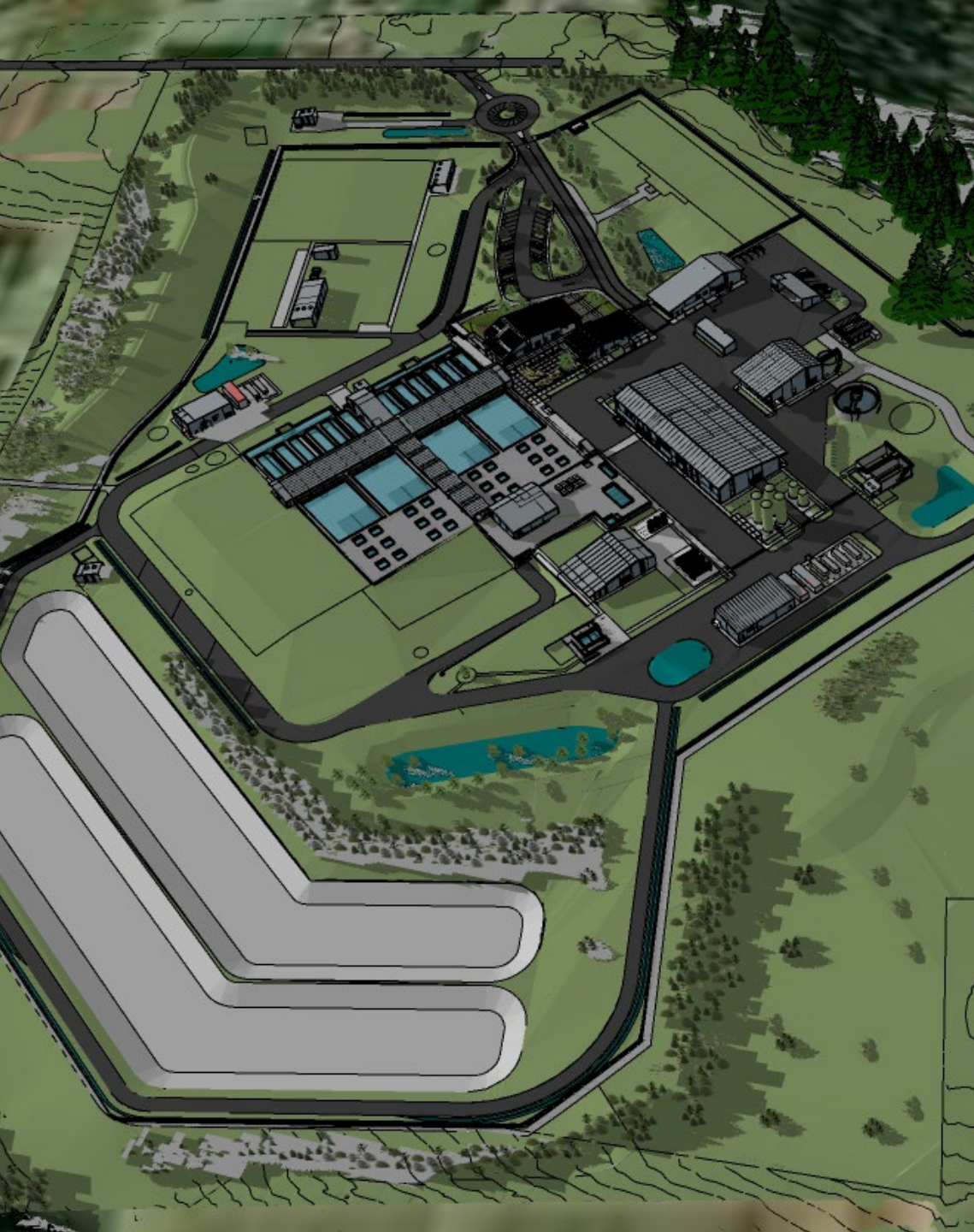




Bull Run
TREATMENT
PROJECTS

*Our water: Safe and abundant
for generations to come*

PORTLAND WATER BUREAU

Bull Run Treatment Projects

City Council

June 28, 2023



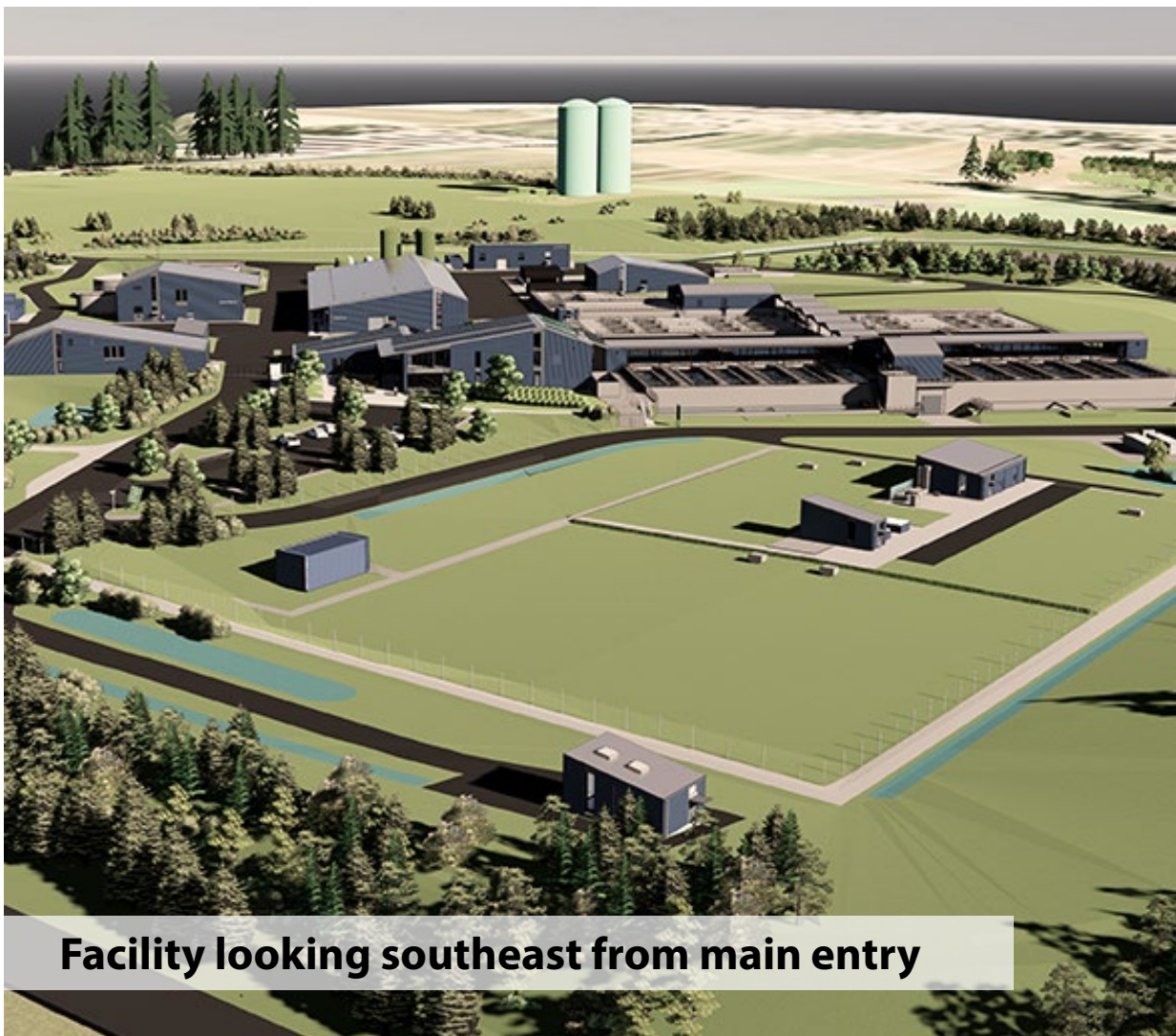
Agenda

1. Intro and background
2. Cost and how to address
3. Moving into construction
4. Six Council Items



Bull Run TREATMENT PROJECTS

Filtration Facility



Facility looking southeast from main entry

Bull Run TREATMENT PROJECTS

Filtration Pipelines



Brief History

2006

2009 -
2016

January
2017

August
2017

December
2017

February
2023

EPA passes regulation to protect against *crypto*, because it is so resistant to chlorine

