

2018-2023 SBP Action Plan Update

Action Plan Title/#: 5 - Sewer Repairs

1. Short summary of the project/program

- **Part 1: Summary of Project.**

This action plan increases investment in a sewer repair by adding an additional repair crew of six positions and associated equipment focused on spot repairs, utilizing a trenchless technology procedure known as cured-in-place pipe (CIPP). SPU currently has two full-time construction crews dedicated to excavate mainline sewer pipes and perform repairs on high risk pipes, reducing the likelihood of structural failures and sewer back-ups. This supports our regulatory threshold of four sewer overflows per 100 miles. Failing to meet EPA Consent Decree requirements on sewer overflows could lead to enforced compliance which would drastically increase SPU's costs.

DWW System Maintenance hired 6.0 new FTEs to staff the sewer lining crew in 2018. The crew has focused on training visits with two other cities that have successful lining programs—Portland and Tacoma. The Line of Business has focused on developing Standard Operating Procedures and scopes of work for the crews. Unfortunately, System Maintenance had planned to be actively lining in 2019; however, fleet reductions and changes in city policy delayed the ordering of critical equipment to go live with this function.

At this time, crews just completed one full week of training with our lining supplier vendor in Chicago. We anticipate completing our first lining job by 12/31/19. Current equipment still backlogged is the Vactor, flatbed crew truck, and generator. The pending equipment adds are with the City Budget Office and they have been contacted to expedite SPU's request. Delays were incurred when the Mayor issued an Executive Order for city-wide fleet reductions in the fall of 2018.

The crews have recently focused on cutting protruding laterals with the equipment we do have.

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

System Maintenance's baseline included two full-time sewer repair crews prior to the lining crew addition in 2018. The sewer repair crews complete approximately 170 repairs annually.

The following has been completed since approval of this Action Plan:

- Hired the crew of six (6) plus a crew chief
- Developed most of the Standard Operating Procedures (SOPs)—to be finalized by 12/31/19.
- Worked directly with the City of Portland and Tacoma on understanding their programs, SOPs, safety protocols, past failures, and cross training in early 2020 where they will assist us with their crews directly.
- Established contract with LMK for lining material.
- Took delivery of the following equipment: CCTV truck, Schwalm robotic cutters, and lining trailer.
- Equipment delayed: Vactor, crew flatbed truck, and generator.
- Real-time field use of the Schwalm robotic cutter on protruding side sewers.

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

	2018	2018 Actuals	2019	2019 Actuals	2020	2021	2022	2023
O&M Budget	247,235	121,922	247,788	249,714	254,233	265,117	267,710	274,753
Capital Budget	1,419,493	350,323	543,875	407,189	1,613,045	543,875	543,875	543,875

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

The Mayor's 2018 Executive Order for fleet reductions delayed the approval and ordering of equipment needed to operationalize the lining crew. All other aspects of the program have moved forward as planned (i.e., hiring).

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

This investment will not continue in the next SBP update. We will complete this action plan in 2023 and it will become part of our baseline budget. Having a lining program in-house is advantageous to SPU and customers because we can respond more quickly to address system issues, and it can reduce our costs on rehabilitating the system because no excavation is involved.

We will have more accurate projection of annual work that can be completed after we have operationalized the crews with a full workload in 2020. The first quarter will be a learning process, and we expect to move more slowly at first as the crew learns this work in the field (job set-up, resin mix and application, etc.).