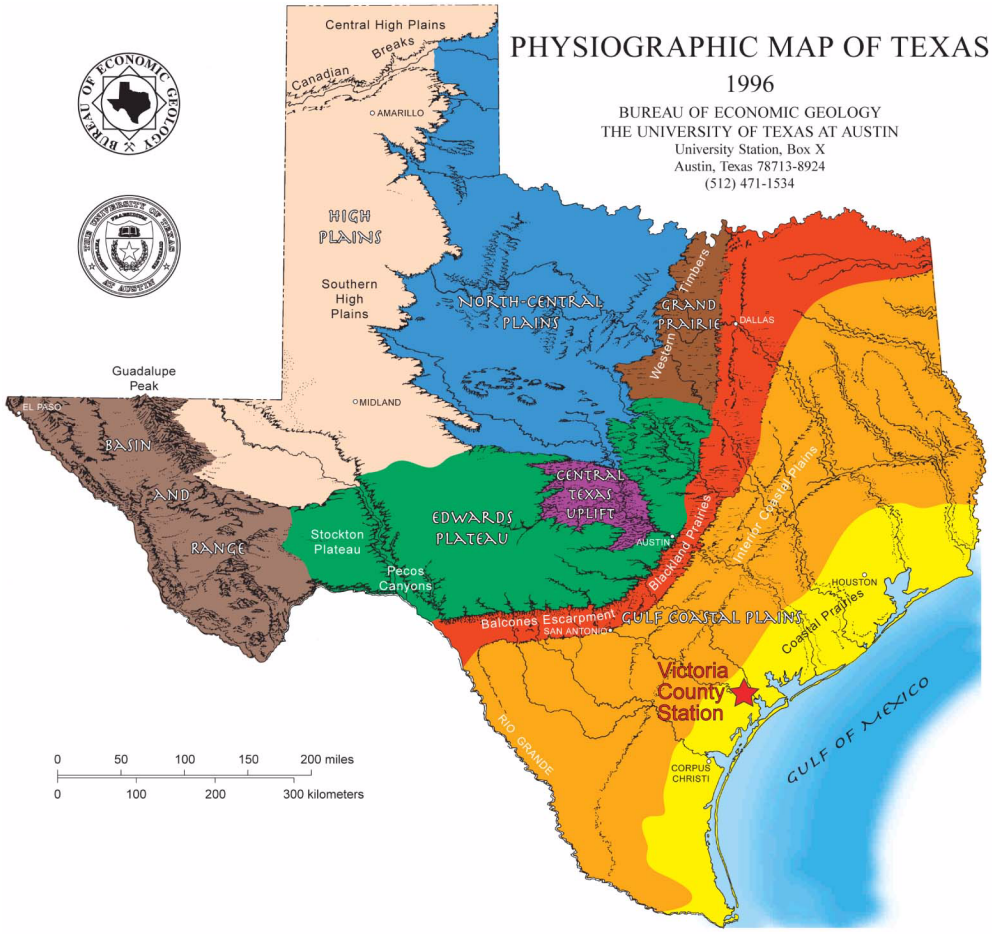
Figure 2.3.1.2-1 Regional Site Location Plan



PROVINCE	MAX. ELEV. (ft)	MIN. ELEV. (ft)	TOPOGRAPHY	GEOLOGIC STRUCTURE	BEDROCK TYPES
Gulf Coastal Plains					
Coastal Prairies	300	0	Nearly flat prairie, <1 ft/mi to Gulf	Nearly flat strata	Deltaic sands and muds
Interior Coastal Plains	800	300	Parallel ridges (questas) and valleys	Beds tilted toward Gulf	Unconsolidated sands and muds
Blackland Prairies	1000	450	Low rolling terrain	Beds tilted south and east	Chalks and marls
Grand Prairie	1250	450	Low stairstep hills west; plains east	Strata dip east	Calcareous east; sandy west
Edwards Plateau					
Principal	3000	450	Flat upper surface with box canyons	Beds dip south; normal faulted	Limestones and dolomites
Pecos Canyons	2000	1200	Steep-walled canyons		Limestones and dolomites
Stockton Plateau	4200	1700	Mesa-formed terrain; highs to west	Unfaulted, near-horizontal beds	Carbonates and alluvial sediments
Central Texas Uplift	2000	800	Knobby plain; surrounded by questas	Centripetal dips, strongly faulted	Granites; metamorphics; sediments
North-Central Plains	3000	900	Low north-south ridges (questas)	West dip; minor faults	Limestones; sandstones; shales
High Plains					
Central	4750	2900	Flat prairies slope east and south	Slight dips east and south	Eolian silts and fine sands
Canadian Breaks	3800	2350	Highly dissected; local solution valleys		
Southern	3800	2200	Flat; many playas; local dune fields		
Basin and Range	8750	1700	North-south mountains and basins	Some complex folding and faulting	Igneous; metamorphics; sediments

Modified from Bureau of Economic Geology, 1996.

