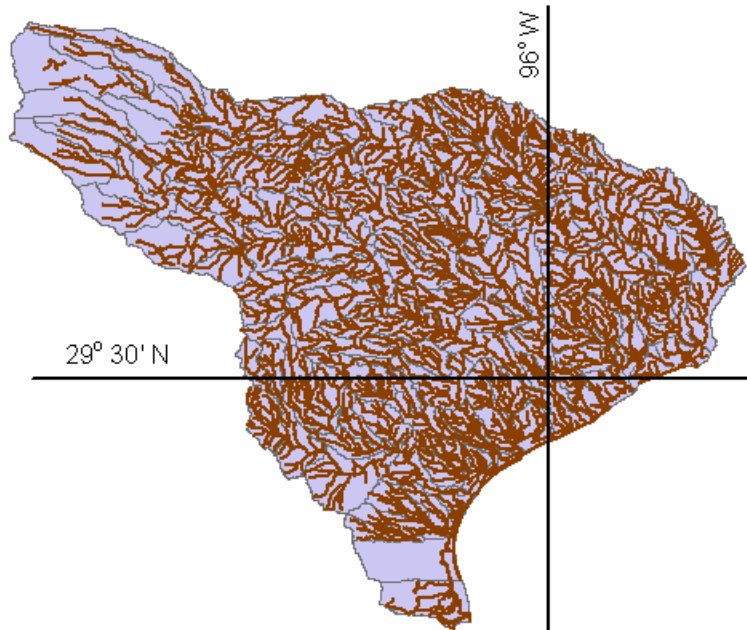


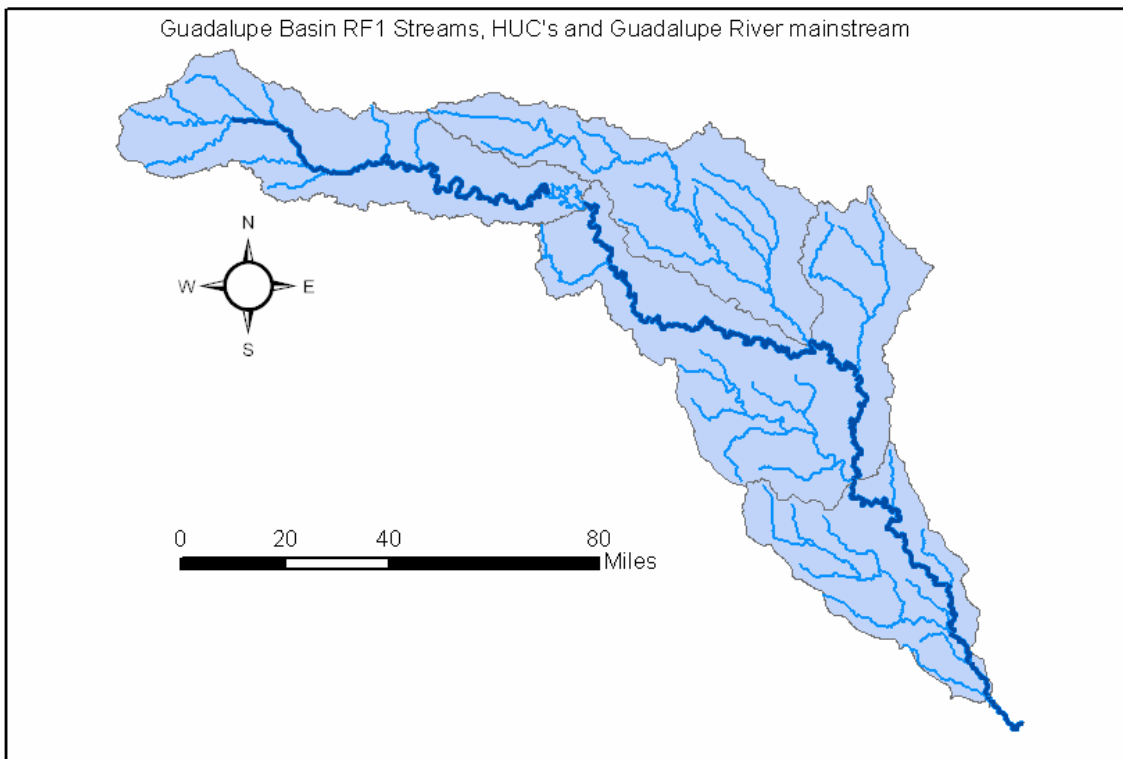
## Exercise 2 Solution

Approximate map extent: 25° 50' N to 34° 45' N latitude, 93° 6' to 103° 50' W longitude.

