



Friends *of the* San Juans

Image Mark Gardner

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Salish Sea Vessel Traffic Projections

Friends of the San Juans issued its first Salish Sea Vessel Traffic Projections in 2015 to provide island community members, the public, and decision-makers with comprehensive information about projects throughout the Salish Sea that would increase large commercial ocean-going vessel traffic, and to illustrate these projects' cumulative impacts. Keeping a diligent eye on proposed projects, Friends updated these projections in 2019 and 2021.

Our newest update, the September 2024 Salish Sea Vessel Traffic Projections, identifies 23 new or expanding terminal and refinery projects that have been proposed or permitted or were recently completed. Ten of the 23 projects (nine projects in British Columbia and one in Washington State) would potentially add at least 2,005 annual ocean-going vessel transits to and from Salish Sea ports.

If all of the proposed, permitted, and recently constructed projects in British Columbia are developed, and if the AltaGas Liquefied Petroleum Gas (LPG) export facility in Ferndale, WA, further expands, this would result in at least an 18% increase in large, ocean-going commercial vessel traffic, as compared with 2023 transits.¹ These calculations don't include 12 projects — nine in Washington state, two in British Columbia, and one in Oregon — with vessel traffic numbers to be determined (TBD), several of which will likely result in increased ocean-going vessel traffic in the Salish Sea.

The following infographic provides an overview of expected new vessel traffic across various ports and terminals in the Salish Sea. Each numbered location represents a port or terminal with projections of additional annual vessel transits, broken down by cargo types, such as containers, cars, oil, and renewable fuel. This visual helps illustrate the potential cumulative impact on local communities and the marine ecosystem. It also highlights key new projects and expansions, enabling the public to understand where and why vessel traffic might increase in the coming years.



[Download the complete Salish Sea Vessel Traffic Projections 2024 infographic, with project summaries.](#)

Two projects in Canada, the recently completed Trans Mountain pipeline expansion project and Roberts Bank Terminal 2, account for over 60% of the quantified projected increase in vessel traffic.

The Canadian-owned Trans Mountain pipeline expansion project that will almost triple Canadian exports of diluted bitumen/tar sands oils that have been strip mined or extracted using intensive steam injection in Alberta. The pipeline expansion project was completed in May 2024, and will add at least 696 annual oil tanker transits through the Salish Sea. However, there has been an unexpected increase in imports of Canadian diluted bitumen/tar sands oil via oil tankers to Washington State refineries. Shipping to Washington State refineries was not included in Trans Mountain's project application and/or the permit application's environmental assessment process. This unplanned-for increase in oil tanker traffic, over-water oil transfer operations, and over-water oil storage at anchorage areas and offshore are increasing the risk of accidents and diluted bitumen/tar sands oil spills in the Salish Sea.

The Port of Vancouver's proposed Roberts Bank Terminal 2 was approved in 2023 by both the Government of Canada and the Government of British Columbia. If a *Fisheries Act* Authorization is obtained and the final investment decision is affirmative, construction is expected to begin in the late 2020s, with completion in the mid-2030s.² Roberts Bank Terminal 2 would add 520 additional container ship transits per year.



Source: Port Metro Vancouver

Washington State Environmental Policy Act Supplemental Orca Checklist now in use in Washington State

The State Environmental Policy Act (SEPA) Supplemental Orca Checklist, which “helps guide lead agencies in determining whether there are vessel traffic impacts to the Southern Resident killer whale”³ is an important addition to the permitting review process for terminal and refinery projects in Washington State.

The previous Salish Sea Vessel Traffic Projections noted that all of the projects in Washington State didn’t quantify any increases in ocean-going vessel traffic, and that the lack of any review of the environmental impacts from the Washington State projects’ potential increases in vessel traffic highlighted a failure in Washington State’s Environmental Policy Act. Since that time, Washington State has made progress addressing this by implementing the Southern Resident Killer Whale Task Force’s Recommendation 27.⁴ Friends of the San Juans strongly advocated for Recommendation 27 to be included in the Task Force’s recommendations and continued to [advocate for the implementation of Recommendation 27.](#)

This is another example of Friends of the San Juans long-standing priority to protect and recover the Southern Resident killer whales. In 2001, Friends of the San Juans was a co-petitioner in the efforts that led to the federal listing of the Southern Resident Killer Whales as an endangered species under the Endangered Species Act (ESA). In recent years, Friends has successfully litigated project proposals that would increase vessel traffic when focusing on the well-researched and documented impacts to the Southern Resident killer whale population from ship strikes, disturbance from vessels, and underwater vessel noise.⁵ In 2022, the [Washington State Court of Appeals ruled in favor of Friends of the San Juans](#) in a lawsuit regarding Phillips 66’s expansion of its Ferndale, WA, refinery, stating:

Here, Phillips 66 has conceded that environmental concerns, including harm to killer whales, could arise if vessel traffic increases. Phillips 66 “does not dispute that Southern Resident Killer Whales are endangered, or that increased vessel traffic poses a threat to that species.” Expert opinions corroborated that increased vessel traffic would harm the whales. Clearly, if the evidence showed a probable increase in vessel traffic attributable to the project, an EIS would have been triggered. An MDNS [Mitigated Determination of Non-Significance] would not have been an option.⁶

Southern Resident killer whales are one of the most at-risk marine mammals in the world.⁷ Since Washington State Governor Jay Inslee’s Executive Order established the Southern Resident Killer Whale Task Force,⁸ Washington State has made significant investments in the protection and recovery of Southern Residents.⁹ Southern Residents are particularly vulnerable to oil spill impacts. According to NOAA (National Oceanic and Atmospheric Administration) Fisheries: “Their small population size and social structure also put them at risk for a catastrophic event, such as an oil spill, that could affect the entire population.”¹⁰

