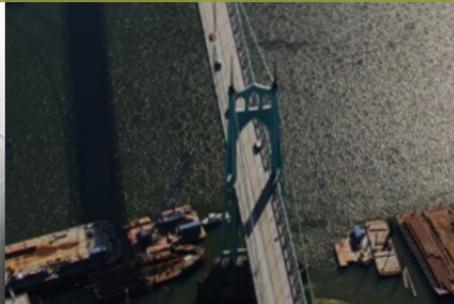
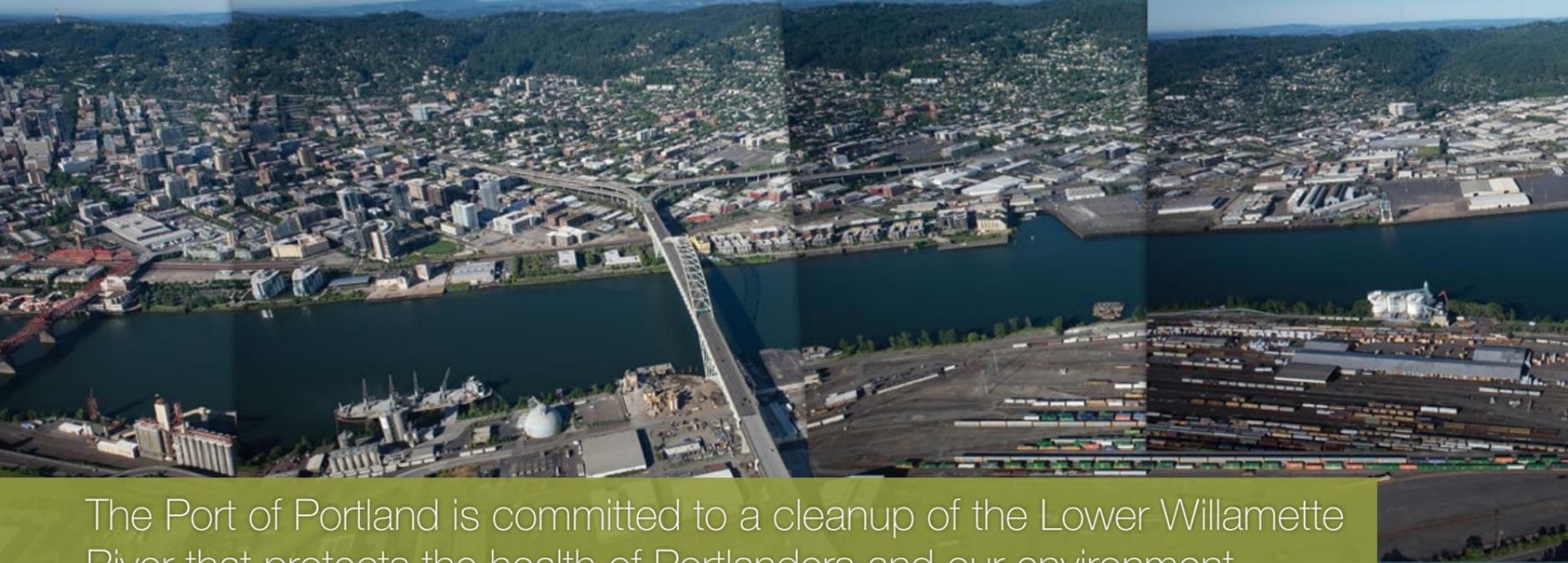




PORTLAND HARBOR SUPERFUND CLEANUP

MOVING FORWARD TO A RESPONSIBLE, COLLABORATIVE SOLUTION





The Port of Portland is committed to a cleanup of the Lower Willamette River that protects the health of Portlanders and our environment.

The Willamette River runs through our city and our history. The river plays many roles – home for beavers and herons; host of trade and commerce, site for recreation and fishing, and a symbol of the place that we call home. But the river needs our help. More than a century of agricultural, commercial and industrial activity along its shores has left portions of it heavily polluted.

The Portland Harbor Superfund Project: It is a complicated topic, but it boils down to some basic facts:

- **WHERE:** The Portland Harbor Superfund site is about a 10 mile stretch of the river from the Broadway Bridge to near the confluence of the Willamette and Columbia rivers.
- **WHAT:** The pollution is mostly in the sediment – the mud – not the water. Pollutants in the river’s sediment include toxic chemicals that pose risks for people and wildlife.
- **HOW DID IT HAPPEN:** The pollution is historic, a legacy of many past practices and limited environmental laws decades ago. The contamination came from more than 100 years of development, ship building and scrapping (dating from World Wars I and II to the Korean War), other industrial activities, combined sewer overflows and stormwater discharges. Much of the land adjacent to the river is being cleaned up, so recontamination will not occur.
- **WHAT’S THE RISK:** The greatest risk in the river is connected to eating the fish that live there, like bass and carp. Salmon and fish that pass through the river to the ocean are safe to eat. The Oregon Health Authority has determined that recreation in the river is safe.



WHAT DO WE KNOW ABOUT THE PORTLAND HARBOR SUPERFUND SITE?

The Port, along with the City of Portland and more than 10 businesses (known as the Lower Willamette Group) has worked cooperatively with the Environmental Protection Agency (EPA) and Oregon's Department of Environmental Quality (DEQ) to study the river.

