Update on Gulf Coast Aquifer System
Groundwater Availability Model (GAM) for
Groundwater Management Areas 15 and 16

Goliad, Texas
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Jerry Shi, Ph.D., P.G.
Outline

• Introduction to Project Team
• Project Status
• Schedule
Project Team

- Jerry Shi, Ph.D., P.G.
  - Project Management
  - Modeling
- Roberto Anaya, P.G.
  - Framework Analysis
  - GIS Support
- Radu Boghici, P.G.
  - Water Quality
  - Geology and Data Analysis
Flow Chart of Project

1. **Define Model Objectives**
2. **Field Data Compilation and Analysis**
3. **Conceptual Model**
4. **Numerical Model Design**
5. **Calibration**
6. **Trial Prediction**
7. **Reporting**
Major Components of Conceptual Model

- Purpose *(done)*
- Geology of Study Area *(done)*
- Previous Investigations *(done)*
- Hydrogeology
  - Framework *(in progress)*
  - Groundwater Levels and Flows
  - Recharge
  - Surface Water
  - Hydraulic Properties *(in progress)*
  - Aquifer Discharge
  - Groundwater Quality
- Conceptual Model/Source Data/Reporting
Data Request

• Any Documented Data Free to Public
  ▪ Water Levels
  ▪ Flow Measurements
  ▪ Pumping Tests
  ▪ Pumping Information
  ▪ Recharge
  ▪ Stream Gain/Loss Study
  ▪ Others

• Date Request by: End of 2018
Tentative GAM Schedule

- Project Start – April 2014
- Stakeholder Advisory Forum # 1: June 2014
- Stakeholder Data Submission – December 2014
- Project Team Reassigned – September 2017
- Finalize Project – Summer to Fall 2020
This presentation will be posted on TWDB website

Thank You
Questions?

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GAM Purpose

- Estimate Desired Future Conditions and Determine Modeled Available Groundwater
- GCD Management Plan
- Aquifer Storage