Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

May 7, 2015

Well Owner
1234 RR 5678
Central Hays County, Texas

Dear Well Owner,

We have been processing the data from the March 2015 Water Level Snapshot and wanted to provide a summary of the data gathered, an update on the status of the ongoing groundwater evaluation, and an overview of upcoming monitoring efforts.

Water Level Data
First, thanks to all the well owners that allowed access to your well. Staff from the Edwards Aquifer Authority, Hays Trinity Groundwater Conservation District, and the Barton Springs/Edwards Aquifer Conservation District were able to visit 65 wells in Central Hays County from March 17 - 20, 2015.

Staff used two instruments to measure water levels: an eline and/or a sonic meter. Eline measurements are the most reliable and accurate. Eline measurements can be made by accessing the well through the observation port then lowering measuring tape with a sensor on the end 100-350' down to the water level, which has its challenges. Sonic meters are much easier and faster, but depending on the well completion, they may not be as accurate. Sonic meters use a sound pulse that bounces off the water surface and back to the instrument to calculate the distance to the water surface. Obstructions or irregularities in the well can affect the readings, so it is good to get both eline and sonic readings to check the validity of the sonic measurements.

Included with this letter is a record of all the water level measurement(s) taken at your well (Jan-Apr 2015). The instrument used for the measurement is documented on your Water Level Report. Additionally, staff attempted to estimate the general aquifer for each well. See the included figure titled "Generalized Stratigraphy of the Edwards and Trinity Aquifers" for additional info.

Groundwater Evaluation Status
Water level and basic field parameter measurements gathered as part of the snapshot are critical elements in the evaluation of the local hydrogeology (aquifers, confining units, and flow paths). This evaluation is a good first step to understanding the groundwater systems at play in Central Hays County--where the Edwards (where present) and Trinity Aquifers are known to be exceptionally complex and variable. A preliminary groundwater evaluation, summarized by the Barton Springs/Edwards Aquifer Conservation District hydrogeologists and reviewed by the collaborating groundwater conservation districts' staff, is underway and should be available in about a month.

Upcoming Monitoring Efforts

Based on the initial round of well visits, water level measurements, and well completion information wells have been assigned to monitoring categories: transducer sites, frequent measurements, periodic measurements, and willing to be monitored. A map of monitoring sites is also included with this letter.

Transducer Sites:

A small number of wells that have good well records (geophysical logs, driller's records, etc.) will be equipped with a drop pipe and a pressure transducer that is programmed to record a measurement at defined intervals. Transducers measure the pressure of the water column above the instrument, which can be easily converted into a water level measurement. Retrofitting wells with the drop pipe and purchasing and maintaining the transducers is costly, so wells are being thoroughly researched and selected to best represent key aquifer formations at various distances and directions from pumping centers. The first round transducer sites are located just north of the Electro Purification test wells and are expected to be operating soon. Additional transducer sites will be established to the south then at greater distances (in the 1-2 mile buffer zones). It is estimated that there will be 10-12 transducer sites in total.

Frequent Water Level Sites:

A larger number of wells are planned to be measured frequently. These wells generally have good well completion records and reflect water levels associated with discrete aquifer interval--typically Upper Trinity, Middle Trinity, or Middle Trinity (Cow Creek). Staff from the collaborating groundwater conservation districts plan to visit these wells about every 2 months to document seasonal water level fluctuations and more frequently if/when a pump test is in progress.

Periodic Water Level Sites:

A large number of wells are considered periodic water level sites. These sites have or will have a baseline water level measurement. Pump configuration or hybrid aquifer well completion often make measurements at these sites difficult or not representative of a discrete aquifer interval. Water level data at these sites are good to track for seasonal trends but not optimal for evaluating groundwater system dynamics.

Willing Monitor Sites:

These sites have not been measured, but well owners have offered well information to be included in the groundwater evaluation. Contact info is on hand for when there is a gap or alternate site needed.

