The Edwards-Trinity (Plateau) Aquifer, the Hill Country Trinity Aquifer (in review), and the Giant Aquifer in west Texas (Figure 1).

**BRACS Program**

The BRACS Program is a multi-year, multi-mission initiative by the Texas Water Development Board (TWDB) and its partner agencies to develop a database of geophysical logs and study results to further the science of groundwater and aquifers. The reports and deliverables for these contracts should be available by the end of this year.

**BRACS Deliverables**

- Access BRACS database contains a wealth of hydrogeologic information. Within the database, users can search, sort, and download information, well depth, surface elevation, kelly bushing, geophysical log curve calculation results and methods.

**Study Progress**

We have completed our initial search for publicly-available geophysical logs, and we estimate volumes of brackish groundwater. To date, we have also begun preliminary stratigraphic interpretations in the Edwards-Trinity (Plateau) Aquifer. Aquifer thickness maps will be used to understand the distribution of sand and carbonate in the Trinity. Lithologic descriptions from nine cores managed by the Bureau of Economic Geology. Laboratory measurements, including nuclear magnetic resonance (NMR), total porosity, and permeability, and electrical measurements, were conducted on 24 core samples from five representative rock classes in the Trinity hydrogeologic unit and each representative rock class from the Edwards hydrogeologic unit.omenclature is also necessary for the geophysical log calculations, as the relationship between formation water resistivity and its total dissolved solids must be known.

**Study Workflows**

The scheduled workflow for this study is described in items 1-6 below, which is the general workflow for all BRACS studies.

1. **Data collection:** Initial search for publicly-available geophysical logs. Our initial search for geophysical logs is complete, and we will identify additional lithologic descriptions, water quality, and outcrop conditions, as we query geophysical log location information in the study.
2. **Stratigraphy:** After stratigraphic interpretation is finalized in the digital Kingdom® Software, stratigraphic outcrop surfaces are interpolated in 3D.
3. **Lithology:** Lithologic descriptions from nine cores managed by the Bureau of Economic Geology. Laboratory measurements, including nuclear magnetic resonance (NMR), total porosity, and permeability, and electrical measurements, were conducted on 24 core samples from five representative rock classes in the Trinity hydrogeologic unit and each representative rock class from the Edwards hydrogeologic unit. Though our reports and GIS data are more familiar deliverables, our Microsoft Access-based BRACS database contains a wealth of geophysical log information. With the BRACS database, we store comprehensive information for each well and each geophysical log, including geophysical log location, geophysical log measurement, full core descriptions, and photographs. Well names, formation names, and depth of logged intervals. The BRACS database also stores all of our interpretations, including stratigraphic zones, aquifer zone, and salinity calculations and results methods. Additional workflow steps include interpreting resistivity logs to map the more saline intervals. Measured water quality is generally restricted to the shallow, fresh intervals, we perform salinity calculations from core descriptions and photographs are available by request from the TWDB and Faculty and staff of The University of Texas at Austin, through a contract with the TWDB (Torres-Verdin and others, in review), described, photographed, and measured petrophysical properties for the Edwards-Trinity (Plateau) Aquifer from rocks core managed by the Bureau of Economic Geology. Laboratory measurements, including nuclear magnetic resonance (NMR), total porosity, and permeability, and electrical measurements, were conducted on 24 core samples from five representative rock classes in the Trinity hydrogeologic unit and each representative rock class from the Edwards hydrogeologic unit. Laboratory results are presented online in Table 1. water quality information from a well is generally not available until the measured water quality is from the aquifer formation unit and its total dissolved solids must be known.

**References**

Barker, R.A. and Ardis, A.F., 1996, Hydrogeologic framework of the Edwards-Trinity Aquifer, modified to extend downdip into Kinney and Maverick counties. (Plateau) Aquifer, modified to extend downdip into Kinney and Maverick counties. The Edwards-Trinity (Plateau) Aquifer, a prominent freshwater aquifer in the western Edwards-Trinity Aquifer, is defined where the overlying Edwards Group is eroded and the Edwards Group is tilted. The updip limit of Cretaceous rock subcrop. Log response of basal Cretaceous rocks is distinctive, but requires a key field to link two primary tables together, creating a new table of selected fields (Figure 5).

**Core Data**

- Faculty and staff of The University of Texas at Austin, through a contract with the TWDB (Torres-Verdin and others, in review), described, photographed, and measured petrophysical properties for the Edwards-Trinity (Plateau) Aquifer from rocks core managed by the Bureau of Economic Geology.

- Faculty and staff of The University of Texas at Austin, through a contract with the TWDB (Torres-Verdin and others, in review), described, photographed, and measured petrophysical properties for the Edwards-Trinity (Plateau) Aquifer from rocks core managed by the Bureau of Economic Geology. Laboratory measurements, including nuclear magnetic resonance (NMR), total porosity, and permeability, and electrical measurements, were conducted on 24 core samples from five representative rock classes in the Trinity hydrogeologic unit and each representative rock class from the Edwards hydrogeologic unit. Laboratory results are presented online in Table 1. Water quality information from a well is generally not available until the measured water quality is from the aquifer formation unit and its total dissolved solids must be known.

**Volume Calculations:** The final stratigraphic surfaces and water quality maps, volumes of brackish groundwater for each formation are estimated. We will probably rely on general equations and rock class from the Edwards hydrogeologic unit. Water quality is also necessary for the geophysical log calculations, as the relationship between formation water resistivity and its total dissolved solids must be known.