

## **STAFF REPORT**

Meeting Type: Council Meeting
Meeting Date: December 2, 2024

From: Jeff Aprati, Deputy City Manager

Jennifer Coker, Former Public Works Director

**Subject:** Wastewater Facility Plan Amendment

### **BACKGROUND / CONTEXT:**

The purpose of this Wastewater Facility Plan Amendment is to examine near-term and long-term improvements at the Wastewater Treatment Plant (WWTP) to comply with the City's Consent Decree with the US Environmental protection Agency (EPA) and the Oregon Department of Environmental Quality (DEQ) and secure a viable long-term wastewater treatment and discharge strategy supporting growth in Sandy.

The plan amendment is necessary to account for the evolved understanding of project needs and costs since the 2019 plan was adopted, as well as the system improvements that have already occurred since that time. A draft of the Facility Plan Amendment has been submitted and reviewed by City and Sandy Clean Waters Program staff, and two viable alternatives have emerged. These alternatives have similar total capital costs, but very different implementation requirements, risks, and impacts on the City's long-term wastewater program. Both approaches also require a bridging strategy to be approved as part of the City's NPDES permit renewal to support near-term permit compliance.

It is important to note that both plan alternatives require funding beyond what the City has secured and beyond what the City can afford based on affordability guidelines used to date; therefore additional grant funding will be required to pursue either alternative. The City will be zealously seeking this funding in the upcoming session of the state legislature, and in any other forums that present themselves.

### **KEY CONSIDERATIONS / ANALYSIS:**

Below are the two most viable alternatives presented in the draft Facility Plan Amendment:

1. Expansion at the WWTP with a Membrane Bioreactor (MBR), and construction of a new effluent pipeline and outfall to discharge treated effluent to the Sandy River (WWTP MBR and Sandy River Outfall).

This approach uses the discharge approach the City has been pursuing for several years but maintains treatment at the existing WWTP site rather than building a satellite WWTP as recommended in the 2019 Plan. Several different treatment technologies were evaluated in the Facility Plan Amendment, and the MBR best met the City's goals at the lowest total capital cost. Total program cost estimates for this alternative are approximately \$228 million, plus additional unknown investment in the solids treatment process once PFAS regulations for treatment are established.

## 2. Send wastewater to Gresham for treatment and discharge (Regional Solution).

In this alternative, the City of Sandy would become a wholesale wastewater customer of the City of Gresham and would no longer operate the WWTP or hold a permit to discharge treated effluent to the Sandy River. The City would also no longer be able to supply recycled water to local nurseries for irrigation, an operation which requires 10-year notice to recycled water users prior to sunsetting the practice. The pump station and 14-mile pipeline require a significant investment, however initial discussions with the City of Gresham indicate that the plant has available capacity to treat flow from Sandy through the planning horizon. The Gresham WWTP also discharges to the Columbia River, a much larger receiving stream that is not likely to have as stringent discharge requirements as either Tickle Creek or the Sandy River for the foreseeable future. The program team has estimated that this alternative has an approximate total program cost of between \$211 million and \$245 million, depending on the results of negotiations with Gresham on the SDC charge required for connection.

### Continued Investments in Existing Infrastructure

It is important to note that these total program cost estimates include: (1) the \$31 million that has already been spent in Phase 1A of Sandy Clean Waters, and (2) continued investments in the City's existing wastewater infrastructure that will be necessary regardless of the discharge alternative chosen. Approximately \$12 million of continuing investment in the treatment plant will be necessary over the coming years to address known issues and ensue continuing permit compliance. In addition, further improvements to the wastewater collection system are required by the Consent Decree, and are estimated at \$19 million.

The project team is working with DEQ to renew the City's existing discharge permit on Tickle Creek in an effort to include interim limits as a bridging strategy while the City constructs the permanent discharge solution.

