



# **2019 NPDES Annual Report and Stormwater Management Program Plan**

March 5, 2020



# Clean Water Act



## NPDES Permit Program



### Phase I Permits



### Phase II Permits

# A Citywide Responsibility

## Key Contributors

- Public Works
  - Water Resources
  - Transportation
  - General Services
  - Engineering
  - Fleet & Facilities
- CP&D
  - Planning
  - Permitting
  - Engineering/Building
- Parks
  - Operations & Maintenance



# Permit Requirements


1. Stormwater Planning
2. Public Education & Outreach
3. Public Involvement
4. Mapping
5. Illicit Discharge Detection & Elimination (IDDE)
6. Construction Site Runoff
7. Municipal Operations and Maintenance (O&M)
8. Source Control for Existing Development
9. Compliance with Total Maximum Daily Load (TMDL)
10. Monitoring and Assessment
11. Reporting

# Stormwater Planning

- Coordination with Long-range Plans
- LID Preferred Approach to Site Development
- Stormwater Management Action Plan (SMAP)
  - Receiving Water Assessment
  - Receiving Water Prioritization
  - Identify Priority Catchment Basin

# Public Education and Outreach

- General Awareness
- Behavior Change
- Stewardship

 2019 Public Education and Outreach Summary							
	TOTAL	Action / Stewardship	Education /Class /Workshop	Education / Schools	Public Education/ Partnership	South Sound GREEN	Salmon Stewards
# of events	364	196	21	18	3	94	32
# of attendees	3,092		862	73	173	1,984	
# of volunteers	2,762	1,866	75	522		250	49
# of volunteer hours	5,939	4,130		1,005		704	100
# of citizens reached (+ newsletters)	8,111						

\*Includes Parks stewardship, Stream Team and Environmental Services actions.

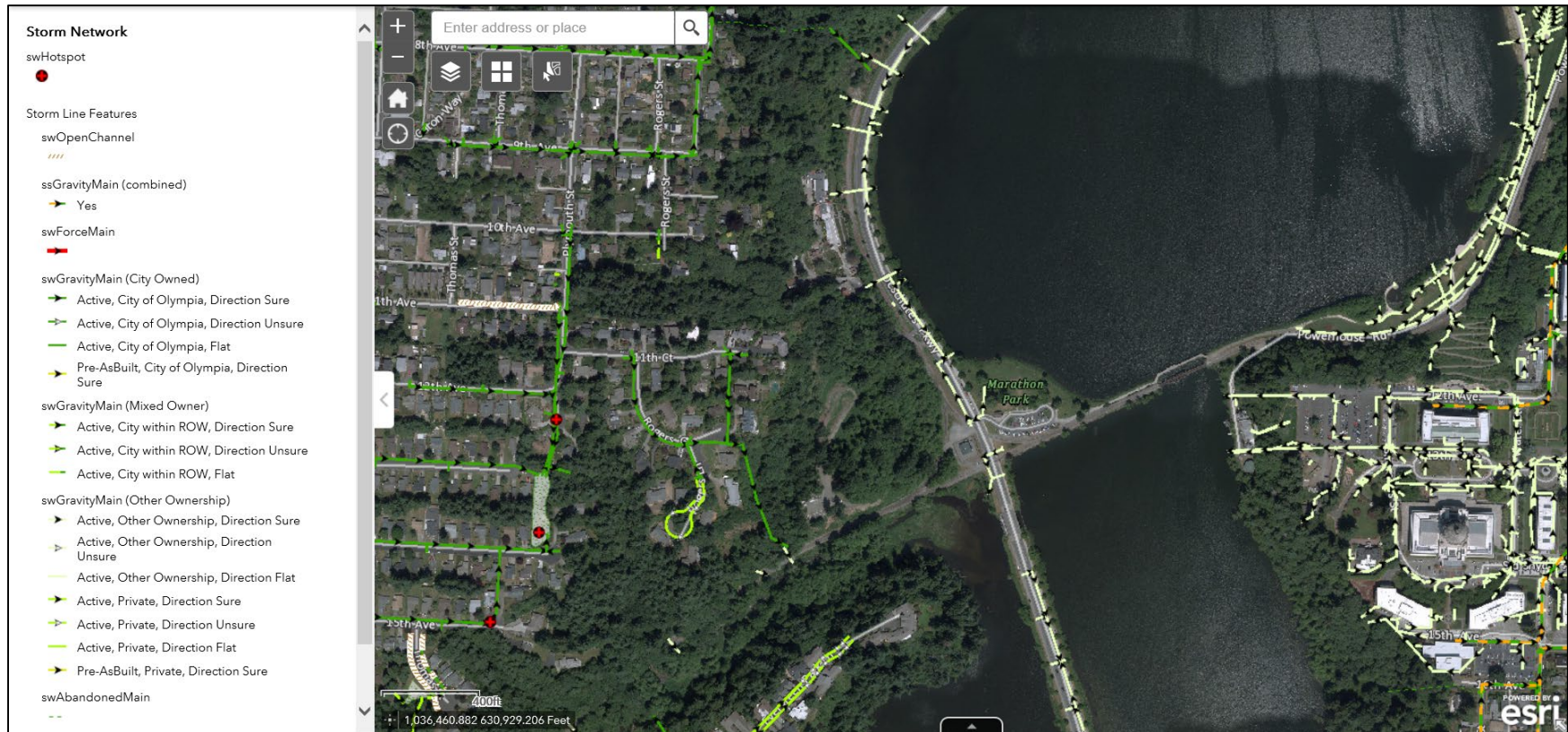
Definitions	
<b>Action/stewardship</b>	Includes water quality and "sense of place"- related citizen monitoring (macro, amphibian, purple martin, forage fish, phytoplankton etc.) invasive plant removal and mapping, restoration planting of native trees and plants, and beach cleanup.
<b>Education / Class/Workshops</b>	Adult/family programming concerning water quality and backyard habitat restoration; including: wildlife/ habitat-related workshops, Marine Creature Mondays, natural yard care beach seining, rain garden lectures, bat lectures and stormwater facility maintenance.
<b>Education/Schools</b>	Water quality and habitat-focused environmental education for Olympia School District, incorporating the South Sound GREEN program.
Other Outreach	
<b>Natural Yard Care</b>	Promoted natural lawn care videos on City and StreamTeam websites and publications. Sent quarterly natural lawn care tip emails to 211 residents.
<b>Stream Team Newsletter/ Website/Facebook/Instagram</b>	In collaboration with other Stream Team jurisdictions, co-produced a quarterly newsletter that is electronically delivered to approximately 2,000 people. 10,450 paper copies are distributed region-wide (approximately 2,325 in Olympia). Co-developed and maintained <a href="#">website</a> , Facebook page and Instagram for Regional Environmental Education Partnership (REEP) aka: Stream Team.
<b>Car Wash Program</b>	Included the <i>Can Clean Cars Clean Streams</i> article in the Stream Team Newsletter summer edition.
<b>Rain Garden Incentives</b>	Provided cost share incentives to Olympia residents to encourage the installation of rain gardens.
<b>Water Resources Through Art Calendar Contest</b>	Developed and distributed 750 - 2019 Water Resources Stewardship Through Art calendars. This calendar raises awareness of stormwater pollution prevention and water conservation best practices. We identified 12 key messages to convey best practices, and invited Olympia middle school students to submit art depicting one of these messages. Artwork was selected and used for the calendar (one for each month of the year) accompanied by the key message depicted. Students and their families received City Council recognition and a pizza party.
<b>Construction Stormwater Pollution Prevention Program (CSWPP)</b>	The CSWPP workgroup met regularly and developed outreach plans using social marketing strategies based on primary audience research conducted in 2018. Developed and produced the <i>Temporary Erosion and Sediment Control Pocket Guide</i> for distribution to construction professionals.
<b>Utility Insert (Five Things)</b>	Articles regarding pet waste, car washing, keeping storm drains clear, natural lawn care, street sweeping, and private stormwater facility maintenance were featured in Olympia's <i>Five Things</i> utility bill insert.

