Our Future Water Supply

The Willamette Water Supply System Commission (WWSS Commission) is an Oregon intergovernmental entity formed by **Tualatin Valley Water** District (TVWD), the City of Hillsboro, and the City of Beaverton. The WWSS Commission was formed to own, operate, manage and maintain the WWSS. TVWD has been designated the Managing Agency for the WWSS Commission, and TVWD operates the Willamette Water Supply Program (WWSP) to plan, design, and construct the WWSS. The WWSS will provide an additional resilient water supply for Washington County. When complete, the WWSS will be one of Oregon's most seismically-resilient water systems—built to better withstand natural disasters, protect public health, and speed regional economic recovery through restoring critical services more quickly. The new system will be completed by 2026.

Willamette Water Supply Monthly Progress Report Our Reliable Water Month End April 2023

Construction Progresses on Water Treatment Plant (WTP_1.0) Project

A new seismically resilient water treatment plant (WTP) is an essential component of the Willamette Water Supply System. The WTP is being constructed southwest of the intersection of SW 124th Avenue and SW Tualatin-Sherwood Road in Sherwood and will initially produce up to 60 million gallons of water per day (mgd) but is designed for expansion to 120 mgd. The stable soils on the site mean the WTP will have superior seismic resiliency and will be better able to withstand a catastrophic natural disaster. The new WTP will utilize <u>multiple treatment</u> steps to meet drinking water standards (learn more here). <u>Construction on the WTP_1.0</u> project began in 2022 and is anticipated to be complete in December 2025, with the plant beginning operations in 2026.

WTP_1.0 Spring 2023 Progress Update

Construction is underway on the WTP_1.0 project, and concrete work is the focus for spring 2023. Current work includes concrete pours and concrete forming of plant components including the floor slabs in four key areas: the water recycling basins, the filter gallery, the ultra-violet (UV) treatment area, and the finished water pump station. Approximately 830 cubic yards of concrete have been poured at the finished water pump station and the UV treatment areas so far. Approximately 38,000 cubic yards of concrete will be required to construct WTP_1.0.

Other recent work onsite includes:

- Construction of the 110-foot-high tower crane with a 262-foot horizontal reach
- Installation of temporary electrical conduits and wires to power construction work
- Setup of an onsite warehouse for storage of materials and a lunch tent and meeting space for the construction workers (at peak construction, approximately 300 workers are anticipated to be onsite daily)



Rebar and formwork placement for the UV area lower slab



UV area lower slab (left), tower crane (middle), and stored large-diameter pipe (right)



Excavation for the 10-million-gallon circular finished water storage tank and lower walls at the finished water pump station

Project of the Month

The WWSP is well underway with all projects currently in the construction phase or complete. The photos below highlight the Scholls Ferry Area Pipeline Project (PLM_5.3). Additional information on the project is available at https://www.ourreliablewater.org/scholls-area-pipeline-project/.



Pipe bedding, final grading, and pipe mobilization to trench along Grabhorn Road



Trench excavation and slope cleaning along Grabhorn Road

Schedule Summary

WWSP design and planning began in 2013; the Willamette Water Supply System is expected to be in service by July 2026. Below are the major milestones and activities forecasted from 2023 to 2026*. The WWSP team is committed to on-time delivery. See page 4 for descriptions of the projects referenced below.



Forecast Cost Summary

The graph below illustrates the projected WWSP cash flow by fiscal year (FY July 1 to June 30)*. The cumulative cash flow establishes the budgeted \$1.6 billion, which accounts for actual and current projected costs, including projected escalation in the cost of labor, materials, and equipment required to build WWSP projects.



*Current program forecast at completion may vary from baseline cumulative budget due to interim approved changes.

Cumulative Cost Summary

WWSP cumulative costs are tracked and updated monthly. The chart below summarizes the distribution of cumulative costs through March 2023.

Cumulative Water Supply Program costs to date are approximately \$607.8 million, with the majority spent on planning, engineering, and construction.





