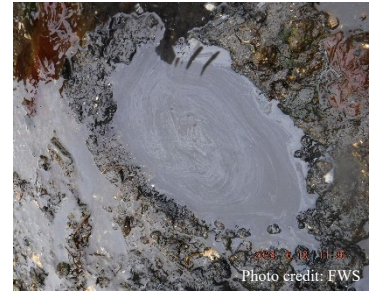




Tug *Western Mariner* Diesel Spill

Natural Resource Damage Assessment Update:

Results of June 10, 2024 Mussel Sampling



On March 21, 2022, the tug *Western Mariner* collided with its freight barge *Chichagof Provider* while traveling through Neva Strait approximately 18 miles northwest of Sitka, Alaska. The collision pushed the tug onto the beach, resulting in a release of diesel. Within the following eight days, the spill was controlled, and the vessel was refloated and removed from the site. Federal and state agencies (Trustees) are conducting a [Natural Resource Damage Assessment](#) (NRDA) to evaluate and quantify impacts to fish, wildlife, their habitats, and the human uses of these natural resources and determine the type and amount of restoration warranted to offset those harms.

Natural Resource Trustees for the Tug *Western Mariner* NRDA

U.S. Department of the Interior:
U.S. Fish & Wildlife Service and
the Bureau of Indian Affairs

U.S. Department of Commerce:
National Oceanic and Atmospheric
Administration (NOAA)

U.S. Department of Agriculture:
U.S. Forest Service

Alaska Department of
Environmental Conservation

Alaska Department of Law

Alaska Department of Fish and
Game

Alaska Department of Natural
Resources

What is the current status of the tug *Western Mariner* NRDA?

The Trustees are currently assessing impacts to natural resources and services caused by the spill. In November 2024, the Trustees published a [Notice of Intent](#) to Conduct Restoration Planning and a [preassessment report](#), summarizing the incident, NRDA activities, and an initial determination of injuries or likely injuries to natural resources. The preassessment considered information from the emergency response to the oil spill and other sources, as well as field assessments conducted by the Trustees in [March 2022](#), [May 2022](#), and [March 2023](#). In June 2024, the Trustees returned to sites in Neva Strait, where lingering oil was documented in 2023, to collect additional information about oil exposure and injury to natural resources two years after the spill. This update provides results from the chemical analyses of mussel tissue samples collected in June 2024.

Where were samples collected and what were the results?

On June 10, 2024 Trustee scientists collected mussels from shorelines in Neva Strait where ongoing oil contamination was documented in spring 2023; 1.7 Mile Beach, Highwater Island, and the Grounding Site, as well as a reference site in Olga Strait that was not oiled (see map). Mussels are a commonly used biomonitoring organism to evaluate the presence and bioavailability of contaminants. These samples were sent to a laboratory and analyzed for oil chemicals, including total petroleum hydrocarbons (TPH) and polyaromatic hydrocarbons (PAH), which can be toxic to natural

resources. The objective of the sampling was to assess recovery in shoreline habitats and resources two years after the spill and evaluate if these resources are experiencing any ongoing oil exposure and related impacts.

The chemical results show that mussels are still being exposed to relatively low levels of oil at the Grounding Site and Highwater Island (Figure 1). The PAH concentrations in mussel tissues have decreased since they were last sampled in spring 2023 and are more than 100-times lower than those recorded in the spill area in spring 2022 (Table 1). In 2024, PAHs were not detected in samples from 1.7 Mile Beach or the reference site in Olga Strait. The TPH concentrations in mussel tissues show a similar pattern (data not shown). During sample collection, the field team observed visible oil sheening when intertidal sediments were disturbed within a specific area of the beach at the Grounding Site. Lingering oil from the spill on certain shoreline areas in Neva Strait has limited bioavailability to intertidal mussels.

The chemistry data for all samples are available for download through NOAA's DIVER web portal: <https://www.diver.orr.noaa.gov/web/guest/diver-explorer?sqid=737>