Further permitting improvements are needed, which includes the need to address cumulative impacts. Projects that increase vessel traffic are being permitting without any evaluation of the cumulative vessel traffic carrying capacity, such as the carrying capacity of the Salish Sea for underwater vessel noise.¹¹ Underwater noise disrupts the Southern Residents' foraging and impacts their ability to successfully hunt and communicate.¹²

Additional Oil Spill Prevention and Spill Response Preparedness Are Needed

Simultaneous with the completion of the Trans Mountain pipeline expansion project and its increase in oil spill risk, it was reported that the Marine Spill Response Corporation, "the primary oil spill response team in Port Angeles has just laid off many of its employees and is putting its primary response ship up for sale, leaving them only a bare bones crew and a single barge to respond to an oil spill."¹³ To which, the Washington State Department of Ecology responded that it plans "to evaluate the proposed plan to determine if it meets standards. ...that is going to be subject to like a 30-day public review. And so people can put in their thoughts and their concerns so that we can know what people are thinking in the community."¹⁴ [Sign up for action alerts here](#) to learn more about this upcoming public review and comment opportunity.

In response to the increased accident and oil spill risks from Trans Mountain's increase in oil tanker traffic, over-water oil transfer operations, over-water storage at anchor, and the use of a "waiting area" near the entrance to the Strait of Juan de Fuca where oil tankers can be seen in offshore drift, Washington State and the United States Coast Guard (USCG) need to increase, not decrease, oil spill response personnel and equipment, specifically for diluted bitumen/tar sands oil spills.

To protect the Salish Sea, what is most important is preventing oil spills. An additional Emergency Response Towing Vessel is needed to address the accident and oil spill risk from current vessel traffic in the central Salish Sea region. A very successful Emergency Response Towing Vessel is stationed at Neah Bay, at the entrance to the Strait of Juan de Fuca.¹⁵ However, there is not enough time for the Neah Bay rescue tug to arrive on scene and keep a vessel in distress in lower Georgia Strait, Boundary Pass, or Haro Strait from going aground and causing an oil spill.¹⁶ Most of the commercial ships entering the Salish Sea used to be destined for Washington State ports. Now, most ships are bound for Canada, including the Port of Vancouver, which is Canada's largest port, with 30 terminals. All the vessel traffic bound to and from Canada travels through lower Georgia Strait, Boundary Pass, and Haro Strait. Stationing another Emergency Response Towing Vessel in Sydney, British Columbia or Roche Harbor, San Juan Island, could prevent a major oil spill.¹⁷

ADDITIONAL PROJECT INFORMATION

Trans Mountain Pipeline Expansion Project

The May 2024 completion of the Trans Mountain pipeline expansion project will almost triple Canadian exports of diluted bitumen/tar sands oils from 300,000 to 890,000 barrels per day and add at least 696 oil tanker transits per year. Exporting tankers will have tug escorts, but tankers entering the Salish Sea, which can carry over 800,000 gallons of propulsion fuel, will not. This one project is responsible for significant increases in oil tanker transits in the Salish Sea that were not included in Trans Mountain’s project application and/or the permit application’s environmental assessment process.

The vessel traffic route that was included in the permit application and addressed in the environmental assessment process showed laden tanker traffic immediately exiting the Salish Sea. In fact, oil tankers are importing tar sands oil to WA State refineries and anchoring at Vendovi Island and drifting offshore near the entrance to the Strait of Juan de Fuca. There was no analysis of tanker-related accidents and oil spill risk beyond the vessel traffic routes included in Trans Mountain’s permit application and environmental review process.¹⁸

Figure 25 of Canada’s National Energy Board (NEB) Reconsideration Report shows shipping lanes to and from Vancouver’s Westridge Marine Terminal. It does not indicate vessel traffic lanes that cross the Strait of Juan de Fuca from Victoria, BC to Port Angeles, WA and vice versa. It is also unclear what pilotage and/or tug escort requirements are in effect for the Strait of Juan de Fuca crossing.¹⁹

