



Storm & Surface Water Plan Update

Public Hearing
April 10, 2018



Storm and Surface Water Plan Update

Agenda

Planning Process

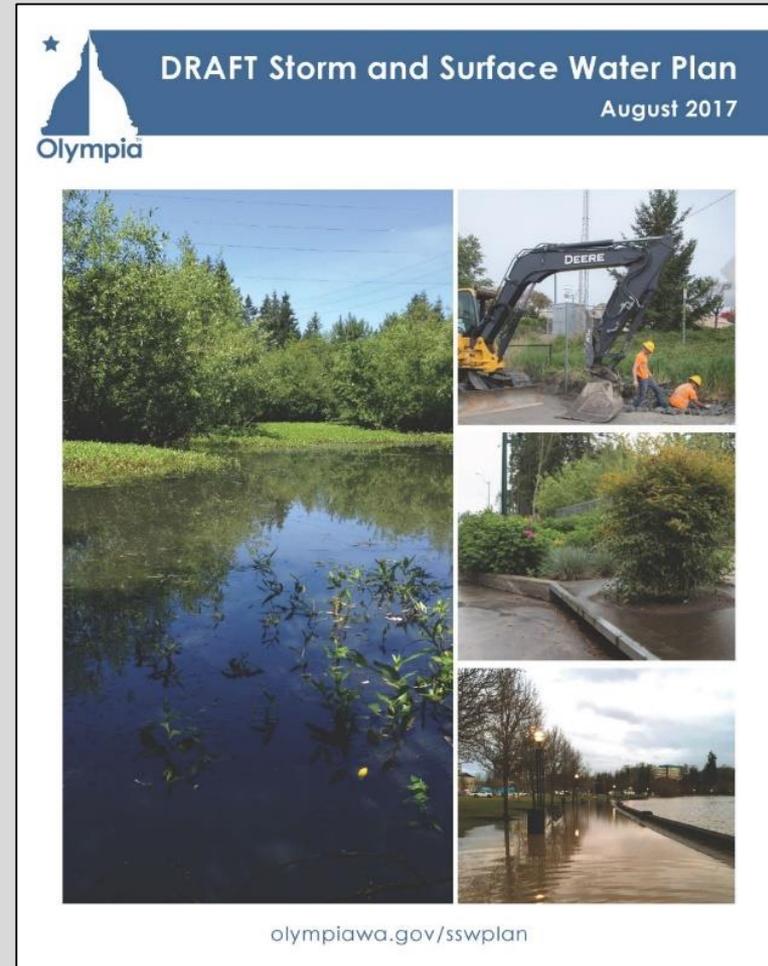
Plan Format

Geology and Weather

Services we Provide

Key Plan Strategies

Implementation Plan



What are the Utility's Responsibilities?

- Flooding
- Water Quality
- Aquatic Habitat



PLANNING PROCESS & PLAN FORMAT

Storm and Surface Water Plan

Formatted to Tell Our Story

- The **“What”** Chapters:
 - Chapter 1 – Introduction
 - Chapter 2 – Context and Trends
 - Chapter 3 – Surface Water Management
 - Chapter 4 – Built and Natural Infrastructure
- The **“Why”** Chapters
 - Chapter 5 – Legal and Policy Framework
 - Chapter 6 – Flooding
 - Chapter 7 – Water Quality
 - Chapter 8 – Aquatic Habitat
- The **“How”** Chapters
 - Chapter 9 – Core Services
 - Chapter 10 – Strategies
 - Chapter 11 – Capital Improvement Program
 - Chapter 12 – Financial Program