Portland develops unique compliance approach to regulations - program is successful for 5 years

Low level detections show *Cryptosporidium* is present in the watershed at levels sufficient to require treatment

Portland City Council passes resolution to build filtration

Bilateral Compliance Agreement signed with Oregon Health Authority

Increased *crypto* detections prompt schedule compliance letter from Oregon Health Authority

Bureau (PWB) Bull Run source. These concentrations make it imperative that PWB stay on track to install 3-log *crypto* removal through filtration and minimize risk of *crypto* in the watershed, as required in the Bilateral Compliance Agreement (BCA) from December 18, 2017.


February 3, 2023
Gabriel Solmer, Director
Portland Water Bureau
1120 SW 5th Avenue, Suite 405
Portland, OR 97204
Sent via email to Gabriel.Solmer@portlandoregon.gov
Dear Ms. Solmer:
Drinking Water Services (DWS) is concerned about the recent elevated concentrations of *Cryptosporidium* (crypto) detected in the Portland Water Bureau (PWB) Bull Run source. These concentrations make it imperative that PWB stay on track to install 3-log crypto removal through filtration and minimize risk of crypto in the watershed, as required in the Bilateral Compliance Agreement (BCA) from December 18, 2017.
Furthermore, DWS seeks assurance that PWB is prepared to take proactive action to reduce exposure of the public to crypto if these actions are determined to be necessary by DWS. Please evaluate PWB's readiness to take the following three actions and provide a written response to DWS by February 15, 2023:
1. Switch to 100% use of its supplemental groundwater source;
2. Install temporary crypto treatment; and
3. Accelerate the construction of the filtration plant.
Since crypto was initially detected and the variance was revoked, DWS has been concerned with those population groups particularly vulnerable to crypto infection. As required in the BCA, to prevent exposure to people most vulnerable to crypto, PWB provides information to clinics serving such populations recommending they avoid drinking the tap water due to the risk of crypto. DWS is also aware of written PWB protocols describing their

Resiliency & Benefit

- Helps adapt to climate change
 - Fires
 - Algal blooms
 - Turbidity
- Seismically resilient
 - Earthquakes
- Emerging contaminants
 - Aging infrastructure
 - Replacing poor condition conduits
- Resiliency for most vulnerable



Heavy rains cause switch to Portland well water

by: Jim Redden, Portland Tribune
Posted: Nov 6, 2022 / 02:12 PM PST
Updated: Nov 6, 2022 / 02:12 PM PST

PORTLAND, Ore. ([Portland Tribune](#)) — The Portland Water Bureau has temporarily switched the city's water supply to the Columbia South Shore Well Field because of turbidity in the **Bull Run Reservoir** caused by recent heavy rains.

Turbidity is organic material suspended in the water. Operations Manager Chris Wanner said the transition from Bull Run water to 100% groundwater went smoothly.

Funding support

- EPA WIFIA Loan
 - **Saves ratepayers \$247M**
 - Championed by Senator Merkley for projects of this scale
 - Largest WIFIA loan to date
 - WIFIA has invited application for 2nd loan
- Anticipating over \$500,000 in Energy Trust of Oregon incentives
- Going forward
 - **Hiring consultant** to seek non-rate revenues with private, federal, and state funding opportunities
 - **Continuing collaborations** with federal, state, and local governments to secure additional resources in consultation with the Office of Government Relations



