



STAFF REPORT

Meeting Type: Council Meeting
Meeting Date: November 4, 2024
From: Jennifer Coker, Public Works Director
Subject: Sandy Drinking Water Reinvestment Program Update

PURPOSE / OBJECTIVE:

The purpose of this work session is to provide the City Council with an update on the goals and status of the Sandy Drinking Water Reinvestment Program. No decisions from the City Council are being requested.

BACKGROUND / CONTEXT:

The City of Sandy's drinking water is sourced from two City sources - Alder Creek and Brownell Springs. As Sandy outgrew these two sources, the City became a wholesale water customer of the Portland Water Bureau and added Bull Run as a third water source. The City is unable to meet all of its water needs without the Portland Water Bureau Bull Run source. Currently Portland and Alder Creek provide about 47% of water supply each during the peak summer season, with Brownell Springs accounting for less than 6%. Both the City of Sandy and the City of Portland are under a bilateral compliance agreement with EPA/OHA for the treatment of cryptosporidium of the Bull Run water source, with a compliance date of September 30, 2027.

The infrastructure at the Alder Creek Plant consists of a raw water pipeline, the Alder Creek intake, and a water treatment plant (WTP) building, all constructed in the 1970s. Additionally, a raw water pump station was constructed in the early 1990s. The Alder Creek WTP has three filter units installed in 1995. However, over the past two decades, the capacity and reliability of the Alder creek WTP has significantly declined due to mechanical control issues and age-related deterioration. The Water Treatment Plant in 2022 was only operating at half capacity, with zero redundancy.

In the winter of 2023, a conceptual design report was developed by Stantec based on the recommendations of the [Water System Master Plan](#) accepted at the [December 19, 2022](#) Council Meeting. The conceptual design report recommended upgrades to the Alder Creek WTP, including the installation of membrane equipment skids and enhancements to the raw water pump station and membrane feed tank. The conceptual design also validated the Water System Master Plan recommendations of building a pipeline and pump station and purchasing filtered water from the Portland Water Bureau as the most resilient and most cost effective option for Sandy citizens.

KEY CONSIDERATIONS / ANALYSIS:

These two major projects (Alder Creek upgrades and new pipeline/pump station) present a significant undertaking for the City, and it was determined that combining them into a single portfolio and managing them under a unified program would be the most effective approach. Both projects need to be completed in less than three years time.

Consequently, the Sandy Drinking Water Reinvestment Program (SDWRP) was established. Since its inception, several key developments have occurred:

1. The City contracted with Stantec for program management, design management, and construction management for the SDWRP.
2. Essential equipment for the Alder Creep WTP upgrades has been procured
3. Consultants for design engineering on both the Portland to Sandy and Alder Creek WTP upgrade projects have been procured.
4. Design on the Portland to Sandy is progression with the Transmission Main at 90%, the Pump Station at 60% and Disinfection at 30%.
5. IGA with the City of Portland

The program team is making steady progress and is actively monitoring both the schedule and budget. However, it is important to be aware of certain risks. If the Portland Water Bureau (PWB) is not operation by the deadline, the Alder Creek WTP project is anticipated to be completed in advance to mitigate any potential issues arising from delays in the Portland to Sandy project.

NEXT STEPS

- Securing Construction Financing for the balance of the program from Business Oregon and WIFIA
- Bid phase documents for the Portland to Sandy Transmission Main
- 90% Design for the Portland to Sandy Pump Station
- 60% Design for the Disinfection System
- Land Use Planning the Alder Creek WTP and Portland to Sandy projects

BUDGET IMPACT:

The total estimated cost of the program is \$70 million, with \$24.5 million in low-interest loans currently secured by the City. Additional funding is being actively pursued with Business Oregon and WIFIA.

LIST OF ATTACHMENTS / EXHIBITS:

- Presentation Slides