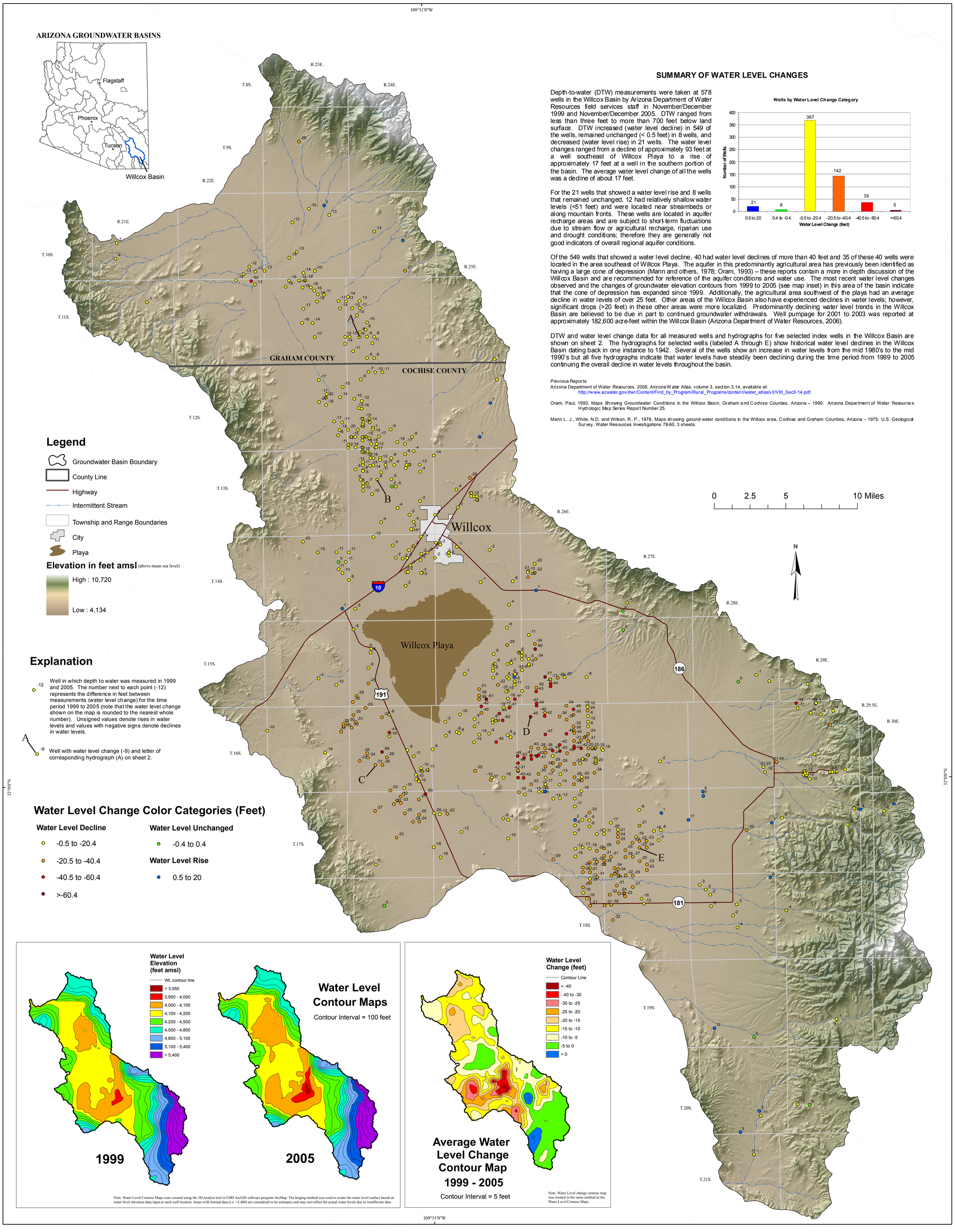

SUMMARY OF WATER LEVEL CHANGES

Depth-to-water (DTW) measurements were taken at 578 wells in the Willcox Basin by Arizona Department of Water Resources field services staff in November/December 1999 and November/December 2005. DTW ranged from less than three feet to more than 700 feet below land surface. DTW increased (water level decline) in 549 of the wells, remained unchanged (< 0.5 feet) in 8 wells, and decreased (water level rise) in 21 wells. The water level changes ranged from a decline of approximately 93 feet at a well southeast of Willcox Playa to a rise of approximately 17 feet at a well in the southern portion of the basin. The average water level change of all the wells was a decline of about 17 feet.

For the 21 wells that showed a water level rise and 8 wells that remained unchanged, 12 had relatively shallow water levels (<51 feet) and were located near streambeds or along mountain fronts. These wells are located in aquifer recharge areas and are subject to short-term fluctuations due to stream flow or agricultural recharge, riparian use and drought conditions; therefore they are generally not good indicators of overall regional aquifer conditions.

Of the 549 wells that showed a water level decline, 40 had water level declines of more than 40 feet and 35 of these 40 wells were located in the area southeast of Willcox Playa. The aquifer in this predominantly agricultural area has previously been identified as having a large cone of depression (Mann and others, 1978; Oram, 1993) – these reports contain a more in depth discussion of the Willcox Basin and are recommended for reference of the aquifer conditions and water use. The most recent water level changes observed and the changes of groundwater elevation contours from 1999 to 2005 (see map inset) in this area of the basin indicate that the cone of depression has expanded since 1999. Additionally, the agricultural area southwest of the playa had an average decline in water levels of over 25 feet. Other areas of the Willcox Basin also have experienced declines in water levels; however, significant drops (>20 feet) in these other areas were more localized. Predominantly declining water level trends in the Willcox Basin are believed to be due in part to continued groundwater withdrawals. Well pumpage for 2001 to 2003 was reported at approximately 182,600 acre-feet within the Willcox Basin (Arizona Department of Water Resources, 2006).

DTW and water level change data for all measured wells and hydrographs for five selected index wells in the Willcox Basin are shown on sheet 2. The hydrographs for selected wells (labeled A through E) show historical water level declines in the Willcox Basin dating back in one instance to 1942. Several of the wells show an increase in water levels from the mid 1980's to the mid 1990's but all five hydrographs indicate that water levels have steadily been declining during the time period from 1999 to 2005 continuing the overall decline in water levels throughout the basin.

Previous Reports:
Arizona Department of Water Resources, 2006, Arizona Water Atlas, volume 3, section 3.14, available at:
http://www.azwater.gov/dwr/Content/Find_by_Program/Rural_Programs/content/water_atlas/v3/VIII_Sec3-14.pdf.

Oram, Paul, 1993, Maps Showing Groundwater Conditions in the Willcox Basin, Graham and Cochise Counties, Arizona – 1990: Arizona Department of Water Resources Hydrologic Map Series Report Number 25.

Mann L. J., White, N.D. and Wilson, R. P., 1978, Maps showing ground-water conditions in the Willcox area, Cochise and Graham Counties, Arizona – 1975: U.S. Geological Survey, Water Resources Investigations 78-60, 3 sheets.

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ARIZONA DEPARTMENT OF WATER RESOURCES

HYDROLOGY DIVISION

WATER LEVEL CHANGES IN WILLCOX BASIN, ARIZONA 1999-2005

By
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Depth to Water (DTW) and Water Level Change (in feet) for wells located in the Willcox Basin with DTW (in feet) measured in 1999 and 2005.

