

# Appendix N

# Whipple Creek Watershed-Scale Stormwater Plan Report

Clark County Stormwater Regulatory History

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### **Background**

Several regulatory programs have significantly influenced the use of stormwater controls and habitat preservation as Whipple Creek developed. While there are additional plans such as the WRIA plan and salmon recovery plan, the principal regulatory protections in Whipple Creek are stormwater design requirements, the water quality ordinance, and the Growth Management Act zoning and habitat protections.

#### **Stormwater Manual Regulatory Landmarks**

Stormwater controls required for development projects have changed considerably over the last 30 years. In Whipple Creek watershed, most of the urban development includes some level of treatment and flow control. The key milestones occurred as Whipple Creek was being developed:

1981 – Clark County adopts a drainage manual that includes the requirement to include a flow control requirement not to exceed the predevelopment 10 year event flow rate.

1990 - Clark County added treatment requirements based on the King County manual.

1994 - 1995 — Adoption of the Ecology 1992 Stormwater Management Manual for Puget Sound as the county manual. Flow control standard was implemented to not exceed the predevelopment rate for 2-year, 10-year and 100-year flows. In 1995, the flow rate was reduced to limiting the 2-year release rate to ½ of the predevelopment 2-year rate. This manual used a smaller treatment design storm than the 2/3 of the two year included in the manual. The county adopted a standard similar to the Portland, Oregon standard of treating 90 percent of the storms rather than 91 percent of all rainfall.

1999 – Clark County adoption the treatment standard of the 1992 Puget Sound Stormwater Management Manual.

2009 – Adoption of the 2005 Stormwater Management Manual for Western Washington. Projects having approved engineering plans before December 28, 2011 were built using the existing land cover as the predevelopment condition for flow control. The manual included LID BMPs for the first time.

December 2011 – Projects approved after December 28, 2011 are required to use the forested condition as the predevelopment land cover.

January 2016 – Clark County adopted its Stormwater Management Manual (2015) containing standards equivalent to the 2012 SWMMWW which included mandatory LID.

## **Water Quality Ordinance**

In 1998, Clark County added a code chapter prohibiting the discharge of pollutants to storm drains, surface water and ground water. This chapter also required businesses to use source control BMPs to

prevent pollutant discharges. The chapter was later amended in 2000 to require all stormwater facilities to follow maintenance standards of the county stormwater manual.

#### **Growth Management Act (GMA) Protections**

Clark County is a state GMA county along with the other phase I counties. Along with setting the urban growth area boundary separating rural land uses from urban, the GMA required critical habitat areas such as flood plains, wetlands, riparian areas and landslide prone areas be set aside from development or fully mitigated if developed. The critical areas protections put in place during the mid-1990s play a large part in retaining forested riparian areas and wetlands.

#### Recommendations

As a practical matter, projects built before the mid-1990s have little or no flow control and treatment, projects built between the late 1990s and 2012 are built to the standards of the Puget Sound manual, and projects built after 2012 are built designed to the standards of the 2005 SWMWW.

The plan should consider including a map of the facility catchments with a date of installation in categories:

- Before 1982
- 1983 1996
- 1997 to 2012
- after 2012