Figure 2.3.1.2-2 Physiographic Map of Texas

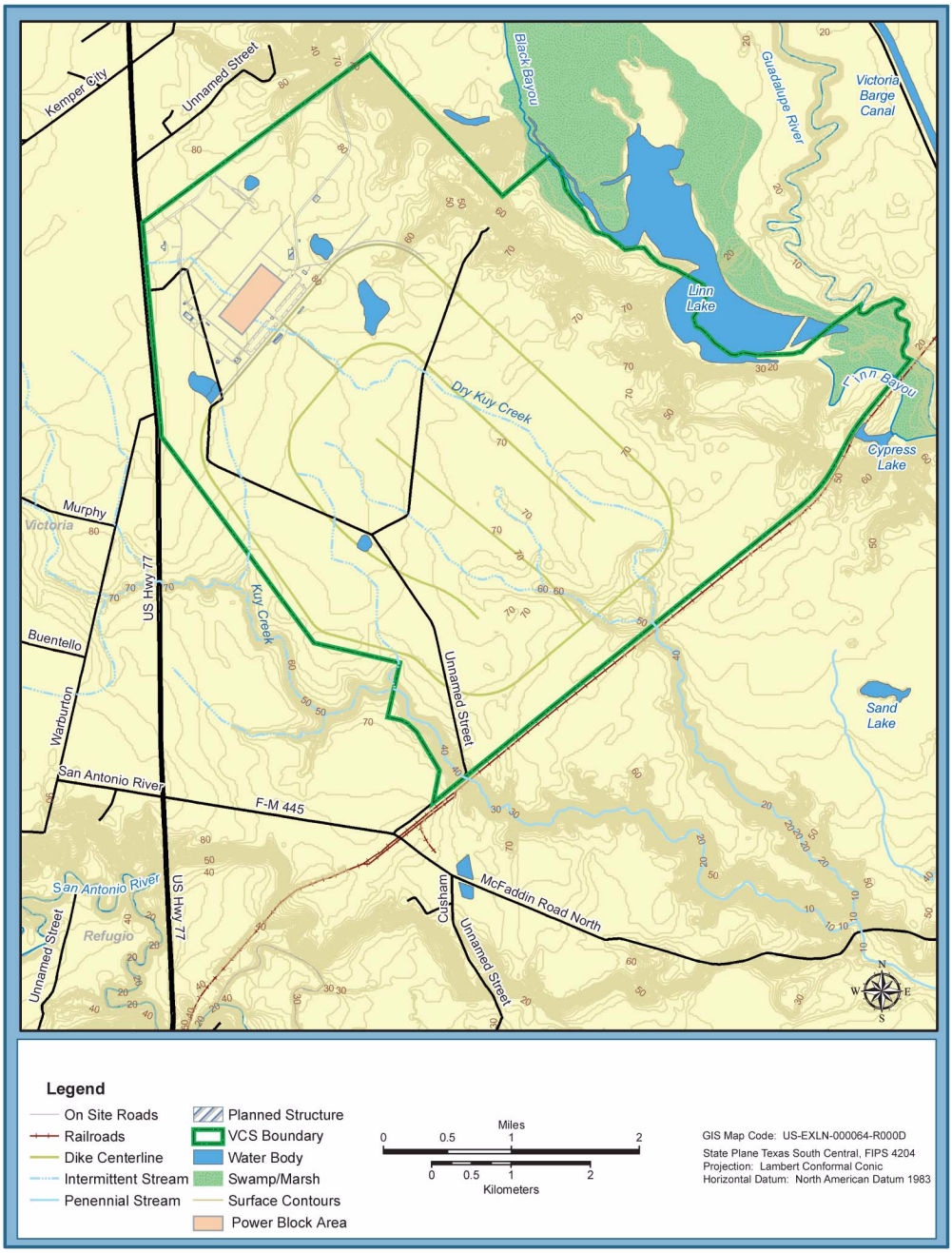
