PANHANDLE GROUNDWATER DISTRICT
"Conserving Water for Future Generations"

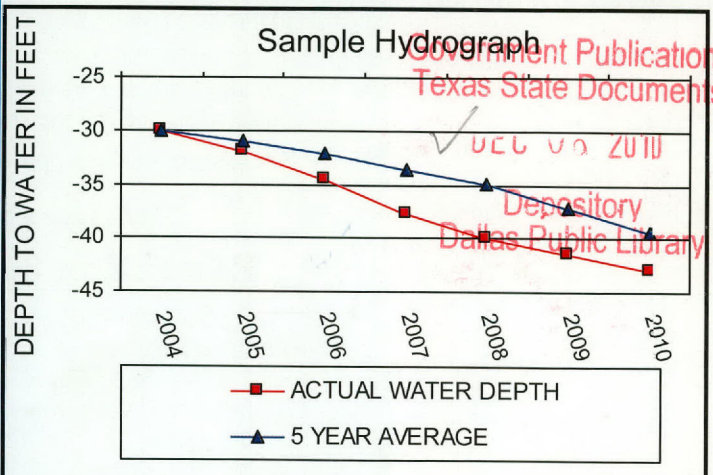
Panhandle Water News

JULY 2010

Points of Interest

County Contour Map Index

Explanation of 5 Year AVG Change Maps and Charts



Year	Depth	Static Change	5 Year AVG	5 Year AVG Change
2004	-30.00	-1.80	-30.00	
2005	-32.00	-2.00	-31.00	-1.00
2006	-34.56	-2.56	-32.19	-1.19
2007	-37.80	-3.24	-33.59	-1.40
2008	-40.00	-2.20	-34.87	-1.28
2009	-41.50	-1.50	**-37.17**	-2.30
2010	-43.00	-1.50	**-39.37**	**-2.20**

This is how the five year average change is calculated using the sample hydrograph above. The 2009 five year average **–37.17** in red was calculated by summing the 2005, 2006, 2007, 2008 and 2009 depth measurements. This sum was then divided by five to get a five year average of **–37.17** in 2009. The 2010 five year average **–39.37** in blue was calculated by summing the 2006, 2007, 2008, 2009 and 2010 depth measurements. This sum was divided by five to get a five year average of **–39.37** in 2010. The five year average change for 2010 was calculated by subtracting the 2010 five year average **–39.37** from the 2009 five year average **–37.17** to reach a value of **–2.20** in green, which is the value used to contour the maps.

If you would like to see a trend analysis for your well, or on an individual well in your area as shown above, please contact Jennifer Puryear or Amy Crowell at the District office at 806-883-2501.

The contour maps in this newsletter show the average change in water level, in feet, of the aquifers in the District. The contour maps were drawn using the difference of the five year averages of 2005-2009 and 2006-2010. All five year average values were calculated using a hydrograph (shown to the left).

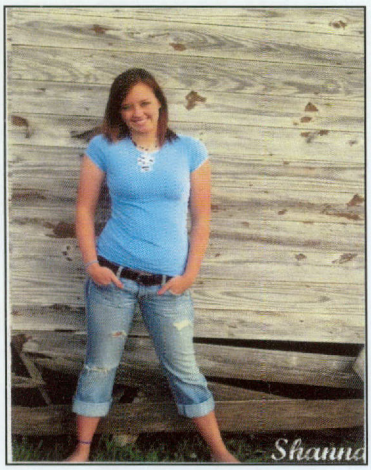
In the past only negative values have been shown, but this year the maps show all positive and negative values. The maps are also slightly different from previous years due to the colored background on the contour maps. These colors should make it easier to determine the average change of the area. There is a color legend located on each map. Crosses on the map indicate wells that have some information, but were not used in contouring because they do not have enough information to calculate a five year average. The maps on pages 17, 18 and 19 only show well locations. The charts show the depth to water measurements for 2000, 2009 and 2010 for each well, actual differences of the annual and 10 year measurements, and the five year average change, where available for each well.

Eighth Annual PGCD Scholarship Winners Announced

Sarah Hammer
$4,000 Scholarship

Panhandle Groundwater Conservation District (PGCD) has announced the winners of the 2010 Essay Scholarship Awards.

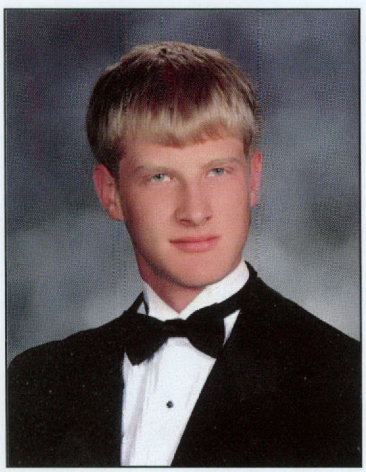
Winner of the $4000 scholarship is Sarah Hammer. Sarah graduated with a 3.91 GPA and was valedictorian of her 48 student class at Panhandle High School. She is the daughter of Philip and Kayla Hammer. Her future plans are to attend Oklahoma State University and major in Education.



Shanna Lamborn
$3,000 Scholarship

The $3000 scholarship winner is Shanna Lamborn. Shanna graduated third of 25 students with a GPA of 3.86 at Claude High School. Her parents are Dasin and Janet Lamborn. Shanna plans to attend West Texas A & M University and major in English.

The $2000 scholarship winner is Ty Tubbs. Ty graduated 16th of 33 students with a GPA of 3.39 at Clarendon High School. He is the son of Laban and Jennifer Tubbs. His future plans include attending Clarendon College and majoring in Agriculture.



Ty Tubbs
$2,000 Scholarship

All scholarship are paid out over four years. The District scholarship essay contest is open to all high school seniors within the PGCD district. Applicants are required to write a 500 to 1,000 word essay over a topic or question chosen by the District staff and Board of Directors. The 2010 question was, "With continued depletion of the Ogallala aquifer in Texas, is sufficient management occurring to extend the life of this valuable resource? Yes or no, and why?".

A total of 13 essays were received this year, and the selection of winners was extremely difficult. The winners are selected by a committee of three Board members, the general manager, and the education assistant. The winning essay will be printed in the October edition of *Panhandle Water News.*

GMA 1 Sets DFC's for Dockum and Blaine Aquifers

Groundwater Management Area 1 (GMA 1) covers 18 counties in the Panhandle and has members from Hemphill County Underground Water Conservation District, North Plains Groundwater Conservation District, High Plains Underground Water Conservation District, and Panhandle Groundwater Conservation District. GMA 1 has been tasked by legislature to set a Desired Future Condition (DFC) for all major and minor aquifers in the area by September 1, 2010. On July 7, 2009, GMA 1 adopted the DFCs for the Ogallala Aquifer. The majority of the area has a DFC of 50 percent left in 50 years, the four northwest counties of the panhandle have a DFC of 40 percent left in 50 years, and Hemphill County has a DFC of 80 percent left in 50 years in the Ogallala Aquifer.

The only other aquifers classified as a major or minor aquifer in this area are the Dockum and Blaine. GMA 1 held a hearing on June 3, 2010, in Amarillo, Texas, to receive public comment on the proposed

GMA continues on page 17

Water Conservation Education 2009-2010 Wrap-Up

The 2009-2010 school year has come to an end along with the eighth year of our elementary water conservation program. This year 3,603 miles were traveled across the Panhandle Groundwater Conservation District to give our water conservation presentation to 2,267 fifth grade students at 44 schools.

This year we reached 80 percent of the schools within the District, and we attended Borger Intermediate School in Hutchinson County, and Coronado Elementary, Landergin Elementary, and Paramount Terrace Elementary in Randall County. The total cost of the program per student, which includes gas, salaries, water kits and water wheels was $9.70. Even with the increase in cost for this program the ever increasing demands on water make this presentation necessary.

The presentation last for about one hour during which we discuss water conservation, the water cycle, aquifer knowledge, where our water comes from, and playa lakes. We also have an underground flow model that shows the kids visually how wells work, what the aquifer looks like, and how water flows beneath the earth. At the end of the presentation we give the kids a water saving kit and a water wheel that teaches them other ways to conserve water. The presentation is a great tool for teachers to incorporate science lessons and everyday life. We include information that is relevant to their Science TAKS test.

PGCD gave fifth grade students the opportunity to take home a water saver kit. The kit contains a high efficiency shower head, kitchen and bathroom sink aerators, leak gauge and an assortment of other conservation tools to use around the house. This leads students to share at home with their parents and use the tools in hand with their families to support water conservation and become a part of the solution.

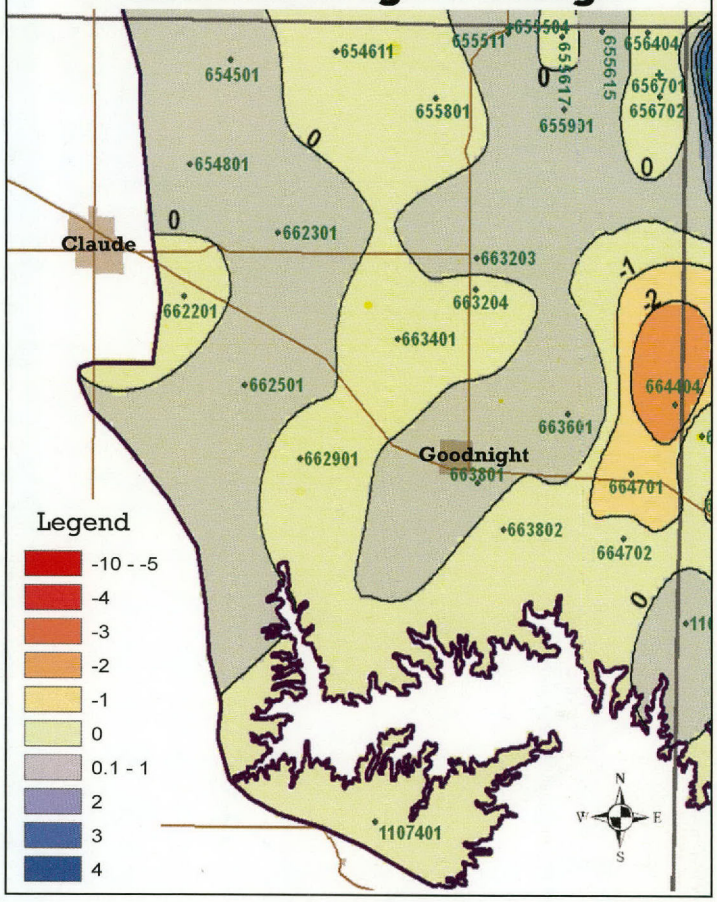
The 2009-2010 school year also concluded the seventh year that PGCD sponsored the "Major Rivers" program. This year 2,424 fourth grade student packets were delivered to the schools in September 2009. "Major Rivers" is a TAKS affiliated, two week course

Education continues on page 19

Armstrong Ogallala Aquifer						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
654501		-251.8	-252		-0.2	0.35
654611	-311.8	-315.4	-316.2	-4.4	-0.8	-0.40
654801	-296.4	-292	-292.3	4.1	-0.3	0.34
655504		-351.2	-352.3		-1.1	
655511	-340.7	-352	-352.9	-12	-0.9	0.38
655615	-352.2	-358.6	-353.8	-1.6	4.8	0.68
655617		-356.5	-352.9		3.6	-0.18
655801	-128.1	-136.7	-136.7	-8.6	0	-0.22
655901	-241.6	-245.7	-247.2	-5.6	-1.5	0.34
656404	-344.2	-342.9	-344.2	0	-1.3	-0.20
656701			-348.9			
656702	-333.5	-333.8	-335.5	-2	-1.7	-0.16
662201	-186.4	-185.6	-186.7	-0.3	-1.1	-0.18
662301	-284.4	-284.4	-284.2	0.2	0.2	0.25
662501	-190.5	-184.4	-183.1	7.4	1.3	0.72
662901		-217.7	-218.8		-1.1	-0.06
663203	-169.4		-169.1	0.3		0.37
663204	-167		-166.3	0.7		-0.27
663401	-194.4	-194.3	-195.5	-1.1	-1.2	-0.10
663601	-92.4		-92.3	0.1		0.40
663801	-193.4	-197.4	-197	-3.6	0.4	0.44
663802	-196.8	-199.2	-199.8	-3	-0.6	-0.38
664404	-109.1	-125.3	-126.2	-17	-0.9	-2.72
664701	-123.7		-133.8	-10		-1.28
664702	-139.4	-145	-146.5	-7.1	-1.5	-0.98
1107401	-116.4	-116.1	-118.4	-2	-2.3	-0.22

