

Second Annual Report to Council-Exhibit A
April 2017- April 2018

Reservoir 1 Parapet Wall



Reservoir 1 Gatehouse Stairs



Reservoir 1 Weir Building



Reservoir 5 Gatehouses



Reservoir 5 Dam Stairs



Reservoir 6 Gatehouse





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ATTACHMENT 1

REPORT TO COUNCIL

To: City Council

From: Michael Stuhr, P.E., in collaboration with the Mt. Tabor Neighborhood Association

Subject: Semi-Annual Report on Compliance with City Council Resolution No. 37146

Dates covered: April - October 2018

Publish date: December 20, 2018

Status Report on Issues from Council Resolution 37146 **Communication**

City of Portland Water Bureau (Water Bureau or Bureau) staff and members of the Mt. Tabor Neighborhood Association (MTNA) met regarding preservation work in May, June, and August 2018. Meetings to discuss the Interpretive Program separately were held in May, June, and September 2018. Water Bureau staff prepared an agenda prior to each meeting and distributed meeting notes soon after each meeting.

Communications between Water Bureau staff and the MTNA on all program elements continue to be fluid, and are comprised of emails, phone conversations, and face to face meetings.

Exploring Alternative Methods for Water Management

Council Resolution No. 37146 directs the Bureau to work with the MTNA to “explore alternative methods to maintain clean water at historic levels, and to maximize the number of days the reservoirs are full, in order to preserve the character of the reservoirs and the park in the most efficient and sustainable manner possible.”

Water Bureau water quality staff and engineers created a draft Reservoir Water Management Plan in spring of 2016 and continue to refine it as more is learned about operating the reservoirs separately from the water supply system. The plan intends to summarize reservoir water quality sampling results, describe reservoir operation and maintenance for the previous year, recommend parameters for future operations, and highlight planned maintenance for the following year.

The draft Reservoir Water Management Plan will be reviewed with the MTNA at the next meeting.

Water levels in the reservoirs will continue to be monitored. Draining, cleaning and refilling schedules will be developed around construction demands, and in response to water quality parameters, to best meet the goals outlined in the Resolution.

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Reservoir Fill Status, April - October 2018

Reservoir 1

Reservoir 1 was drained in October 2017 and has remained offline. It was not refilled in the fall of 2018 as was anticipated in the last report to Council. The refill schedule was pushed back to allow the preservation consultant access to inspect the basin to collect information to include in the bid documents for the next phase of work. Repairs were made to a leaking drain valve as was forecasted in the last report. The refill schedule will likely be pushed back further as construction is expected to start this winter.

Reservoir 5

Reservoir 5 was scheduled to be drained, cleaned, and refilled in June 2018 after completion of work and refilling of Reservoir 6. When the Reservoir 6 repairs were complete, BES had begun work on the piping that Reservoir 5 drains into, making them unusable. Additionally, the especially dry weather in May resulted in an early drawdown of the Bull Run supply and required augmenting from the well field for the summer supply season. Filling Reservoir 5 would not be possible until the summer drawdown season ended so the draining and cleaning was postponed. Once the Water Bureau realized that cleaning would be postponed, water was added to the reservoir to return the water level to 85% full. Water continued to be added throughout this reporting period to keep the water level at or above 85% full.

Reservoir 6

Both the north and south cells of Reservoir 6 were drained beginning on April 8, as was noted in the last report, and cleaning began on May 23. Both cells were filled and at 92% of capacity by June 28. Over time, the reservoir's water level experienced dips due to leakage and evaporation. Water was added to the reservoir throughout the year to keep the water level at or above 85% full. The reservoir remained between 88-96% of capacity.

Reservoir 6 was drained in October 2018 to repair leaks that were found during a Remote Operated Vehicle (ROV) inspection. The reservoir will be cleaned and refilled with water after completion of the repairs.

Reservoir Fill Projections, Next Six Months

Reservoir 1

Reservoir 1 has been drained so that consultants can conduct a basin condition assessment and the first package of preservation projects can begin. It is anticipated that Reservoir 1 will be filled by Fall 2019 after the contractor has completed concrete restoration work around the reservoir.

Reservoirs 5 and 6

Reservoirs 5 and 6 are being maintained at 85% full except during cleaning. They will be filled periodically as necessary to replace water that leaks out, and levels will be maintained between about 85-95% of capacity.

Future cleanings will likely happen between April and June of 2019, with water quality samples taken just prior to cleaning. Any sampling and testing of the reservoir basins in preparation for repair work will take place at the next drain and clean cycle.

Tree Considerations

Construction related to reservoir preservation has been focused on repair of existing concrete structures and has had virtually no impact on trees.

The MTNA has not yet had a chance to work with the Water Bureau on a Tabor-specific alteration to the bureau’s generic “no trees near pipes” policy.

Historic Preservation Project

Council Resolution No. 37146 directs the Water Bureau and others to work with the MTNA to prioritize the historic preservation construction projects specified in the *2009 Mt. Tabor Historic Structures Report*, for which Council allocated at least \$4 million over the ensuing four years.