The data collected as part of the collaborative groundwater evaluation will be critical in better understanding aquifer dynamics, drought response, and influence of pumping on nearby wells. This data can be used to inform future policy and management decisions.

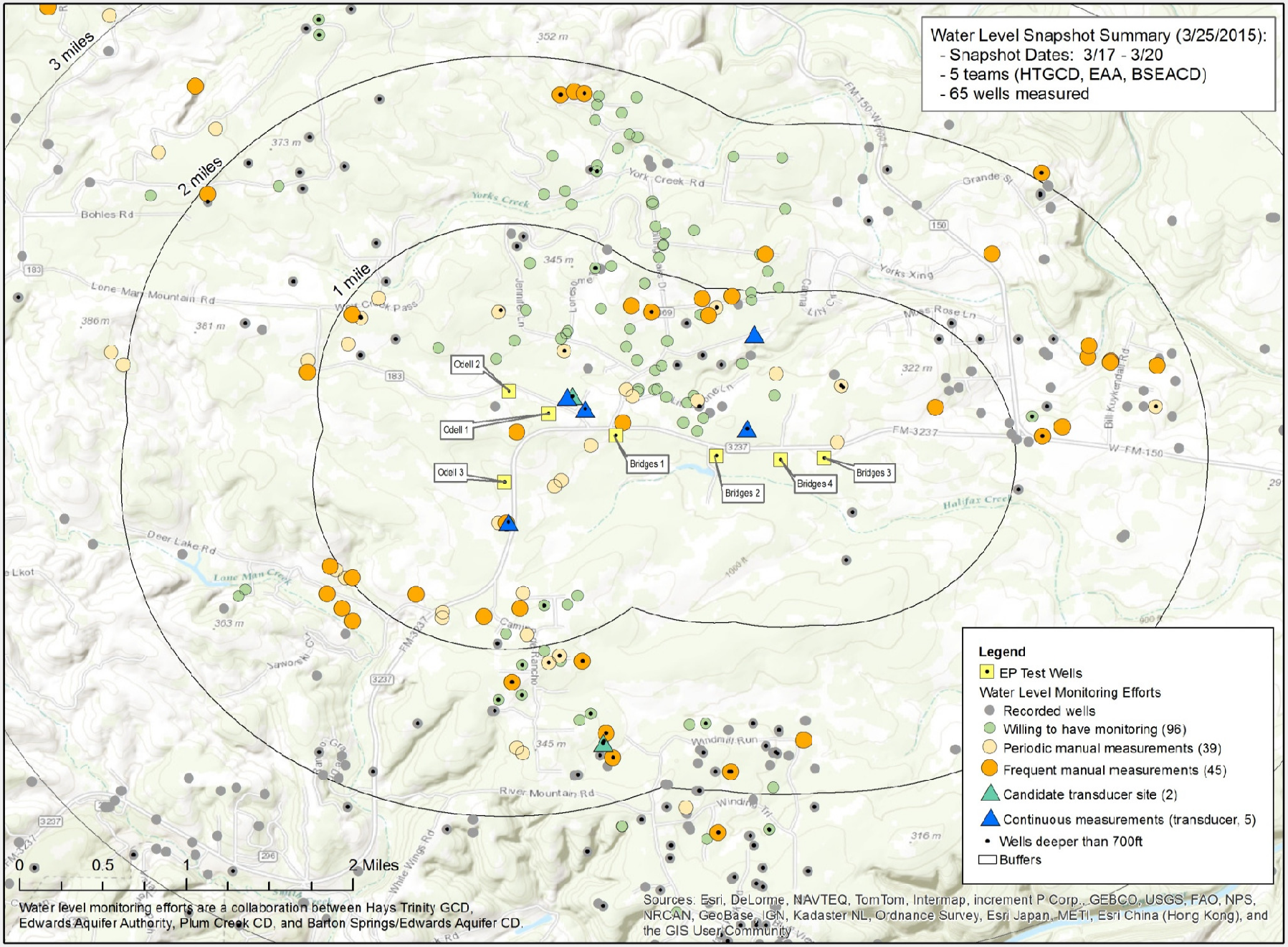
On behalf of the collaborating groundwater conservation districts, thank you for your support of the groundwater evaluation. We'll be in touch.

