

# Western Port Angeles Harbor Cleanup

## Remedial Investigation and Feasibility Study

### Available for Public Review and Comment

#### INFORMATION & CONTACT

Comments accepted

**January 16, 2020 – March 16, 2020**

Submit comments

**Online**

<http://tcp.ecology.commenting.ut.com/?id=V67Cd>

**By mail**

Connie Groven  
Cleanup Project Manager  
Southwest Regional Office  
Department of Ecology  
PO Box 47775  
Olympia, WA 98504-7775

#### Document review locations

Port Angeles Library  
2210 South Peabody Street  
Port Angeles, WA 98362  
360-417-8500

WA Department of Ecology  
Southwest Regional Office  
300 Desmond Drive SE  
Lacey, WA 98503  
By appointment, call  
360-407-6365

#### Western Port Angeles Harbor webpage

<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=11907>

Facility Site ID: 18898

Site Cleanup ID: 11907

#### Why you received this information

You received this information in the mail because you may have expressed interest about the cleanup or live or own property near the western part of Port Angeles Harbor.

The Western Port Angeles Harbor sediment cleanup area is located in the harbor from the downtown commercial/industrial area to Ediz Hook (see Figure 1). Harbor sediment is the material in the seabed primarily composed of silt, sand, and decomposition of plant and animals that settle to the bottom. Past industrial operations and stormwater discharges have contaminated sediments in the western harbor.

The Department of Ecology (Ecology) will have a **comment period that opens January 16, 2020**, and we would like your comments on the following two documents.

- **Remedial Investigation/Feasibility Study (RI/FS).** The Remedial Investigation (RI) identifies contaminants, measures how much there are, and where they are located. The Feasibility Study (FS) proposes several cleanup options that will protect human health and the environment. The FS compares cleanup options for their cost and benefits, like protectiveness, permanence, and other requirements.
- **Amendment to the Agreed Order (DE 9781).** This document is an addition to an agreement between Ecology and the Potentially Liable Persons (PLPs). The amendment calls for the PLPs to prepare a preliminary draft cleanup action plan.

#### Public comment invited

Ecology accepted the draft RI/FS for public comment. The report is available at Ecology's Western Port Angeles Harbor webpage and at document review locations (see blue box on the left).

Ecology invites your comments on the RI/FS and the amendment to the agreed order from **January 16, 2020, to March 16, 2020**.

Ecology will consider your comments before finalizing the RI/FS and the amendment. Ecology will respond to comments in a responsiveness summary after the comment period is over. The summary will be available on the Western Port Angeles Harbor webpage.

After the RI/FS is finalized and the amendment to the agreed order is signed, the PLPs will prepare a preliminary draft cleanup action plan. Ecology will use the preliminary plan to prepare a Draft Cleanup Action Plan.

The Draft Cleanup Action Plan and a new agreed order to put the plan into effect will be available for public comment before Ecology finalizes them.

## Western Port Angeles Harbor sediment contamination

Port Angeles Harbor is an important cultural area in the traditional territory of the Lower Elwha Klallam Tribe. In the last century, timber processing and other development have led to today's busy industrial and shipping harbor.

In 2008, Ecology launched an investigation of Western Port Angeles Harbor through the Puget Sound Initiative and learned that toxic substances contaminated sediments in the harbor. In 2013, Ecology signed a legal agreement (Agreed Order DE 9781) with the PLPs. The PLPs are the Port and City of Port Angeles, Georgia-Pacific LLC, Nippon Paper Industries USA Co. Ltd., and Merrill & Ring. The legal agreement calls for the PLPs to draft the RI/FS.

At first, Ecology did not know how contaminated the sediment was or where the contamination was located. By sampling in the Western Harbor Study Area, Ecology learned where sediment contamination is above state cleanup levels. This area is called the Western Harbor Sediment Cleanup Unit (see Figure 1).



**Figure 1.** Western Harbor Study Area (left) and Western Harbor Sediment Cleanup Unit (right).

### Historical sources of sediment contaminants

In the past, some industries generated liquid waste and released it directly into the harbor and lagoon. Contaminated stormwater was discharged into the harbor.

Several pulp and lumber mills burned salt-laden wood debris as a fuel source. Burning this debris formed hazardous substances, like dioxins, that rose up through smoke stacks and settled out onto marine sediments.

### Sediment contaminants

Ecology learned that sediment near the western and southern shoreline is more heavily contaminated than in areas farther offshore. Contaminants in the Western Harbor Sediment Cleanup Unit include several hazardous chemicals.

- Metals (mercury, cadmium, zinc).
- Dioxins/furans.
- Polychlorinated biphenyls (PCBs).
- Carcinogenic polycyclic aromatic hydrocarbons (cPAHs).

### Exposure pathways to contaminated sediments

People, pets, or wildlife that physically contact or accidentally eat contaminated sediment may be exposed to hazardous chemicals. People and wildlife may be exposed to contaminants when they eat contaminated fish and shellfish. Hazardous chemicals may accumulate in people and wildlife if they eat contaminated seafood and the hazardous chemicals in the food are not removed from the body through natural processes.

