Barton Springs/Edwards Aquifer Conservation District

Permit Update, Aquifer Test on Horizon

District staff is working with existing Temporary Permittees to complete and review final application materials. Once these applications are administratively complete, staff can bring the applications before the Board for approval to convert the Temporary Permits into Regular Permits. All permits will be publicly noticed and will require Board action.

The first group of 15 permit applications is anticipated to be administratively complete by January 30, 2016. This group of permits will have annual pumpage volumes under 2,000,000 gal/yr. The second group of 4 permit applications are anticipated to be administratively complete by March 2016. This group of permits will have annual pumpage volumes ranging from 10,000,000 gal/yr to 180,000,000 gal/yr and will all have completed an aquifer test.

We estimate that in the coming weeks, Needmore Water LLC, the largest temporary permit holder, will be conducting the aquifer test as part of the Regular Permit application requirements. Staff and the applicant will continuously monitor 5 wells before, during, and after the well is pumped to measure baseline aquifer conditions, drawdown, and recovery (respectively). The volume pumped, pumping duration, and aquifer response in surrounding wells will be analyzed by staff, and test results will be used to validate the permitting volume and conditions. This aquifer test is unique in that all wells within a half mile of the pumping well are on the Needmore Ranch itself, and several are being used as monitoring sites.

2015 Edwards and Trinity Aquifer Conditions, A Year in Review

2015 began with some much-needed relief from Stage II Alarm Drought conditions. After rejuvenating rainfall in the preceding months, the Board declared No-Drought on January 29. Fueled by a stronger-than-usual El Niño phenomenon, heavy rainfall continued throughout the spring. A brief dry spell in summer was quickly overtaken by even heavier rains in the fall. In a nutshell, 2015 was a wet, then briefly dry, then even wetter year.

Steady recharge increased water levels in the Edwards and Trinity Aquifers as well as Barton Springs and Jacob’s Well flow early in 2015. Aquifer levels continued an upward trend and received an even larger boost from extremely heavy rainfall on Memorial Day, as 5.20 inches fell on Camp Mabry. Total May rainfall in Austin reached a record-breaking 17.59 inches, topping the previous tally.
Marcos received between 12 - 15 inches. Rain temporarily disappeared from the region in July and August to round out the summer.

Central Texas became perhaps more familiar than ever with the El Niño phenomenon, as 2015 boasts one of the strongest in history. As a result, the dry spell of summer was short-lived. An historic Halloween flood unleashed an astounding 18.5 inches in Buda, with surrounding areas reporting between 11 and 16. This event topped the previous Halloween 2013 and Memorial Day 2015 floods in stage level and discharge on Onion Creek. Antioch Cave began taking desired recharge after storm runoff flows passed.

**FEATURED EVENT**

**Groundwater Stewardship Award Nominations**

Anyone can nominate an individual or group to recognize them as exceptional groundwater stewards. Nominations are due Wed., January 20, 2016 by 5pm.

Join us in honoring outstanding efforts!

**Alternate Water Supply Grant Update**

For the past 10 years, the District has had an interest in investigating the saline portion of the Edwards Aquifer for its potential to provide saline water for a desalination system or to serve as a reservoir for aquifer storage and recovery (ASR). With limited water resources in the area, such alternative sources of water are much needed to accommodate the rapid growth of the area and to substitute for water produced from the freshwater portion of the Edwards Aquifer. With limited funding for such studies, the District has relied primarily on other studies, mainly in the San Antonio area, to assess the feasibility of such alternative sources of water.

This past fall, the District was awarded a grant by the Texas Water Development Board (TWDB) which will help fund a feasibility study of desalination and ASR in the saline Edwards. Carollo Engineers has been selected by the District to conduct the engineering portion of the study. Much of the study will be a technical evaluation and cost analysis of such systems. Another portion of this study will be the installation of a multiport well that will be installed in the saline Edwards. This monitor well will be capable of testing of multiple zones of the Edwards for water-quality analysis and for determining aquifer properties. The District has also applied for another grant...
such systems are likely to be technically and cost effective, these additional funds could help pay for a pilot ASR system.

Upcoming Events, Meetings, & Deadlines

Thurs., Jan 14: BSEACD Board Meeting (details)
Mon., Jan 19: MLK Day - Office closed
Wed., Jan. 20: Groundwater Stewardship Nominations (details)
Thurs., Jan. 28: BSEACD Board Meeting (details)

Tues., Feb. 1: Permittee meter readings due (details)
Thurs., Feb. 11: BSEACD Board Meeting (details)
Mon., Feb 15: Presidents Day - Office closed
Thurs., Feb. 25: BSEACD Board Meeting (details)