- Very low 1.89% interest rate
- Flexible repayment

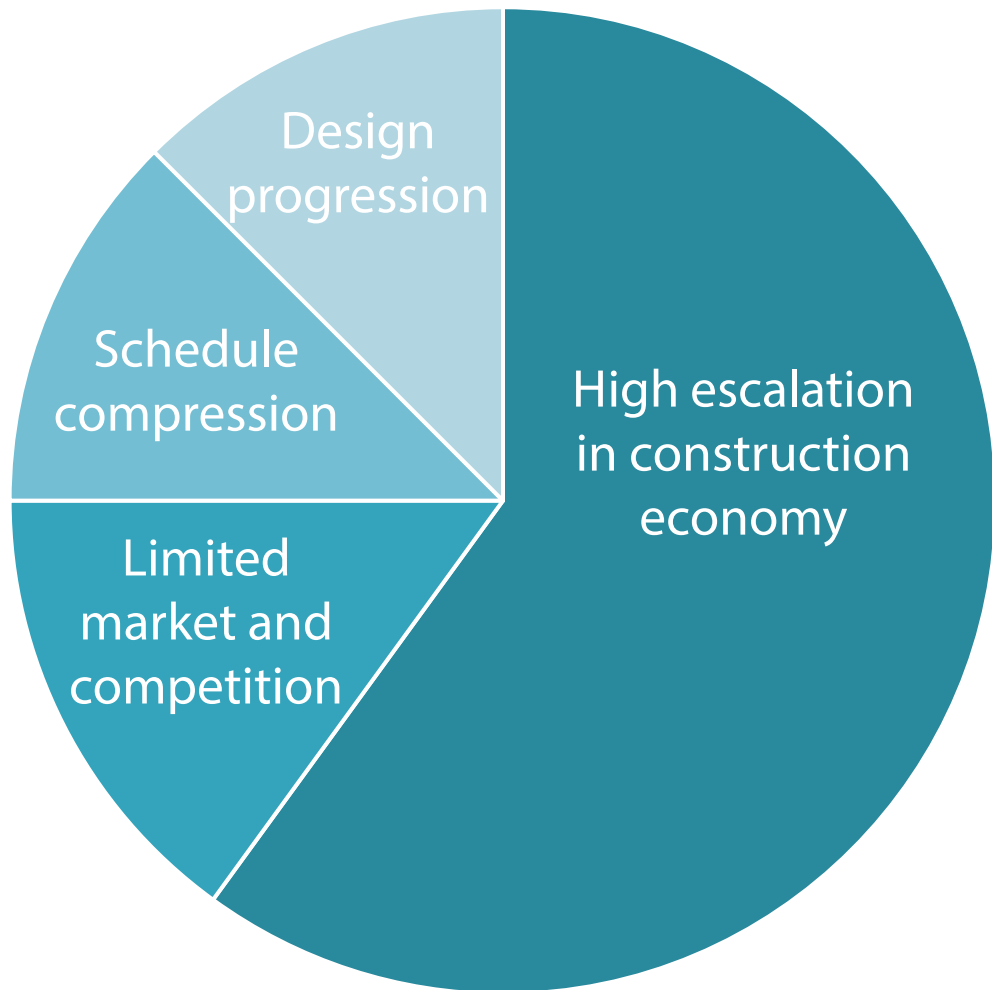


JEFF MERKLEY
UNITED STATES SENATOR FOR OREGON

Current estimated program costs

	WIFIA Application & Funding Plan	2022 Estimated Costs	Current Estimated Costs
Capital Costs	\$967M	\$1,249M	\$1,578M
Other WIFIA-eligible Costs (financing costs, overhead, and interest)	\$106M	\$106M	\$106M
Available Contingency	\$410M	\$128M	\$150M
TOTAL PROGRAM FUNDING	\$1,483M	\$1,483M	\$1,834M