CADASTRAL	WELL ID	DTW 1999	DTW 2005	WATER LEVEL CHANGE
D-09-23 21ABC2	323831109595501	24.5	52.3	-27.8
D-10-21 20ACA	323313110125001	723	729.6	-6.6
D-10-21 29ACB	323224110130601	635	638.9	-3.9
D-10-22 35AAA	323140110033501	283.4	295.8	-12.4
D-10-22 35CCC1	323055110042701	307.4	326.5	-19.1
D-10-22 35DBB	323113110035801	296	308.6	-12.6
D-10-22 36BDC2	323120110031101	272.4	284.9	-12.5
D-10-23 02CCA2	323522109580701	45	42.1	2.9
D-10-23 08DDD	323423110002801	363.2	375	-11.8
D-10-23 10BBA	323511109591401	393.6	403.3	-9.7
D-10-23 11ACC	323448109574701	389.7	402.5	-12.8
D-10-23 28BBA	323232110001501	293.1	306.4	-13.3
D-10-23 29ACD	323220110004501	280.7	295.3	-14.6
D-10-23 31BCB	323134110022401	249	262.4	-13.4
D-10-23 33CBB	323114110002201	295.3	310.4	-15.1
D-10-23 33DBA	323116109594301	300.4	314.8	-14.4
D-10-23 34ACB	323125109585201	322.3	332.7	-10.4
D-10-24 17DBD	323347109543501	613.3	627.2	-13.9
D-10-24 22ACA	323313109523301	241	239.6	1.4
D-10-24 34ADC	323122109522401	139.2	166.6	-27.4
D-11-21 11BCC	322936110105801	59.2	60.4	-1.2
D-11-22 01ACB	323041110031201	271.4	284.2	-12.8
D-11-22 01BAB	323051110032801	278.3	330.2	-51.9
D-11-23 03BBA	323051109593501	292.3	305.1	-12.8
D-11-23 03DAC	323013109585501	281.3	297.3	-16
D-11-23 03DBB	323024109591101	288.6	304.2	-15.6
D-11-23 04ABA	323051110000101	286.7	300.8	-14.1
D-11-23 04DAA	323024109594701	277.8	293.5	-15.7
D-11-23 05AAA	323048110004801	276.9	292.1	-15.2
D-11-23 05ADC	323003110005601	263.7	279.4	-15.7
D-11-23 10AAA	322956109584501	282.5	296	-13.5
D-11-23 10DAA	322931109584401	287	303.4	-16.4
D-11-23 11BAA	322958109581401	300.3	311	-10.7
D-11-23 12CAA	322930109571401	317.2	333.7	-16.5
D-11-23 12DAA	322930109564201	333	346.2	-13.2
D-11-23 13BAA	322905109571201	305.3	319	-13.7
D-11-23 15BBB	322905109593801	247	263.6	-16.6
D-11-23 21AAA	322810109595401	223.2	238.8	-15.6
D-11-23 22ABA	322814109590301	247.5	261.5	-14
D-11-23 25AAA	322620109564101	254.1	265.6	-11.5
D-11-23 25DAA	322654109564201	239.4	252.9	-13.5
D-11-23 27AAB	322722109585401	229.8	246.5	-16.7
D-11-24 07BBD	322947109563001	348.5	362.1	-13.6
D-11-24 07DAA	322931109554201	376.6	389.3	-12.7
D-11-24 18AAA	322904109553901	357.2	368.6	-11.4
D-11-24 18BAA	322904109561201	334.4	344.8	-10.4
D-11-24 18DAB	322840109555101	335.4	345.5	-10.1
D-11-24 19DAD	322746109554101	300.6	308.6	-8
D-11-24 20ABB	322813109550901	348.9	359.1	-10.2
D-11-24 20CAA	322748109551301	326.8	335.2	-8.4
D-11-24 29AAA	322719109543901	342.7	350.2	-7.5
D-11-24 29BAA	322719109551001	313.5	322.2	-8.7
D-11-24 29DAB	322654109545501	312.3	323.5	-11.2
D-11-24 30AAA	322718109554101	287.5	296	-8.5
D-11-24 30BAB	322722109562301	259.2	272.3	-13.1
D-11-24 31ABB	322627109560401	229.8	240.7	-10.9
D-11-24 32CAA	322601109551101	253.1	262.3	-9.2
D-11-24 32DAA	322601109544001	275	283.2	-8.2
D-11-25 35CAD	322555109460001	283.4	285.1	-1.7
D-12-23 11BBB	322441109583601	185.9	203	-17.1
D-12-23 12DBA1	322415109565401	202.9	217.9	-15
D-12-23 13BAD	322344109570301	193.8	207.5	-13.7
D-12-23 14ABB	322349109580601	180.5	197	-16.5
D-12-23 14ABC	322338109580601	163.1	195	-31.9
D-12-23 14CBB	322323109583601	168.5	188.5	-20
D-12-23 14DBC	322315109580801	177.4	195.2	-17.8
D-12-23 24CCC	322214109573401	164.8	181.3	-16.5
D-12-23 25ABB2	322207109570201	154.7	171.7	-17
D-12-23 25CAA	322144109571401	163.7	181.5	-17.8
D-12-23 25CDC2	322123109571901	141	148.7	-7.7
D-12-24 04CAA	322510109540501	251.6	262.2	-10.6
D-12-24 05ACC	322513109550401	189.1	196.4	-7.3
D-12-24 05DAA	322508109543501	230.6	241	-10.4
D-12-24 07AAA	322447109553701	196.8	206.2	-9.4
D-12-24 17CBB	322335109553001	180.2	192.5	-12.3
D-12-24 18ACB	322337109560201	187.8	203.4	-15.6
D-12-24 19AAB3	322059109555001	176.6	189.6	-13
D-12-24 20BBB1	322259109553101	177.4	193.1	-15.7
D-12-24 20CBC	322220109553201	165.3	180.5	-15.2
D-12-24 20DCB	322218109550001	154.4	169.7	-15.3
D-12-24 28ADD	322144109533301	161.7	170.5	-8.8
D-12-24 29ABB	322204109550801	159.6	173.1	-13.5
D-12-24 29ADC	322150109544801	150.9	165.3	-14.4
D-12-24 29BBB2	322206109553001	154.3	164.3	-10
D-12-24 29BBC	322202109553301	154.2	169	-14.8
D-12-24 29BCB	322156109553401	152.8	166.7	-13.9
D-12-24 29DBA	322140109550001	141.4	141.9	-0.5
D-12-24 30CBB	322143109563601	154.9	174.9	-20
D-12-24 30DBA	322143109555301	157.4	172.3	-14.9
D-12-24 31ABB1	322112109560301	147.4	159.3	-11.9
D-12-24 31BBA1	322112109562201	147.1	161.8	-14.7
D-12-24 31CBB	322048109563501	145.7	157.1	-11.4
D-12-24 31CCB2	322036109563501	145.2	156.8	-11.6
D-12-24 31DCB	322038109560601	140.9	155.3	-14.4
D-12-24 32ABB2	322113109550001	141.9	156.5	-14.6
