2018-2023 SBP Action Plan Update

Action Plan Title: Sanitary Sewer Capacity (#6)

1. Short summary of the project/program

Part 1: Summary of Project (Original Scope)

This action plan increases funding to solve sanitary sewer capacity problems. This increase is needed to help SPU meet performance based regulatory requirements and respond to a changing environment. Capacity problems are becoming increasingly challenging as we remedy the problems from past development, deal with increased urbanization and density, and react to climate change. In order to project the required investment SPU has identified the highest priority projects based on previous sewer system planning, known problem locations, customer reports of problems, and wastewater business cases documenting a defined need.

Part 2. Targeted Commitments & Actuals (2018-19)

Planned – Baseline, 2018-19	Actual				
City-wide capacity analysis of the wastewater system	The Wastewater System Analysis (WWSA) was completed 12/31/2019 as planned. The citywide analysis includes prioritized areas at highest risk of limited sewer capacity.				
Dayton Ave SSO & Drainage Improvements (Broadview)	On hold due to budget cuts in 2017. WWSA's new view of sanitary sewer capacity risk areas show this as a medium priority problem and programing will be done as part of the Integrated System Plan.				
Pearl Street DWW Improvement Project (Beacon Hill)	Currently in construction				
 The 2017 Sanitary Sewer Overflow Capacity Projects Package, options analysis phase work, including the following problem locations: Harvard & Roy 8th Ave NE & NE 55th St DWW Imp 24th & Harrison Sewer Capacity 	Options analysis not started for these projects due to resource constraints and WWSA's new view of sanitary sewer capacity risk areas which could indicate that these might not be the highest priority areas				
The baseline also assumes one new sanitary sewer capacity per year, 2020-2023, to enter options analysis phase, and very limited funds for construction of two smaller sewer capacity projects by 2023.	N/A, planned for 2021-23				
Planned – Action Plan, 2018-19	Actual				
2017 SSO Capacity Projects package, design start 2018, construction start 2019 (the baseline only includes funding for options analysis, not for design and construction)	Options analysis deferred for these projects due to resource constraints and WWSA's new view of sanitary sewer capacity risk areas				
Design and construction of two to four sanitary sewer capacity projects over the period from 2020 through 2023. Half would be expected to start by 2023 but complete construction later.	N/A, planned for 2021-23				

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Part 3. Financial Plan & Actuals for 2018-2019.

	2018	2018	2019	2019	2020	2021	2022	2023
		Actuals		Actuals				
O&M (Non-		N/A		N/A				
Labor) Budget	N/A		N/A		N/A	N/A	N/A	N/A
Capital Budget	\$6,984,590	\$2,481,059	\$16,058,452	\$2,383,710	\$1.83M	\$8.96M	\$9.0M	\$9.0M
Action Plan								
Budget						\$4M	\$16.5M	\$16.5M

Note: The above summary illustrates both base funding (not part of this action plan) and the anticipated increased level of fund in 2021-2023 (included in the original action plan).

2. Have there been any significant changes in scope or assumptions since this action plan was approved in 2017? If so, please describe.

Completion of the WWSA at the end of 2019 presents a significant opportunity for the sanitary sewer capacity program. The WWSA has established a solid planning basis for future sewer capacity spending through a citywide technical analysis of wastewater system capacity as well as targeted community outreach. The technical analysis included a flow monitoring program of more than 100 meters around the city as well as detailed hydrologic and hydraulic modeling of the city's entire sewer system. The outreach effort expanded SPU's understanding of wastewater capacity challenges and focused on communities of color where under reporting is likely in order to learn about current capacity issues from customers and residents and provide information to the community about how to report issues.

In addition to driving near-term sanitary sewer capacity projects, the WWSA will be used to support development of a DWW Integrated System Plan (ISP), as well other related capital programs such as the following.

- CSO program
- Pump Station Rehabilitation Program
- Capacity, Management, Operation and Maintenance (CMOM) pipe rehabilitation
- Development of an I/I capital program
- Evaluate opportunities to partner on transportation projects with other agencies including SDOT, WSDOT, and Sound Transit
- Support an analysis of the stormwater code that evaluates how SPU can more effectively leverage the code to alleviate capacity issues in the combined system

3. Do we anticipate this investment continuing in the next strategic plan? Will funding and targets be above or below 2018-2023 levels? Why?

The WWSA identified 46 critical and high-risk areas citywide with the potential of experiencing a sewer overflow or back during a 5-year, 24-hour storm event, which is SPU's performance target. Note that we do not know for certain if these areas experience backups. Over 300 additional risk areas were identified with potential sewer problems.

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We anticipate the need for continued and potentially increased investment. We will be examining specific needs and future funding alternatives in response to information from the WWSA and anticipate proposing adjustments in the 2021-2026 Strategic Business Plan.