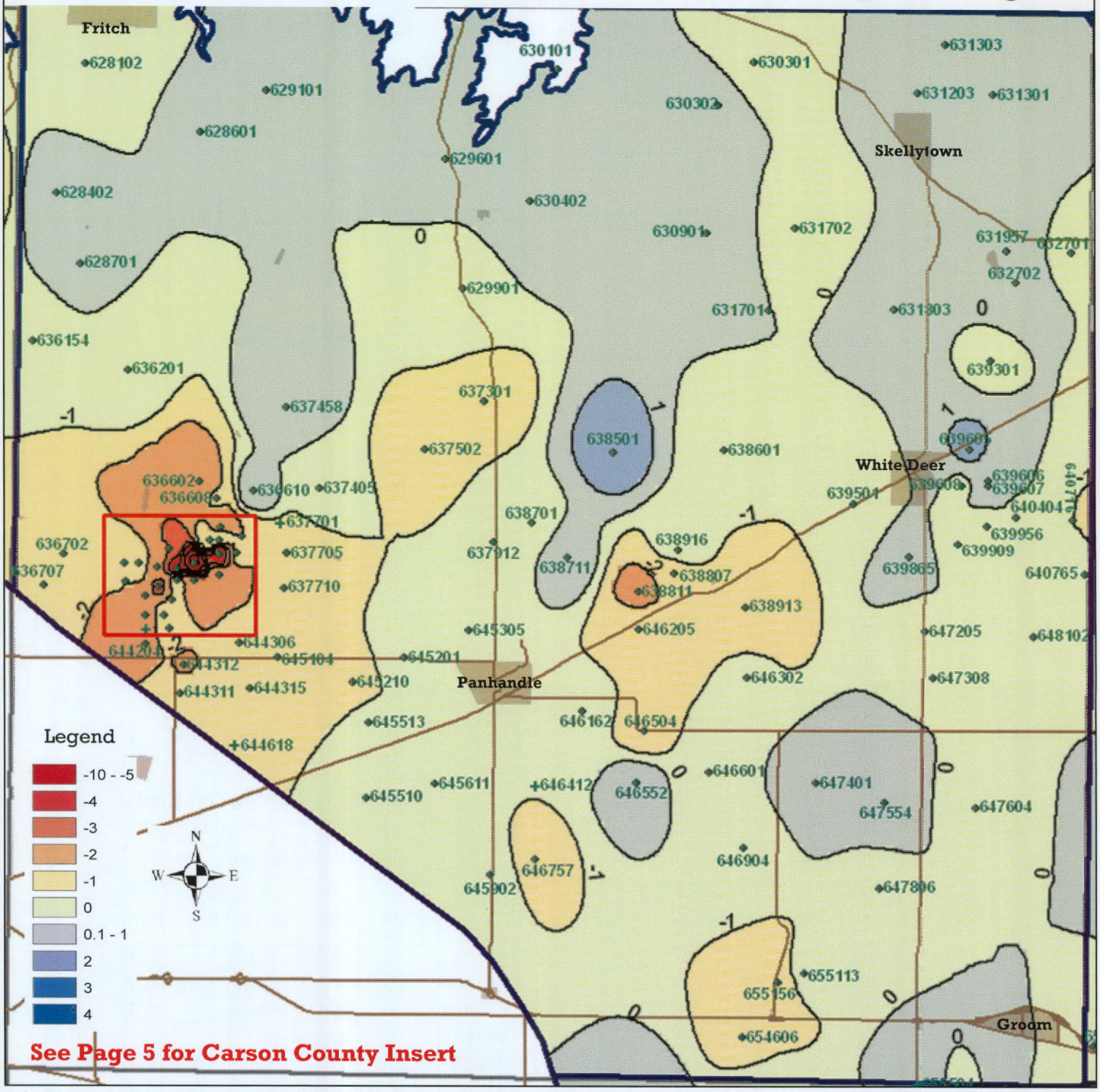
Carson Ogallala Aquifer						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
628102	-203.3	-206.4	-207.2	-3.9	-0.8	-0.62
628402	-206.8	-203.5	-195.7	11.1	7.8	0.34
628601	-60.7	-64.8	-64.9	-4.2	-0.1	0.06
628701	-252.9	-253.8	-254.4	-1.5	-0.6	0.24
629101	-55.8	-55.7	-55.2	0.6	0.5	0.1
629601	-55	-52.9	-48.8	6.2	4.1	0.08
629901	-81	-81.6	-83	-2	-1.4	-0.2
630101		-30.4	-28.5		1.9	0.2
630301	-150.5	-151.1	-151.8	-1.3	-0.7	-0.18
630302		-228.9	-232.8		-3.9	0.1
630402		-121.8	-120.8		1	0.62
630901		-333	-329.9		3.1	1
631203	-303	-299.3	-299.8	3.2	-0.5	0.1
631301	-125	-123.1	-122.5	2.5	0.6	0.18
631303		-257.7	-257.4		0.3	0

Northeast Armstrong County Ogallala Aquifer 5 Year Average Change



Carson Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
631701		-390.3	-391.7		-1.4	0
631702	-276	-278.3	-279.2	-3.2	-0.9	-0.26
631803		-394.7	-394.4		0.3	0.15
631957		-328.6	-328.2		0.4	0.88
632701	-398.6	-392.2	-392.1	6.5	0.1	-0.12
632702	-402.7	-401.6	-402.2	0.5	-0.6	0.24
636154		-319.8	-320.5		-0.7	-0.68
636201	-352.4	-359.8	-360.8	-8.4	-1	-0.76
636602	-474.3	-491.3	-492.1	-18	-0.8	-2.36
636608		-508.8	-510.9		-2.1	-1.98
636610	-414	-420	-417	-3	3	0.4
636702	-449	-458	-458	-9	0	-1.75
636707	-466	-480	-483	-17	-3	-1.6
636808	-513	-528	-542	-29	-14	-3.3
636809	-522	-525	-527	-5	-2	-2.4
636810	-537	-548	-547	-10	1	-2
636811	-531	-542	-540	-9	2	-1.8

Carson County Ogallala Aquifer 5 Year Average Change

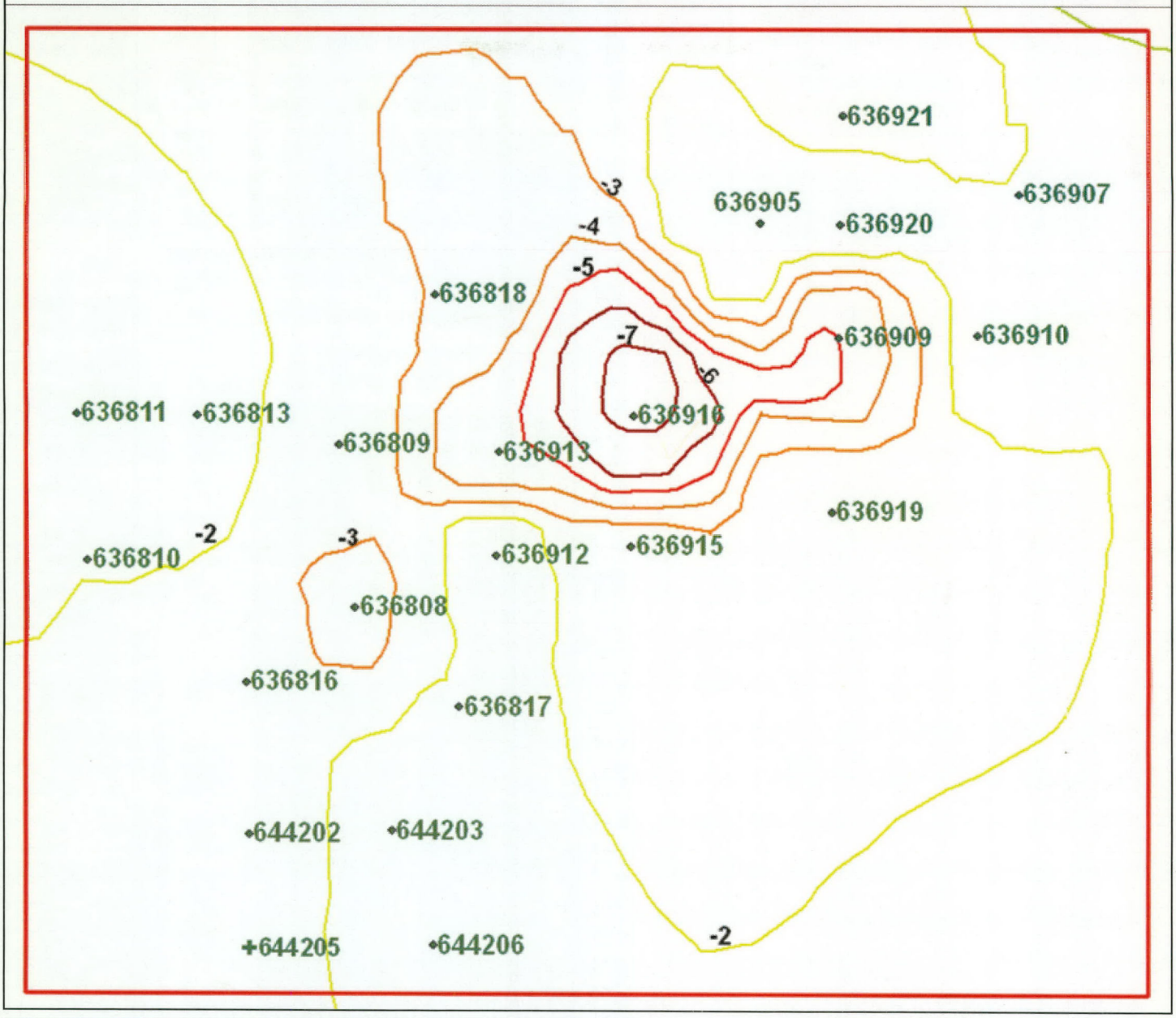


See Page 5 for Carson County Insert

Carson Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
636813		-535	-538		-3	-1.6
636816	-538	-552	-549	-11	3	-2.14
636817	-532	-549	-552	-20	-3	-1.9
636818	-496	-518	-516	-20	2	-3

Carson Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
636905	-526	-542	-545	-19	-3	-1.3
636907	-496	-503	-507	-11	-4	-2
636909	-485	-537	-542	-57	-5	-5
636910	-487	-495	-497	-10	-2	-1.88

Carson County Insert Ogallala Aquifer 5 Year Average Change



Carson Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
636912	-536	-525	-527	9	-2	-1.35
636913	-511	-534	-541	-30	-7	-5
636915	-513	-536	-535	-22	1	-2.6
636916	-504	-547	-554	-50	-7	-7.2
636919	-511.8	-517.6	-520.4	-8.6	-2.8	-2.08
636920	-495	-527	-527	-32	0	-1.1
636921	-512	-521	-525	-13	-4	-2.6
637301	-268.6		-275.1	-6.5		-1.25
637405		-443.8	-445.1		-1.3	-0.8
637458		-431.3	-429.4		1.9	0.76

