

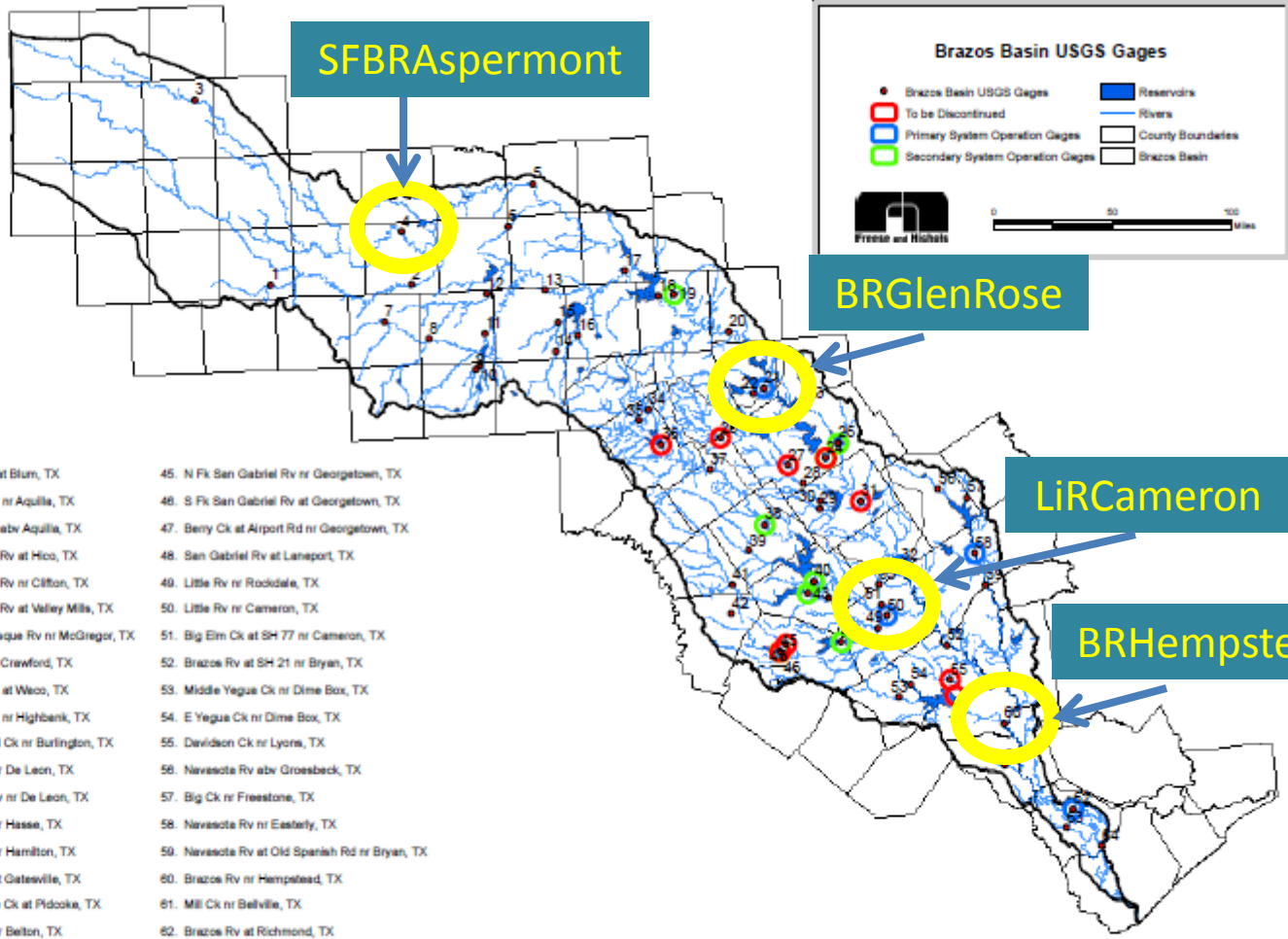
Brazos BBEST

Period of Record Analyses for
Four Pilot Gages

May 23, 2011

Goal

- Increase familiarity with hydrology at four disparate sites
- Examine possible long-term changes in hydrology
 - Reservoir construction
 - Climate shifts
 - Increased return flows
 - Such changes, if identified, may influence period of record decision
- Period of Record decision is a key hydrologic decision that will need to be made by the BBEST
 - Decision does not need to be made today



SFBRAspermont

BRGlenRose

LiRCameron

BRHempstead

Brazos Basin USGS Gages

- Brazos Basin USGS Gages
- To be Discontinued
- Primary System Operation Gages
- Secondary System Operation Gages
- Reservoirs
- Rivers
- County Boundaries
- Brazos Basin