D-12-24 32BBA	322113109552301	142.7	157.5	-14.8
D-12-24 32BBB2	322114109553301	144.9	157.8	-12.9
D-12-24 32BCB	322101109553001	140.3	152	-11.7
D-12-24 32CCB	322038109553501	139	157.7	-18.7
D-12-24 32DBA	322051109545701	133.6	151.9	-18.3
D-12-24 32DDA	322033109543701	132.6	149.4	-16.8
D-12-24 33BBA	322117109542401	135.2	151.9	-16.7
D-12-24 33CBB2	322051109543401	130.7	148.3	-17.6
D-12-24 33CCB	322037109543401	129.7	141.3	-11.6
D-12-24 34BDD2	322055109530501	125.7	144.3	-18.6
D-12-24 34DAA	322048109523101	134.1	150.7	-16.6
D-12-24 35BAA	322110109520401	182.7	192	-9.3
D-12-25 11ABB	322439109455201	168.5	185	-16.5
D-12-25 14CBC	322315109462201	225.2	218.3	6.9
D-12-25 34BAB	322112109470901	48.4	47.5	0.9
D-13-24 01ADA	322007109502901	150.5	164.4	-13.9
D-13-24 02ABB2	322024109515501	102	105.6	-3.6
D-13-24 03ADA	322008109523401	122.8	131	-8.2
D-13-24 03CBB	321959109533201	127.1	136	-8.9
D-13-24 04CAB3	321959109542001	130	144.2	-14.2
D-13-24 04CAC	321952109541801	127.7	140.9	-13.2
D-13-24 05ABC	322014109550001	134.2	151.2	-17
D-13-24 05BAB2	322023109551301	125	141	-16
D-13-24 05BBB1	322025109553501	129.3	146.9	-17.6
D-13-24 05BBB2	322021109553501	135.2	150.9	-15.7
D-13-24 05CCB2	321941109553101	131.9	145.6	-13.7
D-13-24 05DBA	321959109545001	131.3	146.8	-15.5
D-13-24 05DBB	321959109545901	132.2	147.8	-15.6
D-13-24 07ACB2	321925109560501	133	138	-5
D-13-24 08ABA	321933109545001	127.3	140.9	-13.6
D-13-24 08ABB	321931109550301	127.1	141.1	-14
D-13-24 08BBB2	321933109553401	132.7	144.1	-11.4
D-13-24 08BCB	321914109553001	132.5	137.8	-5.3
D-13-24 08BCC1	321908109553401	129	137.1	-8.1
D-13-24 09ABB2	321933109535801	124.6	135.4	-10.8
D-13-24 09CAB2	321906109541601	122.3	133.4	-11.1
D-13-24 10BBA	321931109532301	122.6	129	-6.4
D-13-24 11AAA	321933109513001	123.8	136	-12.2
D-13-24 11BAB	321933109521401	109	116.7	-7.7
D-13-24 11BBA2	321933109522301	116.2	119.8	-3.6
D-13-24 11BBC2	321922109523001	110.8	115.5	-4.7
D-13-24 12CBB	321907109512801	89.9	93.4	-3.5
D-13-24 15BBB	321838109532801	110.2	115.5	-5.3
D-13-24 15CAB	321814109531401	96.4	100.9	-4.5
D-13-24 15CBB	321814109533101	98.2	98.6	-0.4
D-13-24 16BBB	321834109543001	117.4	125.6	-8.2
D-13-24 17BCB	321827109553401	118.9	124.7	-5.8
D-13-24 17BDB	321825109551701	117.9	124.7	-6.8
D-13-24 17CBB	321810109553401	114.8	122.1	-7.3
D-13-24 17CCB	321800109553501	105	115.1	-10.1
D-13-24 18AAB	321840109554301	123.4	129.5	-6.1
D-13-24 20ABB	321748109545801	79.9	89.8	-9.9
D-13-24 23DAA	321722109513001	66.8	69.6	-2.8
D-13-24 26CAB	321628109521501	61.7	66.6	-4.9
D-13-24 27BAA	321655109531201	71.8	75.5	-3.7
D-13-24 33BBA	321600109541601	64.8	68.8	-4
D-13-24 35BAA	321559109520401	54.6	58.6	-4
D-13-24 35CAA2	321537109520101	50.3	53.9	-3.6
D-13-24 35CAB	321538109520901	51	53.9	-2.9
D-13-25 09DCC	321844109475401	154.9	183.1	-28.2
D-13-25 17DCB	321000109485501	97.3	101.5	-4.2
D-13-25 21AAC	321736109473801	115.2	127.2	-12
D-13-25 21ABB	321747109475401	128.8	140.5	-11.7
D-13-25 21ACB	321736109475301	117	128.2	-11.2
D-13-25 21ADA	321732109472401	124.9	136.7	-11.8
D-13-25 22CBB	321720109472301	98	101	-3
D-13-25 29ABA	321654109484701	47.6	50.8	-3.2
D-13-25 30CBB2	321627109502101	48.3	51	-2.7
D-14-23 04ADB	321457109595501	207.1	227.3	-20.2
D-14-23 10AAB	321415109585701	327.8	338.2	-10.4
D-14-23 12AAA	321415109564001	205.3	216	-10.7
D-14-23 12BBB2	321414109573001	257.8	268.9	-11.1
D-14-23 12CBD	321340109573001	178.7	178.8	-0.1
D-14-23 12DDB	321340109565301	204.8	216	-11.2
D-14-23 13BBD	321314109573001	206.1	216.8	-10.7
D-14-23 13CAA	321258109571501	183.3	192.8	-9.5
D-14-23 24AAA	321232109564001	145.8	154.7	-8.9
D-14-23 36BAA2	321049109570801	84.6	84	0.6
D-14-24 01BBB	321511109512701	42.1	45.6	-3.5
D-14-24 02CAD	321435109520401	38.6	40.7	-2.1
D-14-24 02CCD3	321420109522201	37.1	39.5	-2.4
D-14-24 03CBB	321439109532801	46.8	49.5	-2.7
D-14-24 05ABA	321509109545101	92.4	103.9	-11.5
D-14-24 10BCD	321354109531801	38.1	40.3	-2.2
D-14-24 10DBA	321350109524701	37.2	39.4	-2.2
D-14-24 11CBB2	321353109522901	34.7	37.1	-2.4
D-14-24 11DAD	321314109513101	27.1	29.4	-2.3
D-14-24 12BAD	321412109510101	28.5	30.6	-2.1
D-14-24 12BBC	321407109512601	30.6	32.6	-2
D-14-24 12DAA	321352109502901	22.2	24.2	-2
D-14-24 13CBB2	321257109512801	26.4	29.7	-3.3
D-14-24 13CBB3	321259109512801	25.1	28.3	-3.2
D-14-24 14BBA2	321323109521701	31.7	33	-1.3
D-14-24 14CBB	321258109522401	26.2	28.3	-2.1
D-14-24 15ADD	321301109523101	26.2	28.2	-2
D-14-24 22ADD	321210109523501	20.7	22.2	-1.5
D-14-24 31BAB	321047109561201	51.6	54.6	-3
D-14-25 05DCB	321432109485301	19	20	-1