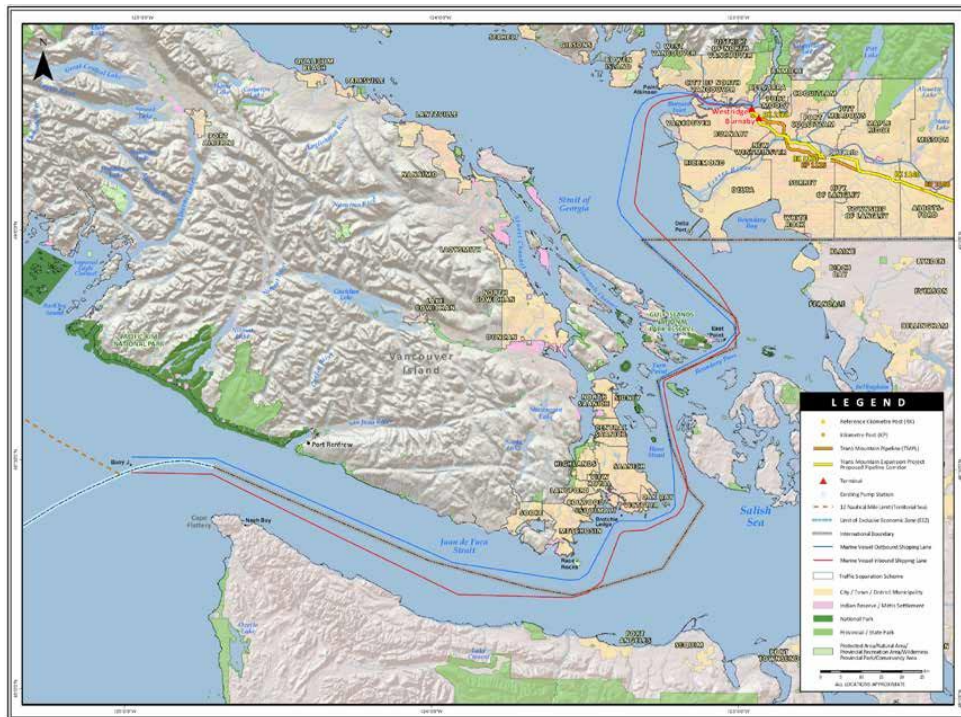
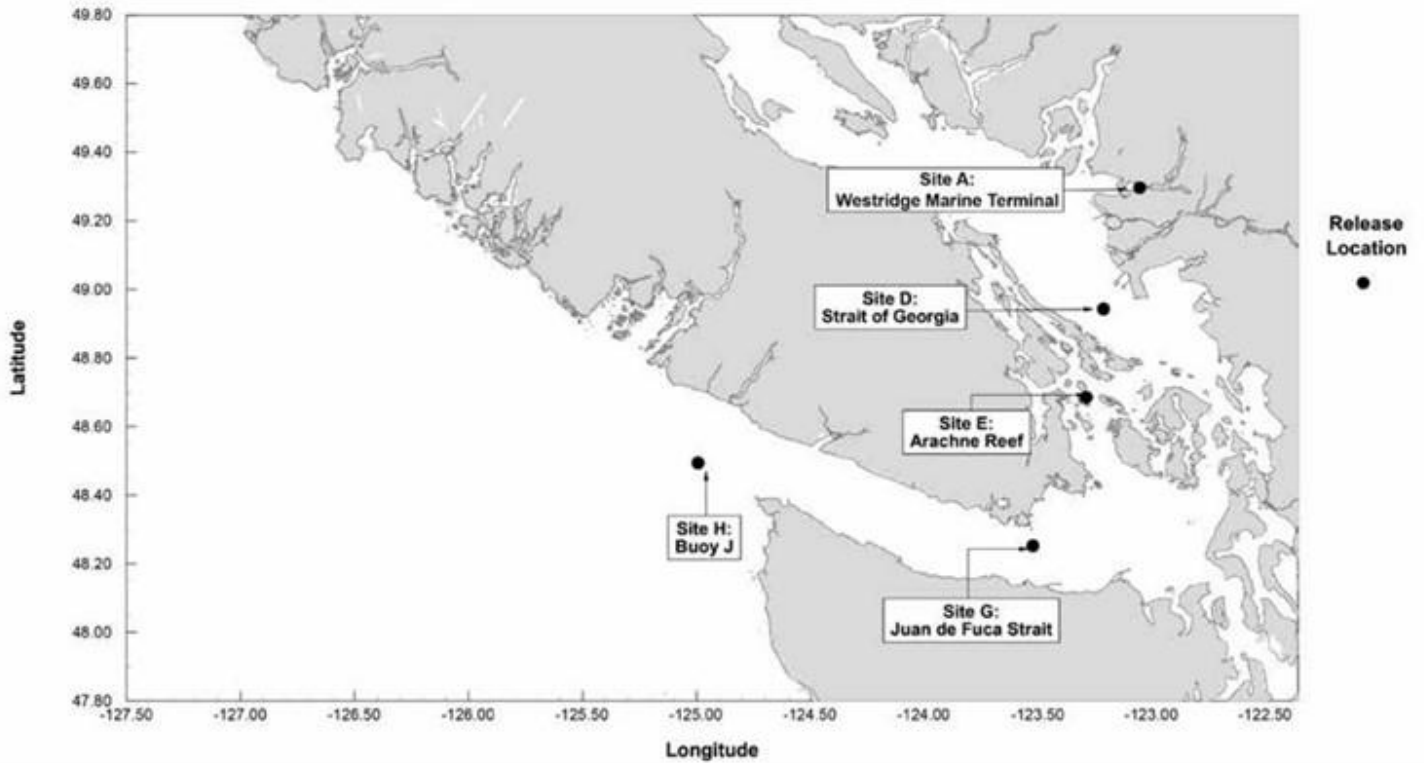
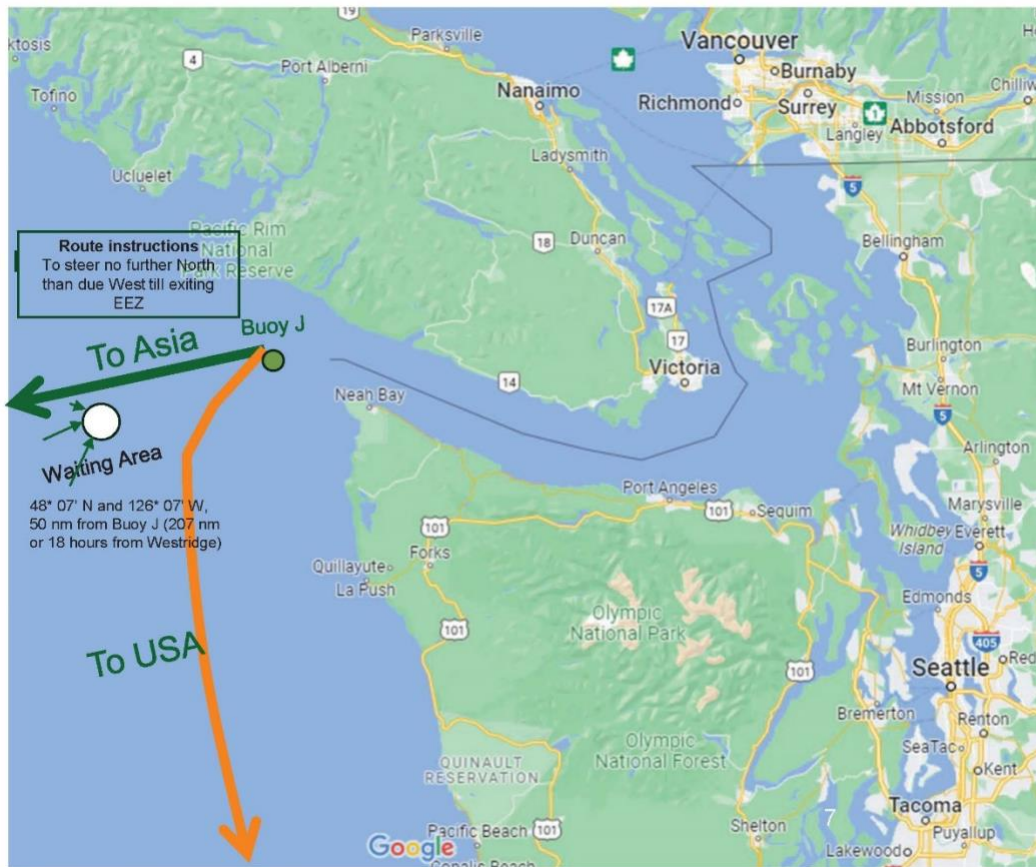


