Port Angeles Rayonier Mill
Public Comment Period


Photo credit: Jon Thompson

Comments accepted
June 12 – August 12, 2025

Submit comments
Online:
go.ecology.wa.gov/comment2270

Or by mail/email:
Marian Abbett, Site Manager
WA Department of Ecology
PO Box 47775
Olympia, WA 98504-7775
Marian.Abbett@ecy.wa.gov

Review documents
Online:
go.ecology.wa.gov/2270

In-person:
- Port Angeles Main Library
- Ecology Lacey Office (by appointment only)

Site information
700 N Ennis, Port Angeles
Facility Site ID: 19
Site Cleanup ID: 2270

Learn more
For more information, visit ecology.wa.gov/Rayonier

Public comments welcomed on cleanup documents
The Department of Ecology invites you to review and comment on documents for the Port Angeles Rayonier Mill cleanup. The study area of this site is moving to the next phase of cleanup. Your feedback is an important part of this process.

Ecology worked with the Lower Elwha Klallam Tribe to develop and review these documents. We seek your input on the following:

- **Legal Agreement:** To move the cleanup forward, Ecology will enter into a **consent decree** with the parties responsible for cleanup—Rayonier A.M. Properties LLC and Rayonier Advanced Materials (collectively referred to as "RAMP" or "Rayonier"). The consent decree is a legal agreement that would require RAMP to carry out Ecology's Interim Action Plan.
- **Draft Interim Action Plan:** Ecology's proposed cleanup plan for the study area. It includes a schedule and cleanup requirements.
- **State Environmental Policy Act (SEPA) Determination of Non-Significance:** Ecology determined the proposed cleanup is not likely to cause significant environmental harm. We considered environmental, historical, and cultural factors in this process.

Public meeting and open house
Join us for a public meeting and open house during the comment period. This is an opportunity to learn more about the cleanup, ask questions, and submit written comments.

Tuesday, July 8 | 5:00-8:00 PM
- Presentation at **6:00 PM,** followed by Q&A session
- Open house before and after the presentation

Field Arts & Events Hall, Donna M. Morris Theater
201 W Front St, Port Angeles, WA 98362

The Rayonier Mill Study Area

The Model Toxics Control Act (MTCA) is Washington's law for cleaning up contaminated areas. It defines a "cleanup site" as any place where contamination is harming or threatening humans or the environment. A cleanup site can include more than the property where contamination originally was released. If the contamination has spread, nearby areas may be part of the site too.

The Rayonier Mill cleanup is a large, complex project. Rayonier and Ecology have studied the area and evaluated cleanup options for many years. We focused our investigations on a portion of the site, called the **study area**, where the highest levels of contamination are located.

Ecology is now proposing final cleanup actions for the study area, which includes two main parts:

- **Upland Area:** Soil and groundwater on the former mill property.
- **Marine Area:** Nearby harbor waters and contaminated sediments.

Figure 1: A map of the Rayonier Mill Study Area.

Figure 2: Rayonier Mill while in operation, 1990s.

Background

The Rayonier Mill study area is located on the northern Olympic Peninsula along the Strait of Juan de Fuca shoreline. It is on the east side of Port Angeles Harbor, mostly within the City of Port Angeles.

The study area lies within the traditional territory of the Klallam and S'Klallam people. The Lower Elwha Klallam, Jamestown S'Klallam, and Port Gamble S'Klallam Tribes have reserved treaty rights in the region. This cleanup is situated near I'e'nis, a historically significant Klallam village.

Industrial activity began in 1887 with a sawmill, followed by a government-built spruce mill in 1917. In 1929, the study area was converted into a pulp mill, which Rayonier purchased in the 1930s and operated until 1997. While the mill produced specialty pulp, it also released harmful chemicals into the environment.

Contaminants

The Rayonier Mill cleanup will work to address contaminants in the upland and marine areas of the study area. These substances can pose a risk to human health through direct contact with contaminated materials or by eating fish and shellfish exposed to these contaminants.

