

**Arizona Department of Water Resources**

**Statewide Groundwater Level Changes in Arizona Water  
Years 2021 to 2022, 2012 to 2022, and 2002 to 2022**

**Open File Report No. 22**

**March 2025**



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## **INTRODUCTION**

### **Scope and Purpose**

The Arizona Department of Water Resources (ADWR) has prepared this report to summarize groundwater level changes observed from annual monitoring of the depth to groundwater within wells located throughout Arizona and adjacent parts of New Mexico for the last 20-year, 10-year, and one-year time periods (2002 - 2022, 2012 - 2022, and 2021 - 2022). This report highlights noteworthy, recent groundwater level trends and compiles data for additional analysis and future investigations.

This report contains water level change data collected and compiled within groundwater basins or sub-basins. Hydrologic interpretations (for causes of observed groundwater level changes) or interpolation of groundwater level changes between wells are not within the scope of this report.

Information provided in this report includes:

- measured groundwater level data for water years: 2002, 2012, 2021 and 2022;
- calculated groundwater level change for each time interval for specific wells;
- maps showing statewide groundwater level changes for the periods 2002 - 2022, 2012 - 2022, and 2021 - 2022;
- Maps depicting 10-year water level change, separated into different selected scaled sections; and
- groundwater level change statistics for each basin and sub-basin.

Previous groundwater monitoring reports, or Open File Reports (OFR) can be found on ADWR's website at: <https://new.azwater.gov/hydrology/e-library>. Each OFR provides a summary of statewide groundwater conditions over the last two decades including general background on water use and the history of groundwater level data collection in Arizona. Also, for a comprehensive assessment of hydrologic activities and previous groundwater level change reports per groundwater basin, see Flora & Davis (2009). Figure 1 (Page 23) shows the boundaries of groundwater basins, sub-basins, and the 10-year maps for selected scaled sections.

### **Methods**

Groundwater level (depth-to-groundwater in feet below land surface, denoted hereafter as “WL”) data were queried from ADWR’s Groundwater Site Inventory (GWSI) database for water years 2002, 2012, 2021, and 2022. The term Water Year (WY) is used to denote the beginning of the field data collection season, from October 1 of each year to September 30 of the next year. For example, WY 2022 is from October 1, 2021 to September 30, 2022. In the following discussion, a “rise” in WL denotes a decrease in the depth to groundwater, while a “decline” in WL denotes an increase in the depth to groundwater from the land surface. As noted, data from the following WYs are compared to calculate groundwater level change in 2002 - 2022, 2012 - 2022, and 2021 - 2022. Initial datasets queried from GWSI contain

all WL measurements for a well for a WY of interest. Datasets were then reduced to measurements within comparable time frames between WYs, such as a same month or season. Time frames believed to represent “static” aquifer conditions were selected for analysis.

Measurements from wells with cascading conditions were used for analysis if both the starting and ending measurements noted cascading conditions. WL measurements without comparable timeframes or remarks were removed from initial data sets for statistical summaries of depth to groundwater and WL change. Remarked WL measurements describe non-static WL conditions. WL measurements with remarks such as; “Pumping,” “Recently Pumped,” “Nearby Pumping,” “Nearby Recently Pumped,” “Injecting,” “Nearby Injecting,” “Undetermined,” and “Other” or without sufficient comments to discern if measurements that were comparable were also removed from the initial datasets.

When multiple WL measurements were made during the time frame of review, such as at automated monitoring sites or index wells with monthly or quarterly measurements, more specific factors were considered to choose comparable WL records. WL records were reviewed per well and reduced to include non-remarked measurements from comparable time frames (e.g. same month for each measurement). Preference was given to measurements without remarks. Preference was also given to measurements occurring from October to February (occasionally March), depending upon location within the state to minimize effects of pumpage. Hydrographs were also reviewed to identify major anomalies or potential sources of error, with respect to water level changes and overall groundwater level trends. Additional factors such as source and measurement method were also considered in selecting measurements for WL change comparison.

Please note that distinctions have not been made for this analysis between aquifers or hydrogeologic units and well construction information such as screened intervals when calculating WL change. Large standard deviations or variances may be observed for WL change data. Wells completed within varying hydrogeologic units or aquifer systems, especially non-regional or local groundwater systems, may exhibit a wide range of WL change data, resulting in the appearance of skewed statistics within a basin or sub-basin.

Once the initial dataset was reduced by removing multiple measurements and comparable WLs were chosen, the groundwater level changes per time period per well were calculated. Appendices 1, 2, and 3 contain groundwater level datasets along with groundwater level changes for WYs 2002 - 2022, 2012 - 2022, and 2021 - 2022. Statewide WL change statistics per basin or sub-basin are provided for WYs 2002 - 2022, 2012 - 2022, and 2021 - 2022 in Appendix 4. WL change distribution graphs are compiled by basin or sub-basin for WL change for WYs 2002 - 2022, 2012 - 2022, and 2021 - 2022 in Figure 2 (Page 24).



## GROUNDWATER LEVEL DATA

Tables 1 through 4 represent a summary of WL data per WY queried from GWSI prior to data reduction. Datasets were later reduced as described in the methods section. Additional information on comparable WL measurements per well site is discussed later in this report.

The total number of WL measurements, the range of WLs (in feet), measurement source, the number of wells deemed Unable to Measure (UTM), and a description of the type of conditions encountered at the well site while the WL measurement was made, known as Remarks, are summarized for each WY. Initial datasets used in this analysis are available for download through the ADWR GWSI website: <https://app.azwater.gov/gws/SearchGWSI.aspx>.

**Table 1. Summary Water Year 2002.**

WY 2002 WL Data (10/1/2001 - 9/30/2002)														
Number of Site Visits	Range of Water Levels [ft]		Measurement Source								Unable to Measure (UTM)	Number of Remarkd Measurements		
3601	-1.2 to 2858		3rd Party WL Portal (3) - 53; ADWR (R) - 2321; USBR (B) - 30; Consultant (C) - 4; Driller (D) - 1; New Mexico Office of the State Engineer (E) - 6; Military (J) - 35; Owner (O) - 166; Owner Reported (R) - 3; SRP (S) - 1; City of Tucson (T) - 654; USGS (U) - 326; Other (Z) - 1								114	310		
*Negative depths to water indicate "artesian pressure conditions" that are generally measured with a pressure gage.														
Remark Code	D	F	M	K	O	P	R	S	T	V	W	X	Z	
Remark Description	Dry	Flowing	Well Plugged	Cascading	Obstructed	Pumping	Recently Pumping	Nearby Pumping	Nearby Recently Pumped	Foreign Material (Oil)	Well Destroyed	Surface-Water Effects	Other	
Remark Frequency	65	28	0	19	40	53	49	29	0	14	7	1	5	

**Table 2. Summary Water Year 2012.**

WY 2012 WL Data (10/1/2011 - 9/30/2012)															
Number of Site Visits	Range of Water Levels [ft]		Measurement Source								Unable to Measure (UTM)	Number of Remarkd Measurements			
2951	1.05 to 2844.4		3rd Party WL Portal (3) - 122; ADWR (R) - 2025; USBR (B) - 29; Consultant (C) - 24; Driller (D) - 9; Owner (O) - 5; Owner Reported (R) - 1; SRP (S) - 38; City of Tucson (T) - 692; USGS (U) - 2; Other (Z) - 4								68	238			
*Negative depths to water indicate "artesian pressure conditions" that are generally measured with a pressure gage.															
Remark Code	D	H	J	K	N	O	P	R	S	T	V	W	X	Z	
Remark Description	Dry	Nearby Recently Flowing	Nearby Injecting	Cascading	Measurements Discontinued	Obstructed	Pumping	Recently Pumping	Nearby Pumping	Nearby Recently Pumped	Foreign Material (Oil)	Well Destroyed	Surface Water Effects	Other	
Remark Frequency	20	1	3	32	0	29	56	36	28	0	11	3	6	13	

**Table 3. Summary Water Year 2021.**

WY 2021 WL Data (10/1/2020 - 9/30/2021)														
Number of Site Visits	Range of Water Levels [ft]		Measurement Source								Unable to Measure (UTM)	Number of Remarkd Measurements		
4473	-3.5 to 1959.5		3rd Party WL Portal (3) - 175; ADWR (R) - 4126; USBR (B) - 3; Driller (D) - 150; Owner (O) - 10; Owner Reported (R) - 4; City of Tucson (T) - 2; USGS (U) - 3;								721	451		
Remark Code	D	F	K	M	N	O	P	R	S	T	V	W	X	Z
Remark Description	Dry	Flowing	Cascading	Well Plugged	Measurements Discontinued	Obstructed	Pumping	Recently Pumping	Nearby Pumping	Nearby Recently Pumped	Foreign Material (Oil)	Well Destroyed	Surface-Water Effects	Other
Remark Frequency	21	11	34	3	0	128	117	24	35	1	20	11	7	39

**Table 4. Summary Water Year 2022.**

WY 2022 WL Data (10/1/2021 - 9/30/2022)													
Number of Site Visits	Range of Water Levels [ft]		Measurement Source						Unable to Measure (UTM)	Number of Remarkd Measurements			
4568	0 to 1959.2		3rd Party WL Portal (3) - 170; ADWR (R) - 4269; Driller (D) - 102; Owner (O) - 24; SRP (S) - 1; USGS (U) - 2						815	520			
Remark Code	D	E	F	K	O	P	R	S	T	V	W	X	Z
Remark Description	Dry	Recently Flowing	Flowing	Cascading	Obstructed	Pumping	Recently Pumping	Nearby Pumping	Nearby Recently Pumped	Foreign Material (Oil)	Well Destroyed	Surface Water Effects	Other
Remark Frequency	29	1	5	46	165	124	18	26	3	29	34	15	25

Table 5 is a statistical summary of WL data sorted by basin/Active Management Area (AMA) and sub-basin for WYs 2002, 2012, 2021, and 2022. Each year's statistics were calculated from WLs that did not include a remark.

Table 5 summarizes the following statistics:

- the WL count;
- the minimum WL;
- the maximum WL;
- the median WL; and
- the mean WL.



Table 5. Statistical summary of water level data for WYs 2002, 2012, 2021, and 2022.