Figure 16 from the NEB Reconsideration Report shows the map of spill locations that were addressed in the environmental assessment process. The only accident and oil spill risk analyses were for locations along the shipping lanes shown in figure 25 above.²⁰

Figure 16: Map of spill locations for the stochastic simulations





On March 27, 2024, there was a Trans Mountain Update presentation at the joint meeting of the Puget Sound Harbor Safety Committee, Pacific Coast Marine Review Panel, and the Navigation Aids & Navigation Services Subcommittee. The use of the oil tanker “waiting area” off the entrance to the Strait of Juan de Fuca (see the map from the presentation’s slide #7 below) has resulted in oil tankers in “offshore drift,” included partially laden oil tankers; the accident and oil spill risk of this “waiting area” was also not addressed in the permit application’s environmental assessment process.²¹

These unplanned-for increases in oil tanker traffic, over-water oil transfer operations, and over-water oil storage at anchorage areas and offshore are increasing the risk of accidents and diluted bitumen/tar sands oil spills in the Salish Sea. In the three months following the completion of the Trans Mountain pipeline expansion project (from May 25-August 25, 2024) over 7.2 million barrels of Canadian diluted bitumen/tar sands crude oil were delivered by oil tanker to WA State refineries.²²

AntID	Company	StartDateTime	Duration	Deliverer	Receiver	Product	TransferQtyInGallon
250548	Phillips 66 Company	5/26/2024 10:30	24	AQUALEADER	Phillips 66 Ferndale Refine	CRUDE OIL	12,600,000
250699	Tesoro Refining & Mark	5/25/2024 14:00	21	AQUALEADER	Anacortes Refinery	CRUDE OIL	12,046,482
250713	SEARIVER MARITIME LLC	5/28/2024 4:00	24	MONIQUE GLORY	Anacortes Refinery	CRUDE OIL	16,800,000
250714	SEARIVER MARITIME LLC	6/2/2024 10:00	20	MONIQUE GLORY	Anacortes Refinery	CRUDE OIL	12,600,000
250799	Phillips 66 Company	6/5/2024 12:00	36	SFL SABINE	Phillips 66 Ferndale Refine	CRUDE OIL	12,264,000
250923	HF Sinclair	5/31/2024 0:01	20	PACIFIC RUBY	Puget Sound Refinery	CRUDE OIL	11,550,000
251525	Phillips 66 Company	6/17/2024 10:30	30	SFL SABINE	Phillips 66 Ferndale Refine	CRUDE OIL	5,183,430
251525	Phillips 66 Company	6/17/2024 10:30	30	SFL SABINE	Phillips 66 Ferndale Refine	CRUDE OIL	18,200,994
251605	HF Sinclair	6/19/2024 10:00	18	PACIFIC RUBY	Puget Sound Refinery	CRUDE OIL	12,810,000
252074	TRAFIGURA MARITIME LI	8/10/2024 14:00	32	NEW ALLIANCE	Anacortes Refinery	CRUDE OIL	27,055,560
252363	Tesoro Refining & Mark	7/2/2024 0:00	18	SFL SABINE	Anacortes Refinery	CRUDE OIL	13,230,000
252666	Phillips 66 Company	7/11/2024 4:30	24	SFL SABINE	Phillips 66 Ferndale Refine	CRUDE OIL	11,550,000
252666	Phillips 66 Company	7/11/2024 4:30	24	SFL SABINE	Phillips 66 Ferndale Refine	CRUDE OIL	12,600,000
253287	Phillips 66 Company	7/25/2024 7:30	30	TARBET SPIRIT	Phillips 66 Ferndale Refine	CRUDE OIL	24,612,000
253517	Phillips 66 Company	8/2/2024 8:15	12	SFL SABINE	Phillips 66 Ferndale Refine	CRUDE OIL	44,100,000
253860	SEARIVER MARITIME LLC	8/10/2024 21:00	48	MONIQUE GLORY	Anacortes Refinery	CRUDE OIL	8,400,000
253860	SEARIVER MARITIME LLC	8/10/2024 21:00	48	MONIQUE GLORY	Anacortes Refinery	CRUDE OIL	4,200,000
253992	Phillips 66 Company	8/20/2024 0:30	48	TARBET SPIRIT	Phillips 66 Ferndale Refine	CRUDE OIL	24,780,000
254183	Tesoro Refining & Mark	8/15/2024 12:00	17	MONIQUE GLORY	Anacortes Refinery	CRUDE OIL	8,400,000
254183	Tesoro Refining & Mark	8/15/2024 12:00	17	MONIQUE GLORY	Anacortes Refinery	CRUDE OIL	4,200,000
254545	Phillips 66 Company	8/24/2024 6:00	24	SEAWAYS REDWOOD	Phillips 66 Ferndale Refine	CRUDE OIL	8,400,000
Total gallons							305,582,466
Total barrels							7,275,773