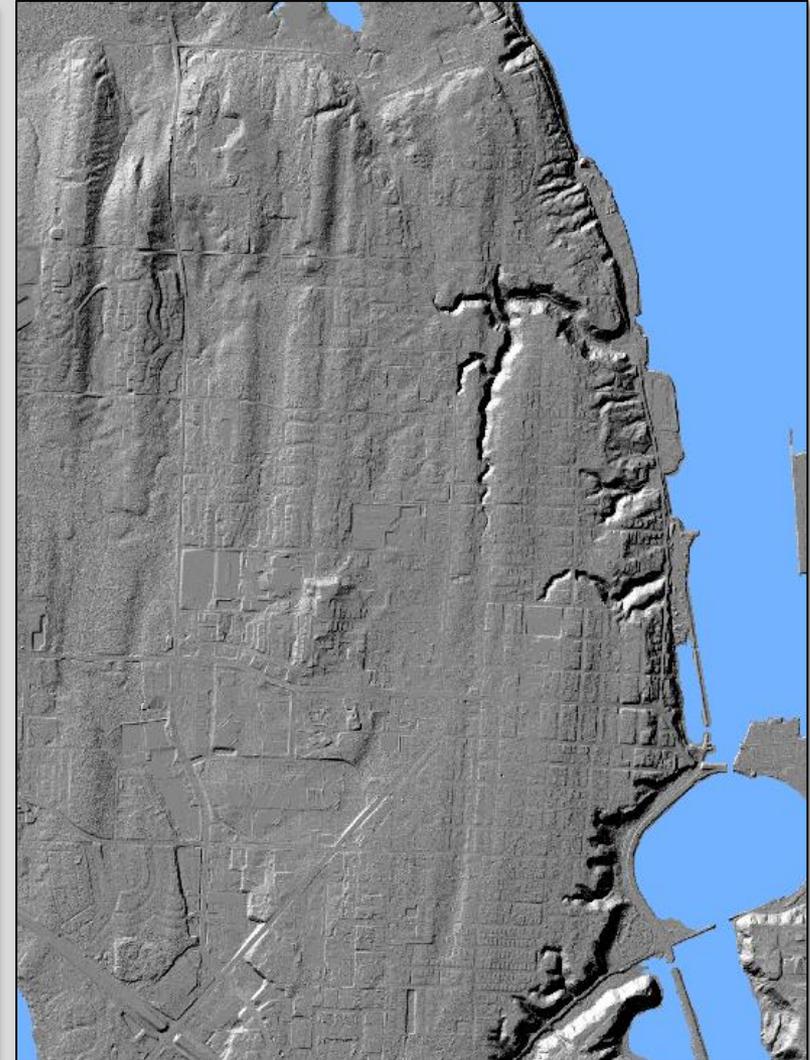
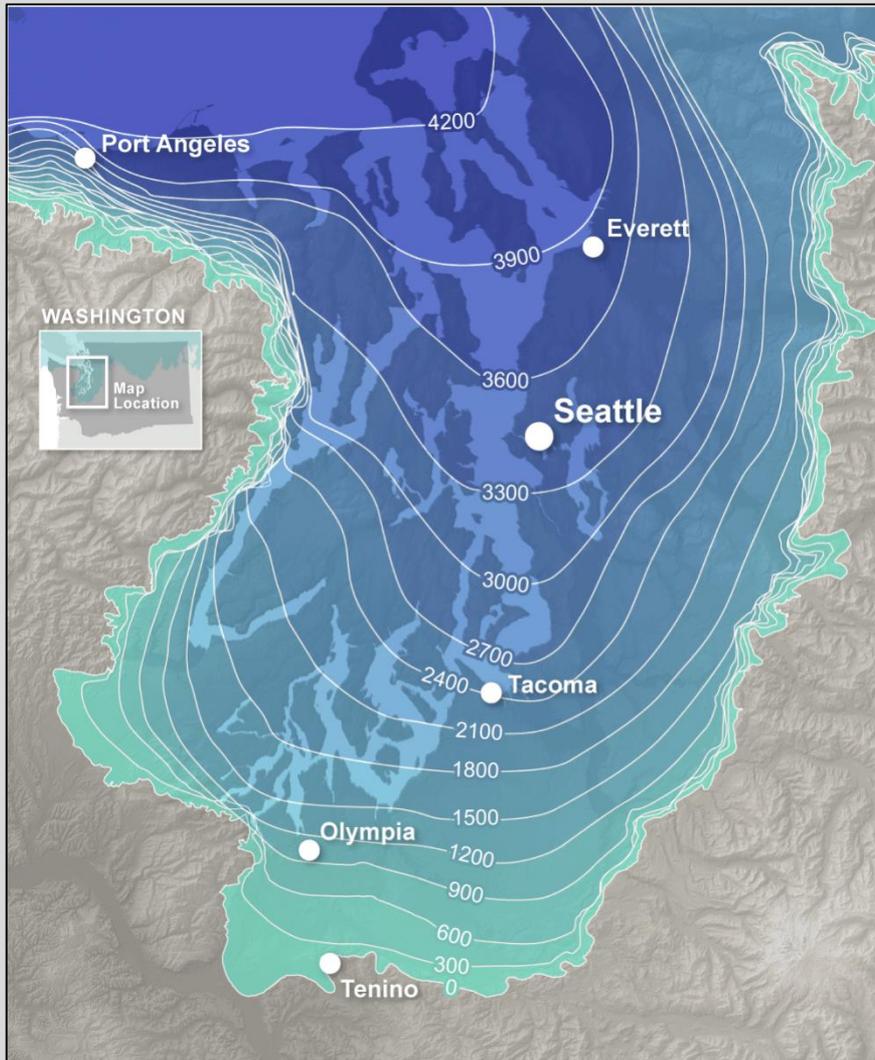
Issuance Date:	August 1, 2012
Effective Date:	August 1, 2013
Expiration Date:	July 31, 2018
Modification Date:	January 16, 2014

