

**LUMMI NATION
SPILL PREVENTION AND RESPONSE CAPABILITY
DEVELOPMENT**

2022 Annual Synthesis Report



Prepared For:
Lummi Indian Business Council

Prepared By:
Water Resources Division
Lummi Natural Resources Department

January 2023

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Introduction

Large amounts of crude oil, petroleum products, and other hazardous materials are transported and stored near the Lummi Indian Reservation (Reservation). These hazardous materials are transported by ships, pipelines, trucks, and railroad and are used, produced, and/or stored throughout the Reservation area, particularly in the Cherry Point Heavy Impact Industrial Zone immediately north of the Reservation boundary. Accidents, equipment failure, and human error have the potential to result in large spills and disastrous human and environmental consequences. Many of these hazardous materials are toxic to people and animals if inhaled, ingested, or contacted. Oil and chemical spills or releases to waters on or adjacent to the Reservation have the potential to threaten public health and safety and destroy some of the most productive and valuable ecosystems in the world. Spills or releases of petroleum products, chemicals, or other hazardous materials to land can threaten public safety, public health, and the environment. To date, there has not been a large hazardous material spill on or near the Reservation that has impacted Lummi Nation Waters. However, future residential and economic growth on the Reservation, in the adjacent Cherry Point Heavy Impact Industrial Zone, and in areas upstream from the Reservation, will increase the risk of a hazardous material emergency on the Reservation.

Because of the potential consequences, it is important for the Lummi Nation to develop and implement a plan to effectively respond to a hazardous material spill or release on or adjacent to the Reservation. The Lummi Natural Resources Department (LNR) has been actively developing spill response capabilities since the mid-1990s and completed the Lummi Nation Spill Prevention and Response Plan (SPRP) in October 2005. An update to the 2005 SPRP was completed in late 2016 and approved by the Lummi Indian Business Council (LIBC) in early 2019. Continuing efforts to develop and maintain spill prevention and response capabilities include staff training and spill response drills, equipment upgrades, planning, research, and public outreach, though the amount has been impacted by COVID restrictions and other events beyond our control. These efforts contribute to achieving the Lummi Nation goals of protecting the public health and safety of Reservation residents and protecting treaty rights to fish and gather throughout all usual and accustomed areas. These activities also contribute to achieving the EPA strategic goals of clean and safe water and healthy communities and ecosystems.

This annual synthesis report is a summary of the Lummi Nation spill prevention and response capability development activities conducted during the January 1, 2022 through December 31, 2022 period. The activities are divided into the following categories: Staff Training and Oil Spill Response Drills, Planning, Equipment, Oil Spill Response Incidents, Public Outreach, and Data Collection/Research.

Spill Prevention and Response Capability Development Activities

1. Staff Training and Oil Spill Response Drills:

Pre-COVID, spill prevention and response training for staff members had been conducted through both in-person dedicated classes and through tabletop and boom deployment exercises. Due to social distancing requirements and group size restrictions none of these

activities occurred after COVID-based protective measures were put into place in early March 2020. In lieu of in-person activities, it was recommended that members of the Lummi Nation Spill Response Team take a certified online Hazardous Waste Operations and Emergency Response (HAZWOPER) 8-Hour Refresher Course. The staff members identified below attended the following training programs, spill response drills, workshops, or completed the online HAZWOPER 8-Hour Refresher Course during 2022.

- a) On August 23, 2022, eight (8) LNR employees and the LIBC Safety Officer participated in a half-day Spill Container Refresher Day Event held at and around the Lummi Nation's Spill Equipment Container, which also included unloading oil spill containment boom from the boom trailer and use of the *Responder II*, the Lummi Nation's spill response boat. See attached memorandum.

2. Planning:

- a) Jeff Solomon and Andy Ross developed a plan to install shelving and hangers in the spill container to allow for easier storage and retrieval of spill equipment. The work is planned for 2023.

3. Equipment:

- a) Routine maintenance of the 2010 Nissan Titan included regular servicing (e.g., oil and filter changes, multi-point inspection).
- b) Routine maintenance of the 1996 Jeep Cherokee included regular servicing.
- c) Routine maintenance of the *Responder II*, a 26 ft purpose-built spill response boat and its trailer.
- d) Replaced rotting floorboards and addressed rust and gate issues with the boom trailer, and replaced the tarp that covers the oil spill containment boom when it is in the spill trailer.

