

Storm and Surface Water Master Plan: Operational/Programmatic Elements

September 28, 2015 Sequim City Council



Presented by:

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City of Sequim

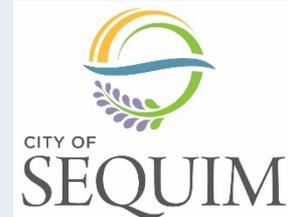
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Stormwater Stewardship

Our Water, Our Future!



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Outline

- Background
- What is a Stormwater Program Evaluation?
- Tier A
- Tiers B and C
- Additional Staffing and Funding Needs
- Next Steps and Questions

Background: Organizational Values

- **Integrity**
- **Stewardship:** We embrace the thoughtful and responsible care of the community and its resources
- **Positive Attitude**
- **Respect**
- **Teamwork**
- **Customer Service**
- **Continuous Learning**



City of Sequim Mission, Vision and Values Statements

Mission Statement

We provide quality, cost-effective services and facilities to build an exceptional community and a great place to live.

Organizational Values

INTEGRITY – We are entrusted by the community to do the right thing for the right reason even when no one is looking.

STEWARDSHIP – We embrace the thoughtful and responsible care of the community and its resources.

POSITIVE ATTITUDE – We choose to believe in the importance of what we do for our community. We enjoy our work, and we expect the best.

RESPECT – We treat those we serve and each other with courtesy, dignity, and understanding because every person matters.

TEAMWORK – We are committed to a spirit of cooperative effort within our organization and community as we work towards shared goals.

CUSTOMER SERVICE – We provide responsive and personalized quality services by listening to our customers and anticipating needs.

CONTINUOUS LEARNING – We are committed to developing our talents, skills and competencies.

Vision Statement

We will achieve the highest level of employee and customer satisfaction by:

- Living our organizational values
- Being proactive and highly productive
- Demonstrating effective leadership at all levels
- Encouraging creative problem solving
- Adapting to changing community needs and environment

City of Sequim Business Hours: 7:30 a.m. to 4:00 p.m.

Website: www.sequimwa.gov



Background: Storm & Surface Water

- Program status: No formal program (*see video*)
- Regulatory status:
 - Not a NPDES municipal stormwater permittee
 - Other regulatory requirements still apply:
 - State surface water and groundwater quality standards (303d list, etc.)
 - UIC requirements
 - Species and habitat protection (ESA, etc.)
 - And others

Background: Components of the Plan

1. Introduction
2. Background
3. Known Stormwater Problems and Recommended Solutions
- 4. Stormwater Program Evaluation and Recommendations**
5. Plan Implementation
6. Conclusions
7. Appendices

What is a Stormwater Program Evaluation?

- Identifies program elements
- Recommendations to address problems
- Staffing, Funding, Equipment
- Prioritization
- Outlines a plan for the future

Stormwater Program Elements

- Stormwater Program Elements:
 - Capital Facilities
 - Inspection Program
 - Water Quality Compliance
 - Stormwater System O&M
 - Asset Management
 - Pollution Source Detection and Elimination
 - Public Education and Involvement
 - Species and Habitat Protection
 - Stormwater Design Guidance and Plan Review

Tier Recommendations

- Tier A (Key Recommendations) – needed to meet minimum standards
- Tier B – likely to be mandated
- Tier C – proactively anticipating and reducing risk

Tier Recommendations

SW Program Element	Tier A	Tier B	Tier C
Capital Facilities	<i>Group 1, 2, and 3</i>		
Inspection Program	H, M, L	H, M, L	H, M, L
Water Quality Compliance	H	H, M	H, M, L
Stormwater System O&M	H	H, M	H, M, L
Asset Management		M	M
Pollution Source Detection and Elimination		H	H, M
Public Education		H	H, M, L
Species and Habitat Protection			H
Stormwater Design and Plan Review			H, M, L

