

# Health Impact Assessment: Proposed Cleanup Plan for the Lower Duwamish Waterway Superfund Site

Fact Sheet for *Advance HIA Report*—May 2013



Photos, left to right: Patrick Robinson, West Seattle Herald; Linn Gould, Just Health Action; Paul Joseph Brown; BJ Cummings, Duwamish River Cleanup Coalition/TAG

## Background

More than a century of industrial and urban wastes have contaminated the lower Duwamish River. In 2001, the Environmental Protection Agency (EPA) placed this site on the Superfund List. On February 28, the EPA released its proposed cleanup Plan. The EPA will accept public comment on the Plan until June 13, 2013.

The Plan calls for capping in place or removing highly contaminated river sediments, plus using enhanced and natural recovery for moderately or low-level contaminated sediments. Even after 17 years of active cleanup and monitored recovery, resident fish and shellfish will still probably be unsafe for human consumption. After cleanup, the river will require what EPA calls “institutional controls,” such as fishing advisories and warning signs. These will probably be needed for decades and possibly in perpetuity. EPA made extensive plans for the cleanup, but the institutional control plan is essentially only a plan to make a plan.

## What is health impact assessment (HIA)?

Health Impact Assessment (HIA) is a tool to inform decision-makers about the potential health impacts of a specific policy or plan. HIA uses community and academic research to uncover health impacts that a plan might have on people, and makes recommendations to ensure that the plan can contribute to healthier communities.

## Why conduct an HIA for a Superfund site?

Conventional EPA evaluation of a Superfund site focuses narrowly on cancer and other disease risks. This HIA uses a broader definition of health and well-being to determine whether additional health problems might occur beyond what EPA identified. Three vulnerable groups are at risk

for cleanup-related problems: 1) South Park and Georgetown residents, 2) non-tribal subsistence fishers and their families, and 3) local Tribes with cultural ties to the river (a fourth group, local industry workers, will be added in a later report). In general, these three groups already have more health problems and environmental risks than the general population.

## What did the HIA find?

Our community stakeholder advisors guided all stages of the HIA. The advisors identified possible health concerns, and we evaluated whether the evidence supported those concerns or not. Here are important findings:

### Local residents

- Cleanup construction may create some additional traffic and air and noise pollution, but this should be minimized by new clean fuel regulations and existing EPA policies.
- The cleanup will reduce beach contamination, but beaches will be contaminated for a while.
- The cleanup could spread contamination in the river if not managed carefully. However, using latest dredging technologies, best practices, and skilled operators should minimize any releases of contamination.
- The cleanup will generate jobs and, with planning, some of these jobs could go to local residents.
- Cleaning the river and restoring the natural environment could help revitalize Georgetown and South Park. However, this could accelerate gentrification that is already occurring. Without planning, lower-income residents are likely to experience fewer benefits and more harms (such as higher rents or taxes, relocation, etc.), while higher-income residents are likely to experience more of the benefits.

### **Fishers**

- Some fishers will continue to fish in the Duwamish River, especially after it is cleaner. Resident seafood will eventually be less contaminated but still not safe for consumption at subsistence fishing rates.
- Some fishers will go somewhere else to fish, but many other local urban waters are also contaminated.
- Some fishers will reduce or stop fishing. If they cannot afford to buy fish, they may choose cheaper, less healthful foods. Reduced fishing also could restrict important cultural traditions and social connections.

### **Local Tribes (Duwamish, Muckleshoot, Suquamish)**

- Tribal health outcomes are likely to be worse than EPA predictions, because EPA did not consider the many existing Tribal health problems and also did not account for broader Tribal definitions of health.
- The expected cleanup outcome is not equitable because the general population will be able to eat resident seafood relatively safely at typical rates of consumption (e.g., 1 meal per month), but Tribes cannot eat resident seafood safely at typical Tribal seafood consumption rates.
- Institutional controls, such as fish advisories, may last forever and may hurt Tribal health by restricting Tribal fishing rights, affecting food security, and harming cultural and spiritual traditions.
- Habitat renewal will be good for Tribal health for cultural reasons.

## **Recommendations directed to EPA**

### **Construction phase**

- Negotiate transport routes and mitigation measures for cleanup-related truck and rail traffic with potentially affected residents.
- Use modern clean engines or those with best available emission controls, cleanest available fuels, and “green remediation” techniques to minimize air emissions, plus noise and light minimization measures during cleanup.
- Provide cleanup job training and placement assistance to local community members.

### **Institutional controls and innovative options**

- Institutional controls should go beyond restrictions and general advisories. Interventions should emphasize positive and innovative options such as: creating maps of safe places to fish, supplying extra fish to local food banks, community supported fisheries (like community supported agriculture), and creating community fishing ponds.
- Intervention plans should target more than just people who currently fish on the Duwamish River and should also consider people who may fish there in the future.
- All controls and innovations should be culturally appropriate, help people make informed choices, and engage and empower people to participate meaningfully in planning, implementation, and monitoring.

- Provide educational signs and washing stations at local beaches until health protective standards are met.

### **Actions to protect Tribal health**

- Collaborate with Tribes to more fully address their health concerns about the river cleanup.
- Restore Tribes’ traditional resource use in accordance with Treaty Rights. Ensure that site-related institutional controls are temporary, not permanent.
- Create a “Revitalization Fund” to enhance Tribal empowerment and health until institutional controls are removed.

## **Recommendations directed to City of Seattle and King County**

### **Gentrification pressures**

- Coordinate future reinvestment and urban development by formalizing a coalition of agencies and community organizations to monitor and guide new development.
- Preserve affordability and produce affordable housing.
- Promote and protect home ownership.

### **Equity policies**

- Ensure equity in all policies and efforts for environment and community development, in accordance with Seattle’s Race and Social Justice Initiative and King County’s Equity and Social Justice Ordinance.

## **Equity**

The City of Seattle and King County are potential responsible parties for the cleanup. They are also responsible for protecting and improving the health and well-being of all people in their jurisdictions. Without equitable planning, the cleanup could cause disproportionate harm to vulnerable populations and could continue or even worsen existing health inequities. The EPA, City, and County each have prominent policies that promote equity, race, or justice in decision-making. The HIA team calls upon each to uphold these commitments in planning the cleanup and related actions, and in planning for predictable health effects of those actions.

## **Where can you get more information?**

The *Advance HIA Report* and other HIA documents are at: <http://deohs.washington.edu/hia-duwamish>

This project was conducted by University of Washington School of Public Health, Just Health Action, and Duwamish River Cleanup Coalition/Technical Advisory Group.

This project and document are supported by a grant from the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts; and also by the Rohm & Haas Professorship in Public Health Sciences, sponsored by the Rohm & Haas Company of Philadelphia. The views expressed are those of the authors and do not necessarily reflect the views of the Health Impact Project, The Pew Charitable Trusts, the Robert Wood Johnson Foundation, or the Rohm & Haas Company.