

LAKE ALAN HENRY WATER INFORMATION

Lake Alan Henry was built by the city of Lubbock as an additional water supply for Lubbock, Texas. Currently, Lubbock has water supplied by a large well field in Bailey County and CRMWA and some water rights in the northern panhandle.

The following information may help clear up some of the false rumors concerning Lake Alan Henry.

City of Lubbock owned Bailey County well water supply – these wells have been online since the 1960's serving Lubbock. These wells provide 30% of Lubbock's water needs (14,000 acre feet per year). Lubbock does not intend to pump this field at maximum due to quicker depletion of the water source. Lubbock is also limited in production from the well field by the newly adopted HPUWCD 50/50 rules.

The city of Lubbock is a member city of CRMWA whom owns water rights in the northern panhandle (Roberts county) that has not been fully developed. Roberts county wells provide 52% of Lubbock's water needs (24,000 acre feet per year).

Recently, CRMWA purchased Mesa water rights in the northern panhandle. CRMWA serves 11 (eleven) cities in the panhandle including Lubbock. CRMWA also owns Lake Meredith. After the purchase of Mesa water rights, CRMWA announced they now have enough water supply for "all" 11 (eleven) cities for over 100 years.

Development of the Roberts County well field and pipeline infrastructure will be installed in the future to bring this water supply into the system.

Lake Alan Henry is a water supply reservoir for the city of Lubbock. The city of Lubbock does not intend to pump at the maximum plant capacity, which is 11,000 per acre feet per year, unless needed. Basically, due to treatment expense, the more water pumped from Lake Alan Henry to Lubbock, results in a higher cost of water in the city of Lubbock.

Lubbock is currently planning to pump 8,000 feet annually (about 3 to 4 feet out of the lake annually). This will be 18% of Lubbock's water needs. This amount may be increased later if needed. Surface acres of Lake Alan Henry are 2880 acres – therefore, 1 foot of water out of Lake Alan Henry equals 2,880 acre feet.

The amount of water that can be pumped from Lake Alan Henry is controlled by a water permit from Brazos River Authority issued to Lubbock. The permit allows a maximum of 19,600 acre feet per year.

LAKE ALAN HENRY WATER INFORMATION

Also, the Brazos River permit further protects the lake from being pumped down to "mud" by a scheduled reduction of pumping if lake levels drop. This schedule is as follows:

Full lake level is 2220 above the erosion level.

<u>LAKE WATER ELEVATION</u>	<u>PERCENT PUMPING REDUCTION IN BASE ANNUAL QUANTITY</u>
(35 ft below full lake) 2185	10%
2180	20%
2175	30%
2170	40%
2165	50%

Lake Alan Henry is about 80' deep at the dam. Most of the main lake is about 60 to 70' deep. Average depth is 46 feet. According to the city of Lubbock engineering study, the average firm dependable annual yield (Annual rainfall caught in Lake Alan Henry) is 16,000 acre feet (5.5 feet).

Lake Alan Henry has one of the best water sheds for catching rainfall for the lake. As a "rule of thumb" this lake catches about a foot of water for every inch of rain that falls in the drainage area. Lake Alan Henry's annual average rain fall is recorded at over 18 inches. As mentioned before, Lubbock's plan for 2013 is to pump 8000 acre feet annually (about 3.5 to 4 feet) out of the lake each year.

As of March 2012, Lubbock recently announced the pipeline from Lake Alan Henry to Lubbock has been filled with water. Also, water has been stored in the terminal storage reservoir at the treatment plant. This took 757 acre feet out of Lake Alan Henry. This calculates to about 3.4 inches out of the lake.

In short, the Brazos River Authority permit with pumping restrictions on Lake Alan Henry, it would have to **not rain any** for 10 to 20 years for Lake Alan Henry to be down to mud. Most of the lakes in Texas do not carry these protective restrictions.

South Garza Water Supply (North Ridge Development) has a contract with the city of Lubbock to use water out of Lake Alan Henry for the development and surrounding area. South Garza Water Supply also provides water to Lubbock's Sam Wahl recreation area at Lake Alan Henry.

South Garza Water Supply has installed a TCEQ (Texas Commission on Environmental Quality) approved surface water treatment plant and, all infrastructure to provide an excellent quality and quantity of water to the North Ridge Development.