)
 - Emergency Management Division (EMD)
 - National Guard (Guard)
- Puget Sound Partnership (Partnership)
- Washington State Energy Facility Site Evaluation Council (EFSEC)
- Washington State Patrol (WSP)

Each agency plays a unique role when a spill occurs, providing comprehensive spill response that could not be achieved without the efforts of these partnerships. For example:

- DNR focuses on derelict vessels, including the removal of certain vessels that may cause an oil spill. It manages state trust lands, state-owned aquatic lands, and state natural areas, all of which may be impacted by an oil spill.
- WDFW centers its work on rescue and rehabilitation of oiled wildlife during a response.
- DOH looks at impacts to shellfish, drinking water, and public health during a spill.
- The Department of Archaeology and Historic Preservation (DAHP) is responsible for addressing spills that may or do affect cultural and historical resources.
- Ecology coordinates with the Utilities and Transportation Commission (UTC) on planning, response, investigations, and other authorities of the state for pipelines and railroads.

Washington State also has a State Emergency Response Commission (SERC), similar to the Local Emergency Planning Committees (LEPCs). The SERC focuses on emergency response coordination as well as providing information to the public. They provide support for reviewing local emergency response plans, determining planning districts, and support of the LEPCs.

Local partners

The Spills Program works with multiple local partners. During response efforts and oil spill drills, we involve local emergency response representatives and work closely with impacted

local communities. We also work with LEPCs, which are responsible for developing local emergency response plans and updating them annually (see Chapter 4 for more information).

Industry and other stakeholders

As a regulatory agency, Ecology consults and builds relationships with non-profits, non-governmental organizations, and the oil handling industry, which includes railroads, facilities, vessels, pipelines and ports. Examples of partners include:

- American Waterways Operators (AWO)
- Western States Petroleum Association (WSPA)
- Pacific Merchant Shipping Association (PMSA)
- Contingency plan holders

Our collaboration with non-profits and environmental organizations includes the Washington Environmental Council (WEC), the Sierra Club, Friends of the San Juans, and Puget Soundkeeper Alliance.

Committee involvement

Spills Program staff represent Ecology on numerous industry and interagency committees, including the Board of Pilotage Commissioners (BPC) and the Puget Sound, Grays Harbor, and Lower Columbia Region Harbor Safety Committees and Area Maritime Security Committees. We are also a part of the Oil Spill Preparedness Committee on the Columbia River and the Citizen's Committee for Pipeline Safety. The program attends the Oregon Board of Marine Pilots meetings as a member of the public to represent Washington for decisions made on the Columbia River and the Columbia River Bar. We work across jurisdictions to build and maintain relationships, develop best practices, discuss safety measures, and determine new recommendations to improve work and reduce the risk of an oil spill. Since the 1990s, as risks have changed and new priorities emerged, multiple committees, work groups, commissions, boards, panels, and task forces have been established and abolished as needed.

Chapter 4: Other Agencies Funded by the Oil Spill Administration Tax

The Oil Spill Administration Tax (OSAT) was originally established by the Legislature to fund oil-related work. In addition to the Spills Program, the OSAT revenue supports relevant work in four other agencies. The Washington Department of Fish and Wildlife (WDFW) and the Emergency Management Division (EMD) of Washington's Military Department (WMD) receive direct appropriations from the Oil Spill Prevention Account (OSPA) to which OSAT revenue is deposited. Washington Sea Grant (WSG) is managed by the University of Washington and receives OSPA funding through an interagency agreement with Ecology. In addition, WMD's National Guard (Guard) receives direct revenue from the OSAT and a direct spending appropriation in the OSPA.¹⁵ WSG and WDFW have been funded by the OSAT since its establishment. The EMD and Guard received funding for emergency planning and training. Funding from the OSPA to the EMD discontinues after the 2019-21 biennium.

Washington Department of Fish and Wildlife

The Washington Department of Fish and Wildlife (WDFW) is responsible for preserving, protecting, perpetuating, and managing the state's wildlife, fish, and shellfish per RCW 77.04.012. Established in 1992, its Oil Spill Team (Spill Team) supports the Spills Program by specializing in the protection of fish, wildlife, and habitat from oil spills. The Spill Team's three main areas of emphasis are planning and preparedness, damage assessment, and wildlife response.

The Spill Team benefits Washington's citizens by working with the oil industry to protect fish and wildlife species throughout the state. They assist the oil industry and Ecology by developing wildlife response personnel and equipment plans, identifying response strategies to protect fish and wildlife, providing technical assistance to achieve wildlife planning standards, training volunteers, participating in worst-case oil spill drills, managing the Wildlife Branch in a Unified Command, and serving as a Resource at Risk Specialist during a spill.

Spill Team work

Planning and preparedness

The Spill Team spends the majority of its time on oil spill planning and preparedness activities. This involves developing wildlife protection plans and building relationships with tribes, state and federal agencies, Canadian agencies, oil companies, wildlife response contractors, and the public. Preparedness activities include:

¹⁵ Ecology collaborated with WDFW, WSG, EMD, and the Guard to complete this chapter.

- Developing and testing wildlife response plans for birds and marine mammals in order to be prepared before a spill occurs.
- Participating in worst-case oil spill drills and wildlife equipment deployment drills to test and improve response capabilities.
- Coordinating with the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) to update portions of geographic response plans (GRPs) that identify and protect fish and wildlife resources.
- Participating in Northwest Area Committee (NWAC) task forces to evaluate impacts on fish and wildlife from sinking oils and alternate response technologies such as dispersants and in-situ burning.
- Coordinating with west coast zoo and aquaria personnel to explore ways to utilize their personnel and equipment to assist during marine mammal responses.
- Securing grant funding to purchase specialized wildlife response equipment.
- Inspecting oiled wildlife rehabilitation facilities to ensure that they meet the facility requirements identified in Chapter 220-450 WAC and the planning standards in Chapter 173-182 WAC.
- Training citizen volunteers to assist with wildlife response efforts: The Spill Team has organized annual wildlife volunteer trainings based on Hazardous Waste Operations and Emergency Response (HAZWOPER) training requirements. Approximately 120 volunteers are trained annually. The United States Coast Guard (USCG), Ecology, Focus Wildlife, M2C Training Solutions, Surfriider, and the Clallam County Marine Resources Committee assist with the effort by providing instructors and/or support for the classes. Instructors have largely covered their salary and travel expenses “out of pocket,” as there has not been a dedicated budget to support this effort.
- Protecting endangered Southern Resident Killer Whales (SRKWs): As required by Governor Inslee’s Executive Order on SRKWs, the Spill Team worked with Ecology to develop a SRKWs deterrence curriculum plan for training vessel crews to assist with hazing efforts in the event of a spill (Washington State Department of Ecology, 2018b).
- Protecting sea otters: The Spill Team authored a sea otter response handbook and worked with zoos and aquaria in Washington, Oregon, and British Columbia, as well as sea otter response specialists in California and Texas, to form a network of facilities and personnel to help with an oiled sea otter response (Washington Department of Fish and Wildlife, 2009). This effort is non-regulatory and the participants have not been funded for their participation. The Spill Team recently received a \$100,000 Ecology equipment grant to purchase pools, pumps, and caging for oiled sea otter response.

Natural resource damage assessment

The Spill Team participates on the state's Resource Damage Assessment (RDA) Committee, working to return fish and wildlife resources to pre-spill conditions. The RDA Committee gathers pre-spill fish and wildlife baseline information, determines impacts following a spill, and monitors existing restoration projects. They review proposed restoration projects to ensure that fish and wildlife benefits are appropriate.

Independent of the RDA Committee, the Spill Team secured a compensation claim for \$100,000 due to an oil spill from a vessel that will be used to plant oyster seed on public beaches to compensate for lost public use of the beaches during the spill.

Oil spill response

Over the past ten years, the Spill Team has received about 140 notifications a year. Most of the notifications involve providing responders with site-specific information about fish and wildlife resources at risk, and strategy recommendations to help inform response activities. They participate in fly overs to search for oiled wildlife, wildlife assessments, and sampling to identify damage to natural resources.

During significant spills, the Spill Team participates in the Unified Command as the Resource at Risk Specialist and the Wildlife Branch Director. Wildlife response generally involves conducting an initial assessment of the species and number of animals likely impacted, conducting animal search and collection, stabilizing animals, removing the oil, and getting the animals strong enough to release back into the wild. The USFWS has delegated the Wildlife Branch Director role to the Spill Team for spills in Washington State. They work closely with the oil industry and wildlife response contractors to develop wildlife response equipment and personnel resources (see Figure 16).



Figure 16: Wildlife equipment deployment drill in Bellingham

Oiled wildlife planning efforts

In 2004, WDFW adopted wildlife rehabilitation facility standards for oiled wildlife. In 2006, Ecology adopted equipment planning standards for wildlife response, which led to industry investment on mobile facility resources. The Spill Team worked closely with USFWS to draft an area Wildlife Response Plan that was incorporated into the NWACP in 2007. The Spill Team led a stakeholder workgroup effort that resulted in the development of industry-owned oiled wildlife response equipment in 2009. Additional equipment has been assembled since that time, expanding response capacity, and is available for deployment within 24 hours after a spill. In 2019, the Spill Team assisted Ecology in the process of updating the wildlife planning standards in Chapter 173-182 WAC.



Figure 17: Oiled mallard duck in Tacoma from Gardner-Fields, Inc. Facility hot asphalt spill in 2015

Spill Team funding

The Spill Team receives direct appropriation from the OSPA to fund four FTEs. The Spill Team budget for the 2019-21 biennium is \$1,199,000. The budget once supported six and a half FTEs. However, in the 2009-11 biennium, the budget was cut by 20 percent on an ongoing basis due to insufficient revenue and fund balance in the OSPA to support existing work (Washington State Department of Ecology, 2020o). This reduction was paired with an ongoing authority reduction at other agencies. Overall reductions resulted in reduced capacity to participate in oil spill drills, fewer field visits during GRP updates, reduced volunteer training, reduced post-spill restoration project monitoring, and reduced collection of baseline information on fish and wildlife at risk from a spill. To restore lost Spill Team activities, WDFW plans to coordinate with Ecology on a proposal in the future to increase the WDFW Spill Team's appropriation sufficiently to restore

the staff to five FTEs, instead of the current level of four. This proposal would be considered following the 2021 legislative session based on analysis of available fund balance.

Underfunded priority work

To restore lost Spill Team activities, address increased operating costs, support new initiatives, and restore services to industry partners, the Spill Team recommends establishing a stable revenue source and an increased team appropriation sufficient to restore the staff to five FTEs, instead of the current level of four. Increasing appropriations will improve WDFW's ability to participate in the planning, response, and restoration activities that are expected from stakeholders, but have been reduced during the last decade due to funding limitations. These activities include:

- SRKWs deterrence planning
- Participation in oil spill drills
- Training volunteers
- Evaluating non-floating oil impacts
- Continuing transboundary planning with Canada and Oregon
- Ensuring restoration after a spill

An increase in the Spill Team's appropriation will help to restore WDFW's ability to participate in these critical activities.

Washington Sea Grant

Washington Sea Grant (WSG) developed the Small Oil Spill Prevention Education Program targeted at small vessel operators and facilities in response to the passing of Engrossed Substitute House Bill (ESHB) 1027 by the Legislature in 1991 (ESHB 1027, Wa. 1991; Wash. Rev. Code § 79A.60.620, 2000). Since the early 1990s, WSG has reached Washington commercial and recreational boaters and boating facilities, including ports and marinas, with information and tools to prevent small oil spills via a variety of avenues including:

- Development and distribution of spill kit materials
- Vessel safety and technical classes
- Community events and boat shows
- Washington's Clean Marina Program
- An online oil spill prevention course
- Pacific Oil Spill Prevention Education Team (POSPET) meetings and projects

- Communications planning, including paid advertising campaigns, media coverage and public relations, and social media outreach campaigns

The Small Oil Spill Prevention Education Program is funded through an appropriation from the OSPA. The original appropriation for WSG was \$229,000 each biennium, was decreased to \$170,000 per biennium in 2001 and has remained constant ever since (ESHB 1330, Wa. 1991; ESSB 6153, Wa. 2001). While funding for WSG has not grown since 2001, the number of commercial and recreational boats operating in Washington waters has steadily increased. As of 2018, Washington State waters had a total of more than 220,000 registered vessels (Robert F. Goodwin Consulting, 2018; Washington Sea Grant, 2018). The potential for small oil spills increases with additional vessels operating in the state and the audience for small oil spill prevention education has increased significantly since it began more than 25 years ago. Figure 18 shows the number of reports of small oil spills in British Columbia, California, Oregon, and Washington (Pacific States – British Columbia Oil Spill Task Force, 2019). Reports of small oil spills for Washington have increased over time, potentially due to an increase in education and awareness efforts by WSG.

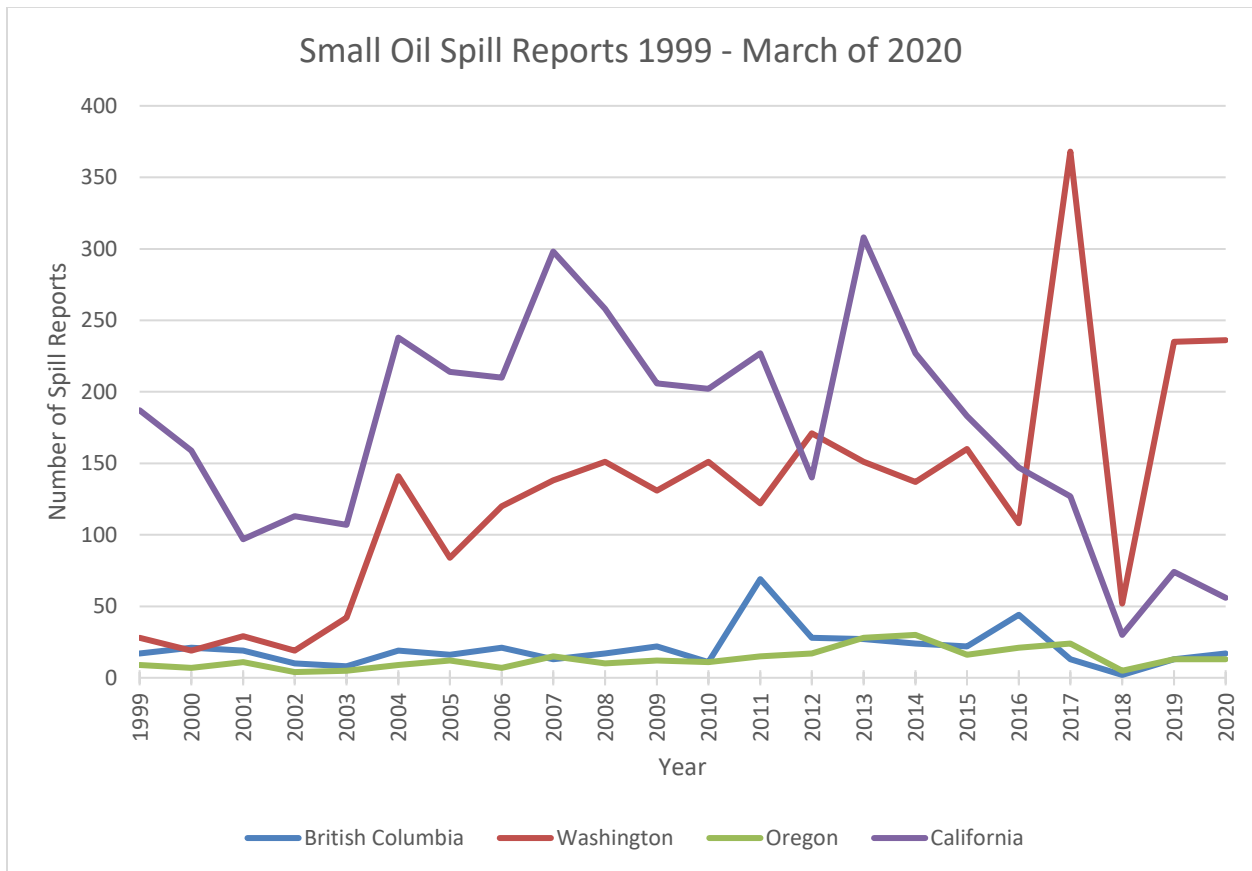


Figure 18: Small oil spill reports from 1999 to June of 2019 (Pacific States – British Columbia Oil Spill Task Force, 2019)¹⁶

¹⁶ There is a drastic decline in 2018 due to a loss in two months of data.

In response, WSG has integrated small oil spill prevention into other outreach activities, such as the Pumpout Washington campaign, fishing vessel safety trainings, public events, and communications. WSG has also leveraged the work of a network of partners and intermediate audiences that include state and federal agencies, industry and marine associations, volunteer groups, marinas and yacht clubs, and environmental organizations. In addition to Ecology, partners include:

- Clean Marina Washington
- District 13 USCG Auxiliary
- Northwest Marine Trade Association
- Puget Soundkeeper Alliance
- USCG Puget Sound Sector
- Washington Department of Natural Resources
- Washington State Parks

Program accomplishments

Development and distribution of spill kit materials

Over 7,500 kits containing a variable mix of oil-soaking bilge pillows, disposable oil-resistant gloves, fuel bibs, and “Spills Aren’t Slick” brochures and stickers were developed and distributed between 2014 and 2018 (Figure 19).