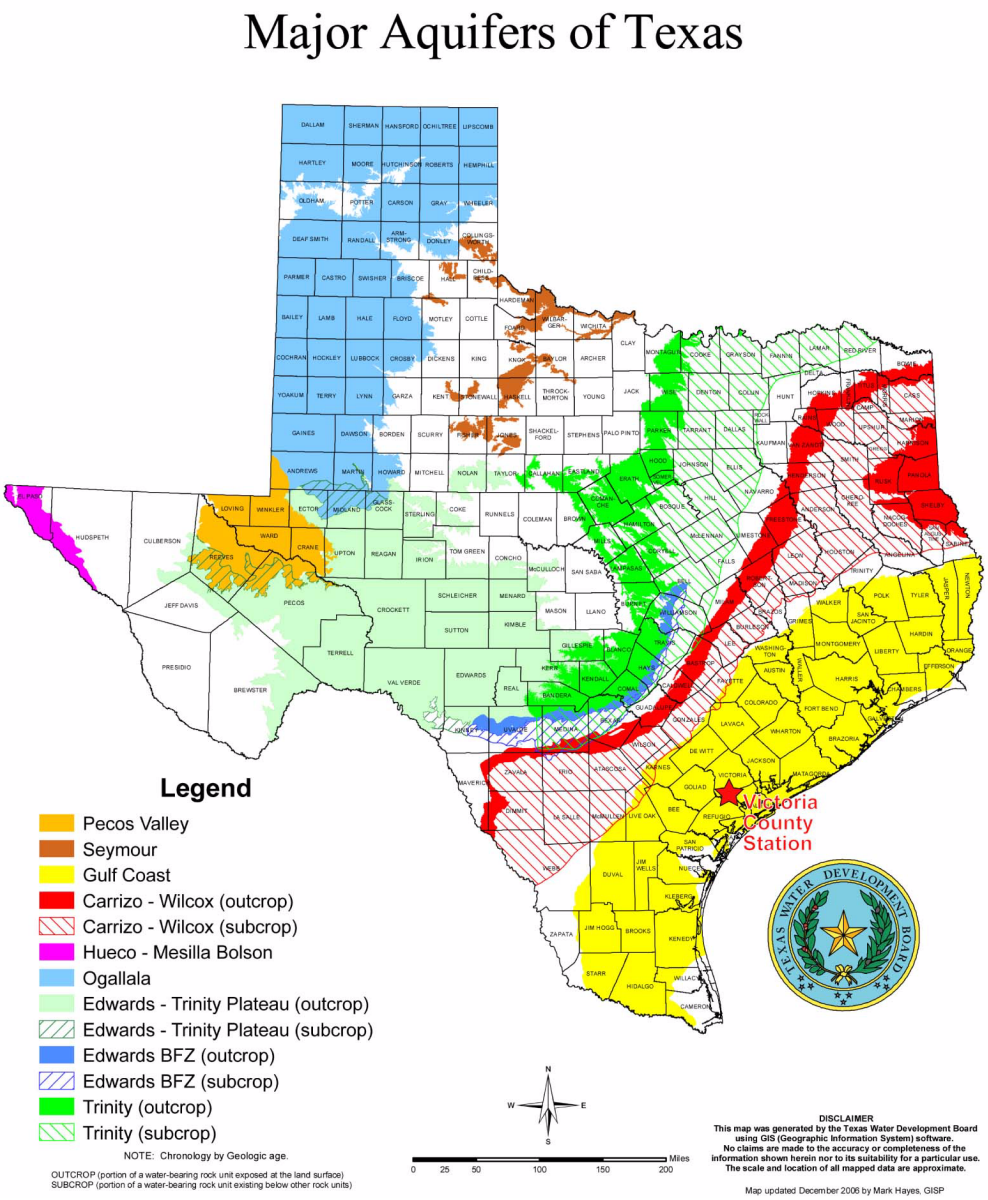
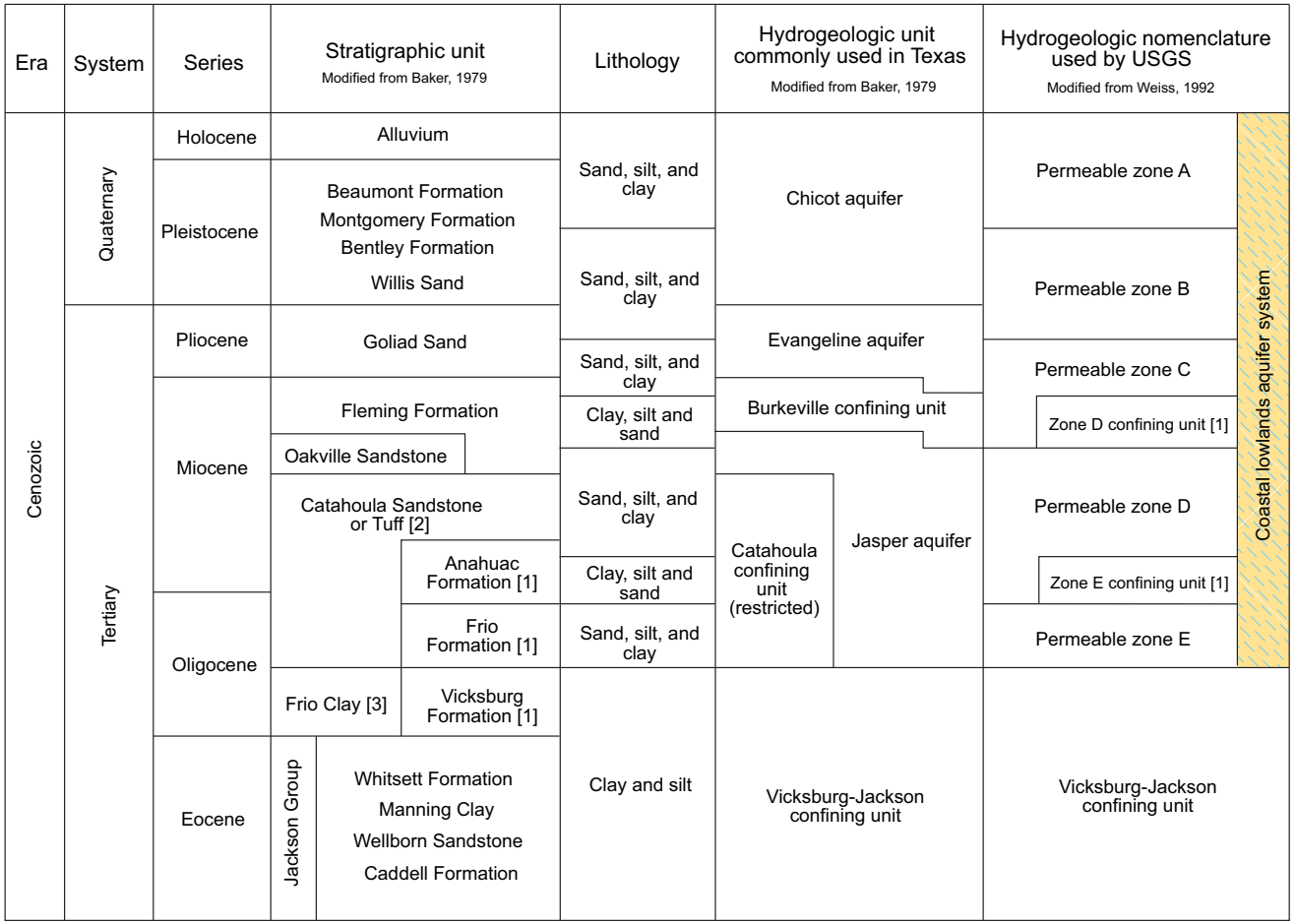


