

December 7, 2023 UAC Review Draft Staff Proposed Revisions

Rainfall, Runoff, and Surface Water

The mission of the Storm and Surface Water Utility is to provide services that minimize flooding, maintain or improve water quality, and protect or enhance aquatic habitat. ~~The g~~Goals and policies that protect water quality and aquatic habitat ~~on from a City-wide scale~~ are located in the [Natural Environment](#) chapter. This Utility ~~leverages opportunities to protect~~ ~~works on reconciling conflicts between protecting~~ our 'built' landscape from flooding ~~while enhancing and conservation of our~~ water quality and aquatic habitat.



Porous pavement, bioretention and constructed wetlands demonstrate stormwater options for low impact development at Yauger Park.

The Storm and Surface Water Utility maintains more than ~~166130~~ miles of underground pipe, more than 7, ~~6900~~ storm drains, and ~~985~~ stormwater ponds that filter stormwater runoff from roads and rooftops before it reaches our streams and Budd Inlet. The "surface water" for which Olympia's Storm and Surface Water Utility shares responsibility includes nine streams within the City, four lakes, four large wetlands, and about six miles of marine shoreline.

The Stormwater Utility is guided by the [Storm and Surface Water Plan](#) [↗](#) which outlines its challenges, goals, implementation tools and financial implications. Increasingly, this Utility is affected by state and federal regulatory requirements such as the [Western Washington Phase II Municipal Stormwater Permit](#) [↗](#).



Kayakers in Budd Inlet as seen from Percival Landing.

Olympia's growth and urbanization continues to have placed increasing demands on our natural systems. Major challenges facing the Storm and Surface Water Utility in upcoming years include:

- **Managing the impact of increasing stormwater runoff.** The cumulative impacts of additional paving, ~~and~~ development and non-point pollution sources will increase pollutants in streams and Puget Sound, decrease infiltration to groundwater, and reduce ~~forest~~ habitat. Impacts from increased rainfall intensity as a result of climate change will exasperate the difficulty of managing stormwater.
- **Preparing for sea level rise.** We will need to continue to support the a coordinated effort to protect our downtown from the flooding that resulted from the completion of the 2019 Olympia Sea Level Rise Response Plan including responding to tidal flooding events. ~~could result from a sea rise scenario of 50 inches by 2100.~~
- **Keeping up with new technology.** As innovative approaches to treating and controlling stormwater rapidly evolve, the Storm and Surface Water Utility must evaluate the effectiveness and long-term implications of new technologies, while also managing risks associated with potential failures.
- **All water has value.** A City-wide approach (including the development community) will be required for the integrated management of all water systems, including stormwater. Taking such an approach will have positive implications for Olympia's long-term sustainability.
- **Increasing regulatory requirements.** To discharge stormwater into

"waters of the United States" the City must obtain and meet requirements of its current a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Discharge Permit (Permit). Permit requirements are continually being expanded with each Permit reissuance. This has resulted in significantly less discretionary staff time and budget available for other aspects of the Utility's work. Meeting growing permit requirements is a shared City-wide responsibility that requires substantial Utility staff time to coordinate with a limited amount of resources.

Goals and Policies

GU10 The frequency and severity of flooding are managed reduced and hazards are eliminated, except during major storm events.

PU10.1 Improve stormwater systems in areas that are vulnerable to flooding.

PU10.2 Emphasize the importance of emergency preparedness.

PU10.3 Evaluate the structural integrity of aging stormwater pipes and repair as needed.

PU10.4 Inspect and maintain private and public stormwater systems. ~~to identify required maintenance and repairs.~~

PU10.5 Inventory ~~and inspect~~ City-owned culverts, ditches, and catch basins and perform maintenance if needed.

PU10.6 Provide technical assistance to private stormwater system owners and ensure they maintain their private stormwater systems~~that private pipe and pond systems are maintained.~~

PU10.7 Prioritize underserved and overburdened communities when developing solutions to flooding.