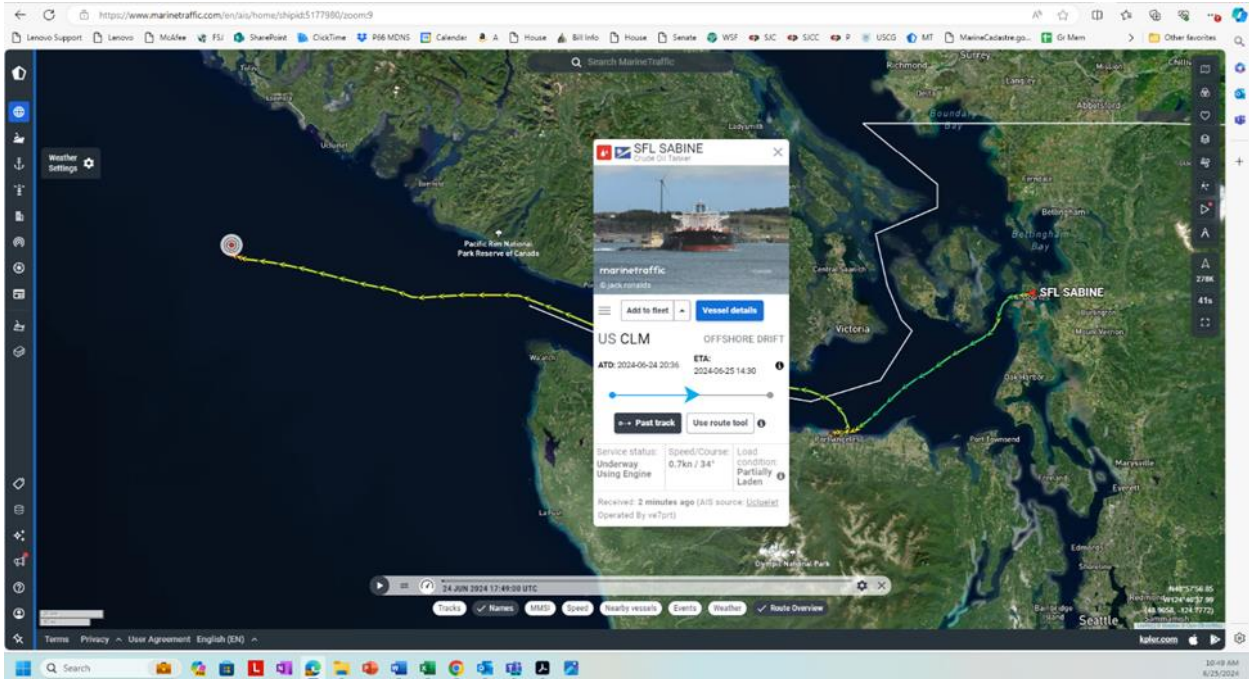
May 25-August 25 2024 Total Canadian Diluted Bitumen/Tar Sands Crude Oil Imports via Oil Tankers to WA State Refineries

HF Sinclair Puget Sound Refinery	580,000	barrels
Marathon Anacortes Refinery	2,546,001	barrels
Phillips 66 Ferndale Refinery	4,149,772	barrels

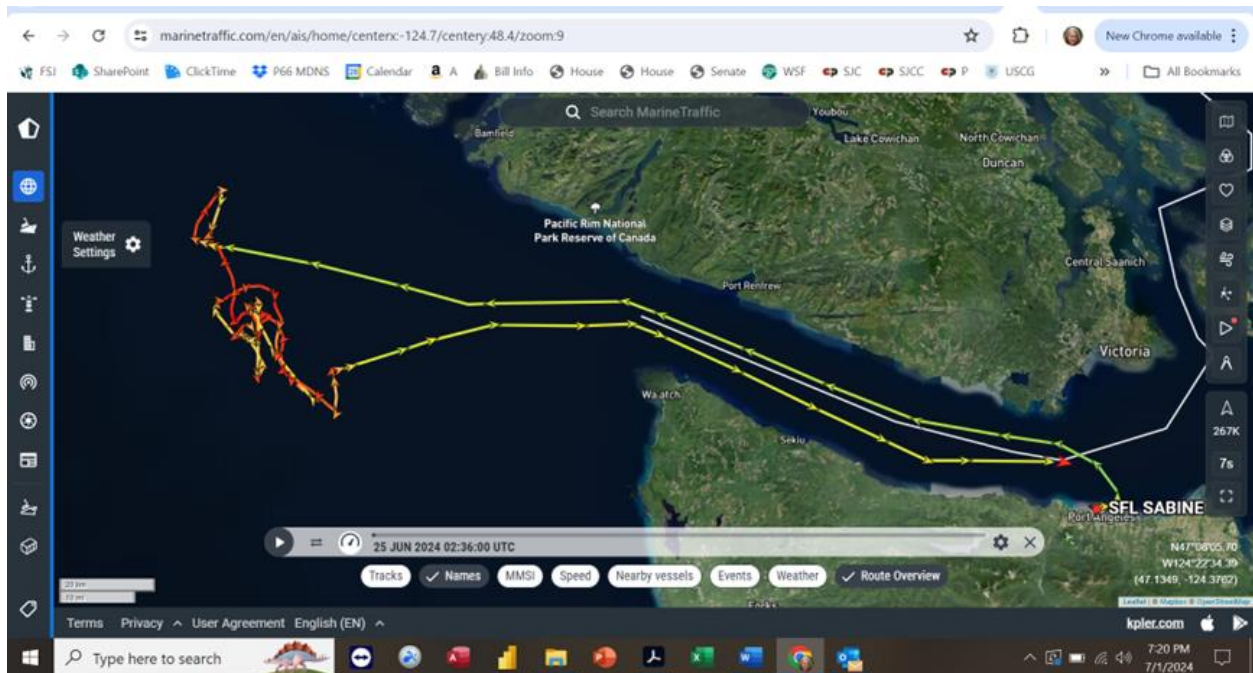
Tankers can be seen on the Marine Traffic app in “offshore drift.” For example, according to Marine Traffic, the SFL SABINE was at Trans Mountain’s Westridge Terminal June 10-12, 2024.