In the upland area, **soil and groundwater** are impacted by:

- **Polycyclic Aromatic Hydrocarbons (PAHs)**
- **Polychlorinated Biphenyls (PCBs)**
- **Dioxins**
- **Ammonia**
- **Metals:** Such as arsenic, iron, lead, zinc, thallium, copper, manganese, and nickel
- **Total Petroleum Hydrocarbons (TPH):** Diesel and heavy oils
- **Elevated pH**: Impacting groundwater quality

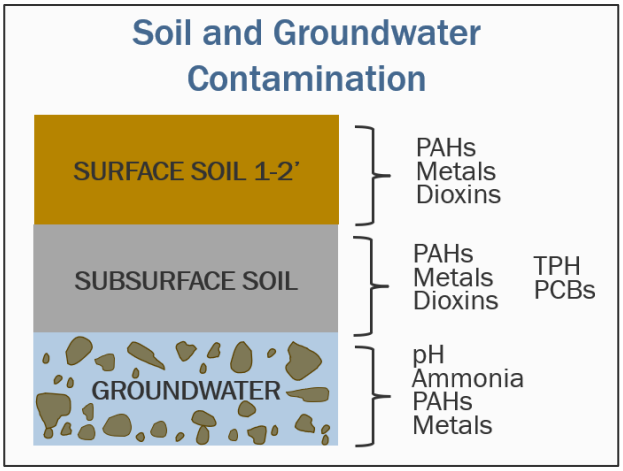


Figure 3: This image shows how contamination is distributed in the upland area's soil and groundwater.

In the marine area, **marine sediments and animal tissue** are impacted by:

- **Polycyclic Aromatic Hydrocarbons (PAHs)**
- **Polychlorinated Biphenyls (PCBs)**
- **Metals:** Such as arsenic and lead
- **Dioxins**
- **Phenols**
- **Phthalates**
- **Woody debris**: May impact habitat and water quality

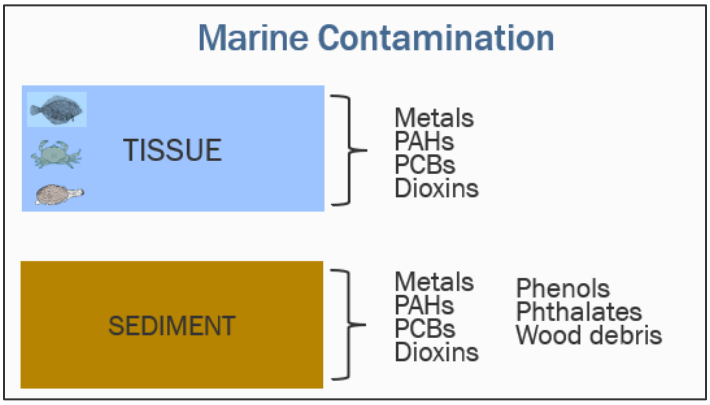


Figure 4: This image shows how contamination is distributed in the marine area. This includes in the sediments at the bottom of the water and the tissue of marine animals living in the water.

Proposed cleanup plans

Rayonier has already begun cleanup of the study area. Between 1993-2008, Rayonier removed over 30,000 tons of the most contaminated soil from the upland area. However, low levels of contamination remain across the study area.

Some cleanups are done in phases, addressing the areas that need the most urgent attention first. When we clean up a section of a larger site like this, we call it an **interim action**. The draft Interim Action Plan proposes how Rayonier will clean up the remaining contamination in the study area. This plan is designed to meet Washington's cleanup standards and protect human health and the environment. We expect this Interim Action Plan will be the final cleanup actions needed for the Rayonier Mill study area. Rayonier remains responsible for any additional cleanup of the site, outside of the study area, as required by MTCA.

Soil cleanup plan

Our proposed soil cleanup plan is based on how we expect the land will be used in the future. Currently, most of the land is zoned for industrial use. A part of the land bought by the City of Port Angeles will keep being used for industrial purposes. In that area, the cleanup will need to meet industrial cleanup levels. We don't yet know how the rest of the land will be used, so Rayonier must clean it up to the highest safety standards, called **unrestricted land use levels**. This would allow for a variety of future uses in the future.

The top layer of soil in the upland area has a low level of contamination. Ecology proposes excavating all contaminated soil (about 55,000 cubic yards). Excavations will go about one foot down from the ground's surface in most areas. Some areas may require deeper soil removal. Excavated areas within the potential restoration area would be restored with clean backfill. See the map for more details.

The contaminated soil will be **consolidated and contained** under a **protective cap** within Rayonier's property (see page 6 for details).

Proposed Soil Cleanup

- Upland study area
- Potential restoration area
- **Shallow Excavation Area** – Planned removal of all contaminated soil by excavating up to 1 foot deep.
- **Deep Excavation Area** – Planned removal of all contaminated soil by excavating deeper than 1 foot.
- **Cap Area** – Planned placement of a protective cover (cap) over contaminated soil to prevent exposure and limit the spread of contamination.