4. Oil Spill Response Incidents:

In 2022, two vessels sank in the Sandy Point Marina on the Reservation and there was a milk spill off Reservation. Lummi Natural Resources staff monitored one of the Sandy Point Marina incidents and remotely engaged the other two, but did not directly participate in spill recovery efforts.

- a) On March 4, 2022, a 60-foot vessel sank at the dock in the Sandy Point Marina as a result of an explosion and fire. The U.S. Coast Guard and Washington Department of Ecology (Ecology) responded. Later that day divers sealed and prepared the vessel for removal, and the vessel was floated and removed on March 9, 2022. It was estimated that 25-50 gallons of diesel had been discharged to surface waters. See attached memorandum.
- b) On May 13, 2022, about 10,000 gallons of milk was spilled due to a commercial vehicle accident at the roundabout intersection of SR-539 (Guide Meridian) and Tenmile Road

near Lynden, Washington. Ecology responded. The milk was fully contained within two Washington Department of Transportation retention ponds and was vacuumed out of the retention basins later the day of the spill. There was no impact to Fourmile or Tenmile creeks (Fourmile is a tributary of Tenmile, which is tributary to the Nooksack River).

- c) During the morning of November 7, 2022, a 25-foot ski boat sank at a private dock in the Sandy Point Marina. The Lummi Nation was officially notified at 6:30 pm that evening by Ecology, though an LNR employee found out about the sinking around 9:00 am that morning via Facebook, but without much detail (and that employee monitored the Facebook thread). Ecology indicated that as of 6:30 pm, there was no observed release from the vessel, and that planning was underway to raise the it, but high winds and a rough sea state precluded the work occurring that evening.

5. Public Outreach:

Information about oil spill prevention and response capabilities (e.g., emergency contact information and equipment list) is also published on the Water Resources Division page of the Lummi Natural Resources Department website (<https://www.lummi-nsn.gov/Website.php?PageID=67>).

6. Data Collection/Research:

The Lummi Natural Resources Department staff regularly conducts data collection activities and research in support of the overall departmental mission to protect and restore tribal natural resources. These data collection/research activities support the goals of the oil spill prevention and response capability development by documenting background and ambient conditions. This information will be useful in evaluating the effectiveness of response efforts in the event of an oil spill and to protect public health and safety.

In addition, the Lummi Water Resources Division has conducted a number of activities that support efforts to prevent and respond to spills including developing and adopting water quality standards, storm water management regulations, and regulations that identify civil fines for activities that negatively impact Lummi Nation Waters.

ATTACHMENTS



LUMMI INDIAN BUSINESS COUNCIL

2665 KWINA ROAD BELLINGHAM, WASHINGTON 98226 (360) 312-2000

MEMORANDUM

DATE: September 23, 2022
TO: Kara Kuhlman, LNR Water Resources Manager
FROM: Jeff Solomon, LNR Natural Resources Specialist I
SUBJECT: “Spill Container Refresher Day” Event – August 23, 2022

The purpose of this memorandum is to summarize the “Spill Container Refresher Day” event that took place on August 23, 2022.

Participants:

The following staff participated in the event:

1. Jeff Solomon – Lummi Natural Resources (LNR) Natural Resources Specialist I
2. Andy Ross – LNR Water Resources Specialist III/Hydrologist
3. Chris Phair – LNR Restoration Specialist I
4. Vincent Feliciano – LNR Permit Specialist III
5. Emily Wirtz – LNR Wildlife Manager
6. Megan Russell – LNR Shellfish Biologist/Dive Safety Administrator
7. Suzanne Gray – LNR Outreach Specialist III
8. Jamie Mattson – LNR Water Resources Specialist II/Planner
9. Randy Jefferson – LIBC Safety Officer

Drill Strategy/Goals:

The Spill Container Refresher was a half-day event and held in the Lummi Nation’s Tribal Administrative Center maintenance/motor pool lot (Figure 1) where the bulk of the Lummi Nation’s spill response equipment is located, the spill response boat *Responder II*, a dedicated trailer that carries spill containment boom, and a dedicated shipping container that contains spill response equipment such as sorbent materials, containment boom anchors, and personal protective equipment (PPE).

The primary purpose of the event was to familiarize or re-familiarize LNR staff with the spill response equipment. A secondary purpose was to evaluate planned storage upgrades (i.e., improved shelves, hangers) in the container and to unload the containment boom from the oil-spill boom trailer to allow for evaluation of the condition of the trailer and remedy rust and other issues. No classroom instruction was involved, and no boom deployment was planned or conducted for this event.

