Lockheed West Seattle and East Waterway Community Involvement Plan Autumn 2016 Update

The U.S. Environmental Protection Agency has developed this update to the Community Involvement Plan to promote meaningful community participation during the Superfund cleanups of Lockheed West Seattle and the East Waterway at Harbor Island. This plan summarizes community concerns about these two projects and describes how we will inform and involve the public. It gives an update on the progress at the two Superfund cleanup sites, details about the sites, what to expect next, and provides resources on where more detailed site information can be obtained.

In consultation with community members and organizations, the EPA developed a Community Involvement Plan for Harbor Island Superfund cleanup sites in 2009. We have updated this plan to reflect upcoming site activities for the Lockheed West Seattle and East Waterway sites.

Community Engagement Goals

Our community engagement goals are to:

- Provide useful information about our site cleanup and activities
- Provide opportunities for meaningful public participation
- Respond to community questions and concerns

Community members have asked the EPA to take a unified approach to community involvement for nearby sites. The EPA began combining community involvement for Harbor Island (including the East Waterway, Lockheed West Seattle, and Pacific Sound Resources) in 2008. This Community Involvement Plan focuses on Lockheed West Seattle and the East Waterway of Harbor Island. To date, the Pacific Sound Resources site and the Harbor Island Superfund cleanup sites have been cleaned up and are undergoing long-term monitoring to ensure the cleanup activities are protective to human health and the environment.

Please contact us!

Julie Congdon
EPA Community Involvement Coordinator
(206) 553-2752
Congdon.julie@epa.gov

For Lockheed West Seattle
Piper Peterson
EPA Remedial Project Manager
(206) 553-4951
Peterson.piper@epa.gov

For East Waterway
Ravi Sanga
EPA Remedial Project Manager
(206) 553-4092
Sanga.ravi@epa.gov

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Harbor Island – includes East Waterway –
https://go.usa.gov/xXN44

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About the Sites

Lockheed West Seattle and the East Waterway are the two remaining sites undergoing investigation and cleanup under the EPA's Superfund program. Historic industrial practices in the Harbor Island area released contaminants into Elliott Bay, including metals, polychlorinated biphenyls (PCBs), tributyltin (TBT), and petroleum products.

At the **Lockheed West Seattle** site, Puget Sound Bridge and Dredge Company with the Lockheed Shipbuilding and Construction Company conducted shipbuilding and repairs at the site from 1946 to 1987. Operations at those companies contaminated the site and surroundings with paint, metal scrapings and sandblast grit, which were all released directly into Elliott Bay. The site is contaminated with heavy metals, PCBs, polycyclic aromatic hydrocarbons (cPAHs), dioxins/furans, petroleum products and many other contaminants. The company expects to remove approximately 167,000 cubic yards of contaminated material over the course of the cleanup, reducing site risks to people's health and the environment. The two year cleanup is expected to begin in 2018.

Lockheed West Seattle site, looking east from a pedestrian pier

Looking north at the East Waterway from the West Seattle Bridge Trail

Over the past 100 years, the **East Waterway** has been highly modified to support urban and industrial development. Some of the changes to the waterway include control of water flow, channel deepening, shoreline modifications, loss of intertidal habitat, and installation of riprap, pier aprons and sheet pile walls. Of the material removed by the Port from dredging the waterway, the sediments went to a permitted landfill rather than open water disposal. Commercial facilities line the shoreline as well as a public access area (Jack Perry Park).

The waterway is currently used by ships to transport goods for business, and it is expected that it will continue to be used in this way.

Tribal members harvest seafood from both cleanup areas, and are guaranteed this right by a treaty with the U.S. government. A Washington Department of Health fish consumption advisory, warning individuals not to consume contaminated resident seafood caught in the waterway, is in place.

Special Advice for Elliott Bay

2-3 Meals per Week	or 1 Meal per Week	or 2 Meals per Month	Do Not Eat
Salmon *Chum, Coho, Pink, Sockeye* Red Rock Crab Spot Prawn (2)	Chinook Salmon Lingcod Squid	Blackmouth Salmon Flatfish *Sole, Sanddab, Flounder* Dungeness Crab	Rockfish *Brown, Quillback, Copper* Clams Mussels Oysters Scallops

Fish consumption advisory

Five Areas of Harbor Island Are Already Cleaned Up!