Port	Actual time of arrival	Actual time of departure	Duration
PORT ANGELES (UTC -7)	2024-06-24 14:08 LT (UTC -7)	2024-06-24 20:36 LT (UTC -7)	6hrs 28mins
ANACORTES (UTC -7)	2024-06-24 10:48 LT (UTC -7)	2024-06-24 11:04 LT (UTC -7)	16mins
ANACORTES (UTC -7)	2024-06-22 14:58 LT (UTC -7)	2024-06-24 10:31 LT (UTC -7)	1d 19hrs 33mins
ANACORTES (UTC -7)	2024-06-22 14:58 LT (UTC -7)	2024-06-22 15:08 LT (UTC -7)	10mins
FERNDALE (UTC -7)	2024-06-17 09:59 LT (UTC -7)	2024-06-19 22:34 LT (UTC -7)	2d 12hrs 35mins
PORT ANGELES (UTC -7)	2024-06-12 20:07 LT (UTC -7)	2024-06-17 03:53 LT (UTC -7)	4d 7hrs 46mins
VANCOUVER (UTC -7)	2024-06-10 06:39 LT (UTC -7)	2024-06-12 09:36 LT (UTC -7)	2d 2hrs 57mins
FERNDALE (UTC -7)	2024-06-05 11:44 LT (UTC -7)	2024-06-07 11:51 LT (UTC -7)	2d 7mins
PORT ANGELES (UTC -7)	2024-05-22 13:39 LT (UTC -7)	2024-06-05 05:47 LT (UTC -7)	13d 16hrs 8mins

Ecology’s Advance Notice of Transfer (ANT) data shows a June 17 delivery of 23,384,424 gallons (556,772 barrels) to the Phillips 66 Ferndale Refinery. On June 25, according to Marine Traffic, the SFL SABINE was “partially laden” in “offshore drift”:



This is the Marine Traffic June 25-July 1 past track (July 1 screenshot):



Ecology's ANT data shows the SFL SABINE making a July 2 delivery of 13,230,000 gallons (315,000 barrels) to the Marathon Anacortes Refinery.

The May 2024 completion of the Trans Mountain pipeline expansion project has raised concerns about the increased public health and safety risks (e.g., see [Trans Mountain Produces 10x Increase in Vancouver Tanker Traffic, Raises Fears of Oil Spills](#)). The increased accident and oil spill risk in the Salish Sea far exceeds what was anticipated from the project application and/or the permit application environmental assessment process. There are many uncertainties about a diluted bitumen/tar sands oil spill. See the U. S. Coast Guard's *Risk Assessment of Transporting Canadian Oil Sands*:

From an oil spill response perspective, it is important to have awareness of the environmental fate and behavior of Canadian oil sands products once they are released into the aquatic environment. Currently, there is scientific uncertainty about how Canadian oil sands products would weather and behave in aquatic environments at different ranges of temperatures, salinity, and sedimentation. There is also uncertainty about the extent that the diluent will separate from Canadian oil sands products under different spill conditions. These uncertainties can pose a major challenge to oil spill responders. Typically, oil sands products are classified as Group IV oil for contingency planning, but during a spill may not behave as such. Additionally, the evaporation of volatile components of the diluents in Canadian oil sands products results in potentially toxic and/or flammable VOCs [Volatile Organic Compounds] in the atmosphere above the spill. The initial portion of an oil sand product response would emphasize minimizing

public and responder hazards from light VOCs that would volatilize in the first several hours/days of the event.²³

While the USCG report is from 2014, the fate and behavior of diluted bitumen/tar sands oil is still unknown. See the 2022 report from the National Academies of Sciences, Engineering, and Medicine:

Behavior and fates of new or unconventional oils: Two classes of unconventional oils are due to be transported by ship in increasing volumes within the next decade: diluted bitumen products and LSFO [Low Sulphur Fuel Oil] and VLSFO [Low Sulphur Fuel Oil] fuel oils. Whereas some research has been conducted on the submergence and sinking potential of dilbit in various environments, there has not yet been a major marine spill of this two-component blend and the fates of the diluent versus the weathered dilbit warrant further large-scale open-air experimentation to provide insight into potential behavior and fates (see Section 5.3.2).²⁴

Concerns have also been raised about potential refinery equipment damage that could also increase the risk of oil spills. The CBC News article, *Oil refiners raise quality concerns over TMX pipeline shipments*, states:

Several West Coast refiners have raised concerns in recent weeks about the initial volumes' high sulphur content, acidity and vapour pressure, conditions that could damage refining equipment or increase air pollution, according to regulatory complaints and three people familiar with the matter, though thus far, it has not affected demand.

...

Vapour pressure limits, which measure the volatility of crude, are "wholly inappropriate" for West Coast refining markets, Valero wrote to the CER [Canada Energy Regulator] last month. It and other West Coast refiners are expected to be top buyers of TMX [Trans Mountain pipeline expansion] barrels. Chevron separately told the CER the vapour pressure limit exceeds the regulatory limit set for storage tanks at both its California refineries. High pressures cause more vapours to leak from tanks into the atmosphere.²⁵

Canada has invested \$170 million (Canadian) in oil spill response preparedness as a condition of the permit issued for the Trans Mountain pipeline expansion project.²⁶ Neither WA State or the US have made recent comparable investments in oil spill response preparedness in this region, and in particular the resources needed to respond to submerged and sunken oil spills.