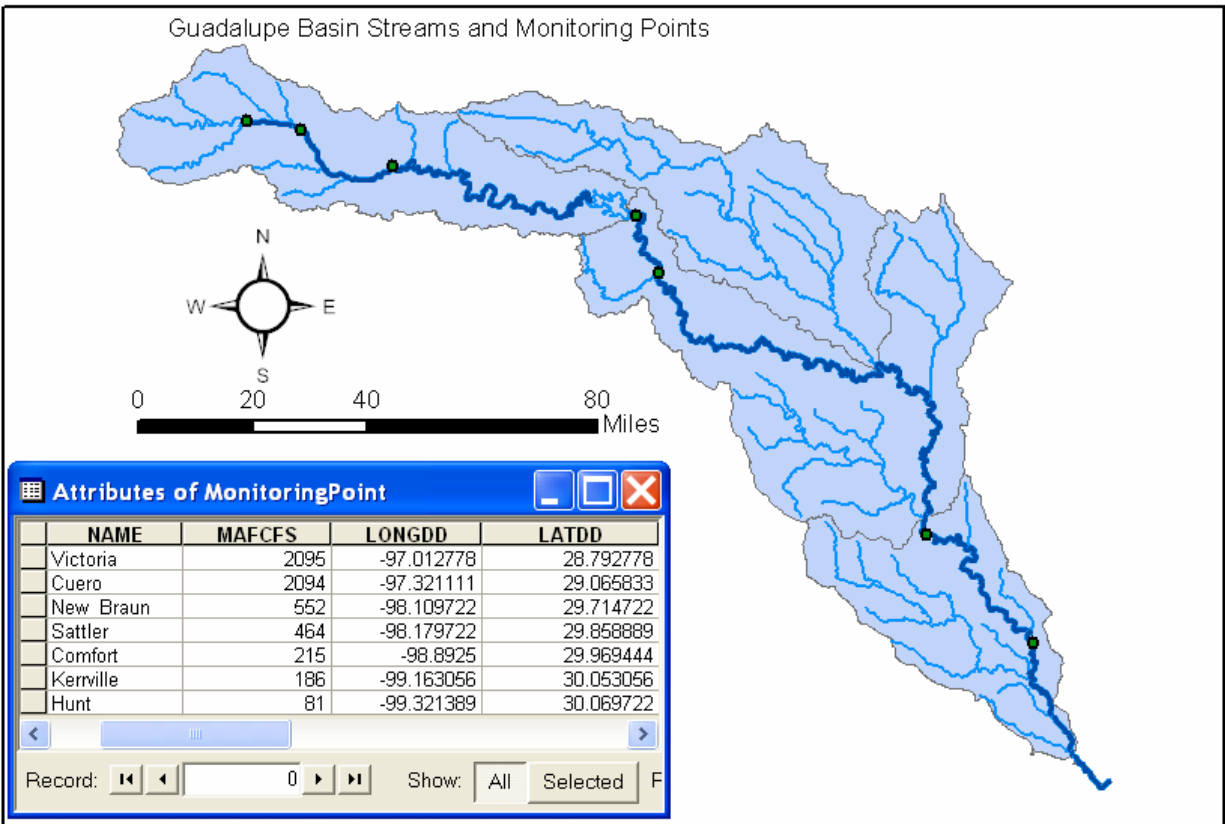
Region 12 Central Meridian and Standard Parallel



