



Proposed Cleanup Plan Community Fact Sheet

Prepared by the Duwamish River Cleanup Coalition/Technical Advisory Group



Background

Seattle's lower Duwamish River was declared a federal Superfund Site in 2001, placing it on EPA's list of the nation's most toxic hazardous waste sites. Since then, EPA has studied pollution in the river, its effect on people's health and the environment, and several possible alternatives for cleanup. EPA has released its Proposed Cleanup Plan ("preferred alternative") and is now holding public meetings and requesting comments on its proposed plan. The comment deadline is June 13, 2013.

The Duwamish River Cleanup Coalition/Technical Advisory Group (DRCC/TAG) is the Community Advisory Group for the Superfund Site. DRCC/TAG represents community, environmental, tribal and small business organizations in the Duwamish Valley and greater Seattle area. DRCC/TAG has commissioned an independent technical review of EPA's Proposed Cleanup Plan and has solicited input from the affected communities. This Fact Sheet summarizes our assessment of the draft plan, as well as additional information from other recent health studies.

Proposed cleanup plan

EPA's Proposed Cleanup Plan for the Duwamish River would use a mix of technologies to reduce toxic pollution levels in mud in the river bottom, where fish and people on local beaches are exposed (see Table 1). The goal of the cleanup is to protect the river environment, its fish and wildlife, and human health. The greatest health risks are to those people who eat seafood (excluding salmon) from the river.

EPA is proposing to leave some areas with toxic pollution to be covered by sediment flowing from upriver, in a process called "natural recovery." Some areas with relatively low-levels of toxins would be monitored to determine if recovery is in fact occurring, and whether or not environmental and health standards are being met. In areas with moderate levels of toxic pollution, a thin layer of sand would be added to "kick-start" the process. This "enhanced natural recovery" might include added materials to block the uptake of toxic chemicals by fish, if it is determined that there are safe and effective additives.

Areas that have high-concentrations of toxic pollution would either be capped (covered), where ever possible, or removed (dredged), or a combination of the two. Some of the most contaminated areas that were designated for "early action" have or are already being dredged and/or capped.

If these cleanup actions do not achieve the goal of protecting human health or matching "background" levels in Puget Sound, EPA would consider another cleanup order, or might issue a "waiver" of the requirement if it finds that meeting the standard is not feasible.

Until the goal of protecting human health (or Puget Sound background concentrations) is met, the EPA plan also calls for "institutional controls" – health advisories and educational efforts to try to discourage people eating local seafood with high levels of contamination. If the goal is not met and a waiver is granted, these measures could become permanent.

How well will the plan work?

Uncertainty is high

The Proposed Plan relies heavily on “natural recovery” to reach the environmental and health goals of the cleanup. However, EPA’s plan states, “whether the Preferred Alternative... can achieve all human health [goals] is uncertain” and “alternatives that rely less on natural recovery have less uncertainty.”

In short, this means we do not know how well the plan will work – it depends on how accurate the predictions are, and whether the effects of new influences, like climate change, alter how the river behaves. Experts predict that climate change will increase floods, storm surges, sea levels, and other things not considered in developing the plan.

The Proposed Plan also doesn’t predict the effects of pollution controls, so the river could wind up either cleaner, the same, or more polluted than it is now, depending on how well we reduce ongoing pollution. Pollution control is not mandated by the Proposed Plan – rather, it is a separate effort by the WA Department of Ecology. Ecology’s plan may not include control of upriver pollution, which is the source of 99% of the sediment entering the river (and the basis of “natural recovery”), but it does include a study of upriver inputs.

The plan’s heavy reliance on natural recovery means there is a lot of uncertainty in how well it will work, and whether we will need to do, and pay for, more cleanup in the future.

Cleanup may not be permanent

In addition to this uncertainty, the Proposed Plan does not guarantee that our actions now will be permanent. EPA’s plan states, “alternatives that remove more contamination through dredging provide the most permanence.” Any toxic material left behind might be re-exposed in the future if the caps or natural recovery areas are disturbed, such as by major floods, an earthquake, or a shipping accident. The only cleanup EPA considers to be permanent is removal, which is a relatively small part of the Proposed Plan. If toxic wastes left behind are re-exposed, a new cleanup may be required.