Friends contacted the Washington State Department of Ecology to ask if Ecology is satisfied that the existing oil spill response preparedness requirements address the increased diluted bitumen/tar sands oil spill risk from the Trans Mountain oil tankers' over-water oil transfer operations and over-water oil storage at anchor and in offshore drift. This was Ecology's reply:

As emergency planners in a constantly changing field, we are never content with status quo. We are constantly looking for improvements in how we prepare for spills. We have taken some of the strongest regulatory actions in the nation to address non-floating oil

spill risks in recent years. Our contingency plan rule update cycle is designed to keep us at the forefront of preparedness.²⁷

Ecology reviews and approves oil spill contingency plans on a five-year cycle.²⁸

Friends contacted [The Pacific States – British Columbia Oil Spill Task Force](#) to request that the December 2024 Oil Spill Task Force Annual Meeting address the completion of Canada's Trans Mountain pipeline expansion project and the resulting increase in oil tanker traffic and increased oil spill risk in British Columbia, Washington State, Alaska, Oregon, and California. The Task Force organizers declined saying that other topics better reflect emerging issues along the entire Pacific Coast and Hawaii.²⁹

Friends will continue to monitor laden oil tankers departing Trans Mountain's Westridge Terminal, with a focus on the transits to WA State refineries and their imports of Canadian tar sands/diluted bitumen crude oil. Friends will also continue to advocate for the state and US and Canadian federal governments to address the increase in oil tanker traffic, over-water oil transfer operations, and over-water oil storage at anchorage areas and offshore that are increasing the risk of accidents and diluted bitumen/tar sands oil spills.

Roberts Bank Terminal 2

In April 2023, Canada approved the Port of Vancouver's Roberts Bank Terminal 2 (RBT2), a new 267-acre offshore and over-water terminal in the Fraser estuary, less than a mile from the US border.³⁰ The project would add 520 container ship transits each year and accommodate Ultra-Large Container Vessels that carry millions of gallons of propulsion fuel. The approval ignores the project's lasting and irreversible environmental impacts, including threats to the survival of the Southern Resident killer whales and wild salmon.³¹

Since 2015, Friends has opposed this project. Given that it appears likely to be fully permitted, Friends has been asking for the following conditions which have not been imposed:

- Require a dedicated Emergency Response Towing Vessel for the Haro Strait/Boundary Pass region, with, or separately provided, fire-fighting capabilities for Ultra-Large Container Vessels.
- Require all container ships that call on RBT2 to participate in voluntary vessel slowdowns and to be accredited as quiet by a ship-classification society.
- Prohibit the use of Heavy Fuel Oil for all container ships that call on RBT2. This high viscosity, tar-like fuel can have significant environmental and economic and cultural impacts when spilled. The use of Heavy Fuel Oil also includes the use of Exhaust Gas Cleaning Systems, commonly known as scrubbers, to comply with shipping emissions regulations. Scrubbers remove pollution from ships' smokestacks and discharge the very acidic and toxic scrubber wastewaters into the ocean. Scrubber wastewater discharges increase ocean acidification and are harmful to salmon and the Southern Resident killer whales and humans who eat the salmon. Scrubber wastewater discharges exacerbate the toxin accumulations in Southern Residents, further threatening their survival.³²

Construction of the terminal is expected “to begin in the late 2020s, with completion in the mid-2030s.”³³ However, the Port of Vancouver still needs to obtain a Fisheries Act Authorization and make a final investment decision.³⁴

AltaGas Liquid Petroleum Gas (LPG) Facility

AltaGas now owns the Ferndale, WA, LPG facility and has also purchased the 1,600-acre adjacent facility which shares the shipping terminal on Cherry Point. The adjacent facility could be a site for a new hydrogen plant.³⁵

AltaGas has submitted a major project permit application, State Environmental Policy Act (SEPA) Environmental Checklist, and commercial building permits for 31 unpermitted prior projects as well as a proposed flare project and a waste gas recycling project for its Petrogas West, LLC (now being rebranded as ALA Energy) LPG facility.³⁶

Friends drafted and submitted Notice of Application and SEPA pre-threshold consultation comments that were also signed by 11 environmental nongovernmental organizations. We urged Whatcom County to require a more thorough environmental impact assessment of the 31 unpermitted prior projects and the two new projects and the cumulative impacts of all 33 projects, including the environmental impacts that have occurred since 2015, and that continue to occur as a result of the 31 unpermitted prior projects. According to the Northwest Clean Air Agency, since 2015 the number of railcars increased from an average of 1,000 cars per year to 16,633 railcars in 2019 and ship traffic has increased from 2-5 berthing events to 26 in 2019.

The SEPA Environmental Checklist states:

No threatened or endangered species are known to be present in the immediate vicinity of the Facility, nor were any observed during an onsite passive survey. The nearby Salish Sea is habitat for Listed salmon species and Southern Resident Killer Whale. However, the Facility is greater than 300 feet from the OHWM [Ordinary High Water Mark] and has no direct impact on those species or their habitat.³⁷

Having stated that in the SEPA checklist, the applicant includes an Orca Supplemental Environmental Checklist, which includes this question: “What frequency of vessel traffic is expected as a result of this project (e.g., the anticipated number of transits per year, etc.)?” The Orca Supplemental Environmental Checklist states:

The Projects do not change the number of marine vessels currently permitted through the Department of Natural Resources Aquatic Lands Lease (20-A08488). A maximum of 48 vessels per year are allowed at the Pier for all products. The Aquatic Lands Lease limits ALA Energy to five (5) marine vessels per month between March 1st to June 30th of any year.

Since 2016, the total vessel traffic at the Pier has ranged between 26 and 35 vessels annually.³⁸

The application and SEPA checklist do not include any documentation of any permits that have been issued by the WA State Department of Natural Resources (DNR). Only the DNR Aquatic Lands Lease (20-A08488) is provided.³⁹

AltaGas's LPG facility's vessel traffic increased from 2-5 berthing events per year prior to 2016 to 26 - 35 vessels per year since 2016. According to AltaGas' permit application, vessel traffic could further increase to 48 vessels per year.