Basin/AMA	Sub-basin	WL 2002 Count	Minimum WL 2002 [ft bls]	Maximum WL 2002 [ft bls]	Median WL 2002 [ft bls]	Mean WL 2002 [ft bls]	WL 2012 Count	Minimum WL 2012 [ft bls]	Maximum WL 2012 [ft bls]	Median WL 2012 [ft bls]	Mean WL 2012 [ft bls]	WL 2021 Count	Minimum WL 2021 [ft bls]	Maximum WL 2021 [ft bls]	Median WL 2021 [ft bls]	Mean WL 2021 [ft bls]	WL 2022 Count	Minimum WL 2022 [ft bls]	Maximum WL 2022 [ft bls]	Median WL 2022 [ft bls]	Mean WL 2022 [ft bls]
AGUA FRIA BASIN	AGUA FRIA	7	19.8	453.8	38.0	88.8	14	4.8	448.9	56.6	143.4	15	8.4	479.4	21.2	115.1	16	10.5	481.1	24.1	117.1
ARAVAIPA CANYON BASIN	ARAVAIPA CANYON	3	35.3	124.8	52.1	70.7	3	37.6	133.0	62.0	77.5	50	14.2	142.8	0.0	18.5	2	60.0	174.7	117.4	117.4
BIG SANDY BASIN	FORT ROCK	2	127.7	486.9	307.3	307.3	2	123.6	486.3	305.0	305.0	4	126.2	492.0	425.0	367.1	8	126.8	491.5	488.6	366.9
BIG SANDY BASIN	WIKIEUP	6	14.4	373.7	101.3	151.0	13	13.8	547.3	121.0	184.4	15	16.0	535.6	119.3	180.3	27	16.2	534.7	126.6	152.9
BILL WILLIAMS BASIN	ALAMO RESERVOIR	4	51.6	642.0	389.7	368.3	4	51.2	639.7	387.0	366.2	9	51.5	640.4	52.9	256.8	9	51.7	639.1	52.3	191.4
BILL WILLIAMS BASIN	BURRO CREEK	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A
BILL WILLIAMS BASIN	CLARA PEAK	3	22.0	363.4	101.5	162.3	2	19.7	97.6	58.6	58.6	2	19.7	97.3	58.5	58.5	2	21.0	100.1	60.6	60.6
BILL WILLIAMS BASIN	SANTA MARIA	4	25.9	91.8	60.9	59.9	6	20.7	111.1	63.0	66.7	6	24.4	100.2	64.8	57.4	6	20.1	92.4	36.9	40.7
BILL WILLIAMS BASIN	SKULL VALLEY	10	25.2	406.5	108.3	164.3	16	34.7	485.5	77.2	124.7	32	55.1	470.6	113.9	163.2	33	77.5	492.7	114.2	160.8
BONITA CREEK BASIN	BONITA CREEK	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A
BUTLER VALLEY BASIN	BUTLER VALLEY	17	83.8	513.2	178.6	194.9	12	92.4	513.8	206.1	198.7	23	101.4	515.5	118.6	141.6	38	68.6	516.0	93.8	130.7
CIENEGA CREEK BASIN	CIENEGA CREEK	27	7.2	216.5	45.7	76.6	14	19.3	206.5	107.8	106.0	38	-0.7	409.3	74.7	105.9	37	0.0	409.5	86.2	108.3
COCONINO PLATEAU BASIN	COCONINO PLATEAU	2	90.3	287.7	189.0	189.0	4	91.5	2844.4	1555.6	1511.8	4	90.6	463.1	45.3	138.4	3	93.0	463.6	273.4	276.7
DETRITAL VALLEY BASIN	DETRITAL VALLEY	4	57.1	596.1	382.6	354.6	14	57.4	737.0	455.6	390.2	15	57.7	736.5	460.9	373.7	25	56.3	736.4	74.5	263.9
DONNELLY WASH BASIN	DONNELLY WASH	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	26	20.6	392.6	33.1	73.4	0	0.0	0.0	N/A	N/A
DOUGLAS BASIN	DOUGLAS	11	24.5	293.4	45.5	83.1	3	132.7	330.0	226.4	229.7	277	22.2	413.9	90.1	120.8	11	59.0	300.6	67.3	110.5
DOUGLAS BASIN	DOUGLAS INA	23	60.8	298.9	119.6	134.8	22	67.2	361.9	128.2	157.1	26	68.0	438.3	116.8	151.5	23	71.0	354.2	96.2	139.1
DRIPPING SPRING WASH BASIN	DRIPPING SPRING WASH	2	84.8	97.5	91.2	91.2	1	98.2	98.2	98.2	98.2	25	11.7	368.4	0.0	48.7	2	94.5	102.3	98.4	98.4
DUNCAN VALLEY BASIN	DUNCAN VALLEY	7	21.8	192.7	42.9	73.8	7	23.3	192.1	47.5	77.1	7	23.6	191.5	50.5	60.0	7	22.2	191.4	54.1	79.2
DUNCAN VALLEY BASIN	VIRDEN VALLEY, NEW MEXICO ( DUNCAN - NEW MEXICO)	4	83.8	317.8	205.4	203.1	4	85.9	316.9	197.8	199.6	4	85.6	315.6	215.1	207.9	4	87.1	295.4	107.1	127.4
GILA BEND BASIN	GILA BEND	35	26.7	638.1	184.5	210.0	37	31.7	653.1	233.8	242.1	47	47.2	678.6	170.8	232.3	55	48.7	683.3	106.0	245.3
GRAND WASH BASIN	GRAND WASH	2	7.8	506.4	257.1	257.1	2	5.8	508.0	256.9	256.9	3	9.1	507.7	25.8	180.9	8	20.3	507.5	21.7	77.2
HARQUAHALA BASIN	HARQUAHALA INA	37	24.0	600.1	400.6	370.6	37	25.5	607.4	378.2	346.1	44	20.2	653.3	322.7	269.4	150	20.8	661.4	322.5	262.8
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	10	377.0	652.7	559.9	539.1	24	262.6	1100.2	569.0	565.9	49	275.5	957.5	520.8	478.5	90	275.0	958.3	453.5	410.9
KANAB PLATEAU BASIN	KANAB PLATEAU	3	84.7	610.9	485.3	393.6	3	87.5	611.3	484.8	394.5	6	89.5	610.8	484.2	395.5	18	89.7	653.5	91.5	271.4
LAKE HAVASU BASIN	LAKE HAVASU	0	0.0	0.0	N/A	N/A	1	26.6	26.6	26.6	26.6	1	27.0	27.0	27.0	27.0	1	0.0	0.0	0.0	0.0
LAKE MOHAVE BASIN	LAKE MOHAVE	2	336.4	349.7	343.1	343.1	2	338.3	427.0	382.7	382.7	2	340.0	425.8	382.9	382.9	2	339.7	339.7	169.9	169.9
LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	4	20.1	65.9	30.9	31.9	12	1.1	307.0	19.5	65.0	10	15.6	309.0	31.4	110.0	11	14.7	308.9	39.9	124.2
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	68	13.6	865.9	123.1	189.9	164	9.1	1960.7	122.9	315.0	184	17.1	1959.5	118.8	268.6	253	2.8	1959.2	116.5	231.7
LOWER GILA BASIN	CHILDS VALLEY	2	682.1	809.2	745.6	745.6	1	673.4	673.4	673.4	673.4	2	668.4	668.4	334.2	334.2	1	667.2	667.2	667.2	667.2
LOWER GILA BASIN	DENDORA VALLEY	2	77.0	228.6	152.8	152.8	2	92.2	92.2	46.1	46.1	0	0.0	0.0	N/A	N/A	1	108.6	108.6	108.6	108.6
LOWER GILA BASIN	WELLTON - MOHAWK	28	5.1	389.9	120.4	165.8	34	12.7	634.2	152.2	182.9	48	13.9	634.0	81.3	139.9	39	13.5	633.9	81.7	149.8
LOWER SAN PEDRO BASIN	CAMP GRANT WASH	1	128.7	128.7	128.7	128.7	1	71.2	71.2	71.2	71.2	31	2.8	358.6	18.0	59.5	1	77.0	77.0	77.0	77.0
LOWER SAN PEDRO BASIN	MAMMOTH	15	16.6	502.0	53.4	110.4	17	15.1	491.1	40.4	87.5	209	-3.5	482.1	17.9	46.1	22	21.2	481.5	34.0	67.5
MCMULLEN VALLEY BASIN	MCMULLEN VALLEY	27	27.4	649.6	364.1	349.8	31	19.0	678.2	334.7	353.3	30	28.1	691.0	393.4	370.8	173	32.0	713.7	261.2	277.4
MEADVIEW BASIN	MEADVIEW	4	402.5	404.4	403.5	403.5	4	133.1	423.7	422.8	350.6	5	126.8	431.5	430.6	311.3	10	102.5	433.1	131.9	233.7
MORENCI BASIN	MORENCI	2	7.1	502.7	254.9	254.9	6	19.0	503.5	80.8	163.3	6	8.6	504.9	59.8	126.6	6	7.3	531.0	67.6	134.7
PARIA BASIN	PARIA	1	468.5	468.5	468.5	468.5	1	494.2	494.2	494.2	494.2	9	110.3	520.1	147.7	178.9	9	112.7	536.8	174.0	204.6
PARKER BASIN	CIBOLA VALLEY	1	322.3	322.3	322.3	322.3	1	319.7	319.7	319.7	319.7	1	319.4	319.4	319.4	319.4	1	314.8	314.8	314.8	314.8
PARKER BASIN	COLORADO RIVER INDIAN RESERVATION	0	0.0	0.0	N/A	N/A	1	77.1	77.1	77.1	77.1	1	77.5	77.5	77.5	77.5	1	75.9	75.9	75.9	75.9
PARKER BASIN	LA POSA PLAINS	4	38.0	494.5	52.0	149.6	3	65.1	65.1	0.0	21.7	3	67.5	146.2	67.5	71.2	3	68.3	528.4	146.8	247.8



Table 5. Statistical summary of water level data for WYs 2002, 2012, 2021, 2022 Continued.

Basin/AMA	Sub-basin	WL 2002 Count	Minimum WL 2002 [ft bls]	Maximum WL 2002 [ft bls]	Median WL 2002 [ft bls]	Mean WL 2002 [ft bls]	WL 2012 Count	Minimum WL 2012 [ft bls]	Maximum WL 2012 [ft bls]	Median WL 2012 [ft bls]	Mean WL 2012 [ft bls]	WL 2021 Count	Minimum WL 2021 [ft bls]	Maximum WL 2021 [ft bls]	Median WL 2021 [ft bls]	Mean WL 2021 [ft bls]	WL 2022 Count	Minimum WL 2022 [ft bls]	Maximum WL 2022 [ft bls]	Median WL 2022 [ft bls]	Mean WL 2022 [ft bls]
PEACH SPRINGS BASIN	PEACH SPRINGS	4	147.2	828.7	377.1	432.5	3	146.6	221.8	146.6	122.8	6	161.0	831.4	306.4	405.2	10	147.3	848.0	160.6	305.0
PHOENIX AMA	CAREFREE	10	121.6	421.1	394.5	322.2	8	25.5	348.1	206.0	203.6	10	28.1	298.0	191.2	188.4	10	22.9	300.2	191.8	190.0
PHOENIX AMA	EAST SALT RIVER	97	28.9	844.9	313.9	310.4	137	11.8	849.2	264.7	292.4	286	10.6	842.6	335.5	315.8	271	10.8	839.6	324.6	317.0
PHOENIX AMA	FOUNTAIN HILLS	8	11.9	518.4	252.7	229.4	12	12.6	653.8	64.6	163.1	11	14.7	647.7	94.7	184.5	14	12.7	643.9	76.3	171.0
PHOENIX AMA	HASSAYAMPA	43	22.6	655.6	286.5	253.5	68	14.7	656.1	178.4	206.1	69	47.0	654.3	185.8	211.4	67	47.4	656.2	184.5	212.7
PHOENIX AMA	LAKE PLEASANT	10	19.6	282.6	157.5	135.8	10	21.5	277.5	149.7	139.5	13	28.9	276.0	126.9	138.9	12	20.3	273.1	106.9	120.1
PHOENIX AMA	RAINBOW VALLEY	25	267.7	568.8	383.6	395.8	22	243.3	491.0	362.1	361.0	32	261.7	579.7	360.0	293.3	27	262.8	578.9	358.7	292.9
PHOENIX AMA	WEST SALT RIVER	67	13.1	457.7	104.0	148.1	167	15.5	614.4	220.8	229.2	218	13.0	605.8	152.8	177.4	216	13.0	605.9	168.8	190.3
PINAL AMA	AGUIRRE VALLEY	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A
PINAL AMA	ELOY	113	35.5	483.5	227.6	217.9	99	33.7	503.5	220.5	231.2	215	14.6	616.6	275.7	266.0	247	22.6	740.0	276.1	254.5
PINAL AMA	MARICOPA - STANFIELD	38	43.7	663.3	273.4	280.2	43	41.9	664.0	318.2	304.5	53	28.5	677.4	303.7	298.2	70	24.2	668.6	168.5	238.1
PINAL AMA	SANTA ROSA	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A
PINAL AMA	VEKOL VALLEY	8	212.8	526.8	361.0	354.4	9	213.2	525.7	342.4	352.9	9	211.2	518.9	341.1	352.8	9	211.6	519.2	340.7	351.1
PRESCOTT AMA	LITTLE CHINO VALLEY	108	12.4	496.4	289.5	247.5	92	3.1	514.7	237.8	234.6	122	3.0	512.0	231.1	216.4	239	2.6	513.0	52.7	126.7
PRESCOTT AMA	UPPER AGUA FRIA	66	34.9	705.1	118.2	208.5	49	42.4	731.9	128.3	202.9	55	35.1	611.1	214.2	231.9	59	30.8	586.2	159.6	199.7
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	21	74.7	434.4	235.4	225.7	20	77.1	437.3	263.2	238.3	21	79.9	439.6	233.3	228.8	229	34.6	609.8	91.0	160.4
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	16	48.3	1060.5	597.7	512.2	25	38.9	1066.6	496.8	541.9	30	31.3	1069.9	497.4	492.1	44	26.8	1069.9	527.5	492.3
SAFFORD BASIN	GILA VALLEY	19	18.4	628.4	49.1	98.5	20	20.8	637.9	44.4	80.5	23	20.8	642.8	50.9	96.2	23	21.9	643.4	53.0	97.1
SAFFORD BASIN	SAN CARLOS VALLEY	2	638.5	719.2	678.9	678.9	2	658.6	724.3	691.5	691.5	2	704.0	704.0	352.0	352.0	2	748.0	748.0	374.0	374.0
SAFFORD BASIN	SAN SIMON VALLEY	34	23.5	514.8	126.9	157.2	31	35.0	584.5	131.8	182.2	257	15.4	608.8	100.4	144.7	35	51.5	602.5	132.6	174.5
SALT RIVER BASIN	BLACK RIVER	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A
SALT RIVER BASIN	SALT RIVER CANYON	1	21.0	21.0	21.0	21.0	3	20.0	147.1	141.1	102.7	2	165.4	168.4	166.9	166.9	2	168.7	168.7	84.4	84.4
SALT RIVER BASIN	SALT RIVER LAKES	1	11.9	11.9	11.9	11.9	4	4.5	32.7	31.3	24.9	4	5.5	27.1	25.4	20.9	5	8.8	28.4	23.0	20.6
SALT RIVER BASIN	WHITE RIVER	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A
SAN BERNADINO VALLEY BASIN	SAN BERNADINO VALLEY	3	30.0	612.6	203.8	282.1	3	31.3	612.2	203.8	282.4	22	0.0	205.6	9.0	19.7	2	29.9	206.1	118.0	118.0
SAN RAFAEL BASIN	SAN RAFAEL	6	6.4	202.9	70.0	81.9	6	6.4	212.3	71.2	83.3	21	7.7	279.8	27.8	61.4	9	6.2	212.8	7.8	45.3
SAN SIMON WASH	SAN SIMON WASH	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A
SANTA CRUZ AMA	SANTA CRUZ AMA	145	7.1	415.9	24.2	57.0	96	7.9	316.2	32.4	78.2	146	3.3	329.0	26.7	60.4	161	5.4	363.3	24.8	57.1
SHIVWITS PLATEAU BASIN	SHIVWITS PLATEAU	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A
TIGER WASH BASIN	TIGER WASH	1	29.2	29.2	29.2	29.2	1	218.5	218.5	218.5	218.5	2	36.9	219.7	128.3	128.3	5	178.0	352.9	178.0	150.1
TONTO CREEK BASIN	TONTO CREEK	14	8.9	128.7	46.5	60.4	25	6.4	121.9	69.8	77.2	45	5.2	190.1	39.5	58.3	38	5.2	194.2	43.2	64.2
TUCSON AMA	AVRA VALLEY	50	13.8	601.7	246.0	269.7	56	10.5	601.2	204.0	222.0	74	12.7	601.5	199.7	200.3	71	6.1	601.5	211.0	226.4
TUCSON AMA	UPPER SANTA CRUZ	92	20.4	557.9	149.4	163.7	75	22.7	584.5	184.9	202.5	294	16.2	788.6	143.3	154.1	297	10.9	790.0	139.5	150.6
UPPER HASSAYAMPA BASIN	UPPER HASSAYAMPA	8	18.8	817.3	412.2	469.1	6	16.2	815.4	412.8	433.8	8	15.3	422.9	39.9	132.1	4	19.0	439.5	215.9	217.8
UPPER SAN PEDRO BASIN	ALLEN FLAT	16	2.0	722.0	37.4	133.8	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A	0	0.0	0.0	N/A	N/A
UPPER SAN PEDRO BASIN	SIERRA VISTA	700	-1.2	656.3	62.9	126.4	66	4.1	611.2	218.0	228.3	70	9.5	693.6	182.5	219.6	72	6.8	611.6	170.9	183.4
VERDE RIVER BASIN	BIG CHINO	43	7.9	997.5	113.5	145.0	140	3.8	996.6	135.2	155.3	212	3.1	998.2	109.9	140.1	270	3.1	1354.8	40.3	114.2
VERDE RIVER BASIN	VERDE CANYON	42	37.1	729.8	169.4	189.3	65	18.6	727.3	186.3	186.1	86	16.7	721.4	133.6	153.1	129	3.7	413.2	88.1	103.8
VERDE RIVER BASIN	VERDE VALLEY	70	10.0	814.1	154.9	200.7	67	3.8	816.6	103.5	208.4	82	3.7	819.1	116.2	217.7	397	0.0	814.5	35.5	122.2
VIRGIN RIVER BASIN	VIRGIN RIVER	6	56.6	378.8	233.5	226.4	8	46.4	377.8	266.8	235.3	11	50.5	380.4	202.5	210.7	25	52.9	381.8	202.5	232.7
WESTERN MEXICAN DRAINAGE BASIN	WESTERN MEXICAN DRAINAGE	1	335.8	335.8	335.8	335.8	1	382.3	382.3	382.3	382.3	11	62.5	470.0	62.5	124.7	1	353.6	353.6	353.6	353.6
WILLCOX BASIN	WILLCOX	41	27.6	510.2	229.7	225.2	53	17.5	422.6	271.6	236.9	312	5.2	498.7	197.6	184.1	65	3.4	471.7	299.3	233.3
YUMA BASIN	YUMA	8	12.0	139.3	79.1	68.1	8	17.4	167.7	44.5	68.7	17	16.5	180.1	34.1	82.1	24	16.6	184.8	124.5	97.2
TOTAL		2321	-1.2	1060.5	140.1	187.8	2025	1.1	2844.4	187.4	236.5	4120	-3.5	1959.5	174.4	221.5	4269	0.0	1959.2	180.2	234.9



