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 build the Willamette Water Supply System (WWSS) in response to planned growth in their service areas. 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 March 2021

A Resilient Water Supply System

Natural disasters such as earthquakes, severe storms, flooding, and droughts can affect drinking water supplies, thereby threatening health and safety as well the region's economy. Creating a clean and reliable water supply system that is resilient against these risks is of utmost importance to the Willamette Water Supply partners.

The Oregon Resilience Plan provides guidance for reducing risk and improving recovery in the event of a major earthquake. The Plan indicates that a major earthquake would seriously compromise our region's water systems. Most water systems were designed and built before engineers had a good understanding about the magnitude of potential earthquakes we could experience. Without significant improvements, the region's water systems will experience thousands of leaks and breaks; many reservoirs and treatment plants may be damaged, some beyond repair.



Image courtesy of the Oregon Office of Emergency Management.

The Willamette Water Supply System (WWSS) is being designed to withstand the impacts of a large earthquake or other natural disaster so that water service can be restored quickly and our communities can recover sooner.

Pipelines, water storage tanks, and other infrastructure along the 30+ mile route are being constructed to decrease the likelihood of cracking or breaking during an earthquake. In areas along the route where the soil is likely to liquefy due to the shaking from an earthquake, special precautions are being taken, including locating the pipeline at a depth below where this kind of geologic hazard would affect the pipe.

Regional Seismic Hazards



For the last 25 years, scientists have been aware of the possibility that a major earthquake caused by the Cascadia subduction zone could strike the Pacific Northwest in the next 50 years.

Subduction zone earthquakes are the largest earthquakes in the world and can reach a magnitude of 9.0 or greater.

Procurement & Business Opportunities

The WWSP staff are preparing for several upcoming professional services and construction contractor procurements. Listed below are active procurements and upcoming events and procurements. Procurement opportunities are also published at http://www.ourreliablewater.org/business-opportunities.

Active Procurements

- MPE_1.1/COB_1.2 Invitation to Bid (ITB) for Construction by City of Beaverton
- MPE_1.2/COB_1.2 Request for Proposal (RFP) for Construction

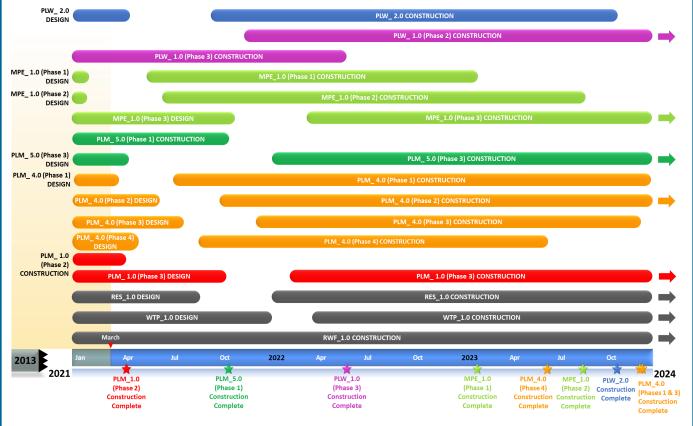
Upcoming Procurements

- PLM_4.1 ITB for Construction* (Quarter 2, 2021)
- PLM_4.4 ITB for Construction* (Quarter 2, 2021)
- PLW_2.0 RFP for Construction (Quarter 2, 2021)
- PLM_4.2 ITB for Construction* (Quarter 3, 2021)
- PLM_4.3 RFP for Construction (Quarter 3, 2021)
- PLM_5.3 RFP for Construction (Quarter 3, 2021)
- PLW_1.2 ITB for Construction* (Quarter 3, 2021)

*by Washington County

Schedule Summary

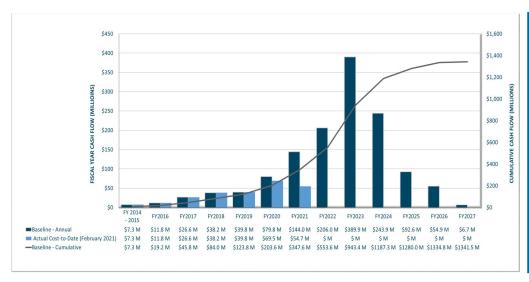
WWSP design and planning began in 2013; the Willamette Water Supply System is expected to be in service by July 2026. Below are the major milestones and activities forecasted from 2021 to 2024*. The WWSP team is committed to on-time delivery. See page 4 for descriptions of the projects referenced below.



*The actual order and duration of projects continues to be refined and is subject to change.

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 \$1.3 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.

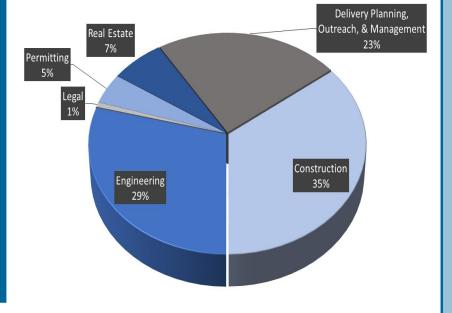


Costs to date for
FY 2021 are \$55
million. Cumulative
costs are projected
to be \$337 million
through the end of
FY 2021.

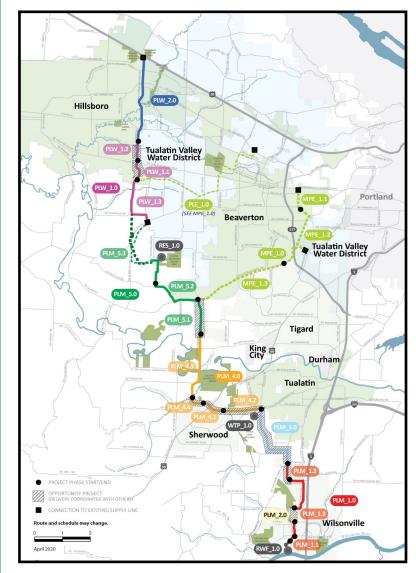
Cumulative Cost Summary

WWSP cumulative costs are tracked and updated monthly. The chart below summarizes the distribution of cumulative costs through February 2021.

Cumulative Water
Supply Program
costs to date are
approximately \$248
million, with the
majority spent on
planning,
engineering, and
construction.



^{*}Data continues to be refined and is subject to change.



WTP 1.0

Willamette Water Supply System Water Treatment Plant

(Water Treatment Plant (WTP))

FPS_1.0

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.

DCS_1.0 Status: Design (WTP, FPS, DCS)

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: Construction; Phase 2: Design Complete

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; connects to existing supply lines for City of Hillsboro and TVWD.

Status: Design

South Hillsboro Area Pipeline Project

(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: Design;

Phase 3: Construction

Metzger Pipeline East Project

(Roy Rogers Road to Beaverton Hillsdale Hwy)

Description: 7.3-mile water pipeline to be built in lieu of PLE_1.0 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: Design; Phase 2: Design; Phase 3: Design

RES 1.0

South Beaverton Area Water Storage Tanks (Storage Tanks)

Description: Two 15-million gallon storage tanks located on Cooper Mountain.

Status: Design

PLM_5.0

Scholls Area Pipeline Project

(North of Beef Bend Road to Farmington Road)

Description: 7-mile water pipeline from SW Roy Rogers Rd. 0.5-mile north of SW Beef Bend Rd. to SW Farmington Rd. at SW 209th Ave.

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

PLM 4.0

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

Description: 5.2-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: Design; Phase 2: Design; Phase 3: Design; Phase 4: Design

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 (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: Construction;

Phase 3: Design

For additional schedule information, go to page 3 of this report, or www.ourreliablewater.org.