Gage Legend

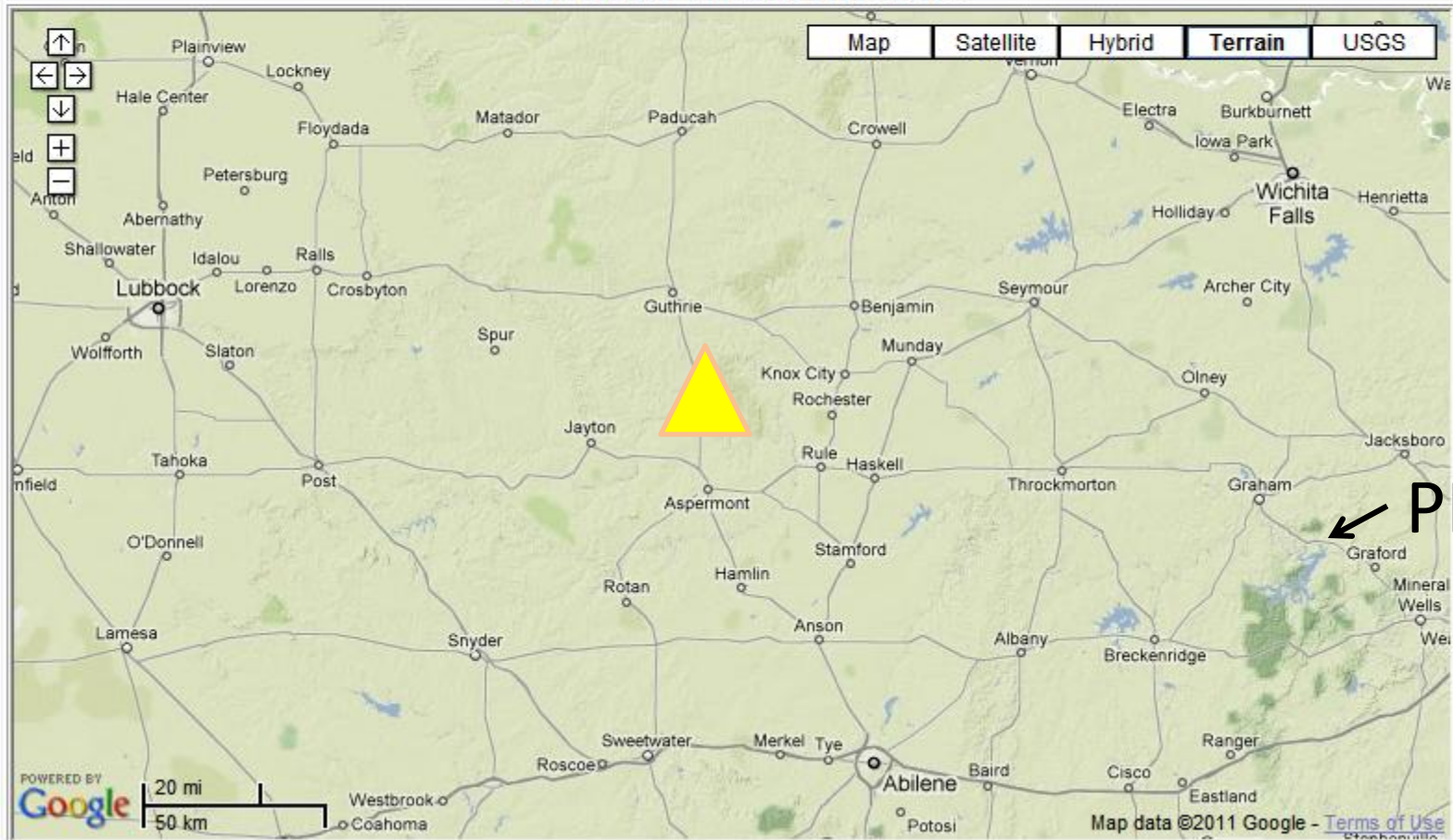
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|--|--------------------------------------|--|
| 1. DMF Brazos Rv at Justiceburg, TX | 23. Nolan Rv at Blum, TX | 45. N Fk San Gabriel Rv nr Georgetown, TX |
| 2. DMF Brazos Rv nr Aspermont, TX | 24. Brazos Rv nr Aquilla, TX | 46. S Fk San Gabriel Rv at Georgetown, TX |
| 3. Running Water Draw at Plainview, TX | 25. Aquilla Ck abv Aquilla, TX | 47. Berly Ck at Airport Rd nr Georgetown, TX |
| 4. Salt Fk Brazos Rv nr Aspermont, TX | 26. N Bosque Rv at Hico, TX | 48. San Gabriel Rv at Laneport, TX |
| 5. Brazos Rv at Seymour, TX | 27. N Bosque Rv nr Clifton, TX | 49. Little Rv nr Rockdale, TX |
| 6. Millers Ck nr Munday, TX | 28. N Bosque Rv at Valley Mills, TX | 50. Little Rv nr Cameron, TX |
| 7. Clear Fk Brazos Rv nr Roby, TX | 29. Middle Bosque Rv nr McGregor, TX | 51. Big Elm Ck at SH 77 nr Cameron, TX |
| 8. Clear Fk Brazos Rv nr Noodle, TX | 30. Hog Ck nr Crawford, TX | 52. Brazos Rv at SH 21 nr Bryan, TX |
| 9. Cat Claw Ck at Abilene, TX | 31. Brazos Rv at Waco, TX | 53. Middle Yegua Ck nr Dime Box, TX |
| 10. Cedar Ck at IH 20, Abilene, TX | 32. Brazos Rv nr Highbank, TX | 54. E Yegua Ck nr Dime Box, TX |
| 11. Clear Fk Brazos Rv at Nugent, TX | 33. Little Pond Ck nr Burlington, TX | 55. Davidson Ck nr Lyons, TX |
| 12. California Ck nr Stamford, TX | 34. Leon Rv nr De Leon, TX | 56. Navasote Rv abv Groesbeck, TX |
| 13. Clear Fk Brazos Rv at Ft Griffin, TX | 35. Sabena Rv nr De Leon, TX | 57. Big Ck nr Freestone, TX |
| 14. Deep Ck at Moran, TX | 36. Leon Rv nr Hesse, TX | 58. Navasote Rv nr Easterly, TX |
| 15. Hubbard Ck bl Albany, TX | 37. Leon Rv nr Hamilton, TX | 59. Navasote Rv at Old Spanish Rd nr Bryan, TX |
| 16. Big Sandy Ck abv Breckenridge, TX | 38. Leon Rv at Gatesville, TX | 60. Brazos Rv nr Hempstead, TX |
| 17. Brazos Rv nr South Bend, TX | 39. Cowhouse Ck at Pidcock, TX | 61. Mill Ck nr Bellville, TX |
| 18. Brazos Rv nr Graford, TX | 40. Leon Rv nr Belton, TX | 62. Brazos Rv at Richmond, TX |
| 19. Brazos Rv nr Palo Pinto, TX | 41. Lampasas Rv nr Kempner, TX | 63. Big Ck nr Needville, TX |
| 20. Brazos Rv nr Dennis, TX | 42. S Fk Rocky Ck nr Briggs, TX | 64. Brazos Rv nr Rosharon, TX |
| 21. Brazos Rv nr Glen Rose, TX | 43. Lampasas Rv nr Belton, TX | |
| 22. Paluxy Rv at Glen Rose, TX | 44. Little Rv nr Little River, TX | |

