

## Identifying community contamination concerns in the Puget Creek Watershed

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### The Duwamish Valley Research Coordination Network (DVRCN): Building Capacity for Tribal, Community, and Agency Research in Urban Watersheds

In 2021, the DVRCN met to discuss the health of the Duwamish Valley and its people.<sup>1</sup>

The Lower Duwamish River is one of the largest superfund sites in the country.<sup>2</sup> In 2013, a Cumulative Health Impacts Analysis reported South Park and Georgetown residents have a life expectancy of 73.3 years – eight less than the King County average. Much of this survival discrepancy is attributed to toxic exposure from contaminated air, soil, sediment, and water.<sup>3</sup>

Supported by an Environmental Protection Agency Star Grant, the DVRCN is empowering community members to spearhead the clean-up efforts of the Puget Creek Watershed area.<sup>4</sup> This project played an important role in these efforts.

#### Project Objectives

##### > Key Objective:

Gather community-identified water and land-based sampling locations throughout the Puget Creek Watershed.

##### > Secondary Objective:

Collect qualitative data centering clean-up priorities, environmental justice concerns, and community histories.

### Methods

From December 2023 to March 2024, the following steps were taken to achieve the objectives:

- > Audited the team's policies and procedures to ensure they aligned with the grant's goals.
- > Created three data collection tools:
  - Online survey
  - In-depth interview guide
  - Modified interview guide to be used in the field
- > Identified participants, gathered survey data and transcripts, and analyzed mixed method data for preliminary results

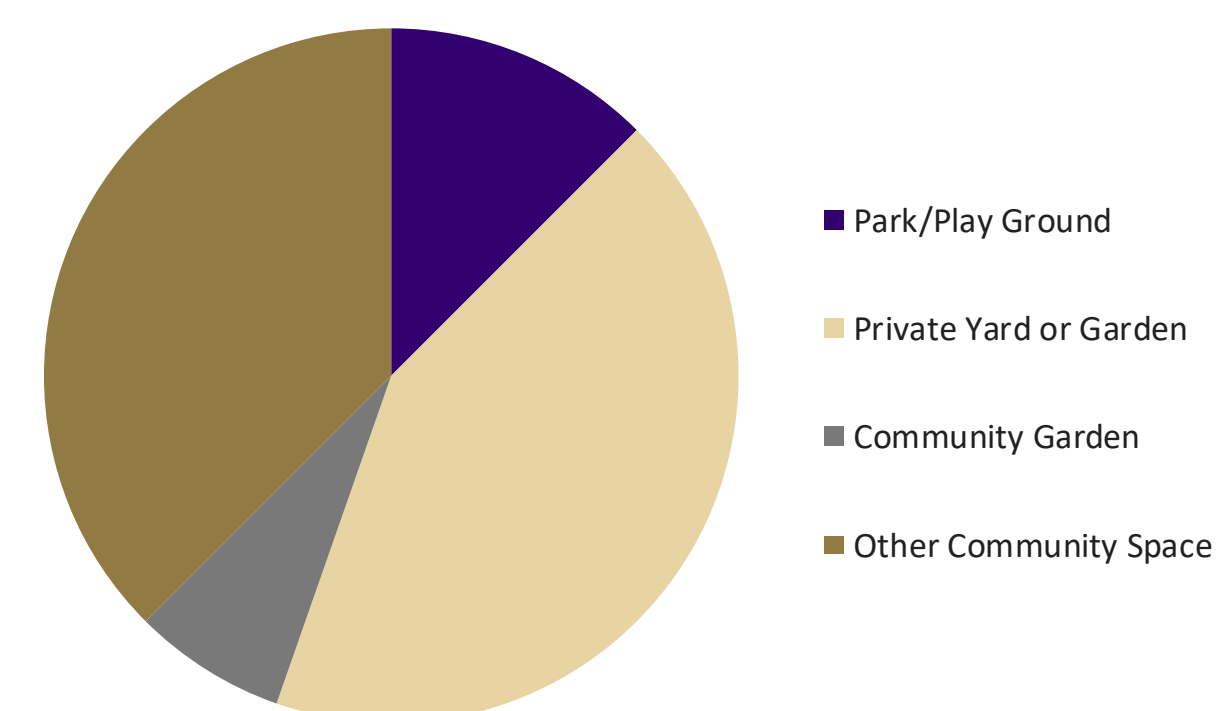
### Results

By April 2024, the community identified 139 locations to sample for contamination through surveys, interviews, and events. Thus far, 82 samples have been analyzed by the team.