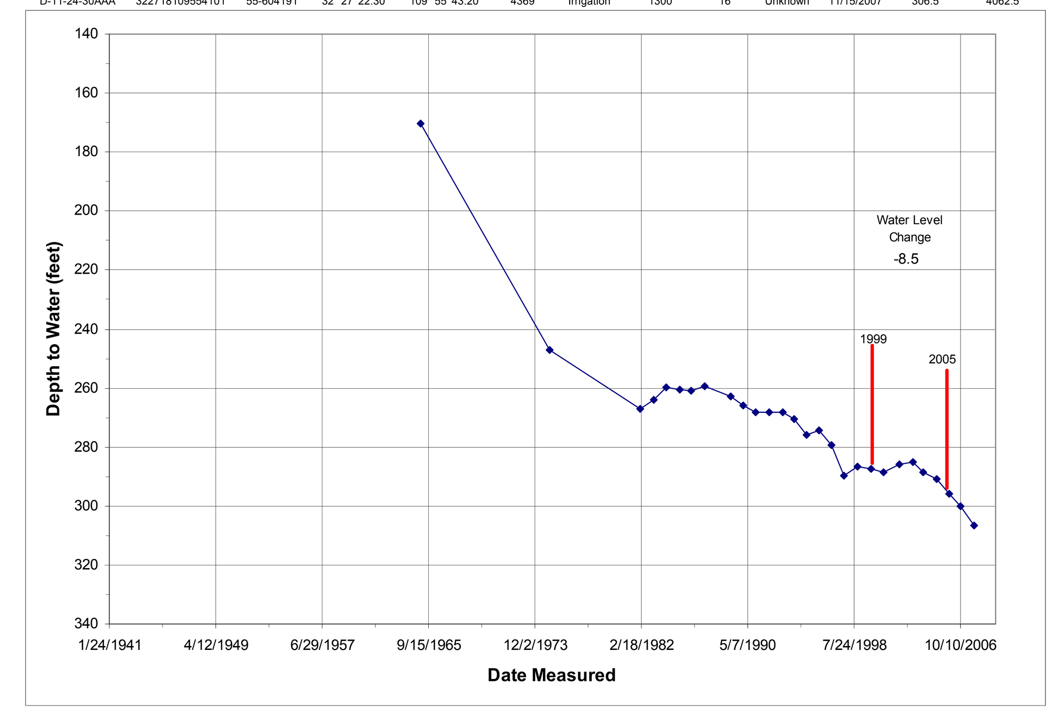
CADASTRAL	WELL ID	DTW 1999	DTW 2005	WATER LEVEL CHANGE
D-14-25 06BCC2	321447109502501	26.6	28.7	-2.1
D-14-25 06CAA	321440109500501	26.5	28.5	-2
D-14-25 07AAD2	321410109492901	17	18.2	-1.2
D-14-25 07ADD	321400109492701	15.1	18.3	-3.2
D-14-25 08BBB	321413109492701	16.3	18.5	-2.2
D-14-25 10AAB	321414109463201	44.9	47	-2.1
D-14-25 22BBD2	321221109471301	27.4	28.5	-1.1
D-14-25 24BAD	321223109445601	63.3	69.4	-6.1
D-14-25 25CCC	321057109451301	51.5	55.8	-4.3
D-14-26 18AAA	321324109432201	230.3	249.8	-19.5
D-14-26 18CAA1	321303109435201	208.7	229.4	-20.7
D-14-26 18CAA2	321257109434801	103.4	113.2	-9.8
D-14-26 18CDD	321239109434901	113.2	135.5	-22.3
D-14-26 18DAD	321251109432001	237.6	259.8	-22.2
D-14-26 20CCB	321148109431101	236.1	234.7	1.4
D-14-27 29CDA	321100109364401	39	47.5	-8.5
D-14-27 32BCB	321030109370301	47.8	48.2	-0.4
D-15-23 22DDC2	320634109585301	300	307.1	-7.1
D-15-23 25BCB	320612109573801	260.8	270.4	-9.6
D-15-24 06BCD	320936109562401	72.1	77.1	-5
D-15-24 08CDA	320830109550901	64.1	69.1	-5
D-15-24 17BAA	320808109550901	75.5	81.5	-6
D-15-24 20BAC	320714109551801	127.3	136.7	-9.4
D-15-24 29BCA	320615109552101	174.5	199.1	-24.6
D-15-24 31BAD	320530109561001	236.8	266	-29.2
D-15-24 31CBA	320508109562601	245.9	276.1	-30.2
D-15-24 32CCC	320445109553401	221	250.3	-29.3
D-15-25 02ADD	320934109452301	31.6	37.2	-5.6
D-15-25 11DAD	320842109452101	170.1	199.4	-29.3
D-15-25 13AAD	320802109442201	65.9	71.7	-5.8
D-15-25 13ADB	320802109443401	57.6	63.3	-5.7
D-15-25 13ADD1	320750109442001	65	70.6	-5.6
D-15-25 13CCD	320723109450701	59.6	66.7	-7.1
D-15-25 13DDA	320736109442101	66.2	69.5	-3.3
D-15-25 14BCB	320758109462201	24.8	30.5	-5.7
D-15-25 20DAD	320647109482501	20.31	20.97	-0.66
D-15-25 22ADA	320706109462501	38.9	47.9	-9
D-15-25 22ADD	320657109462401	45.2	52.8	-7.6
D-15-25 22DDD	320632109462401	26.5	32.3	-5.8
D-15-25 23AAA	320721109452201	51.73	61.2	-9.47
D-15-25 23BBB	320722109461601	44.6	52.36	-7.76
D-15-25 23DDD	320633109452501	59.8	68.1	-8.3
D-15-25 24ADD1	320658109442102	73.6	78.4	-4.8
D-15-25 24ADD2	320658109442101	232.1	266.5	-34.4
D-15-25 24CDA	320642109445201	77.2	84.9	-7.7
D-15-25 24CDD	320631109445301	79.1	76.3	2.8
D-15-25 25BBB	320627109451701	65.3	72.1	-6.8
D-15-25 25BDA	320616109445501	70.5	78.3	-7.8
D-15-25 25BDD	320611109445401	70.2	81.6	-11.4
D-15-25 25DDD2	320541109442101	81.4	93.3	-11.9
D-15-25 26BDC	320605109460401	39.7	62.17	-22.47
D-15-25 26DDD1	320544109452401	55.5	70.4	-14.9
D-15-25 26DDD2	320543109452301	221.2	257.9	-36.7
D-15-25 28DAD	320550109472501	103.6	124.71	-21.11
D-15-25 33AAD	320526109472501	185.8	223.9	-38.1
D-15-25 33ADD	320513109472501	184.8	223.2	-38.4
D-15-25 34BDD2	320513109465401	71.3	131.9	-60.6
D-15-25 34CCD	320447109471601	185.6	227.5	-41.9
D-15-25 35ADD2	320514109452201	59.16	75.56	-16.4
D-15-25 36BDD	320516109445401	239.3	280.6	-41.3
D-15-26 07ABB	320905109435001	95.3	105.9	-10.6
D-15-26 07DAD	320833109432201	261.2	294.7	-33.5
D-15-26 18AAA	320812109432201	201.2	291.6	-90.4
D-15-26 18CAD	320738109435101	87.3	89.8	-2.5
D-15-26 18DAD	320737109432001	259.4	293.3	-33.9
D-15-26 19BAA	320720109435101	79.3	83.9	-4.6
D-15-26 19BAD	320712109435301	79.9	86.7	-6.8
D-15-26 20DCC	320633109423801	192.8	269.3	-76.5
D-15-26 23DCC2	320633109393901	330.9	338.5	-7.6
D-15-26 28AAA	320630109411801	312.6	332.1	-19.5
D-15-26 28BAA	320628109414801	324.1	350.4	-26.3
D-15-26 29AAD	320618109422001	312.8	329.7	-16.9
D-15-26 29ADD	320606109421901	308.1	350.1	-42
D-15-26 29CCB	320554109431801	269.4	299	-29.6
D-15-26 29DAD	320557109421901	305.7	349.2	-43.5
D-15-26 30DDD2	320540109432001	268.4	311	-42.6
D-15-26 31DDD	320451109432401	285.9	329.9	-44
D-15-26 32CCB	320458109431801	286.2	329.6	-43.4
D-15-27 05CCB	320918109370501	471	471.1	-0.1
D-15-28 23CDC	320630109273801	533.6	534.7	-1.1
D-15-28 25BDC	320608109264001	121.8	122.6	-0.8
D-15-28 27CBB	320603109285201	431.6	431.6	-0
D-15-29 29DAD	320553109235701	33.6	35.7	-2.1
D-16-22 12DAA	320325110023701	289.1	298.8	-9.7
D-16-23 12AAB	320351109565301	274.6	304.8	-30.2
D-16-23 12ABC	320346109570801	283.9	313.3	-29.4
D-16-23 12ACB	320337109570801	287.9	318	-30.1
D-16-23 12CAD	320320109571001	305.3	335.9	-30.6
D-16-23 23BAB	320204109582501	396.5	415.3	-18.8
D-16-24 03BCC	320420109535201	69.1	76.7	-7.6
D-16-24 04DBC	320410109542001	168.6	201.5	-32.9
D-16-24 06ACC	320422109564001	253.7	283.6	-29.9
D-16-24 06DCD	320354109561601	266	297	-31
D-16-24 07BDC	320334109563501	274.1	305.8	-31.7
D-16-24 10CBC	320315109535101	168.1	208.9	-40.8
D-16-24 14CCD	320210109523601	61.5	70.6	-9.1
D-16-24 15BBB	320301109535201	115.5	134.9	-19.4
