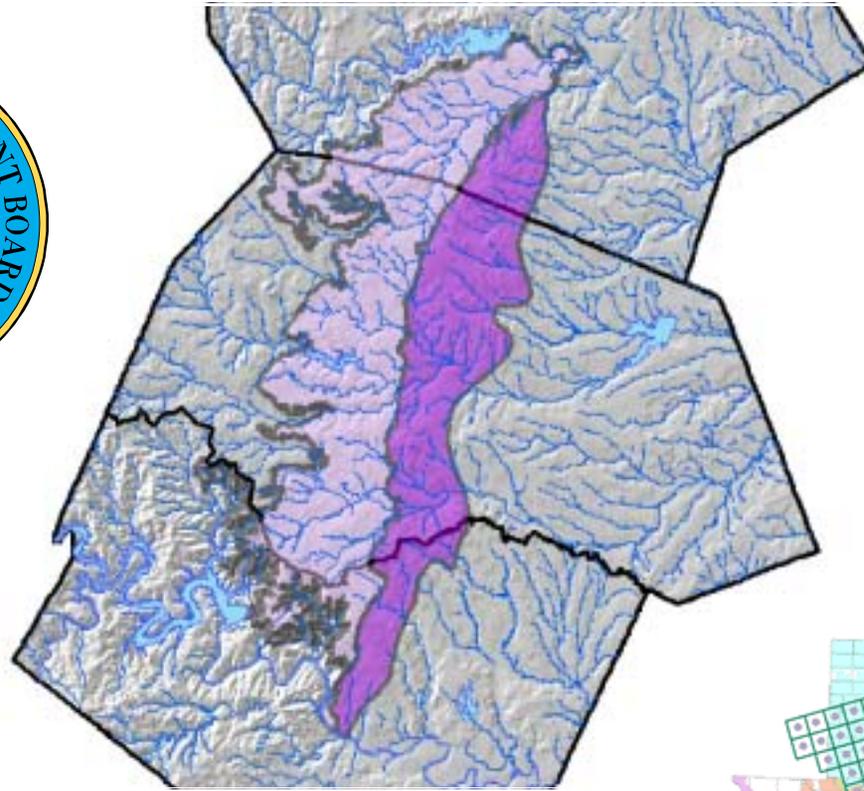


NORTHERN EDWARDS AQUIFER



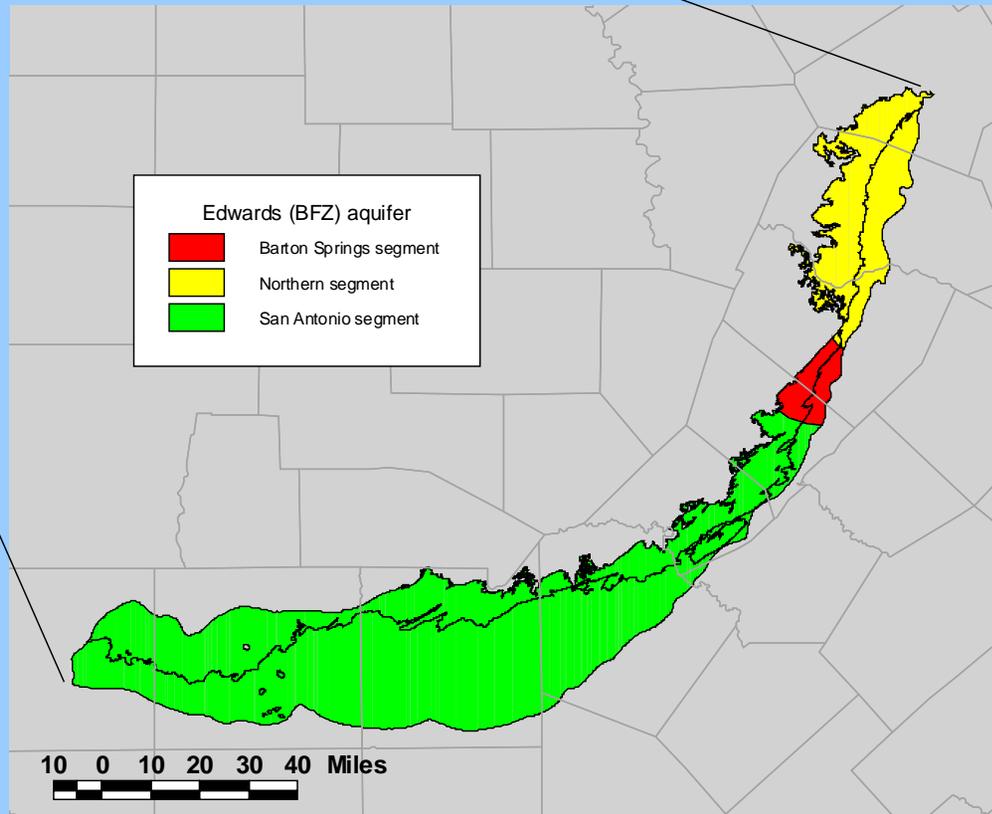
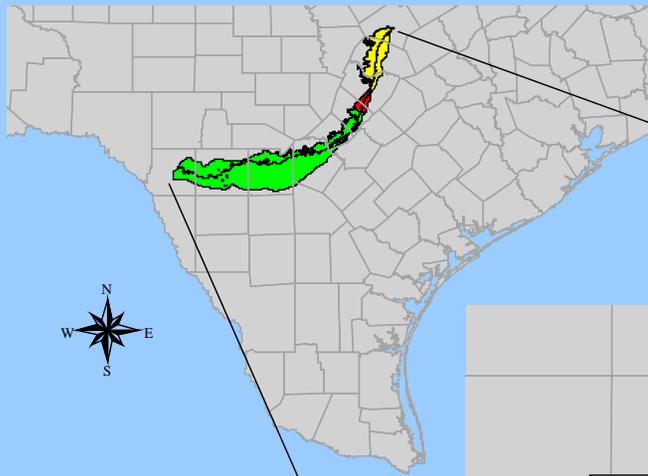
**Second Stakeholder Advisory Forum
June 27, 2002**



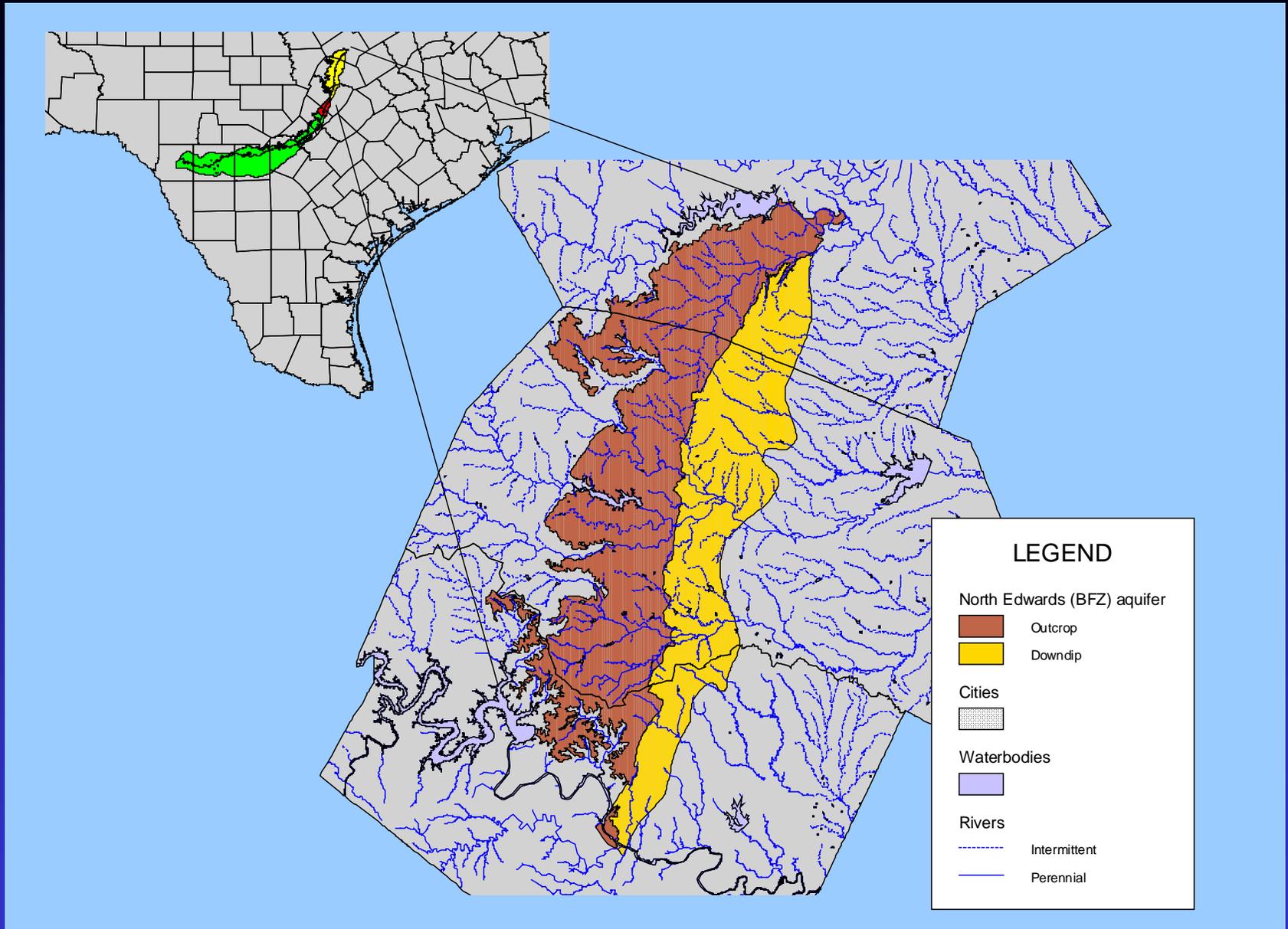
texas water development board

OUTLINE

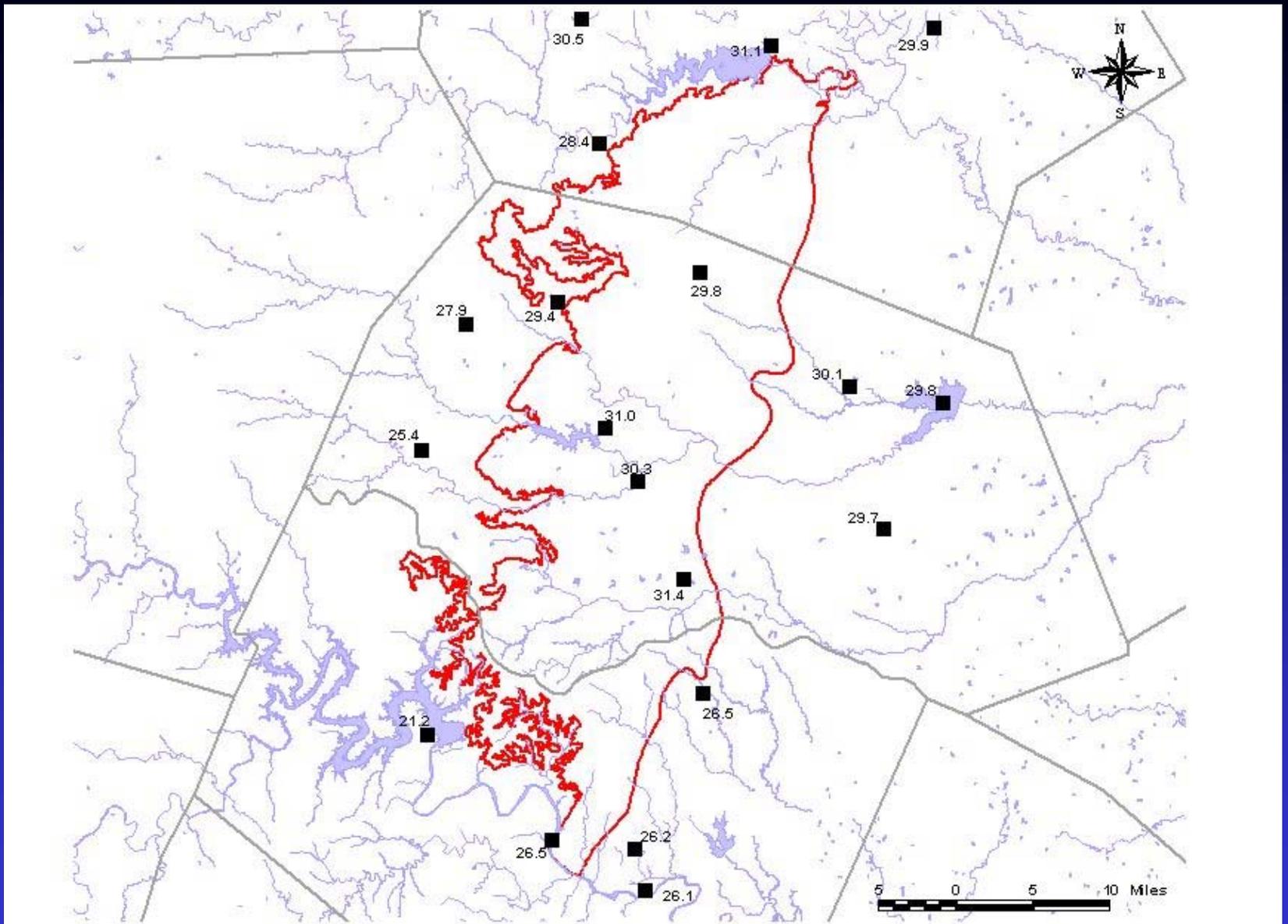
- Overview of Aquifer
 - Climate
 - Geology/Hydrostratigraphy
 - Structure
 - Water levels
 - Streamflow
 - Pumpage
 - Model grid
- GAM schedule
 - SAF meetings
 - Project milestones



