

National Pollutant Discharge Elimination System (NPDES) Phase II Permit : *2017 Stormwater Management Program*

Whatcom County Public Works
Stormwater/NPDES
Surface Water Work Session
March 14, 2017



OBJECTIVES:

- ❑ Summarize background of the NPDES Phase II Permit and Whatcom County's NPDES Program
- ❑ 2016 Accomplishment Highlights
- ❑ 2017 Task Highlights
- ❑ 2018-2023 Permit Cycle



BACKGROUND

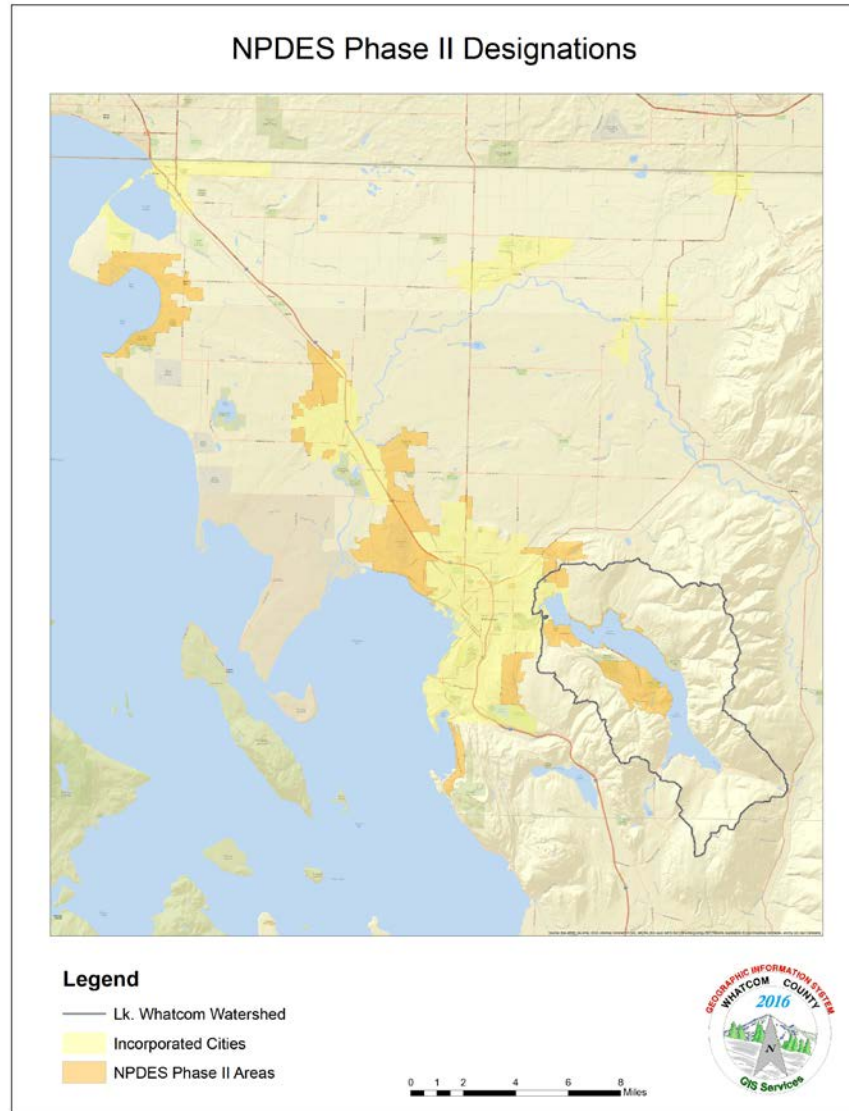
- ❑ The Clean Water Act allows the Environmental Protection Agency (EPA) to authorize the National Pollutant Discharge Elimination System (NPDES) Permit Program to state governments.
 - The Clean Water Act
 - State Water Pollution Control Act
 - Western Washington Phase II Municipal Stormwater Permit

- ❑ “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

NPDES AREA AND FACILITIES

- Approximate number of MS4 facilities:
 - 2,900 catch basins
 - 110 miles of ditches
 - 4,000 culverts
 - 200 outfalls
 - 11 pre-treatment and flow control vaults
 - 17 stormwater filter vaults
 - 10 bioinfiltration and treatment swales
 - 2 detention ponds
 - 1 retention/detention pond
- Area covers approximately 15,000 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