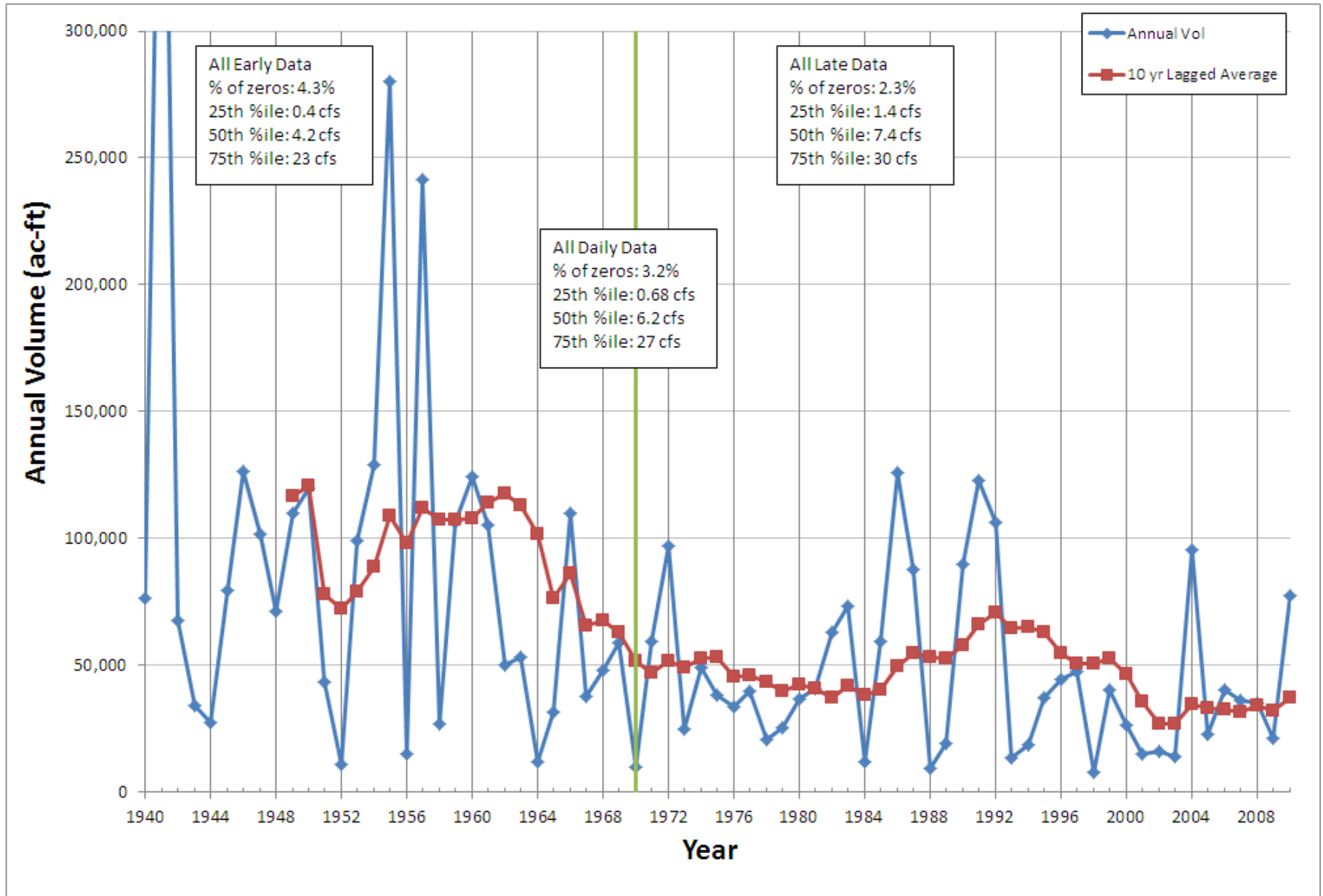


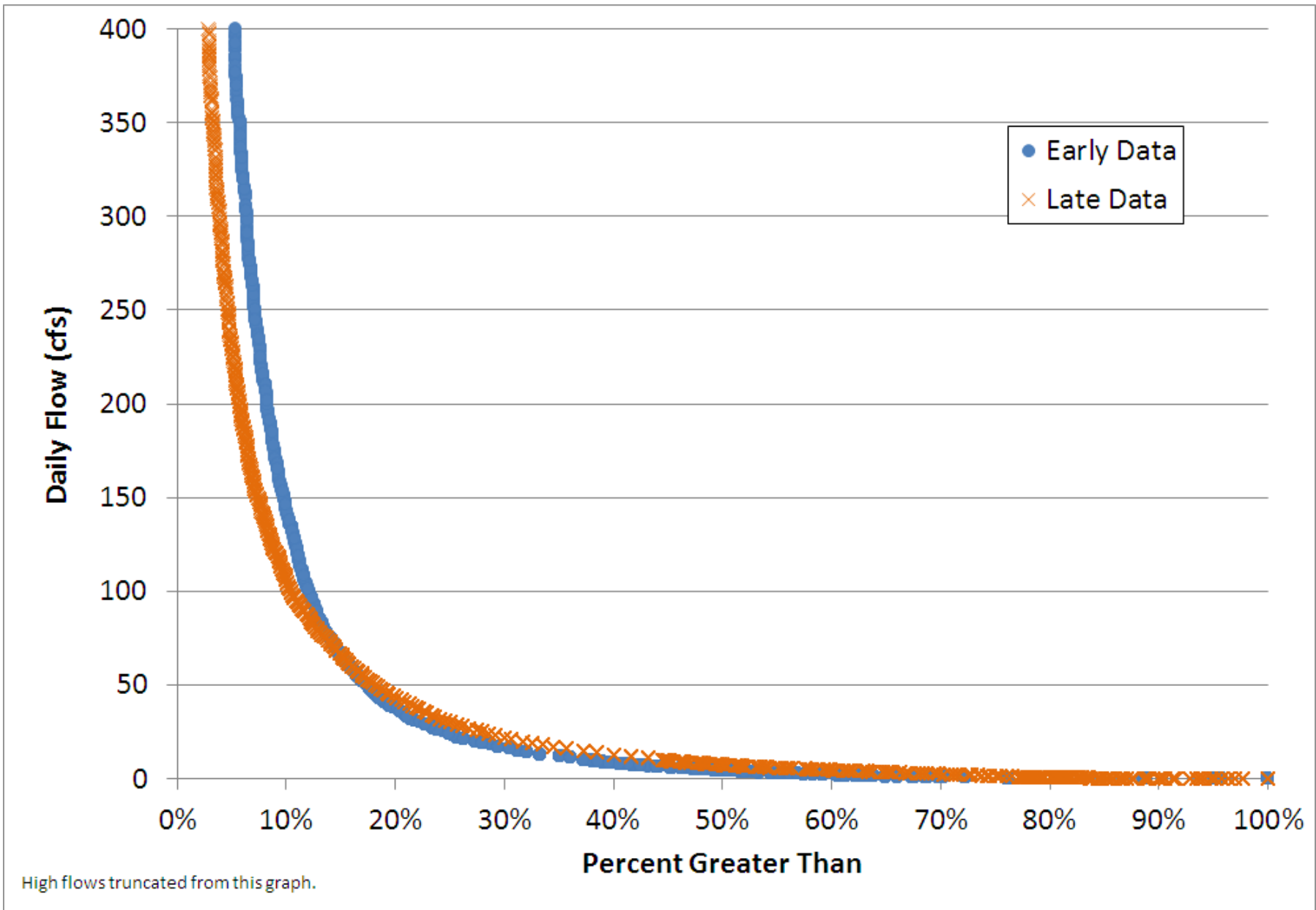
Salt Fork Brazos River near Aspermont

Stonewall County, Texas
Hydrologic Unit Code 12050007
Latitude 33°20'02", Longitude 100°14'16" NAD27
Drainage area 5,130 square miles
Contributing drainage area 2,496 square miles
Gage datum 1,588.70 feet above NGVD29

Location of the site in Texas.