## GROUNDWATER LEVEL CHANGE

### Statewide: Water Years 2002 - 2022

#### General Observations

Appendix 1 provides a table of information for WL measurements made in Arizona for WYs 2002 and 2022, as well as the calculated WL changes for this 20-year timeframe. The table is sorted by basin/AMA, sub-basin, and cadastral or well site. Groundwater level change data are calculated for comparable WL measurement pairs for each available well site in GWSI. This summary consists of 769 records that include all reduced data and all remarked comparable measurements (see Methods section).

Plate 1 shows long-term (20 year) WL change statewide (from data in Appendix 1). Plate 1 shows clusters of wells with either rising or declining WLs. Rises in groundwater level are shown in blue, declines in red, and no change (less than one foot) are shown in green. The size of well symbols are proportional to the magnitude of groundwater level changes. WL measurements with remarks were plotted if either one or both WL measurements had an associated remark such as pumping, cascading, etc. WL measurements with remarks are indicated with an asterisk posted within the well symbol and can be reviewed in Appendix 1.

In general, concentrations of WL rise occurred in the central and south-central areas of the state. WL declines are observed throughout the southeastern, central, and north-central regions of Arizona.

#### Statistics by Sub-basin

Appendix 1 data were further reduced by removing selected measurements that were inappropriate for statistical analyses due to measurements not representing static conditions. A total of 9 records were not used in statistical calculations, leaving 760 comparable groundwater level measurements for WL change statistics (Table 6).

Table 6 is sorted by basin/AMA and then by sub-basin and summarizes:

- the well count;
- the number of wells with rising WLs;
- the number of wells with declining WLs;
- the number of wells with no change (less than 1-foot change);
- the range of WL change;
- median, mean, and standard deviation of WL change;
- the mean rate of WL change per year; and
- the median rate of WL change per year.

The East Salt River (ESR) Sub-basin of the Phoenix AMA had the largest number of rising groundwater level measurements (35) and the Eloy (ELO) Sub-basin of the Pinal AMA had the largest number of declining groundwater level measurements (46) of any sub-basin in the state during WYs 2002 - 2022.

Statewide, for the period WYs 2002 – 2022, WL change ranged from a maximum decline of -198.5 feet in the Gila Bend (GIL) Sub-basin to a maximum rise of 176.0 feet in the Avra Valley (AVR) Sub-basin of the Tucson AMA. The mean WL change was negative in 61.8 percent of the basins measured and positive in 27.9 percent of basins measured. Negligible mean WL change (WL change less than one foot) was observed in 10.3 percent of basins measured.

Both the greatest median groundwater level decline (-74.6 feet) and the greatest mean groundwater level decline (-90.9 feet) occurred in the Gila Bend (GIL) Basin. The Gila Bend Basin also showed the greatest negative mean rate of WL Change (-4.5 feet per year) and the greatest negative median rate of WL Change (-3.7 feet per year). Both the greatest median rise in groundwater level (100.2 feet) and the greatest mean rise in groundwater level (70.9 feet) occurred in the Carefree (CRF) Sub-basin of the Phoenix AMA. The Carefree (CRF) Sub-basin also showed the greatest positive mean rate of WL change (3.5 feet per year) and the greatest positive median rate of WL change (5.0 feet per year).

Statewide statistics shown in Table 6 include a well count of 760 wells: 488 wells with rising WLs, 689 wells with declining WLs, and 59 wells with no change in WL.

Other statewide statistics include:

- range of WL change from -198.5 feet to 176.0 feet
- median WL change of -4.0 feet;
- mean WL change of -4.2 feet;
- standard deviation of WL change of 37.8 feet;
- mean rate of WL change of -0.2 feet per year; and
- median rate of WL change of -0.2 feet per year.

**Table 6. Groundwater level change statistics and counts of wells with declines, rises, or no WL change in Arizona by sub-basin – WYs 2002 to 2022.**

Basin/AMA	Sub-basin	WL Change Count	Wells w/ Rising WLs	Wells w/ Declining WLs	Wells w/ No Change in WLs	Range of WL Change [ft]	Median WL Change [ft]	Mean WL Change [ft]	Standard Deviation of WL Change [ft]	Mean Rate of WL Change [ft/yr]	Median Rate of WL Change [ft/yr]
AGUA FRIA BASIN	AGUA FRIA	4	0	3	1	-26.8 to 1	-3.6	-8.2	12.6	-0.4	-0.2
ARAVAIPA CANYON BASIN	ARAVAIPA CANYON	1	0	1	0	-7.9 to -7.9	-7.9	-7.9	N/A	-0.4	-0.4
BIG SANDY BASIN	FORT ROCK	2	0	1	1	-1.9 to 0.9	-0.5	-0.5	2.0	0.0	0.0
BIG SANDY BASIN	WIKIEUP	4	2	2	0	-19.8 to 4.1	0.1	-3.9	10.9	-0.2	0.0
BILL WILLIAMS BASIN	ALAMO RESERVOIR	4	2	0	2	-0.1 to 9.2	0.8	2.7	4.4	0.1	0.0
BILL WILLIAMS BASIN	BURRO CREEK	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
BILL WILLIAMS BASIN	CLARA PEAK	2	1	0	1	1 to 1.4	1.2	1.2	0.3	0.1	0.1
BILL WILLIAMS BASIN	SANTA MARIA	4	1	2	1	-7.4 to 5.8	-1.5	-1.2	5.5	-0.1	-0.1
BILL WILLIAMS BASIN	SKULL VALLEY	5	2	3	0	-25.8 to 32.5	-2.6	1.2	20.9	0.1	-0.1
BONITA CREEK BASIN	BONITA CREEK	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
BUTLER VALLEY BASIN	BUTLER VALLEY	5	0	5	0	-22.9 to -2.8	-17.1	-14.7	8.9	-0.7	-0.9
CIENEGA CREEK BASIN	CIENEGA CREEK	7	2	5	0	-5.5 to 6.5	-3.5	-1.8	4.4	-0.1	-0.2
COCONINO PLATEAU BASIN	COCONINO PLATEAU	2	1	1	0	-2.7 to 14.3	5.8	5.8	12.0	0.3	0.3
DETRITAL VALLEY BASIN	DETRITAL VALLEY	3	1	0	2	-0.9 to 3.8	0.0	1.0	2.5	0.0	0.0
DONNELLY WASH BASIN	DONNELLY WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
DOUGLAS BASIN	DOUGLAS	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
DOUGLAS BASIN	DOUGLAS INA	14	0	14	0	-111.6 to -4.4	-35.2	-39.5	29.4	-2.0	-1.8
DRIPPING SPRING WASH BASIN	DRIPPING SPRING WASH	2	0	2	0	-9.7 to -4.8	-7.3	-7.3	3.5	-0.4	-0.4
DUNCAN VALLEY BASIN	DUNCAN VALLEY	6	1	3	2	-16.2 to 1.3	-2.0	-4.4	6.5	-0.2	-0.1
DUNCAN VALLEY BASIN	VIRIDEN VALLEY, NEW MEXICO ( DUNCAN - NM)	2	0	2	0	-20.1 to -3.3	-11.7	-11.7	11.9	-0.6	-0.6
GILA BEND BASIN	GILA BEND	10	0	10	0	-198.5 to -23.9	-74.6	-90.9	52.8	-4.5	-3.7
GRAND WASH BASIN	GRAND WASH	1	0	1	0	-1.1 to -1.1	-1.1	-1.1	N/A	-0.1	-0.1
HARQUAHALA BASIN	HARQUAHALA INA	16	4	11	1	-124.1 to 23.3	-9.2	-34.6	50.9	-1.7	-0.5
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	5	1	4	0	-4.7 to 1.1	-2.1	-2.2	2.2	-0.1	-0.1
KANAB PLATEAU BASIN	KANAB PLATEAU	2	1	1	0	-5 to 1.9	-1.6	-1.6	4.9	-0.1	-0.1
LAKE HAVASU BASIN	LAKE HAVASU	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
LAKE MOHAVE BASIN	LAKE MOHAVE	1	0	1	0	-3.3 to -3.3	-3.3	-3.3	N/A	-0.2	-0.2
LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	2	0	2	0	-19.8 to -4.6	-12.2	-12.2	10.7	-0.6	-0.6
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	27	12	13	2	-84.5 to 22	-0.3	-3.5	20.8	-0.2	0.0
LOWER GILA BASIN	CHILDS VALLEY	1	1	0	0	14.9 to 14.9	14.9	14.9	N/A	0.7	0.7
LOWER GILA BASIN	DENDORA VALLEY	1	0	1	0	-31.6 to -31.6	-31.6	-31.6	N/A	-1.6	-1.6
LOWER GILA BASIN	WELLTON - MOHAWK	15	3	10	2	-60.1 to 63.1	-5.1	-6.0	26.0	-0.3	-0.3
LOWER SAN PEDRO BASIN	CAMP GRANT WASH	1	1	0	0	51.7 to 51.7	51.7	51.7	N/A	2.6	2.6
LOWER SAN PEDRO BASIN	MAMMOTH	8	4	4	0	-22.9 to 44.3	-1.6	2.9	20.8	0.1	-0.1
MCMULLEN VALLEY BASIN	MCMULLEN VALLEY	18	3	15	0	-138.4 to 21	-22.4	-30.5	36.4	-1.5	-1.1
MEADVIEW BASIN	MEADVIEW	1	0	1	0	-28.7 to -28.7	-28.7	-28.7	N/A	-1.4	-1.4
MORENCI BASIN	MORENCI	1	0	0	1	-0.2 to -0.2	-0.2	-0.2	N/A	0.0	0.0
PARIA BASIN	PARIA	1	0	1	0	-68.3 to -68.3	-68.3	-68.3	N/A	-3.4	-3.4
PARKER BASIN	CIBOLA VALLEY	1	1	0	0	7.5 to 7.5	7.5	7.5	N/A	0.4	0.4
PARKER BASIN	COLORADO RIVER INDIAN RESERVATION	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
PARKER BASIN	LA POSA PLAINS	1	0	1	0	-2.4 to -2.4	-2.4	-2.4	N/A	-0.1	-0.1
PEACH SPRINGS BASIN	PEACH SPRINGS	1	0	1	0	-22.5 to -22.5	-22.5	-22.5	N/A	-1.1	-1.1

Table 6. Continued.