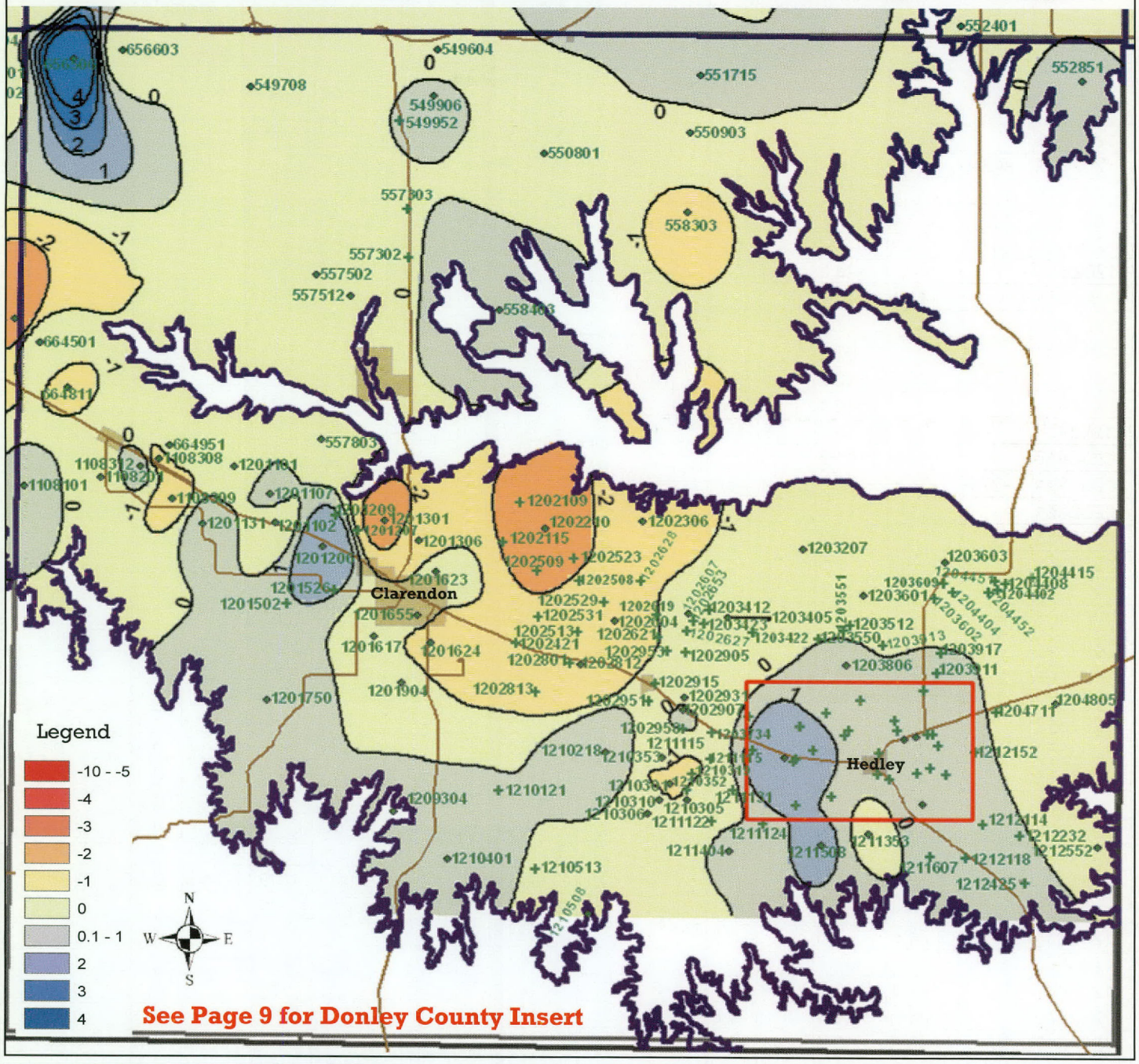
Carson Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
637502		-310.7	-311.8		-1.1	-1.28
637701			-439.1			
637705	-428.3	-463.8	-467.6	-39	-3.8	-1.56
637710		-437.9	-440.3		-2.4	-1.44
637912		-407.1	-407.5		-0.4	-0.82
638501	-382.7	-380.8	-378.1	4.6	2.7	1.16
638601	-379.9	-373.7	-374	5.9	-0.3	-0.4
638701	-414	-416.1	-416.8	-2.8	-0.7	-0.16
638711		-424.8	-425.2		-0.4	0.24
638807		-415.2	-414.8		0.4	-1.98

Carson Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
638811		-432.6	-436.6		-4	-2.1
638913	-397.4		-410.4	-13		-1.88
638916	-414.5	-413.9	-412.2	2.3	1.7	-0.42
639301	-397.8	-397.4	-397.5	0.3	-0.1	-0.06
639501	-367.2	-373.2	-374	-6.8	-0.8	-0.84
639605		-284.6	-284.1		0.5	1.1
639606		-347.7	-349.6		-1.9	0.2
639607		-355.3	-356.1		-0.8	0.38
639608		-353	-353.6		-0.6	-0.05
639865		-394.3	-393.3		1	0.34
639909	-352.4	-353.4	-354.4	-2	-1	-0.3
639956		-365.6	-365.6		0	-0.25
640404	-375		-372.1	2.9		-0.07
640716	-373.3	-376.6	-377.1	-3.8	-0.5	-1
640765	-336.6	-336.8	-345.6	-9	-8.8	-0.52
644202	-529	-544	-549	-20	-5	-2.8
644203	-528	-536	-542	-14	-6	-1.4
644204	-487	-499	-496	-9	3	-2.2
644205	-527	-534	-535	-8	-1	
644206	-541	-536	-538	3	-2	-1.7
644306	-484	-459	-464	20	-5	-1.6
644311	-480.6	-493	-493.9	-13	-0.9	-1.24
644312	-508.8	-511.9	-513.3	-4.5	-1.4	-2.02
644315	-442.1	-454.1	-455.5	-13	-1.4	-1.36
644618		-444	-444.8		-0.8	
645104		-429.7	-429.1		0.6	-1.26
645201	-420.2	-427.8	-428.5	-8.3	-0.7	-0.74
645210		-441.6	-441.8		-0.2	-1.22
645305		-435.8	-434.8		1.1	-0.51
645510	-422.3	-426.9	-427.1	-4.8	-0.2	-0.78
645513		-440.4	-440.9		-0.5	-0.9
645611	-416.2	-419.8	-422.2	-6	-2.4	-0.6
645902	-398.7	-395.2	-396.4	2.3	-1.2	-0.84
646162		-380	-381.4		-1.4	-0.74
646205	-427	-424.9	-424.9	2.1	0	-1.42
646302	-366	-376.1	-376.8	-11	-0.7	-0.94
646412			-405.7			
646504	-387.2	-385.2	-389.1	-1.9	-3.9	-1.32
646552	-354.7	-355.5	-353.5	1.2	2	0.32
646601		-373.2	-373.5		-0.3	-0.48
646757		-379.5	-380.4		-0.9	-1.08
646904	-360.5	-364.3	-364.7	-4.2	-0.4	-0.42
647205	-376.7	-380.2	-379.7	-3	0.5	-0.24
647308	-298.3	-297.9	-298.7	-0.4	-0.8	-0.02
647401	-346.7	-349.7	-349.6	-2.9	0.1	0.5
647554		-306.4	-307.9		-1.5	0.8
647604	-311.2	-320.2	-320.5	-9.3	-0.3	-0.52
647806		-358.5	-357.5		1	-0.42
648102	-350.3	-353.9	-354	-3.7	-0.1	-0.38

Carson Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
654606	-368.8		-377.2	-8.4		-1.15
655113	-368.3	-377.3	-378	-9.7	-0.7	-0.86
655156		-369.3	-380.6		-11	-1.47

Donley Ogallala Aquifer						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
549604	-237.5	-236.3	-237.8	-0.3	-1.5	-0.46
549708	-318.4	-320.4	-320.2	-1.8	0.2	-0.44
549906	-206.6	-204.8	-205.2	1.4	-0.4	0.05
549952			-249.4			
550801		-104.9	-103.5		1.4	-0.40
550903	-112.3	-107.2	-107.6	4.7	-0.4	-0.14
551715	-113.6	-111.8	-112	1.6	-0.2	0.24
552851		-120.7	-120.5		0.2	0.06
557302			-115.8			
557303			-166.6			
557502	-96.1	-96.9	-96.8	-0.7	0.1	-0.20
557512		-40.4	-41.4		-1	-0.36
557803	-87.3	-87.5	-89.2	-1.9	-1.7	-0.22
558303	-34.7	-41.3	-41.2	-6.5	0.1	-1.04
558403		-137.8	-137.6		0.2	0.86
656506	-287.7	-329.8	-330.7	-43	-0.9	4.70
656603		-308.9	-309.2		-0.3	-0.42
664501	-113.6	-116.9	-118.1	-4.5	-1.2	-0.58
664811	-94.3	-100.1	-101.9	-7.6	-1.8	-1.02
664951	-62.8	-65.1	-67.1	-4.3	-2	-0.72
1108101		-95.9	-97.2		-1.3	0.20
1108201	-115	-120.6	-122.3	-7.3	-1.7	-0.25
1108308	-64.1	-71.1	-72.9	-8.8	-1.8	-1.28
1108309		-77.7	-79.9		-2.2	-1.32
1108312	-68.6	-78	-72	-3.4	6	0.24
1201101	-94.7	-96.4	-97	-2.3	-0.6	-0.36
1201102	-34.9	-34.2	-35.5	-0.6	-1.3	-0.32
1201107		-47	-47		0	0.08
1201131	-49	-52.9	-54.8	-5.8	-1.9	0.30
1201206	-67.6	-66.3	-68.4	-0.8	-2.1	1.67
1201207			-41.4			
1201209			-44.2			
1201301	-41.3	-47	-50.5	-9.2	-3.5	-2.12
1201306	-41.1	-56.7	-57.6	-17	-0.9	-1.88
1201502	-130.8	-128.9	-131.2	-0.4	-2.3	
1201526			-103.2			
1201617	-119.2	-115	-115.4	3.8	-0.4	-0.06
1201623	-55	-67.6	-65.4	-10	2.2	-0.72
1201624	-107	-100	-100.7	6.3	-0.7	-1.72

Donley County Ogallala Aquifer 5 Year Average Change



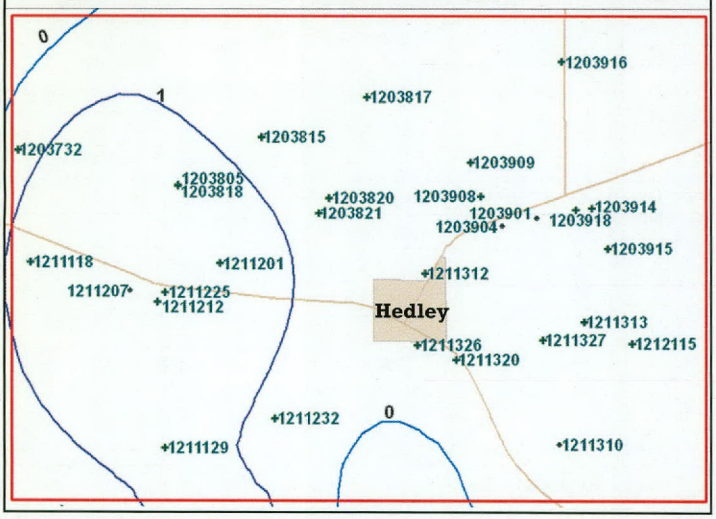
Donley Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
1201655		-52.8	-55.4		-2.6	-0.77
1201750		-108.2	-107.7		0.5	0.95
1201904	-140.8	-141	-142.6	-1.8	-1.6	-0.30
1202109			-96			
1202115			-73.8			
1202210	-63.5	-68.1	-71.2	-7.7	-3.1	-2.30
1202306	-47.6	-50.9	-52.1	-4.5	-1.2	-1.78

Donley Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
1202421			-26.2			
1202508			-83.1			
1202509			-67.2			
1202513			-71.4			
1202523			-84.4			
1202529			-75.5			
1202531			-59.4			

Donley Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
1202604		-62.6	-64.9		-2.3	-1.58
1202607	-73.4	-74.6	-78.5	-5.1	-3.9	-0.90
1202619			-75.2			
1202621			-52.7			
1202627			-79			
1202628			-49.5			
1202653			-99			
1202801			-32.5			
1202813			-81.9			
1202812	-13.9	-27.7	-25.9	-12	1.8	-1.70
1202905			-68.6			
1202907	-12	-11	-10.6	1.4	0.4	0.14
1202915		-15.93	-17.95		-2	
1202931	-37.6	-38.6	-39.9	-2.3	-1.3	-0.90
1202951			-17.5			
1202953			-48			
1202958		-9.6	-12.3	-12	-2.7	
1203207	-79.8	-80	-81.1	-1.3	-1.1	-0.14
1203405	-62.9	-69.7	-70.7	-7.8	-1	-0.54
1203412			-80.6			
1203422			-58.2			
1203423			-89.6			
1203512			-111			
1203550			-93.1			
1203551			-112.8			
1203601	-94	-96.5	-97.3	-3.3	-0.8	-0.58
1203602			-111.8			
1203603		-88	-89.3		-1.3	-0.46
1203609			-115.7			
1203732		-56.4	-57.5		-1.1	
1203734		-34.9	-28		6.9	
1203805			-67.7			
1203806	-118.5	-121.1	-120.9	-2.4	0.2	0.04
1203815		-55.3	-56.1		-0.8	
1203817		-86.6	-85.7		0.9	
1203818			-67.6			
1203820			-70.5			
1203821			-62.7			
1203901		-92.2	-88.9		3.3	0.46
1203904	-56.8	-66.5	-64.5	-7.7	2	0.88
1203908			-76.1			
1203909			-83.8			
1203911		-47.5	-49.5		-2	
1203913		-107.8	-99.7		8.1	
1203914			-96.6			
1203915		-90.4	-85		5.4	
1203916			-28.1			
1203917			-46.2			
1203918			-78.6			