Some strategies are ineffective, potentially harmful

Because the Proposed Plan is not expected to protect the health of people who eat most fish, EPA proposes to use “institutional controls”, such as warning signs and educational campaigns, to discourage people from eating Duwamish River seafood. However, many of the river’s fishermen rely on the river for food, and others, such as Tribal members, have cultural ties to the river and its fish. Studies show that trying to prevent people from fishing is notoriously ineffective. These measures also threaten their livelihood and cultural traditions, which may pose additional threats to their health.

How much will it cost?

EPA considered a range of cleanup options with estimated costs from \$210–\$810 million (not including the “no action” alternative). The Proposed Plan EPA selected is estimated to cost \$305 million, but does not take into account the possibility additional cleanup requirements later. The costs will be paid by the “responsible parties,” which will include Seattle and King County, the Port of Seattle, the Boeing Company, and others.

How long will it take?

If the Proposed Plan works as predicted, it will take approximately 17 years: seven years of “active” cleanup (dredging and capping) plus ten more years of “natural recovery.” However, these estimates assume that active cleanup will be uninterrupted. This may not be the case, as EPA has said that it will wait until pollution sources are reduced enough to prevent recontamination before it starts cleanup. Since pollution control is not part of EPA’s plan, it is not certain when this will be achieved. The time estimates also assume that only two dredgers will be on the river at a time. If more are used, the cleanup could be completed more quickly.

Can the cleanup plan be improved?

DRCC/TAG has commissioned an independent review of EPA’s Proposed Cleanup Plan, the supporting studies, and the evaluation of alternatives. The University of Washington School of Public Health is also conducting a Health Impact Assessment of the plan, and is preparing a report with recommendations for improvements to the plan to benefit the health of affected communities, including residents, fishermen, and Tribes.

The following recommendations will strengthen the environmental and health protections of the cleanup, reduce the plan’s uncertainty, and ensure greater permanence of the Duwamish River cleanup action.

Table 1: Proposed Cleanup Plan technologies

<i>Cleanup method</i>	<i>Acreage</i>	<i>Percent</i>
Monitored natural recovery	256	62%
Removal (dredging)	84	20%
Enhanced natural recovery	48	12%
Capping (covering)	24	6%
Total	412	100%

RECOMMENDATIONS

- 1. Remove all highly contaminated sediments, instead of burying them in place under a cap.**
This will ensure the cleanup is permanent, by ensuring that toxic wastes will not be re-exposed.
- 2. Remove moderately contaminated sediments, instead of relying on “enhanced” natural recovery.**
This will provide greater health protections, decrease uncertainty, and ensure the cleanup is permanent.
- 3. Kick-start recovery of remaining contamination, by adding a thin layer of clean material instead of relying entirely on highly uncertain natural processes.**
This will provide greater health protections and decrease uncertainty that the cleanup will work.
- 4. Include controls on ongoing pollution sources, including from upriver, in the final cleanup order, instead of as a separate and unenforceable effort.**
This will provide greater health protections, and decrease uncertainty that the cleanup will work.
- 5. Ensure efforts to discourage fishing are culturally-appropriate and don’t further harm people’s health, by working with affected community members to develop effective and appropriate institutional controls.**
This will prevent inadvertent harmful effects on health, and be more equitable to the affected communities.
- 6. Establish a Pollution Prevention & Mitigation Fund for as long as the site’s health impacts persist, to be funded by responsible parties and directed by the affected communities to reduce ongoing health impacts until recovery is complete.**
This will reduce and mitigate cumulative health impacts caused by toxic pollution from responsible parties.
- 7. Hire local! Employment and income are some of the most important factors that influence health; local residents who are directly affected by the site should benefit from job opportunities created by the cleanup.**

Other documents for public review

Environmental Justice Analysis

In addition to the Proposed Plan, EPA has released a Draft Environmental Justice Analysis of the cleanup alternatives it considered in the Feasibility Study. EPA has a mandate to consider the impacts of its decisions on low-income and minority communities, particularly those with high environmental pollution burdens and/or already poor health, such as those who live near and fish in the river, and Tribal nations. The Environmental Justice Analysis includes information showing that more permanent cleanup alternatives can provide health risk reductions as quickly as the Proposed Plan, and also recommends community consultation and mitigation for contaminated seafood.

