



Gateway to the Redwoods

111 E. Commercial Street
Willits, California 95490
Tel | 707.459.4601
Fax | 707.459.1562
www.cityofwillits.org

Public Utilities Fact Sheet

City of Willits Groundwater Resiliency Improvement Project

This phase of the Groundwater Resiliency Improvement Project would further develop existing groundwater infrastructure to provide the City with a reliable secondary source of water that would be sufficient to meet community needs if surface water supply is compromised and to supplement the City's drinking water system on a regular basis. This would provide operational flexibility to manage water sources conjunctively, considering factors such as reservoir management, aquifer and watershed health, water quality, operational constraints, and ecosystem health. The following are quick facts relating to the City's groundwater system and proposed improvement project.

➤ Why is the City adding to the existing groundwater system?

- In 2006, the City's Water Supply Planning Study concluded that there would be a water supply deficit of 650-acre feet (approximately 250-million gallons) during a critically dry year. This number was calculated using an average water consumption rate of 0.9-million gallons per day during the dry months.
- In late 2013 and early 2014, the City faced severe drought conditions. The City's reservoirs were reduced to a maximum supply of 90-days, which assumed the entire volume of water stored in the reservoirs was treatable.
- This dangerously low amount of water available caused the City to undertake an emergency groundwater project with the project completed in the Fall of 2015.
- Had it not rained in March of 2014 the surface water supply would have likely become unusable or untreatable due to raw water quality issues.

➤ What is the City's current groundwater infrastructure?

The City currently has a groundwater treatment plant that treats raw water from the Elias Replacement Well and can produce up to 330-gallons per minute of treated drinking water that is pumped directly into the City's water distribution system. This system is currently permitted by the State Division of Drinking Water.

➤ **What is the scope of this phase of the Groundwater Resiliency Improvement Project?**

- Replacement of 3,600 lineal feet of raw water pipe.
- Installation of 150 lineal feet of new raw water pipe.
- Installation of a pump and development of the Long 20 Well and connect the well to the new pipeline that conveys raw water to the groundwater treatment plant.
- Construction of a new, 250,000-gallon, chlorine contact tank at the groundwater treatment plant.
- Construction of a new pumping facility between the chlorine contact tank and the distribution system to improve the control over the amount of treated drinking water pumped into the distribution system.

➤ **What about water quality?**

Based on the test results for the raw water in the Long 20 Well, the City is confident that the groundwater treatment plant can effectively treat the raw water to a level that meets the State of California, Division of Drinking Water, standards for municipal domestic water supply.

➤ **Do we know how much water is in the aquifer?**

Three studies have shown volumes estimated that range from 35,000-acre feet to 91,600-acre feet of water. As a helpful reference, one-acre foot of water is equivalent to 325,829-gallons. Studies on the Little Lake Aquifer have also estimated that at 75-percent of average rainfall, based on an estimated annual use of 2,000 AF, the aquifer completely recharges.

➤ **Does the City expect the wells to impact shallow wells in the Little Lake Valley?**

No. The City's wells are constructed to pull water from the deeper aquifer. Pump tests have shown that pumping from the lower water producing zones does not adversely affect shallow wells that pull from surface water (less than 50 feet)

➤ **How much water does the City use for domestic purposes (excluding irrigation of the Recreation Grove and the ballfields)?**

- Surface Water:
 - 2019: 827 acre-feet
 - 2020: 718 acre-feet
- Groundwater:
 - 2019: 41.7 acre-feet
 - 2020: None

For more information regarding the Park Well or the City's Water Program, please contact Public Works Director Scott Herman at 707.459.7129.