



North Twin Oaks Reservoirs

Largest Prestressed Concrete Tank in the World





**Twin Oaks Reservoir #1
33-million gallon tank
(constructed and buried)**

Impressive Statistics of Reservoir #2

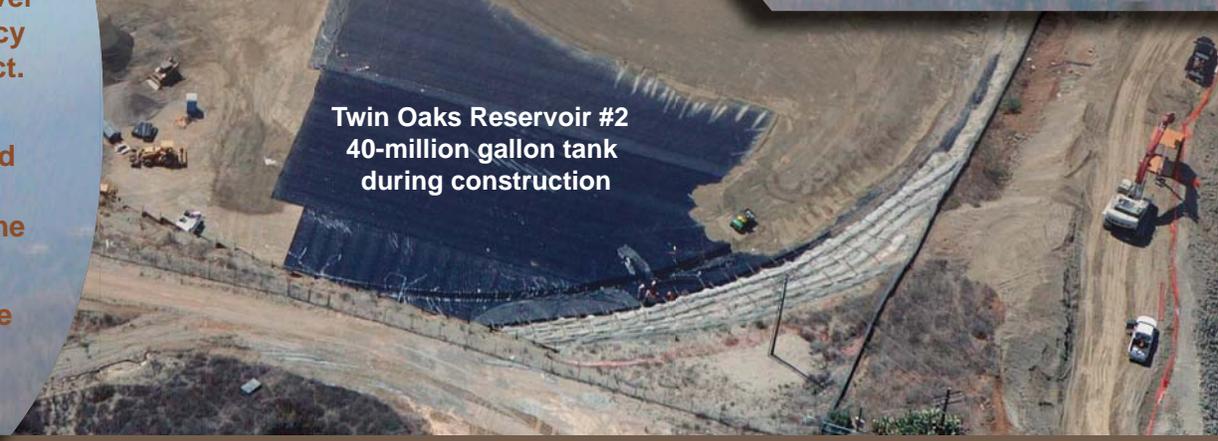
- 40-million gallon capacity
- Inside wall diameter is over 434 feet, which is larger than the infield of most professional ballfields
- Contains 254 miles of cable wrapping strand
- Contains 256 columns (30 inch diameter)
- Roof thickness is 18 inches
- Wall height is 40 feet
- Water depth of 38 feet
- Backfill height is 30 inches above the roof
- Said to be the largest prestressed concrete tank in the world!
- Earned 2004 and 2008 'Project of the Year' award by the American Society of Civil Engineers.

Facts About Both Tanks:

- The 33-million gallon tank is similar to the 40-million gallon tank, but is smaller in diameter.
- Both tanks provide over five days of emergency storage for the District.
- The \$25 million dollar project included land acquisition and accompanying pipeline
- The tanks are located on a 29-acre, rural site in the northern part of the District.



**Twin Oaks Reservoir #2
40-million gallon tank
during construction**



History of the Project

The Vallecitos Water District originally planned to construct two 33-million gallon tanks at the Twin Oaks Reservoir site. The first 33-million gallon tank was constructed beginning in 1998 and completed in early 2001.

Due to updates to the District's 2004 Master Plan, it was later

determined that a second 33-million gallon tank would not be sufficient to provide the additional water storage that was needed.

The District's consultant, Infrastructure Engineering Corporation (IEC), completed a planning study and alternative analysis to maximize storage on the existing site. The study recommended construction of

a 40-million gallon circular prestressed concrete tank on the site for a combined reservoir capacity of 73-million gallons.

The project was constructed in three phases: mass grading, reservoir construction and final site improvements. The reservoir was completely buried and landscaped, concealing it from the surrounding community.