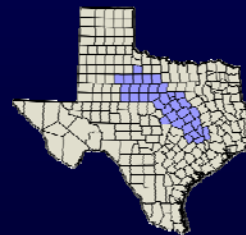


Agenda Item 6.8

Groundwater Availability Methods for the 2011 Brazos G Regional Water Plan

February 18, 2009



Background

- ✓ **Groundwater Availability:** “Annual quantity of groundwater that can be extracted from a given aquifer in a given county throughout the planning horizon.”
- ✓ **For 2006 Plan, groundwater availability based on:**
 - **Previous TWDB and other estimates**
 - **HDR analysis of groundwater levels and historical pumping**
 - **Modeling of Carrizo-Wilcox Aquifer**

House Bill 1763 Process

- ✓ 79th Texas Legislature (2005)
- ✓ Establishes 16 **Groundwater Management Areas (GMAs)** covering entire State
 - Led by confirmed GCDs
 - Counties without GCDs are essentially unrepresented
- ✓ GCDs develop **Desired Future Conditions (DFCs)**
 - How should the aquifer look in the future?
 - ✓ Water levels, springflows, etc.
 - Public process
- ✓ TWDB uses DFCs to estimate **Managed Available Groundwater (MAG)** by aquifer by county
 - **Groundwater Availability Models (GAMs)**

House Bill 1763 Process (cont'd)

- ✓ **Regional water plans required to use MAG if GMA process met January 2008 deadline**
- ✓ **Five GMAs affect Brazos G (GMAs 6, 7, 8, 12, 14)**
- ✓ **Only GMA 8 met January deadline**
- ✓ **Jan 15, 2008 letter from Brazos G to GMAs:**
 - **Commit to using MAG if available before 10/1/08**
 - **Will use 2006 estimates otherwise**
 - **Reserve ability to refine 2006 availability**
- ✓ **Some GMAs have made progress and MAG is nearly finalized and could be used**

For 2011 Plan

- ✓ Use Managed Available Groundwater from House Bill 1763 Process (Groundwater Management Areas)
 - Five GMAs in Brazos G Area
 - Use final MAG if available (only GMA 8 is final)
 - Use draft MAG if GMA process nearly complete
- ✓ Use application of Carrizo-Wilcox and Trinity GAMs (as per scope of work) to refine 2006 Plan estimates
- ✓ Use previous estimates from 2006 Plan

What's Next

- ✓ **No need to act upon this approach – it is consistent with the scope of work**

- ✓ **Memorandum summarizing updated availability estimates will be submitted by end of March**
 - **Final GMA estimates of MAG**
 - **Draft MAG estimates that HDR recommends adopting**
 - **Availability estimates to be carried forward from 2006 Plan**
 - **Results from Carrizo-Wilcox and Trinity simulations and any recommendations to refine availability estimates**

- ✓ **Consider adopting those updated availability estimates at April meeting**