Figure 2.3.1.2-3 Detailed Site Location Plan



Modified from TWDB, 2006a.

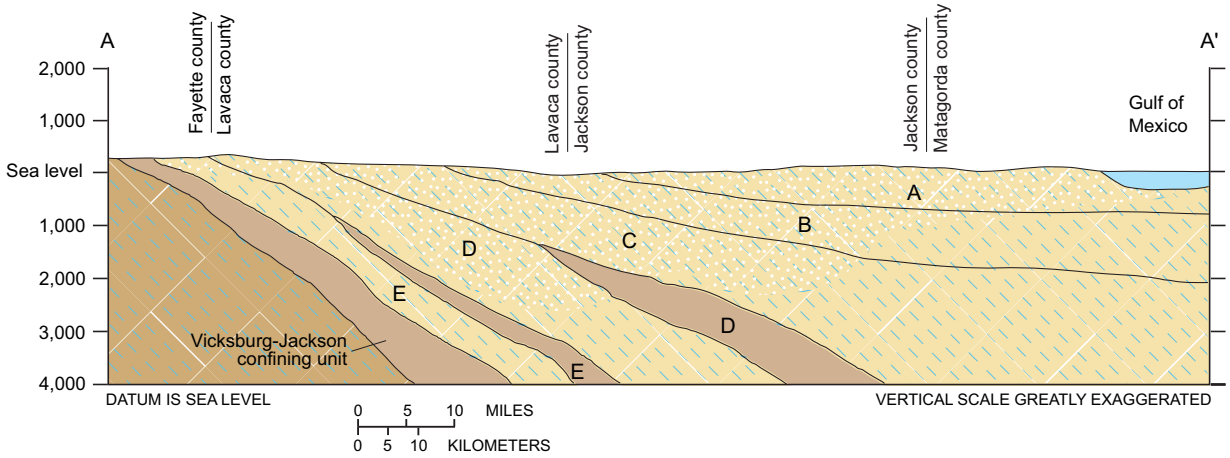
Figure 2.3.1.2-4 Major Aquifers of Texas



[1] Present only in the subsurface
[2] Called Catahoula Tuff west of Lavaca County
[3] Not recognized at surface east of Live Oak County

Modfied from Ryder, 1996.

Figure 2.3.1.2-5 Correlation of USGS and Texas Nomenclature



Notes:

Coastal lowlands aquifer system—Dot patterned area indicates freshwater

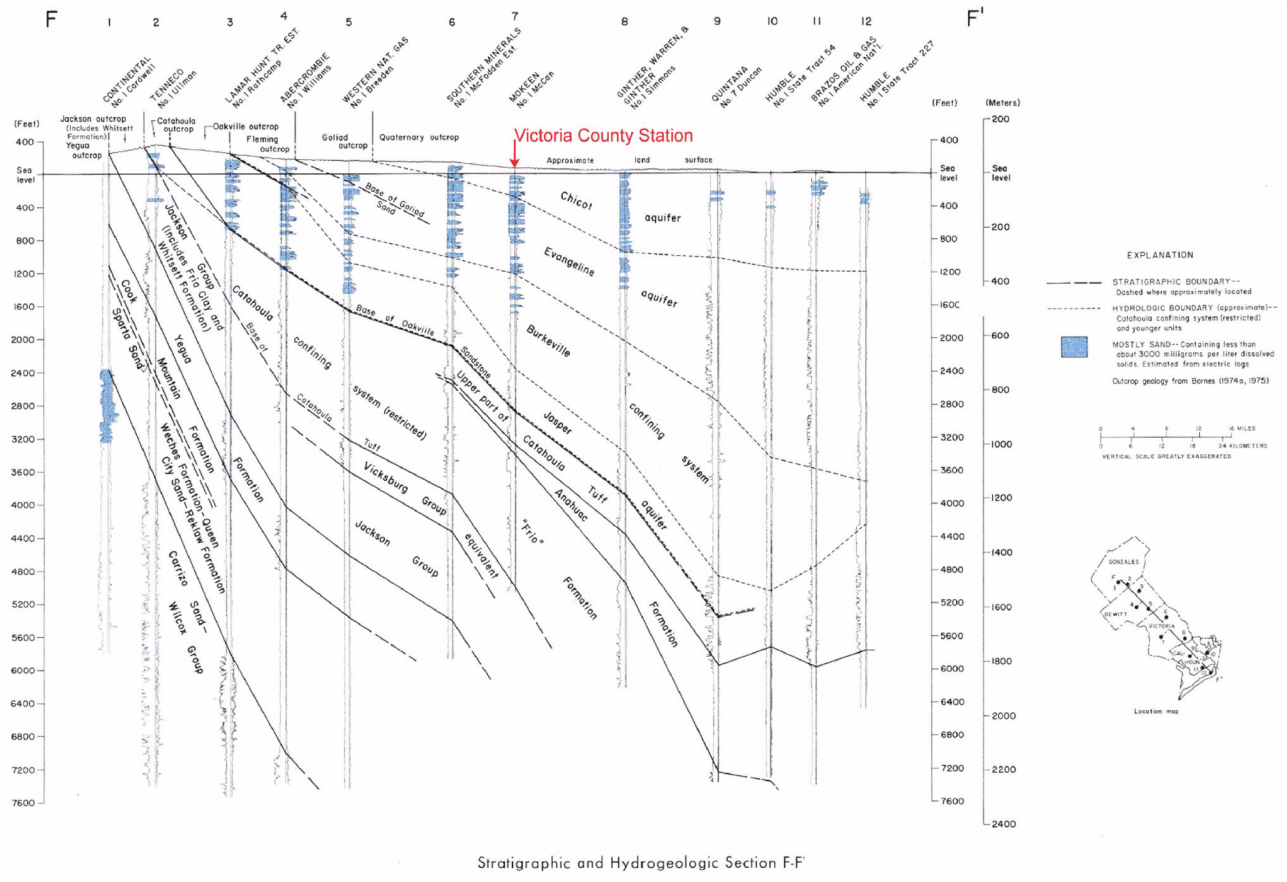
Texas coastal uplands aquifer system

Confining unit

D Hydrogeologic unit

Modified from Ryder, 1996.

