# GAM run 04-14

#### by Richard Smith

Texas Water Development Board Groundwater Availability Modeling Section (512) 936-0877 September 22, 2004

#### **REQUESTOR:**

Mr. Ray Brady on behalf of the Panhandle Regional Water Planning Group

### **DESCRIPTION OF REQUEST:**

What are the recharge rates associated with each cell in the updated Groundwater Availability Model for the northern part of the Ogallala aquifer and what is the GIS projection of the resulting matrix?

### **METHODS:**

To address the request, we:

- Extracted the recharge rates for each cell (5,280 x 5,280 feet) GAM for the entire area,
- Stored the resulting matrix as a txt file;
- Used the projection information supplied by Dutton (2004)

# **PARAMETERS AND ASSUMPTIONS:**

Recharge was reappraised in the updated model. The methodology is discussed in Dutton (2004).

#### RESULTS

The recharge rates results are in the accompanying GR04-14\_data.pdf file. Please note that this document contains 390 pages.

The GIS projection of the resulting matrix is shown in the following figure 1.

Reprojection Properties	X
🔿 Standard 💿 Custom	ОК
	Cancel
Projection: Albers Equal-Area Conic	<b>T</b>
Spheroid: GRS 80	<b>T</b>
Central Meridian:	-101.5
Reference Latitude:	36
Standard Parallel 1:	35
Standard Parallel 2:	37
False Easting:	820210
False Northing:	820210

Figure 1. GIS projection

# **REFERENCES:**

Dutton, Alan, 2004, Adjustments of parameters to improve the calibration of the Og-N model of the Ogallala aquifer, Panhandle Water Planning Area : Bureau of Economic Geology, The University of Texas at Austin, 9 pp