

Lake Alan Henry Pipeline Update

Lubbock's Water Project Moves Forward

Lake Alan Henry was planned to serve as a water supply for the City of Lubbock and construction on the John T. Montford Dam was completed in October 1993. Projections for when the water would be necessary have varied greatly from 10 to 50 years. The Texas State Water Plan currently projects that the City of Lubbock may need the water by 2010. This projection is based upon Lubbock's continued population growth, conservation efforts, the impact of drought and declining groundwater levels, and water use projections prepared by both professional engineers and city staff. Based upon this information, final engineering for Lake Alan Henry is underway with a proposed completion date of 2012.



▼ Northwest aerial view of Lake Alan Henry.

As a result, a preliminary engineering study was approved in the spring of 2006 and completed in November 2007. The study developed initial plans to make use of Lake Alan Henry as a new water supply by constructing 65 miles of large diameter pipe, three pump stations, and a new water treatment plant. Lake Alan Henry has a firm yield of 19,000 acre-feet of water or about 6.2 billion gallons, and can supply over 40% of the City's current water supply needs. Several pipeline route alternatives

were evaluated. The most direct pipeline route was selected since the large diameter pipeline could cost almost \$2,000,000 per mile. Right-of-way for the pipeline must be acquired before design engineering for the pipeline can begin. One pump station will be located at Lake Alan Henry just northeast of the John T. Montford Dam with a second located near the City of Post. The third pump station near Southland will not be needed for a number of years.

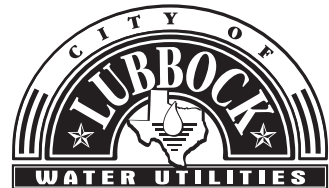
The water treatment plant will use both conventional and ultra-fine membrane filtration technologies in order to treat water from a variety of future water sources. The new water treatment plant will be constructed to the south of Lubbock. Initial plant

capacity will be 10 million gallons per day (MGD) with a future capacity of 50 MGD. An initial terminal storage reservoir near the water treatment plant will be constructed with a capacity of 150 million gallons. The treated water will be conveyed into the existing City of Lubbock distribution system.

During 2008 and early 2009, the City will complete most of the design engineering for the pipeline, pump stations and water treatment plant. Construction should begin in 2009 with all project phases being under construction by early 2010. The \$240 million project is scheduled for completion by 2012. Federal and State funding for portions of the project are being pursued to help lower the cost of the project for citizens of Lubbock.

Lake Alan Henry Facts

Raw Water Line Size	42 To 48-Inch Diameter
Raw Water Pipe Material	Concrete/Steel Cylinder Pipe
Water Transmission Pipeline Cost	\$146 Million
Transmission Pump Stations	\$42 Million
Water Treatment Plant	\$52 Million



Construction Timeline

October 2007	Began surveying route and acquiring right-of-way
November 2007	Preliminary Engineering completed
March 2008	Begin Final Engineering Design
2009	Award bids and begin construction
2012	Project completion

For more information contact the Water Conservation and Education Department at 775-2595 or visit us online at <http://water.ci.lubbock.tx.us>