Individual Method Results:

- > Collected survey results from 38 people. Many folks wanted their yards sampled, especially if located near a factory or remediation site. Others identified important community spaces, such as the Mini Mart City Park, River City Skate Park, and the Duwamish Longhouse and Cultural Center.

#### Sample Locations Identified by Type

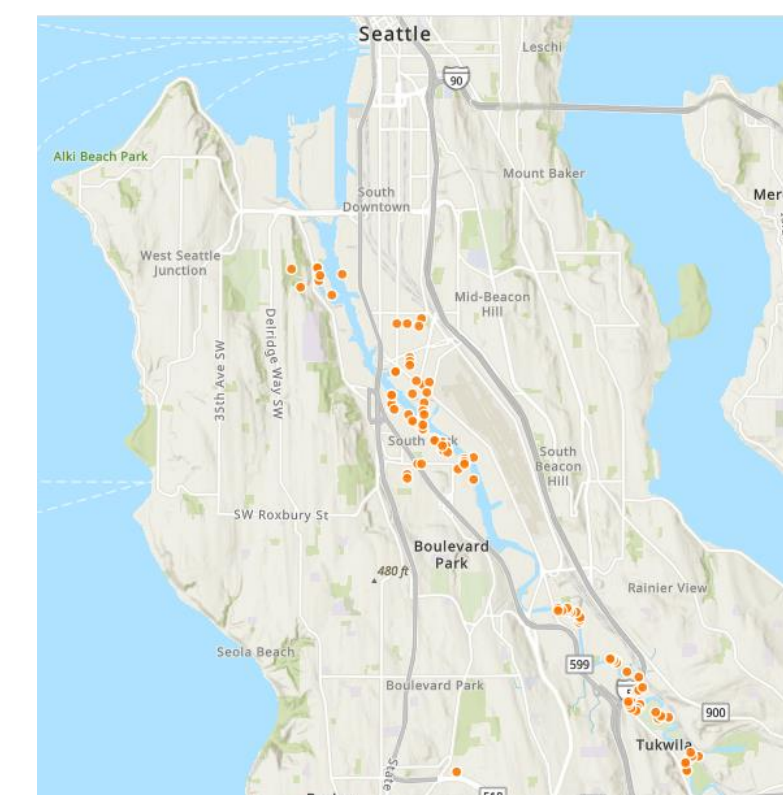


- > Completed six in-depth interviews. The interviews provided important sample requests, oral histories, and other clean-up efforts owned by the community.



Above: Two of the dumping sites along the Duwamish River. Both photos were taken during an in-depth interview on February 14, 2024.

- > Created a story map with the sampling team to communicate active sampling requests and completed analyses.



Above: Mapping of community proposed locations utilizing ArcGIS.

### Community Building Experiences

Local events were important to build community and connect with potential participants. Some events included:

- > Department of Ecology Meeting
- > South Park Neighborhood Association Meeting
- > Duwamish Forest Planting Event
- > Community Sampling Workshop with Dirt Corps
- > Against the Current: Protein Clean Water in Puget Sound Film Screening

### Next Steps

- > DVRCN will continue to conduct interviews, collect samples, and analyze data to focus group findings.
- > The Environmental Coalition of South Seattle will translate the in-depth interview guide into appropriate languages and use it to lead focus groups.
- > A UW undergraduate class will take samples and complete interviews in the field with the modified interview guide.
- > The project is slated to finish in 2026.

### Clean-up is ongoing!

If you have contamination concerns in Georgetown, South Park, or SODO, the team would love to hear from you. Scan the QR Code below.

#### References

1. Duwamish Valley Research Coordination Network. DVRCN [Internet]. sites.google.com. 2022. Available from: <https://sites.google.com/uw.edu/dvrcn/>
2. US EPA. LOWER DUWAMISH WATERWAY Site Profile [Internet]. cumulis.epa.gov. Available from: <https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=1002020#bkground>
3. Gould L, Cummings BJ. Duwamish Valley Cumulative Health Impacts Analysis. Seattle, WA: Just Health Action and Duwamish River Cleanup Coalition/Technical Advisory Group. March 2013.
4. US EPA. The Duwamish Valley Research Coordination Network: Building Capacity for Tribal, Community, and Agency Research in Urban Watersheds | Research Project Database | Grantee Research Project | ORD | US EPA [Internet]. cpub.epa.gov. 2023. Available from: [https://cpub.epa.gov/ncer\\_abstracts/index.cfm?fuseaction/display.abstractDetail/abstract\\_id/11360/report/0](https://cpub.epa.gov/ncer_abstracts/index.cfm?fuseaction/display.abstractDetail/abstract_id/11360/report/0)