Construction was substantially completed July 31, 2018 on the first construction phase to replace the fence at the Reservoir 5 dam face and the concrete restoration work on the walkway, fountain, weir building and reservoir wall at Reservoir 1, and the Reservoir 5 Gatehouse and Hypochlorite Building. The final dollar value of the T Edge contract is \$1,031,542.

From May to October 2018, the team finalized bid documents for the next construction phase to make repairs to the Reservoir 1 basin and parapet walls at Reservoirs 5 and 6. The estimated cost of this work is approximately \$750,000.

An Art Conservator, Cascadia Art Conservation Center, LLC, was hired to repair and preserve a little-known water feature (or fountain) at Reservoir 1. The dollar amount for this contract is a not to exceed price of \$25,000. Repair work is complete. Final color applications to match existing patinas is ongoing and will be complete in mid-November. Before and after photos are included in Appendix A.

Historic Preservation Budget

Funds for the historic preservation of the reservoirs and buildings come from the general fund. The table below summarizes funding received and spent for each fiscal year.

| Fiscal Year | Funding approved by Council | Actual spending |
|-----------------------------|-----------------------------|-----------------|
| 2016-17 | \$750,000 | \$356,423 |
| 2017-18 | \$1,020,000 | \$1,369,200 |
| 2018-19 (through Oct. 2018) | \$1,115,000 | \$105,300 |

Interpretive Program

Both the Land Use Review Approval Findings and Council Resolution No. 37146 direct that a public interpretive program be developed on Mt. Tabor, in collaboration with the MTNA. The Resolution mandates that within five years of final approval of land use review, “the Water Bureau and other City bureaus as are necessary, [are] directed to collaborate with the MTNA to develop an interpretive program that tells the history of the Mt. Tabor reservoirs and the City’s water system.”

Activities accomplished:

- The Water Bureau held meetings with the project team, including the MTNA, on May 24th and June 12th. The project team discussed findings from the first phase of public input on the design concepts presented and reviewed City approval requirements for the project.
- The team requested at its June 12th meeting that the design consultant (Bryan Potter Design) prepare a presentation for the next meeting to consider possible design options, beginning with Reservoir 1.
- Water Bureau staff, the MTNA committee, and the historic and design contractors met in September to see and discuss initial draft interpretive designs for Reservoir 1. The project team did not reach consensus as to which if any of this round of draft designs should move forward. The MTNA side of the project team requested further design drafts that could accommodate stories that might be slightly longer, or that might benefit from multiple photos.

- At the direction of Commissioner Fritz, the Water Bureau met with the Office of Equity and Human Rights (OEHR) and the City's Tribal Relations Director for input on the project to help inform and develop the interpretive program and guide the decision-making process. The Tribal Relations Director suggested the Water Bureau engage the Native American community, starting with the Native American Advisory Council (NACAC).
- Water Bureau staff presented to the Native American Community Advisory Council (NACAC) and will be presenting the project to Parks Accessibility Advisory Committee (PAAC) in early November for its input on the project. NACAC members strongly suggested the inclusion of Native American narratives in the story of the water system.
- The project team will meet again in late November or early December 2018 to continue dialogue and decide on an agreeable approach to design and content for the project. Water Bureau staff will present findings/recommendations regarding equity/accessibility input from OEHR, the City Tribal Relations Director, NACAC, and PAAC.

Interpretive Program Budget:

The spending plan allocates a total of \$470,000 for the Tabor Interpretive Program. Funds for the interpretive program come from the Portland Water Bureau. The first year of the interpretive program started in late March 2017 and focused on historic research, developing a public outreach plan, and draft program development. End of FY2017-18 expenditures totaled \$107,000 (\$82,000 allocated in spending plan) due to additional Water Bureau staff involvement related to public outreach, the addition of a public outreach consultant and facilitator, and design work by Historical Research Associates.

The FY2018-19 estimated spending plan for the interpretive program development project is \$165,000, to continue with program development, design, and public outreach tasks. This estimated spending plan revises the original spending plan estimate of \$210,300 by shifting all Construction Phase tasks to FY2019-20 because it is likely they will not occur during FY2018-19. Additionally, because HRA and sub-contractor Brian Potter Design will perform most of the historic and design tasks for the project during FY2018-19, and additional public outreach/meeting facilitation services will be needed Fall 2018/Winter 2019 for which these services were not originally budgeted, the current consulting cost plan for FY2018-19 was increased to \$130,000 (\$108,000 HRA/\$22,000 JLA) from \$50,000 originally estimated. As a result of these spending plan adjustments, the interpretive program is now considered a major project.

Next Steps

- Projects and budgets for 2019-2020 will be identified in FY 2018-19 by the Water Bureau project team and MTNA representatives.
- The Water Bureau project team and the MTNA representatives will continue to meet monthly regarding implementation of the Mt. Tabor Reservoirs Historic Preservation Project and Interpretive Program.

Report to Council April to October 2018-Exhibit A

Reservoir 1 Water Feature Restoration

Before



During



During



After