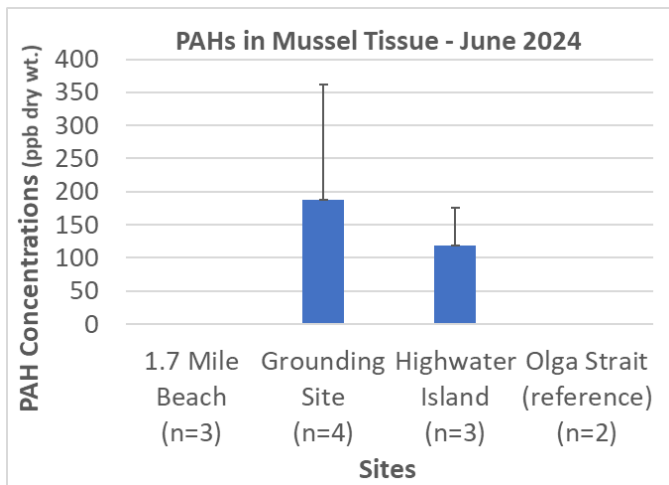


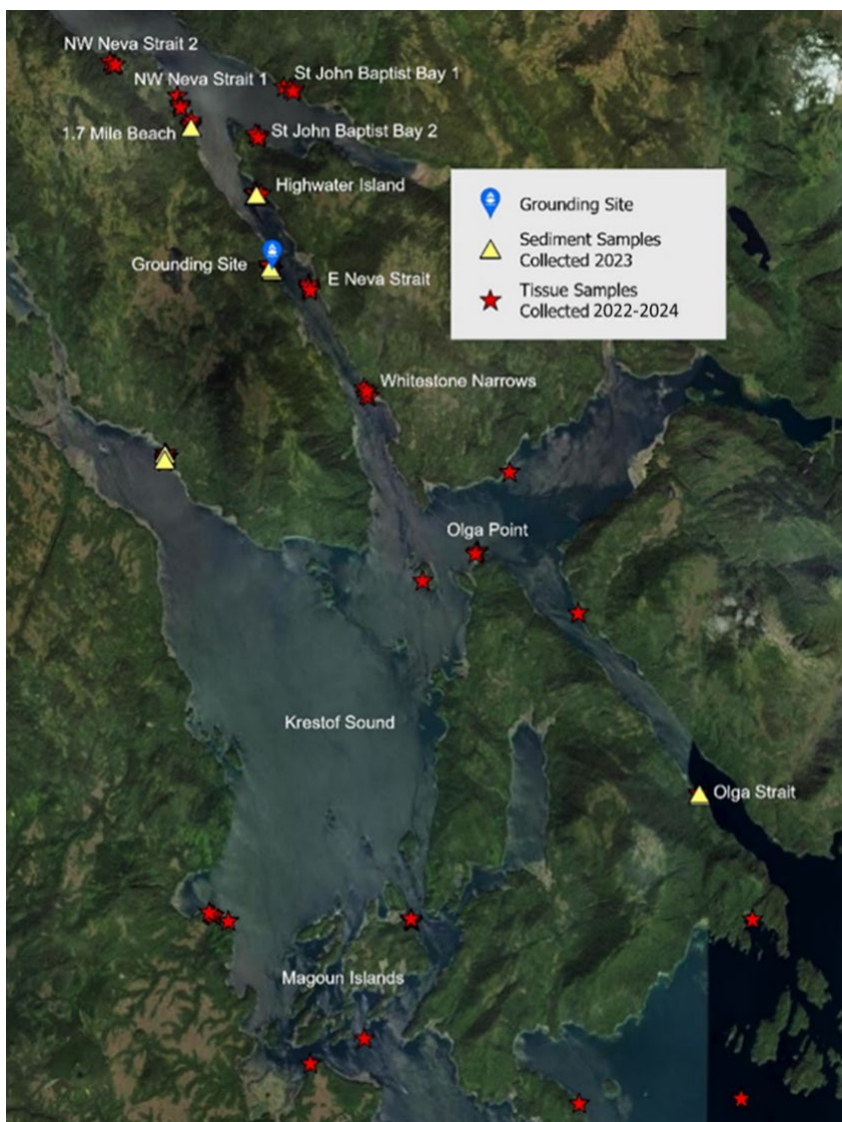
Figure 1: PAH concentrations in mussel tissue samples collected in June 2024 (Avg. + SD; n=number of samples).

	March 2022	April 2022 ^a	May 2022	March 2023	June 2024
NW Neva Strait 2	4700	n/s	n/s	11	n/s
NW Neva Strait 1	29000	n/s	n/s	4.0	n/s
St John Baptist Bay 1	4500	n/s	n/s	2.5	n/s
St John Baptist Bay 2	n/s	710	n/s	3.7	n/s
1.7 Mile Beach	n/s	n/s	n/s	55	0
Highwater Island	n/s	n/s	21000	70	120
Grounding Site	n/s	n/s	16000	780	190
E Neva Strait	27000	n/s	n/s	7.7	n/s
Whitestone Narrows	n/s	340	n/s	5.0	n/s
Olga Point	290	n/s	n/s	1.5	0

^a Samples collected by an outside party, analyzed by the NRDA

Table 1: PAH concentrations in mussel tissue samples (ppb dry wt.) collected in 2022-2024 (n/s – not sampled).

For figure and table: Concentrations are the sum of 72 PAH compounds in parts per billion (ppb) in the dry weight of tissue. PAH compounds not detected in samples (i.e., below method detection limits) were not included in the sums. Phenanthrene was excluded from sums for the June 2024 samples (71 total PAHs) due to a laboratory anomaly.



Map: Sites where samples were collected for the Natural Resource Damage Assessment in 2022-2024.

What are the next steps for the tug *Western Mariner* NRDA?

The Trustees are evaluating and quantifying injuries to natural resources and the human uses of resources caused by the oil spill, with the goal of determining the appropriate type and amount of restoration to compensate for those injuries. The Trustees will evaluate potential restoration projects that protect, restore, or enhance the resources impacted by the spill and develop a draft Restoration Plan that will be made available for public review and input.

Throughout the damage assessment and restoration planning process, the Trustees welcome information from the public.

Who should I contact to obtain more information or to share my information?

For NRDA information, contact the Federal Lead Administrative Trustee, Sarah Allan at 907-202-1859 or sarah.allan@noaa.gov.

Additional information is also available on the [Western Mariner NRDA case page](#).