The last in-person LNR spill drill occurred November 2019 before Lummi Nation implemented COVID safety and lockdown protocols in early 2020, which eliminated LNR's ability to host these training events. This lack of activity, coupled with the need for work in the container and on the boom trailer served as an opportunity to refresh the Lummi Nation's Oil Spill Response program.

Briefing and Scenario:

All discussions were led by Andy and Jeff following the agenda below, but no specific training scenario was exercised during the event. No tide predictions or Geographical Response Plan (GRP) review & employment were required for this event. However, the Spill Response Actions Review (Agenda Item #3) portion was conducted as if there was going to be a boom-deployment spill drill.

Briefing Agenda:

1. Check-in and Introductions
2. Review Agenda/Goals
3. Spill Response Actions Review
 - a. Safety Discussion
 - b. Incident Command System (ICS) review
 - c. Boots-on-the-ground Spill Response Approach (teams, roles, assignments, etc.)
4. Equipment Review Discussion/Working lunch
 - a. Equipment from container and containment boom trailer
 - i. Safety equipment
 - ii. Containment boom, bridles, land & water anchors
 - iii. Absorbents & kits
 - iv. Miscellaneous
 1. Ropes, chains, shackles, carabiners
 2. Pitchforks, shovels
 3. Disposal bags
 - v. Place equipment back into trailer
 - b. Containment boom (trailer)
 - c. Boat (Responder II)
 - i. Overview
 - ii. Tow post
5. Move and offload spill containment boom trailer
 - a. Position offloaded boom for cleaning, inspection and maintenance
 - b. Position/park trailer for rust treatment
6. Closing discussion/Q&A/event summary

The Check-in and Introductions section grew into an informative and diverse discussion that became an overall introduction to oil spill response actions and LNR capabilities.

Results:

The various types of sorbent, boom, boom anchor, safety, and related equipment were shown to participants and their use described and discussed. The boom was removed from the trailer and is in good condition (though could benefit from a gentle cleaning). Several of the attendees are new to LNR and spill response, which led to good questions to and discussions with LNR staff that do have spill and spill drill experience. Figures 2-6 document the event and follow-up.