Basin/AMA	Sub-basin	WL Change Count	Wells w/ Rising WLs	Wells w/ Declining WLs	Wells w/ No Change in WLs	Range of WL Change [ft]	Median WL Change [ft]	Mean WL Change [ft]	Standard Deviation of WL Change [ft]	Mean Rate of WL Change [ft/yr]	Median Rate of WL Change [ft/yr]
PHOENIX AMA	CAREFREE	5	4	1	0	-35.4 to 147.8	100.2	70.9	75.9	3.5	5.0
PHOENIX AMA	EAST SALT RIVER	46	35	11	0	-31.9 to 135.1	30.1	29.8	37.2	1.5	1.5
PHOENIX AMA	FOUNTAIN HILLS	3	0	3	0	-125.5 to -1.3	-4.4	-43.7	70.8	-2.2	-0.2
PHOENIX AMA	HASSAYAMPA	25	10	14	1	-41.9 to 155.2	-1.9	9.4	48.6	0.5	-0.1
PHOENIX AMA	LAKE PLEASANT	3	2	1	0	-28.4 to 9.5	9.1	-3.3	21.8	-0.2	0.5
PHOENIX AMA	RAINBOW VALLEY	17	1	16	0	-38.6 to 20.8	-10.6	-11.3	11.1	-0.6	-0.5
PHOENIX AMA	WEST SALT RIVER	34	7	25	2	-72.4 to 98.9	-8.2	-4.7	25.4	-0.2	-0.4
PINAL AMA	AGUIRRE VALLEY	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
PINAL AMA	ELOY	69	20	46	3	-93.5 to 81.5	-11.7	-12.2	33.8	-0.6	-0.6
PINAL AMA	MARICOPA - STANFIELD	20	13	6	1	-21.6 to 126.3	25.7	33.8	45.6	1.7	1.3
PINAL AMA	SANTA ROSA	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
PINAL AMA	VEKOL VALLEY	7	5	1	1	-3.3 to 7.6	1.8	2.0	3.2	0.1	0.1
PRESCOTT AMA	LITTLE CHINO VALLEY	35	5	30	0	-133.2 to 40.1	-22.5	-24.0	30.2	-1.2	-1.1
PRESCOTT AMA	UPPER AGUA FRIA	18	4	13	1	-31.9 to 118.2	-4.2	7.6	39.8	0.4	-0.2
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	12	0	11	1	-76.8 to -0.7	-7.7	-17.7	22.0	-0.9	-0.4
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	9	3	4	2	-21.9 to 21.5	-0.9	0.7	12.3	0.0	0.0
SAFFORD BASIN	GILA VALLEY	10	2	8	0	-30.2 to 17.4	-11.5	-8.8	13.4	-0.4	-0.6
SAFFORD BASIN	SAN CARLOS VALLEY	1	0	1	0	-28.8 to -28.8	-28.8	-28.8	N/A	-1.4	-1.4
SAFFORD BASIN	SAN SIMON VALLEY	14	0	14	0	-154.6 to -2.3	-18.7	-41.8	49.1	-2.1	-0.9
SALT RIVER BASIN	BLACK RIVER	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
SALT RIVER BASIN	SALT RIVER CANYON	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
SALT RIVER BASIN	SALT RIVER LAKES	1	1	0	0	3.1 to 3.1	3.1	3.1	N/A	0.2	0.2
SALT RIVER BASIN	WHITE RIVER	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
SAN BERNADINO VALLEY BASIN	SAN BERNADINO VALLEY	1	0	0	1	0.1 to 0.1	0.1	0.1	N/A	0.0	0.0
SAN RAFAEL BASIN	SAN RAFAEL	3	0	2	1	-9.9 to 0.6	-1.4	-3.6	5.6	-0.2	-0.1
SAN SIMON WASH BASIN	SAN SIMON WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
SANTA CRUZ AMA	SANTA CRUZ AMA	34	4	25	5	-30.4 to 2.5	-6.3	-7.8	8.2	-0.4	-0.3
SHIVWITS PLATEAU BASIN	SHIVWITS PLATEAU	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
TIGER WASH BASIN	TIGER WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
TONTO CREEK BASIN	TONTO CREEK	3	2	0	1	0.1 to 6.5	3.8	3.4	3.2	0.2	0.2
TUCSON AMA	AVRA VALLEY	43	31	8	4	-29.9 to 176	28.7	30.5	45.5	1.5	1.4
TUCSON AMA	UPPER SANTA CRUZ	37	21	15	1	-32.3 to 105.5	9.5	7.5	31.1	0.4	0.5
UPPER HASSAYAMPA BASIN	UPPER HASSAYAMPA	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
UPPER SAN PEDRO BASIN	ALLEN FLAT	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
UPPER SAN PEDRO BASIN	SIERRA VISTA	37	2	30	5	-32.4 to 3.2	-8.6	-8.3	7.4	-0.4	-0.4
VERDE RIVER BASIN	BIG CHINO	21	3	17	1	-14.1 to 3.7	-6.1	-5.4	5.0	-0.3	-0.3
VERDE RIVER BASIN	VERDE CANYON	12	10	2	0	-21.1 to 79.9	9.8	23.1	33.0	1.2	0.5
VERDE RIVER BASIN	VERDE VALLEY	33	11	13	9	-29.9 to 29	-0.4	-0.4	9.4	0.0	0.0
VIRGIN RIVER BASIN	VIRGIN RIVER	4	0	4	0	-1.9 to -1.3	-1.7	-1.6	0.3	-0.1	-0.1
WESTERN MEXICAN DRAINAGE BASIN	WESTERN MEXICAN DRAINAGE	1	0	1	0	-17.8 to -17.8	-17.8	-17.8	N/A	-0.9	-0.9
WILLCOX BASIN	WILLCOX	18	0	18	0	-106.4 to -6.6	-52.6	-54.7	32.2	-2.7	-2.6
YUMA BASIN	YUMA	3	0	1	2	-36.2 to -0.2	-0.3	-12.2	20.8	-0.6	0.0
Statewide Statistics		760	488	689	59	-198.5 to 176	-4.0	-4.2	37.8	-0.2	-0.2



## **Statewide: Water Years 2012 -2022**

### General Observations

Appendix 2 provides information for groundwater level measurements made in Arizona for WYs 2012 and 2022, as well as the calculated WL changes for this 10-year timeframe. This summary includes 1,083 records for all reduced data and all remarked comparable measurements. Plate 2 shows long-term WL change statewide as plotted from data in Appendix 2.

Wells showing groundwater level rises and declines are shown in Plate 2. In general, large declines are seen in the southeastern and north-central portions of the state. Large rises in groundwater levels are mostly observed in central and south-central Arizona.

The statewide 10-year WL change data have been separated into different selected scaled sections (Plates 4-17). These sections may encompass one or more groundwater basins based on their selected scaled areas for easier viewing.

### Statistics by Sub-basin

Appendix 2 data were further reduced for statistical purposes by removing remarked measurements. A total of 24 records were not used in statistical calculations, leaving 1,059 comparable WL measurements to calculate WL change statistics summarized by sub-basin in Table 7.

The West Salt River (WSR) Sub-basin of the Phoenix AMA had the largest number of rising groundwater level measurements (48) for the time period WYs 2012 - 2022. The Eloy (ELO) Sub-basin of the Pinal AMA had the largest number of water level declines (45).

Statewide, for the period WYs 2012 – 2022, WL change ranged from a maximum decline of -147.9 feet in the Gila Bend (GIL) Sub-basin to a maximum rise of 149.7 feet in the Upper Agua Fria (UAG) Sub-basin of the Prescott AMA. The mean WL change was negative in 63.4 percent of the basins measured and positive in 18.3 percent of basins measured. Negligible mean WL change (WL change less than one foot) was observed in 18.3 percent of basins measured.

The greatest median groundwater level decline (-42.6 feet) was found in the Paria (PAR) Basin whereas the greatest mean groundwater level decline (-60.2 feet) occurred in the Gila Bend (GIL) Basin. The greatest median rise in groundwater level (16.7 feet) was found in the Maricopa-Stanfield (MST) Sub-basin of the Pinal AMA, and the greatest mean rise in groundwater level (21.4 feet) occurred in the Verde Canyon (LVR) Sub-basin of the Verde River Basin. The Verde Canyon (LVR) Sub-basin also showed the greatest positive mean rate of WL change (2.1 feet per year) whereas the greatest positive median rate of WL change (1.7 feet per year) was found in the Maricopa-Stanfield (MST) Sub-basin of the Pinal AMA. The greatest negative mean rate of WL change (-6.0 feet per year) was found in the Gila Bend (GIL) Basin and the greatest negative median rate of WL change (-4.3 feet per year) occurred in the Paria (PAR) Basin.

Statewide statistics shown in Table 7 include 1,059 wells: 324 wells with rising WLs, 575 wells with declining WLs, and 108 wells with no change in WL.

Other statewide statistics include:

- range of WL change from -147.9 to 149.7 feet;
- median WL change of -2.2 feet;
- mean WL change of -3.1 feet;
- standard deviation of WL change of 23.5 feet;
- mean rate of WL change of -0.3 feet per year; and
- median rate of WL change of -0.2 feet per year.

**Table 7. Groundwater level change statistics and counts of wells with declines, rises, or no WL change in Arizona by sub-basin – WYs 2012 to 2022.**

Basin/AMA	Sub-basin	WL Change Count	Wells w/ Rising WLs	Wells w/ Declining WLs	Wells w/ No Change in WLs	Range of WL Change [ft]	Median WL Change [ft]	Mean WL Change [ft]	Standard Deviation of WL Change [ft]	Mean Rate of WL Change [ft/yr]	Median Rate of WL Change [ft/yr]
AGUA FRIA BASIN	AGUA FRIA	9	1	5	3	-31.8 to 2.2	-1.0	-4.5	10.5	-0.5	-0.1
ARAVAIPA CANYON BASIN	ARAVAIPA CANYON	1	1	0	0	2 to 2	2.0	2.0	N/A	0.2	0.2
BIG SANDY BASIN	FORT ROCK	2	0	2	0	-3.2 to -2.5	-2.9	-2.9	0.5	-0.3	-0.3
BIG SANDY BASIN	WIKIEUP	9	1	6	2	-19 to 12.6	-2.8	-5.6	10.2	-0.6	-0.3
BILL WILLIAMS BASIN	ALAMO RESERVOIR	4	1	1	2	-1.5 to 3.9	0.0	0.6	2.4	0.1	0.0
BILL WILLIAMS BASIN	BURRO CREEK	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
BILL WILLIAMS BASIN	CLARA PEAK	2	0	2	0	-2.5 to -1.3	-1.9	-1.9	0.8	-0.2	-0.2
BILL WILLIAMS BASIN	SANTA MARIA	4	1	2	1	-3 to 8.4	-1.0	0.9	5.3	0.1	-0.1
BILL WILLIAMS BASIN	SKULL VALLEY	5	0	4	1	-23.5 to -0.2	-1.6	-6.8	9.7	-0.7	-0.2
BONITA CREEK BASIN	BONITA CREEK	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
BUTLER VALLEY BASIN	BUTLER VALLEY	5	0	5	0	-17 to -2.2	-12.5	-10.1	6.1	-1.0	-1.3
CIENEGA CREEK BASIN	CIENEGA CREEK	8	3	3	2	-10.2 to 6.8	0.8	0.4	5.3	0.0	0.1
COCONINO PLATEAU BASIN	COCONINO PLATEAU	2	0	2	0	-4.6 to -1.5	-3.1	-3.1	2.2	-0.3	-0.3
DETRITAL VALLEY BASIN	DETRITAL VALLEY	10	2	3	5	-25.7 to 2.2	-0.1	-5.9	10.9	-0.6	0.0
DONNELLY WASH BASIN	DONNELLY WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
DOUGLAS BASIN	DOUGLAS	1	0	0	1	0.9 to 0.9	0.9	0.9	N/A	0.1	0.1
DOUGLAS BASIN	DOUGLAS INA	14	0	14	0	-74.5 to -1.9	-22.2	-26.1	20.4	-2.6	-2.2
DRIPPING SPRING WASH BASIN	DRIPPING SPRING WASH	1	0	1	0	-4.1 to -4.1	-4.1	-4.1	N/A	-0.4	-0.4
DUNCAN VALLEY BASIN	DUNCAN VALLEY	5	1	3	1	-7.3 to 1.6	-1.9	-1.8	3.5	-0.2	-0.2
DUNCAN VALLEY BASIN	VIRDEN VALLEY, NEW MEXICO ( DUNCAN - NM)	2	0	2	0	-25.2 to -1.2	-13.2	-13.2	17.0	-1.3	-1.3
GILA BEND BASIN	GILA BEND	9	0	9	0	-147.9 to -17	-41.0	-60.2	41.2	-6.0	-4.1
GRAND WASH BASIN	GRAND WASH	2	0	1	1	-14.5 to 0.5	-7.0	-7.0	10.6	-0.7	-0.7
HARQUAHALA BASIN	HARQUAHALA INA	18	3	14	1	-110.4 to 14.8	-17.4	-33.6	40.7	-3.4	-1.7
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	14	3	9	2	-15.3 to 6	-2.4	-4.4	6.7	-0.4	-0.2
KANAB PLATEAU BASIN	KANAB PLATEAU	3	2	1	0	-2.2 to 2.6	1.4	0.6	2.5	0.1	0.1
LAKE HAVASU BASIN	LAKE HAVASU	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
LAKE MOHAVE BASIN	LAKE MOHAVE	1	0	1	0	-1.4 to -1.4	-1.4	-1.4	N/A	-0.1	-0.1
LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	4	2	2	0	-8.4 to 4.5	0.6	-0.7	5.8	-0.1	0.1
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	65	14	41	10	-146.4 to 56.8	-2.2	-6.1	24.4	-0.6	-0.2
LOWER GILA BASIN	CHILDS VALLEY	1	1	0	0	6.2 to 6.2	6.2	6.2	N/A	0.6	0.6
LOWER GILA BASIN	DENDORA VALLEY	1	0	1	0	-16.4 to -16.4	-16.4	-16.4	N/A	-1.6	-1.6
LOWER GILA BASIN	WELLTON - MOHAWK	18	4	10	4	-63.9 to 64.3	-1.6	-6.9	27.3	-0.7	-0.2
LOWER SAN PEDRO BASIN	CAMP GRANT WASH	1	0	1	0	-5.8 to -5.8	-5.8	-5.8	N/A	-0.6	-0.6
LOWER SAN PEDRO BASIN	MAMMOTH	11	2	4	5	-7.2 to 9.6	-0.6	-0.3	5.0	0.0	-0.1
MCMULLEN VALLEY BASIN	MCMULLEN VALLEY	21	4	17	0	-92.1 to 57.2	-11.7	-13.3	28.8	-1.3	-1.2
MEADVIEW BASIN	MEADVIEW	2	0	2	0	-9.6 to -1.1	-5.3	-5.3	6.0	-0.5	-0.5
MORENCI BASIN	MORENCI	4	0	4	0	-26.2 to -1.5	-10.6	-12.2	12.4	-1.2	-1.1
PARIA BASIN	PARIA	1	0	1	0	-42.6 to -42.6	-42.6	-42.6	N/A	-4.3	-4.3
PARKER BASIN	CIBOLA VALLEY	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
PARKER BASIN	COLORADO RIVER INDIAN RESERVATION	1	1	0	0	1.2 to 1.2	1.2	1.2	N/A	0.1	0.1
PARKER BASIN	LA POSA PLAINS	1	0	1	0	-3.2 to -3.2	-3.2	-3.2	N/A	-0.3	-0.3
PEACH SPRINGS BASIN	PEACH SPRINGS	1	0	1	0	-23.1 to -23.1	-23.1	-23.1	N/A	-2.3	-2.3

Table 7. Continued.

