Action Plan Title/#: Sewer Rehabilitation/#7

1. Short summary of the project/program

Part 1: Summary of Project.

This action plan increased investment in the repair, rehabilitation and replacement of Seattle's aging sewer pipes, helping to prevent sewer overflows and meet regulatory requirements. The additional funding was used to complete more contractor-constructed full-dig replacement, open-cut spot repair, and full-pipe lining projects.

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

Our annual average work over 2018-2019 surpassed the goals for miles of pipe lined, pipe replaced and spot repairs by crews. 2018 was a high accomplishment year, while in 2019 we focused on design for 2020 construction projects. We expect to have a high accomplishment year again in 2020.

- <u>Pipe lining</u>: During 2018 two large lining contracts were in construction. For 2019, we completed one small lining project and but focused on the design for two large lining contracts that will be in construction in 2020.
- <u>Full-dig replacement</u>: Six pipes were replaced in 2018. Like pipe lining, 2019 work focused on design for six replacement projects to be constructed in 2020.
- <u>Spot repairs by contractor</u>: We did not meet the goal of 50 spot repairs by contractors in 2018 and 2019. This goal is rather high due to the complexity of the spot repairs we use contractors to complete and given that our typical number annually up to now has been 25. There was a large increase in the number of spot repairs in 2019 as we used our first Task Order Contract. The contract is based on unit pricing and does not identify sites in the bid document, but instead allows SPU to select spot repairs based on priority. This also provides us flexibility to address urgent needs. A downside of the Task Order Contract has been higher costs per site than with a traditional design-bid-build package.
- <u>Spot repairs by crew</u>: The crew's productivity increased substantially between 2013 and 2015. They continue to sustain a high level of accomplishment and exceed their goal.

Metric	Annual Goal	Annual Average Completed	2018	2019 (as of 12/4)	2020 Projected
Miles of pipe lined	3	6.7	11.5	1.72	11.1
Feet of pipe replaced (full-dig replacement)	500	766	1,533	0^	1,866
Spot repairs by contractor	50	27.5	11	44	25
Spot repairs by crews	160	205	208	203	160
Total miles	3.3	7	12	2	11.6

^A 2019 work focused on design for 6 full-dig replacement projects to be constructed in 2020.

2018-2023 SBP Action Plan Update

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

	2018	2018 Actuals	2019	2019 Actuals	2020	2021	2022	2023
O&M (Non- Labor) Budget								
Action Plan CIP Budget Add (included in totals below)	987,501		4.6M		2.8M	6.2M	6.2M	5.25M
Total Capital Budget – 2019 Adopted/Endorsed	23.0M	22.3M	24.1M ¹	22.1M	33.5M	20.8M	20M	20M

1 Projections as of mid-November 2019

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

Several elements in the Pipe Rehab Program have changed since 2017 which include:

- Project schedules have been delayed by SDOT Right of Way permitting, especially projects that require a Traffic Control Plan in arterial streets from SDOT. SDOT has taken longer to review and issue permits because of the large amount of construction that is occurring in the city.
- Project initiation and progress was affected by the number of SPU project managers available. The project management group went through a staffing shortage in 2018-2019 that slowed down work. That has now been remedied.

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

We anticipate sewer rehabilitation investment continuing in the next strategic plan. We see a need to increase funding based on the preliminary results of a recently completed investment analysis that modeled future system need given current pipe condition, pipe degradation, risk tolerance and rehabilitation funding. The analysis is being used to develop the funding recommendation which will be based on what is required to mitigate the current backlog of pipes at high-risk of failure (and/or the consequence of their failure is very high) and move towards a reinvestment strategy that more proactively plans for the renewal of gravity sewer pipes. SPU is working to finalize the analysis and document the results. SPU is planning to present additional information at an upcoming Customer Review Panel meeting (1Q-2020)