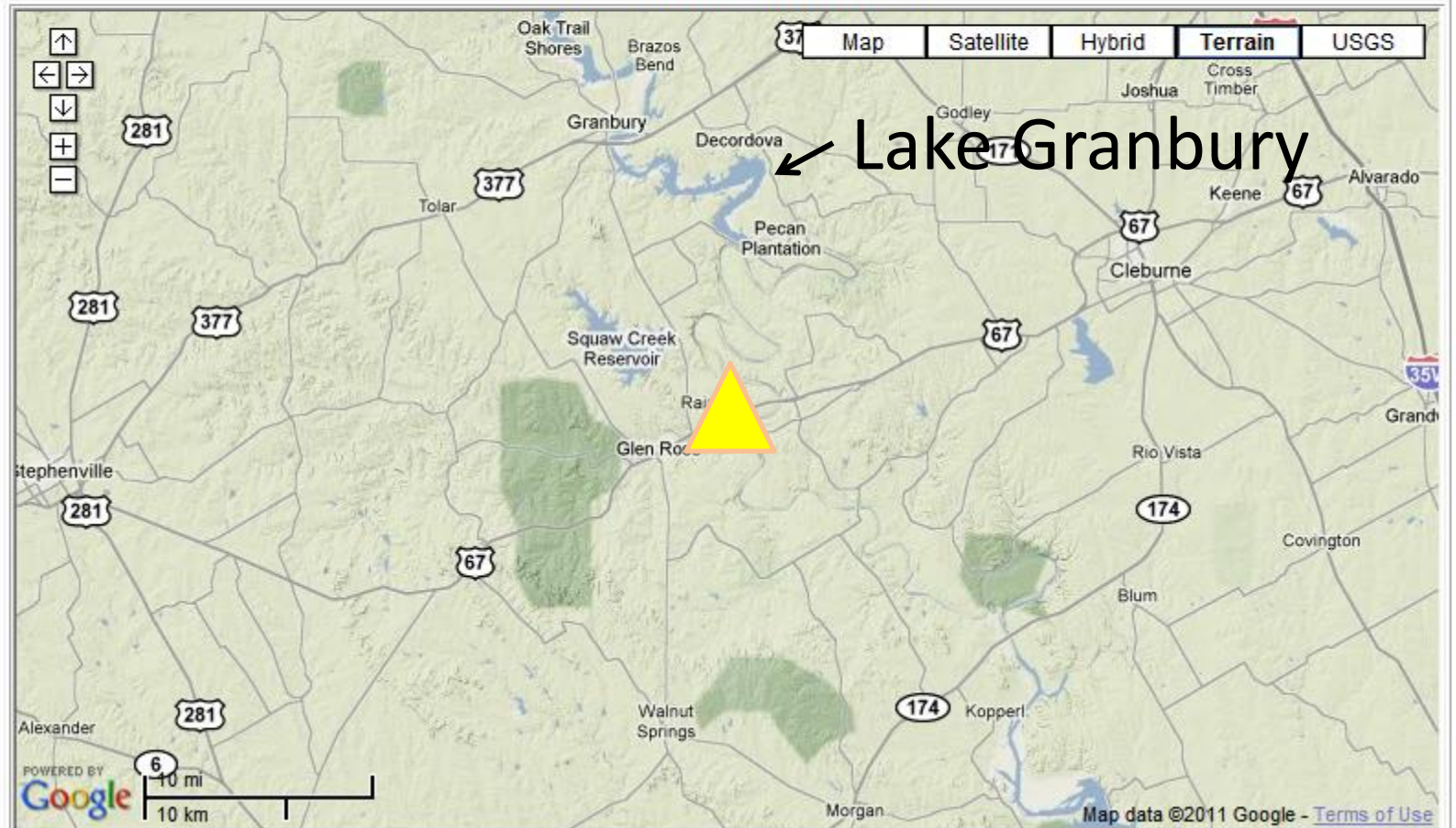


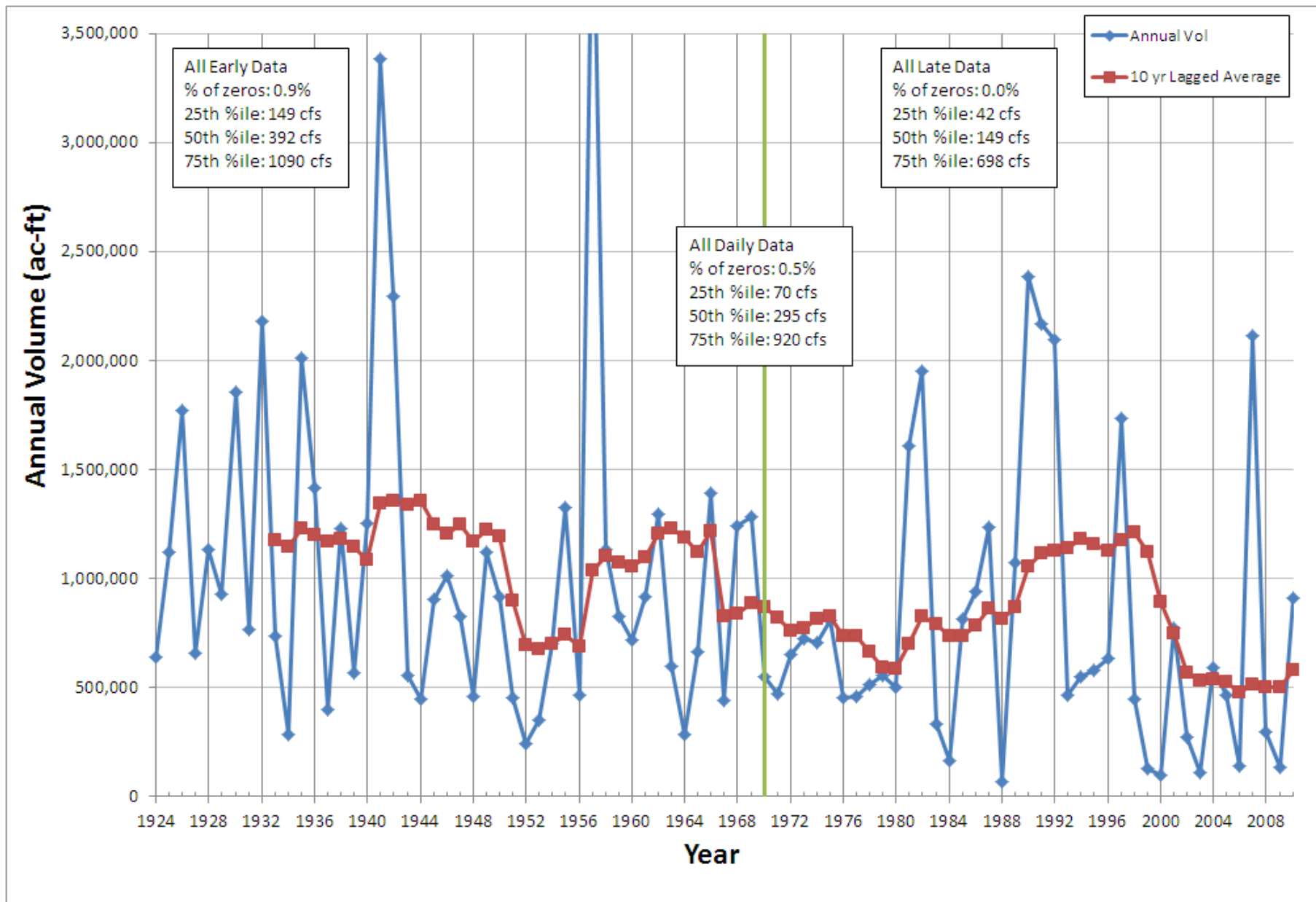


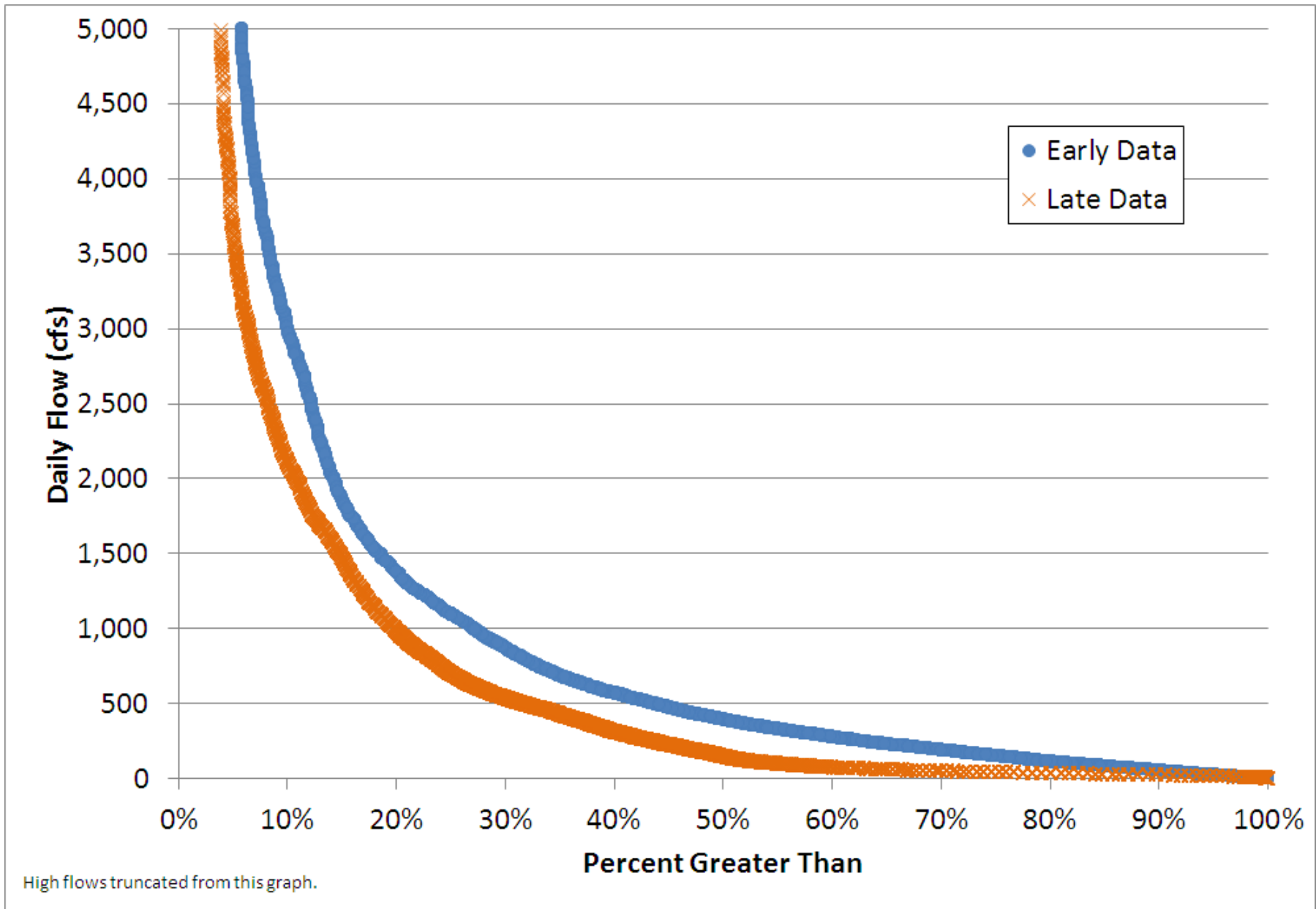
Brazos River near Glen Rose

Somervell County, Texas
Hydrologic Unit Code 12060202
Latitude 32°15'32", Longitude 97°42'08" NAD27
Drainage area 25,818 square miles
Contributing drainage area 16,252 square miles
Gage datum 561.79 feet above NGVD29

Location of the site in Texas.