Basin/AMA	Sub-basin	WL Change Count	Wells w/ Rising WLs	Wells w/ Declining WLs	Wells w/ No Change in WLs	Range of WL Change [ft]	Median WL Change [ft]	Mean WL Change [ft]	Standard Deviation of WL Change [ft]	Mean Rate of WL Change [ft/yr]	Median Rate of WL Change [ft/yr]
PHOENIX AMA	CAREFREE	6	4	2	0	-20.5 to 53.7	2.0	11.6	32.2	1.2	0.2
PHOENIX AMA	EAST SALT RIVER	75	46	26	3	-38.8 to 61.2	4.1	5.6	18.5	0.6	0.4
PHOENIX AMA	FOUNTAIN HILLS	7	1	4	2	-31.1 to 3.9	-1.1	-6.8	12.7	-0.7	-0.1
PHOENIX AMA	HASSAYAMPA	43	13	24	6	-36.3 to 51.2	-2.6	-1.5	16.1	-0.1	-0.3
PHOENIX AMA	LAKE PLEASANT	7	4	2	1	-22.6 to 4.4	1.2	-1.8	9.4	-0.2	0.1
PHOENIX AMA	RAINBOW VALLEY	14	0	14	0	-37.3 to -4.1	-7.8	-14.5	12.2	-1.5	-0.8
PHOENIX AMA	WEST SALT RIVER	93	48	42	3	-25.5 to 130.1	1.8	6.9	22.6	0.7	0.2
PINAL AMA	AGUIRRE VALLEY	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
PINAL AMA	ELOY	69	23	45	1	-57.5 to 47.2	-7.3	-8.6	19.8	-0.9	-0.7
PINAL AMA	MARICOPA - STANFIELD	23	15	7	1	-24.9 to 30.6	16.7	10.1	16.2	1.0	1.7
PINAL AMA	SANTA ROSA	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
PINAL AMA	VEKOL VALLEY	9	8	1	0	-4.3 to 6.5	1.7	1.8	2.8	0.2	0.2
PRESCOTT AMA	LITTLE CHINO VALLEY	41	4	35	2	-60 to 16.2	-10.5	-10.8	12.4	-1.1	-1.1
PRESCOTT AMA	UPPER AGUA FRIA	20	8	10	2	-28.8 to 149.7	-0.4	16.3	45.1	1.6	0.0
RANERGRAS PLAIN BASIN	RANERGRAS PLAIN	13	0	13	0	-48.8 to -1.2	-3.9	-9.8	12.9	-1.0	-0.4
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	15	2	10	3	-16.3 to 12.1	-1.8	-2.3	5.8	-0.2	-0.2
SAFFORD BASIN	GILA VALLEY	13	2	7	4	-31.3 to 8.2	-2.2	-4.5	10.0	-0.5	-0.2
SAFFORD BASIN	SAN CARLOS VALLEY	1	0	1	0	-23.7 to -23.7	-23.7	-23.7	N/A	-2.4	-2.4
SAFFORD BASIN	SAN SIMON VALLEY	15	0	14	1	-120.5 to -0.8	-11.8	-26.9	34.9	-2.7	-1.2
SALT RIVER BASIN	BLACK RIVER	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
SALT RIVER BASIN	SALT RIVER CANYON	1	0	1	0	-21.6 to -21.6	-21.6	-21.6	N/A	-2.2	-2.2
SALT RIVER BASIN	SALT RIVER LAKES	2	1	1	0	-4.4 to 4.3	0.0	0.0	6.1	0.0	0.0
SALT RIVER BASIN	WHITE RIVER	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
SAN BERNADINO VALLEY BASIN	SAN BERNADINO VALLEY	2	1	1	0	-2.3 to 1.4	-0.5	-0.5	2.6	0.0	0.0
SAN RAFAEL BASIN	SAN RAFAEL	5	1	1	3	-1.1 to 1.6	-0.8	-0.3	1.1	0.0	-0.1
SAN SIMON WASH BASIN	SAN SIMON WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
SANTA CRUZ AMA	SANTA CRUZ AMA	38	18	16	4	-13 to 14.6	0.6	0.5	5.7	0.1	0.1
SHIVWITS PLATEAU BASIN	SHIVWITS PLATEAU	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
TIGER WASH BASIN	TIGER WASH	1	0	0	1	-1 to -1	-1.0	-1.0	N/A	-0.1	-0.1
TONTO CREEK BASIN	TONTO CREEK	8	5	1	2	-9.7 to 13.4	2.2	2.0	6.4	0.2	0.2
TUCSON AMA	AVRA VALLEY	45	25	12	8	-30.2 to 123.8	2.1	12.0	32.0	1.2	0.2
TUCSON AMA	UPPER SANTA CRUZ	46	25	19	2	-22.1 to 64.4	6.1	8.4	19.1	0.8	0.6
UPPER HASSAYAMPA BASIN	UPPER HASSAYAMPA	1	0	1	0	-2.8 to -2.8	-2.8	-2.8	N/A	-0.3	-0.3
UPPER SAN PEDRO BASIN	ALLEN FLAT	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
UPPER SAN PEDRO BASIN	SIERRA VISTA	35	8	22	5	-11.2 to 23.6	-3.3	-2.1	6.5	-0.2	-0.3
VERDE RIVER BASIN	BIG CHINO	43	10	29	4	-15 to 26	-4.0	-2.7	6.7	-0.3	-0.4
VERDE RIVER BASIN	VERDE CANYON	19	16	3	0	-13.4 to 71.5	11.5	21.4	27.0	2.1	1.2
VERDE RIVER BASIN	VERDE VALLEY	46	11	26	9	-65 to 12.1	-2.3	-5.4	13.7	-0.5	-0.2
VIRGIN RIVER BASIN	VIRGIN RIVER	5	0	3	2	-6.5 to -0.7	-2.5	-2.7	2.3	-0.3	-0.3
WESTERN MEXICAN DRAINAGE BASIN	WESTERN MEXICAN DRAINAGE	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
WILLCOX BASIN	WILLCOX	28	2	26	0	-114.6 to 14	-34.5	-36.0	29.8	-3.6	-3.4
YUMA BASIN	YUMA	7	0	5	2	-12.4 to 0.8	-6.1	-6.1	5.3	-0.6	-0.6
Statewide Statistics		1059	348	599	112	-147.9 to 149.7	-2.2	-3.1	23.5	-0.3	-0.2



## **Statewide: Water Years 2021 -2022**

### General Observations

Appendix 3 provides information for groundwater level measurements made in Arizona for WYs 2021 and 2022, as well as the calculated WL changes for this one-year timeframe. This summary includes a total of 1,335 records. Plate 3 shows short-term (one-year) statewide WL change trends from data in Appendix 3.

Geographic concentrations of both WL rise and decline are shown on Plate 3. In general, large concentrations of WL rise were observed throughout central Arizona. Large concentrations of WL decline were observed in central, north-central, and southeastern Arizona.

### Statistics by Sub-basin

Appendix 3 data were further reduced for statistical purposes by removing remarked measurements. A total of 36 records were not used in statistical calculations, leaving 1,299 comparable WL measurements to calculate WL change statistics summarized by sub-basin in Table 8.

Well counts per sub-basin were greatest in the Phoenix AMA's West Salt River (WSR) Sub-basin, with 120 measurements. The West Salt River (WSR) Sub-basin of the Phoenix AMA had the largest number of rising groundwater level measurements (49) for the time period WYs 2021 -2022. The Eloy (ELO) Sub-basin of the Pinal AMA had the largest number of water level declines (62).

Statewide, for the period WYs 2021 – 2022, WL change ranged from a maximum decline of -43.6 feet to a maximum rise of 39.2 feet, both within the Verde Canyon (LVR) Sub-basin of the Verde River Basin. The mean WL change was negative in 33.3 percent of the basins measured and positive in 18.8 percent of basins measured. Negligible mean WL change (WL change less than one foot) was observed in 47.8 percent of basins measured.

The greatest median groundwater level decline (-16.7 feet) occurred in the Paria (PAR) Sub-basin with a well count of three. The second greatest median groundwater level decline (-5.5 feet) occurred in the Grand Wash (GWA) Sub-basin. The greatest median groundwater level rise (5.9 feet) occurred in the Aravaipa Canyon (ARA) Basin, with a well count of one. The second greatest median groundwater level (2.8 feet) rise occurred in the Salt River Lakes (SRL) Sub-basin.

The greatest mean groundwater level decline (-12.9 feet) also occurred in the Paria (PAR) Sub-basin. The second greatest median groundwater level decline (-10.1 feet) occurred in the Gila Bend (GIL) Basin. The greatest mean groundwater level rise (5.9 feet) occurred in the Aravaipa Canyon (ARA) Sub-basin with a single well count. The second greatest mean groundwater level rise (3.2 feet) occurred in the Upper Agua Fria (UAG) Sub-basin of the Prescott AMA.

Statewide statistics shown in Table 8 include a well count of 1,299 wells: 362 wells with rising WLs, 434 wells with declining WLs, and 503 wells with no change in WL.

Other statewide statistics for WY 2021 to 2022 include:

- the range of WL change from -43.6 to 39.2 feet;
- the median water level change of -0.4 feet;
- the mean water level change of -0.4 feet;
- the standard deviation of water level change of 6.2 feet;
- the mean rate of water level change of -0.4 feet per year;
- and median rate of WL change of -0.2 feet per year.

**Table 8. Groundwater level change statistics and counts of wells with declines, rises, or no WL change in Arizona by sub-basin – WYs 2021 to 2022.**