Figure 5: A map of proposed soil cleanup activities. Please note that these are approximate locations.

Marine sediment cleanup plan

Our plan divides the marine sediment cleanup area into four unique sections called Sediment Management Areas (SMAs). We considered environmental protection, cost-effectiveness, and future harbor use when tailoring the proposed cleanup methods for each SMA.

SMA 1 is the area around the former mill dock landing. **SMA 2** is the former log pond area. The cleanup plans for SMAs 1 and 2 include **excavating** or **dredging** contaminated sediments or using **Enhanced Monitored Natural Recovery (EMNR)**. Dredged areas will be backfilled and shorelines restored as gravel beaches. About 20,200 cubic yards of contaminated sediment will be removed and sent off-site for disposal or placed in the upland soil consolidation area. EMNR will be used in the non-dredged areas. This process adds a layer of clean material to the harbor floor to mix into contaminated surface sediment and to speed up the area's natural recovery.

SMA 3 is the area under the dock. **SMA 4** is the nearshore area. Proposed cleanup methods for these SMAs will be determined once additional data collection and modeling are completed. Possible remedies include EMNR, thin-layer capping, dredging, or no action. Before this cleanup work happens, the treated timbers of the dock and jetty must be removed because they are an ongoing source of contamination.

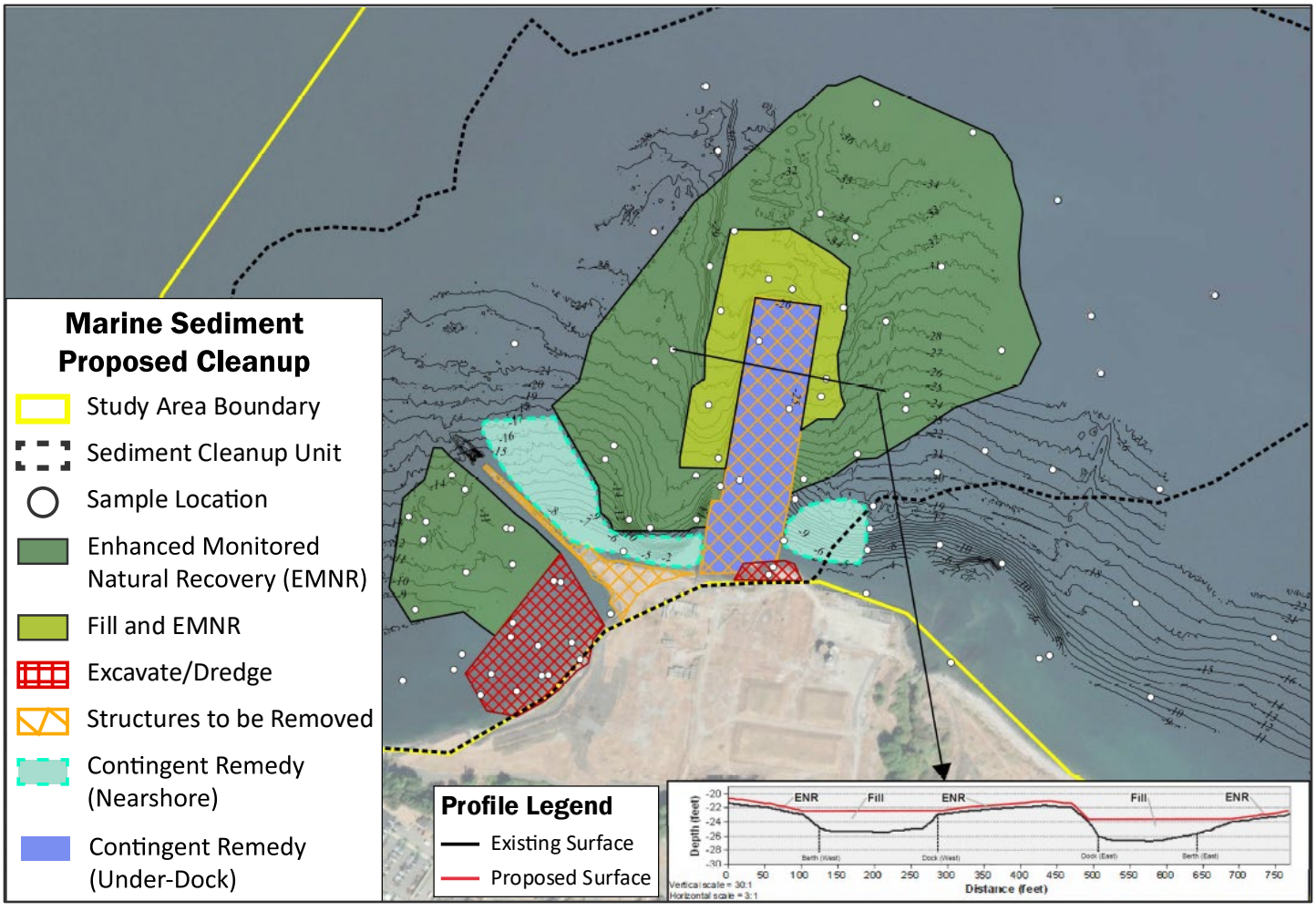


Figure 6: A map of proposed soil cleanup activities. Please note that these are approximate locations.

Plan for capping contaminated soil and sediment

In total, up to 128,000 cy of excavated soil and sediment could be consolidated and capped in the upland area. This work could raise the ground level by approximately five feet across a 10-acre portion on the western side of the upland area. Final quantities and locations will be determined in the next phase of cleanup design.