Many Superfund sites like Harbor Island are large and complicated. These sites are often broken up into smaller areas to make cleanup easier and more manageable. These areas are called "Operable Units" or OUs. Five OUs of Harbor Island have been cleaned up:

- **Soil and Groundwater OU**: Removed contaminated soil, treated and disposed soil off-site; capped remaining soil; implemented Institutional Controls (ICs); implemented long term removal and treatment of petroleum-related products, and continued with the shoreline groundwater monitoring program.
- **Tank Farms OU**: BP, Kinder Morgan and Shell excavated lead and arsenic contaminated shallow surface soil; removed total petroleum hydrocarbons (TPH), treated and disposed this soil off-site; treated remaining contaminated soil and groundwater; used natural processes to lessen contamination; implemented long-term groundwater monitoring and ICs.
- **Lockheed Upland OU**: on Harbor Island, removed upland contaminated soil, treated and disposed soil off-site; capped remaining soil contamination; implemented ICs; continued long-term groundwater monitoring; and implemented stormwater management.
- **Lockheed Shipyard Sediments OU**: Demolished the existing pier on the West Side of Harbor Island and removed approximately 6,000 creosote-coated piles; dredged the nearshore area and capped remaining sediments; created a riparian buffer and a habitat-friendly soil layer on top of the capped sediments.
- **Todd Shipyards Sediments OU:** dredged the area near the berth; demolished piers; capped contaminated sediments under the remaining piers; and created a habitat area at a capped nearshore area.

As the cleanups progress, we will continue to respond to concerns about the Lockheed West Seattle and East Waterway cleanup processes and in coordination with other organizations involved with these projects. These organizations include the Washington State Departments of Health, Ecology, and Natural Resources; the National Oceanic and Atmospheric Administration; the Muckleshoot and Suquamish Tribes; and other local and non-profit interest groups.

A great blue heron on the shoreline of the East Waterway

Concerns Related to the Sites

Community members and other stakeholders have noted the following concerns and issues related to the cleanup of these sites:

General Concerns

- Eating Fish
- Worker Exposure
- Recreation
- Fish and Wildlife
- Habitat
- Water Pollution
- Air Pollution
- Culture and Image
- Economy
- Cleanups
- Signs and Information

Specific to the Cleanup

- Work Hours
- Air quality (dust, odors)
- Noise
- Lighting
- Traffic and parking
- Waterway activities (barge and other waterway vessels related to construction)
- Staging areas for large equipment and materials near the site
- Active work zones (separation from public areas/access)
- Disposal areas
- Implementation around fishing closures per seasonal Tribal fishing
- Ground transport of any materials anticipated during the actual work period and is built into or proposed in the design
- Railway availability if this transportation method is selected for disposal of sediment .

Parks and Public Access on and near Harbor Island

Come enjoy a picnic, Seattle views and fishing for salmon at these spots along the water:

- **Jack Block Park**: Terminal 5, 2130 Harbor Ave. SW
- **Jack Perry Memorial Par**k: Terminal 30, 1731 Alaskan Way S
- **Terminal 18 Park**: Pier 18

Painted roof over picnic pavilion at Terminal 18 public access area.

Looking north at East Waterway with Public Shore access sign

What Is Next With the Cleanup?

Lockheed West Seattle

The final cleanup plan, also known as the "Record of Decision" or ROD, was signed in 2013. There was also an Explanation of Significant Differences, dated February 2015. The plan reduces risks to people and aquatic life from contaminated sediments by:

- Dredging and disposing of dredged sediments and other materials at a permitted landfill
- Adding a thin layer of clean material across the entire site to enhance natural recovery and cover dredged areas
- Continuing the Washington State Department of Health fish advisory to make people aware of risks from eating contaminated seafood
- Removing debris and pilings

Beach area near the Lockheed West Seattle site.

The next phase of the cleanup consists of the Lockheed Martin Corporation developing the cleanup design plans.

The Lockheed West Seattle (LWS) cleanup will remove contamination from a 40-acre area in the northwest mouth of the West Waterway and north of the Port of Seattle's Terminal 5. More than 151,000 cubic yards of sediment will be dredged from the sub-tidal area and an additional 15,800 cubic yards will be excavated or dredged from the shoreline and intertidal area. Cleanup planning and construction will be completed in four years. When construction at the cleanup site is done, the EPA will monitor the site to ensure that the cleanup is effective. Monitoring will be conducted to support the EPA's Five Year Review process.