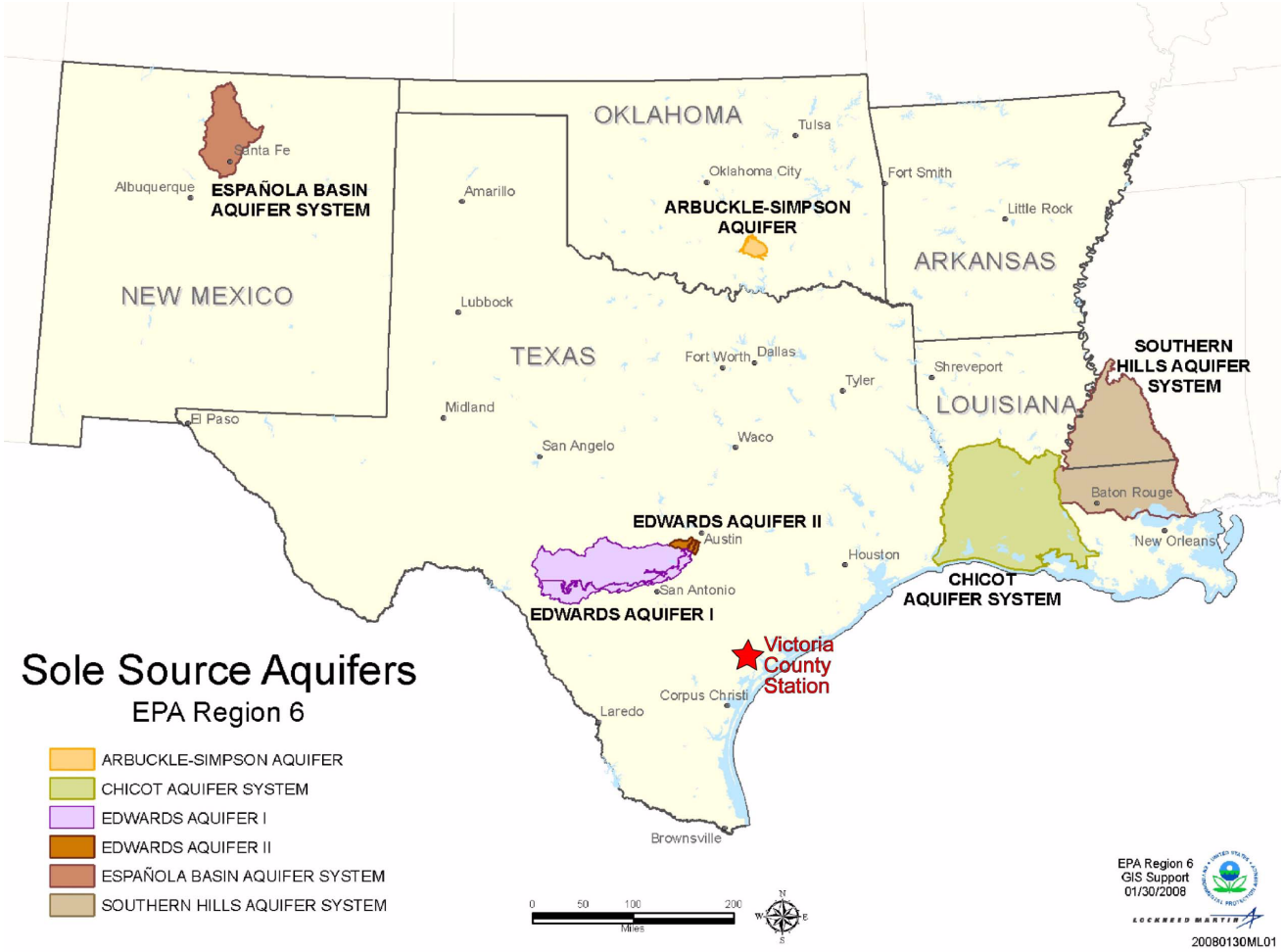
Figure 2.3.1.2-6 Generalized Cross Section through the Coastal Lowlands/Coastal Uplands Aquifer Systems



Stratigraphic and Hydrogeologic Section F-F'

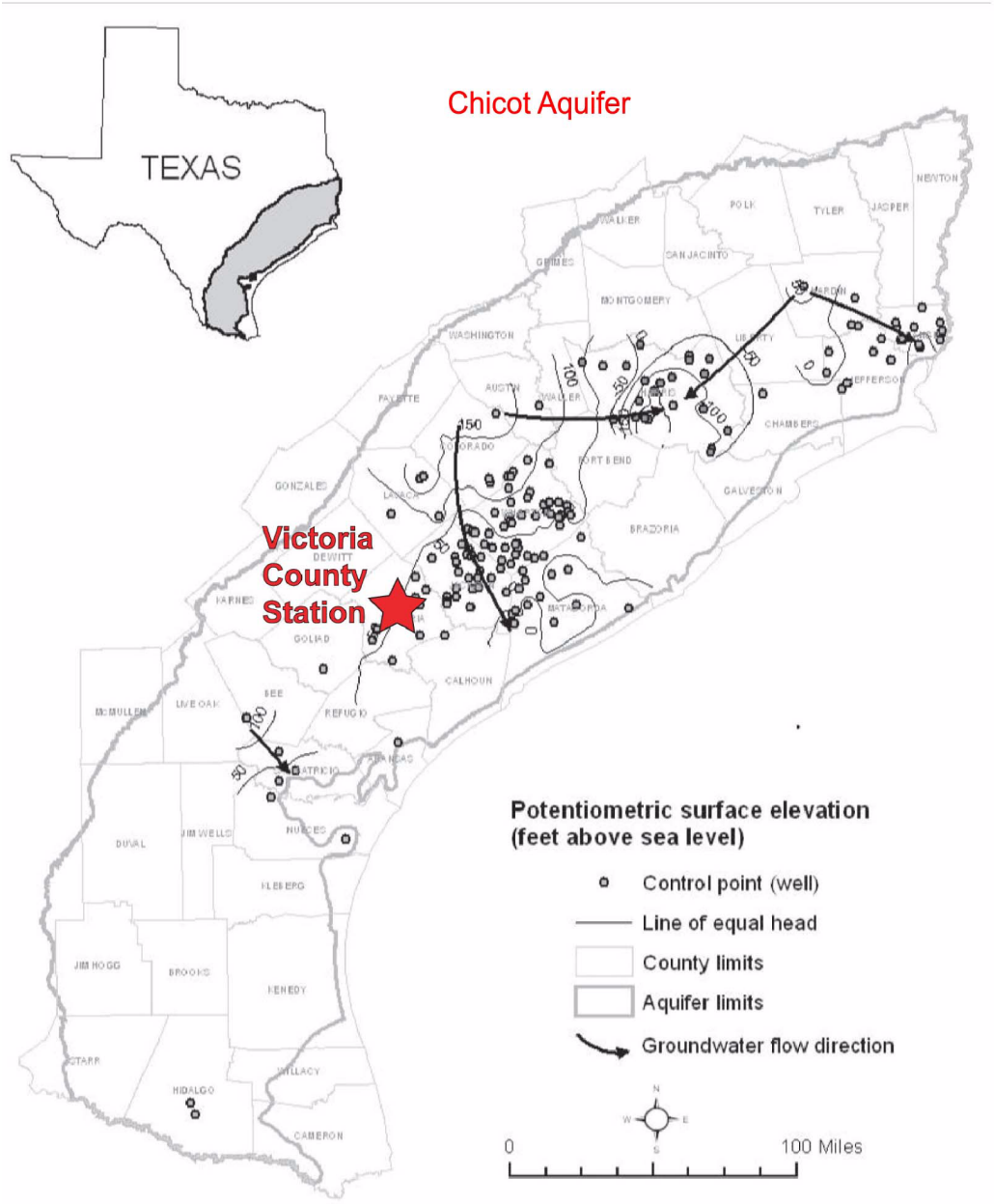
Modified from Baker, 1979.