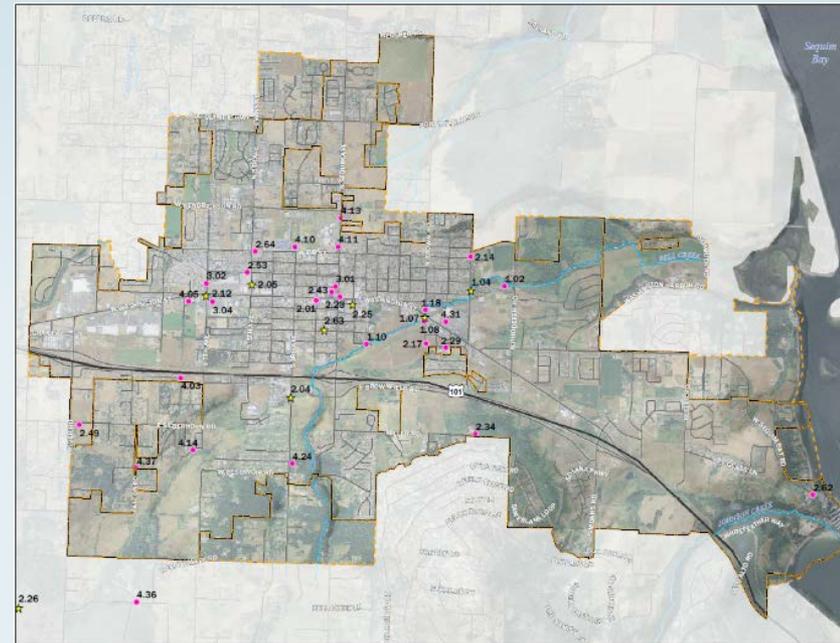
Program Gaps: Capital Facilities

- Stormwater flooding and water quality problems caused by:
 - Flow from upland development
 - Misconnected street drains
 - Flooded irrigation infrastructure
 - Aging stormwater infrastructure
 - Unmanaged runoff from non-City-owned properties
 - Direct stormwater discharge to surface water bodies



Key Recommendations: Capital Facilities

- Institute a stormwater Capital Facility Program to address flooding and water quality issues within the city
- 10 CIP projects identified
 - Grouped into CIP Groups 1, 2, and 3 (discussed at the August 24 City Council meeting)



Program Gaps: Inspection Program

- Current program is not consistent with code language (SMC 13.108.110-190)
 - Regulates maintenance, operation and repair of private stormwater drainage systems and BMPs
 - The director is authorized to develop an inspection program for stormwater facilities
 - Requires the director to establish a maintenance schedule for private facilities and inspect these facilities annually



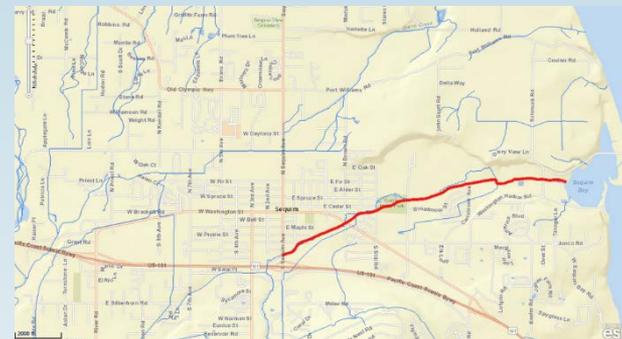
Key Recommendations: Inspection Program

- Institute a stormwater facility inspection program
- Develop maintenance standards for non-City-owned stormwater facilities



Program Gaps: Water Quality Compliance

- Over 150 UIC wells not yet registered with Ecology
- Ecology's 2012 303(d) list of impaired waters (Category 5) includes:
 - Bell Creek: fecal coliform bacteria, dissolved oxygen, and B-IBI
 - Johnson Creek: fecal coliform bacteria
 - Sequim Bay: fecal coliform bacteria and dissolved oxygen



303(d) listings along Bell Creek.



303(d) listings along Johnson Creek.

Key Recommendations: Water Quality Compliance

- Develop and implement a pollution control plan for waterbodies currently on the 303(d) list of impaired waters
- Develop and implement water quality and flow monitoring programs
- Meet UIC registration and assessment requirements



Program Gaps: Stormwater System O&M

- Maintenance issues with irrigation ditches also used for stormwater conveyance
- The GIS database (and/or other programs) should be used to document inspection and maintenance activities
- The City currently does not have sufficient staff support for performing annual catch basin inspections.