D-16-24 19DAD	320131109555701	254.6	281.7	-27.1
D-16-24 20ACC	320143109552501	228.1	261.9	-33.8
D-16-24 20BAD	320159109552901	232.5	267.3	-34.8
D-16-24 21ADC3	320142109540301	151.2	179.3	-28.1
D-16-24 21BAA	320203109542301	149.7	216	-66.3
D-16-24 21CCC	320119109545001	195.3	226.2	-30.9
D-16-24 21DCC	320117109542301	167.7	205.7	-38
D-16-24 23ACD	320147109520801	54.3	64.98	-10.68
D-16-24 25ACD	320057109510901	44.25	55.39	-11.14
D-16-24 25BBD	320104109513701	54.15	64.3	-10.15
D-16-24 25BDC	320051109513301	77.39	91.67	-14.28
D-16-24 26DAC	320040109520001	88.24	98.2	-9.96
D-16-24 34CCB	315941109535101	239.6	262.2	-22.6
D-16-24 35AAB3	320023109515901	100.4	110.4	-10
D-16-24 35CBB	315958109525101	173.2	188.7	-15.5
D-16-24 36BBC	320013109514801	105.9	115.44	-9.54
D-16-25 01BAA1	320441109451601	230.1	271.1	-41
D-16-25 01BAA2	340445109451301	71.6	88.13	-16.53
D-16-25 01BBB	320441109453901	57.73	77.08	-19.35
D-16-25 02ACD	320429109455901	214.7	259	-44.3
D-16-25 02CDC	320356109462701	77.1	83.3	-6.2
D-16-25 02DCC	320354109461201	81.3	91.9	-10.6
D-16-25 02DDD	320355109454401	115	174.8	-59.8
D-16-25 03BDD	320423109471601	198.8	238.5	-39.7
D-16-25 04DDA	320405109464801	73.4	82.5	-9.1
D-16-25 05DAA	320418109484801	60.72	71.11	-10.39
D-16-25 07AAA	320352109495101	35.9	38.4	-2.5
D-16-25 08DBD	320315109490301	63.5	71.1	-7.6
D-16-25 08DDA	320310109485301	62.81	70.61	-7.8
D-16-25 09ADD	320330109475101	76.34	77.8	-1.46
D-16-25 10CDC	320305109472501	70.88	88.44	-17.56
D-16-25 10DDD	320307109464501	74.6	83.95	-9.35
D-16-25 11BBA	320351109463101	78.31	88.3	-9.99
D-16-25 13BAB	320301109452501	170.7	175.8	-5.1
D-16-25 13BAD	320252109451301	112.1	118.4	-6.3
D-16-25 14BDD	320236109461601	220.1	264.8	-44.7
D-16-25 16ADD2	320237109475101	65.68	79.76	-14.08
D-16-25 18AAA	320301109495001	43.64	49.16	-5.52
D-16-25 18CCC	320212109504701	29.87	35.59	-5.72
D-16-25 24ADD	320143109444601	255.3	303.9	-48.6
D-16-25 24DDD	320121109444701	257.1	302.6	-45.5
D-16-25 25DAA1	320051109444301	215.1	245.9	-30.8
D-16-25 25DAA2	320049109444201	256.7	298.4	-41.7
D-16-25 26CCD	320027109463401	157.3	167	-9.7
D-16-25 26DDD	320026109454401	223.7	239.2	-15.5
D-16-25 28ADD	320051109474601	197.6	232.5	-34.9
D-16-25 35BBB	320018109463901	217.6	254.3	-36.7
D-16-25 36AAA	320022109444601	248.6	291.3	-42.7
D-16-26 02AAA1	320445109393901	288.2	304	-15.8
D-16-26 02AAA2	320446109393901	287.5	301.3	-13.8
D-16-26 02ADD	320435109394301	271.8	295.7	-23.9
D-16-26 02DDA	320407109394001	271.8	278.1	-6.3
D-16-26 03ADA	320433109404101	288.2	336.2	-48
D-16-26 03BAA	320443109411201	308.3	332.4	-24.1
D-16-26 03CDD	320355109411101	317	354.2	-37.2
D-16-26 03DAD	320910109404201	284.2	314.6	-30.4
D-16-26 04DDA	320406109414201	318.14	354.1	-35.96
D-16-26 05ADD2	320421109424301	309.7	349.7	-40
D-16-26 05DAD	320409109424501	309.4	351.6	-42.2
D-16-26 06DDA	320403109434701	275.1	320.2	-45.1
D-16-26 08DDD	320306109424701	312.35	359.4	-47.05
D-16-26 10ADD	320329109404401	324	355.7	-31.7
D-16-26 10CDD	320303109410601	343.7	389	-45.3
D-16-26 10DAD	320318109404101	336.3	374.2	-37.9
D-16-26 11AAD	320346109394001	264.3	276.6	-12.3
D-16-26 11ADD	320333109394301	274.2	280.3	-6.1
D-16-26 11CCC	320306109403801	344.8	385	-40.2
D-16-26 11DDD	320303109394001	319.9	343.5	-23.6
D-16-26 14ABD	320250109395501	350	388.3	-38.3
D-16-26 14ADD	320236109393901	338.9	374.5	-35.6
D-16-26 14BDD	320238109400901	353.4	378.8	-25.4
D-16-26 14DAA	320232109394201	343.3	374.2	-30.9
D-16-26 15ADD	320237109404101	356.6	387.7	-31.1
D-16-26 15DDA2	320217109404101	363.1	407	-43.9
D-16-26 16DAD	320223109414201	350	392.3	-42.3
D-16-26 17CDD	320212109431401	300	325.5	-25.5
D-16-26 17DDD	320211109424601	318.6	356.2	-37.6
D-16-26 18DDD	320215109434401	279	319.2	-40.2
D-16-26 19ADD	320145109434501	284.5	325.1	-40.6
D-16-26 19CAD	320137109441501	267.9	311	-43.1
D-16-26 19DAD	320132109434501	281.9	323.6	-41.7
D-16-26 20ADA1	320156109424301	321.6	362	-40.4
D-16-26 20BDD	320148109431401	301.8	342.8	-41
D-16-26 20CAB	320142109432401	296.9	339.2	-42.3
D-16-26 21AAD	320201109414101	296.4	389.1	-92.7
D-16-26 21BAD	320156109421201	336.4	378	-41.6
D-16-26 21CAA	320143109421201	296.9	300.6	-3.7
D-16-26 22AAA	320209109404101	359.6	401.2	-41.6
D-16-26 22BDD	320149109411201	346.9	387.2	-40.3
D-16-26 23AAA	320210109394001	345	373.2	-28.2
D-16-26 23ADD	320144109394201	348.6	368.9	-20.3
D-16-26 23BAA	320209109401101	358.1	399.6	-41.5
D-16-26 23DBC	320130109400901	346.5	365.4	-18.9
D-16-26 24AAA	320209109384101	328.4	346.7	-18.3
D-16-26 24AAD	320204109383801	327.4	345.1	-17.7
D-16-26 24BAA	320204109391101	336.4	358.1	-21.7