Looking at the Lockheed West Seattle site from a pedestrian pier at Jack Block Park

Throughout the Remedial Design and cleanup, the key goals in the outreach activities are to engage with the public, the land and water-based business community near the LWS site, Coast Guard, and interested community groups about the planned design and implementation actions related to the LWS cleanup.

After this cleanup, there should be few restrictions to maritime activities and future uses near the site. The usual and accustomed fishing rights of the Suquamish and Muckleshoot Tribes will be respected during the design and implementation of the cleanup.

East Waterway

Information gathered during the investigation will help the EPA determine the best and most efficient ways to address the threats to human health and the environment from the East Waterway (EW) sediment. The EPA is evaluating several cleanup options that will consist of removal of contaminants by dredging, capping over contaminants with an engineered clean sand cap, adding thin layers of sand to less contaminated areas where sediment does not move, and monitoring contaminant concentrations over time to ensure contaminant levels are decreasing. The cleanup options will be detailed in a document called a Feasibility Study and presented to the public with the preferred cleanup in the Proposed Plan.

A planter of designated Pollinator Habitat at West Seattle Bridge Trail bicycle and pedestrian bridge on the East Waterway.

The Remedial Investigation and Human Health and Ecological Risk Assessments are completed. The mud of the EW is contaminated with high levels of pollutants including PCBs, arsenic, carcinogenic PAHs, TBT and mercury. The potential sources of contaminants are both historical and from potentially ongoing sources. In these studies, the findings state that risks are lower to humans who touch sediment through activities such as clamming and net fishing. There is higher risk to humans who eat seafood. Resident seafood and shellfish have been found to be contaminated with PCBs, arsenic, carcinogenic PAHs and dioxins. In addition, contaminated sediments pose a concern to worms and other creatures that live in the mud and therefore affect the food chain. Elevated levels of PCBs, TBT and mercury are among the 30 contaminants that are of concern to bottom-dwelling animals.

The EPA's proposed preferred cleanup option will be available for public comment in a Proposed Plan in late 2017/early 2018. The final cleanup decision will be documented in a "Record of Decision," or ROD, and will address comments received on the proposed preferred cleanup alternative.

Cleanup is not the only work happening at Harbor Island. The Port of Seattle has two projects underway in the area of Harbor Island:

Terminal 5 Improvements Project

The Port of Seattle's Terminal 5 Improvements Project proposes upgrades to the dock, vessel berth and upland areas of the terminal to accommodate larger ships and more cargo. The proposed improvements are meant to help the region remain competitive in international trade now and into the future. The Port is conducting an Environmental Impact Statement (EIS) on the project; the Final EIS is expected to be published in the fall of 2016.

Duwamish Waterway Deepening Project

The U.S. Army Corps of Engineers is preparing an environmental assessment for the Seattle Harbor Navigation Improvement Project. The Corps will analyze alternatives for navigation improvements to the East and West Waterways, including potential deepening of the waterways and allow sufficient water depth for vessels to access cargo terminals. A public comment period and hearing will follow publication of the Draft Feasibility Report, available in the summer of 2016. The Final Feasibility Report/Environmental Assessment is expected to be available for public review in summer 2017.

Community Engagement

Key Audiences

- Residents and businesses in North Delridge, Alki and other neighborhoods within the viewscape
- Recreationists like fisherpeople, kayakers, canoeists, boaters, bicyclists, people using area parks, etc.
- Small business owners in Alki and their customers
- Businesses related to Harbor Island area, including:
  - West Seattle Chamber of Commerce
  - Port of Seattle
  - Manufacturing Industrial Council (MIC)
- Transportation interests related to Harbor Island area, including:
  - Washington State Department of Transportation (WSDOT)
  - Seattle Department of Transportation (SDOT)
  - Port of Seattle
  - Railroad companies
  - Trucking industry
  - Bike commuters
- Federal agencies, including:
  - US Army Corps of Engineers
  - US Fish and Wildlife Service
  - US Coast Guard
  - NOAA: National Marine Fisheries Service
- Washington State Departments:
  - Ecology
  - Natural Resources
  - Fish and Wildlife