Key drivers for increase in estimated costs

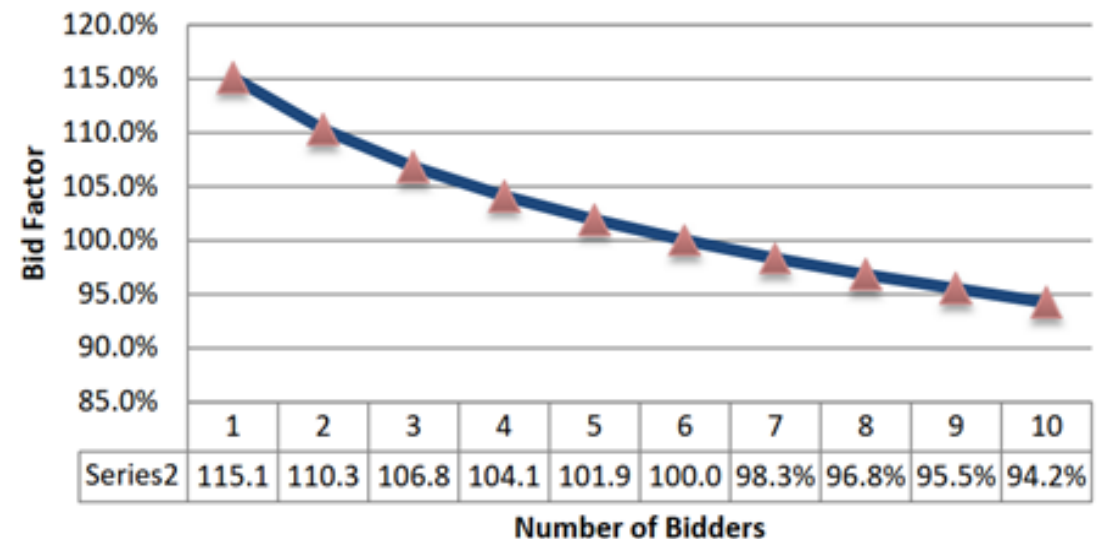


Regional Case Study

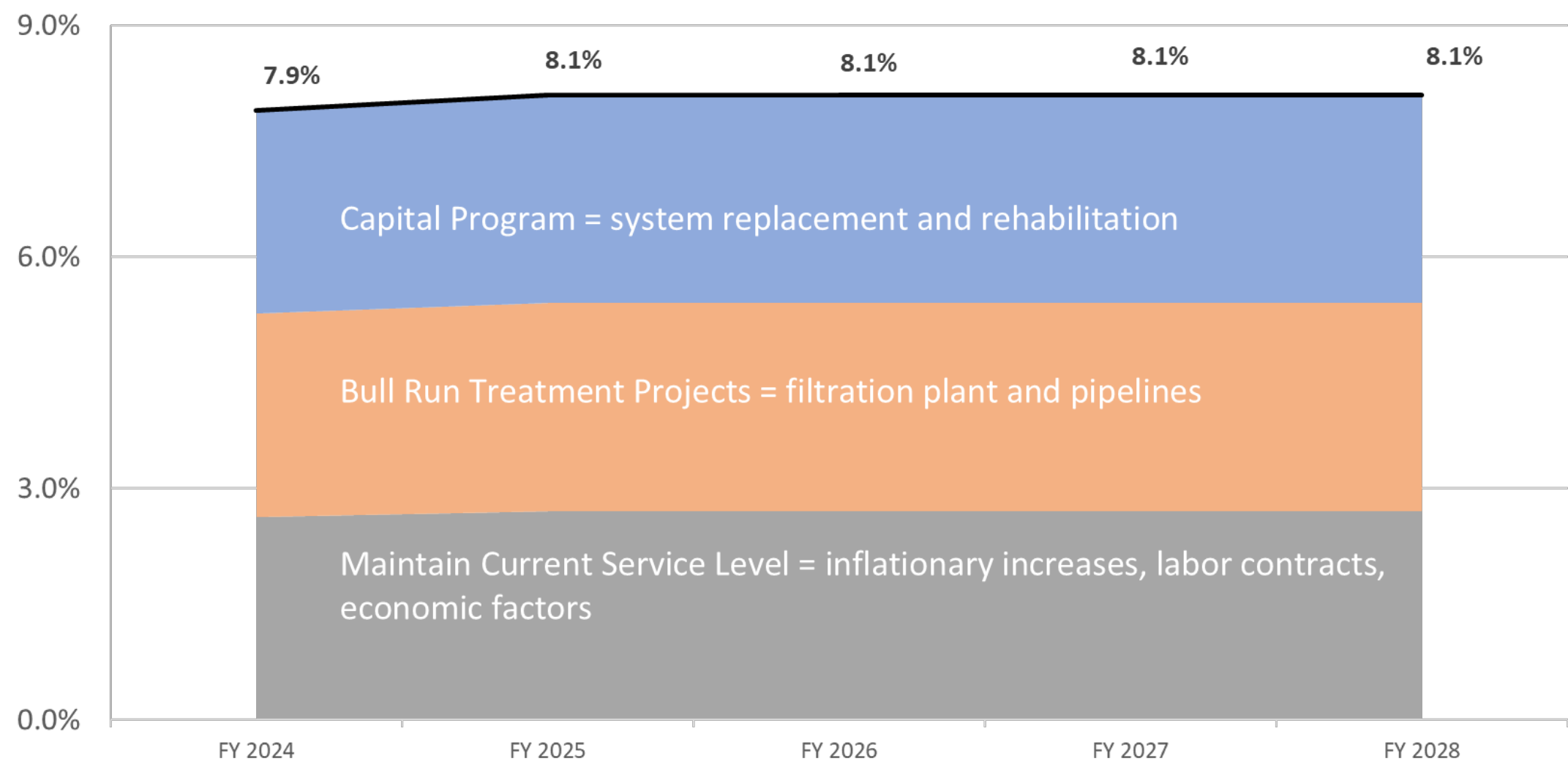
Willamette Water Supply *Our Reliable Water Future*

