



Patterson Pass Water Treatment Plant Upgrades and Ozonation Project

July 21, 2021 - Zone 7 Board of Directors Meeting

Presented by Rhett Alzona, Principal Engineer, Zone 7 Water Agency

Construction Progress Report

Project Overview

Project Objectives

- Increase plant capacity from 12 to 24 MGD
- Increase treated water storage capacity an additional 5 MG
- Replace or upgrade many major plant components that are reaching the end of their useful life
- Improve treated water quality and plant reliability with the addition of ozone treatment

Cost

- Approximately \$110 million for planning, design, and construction

Funding Sources

- Funded by water rates, new connection fees, and bonds (\$19 million)

In Service Date: Spring 2022



Water Reliability



Ozone Treatment



Water Quality

Project Supports Multiple Strategic Plan Initiatives



Water Reliability

Initiative 3

Continue to effectively implement infrastructure projects in the Water System CIP



Ozone Treatment

Initiative 4

Implement Ozone



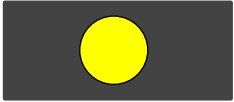




Water Quality

Initiative 5

Meet or surpass all drinking water health and safety requirements

Project Status

Overall project status is **YELLOW**.

Schedule		Project is on schedule and approximately 80% complete. Project completion is anticipated in Spring 2022. COVID-19 uncertainty remains.
Budget		Project budget is under control. Negotiated and executed change orders total \$2.7M to date (3.5% of original contract amount). COVID-19 uncertainty remains.
Issues		Multiple project issues, but they are under control. Project team holding regular meetings to plan for startup of ozone and other new facilities.
Decisions		No decisions are requested at this time.
Risks		COVID-19 related delays and cost impacts unknown at this time.

Construction Site Overview (5/28/21)



Sitework



Installing 36-Inch Treated Water Pipe from TWMV
to 5 MG CW – 5/18/21



Installing Electrical Conduit to
Filter-to-Waste Return Pump
Station – 7/14/21



Pouring Concrete for Chemical Vault Construction –
4/20/21



Backfilling 48-Inch Settled Water Pipe From Clarifiers to
New Filters – 6/14/21

Ozone Generation Building

- Installation of piping, instrumentation, and electrical equipment continues



General View of Ozone Generation Room – 5/21/21



Installing Cooling Water Pipes – 5/5/21

Flash Mix Area

- Construction of flash mix area continues



Constructing Concrete Slab at Flash Mix Facility – 5/18/21



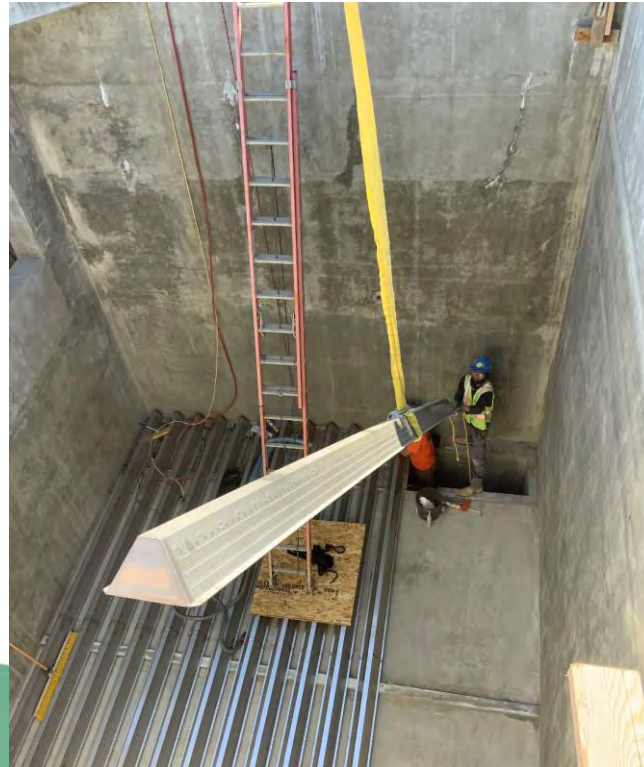
Installing Pumps at Flash Mix Facility – 7/9/21

Filter Structure

- Installation of piping and valves in filter pipe gallery continues
- Installation of underdrain system in filter cells continues through July
- Installation of filter media to begin in August
- Construction of filter-to-waste return pump station is wrapping up



Installing 24-Inch Backwash Pipe in
Filter Pipe Gallery – 5/5/21



Installing Underdrain System in Filter
Cells – 6/1/21



Installing Piping at Filter-to-Waste Return Pump Station – 4/27/21

5 MG Clearwell

- In late-May, completed interior coating and began exterior surface preparation
- Exterior tank coating through July



Touching Up Interior Coating of 5 MG Clearwell – 5/27/21



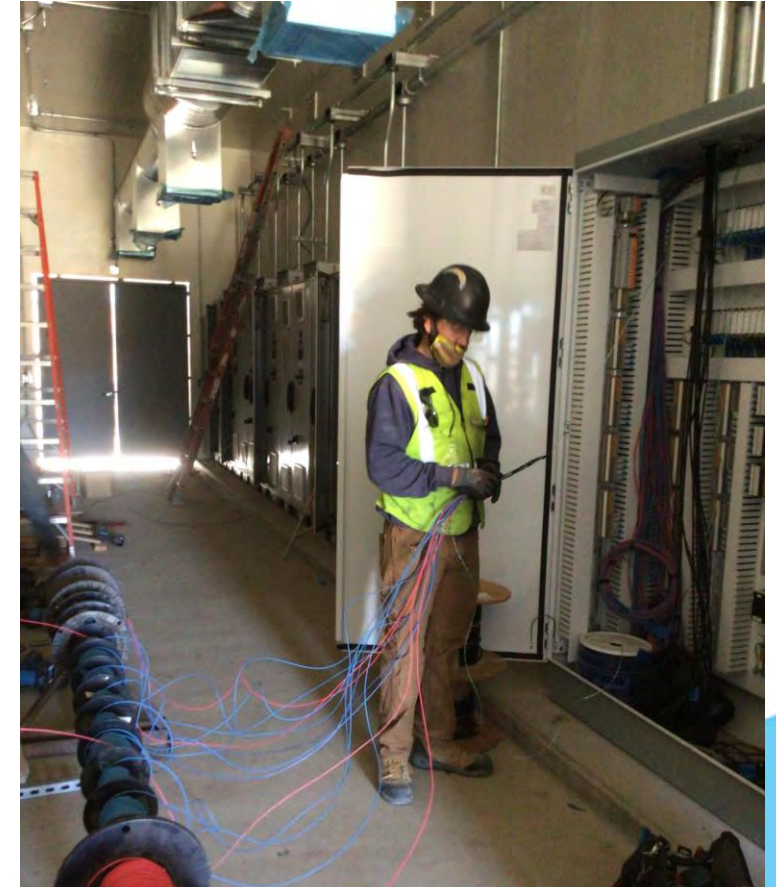
Exterior Coating (starting with seams and roof) – 7/8/21

Treated Water Pump Station (TWPS)

- Installation of above-ground piping wrapping up
- Installation and testing of instrumentation and electrical equipment continues



General View of Treated Water Pump Station and Electrical Building – 7/8/21



Installing Wiring in TWPS Electrical Building – 6/9/21



Water Reliability



Ozone Treatment



Water Quality

Questions?