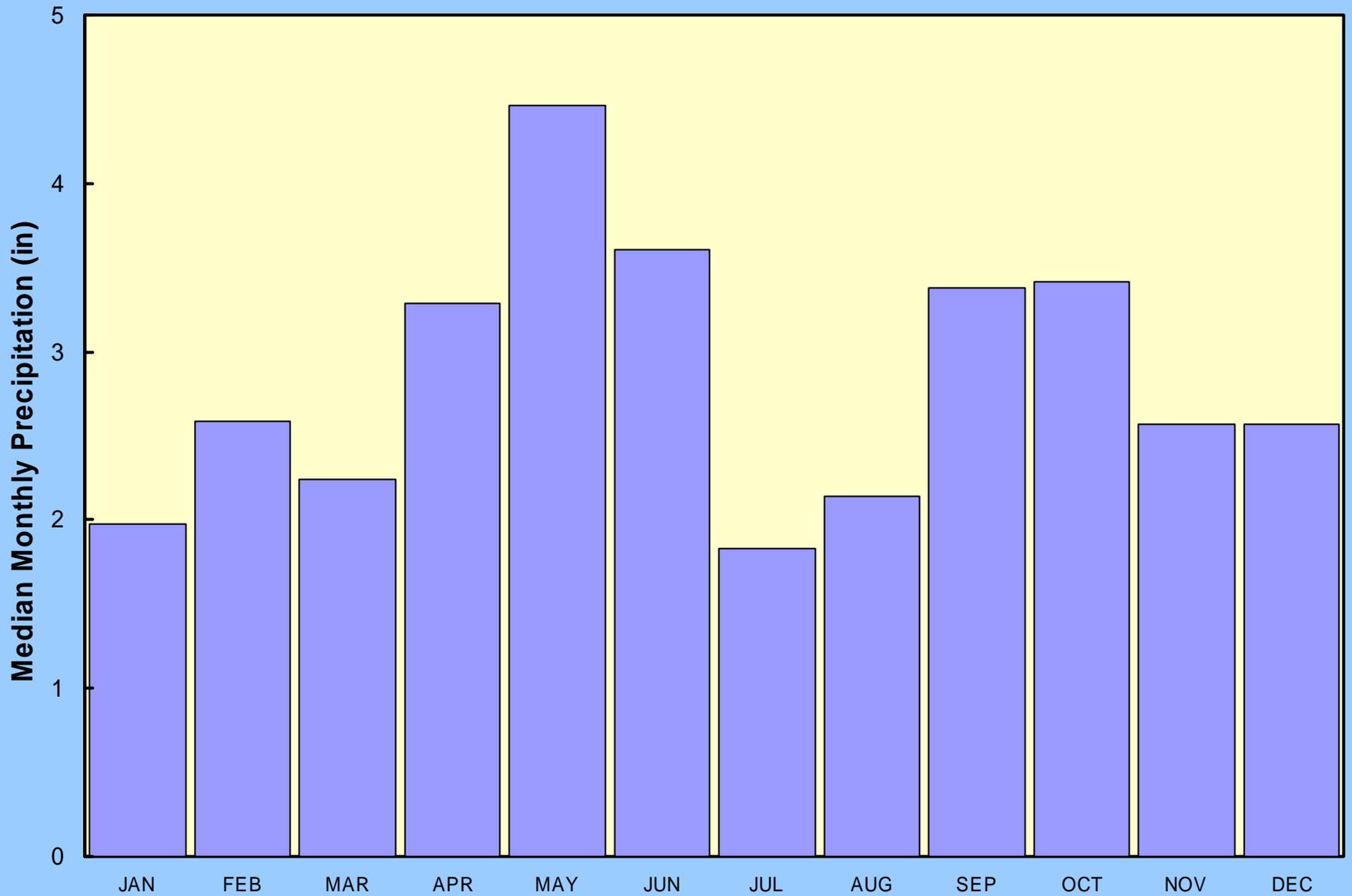
EDWARDS AQUIFER



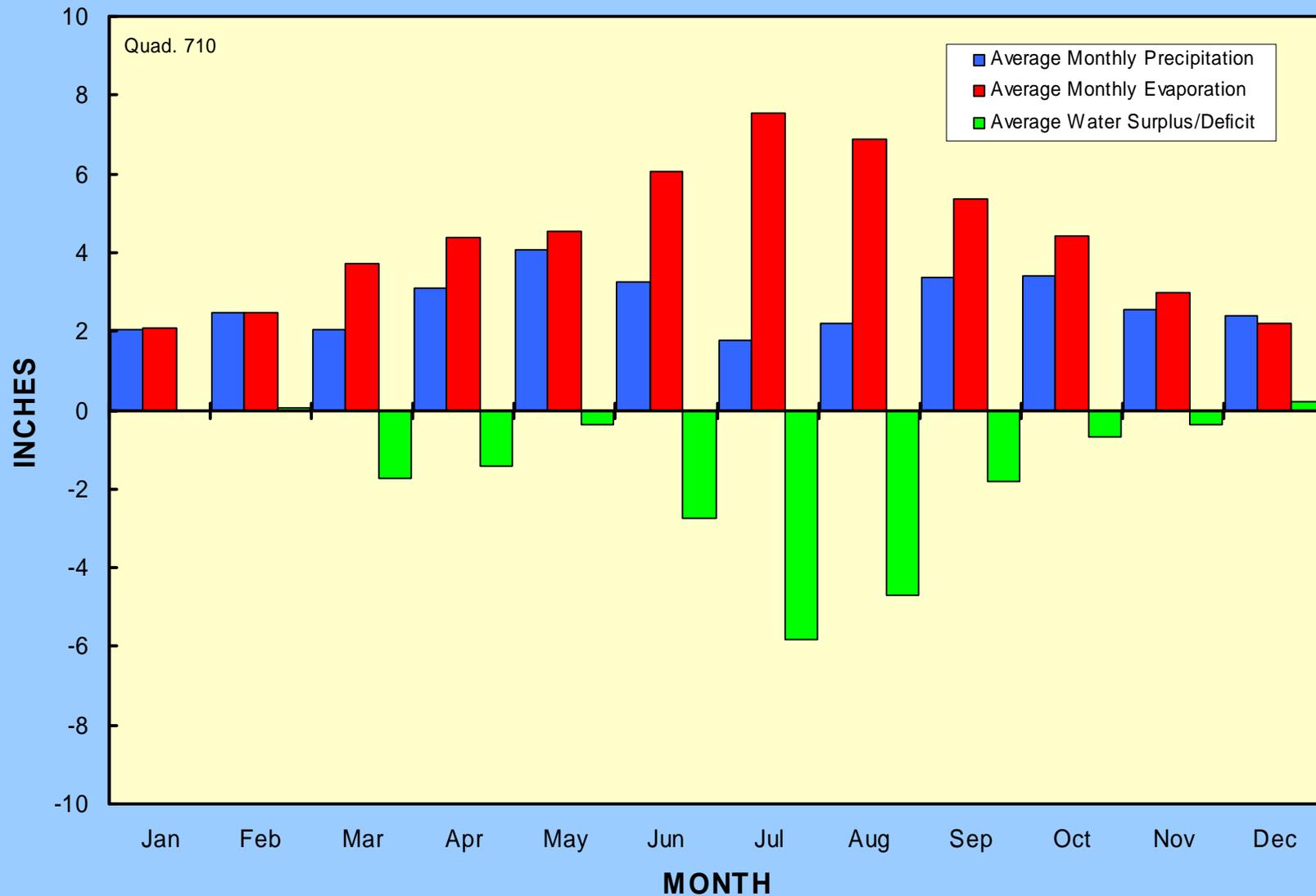
LOCATION MAP



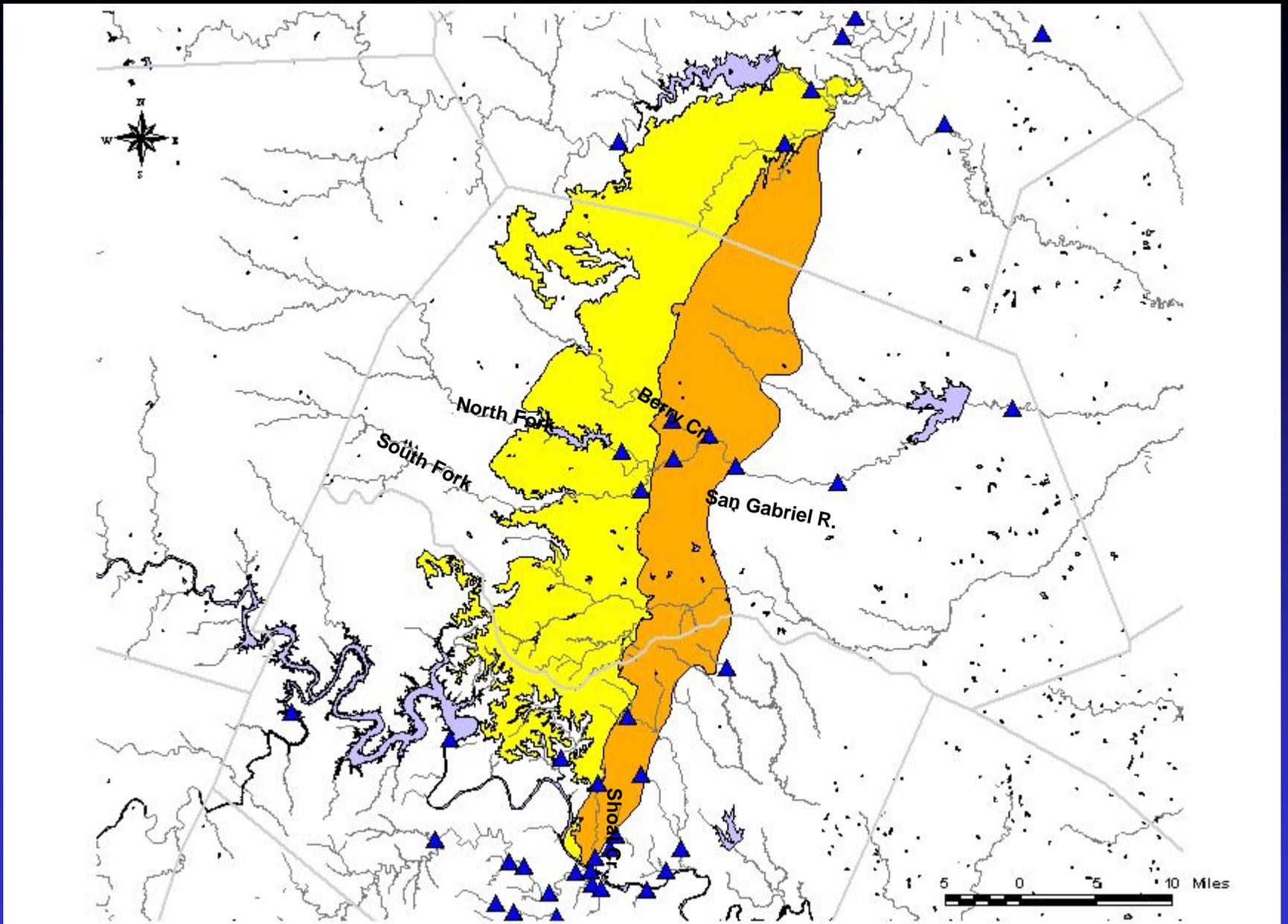
AVERAGE ANNUAL PRECIPITATION



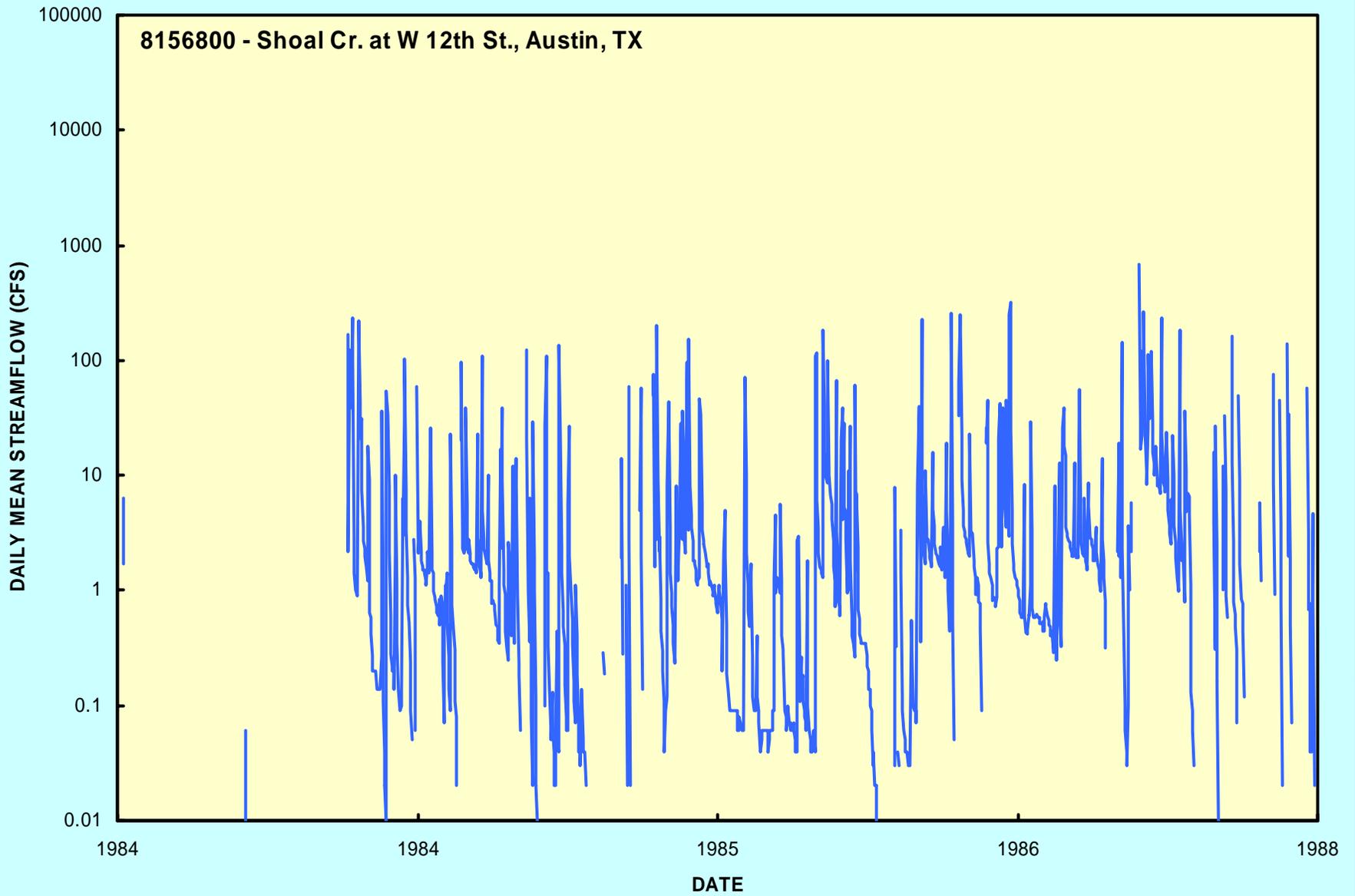
MEDIAN MONTHLY PRECIPITATION



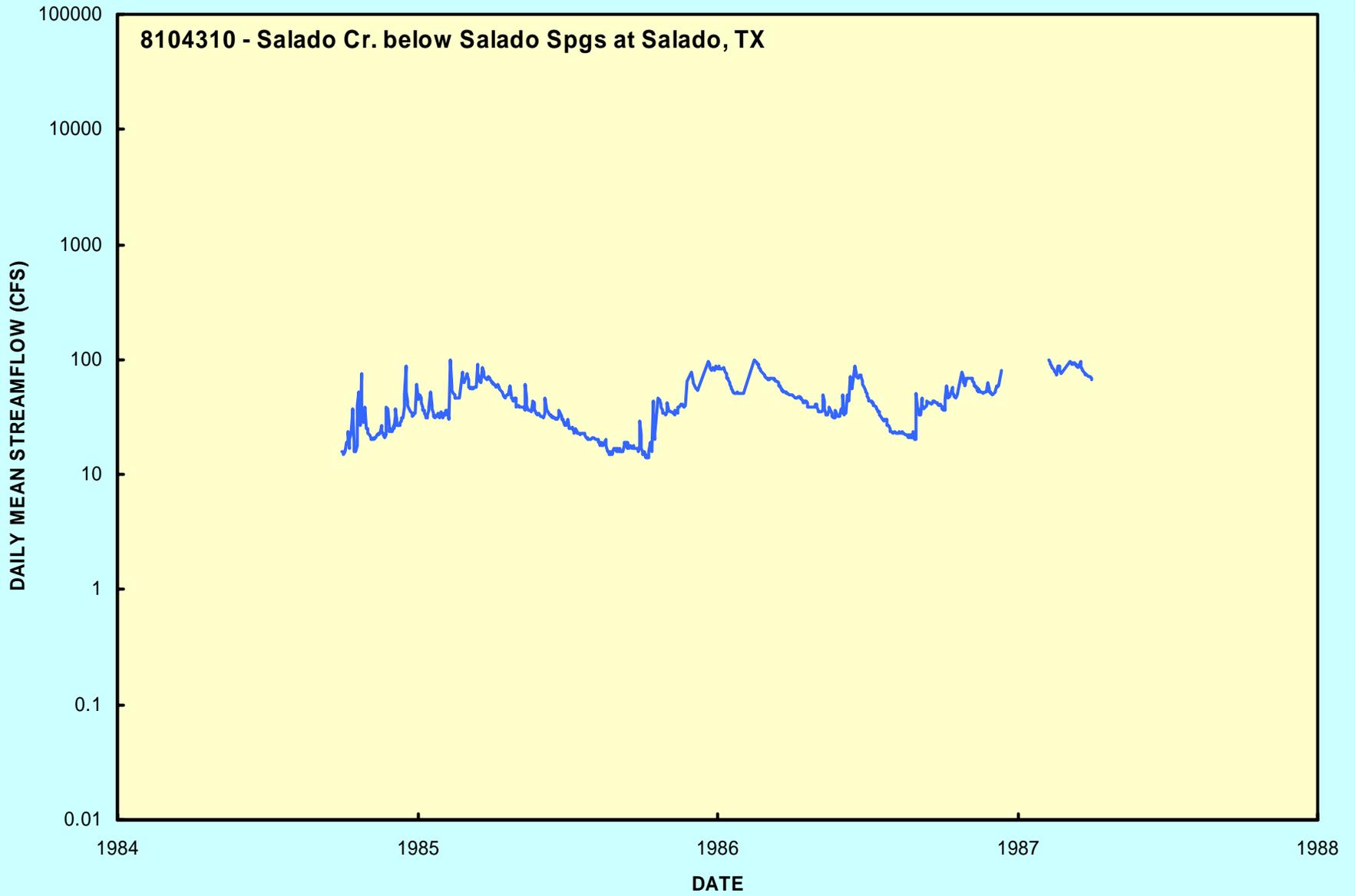