Donley Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
1204402			-115.2			
1204404			-116.5			
1204408			-113.7			
1204415			-97			
1204451		-127.4	-125.8		1.6	
1204452		-127.4	-129.1		-1.7	
1204711		-45	-41.6		3.4	
1204805	-27.5	-25	-31	-3.5	-6	-0.70
1209304	-22.6	-22.9	-24.2	-1.6	-1.3	0.14
1210121		-128.3	-127.9		0.4	
1210218	-58.5	-60.8	-61.9	-3.4	-1.1	0.86
1210301	-9.2	-14.4	-16.5	-7.3	-2.1	-1.90
1210305	-31	-40.8	-38.3	-7.3	2.5	-0.74
1210306	-30.1	-35.7	-36.5	-6.4	-0.8	-0.20
1210310	-19.8	-28	-28.1	-8.3	-0.1	-0.27
1210319			-42.5			
1210352			-35.6			
1210353	-17.3	-20.1	-22.2	-4.9	-2.1	-0.84
1210401	-112.5	-117.2	-112.3	0.2	4.9	0.56
1210508			-27.4			-0.63
1210513		-117.1	-115.4		1.7	
1211115			-105.2			
1211118		-101.1	-102.1		-1	
1211122		-110.8	-109.4		1.4	
1211124		-183.2	-182.8		0.4	
1211129		-167.7	-165.5		2.2	
1211131		-76.2	-75.4		0.8	
1211201			-52			
1211207	-90	-109.7	-109.1	-19	0.6	1.48
1211212			-90.7			
1211225			-71.6			
1211232			-165.5			
1211312			-57.4			
1211313			-147.1			
1211310	-71.5	-75.6	-73.4	-1.9	2.2	0.18
1211320		-83.1	-83.6		-0.5	
1211326			-75.6			
1211327			-119			
1211353	-103.5	-103.9	-104.4	-0.9	-0.5	-0.10
1211404	-191.3	-194.2	-193.8	-2.5	0.4	0.02
1211508	-166.9	-167.7	-168	-1.1	-0.3	1.06
1211607		-133.3	-136.6		-3.3	
1212114		-85.3	-85.2		0.1	
1212115		-122.8	-124.4		-1.6	
1212118		-72.9	-73.8		-0.9	
1212152		-94.5	-95.1		-0.6	
1212232		-109.3	-109.7		-0.4	
1212425		-29.8	-30		-0.2	
1212552		-60.9	-61		-0.1	0

Donley County Insert Ogallala Aquifer 5 Year Average Change



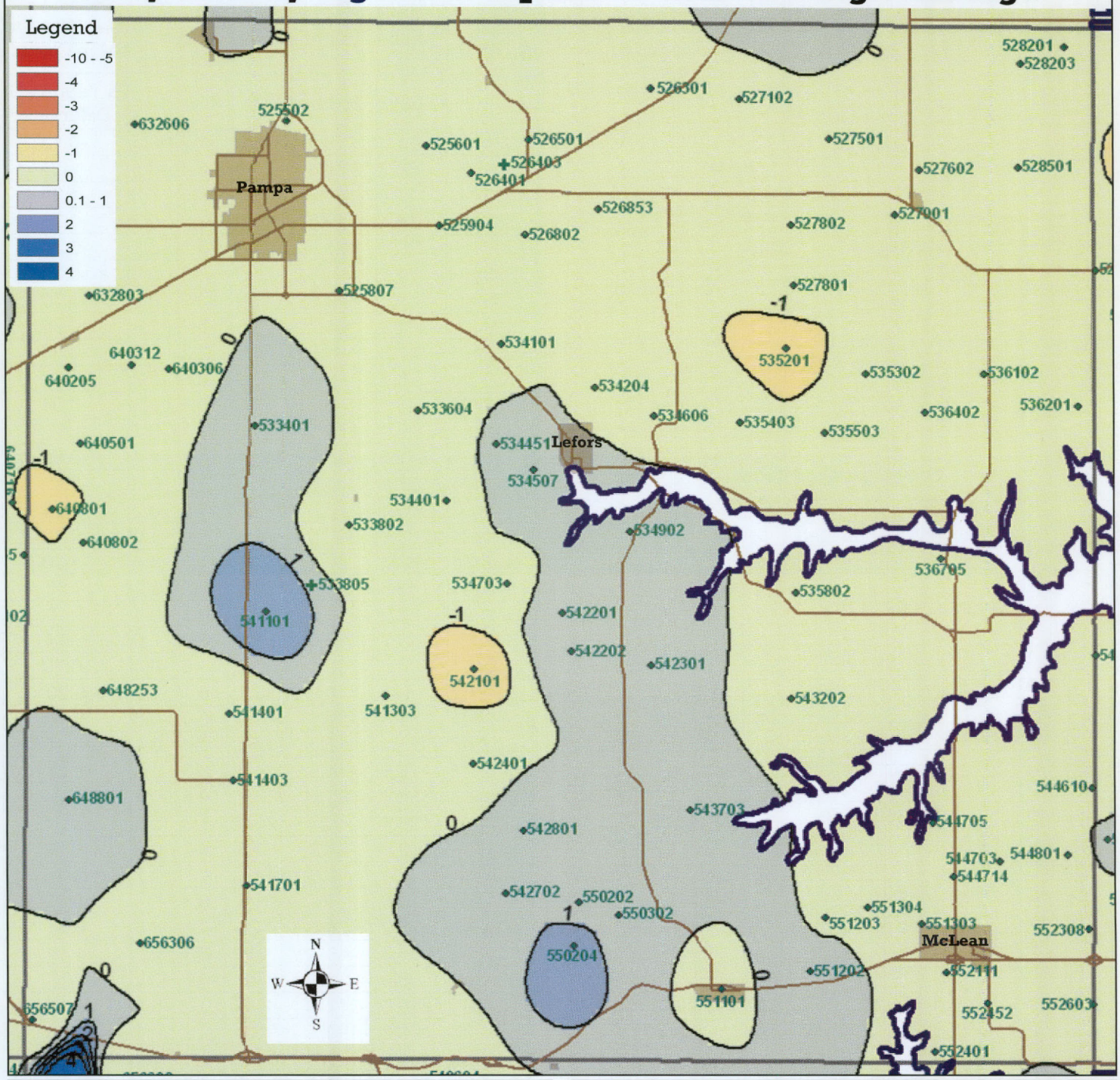
Gray Ogallala Aquifer

Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
525502	-349.1	-350.6	-350.5	-1.4	0.1	-0.16
525601		-370.2	-370		0.2	-0.14
525807	-371.6	-371.5	-371.2	0.4	0.3	-0.16
525904	-364.2	-366.2	-366.5	-2.3	-0.3	-0.46
526301	-363.1		-364.2	-1.1		-0.77
526401	-370.2	-372.6	-371.9	-1.7	0.7	-0.08
526403		-368	-368.1		-0.1	
526501	-363.9	-367.4	-367.2	-3.3	0.2	-0.54
526802	-362.5	-355.9	-355.8	6.7	0.1	-0.20
526853	-363.2	-365.2	-366.1	-2.9	-0.9	-0.07
527102	-359.4	-361.2	-361.7	-2.3	-0.5	-0.38
527501	-350.2	-349.2	-349.2	1	0	-0.05
527602	-331.5	-331.9	-331.6	-0.1	0.3	-0.24
527801	-137.7	-132.5	-133.3	4.4	-0.8	-0.14
527802	-338.8	-339	-338.9	-0.1	0.1	-0.34
527901	-340.1		-340.2	-0.1		-0.07
528201	-346.8	-346.9	-347.1	-0.3	-0.2	-0.44
528203	-340.7	-341.1	-339.5	1.2	1.6	-0.08
528501	-287.9	-283.6	-284.1	3.8	-0.5	-0.24
533401	-343.5	-351.2	-350.6	-7.1	0.6	0.78
533604	-77.9	-86.7	-89	-11	-2.3	-0.90
533802	-207.5	-209.5	-210.3	-2.8	-0.8	-0.20
533805			-342.9			
534101	-139.8	-141.4	-141.6	-1.8	-0.2	-0.14
534204	-194.2	-195	-194.8	-0.6	0.2	-0.08
534401	-117.2	-121.8	-118.6	-1.4	3.2	-0.22
534451		-109.1	-109.7		-0.6	0
534507	-33	-34.8	-33.3	-0.3	1.5	0.98
534606	-72.4	-73.5	-73.8	-1.4	-0.3	-0.14

Gray Ogallala Aquifer Cont'd

Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
534703	-74.7	-75.2	-75.9	-1.2	-0.7	-0.12
534902	-68.2	-70.4	-70.9	-2.7	-0.5	1.00
535201	-117.8	-129.9	-128.1	-10	1.8	-1.80
535302	-14.4	-16.3	-16.6	-2.2	-0.3	-0.20
535403	-128.6	-125.4	-125.5	3.1	-0.1	-0.28
535503	-74.7	-76	-76.3	-1.6	-0.3	-0.28
535802	-119.5	-118.5	-118.6	0.9	-0.1	-0.10
536102	-165.2	-165.7	-166.1	-0.9	-0.4	-0.28
536201	-147.5	-150	-149.8	-2.3	0.2	-0.36
536402	-8.4	-8.8	-9	-0.6	-0.2	-0.04
536705	-5.1	-5.9	-5.6	-0.5	0.3	-0.04
541101	-369.1	-370.1	-370.8	-1.7	-0.7	1.16
541303	-341.5	-341.2	-345.6	-4.1	-4.4	-0.88
541401	-323.1	-324.5	-325	-1.9	-0.5	-0.42
541403	-295.1	-293.3	-293.5	1.6	-0.2	-0.81
541701	-263.6	-265.5	-263.6	0	1.9	-0.10
542101	-263.3	-267.2	-270.6	-7.3	-3.4	-1.16
542201	-132.6	-135.6	-133.4	-0.8	2.2	0.30
542202	-262.3	-261.9	-262	0.3	-0.1	0.10
542301	-139.7	-139.6	-139.6	0.1	0	0.14
542401	-206.2	-200.1	-200.2	6	-0.1	-0.10
542702	-145	-144.9	-145.1	-0.1	-0.2	0.20
542801	-81.5	-81.1	-81.9	-0.4	-0.8	0.10
543202	-111.8	-112.3	-112.2	-0.4	0.1	-0.10
543703	-16.8	-14.9	-14.5	2.3	0.4	0.26
544610	-183.8	-183.3	-183.2	0.6	0.1	-0.24
544703	-125.6	-127	-126.9	-1.3	0.1	-0.34
544705	-62.5	-64.6	-63.8	-1.3	0.8	-0.22
544714		-113.6	-110.9		2.7	-0.22
544801	-110.6	-111	-111.4	-0.8	-0.4	-0.22
550202	-23.2	-28.5	-24	-0.8	4.5	0.34
550204	-54.3	-48.2	-48	6.3	0.2	1.40
550302	-86.9	-87	-87.2	-0.3	-0.2	0
551101	-216.3	-212.9	-213	3.3	-0.1	-0.06
551202	-190.2	-190.3	-190.2	0	0.1	0.56
551203	-151.5	-153.2	-151.9	-0.4	1.3	-0.02
551303	-107.2	-107.4	-107.9	-0.7	-0.5	-0.26
551304	-70.6	-72.8	-73.4	-2.8	-0.6	-0.23
552111	-105	-107	-106.9	-1.9	0.1	-0.56
552308	-99.6	-100.9	-102.9	-3.3	-2	-0.38
552401	-72.2	-72	-71.6	0.6	0.4	-0.10
552452		-107.3	-107.4		-0.1	-0.32
552603	-20	-20.4	-20.5	-0.5	-0.1	-0.74
632606	-363.3		-364.6	-1.3		-0.22
632803	-394.1	-394.9	-394.7	-0.6	0.2	-0.10
640205	-386.7	-390.1	-388.4	-1.7	1.7	-0.18
640306	-401	-404.9	-405.1	-4.1	-0.2	-0.88
640312		-405.7	-405.5		0.2	-0.17
640501		-373.6	-374		-0.4	-0.24