Vessel safety and technical classes

WSG has taught more than 100 fishing vessel safety classes, often in rural Pacific coastal and Columbia River locations where there are few training opportunities. Oil spill prevention is a key component of the curriculum.

Community events and boat shows

Since 2014, Sea Grant has reached over 10,000 small vessel operators per year through Waterfront visits and participation at trade shows and local festivals, such as the Seattle Boat Show, Pacific Marine Expo, and Port Townsend Wooden Boat Festival, offering the opportunity to talk directly to boat owners and operators about small oil spills. Thousands of boaters walk away with improved awareness and tools for preventing pollution. In 2018, WSG launched a focused outreach effort in the San Juan Islands.



Figure 19: Spill kit materials distributed



Figure 20: Outreach at a Washington marina

Washington’s Clean Marina Program

As a charter member of Clean Marina Washington, WSG has helped to recruit and certify 73 new marinas since 2005, assisting them in adapting best management practices to meet Clean Marina’s voluntary certification criteria. Today, 105 marinas throughout the state are certified, including two recent additions at Lake Chelan. WSG supports the Puget Soundkeeper Alliance (lead organization for the Clean Marina program in Washington) with outreach and certification outside of the Puget Sound area and the EnviroStars network.

Pollution prevention handbook

In 2016, production of *Pollution Prevention for Washington State Marinas*, a handbook that pulls together information on current laws, regulations, and best practices for the marina industry, was a Clean Marina success. WSG collaborated with the Puget Soundkeeper Alliance and Ecology to complete this well-researched, coherent, and usable handbook. Puget Soundkeeper Alliance continues to distribute the handbook.

Online oil spill prevention course

In an attempt to reach remote and often inaccessible oil spill target audiences, WSG developed an online oil spill prevention, preparedness, and response course offered through the University of Alaska Southeast Career Training for Ports and Marinas program. The online course has enabled training of hundreds of port and marina staff.

Pacific Oil Spill Prevention Education Team program

Through participation in POSPET, Sea Grant has been involved with the production and distribution of many spill prevention materials, including creation of the OILS-911 spill reporting number and subsequent stickers and signage conveying this information.



Figure 21: “SPILLS aren’t SLICK” sign example posted at a Washington marina

Communications Plan

The Communications Plan outlined a two-phase public relations and marketing campaign spanning four years with the goal of raising awareness of impacts from small oil spills in Washington waters amongst recreational boaters using a mix of targeted advertising, social media, public relations activity, and public events outreach. A 2016 survey in phase I set a baseline on demographics and identified where boaters get their information. The survey informed phase II messaging and a series of ads using quotes from boaters endorsing the kits. Phase II also included increased use of social media platforms to support the advertising, which expanded reach into Eastern Washington using the theme “Join the Clean Bilge Project”.

Materials produced for the Communications Plan included a small oil spills one-pager, a press information kit, and a suite of online and print ads. Between 2016 and 2018, 160,000 boaters were reached each year with the small oil spill prevention message through advertising alone. A media campaign was conducted each summer in tandem to support the advertising, and in 2016, this garnered nine feature articles on small oil spill prevention, reaching more than 300,000 readers. Social media promotion complemented the media and advertising effort, using WSG platforms (Facebook, Twitter, and more recently Instagram) from June to August each year. A recent Twitter social media campaign in 2018 garnered 15,517 impressions.

Funding

From 1991 through 2014, WSG’s work on small spill prevention activities were led by one FTE for the first 16 years. However, level program funding has resulted in incremental reductions in staff time dedicated to this work since 2007. Beginning in 2014, WSG maintained the scope of

work – despite reductions in staff time – by leveraging other WSG outreach efforts that engage boaters and facility operators, including the Clean Vessel Act Pumpout Washington program funded by Washington State Parks, and safety and operations classes for vessel operators.

Additional funding would allow WSG to improve the Small Oil Spill Education Program in four ways:

1. Reach higher percentages among target audiences.
2. Expand geographic reach, educating boating audiences in other parts of Washington.
3. Expand the variety and content of outreach materials for greater impact.
4. Improve accountability for results by strengthening performance metrics.

WSG currently reaches approximately 10,000 vessel operators per year. With additional funding, WSG would be able to double the number of individual vessel operators reached to 20,000 per year (roughly equivalent to 10 percent of the recreational vessel owners in the state). Increasing in-person contacts could be accomplished by increasing the number of in-person presentations, working more closely with the USCG Auxiliary, and participating in more boater-oriented events. Additional individual contacts could be accomplished through communications campaigns.

Along with an increase in boaters reached, additional funding would enable WSG to develop new value-added outreach materials and double their distribution from 3,000 per year to 6,000 per year. Oil-absorbent pads, bilge pillows, and fueling bibs are popular with boaters because the products have practical value and convey useful information. Variations on these ideas can be developed into novel materials, with some targeting the needs of small commercial vessels. The strategy keeps key messages fresh in people’s minds and nearby when needed.

Communications campaigns to date have focused on awareness, prevention, and reporting information. With increased penetration in the target audiences and proven distribution methods in hand, WSG can expand on the content to cover “bite-sized” versions of best practices for boaters and shoreside facility operators that appear in *Pollution Prevention for Washington State Marinas*. Communications platforms could include value-added outreach materials, year-round print, and online media ads rather than seasonal, social media posts, signage at boating facilities, and/or stickers, rack brochures, and other print pieces.

Finally, additional program funding would enable WSG to strengthen performance metrics for the program. Ecology and USCG track reports of small gasoline and diesel spills from recreational vessels. This metric could be strengthened by including small commercial vessels in the reporting statistics, surveying target audiences, developing and implementing an aerial synoptic monitoring protocol, and/or spot sampling for pollution markers in marinas and nearby control sites. A wide range of potential ideas should be screened with technical experts, and the best ideas could then be developed into protocols and integrated with other program activities.

Washington State Military Department

The Washington State Military Department (WMD)'s Emergency Management Division (EMD) and the National Guard (Guard) both receive funding from the Oil Spill Administration Tax (OSAT). In 2015, the Legislature extended use of funds from the Oil Spill Prevention Account (OSPA) to the EMD. These funds were intended to assist with Local Emergency Planning Committees (LEPCs) through the end of FY 2019 to address emergency issues. Funding was adjusted for statewide cost changes in the 2017-19 biennium budget and the 2019-21 budget. The current appropriation of \$1,040,000 is planned to expire after the 2019-21 biennium.

In 2018, the Legislature passed Engrossed 2nd Substitute Senate Bill (E2SSB) 6269, which directed the first \$200,000 in annual revenue from the OSAT to the Military Department Active State Service Account (ASSA) and the Military Department received a corresponding \$200,000 annual appropriation in the ASSA, totaling \$400,000 per biennium (Wash. Rev. Code § 82.23B.020, 2018).

Emergency Management Division

Hazardous Material Planning Program

The EMD is mandated through WAC 118-40-060 to assist LEPCs in the development and annual review of their plans as required in the Emergency Planning and Community Right-to-Know (EPCRA) Act (Emergency Planning and Community Right-to-Know, 1986). This addresses hazardous material risks, to which oil is a part of among many other materials. LEPCs are responsible for developing local emergency response plans and updating them annually.

Since 2015, the OSPA has funded EMD's Hazardous Material Planning Program. Prior to 2015 resources to assist LEPCs, planning efforts was limited to 0.2 FTE. Engrossed Substitute House Bill (ESHB) 1449 provided two year funding for increased capability to focus LEPC planning efforts, so that LEPC plans can address the emergency issues posed by oil transported by rail.

Federal regulations in EPCRA require LEPCs to have a training program, exercise their plans at least once a year, review their plans on a yearly basis, and update their plans every five years. This process continually improves plans and improves response capabilities of local communities. To support the EPCRA planning process, the program helps LEPCs with the development and review of plans, contributes to training programs, and assists with exercises. The team has now started the process of ensuring plans are updated per the required cycle.

Development and review of LEPC plans

Planning improves community response times to hazardous substance spills. Having plans ready to execute in the time of need creates positive conditions for the safety of Washington residents and protection of the environment.

In 2015, when the program began, only one of 43 LEPCs in the state had a plan that met all nine of the EPCRA requirements. As a direct result, the state's investment of four FTEs has

revitalized them across the state. EMD's Hazardous Material Planners bring their expertise in preparing plans, hazardous material response, planning coordination, and EPCRA. This results in viable plans that meet the needs of each community, more standardization of the plan's content, as well as better community participation in the process. Since its inception, the team assisted in the development of 32 of the 43 LEPCs in the completion of their plans, 21 have passed the State Emergency Response Commission (SERC) review, 12 are in the process of approval, and five are still being developed.

Contribution to LEPCs training programs

EPCRA directs that a LEPC must have a training program. In fulfilling one of its roles in the SERC, the EMD works closely with state agency partners on the SERC to provide and administer training opportunities. The Hazardous Material Planning Team includes two certified trainers for FEMA courses and offered training to LEPCs. During the program, the two-team members instructed 57 courses.

Another major training opportunity is the annual Washington State LEPC/Tribal Conference. This conference provides one or two members of every committee and tribal members the opportunity to participate in a workshop and lecture series to discuss issues. The 2019 conference included 100 attendees representing tribes and committee members. The state funds the conference through a federal grant and uses a subcommittee of the SERC to plan it.

Assistance with LEPCs exercises

Exercises enable LEPCs the opportunity to test, validate, and identify both strengths and areas for improvement. It is important to ensure corrective actions and lessons learned from training and exercises contribute to improving their plans.

Between March 2016 and February 2018, the EMD Hazardous Material Planning Team assisted with the design, development, and staffing of 122 exercises. The EMD's LEPC planning team also created exercise templates to provide LEPCs with a tool to create effective exercises and save them time and resources.

Funding

The enacted 2015-17 biennium budget provided \$1,000,000 in the OSPA for the Military Department to implement provisions of ESHB 1449. EMD was provided this funding to develop and review local emergency planning response plans for compliance with the requirements in the federal Emergency Planning and Community Right-to-Know Act. Funding was adjusted for statewide cost changes in the 2017-19 biennium budget and the 2019-21 budget. The current appropriation of \$1,040,000 is planned to expire after the 2019-21 biennium. Current appropriations support four FTEs (Washington State Department of Ecology, 2020f). At this time, EMD recommends funding continue for this work and will evaluate other funding options for the following biennia during the 2021 legislative session.

Washington National Guard

Beginning in FY 2019, the Legislature directed the first \$200,000 in annual revenue from the OSAT to the Military Department Active State Service Account (ASSA), and the Military Department received a corresponding \$200,000 annual appropriation in the ASSA (Wash. Rev. Code § 82.23B.020, 2018). The Guard used this funding in FY 2019 to develop and maintain their “just in time” (JIT) training program for emergency response and planning. The goal of JIT is to provide training to Guard personnel, with the intent of rapidly assisting state and local agencies, and integrating them into the disaster mitigation, response, and recovery plans. The JIT program refers to training that takes place during an incident. The benefits include improvements to individual performance, understanding of how individual positions interact in the response structure, and deeper development of understanding of tasks and assignments.

Just in time training

The JIT training provides the opportunity for the Guard personnel to be trained by local civilian agencies, which would help create and build interrelationships between all agencies involved, improve existing communication channels, and mitigate any gaps discovered in the development of future JIT training modules.

Once implemented, the following training modules could be utilized in order to rapidly train and deploy the Guard personnel when and where they are needed during an oil spill or natural disaster where hazardous materials could be spilled to the environment or endanger communities. The training format would be JIT, in which the block of instruction would take no more than four or six hours. The training modules consist of the following topics:

- Oil Spill Response for Beach Clean-Up Supervisor
- Volunteer supervision training
- Household Hazardous Materials Training
- Decontamination of Working/Domestic Animals
- Incident Command Post EOC Interface

The target audience for all five courses would be Chemical Officers and Non-Commissioned Officers (NCOs) who have completed their schooling, whether it is the Basic Officer Leadership Course (BOLC) or Senior Leadership Course (SLC). The requirements from Air Guard personnel would consist of an Emergency Management background. Instructors for each module would be dependent on the course itself.

The training would allow the Guard personnel and equipment to be used as an initial response in a surge capacity to support state, county, and local officials due to the overwhelming nature of the disaster. This would be during an incident in which the Governor has declared a State of Emergency, since the use of the Guard cannot impede or interfere with emergency management officials initiating contracts with private individuals, third party vendors, or contractors that can

support emergency operations (Oil Pollution Act, 1990; Robert T. Stafford Disaster Relief and Emergency Assistance Act, 2018). The JIT is not a replacement to any current training program provided by the Guard for its personnel. It is not designed to become a long-term strategic solution in any type of emergency management incident or response.

In addition to developing the JIT training program, the Guard also conducts annual tabletop exercises that may include stakeholders from the Guard, Homeland Response Force (HRF), 10th Civil Support Team (CST), and the Joint Operations Center (JOC). Other stakeholders may include EMD, Ecology, BNSF Railway, and emergency management representatives from Pierce County, King County, Snohomish County, and the City of Shoreline.

The goal was to conduct a gap analysis of an oil spill response within King County, north of Richmond Beach, in the City of Shoreline and identify current state, future targets for processes within the organizations, and areas of improvement. During discussions, the attendees concluded that although the topics of discussion were useful and would benefit the Incident Management Team during an oil spill, an area in which the Guard can make the most impact was assisting with communication capabilities.

Funding

Since FY 2019, the first \$200,000 of annual OSAT revenue is deposited into the Military Department ASSA for use by the National Guard. Per RCW 38.40.220, expenditures from this account may only be used for claims and expenses of the National Guard when called into active state service to perform the duties authorized in RCW 38.08.040. This includes assisting with public health, safety, welfare, or performing any military duty authorized by state law, as well as planning, training, exercises, and other administrative duties that are not of an emergency nature. During FY 2020, the Guard anticipates spending appropriations from the Military Department ASSA on the administrative tools and resources required for a coordinated response, such as personnel and resource tracking, logistics tracking, state active duty payroll calculations, and calculation of cost reimbursements.

In order for the Guard to be activated and utilized for a domestic incident such as an oil spill, a State of Emergency Proclamation by the Governor of Washington is required. However, an emergency declaration could have an unfavorable cost implication to Washington. An emergency declaration shifts funding for the incident from the National Pollution Liabilities Trust Fund (NPLTF) created under the federal Oil Pollution Act of 1990 (OPA) to the Robert T. Stafford Act administered by the Federal Emergency Management Agency (FEMA). Unlike NPLTF reimbursements to states where all eligible response and cleanup costs are reimbursed, Stafford Act funding requires a 25 percent match from states. If activated, Ecology recommends an interagency agreement between the Guard and Ecology to determine an efficient way to integrate the Guard into the existing oil spill response structure. An agreement could determine a sustainable use of funds for the foreseeable future and help to ensure an understanding of a spill response under the Oil Pollution Act's ICS structure.

Additionally, the JIT Program could focus on hazardous substances that are often encountered during natural disaster responses. Since the Guard would be likely deployed during a natural

disaster, a hazardous substance response and cleanup focus would create response capacity during an incident as the need arises when resources within state and local response organizations are taxed or exhausted.

Moving forward, the Guard and Ecology will work to potentially establish an interagency agreement to determine a sustainable use of funds for the foreseeable future and help to ensure an understanding of a spill response under the Oil Pollution Act's ICS structure.

Chapter 5: Budget

In the wake of the 1988 *Nestucca* fuel barge spill in Washington and the catastrophic 1989 *Exxon Valdez* tank ship spill in Alaska, the 1991 Legislature created two dedicated accounts to fund the Spills Program (ESHB 1027, Wa. 1991). These two accounts are the Oil Spill Prevention Account (OSPA) and Oil Spill Response Account (OSRA) (Wash. Rev. Code § 82.23B.020, 2018).

The OSPA receives revenue from the Oil Spill Administration Tax (OSAT) and the OSRA receives revenue from the Oil Spill Response Tax (OSRT) (Wash. Rev. Code § 82.23B.020, 2018). Combined, these two taxes are commonly referred to as the barrel tax.

When the barrel tax was first established, the rate of the OSAT was three cents and the rate of the OSRT was two cents for every 42-gallon barrel of crude oil or petroleum products imported into Washington (ESHB 1027 § 802, Wa. 1991). In 1998, this changed to four cents for the OSAT and one cent for the OSRT (ESHB 2096, Wa. 1997).¹⁷

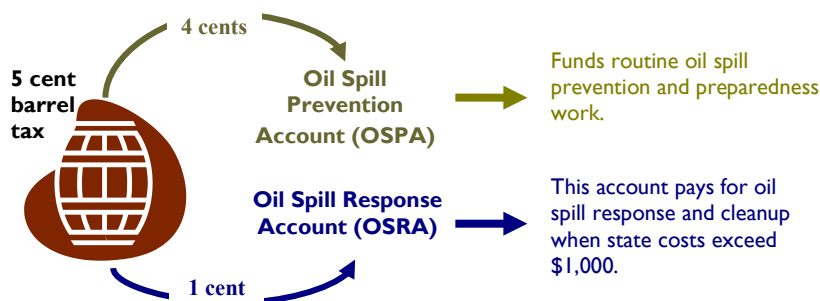


Figure 22: Revenue source for the Oil Spill Prevention Account and Oil Spill Response Account

Accounts

The Spills Program has two main funding sources supporting its operating budget (excluding response costs): the Model Toxics Control Operating Account (MTCA-OP) and the OSPA. The OSRA funds response costs for spills that are estimated to cost over \$1,000 (Wash. Rev. Code § 90.56.500, 2018).