- New 60 MGD water treatment plant
- **46%** cost increase in 2 months

Impact of Bidder Participation



Rate Forecast



Centering water rate affordability

Maintaining current forecasted rates

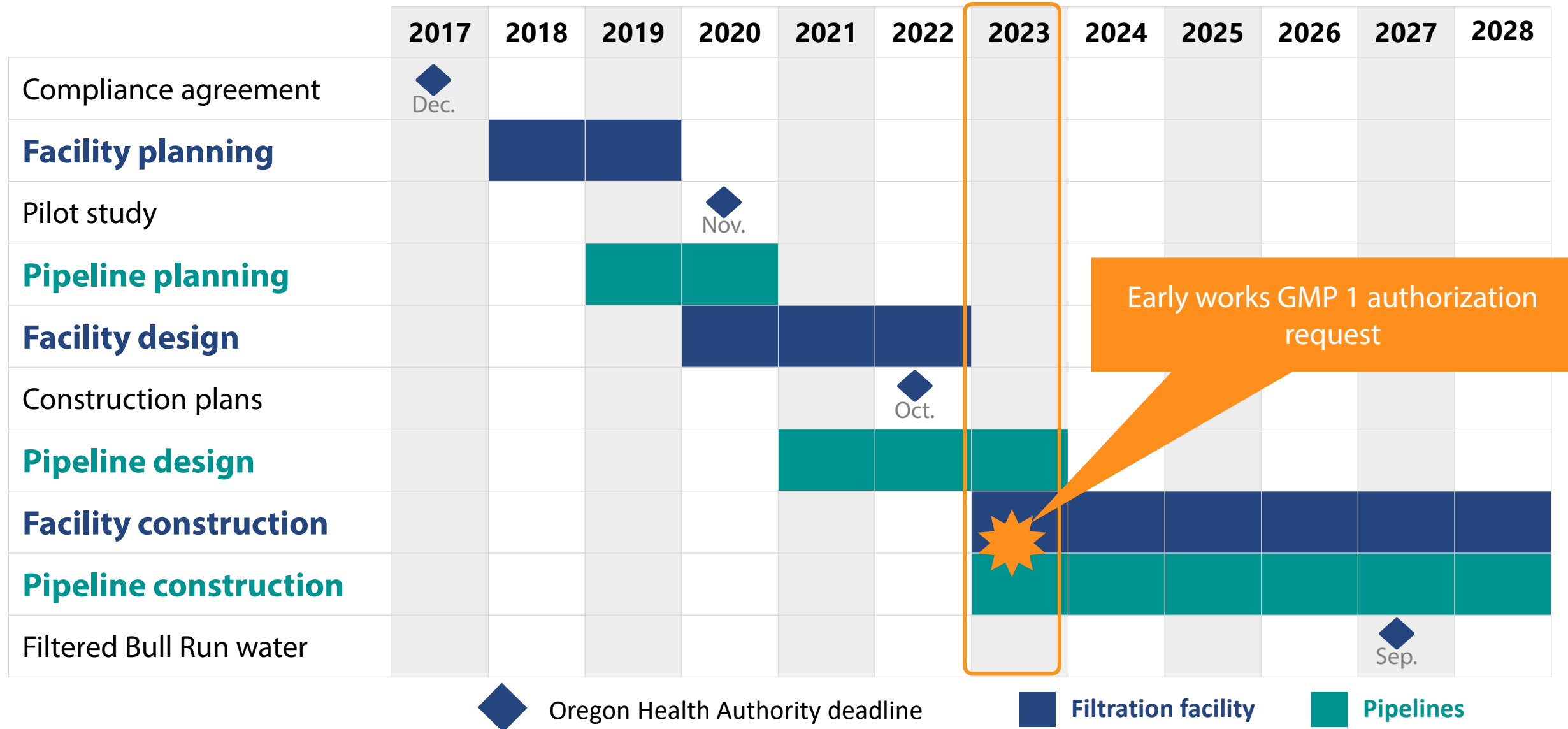
- Applying for second WIFIA Loan
 - 49% WIFIA - \$172 M
 - Defer payment until projected rates are lower
- Reviewing Capital Improvement Plan
 - Deferring projects
 - Slowing Seismic Implementation Plan
 - Maintaining core asset work
 - Less able to fund emergency or new interagency projects, federal mandates (FERC), or react to failure increases of an asset class