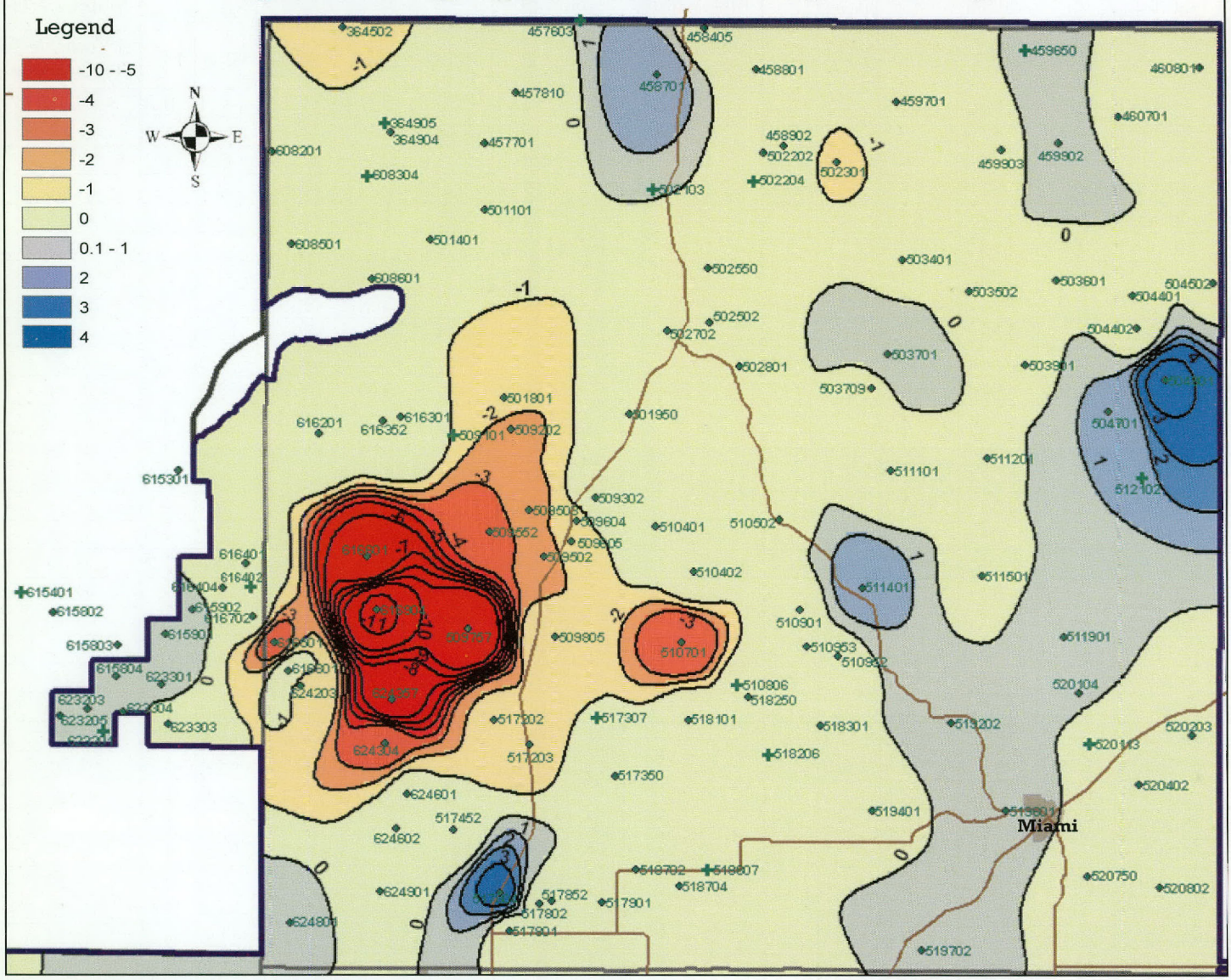
Gray County Ogallala Aquifer 5 Year Average Change



Gray Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
640801	-370	-375	-379.9	-9.9	-4.9	-1.46
640802	-358.3	-363.7	-363.8	-5.5	-0.1	-0.40
648253	-354.2	-356.7	-355.9	-1.7	0.8	-0.04
648801	-291.1	-285.9	-285.2	5.9	0.7	0.43
656306	-283.5	-283.8	-283.4	0.1	0.4	-0.06
656507	-299		-300.7	-1.7		-0.50

Hutchinson Ogallala Aquifer						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
615301	-122.3		-114.9	7.4		-0.20
615401		-134.3	-136.3		-2	
615802		-169.3	-166.5		2.8	-1.60
615803	-80	-77	-79.2	0.8	-2.2	0.16
615804	-111.4	-110.6	-109.6	1.8	1	0.28
615901	-77.5	-74.1	-72.9	4.6	1.2	0.42

Roberts/Hutchinson County
Ogallala Aquifer 5 Year Average Change



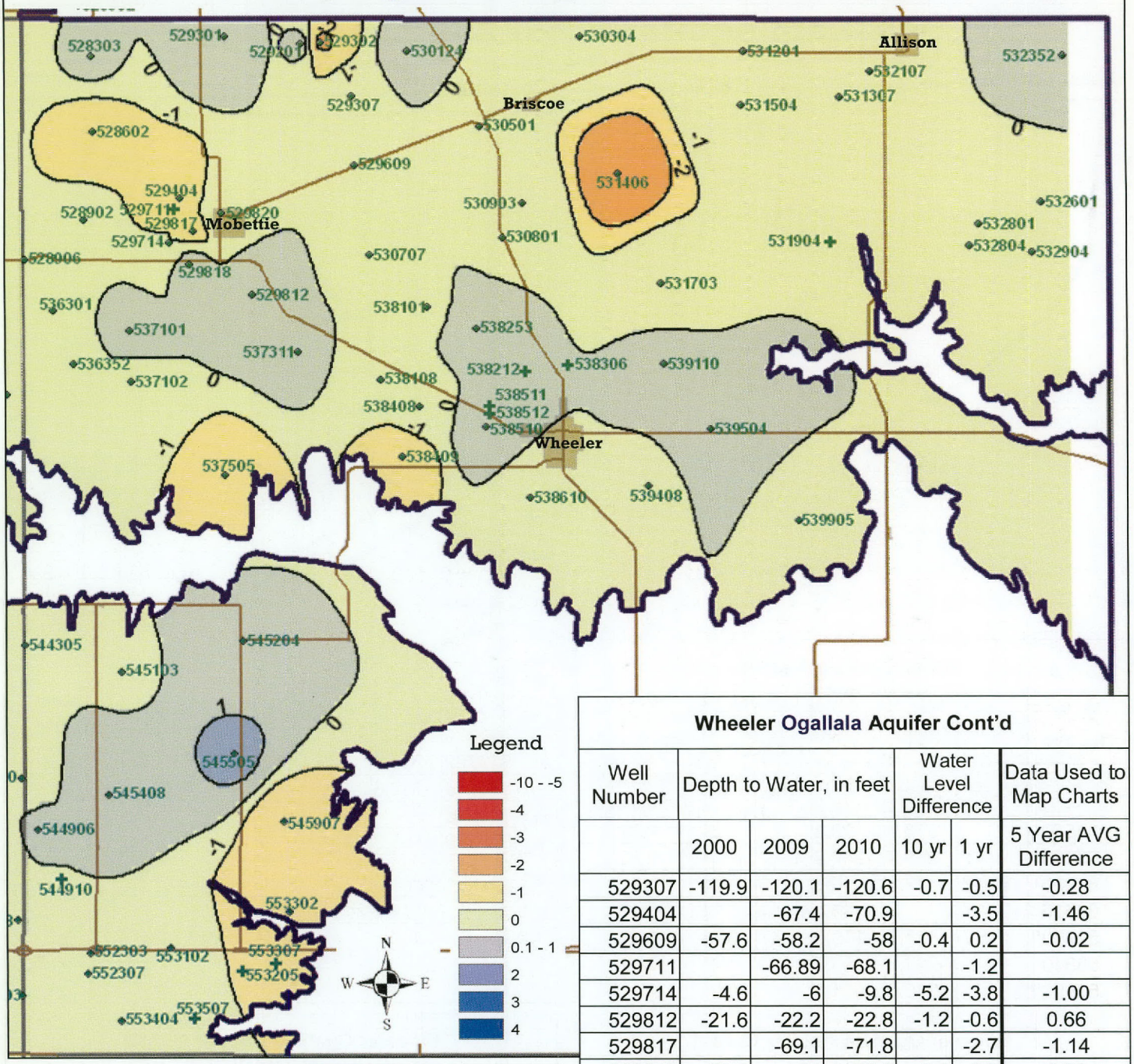
Hutchinson Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
615902		-25.1	-24.6		0.5	0.08
616401			-295			-0.25
616402		-267	-267.1		-0.1	
616404	-96.7	-99.8	-103.5	-6.8	-3.7	-0.44
616702		-238.2	-239.4		-1.2	-0.51
623201			-204.7			
623203	-181.8	-189.8	-185.2	-3.4	4.6	1.00
623205		-154.8	-153.4		1.4	0.16
623301	-116.1	-114.5	-113.9	2.2	0.6	0.23
623303			-101.2			-0.97
623304		-188.7	-189.5		-0.8	0.90

Roberts Ogallala Aquifer						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year Avg D fference
364502	-437.1	-447.3	-448.7	-12	-1.4	-1.20
364904	-108.6	-113.1	-113.8	-5.2	-0.7	-0.60
364905		-95.9	-97		-1.1	
457603		-401.7	-403.1		-1.4	
457701		-25	-25.5		-0.5	-0.50
457810	-253.4	-254.9	-255.3	-1.9	-0.4	-0.60
458405	-337.8	-344	-342	-4.2	2	-0.34
458701	-96.1	-90	-90.7	5.4	-0.7	1.38
458801	-390.1	-394.9	-395.1	-5	-0.2	-0.33
458902		-118	-118.6		-0.6	-0.30
459650	-275.8	-290.3	-287.8	-12	2.5	

Roberts Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
459701	-53	-55.2	-55.4	-2.4	-0.2	-0.26
459902		-47.4	-45		2.4	0.50
459903	-40	-40.9	-41	-1	-0.1	-0.14
460701	-97.5	-97.1	-97.6	-0.1	-0.5	-0.10
460801	-187.8	-187.4	-187.4	0.4	0	-0.08
501101	-54.5	-55.2	-55.9	-1.4	-0.7	-0.20
501401	-50.4	-52.2	-52.6	-2.2	-0.4	-0.26
501801	-210.1	-214.1	-217.9	-7.8	-3.8	-1.78
501950		-128.5	-128.7		-0.2	-0.18
502103		-20	-20.1		-0.1	
502202	-69.2	-69.1	-69.3	-0.1	-0.2	-0.20
502204		-12	-12.1		-0.1	
502301	-60.8	-60.4	-63.9	-3.1	-3.5	-1.04
502502	-113.3	-107.8	-107.7	5.6	0.1	-0.04
502550	-101.1	-100.6	-100.7	0.4	-0.1	-0.10
502702	-53	-57.6	-58.8	-5.8	-1.2	-0.90
502801	-7.4	-6.3	-7.7	-0.3	-1.4	-0.12
503401	-98.7	-99.8	-100.1	-1.4	-0.3	-0.16
503502	-30.4	-30.6	-31.1	-0.7	-0.5	-0.10
503601	-84.6	-85.5	-86.1	-1.5	-0.6	-0.12
503701		-86.6	-86.2		0.4	0.70
503709		-275.6	-277		-1.4	-0.15
503901	-65.5	-65.7	-65.6	-0.1	0.1	-0.10
504401	-104.1	-99.5	-99.8	4.3	-0.3	-0.08
504402	-166.4	-168	-168.5	-2.1	-0.5	-0.36
504502	-113.3	-116.1	-116.2	-2.9	-0.1	-0.14
504701		-321.7	-320.2		1.5	1.03
504801	-204.8	-173.9	-173.6	31.2	0.3	4.12
509101	-52.1		-52.5	-0.4		
509202	-241.4		-249.8	-8.4		-2.10
509302	-186.2	-181.7	-185.5	0.7	-3.8	-0.46
509502	-278.9	-297.4	-298.8	-20	-1.4	-2.78
509503		-261.6	-263.8		-2.2	-2.22
509552		-106.4	-109.5		-3.1	-3.58
509604		-186.2	-187.6		-1.4	-1.10
509605		-237.8	-239.1		-1.3	-1.20
509757	-284.5	-445	-455.8		-11	-9.86
509805	-302.6	-314.8	-315.6	-13	-0.8	-1.18
510401	-159.7	-150.4	-151.2	8.5	-0.8	-0.28
510402		-253.1	-253.8		-0.7	-0.50
510502		-245.2	-244		1.2	-0.07
510701		-294.7	-295.7		-1	-3.62
510806			-286.5			
510901	-154.4	-156	-156.4	-2	-0.4	-0.20
510952		-345.1	-345.2		-0.1	-0.12
510953		-184.9	-185.2		-0.3	-0.18
511101	-285.2	-286	-288	-2.8	-2	-0.50
511201	-292.5	-293.1	-293.1	-0.6	0	-0.02
511401	-328.9	-328.3	-327.7	1.2	0.6	1.42