CADASTRAL	WELL ID	DTW 1999	DTW 2005	WATER LEVEL CHANGE
D-16-26 24BAB	320209109392201	336.4	356.5	-20.1
D-16-26 24CDA	320129109390801	327.5	347.5	-20
D-16-26 24CDD	320123109391001	329	345.3	-16.3
D-16-26 25BAA	320118109391001	325.8	345.9	-20.1
D-16-26 25CAD	320041109391001	322.4	356.8	-34.4
D-16-26 26BAA2	320115109401001	332.1	352.3	-20.2
D-16-26 27AAA	320111109404301	329.3	352.3	-23
D-16-26 28AAD	320109109414101	312.8	340.7	-27.9
D-16-26 28BAA	320117109421301	314	343.2	-29.2
D-16-26 28CAA	320052109421101	292.4	332.6	-40.2
D-16-26 28DDA	320036109414101	281.5	294.5	-13
D-16-26 29ADA	320104109424501	294.7	327.2	-32.5
D-16-26 29CAD	320038109431701	277.4	307.6	-30.2
D-16-26 31ADD	320000109434401	244.6	266.6	-22
D-16-26 31BAA	320022109441601	256.7	298.9	-42.2
D-16-26 32AAA	320022109424601	274	291.2	-17.2
D-16-26 32ADD	320000109424301	254.3	271.6	-17.3
D-16-26 32DAA	315954109424301	250.9	267.7	-16.8
D-16-26 33DAA2	315957109414501	267.4	281.3	-13.9
D-16-26 34AAA	320020109404401	289	314.5	-25.5
D-16-26 34DAA	315955109404101	269.4	304	-34.6
D-16-26 35BAA	320023109401301	295	315.1	-20.1
D-16-26 35BAD	320011109400901	284.4	308.3	-23.9
D-16-27 27AAA	320116109343301	213.6	215.4	-1.8
D-16-28 25BCD1	320052109271001	185.9	205.7	-19.8
D-16-28 25BCD2	320051109271001	186.1	206.9	-20.8
D-16-28 25CDB	320040109270601	270.7	286.7	-16
D-16-29 02CBA	320414109220801	6.3	10.2	-3.9
D-16-29 03CDB	320402109230201	32	36.2	-4.2
D-16-29 04AAA1	320442109235401	32.6	58.9	-26.3
D-16-29 04AAA3	320441109232002	45.9	49.4	-3.5
D-16-29 04DBC	320406109234301	28.1	33.9	-5.8
D-16-29 05ABB	320443109244701	142.7	190.6	-47.9
D-16-29 05ACD	320424109244001	32	42.5	-10.5
D-16-29 10DAA	320322109222201	74.5	103.5	-29
D-16-29 21DAC	320136109233001	196.6	201.5	-4.9
D-16-29 26CCC2	320029109221601	14.8	17.6	-2.8
D-16-29 26CDB	320032109215701	10.1	11	-0.9
D-16-29 26DAD1	320038109211901	25.6	27.4	-1.8
D-16-29 27DDA	320031109222501	19.9	21.7	-1.8
D-16-29 27DDD	320028109222001	18.3	21	-2.7
D-16-29 28CCB	320033109241701	14.4	28.1	-13.7
D-16-29 28CCC	320028109241601	20.1	32.9	-12.8
D-16-29 28CDC	320025109240301	9.9	21.9	-12
D-16-29 30BBD1	320109109261301	21.4	52.5	-31.1
D-16-29 30BBD2	320107109261201	19.2	53.1	-33.9
D-16-29 33BAB	320019109240601	20.4	32.6	-12.2
D-16-29 33BAD2	320011109235201	18.4	30	-11.6
D-16-29 33BBB	320022109242001	19.9	36.8	-16.9
D-17-24 01BAA	315930109512001	119.5	169.1	-49.6
D-17-24 01BCC	315909109514901	150	177.4	-27.4
D-17-24 03AAA	315929109525301	194.8	211.4	-16.6
D-17-24 03ABD	315919109530401	222	244.5	-22.5
D-17-24 03ACC	315906109532101	249.1	271	-21.9
D-17-24 03BDD	315907109532201	249	270.3	-21.3
D-17-24 03CCA	315852109534201	272.1	295	-22.9
D-17-24 03DBD	315854109530701	238.4	261.2	-22.8
D-17-24 08AAD2	315829109545501	375.6	402.1	-26.5
D-17-24 11BCC	315812109525101	260.3	285.6	-25.3
D-17-24 11DCC	315748109521501	260.2	285.9	-25.7
D-17-24 12BCC	315815109515101	221.4	247	-25.6
D-17-24 12CCC	315748109514801	238.2	261.7	-23.5
D-17-24 22BAA	315652109532701	352	374.4	-22.4
D-17-24 29DDD	315513109545701	219.8	226.4	-6.6
D-17-25 07ACC2	315814109501901	181.8	193.5	-11.7
D-17-25 07BCC	315818109504401	186.8	206.8	-20
D-17-25 08BCC2	315816109494501	159.1	180.6	-21.5
D-17-25 11DDA1	315750109454601	144.7	152.3	-7.6
D-17-25 12CDC	315752109452401	148.4	152.3	-3.9
D-17-25 16CBC	315709109484601	196.2	208.1	-11.9
D-17-25 19CCB	315611109504701	296.8	314.4	-17.6
D-17-25 24BDB	315642109452601	140.9	150.9	-10
D-17-25 30ACC	315538109501301	305.9	323.8	-17.9
D-17-26 02BAA	315930109401101	264	279.7	-15.7
D-17-26 03DAA	315907109404001	246.8	259.2	-12.4
D-17-26 04ADD1	315910109414501	255.7	269	-13.3
D-17-26 04BDD	315908109421201	254.5	268.4	-13.9
D-17-26 05AAA2	315931109424401	240	238.7	1.3
D-17-26 05AAA3	315931109424701	246.3	238.6	7.7
D-17-26 05AAB	315930109425501	244.9	259.2	-14.3
D-17-26 05BAA	315932109431401	242.1	257.1	-15
D-17-26 06BAD	315920109441601	224.9	239.8	-14.9
D-17-26 06BBB	315932109443901	241.9	277.2	-35.3
D-17-26 10AAA2	315835109404301	225	235.9	-10.9
D-17-26 11DAA	315813109394001	192.2	225.2	-33
D-17-26 13DAD	315710109383901	212.8	223.7	-10.9
D-17-26 14AAA	315745109393901	205.3	214	-8.7
D-17-26 14ABB	315748109400801	198.6	206.1	-7.5
D-17-26 14ADD	315719109394401	195.9	204.4	-8.5
D-17-26 15AAA	315744109404301	193.7	191.8	1.9
D-17-26 15ADD	315725109404301	188.4	194.7	-6.3
D-17-26 15DDD	315658109404101	177.2	185.7	-8.5
D-17-26 17CBA	315721109433001	459	476.4	-17.4
D-17-26 23CDD	315606109401201	171.7	184.7	-13
D-17-26 24AAA	315651109384001	214.6	226	-11.4
D-17-26 24BAA	315656109390701	197.7	208.3	-10.6
D-17-26 25AAA	315600109383901	217.5	245.4	-27.9
D-17-26 25BAD	315553109391001	187.8	212.6	-24.8
D-17-26 25CDD	315511109391001	191	217.3	-26.3
D-17-26 25DAA	315535109384201	221.9	253	-31.1
D-17-26 25DDA	315518109383701	214.4	249.4	-35
D-17-26 26AAA	315601109394001	178.9	195.2	-16.3
D-17-26 27AAA	315601109404101	165.6	177.8	-12.2
D-17-26 27DAA	315537109404101	161.8	177.9	-16.1
D-17-26 28CAD	315525109421501	17.2	46.5	-29.3
D-17-26 35AAA	315509109394001	185.5	208.9	-23.4
D-17-26 35ADA	315457109394401	200.5	218.5	-18
D-17-26 35BDA	315451109401001	170	194	-24
D-17-26 35CAD	315433109401001	163.8	192	-28.2
D-17-26 35DAD	315433109394101	204.1	225.5	-21.4
D-17-26 36AAA	315508109384001	208.3	246	-37.7
D-17-27 09BDA	315825109360501	291.1	296.7	-5.6
D-17-27 11CBB	315809109343001	187.7	186.5	1.2
D-17-27 13AAA	315743109323501	279.5	262.2	17.3
D-17-27 15CDD	315707109350501	259.6	275.2	-15.6
D-17-27 15DDA	315707109343501	240.4	248.8	-8.4
D-17-27 16BDD	315724109360501	246.1	266.8	-20.7
D-17-27 18BAD	315735109380901	212.3	229.5	-17.2
D-17-27 18DAD	315710109373901	222.1	242.5	-20.4
D-17-27 18DDD	315657109373701	223.9	244.9	-21
D-17-27 19AAD	315643109374001	228.4	252.1	-23.7
D-17-27 19DAA	315627109374001	230.8	255.3	-24.5
D-17-27 20DAA2	315626109363601	227.9	250.7	-22.8
D-17-27 21BAC	315642109362601	236.3	255.6	-19.3
D-17-27 21CAA	315628109360501	236	258.1	-22.1
D-17-27 21DAA	315627109353401	240.2	262.8	-22.6
D-17-27 22ADC	315630109344201	255.8	259.2	-3.4
D-17-27 28AAA	315559109353801	232.5	256.8	-24.3
D-17-27 28BAA	315602109360701	225.4	247.2	-21.8
D-17-27 28CDD	315514109361001	222.9	247.6	-24.7
D-17-27 29BAD	315551109370901	215.1	240.3	-25.2
D-17-27 29CAA	315533109371101	215.4	243.6	-28.2
D-17-27 29DAA	315531109363601	220.9	247.7	-26.8
D-17-27 30CAD	315528109381001	222.5	253.8	-31.3
D-17-27 31ACD	315444109375601	217	250.9	-33.9
D-17-27 31ADD2	315447109374001	219	252.8	-33.8
D-17-27 31CDD2	315421109380401	209.2	243.7	-34.5
D-17-27 31DCA	315428109375301	214.6	249	-34.4
D-17-27 31DDD	315420109374001	219.2	253.6	-34.4
D-17-27 32CDD	315421109371201	222.7	254.8	-32.1
D-17-27 32DDD	315422109364201	229.1	258.1	-29
D-17-27 33AAD	315510109353501	225.4	247.9	-22.5
D-17-27 33DAA	315440109353501	226.7	249.4	-22.7
D-17-28 06AAD	315920109313501	343.9	336	7.9
D-17-28 06ADD	315908109313001	343.9	336.9	7
D-17-28 13ADB	315727109263301	166.6	160.1	6.5
D-17-28 14CCB2	315702109282401	18.1	47.9	-29.8
D-17-29 12ACC1	315817109204301	16.7	20.5	-3.8
D-17-29 12ACC2	315818109204301	20.2	27.9	-7.7
D-17-29 12DAA	315812109201601	27.7	23.6	4.1
D-17-29 13CBB	315716109211001	7.2	9.3	-2.1
D-17-29 18BAA	315745109255301	43.8	49.6	-5.8
D-17-30 05CAD	315832109175301	39.7	37.5	2.2
D-17-30 07ABD	315805109183501	16.1	21.8	-5.7
D-18-24 09DCB	315241109542101	14.69	14.77	-0.08
D-18-26 01BAA	315418109390801	186.3	217.6	-31.3
D-18-26 02AAA	315413109394201	212.6	225.3	-12.7
D-18-26 02ADD	315354109394001	195.1	230.3	-35.2
D-18-26 02CAD	315341109400901	188.3	209.4	-21.1
D-18-26 11BAA	315322109401001	206.8	224.9	-18.1
D-18-26 11DBA	315300109395301	218.8	237.7	-18.9
D-18-26 12DDD1	315232109384001	202	238.9	-36.9
D-18-26 14AAA	315230109394201	222.3	243.4	-21.1
D-18-27 05DAD	315334109363601	222.8	244.2	-21.4
D-18-27 06DAA	315346109374301	210.9	241.5	-30.6
D-18-27 07BDB2	315313109381401	202.8	234.9	-32.1
D-18-27 07CDD2	315235109380801	211	246.1	-35.1
D-18-27 08BAC	315318109372101	213.2	237.1	-23.9
D-18-27 08BBC	315316109373501	208.8	235.3	-26.5
D-18-27 08BDA	315306109371001	214.8	237.6	-22.8
D-18-27 09DBB	315258109355901	228.4	243.9	-15.5
D-18-27 09DCD	315238109355101	233.4	248.2	-14.8
D-18-27 19ABB	325136109380401	222.7	254.8	-32.1
D-18-28 01ABC	315407109264601	52.4	50.1	2.3
D-18-28 05CCC2	315329109312701	358	360.2	-2.2
D-18-28 06DBD	315344109314801	339.6	342.6	-3
D-18-28 08BDA2	315308109305901	377.7	379.6	-1.9
D-18-28 15BBA	315232109291301	523.8	525.7	-1.9
D-18-28 16DDA	315151109292901	490.1	492.3	-2.2
D-18-28 17BAA	315228109310301	376.3	381.7	-5.4
D-18-28 22CAC	315106109291001	483.8	488	-4.2
D-18-29 18ACD	315207109254001	16.5	20	-3.5
D-19-28 34ABD	314430109280601	12.1	12	0.1
D-19-28E30DAB	314502109310201	45.7	33.8	11.9
D-19-29 22CDD	314527109221201	7.5	8.2	-0.7
D-20-28 21CAD2	314030109291801	7.9	8.1	-0.2
D-20-28 26CCB	313925109274101	5.1	16.3	-11.2
D-20-28 27ADA	313952109274801	9.5	6.6	2.9
D-20-28 33DCA	313839109291001	6.1	2.7	3.4
D-20-29 19DCA	314018109250401	13.2	25	-11.8
D-21-28 11BCA1	313712109281301	34.3	41.7	-7.4
D-21-28 11BCA2	313721109281301	32	42.8	-10.8