# Public Involvement

- Advisory Councils
- Public Meetings/Hearings
- Watershed Committees
- Participation in developing rate structures



# Mapping





# Illicit Discharge Detection and Elimination (IDDE)

- Prevent, Detect, Trace, and Eliminate Illicit Connections and Illicit Discharges
  - Spill Hotline: 360.753.8333 (PW Dispatch)
  - 20 illicit discharges eliminated during 2019
- Compliance and Enforcement
- Training Field Staff

# Construction Site Runoff

- Drainage Design and Erosion Control Manual for Olympia
- CP&D and PW Coordination
  - Development Plan Review
  - Inspections
  - Compliance & Enforcement
- Training (Erosion Control, LID, SW Design)

# Operations and Maintenance (O&M) Pollution Prevention

- Stormwater System Inspections
  - Spot Checks: “hot spot” list
  - Catch Basins
  - Treatment and Flow Control Facilities
- Stormwater Pollution Prevention Plan (SWPPPs)
  - Public Works Maintenance Center
  - Priest Point Park Maintenance Facility
- Training (Spill Response, Erosion Control, BMPs)

# Source Control

- Ordinance
  - Source Control BMPS
  - Structural BMPs
- Site Inventory
- Site Inspections
- Enforcement
- Training



# TMDL and Monitoring

- Henderson
  - Updated Coordinated Monitoring Plan
- Deschutes
  - EPA approved temperature parameter of the TMDL plan and disapproved others.
  - Track Temperature Reduction Measures



**Deschutes River, Percival Creek,  
and Budd Inlet Tributaries  
Temperature, Fecal Coliform  
Bacteria, Dissolved Oxygen,  
pH, and Fine Sediment  
Total Maximum Daily Load**

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*Water Quality Improvement Report  
and Implementation Plan - FINAL*



December 2015  
Publication no. 15-10-012

# Monitoring and Assessment

- Stormwater Action Monitoring
  - Status and trends receiving waters
  - Effectiveness and source identification studies
- Interlocal Agreement with Thurston County
  - Black Lake Ditch
  - Chambers Creek
  - Indian Creek
  - Moxlie Creek
  - Percival Creek



# Questions