Roberts Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
511501	-306.8	-307.2	-306.9	-0.1	0.3	-0.10
511901	-273.8	-274.2	-272.8	1	1.4	0.27
512102	-281.9	-278.9	-282.1	-0.2	-3.2	
517202	-166.2		-175.9	-9.7		-1.90
517203	-321.1	-323.7	-325.1	-4	-1.4	-1.11
517307			-120.7			
517350		-341.5	-341.7		-0.2	-0.18
517452		-358.4	-358.9		-0.5	-0.62
517801	-404.7	-391.1	-391.2	13.5	-0.1	-0.36
517802	-395.2	-402.3	-401.7	-6.5	0.6	-0.20
517804	-396.1	-399.1	-400	-3.9	-0.9	3.22
517852		-406.8	-406.4		0.4	-0.20
517901	-392.9	-394.3	-393.6	-0.7	0.7	-0.24
518101	-324.2	-327.9	-325.3	-1.1	2.6	-0.56
518206		-392.2	-391.9		0.3	
518250		-334.8	-336.4		-1.6	-0.44
518301	-357.7	-358.2	-358.4	-0.7	-0.2	-0.02
518702	-388.4		-389.6	-1.2		-0.28
518704	-380.2	-384.3	-384.3	-4.1	0	-0.30
518807			-372.3			
519202	-380.3	-361.2	-362.7	17.6	-1.5	0.16
519401	-326.7		-327.6	-0.9		-0.20
519601	-115	-116.7	-116.9	-1.9	-0.2	0.30
519702	-256.9	-260.1	-260.3	-3.4	-0.2	0.74
520104	-142.6	-141.3	-141.1	1.5	0.2	0.00
520113		-65.5	-64.2		1.3	
520203	-111.9	-111.8	-112.9	-1	-1.1	-0.22
520402	-286.4	-292.4	-291.7	-5.3	0.7	-1.00
520750	-291.1	-293.9	-294.5	-3.4	-0.6	-0.25
520802	-245.4	-243.8	-243.9	1.5	-0.1	-0.13
608201	-174	-177.2	-175.3	-1.3	1.9	-0.22
608304		-79.8	-80.7		-0.9	
608501	-61.4	-64.6	-65	-3.6	-0.4	-0.38
608601	-10.9	-9.1	-9.4	1.5	-0.3	-0.70
616201		-143.9	-144		-0.1	-0.04
616301	-178.2	-178.8	-179.1	-0.9	-0.3	-0.10
616352		-180.7	-182.2		-1.5	-0.22
616501		-217.8	-218.7		-0.9	-3.46
616601	-217.1	-255.3	-260.9	-44	-5.6	-6.16
616801	-215.2	-218.1	-218.1	-2.9	0	-0.40
616904		-317.2	-331.2		-14	-11.06
624203	-240.5	-244.1	-245.1	-4.6	-1	-1.08
624304	-279.6	-299.8	-302.8	-23	-3	-3.22
624357	-295.2	-370.2	-366.8	-72	3.4	-7.64
624601	-203.9	-209.7	-206.1	-2.2	3.6	-0.78
624602		-327.6	-325.7		1.9	-0.57
624801	-109.4	-111.6	-111.7	-2.3	-0.1	0.10
624901	-355.4	-355.1	-357.3	-1.9	-2.2	-0.25

Wheeler County Ogallala Aquifer 5 Year Average Change



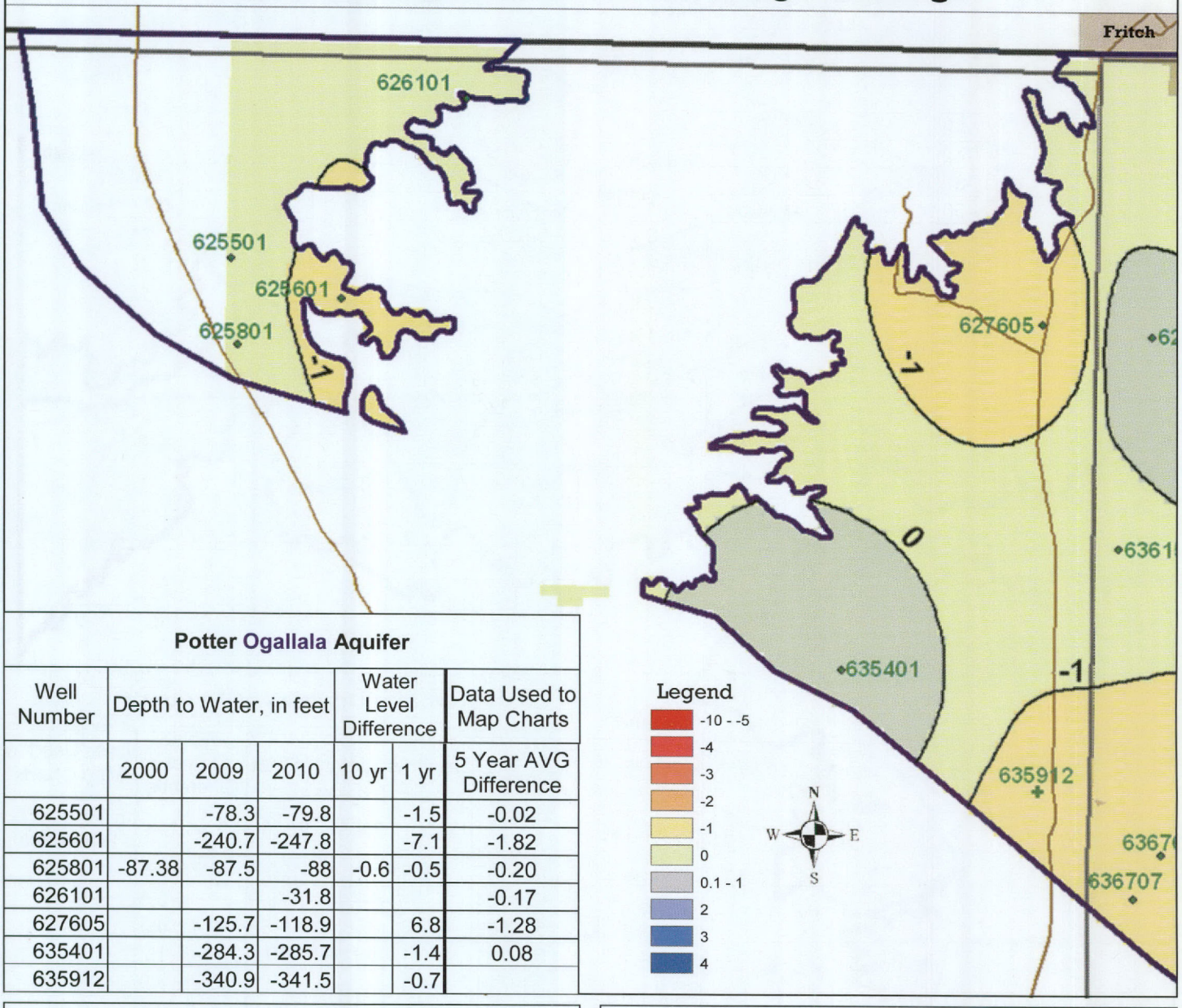
Wheeler Ogallala Aquifer

Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
528303	-297.4	-297.3	-296.7	0.7	0.6	0.05
528602	-108	-113.8	-115	-7	-1.2	-1.44
528902	-25.8		-33.3	-7.5		-0.90
528906		-169.9	-170.6		-0.7	-0.56
529201	-142.1	-140.8	-139.6	2.5	1.2	0.62
529301	-123.6	-121.4	-122.7	0.9	-1.3	0.08
529302	-108.7	-114.8	-119	-10	-4.2	-2.02

Wheeler Ogallala Aquifer Cont'd

Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
529307	-119.9	-120.1	-120.6	-0.7	-0.5	-0.28
529404		-67.4	-70.9		-3.5	-1.46
529609	-57.6	-58.2	-58	-0.4	0.2	-0.02
529711		-66.89	-68.1		-1.2	
529714	-4.6	-6	-9.8	-5.2	-3.8	-1.00
529812	-21.6	-22.2	-22.8	-1.2	-0.6	0.66
529817		-69.1	-71.8		-2.7	-1.14
529818	-52.5	-54	-56.3	-3.8	-2.3	0.32
529820		-74.5	-76.6		-2.1	-0.26
530124		-25.1	-25.1		0	0.13
530304	-88.1	-90.2	-88.2	-0.1	2	-0.40
530501	-105.3	-108.1	-108.5	-3.2	-0.4	-0.18
530707	-12.4	-13.4	-13.6	-1.2	-0.2	-0.32
530801	-64.9	-66.1	-66.3	-1.4	-0.2	-0.12
530903	-76.6	-77.6	-78.3	-1.7	-0.7	-0.44
531201	-109.7	-110.9	-108.5	1.2	2.4	-0.08
531307	-50.8	-53.4	-55	-4.2	-1.6	-0.70
531406		-81.4	-88.4		-7	-2.28
531504	-34.3	-35.7	-35	-0.7	0.7	-0.24
531703	-94.8	-99.8	-98.7	-3.9	1.1	-0.55
531904		-79.4	-78.3		1.1	

Northeast Potter County
Ogallala Aquifer 5 Year Average Change



Potter Ogallala Aquifer

Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
625501		-78.3	-79.8		-1.5	-0.02
625601		-240.7	-247.8		-7.1	-1.82
625801	-87.38	-87.5	-88	-0.6	-0.5	-0.20
626101			-31.8			-0.17
627605		-125.7	-118.9		6.8	-1.28
635401		-284.3	-285.7		-1.4	0.08
635912		-340.9	-341.5		-0.7	

Wheeler Ogallala Aquifer Cont'd

Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
532107	-51	-53.2	-52.6	-1.6	0.6	-0.20
532352		-93.4	-94		-0.6	0.38
532601		-68.6	-69.5		-0.9	-0.34
532801	0	-0.9	-0.93	-0.9	-0	-0.19
532804	-17.7	-16.7	-17.1	0.6	-0.4	-0.06
532904		-63.6	-63.5		0.1	-0.34
536301		-137.4	-136.8		0.6	-0.52
536352		-52.2	-53.2		-1	-0.58
537101	-81.8	-83.9	-83.6	-1.8	0.3	0.36

Wheeler Ogallala Aquifer Cont'd

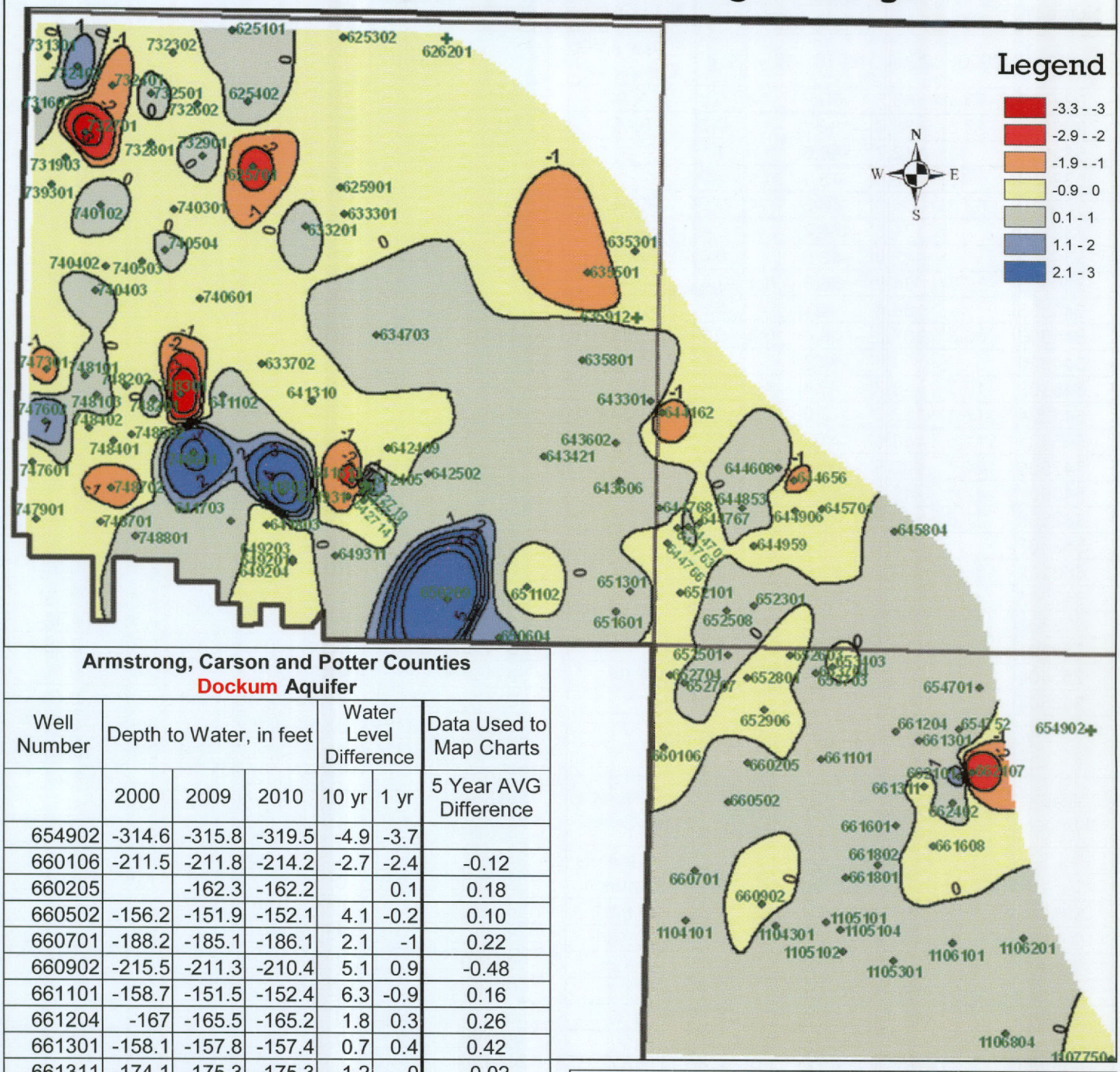
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
537102		-56.2	-57.2		-1	-0.24
537311	-21.7	-25.7	-21.8	-0.1	3.9	0.12
537505		-62.7	-62.9		-0.2	-1.22
538101	-4.4	-5.3	-5.3	-0.9	0	-0.10
538108	-120.7	-125.5	-125.9	-5.2	-0.4	-0.70
538212			-67.7			
538253		-97.7	-96.1		1.6	0.50
538306		-53.5	-53.5		0	
538408	-91.2	-90.9	-90.2	1	0.7	-0.52