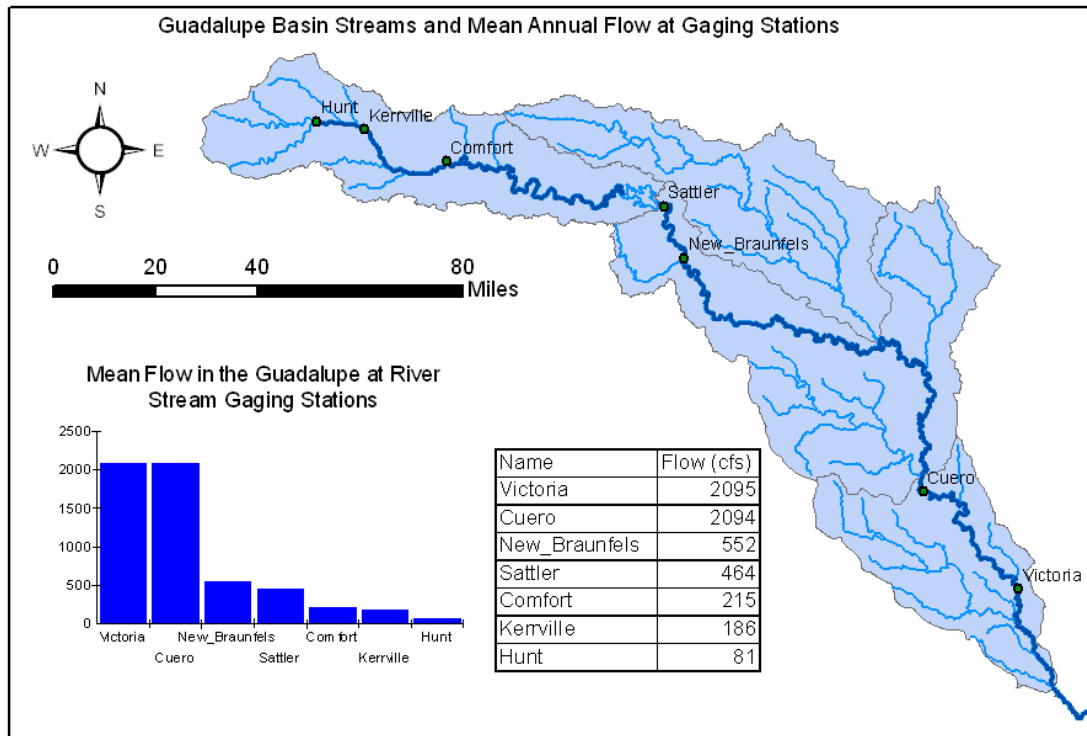
Guadalupe Basin and Streams Layout



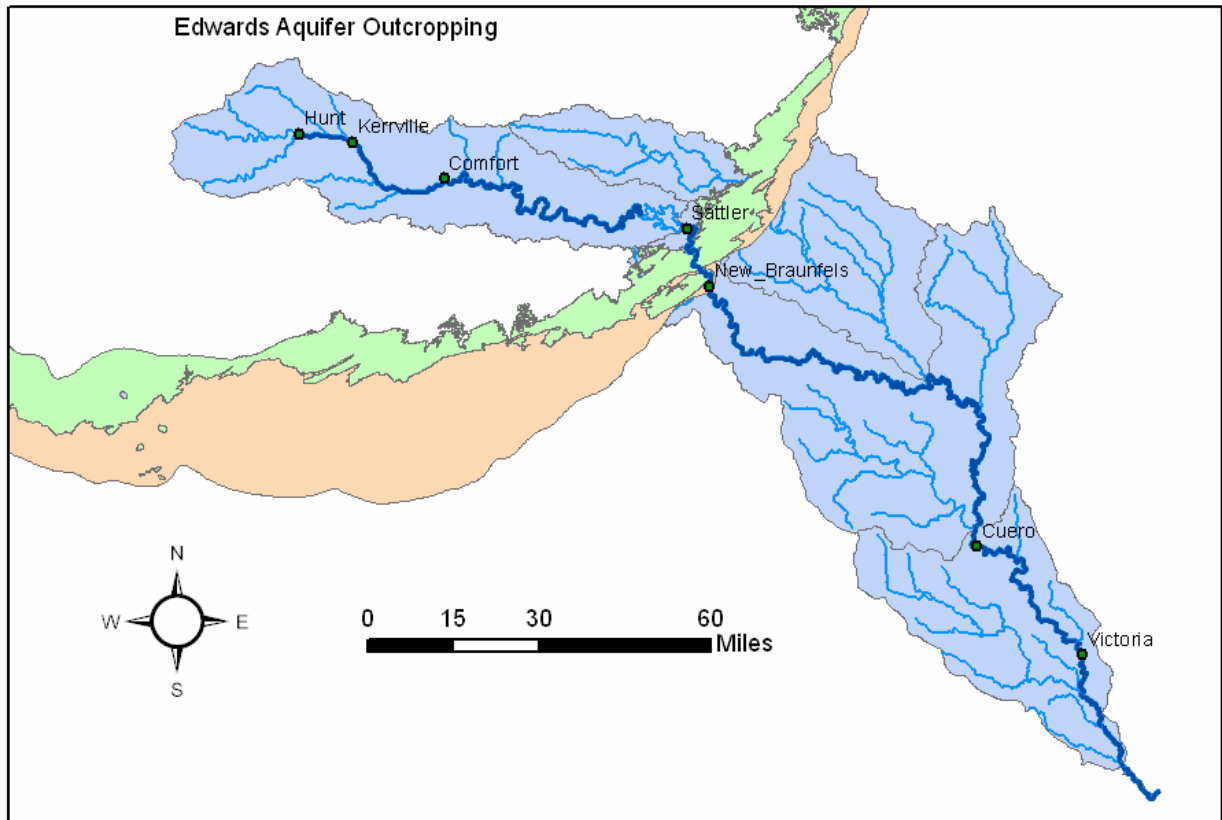
## Guadalupe Basin Monitoring Points



## Guadalupe streamflow layout.



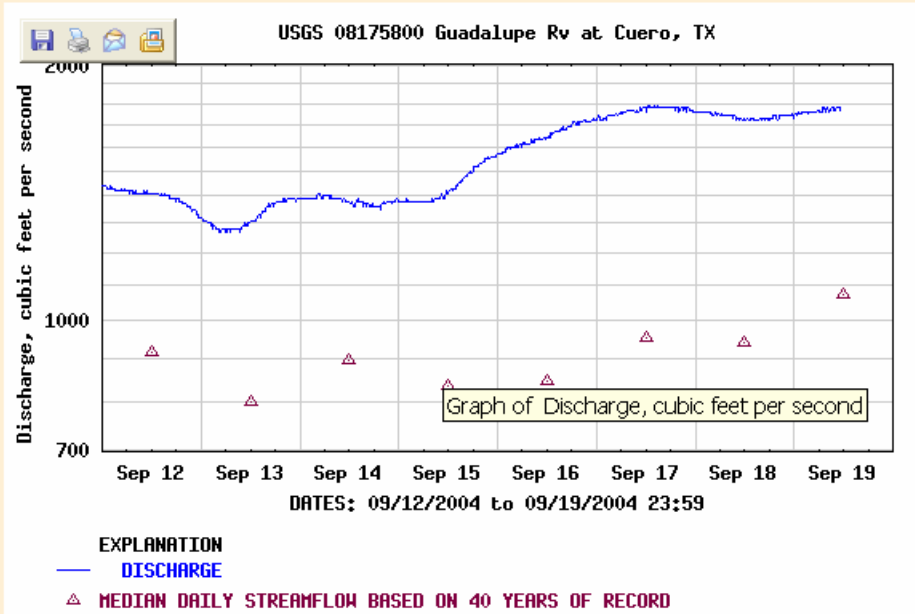
The Edwards Aquifer outcrops between the Sattler and New Braunfels gages. The difference in mean annual flow is  $552 - 464 = 88\text{cfs}$ . This gain in streamflow suggests discharge from the aquifer into the Guadalupe River.



Graph of Guadalupe River at Cuero Real time streamflow from NWIS website.