Western Washington Phase II Municipal Stormwater Permit

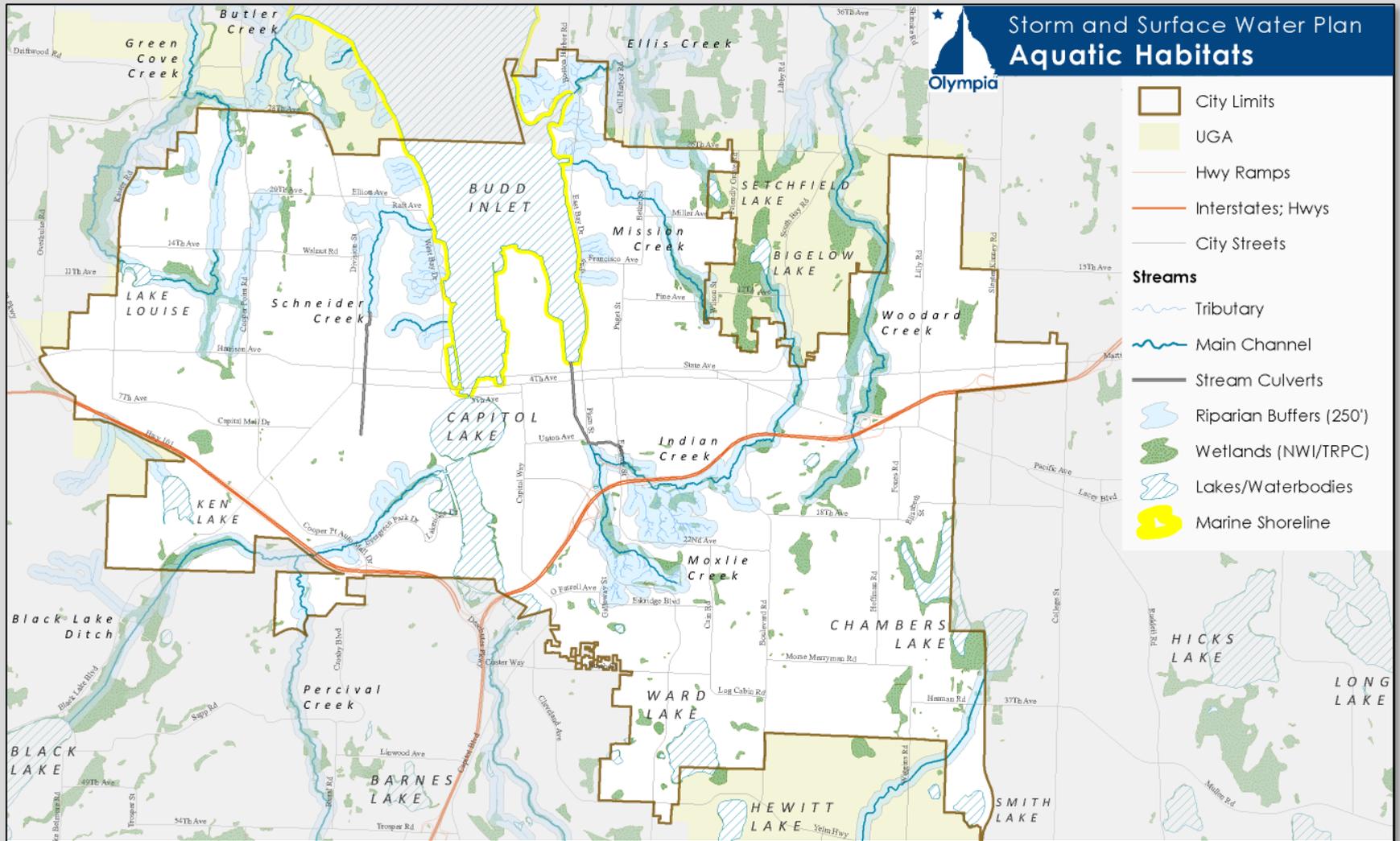
National Pollutant Discharge Elimination System and
State Waste Discharge General Permit
for discharges from Small Municipal Separate Storm Sewers
in Western Washington

