

Churchill County Commissioners Meeting

February 12, 2018

Lyon County Utilities Department – Talking Points

- Service area – Mound House & Dayton to 10 Mile Hill (Chavez Rd)
 - 6,800 customers water / 5,900 sewer
 - 2.7 mgd average demand with a 5mgd peak demand
 - The system is looped. No longer 5 small systems so we can operate as one medium sized interconnected system.

- We have 15 ground water wells of varying size. 95gpm up to 2,000gpm (induction well)
 - Many of the older wells are located within 200 – 500 feet of the Carson River
 - The post 2004 ground water righted wells are 2,000 feet away from the river and are in the 400 - 500 feet depth range.
 - The Rolling A Induction well is 600 feet from river at a depth of 128 feet with a 100 sanitary seal.
 - There is a 16" inter-connection with Carson City. We share a 3 million gallon storage tank. Water can be pumped in either direction. 2 times per year water billing with staff meetings as needed. About 200 acre feet per year goes to and from Carson City. 10 years of operation without any major operational issues.
 - We operate under a Conjunctive Use program. We use the 40-40-20 rule as a base line for surface right pumping. The most we have pumped the induction well was 128 days back in 2009.

- Water Rights
 - 11,662 afa groundwater
 - 2,207 Carson River Decreed Rights – 1,725 are accessed through induction well in Segment 7B. Last user in 7B. (342afa was pumped in 2016) do not pump unless strong water year in River.
 - Total of 13,869 afa
 - No supplemental water is used or considered for will serve issuance. This has been the position of LCUD and the State Engineers office since the Conjunctive Use program was developed.

 - **6,600 afa is currently allocated** for development. Some using the old allocation tables of 1.12 & .70 afa with the new ones using the TMWA rule x 1.4. (8,000 ft lot = .60af, 12,000 = .72af). New allocation rate was firmed up in 2007-08.
 - **2,698af is actual amount** used service area wide leaving a balance of **3,895af** **which we consider our drought reserve.**

- Average use per residential connection
 - 2007 - .52 afa per connection
 - 2016 - .30 afa per residential connection

- **Stewardship Components**
 - Monthly Water Auditing by parcel
 - 2006 – 11.3% unaccounted for water loss
 - 2017 – 4.5 – 5% unaccounted for water loss
 - Water meter replacement and fixed base metering system upgrade (current project)
 - Water rates - \$3.12 / 1,000 (over the 5,000 base) current, \$3.20 in July

- Groundwater level monitoring – 26 wells read weekly and logged.
- Demonstration xeriscape landscaping at LCUD office. Reduced water use by 40%.
- Making effort to move groundwater permitted wells further away from river. Using 2,000 feet as a base line. One may need to be closer due to topography TBD.
- 97% reuse. 1,014af of sewage was treated at WWTP. Of that, 1,000af was reused through RIBs, golf course irrigation which reduces their ground water pumping.
- Domestic Well Credit Program – residential customers that connect to our system and abandon their well us an average of .29afa compared to the 2.02 afa that is allotted.
 - Water rights returned to system. Both ground and surface Ag to Muni water gets a 50% reduction when changed.
 - Unused portion of municipal surface water allocation stays in river
 - Supplemental ground not used and stays in basin.
 - El Dorado surface water is not being considered for ASR storage – stays in system.
- Conservation and Drought Ordinance in place including monitoring and consulting with customers that exceed their allocation amount.
- Improved WWTP processes and RIB capacities.
- Septic tank conversion project. Converted 500 septics to muni sewer to help protect aquifer.