Funding for the program also comes from the Coastal Protection Account (CPA) for contracts and grants related to natural resource restoration projects and the General Fund Private Local Account (GF-Pvt L) for contracts related to the Pacific States – British Columbia Oil Spill Task Force (OSTF). Table 8 provides a summary of each account.

¹⁷ Effective date of tax change July 1, 1997, but not officially enacted by the Department of Revenue (DOR) until 1998.

Table 8: Accounts providing funding for the Spills Program

Account name	Revenue source	Expenditure authority
Oil Spill Prevention Account (OSPA)	<p>Oil Spill Administration Tax (OSAT)</p> <p>Definition:</p> <p>A four cents tax on every barrel (42 gallons) of crude oil or petroleum products upon first receipt at a storage facility or terminal by vessel, rail, or pipeline.</p>	<p>Appropriates funds to:</p> <ul style="list-style-type: none"> • Spills Program for operating costs (since 1991) • Washington Sea Grant (since 1991) • Washington Department of Fish and Wildlife (since 1991) • Emergency Management Division (2015-21) • Washington National Guard (since 2018)
Oil Spill Response Account (OSRA)	<p>Oil Spill Response Tax (OSRT)</p> <p>Definition:</p> <p>A one cent tax on every barrel (42 gallons) of crude oil or petroleum products upon first receipt at a storage facility or terminal by vessel, rail, or pipeline.</p>	<p>Appropriates funds to:</p> <ul style="list-style-type: none"> • Spills Program for response costs (since 1991)
Model Toxics Control Operating Account (MTCA-OP)	<p>Hazardous Substances Tax (HST)</p> <p>Definition:</p> <p>A one dollar and nine cents per barrel tax on petroleum products. The tax increases annually by the implicit price deflator for non-residential structures.</p> <p>After first depositing \$50,000,000 each biennium into the Motor Vehicle Fund, the tax on petroleum products is deposited as follows: 60 percent into the MTCA-OP, 25 percent into the MTCA-CAP, and 15 percent into the MTCA-SW.</p>	<p>Appropriates funds to:</p> <ul style="list-style-type: none"> • Ecology programs, including the Spills Program • Eight other agencies <p>Used for hazardous waste prevention, solid waste prevention, recycling, oil and hazardous spill prevention, preparedness, and response, air quality, debris cleanup, storm water, toxics cleanup, and public participation grants.</p>
Coastal Protection Account (CPA)	<p>Oil spill penalties, natural resource damages from oil spills, a one cent per gallon charge for each Marine Use Tax Refund claim, and water quality penalties.</p>	<p>Natural Resource grants and projects managed by the Spills Program are decided by a steering committee comprised of Ecology, WDFW, DNR, and WA State Parks and Recreation Commission, in consultation with tribes, local governments, and agencies.</p>
General Fund – Private Local Account	<p>Funded by West Coast states for the Pacific States – British Columbia Oil Spill Task Force.</p>	<p>Applicable agencies. Based on receivable agreements with private and local entities.</p>

Oil Spill Prevention Account

The OSPA currently comprises about 24 percent of the program’s operating budget for a total of \$11,379,000 for the 2019-21 biennium (Washington State Department of Ecology, 2020a).¹⁸ Since 1991, the OSPA has traditionally only appropriated funds for the Spills Program, the Washington Department of Fish and Wildlife (WDFW), and Washington Sea Grant (WSG) for work related to oil spills (see Chapter 4 for more information).¹⁹ Table 9 shows OSPA appropriations for Ecology and other agencies since FY 2008. The underlying statute states appropriations may only be used for:

- Administrative costs related to oil and hazardous substance response, as outlined in Chapter 90.56 RCW.
- Vessel oil spill prevention and response, as outlined in Chapter 88.46 RCW.
- Water pollution control, as outlined in Chapter 90.48 RCW and RCW 90.56.510.

However, starting in 2015, the Legislature extended the use of funds from the OSPA to the Emergency Management Division for their work with Local Emergency Planning Committees (LEPCs) and then to the Washington National Guard (Guard) beginning in FY 2019.

Table 9: Oil Spill Prevention Account appropriations FY 2008-2019 (Washington State Fiscal Information, 2019)

Agency	2007-09	2009-11	2011-13	2013-15	2015-17	2017-19
Washington Department of Ecology ²⁰	\$12,444,000	\$10,518,000	\$5,393,000	\$5,514,000	\$8,424,000	\$8,299,000
Office of the Governor ²¹	\$715,000	N/A	N/A	N/A	N/A	N/A
Department of Revenue ²²	\$16,000	\$19,000	\$19,000	N/A	N/A	N/A
Special appropriations to the	N/A	N/A	N/A	N/A	\$12,000	N/A

¹⁸ This amount includes Spills Program operating budget and Ecology’s administration costs after the 2020 Supplemental Operating Budget. \$2,200,000 of the appropriation is for a one-time transfer to OSRA.

¹⁹ The Oil Spill Prevention Account (OSPA) appropriated funds to Washington Sea Grant (WSG) and the Washington Department of Fish and Wildlife (WDFW) in 1991.

²⁰ Ecology’s funding amounts exclude the proviso funding appropriated to Ecology to fund an interagency agreement with University of Washington to support WSG.

²¹ The Office of the Governor received an OSPA appropriation in the 2005-07 biennium to implement ESSB 5432, which established an Oil Spill Oversight Council in the Office of the Governor. The 2007-09 biennium appropriation supported continued implementation of the enacted legislation.

²² The Department of Revenue had direct spending authority in the OSPA to support administration of the OSAT. This authority was removed by a maintenance-level line item in the 2013-15 biennium enacted operating budget.

Agency	2007-09	2009-11	2011-13	2013-15	2015-17	2017-19
Governor²³						
Washington Department of Fish and Wildlife	\$1,104,000	\$884,000	\$887,000	\$917,000	\$1,069,000	\$1,122,000
Washington Sea Grant²⁴	\$170,000	\$170,000	\$170,000	\$170,000	\$170,000	\$170,000
Emergency Management Division (LEPCs)	N/A	N/A	N/A	N/A	\$1,000,000	\$1,028,000

Note: All numbers rounded to the nearest thousand and reflect initial enacted operating budgets for each biennium.

Oil Spill Response Account

The OSRA accounts for about 18 percent of the Spills Program’s operating budget for a total of \$8,576,000 for the 2019-21 biennium (Washington State Department of Ecology, 2020a). The OSRA has a cap of \$9,000,000. Once the balance in this account reaches \$9,000,000, the tax is no longer collected. Revenue is collected again when the account balance drops to \$8,000,000 or below (Wash. Rev. Code § 82.23B.020, 2018). Recent fund transfers from the OSRA into the OSPA have left the OSRA at historic lows. Since the 2015-17 biennium, almost \$8,000,000 in revenue has been transferred from the OSRA to help cover shortfalls in the OSPA and support other agencies (see Table 13 for more information).

The funds in this account are used for:

- Costs for responding to spills or imminent threats of spills of crude oil or petroleum products to surface water that may exceed \$1,000.
- Costs of Ecology’s use of an Emergency Response Towing Vessel (Wash. Rev. Code § 90.56.500, 2018).

Specifically, appropriations from this account can pay for Natural Resource Damage Assessments (NRDAs), response costs, containment, clean up and disposal costs, wildlife rescue,

²³ The 2015-17 biennium Special Appropriation to the Governor supported the statewide Information Technology Cost Pool, which was established in the 2015-17 biennium enacted operating budget to support agencies’ approved IT projects.

²⁴ Washington Sea Grant’s OSPA funding is appropriated to Ecology through a budget proviso. Ecology provides the funding to WSG through an interagency agreement with the University of Washington.

contracts, overtime staff costs, and equipment costs for a large oil spill (Wash. Rev. Code § 90.56.500, 2018).²⁵ However, if a spill is a hazardous substance spill other than oil, the program cannot use funding from this account, but rather the MTCA-OP.²⁶ For example, responses to clean up chemicals associated with manufacturing and growing illicit drugs, including illegal marijuana grows and methamphetamine and fentanyl production, are not eligible for funding from the account. Instead, the MTCA-OP must be used.

Responsible parties for a spill exceeding \$1,000 are required to reimburse the state for these costs, which are then deposited into the OSRA for oil related spills or the MTCA-OP for other hazardous substances (Wash. Rev. Code § 90.56.500, 2018). This does not include penalties or NRDA assessments. NRDA assessment payments are deposited into the CPA for NRDA projects. Penalties for vessels are deposited into the Vessel Response Account and non-vessel penalties are deposited into the CPA (see section titled “Coastal Protection Account”).²⁷

Model Toxics Control Act accounts

The Model Toxics Control Operating Account (MTCA-OP) funds approximately 55 percent of the Spills Program’s operating budget for a total of \$25,988,000 for the 2019-21 biennium (Washington State Department of Ecology, 2020a).²⁸

Prior to the passage of Engrossed Substitute Senate Bill (ESSB) 5993 in 2019, revenue for the MTCA accounts were funded by the Hazardous Substance Tax (HST), a wholesale tax on hazardous substances, including petroleum products (about 90 percent of the substances), pesticides, and certain chemicals.

The MTCA accounts were broken down into three separate accounts:

- State Toxics Control Account (STCA)
- Local Toxics Control Account (LTCA)
- Environmental Legacy Stewardship Account (ELSA)

Both the STCA and ELSA provided funding to the program as well as other programs at Ecology and other agencies (Wash. Rev. Code § 70.105D.070, 2018). The STCA accounted for 44 percent of the program’s budget during the 2017-19 biennium (Washington State Department of Ecology, 2018c). Funding from this account was for oil spill prevention, preparedness, and hazardous substance and oil spill response work. This also included drug lab clean up. The ELSA accounted for 6 percent of the program’s budget during the 2017-19 biennium

²⁵ This is true for a current spill response. Otherwise, administration of NRDA work is funded through the MTCA-OP. This account does not fund operating staff costs.

²⁶ If the spill is a mix of oil and a hazardous substance, the OSRA can be used.

²⁷ Until July 1, 2020 and then will be deposited into the Coastal Protection Account as well.

²⁸ This amount includes Spills Program operating budget and Ecology’s administration costs after the 2020 Supplemental Operating Budget.

(Washington State Department of Ecology, 2018c). This funding was for hazardous substance and oil spill response and cleanup work.

Model Toxics Control Operating Account

The passage of ESSB 5993 in 2019 changed the MTCA accounts to include the following:

- Model Toxics Control Operating Account (MTCA-OP)
- Model Toxics Control Capital Account (MTCA-CAP)
- Model Toxics Control Stormwater Account (MTCA-SW)

The MTCA-OP is now the sole account providing funds from the HST to the program, instead of the STCA and ELSA. Prior to FY 2020, the HST was based on the wholesale price of all hazardous substances including petroleum products. HST revenue would fluctuate based on oil prices. During the 2019 legislative session, ESSB 5993 modified the HST for petroleum products to be one dollar and nine cents per barrel, which is a stable volume-based rate. The rate will be adjusted annually based on the implicit price deflator for non-residential structures. To compare just the MTCA-OP and the OSPA, which are the two main funding sources for the program, the percentage is about 74 percent for the MTCA-OP and 26 percent for the OSPA in the 2019-21 biennium.

The program relies on funding from the MTCA-OP to help pay for prevention and preparedness work as well as hazardous substance responses (non-oil spill responses when the OSRA cannot be used), which are 10 percent of the program's response work. The MTCA-OP explicitly includes oil spill prevention, preparedness, and response work as appropriate uses of the account (Wash. Rev. Code § 70.105D.070, 2018).

We rely on the MTCA-OP as a funding source for hazardous substance responses because the OSRA funds are only used for responses to oil. For example, the *Davy Crockett* semi-derelict vessel removal response in 2011 included both oil and a hazardous substance (chlorinated oil). In this case, because there was oil, a majority of the response was funded through the OSRA. However, for removal of the chlorinated oil, the MTCA accounts were used.

Coastal Protection Account

Chapter 90.48 RCW established the Coastal Protection Account (CPA) to provide funding for restoring natural resources (Wash. Rev. Code § 90.48, 1971). The CPA accounts for two percent of the Spills Program's operating budget with a total appropriation of \$1,064,000 for the 2019-21 biennium (Washington State Department of Ecology, 2020a). The account garners most of its revenue from oil spill penalties, natural resource damages from oil spills, and water quality penalties (Wash. Rev. Code § 90.48.390, 2012).

The CPA can be used for:

- Environmental restoration projects and projects that are intended for environmental, recreational, archaeological, or aesthetic restoration or enhancement for the benefits of citizens.

- Investigating the long-term effect of oil spills.
- An aquatic land Geographic Information System (GIS) (Wash. Rev. Code § 90.48.400, 1994).

The program relies on this funding for restoration of natural resources damaged by oil spills and non-personnel related oil projects.²⁹

General Fund Private Local Account

The General Fund Private Local Account (GF-Pvt L) is one percent of the Spills Program’s budget, with \$338,000 appropriated for the 2019-21 biennium (Washington State Department of Ecology, 2020a). Funds from this account are used for the Pacific States – British Columbia Oil Spill Task Force, which works to prevent oil spills from happening by collecting and sharing data, and promoting regulatory safe practices (see Chapter 3 for more information) (Pacific States – British Columbia Oil Spill Task Force, n.d.).

Funding history

Barrel tax rate changes

The OSAT rate has not been adjusted since 1998.³⁰ In over 22 years, this lack of increased revenue has pushed the program to be reliant on other sources of revenue. Table 10 demonstrates the change in the tax rate since the initiation of the barrel tax in 1991 to present day, as well as instances when the OSRT was suspended and re-imposed. The change in 1998 was a shift in barrel tax allocation, not an increase – moving one cent from the OSRT rate to the OSAT rate.

Table 10: Rate change for the barrel tax since 1991 (Washington State Department of Revenue, 2016)

Date	Change	OSAT Rate	OSRT Rate	Total Barrel Tax Rate
October 1991	Barrel tax initiated	\$0.03	\$0.02	\$0.05
January 1998	Rate change	\$0.04	\$0.01	\$0.05
January 2002	OSRT suspended	\$0.04	\$0.00	\$0.04
April 2007	OSRT re-imposed	\$0.04	\$0.01	\$0.05
October 2009	OSRT suspended	\$0.04	\$0.00	\$0.04
January 2013	OSRT re-imposed	\$0.04	\$0.01	\$0.05
April 2013	OSRT suspended	\$0.04	\$0.00	\$0.04
January 2016	OSRT re-imposed	\$0.04	\$0.01	\$0.05

²⁹ Environmental restoration projects funded by water quality penalties are not discussed in this report, as they are not related to the Spills Program. However, the appropriation is shared in the CPA.

³⁰ Effective date of tax change July 1, 1997, but not officially enacted by the Department of Revenue (DOR) until 1998.

Date	Change	OSAT Rate	OSRT Rate	Total Barrel Tax Rate
July 2018	OSRT suspended	\$0.04	\$0.00	\$0.04
October 2018 to forecasted FY 2023	OSRT re-imposed	\$0.04	\$0.01	\$0.05

Transportation modes taxed

The barrel tax was established to apply only to crude oil or petroleum products imported from a waterborne vessel or barge arriving at a marine terminal (ESHB 1027, Wa. 1991). Beginning in 2015, crude oil or petroleum products arriving from rail to a bulk oil terminal were also taxed (ESHB 1449, Wa. 2015). In 2018, pipelines became subject to the barrel tax (E2SSB 6269, Wa. 2018). Currently, the barrel tax applies to crude oil or petroleum products transported by vessel, railroad, and pipelines that import these products into Washington. Of the oil moved through Washington, 47 percent is transported by vessel, 40 percent by pipeline, and 13 percent by rail (see Chapter 1 for more information) (Washington State Department of Ecology, 2020l).

Export tax credit

A tax credit is given to tax payers for any crude oil or petroleum product that is exported out of the state (ESHB 1027, Wa. 1991). Ecology estimates Washington State consumes approximately 50 percent of fuel produced in the state while exporting roughly 50 percent.³¹

Table 11 shows:

- The total tax revenue that *would have been* collected from the OSAT if the export tax credit did not exist (actual tax revenue + export tax credit).
- The *actual net* OSAT revenue collected (total tax revenue – export tax credit).

Table 11: Revenue and export tax credit from the Oil Spill Administration Tax (Washington State Department of Ecology, 2020i; Washington State Department of Revenue, 2020a; Washington State Department of Revenue, 2020b)

Biennium	Total OSAT Revenue	Export Tax Credit applied to OSAT (80% of total Export Tax Credit)	Net OSAT Revenue
2007-09	\$12,769,000	-\$5,398,000	\$7,371,000
2009-11	\$12,258,000	-\$5,004,000	\$7,254,000
2011-13	\$12,376,000	-\$4,845,000	\$7,531,000
2013-15	\$11,181,000	-\$4,643,000	\$6,538,000
2015-17	\$13,649,000	-\$6,356,000	\$7,293,000

³¹ Based on Ecology's Advance Notice of Transfer Data System and Department of Revenue tax collection data.

