Storm & Surface Water Plan Update

Land Use and Environment Committee

November 16, 2017

Storm and Surface Water Plan Update

Agenda

- **The What**:
  - Our mission & responsibilities
- **The Why**:
  - Regulatory environment
  - Flooding challenges
  - Water quality challenges
  - Aquatic habitat challenges
- **January 2018….The How**:
  - Current core services
  - Recommended enhancements
  - Financial Plan

Storm and Surface Water Plan Update

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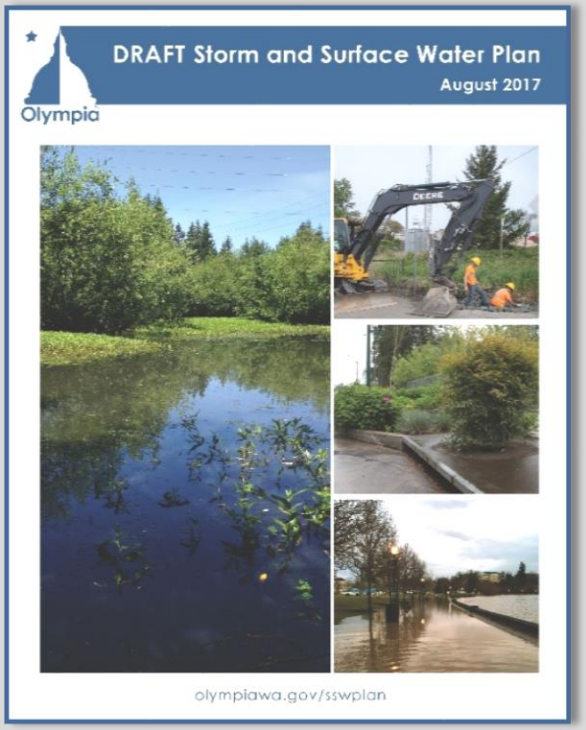
- The **"What"** Chapters:
  - Chapter 1 – Introduction
  - Chapter 2 – Context and Trends
  - Chapter 3 – Surface Water Management
  - Chapter 4 – Built and Natural Infrastructure
- The **"Why"** Chapters
  - Chapter 5 – Legal and Policy Framework
  - Chapter 6 – Flooding
  - Chapter 7 – Water Quality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



What is the Utility Responsible To Do?

Responsibilities:

- Flooding
- Water Quality
- Aquatic Habitat

What is the Utility Responsible To Do?

Storm and Surface Water Plan Goals

Goal 1: Reduce the frequency and severity of flooding so hazards are eliminated.

Goal 2: Improve surface water quality.

Goal 3: Protect, enhance, and restore aquatic habitat functions provided by wetlands, streams, lakes, marine shorelines, and riparian areas.

Goal 4: Ensure reliable functioning of the built and natural stormwater infrastructure.

Goal 5: Manage Utility finances responsibly and recover costs equitably.

What is the Utility Responsible To Do?

Storm and Surface Water Infrastructure

Built Facilities

- 160 miles underground pipe
- 7,400 storm drains
- 1,400 manholes
- 167 flow control structures
- 129 treatment facilities
- 20 miles combined sewer/storm pipe

Natural Environment

- Swales
- Streams
- Rivers
- Lakes
- Wetlands

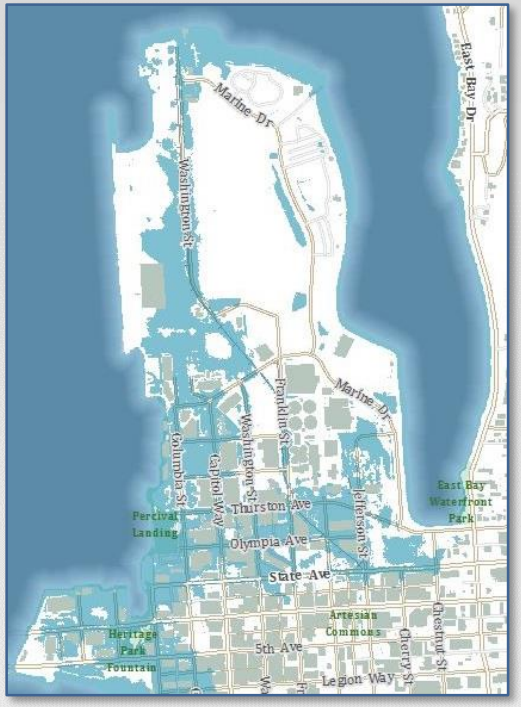
Why Do We Do What We Do?

Municipal Stormwater Permit Requirements

- Keep an updated Stormwater Management Program Plan.
- Maintain an education and outreach program for source control.
- Maintain an inventory and mapping of the stormwater infrastructure.
- Implement an Illicit Discharge Detection and Elimination (IDDE) program.
- Maintain a spill hotline.
- Implement and enforce the Drainage Design and Erosion Control Manual.
- Inspect and enforce erosion and sediment control.
- Annually inspect and maintain all city-owned stormwater facilities.
- Annually inspect and enforce maintenance of private stormwater facilities.
- Inspect (and clean) all city-owned catch basins on a 2-year cycle.
- Comply with the TMDL-specific requirements.
- Contribute to the Regional Stormwater Monitoring Program.
- Report to Ecology to document compliance with permit requirements.

General Challenges

- Equitable and Predictable Rates and Fees
  - Challenging in a complex regulatory environment.
- Legacy Development
  - Infrastructure was developed before stringent regulations.
  - Retrofits required, but more challenging than new construction.
- Reliance on Choices by Individuals
  - How the community maintains cars and lawns, increases impervious surfaces and removes backyard trees impacts our work.
- Land Development Pressure
  - Increased density creates increased impervious surfaces.
- Climate Change and Sea Level Rise
  - More frequent and intense winter precipitation.
  - Increasing investment in infrastructure required.



Flooding Challenges

Asset Management

- To increase understanding of infrastructure and its condition requires staff resources

Low Impact Development (LID)

- Increase in number of facilities with LID regulations
- Increase in inspections and maintenance as a result

Water Quality Challenges

Increasing Permit Requirements

- NPDES Municipal Stormwater Permit requirements changing.
- Requirements could result in less staff time available for other work.

Reliance on the Public for Nonpoint Pollution Prevention

- Nonpoint pollution has no clear single source.
- Challenging to educate people and change behaviors.

Aquatic Habitat Challenges

Multiple Public/Private Ownership

- The Utility must rely on voluntary programs to encourage stewardship on private properties.

Habitat Fragmentation

- Improving habitat on large tracts of land requires strategies that work across the landscape.

Legacy Impacts of Urban Development

- Maintaining functional habitat in an urban environment requires creativity and flexibility.

Tonight's Take Away

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  - Not just to Meet a Regulatory Requirement
  - Project Team Passionate About Implementation
- Collaborative Development Process
  - Planning, Engineering and Operations
  - In-house Writing Results in Ownership
  - Project Team Considered Complete Responsibilities
- Be Back in January
  - Our Current Core Services
  - Recommended Enhancements
  - Financial Plan

Next Steps

- Draft Plan Released for Public Review and Comment
  - Mid-November 2017
  - Through mid-December 2017
- Utilities Advisory Committee
  - January 4, 2018 – Review of Public Comment and Final Recommendation
- Land Use and Environment Committee
  - January 18, 2018 – Review of Plan Recommendations and Public Comment
  - Recommended Action
- Public Hearing
  - February 2018

Questions and Discussion

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