Basin/AMA	Sub-basin	WL Change Count	Wells w/ Rising WLs	Wells w/ Declining WLs	Wells w/ No Change in WLs	Range of WL Change [ft]	Median WL Change [ft]	Mean WL Change [ft]	Standard Deviation of WL Change [ft]	Mean Rate of WL Change [ft/yr]	Median Rate of WL Change [ft/yr]
AGUA FRIA BASIN	AGUA FRIA	7	3	3	1	-2.1 to 3.3	-0.1	0.3	2.3	0.3	-0.1
ARAVAIPA CANYON BASIN	ARAVAIPA CANYON	1	1	0	0	5.9 to 5.9	5.9	5.9	N/A	5.9	5.9
BIG SANDY BASIN	FORT ROCK	3	0	0	3	-0.7 to 0.2	-0.6	-0.4	0.5	-0.4	-0.6
BIG SANDY BASIN	WIKIEUP	9	0	2	7	-17.6 to 0.9	-0.2	-2.2	5.8	-2.2	-0.2
BILL WILLIAMS BASIN	ALAMO RESERVOIR	4	1	0	3	-0.6 to 1.1	0.4	0.3	0.9	0.3	0.4
BILL WILLIAMS BASIN	BURRO CREEK	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
BILL WILLIAMS BASIN	CLARA PEAK	2	0	2	0	-2.8 to -1.3	-2.1	-2.1	1.1	-2.1	-2.1
BILL WILLIAMS BASIN	SANTA MARIA	4	1	2	1	-2.9 to 4.3	-0.6	0.1	3.3	0.1	-0.6
BILL WILLIAMS BASIN	SKULL VALLEY	8	0	2	6	-22.1 to 0.8	-0.2	-3.0	7.8	-3.0	-0.2
BONITA CREEK BASIN	BONITA CREEK	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
BUTLER VALLEY BASIN	BUTLER VALLEY	8	0	5	3	-12.1 to -0.2	-1.9	-3.6	4.5	-3.6	-1.9
CIENEGA CREEK BASIN	CIENEGA CREEK	16	8	3	5	-4 to 4.8	0.9	0.8	2.5	0.8	0.9
COCONINO PLATEAU BASIN	COCONINO PLATEAU	2	0	1	1	-2.4 to -0.5	-1.5	-1.5	1.3	-1.5	-1.5
DETRITAL VALLEY BASIN	DETRITAL VALLEY	9	1	1	7	-6.9 to 3.2	-0.4	-0.6	2.7	-0.6	-0.4
DONNELLY WASH BASIN	DONNELLY WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
DOUGLAS BASIN	DOUGLAS	5	3	0	2	-0.8 to 3.2	1.4	1.1	1.6	1.1	1.4
DOUGLAS BASIN	DOUGLAS INA	13	3	8	2	-6.2 to 4.2	-1.6	-1.4	3.2	-1.4	-1.6
DRIPPING SPRING WASH BASIN	DRIPPING SPRING WASH	2	0	1	1	-2.6 to 0.3	-1.2	-1.2	2.1	-1.2	-1.2
DUNCAN VALLEY BASIN	DUNCAN VALLEY	5	1	2	2	-2.2 to 1.4	0.1	-0.4	1.6	-0.4	0.1
DUNCAN VALLEY BASIN	VIRIDEN VALLEY, NEW MEXICO ( DUNCAN - NM)	2	1	1	0	-1.5 to 1.6	0.1	0.1	2.2	0.1	0.1
GILA BEND BASIN	GILA BEND	11	0	10	1	-37.5 to -1	-5.0	-10.1	11.0	-10.1	-5.0
GRAND WASH BASIN	GRAND WASH	2	0	1	1	-11.2 to 0.2	-5.5	-5.5	8.1	-5.5	-5.5
HARQUAHALA BASIN	HARQUAHALA INA	19	3	12	4	-9.1 to 13.4	-2.4	-2.6	5.4	-2.6	-2.4
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	21	1	7	13	-5.4 to 2.1	-0.4	-0.9	1.7	-0.9	-0.4
KANAB PLATEAU BASIN	KANAB PLATEAU	3	2	0	1	-0.4 to 4.4	1.7	1.9	2.4	1.9	1.7
LAKE HAVASU BASIN	LAKE HAVASU	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
LAKE MOHAVE BASIN	LAKE MOHAVE	1	0	0	1	0.3 to 0.3	0.3	0.3	N/A	0.3	0.3
LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	3	0	0	3	0.1 to 0.2	0.2	0.2	0.0	0.2	0.2
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	78	22	23	33	-29.7 to 25.8	-0.1	0.1	7.0	0.1	-0.1
LOWER GILA BASIN	CHILDS VALLEY	1	1	0	0	1.2 to 1.2	1.2	1.2	N/A	1.2	1.2
LOWER GILA BASIN	DENDORA VALLEY	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
LOWER GILA BASIN	WELLTON - MOHAWK	25	3	7	15	-17.8 to 7.1	0.0	-1.2	4.7	-1.2	0.0
LOWER SAN PEDRO BASIN	CAMP GRANT WASH	1	0	1	0	-2.4 to -2.4	-2.4	-2.4	N/A	-2.4	-2.4
LOWER SAN PEDRO BASIN	MAMMOTH	12	1	3	8	-4.8 to 2.4	0.2	-0.4	1.9	-0.4	0.2
MCMULLEN VALLEY BASIN	MCMULLEN VALLEY	22	6	14	2	-10.5 to 12.7	-2.2	-1.8	5.8	-1.8	-2.2
MEADVIEW BASIN	MEADVIEW	2	1	1	0	-1.4 to 1.9	0.3	0.3	2.3	0.3	0.3
MORENCI BASIN	MORENCI	5	2	3	0	-14 to 2	-1.7	-4.4	7.1	-4.4	-1.7
PARIA BASIN	PARIA	3	1	2	0	-23.2 to 1.3	-16.7	-12.9	12.7	-12.9	-16.7
PARKER BASIN	CIBOLA VALLEY	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
PARKER BASIN	COLORADO RIVER INDIAN RESERVATION	1	1	0	0	1.6 to 1.6	1.6	1.6	N/A	1.6	1.6
PARKER BASIN	LA POSA PLAINS	2	0	0	2	-0.8 to -0.6	-0.7	-0.7	0.1	-0.7	-0.7
PEACH SPRINGS BASIN	PEACH SPRINGS	2	1	1	0	-8.3 to 1.8	-3.3	-3.3	7.1	-3.3	-3.3

Table 8. Continued.

Basin/AMA	Sub-basin	WL Change Count	Wells w/ Rising WLs	Wells w/ Declining WLs	Wells w/ No Change in WLs	Range of WL Change [ft]	Median WL Change [ft]	Mean WL Change [ft]	Standard Deviation of WL Change [ft]	Mean Rate of WL Change [ft/yr]	Median Rate of WL Change [ft/yr]
PHOENIX AMA	CAREFREE	8	3	3	2	-18 to 5.2	-0.6	-2.1	7.0	-2.1	-0.6
PHOENIX AMA	EAST SALT RIVER	83	31	23	29	-16.8 to 26.7	0.6	1.3	5.7	1.3	0.6
PHOENIX AMA	FOUNTAIN HILLS	6	2	1	3	-21.1 to 3.8	0.5	-2.4	9.3	-2.4	0.5
PHOENIX AMA	HASSAYAMPA	53	15	13	25	-9.9 to 9.1	0.0	0.4	3.5	0.4	0.0
PHOENIX AMA	LAKE PLEASANT	9	7	1	1	-5.2 to 9.6	2.2	2.2	3.9	2.2	2.2
PHOENIX AMA	RAINBOW VALLEY	18	1	9	8	-11.9 to 1.7	-1.0	-1.5	2.8	-1.5	-1.0
PHOENIX AMA	WEST SALT RIVER	120	49	31	40	-28.1 to 18.8	0.3	1.0	6.1	1.0	0.3
PINAL AMA	AGUIRRE VALLEY	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
PINAL AMA	ELOY	97	11	62	24	-32.1 to 14.3	-2.3	-3.9	6.7	-3.9	-2.3
PINAL AMA	MARICOPA - STANFIELD	34	12	11	11	-33.3 to 17.8	0.3	-0.7	7.9	-0.7	0.3
PINAL AMA	SANTA ROSA	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
PINAL AMA	VEKOL VALLEY	9	3	0	6	-0.4 to 8.6	0.4	1.6	2.9	1.6	0.4
PRESCOTT AMA	LITTLE CHINO VALLEY	55	15	17	23	-13.6 to 29.1	-0.5	1.0	5.9	1.0	-0.5
PRESCOTT AMA	UPPER AGUA FRIA	23	10	5	8	-17.1 to 31.3	0.4	3.2	10.2	3.2	0.4
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	13	2	6	5	-5.3 to 1.6	-0.2	-1.2	2.2	-1.2	-0.2
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	16	1	4	11	-5.4 to 4.5	-0.3	-0.6	2.1	-0.6	-0.3
SAFFORD BASIN	GILA VALLEY	19	3	8	8	-6.1 to 6.3	-0.6	-0.6	2.7	-0.6	-0.6
SAFFORD BASIN	SAN CARLOS VALLEY	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
SAFFORD BASIN	SAN SIMON VALLEY	15	4	6	5	-8.5 to 17	-0.4	0.2	5.5	0.2	-0.4
SALT RIVER BASIN	BLACK RIVER	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
SALT RIVER BASIN	SALT RIVER CANYON	1	0	0	1	-0.3 to -0.3	-0.3	-0.3	N/A	-0.3	-0.3
SALT RIVER BASIN	SALT RIVER LAKES	2	1	1	0	-3.3 to 8.8	2.8	2.8	8.6	2.8	2.8
SALT RIVER BASIN	WHITE RIVER	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
SAN BERNADINO VALLEY BASIN	SAN BERNADINO VALLEY	2	1	0	1	-0.5 to 1.6	0.6	0.6	1.5	0.6	0.6
SAN RAFAEL BASIN	SAN RAFAEL	5	1	1	3	-1.1 to 3	0.3	0.4	1.7	0.4	0.3
SAN SIMON WASH BASIN	SAN SIMON WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
SANTA CRUZ AMA	SANTA CRUZ AMA	50	15	13	22	-14.8 to 13.2	0.4	-0.1	4.6	-0.1	0.4
SHIVWITS PLATEAU BASIN	SHIVWITS PLATEAU	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
TIGER WASH BASIN	TIGER WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
TONTO CREEK BASIN	TONTO CREEK	11	4	6	1	-7.4 to 12.7	-1.2	0.1	5.3	0.1	-1.2
TUCSON AMA	AVRA VALLEY	49	26	5	18	-4.5 to 14.7	1.2	2.6	4.2	2.6	1.2
TUCSON AMA	UPPER SANTA CRUZ	57	27	18	12	-15.9 to 26.3	0.3	1.9	6.8	1.9	0.3
UPPER HASSAYAMPA BASIN	UPPER HASSAYAMPA	1	0	1	0	-3.7 to -3.7	-3.7	-3.7	N/A	-3.7	-3.7
UPPER SAN PEDRO BASIN	ALLEN FLAT	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
UPPER SAN PEDRO BASIN	SIERRA VISTA	39	11	6	22	-7 to 11	0.0	0.4	3.0	0.4	0.0
VERDE RIVER BASIN	BIG CHINO	70	14	8	48	-4 to 17.2	-0.1	0.5	3.0	0.5	-0.1
VERDE RIVER BASIN	VERDE CANYON	18	10	6	2	-43.6 to 39.2	1.4	0.9	15.7	0.9	1.4
VERDE RIVER BASIN	VERDE VALLEY	53	13	21	19	-33.8 to 12.4	-0.7	-1.9	7.6	-1.9	-0.7
VIRGIN RIVER BASIN	VIRGIN RIVER	5	0	1	4	-2.4 to 0.2	-0.4	-0.6	1.0	-0.6	-0.4
WESTERN MEXICAN DRAINAGE BASIN	WESTERN MEXICAN DRAINAGE	1	0	0	1	-0.9 to -0.9	-0.9	-0.9	N/A	-0.9	-0.9
WILLCOX BASIN	WILLCOX	36	2	28	6	-19.2 to 25.8	-3.9	-5.0	7.9	-5.0	-3.9
YUMA BASIN	YUMA	7	0	1	6	-1.1 to 0.5	-0.2	-0.3	0.6	-0.3	-0.2
Statewide Statistics		1299	362	434	503	-43.6 to 39.2	-0.4	-0.4	6.2	-0.4	-0.2



## SUMMARY

Appendix 4 lists statewide WL statistics by sub-basin and provides a summary of 20-year, 10-year and one-year WL changes. Sub-basins with no measurements for a specific time period are listed for completeness. Data are assembled to illustrate the variability of WL change statistics and well counts per basin or sub-basin over the various time periods. Figure 2 (pages 24-30) contains graphs of WL change distribution per sub-basin for 20-year, 10-year, and one-year time periods. The graphs provide an understanding of rising and declining WLs per time period; averages are displayed as an orange line and the range of WL change is displayed as a blue bar.

Compilation of WL change data assists in identifying basins and sub-basins within the state that may need additional groundwater level monitoring. Basins and sub-basins with large WL changes (especially those with significantly declining groundwater levels) with few wells will be evaluated for additional or increased monitoring.

Adequate spatial coverage of wells is only one factor for selecting additional monitoring locations. Understanding what aquifer or hydrogeologic unit a well is monitoring (knowing what intervals are screened) is another critical factor in siting additional monitoring wells. In addition to the data presented in this report, the following criteria are also considered when selecting new monitoring sites:

- areas showing an increase in water demand or a decrease in recharge;
- areas where wells can be co-located with pre-existing stream and/or precipitation gages;
- areas with significant on-going or projected population growth;
- areas with land subsidence;
- safe yield considerations;
- water quality concerns;
- riparian and other environmental considerations; and
- drought considerations.

Monitoring at some sites may be discontinued if analysis of the existing monitoring network reveals that data are either redundant, ambiguous or fluctuate too widely to discern static conditions or trends. Also, WLs obtained from actively pumping wells are of marginal value. Groundwater levels collected from “static” groundwater conditions (conditions where groundwater is not being stressed by pumpage or artificial influences) provide data that can assist with understanding the true nature of aquifer systems.

ADWR is working to analyze and document which wells are monitoring specific aquifers, thus allowing for hydrologic interpretations of water level change data or statistics. Evaluating WL change data presented in this report with respect to screened intervals in wells and hydrogeologic units or aquifers, along with the other factors described above, will be the next step in improving and optimizing the statewide groundwater monitoring network.

## **ACKNOWLEDGEMENTS**

Arizona's hydrologic data collection activities are fundamental components of the state's strategic vision for water supply sustainability. This report is dedicated to the well owners who have allowed their wells to be measured over the years and to the individuals and organizations that have collected hydrologic data in Arizona: data that are essential to reliable resource evaluations that support informed decision making.