Biennium	Total OSAT Revenue	Export Tax Credit applied to OSAT (80% of total Export Tax Credit)	Net OSAT Revenue
2017-19	\$17,074,000	-\$7,718,000	\$9,356,000
2019-21 current (July 2019–January 2020 (seven months))	\$5,447,000	-\$2,717,000	\$2,730,000

Note: All numbers rounded to the nearest thousand.

Vulnerability of funding source

Revenue from the OSAT and OSRT poses challenges as a dedicated source for funding the program’s work. The inclusion of pipeline and rail to the tax addressed concerns around the stability of the tax. Additionally, refineries in Washington are operating at or near capacity, helping keep revenue almost constant over time. However, there are still concerns whether this revenue source is adequate to keep up with changes in inflation, new legislative directives, transfers to other agencies, and increased operating costs. Two recent examples include the Oil Transportation Safety Act in 2015 and the Strengthening Oil Transportation Safety Act in 2018. Both Acts address rapid changes in how crude oil is moving through rail corridors and over state waters. New work from both Acts were funded by one-time fund transfers from the OSRA to the OSPA and by adding oil imported by rail and pipeline to the barrel tax. The revenue generated by rail only made up for the loss in revenue that the account experienced due to a decrease in vessel imports over time. The addition of pipeline also did not provide sufficient revenue in the OSPA to fully support the new work directed under both Acts on an ongoing basis.

As legislative mandates continue to increase as oil spill risks evolve, a flat revenue source is insufficient to compete with additional demands. Appropriation levels need to expand to account for this new work, otherwise it will continue to exceed the capacity of the program to effectively perform directed work. Table 12 demonstrates the amount of revenue for the OSPA and OSRA between FY 2008 and 2019.

Table 12: OSAT and OSRT revenue generated for the Oil Spill Prevention and Oil Spill Response Accounts since FY 2008 (Office of Financial Management, 2019b; Washington State Department of Revenue, 2020a, Washington State Department of Revenue, 2020b)

Biennium	OSAT Revenue	OSRT Revenue
2007-09	\$7,371,000	\$2,142,000
2009-11	\$7,254,000	\$305,000
2011-13	\$7,531,000	\$198,000
2013-15	\$6,538,000	\$143,000
2015-17	\$7,293,000	\$1,275,000
2017-19	\$9,356,000	\$1,995,000
2019-21 Forecasted	\$9,614,000	\$2,547,000

Note: All numbers rounded to the nearest thousand. 2019-21 forecasted are based on February 2020 Department of Revenue forecast.

Over the last 10 years, revenue from the OSAT, deposited in the OSPA, has remained between \$3,000,000 and \$4,000,000 each year. Prior to 2007, revenue collected from the OSAT was nearly double. The drastic decline in revenue in 2007 was caused by several factors: decrease in-state gasoline usage, decrease in vessel oil transport paired with an increase in untaxed pipeline and rail transport, and significant refunds of tax revenue to tax payers resulting from Department of Revenue audits. Yet, the OSAT has remained at four cents per barrel since 1998. If the OSAT had been adjusted for the state fiscal growth factor, the tax rate for FY 2020 would be an estimated 11 cents per barrel (Expenditure Limit Committee, 2019; Washington State Department of Ecology, 2019h). Figure 23 shows the historical data for the gap in appropriation and revenue since FY 2008 through FY 2019 for all agencies.

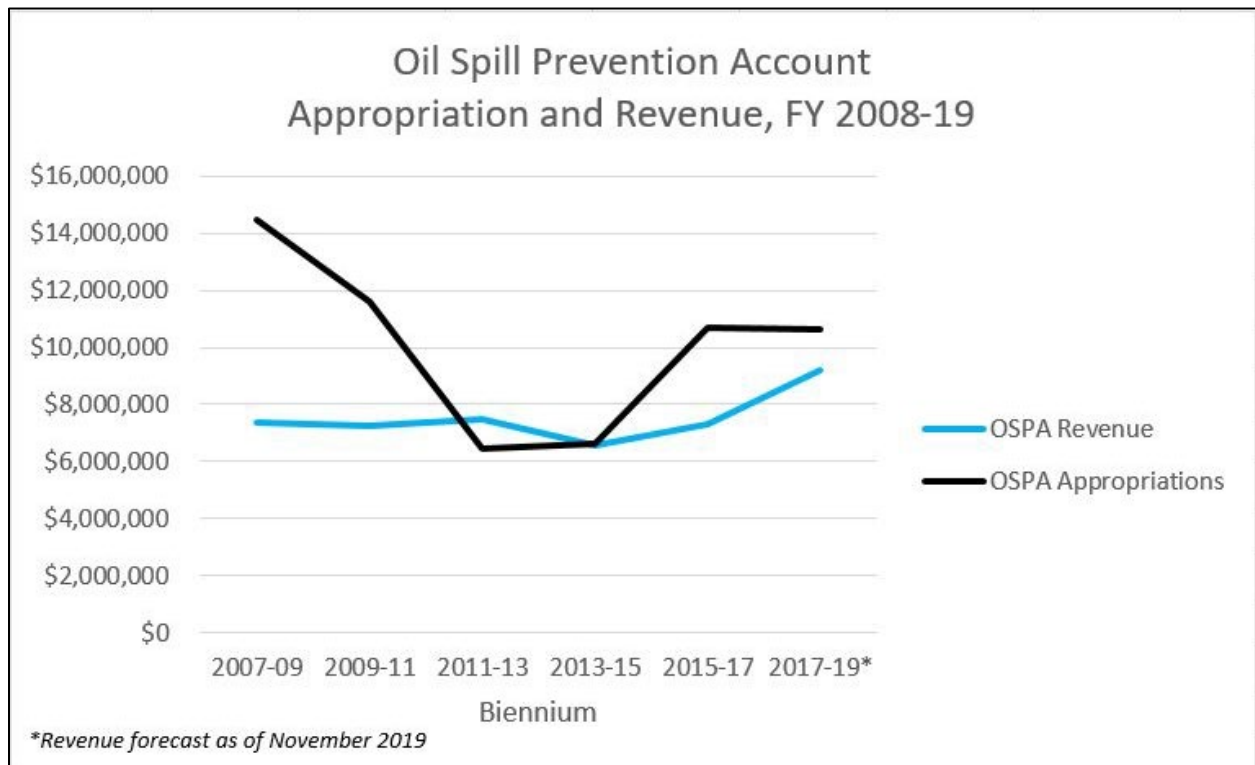


Figure 23: All agencies appropriation and revenue for the Oil Spill Prevention Account, fiscal years 2008 to 2019 (Washington State Fiscal Information, 2019; Washington State Department of Revenue, 2020a)

Changes in reliance on the MTCA accounts

When comparing the program’s two main funding sources, the MTCA accounts and the OSPA, during the 1997-99 biennium, the MTCA accounts funded about 30 percent of the program. As of the 2020 enacted supplemental budget, the MTCA accounts comprise 70 percent of the program’s budget. This funding level shift for the program between the MTCA accounts and the OSPA are shown in Figure 24.

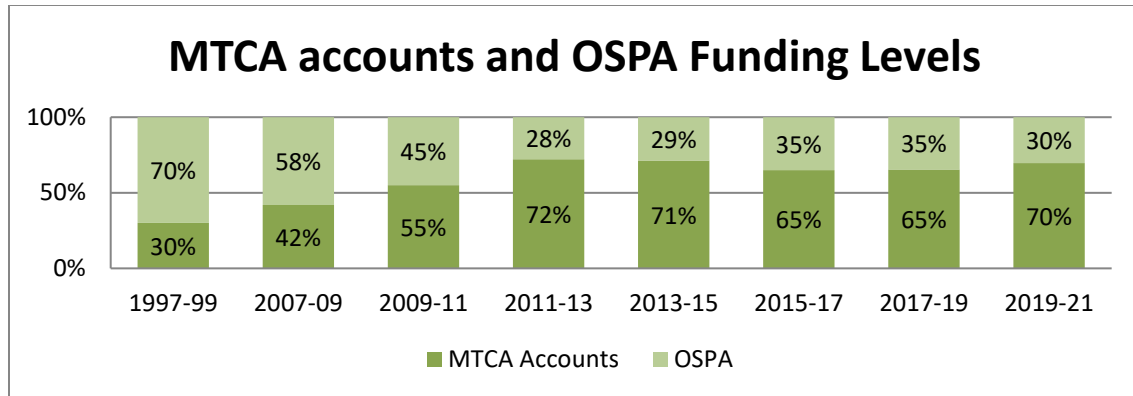


Figure 24: Model Toxics Control Act accounts and Oil Spill Prevention Account funding levels since the 1997-99 biennium (Washington State Department of Ecology, 2020h)

One-time fund transfers and appropriation cuts

Historically, the OSPA has faced significant shortfalls, requiring budgetary intervention in order to maintain program activities. These transfers are in addition to appropriations from other accounts. Table 13 shows a history of these shortfalls and consequent transfers and appropriation cuts.

It is important to note, 2015 and 2018 were the same years that rail and pipeline, respectively, began to contribute to the barrel tax. Despite two new revenue sources, sufficient revenue was not generated to meet appropriated needs for the program. These included new activities directed by the Legislature to enhance oil transportation safety and new appropriations and direct funding in the OSPA for the EMD and the National Guard. Without these one-time fund transfers and shifts in funding, the program would have had to substantially reduce statutorily directed work to support oil spill prevention and preparedness activities.³²

Table 13: Fund transfers and budget cut history (1994 – 2019) for the Spills Program

Legislative session	Amount transferred to the OSPA (rounded to the nearest thousand)	Account transferred from	Reason for transfer
1994	\$900,000	Oil Spill Response Account	Due to revenue shortfall.
1995	\$1,700,000	Oil Spill Response Account	To accommodate deficit.
2000	\$1,650,000	General Fund State Account	To help fund Neah Bay Emergency Response Towing Vessel.
2008	\$2,400,000	State Toxics Control Account	Drastic decrease in revenue resulting from significant refunds and reduction in vessel oil transport.
2009	-\$1,900,000	Funding cut, lowered the	Due to cost increases

³² Other agencies reliant on this fund source would have to make reductions as well.

Legislative session	Amount transferred to the OSPA (rounded to the nearest thousand)	Account transferred from	Reason for transfer
		appropriated amount.	and flat-to-declining revenue.
	-\$300,000	Reduction in 2009 supplemental appropriation.	Due to cost increases and flat-to-declining revenue.
2011	\$5,000,000	State Toxics Control Account <i>Permanent fund shift from the OSPA to the STCA to balance expenditures with revenue in the OSPA.</i>	Appropriation balance to available revenue.
2015	\$2,225,000	Oil Spill Response Account	Oil Transportation Safety Act passed.
2018	\$4,700,000	Oil Spill Response Account	Strengthening Oil Transportation Safety Act passed.
2019	\$1,040,000	Oil Spill Response Account	To transfer funds to the Emergency Management Division.

In 2009, the Legislature reduced funding for the OSPA by \$1,900,000 and reduced Spills Program staff authority by eight FTEs. Appropriations were further reduced by another \$300,000 in a supplemental budget due to cost increases and flat to declining revenue. As a result, Ecology conducted less prevention and preparedness work, including fewer vessel inspections, facility inspections, response readiness drills, and review and approval of fewer prevention and contingency plans. We had to cut two areas of work completely, including:

- Onboard vessel notification drills (had previously conducted about 100 annually).
- Agency attendance and evaluation of tabletop drill exercises (had previously conducted about 40 to 50 annually).

Both are regulatory requirements. The program met the mandates by developing criteria for industry to self-certify, which was a first in Washington drill program history. There was a significant degradation to services and readiness to respond to spills. This was also a setback for industry because Ecology's documentation and evaluation allowed industry to meet federal requirements used for audits.

Industry had to bear the costs by doing its own certification, hiring additional employees to meet this new shift in workload. The program and industry both understand the importance of working together during drill exercises to better prepare for a response. Currently, the program is working towards eliminating self-certification, with only a few self-certified drills left taking place each year.

Based on the November 2017 revenue forecast, the program faced a significant shortfall in the OSPA revenue for the 2017-19 biennium. Although the OSPA received a one-time fund transfer

from the OSRA, the program was still facing an estimated \$1,600,000 deficit in the base budget due to budget reductions in the MTCA accounts, Washington Management Service (WMS) cuts, and unfunded budget items such as eHub (Ecology Revenue Management System), the Vancouver field office lease increase, and other general program cost increases. Due to this, we retained vacancies that had carried over from prior biennium and managed a reduced budget for purchases, training, travel, and other discretionary spending to balance the base budget. Facing escalating costs for the Olympia Brewery Transformer Spill response, vacancies continued to be held into the 2019-21 biennium.

Five times in Spills Program history, funds were transferred from the OSRA to the OSPA in order to remedy revenue shortfalls faced by this account. By transferring funds from the OSRA to fill the gap in the OSPA and to transfer money to other agencies, the OSRA has less capacity to respond to an oil spill. By relying solely on an inadequate revenue source, continual one-time fund transfers, and a heavy reliance on the MTCA accounts, the capacity of our state to prevent, prepare for, and respond to an oil spill is at risk. OSRT revenue accrues slowly, at a rate of roughly \$100,000 a month (Washington State Department of Ecology, 2020k). The transfer of \$4,700,000 to the OSPA in 2017-19 biennium utilized almost four years' worth of revenue in the OSRA. Additional transfers summing to \$1,040,000 in the 2019-21 biennium will utilize another year of revenue collections.

Oil Spill Response Account cap

When the OSRT was established in 1991, the fund balance cap at which the tax would be suspended was set at \$25,000,000. The cap was lowered in 1997 to \$10,000,000 and again in 1999 to the current \$9,000,000 level (ESHB 1027, Wa. 1991; ESHB 2096, Wa. 1997; ESHB 2247, Wa. 1999; Wash. Rev. Code § 82.23B.020, 2018). The OSRA fund balance is currently at a historic low due in part to budget transfers to keep the OSPA solvent.

Maintaining a low balance, coupled with multiple one-time fund transfers to the OSPA, compromises our ability to respond effectively to an oil spill where there may not be a responsible party or where the responsible party cannot financially fund a large-scale response. Removing or raising the cap would allow the OSRA to accrue and have sufficient funds to effectively respond when an oil spill occurs.

Olympia Brewery Transformer Spill example

On February 25, 2019, Ecology responded to an oil spill from a transformer at the former Olympia Brewery site in Olympia, Washington, which caused oil to enter the Deschutes River and Capitol Lake. Ecology estimates approximately 600 gallons of oil spilled. The response and cleanup was complex and extensive because the oil contained toxic polychlorinated biphenyls (PCBs). The PCB oil was not an imminent public health threat, but the spill was a concern to the environment because PCBs can accumulate in the aquatic food chain and build up over time to harmful levels.



Figure 25: Deployed boom for the Olympia Brewery Transformer Spill

The program worked closely with Ecology’s Toxics Cleanup Program (TCP). Since the initial response, Ecology used the OSRA to fund spill responder costs.

The owner of the former Olympia Brewery was unable to provide continuous funding to the spill response operations without interrupting clean-up activities. Because of the continued risks to human health and the environment, Ecology continued cleanup operations with state funds through the OSRA.

In May of 2019, Ecology assumed responsibility for contractor costs and all other costs for the spill until the cleanup was complete. On August 26, 2019, Ecology and the contractor concluded active response and began to demobilize the cleanup operations at the various sites. As of March 2020, estimated contractor costs were \$11,000,000 for Washington (Washington State Department of Ecology, 2020k). This is in addition to the \$4,100,000 paid by the responsible party.

Ecology used available end-of-biennium fund balance in the MTCA accounts to transfer \$3,500,000 in response costs from the OSRA to the MTCA accounts. To avoid driving the account’s cash balance negative, and exhausting our remaining OSRA appropriation authority completely, Ecology delayed the distribution of equipment cache grants during the 2019-21 biennium and held positions vacant within the program for a total of \$1,300,000 to help pay for the response costs. Even with this expenditure shift, the OSRA cash balance was under \$295,000 by December 2019 (an all-time low) and was not projected to rise to a balance that would remain

consistently above \$500,000 until August of 2020 (Washington State Department of Ecology, 2020k). The enacted 2020 supplemental operating budget provided a much needed one-time fund transfer from the OSPA, which will be returned with interest by June 30, 2028. It also provided supplemental funding to fulfill equipment cache grants and provide contingency support for spill responses for the remainder of the biennium.

Due to differences in how Washington State and the federal government define “oil”, Washington is not eligible for federal reimbursement of response costs for this spill. However, Ecology will seek reimbursement from the responsible party, an effort that could take years.

Appropriations

Total appropriations for the Spills Program have ranged from \$20,000,000 to over \$40,000,000 each biennium since the 2007-09 biennium. Requirements by the Legislature have expanded over the years, as have statewide costs, increasing the need for a sustainable revenue source. Table 14 demonstrates the change in appropriations since the 2007-09 biennium from all accounts, including those no longer providing appropriation to the program.

These accounts include the Vessel Response Account.³³ The MTCA accounts have switched from the STCA, LTCA, and ELSA, to the MTCA-OP in the 2019-21 biennium. See Appendix B for expenditure history.