Liquified Natural Gas (LNG) Projects

The Woodfibre LNG export facility is under construction in Squamish, British Columbia, on the northwestern shoreline of Howe Sound, with 250,000 m³ of floating storage capacity.⁴⁰ LNG exports are expected to start in 2027 adding 80 transits per year.⁴¹

Tilbury Phase 2 LNG is in Tilbury, British Columbia, along the south shore of the Fraser River: The exact number of vessel calls does depend on market conditions. However, in Appendix 1 of the EAO's [Environmental Assessment Office's] Assessment Report, it includes a description of the *Marine Access and Transportation Plan* key mitigation measure, that specifies "*in each calendar year, the TMJ will receive a maximum of 365 LNG vessel calls, of which a maximum of 68 will be LNG carrier calls*". While the exact ratio of LNG carrier and bunker vessels is not specified, of the 365 LNG vessel calls annually, no more than 68 of the calls would be LNG carriers.⁴²

Puget Sound Energy (PSE) canceled an LNG expansion project in Tacoma, WA in January 2024 after permits for the project were appealed to the state Shoreline Hearings Board.⁴³ In February 2024, PSE submitted a Joint Aquatic Resources Permit Application to install additional vessel fueling/loading infrastructure to fuel vessels with LNG and to load bunker barges that would then conduct over-water transfers to fuel ships with LNG.⁴⁴

Terminal Improvements for Unspecified Projects

The Port of Bellingham's Shipping Terminal Modernization Project, the Port of Everett's Maritime Industrial Expansion at the Norton Terminal, and the Port of Longview's Rail Corridor Expansion are all terminal improvement projects for unspecified projects. Vessel traffic will likely increase as a result of these projects, and it is unclear what permitting would be required and if the environmental impacts of any increased vessel traffic would be addressed when projects are identified for these terminals' improved facilities and infrastructure.

On August 19, 2021, the US Department of Transportation announced the Marine Highway Designation, M-5 Coastal Connector, which will increase tug and barge traffic between Bellingham, Washington; Southern Oregon; and San Diego, California, and will reduce truck traffic along Interstate 5.⁴⁵ Port expansion continues with the 2023 - 2025 Shipping Terminal Modernization Project that includes dock replacement and dredging to deepen the navigation channel.⁴⁶ The Port also recently received a federal \$17.9 million Department of Transportation grant to reconnect the shipping terminal to rail.⁴⁷

In December 2022, the Port of Everett opened “its new Norton Terminal – the first all new cargo terminal to open on the U.S. West Coast in more than a decade.”⁴⁸ Staff at the Port of Everett confirmed that there has been no additional vessel traffic to or from the Norton Terminal since the project’s completion in 2022 through July 2024, but potentially there could be additional vessel traffic in the future.⁴⁹ The SEPA Environmental Checklist states, “Analysis of future shipping traffic will be done as part of that Project's environmental review.”⁵⁰

The Port of Longview’s Industrial Rail Corridor Expansion Project “involves expanding the Port’s existing two-track Industrial Rail Corridor (IRC) to provide improved rail service between their marine terminals on the Columbia River and a Class I mainline railroad that runs between Seattle, Washington, and Portland, Oregon.” And further states that the purpose of the proposed expansion includes “efficient rail service to support rail demands of the Port’s current tenants and customers, and prepare for projected growth at the Port and in the surrounding areas.”⁵¹

It is unclear what if any environmental reviews would be required for the future use of these permitted infrastructure improvements that would accommodate additional vessel traffic in the Salish Sea.

Projects located outside the Salish Sea

A project in the Port of Grays Harbor and another in the Port of Longview, both in Washington State, and a third project, Zenith Energy’s expansion in Portland, Oregon, are all located outside the Salish Sea. These projects are included because their ocean-going vessels could enter the Salish Sea for bunkering — the over-water oil transfer operations that re-fuel large commercial ships, thus increasing vessel traffic in the Salish Sea.

ABOUT FRIENDS OF THE SAN JUANS

The mission of Friends of the San Juans (Friends) is to connect people and nature to protect the San Juan Islands and the Salish Sea through education, science, policy, and law. Acting as a catalyst for change, Friends works to:

- Protect vital shorelines and restore nearshore habitats.
- Educate and engage youth and the community.
- Address vessel traffic risks and impacts, and advocate for improved oil spill prevention and spill response preparedness, and solutions to shipping pollution.
- Promote climate resilience to safeguard natural ecosystems and communities.

Friends values interconnectedness, respecting the link between nature, community, and cultural wisdom, particularly that of sovereign tribal nations. Guided by principles of advocacy, justice,

integrity, and community, Friends collaborates with tribes, leaders, and environmental allies to protect the Salish Sea bioregion.

A group of islanders formed Friends of the San Juans in 1979 to protect this place's beauty, character, and wildness in the face of destructive development. We envision a future where the San Juan Islands and the Salish Sea thrive as a sanctuary of biodiversity and sustainability, fostered by a community deeply connected to and actively protecting this special place.

Protect this place with us and take action today at sanjuans.org.

Friends *of the* San Juans

FOOTNOTES

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² Port of Vancouver's webpage for Roberts Bank Terminal 2: <https://www.robertsbankterminal2.com/project-overview/about-the-project/>. Accessed 9-15-2024.

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ECCC estimates that over 26 million tonnes of scrubber washwater was discharged into SRKW critical habitat in 2022, including 69 kg of PAHs [Polycyclic Aromatic Hydrocarbons as phenanthrene equivalents] and over 8,000 kg of metals. Cruise ships accounted for 44% of the washwater discharge and 40% of the PAHs and 44% of the metals in this habitat. ...

ECCC estimates that marine vessel scrubbers contribute between 40-98% of the loading of priority contaminants within 300m of SRKW critical habitat. Further, ECCC calculated that scrubbers are estimated to be responsible for the largest proportion of vanadium within 300 m of the SRKW critical habitat.

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