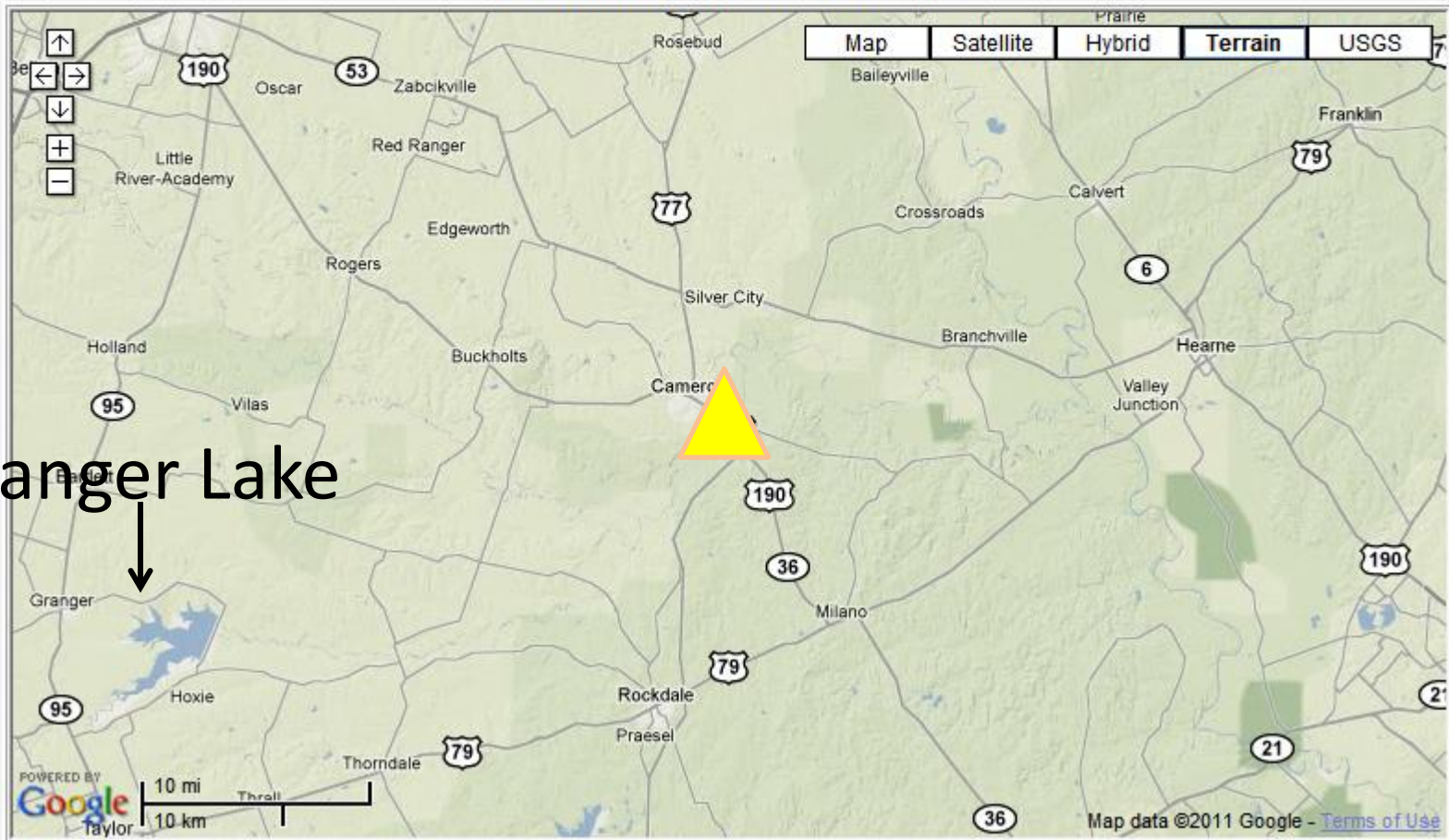


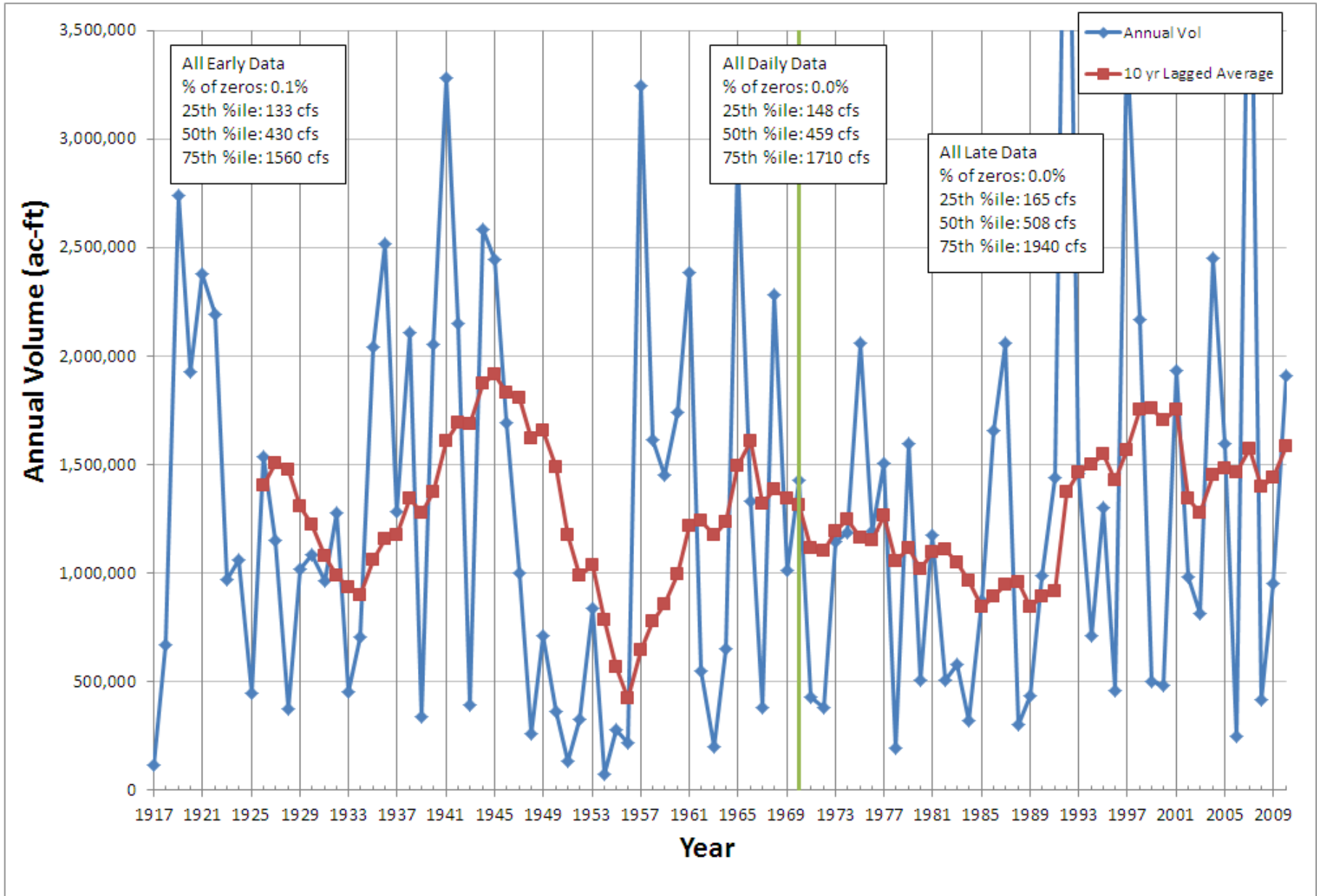


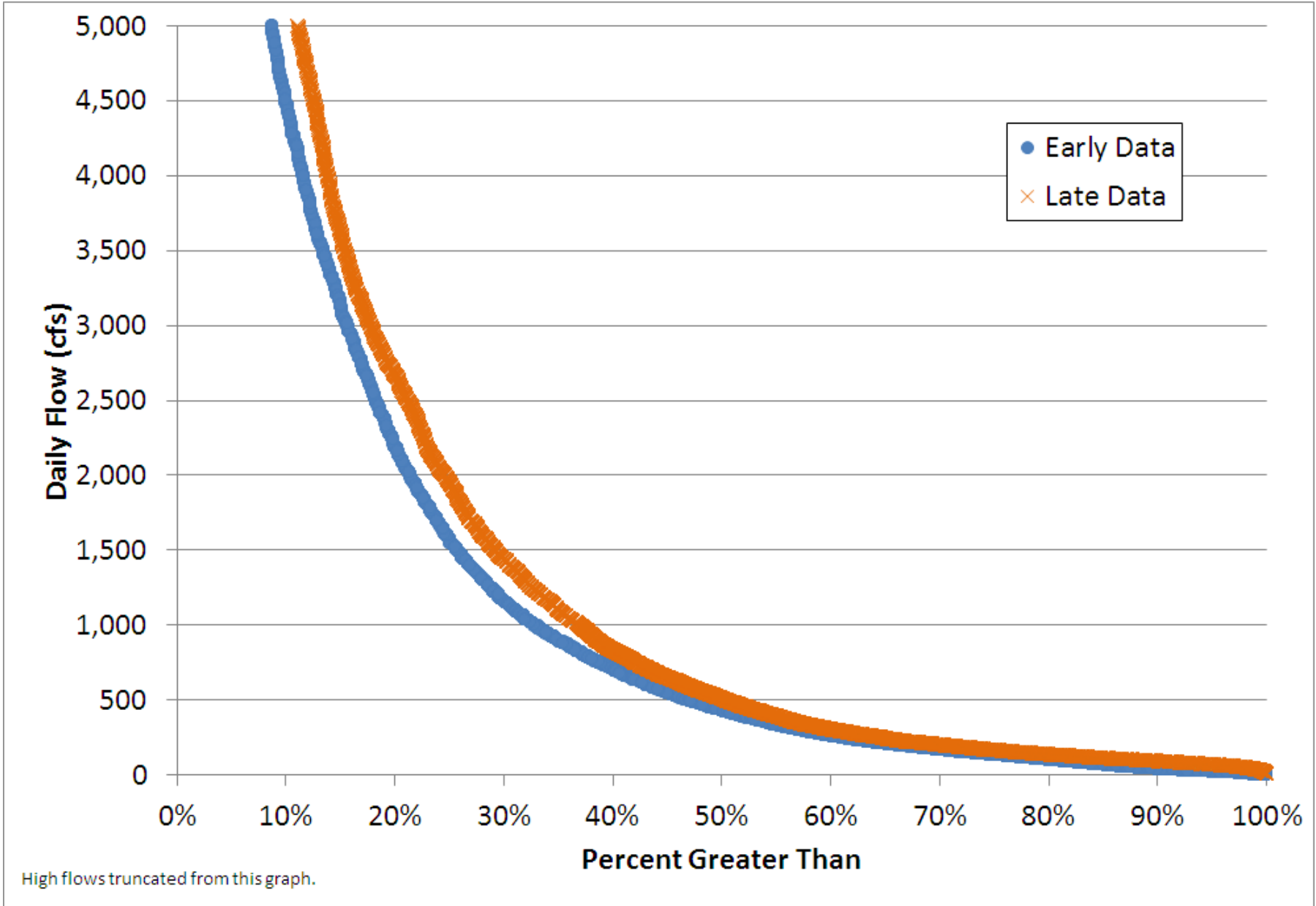
Little River near Cameron

Milam County, Texas
Hydrologic Unit Code 12070204
Latitude 30°50'06", Longitude 96°56'47" NAD27