WTP 1.0 Willamette Water Supply System Water Treatment Plant (Water Treatment Plant (WTP))

Description: 60-million gallon per day water treatment plant (WTP_1.0), including a finished water pump station (FPS_1.0) and a control system (DCS 1.0) located in Sherwood.

Status: Construction (WTP, FPS, DCS)

FPS_1.0

DCS_1.0

[RWF_1.0]

Raw Water Facilities Expansion

(Raw Water Facilities (RWF) Expansion)

Description: Expansion of the existing raw water pump station and intake at the Willamette River WTP (WRWTP) in Wilsonville to 60 million gallons per day of initial capacity for the Willamette Water Supply System. Status: Phase 1: Complete; Phase 1.5: Complete; Phase 2: Construction

The mid-Willamette River at Wilsonville is the supply source for the WWSS. The system consists of modifying the existing river intake and expanding pumping capacity, building more than 30 miles of drinking water pipeline, reservoir storage facilities on Cooper Mountain, and a new WTP in Sherwood.

For more information about the WWSP, visit www.ourreliablewater.org or call 503.941.4570.

PLW 2.0

Cornelius Pass Pipeline Project (Frances Road to Highway 26)

Description: 3.3-mile water pipeline along Cornelius Pass Rd. from Frances St. to Hwy 26 with Phase 1 consisting of 0.7 miles of pipeline beginning at Orenco Woods Nature Park; connects to existing supply lines for City of Hillsboro and TVWD.

Status: Phase 1: Construction; Phase 2: Deferred

South Hillsboro Area Pipeline Project PLW 1.0

(Farmington Road to Frances Street) Description: 4-mile water pipeline from SW Farmington Rd. at SW 209th Ave. to Cornelius Pass Rd. at Frances St. Status: Phase 1: Complete: Phase 2: Construction: Phase 3: Construction

Metzger Pipeline East Project MPE_1.0

(Roy Rogers Road to Beaverton Hillsdale Hwy) Description: 7.3-mile water pipeline to be built along SW Scholls Ferry Rd. between SW Roy Rogers Rd. and Allen Blvd.; connects to Metzger service area at SW Oleson Rd. and TVWD's system.

Status: Phase 1: Construction; Phase 2: Construction; Phase 3: Construction

RES_1.0

South Beaverton Area Water Storage Tanks (Storage Tanks)

Description: One 15-million gallon storage tank located on Cooper Mountain.

Status: Construction

PLM_5.0

Scholls Area Pipeline Project

(North of Beef Bend Road to Rosedale Road) Description: 7-mile water pipeline from SW Roy Rogers Rd. 0.5-mile north of SW Beef Bend Rd. to SW Rosedale Rd. Status: Phase 1: Complete; Phase 2: Complete; Phase 3: Construction

Tualatin-Sherwood Area Pipeline Project PLM_4.0 (SW 124th Avenue to north of Beef Bend Road)

Description: 5.3-mile water pipeline from 124th Ave. at SW Tualatin Sherwood Rd. along SW Roy Rogers Rd. to 0.5 miles north of SW Beef Bend Rd.

Status: Phase 1: Construction; Phase 2: Construction; Phase 3: Construction; Phase 4: Construction

PLM 3.0

124th Avenue Partnership Project (SW 124th Avenue Extension)

Description: 2.7-mile water pipeline from Grahams Ferry Rd. at Day Rd. to 124th Ave. at SW Tualatin Sherwood Rd. Status: Complete

PLM 2.0

Kinsman Road Partnership Project (Kinsman Road Extension)

Description: 0.6-mile water pipeline along Kinsman Rd. between Barber St. and Boeckman Rd. Status: Complete

Wilsonville Area Pipeline Project PLM_1.0 (WRWTP to Day Road)

Description: 3.3-mile water pipeline from WRWTP to intersection of SW Garden Acres Rd. at Day Rd. Status: Phase 1: Complete; Phase 2: Complete; Phase 3: Construction