Table 14: Spills Program appropriations from all accounts since 2007-09 biennium (Washington State Department of Ecology, 2020a)

ACCOUNT	2007-09	2009-11	2011-13	2013-15	2015-17	2017-19	2019-21
OSPA	\$10,715,000	\$9,212,000	\$4,737,000	\$5,169,000	\$7,896,000	\$7,747,000	\$10,691,000
OSRA	\$7,078,000	\$7,055,000	\$7,076,000	\$7,076,000	\$7,076,000	\$7,076,000	\$8,576,000
STCA	\$7,732,000	\$7,722,000	\$12,386,000	\$10,925,000	\$12,783,000	\$14,879,000	N/A
ELSA	N/A	N/A	N/A	\$1,894,000	\$1,852,000	\$1,961,000	N/A
MTCA-OP	N/A	N/A	N/A	N/A	N/A	N/A	\$24,463,000
CPA	\$1,776,000	\$1,556,000	\$1,556,000	\$1,556,000	\$1,556,000	\$1,556,000	\$1,064,000
GF – Pvt L	\$338,000	\$338,000	\$338,000	\$338,000	\$338,000	\$338,000	\$338,000
GF – State	\$30,000	N/A	N/A	N/A	N/A	N/A	N/A
LTCA	N/A	\$3,600,000	N/A	N/A	N/A	N/A	N/A
Vessel Response Account	\$1,438,000	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL	\$29,107,000	\$29,483,000	\$26,093,000	\$26,958,000	\$31,501,000	\$33,557,000	\$45,132,000

Note: All numbers rounded to the nearest thousand. All numbers through the 2017-19 are based on initial enacted budgets for each biennium as published in Ecology’s [Budget and Program](#)

³³ The Vessel Response Account was originally used to fund the Neah Bay ERTV. This account sunsets July 1, 2020, as the Neah Bay ERTV is now funded by industry.

Overview books. The 2019-21 biennium figures are based on the budget for the Spills Program’s activities as of the 2020 enacted supplemental operating budget.

2019-21 Biennium operating budget

The Spills Program’s operating budget determines which policies, programs, and projects under each activity will be conducted during the biennium. There is no capital budget for the program.

Baseline budget

The current baseline budget for the Spills Program for the 2019-21 biennium operating budget, as of the 2020 enacted Supplemental Budget, is 91.2 FTEs and \$47,345,000 (Washington State Department of Ecology, 2020a). The baseline budget includes all funds necessary to allow the program to operate, including a proportionate share of Ecology’s agency administration costs in the appropriate accounts. Table 15 displays the 2019-21 operating budget.

Table 15: 2019-21 operating budget for the Spills Program (Washington State Department of Ecology, 2020a)

Account	2019-21 operating budget	Percentage
General Fund Private Local Account	\$338,000	1%
Model Toxics Control Operating Account	\$25,988,000	55%
Oil Spill Prevention Account	\$11,379,000	24%
Oil Spill Response Account	\$8,576,000	18%
Coastal Protection Account	\$1,064,000	2%
Total	\$47,345,000	100%

Note: All numbers rounded to the nearest thousand. Percentages rounded to whole number. Administrative costs included in account totals.

Program activities

Each of the four program activities discussed in Chapter 2 are funded from these five accounts. Each program activity receives a different percentage of funding from the various accounts, as each account was established for specific services. Table 16 shows the 2019-21 appropriation for each program activity.

Table 16: Funds allocated for each program activity (Washington State Department of Ecology, 2020c)

Program Activity	2019-21 Biennium Operating Budget	2019-21 Biennium FTEs	Budget %	Account(s)
Prevention of oil spills from vessels and oil handling facilities	\$10,133,000	25.8	22%	GF-Pvt L MTCA-OP OSPA
Prepare for aggressive response to oil and hazardous material incidents	\$7,020,000	22.9	16%	GF-Pvt L MTCA-OP OSPA
Rapidly respond to and clean up oil and hazardous material spills	\$26,333,000	39.7	58%	GF-Pvt L MTCA-OP OSRA OSPA ³⁴
Restore public natural resources damaged by oil spills	\$1,646,000	2.8	4%	MTCA-OP CPA
Total	\$45,132,000	91.2	100%	All listed above

Note: Ecology's administrative costs are not included. The total amount will not equal the total amount shown in Table 15.

Forecast

Based on the Department of Revenue's February 2020 forecast and the 2020 Supplemental Operating Budget, Ecology projects the fund balance in the OSPA to remain positive over the next three biennia, if current appropriations are maintained, and assuming an operating budget growth for average statewide operating changes of 4.7 percent (Washington State Department of Revenue, 2020). The OSRA fund balance is projected to be just under \$200,000 at the end of the 2019-21 biennium. Because current revenue estimates for the OSRT are \$2,500,000 per biennium, the rebuilding of the OSRA fund balance will depend on oil spill activity. The account could not immediately support response costs for a significant oil spill event.

³⁴ The OSPA funding for oil spill response is the \$2,200,000 of funds appropriated in the 2020 enacted supplemental operating budget to provide revenue to the OSRA.

Chapter 6: Striving Towards a Permanent and Sustainable Funding Solution

Currently, the limitations associated with ongoing funding challenges prevent Ecology from fully implementing all of the activities in the program’s portfolio of statutorily directed work. At this time, we do not recommend any activities within the program’s portfolio for reduction or discontinuance. There are areas within the program’s portfolio that due to limited revenue and reduced appropriation over time prevents full development and implementation of the work. These areas, as described in Chapter 7, are still important to ensure Washington continues to strive towards its goal of zero spills and should therefore not be reduced or discontinued.

Funding fix attempts proposed by the Legislature

Over the years, Ecology and the Legislature have proposed legislation to address the revenue shortfalls faced by the program. These proposals are shown in Table 17 and only represent Ecology and legislative requests since 1997. Table 13 complements Table 17 by showing the history of one-time fund transfers, permanent transfers, and appropriation cuts made due to lack of sufficient revenue.

Table 17: Funding fix attempts for the Spills Program since 2010

Year	Bill	Funding Fix	Passed?
1997	ESHB 2096	Changed the rate of the Oil Spill Administration Tax from \$0.03 to \$0.04. Changed the rate of the Oil Spill Response Tax from \$0.02 to \$0.01.	Yes
2007	SB 5553	Removed the export tax credit from the barrel tax. Added collection of a risk-based Oil Spill Prevention and Response Service Transfer tax at a rate of five cents per barrel of refined oil product for transfer of oil from or to a vessel. Included a fiscal growth factor to be applied to the barrel tax and new transfer tax. Funds in the Oil Spill Response Account above \$9,000,000 would be transferred to the Oil Spill Prevention Account.	No
2010	HB 2965	Expanded the barrel tax so it would apply to crude oil and petroleum products received by pipelines, in addition to oil received by vessel. Increased the Oil Spill Administration Tax from four to six cents. Petroleum products delivered into fuel tanks of waterborne vessels or tug boats, airplanes, trains, and other vehicles would not be subject to the export tax credit. Included a fiscal growth factor for the barrel tax.	No
2014	SB 6576	Expanded the barrel tax so it would apply to crude oil received by rail, in addition to vessels.	No

Year	Bill	Funding Fix	Passed?
2015	SB 5087	Expanded the barrel tax so it would apply to crude oil and petroleum products received from rail and pipeline, in addition to vessels. Increased the Oil Spill Administration Tax from \$0.04 to \$0.10 cents. ³⁵	No
	ESHB 1449	The final bill expanded the barrel tax so it would apply to crude oil and petroleum products received by rail in addition to vessels. The Oil Spill Administration Tax rate remained unchanged.	Yes
2016	SB 6418 <i>This was not Ecology request legislation.</i>	Added a new \$1.00 per barrel tax for crude oil received by vessel, rail, and pipeline. Half of the revenue collected would be deposited into the OSRA. The remaining half would be deposited into a newly created oil refinery worker assistance account to fund programs for workers whose jobs have been eliminated due to reductions in refining operations. A tax credit would be applied against the new tax for any crude oil that is refined in Washington.	No
2017	HB 1210 / SB 5425 ³⁶	Increased the Oil Spill Administration Tax from \$0.04 to \$0.065 per barrel. Eliminated the contingency to suspend the Oil Spill Administration Tax collection based on the balances of the Oil Spill Prevention Account and the Oil Spill Response Account.	No
	SB 5968 <i>This was not Ecology request legislation.</i>	Provided for a one-time transfer of \$3,000,000 from the Oil Spill Response Account for the 2017-19 biennium.	No
	2SHB 1611	Proposed a rate change in the Oil Spill Administration Tax from \$0.04 to \$0.065. Expanded the barrel tax so it would apply to crude oil and petroleum products received from pipeline, in addition to vessels and rail.	No
2018	E2SSB 6269	The original version added pipeline to the barrel tax and increased the Oil Spill Administration Tax from \$0.04 to \$0.065. The final version added pipeline to the barrel tax, but did not change the Oil Spill Administration Tax rate.	Yes

³⁵ SB 5087 and ESHB 1449 were companion bills. SB 5087 was not amended so it remained in its original form.

³⁶ HB 1210 and SB 5425 were companion bills. Neither bill was amended so both remained in their original forms.

Year	Bill	Funding Fix	Passed?
2020	CW01 Oil Spills Program (Policy-level Budget Proposal)	<p>Shifted \$2,200,000 of annual Oil Spill Prevention Account (OSPA) expenditure authority on an ongoing basis at the start of FY 2021 from the OSPA to the Model Toxics Control Operating Account (MTCA-OP).</p> <p>Transferred the \$2,200,000 not spent in the OSPA in FY 2021 as a result of the fund shift described above to the Oil Spill Response Account (OSRA) for a one-time fund transfer to replenish the cash balance. This transfer is a loan that will be returned, with interest, from the OSRA to the OSPA by June 30, 2028.</p> <p>Increased appropriation authority for FY 2021 for the Oil Spill Response Account in order to allow for utilization of the one-time transfer of \$2,200,000 for oil spill response, as needed.</p> <p>Provided one-time contingency funding of \$1,000,000 from the Model Toxics Control Operating Account to supplement the Oil Spill Response Account if the cash balance were to be depleted within the 2019-21 biennium.</p> <p>Provided a one-time fund of \$1,000,000 from the Model Toxics Control Operating Account for the Equipment Cache Grant program, replacing funds for this program that were utilized to cover costs during the Olympia Brewery Transformer Spill response.</p>	Yes

All funding options considered

While the majority of this report focuses on finding a sustainable funding solution for the OSPA, since the recent Olympia Brewery Transformer Spill, the need to right-size the OSRA has also become more apparent.

The OSRA is not sufficient to fund a significant spill. The account is currently capped at \$9,000,000 and faces increased pressure from inflation, increased cleanup expectations, and continual fund transfers. It is vital to ensure a sustainable OSRA in order for Ecology to adequately respond to a significant spill.

To find a sustainable funding solution for both accounts, we reviewed all funding options considered in the past by the program for the OSPA and OSRA:

- Shift OSPA appropriations to the MTCA-OP.
- Increase the OSAT.
- Charge an Oil Spill Prevention and Preparedness Fee on non-tank vessels and include a fiscal growth factor.
- Eliminate the export tax credit from the OSAT and the OSRT.
- Include a fiscal growth factor or implicit price deflator to the OSAT and OSRT.

- Require an Oil Transfer Fee on all entities transferring crude oil or petroleum products.
- Require a Certificate of Financial Responsibility Fee to ensure oil operators have sufficient funds to pay for response and restoration costs of an oil spill.
- Fund the OSRA through the MTCA-OP and move the one cent from the OSRT to the OSAT.
- Merge both the OSPA and OSRA with the MTCA-OP accounts, eliminating the barrel tax and only having the Hazardous Substance Tax (HST).
- Increase the OSRA cap and include a fiscal growth factor.
- Increase the OSRA cap and the OSRT.

Table 18 provides a summary of all funding options considered for each account. This table describes what each funding option is, the pros and cons of each, and a conclusion as to why the funding option is or is not recommended at this time. For comparison, Appendix D provides a comparison of funding mechanisms for prevention, preparedness, and response work conducted by other west coast states, including Hawaii. A few of the funding options listed in Table 18 are already implemented in these states.

Table 18: Funding options considered by the Spills Program

Funding option	Summary	Pros	Cons	Conclusion
<p>Shift OSPA appropriation to the MTCA-OP</p>	<p>The MTCA accounts have provided funding to the program since it was established in the early 1990s. Over the years, the program has relied on multiple one-time fund transfers and permanent fund shifts from the MTCA accounts.</p>	<p>The program already receives funding from this account. There would be no additional implementation or administrative costs associated with this option.</p> <p>This would create a broader base of payers than the barrel tax.</p> <p>This is a shift in appropriation and does not result in a tax or fee increase of any kind.</p>	<p>The MTCA accounts provide funding to multiple programs and agencies. The program would be one of many programs competing for funding.</p>	<p>This funding option was adopted in the 2020 Operating Supplemental Budget. This option does not result in a tax or fee increase and it is projected to stabilize the OSPA fund balance through the 2027-29 biennium, based on February 2020 revenue forecasts.</p> <p>Ecology also recommends this funding option for future consideration.</p>
<p>Eliminate Export Tax Credit</p>	<p>The OSAT and OSRT applies to all crude oil and petroleum products brought into Washington via vessel, rail, and pipeline. Crude oil and petroleum products received at a terminal and then exported or sold for export from Washington receive an export tax credit, canceling out this portion of the revenue source (Wash. Rev. Code § 82.23B.040, 2015). Additionally, some companies such as jet fuel suppliers and ship fueling companies, can receive a tax credit for selling fuel to aircrafts and ships, and do not have to pay the barrel tax (Wash. Admin. Code § 458-20-260, 2018).</p>	<p>This funding option would require limited implementation costs, as no new taxes would be required.</p> <p>Removing the export tax credit would incorporate the full scope of revenue from the OSAT and OSRT.</p>	<p>Similar tax credits exist in other areas of law and are relied upon.</p>	<p>This funding option is not recommended at this time due to the potential for litigation.</p>

Funding option	Summary	Pros	Cons	Conclusion
Oil Spill Prevention and Preparedness Fee on non-tank vessels	<p>Cargo and passenger vessels weighing over 300 gross tons transit Washington waters to a Washington port about 2,900 times each year carrying heavy fuel oil. This industry sector transports upwards of a billion gallons of oil as fuel each year, but does not currently pay for any of Washington's legislatively directed prevention and preparedness services. These vessels are subject to prevention and preparedness activities, such as vessel screenings, inspections, and contingency plan requirements.</p>	<p>This option provides a better cost sharing balance between the oil industry and non-tank vessel industry, capturing risk from all regulated vessels that carry oil.</p> <p>It allows the program to adjust the fee based on inflation and new legislatively directed work for these activities associated with cargo and passenger vessels.</p>	<p>Implementation and administrative costs may be high.</p> <p>There is a potential for this funding option to have an impact on port competitiveness as increased fees could lead to vessel operators moving to out-of-state ports.</p> <p>Local companies make frequent and multiple transits.</p> <p>Transits fluctuate, so this fee could be a less reliable funding source.</p>	<p>This funding option was not included in the enacted 2020 Supplemental Operating Budget because it would not generate all of the revenue needed and would need to be combined with another funding option.</p> <p>However, this funding option is recommended for future consideration in the event that additional resources were needed to maintain current work, or if new legislative priorities were to evolve.</p>
Increase the Oil Spill Administration Tax	<p>The OSAT is the \$0.04 portion of the barrel tax and helps fund prevention and preparedness work. This tax was last adjusted in 1998, changing the rate from \$0.03 to \$0.04. The OSAT has not been adjusted to include inflation, new legislative directives, increased operating costs, and transfers to other agencies.</p>	<p>This funding option would require limited implementation costs, as the structure for tax collection is already in place.</p> <p>It provides a sufficient revenue source.</p> <p>It applies to industry with the greatest risk for a high-volume spill, covering all oil handled and transported in bulk.</p>	<p>Increasing the OSAT would not offset the loss of revenue from the export tax credit, which is equivalent to the taxed amount. Each barrel exported receives a credit in the amount of the tax originally paid for first receipt of the oil or petroleum product. The OSAT does not capture all entities regulated by the program, such as cargo and passenger vessels.</p>	<p>This funding option was not enacted in the 2020 Supplemental Operating Budget because it would result in an additional tax increase on similar taxpayers impacted by the Hazardous Substance Tax increase from the passage of ESSB 5993 in 2019.</p> <p>However, this funding option is recommended for future consideration in the event that additional resources were needed to maintain current work or if new legislative priorities were to evolve.</p>

