

# National Pollutant Discharge Elimination System (NPDES) Phase II Permit : *2018 Stormwater Management Program*

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Whatcom County Public Works  
Stormwater/NPDES  
Surface Water Work Session  
March 20, 2018



# OBJECTIVES:

- ❑ Summarize background of the NPDES Phase II Permit and Whatcom County's NPDES Program
- ❑ 2017 Accomplishment Highlights
- ❑ 2018 Task Highlights
- ❑ Adjusted Permit Cycle Overview

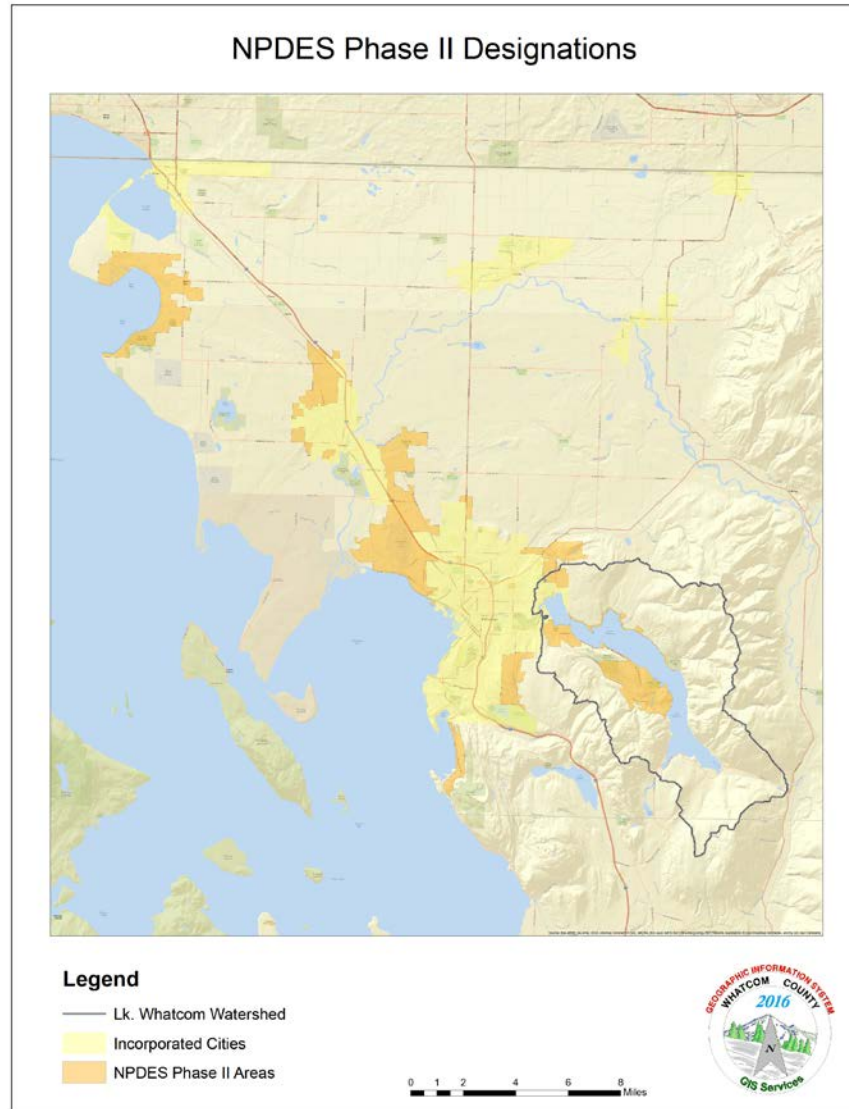


# BACKGROUND

- ❑ The Clean Water Act allows the Environmental Protection Agency (EPA) to authorize the National Pollutant Discharge Elimination System (NPDES) Permit Program to state governments.
  - The Clean Water Act
    - State Water Pollution Control Act
      - Western Washington Phase II Municipal Stormwater Permit
- ❑ “NPDES Phase II Permit” regulates **discharges from a *small Municipal Separate Storm Sewer Systems (MS4s)* into water bodies of the State (e.g. rivers, lakes, etc.)**
  - MS4s are publicly-owned and operated conveyance systems (e.g. roads with drainage systems, catch basins, curbs, gutters, ditches, storm drains, etc.).
  - The Permit lists the allowable and conditionally allowable discharges. Jurisdictions must protect water quality by implementing programs (required by the Permit) that reduce pollutants from MS4 discharges.
  - Whatcom County’s “**point of compliance**” for water quality is where our MS4 enters into a water body of the State.
- ❑ Whatcom County under Permit since 2007
- ❑ 2007-2012 Permit (\*With modification in 2009)
- ❑ 2012-2013 Permit (\*Continuation of the previous year’s permit)
- ❑ 2013-2018 Permit effective August 1, 2013-July 31, 2018
- ❑ 2018-2019 Permit (Continuation of current permit)
- ❑ 2019-2024 Permit (Draft release- Spring 2018; Effective August 1, 2019-July 31, 2024)