OUR GEOLOGY & WEATHER

Geology in Olympia



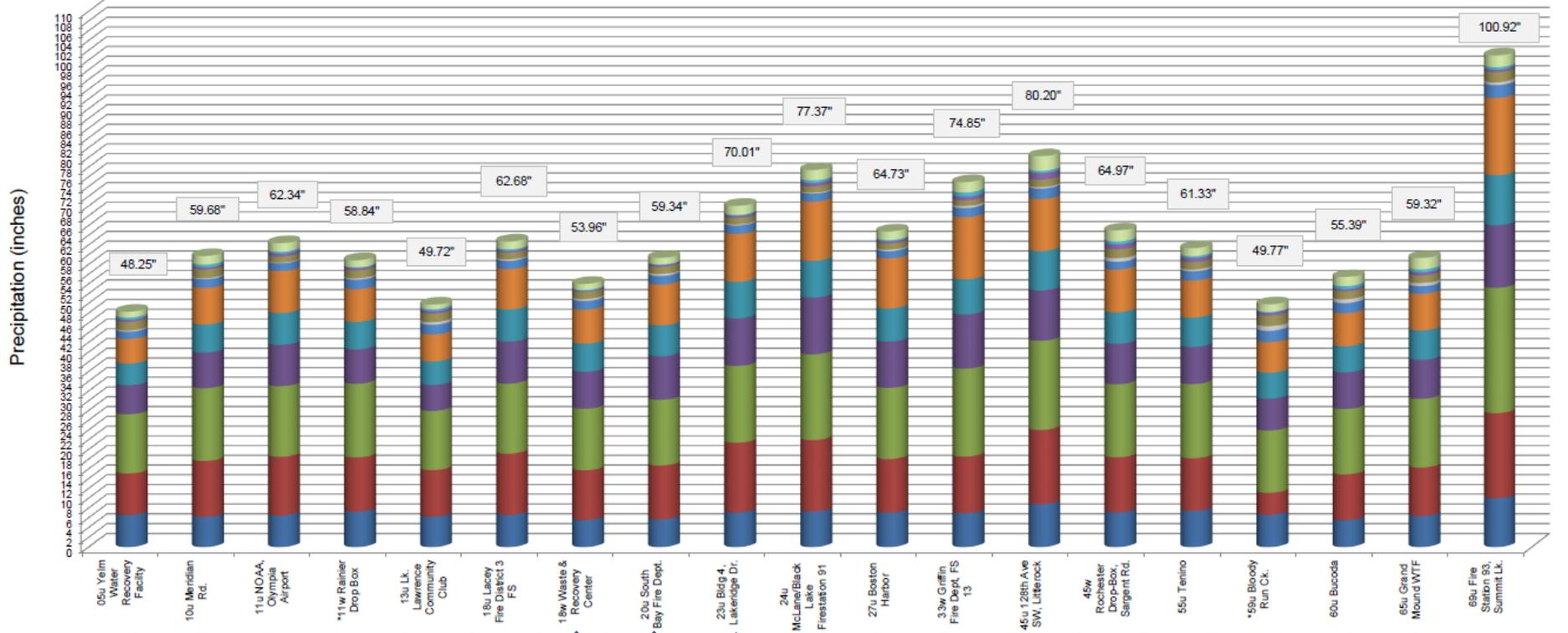
Critical Areas in Olympia



Precipitation in Olympia

Average Annual Rainfalls: Olympia 50" vs. Seattle 37"

Monthly Rainfall Totals (inches) for the Thurston County Rain Gage Network for Water Year 2016, from October 2015 to September 2016

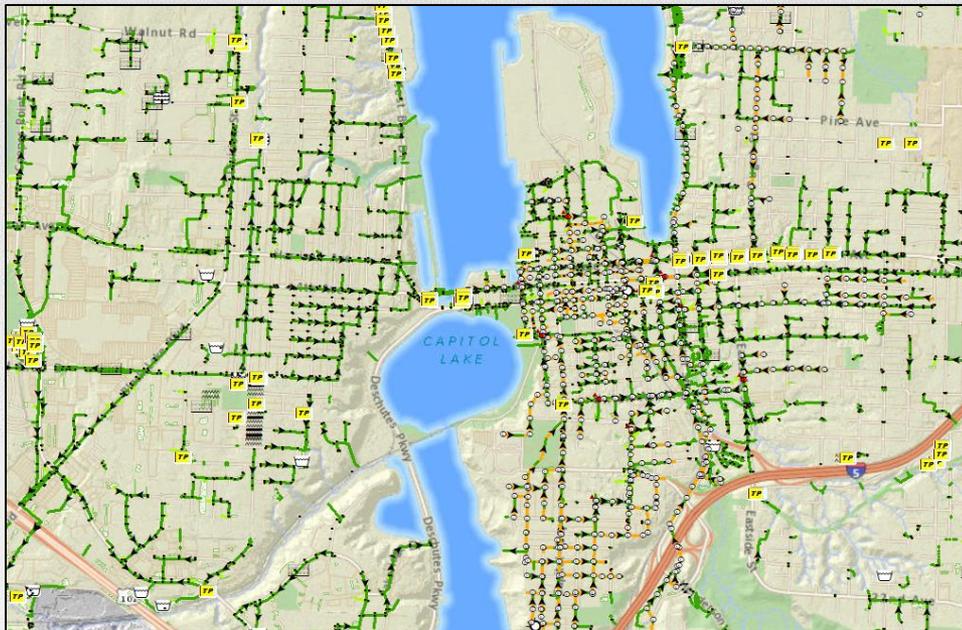