~~GU11 The City uses best available information to implement a sea level rise management plan that will protect Olympia's downtown.~~

~~PU11.1 Evaluate different scenarios for sea level rise, including varying magnitudes and time horizons, and develop a progression of adaptation and response actions for each scenario.~~

~~**PU11.2** Develop plans, cost estimates and financing options for addressing sea level rise that include regulatory, engineering and environmentally sensitive solutions.~~

~~**PU11.3** Maintain public control of downtown shorelines that may eventually be needed to help manage flood water.~~

~~**PU11.4** Incorporate sea level rise planning into the design of public and private infrastructure where needed.~~

~~**PU11.5** Use the best available science and the experiences of other communities in formulating plans for sea level rise.~~

~~**PU11.6** Partner with government entities and other key stakeholders, such as, the federal government, State of Washington, LOTT Clean Water Alliance, Port of Olympia, Squaxin Island Tribe, downtown property owners, businesses and residents, environmental groups, and other interested parties.~~

~~**PU11.7** Engage the community in a discussion of various sea level rise scenarios, how the City will respond to lessen the impact, and what the costs would be.~~

~~**PU11.8** Require development to incorporate measures, such as higher finished floor elevations, that will reduce risks and avoid future costs associated with rising sea levels; and to encourage acknowledgment of such risks by state and federal agencies.~~

GU11 The Utility considers the interrelationship and complexity of its three missions to manage flooding, improve water quality and protect and enhance aquatic habitat in its decisions and involves other City departments in this effort.

PU11.1 Develop a priority ranking system for capital projects that balances the Utility's three missions: flooding, water quality and habitat. Equity will be part of the ranking criteria.

PU11.2 Plan and implement programs and actions that can effectively achieve equitable stormwater management, urban forestry, open space and water quality objectives.

PU11.3 Complete and maintain watershed or basin plans for all areas of the City to guide management and prioritization. Address water quality, habitat,

stormwater runoff, flooding issues, and service equity.

PU11.4 Consider a program of retrofitting existing streetscapes with water quality and quantity stormwater system improvements to minimize pollution from roadway runoff to natural drainage systems and the waters of Puget Sound.

PU11.5 Effectively manage the City's existing municipal separate storm sewer system in a manner that manages flooding, improves water quality and protects the natural environment.

PU11.6 Implement a Capital Improvement Program that maintains and improves the municipal separate storm sewer system in a manner that enhances and protects the City's natural environment, mitigates flooding problems, improves water quality, promotes a reliable and safe transportation network and provides the community a safe and healthy place for living, working and recreating.

PU11.7 Foster City partnerships with public, private, and non-profit agencies and groups and encourage them to help identify and evaluate new low impact development and green infrastructure approaches. Note: Pulled from the current Natural Environment chapter.

PU11.8 Increase the use of low impact and green infrastructure methods through education, technical assistance, incentives, regulations, and grants. Note: Pulled from the current Natural Environment chapter.

PU11.9 Prioritize Utility land purchases when there are opportunities to make connections between healthy systems; for example, land parcels in a stream corridor; those that facilitate future water quality retrofits or protect existing aquatic ecological function. Note: Pulled from the current Natural Environment chapter with modifications as highlighted.

PU11.10 Improve programs and management strategies designed to prevent and reduce contamination of roadway runoff and other sources of stormwater. Note: Pulled from the current Natural Environment chapter.

PU11.11 Investigate the role Community-Based Public-Private Partnerships could play to incentivize investments in stormwater solutions that ensure community co-benefits including, but not limited to, water quality and habitat improvements.

PU11.12 Investigate the feasibility of developing an in-lieu mitigation program that involves the restoration, establishment, enhancement and/or preservation of aquatic resources and results in stormwater management.

GU12 City departments work collaboratively to maintain and document compliance with the Municipal Stormwater Permit.

PU12.1 The Utility effectively communicates and coordinates the complex City-wide responsibilities of the Municipal Stormwater Permit to other City departments.

PU 12.2 The Utility reviews development plans to ensure compliance with the Municipal Stormwater Permit.

PU 12.3. The Utility manages the compilation of essential City-wide documentation required for Municipal Stormwater Permit report submissions.