PRECIPITATION vs. EVAPORATION



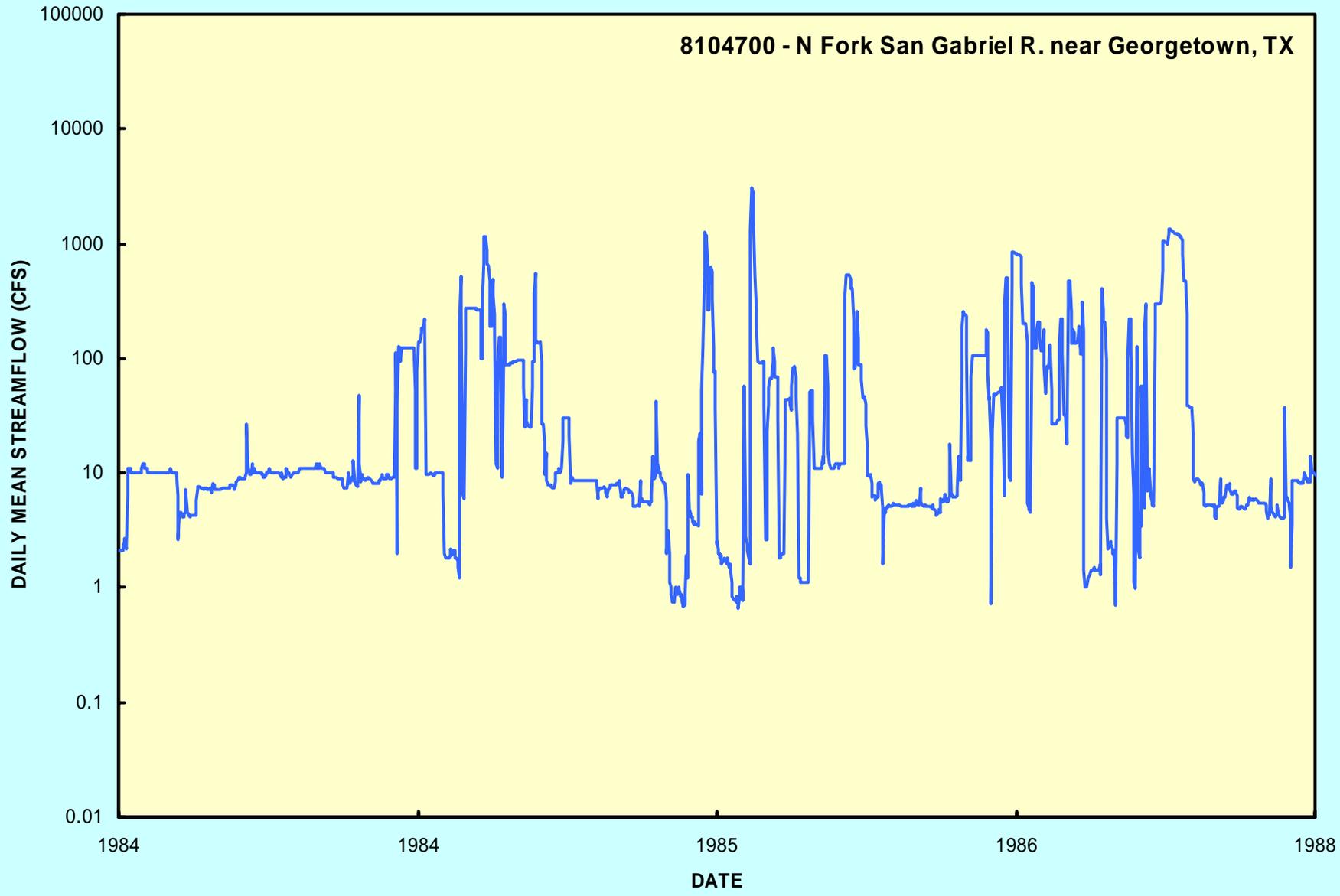
STATIONS WITH DAILY STREAMFLOW DATA



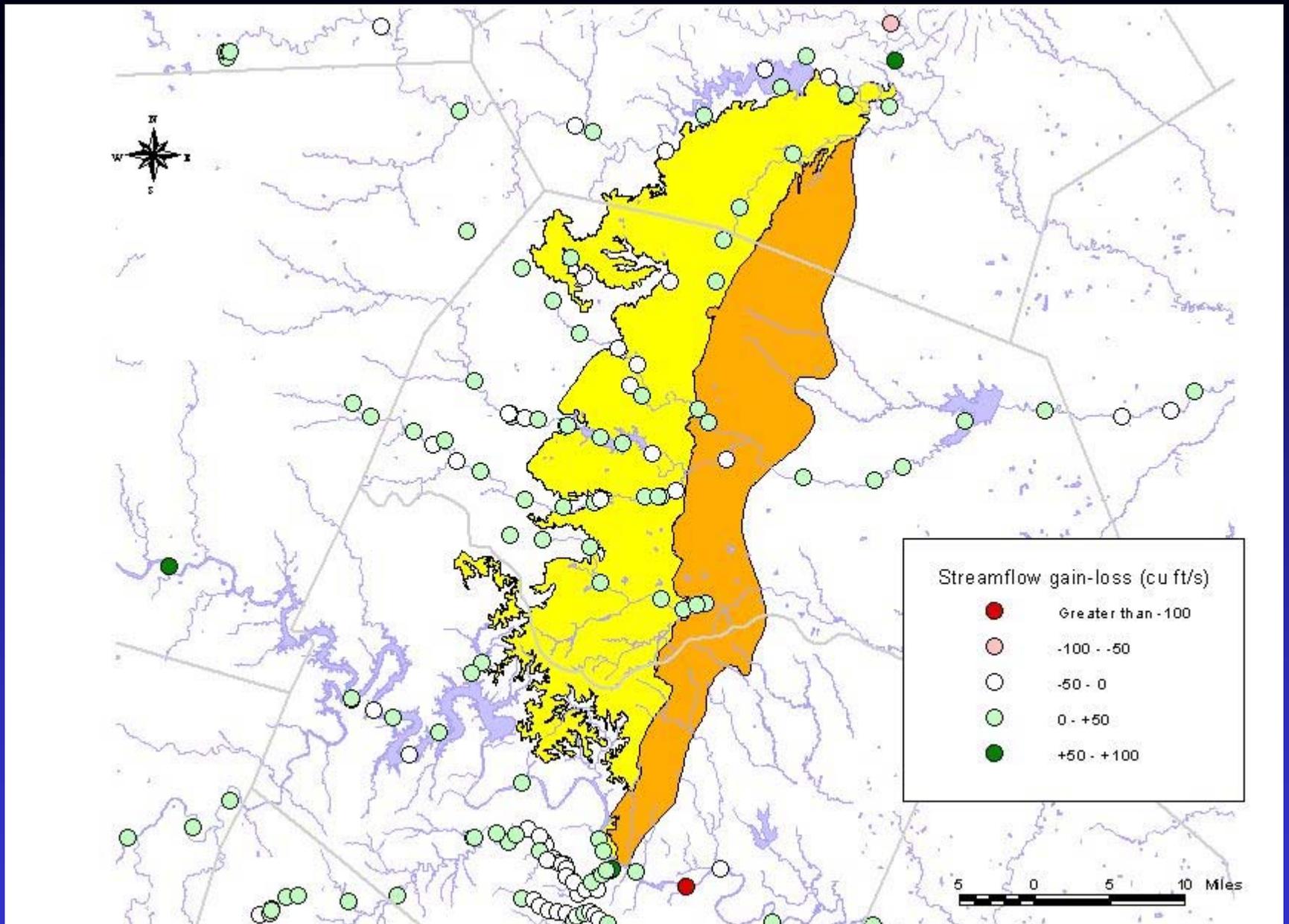
STREAMFLOW



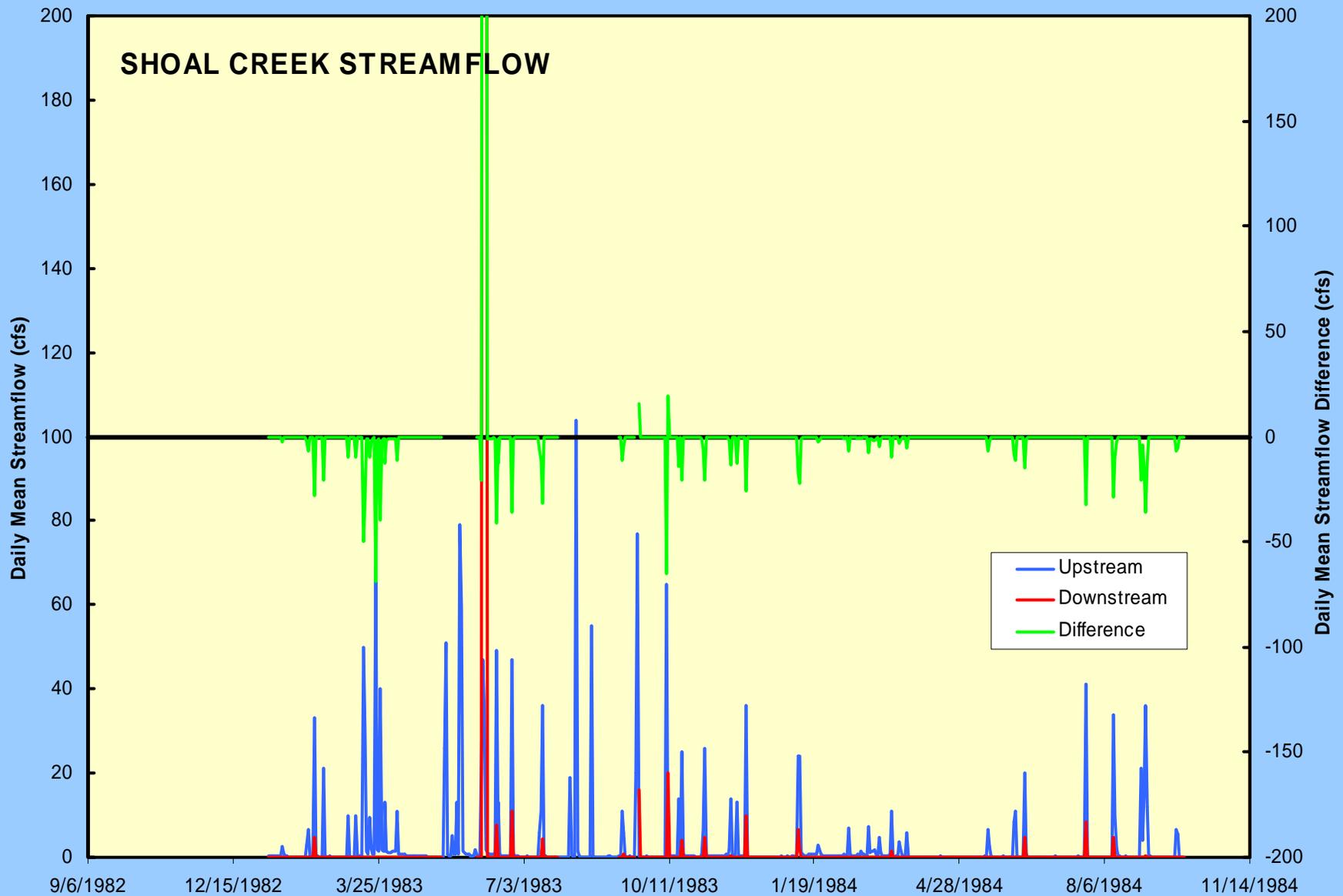
STREAMFLOW



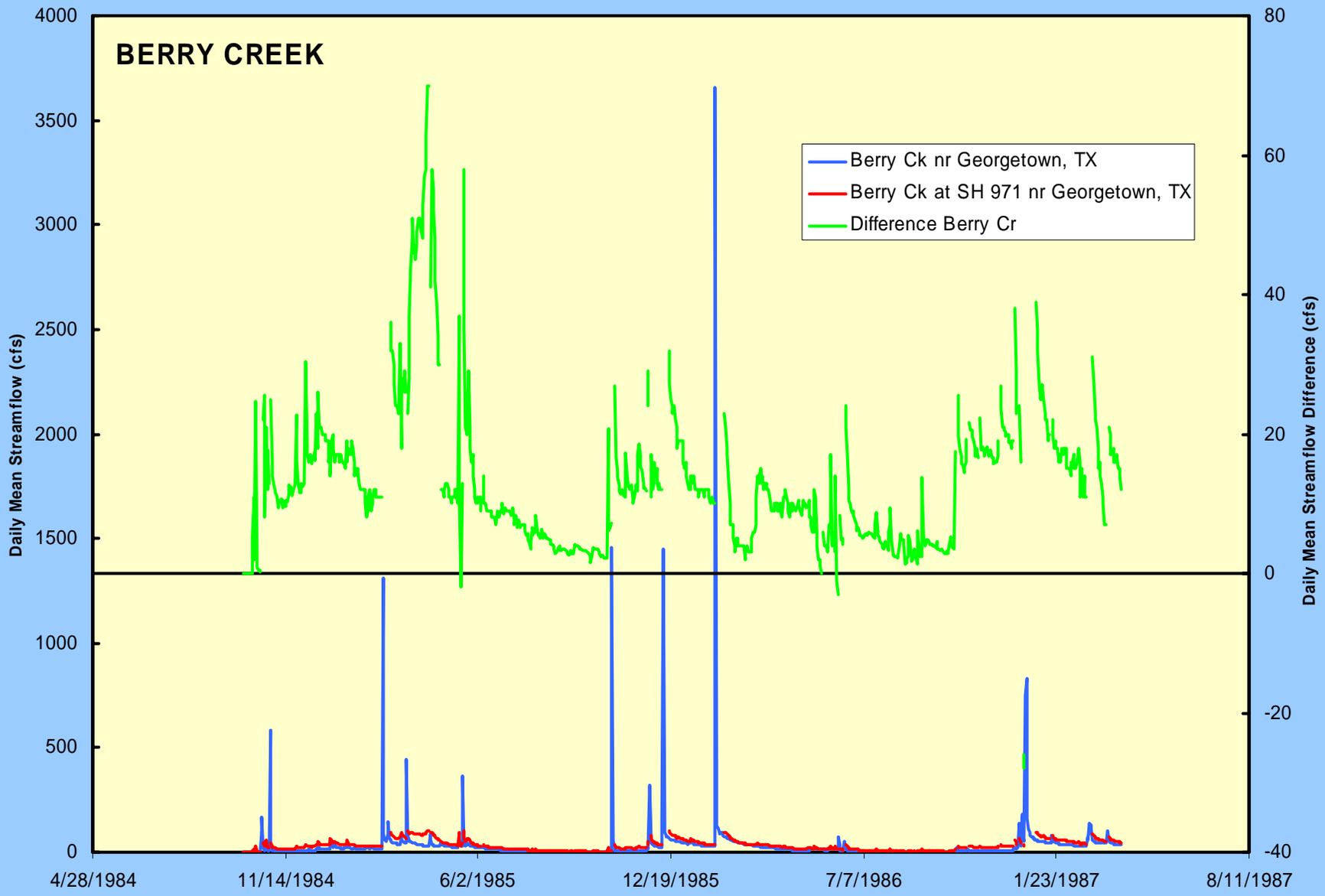
STREAMFLOW



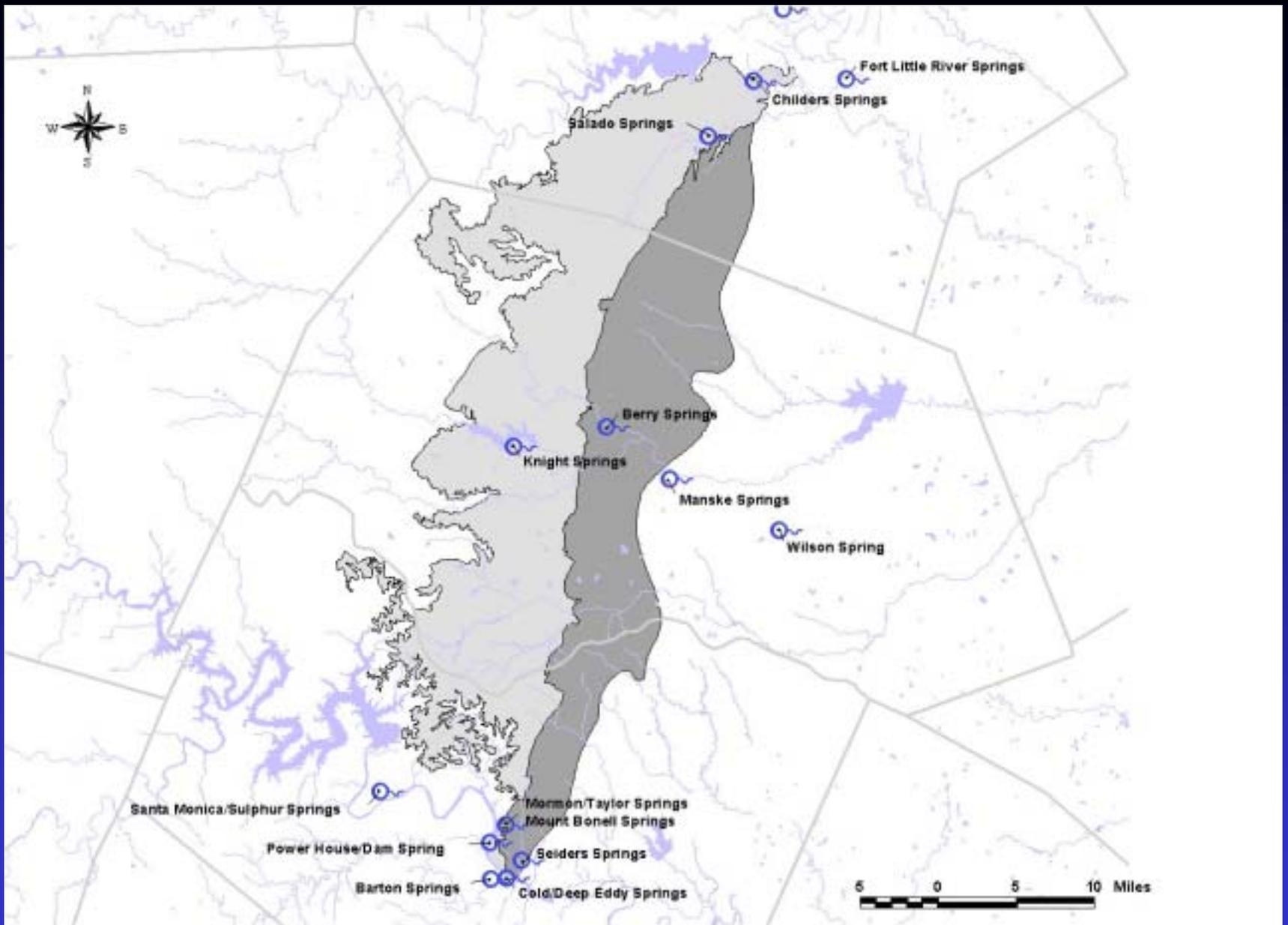
STREAMFLOW GAIN-LOSS