Drainage area 7,065 square miles
Contributing drainage area 7,065 square miles
Gage datum 281.89 feet above NGVD29

Location of the site in Texas.





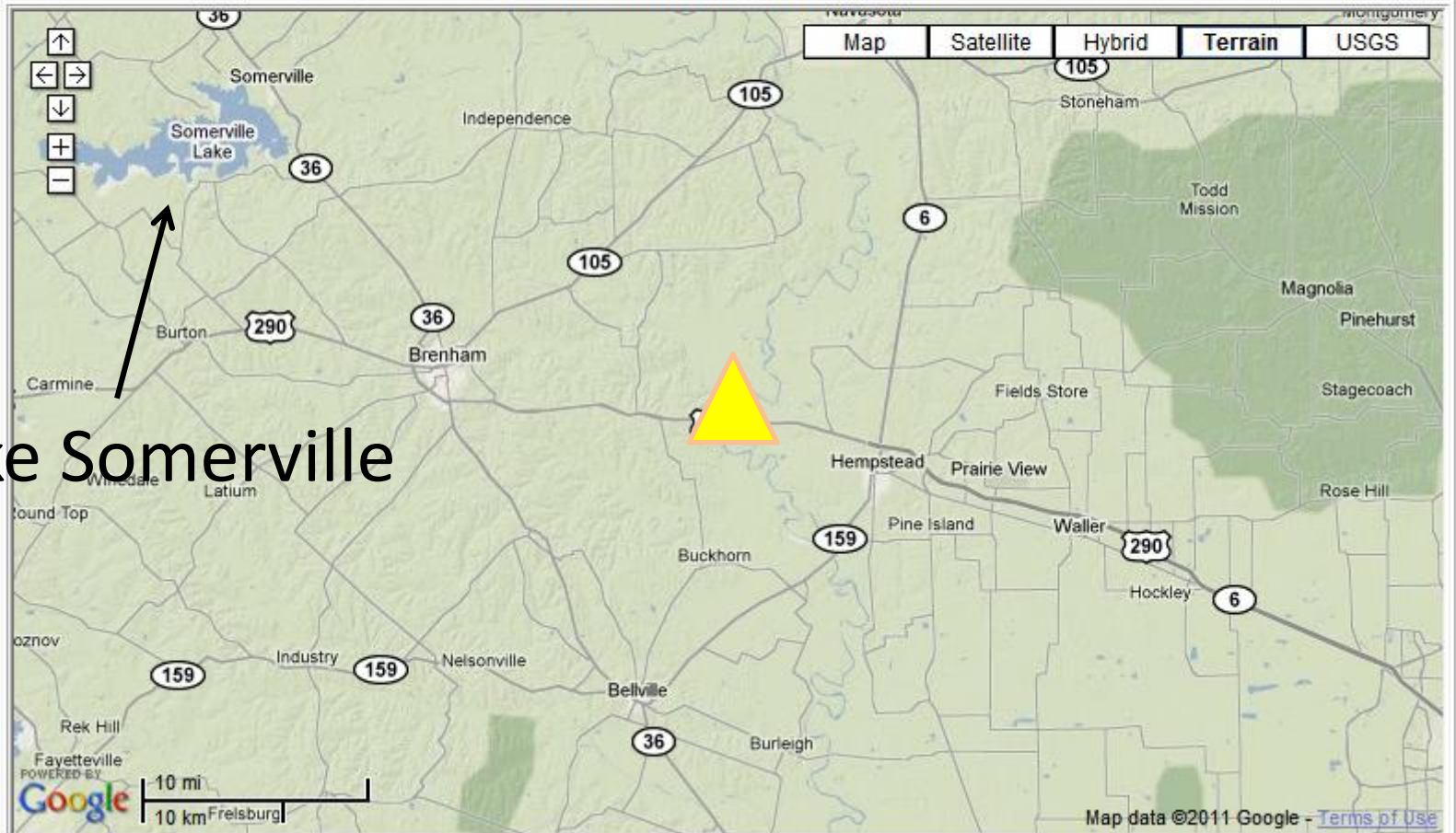


High flows truncated from this graph.