### Next Steps for Development

The Consent Decree relies on the Comprehensive Capacity Evaluation (CCE) to support connecting new Equivalent Residential Units (ERUs) to the treatment plant. The CCE was completed in 2023, and a Conditional Approval was issued by EPA earlier this year allowing the City to modify the development moratorium and implement near-term measures to unlock 190 ERUs of additional available capacity in the WWTP for the next increment of growth. These measures are underway; they include expansion of the equalization basin and process improvements at the plant, both of which need to be evaluated and approved by regulators before the 190 ERUs are formally granted.

## **BUDGET IMPACT:**

# **WWTP MBR & Sandy River Outfall Alternative: Total Cost**

Component	Cost
Phase 1A Total Costs (already spent)	\$31 M
Phase 1B	
Required WWTP Improvements	\$12 M
Collection System Improvements	\$19 M
Phase 1B Total Costs (required regardless)	\$31 M
Phase 2	
WWTP Improvements	\$78 M
Sandy River Pump Station & Outfall	\$61 M
Construction Management, Inspection, Escalation	\$9 M
Management Reserve (10%)	\$18 M
Phase 2 Total Costs	\$166 M
PROGRAM TOTAL	\$228 M

# **Regional Treatment Alternative: Total Cost**

Component	Cost
Phase 1A Total Costs (already spent)	\$31 M
Phase 1B	
Required WWTP Improvements	\$12 M
Collection System Improvements	\$19 M
Phase 1B Total Costs (required regardless)	\$31 M
Phase 2	
Pump Station and Pipeline	\$103 M
Construction Management, Inspection, Escalation	\$6.5 M
System Development Charge (SDC)	\$25 M - \$59 M*
Management Reserve (10%)	\$14 M
Phase 2 Total Costs	\$149 M - \$183 M
PROGRAM TOTAL	\$211 M - \$245 M

<sup>\*</sup>Estimated range for alternatives comparison. Negotiations are required to update SDC

### **KEY MESSAGES:**

### Facility Alternative Recap

- A regional treatment solution appears to be the most viable option for Sandy. It has the greatest
  potential to generate political and financial support, and it gets the City out of the treatment
  business in the long term.
- A Sandy River outfall is a good secondary option to retain, though it comes with significant challenges and uncertainties.
- The project team has determined that remaining on Tickle Creek over the long term is not a
  viable solution, even if the Three Basin Rule is revised. Tickle Creek flow levels are too low to
  meet dilution ratio requirements; we would max out and be out of compliance in less than 16
  years.
- The City is still pursuing Three Basin Rule accommodations in our permit renewal to provide near-term certainty while improvements are constructed.

## Issues of Fairness: Cost Burden

- Both viable facility alternatives carry an unacceptably high cost for Sandy to bear on our own.
- Sandy is subject to more stringent wastewater regulations than almost any other city in Oregon.
   Compliance with the Three Basin Rule raises the cost of our required capital improvements by at least \$60 million; a cost that should not be borne by a town of 13,000 residents for the benefit of 300,000 downstream water customers.
- Sandy will do everything possible to communicate this message and secure substantial additional funding from the State and other entities to lessen the impact to our ratepayers

### **Funding Sources**

- Even though we are doing everything we can to secure grants, large loans will still be necessary. Lenders require Sandy to raise utility rates to ensure repayment (coverage requirements).
- The City is also pursuing raising system development charges (SDCs) to ensure that the cost of these improvements is appropriately spread

### **REQUEST FOR DIRECTION TO STAFF:**

Staff is requesting Council direction on the following:

- Authorize staff to conduct public outreach in Q1 2025
- Direct staff to move forward on discussions with Gresham on the Regional Treatment Alternative
- Authorize staff to begin conceptual design of pipeline routing and performance requirements for the Regional Treatment Alternative
- Direct staff to move forward with pursuing funding opportunities, with primary focus on Regional Treatment Alternative

#### LIST OF ATTACHMENTS / EXHIBITS:

- Presentation slides
- Wastewater Facility Plan Amendment Nov 2024 Draft