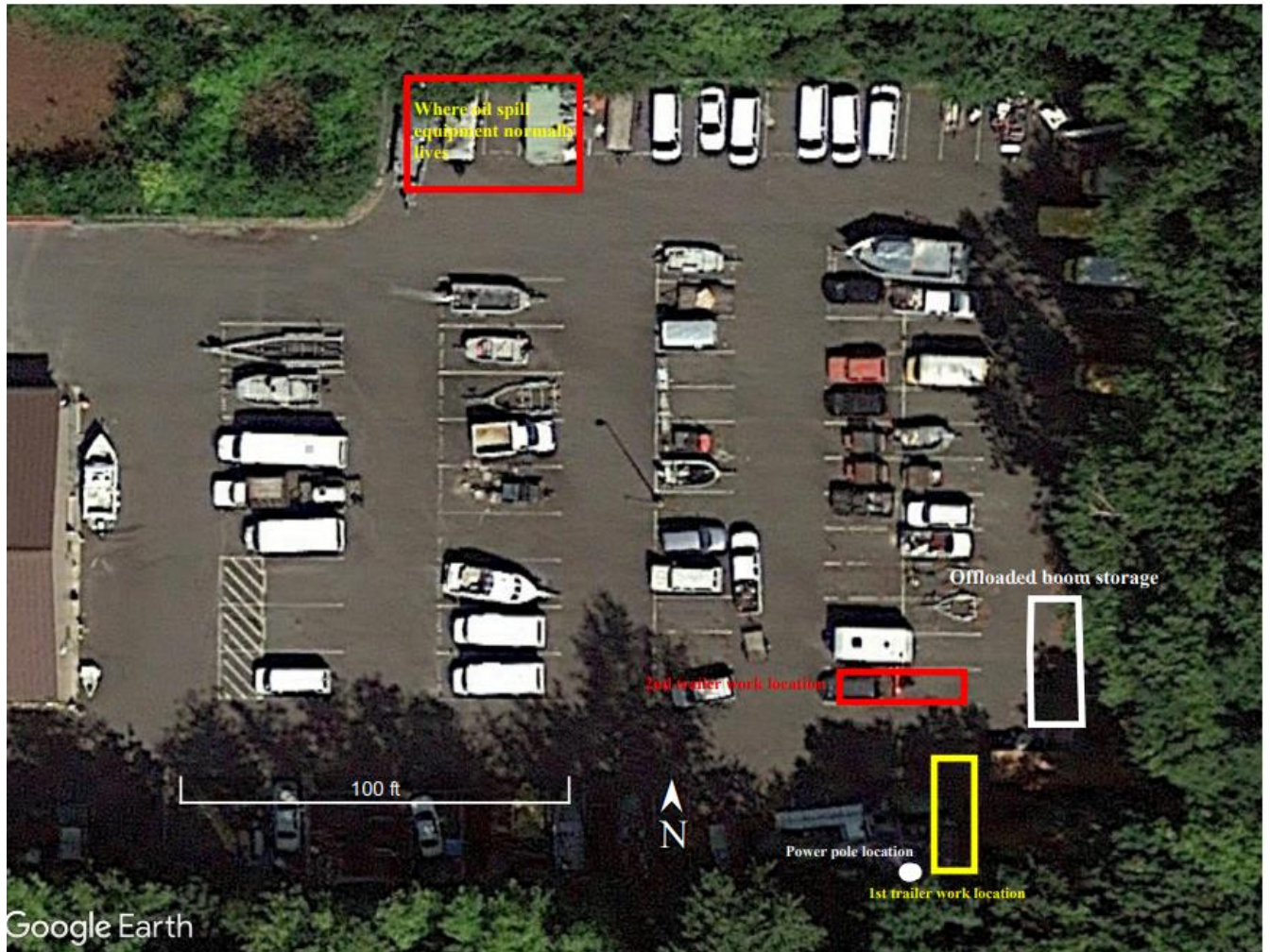


Figure 1. Spill equipment and trailer maintenance layout.



Figure 2. Container Day discussion of oil spill response. Photo credit: Andy Ross