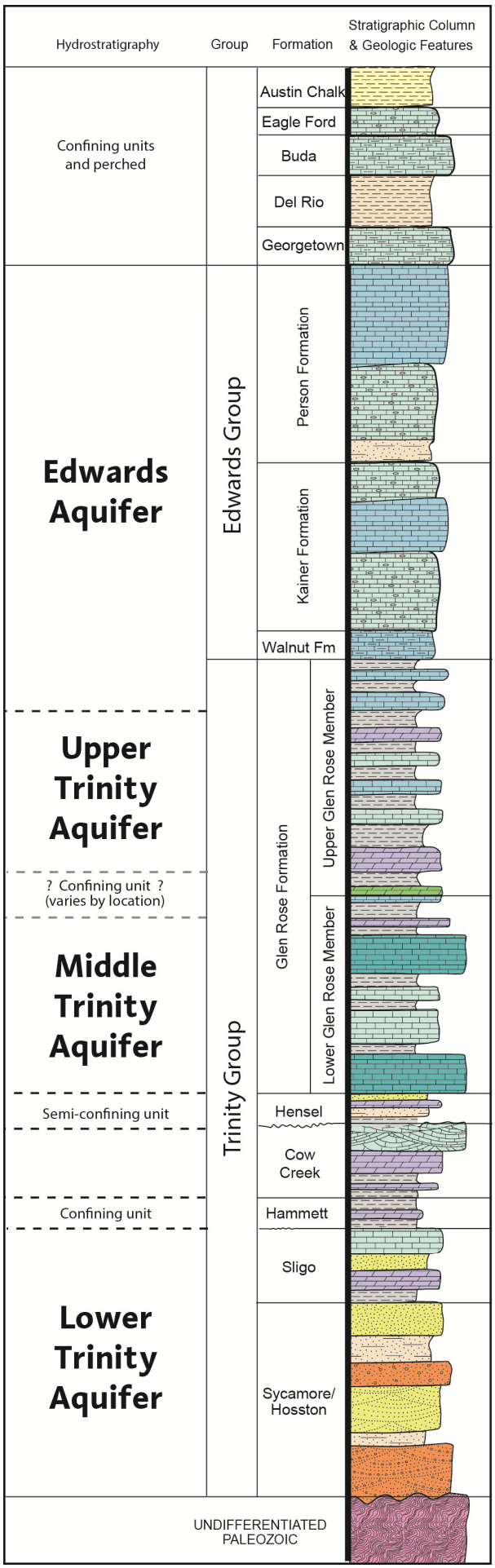
Sincerely,

John Dupnik
General Manager

Robin H. Gary
Senior Public Information and Education Coordinator

Central Hays County Groundwater Evaluation Well Monitoring - April 29, 2015





Generalized Stratigraphy of the Edwards and Trinity Aquifers

Explanation

- Chalk
- Limestone (micritic)
- Limestone (skeletal, grains)
- Limestone (reef)
- Dolomite
- Shale/marl
- Gypsum/anhydrite
- Siliciclastic (silt, clay)
- Siliciclastic (sand, silt)
- Conglomerate

Figure modified from Wierman et al., 2010
Stratigraphic notes:

1 - Edwards Group, Kainer Fm, as defined by Rose (1972).
2 - Ages and sequence boundaries from Scott et al. (2007).

For additional detail, see Hydrogeologic atlas of the Hill Country Trinity Aquifer, Blanco, Hays and Travis Counties, central Texas, Plate 2: Stratigraphic Column and Type Geophysical Logs
http://repositories.lib.utexas.edu/handle/2152/8977