FACT SHEET

Surface Water Supply Project: Wet Well

SRWA
STANISLAUS REGIONAL WATER AUTHORITY

PROJECT OVERVIEW

The Stanislaus Regional Water Authority (SRWA) is developing a regional Surface Water Supply Project (SWSP) to provide a new, treated surface water supply to the Cities of Ceres and Turlock (Cities). One of the first facilities to be constructed is the raw water wet well. This facility will convey water from the Tuolumne River (River) to a new regional surface water treatment plant (WTP).

A key component of the SRWA's regional Surface Water Supply Project is the Raw Water Pump Station (RWPS). The completed RWPS will consist of two major structures: the Wet Well, which is a large, buried concrete "box" used to hold water drawn from the Tuolumne River; and the Pump Station building, which will be constructed directly above the Wet Well and used to house pumps, piping and electrical equipment. The Wet Well can be thought of as the container that holds the straw needed to drink water from a glass. Raw water will be drawn from an existing infiltration gallery located within the riverbed. An infiltration gallery is a horizontal collection of perforated pipes that serve as a conduit to collect water in a chamber (the Wet Well), which is then pumped via the RWPS to the WTP. The Wet Well and the future RWPS will be located on the south bank of the Tuolumne River, just west of the Geer Road bridge near Hughson, and just south of the existing buried infiltration gallery.

Constructing the Wet Well will provide SRWA access to the existing infiltration gallery that was installed by Turlock Irrigation District in the early 2000's. This access will allow SRWA to test the gallery's production capacity and collect samples of water from the infiltration gallery, and compare them to samples from the River. Information obtained from these activities will assist the engineers working on the preliminary design of the WTP to fine tune the treatment processes to ensure the highest quality water is delivered to both Cities.

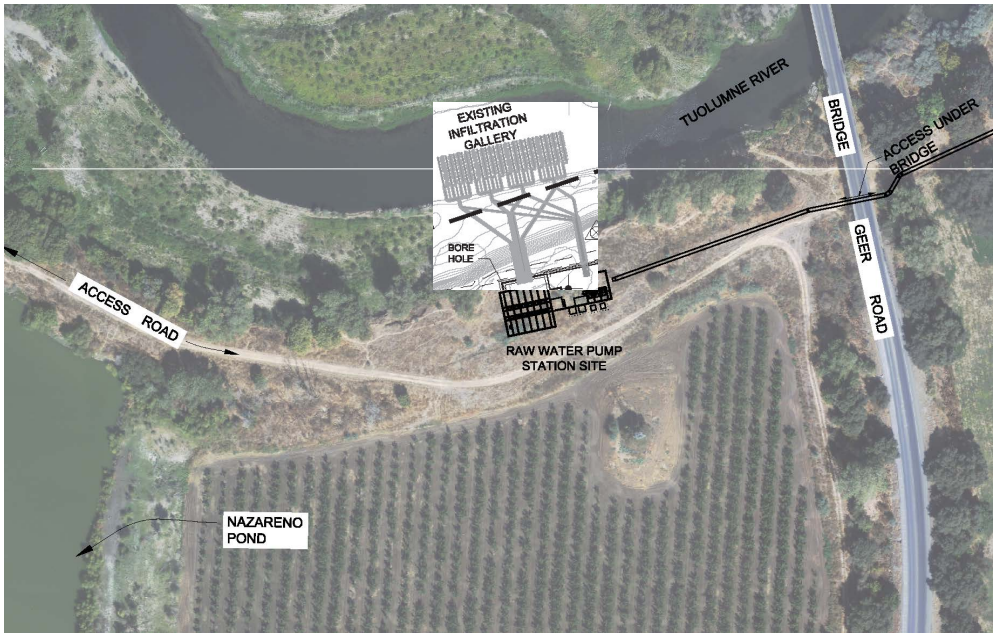
Total construction costs for the Wet Well are projected to be approximately $8 million. The design for the Project was completed by West Yost Associates. Overaa Construction was selected by the SRWA to build the Project, and Inferrera Construction Management Group, LLC was selected by the SRWA to oversee construction management of the Project.

Construction is expected to begin in July 2018 and continue for up to 19 months.

SWSP OVERVIEW

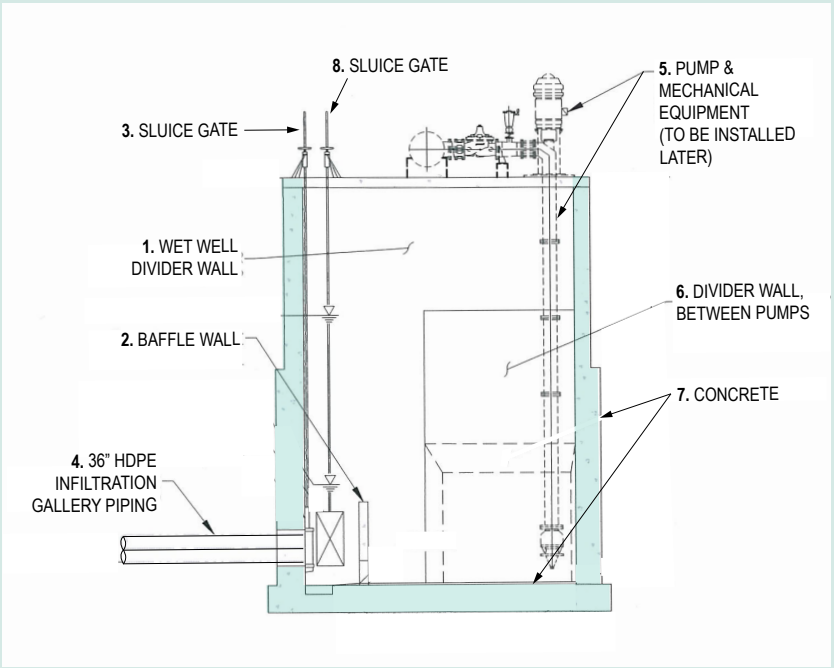
The Cities of Ceres and Turlock have formed the Stanislaus Regional Water Authority (SRWA) and, in cooperation with the Turlock Irrigation District (TID), are working on a multi-benefit Surface Water Supply Project (SWSP) to develop a resilient source of drinking water that will reduce groundwater dependence, improve drinking water quality, diversify regional drinking water supplies, and provide environmental benefits.

PROJECT LOCATION



A key component of the SRWA's regional Surface Water Supply Project is the Raw Water Pump Station and the Wet Well, which is a large, below-ground concrete structure that will ultimately house the pumps needed to draw raw water from the Tuolumne River into the Raw Water Pump Station.

WET WELL CROSS-SECTION



KEY WET WELL COMPONENTS

1. Full height concrete wall used to divide Wet Well into two halves and allow for periodic isolation, inspection and maintenance
2. Short concrete wall used to reduce turbulence and improve hydraulic conditions inside Wet Well
3. Used for as-needed isolation of gallery piping
4. Existing piping connected to infiltration gallery
5. Pumps and piping used to extract water from the Wet Well and deliver raw water to the treatment plant
6. Mid-height concrete wall used to improve hydraulic conditions experienced by each pump
7. High strength structural concrete designed to withstand stresses from water, soil, earthquakes and a future building to be located above the Wet Well
8. Sluice gate used to separate the two halves of the Wet Well

CONTACT US

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