## REFERENCES CITED

Arizona Department of Water Resources, Groundwater Site Inventory (GWSI), GWSIWEB, accessed at July 8, 2024  
<https://gisweb.azwater.gov/waterresourcedata/GWSI.aspx>

Flora, S. & Davis, T. (2009). *Hydrologic Map Series (HMS), Water Level Change Map Series (WLCMS), and Basin Sweep Assessment Report ADWR Basins and Sub-basins*. Arizona Department of Water Resources.  
[https://www.azwater.gov/sites/default/files/2022-07/HMSWLCMSBasinSweepAssessmentReport2009\\_0.pdf](https://www.azwater.gov/sites/default/files/2022-07/HMSWLCMSBasinSweepAssessmentReport2009_0.pdf)



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Or visit the Arizona Department of Water Resources Web site: <http://www.azwater.gov>

## **Figure 1**

**Arizona groundwater basins, sub-basins, and  
designated sections**





## **Figure 2**

**Water level change distribution per basin or sub-basin for 20-year, 10-year, and 1-year time periods**

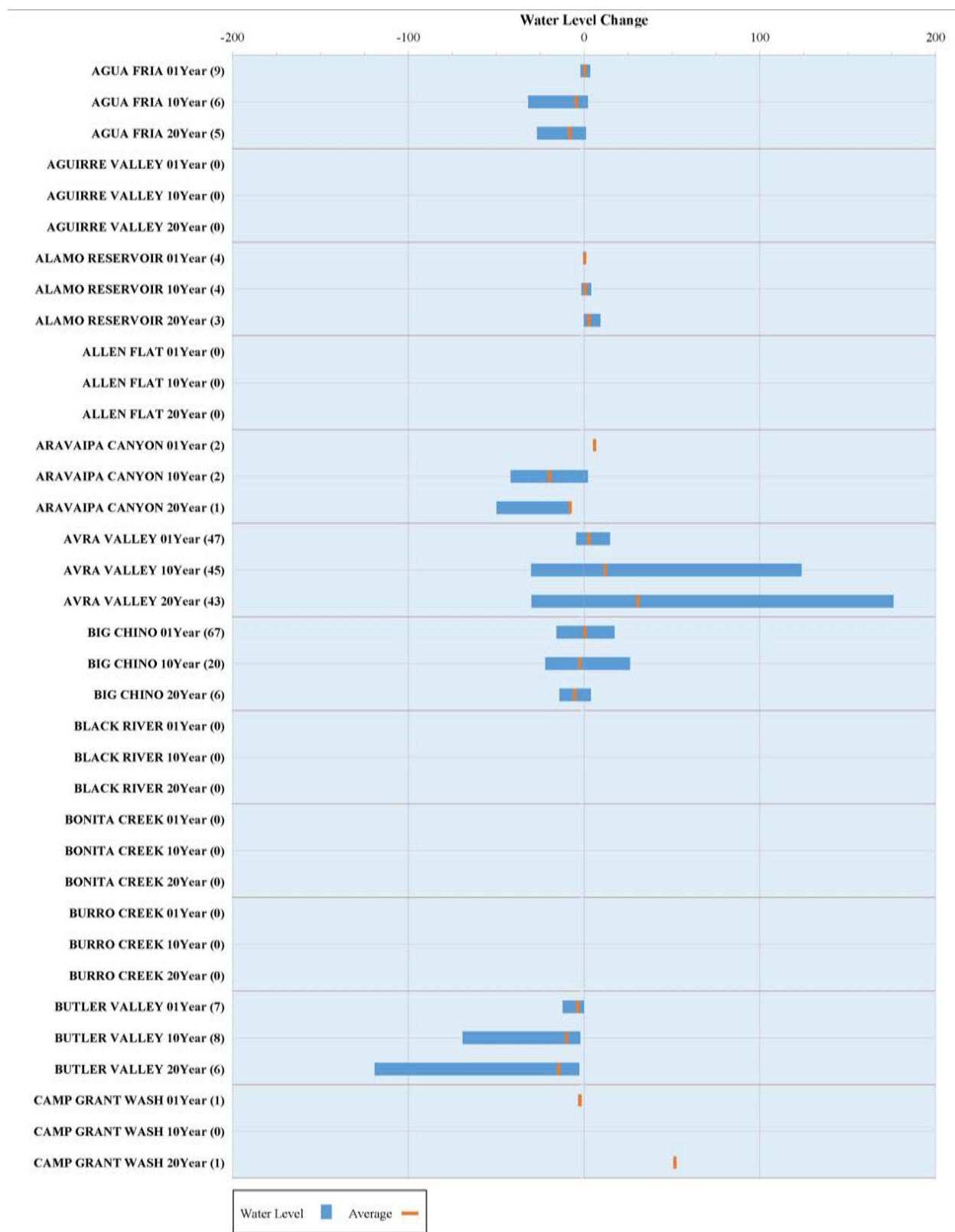


Figure 2. Water level change distribution per basin or sub-basin for 20-year, 10-year, and 1-year time periods.  
 \*Number next to sub-basin name indicates the number of measurements.

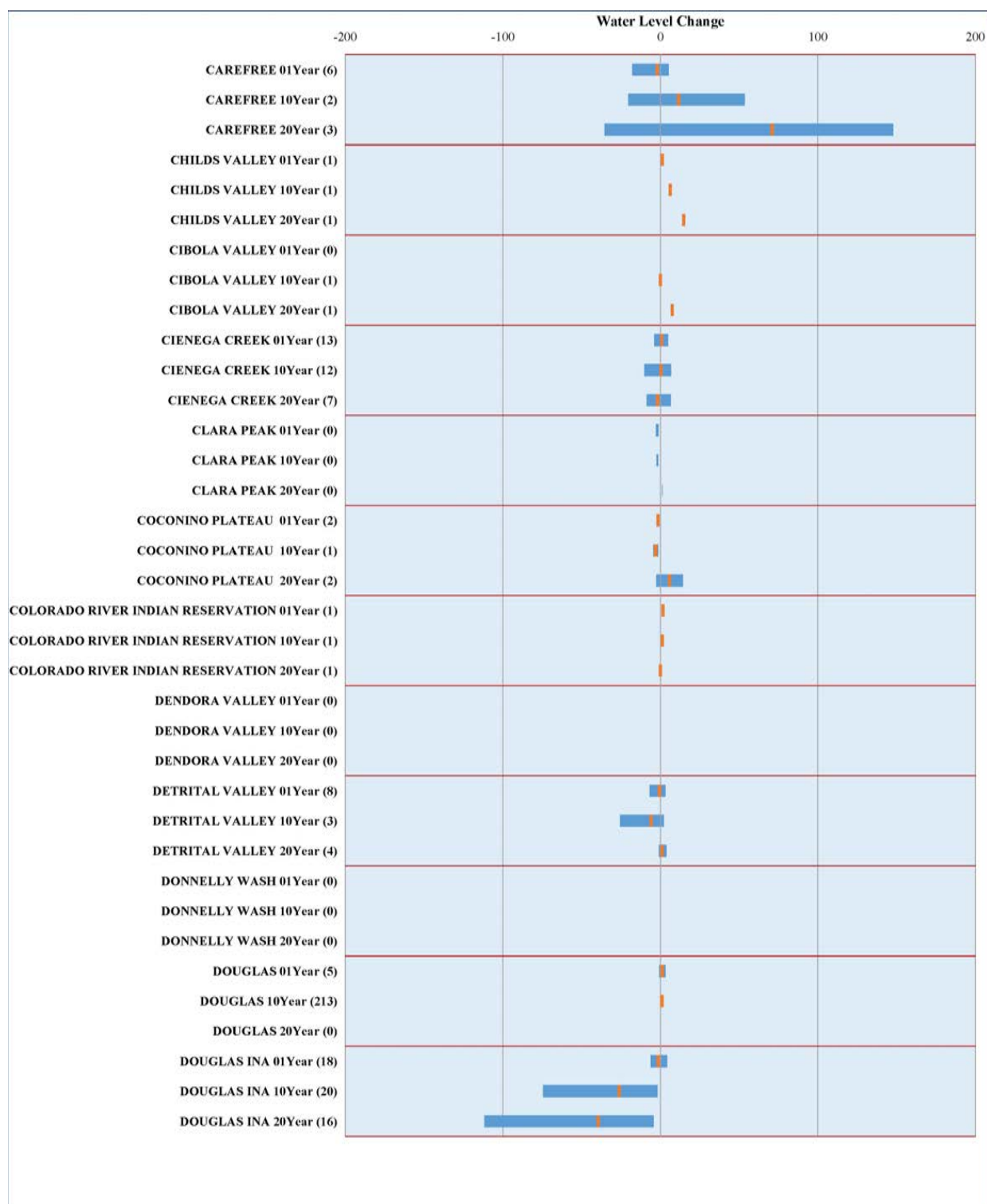


Figure 2 continued.



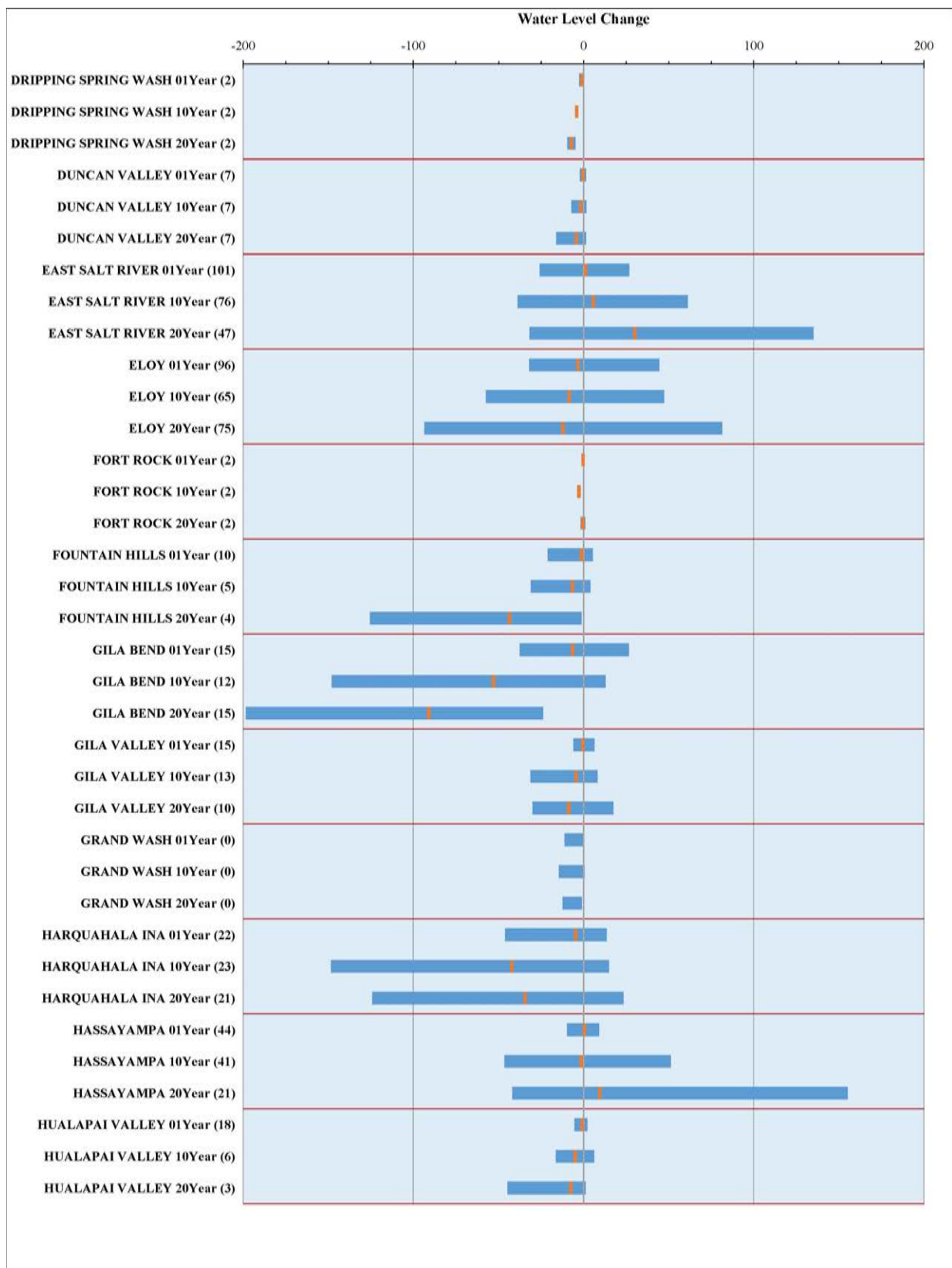


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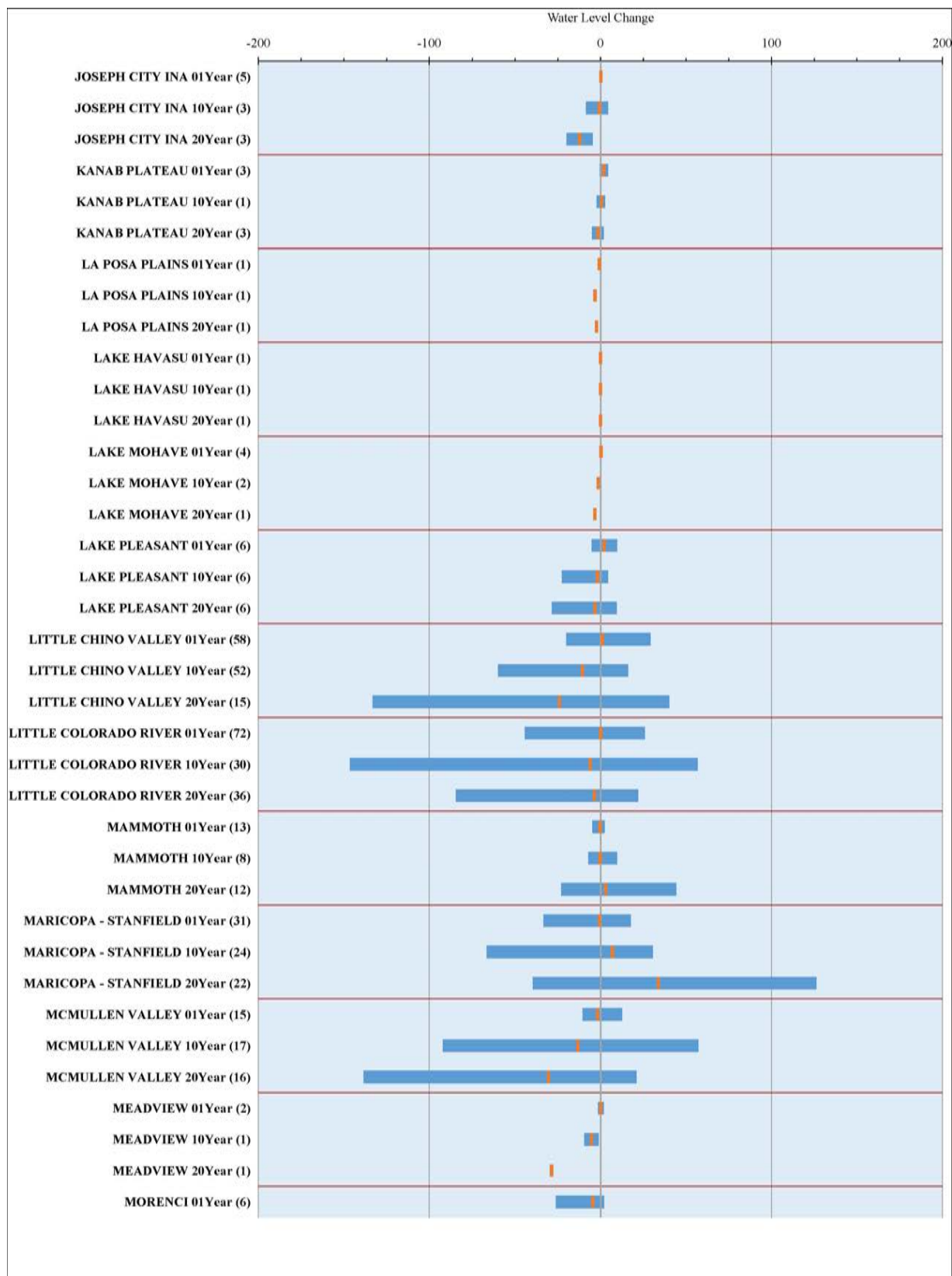