Funding option	Summary	Pros	Cons	Conclusion
Increase the Oil Spill Response Tax	The OSRT is the \$0.01 portion of the barrel tax and helps fund oil spill response costs over \$1,000. This tax was last adjusted in 1998, changing the rate from \$0.02 to \$0.01. The OSRT has not been adjusted to include inflation, new legislative directives, increased operating costs, and transfers to other agencies.	<p>This funding option would require limited implementation costs, as the structure for the tax collection is already in place.</p> <p>It provides a sufficient revenue source.</p> <p>It applies to industry with the greatest risk for a high-volume spill, covering all oil handled and transported in bulk.</p>	<p>Increasing the OSRT does not capture the loss of revenue from the export tax credit.</p> <p>The OSRT does not capture all entities regulated by the program, such as cargo and passenger vessels.</p>	<p>This funding option is not recommended at this time, because it would result in an additional tax increase on similar taxpayers impacted by the Hazardous Substance Tax increase from the passage of ESSB 5993 in 2019.</p> <p>However, this funding option could be considered in the event that the OSRA fund balance remains too low to support response to a significant oil spill event.</p>
Include Fiscal Growth Factor (FGF) or Implicit Price Deflator (IPD)	This option accounts for inflation and new legislative demands over time. The FGF or the IPD can be applied to all funding solutions presented.	<p>There are minimal implementation or administrative costs for this funding option, as it is already in place for other accounts. The IPD is used for the Model Toxic Control Accounts, and the IPD is used for adjusting water discharge fees.</p> <p>This option accounts for inflation and new legislative demands over time.</p>	There have been cases in which the implicit price deflator (IPD) has gone negative, which would reduce the tax rate and revenue collected.	<p>This funding option was not enacted in the 2020 Supplemental Operating Budget because the revenue source for the MTCA-OP includes the IPD.</p> <p>However, this funding option is recommended for future consideration, in combination with either increasing the OSAT or charging a fee on non-tank vessels as a fund balance solution for the OSPA. It is also recommended in combination with increasing the OSRA fund balance cap as a fund balance solution for the OSRA.</p>

Funding option	Summary	Pros	Cons	Conclusion
Oil Transfer Fee	This option charges an Oil Transfer Fee on each gallon of oil transferred by regulated entities. This fee would apply to tank vessels (articulated tug barges (ATBs), tank barges, and tank ships), rail cars, and pipelines transferring to all class facility types. Transfers of less than 100 gallons or to recreational vessels would be exempt.	<p>This option captures all crude oil and petroleum products exported out of Washington.</p> <p>The revenue gained represents the level of risk of oil movement through Washington and can later be adjusted to add the FGF or IPD to reflect inflation, increased operating costs, and changes in risk level.</p> <p>It applies to all regulated industry sectors.</p>	<p>This option has potentially mid-to-high administrative costs for fee implementation.</p> <p>There are limitations for what aspects of the program for which the revenue could be used.</p> <p>This would result in a double charge for certain industry sectors.</p>	This funding option is not recommended at this time, because it creates a double charge for current payers.
Certificate of Financial Responsibility Fee	The Certificate of Financial Responsibility (CFR) fee ensures oil operators have sufficient funds to pay for response and restoration costs of an oil spill. To receive a CFR, oil operators would need to provide proof of insurance, self-insurance, Protection and Indemnity Club membership, guaranty, a letter of credit, certificate of deposits, and surety bonds. This funding option is scalable, as fees for the CFR would be based on the type of oil operator.	This option ensures oil operators have enough funds to cover an oil spill, rather than placing the burden on the OSRA (which would potentially impact other state funding accounts if the OSRA has insufficient funds).	<p>Specifics for this program still need to be set by rule, but limited funding has prevented this program from starting.</p> <p>There would be high administrative costs for implementation that may initially outpace the revenue collected.</p>	This is currently not a feasible funding option because the specifics of the CFR program would need to be set during rulemaking, which has been delayed due to limited funding.

Funding option	Summary	Pros	Cons	Conclusion
Expand the MTCA accounts: Fund the OSRA	A portion of funds from the Hazardous Substance Tax (HST) could go towards the OSRA. Currently, the program responds to all oil and hazardous substance spill notifications received and determines which spill receives a field versus non-field response. Initial oil spill costs are paid from the OSRA for large oil spills with estimated costs over \$1,000. The responsible party is required to pay for costs, but if unable to do so, this money comes directly from the OSPA or MTCA-OP for hazardous substance spills.	<p>There are low administrative costs as the HST is already in place and would simply merge the OSRT into the OSAT.</p> <p>This would capture all crude oil exported out of Washington.</p>	Without sufficient funds to pay for responses, the spill site could turn over to the Toxics Cleanup Program (TCP), turning into a toxics cleanup site. This has the potential to take years to cleanup a given incident. Alternatively, without a dedicated fund source, cleanup would have to be funded by program operating appropriation, which would impact the ability to respond to future incidents and perform other program work.	<p>This funding option is not recommended at this time because the 2020 Operating Supplemental Budget supported a solution for the OSPA fund balance and a near term solution for the OSRA.</p> <p>However, this funding option may be considered in the future to ensure dedicated funding to respond to non-oil, non-petroleum hazardous substance spills.</p>
Merge the OSPA into the MTCA-OP	The HST is currently imposed on hazardous substances and petroleum products. The HST could incorporate crude oil into the definition of products being taxed, putting all of the revenue collected from these products into one tax, the HST, rather than two separate taxes. This option would create one tax that funds hazardous substances (including petroleum products) and crude oil products.	<p>There are low administrative costs for implementing this option as the HST is already in place and would simply merge the OSAT and OSRT into the HST.</p> <p>This would capture all crude oil exported out of Washington.</p>	<p>This funding source is dedicated to multiple activities and programs, not just the Spills Program.</p> <p>The HST rate would need to be raised to generate the additional revenue from the barrel tax rate in order to fully meet the program's funding needs. This may put further strain on the MTCA-OP.</p>	This funding option is not recommended, because the 2020 Operating Supplemental Budget supported a shift of part of the program's funding from the OSPA to the MTCA-OP on an ongoing basis, which is projected to stabilize the OSPA fund balance for the next three biennia.

Funding option	Summary	Pros	Cons	Conclusion
Increase the OSRA cap	The OSRA cap is currently \$9,000,000. This cap was originally set at \$25,000,000 in 1991 when the OSRT was established. It was lowered to \$10,000,000 in 1997 and subsequently lowered to the current \$9,000,000 cap in 1999.	<p>Increasing the OSRA cap allows revenue to accrue to a balance that would adequately fund multiple spills occurring simultaneously.</p> <p>Additional funds in the OSRA could provide a safety net for the OSPA if additional fund transfers were needed in future biennia.</p>	This is a funding solution for the OSRA, not a direct funding solution for the OSPA, ultimately increasing reliance on fund transfers from this account to keep the OSPA solvent.	<p>This funding option was not included in the enacted 2020 Supplemental Operating Budget because it continues to create a reliance on the OSRA to provide transfers into the OSPA instead of finding a direct solution.</p> <p>However, this funding option is recommended for future consideration to ensure the OSRA has a sufficient balance to support response to a significant oil spill event. Ecology is including this funding option in the agency's proposed request legislation for the 2021 legislative session.</p>

2020 Enacted funding solution

The MTCA-OP and OSPA are the main funding sources for the program. Over the years, the program has relied on several one-time fund transfers from various accounts to keep the OSPA fund balance solvent. During the 2011-13 biennium, the Legislature approved a \$5,000,000 permanent fund shift from the OSPA to the MTCA-OP due to a significant revenue decrease from the OSAT. Excluding other funding sources, the MTCA-OP has supported roughly 70 percent of the program's budget and the OSPA has supported the remaining 30 percent. In recent years, with new legislative direction, transfers to other agencies, and increased operating costs, revenue continues to fall behind appropriations, resulting in three subsequent one-time fund transfers since the initial \$5,000,000 fund shift in 2011.

During the 2020 legislative session, the Legislature implemented a multi-step solution in the enacted 2020 supplemental operating budget to address current oil spill response costs in the OSRA and to stabilize the OSPA long term (Washington State Department of Ecology, 2019a):

- **Step one:** Shifting \$2,200,000 in the OSPA expenditure authority on an ongoing basis at the beginning of FY 2021 from the OSPA to the MTCA-OP. This amount increases to \$4,400,000 at the beginning of the 2021-23 biennium. This ongoing shift of costs to the MTCA-OP reduces spending in the OSPA, and should stabilize the OSPA fund balance long term, if no new work is required.
- **Step two:** Transferring the \$2,200,000 not spent in the OSPA in FY 2021 from step one above to the OSRA on a one-time basis to replenish the OSRA cash balance. This transfer is a loan that will be returned, with interest, from the OSRA to the OSPA by June 30, 2028.
- **Step three:** Increasing appropriation authority for FY 2021 for the OSRA in order to allow for utilization of the one-time transfer of \$2,200,000, if needed for oil spill response costs.
- **Step four:** Providing one-time contingency funding of \$1,000,000 from the MTCA-OP to cover oil spill response costs, if the OSRA cash balance were depleted within the 2019-21 biennium. This should provide sufficient funds to address spill responses for the near term. If not needed, funds will be returned at the end of the biennium to the MTCA-OP.
- **Step five:** Providing a one-time fund of \$1,000,000 from the MTCA-OP for the Equipment Cache Grant program. Funds for this program were utilized to cover costs during the 2019 Olympia Brewery Transformer Spill response and need to be replenished.

This multi-step approach is designed to solve the OSPA projected shortfall and provide a long term funding solution. This approach will also replenish the OSRA cash balance through the 2019-21 biennium.

Permanently shifting a portion of the OSPA appropriation to the MTCA-OP will provide more stability to the program's budget, and as described below, is a net positive solution.

Pros

- The program already receives funding from the MTCA-OP. There will be no additional implementation or administrative costs associated with this option.
- This is a shift in appropriation and does not result in a tax or fee increase of any kind.
- During the 2019 legislative session, Engrossed Substitute Senate Bill (ESSB) 5993 passed, restructuring the revenue source for the MTCA accounts. This restructuring provides additional projected revenue and more stability for the MTCA accounts.

Cons

- The MTCA-OP provides funding to multiple programs and agencies. The Spills Program is one of many programs that rely on the MTCA-OP for operating costs.

Based on the February 2020 revenue forecast, this funding solution should cover the OSPA base revenue need until the 2027-29 biennium, if current appropriations continue at maintenance level (Washington State Department of Ecology, 2020g). This solution also supports the OSRA fund balance through the 2019-21 biennium (Washington State Department of Ecology, 2020g).

Chapter 7: Underfunded Priority Work

As knowledge regarding oil spill risk evolves, areas of new or increased risk emerge. In response to changing risks, legislation may direct the program to address these concerns. This could include new statutory authority or additional requirements to existing authority. When this occurs, appropriation for the program increases if the change requires additional resources. However, revenue may not be sufficient to meet new appropriation needs.

Alternatively, there are areas of work statutorily required of the program, yet limited revenue and reduced appropriation over time prevents full development and implementation of this work.

This chapter provides a few examples of work for which the program would need additional resources to effectively pursue these legislatively required activity areas.

Certificate of Financial Responsibility Program

Under Chapter 88.40 RCW, state law requires all vessels and facilities transporting oil and hazardous substances into Washington to demonstrate a defined level of financial responsibility for the cost of a spill (see section titled “Financial responsibility” for more information). Chapter 88.40 RCW became state law in 1991 under Engrossed Substitute House Bill (ESHB) 1027 (ESHB 1027, Wa. 1991). To date, Ecology has not established a regulatory level of financial responsibility for oil handling facilities nor established a Certificate of Financial Responsibility Program (CFRP) to verify and document financial responsibility for vessel companies and oil handling facilities.

Under RCW 88.40.020, levels of financial responsibility for vessels are explicitly defined and vessel companies can indirectly demonstrate financial responsibility through Protection and Indemnity Club membership documents. However, rulemaking would be required to calculate and establish the levels of financial responsibility for oil handling facilities under RCW 88.40.025. The CFRP would review existing forms of financial responsibility such as an insurance policy, Protection and Indemnity Club membership documents, surety bonds, guarantees, letters of credit, or qualification for self-insurance in order to issue certificates to demonstrate compliance. Annual evidence could be a requirement under this rule, for example.

Rulemaking for this area of law first began in 1991 with anticipated adoption by 1993. However, with substantial rulemaking underway at the time, Ecology decided to postpone rulemaking for several reasons:

- Multiple regulatory requirements were issued during this time, increasing costs for facilities. Adoption of this rule was estimated, at the time, to cost facilities approximately \$6,000,000.
- There was preference for companies to focus their resources on compliance with spill prevention requirements instead because this would reduce risk of spills and their associated costs.

- If spill risks were to decrease over time, insurance prices for companies would also decrease, making demonstration of financial responsibility more affordable for regulated entities in the future.

When oil handling facilities and vessel companies cannot adequately cover the cost of a spill, the costs are then borne by the citizens of Washington State. Being financially responsible ensures a rapid response to a spill and a reduction of damages from the spill. As spill risk has decreased over the years, the financial burden of this requirement for facilities has also decreased.

Campaign to enhance engagement of tribes, agencies, and citizens

Under RCW 90.56.005, the Legislature described the value of including local citizens in the oversight of oil spill plans, as is consistent with the Oil Pollution Act of 1990. This was incorporated into state law in 2005 with the passing of Engrossed Substitute Senate Bill (ESSB) 5432 (ESSB 5432, Wa. 2005).

To carry out this requirement, we would need to develop a campaign to engage citizens in a meaningful way and enhance participation of underfunded tribes and agencies in our work. The campaign would be inclusive of participation before, during, and after a spill. Some of these areas include:

- Tribal and agency participation in drills, community participation in geographic response plan (GRP) development, wildlife recovery and rehabilitation, shoreline assessments, and collection of citizen science data and other actions before, during, and after spills occur.
- Implementation of the whale watching vessel of opportunity curriculum, which includes identifying, equipping, and training participants, and conducting drills.
- Additional resources to field-test GRPs with trustees and others contributing their knowledge.
- Targeted training for citizens, assessments, and surveys of needs to develop the campaign.
- Local Emergency Planning Committee (LEPC) coordination and connection to communities.

Communities in Washington have concerns about the use of oil and potential for oil spills. A spills engagement campaign means creating authentic messages and mechanisms that engage people and increase their confidence and participation in the program's work.

Increase prevention and response capacity in the Port Angeles area

The Spills Program does not currently have sufficient staff capacity to conduct regular tank vessel and oil transfer inspections on the Olympic Peninsula, nor does it have the full capacity to respond to an oil spill in this region in a timely manner.

In 2018, over 600 oil transfers and approximately 50 percent of the statewide oil transfers at anchor took place in Port Angeles (316 in 2018) (Washington State Department of Ecology, 2019j). Since 2008, there have been over 7,000 oil transfers in Port Angeles (Washington State Department of Ecology, 2019j). This is an area at high risk of spills from increased tank vessel traffic and increased illegal drug manufacturing facilities.

An additional inspector would focus on filling this geographic inspection gap, but would also be available to assist with inspections in the greater Seattle area as needed. The inspector would be positioned in the Port Angeles area and be immediately available to conduct and support other critical field activities for the program. These areas include supporting Class 2-4 facility inspections, tank vessel ECOPRO inspections, marine incident investigation, oil spill preparedness activities, and oil spill response.

An additional spill responder would also be located in the Port Angeles area to reduce response time. In the Port Angeles area alone, since 2008, there have been over 400 incidents (Washington State Department of Ecology, 2019i). This responder would be able to support community and responder safety during oil, hazardous substance, and illegal drug lab manufacturing incidents.

Both the inspector and responder stationed in the Port Angeles area would work as a team and provide increased capacity in this area. Our currently limited capacity to conduct inspections in this area puts Washington at greater risk of a spill. If a spill were to occur, response time would be substantially delayed, increasing costs and damages from the spill.

Fully fund all hazardous substance spill response work

The use of the OSRA is limited to spill response for crude oil or petroleum products that are estimated to exceed \$1,000 (Wash. Rev. Code § 90.56.500, 2018). When the Spills Program responds to spill incidents involving other hazardous substances, these costs are covered by the program's baseline operating budget, reducing capacity for other program work. In order to ensure readiness around the clock to respond to spills, the program operates a standby schedule. Spill response requires use of a vehicle equipped with specialized supplies and equipment, specialized training and health screening, and appropriate personal protective equipment (PPE). Furthermore, response equipment requires dedicated storage space. The program must make unique investments in order to ensure that responders are properly equipped and ready. Former budget requests for new responders did not historically account for these additional, specialized costs. In the future, the program plans to evaluate the changing costs for non-oil, non-petroleum spills over time, as well as costs for new response personnel, including standby and assignment

pay, and equipment and storage needs, and explore solutions to ensure that these costs are fully funded without compromising other priorities.

Chapter 8: Conclusions and Recommendations

This chapter presents a summary of the information presented in this report and provides a funding recommendation developed from evaluation of the potential funding solutions considered as well as future funding recommendations.

Conclusions

Current funding for the Spills Program has been unsustainable and leaves Washington State vulnerable to a significant spill. Over time, revenue from the OSAT was supplemented by funds from the Oil Spill Response Account (OSRA) and the Model Toxic Control Act (MTCA) accounts. Heavy reliance on the MTCA accounts has provided the majority of funds for the past 10 years. Multiple one-time fund transfers and new requirements on the program from the Legislature have required Ecology to propose multiple funding fixes in legislation. In order to continue to strive towards our legislative mandate of zero spills, the program needs a sustainable funding solution.

2020 Enacted funding solution

During the 2020 legislative session, the Legislature implemented a multi-step solution in the enacted 2020 supplemental operating budget to address current oil spill response costs in the OSRA and to stabilize the OSPA long term (Washington State Department of Ecology, 2019a). This solution included an ongoing fund shift from the OSPA to the MTCA-OP, which should stabilize the OSPA long term, if no new work is required. There were also a series of one-time maneuvers to replenish the OSRA cash balance, including providing one-time contingency funding should a significant oil spill take place in FY 2021, and restoring a portion of the Equipment Cache Grant program utilized to cover costs from the 2019 Olympia Brewery Transformer Spill response.