Figure 2.3.1.2-7 Regional Hydrogeologic Cross Section through the Gulf Coast Aquifer System



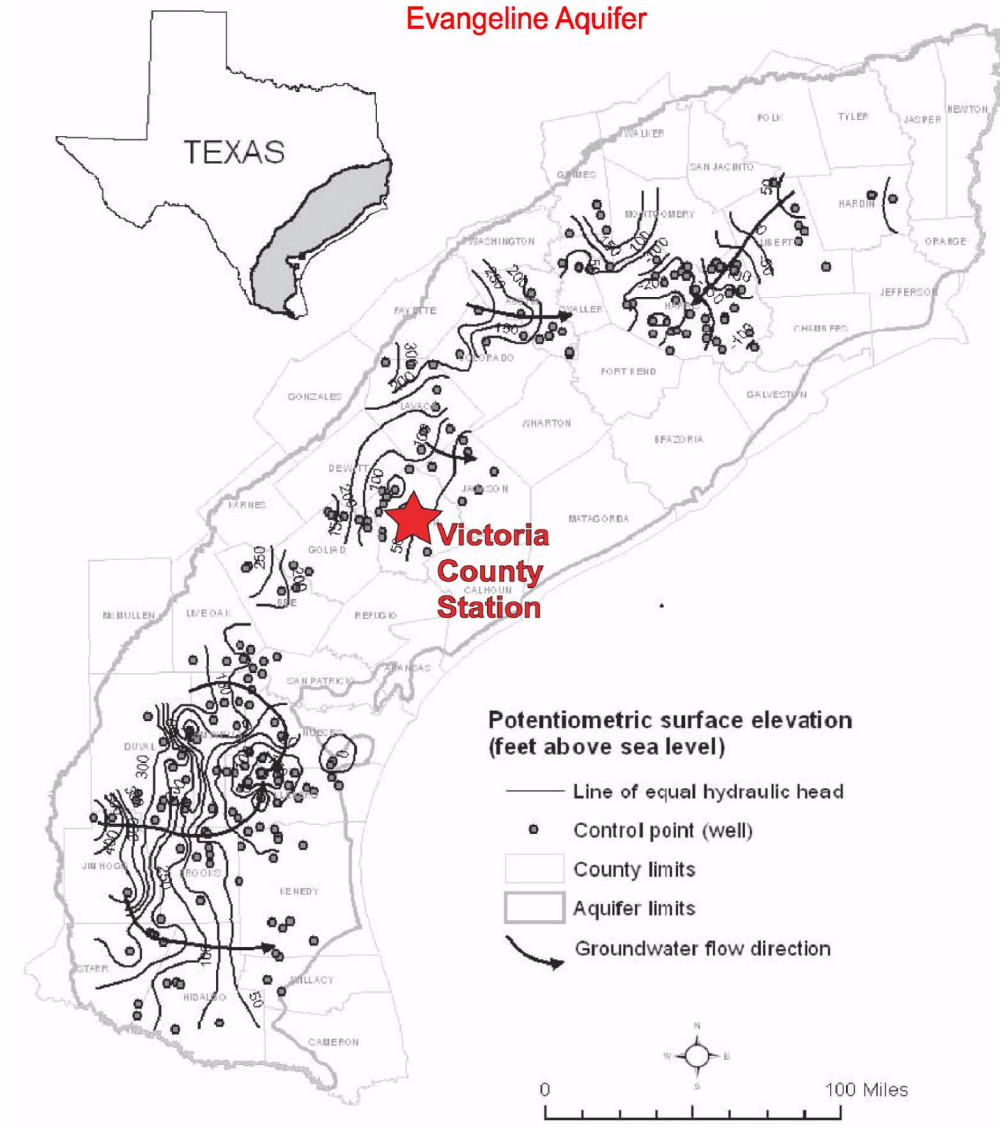
Modified from U.S. EPA, 2008a.