STREAMFLOW CHANGE ALONG SHOAL CREEK

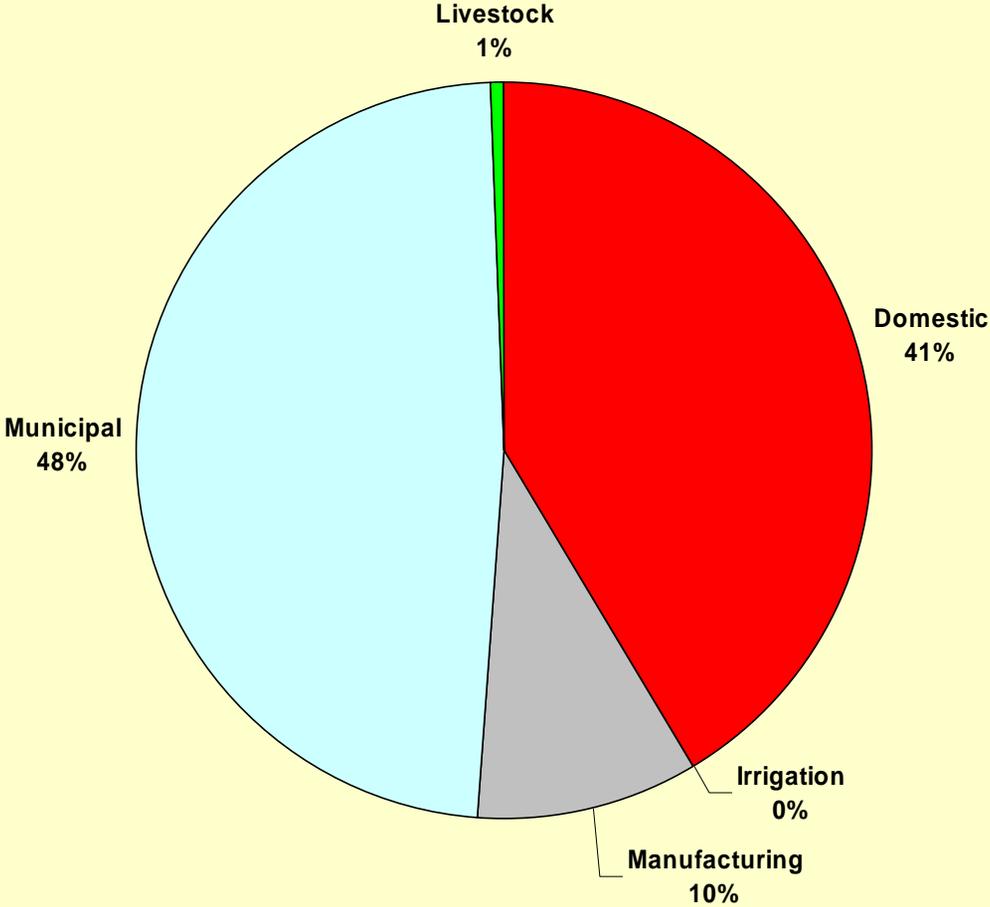


STREAMFLOW CHANGE ALONG BERRY CREEK

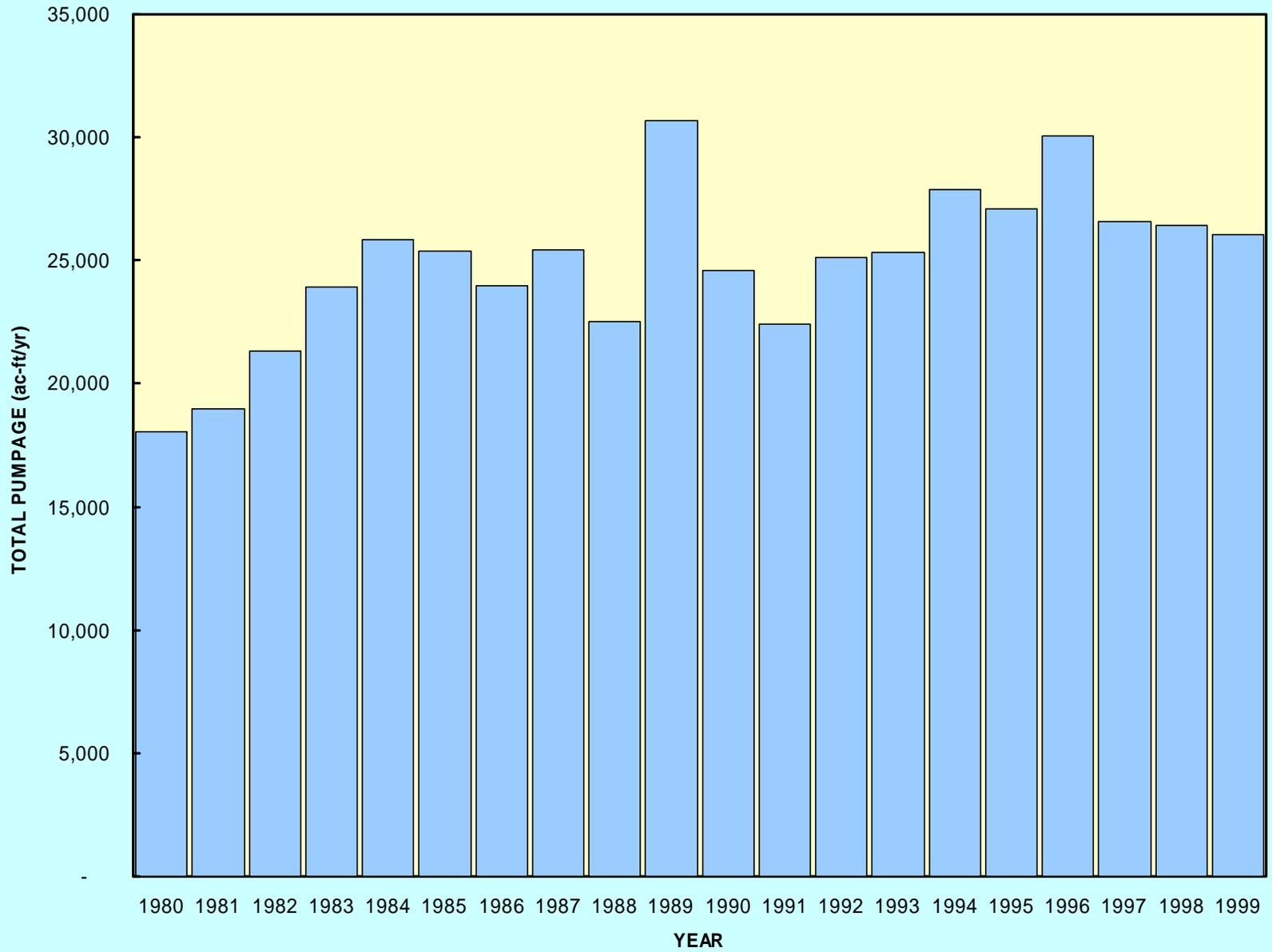


MAJOR SPRINGS

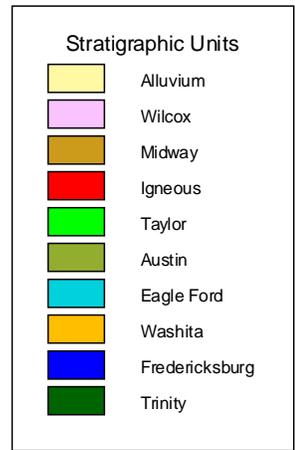
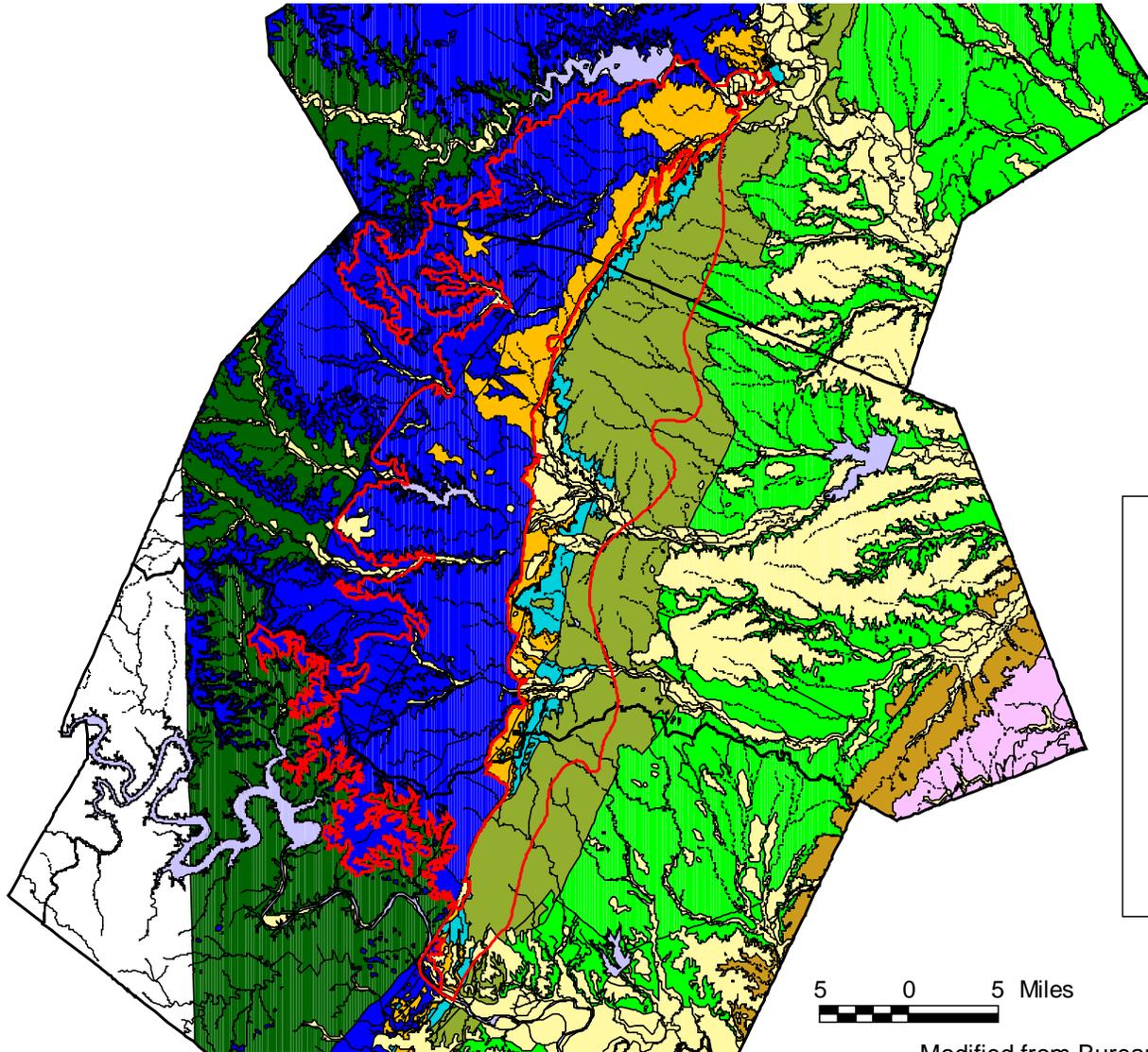
**PUMPAGE FROM NORTHERN EDWARDS AQUIFER
(1999)**