*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
<ul style="list-style-type: none"> 1 Manager 1 Senior Planner 	<ul style="list-style-type: none"> 1 Manager 1 Senior Planner 	<ul style="list-style-type: none"> 1 Manager 1 Senior Planner 	<ul style="list-style-type: none"> 1 Manager 1 Senior Planner 1 Engineering Tech (Inspector) 1 M&O Crew Leader 1 Senior Road Maintenance Worker 	<ul style="list-style-type: none"> 1 Manager 1 Senior Planner 1 Engineering Tech (Inspector) 1 M&O Crew Leader 1 Senior Road Maintenance Worker Heavy Equipment Operator Road Maintenance Worker
		NEW FTE's IN 2015	NEW FTE's IN 2016	NEW FTE's IN 2017
		<ul style="list-style-type: none"> 1 Engineering Tech (Inspector) 1 M&O Crew Leader 1 Senior Road Maintenance Worker 3 Temp Extra Help (summer) 	<ul style="list-style-type: none"> Heavy Equipment Operator Road Maintenance Worker (reassigned from other crew) 2 Temp Extra Help (summer) 	<ul style="list-style-type: none"> 1 Engineering Tech (Inspector) Road Maintenance Worker 2 Temp Extra Help (summer)
		<ul style="list-style-type: none"> \$75,000 Contract for LID Code Update 	<ul style="list-style-type: none"> Continued contract ending December 31, 2016 	

2016 ACCOMPLISHMENT HIGHLIGHTS

- ❑ Contracted for two Gardening Green: Sustainable Landscaping Series (one for BBWARM residents; one in Bellingham open to all Whatcom County residents)
- ❑ Contracted one Private Stormwater Facility Maintenance Workshop; 11 inspections completed
- ❑ Adopted Low Impact Development and requirement for annual inspection of treatment and flow control BMPs
- ❑ Annual maintenance of publicly-owned treatment and flow control facilities (Capital Projects)
- ❑ Completed 659 catch basin inspections; ~200 remaining inspections to be done beginning of 2017 to complete the two-year inspection cycle (except every year for Lake Whatcom)

2017 TASK HIGHLIGHTS

- ❑ Outfall Inventory and Inspection Program
- ❑ Implement Low Impact Development regulations & annual inspections of treatment and flow control BMPs
- ❑ Begin another round of catch basin inspections for the every two year schedule, with annual schedule for Lake Whatcom watershed
- ❑ 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
- ❑ Continue technical support on small works projects

FINAL STRETCH OF 2013-2018 PERMIT CYCLE

Completed requirements with specific deadlines in current Permit Cycle:

- ❑ Measure the understanding and adoption of target behaviors (regarding stormwater problems) by specific audiences by February 2, 2016
- ❑ Field screen at least 40% of regulated MS4 for illicit discharges by December 31, 2017, and on average 12% each year thereafter
- ❑ Implement the requirement for an annual inspection for all developments approved for treatment and flow control BMPs. (Adopted October 22, 2016)
- ❑ Implement Low Impact Development (LID) Ordinance by December 31, 2016. (Adopted October 22, 2016)
- ❑ Update and implement maintenance standards for stormwater facilities to the 2012 Stormwater Management Manual for Western Washington by December 31, 2016
- ❑ Inspect all catch basins at least once by August 1, 2017, and every two years thereafter

What's left to do?:

- ❑ If necessary, amend IDDE Ordinance to meet requirements by February 2, 2018.

2018-2023 PERMIT CYCLE- WHAT TO EXPECT

- ❑ Jurisdictions and other agencies and organizations giving Ecology input on current requirements, and asking for clarification of potential new requirements
- ❑ Ecology recently held workshops on potential new requirements.
- ❑ Lake Whatcom TMDL included in Appendix 2 of the Permit
- ❑ Capacity grants unlikely
- ❑ Draft of Permit will be out spring of 2018

Topics of Interest for new Permit:

- ❑ Possibly additional requirements on addressing stormwater for businesses, commercial developments, and industrial developments
- ❑ Regulatory schedule for street sweeping and culvert cleaning

Questions?

This presentation and the DRAFT 2017 Stormwater Management Program (SWMP) document will be made available for public comment until 5:00 p.m. on Monday, March 27, 2017 at: <http://www.npdes.whatcomcounty.org/home>.

Comments can be directed to:
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Airport Way/
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retention/
detention
pond
maintenance