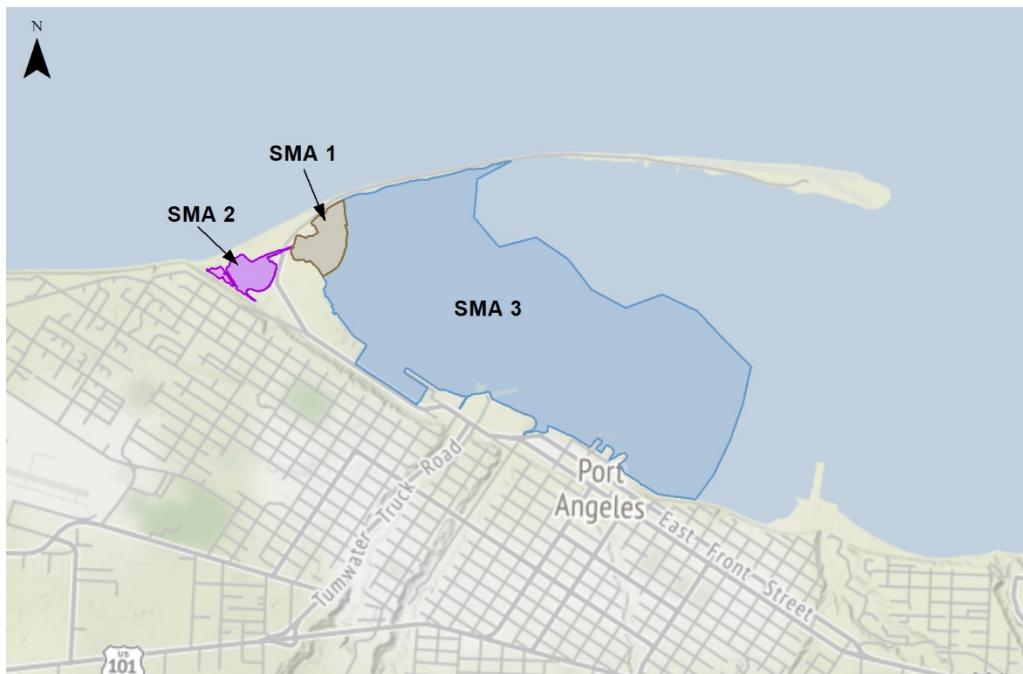
## Options for sediment cleanup

The Western Harbor Sediment Cleanup Unit is a large area of approximately 1,160 acres. It is divided into three sediment management areas (SMAs) based on the level of sediment contamination and the ability of cleanup equipment to access the sediment (see Figure 2).

SMA 1 is approximately 37 acres. This area is the inner harbor and has the highest level of sediment contamination of the three areas. Cleanup equipment can more easily access contaminated sediments here.

SMA 2 is approximately 25 acres. This area is the lagoon, which is located on private property. Concentrations of sediment contamination are lower than in SMA 1. Cleanup equipment may have difficulty accessing contaminated sediment because water depths are shallow, and the area around the lagoon is an active industrial facility.

SMA 3 is approximately 1,100 acres. This area has a lower level of sediment contamination than the other two areas. Along the shoreline, cleanup equipment will have trouble getting to sediments located close to structures built over the water. It is also difficult to access sediment where water is deeper than 50 feet.



**Figure 2.** The three sediment management areas (SMAs) of the Western Harbor Sediment Cleanup Unit.

All options for cleanup prevent exposure of people and other animals to contamination in sediment. Options for cleanup include:

- Excavate contaminated sediment and disposal offsite.
- Cover and contain contaminated sediment with a 2-foot layer of clean sand, gravel and/or rock. This “cap” requires an environmental covenant to protect the integrity of the cap in the future.
- Place a 6-inch layer of clean sand or gravel on top of contaminated sediments to jump-start the natural recovery process that occurs through the natural deposition of cleaner material.
- Check regularly on natural deposition to make sure new, cleaner material covers contaminated sediment over time as expected.

Recovery by natural deposition occurs relatively slowly in the Western Harbor Sediment Cleanup Unit. Contaminants in sediment would be monitored until cleanup levels are reached. If needed, cleanup to control ongoing upland pollution sources will be handled separately by the upland property owners and Ecology.



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

## Public comment period and open house for the Western Port Angeles Harbor RI/FS

### Public Comments Accepted

**January 16, 2020 to March 16, 2020**

<http://tcp.ecology.commentinput.com/?id=v67Cd>

Facility Site ID: 18898

Site Cleanup ID: 11907

Ecology seeks public comment on the following documents:

- Remedial Investigation/Feasibility Study (RI/FS)
- Amendment to Agreed Order No. DE 9781

### Accommodation Requests

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 360-407-6831 or visit <https://ecology.wa.gov/accessibility>.

People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341.

### Public Open House

**January 28, 2020**

**6:30 to 8:30 p.m.**

Olympic Medical Center, Linkletter Hall  
939 Caroline Street  
Port Angeles

Ecology invites you to an open house to answer your questions about the RI/FS and options for the Western Port Angeles Harbor Cleanup. Staff will be available to talk one-on-one during the open house sessions. At 7:00 p.m. there will be presentation, followed by a question and answer session.

#### Agenda

6:30-7:00 p.m.	Open House
7:00-8:00 p.m.	Presentation and Q & A
8:00-8:30 p.m.	Open House

### ¿Habla Español?

Si necesita esta información en español—contáctenos a [preguntas@ecy.wa.gov](mailto:preguntas@ecy.wa.gov).