Based on the February 2020 revenue forecast, this funding solution should cover the OSPA base revenue need until the 2027-29 biennium, if current appropriations continue at maintenance level (Washington State Department of Ecology, 2020g). This solution also supports the OSRA fund balance through the 2019-21 biennium (Washington State Department of Ecology, 2020g).

Future recommendations

The following recommendations are alternative solutions for both the OSPA and OSRA for sustainable funding. As stated above, the 2020 enacted funding solution covers the OSPA base revenue need until the 2027-2029 biennium and supports the OSRA fund balance through the 2019-21 biennium. These recommendations should be considered if additional resources are needed to maintain existing work or new legislative priorities evolve before the 2027-29 biennium. Additionally, they should also be considered if a significant oil spill occurs before the OSRA fund balance has reached a stable level. These alternative solutions include the following:

Shift in OSPA appropriation to the MTCA-OP

The MTCA accounts have provided funding to the Spills Program since it was established in the early 1990s. Over the years, the program has relied on multiple one-time fund transfers and the permanent fund shift enacted in 2020 from the MTCA accounts. Ecology recommends considering further utilization of the MTCA-OP, as there are no additional implementation or administrative costs.

Include the fiscal growth factor (FGF) to the OSAT

The fiscal growth factor (FGF) accounts for inflation and new legislative requests over time. There are no implementation or administrative costs for this option. Ecology did not include this funding solution in the enacted 2020 Supplemental Operating Budget, however, it is recommended for future consideration.

Increase the rate of the OSAT without the FGF

The OSAT is the four cent portion of the barrel tax and helps fund prevention and preparedness work. This tax was last adjusted in 1998, changing the rate from three to four cents. This funding option would require limited implementation costs, as the structure for the tax collection is already established. Ecology did not include this funding solution in the enacted 2020 Supplemental Operating Budget, however, it is recommended for future consideration.

Charge a fee with the FGF for non-tank vessels

Cargo and passenger vessels weighing over 300 gross tons transit Washington waters to a Washington port about 2,900 times each year carrying heavy fuel oil. This industry sector transports upwards of a billion gallons of oil as fuel each year, but does not currently pay for any of Washington's legislatively directed prevention and preparedness services. These vessels are subject to prevention and preparedness activities, such as vessel screenings, inspections, and contingency plan requirements. This funding option provides a better cost sharing balance between the oil industry and non-tank vessel industry, capturing risk from all regulated vessels that carry oil. Including the FGF allows Ecology to adjust the fee based on inflation and new legislatively directed work for activities associated with cargo and passenger vessels. Ecology did not include this funding solution in the enacted 2020 Supplemental Operating Budget, however, it is recommended for future consideration.

Increase the OSRA cap

The OSRA cap is currently \$9,000,000. This cap was originally set at \$25,000,000 in 1991 when the OSRT was first established. It was lowered to \$10,000,000 in 1997 and subsequently lowered to the current \$9,000,000 cap in 1999. Increasing the OSRA cap allows revenue to accrue to a balance that would adequately fund multiple spills occurring simultaneously. Additional funds in the OSRA could provide a safety net for the OSPA if additional fund transfers were needed in future biennia. Ecology did not include this funding solution in the enacted 2020 Supplemental Operating Budget, however, it is recommended for future consideration and will be included in the agency's proposed request legislation for the 2021 legislative session.

Other agencies supported by the OSAT

The OSAT provides funding to four other agencies. Each agency provides the following recommendation for future funding:

Washington Department of Fish and Wildlife

The WDFW Spill Team receives direct appropriation from the OSPA to fund four FTEs. The Spill Team budget for the 2019-21 biennium is \$1,199,000. The budget once supported six and a half FTEs. However, in the 2009-11 biennium, the budget was cut by 20 percent on an ongoing basis due to insufficient revenue and fund balance in the OSPA to support existing work (Washington State Department of Ecology, 2020o). This reduction was paired with an ongoing authority reduction at other agencies. Overall reductions resulted in reduced capacity to participate in oil spill drills, fewer field visits during GRP updates, reduced volunteer training, reduced post-spill restoration project monitoring, and reduced collection of baseline information on fish and wildlife at risk from a spill. To restore lost Spill Team activities, WDFW plans to coordinate with Ecology on a proposal in the future to increase the WDFW Spill Team's appropriation sufficiently to restore the staff to five FTEs, instead of the current level of four. This proposal would be considered following the 2021 legislative session based on analysis of available fund balance.

Washington Sea Grant

Static program funding since 1991 for the Small Oil Spill Prevention Education Program has resulted in incremental reductions in staff time dedicated to this work since 2007. Beginning in 2014, WSG maintained the scope of work – despite reductions in staff time – by leveraging other WSG outreach efforts. Additional funding would allow WSG to reach higher percentages among target audiences, expand geographic reach of boater communities, and expand the variety and content of outreach materials, improving results.

Emergency Management Division

Prior to 2015 funding from the OSPA, planning efforts to assist LEPCs was limited to 0.2 FTE. In 2015, the Legislature extended use of funds from the OSPA to the EMD. These funds were intended to assist with LEPCs through the end of FY 2019 to address emergency issues. Funding was adjusted for statewide cost changes in the 2017-19 biennium budget and the 2019-21 budget. The current appropriation of \$1,040,000 is planned to expire at the end of the 2019-21 biennium. Current appropriations support four FTEs (Washington State Department of Ecology, 2020f). At this time, EMD recommends funding continue for this work and will evaluate other funding options for the following biennia during the 2021 legislative session.

Washington National Guard

In order for the Guard to be activated and utilized for a domestic incident such as an oil spill, a State of Emergency Proclamation by the Governor of Washington is required. However, an emergency declaration could have an unfavorable cost implication to Washington. An emergency declaration shifts funding for the incident from the National Pollution Liabilities Trust Fund (NPLTF) created under the federal Oil Pollution Act of 1990 (OPA) to the Robert T.

Stafford Act administered by the Federal Emergency Management Agency (FEMA). Unlike NPLTF reimbursements to states where all eligible response and cleanup costs are reimbursed, Stafford Act funding requires a 25 percent match from states. If activated, Ecology recommends an interagency agreement between the Guard and Ecology to determine an efficient way to integrate the Guard into the existing oil spill response structure. An agreement could determine a sustainable use of funds for the foreseeable future and help to ensure an understanding of a spill response under the Oil Pollution Act's ICS structure.

Spills Program's path forward

This report outlines a comprehensive inventory of the Spills Program's activities, funding sources, funding challenges, and recommendations for providing a funding source for the program into the future. As the risk for spills in Washington change over time, Ecology and other agencies focused on spill prevention, preparedness, and emergency response work, continue to adapt to ensure we continue to protect the environment, communities, and economy from the disastrous effects of a spill.

During the 2020 legislative session, Ecology's budget request was enacted by the Legislature. Over time, the program may require additional resources as new legislative priorities emerge or a significant spill occurs. During that time, Ecology will evaluate the future recommendations proposed in this report and determine the appropriate funding solution.

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Appendices

Appendix A. Total oil movement, 2007-2018

The table below includes total oil movement by volume (gallons) via vessel, rail, and pipeline between 2007 and 2019 (Washington State Department of Ecology, 2020l).

Table 19: Total oil movement by volume (gallons) via vessel, rail, and pipeline in Washington State from 2007 to 2018

Year	2007	2008	2009	2010	2011	2012	2013	2014
Vessel (gallons)	13,543,835,172	13,489,096,404	13,406,380,470	10,556,937,762	11,489,223,816	11,359,982,970	11,716,994,562	10,516,130,310
Vessel (%)	69	67	69	62	64	61	62	56
Rail (gallons)	0	0	0	0	0	509,176,752	691,808,250	1,378,094,256
Rail (%)	0	0	0	0	0	3	4	7
Pipeline (gallons)	6,094,012,806	6,551,744,766	6,139,363,356	6,393,628,374	6,603,628,374	6,606,600,000	6,639,091,452	6,772,845,156
Pipeline (%)	31	33	31	38	36	36	35	36
Total (gallons)	19,637,847,978	20,040,841,170	19,545,743,826	16,950,566,136	18,092,852,190	18,475,759,722	19,047,894,264	18,667,069,722

Year	2015	2016	2017	2018	2019
Vessel (gallons)	9,691,929,114	10,786,931,736	9,845,272,248	10,048,573,500	9,636,108,552
Vessel (%)	50	52	50	50	47
Rail (gallons)	2,105,479,236	2,100,000,000	2,285,077,536	2,496,842,670	2,651,927,334
Rail (%)	11	10	12	13	13
Pipeline (gallons)	7,445,220,258	7,821,949,800	7,429,803,906	7,402,487,652	8,201,590,614
Pipeline (%)	39	38	38	37	40
Total (gallons)	19,242,628,608	20,708,881,536	19,560,153,690	19,947,903,822	20,489,626,500

Appendix B. Expenditure history

The table below includes a 10 year expenditure history timeline for all past and current accounts for the Spills Program (Office of Financial Management, 2019a; Washington State Department of Ecology, 2019b).

Table 20: Expenditure history for the Spills Program

Biennium	Total	Oil Spill Prevention Account	Oil Spill Response Account	State Toxics Control Account	Environmental Legacy Stewardship Account	Coastal Protection Account	General Fund Private / Local	Local Toxics Control Account	Model Toxics Control Operating Account	Aquatic Lands Enhancement Account	Vessel Response Account	Water Quality Account	Water Quality Permit
2009-11	\$25,924,000	\$10,028,000	\$1,500,000	\$8,303,000	N/A	\$2,530,000	\$214,000	\$1,644,000	N/A	\$104,000	\$1,589,000	\$6,000	\$6,000
2001-13	\$21,161,000	\$8,812,000	\$291,000	\$7,338,000	N/A	\$1,198,000	\$198,000	\$3,318,000	N/A	N/A	N/A	N/A	\$6,000
2013-15	\$20,142,000	\$4,628,000	\$2,094,000	\$11,992,000	N/A	\$1,186,000	\$236,000	N/A	N/A	N/A	N/A	N/A	\$6,000
2015-17	\$20,424,000	\$5,393,000	\$1,230,000	\$11,239,000	\$1,894,000	\$453,000	\$215,000	N/A	N/A	N/A	N/A	N/A	N/A
2017-19	\$30,443,000	\$8,021,000	\$1,225,000	\$16,912,000	\$3,374,000	\$680,000	\$231,000	N/A	N/A	N/A	N/A	N/A	N/A

Note: All numbers are rounded to the nearest thousand. STCA and ELSA expenditures are higher than the initial Spills Program budget for the 2017-19 biennium. Ecology utilized unused funds from both accounts to cover \$3,500,000 for the Olympia Brewery Transformer Spill.

Appendix C. Sector Survey

The tables below include the percentage of time the program spends within each sector. Administrative and statewide program costs are assumed equal benefit for the three program activities: prevention, preparedness, and response. Prevention and preparedness sub-activity values are based on input from staff working on the sub-activity and section managers regarding the estimated average workload between potential sources. Prevention sub-activity values also include an analysis of staff time accounting data. Response sub-activity values are based on the percentage of incidents within each sector. See Chapter 2 for more information about specific work activities conducted in each sub-activity area.

The following definitions are for terms used in the sector survey:

Facility (other): This category includes manufacturing, agricultural, and mining facilities. This also includes marinas and other establishments that store and use oil as part of their operations for fuel and/or raw materials. Class 4 facilities fall into this category.

Oil terminal: Also known as storage terminals. This includes marine terminals and bulk oil terminals. This does not include oil terminals with refining processes. Class 1 facilities fall into this category.

Refinery: Defined as an oil terminal, but includes refining processes. Class 1 facilities fall into this category.

Tanker trucks: Carry oil as cargo. This includes Class 2 facilities.

Tank barge: Carry oil as cargo, but are pushed or pulled by a towboat or tugboat. This is a type of tank vessel.

Tank vessel: A vessel that is constructed or adapted to carry, or that carries oil in bulk as cargo, and that operates on the waters of the state or transfers oil in a port of place subject to the jurisdiction of the state. Articulated tug barges (ATBs), tank barges, and tank ships are considered tank vessels.

Tank ship: Carry oil as cargo. This includes oil tankers, chemical tankers, and oil/bulk/ore vessels. This is a type of tank vessel.

Non-tank vessel: Cargo and passenger vessels 300 or more gross tons. Substantial risk vessel inspections would fall into this category.

Other vessel: Fish vessels, passenger vessels (e.g. commercial cruise ships that carry passengers), pleasure craft (smaller recreational vessels), ferries, towboats, and tugboats.

Military: Any facilities, vessels, vehicles, and aircraft related to military operations. Some Class 1 facilities fall into this category.

Table 21: Spills Program work activity sector survey for the prevention section

Activity	Statutory mandate	Facility (other)	Oil terminal	Refinery	Pipeline	Railroad	Tanker trucks	Tank barge	Tank ship	Non-tank vessel	Other vessel	Military	Aircraft / airport	Residential	Road / vehicle	Percentage of activity
Facility prevention planning	Prevention plans are required for Class 1 facilities. Other activities include reviewing Operations Manuals, training, and certifications. Class 1 facilities includes any refinery and marine oil handling terminal located on or near the navigable waters of the state that transfers oil in bulk to or from a tank vessel or pipeline. A factory or military facility that receives oil from a pipeline or tank vessel (Wash. Rev. Code § 90.56.200, 2015; Wash. Rev. Code § 90.56.220, 1991; Wash. Rev. Code § 90.56.230, 1991).	N/A	1.80%	1.80%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.40%	N/A	N/A	N/A	7.00%
Facility inspections	Inspections are required for Class 1 and Class 4 facilities. A Class 4 facility includes any marina, boatyard, and marine fueling outlet transferring oil to non-recreational vessels with an oil capacity of less than 10,500 gallons (Wash. Rev. Code § 88.46.160, 2004; Wash. Rev. Code § 90.56.220, 1991).	2.00%	5.50%	5.50%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.00%	N/A	N/A	N/A	14.00%

Activity	Statutory mandate	Facility (other)	Oil terminal	Refinery	Pipeline	Railroad	Tanker trucks	Tank barge	Tank ship	Non-tank vessel	Other vessel	Military	Aircraft / airport	Residential	Road / vehicle	Percentage of activity
Mobile facility plan and manuals	Class 2 facilities, which includes any mobile facility such as tank trucks, rail cars, and portable tankers, are required to have response plans and operation manuals (Wash. Rev. Code § 90.56.220, 1991; Wash. Rev. Code § 90.56.230, 1991).	N/A	N/A	N/A	N/A	N/A	1.97%	N/A	N/A	N/A	N/A	0.03%	N/A	N/A	N/A	2.00%
Transfer inspections and guidance manual	Transfer inspections, guidance manual and requirements cover any transfer, including Class 1-3 facilities, of oil that is not for personal pleasure or recreation. A Class 3 facility includes any non-recreational marina, boatyard, and marine fueling outlet transferring oil to non-recreational vessels with an oil capacity of 10,500 gallons or more (Wash. Rev. Code § 88.46.160, 2004; Wash. Rev. Code § 88.46.165, 2006; Wash. Rev. Code § 88.46.167, 2006; Wash. Rev. Code § 88.46.170, 2000; Wash. Rev. Code § 90.56.220, 1991).	N/A	4.00%	4.00%	N/A	N/A	4.00%	4.50%	4.50%	4.00%	N/A	1.00%	N/A	N/A	N/A	26.00%

Activity	Statutory mandate	Facility (other)	Oil terminal	Refinery	Pipeline	Railroad	Tanker trucks	Tank barge	Tank ship	Non-tank vessel	Other vessel	Military	Aircraft / airport	Residential	Road / vehicle	Percentage of activity
Vessel screening	Address vessels with a substantial risk of harm by analyzing vessel information, coordinating with the USCG, and conducting consensual boarding (Wash. Rev. Code § 88.46.050, 2000; Wash. Rev. Code § 88.46.170, 2000).	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11.50%	0.50%	N/A	N/A	N/A	N/A	12.00%
ECOPRO - Tank vessel prevention	A voluntary program for tank vessels to achieve voluntary best achievable protection.	N/A	N/A	N/A	N/A	N/A	N/A	0.20%	1.80 %	N/A	N/A	N/A	N/A	N/A	N/A	2.00%
Risk assessments	Vessel and rail safety/risk traffic assessments to develop safety recommendations for state waterways, vessel operations, rail operations, pipelines, and their cross connections via facilities all relating to the changing energy transportation picture.	N/A	N/A	N/A	N/A	6.00%	N/A	2.00%	2.00 %	4.00%	1.00%	N/A	N/A	N/A	N/A	15.00%
Technical assistance	Provide voluntary assistance to vessels and facilities to reduce oil spill risks (Wash. Rev. Code § 43.05.020, 1995).	1.00%	4.50%	4.50%	N/A	N/A	4.50%	0.50%	0.50 %	5.50%	0.50%	0.50%	N/A	N/A	N/A	22.00%
N/A	TOTAL	3%	16%	16%	0%	6%	10%	7%	9%	25%	2%	6%	N/A	N/A	N/A	100.00%