Source Control Strategy

The WA Department of Ecology has released a Draft Pollution Source Control Strategy for the lower Duwamish River, as a parallel and supporting effort to EPA’s Proposed Cleanup Plan.

Additional health studies

Duwamish Valley Cumulative Health Impacts Analysis

DRCC/TAG and Just Health Action have conducted a study of cumulative health impacts in the Duwamish area, which considers environmental and socioeconomic status and scientifically-established indicators of health. The study found that the Duwamish area has the highest cumulative risks of ten ZIP codes studied citywide, and that South Park and Georgetown residents have a shorter life expectancy than the Seattle or King County average. DRCC/TAG has made recommendations for EPA’s cleanup plan based on the findings of the study – in addition to the recommendations at right, these include:

- increase neighborhood green space and walking/biking trails as part of Superfund’s required restoration projects;
- establish and fund a Community Health Task Force.

See www.duwamishcleanup.org/programs for more info.

Duwamish Cleanup Plan Health Impacts Assessment

The UW School of Public Health, Just Health Action, and DRCC/TAG are conducting a Health Impact Assessment (HIA) of EPA’s Proposed Cleanup Plan, in order to identify ways to maximize the health benefits of the plan, minimize unintended harmful impacts, and promote health equity. The HIA focuses on the health of residents, Tribes, fishing communities, and workers in Duwamish Valley industries. An *Advance Report* will be publicly available in April, and a *Final Report* will be submitted to EPA during the public comment period with detailed recommendations on the cleanup plan. *A link to the UW web site will be posted by DRCC/TAG as soon as the Advance Report is available (late April).*

How can I get involved?

Attend a public meeting

EPA and DRCC/TAG are holding a series of public hearings and meetings – pick one that works for you!

EPA Public Hearings:

- April 30, 3:30 & 6 p.m., South Seattle Community College - Georgetown Campus, 6737 Corson Ave. S.
- May 15, 5:30 p.m., South Park Community Center, 8319 8th Ave. S. – in Spanish
- May 29, 3 & 6 p.m., Town Hall, downtown Seattle, 1119 8th Ave.

DRCC/TAG Community Meetings:

- May 9, 6 p.m., Concord International School, 723 S. Concord St. - Multilingual & family-friendly!
- May 23, 6 p.m., Sandbox Sports, 5955 Airport Way S. The Duwamish River in 3–D – in sand!

Comment on the proposed plan

- Comment at any of the meetings above
- Send written comments via email: “ldpc@resolve.org” or by postal mail:
Allison Hiltner, EPA, 1200 6th Ave, Suite 900, ECL-111, Seattle, WA 98101.
- Post your comment to the “River for All” Facebook page:
www.facebook.com/River4All
- Record your comment as an audio, video, still photo, or digital story – all formats are accepted! – and send to EPA or DRCC/TAG as listed above.

Endorse our recommendations

- Endorse and include our recommendations in your individual or organization’s comments to EPA.

Pledge to support “A River for All!”

- Visit our web page to join your neighbors and many community leaders by taking the River for All! Pledge.
- Help us spread the word by asking your family, friends, co-workers, etc. to take the Pledge, send their comments to EPA, and support a River for All!

Questions?

Contact us at (206) 954-0218, or by email at contact@duwamishcleanup.org.

The Duwamish River Proposed Cleanup Plan, draft Environmental Justice Analysis, and draft Source Control Strategy are available at the South Park Library and EPA Region 10 Headquarters in Seattle, or online: see www.duwamishcleanup.org for links and more info.

EPA is accepting comments on the draft documents until June 13, 2013: email comments to “ldpc@resolve.org” (please cc us at contact@duwamishcleanup.org).



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