A 2-foot-thick protective cap will be placed over the consolidated soil to prevent exposure to humans and wildlife (see image). The capped area will be located at least 200 feet from the shoreline, consistent with the Port Angeles Shoreline Master Plan. The final design will be completed during the next phase of planning. For more information on capping, please review the EPA's Community Guide to Capping.[1]

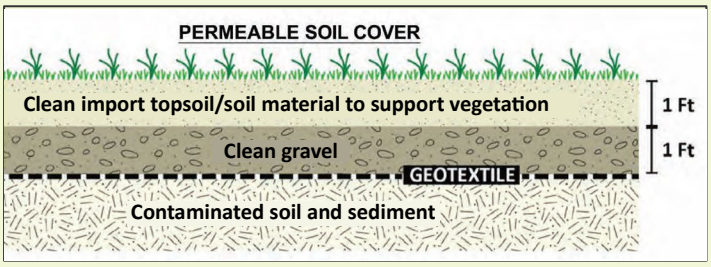


Figure 7: An illustration of a sample cap design.

Groundwater cleanup plan

We're proposing a cleanup method called **air sparging** to address contamination in groundwater. This process uses special wells, called **remediation wells**, to pump compressed air deep into the ground. The vertical remediation wells are connected to above-ground machines that pump the air down.

The pumped air raises oxygen levels in the groundwater. As the air bubbles rise toward the surface, they help naturally occurring bacteria break down harmful chemicals. The extra oxygen also helps reduce other contaminants, like manganese and ammonia, by changing them into less harmful forms. When manganese changes form, it can also trap other metals, helping to clean the groundwater even further.

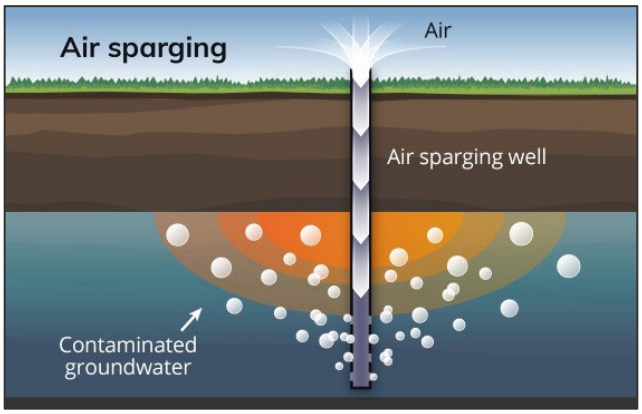


Figure 8: An illustration showing the air sparging process.

Ongoing Protection and Monitoring

After the soil cleanup is complete, long-term steps will help keep the area safe. Rayonier will check the protective cap on a regular basis and report findings to Ecology. Limiting access to the area will also help make sure the cap stays in good condition. Fencing and information signs will be installed to help protect the cap and the public. A legal agreement called an Environmental Covenant will also be put in place. It will limit how the land in the capped area can be used. It will also keep a public record of where the capped contamination exists. Any future development of the capped area within the property will need approval from Ecology so we can ensure the contaminated soil continues to be capped.