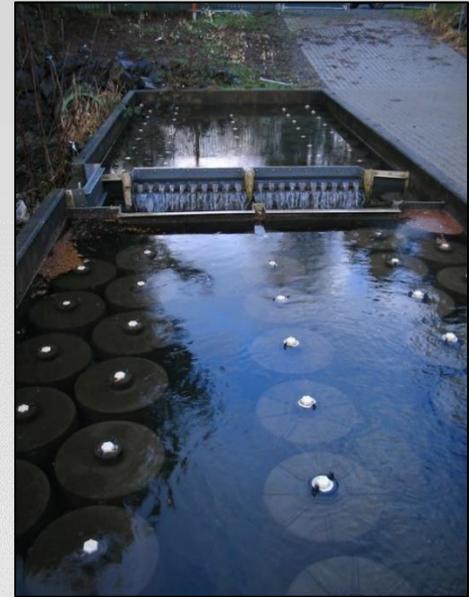


Waste Recovery Center (Exit 111) 53.96"
South Bay 59.34"
Courthouse Hill 70.01"
McLane 77.37"

SERVICES WE PROVIDE

We Maintain

- More than 200 acres of land
- 160 miles of storm drainage pipe
- 7,500 storm drains (catch basins)
- 244 public flow control facilities (ponds, etc.)
- 137 public treatment facilities (filters, etc.)