PUMPAGE



PUMPAGE

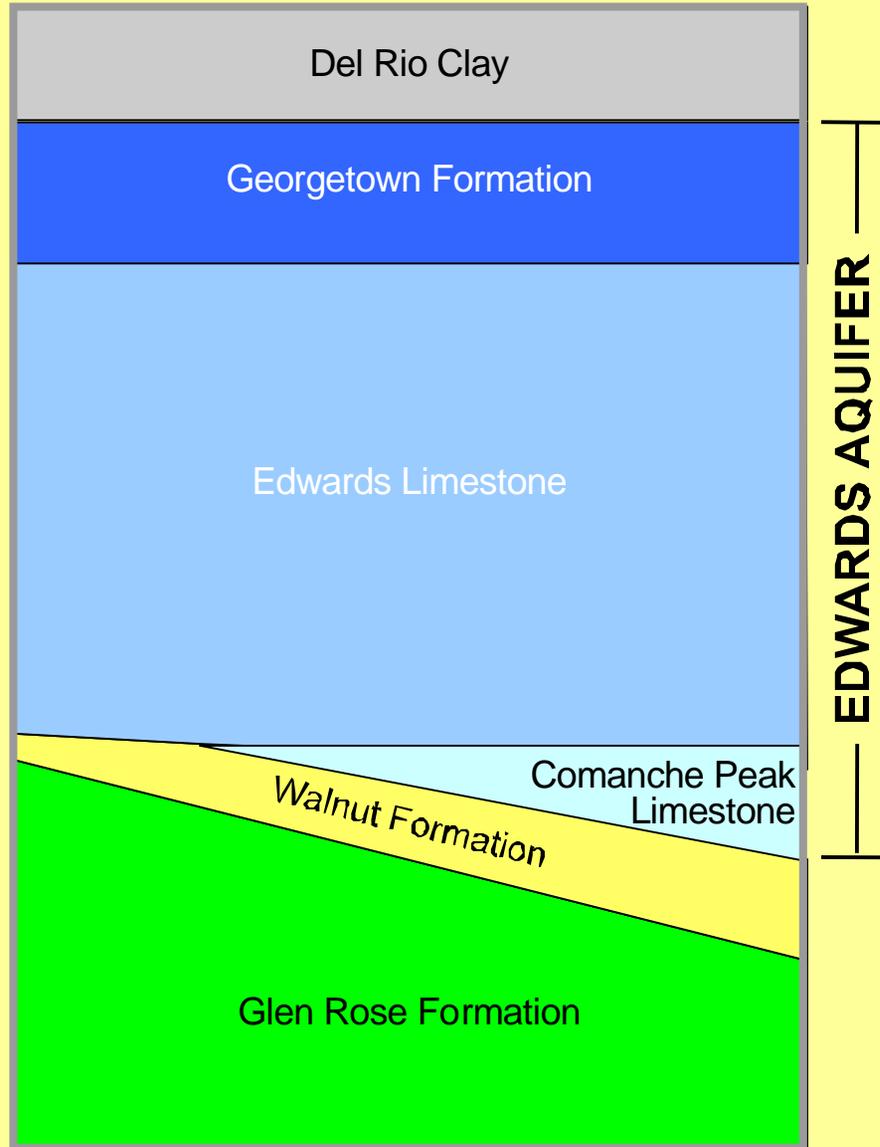


Modified from Bureau of Economic Geology
Geologic Atlas of Texas

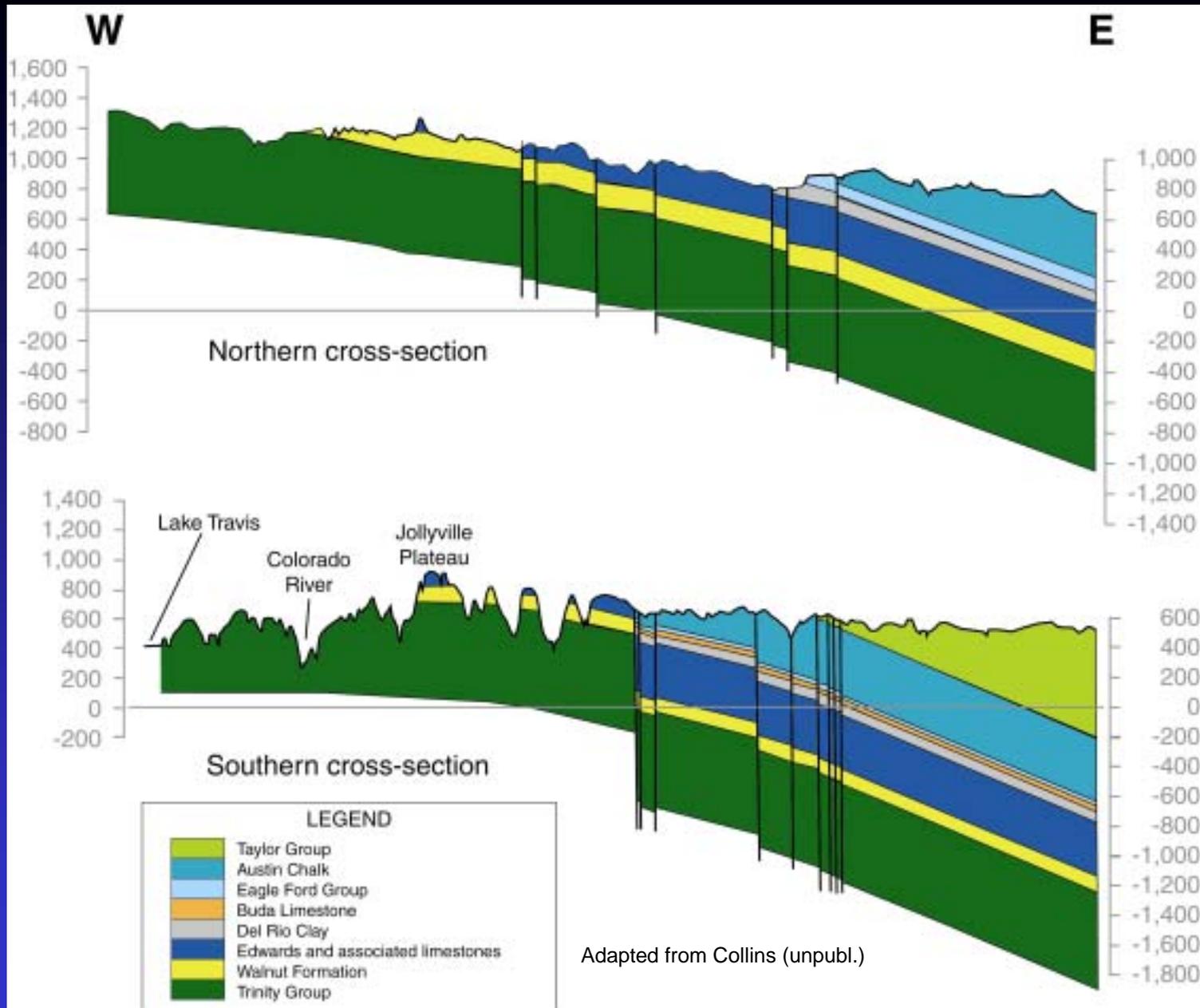
SURFACE GEOLOGY

S

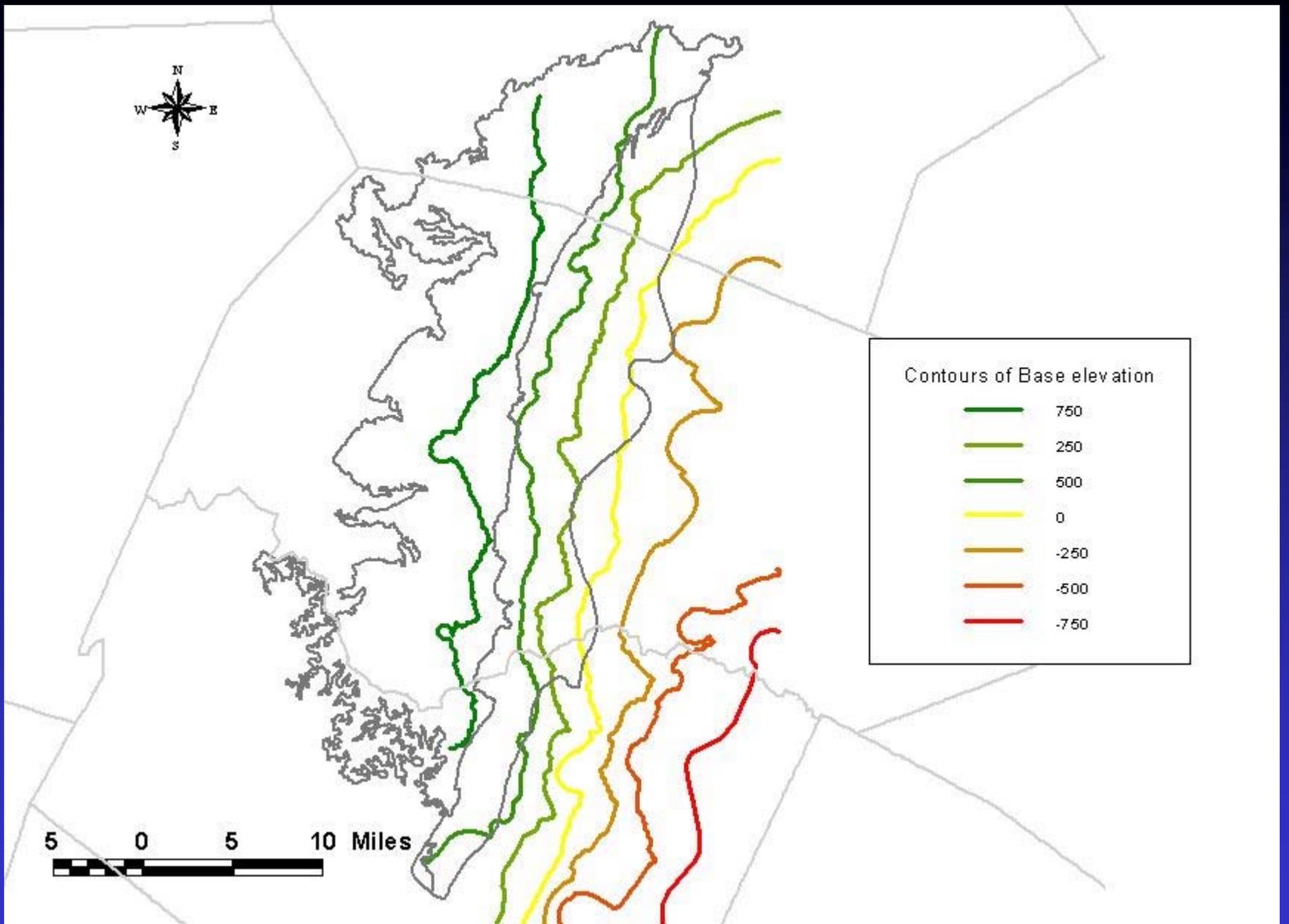
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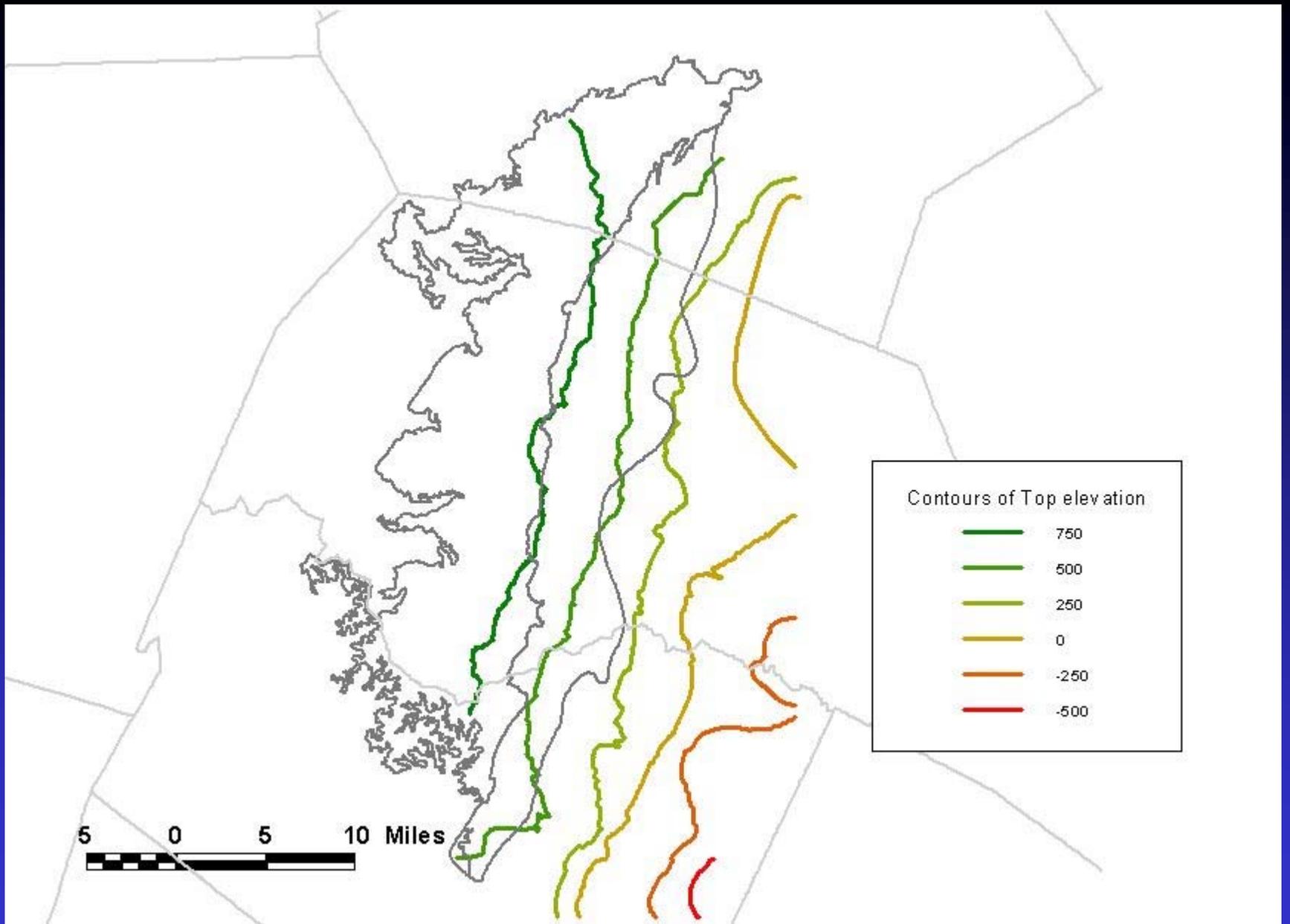
GEOLOGIC AND HYDROGEOLOGIC UNITS



