

Living With Water

Co-developing strategies to protect health while adapting to sea level rise in the Duwamish Valley

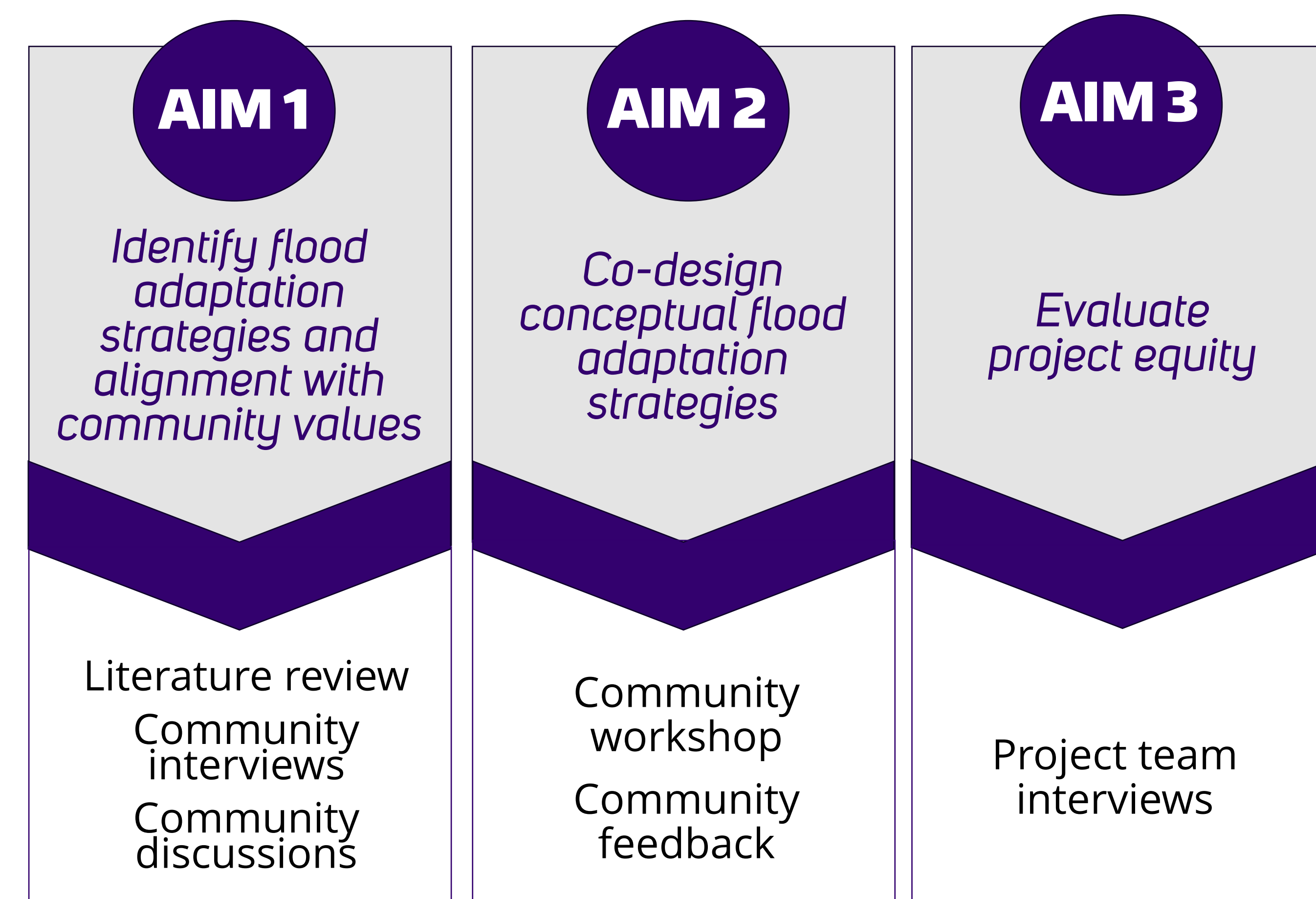
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BACKGROUND AND METHODS

Living With Water was a community-engaged research project co-led by the Duwamish River Community Coalition (DRCC) and the University of Washington (UW) in South Park, Seattle.

In December 2022, a king tide on the Duwamish River during heavy rains caused flooding that damaged more than 40 households in South Park. Future neighborhood floods are expected due to sea level rise and intensified storms resulting from climate change. DRCC and UW sought to identify strategies to protect neighbors from future floods, while supporting community values and building on community strengths.



The project team engaged South Park residents at community events, to educate neighbors on the root causes of flooding and to gather feedback on possible flood adaptation strategies.

RESULTS

AIM 1

Literature review
Identified 126 types of flood adaptation strategies, particularly nature-based solutions (NBS) and their co-benefits (e.g., improved public health).

Community interviews
Explored community values, including place attachment and a desire for “green” solutions (n=23).

Community discussions
Highlighted places that the community values protecting from floods (e.g., residential streets and the community center).

AIM 2

Community workshop
Neighbors discussed where they would like NBS to be located in South Park, and the team produced a map representing the responses (below).

Community feedback
Neighbor feedback on the map at 25+ community events confirmed support for NBS and identified interest in relocation within South Park as a flooding solution.

AIM 3

Project team interviews
Assessed the project’s alignment with systemic equity, identifying lessons that can inform future community research partnerships.

KEY TAKEAWAYS

South Park residents want to be involved in planning for future floods to make sure those plans respect impacted neighbors’ priorities and values.

Nature-based solutions can reduce flood risk better than gray infrastructure, alone. NBS can be affordable, long-lasting, and provide environmental and health benefits.

Community members have a strong attachment to South Park, preferring solutions that allow them to stay there. NBS better align with community values than infrastructure solutions.

The nature-based solutions that interest the community the most include vegetated levees, shoreline restoration, floodable parks and buildings, and relocation to safer areas within the neighborhood.

APPLICATIONS

- The team shared the results with the City of Seattle to provide a community perspective to its flood adaptation planning.
- The results are informing a follow-on community survey project on relocation as a flood adaptation solution, examining how to move people from flood-prone areas, while being sensitive to community attachment to place.

LEARN MORE

Visit: (1) cdrc.uw.edu/what-we-do/projects/living-with-water
(2) drcc.org/flooding-updates
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