A

ADWR Index Well Ground Water Monitoring Site Hydrograph

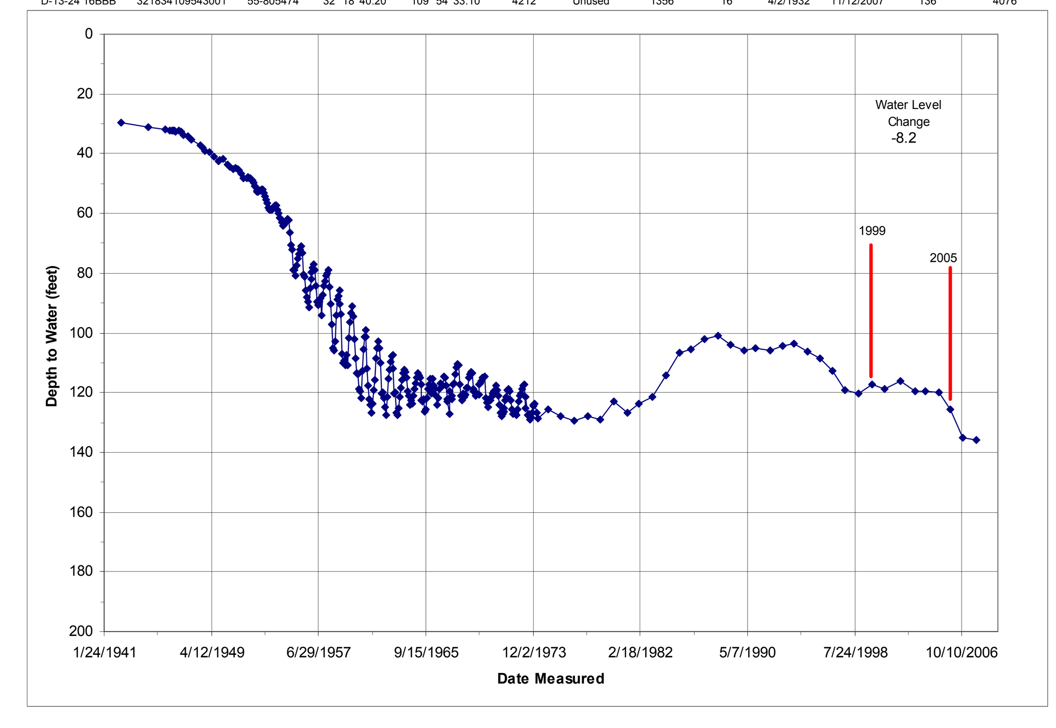
Cadastral	Well ID	ADWR Registry ID	Latitude	Longitude	Altitude (feet amsl)	Water Use	Well Depth (feet)	Casing Dia. (in)	Drill Date	Latest WL Date	Latest DTW (feet)	Latest WL alt. (feet amsl)
D-11-24-30AAA	322718109554101	55-604191	32° 27' 22.30"	109° 55' 43.20"	4369	Irrigation	1300	16	Unknown	11/15/2007	306.5	4062.5



B

ADWR Index Well Ground Water Monitoring Site Hydrograph

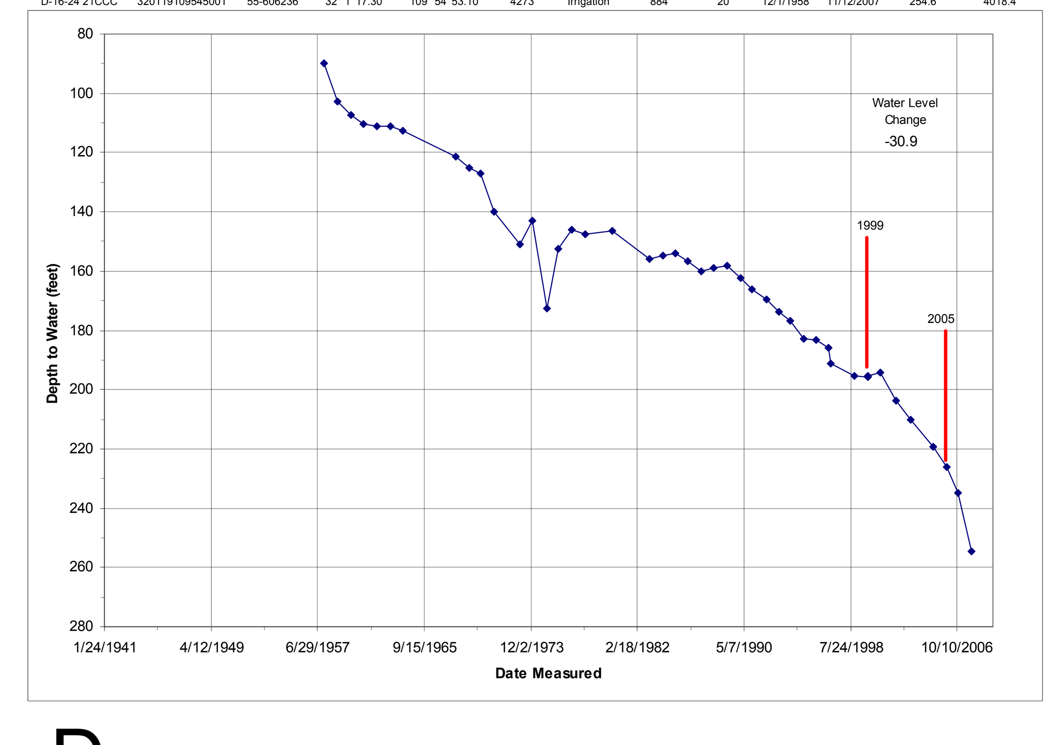
Cadastral	Well ID	ADWR Registry ID	Latitude	Longitude	Altitude (feet amsl)	Water Use	Well Depth (feet)	Casing Dia. (in)	Drill Date	Latest WL Date	Latest DTW (feet)	Latest WL alt. (feet amsl)
D-13-24 16BBB	321834109543001	55-805474	32° 18' 40.20"	109° 54' 33.10"	4212	Unused	1356	16	4/2/1932	11/12/2007	136	4076



