

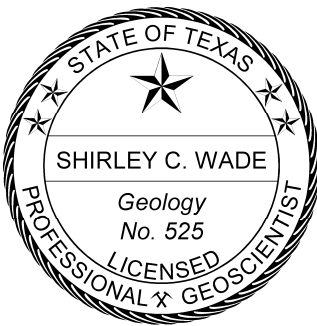
GAM Run 08-43 Clarification Memo

by Shirley C. Wade, P.G.

Texas Water Development Board
Groundwater Availability Modeling Section
(512) 936-0883
September 29, 2008

SUMMARY:

Average drawdowns for each county in the study area for GAM Runs 08-41 (high pumping scenario), 08-42 (low pumping scenario), and 08-43 (medium pumping scenario) were requested by the members of Groundwater Management Area 13. This Clarification Memo addresses this request. Table 1 presents the average drawdowns for these model runs for each aquifer layer and county in the model area. It should be noted that dry cells are not included in the calculations of average water level changes and drawdowns may include portions of the aquifer where the water quality is not considered fresh. Also, note that drawdowns in the Sparta and Queen City Layers in McMullen, La Salle, Webb, Dimmit, Zavala, and Frio counties include areas west of the Frio River although this area is not considered part of those aquifers.



The seal appearing on this document was authorized by Shirley C. Wade, P.G. 525, on September 29, 2008.

Table 1. Average water level changes in feet by county and aquifer. Negative values indicate an average lowering of water levels between 1999 and 2060 while a positive value indicates an increase in water levels since 1999. Dashes (--) indicate this aquifer (layer) is not modeled in the county indicated.

County Run	Sparta			Queen City			Carrizo			Upper Wilcox			Middle Wilcox			Lower Wilcox		
	low	med	high	low	med	high	low	med	high	low	med	high	low	med	high	low	med	high
Atascosa	-6.8	-12.9	-20.4	-8.6	-18.0	-29.6	-49.5	-80.0	-111.3	-49.1	-79.5	-110.5	-47.1	-69.9	-92.6	-54.1	-81.1	-107.7
Bastrop	12.9	12.1	10.9	3.9	2.1	-0.5	-22.0	-31.1	-41.0	-21.4	-30.6	-40.6	-8.0	-18.2	-32.2	-8.6	-19.2	-30.4
Bee	-11.8	-18.0	-25.3	-22.2	-33.5	-46.8	-44.4	-71.3	-101.8	-43.0	-67.0	-94.3	-13.9	-23.8	-35.1	-2.4	-13.0	-24.2
Bexar	--	--	--	--	--	--	-49.4	-63.7	-77.3	-37.2	-47.7	-60.8	-29.7	-37.8	-45.4	-51.6	-70.4	-88.2
Caldwell	--	--	--	1.2	-1.8	-6.3	-39.4	-55.8	-74.0	-38.8	-55.4	-73.7	-34.7	-63.7	-102.1	-34.9	-68.1	-105.4
DeWitt	-3.6	-9.9	-16.4	-13.7	-24.8	-36.2	-35.7	-53.7	-73.4	-29.9	-46.2	-64.2	3.0	-9.4	-24.9	-12.3	-45.2	-80.3
Dimmit	2.0	2.0	1.9	4.1	3.3	2.8	18.3	2.0	-5.8	18.0	1.6	-6.1	22.6	7.3	0.3	18.5	4.1	-2.8
Fayette	-1.5	-6.1	-12.8	-4.7	-10.1	-17.7	-19.7	-29.2	-40.2	-19.6	-29.1	-40.2	-18.5	-38.4	-67.9	-16.9	-34.2	-52.4
Frio	-3.1	-5.6	-7.4	7.6	2.5	-2.1	-36.6	-72.2	-101.1	-35.3	-70.8	-99.7	-34.1	-67.8	-95.8	-49.7	-87.2	-119.8
Gonzales	-6.8	-13.1	-21.9	-13.8	-24.9	-39.3	-58.0	-81.9	-109.6	-57.9	-81.9	-109.8	-42.2	-91.6	-163.4	-42.1	-92.7	-146.8
Guadalupe	--	--	--	11.0	10.0	8.0	-50.5	-63.8	-72.8	-48.3	-61.8	-70.4	-18.3	-29.5	-44.7	-20.0	-38.0	-57.4
Karnes	-12.8	-20.4	-28.9	-24.7	-38.3	-53.6	-58.2	-87.9	-119.7	-56.0	-84.5	-115.1	-28.5	-49.7	-74.3	-22.1	-47.1	-73.3
La Salle	-5.0	-9.1	-12.4	-6.5	-13.8	-19.7	-5.5	-28.7	-47.0	-5.4	-28.6	-46.7	5.2	-8.9	-20.2	7.5	-6.7	-18.1
Lavaca	2.2	-1.0	-4.5	-2.1	-7.7	-13.7	-11.9	-19.8	-29.2	-8.1	-15.5	-24.2	6.5	-2.8	-15.8	-10.2	-30.8	-52.8
Live Oak	-23.5	-30.3	-39.0	-32.5	-44.1	-58.9	-38.3	-64.3	-94.9	-37.3	-62.2	-91.7	-9.1	-18.6	-30.4	1.9	-6.4	-15.5
Maverick	--	--	--	--	--	--	7.7	6.7	6.1	11.6	10.4	9.7	11.3	10.2	12.1	3.2	2.1	10.0
McMullen	-18.0	-27.1	-38.2	-22.4	-34.9	-50.1	-24.5	-47.7	-74.4	-23.6	-46.2	-72.1	-3.8	-13.1	-25.2	3.5	-4.4	-13.2
Medina	--	--	--	--	--	--	-28.8	-33.5	-37.5	-28.4	-33.5	-37.8	-25.6	-33.0	-39.4	-36.2	-52.9	-72.6
Uvalde	--	--	--	--	--	--	-0.7	-169.0	-289.5	-2.0	-3.3	-3.7	-11.9	-8.5	-7.9	-27.9	-31.4	-33.1
Webb	7.2	6.0	5.0	9.6	8.7	7.9	4.9	0.9	-2.1	4.7	0.5	-2.6	1.9	-0.3	-1.6	3.3	0.7	-0.7
Wilson	-7.0	-10.6	-14.5	-10.3	-20.0	-30.4	-59.6	-89.2	-119.8	-59.1	-88.6	-119.0	-44.9	-71.0	-101.5	-56.3	-88.6	-121.6
Zavala	6.8	6.8	6.8	12.7	11.3	10.6	0.2	-37.8	-53.9	1.9	-36.7	-52.7	5.5	-28.8	-43.3	2.9	-25.8	-38.9