• Purpose: to develop the best possible groundwater availability model with the available time and money.
• Public process: you get to see how the model is put together.
• Freely available: standardized, thoroughly documented, and available over the internet.
• Living tools: periodically updated.
What is a Numerical Groundwater Flow Model?

• ‘The aquifer in a computer!’
Groundwater Modeling

- Includes everything we know about the aquifer
- A regional tool to help define groundwater availability
- Evaluate water management strategies
- Run “What ifs…”
Location of Completed, Ongoing, and Proposed Models for GAM

- **c** = completed
- **o** = ongoing
- **p** = proposed

1. Trinity (Hill Country) c
2. Hueco Bolson c
3. Ogallala (northern part) c
4. Edwards (Barton Springs segment) c
5. Lower Rio Grande Valley o
6. Edwards-Trinity Plateau o
7. Ogallala (southern part) o
8. Gulf Coast (central part) o
9. Carrizo-Wilcox (northern part) o
10. Carrizo-Wilcox (central part) o
11. Carrizo-Wilcox (southern part) o
12. Gulf Coast (northern part) o
13. Edwards (San Antonio segment) o
14. Edwards (northern segment) p
15. Trinity (northern part) p
16. Seymour p
17. Pecos Alluvium p

Approximate location of model within Texas

October 2000
Location of the Minor Aquifers in Texas

- Rita Blanca
- Dockum
- Edwards-Trinity (High Plains)
- Capitan Reef
- Bone Spring-Victorio Peak
- Rustler
- West Texas Bolsons
- Marathon
- Igneous
- Ellenburger-San Saba
- Hickory
- Lipan
- Marble Falls
- Woodbine
- Blossum
- Nacatoch
- Queen City
- Sparta
- Brazos River alluvium
We need your help!

- we need:
  - your guidance on the important issues
  - your knowledge on the area
  - your review of the model as it is developed
Stakeholder Advisory Forum (SAF)

- SAF will consist of knowledgeable and interested people
- will meet periodically
On February 19, 2002, the Texas Water Development Board held the first Stakeholders advisory meeting for the Northern Trinity Groundwater Availability Model in Waco Texas on the grounds of Baylor University. The meeting focused on a basic discussion of GAM and requirements for the Northern Trinity model.

Attendance list:

- George Shannon: TRWD/Region C
- Kevin Spencer: R.W. Harden and Associates
- Andrew Chastain-Howley: WPRC
- Joe C. Yelderman Jr.: Baylor University (Professor)
- Alan Dutton: University of Texas at Austin/Bureau of Economic Geology
- Louis Fleischhauer: Trinity Eng./Kleinfeden
- David E. Gattis: City of Sherman
- Kraig Kahler: Weatherford Municipal Utility System
- Nat Beal: Baylor University (student)
- Tom Gooch: Freese & Nichols
- Kristin Holton: Baylor University (student)
- Lynda Toia: Baylor University (student)
- Bo Spoonts: TDA
- Charles Besda: Birone WSC
On February 19, 2002, the Texas Water Development Board held the first Stakeholders advisory meeting for the Northern Trinity Groundwater Availability Model in Waco Texas on the grounds of Baylor University. The meeting focused on a basic discussion of GAM and requirements for the Northern Trinity model. Some of the questions asked during the forum included:

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will the Woodbine be part of the Trinity model?</td>
<td>Yes</td>
</tr>
<tr>
<td>Will over drafting be defined?</td>
<td>No, it is up to policy makers to define what is overdraft.</td>
</tr>
<tr>
<td>Will TWDB make any statements about groups that won’t recognize that overdrafts are occurring?</td>
<td>No, Planing is up to RWPG’s.</td>
</tr>
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<td>No, Planing is up to RWPG’s.</td>
</tr>
<tr>
<td>East Boundary- TDS level. Will this boundary be further defined?</td>
<td>If necessary and there is data to support it.</td>
</tr>
<tr>
<td>Will model include Water Quality?</td>
<td>No, but the report will discuss water quality and include some WQ maps.</td>
</tr>
<tr>
<td>What about the Trinity aquifer north of the Red River? What happens to it? How far does it go into Oklahoma?</td>
<td></td>
</tr>
<tr>
<td>“Have you seen a negative side to having the models on the web?”</td>
<td>No</td>
</tr>
<tr>
<td>Will you be collecting Data from any one with a Trinity well?</td>
<td>Yes</td>
</tr>
<tr>
<td>How old is the present well data?</td>
<td>1 to 100 years.</td>
</tr>
<tr>
<td>If people want to be involved in the process how would they accomplish that?</td>
<td>Go to web site, register in GAM database and attend SAF.</td>
</tr>
<tr>
<td>Region C has “predictions for future use. How will GAM results affect this?”</td>
<td>GAM’s should provide more reliable numbers for planning purposes.</td>
</tr>
<tr>
<td>With there be a draft report available halfway through?</td>
<td>No only monthly reports and SAF meetings.</td>
</tr>
</tbody>
</table>

TWDB data shows big use in the Woodbine in Fannin County. This could possibly indicate high recharge to the Woodbine in this area.

Questions about water levels and who collects them. Roberts describes HYMON and schedule.

Region C has “predictions for future use. How will GAM results affect this?”—GAM’s should provide more reliable numbers for planning purposes.

Check out RWPG planning deadlines vs model deadlines and see if models might be available early.