Wheeler Ogallala Aquifer Cont'd						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
538409	-69.4	-80.5	-80.9	-12	-0.4	-1.34
538510	-28.8	-32.7	-32	-3.2	0.7	0.46
538511	-35	-42.7	-38.6	-3.6	4.1	
538512	-43	-37.5	-43.4	-0.4	-5.9	
538610	-62.8	-66.3	-66.8	-4	-0.5	-0.46
539110		-74.6	-74.2		0.4	0.19
539504		-42.9	-42.5		0.4	0.62
539905	-36.7	-34.9	-36.3	0.4	-1.4	-0.14
544305		-86.4	-87		-0.6	-0.38
544906	-106.8	-107.2	-106.4	0.4	0.8	0.04
544910			-91.5			
545103	-10.7	-6.7	-6.6	4.1	0.1	-0.02
545204	-117.1	-112.7	-112.9	4.2	-0.2	0.30
545408	-111.6	-116.4	-106	5.6	10	0.68
545505	-104.7	-102.5	-100.9	3.8	1.6	1.04
545907	-42.1	-45.6	-49.1	-7	-3.5	-1.30
552303	-37.6	-42.7	-42	-4.4	0.7	-0.06
552307		-76.1	-75.3		0.8	-0.42
553102	-56.7	-62.7	-63.6	-6.9	-0.9	-0.86
553205			-29.5			
553302	-21	-23.3	-24.6	-3.6	-1.3	-1.80
553307			-39			
553404	-7.7	-8.3	-7.4	0.3	0.9	-0.04
553507			-37.9			

Armstrong, Carson and Potter Counties Dockum Aquifer						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
625101		-257.4	-258.9	-259	-1.5	0.64
625302		-92.1	-92.6		-0.5	-0.18
625402		-95	-95.7		-0.7	0.12
625701		-156.1	-160.9		-4.8	-2.03
625901		-164.7	-165.2		-0.5	-0.32
626201	-131.2		-111.8	19.4		
633201		-82	-85.6		-3.6	0.04
633301		-64.9	-67.1		-2.2	-0.26
633702		-98.3	-99.8		-1.5	-0.02
634703		-86.5	-85.7		0.8	0.78
635301	-296	-301.7	-302.4	-6.4	-0.7	-0.58
635501	-309.1	-313.3	-313.9	-4.8	-0.6	-1.45
635801		-134.3	-131.3		3	0.94
635912		-340.9	-341.5		-0.6	
641102		-103.1	-102.8		0.3	0.06
641310		-38.1	-43.5		-5.4	-0.30
641613	-85.12	-100.5	-99.9	-15	0.6	-2.23
641703		-305.5	-305.7		-0.2	0.52

Armstrong, Carson and Potter Counties Dockum Aquifer						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
641802		-98.9	-98.8		0.1	4.06
641803		-130.2	-133.2		-3	-0.92
641931		-62.7	-67.4		-4.7	-1.08
642405		-144	-152.9		-8.9	
642409		-67.3	-68.1		-0.8	-0.52
642502		-77.6	-76.6		1	0.04
642703		-96.2	-100.8		-4.6	-1.16
642714		-84.5	-88.5		-4	-0.40
642719		-138.5	-128.8		9.7	2.24
643301	-479	-487	-486	-7	1	0.90
643421		-178.2	-177.9		0.3	0.73
643602		-319.4	-319		0.4	0.28
643606		-268.5	-268.2		0.3	0.50
644162			-484.9			-1.32
644608	-418	-429.1	-428.8	-11	0.3	0.32
644656	-433	-437	-438.1	-5.1	-1.1	-1.16
644701	-252.5	-250.1	-249.9	2.6	0.2	0.28
644763	-233.1	-237.3	-238.9	-5.8	-1.6	-0.32
644766	-226.2	-229.7	-232.3	-6.1	-2.6	-0.96
644767		-263.9	-265.4		-1.5	-0.30
644768		-269.2	-268.9		0.3	0.62
644853	-305.2	-302.1	-301.3	3.9	0.8	0.38
644906		-349.7	-349.3		0.4	-0.02
644959	-221.5	-221.3	-221.3	0.2	0	-0.04
645701	-387.5	-388.5	-388.2	-0.7	0.3	-0.06
645804	-323.9	-325.8	-325.7	-1.8	0.1	0.02
649201		-113.8	-112.6		1.2	0.24
649203		-104	-107.5		-3.5	-0.32
649204		-121.9	-128		-6.1	-0.68
649311		-60	-56		4	0.58
650209		-205.1	-203.2		1.9	5.94
650604		-198.8	-196.3		2.5	1.02
651102		-174.6	-176.8		-2.2	-0.10
651301		-208.7	-208.6		0.1	0.10
651601		-193.4	-193.4		0	0.30
652101	-189.4	-191.4	-191.3	-1.9	0.1	-0.28
652301	-202.7	-199.6	-199.2	3.5	0.4	0.14
652501	-203.9	-200.2	-200.7	3.2	-0.5	0.22
652508	-203.7	-202.7	-201.6	2.1	1.1	0.72
652603		-169.8	-170		-0.3	-0.28
652704		-171.3	-172.2		-0.9	-0.24
652707		-221.6	-219.8		1.8	0.30
652801	-171.2	-172.3	-173.2	-2	-0.9	-0.14
652906	-114.3	-118.6	-120.4	-6.1	-1.8	-0.97
653403	-181.3	-182	-181.7	-0.4	0.3	-0.06
653703	-183	-183.3	-183.6	-0.6	-0.3	0.06
653704	-175.6	-181.5	-175.4	0.2	6.1	0.70
654701	-257	-252.3	-252.7	4.3	-0.4	0.00
654752		-184.7	-184.1		0.6	0.36

Armstrong, Carson and Potter Counties
Dockum Aquifer 5 Year Average Change



Armstrong, Carson and Potter Counties
Dockum Aquifer

Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
654902	-314.6	-315.8	-319.5	-4.9	-3.7	
660106	-211.5	-211.8	-214.2	-2.7	-2.4	-0.12
660205		-162.3	-162.2		0.1	0.18
660502	-156.2	-151.9	-152.1	4.1	-0.2	0.10
660701	-188.2	-185.1	-186.1	2.1	-1	0.22
660902	-215.5	-211.3	-210.4	5.1	0.9	-0.48
661101	-158.7	-151.5	-152.4	6.3	-0.9	0.16
661204	-167	-165.5	-165.2	1.8	0.3	0.26
661301	-158.1	-157.8	-157.4	0.7	0.4	0.42
661311	-174.1	-175.3	-175.3	-1.2	0	-0.02
661601	-170.3	-171	-169	1.3	2	0.08
661608	-165.8	-161.9	-165.5	0.3	-3.6	-0.52
661801	-164.1	-162.6	-163.6	0.5	-1	0
661802	-156.8	-155.6	-155.7	1.1	-0.1	0.04
662101	-210.2	-224.5	-207.7	2.5	17	1.16
662107		-184.1	-188.6		-4.5	-2.72
662402	-146.1	-146.5	-146.9	-0.8	-0.4	0.06
731301		-19.4	-22.1		-2.7	-0.16
731602		-191.3	-191.3		0	0.24
731903		-23.4	-24.2		-0.8	-0.07
732302		-57.1	-54		3.1	-0.30

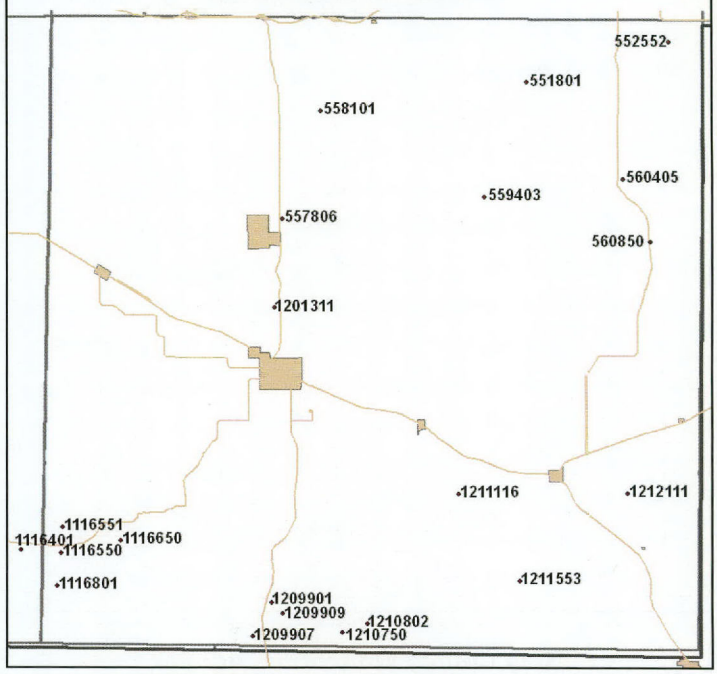
Armstrong, Carson and Potter Counties
Dockum Aquifer

Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
732401		-38.8	-37.4		1.4	-1.70
732402		-3.3	-4.2		-0.9	1.30
732501			-63.5		-64	0.07
732602		-39.5	-40.7		-1.2	-0.22

Armstrong, Carson and Potter Counties Dockum Aquifer						
Well Number	Depth to Water, in feet			Water Level Difference		Data Used to Map Charts
	2000	2009	2010	10 yr	1 yr	5 Year AVG Difference
732701			-37			-3.10
732801		-132.1	-132.3		-0.2	-0.02
732901		-166.7	-169.8		-3.1	0.06
739301		-4.4	-5.1		-0.7	-0.16
740102			-25			0.13
740301			-165.4			-0.40
740402		-85.7	-85.9		-0.2	-0.14
740403		-61	-60.9		0.1	0.06
740503		-30.2	-31.4		-1.2	-0.60
740504		-25.1	-25.4		-0.3	0.08
740601		-73.1	-75.6		-2.5	-0.80
745502			-82.8			
747301			-44.3			-1.02
747601		-41.8	-41.9		-0.1	-0.20
747602		-85.8	-85.5		0.3	1.54
747901		-119.3	-117.6		1.7	-0.45
748101		-110.8	-109.3		1.5	0.06
748103		-40	-40		0	0.34
748201			-137.6			0.10
748202		-5.3	-7.8		-2.5	-0.34
748301		-70.1	-76.4		-6.3	-3.31
748401		-53.6	-45.1		8.5	-0.54
748402		-27.4	-26.8		0.6	-0.14
748502			-82.8		-83	-0.27
748601		-129.3	-129.1		0.2	3.00
748701		-82.8	-82.5		0.3	-0.16
748702		-48.5	-45.1		3.4	-1.54
748801		-40.1	-41.9		-1.8	0.38
1104101	-202.4	-201.9	-199.8	2.6	2.1	0.53
1104301	-304.1	-302	-302.4	1.7	-0.4	0.22
1105101	-186.5	-183.6	-183.4	3.1	0.2	0.48
1105102	-160.6	-160.7	-161.2	-0.6	-0.5	0.02
1105104		-174.4	-174.8		-0.4	0.08
1105301	-158.2	-157	-156.8	1.4	0.2	0.24
1106101	-176.4	-173.3	-175	1.4	-1.7	0.12
1106201	-160.4	-159.3	-159.8	0.6	-0.5	0.18
1106804	-226		-220.3	5.7		1.00
1107750		-121.4	-121.6		-0.2	-0.40