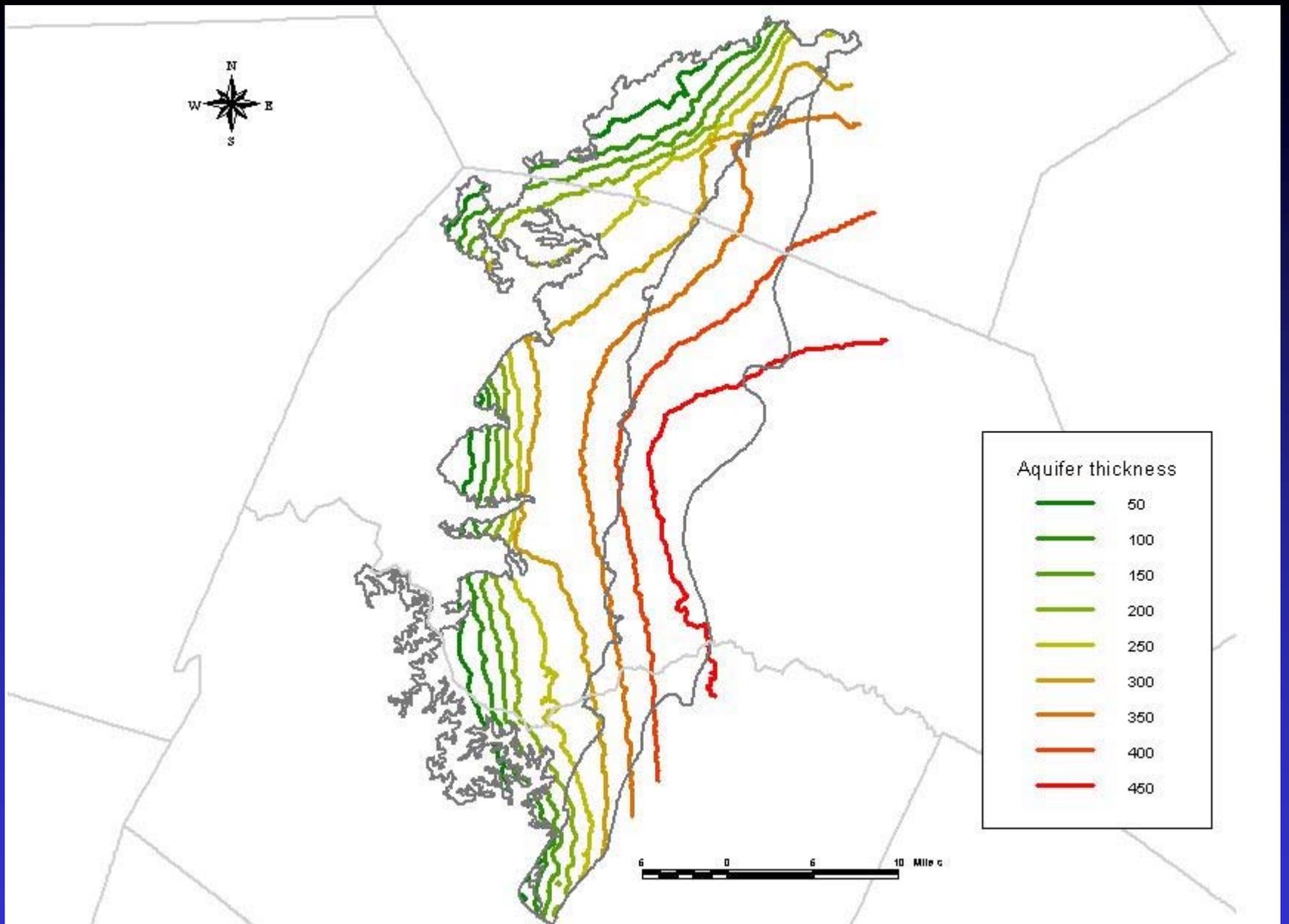
CROSS SECTIONS



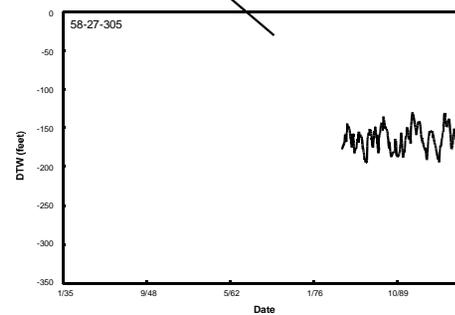
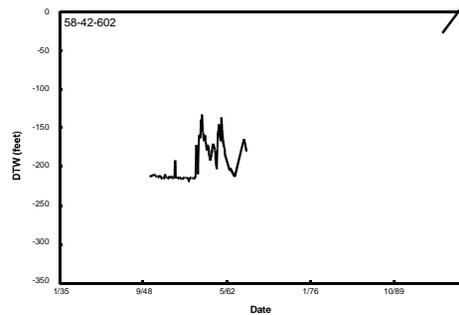
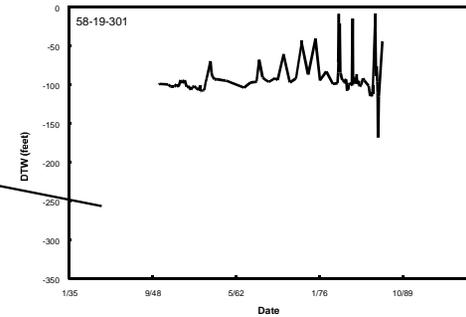
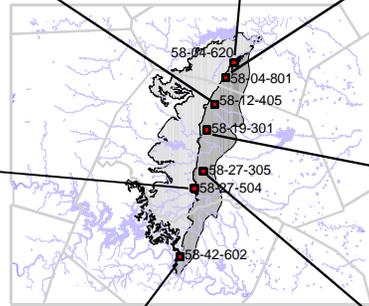
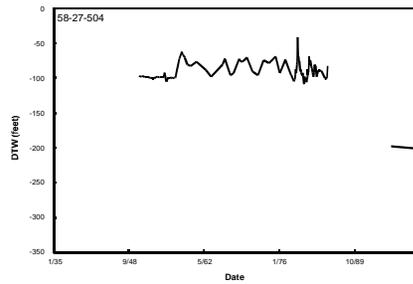
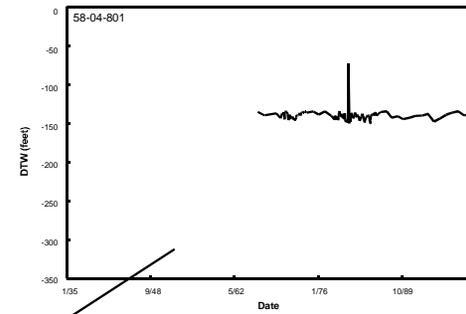
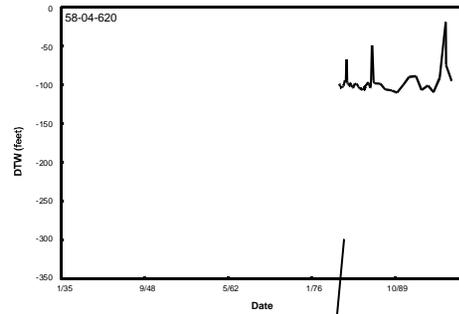
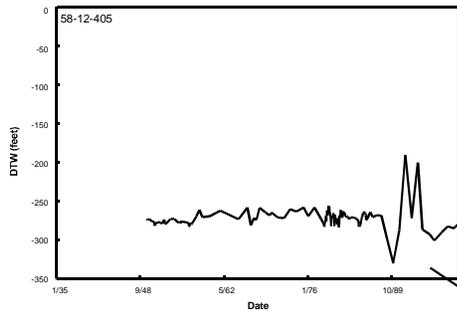
AQUIFER BASE



