

# TURKEY PEAK RESERVOIR

## PROJECT AREA

The Turkey Peak Reservoir will be located on Palo Pinto Creek immediately downstream from Lake Palo Pinto, approximately two miles northwest of the City of Santo, and upstream from the bridge over Palo Pinto Creek on FM 4.

## NEEDS

For many years, the capacity of Lake Palo Pinto has been slowly decreasing and the demand for water in Palo Pinto County has been increasing. Then, at the peak of the drought in 2015, Lake Palo Pinto was nearly dry, with the water level down to eight percent of capacity. Spring rains eventually restored the lake to adequate levels, but the need to secure additional water sources was confirmed.



## Principal Elements of the Project

- 1 New dam and spillway construction
- 2 Closing of a portion of FM 4
- 3 Upgrade of Ward Mountain Road to support traffic diverted from FM 4
- 4 Construction of a bridge at the existing dam and spillway at Lake Palo Pinto along with extension of Brown Road to Lakeview Drive
- 5 New boat ramp facility off Ward Mountain Road serving the Turkey Peak Reservoir.
- 6 Removal of a four-foot portion of the existing spillway at Lake Palo Pinto to connect the two reservoir pools
- 7 Construction of a multi-level outlet tower which will release water downstream into Palo Pinto Creek

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## PROJECT STATUS

The estimated cost of the project is \$95 million.\* To date, Palo Pinto County Municipal Water District No. 1 has secured \$17.1 million in funding from the State Water Implementation Fund (SWIFT). An additional \$8 million has been secured from the Texas Water Development Board (TWDB), the Economically Disadvantaged Assistance Program (EDAP) and the Water Infrastructure Financial Program (WIF). The remaining project costs are to be funded by TWDB SWIFT loan. The District has permits to build and is working to complete final design and acquire the necessary property rights.

**\$95** Million estimated project cost\*  
 (\$74 million of this is estimated construction cost)

**2020** Construction is planned to begin

\* Based on January 2015 cost estimate for TWDB SWIFT application

## SERVICE LEVELS

Currently, Palo Pinto County Municipal Water District No. 1 serves 31,000 customers in Palo Pinto and Parker counties, including the City of Mineral Wells, the town of Graford, two special utility districts, five water supply corporations, and the Brazos Electric Power Co-op

Lake Palo Pinto's current capacity is approximately 27,000 acre-feet, or 8.8 billion gallons. Upon project completion, the combined lake and reservoir capacity will be about 50,000 acre-feet, or 15.9 billion gallons. This will increase storage by 83 percent and increase reliable supplies by 6,000 acre-feet per year, allowing the District to meet future demands.

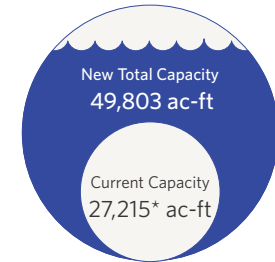
**31,000** Current customers

**8.8** Billion gallon capacity currently

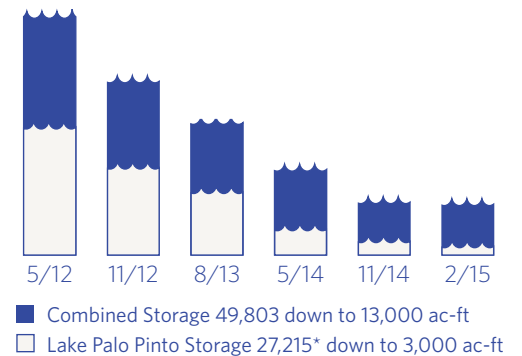
**15.9** Billion gallon capacity after expansion

## PROJECT BENEFITS

**83% Capacity Increase**



**Drought Reliability:**  
 Water Storage with Turkey Peak Reservoir  
 (Recent Droughts May 2012 - February 2015)



\*According to a volumetric survey performed in 2007

## PROJECT TIMELINE

**1963**

Lake Palo Pinto dam was initially constructed with a conservation pool level of 863 feet above mean sea level. The level was raised a few years later to 867 feet.

**1985**

During the early 1980s and after multiple recurrences of low lake levels, a volumetric survey of the lake was performed and determined the reservoir's conservation capacity to be 27,650 ac-ft, or about 16,450 ac-ft less than the authorized capacity of 44,100 ac-ft.

**2004**

Increasing demands and drought led the District to evaluate various options to supplement the Lake Palo Pinto water supply.

**2009-2018**

The District submits required permit applications to state and federal agencies. Permits were granted in 2015 and 2018.

**2012-2015**

New drought highlights the critical need for additional water supplies.

**2020**

Begin construction of the Turkey Peak Reservoir.