Activity	Statutory mandate	Facility (other)	Oil terminal	Refinery	Pipeline	Railroad	Tanker trucks	Tank barge	Tank ship	Non-tank vessel	Other vessel	Military	Aircraft / airport	Residential	Road / vehicle	Percentage of activity
N/A	Transporting and handling oil in bulk	67%								N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 22: Spills Program Work Activity Sector Survey, Preparedness Section Percentage View

Activity	Statutory mandate	Facility (other)	Oil terminal	Refinery	Pipeline	Railroad	Tanker trucks	Tank barge	Tank ship	Non-tank vessel	Other vessel	Military	Aircraft / airport	Residential	Road / vehicle	Percentage of activity
Contingency planning	Larger oil handling facilities, pipelines, commercial vessels (300 gross tons or above), and rail transporting bulk oil have state approved oil spill contingency plans that describe their ability to respond to oil spills (Wash. Rev. Code § 88.46.060, 2018; Wash. Rev. Code § 90.56.210, 2018). These plans are tested and verified through drills (Wash. Rev. Code § 88.46.220, 2018; Wash. Rev. Code § 90.56.260, 1990).	N/A	10.60%	11.30%	10.50%	5.10%	1.00%	4.80%	7.80%	8.90%	2.40%	1.30%	N/A	N/A	N/A	63.70%
Response contractor approval	Review and approve response contractors that support plan holders in responding to a spill (Wash. Rev. Code § 90.56.240, 2018).	N/A	1.10%	1.10%	0.80%	0.30%	N/A	0.90%	0.90%	0.70%	0.40%	0.10%	N/A	N/A	N/A	6.30%

Activity	Statutory mandate	Facility (other)	Oil terminal	Refinery	Pipeline	Railroad	Tanker trucks	Tank barge	Tank ship	Non-tank vessel	Other vessel	Military	Aircraft / airport	Residential	Road / vehicle	Percentage of activity
Financial responsibility	Gather and review protection and indemnity insurance plans and coverage to ensure adequacy to address the costs of spills (Wash. Rev. Code § 88.40.005, 1991; Wash. Rev. Code § 88.40.011, 2015; Wash. Rev. Code § 88.40.020, 2003; Wash. Rev. Code § 88.40.025, 1991; Wash. Rev. Code § 88.40.030, 2000; Wash. Rev. Code § 88.40.040, 2003).	N/A	N/A	N/A	N/A	N/A	N/A	0.10%	0.10%	0.10%	0.10%	N/A	N/A	N/A	N/A	0.40%
Statewide Master Plan/ NW Area Contingency Plan	The NW Area Contingency Plan serves as the statewide master plan. The NWACP is drafted and updated through the Spills Program in coordination with the federal government and other states (Wash. Rev. Code § 90.56.060, 2010).	0.10%	0.40%	0.40%	0.40%	0.40%	0.10%	0.40%	0.40%	0.40%	0.40%	0.40%	0.10%	0.10%	N/A	4.00%
Geographic response plans	Provides response strategies tailored to a particular shore or waterway at risk of injury from oil (Wash. Rev. Code § 88.46.060, 2018; Wash. Rev. Code § 90.56.210, 2018).	0.10%	2.40%	2.10%	5.70%	6.30%	0.20%	1.20%	2.80%	2.40%	0.40%	0.40%	0.10%	0.20%	N/A	24.30%

Activity	Statutory mandate	Facility (other)	Oil terminal	Refinery	Pipeline	Railroad	Tanker trucks	Tank barge	Tank ship	Non-tank vessel	Other vessel	Military	Aircraft / airport	Residential	Road / vehicle	Percentage of activity
Vessel of opportunity and volunteers	Voluntary programs for vessels and individuals to assist with spills (Wash. Rev. Code § 88.46.190, 2011; Wash. Rev. Code § 88.46.200, 2000; Wash. Rev. Code § 88.46.210, 2011).	N/A	0.10%	0.10%	0.10%	0.10%	N/A	0.30%	0.30%	0.30%	N/A	N/A	N/A	N/A	N/A	1.30%
N/A	TOTAL	0.20%	14.60%	15.00%	17.50%	12.20%	1.30%	7.70%	12.30%	12.80%	3.70%	2.20%	0.20%	0.30%	N/A	100.00%
N/A	Transporting and handling oil in bulk	81%								N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 23: Spills Program Work Activity Sector Survey, Response Percentage View

Activity	Statutory mandate	Facility (other)	Oil terminal	Refinery	Pipeline	Railroad	Tanker trucks	Tank barge	Tank ship	Non-tank vessel	Other vessel	Military	Aircraft / airport	Residential	Road/vehicle	TOTAL
Oil response activities	Response to oil spills that impact waters of the state. Investigations and enforcement are also included as part of response activities. Spill activities are based on the number of events where oil spilled to state waters for each sector (Wash. Rev. Code § 90.48.080, 1987; Wash. Rev. Code § 90.56.020, 2018; Wash. Rev. Code § 90.56.280, 1995; Wash. Rev. Code § 90.56.320, 1990; Wash. Rev. Code § 90.56.350, 1990). Percentages are based on response incidents from January 2019 through December of 2019.	19.64%	0.75%	0.21%	0.21%	0.21%	0.00%	0.11%	0.54%	1.18%	48.82%	0.75%	0.11%	1.72%	25.75%	100.0%

Appendix D. State comparisons

Multiple coastal states are homeports for oil movement and have the risk of a spill. The table below includes funding mechanisms for other west coast states and Hawaii for funding oil spill prevention, preparedness, and response work.

Table 24: Funding mechanisms for west coast states, including Hawaii

State	Tax or fee?	Applied to
<p>Alaska (Alaska Stat. § 43.55.300, 2018) (Alaska Stat. § 43.55.201, 2018)</p>	Tax	<p>Conservation surcharge (\$0.01/42 gallons of oil produced in Alaska) for the response account. Surcharge suspended when the account is >\$50,000,000.</p> <p>Additional conservation surcharge (\$0.04/42 gallons of oil produced in Alaska) for the Oil and Hazardous Substance Release Prevention Account.</p> <p>Funding also comes from a \$0.95 surcharge to the General Fund Account, settlement penalties, and cost recovery.</p>
<p>California (Cal. Gov. Code § 8670.40, 2016) (Cal. Gov. Code § 8670.48, 2014) (Cal. Gov. Code § 8670.48.5, 2007) (14 CCR § 870.17, 2015)</p>	Tax and fee	<p>The following tax and fees are deposited into the Oil Spill Prevention and Administration Fund for prevention, preparedness, and response work.</p> <p>\$0.065 per 42 gallons of crude oil or petroleum products.</p> <p>Non-tank vessel fee charged to owner or operator for Certificate of Financial Responsibility:</p> <ul style="list-style-type: none"> - \$3,250 for carrying capacity >273,000 gallons of oil. - \$1,950 for carrying capacity >21,000, but <=273,000 gallons of oil. - \$650 for carrying capacity <=21,000 gallons of oil. <p>Oil spill response fees:</p> <ul style="list-style-type: none"> - \$0.25 per 42 gallons of crude oil or petroleum products received or exported at a marine terminal by vessel from outside or to California. - \$0.25 per 42 gallons of crude oil or petroleum products transported through pipelines in and out of California that are operating on, under, or over waters in California. - \$0.25 per 42 gallons of crude oil or petroleum products received by a refinery by any mode of transport. - The \$0.25 fee can be raised to \$1.00 by \$0.25 increments if there is a monetary need. <p>The cap for this account is \$55,000,000. There is an additional \$55,000,000 available if a significant spill occurs.</p>
<p>Hawaii (HI. Rev. Stat. § 128D-2, 2012)</p>	Tax	<p>\$1.05 per 42 gallon of crude oil or petroleum products. Fines and penalties also provide revenue. Only \$0.05 goes towards oil spill prevention, preparedness, and response work.</p>

State	Tax or fee?	Applied to
<p>Oregon (Or. Rev. Stat. § 468B.405, 2019) (Or. Rev. Stat. § 468B.435, 2019)</p>	<p>Fee</p>	<p>All of the following is deposited into the Oil Spill Prevention Fund, which funds Oregon's prevention, preparedness, and response work.</p> <p>Annual fee charged for the following:</p> <ul style="list-style-type: none"> - \$20,000 for facilities. - \$15,000 for pipelines ≤6". - \$25,000 for pipelines >6". <p>Fee charged per trip for the following:</p> <ul style="list-style-type: none"> - \$220 for cargo vessels. - \$5,500 for tank vessels >300 gross tons. - \$160 for tank vessels <300 gross tons. - \$160 for vessels carrying <25,000 barrels of oil. - \$220 for vessels carrying >25,000 and <10,000 barrels of oil. - \$1,850 for vessels carrying >100,000 barrels of oil. <p>Dredge fee of \$100 charged per day of operation.</p> <p>Railroad required to submit a contingency plan for a high hazard train route should pay a fee amount determined by the Department of Environmental Quality. Additionally, up to \$20 per railroad tank car loaded with oil entering the state.</p>

Appendix E. Factors influencing programmatic shifts

The table below shows factors that influenced shifts in program priorities over the years.

Table 25: History of major shifts in the Spills Program

Year	Funding change	FTE change	New legislative direction	Priority shift / impact on program	Reason for change
1994	\$900,000 transferred from the Oil Spill Response Account to the Oil Spill Prevention Account.	Eliminated 1 FTE at the Office of Marine Safety.	No.	<p>This resulted in a reduction of administrative duties, quality control checks for contingency plans, and reductions for prevention and response data management efforts.</p> <p>There was a heavy focus on oil spill prevention measures during this time. Examples include vessel contingency plans, oil spill prevention plans for vessels, substantial risk vessel screenings, and bunkering operations focus.</p>	There was a lack of revenue from the Oil Spill Administration Tax.
1995	\$1,700,000 transferred from the Oil Spill Response Account to the Oil Spill Prevention Account.	No.	No.	<p>This resulted in a reduction of administrative duties, quality control checks for contingency plans, and reductions for prevention and response data management efforts.</p> <p>There was a heavy focus on oil spill prevention measures during this time. Examples include vessel contingency plans, oil spill prevention plans for vessels, substantial risk vessel screenings, and bunkering operations focus.</p>	To accommodate a deficit.
2000	\$1,650,000 transferred from General Fund State Account to the Oil Spill Prevention Account.	No.	Yes.	The focus during this time was on pipeline safety measures. A few notable pipeline spills such as the Olympic Pipeline rupture and spill (1999) and Trans Mountain Pipeline spill (2000) occurred during this time.	To fund the Neah Bay Emergency Response Towing Vessel.

Year	Funding change	FTE change	New legislative direction	Priority shift / impact on program	Reason for change
2001	\$3,424,000 from the State Toxics Control Account appropriation.	No.	No.	<p>At this time, response capabilities were overwhelmed with methamphetamine lab field responses.</p> <p>The preparedness section was established to provide investment in planning and drills. By distinguishing the preparedness and prevention sections, investments were made in prevention and response capabilities due to robust preparedness work.</p>	There was a large increase in methamphetamine lab response cleanups during this time, pulling most of response resources.
2003	No.	No.	No.	<p>Hired an equipment inspector to verify response equipment.</p> <p>Started to create a database for response equipment, which later became the Worldwide Response Resource List. This database was utilized during the <i>Deepwater Horizon</i> spill in 2010, allowing the nation to see which response equipment was available for response versus equipment that needed to stay in its home state.</p>	A Foss Maritime tank barge fueling spill at Point Wells in Edmonds, WA.
2004	No.	No.	Yes.	<p>Zero spills goal directed by the Legislature.</p> <p>Started to work towards policy changes to have response capabilities 24/7. This was fully implemented after the <i>Deepwater Horizon</i> spill in 2010.</p> <p>The Dalco Passage spill influenced response contractors to work together, allowing Washington State to have access to all contractors as needed and ensuring safe, consistent practices across companies. This was the catalyst for today's large-scale equipment deployment drills.</p>	Early Action Task Force established. The Dalco Passage spill occurred during this time.

Year	Funding change	FTE change	New legislative direction	Priority shift / impact on program	Reason for change
2005	Appropriation increase.	No.	No.	Major improvements in response and preparedness. Some examples include increased opportunities for public participation, incorporation of best achievable technology, improvements to the spill reporting system, strategic placement of response equipment, and increased resources for geographic response planning.	Early Action Task Force recommendations.
2006	Appropriation increase.	Nine additional FTEs, five of which focused on oil transfer inspection work.	Yes.	Focus on oil transfer inspections and pre-booming requirements. Shift in response capability locations so focus could be on geographic areas with high response needs. Field responder stationed in Bellingham.	New oil transfer rule passed by the Legislature. Data collected during collaborative inspection work with the U.S. Coast Guard allowed us to justify the need for oil transfer inspection work.
2008	\$2,400,000 from the State Toxics Control Account.	Loss of 0.5 FTE.	No.	Preparing for program shift the following year.	There was a lack of revenue from the Oil Spill Administration Tax. The program had to make significant refunds.

Year	Funding change	FTE change	New legislative direction	Priority shift / impact on program	Reason for change
2009	\$1,900,000 funding cut, lowered appropriation amount by \$300,000.	Reduction in eight FTEs.	No.	<p>Re-assigned FTE from prevention to preparedness work, recognizing work priority needs and to accommodate drastic FTE cut.</p> <p>Preparedness work significantly reduced. This includes cutting onboard vessel notification drills, and attendance and evaluation of drill exercises, making industry self-certify their spill readiness.</p> <p>There were also fewer review and approvals of prevention and contingency plans.</p>	Overall cost increases and flat to declining revenue.
2010	No.	Converted drill planner responsibilities to focus on equipment.	No.	Re-assignment of planner responsibilities and positions in the preparedness section to account for drastic FTE cut in 2008.	Accounting for FTE cut the year prior.

Year	Funding change	FTE change	New legislative direction	Priority shift / impact on program	Reason for change
2011	\$5,000,000 permanent appropriation shift from the Oil Spill Prevention Account to the State Toxics Control Account.	Converted drill planner responsibilities to focus on response equipment, recognizing the need for a shift in focus.	No.	<p><i>Deepwater Horizon</i> spill influenced amendments to preparedness regulations for vessel plan holders.</p> <p>Crude oil by rail focus during this time after the Enbridge Pipeline spill. Shift in program focus towards oils that may submerge or sink. The program influenced the broader community to focus on this and published reports as well.</p> <p>The program started to focus on new facility proposals in Canada and SEPA reviews. Utilized existing resources to incorporate this into the program's work.</p> <p>Focus on inclusion and training of the Incident Management System. Orphan spill drill with the U.S. Coast Guard to collaborate and train with this new focus.</p>	Lack of revenue to meet appropriation needs.
2012	No.	Loss of responder in the southwest region.	No.	<p>Re-assigned responder to account for growing spill response needs.</p> <p>Re-assigned inspector to facility engineer.</p> <p>Preparedness work focus on rail.</p>	Reorganize program roles to focus on emerging risks and areas of concern.
2013	No.	Communications manager position converted to full time FTE to account for growing need to better communicate oil spill issues.	No.	<p>Statewide resources section established to create a broader support focus for the program.</p> <p>Overall support staff re-assigned to new section to create a centralized program focus, rather than section focus.</p>	Creating efficiency in the program by centralizing roles to support entire program, rather than section focus.

Year	Funding change	FTE change	New legislative direction	Priority shift / impact on program	Reason for change
2014	No.	Three additional FTEs to focus on geographic response plans. Additional vessel inspector.	No.	Legislature directed us to focus on developing plans for inland rail routes. Added geographic response plans to focus on rail. Focus on substantial risk vessel inspections.	Marine and Rail Oil Transportation Study provided 43 recommendations to reduce the risk of a crude oil by rail spill.
2015	\$2,225,000 transferred from the Oil Spill Response Account to the Oil Spill Prevention Account.	Eight and a half additional FTEs.	Yes.	Focus on oil spill risk transportation by rail. Some examples include contingency plans for rail, vessel risk assessments for the Columbia River, and advance notice of transfer requirements from rail. Re-classified vacancy into GIS specialist to support geographic response plan needs.	The Oil Spill Transportation Safety Act (ESHB 1449) passed.
2018	\$4,700,000 transferred from the Oil Spill Response Account to the Oil Spill Prevention Account.	Loss of four FTEs.	Yes.	Legislatively directed focus on oils that may submerge or sink. The program began focusing on this as early as 2011. Combined FTEs to include both contingency plan review and geographic response plan development. Combined vessel transfer inspector and vessel inspector roles into one FTE versus two FTEs. Expanded training of current FTEs to do this. This provided flexibility for inspections, increasing program efficiencies.	The Strengthening Oil Transportation Safety Act (E2SSB 6269) passed.

Year	Funding change	FTE change	New legislative direction	Priority shift / impact on program	Reason for change
2019	\$1,040,000 transferred from the Oil Spill Response Account to the Oil Spill Prevention Account.	Three additional FTEs.	Yes.	<p>Focus on risk modeling and analysis of tug escort requirements or alternative safety measures for Puget Sound.</p> <p>Drill and equipment inspector vacancies filled to focus on oils that may submerge or sink.</p> <p>This monetary shift resulted in insufficient revenue in the Oil Spill Response Account.</p>	Legislation passed to require funds continue to be transferred to the Washington Military Department's Emergency Management Division.