Tribal Consultation and Engagement

The Muckleshoot and Suquamish Tribes, as sovereign nations, have engaged in government-to-government consultations with the EPA on the cleanup process and decisions. The EPA has consulted with the Muckleshoot and Suquamish Tribes at key points during the investigation, analysis of alternatives, and cleanup selection phases. The Tribes have also broadly and actively participated in meetings determining the course of the cleanup to date. The EPA will continue to consult with the Muckleshoot and Suquamish Tribes on a government-to-government basis and will closely coordinate with them throughout design, construction, and long-term monitoring of the cleanup. The EPA will rely on the Tribal representatives to relay information on the cleanup to their membership, including sending announcements to Tribal contacts for them to share in their Tribal news publications.

We will maintain regular contact with key stakeholder contacts via a traditional and/or electronic newsletter update. By maintaining communication with interested parties, we want to ensure you are getting the information you need to know about the progress of the cleanup. For non-English speaking communities, the EPA will work with ECOSS to reach Spanish and other non-native English speakers near the Harbor Island area to ensure they receive cleanup information in their language.

Looking north from Jack Block Park with a view of the Space Needle and downtown Seattle .

How You Can Stay Informed

Action	More Information
Review Cleanup Documents	The EPA will make reports, documents and other relevant materials accessible to the public by posting them on the EPA's websites for Lockheed West Seattle and East Waterway. We will also send email notification of their availability, as well as post on social media like Twitter and Facebook. We will make hard copies available in the West Seattle Branch Library and in the EPA's Seattle Office. Copies of reports will also be available on CD-ROMs upon request.
Participate in Public Comment Periods	Public comments received by the EPA during the public comment period on the Proposed Plan for the EW will be provided to the EPA project manager and the project team, placed in the Administrative Record, and addressed in the Responsiveness Summary (included for the Record Of Decision). Comments received outside of formal public comment periods will also be shared with project managers and the project team and placed in the administrative record, but they will not receive a written response.
Attend and Participate in Public Meetings	The EPA will continue to host formal public meetings and periodic informal open houses, public information sessions and workshops to help make information widely available at significant milestones during the site's cleanup. For example, upon completion of the final design of the cleanup, the EPA must provide a public briefing, prior to beginning remedial action per NCP 40 CFR 300.435(c)(3).
Invite Us to Your Community Event or Meeting	EPA staff are available to meet with community members, neighborhood associations and other site stakeholders to discuss the sites' status and keep up-to-date on community issues and concerns. The EPA is available to attend regularly scheduled meetings of community groups and neighborhood associations upon request. Groups would include: • North Delridge Neighborhood Council (http://www.ndnc.org) • Sustainable West Seattle • Kiwanis Club of West Seattle
Briefings for Elected Officials and Staffs	EPA project managers and staff are available to brief local, state and federal legislators about progress on the Harbor Island cleanups. These briefings will provide another way for project information to reach local constituents. In return, legislators will be able to share their constituents' concerns with the EPA.
Fact Sheets	The EPA will issue periodic fact sheets about cleanup activities, significant milestones, and technical information and project findings. The fact sheets will be sent to the Harbor Island email list and posted on the EPA web page. Hard copies of fact sheets will be distributed at meetings and provided to community groups and individuals upon request. For example, upon completion of the final design of a cleanup, the EPA must issue a fact sheet, prior to beginning remedial action per NCP 40 CFR 300.435(c)(3).