Figure 2.3.1.2-8 Sole Source Aquifers EPA Region 6



Modified from Chowdhury, et al., 2006.

Figure 2.3.1.2-9 Regional Potentiometric Surface Map for the Chicot Aquifer, including Water Level Measurements from 2001 to 2005 (Sheet 1 of 2)



Modified from Chowdhury, et al., 2006.

Figure 2.3.1.2-9 Regional Potentiometric Surface Map for the Chicot Aquifer, including Water Level Measurements from 2001 to 2005 (Sheet 2 of 2)

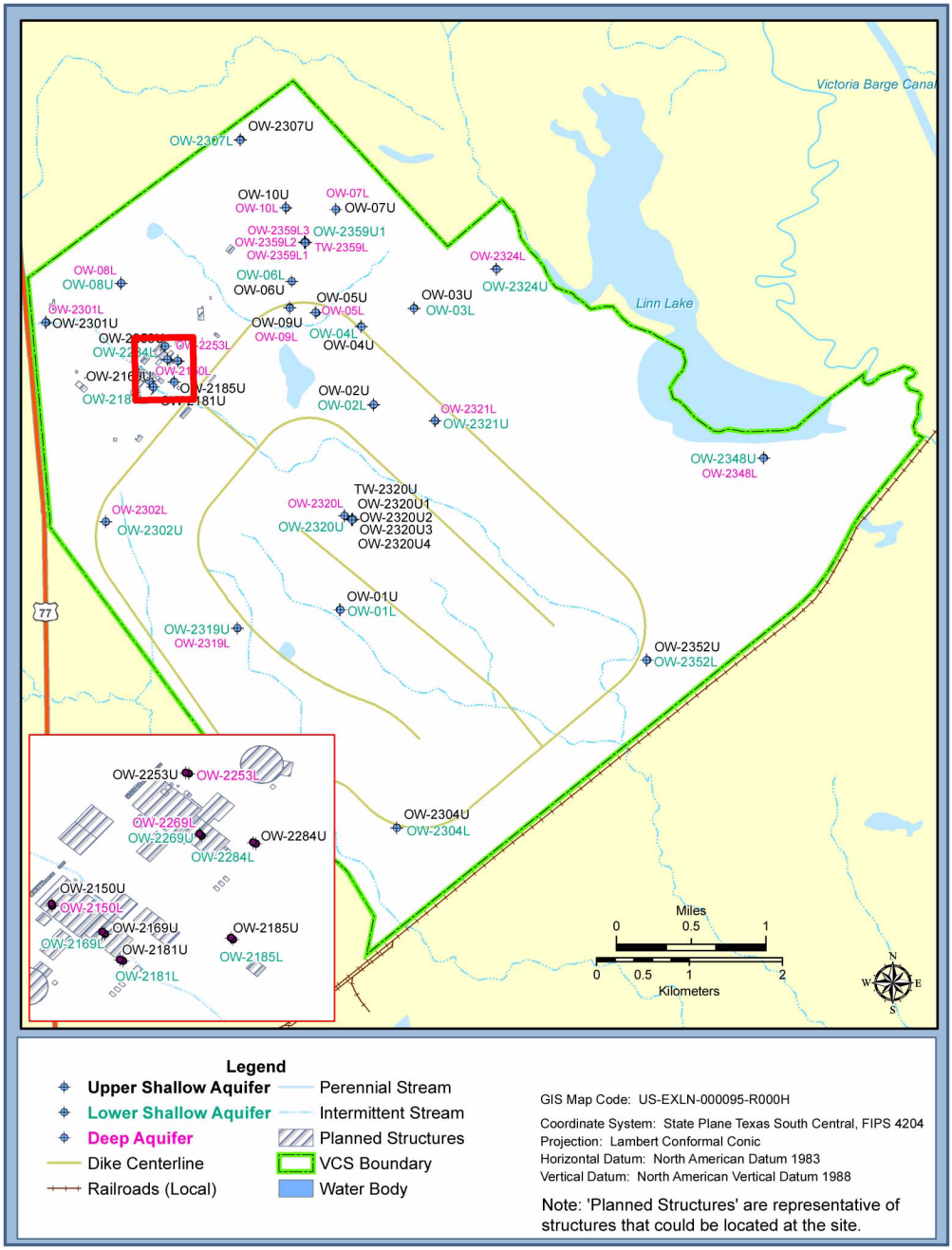
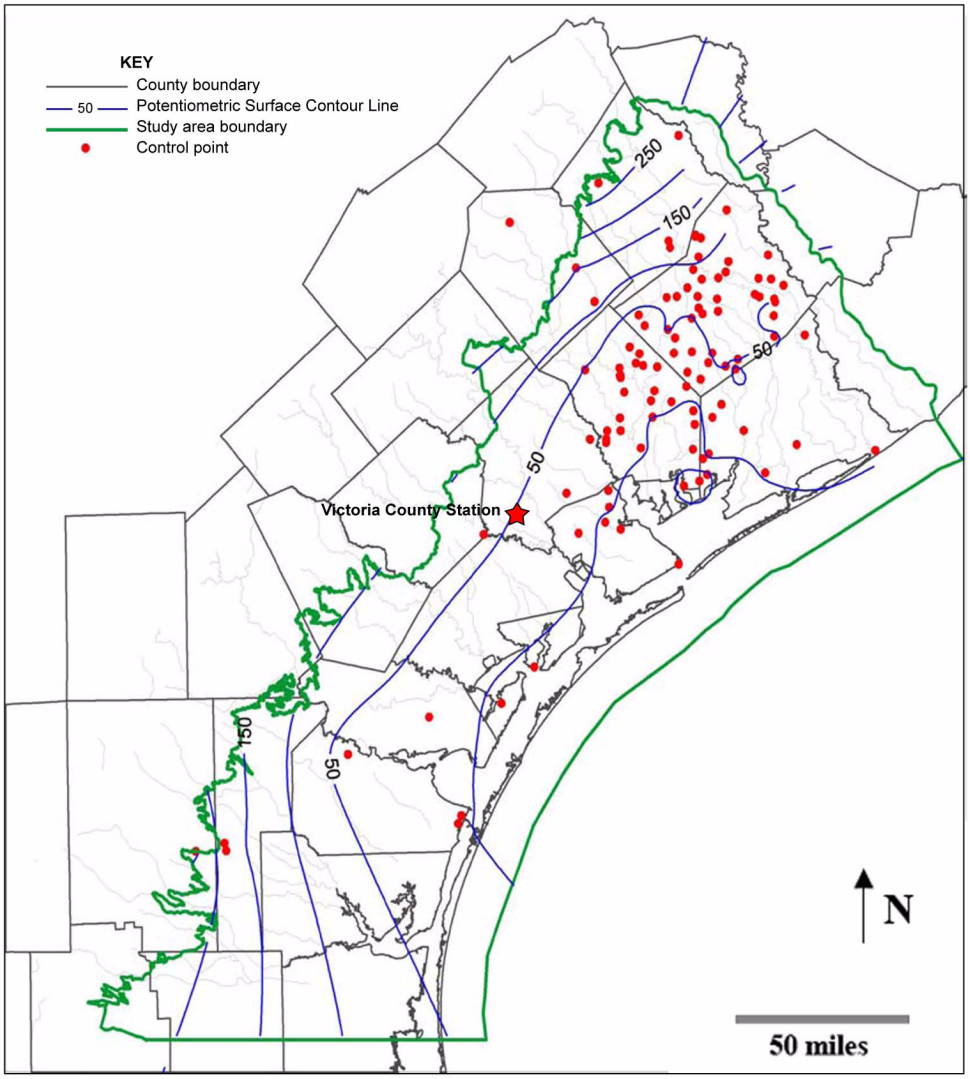
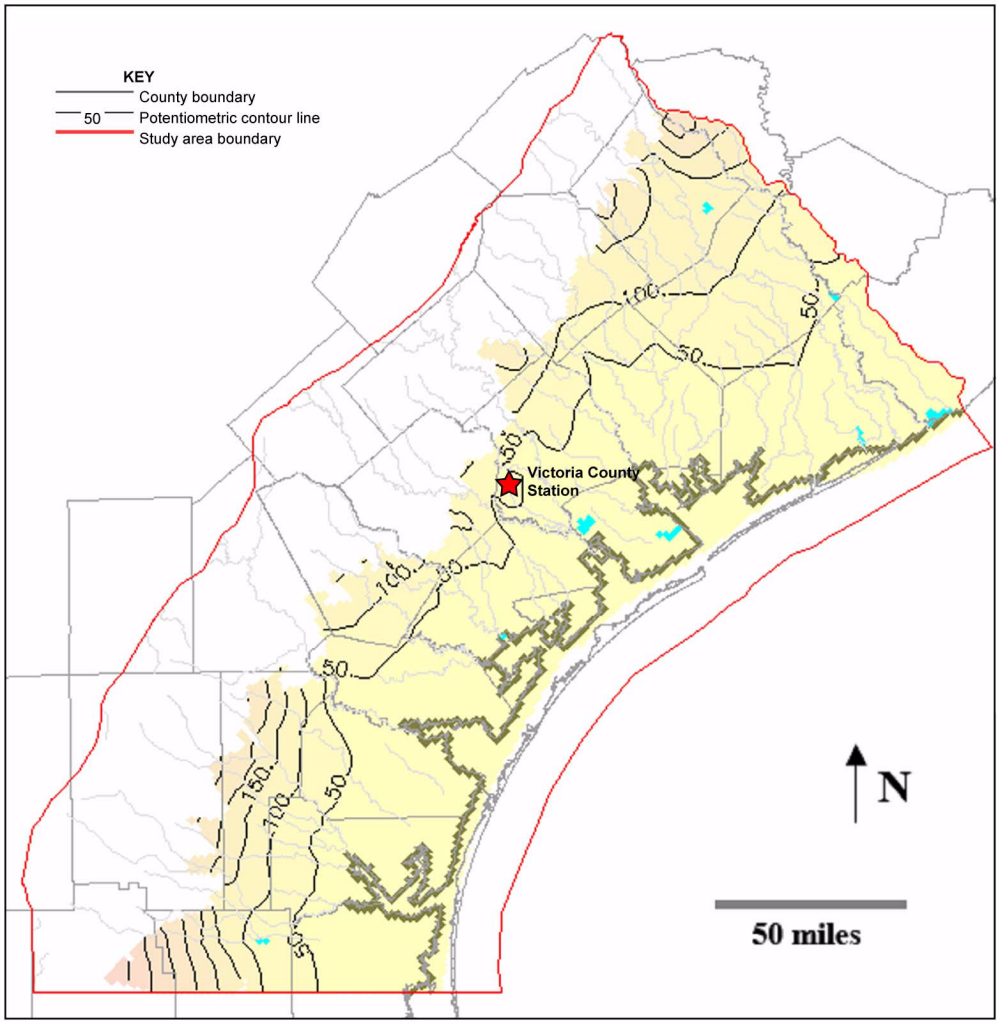


Figure 2.3.1.2-10 VCS Site Well Location Plan



Modified from Chowdhury, et al., 2004.

Figure 2.3.1.2-11 1999 Potentiometric Surface of the Chicot Aquifer



Modified from Chowdhury, et al., 2004.

Figure 2.3.1.2-12 Simulated Chicot Aquifer Groundwater Levels from GAM Steady-State Model