Key Recommendations: Stormwater System O&M

- Establish maintenance agreements with irrigators and other stormwater management partners
- Add maintenance and inspection information to the storm system map and database in GIS
- Increase staff support (seasonal and/or full time) for inspecting and cleaning stormwater facilities



Tier Recommendations

SW Program Element	Tier A	Tier B	Tier C
Capital Facilities	<i>Group 1, 2, and 3</i>		
Inspection Program	H, M, L	H, M, L	H, M, L
Water Quality Compliance	H	H, M	H, M, L
Stormwater System O&M	H	H, M	H, M, L
Asset Management		M	M
Pollution Source Detection and Elimination		H	H, M
Public Education		H	H, M, L
Species and Habitat Protection			H
Stormwater Design and Plan Review			H, M, L

Gaps and Recommendations: Asset Management

Tiers B and C

■ Gaps

- City does not have an asset management program

■ Recommendations

- Improve the existing asset inventory by updating stormwater system components in GIS with current conditions.

	A	B	C
8	ID	A2.03	
9	Street	N 5th	
	Cross street/	Alder, SE corner	
10	Location		
	Checked/	11/13/2013; vac'd, jetted CBs and	
	Maintained	drywell.	
11	Comments	Note concrete chunk at end of inlet pipe may cause clogging.	
12			
13			
14	ID	A2.06	
15	Street	N 7th	
	Cross street/	Washington, SW corner (in front of	
	Location	McDonald's)	
16	Checked/	Ty / Josh / Clint have dates	
	Maintained		
17	Comments	Undersized perf pipe?	
18			
19	ID	A2.12	
20	Street	S Brown	
	Cross street/	Washington, SW corner as well as	
	Location	south along Brown	
22	Checked/	Bell Creek backs up	
	Maintained		
23	Comments	(also listed under Creek issues)	

Gaps and Recommendations : Tiers B and C

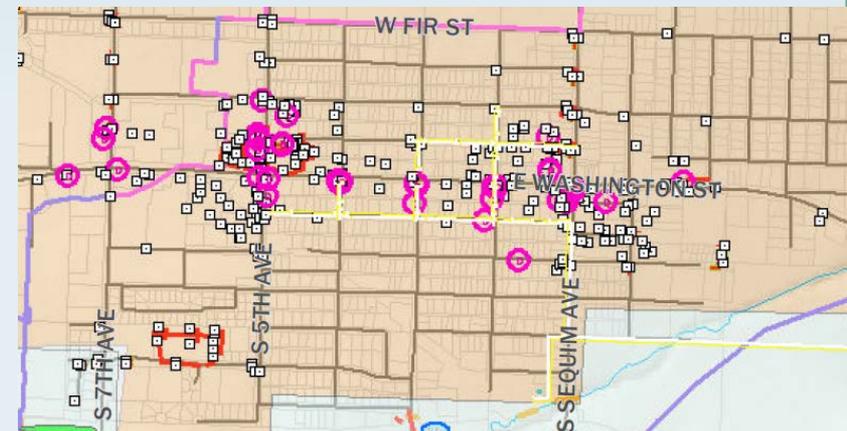
Pollution Source Detection and Elimination

■ Gaps

- The City should have a program for actively identifying pollution sources.
- The City's GIS for storm system components needs to be updated and maintained.

■ Recommendations

- Develop and implement a pollution source tracking program
- Continue to update the storm system map and database as needed.



Gaps and Recommendations: Public Education and Involvement

Tiers B and C

■ Gaps:

- Lacking educational material for developers, builders, general public, and businesses.
- Need to coordinate with other entities that conduct water quality outreach.

■ Recommendations:

- Additional guidance (e.g., factsheets or brochures) for developers and builders.
- Develop outreach materials for residents, landscapers, and property managers/landowners.
- Participate in regional conferences on stormwater and surface water management.