We Inspect and Clean

- More than 4,500 storm drains (catch basins) annually
- More than 11 miles of drainage pipe annually
- More than 100 “flooding hot spots” during rain events



We Repair

More than 100 Structural Defects Annually



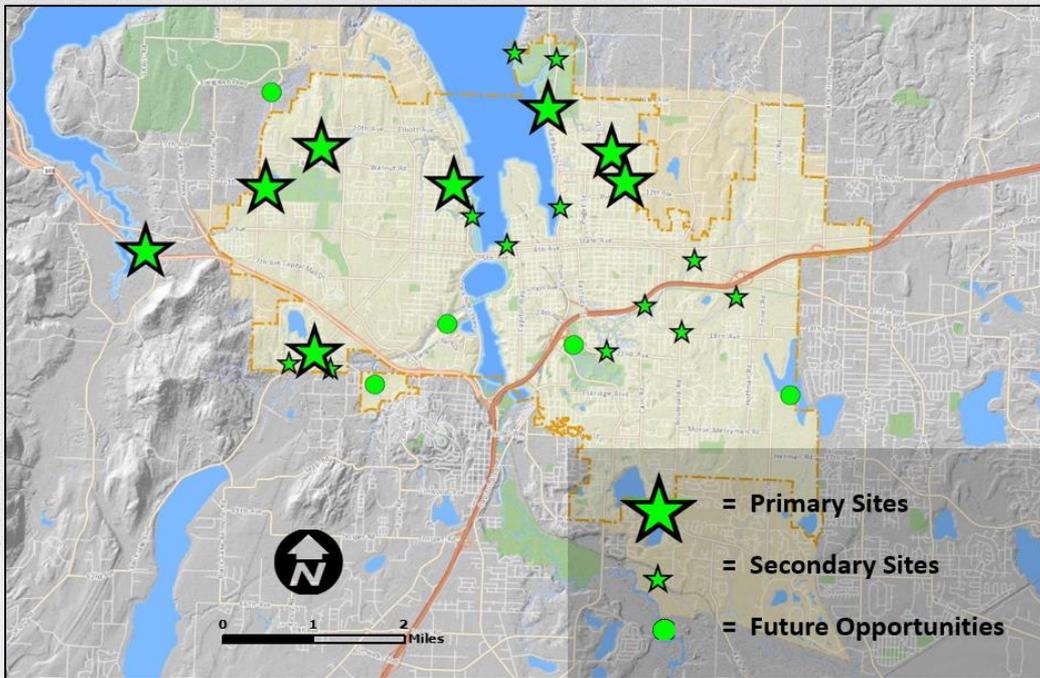
We Educate

- Host more than 100 educational events annually (>1,300 citizens)
- Support education of more than 350 students annually



We Plant

- More than 5,000 trees and shrubs annually
- City owned property (Parks and PW) and others
- Replace invasive species with natives



We Investigate

- More than 100 drainage problems
- Approximately 20 pollution discharges annually