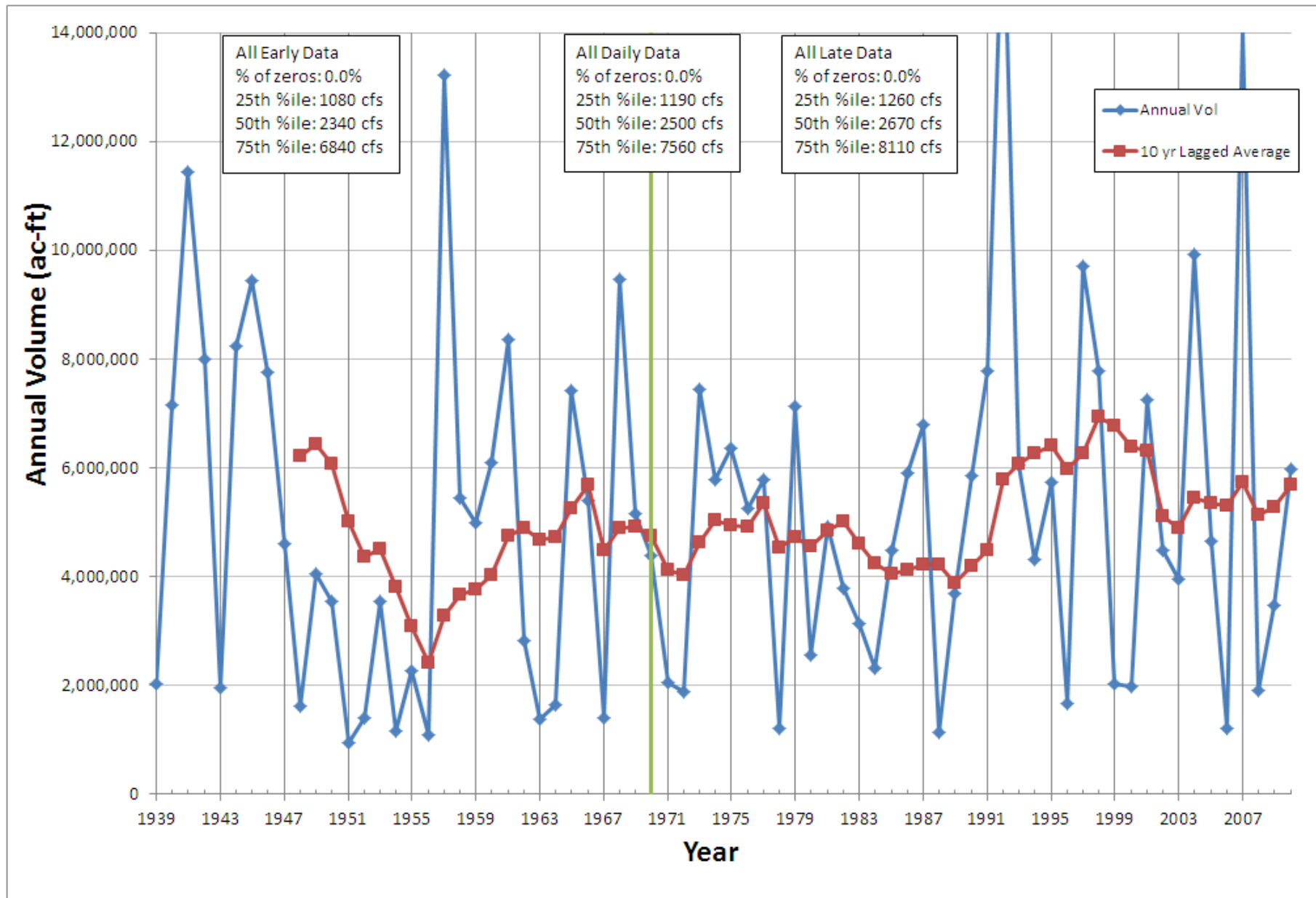
Brazos River near Hempstead

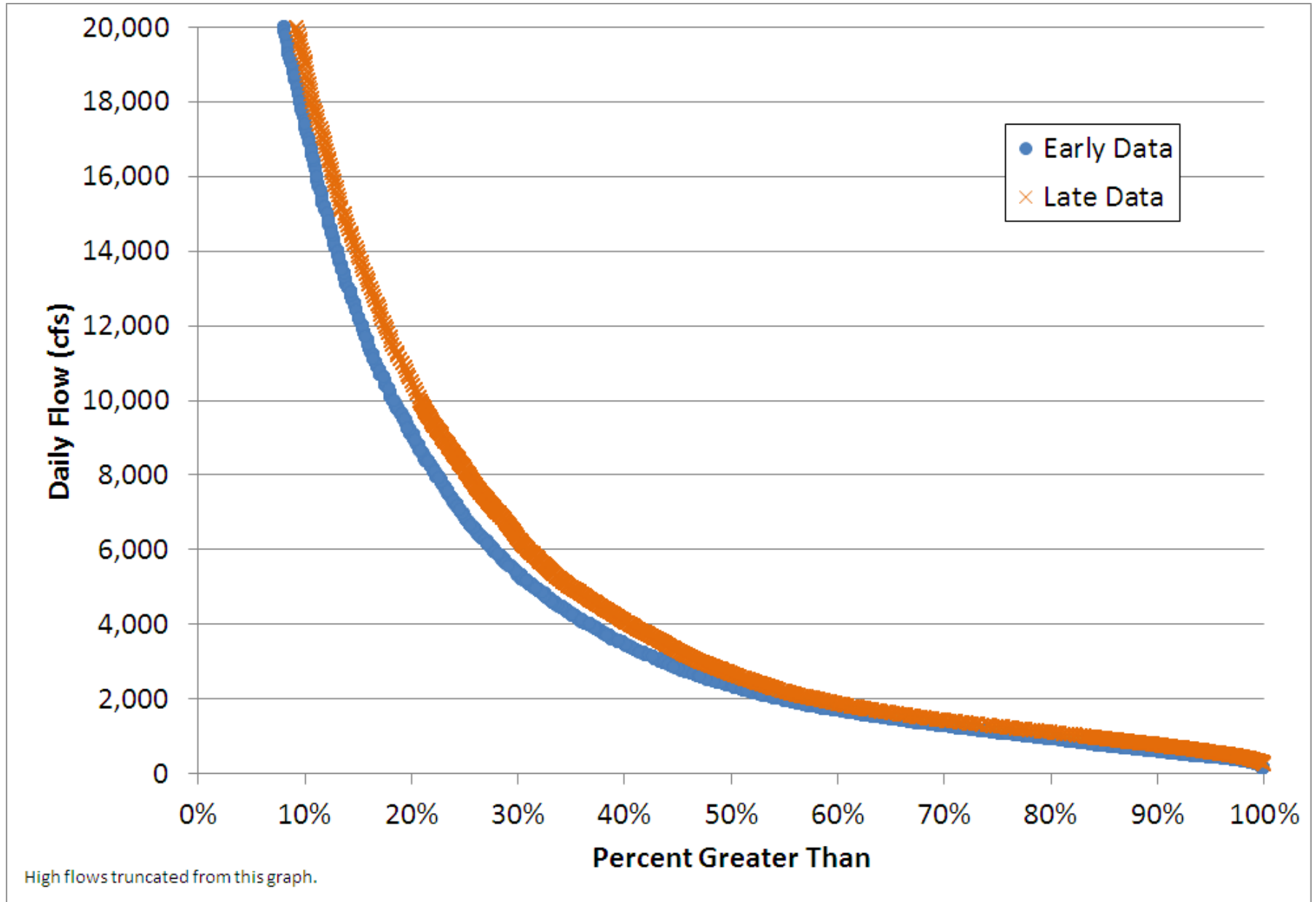
Washington County, Texas
Hydrologic Unit Code 12070101
Latitude 30°07'44", Longitude 96°11'15" NAD27
Drainage area 43,880 square miles
Contributing drainage area 34,314 square miles
Gage datum 107.90 feet above NGVD29

Location of the site in Texas.



Lake Somerville





Issues

- Are there notable changes in hydrology at any location.
- What other locations need to be examined similarly?
 - Hopefully not all 15 other locations