Financial assistance programs

- A dedicated financial assistance service team
- Discounts available for customers in a variety of financial situations

Bull Run Filtration critical path to compliance



Multi-step land use permitting process



- Type III conditional use review
- Over 25 individual land use and permit applications
- Over 2,700 pages of applications, narratives and supporting documentation
- Public hearing scheduled for June 30



- Required for secondary access
- Currently in review
- Preliminary process direction expected June 30

Equity contracting and workforce

- Partnership
 - City Procurement Office, Project Team, and the contracting community working together
 - Commitment to maximizing participation
- Preparing the community
 - Engagement over the last year
 - Presentations at over 16 organizations for both workforce and contracting
- Workforce
 - Largest project yet to implement the new Regional Workforce Equity Agreement
 - Goals for apprenticeship and Safe from Hate workplace



Building vital infrastructure that will serve local industry and businesses

4,700 construction jobs +
25% hard construction costs
to equity contractors

\$1.59B economic activity through
construction +
\$14.9M annually when complete



"[These projects] pay well and give people economic independence. If you have that experience, that gives you an opportunity to start your own company and hire other people and grow." -- Andre Baugh, principal at Group AGB



"For us water is super important. We use water in everything we do. Put it simple... without water we couldn't have a business." -- Fernando Rodriguez, Fernando's Alegria



"One of the things that's really beneficial is having assurance from the City that an item such as *Cryptosporidium* is not in the water. This will help us ensure that the care we provide our patients does not inadvertently cause them any harm." -- Darcey Ayala, Oregon Health & Science University