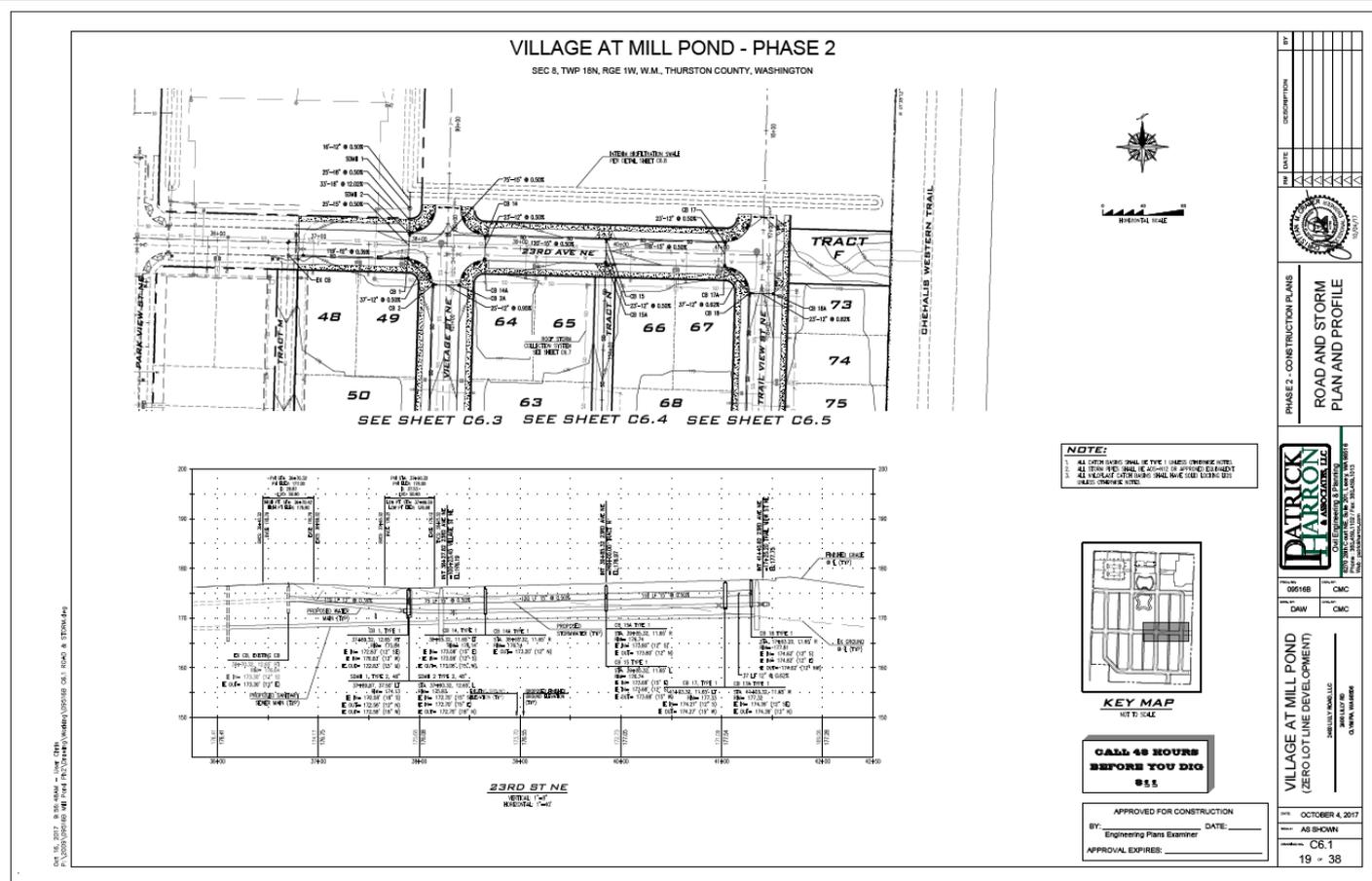
We Inspect

- More than 380 public stormwater management sites annually
- More than 200 private stormwater management sites annually
- More than 760 construction site visits for erosion control



We Review

Approximately 120 Design Plans Annually for Compliance With Stormwater Regulations



We Monitor

- 7 local streams monthly
- Contribute to the regional Stormwater Action Monitoring Program
- Sponsor a low impact development effectiveness study



We Support

- Provide technical expertise to Public Works, CP&D and OPARD
- Fund and coordinate sea level rise planning efforts
- Fund half of the street sweeping program



STORM AND SURFACE WATER PLAN UPDATE

Key Plan Recommendations

Continue Core Services (No reductions recommended)

Key Recommended Enhancement Strategies

- Permanently funding the pilot habitat program started in 2015 (11 strategies)
- Expanding education and outreach efforts (2 strategies)
- Responding to requirements resulting from the Deschutes Total Maximum Daily Load process (3 strategies)
- Planning for anticipated sea level rise (6 strategies)
- Improving the asset management program (5 strategies)
- Modifying the street sweeping program to have a water quality focus (3 strategies)
- Developing a rate structure that provides an incentive to retrofit private stormwater systems to provide higher levels of treatment (1 strategy)

Capital Facilities Plan



Implementing the Plan



Public Hearing