# NPDES AREA AND FACILITIES

- Approximate number of MS4 facilities:
  - 2,900 catch basins
  - 110 miles of ditches
  - 360 outfalls
  
- Stormwater Treatment and Flow Control Capital Facilities:
  - 24 Filter Vaults
  - 35 swales/bioretention
  - 3 detention/ retention ponds
  
- Area covers approximately 44,000 acres



# PERMIT PROGRAM AREAS

- Public Education & Outreach
- Public Involvement & Participation
- Illicit Discharge Detection & Elimination (IDDE)
- Controlling Runoff From New Development, Redevelopment, and Construction Sites
- Municipal Operations and Maintenance

## ADDITIONAL REQUIREMENTS

- Compliance With Total Maximum Daily Load Requirements (TMDL)
- Monitoring and Assessment



**VELOCITY CONTROL AND BANK STABILIZATION PROJECT: AIRPORT WAY (ADJACENT TO RUNWAY).**

# TWO-PRONGED APPROACH TO PERMIT COMPLIANCE

- Whatcom County responsible for specific requirements applicable to County-owned MS4 infrastructure
  - Ex: Inspections, maintenance, monitoring, field reconnaissance, employee training, etc.



- Whatcom County responsible for creating a predictable path for private property owners to protect water quality
  - Ex: Educational opportunities (programs or events), adopted ordinances, technical support, etc.

**BIOINFILTRATION SWALE REPAIR AND ENHANCEMENT AT LAKEWOOD LANE AND LAKEWAY DRIVE (BEHIND GENEVA ELEMENTARY SCHOOL)**

# NPDES BUDGET HISTORY

YEAR	APPROXIMATE ANNUAL BUDGET
2011	\$167,000
2012	\$164,000
2013	\$195,000
2014	\$300,000*
2015	\$1.2 M**
2016	\$1.05M
2017	\$997,000
2018	\$1.05M

\*The increase in budget in 2014 was in response to increase programmatic development to comply with new requirements of the 2013-2018 Permit effective August 1, 2013.

\*\*The increase in budget in 2015 initiated the ramping up in level of service needed to accomplish operations and maintenance requirements primarily through additional staffing.

# NPDES PROGRAM STAFFING

2013	2014	2015	2016	2017	2018
<ul style="list-style-type: none"> <li>Manager</li> <li>Sr. Planner</li> </ul>	<ul style="list-style-type: none"> <li>Manager</li> <li>Sr. Planner</li> </ul>	<ul style="list-style-type: none"> <li>Manager</li> <li>Sr. Planner</li> </ul>	<ul style="list-style-type: none"> <li>Manager</li> <li>Sr. Planner</li> <li>Eng. Tech (Inspector)</li> <li>M&amp;O Crew Leader</li> <li>Sr. Road Maintenance Worker</li> </ul>	<ul style="list-style-type: none"> <li>Manager</li> <li>Senior Planner</li> <li>Eng. Tech (Inspector)</li> <li>M&amp;O Crew Leader</li> <li>Sr. Road Maintenance Worker</li> <li>Heavy Equipment Operator</li> <li>Road Maintenance Worker</li> </ul>	<ul style="list-style-type: none"> <li>Manager</li> <li>Sr. Planner</li> <li>2 Eng. Techs (Inspectors)</li> <li>M&amp;O Crew Leader</li> <li>Sr. Road Maintenance Worker</li> <li>Heavy Equipment Operator</li> <li>2 Road Maintenance Workers</li> </ul>
(2 FTE's)	(2 FTE's)	(2 FTE's)	(5 FTE's)	(7 FTE's)	(9 FTE's)
		<b>NEW STAFFING IN 2015</b>	<b>NEW STAFFING IN 2016</b>	<b>NEW STAFFING IN 2017</b>	<b>NEW STAFFING IN 2018</b>
		<ul style="list-style-type: none"> <li>Eng. Tech (Inspector)</li> <li>M&amp;O Crew Leader</li> <li>Sr. Road Maintenance Worker</li> <li>3 Temp Extra Help (summer)</li> </ul>	<ul style="list-style-type: none"> <li>Heavy Equipment Operator</li> <li>Road Maintenance Worker (reassigned from other crew)</li> <li>2 Temp Extra Help (summer)</li> </ul>	<ul style="list-style-type: none"> <li>Eng. Tech (Inspector)</li> <li>Road Maintenance Worker</li> <li>2 Temp Extra Help (summer)</li> </ul>	<ul style="list-style-type: none"> <li>3 Temp Extra Help (summer)</li> </ul>
		<ul style="list-style-type: none"> <li>\$75,000 Contract for LID Code Update</li> </ul>	<ul style="list-style-type: none"> <li>Completed LID Contract December 31, 2016</li> </ul>		



