

Manchester Stormwater Park

Kitsap County



Facility type

Small park with natural and engineered stormwater infrastructure that provides treatment and flood control

Construction date

2015

Facility size

0.5 acres

Drainage basin area

100 acres (community of Manchester)

Facility Description

Manchester Stormwater Park treats stormwater from roads, parking lots, and residential and commercial properties in the small Kitsap County community of Manchester. Treatment cells around the perimeter of the park process stormwater through engineered filter media and plants. A spiral rain garden intercepts flows from groundwater and light storms and treats it through a bioretention soil mix and plants in the rain garden. The rain garden extends the life of the more expensive engineered treatment media in the treatment cells. Treated water is discharged to Puget Sound. The stormwater park provides a community gathering space for farmers' markets, celebrations, relaxation, and education.

Before the stormwater park was built, Manchester did not have any stormwater treatment structures and stormwater drained untreated through one pipe into Puget sound. The stormwater park was built on a vacant lot in Manchester that was once a gas station. The project

was initially designed to replace an aging and undersized outfall. However, Kitsap County recognized the opportunity for multiple benefits: treating a larger drainage area, reducing flooding, and providing a community amenity.

It is estimated that more than 100,000 pounds of contaminated suspended solids will be cleansed from the upstream stormwater runoff in its first 10 to 20 years.

Departments involved Kitsap County Public Works

Contractors Parametrix, N.L. Olson & Associates, Northwest Cascade

Public engagement

Public engagement was key to the project's success and helped shape the design of the park. The community wanted a gathering space and interpretive signage on environmental solutions.

Maintenance and monitoring

The Port of Manchester takes care of mowing and garbage collection, Kitsap County Public Works maintains the rest of the facility, and the University of Washington's Green Futures Lab provides water quality monitoring. Monitoring indicates that the stormwater park is effective in treating pollutants and is especially effective at treating bacteria and metals in the runoff.

Challenges and lessons learned

- It helps to have a champion as there are many issues to work through with innovative projects
- Do public outreach early
- Formal agreements can help when multiple departments and agencies are involved, especially for maintenance
- Having a use agreement helps with liability concerns when a group wants to reserve the park
- The success of Manchester stormwater park has led the county to develop others (<https://www.estormwater.com/whispering-firs-stormwater-park>)

Cost

\$4M (Phase I \$2.3M: stormwater park/surrounding roadway/sidewalks, Phase 2 \$0.4M: new outfall/roadway/sidewalk improvements, Phase 3 \$1.2M: stormwater conveyance/roadway/sidewalks)

Funding Sources Kitsap County Public Works Stormwater and Roads Divisions, Washington State Department of Ecology grant

For more information

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Additional information

- Monitoring information:
<http://greenfutures.washington.edu/2019/07/25/manchester-stormwater-park/>
- Detailed project description:
<https://www.waterworld.com/home/article/14070125/manchesters-stormwater-park>