⇨ *Continued*

How You Can Stay Informed

Action	More Information
Articles and News Releases	The EPA may periodically submit articles, provide interviews and share significant project news and milestones to trade publications, radio broadcasts, local newspapers and blogs. Public notices for submission of public comments for milestones like the Proposed Plan for the East Waterway will be posted in one or more newspapers. Media outlets for outreach would include: • West Seattle Blog (westseattleblog.com) • West Seattle Herald (www.westseattleherald.com) • La Raza Del Noroeste (www.larazanw.com) • NW Asian Weekly (nwasianweekly.com)
Social Media	The EPA will send emails to community representatives such as the Southwest and Delridge Neighborhood District Coordinators for the City of Seattle, and Seattle City Councilmember for Council District 1 which includes the Alki and Delridge areas. The EPA will rely on moderators of community and neighborhood Listservs to share cleanup announcements.
Harbor Island Email List	We will send periodic updates to the email list to make sure stakeholders and neighbors receive information about cleanup progress. To join the email list, please send a request by email, phone or mail to the EPA contacts listed on front page, or visit the webpage http://bit.ly/ZEJGD3 to sign up.
Information Repositories	Reports, technical documents and other information requested from the EPA can be delivered to West Seattle Branch Library (2306 42nd Ave. SW, Seattle, WA, 98116. (206) 684-7444) for public review. If the libraries are unable to accept a copy of the document, EPA will work with the community to locate alternate viewing areas.
Websites	The EPA maintains project websites where people can access site information. To access the EPA Harbor Island websites, please visit: • Harbor Island – http://go.usa.gov/chsBe • Lockheed West Seattle – http://go.usa.gov/chsmJ • East Waterway – http://go.usa.gov/chhHB
Project Hotline	Lockheed Martin Corporation maintains a phone hotline for the public to report concerns and ask questions regarding the LWS cleanup: (800) 449-4486

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How You Can Stay Informed

Action	More Information
"What's Happening" Informational Kiosks	Post a QR Code, notices and other cleanup information at locations near the site, including but not limited to: • Jack Block Park • Marina in West Seattle • Salty's Seafood Grill • Don Armani Boat Dock / West Seattle Passenger Ferry Terminal • US Coast Guard office at Alki Spokane Street Bridge pedestrian entry points

Cleanup Schedule – Lockheed West Seattle

Before Remedial Design Begins

Document or Activity	Schedule
Consult community and other interested stakeholders regarding issues potentially impacting users of and communities near the site	Late 2016 - 2017
Establish a GovDelivery list for the site or similar way for interested parties to interact with the EPA regarding the site cleanup	Ongoing

At 30% of Remedial Design

Document or Activity	Schedule
Update Community Involvement Plan with new phase of cleanup	September 2016

At 60% of Remedial Design

Document or Activity	Schedule
Consult community and other interested stakeholders regarding issues potentially impacting users of and communities near the site	March 2017
Postcard or 1-page fact sheet gets mailed out to specific zip code zones around site	2017
Host a public information and educational open house(s) hosted in the Delridge and/or West Seattle area	2017

⇨ *Continued* Cleanup Schedule – Lockheed West Seattle

At 90% of Remedial Design

Document or Activity	Schedule
Publish general project work schedule & update	November 2017

Final Remedial Design

Document or Activity	Schedule
Publish general project work schedule & update	May 2018
Fact Sheet—(required activity)	May 2018
Public Briefing—(required activity)	May 2018
In-water work starts for Remedial Action Work Plan	July 2018

Cleanup Schedule – East Waterway

Feasibility Study and Proposed Plan

Document or Activity	Schedule
Public Notice for Proposed Cleanup Plan	2017/18
Public Comment Period—(required activity)	2017/18
Public Meeting—required (required activity)	2017/18
Meeting Transcript—(required activity)	2018

Looking north at East Waterway and wooden piling with flowers growing.

For More Information

EPA Staff

For Lockheed West Seattle

Piper Peterson, Remedial Project Manager
206-553-4951 ◆ 800-424-4372
peterson.piper@epa.gov

For East Waterway

Ravi Sanga, Remedial Project Manager
206-553-4092 ◆ 800-424-4372
sanga.ravi@epa.gov

Julie Congdon, Community Involvement Coordinator, Seattle
206-553-1896 ◆ 800-424-4372
congdon.julie@epa.gov

Websites

Harbor Island –
http://go.usa.gov/chsBe

Lockheed West Seattle –
http://go.usa.gov/chsmJ

East Waterway –
http://go.usa.gov/chhHB

Join our email list:
http://bit.ly/ZEJGD3

Alternative formats are available

For reasonable accommodation, please call ***Julie Congdon*** *at 206-553-2752*

TTY users, please call the Federal Relay Service at 800-877-8339. Ask for Julie Congdon at the number listed above.

United States Environmental Protection Agency

Region 10

1200 Sixth Avenue, Suite 900, PACEU-202
Seattle, Washington 98101-3140