625 East 10th Street Austin, TX 78701











**Austin Water** Utility's Mission is to provide safe, reliable high-quality drinking services to its nearly 900.000 current customers, and to ensure reliable water to its future customers

#### **CONTACT INFORMATION**

Please email questions and comments about WTP4 to info@wtpfour.com or call us at 498-9874. This newsletter is mailed to stakeholders.

If you or someone you know wants to receive this information electronically, please subscribe by emailing us at info@wtpfour.com.

#### **VISIT OUR WEB SITE AT**

http://www.austintexas.gov/department/water-treatment-plant-4

### CONSTRUCTION OF WATER TREATMENT PLANT 4 REACHES 50% COMPLETION

Construction of Water Treatment Plant 4 (WTP4) reached a milestone this summer when it attained 50% completion. WTP4 will become Austin's third active water treatment plant and is on schedule to become operational by mid-2014.WTP4 will initially produce up to 50 million gallons of drinking water daily and will supplement Austin's other two water treatment plants, Davis (built in 1954) and Ullrich (built in 1969).

WTP4 is a multi-faceted project and includes construction of the Raw Water Intake System, the Raw Water Pump Station, the WTP4 facility and the Jollyville Transmission Main



#### Raw Water Intake System

This summer the WTP4 team completed installation of the Raw Water Intake System in Lake Travis near The Oasis restaurant, northwest of RM 620 and west of Oasis Bluff Drive. Construction of the Raw Water Intake System began in September 2011. When WTP4 is operational, the intake system will draw raw water from the deepest part of Lake Travis through one of three intake screens. The raw water will then flow by gravity through a nine foot diameter, concrete lined tunnel over 400 feet deep to the Raw Water Pump Station nearly a mile away. The raw water will then be pumped through an underground pipeline to WTP4 for treatment



The intake system consists of three stainless steel screened inlets, each of which is installed at a different depth. Only one screen will be used at any given time to draw raw water from the Lake. Which screen is used will depend on the current lake level to optimize raw water quality, which in turn helps increase treatment efficiency.

On August 21st, Lake Travis was at 636.8 feet Median Sea Level (MSL), which is about 29 feet below its historic August average. The upper level screen is visible above the surface of the water (see photo below). However, the intake system will not be visible when Lake Travis is full at 681' Median Sea Level (MSL). The top of the upper level screen is located at 655.5' MSL.

For safety purposes and in accordance with LCRA guidelines, buoys have been installed around the perimeter of the intake area to prohibit boaters and swimmers from entering the area.

During the month of August, crews worked to remove construction equipment and materials from their staging area at Keller Marina and site restoration has been completed. No additional work is anticipated at the Raw Water Intake site until sometime in 2013. Crews will then briefly return to Lake Travis to connect the Intake Structure with the raw water tunnel after it is completed.



#### Raw Water Pump Station

Crews have also been busy this summer building the Raw Water Pump Station along Bullick Hollow Road. As part of this work, Bullick Hollow Road was widened to construct a climbing lane to allow local traffic to move past trucks entering and leaving the construction site.

# CONSTRUCTION EXPECTED TO BEGIN THIS FALL ON BULLICK HOLLOW ROAD DUCT BANK

Construction of an electrical duct bank that connects the Raw Water Pump Station with an electrical substation being installed at the WTP4 site could begin as early as late October. Construction is anticipated to take approximately 8-10 months to complete.

The majority of the duct bank will be constructed outside the two main eastbound and westbound lanes of traffic. However, the duct bank will cross Bullick Hollow Road in two locations and will also be constructed within the eastbound climbing lane. The proposed alignment for the duct bank was deemed the most cost effective and environmentally acceptable following careful examination and consideration of many options. Neighboring residents provided input to the project during several community outreach events and presentations that were held in 2011 to obtain feedback from residents of the Village of Volente and surrounding communities.

Installation of the duct bank will require temporary nighttime road closures to provide adequate access for construction and to ensure

the safety of the public. In addition, signage will be posted along the roadway two weeks in advance of any road closures to give drivers advanced notice.

The WTP4 project team is working with Travis County to obtain the proper permitting for road closures. If you would like to receive additional information about the duct bank construction, please send us an email at info@wtpfour.com or call us at 498-9874.

#### WTP4 Site

Construction of the water treatment plant facility, itself, is also well underway. More than 200 companies and 350 workers are engaged in various aspects of construction on a daily basis. In addition to underground tunneling and pipe work, foundations have been poured for many of the buildings and structures that will be located at WTP4 and columns and walls have also been constructed. Work at the WTP4 plant is expected to be complete in 2014.



#### **Jollyville Transmission Main**

A key component of the WTP4 project is the Jollyville Transmission Main, which will carry the treated water from WTP4 via a 7-foot diameter underground transmission pipeline to the Jollyville Reservoir, located at US 183 and McNeil Drive. The transmission main will be installed inside of an approximately seven mile long, 10-foot diameter tunnel.

Crews have completed three of the four vertical tunnel shafts that will provide access for construction and allow for adequate ventilation to keep workers safe during construction. Excavation of the fourth shaft site, located at the intersection of Spicewood Springs Road and Old Lampasas Trail, is expected to begin in September and is anticipated to be completed by the first quarter of 2013. The Spicewood Springs shaft will be used to retrieve two Tunnel Boring Machines coming from the Four Points shaft and the Jollyville shaft. Tunnel excavation from those sites began in August.



WTP4 HAS REACHED 50% COMPLETION. IN LATE JULY 2012, A SIGNIFICANT SAFETY MILESTONE WAS ACHIEVED WHEN 1,000,000 WORK HOURS WERE OFFICIALLY LOGGED WITHOUT A LOST TIME ACCIDENT.

## EXCAVATED ROCK BEING RECYCLED FOR CITY OF AUSTIN PROJECTS

The WTP4 project is being developed with an unprecedented level of environmental oversight. Every aspect of the project is being monitored to ensure it meets or exceeds the City of Austin's environmental standards. Recycling is a fundamental effort of the WTP4 project team. In addition to reusing onsite materials for backfill and recycling construction debris, the team has also donated large boulders that have been excavated as part of the project for reuse by the City of Austin on other municipal projects. Large rocks will be used as aesthetic enhancements and support rests along hike and bike trails throughout Austin. Smaller rock will be used on a road reconstruction project along 32nd street between Duval and Red River.