The study has found:

- Sediment areas near the shore have more contamination than sediment in the middle of the channel. Some heavily contaminated areas of the river need more immediate attention than other areas.
- Sediment quality has improved over time as pollution sources have been addressed and natural movement of the river has deposited cleaner material. Consequently, surface sediment now has lower chemical concentrations than deeper layers of the river bottom.

For more information on Superfund, please go to:

yosemite.epa.gov/r10/cleanup.nsf/ph/portland+harbor+superfund+site
www2.portofportland.com/Superfund

RISKS TO HUMAN HEALTH



Currently the greatest risk in the river is to the people who eat the resident fish – fish that live there, like bass and carp, not migratory fish like salmon. Four main chemicals pose the most risk:

- PCBs (polychlorinated biphenyls) – banned in the 1970s but persist in the environment
- PAHs (polycyclic aromatic hydrocarbons) – chemicals found in fossil fuels
- Dioxin/furans – byproducts of industrial and combustion processes
- Pesticides

[Link: public.health.oregon.gov/HealthyEnvironments/TrackingAssessment/EnvironmentalHealthAssessment/Documents/PHarborRecreationalUserSummary_2014.pdf](http://public.health.oregon.gov/HealthyEnvironments/TrackingAssessment/EnvironmentalHealthAssessment/Documents/PHarborRecreationalUserSummary_2014.pdf)



PORTLAND'S WORKING HARBOR

Portland's Working Harbor is the deep water shipping channel along the Lower Willamette River that includes public and private marine terminals, industrial parks and commercial and warehousing businesses. Nearly 30,000 direct jobs are created by businesses located within the Portland Working Harbor at an average salary of \$51,000. State and local tax revenue generated by activity in the Portland Working Harbor in Fiscal Year 2015 was more than \$413 million.





PORT CLEANUP ACTIONS ALREADY COMPLETED

For the past decade, the Oregon DEQ has overseen cleanups at numerous locations along the Portland Harbor, helping to ensure contamination doesn't continue to flow into the river. This "upland" cleanup must occur before EPA's river cleanup and is vital to its success.

The Port has done numerous upland cleanups under DEQ guidance, including at Terminal 1, Terminal 2, Terminal 4, Terminal 5, Swan Island and Willamette Cove.

In 2007, the Port also did an "early action" in-water cleanup at Terminal 4, removing 13,000 cubic yards of contaminated sediment from the river.

WHAT NEEDS TO BE DONE?

EPA's Proposed Plan for cleanup at Portland Harbor was issued in June for public comment. It includes a combination of cleanup methods. Each has its pros and cons and comes with a different price tag. The four methods in the Proposed Plan are capping, dredging, monitored natural recovery, and enhanced natural recovery. Three of the techniques – dredging, capping and enhanced natural recovery – can only be undertaken during four months of the summer when the work will not harm endangered species, such as salmon. **Each of the suggested cleanup alternatives is supposed to reach the pollution-reduction targets identified by EPA.**

The Superfund law requires that cleanups reduce risks to safe and acceptable levels. The EPA is required to consider costs as well as other, more technical, factors such as long-term and short-term effectiveness, ability to be implemented, and reduction of toxicity.

Differences between cleanup options largely involve the reliance on more or less dredging as compared to monitored natural recovery; the short-term impacts to the environment and community, the length of time to implement, and the cost. Science and best practices must ground EPA's decisions about clean up methods so that public dollars are spent wisely.

WHO IS RESPONSIBLE... AND WHO WILL PAY?

The cost to cleanup Portland Harbor is significant, at a time when our region is facing many critical issues as our city grows. The bill for cleanup could exceed \$800 million.

The Superfund law requires that the total cost of cleanup be paid by parties responsible for and connected to the historical pollution. The costs are allocated by liability, not equally among parties. There are likely 150 parties with potential liability (PRPs, or potentially responsible parties) who have been involved with the site. These include private property owners and businesses, local utilities, as well as local, state, and federal governments. Sometimes companies that caused contamination are no longer in existence. When a historical PRP business leaves no funds to pay for cleanup, the remaining PRPs must pay for those costs.

The majority of the Portland Harbor cleanup will be paid for by local employers, taxpayers and utility customers for many years to come. It is time to move forward with a cost-effective cleanup that is right for the current and future citizens of the region.



WHAT HAPPENS NEXT?

EPA issued its final Feasibility Study and Proposed Plan in June, outlining the combination of cleanup methods it recommends. A 60-day public comment period will occur during the summer. EPA must review and respond to the comments received on its Proposed Plan. EPA will then issue the final Record of Decision.

WHAT CAN YOU DO? STAY INFORMED. SUBMIT YOUR COMMENTS.

You will be hearing more about the Portland Harbor Superfund site in the next few months. There will be diverse views expressed about the best resolution and who should pay for the cleanup costs. **At the Port, we are committed to a cleanup of the Lower Willamette River that protects the health of Portlanders and our environment, and to finding the most cost-effective way to achieve it. We know the important health benefits and positive economic impact the cleanup can bring. And, after studying the river and doing early cleanup work, we are ready for the next step.**

You can learn more about the Superfund project and get information on how to weigh in at: www2.portofportland.com/Superfund. The Port's Podcast series, One River Many Voices, is also a fun way to learn more.

Please tell EPA what you think! You can learn more about hearing schedules and submitting comments at: www.epa.gov/or/forms/comment-epas-proposed-cleanup-plan-portland-harbor-superfund-site.

