

2018-2023 SBP Action Plan Update

Action Plan #3 – Expand Maintenance of the Water Distribution System

1. Short summary of the project/program

- **Part 1: Summary of Project.** *This action plan adds two crews (four positions total) to perform essential maintenance of the water system. This includes hydrant maintenance and valve maintenance. Over time, SPU has had to scale back this work and reallocated staff to competing priorities, including meeting the needs of new development (new water service taps) and other capital programs. These competing priorities are not temporary in nature, therefore SPU is proposing adding additional resources to perform this essential maintenance function.*
- **Part 2. Targeted Commitments & Actuals (2018-19).** *The 2017 metrics were as follows:
“# of hours to fix a hydrant (that is out of service). Target: within 72 hours for above ground, 21 days below ground
of work orders completed/# of work orders scheduled for hydrants. Target: 100%
of work orders completed/# of work orders scheduled for valves. Target: 100%
Length of time since last maintenance (inspection) for hydrants. Target: 12 months
of valves that failed due to lack of maintenance. Target: 0”*

Since 2017, SPU has not hired the 4 FTEs. The reasons for that are shown in item 2, below.

Since 2017, SPU has updated its Asset Management Plans (AMPs) for Valve and for Hydrants. The updated AMPs included updated tools for tracking performance:

Hydrants:

- *Minor maintenance work orders: hydrant still functions*
 - *Backlog continues to grow, currently at about 7,000 work orders. Goal is to substantially reduce that backlog over a period of years.*
- *Out of service hydrants*
 - *We have about 30 out of service hydrants in any given month, with new hydrants reported out of service approximately equaling the number of hydrants being put back in service. Goal is to minimize the number of out of service hydrants.*

Valves:

- *Less-critical valves: includes all hydrant branch valves, as well as most smaller valves in the system. Maintenance is reactive only (maintenance in response to a failed valve).*
 - *Approximately 20,500 valves associated with large water service lines*
 - *Approximately 19,000 valves associated with fire hydrant branch lines*
 - *Approximately 16,000 distribution piping isolation valves that are less critical*
- *Critical valves: includes most larger diameter valves and valves that are most critical to continued performance of the water system. The goal for preventive maintenance is a 5-year inspection interval.*
 - *Approximately 2,000 of these valves*
- *SPU is not performing any valve maintenance currently, except for reactive maintenance. This is due to the resource limitation issues described in item 2, below.*

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

	2018	2018 Actuals	2019	2019 Actuals	2020	2021	2022	2023
O&M (Non- Labor) Budget	659,767	0	495,339	0	505,621	516,160	526,962	538,035
Capital Budget								

Note: the data for 2020-2023 is based on the projections developed in 2017. Revised projections are not ready at this time. However, the revised projections will generally follow the projections as shown.

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

Yes, there have been two factors:

- *The volume of work associated with new water service connections has continued at a historically high rate for the last 4+ years. In order to accomplish this work, some O&M work has continued to be deferred.*
- *Hiring for vacancies has not been successful. SPU has not been able to attract qualified water pipe workers in the last several hiring processes. To address this issue:*
 - *SPU plans to broaden the recruitment process to expand the number of applicants.*
 - *SPU plans to consider use of private contractors to help catch up on deferred maintenance, as a short-term fix.*
 - *SPU plans to hire an apprentice class in early 2020, to develop more qualified water pipe worker candidates.*

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 this position as a continuing need – no reduction or increase anticipated. Our goal is to hire the 4 FTEs in 2020, with their major focus on reducing the maintenance backlog through 2020-2023. After hiring these FTEs, the plan is to have them reduce the maintenance backlog and track their efforts over time, so that we can better understand the staffing needs over a longer term.