Council Actions – Reports to Council

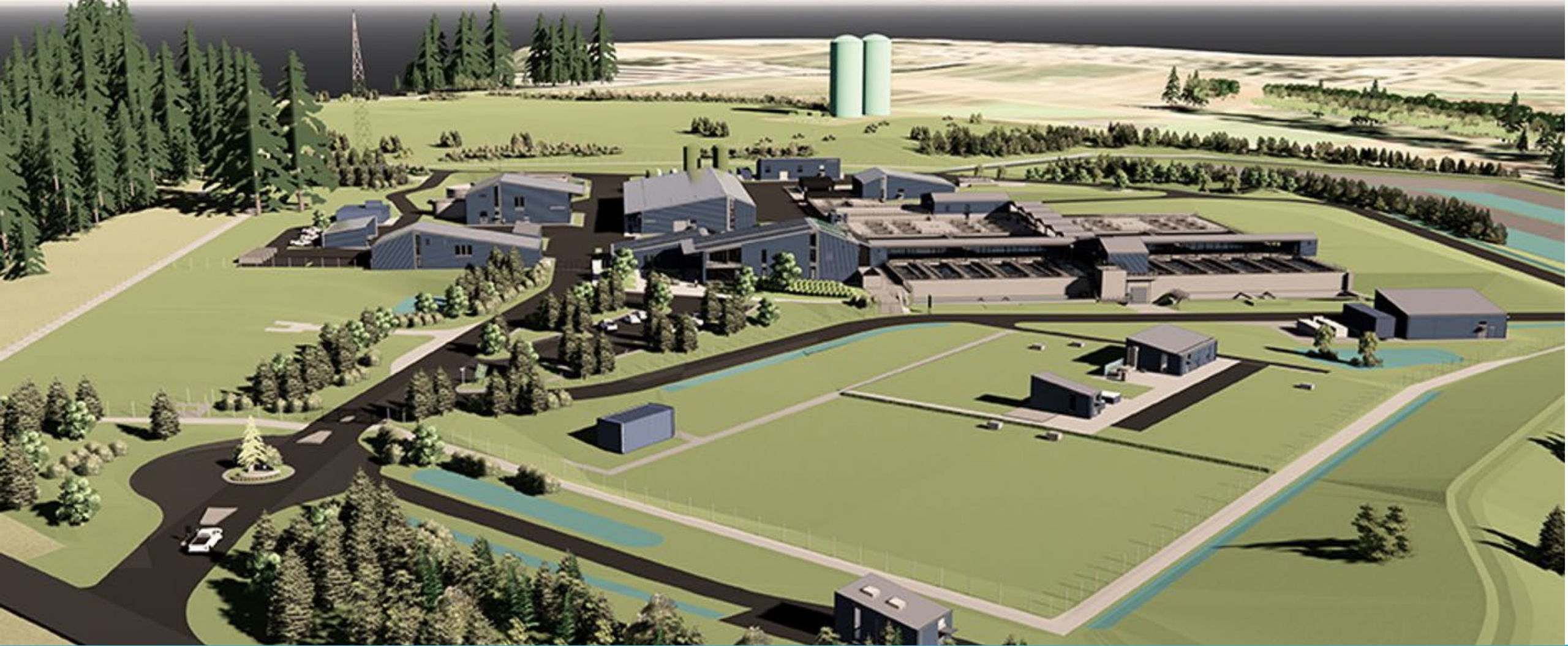
- 561: Accept the Bull Run Treatment Projects 2023 Annual Report (Report)
 - Annual update on the status of the Bull Run Treatment Projects (*no Council action required*)
- 562: Extend the Contract with Brown and Caldwell for Program Management and Support Services for the Bull Run Filtration Projects (Report)
 - No-cost extension to duration due to City 5-yr original contract length requirement (*Council vote to accept the report*)

Council Actions – Guaranteed Maximum Prices

- 563 Authorize the Bull Run Filtration Facility Project construction in two phases with two guaranteed maximum prices and update estimated total cost of construction to \$1,069,000,000 (Ordinance)
- 564 Authorize the Bull Run Filtration Pipelines Project construction in two phases with two guaranteed maximum prices and update estimated total cost of construction to \$404,000,000 (Ordinance)
- **565** Accept Guaranteed Maximum Price of \$286,245,376 from MWH-Kiewit JV for construction of the first phase of the Bull Run Filtration Facility Project (Procurement Report - 00001428) (Report)
- **566** Accept Guaranteed Maximum Price of \$51,792,077 from Bull Run Conveyance Partners for construction of the first phase of the Bull Run Filtration Pipelines Project (Procurement Report - RFP 00001634) (Report)



Key to staying on track
and managing costs



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Learn More portland.gov/bullrunprojects

Thank you!