**Discharge, cubic feet per second**

Most recent value: 1,770 09-19-2004 11:15



Download a [presentation-quality graph](#)

Parameter Code 00060; DD 01

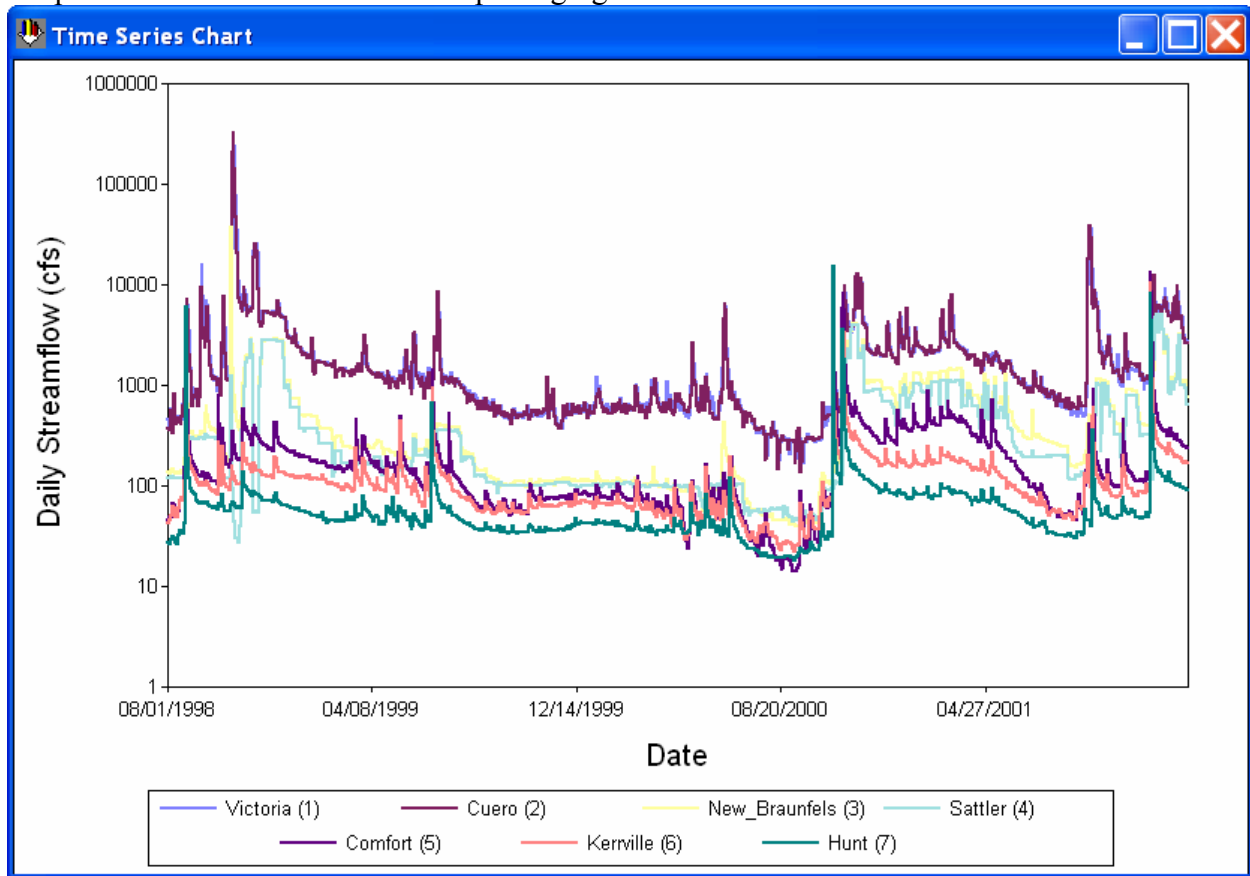
**Daily mean flow statistics for 9/19 based on 40 years of record in ft<sup>3</sup>/sec**

Current Flow	Minimum	Mean	Maximum	80 percent exceedance	50 percent exceedance	20 percent exceedance
1,770	132	1,557	6,880	529	1,070	1,832

Percent exceedance means that 80, 50, or 20 percent of all daily mean flows for 9/19 have been greater than the value shown.

The 20%, 50% and 80% exceedence flows for Sept 19 are 1832, 1070 and 529 cfs respectively. The flow on 9/19/2004 was 1770 cfs, near the 20% exceedence value.

Graph of Streamflow in the Guadalupe Gaging Stations



(You need to be more creative than this in your solutions.)