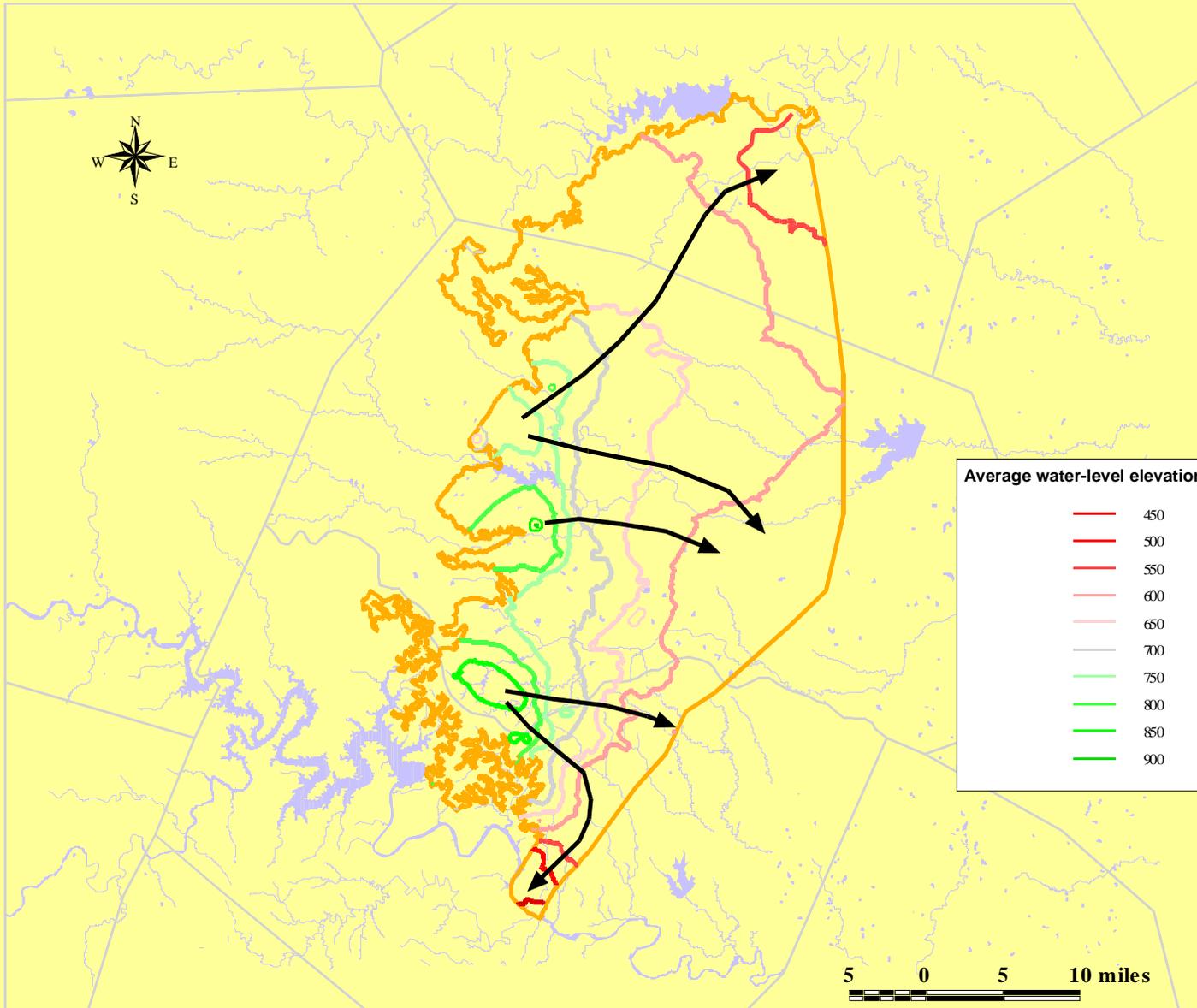
AQUIFER TOP



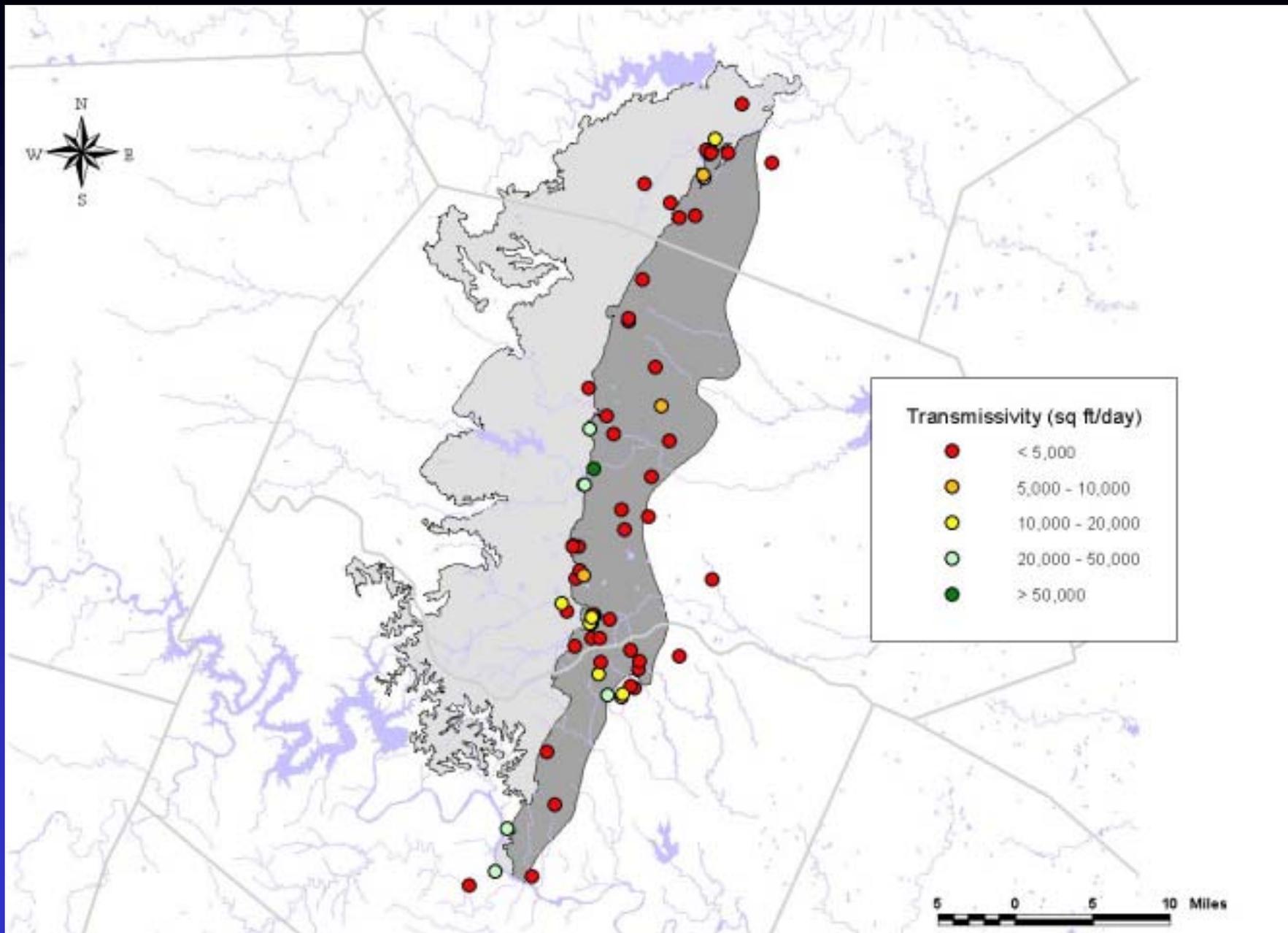
AQUIFER THICKNESS



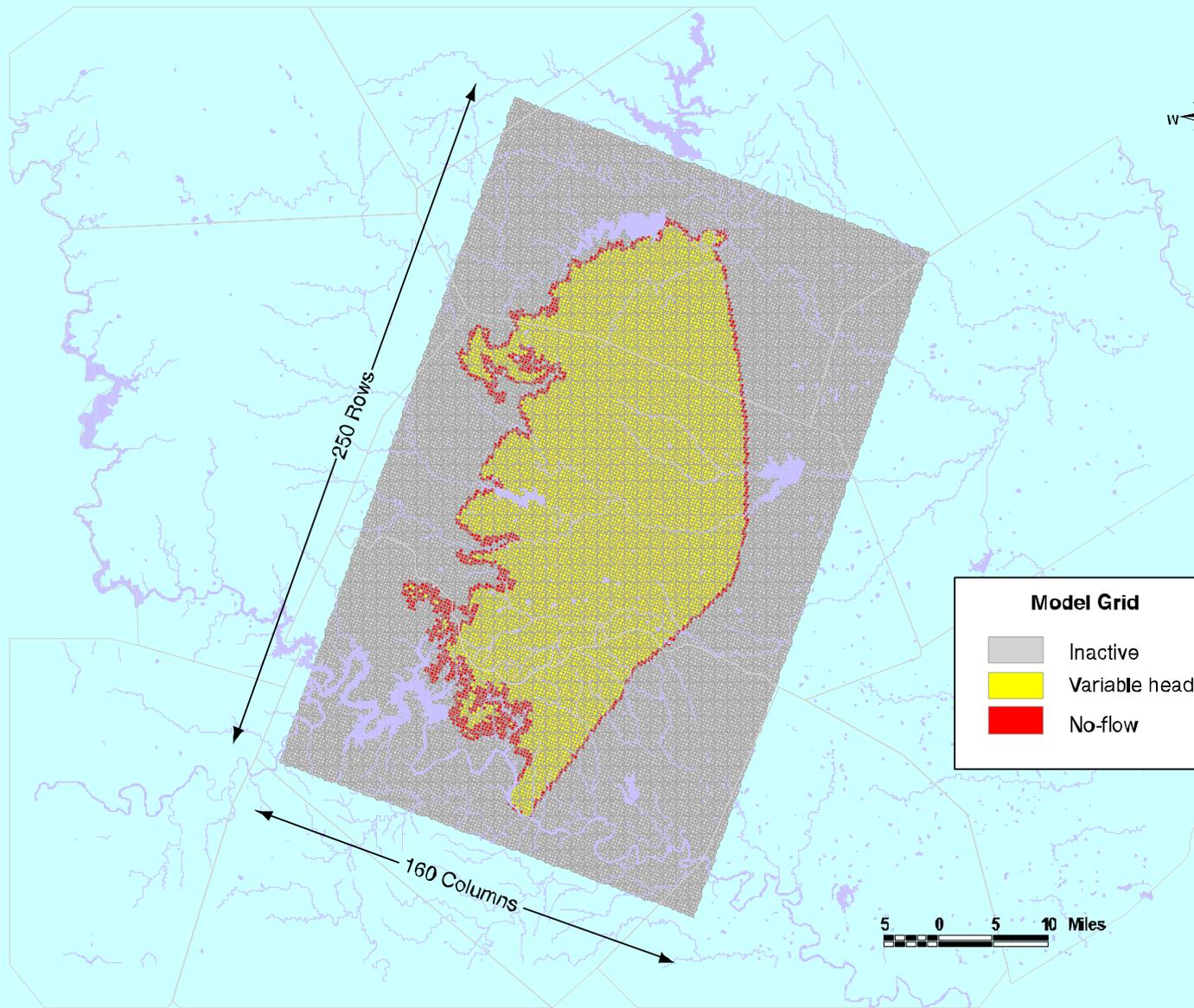
HYDROGRAPHS



POTENTIOMETRIC SURFACE

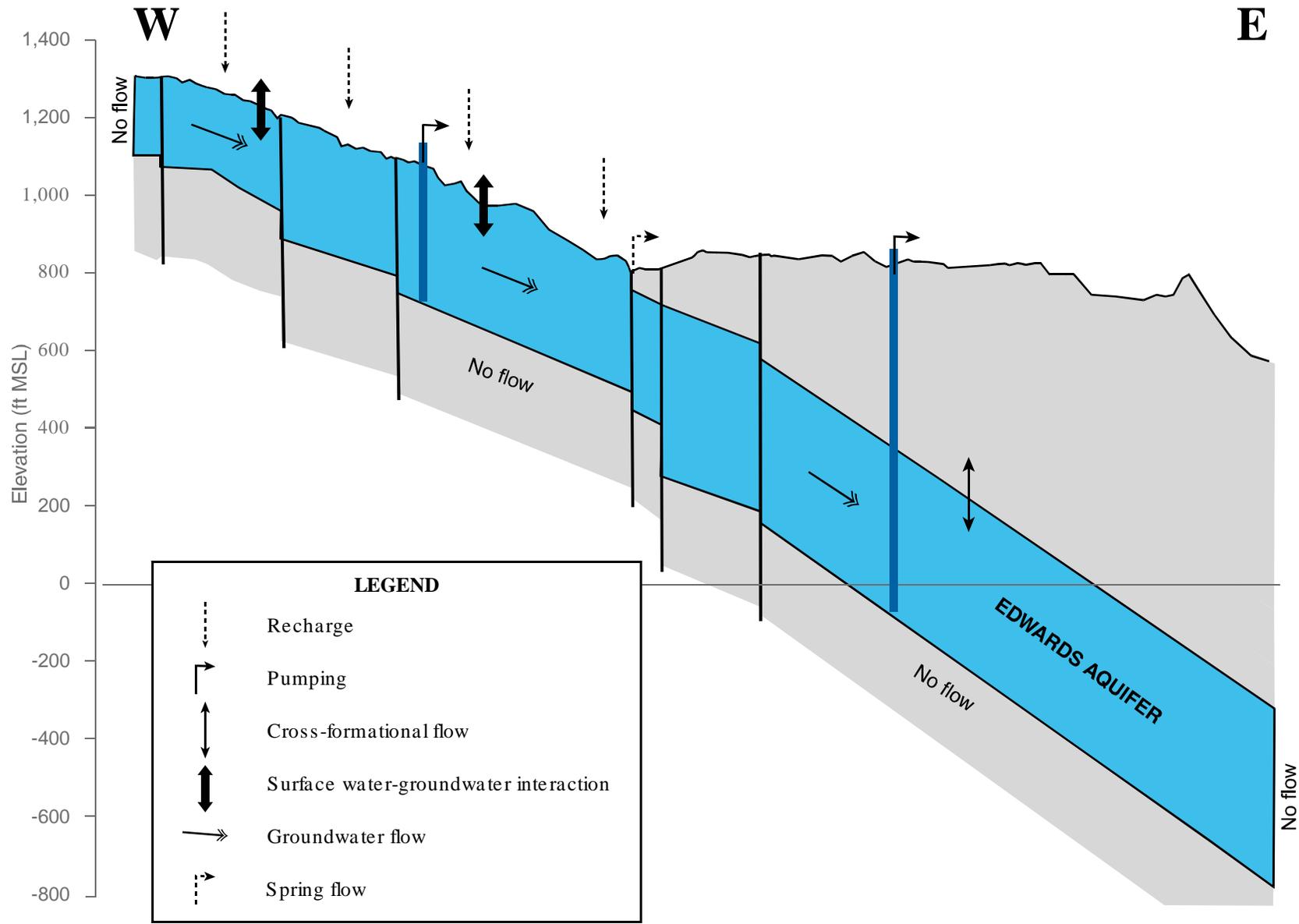


AQUIFER TEST DATA



Model grid

MODEL GRID



CONCEPTUAL MODEL

GAM SCHEDULE

SCHEDULE

SAF Meeting 1— Mar. 18 ■

SAF Meeting 2 — June ■ ● June —Draft conceptual model

SAF Meeting 3— Sept. ■ ● Sept. —Initial model design

SAF Meeting 4 — Dec. ■ ● Dec. —Calibrate steady-state model

● Feb. —Calibrate transient model

SAF Meeting 5 — Mar. ■ ● Mar. —Complete model predictions

● Apr. —Prepare draft report

SAF Meeting 6— June ■

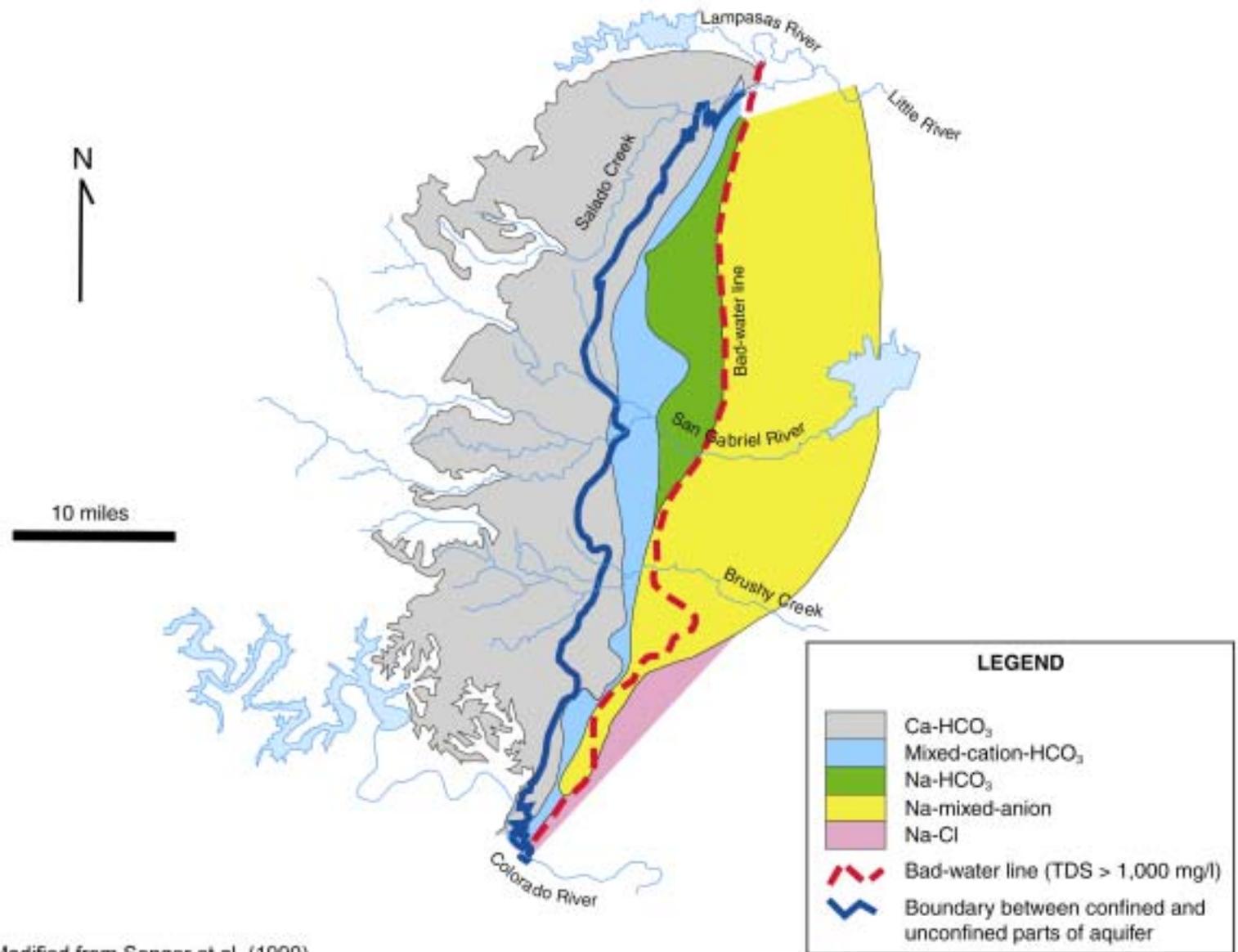
● Aug. —Present SAF Model Seminar

▲ Deliver Final Product

2002

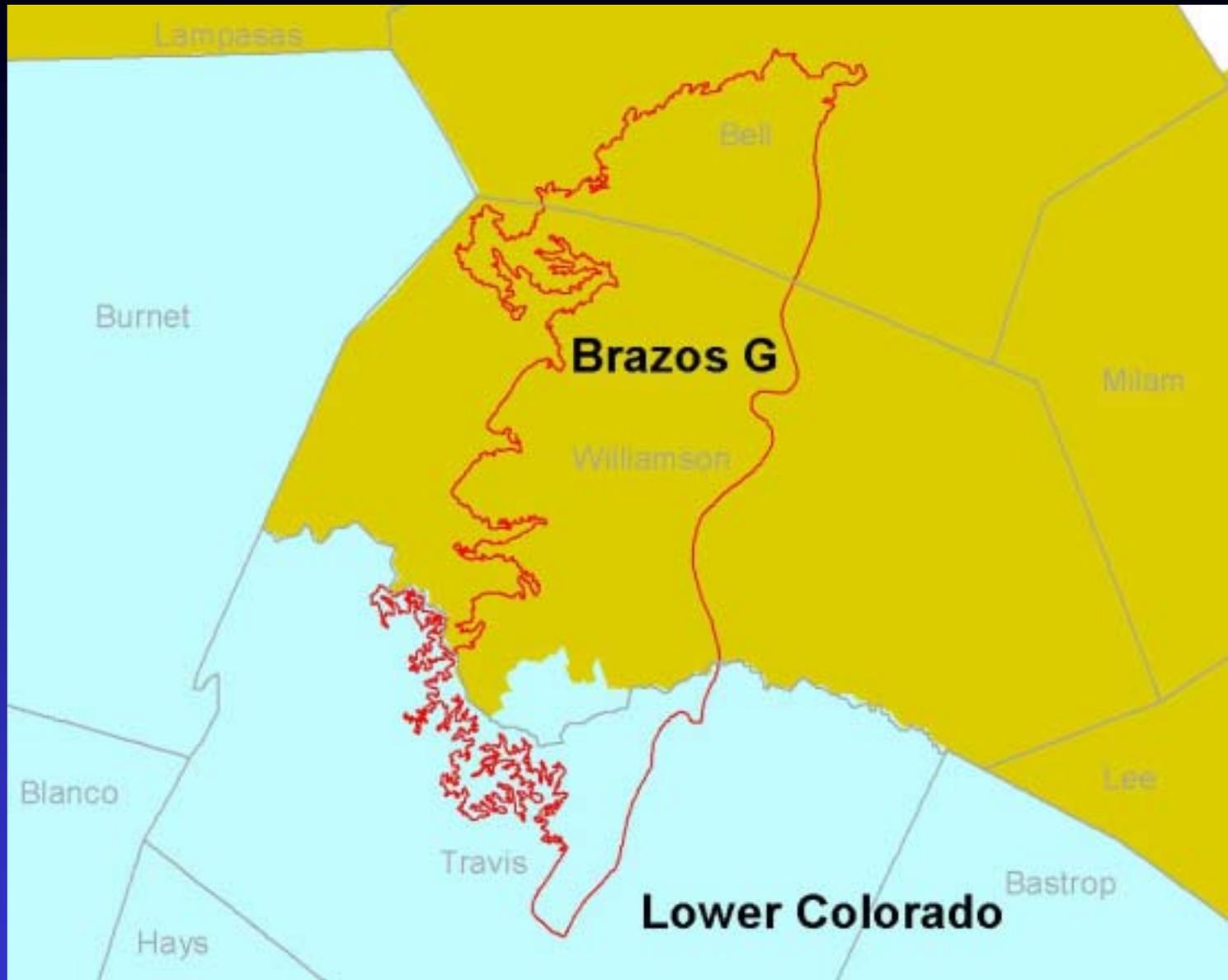
2003



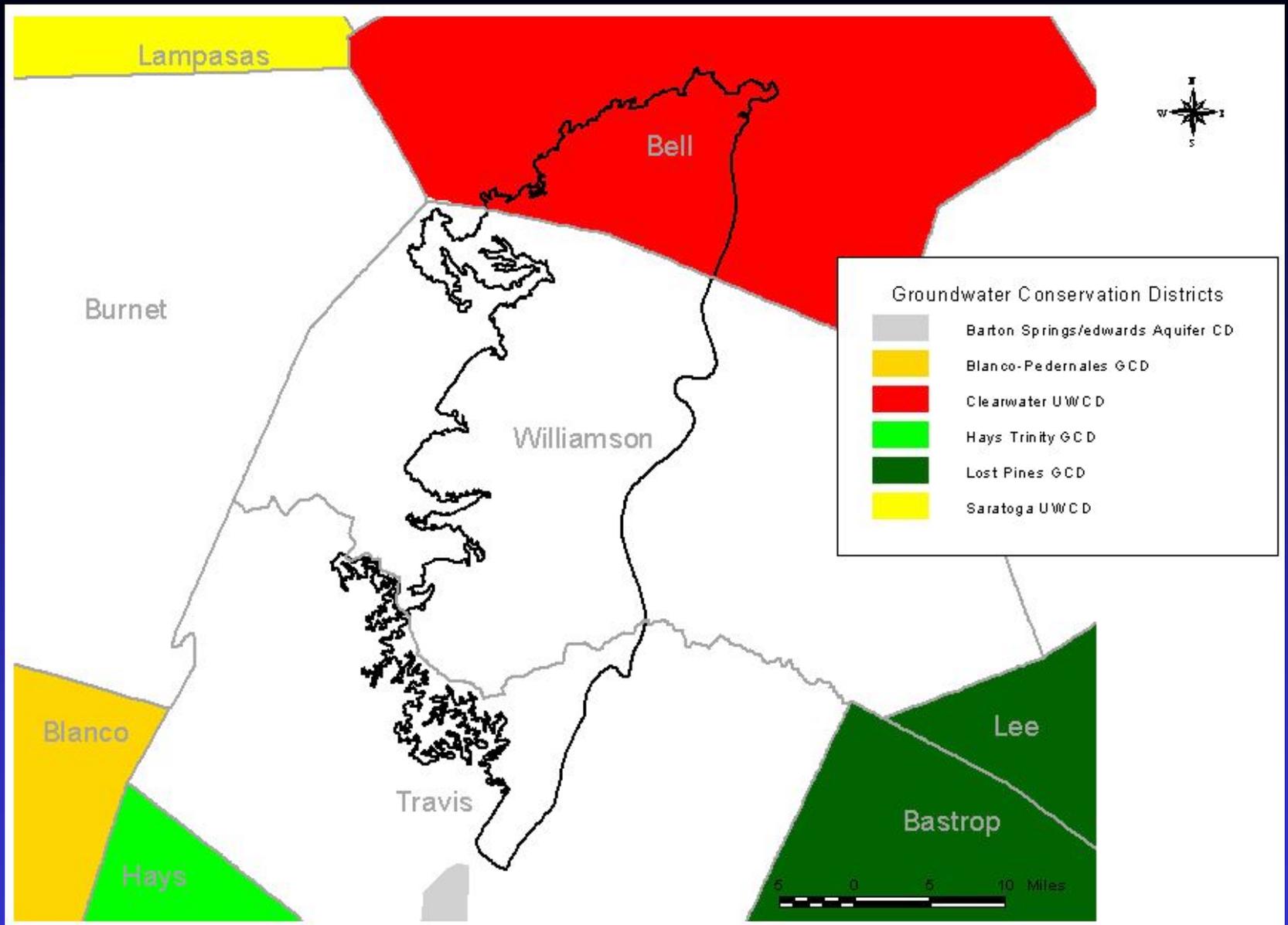


Modified from Senger et al. (1990)

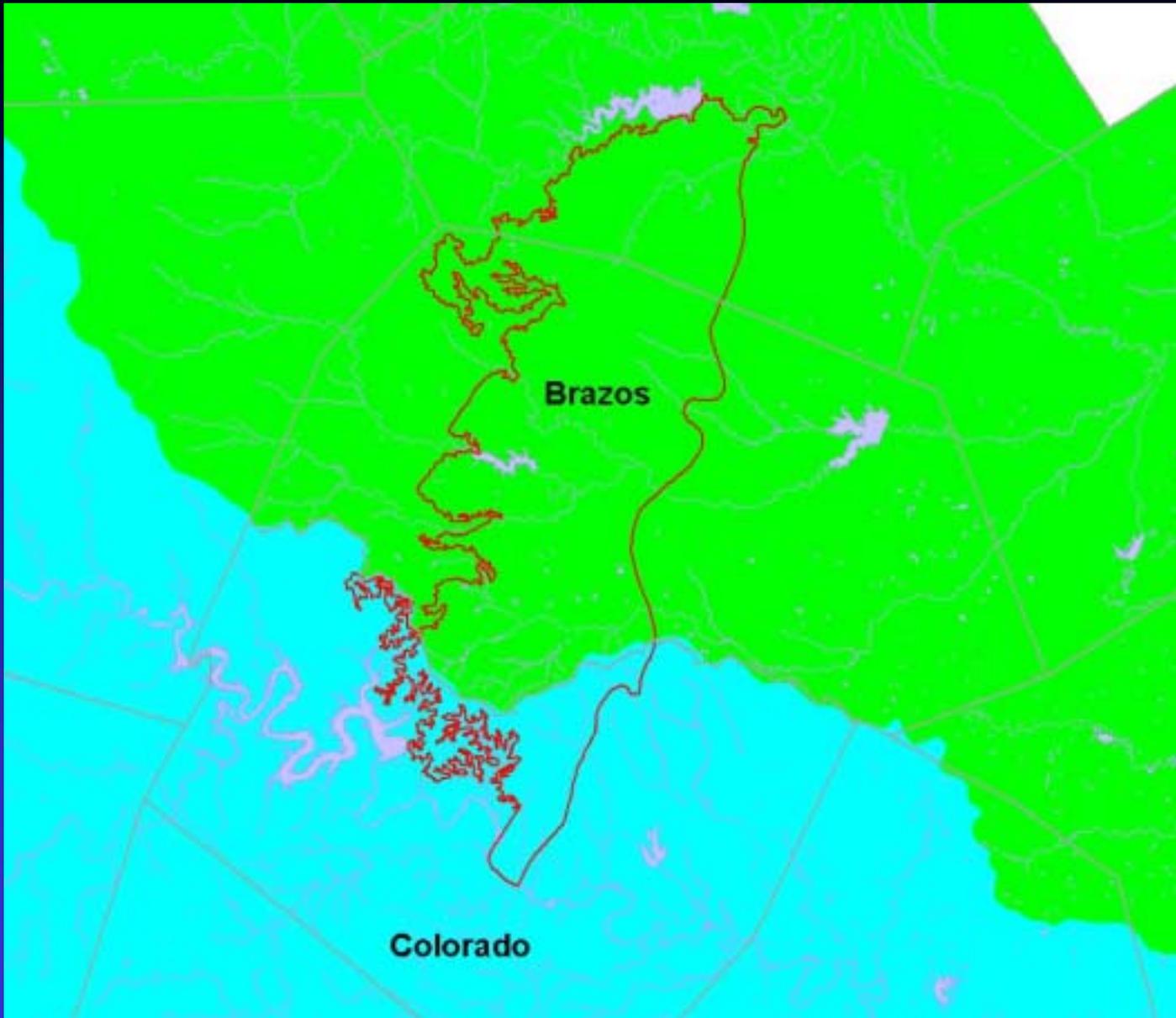
GROUNDWATER QUALITY



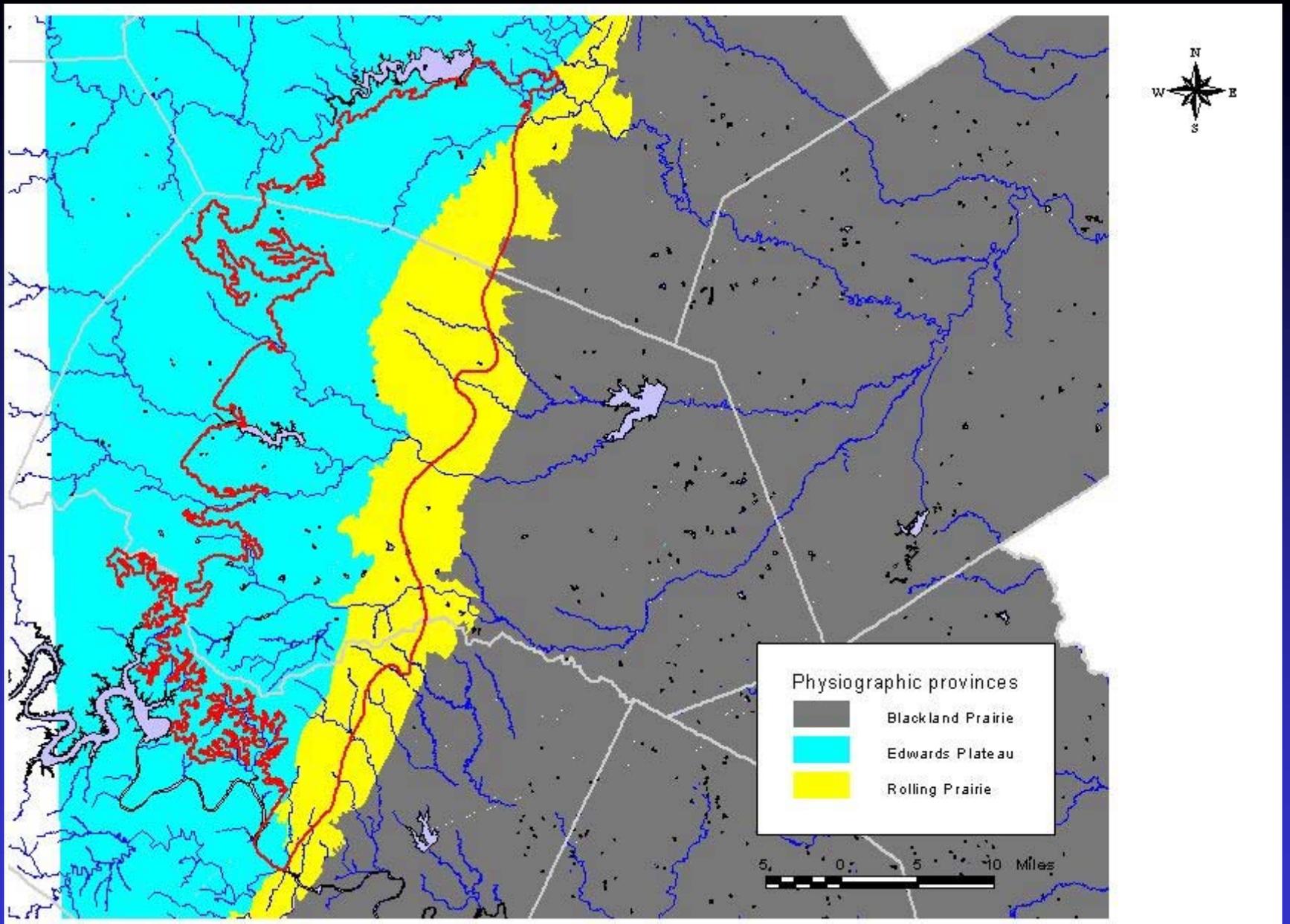
REGIONAL WATER PLANNING GROUPS



GROUNDWATER CONSERVATION DISTRICTS



RIVER BASINS



PHYSIOGRAPHY

**Northern Segment of the Edwards Aquifer
Stakeholder Advisory Forum 1
March 18, 2002**

Name	Affiliation
1 Cheryl Maxwell	Clearwater UWCD
2 James Carson Sloan	TNRCC
3 Teresa Lutes	City of Austin
4 Roberto Anaya	TWDB
5 Robert Mace	TWDB
6 Ian Jones	TWDB
7 Ali Chowdhury	TWDB
8 David Meesy	TWDB
9 Jennifer Walker	Sierra Club

**NORTHERN SEGMENT OF THE EDWARDS AQUIFER GROUNDWATER
AVAILABILITY MODEL**

Stakeholder Advisory Forum #2, June 27, 2002

About 9 people attended the second Stakeholder Advisory Forum for the northern segment of the Edwards aquifer groundwater availability model. These stakeholders represent different state government agencies, the City of Austin, the Clearwater UWCD, and the Sierra Club.

Ian Jones outlined the work conducted as part of construction of the conceptual model. This included brief discussions of climate, streamflow, springs, pumpage, geology, water levels, hydraulic properties, and the model grid. This all was summarized in the conceptual model that outlines our understanding of the working of the aquifer. In the conceptual model precipitation recharges the aquifer where the aquifer rock is exposed at the surface through diffuse infiltration through the soil or by infiltration from intermittent streams. The groundwater generally flows from west to east. Discharge takes the form of spring discharge to perennial streams and rivers and pumpage.

A brief discussion followed the presentation. Questions were related to the structure of the aquifer (elevation of aquifer top and variation of aquifer thickness), and the potentiometric surface (factor influencing groundwater flow paths).