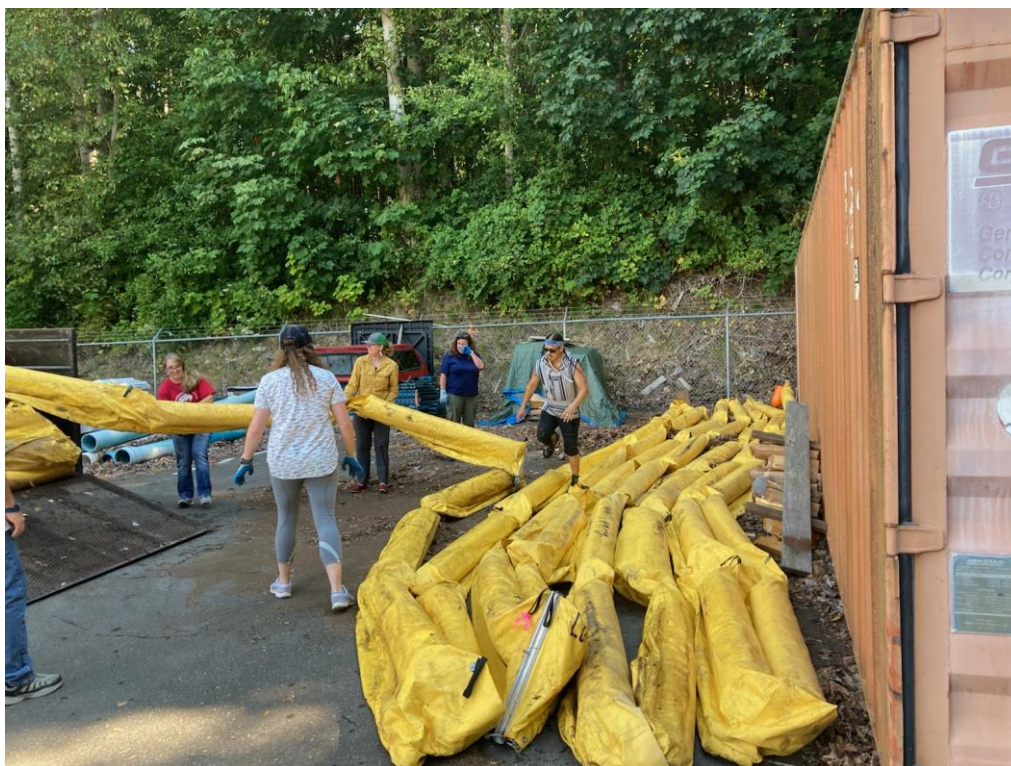


Figure 3. Offloading oil spill boom. Photo credit: Andy Ross



Figure 4. Offloaded oil spill boom. Photo credit: Andy Ross

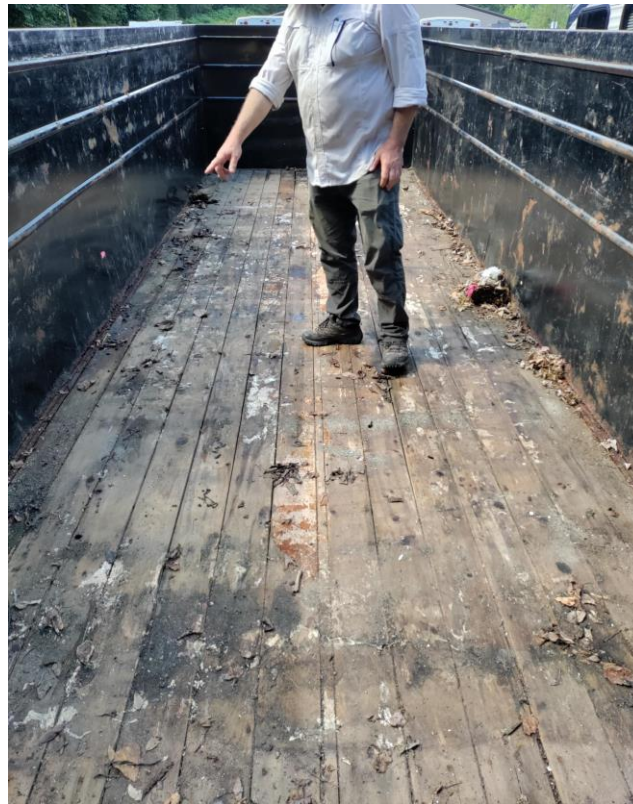


Figure 5. Pre-rust treatment and floorboard replacement on boom trailer. Photo credit: Jeff Solomon



Figure 6. Boom trailer after rust treatment and floorboard replacement. Photo credit: Jeff Solomon



LUMMI INDIAN BUSINESS COUNCIL

2665 KWINA ROAD BELLINGHAM, WASHINGTON 98226 (360) 312-2000

MEMORANDUM

DATE: March 11, 2022
TO: Kara Kuhlman, Water Resources Manager
FROM: Jeff Solomon, Natural Resources Specialist I
SUBJECT: Explosion/Fire and diesel spill in Sandy Point Marina

On the morning of March 4, 2022, Lummi Natural Resources (LNR) staff were informed of an explosion and fire which resulted in a sunken vessel in the Sandy Point Marina on the Lummi Indian Reservation. It was reported to dispatch that the explosion occurred at 0023 hours. Fire District #17 responded and actively fought the fire. Site location is 4079 Sucia Drive.

Department of Ecology (Ecology) were notified middle of the night and arrived at the scene at 0700 and deployed soft boom by 0730. Ecology's initial point of contact is David Cline (425) 736-3468, relief/daytime contact is Madeline Fritzen (425) 389-2493.

I had seen a post of the incident on social media that morning and sent screenshot to you immediately via text. Shortly after, I was dispatched to the scene to observe and take notes on response effort, I arrived by 0950 hours. Several agencies were already present, including:

- U.S. Coast Guard - Chief Petty Officer Kevin Ouioumjiam (Chief "O.J.")
- Ecology – David Cline & Madeline Fritzen
- P66 personnel with WRS (P66 contractor) deploying hard boom

By 0800 hours, initial estimates were 25-50 gallons of red dye diesel had discharged to surface waters within the marina. The vessel owner/responsible party had been contacted by response personnel and was compliant immediately hiring cleanup contractors to address the sunken vessel and resulting spill.

By 2000 hours, dive crews had patched all leaks and closed all holes and vents, then prepped the vessel for flotation and removal.

The vessel owner is a non-tribal member who was out-of-state during the incident. The vessel is 60-feet long with a 200-gallon capacity fuel tank which was estimated to be ¼ to ½ full at time of explosion. The vessel does not have a name, but is identified by registration number WN-7215-MC.

According to email updates by Ecology, by midday on Sunday March 6, 2022 final sweeps to local shoreline and neighboring docks observed no visible/recoverable product.

On Wednesday March 9, 2022, the dive team had the vessel floated. Then on Thursday, the vessel was towed to the Sandy Point boat launch and successfully removed from the water. No additional product has been released from the vessel. The vessel has been transported to an appropriate disposal facility. Please see photos below:



Figure 1



Figure 2



Figure 3



Figure 4