

## Washington Square Area Retrofit Plan



## **Problem Statement**

The retail and commercial developments at Washington Square Mall, Washington Square Too, Lincoln Towers, and adjacent developments comprise more than 200 acres of impervious area.

Most of the area was developed in the 1970's and 1980's before water quality or stormwater detention facilities were required in Washington County. Therefore, most runoff from this large impervious area discharges unmanaged to Ash Creek.

Highway 217 also discharges runoff to Ash Creek in this area.

Ash Creek meets Fanno Creek less than 1/2 a mile downstream of the mall area. Both creeks are known to provide habitat for steelhead that are listed as threatened under the Endangered Species Act. Both creeks are water quality limited under the Clean Water Act for phosphorus, bacteria, dissolved oxygen, and temperature.

Analysis of Ash Creek shows channelization, siltation, and flooding in the vicinity of the mall. Between Hwy 217 and the railroad, Ash creek is incising and has nearly vertical banks while non-native vegetation dominates the plant communities.

Pollutants, high stream temperatures, and incision in the stream could be reduced by building new stormwater facilities to treat runoff from existing impervious surfaces and by planting trees to shade the stream. However, there is little public land in the area, except for state rights-of-way along Hwy 217.

Available public land in the area could hold one or two small new stormwater facilities, which likely would be insufficient to adequately treat runoff from the large amount of impervious surface. An integrated strategy to coordinate with private property owners and the Oregon Department of Transportation (ODOT) to retrofit the area could be a more effective solution.

## Recommendation

The recommendation is to develop a Washington Square Area Retrofit Plan.

Washington Square Mall and adjacent developments are owned by a small number of property owners. This circumstance provides a good opportunity to work with private property owners to coordinate stormwater retrofits that provide multiple benefits.

Private property owners, ODOT, and the City could collaborate to:

- Identify retrofit opportunities for ODOT to mitigate future widening of Hwy 217;
- Identify opportunities to benefit Ash Creek downstream;
- Facilitate future redevelopment by identifying opportunities to provide required water quality and stormwater detention in advance;
- Look for innovative ways to reduce and reuse runoff, such as piloting a water re-use strategy in the mall and removing impervious surfaces from small areas of large parking lots to capture and infiltrate small amounts of runoff ("depaying"); and
- Ensure long-term investment by sharing costs and responsibilities for operation and maintenance to increase efficiencies.

A study and plan are needed to identify specific retrofit opportunities and to develop the partnerships needed to achieve multiple benefits. A completed plan can create a basis for establishing conditions of development and for discussion about cooperative public-private efforts when mall owners decide to make future redevelopment improvements.

## **Cost Estimate**

The cost estimate below assumes the City will use professional services to research and formulate the plan.

One-Time Costs	
Professional Services Contract	\$75,000
Project Administration, 15% of Services	\$15,000
Total	\$90,000



A water quality swale between Hwy 217 and Cascade Avenue treats runoff from the highway