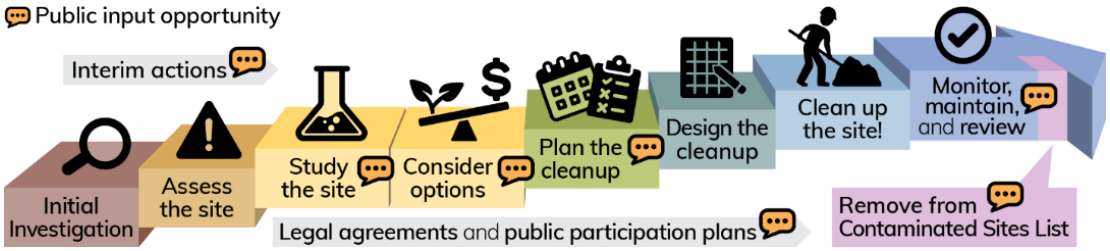
If land use changes, the cap could be re-designed. For example, we are currently proposing a cap made of 2 feet of clean soil. However, if the area was ever re-developed for commercial use, it could be leveled and

[1] https://semspub.epa.gov/work/HQ/401585.pdf

capped with an asphalt parking lot and building(s). We used commercial use as an example, but re-designs could be used for any change in land use with Ecology approval and oversight.

Sediment and groundwater monitoring will continue after cleanup work is finished. This will make sure the cleanup goals are being met. Combined, these actions will help protect people and the environment for the long term.

Next steps in the cleanup process



The formal cleanup process in Washington follows several key steps, as shown in the graphic above. Right now, we are in the "Plan the Cleanup" step for the study area portion of the site.

After the public comment period, we will carefully consider and respond to comments. We will finalize the documents, including any changes based on public comments, then file with the Superior Court for entry as an Order. At that point, Rayonier will submit required cleanup plans to Ecology following the schedule outlined in the consent decree and Interim Action Plan.

You can now **subscribe to the Rayonier Mill cleanup page**.[2] Those subscribed will receive a weekly automated email update whenever there is a comment period, a new document, or an update to the cleanup details. For more information about this new subscription tool, please visit Ecology's blog.[3]

Estimated Cleanup Timeline & Costs

The cleanup is expected to take up to 10 years, including design, permitting, and construction. Soil cleanup should take 7 years, while groundwater and sediment cleanup may take 10 years. Since these efforts will happen at the same time, the full project is expected to be completed within 10 years. Adjustments may be made as the cleanup progresses.

The cleanup is expected to cost around $30 million. Rayonier is responsible for the costs of this cleanup and ongoing monitoring and maintenance.

What to Expect Next

- **June 12 – August 12, 2025:** Public comment period on the consent decree, Interim Action Plan, and SEPA checklist and determination.
- **Late summer – fall 2025:** Ecology will review and respond to public comments. If updates to the documents are needed, they will be revised. The final documents will be submitted to the Superior Court for approval.
- **After documents are finalized:** Rayonier will follow the Interim Action Plan's cleanup schedule.

[2] https://go.ecology.wa.gov/2270
[3] https://ecology.wa.gov/blog/may-2025/updates-on-cleanup-sites-in-your-inbox

DEPARTMENT OF ECOLOGY
State of Washington

Toxics Cleanup Program
PO Box 47775
Olympia, WA 98504-7775

Comment Period for Rayonier Mill Consent Decree, Draft Interim Action Plan, and SEPA Determination

Comments accepted: June 12 – August 12, 2025

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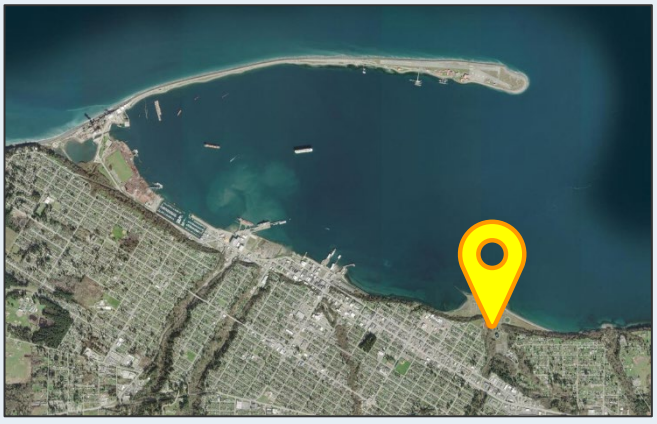

Contact Information
Marian Abbett, Site Manager
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ADA Accessibility
To request an ADA accommodation, contact Ecology by phone at 564-250-0561 or email at abby.zabrodsky@ecy.wa.gov, or visit https://ecology.wa.gov/accessibility

For Relay Service or TTY call 711 or 877-833-6341.