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Gaps and Recommendations: Species and Habitat Protection

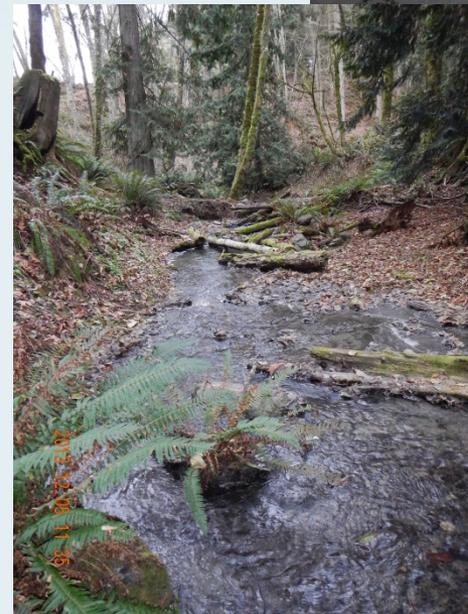
Tiers B and C

■ Gaps:

- No current species and habitat protection program
- Threatened species of fish in Bell and Johnson Creek

■ Recommendations:

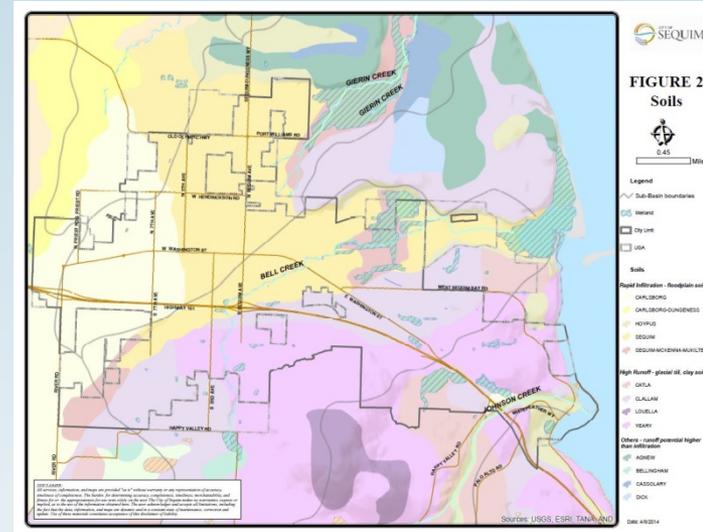
- Participate in Dungeness River Management Team (DRMT) routine meetings and with Water Rule implementation groups



Gaps and Recommendations: SW Design Guidance and Plan Review

Tiers B and C

- Gaps:
 - Lacking stormwater guidelines specific to the City's hydrology, soils, and climate.
- Recommendations:
 - Develop an amendment to the 2012 SWMMWW that provides guidelines and requirements specific to the City
 - Develop a consistent stormwater plan review process



Additional Staffing and Funding Needs

SW Program Element	Tier A	
	Funding	Staffing
Capital Facilities	\$504,500 (Group 1)	--
Inspection Program	--	0.12 FTE
Water Quality Compliance	\$100,000	0.20 FTE
Stormwater System O&M	--	1.39 FTE
Asset Management	--	--
Pollution Source Detection and Elimination	--	--
Public Education	--	--
Species and Habitat Protection	--	--
Stormwater Design and Plan Review	--	--
Total	\$604,500	1.71 FTE*

***1.71 FTE ~ \$128,250 S&B**



Additional Staffing and Funding Needs

SW Program Element	Tier B		Tier C	
	Funding	Staffing	Funding	Staffing
Capital Facilities	\$504,500 (Group 1)	--	\$754,500 (Group 1 & 2)	--
Inspection Program	--	0.12 FTE	--	0.12 FTE
Water Quality Compliance	\$148,000	0.27 FTE	\$158,000	0.29 FTE
Stormwater System O&M	\$15,000	1.54 FTE	\$281,000	1.54 FTE
Asset Management	\$6,000	0.5 FTE	\$6,000	0.5 FTE
Pollution Source Detection and Elimination	\$4,000	0.11 FTE	\$24,000	0.3 FTE
Public Education	\$8,000	0.17 FTE	\$39,000	0.29 FTE
Species and Habitat Protection	--	--	--	0.04 FTE
Stormwater Design and Plan Review	--	--	\$40,000	0.27 FTE
Total	\$685,500	2.72 FTE*	\$1,302,500	3.37 FTE*

***2.72 FTE ~ \$204,000 S&B, 3.37 FTE ~ \$252,750 S&B**



Next Steps

- Develop funding strategy options (staff) Fall 2015
- Council review of funding strategies Winter 2016
- Final Storm & Surface Water Master Plan Winter 2016
- Plan implementation, ordinance review Spring 2016

Questions?

Please let us know ASAP if you have concerns about the Operational priorities presented here in Tiers A, B and C.