C

ADWR Index Well Ground Water Monitoring Site Hydrograph

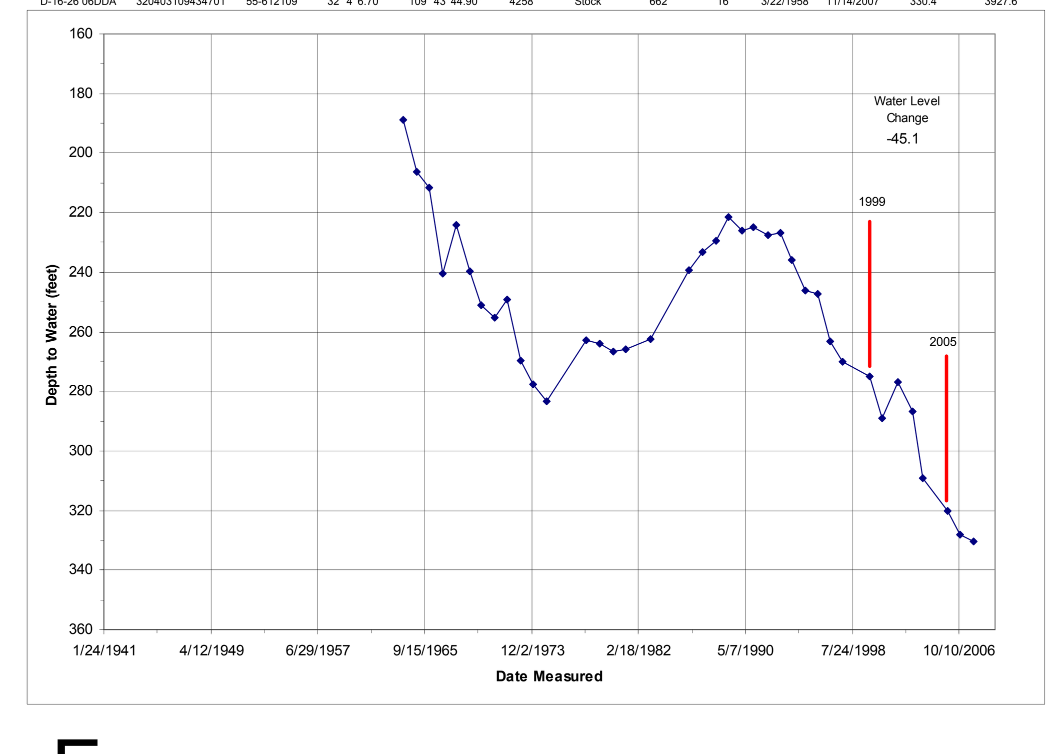
Cadastral	Well ID	ADWR Registry ID	Latitude	Longitude	Altitude (feet amsl)	Water Use	Well Depth (feet)	Casing Dia. (in)	Drill Date	Latest WL Date	Latest DTW (feet)	Latest WL alt. (feet amsl)
D-16-24 21CCC	320119109545001	55-606236	32° 1' 17.30"	109° 54' 53.10"	4273	Irrigation	884	20	12/1/1958	11/12/2007	254.6	4018.4



D

ADWR Index Well Ground Water Monitoring Site Hydrograph

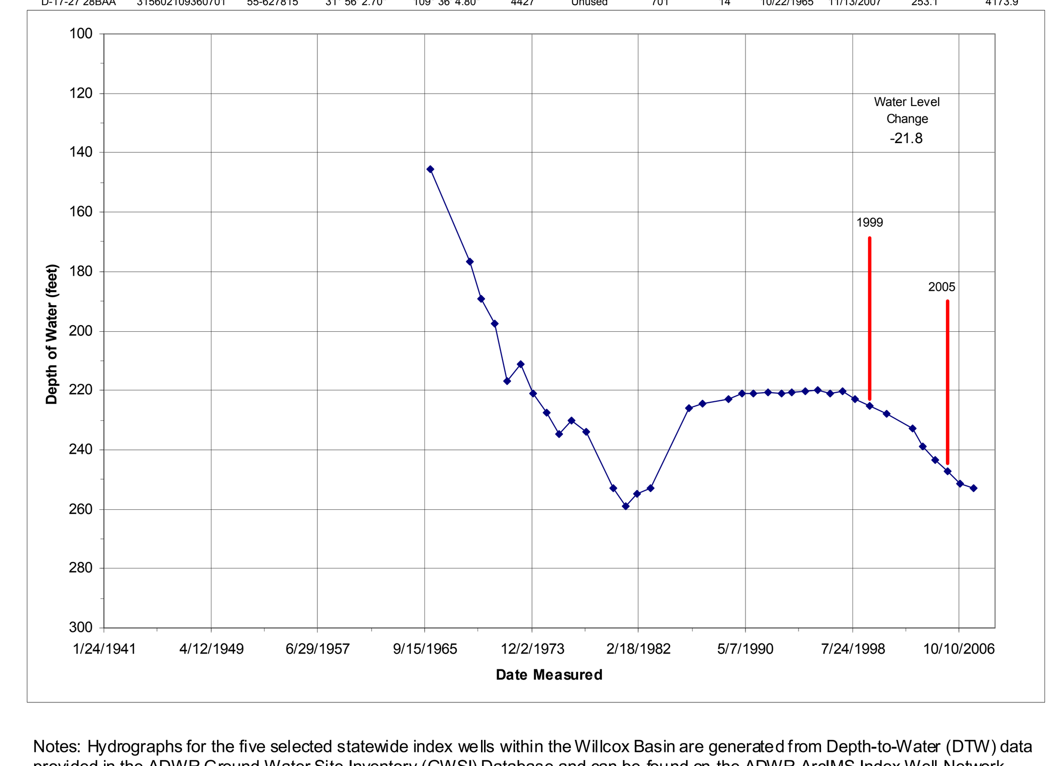
Cadastral	Well ID	ADWR Registry ID	Latitude	Longitude	Altitude (feet amsl)	Water Use	Well Depth (feet)	Casing Dia. (in)	Drill Date	Latest WL Date	Latest DTW (feet)	Latest WL alt. (feet amsl)
D-16-26 06DDA	320403109434701	55-612109	32° 4' 6.70"	109° 43' 44.90"	4258	Stock	662	16	3/22/1958	11/14/2007	330.4	3927.6



E

ADWR Index Well Ground Water Monitoring Site Hydrograph

Cadastral	Well ID	ADWR Registry ID	Latitude	Longitude	Altitude (feet amsl)	Water Use	Well Depth (feet)	Casing Dia. (in)	Drill Date	Latest WL Date	Latest DTW (feet)	Latest WL alt. (feet amsl)
D-17-27 28BAA	315602109360701	55-627815	31° 56' 2.70"	109° 36' 4.80"	4427	Unused	701	14	10/22/1965	11/13/2007	253.1	4173.9



Notes: Hydrographs for the five selected statewide index wells within the Willcox Basin are generated from Depth-to-Water (DTW) data provided in the ADWR Ground Water Site Inventory (GWSI) Database and can be found on the ADWR ArcIMS Index Well Network website (http://arcims.azwater.gov/website/IndexWell/viewer.htm). Water level change from 1999 to 2005 is also shown on each hydrograph. The map (sheet 1) and data table include all wells in the Willcox Basin (listed in ADWR GWSI Database) measured in 1999 and 2005 excluding those listed with remarks (i.e. pumping). Data in the table is arranged in order of cadastral location.

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ARIZONA DEPARTMENT OF WATER RESOURCES

HYDROLOGY DIVISION

WATER LEVEL CHANGES IN WILLCOX BASIN, ARIZONA 1999-2005

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