# 2017 ACTIVITY HIGHLIGHTS

## **Public Education & Outreach**

- ❑ Gardening Green: Sustainable Landscaping Series
- ❑ Private Stormwater Facility Maintenance Workshop; 4 inspections completed
- ❑ Coordinated with BBWARM and Whatcom Conservation District on new *Stormwatchers Program*

## **Controlling Runoff from Development**

- ❑ Began implementing Low Impact Development Ordinance (adopted October 2016)

## **Municipal Operations & Maintenance**

- ❑ Annual maintenance of publicly-owned treatment and flow control facilities (Capital Projects)
- ❑ Completed 675 catch basin inspections; performed maintenance on 435
- ❑ Completed 242/368 outfall inspections

# 2018 PLANNED TASKS HIGHLIGHTS

- ❑ Continue Outfall Inventory and Inspection Program
  
- ❑ Expand outreach materials:
  - Capital facility maintenance brochure/fliers
  - Illicit Discharge brochures/fliers
  - Lake Whatcom TMDL
  
- ❑ Continue Sustainable Landscaping: Gardening Green Series
  
- ❑ Continue Private Stormwater Facility Maintenance Inspections
  
- ❑ Identified 10 “small works projects” planned for 2018

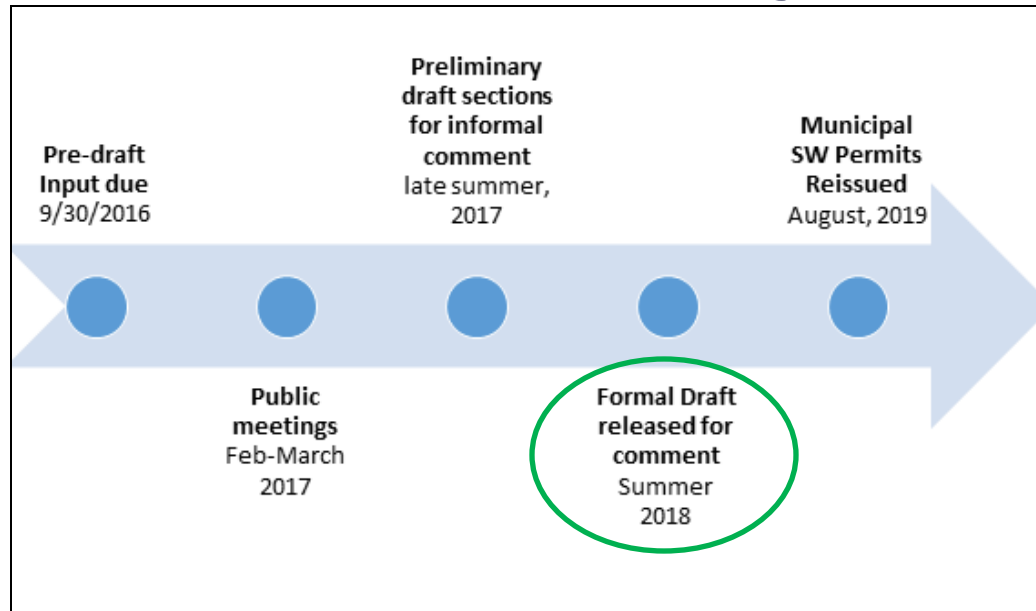
# 2013-2018 PERMIT CYCLE

- Whatcom County is implementing all requirements in the 2013-2018 Permit.

# 2018-2019 PERMIT CYCLE

- In June 2017, the Department of Ecology announced the **one-year extension** of the 2013-2018 Permit. (No additional requirements added.)
- Timeframe: August 1, 2018-July 31, 2019

# 2019-2024 Permit Cycle



Topics of Interest for new Permit:

- Additional requirements on addressing stormwater for businesses, commercial developments, and industrial developments.
- Regulatory schedule for street sweeping and culvert cleaning.

# Questions or comments?

This presentation and the 2018 SWMP are available at: <http://www.npdes.whatcomcounty.org/>

Public comments on the SWMP will be accepted until 5:00 p.m. on Tuesday, March 27, 2018.

Questions and public comments can be directed to:

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(360) 778-6299



**SILVER BEACH CREEK  
BIOINFILTRATION SWALE**



**AIRPORT WAY/ BENNETT  
DRIVE RETENTION/ POND  
MAINTENANCE**