Armstrong and Donley Counties Whitehorse Aquifer					
Well Number	Depth to Water, in feet			Water Level Difference	
	2000	2009	2010	10 yr	1 yr
551801	-92.1	-91.31	-93.1	-1	-1.79
552552	-95.4	-96.2	-96.5	-1.1	-0.3
557806			-39		
558101			-107.8		-107.8
559403			-82.4		-82.4

Armstrong and Donley Counties Whitehorse Aquifer Well Locations

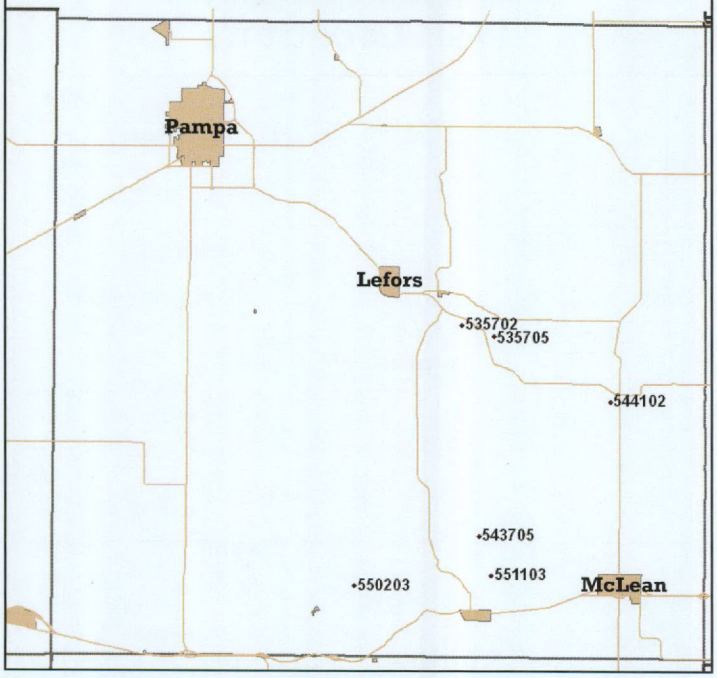


Armstrong and Donley Counties Whitehorse Aquifer Cont'd					
Well Number	Depth to Water, in feet			Water Level Difference	
	2000	2009	2010	10 yr	1 yr
560405	-48	-47.6	-30.7	17.3	16.9
560850		-124	-98.5		25.5
1116401		-65.8	-57.4		8.4
1116550		-122.1	-119.6		2.5
1116551		-124.5	-128.9		-4.4
1116650		-5.6	-6.2		-0.6
1116801		-47.5	-49.5		-2
1201311			-124.1		
1209901	-60.5	-65.6	-62.6	-2.1	3
1209907		-33.2	-35.5		-2.3
1209909			-156		
1210750			-55.9		
1210802		-129.7	-131.2		-1.5
1211116			-112.4		
1211553		-23.1	-23.8		-0.7
1212111		-59.5	-59.8		-0.3

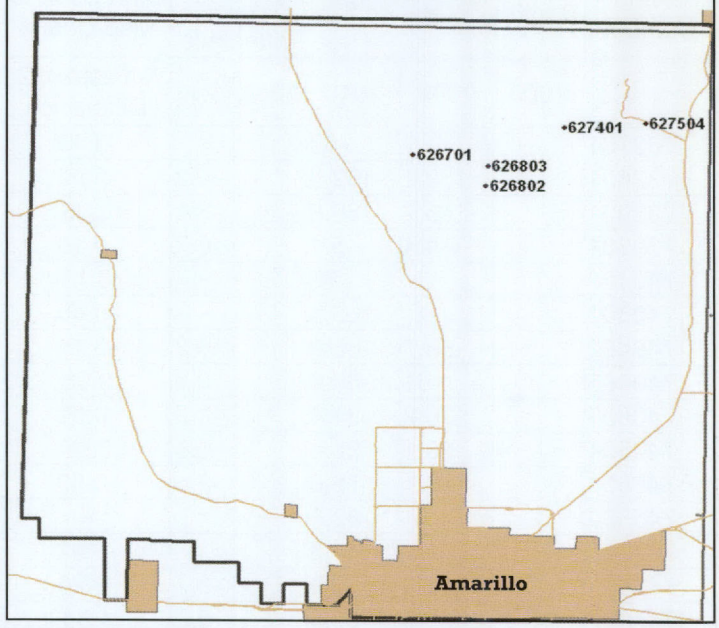
GMA continued from page 2

DFC's for the Dockum and Blaine Aquifers. After the hearing, the GMA 1 meeting convened and the DFCs for the two aquifers were voted on by the members. The DFC for the Dockum Aquifer was set to allow no more than 30 feet average decline in the water levels over the next 50 years. The DFC for the Blaine Aquifer was set at 50 percent of the saturated thickness remaining in 50 years.

Gray County Whitehorse Aquifer Well Locations



Potter County Whitehorse Aquifer Well Locations



Gray County Whitehorse Aquifer

Well Number	Depth to Water, in feet			Water Level Difference	
	2000	2009	2010	10 yr	1 yr
535702	-20.9	-21.1	-21.3	-0.4	-0.2
535705	-38.4	-37.9	-41.8	-3.4	-3.9
543705	-102.9	-104.8	-105.5	-2.6	-0.7
544102	-138.6	-140.1	-104.2	34.4	35.9
550203	-58.8	-59.2	-55.8	3	3.4
551103	-136.9	-134.7	-134.3	2.6	0.4

Potter County Whitehorse Aquifer

Well Number	Depth to Water, in feet			Water Level Difference	
	2000	2009	2010	10 yr	1 yr
626701		-43.4	-38.6		4.8
626802			-48.4		
626803		-37.2	-40.7		-3.5
627401		-116.6	-116.9		-0.3
627504		-28	-27.8		0.2

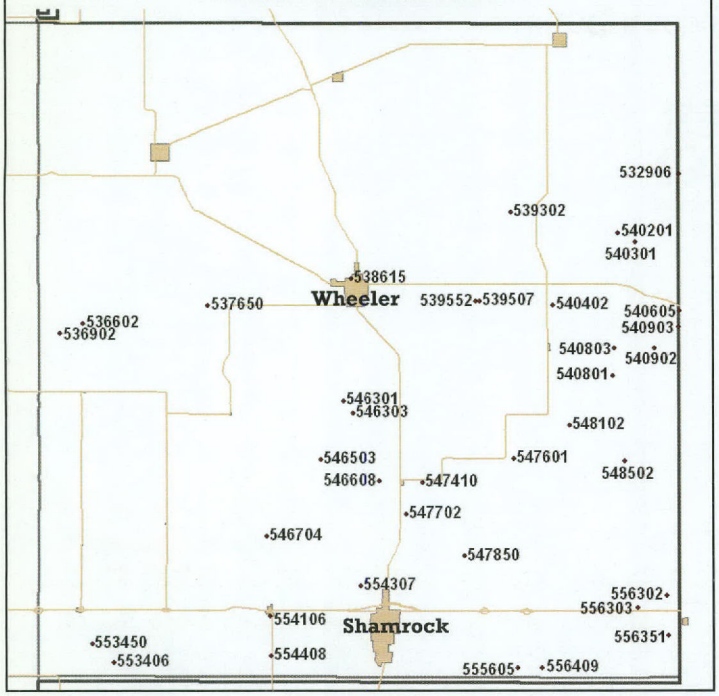
Wheeler County Blaine and Whitehorse Aquifer

Well Number	Depth to Water, in feet			Water Level Difference	
	2000	2009	2010	10 yr	1 yr
532906		-17.3	-15.8		1.5
536602		-35.7	-35.7		0
536902			-23.4		
537650	-8.6	-10.1	-10	-1.4	0.1

Wheeler County Blaine and Whitehorse Aquifer

Well Number	Depth to Water, in feet			Water Level Difference	
	2000	2009	2010	10 yr	1 yr
538615		-35	-35.4		-0.4
539302		-51	-50.7		0.3
539507		-28.2	-28.4		-0.2
539552	-23.6	-26	-26.7	-3.1	-0.7
540201	-13.4	-5	-5.2	8.2	-0.2
540301	-36.4	-35.9	-32.1	4.3	3.8
540402		-39.7	-39.5		0.2
540605	-47.1	-42.7	-42.4	4.7	0.3
540801	-20.2	-18.2	-18.2	2	0
540803	-10.4	-6.2	-6	4.4	0.2
540902	-34.7		-48.6	-13.9	
540903	-61.7	-58	-59.9	1.8	-1.9
546301	-8.5	-12.7	-13	-4.5	-0.3
546303	-8.4	-9.3	-10	-1.6	-0.7
546503		-38.3	-38.1		0.2
546608	-23.5	-34.9	-35.2	-11.7	-0.3
546704	-88.5	-103.6	-104.1	-15.6	-0.5
547410	-23.9	-23.3	-25.4	-1.5	-2.1
547601	-47.3	-50.9	-51	-3.7	-0.1
547702	-31.8	-40.1	-39.6	-7.3	0.5
547850		-96.2	-97.3		-1.1
548102	-41.3	-52.7	-45.9	-4.3	6.8
548502	-32.9	-36.6	-33.2	-0.3	3.4
553406			-7.8		
553450		-39.7	-37.9		1.8
554106	-50.7	-55.13	-56.8	-6.1	-1.67
554307			-53.4		
554408		-85.6	-86.3		-0.7

Wheeler County Blaine and Whitehorse Aquifer Well Locations



Wheeler County Blaine and Whitehorse Aquifer					
Well Number	Depth to Water, in feet			Water Level Difference	
	2000	2009	2010	10 yr	1 yr
555605	-80.4	-81.4	-85.7	-5.3	-4.3
556302	-30.6	-4.7	-7	23.6	-2.3
556303		-33	-35		-2
556351		-56.8	-60.7		-3.9
556409	-40.6	-45.7	-50.6	-10	-4.9

Education continued from page 2

developed by teachers and the Texas Water Development Board to introduce fourth graders to Texas' major water resources, how water is treated and delivered to their homes and schools, how to care for water resources, and how to use them wisely.

In addition to the education of our fourth and fifth grade students, District personnel were very busy manning informational booths at events throughout the District. We participated in the Amarillo Farm and Ranch Show, High Plains Irrigation Conference, Expiring CRP meetings, agriculture days, health fairs and science fairs; providing information and answering questions. Throughout the year, C. E. Williams, Amy Crowell, Jennifer Wright, Brenda Gillespie and Anita Haiduk gave numerous presentations to various groups, civic clubs and organizations, throughout District and around the state. These presentations included information about the District, regional planning, water conservation, the Ogallala Aquifer, creating a district or annexation, and economics and impacts of groundwater. Williams was also interviewed by local radio, television and newspaper reporters.

PGCD will continue to focus on education as a resource to increase water conservation throughout our District. Education applies to everyone and increased knowledge can lead to increased water savings.

PGCD Awarded Two TWDB Grants

The 2010 Texas Water Development Board (TWDB) grant competition was a big success for Panhandle Groundwater Conservation District. TWDB received 15 proposals vying for the $600,000 available in grant money to fund agricultural water conservation projects across the state. TWDB awarded $453,288 to fund eight projects, with PGCD receiving $190,675 of that money for two projects. The first project will allow PGCD to install meters in Study Areas free to the producers.

PGCD will also be starting a new Water Efficiency and Verification Program with grant money that provided for three new ultrasonic flow meters. These flow meters will be used to perform flow tests to help producers determine flow rates, and verify that meter data is accurate and correct. If you are interested in a free meter and have a well that produces more than 25,000 gallons per day in a Study Area, please contact the District.

The 2009 grant awarded by TWDB was used to conduct a study with Texas Tech University on the economic impacts of the 50/50 management standard. This study is scheduled to be completed in 2010. Past grants from TWDB have allowed PGCD to install approximately 140 meters for free across the District, and cost share 20 telemetry systems for center pivots. All of this information will be helpful to analyze water use patterns in the District.

1.67% Interest on New Agricultural Water Conservation Equipment Loans

If you are thinking about purchasing a new or another sprinkler unit this might be the right time. The District has obtained a new interest rate for agricultural water conservation equipment loans from the Texas Water Development Board. The new rate will be 1.67% to producers. At this interest rate loans of up to $125,000 can be made for up to 7 years. If you are interested in this please contact Brenda Gillespie at the Panhandle Groundwater Conservation District office.

DISTRICT OFFICE
201 W. Third St, PO Box 637
White Deer, TX 79097
Phone: 806/883-2501
FAX: 806/883-2162
Web Page: www.pgcd.us

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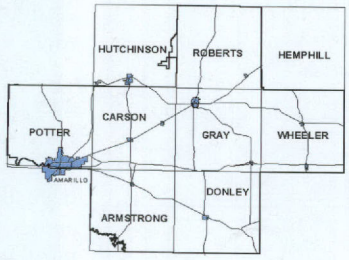

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