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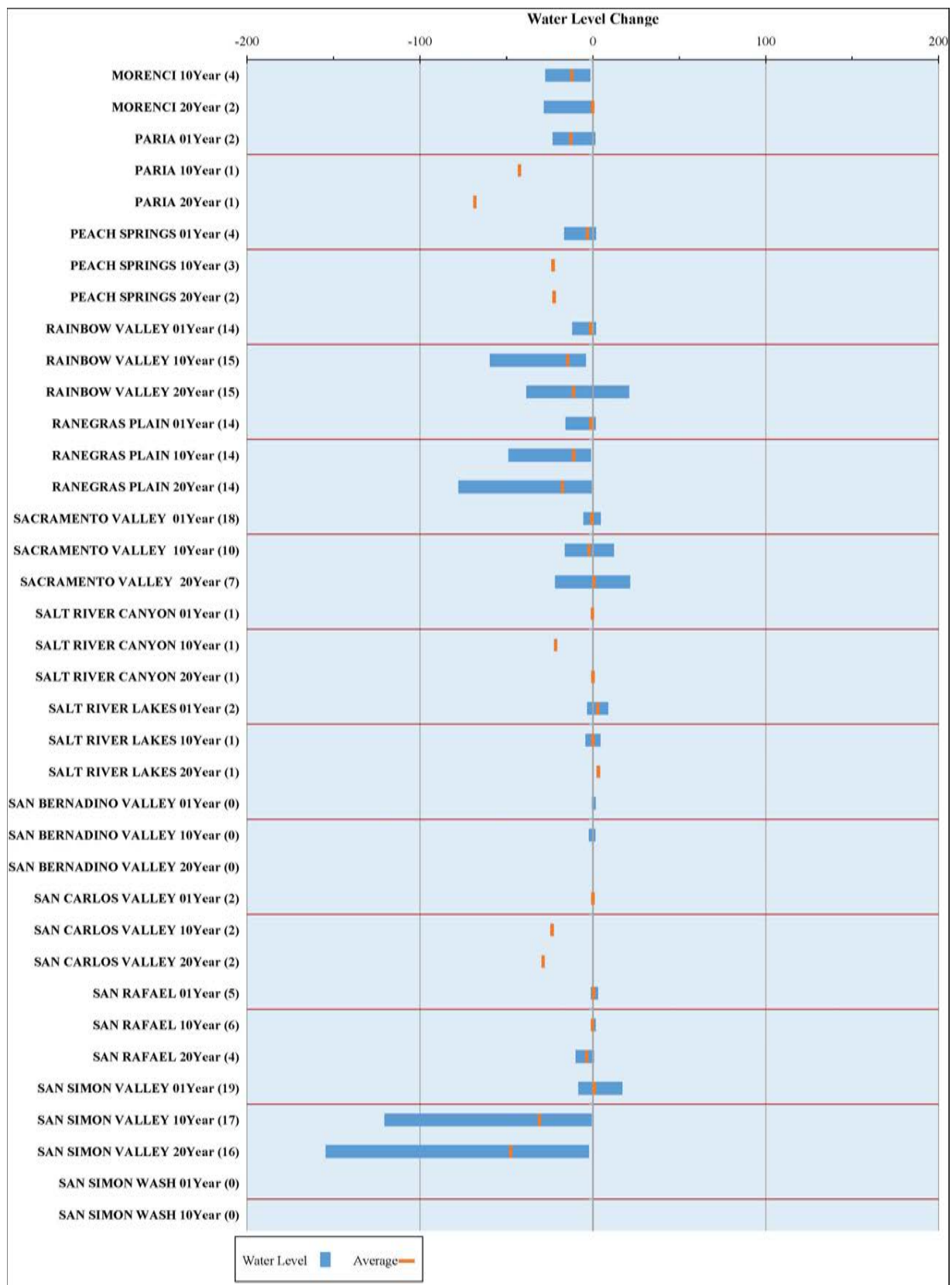


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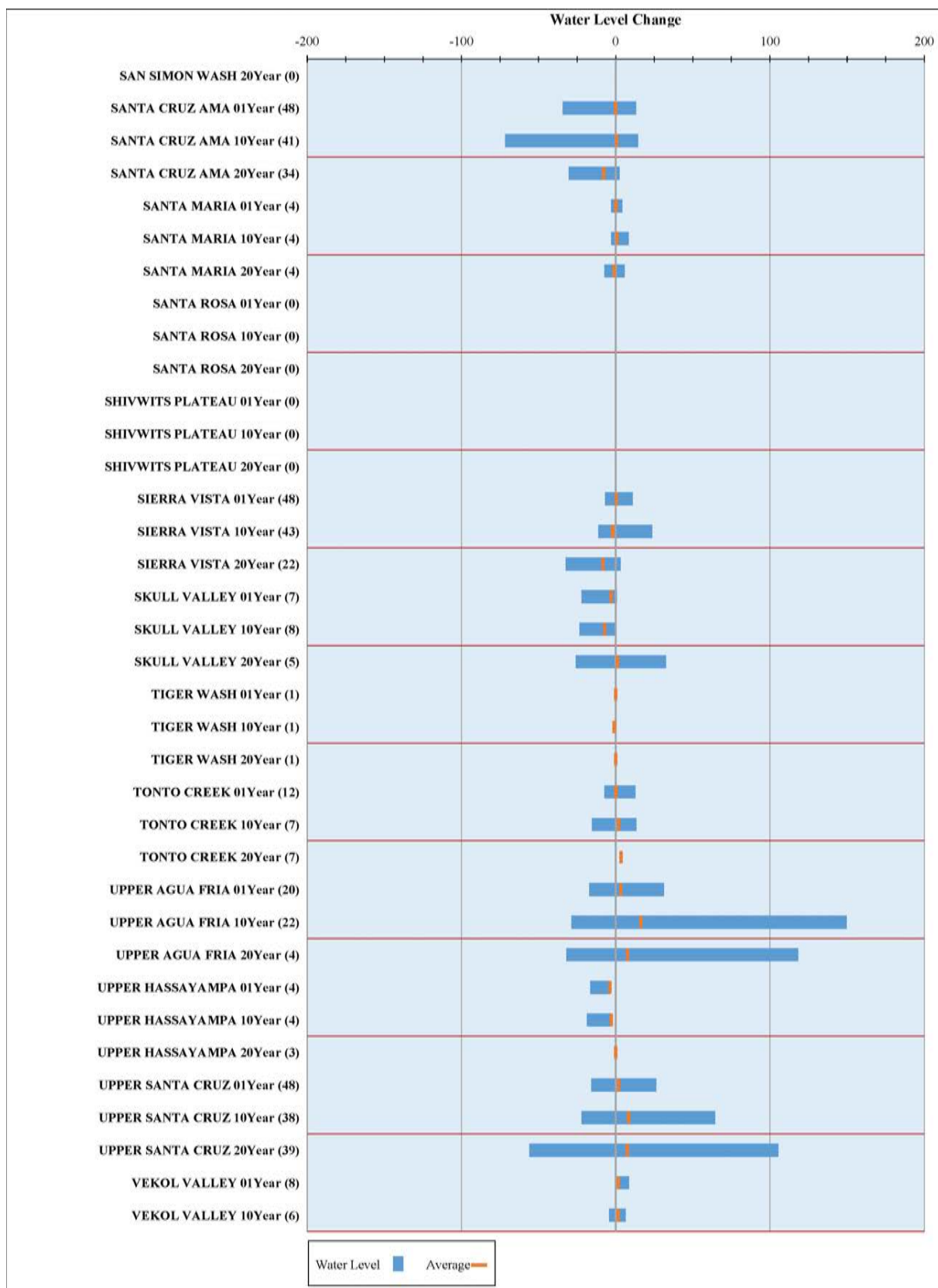


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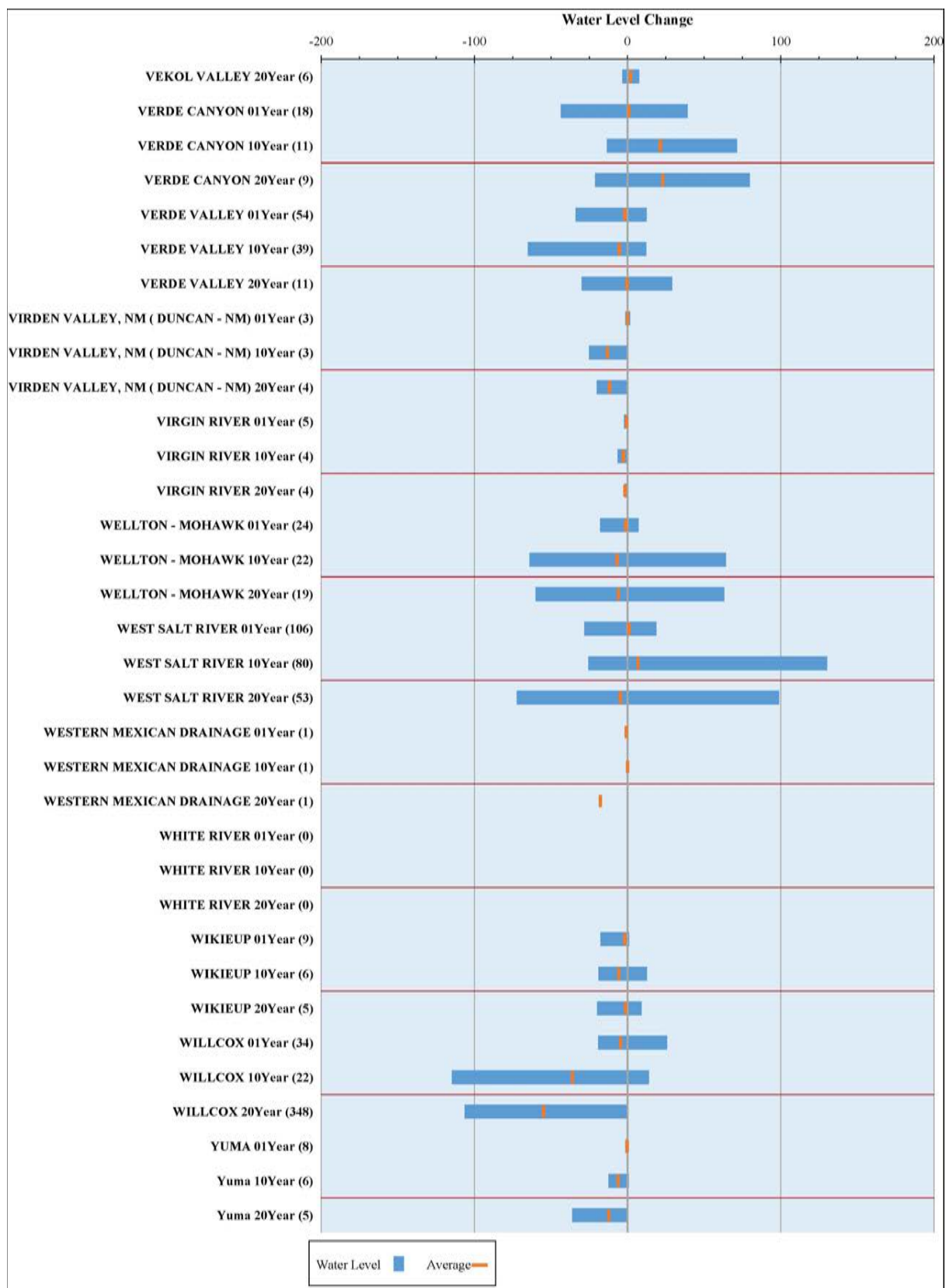
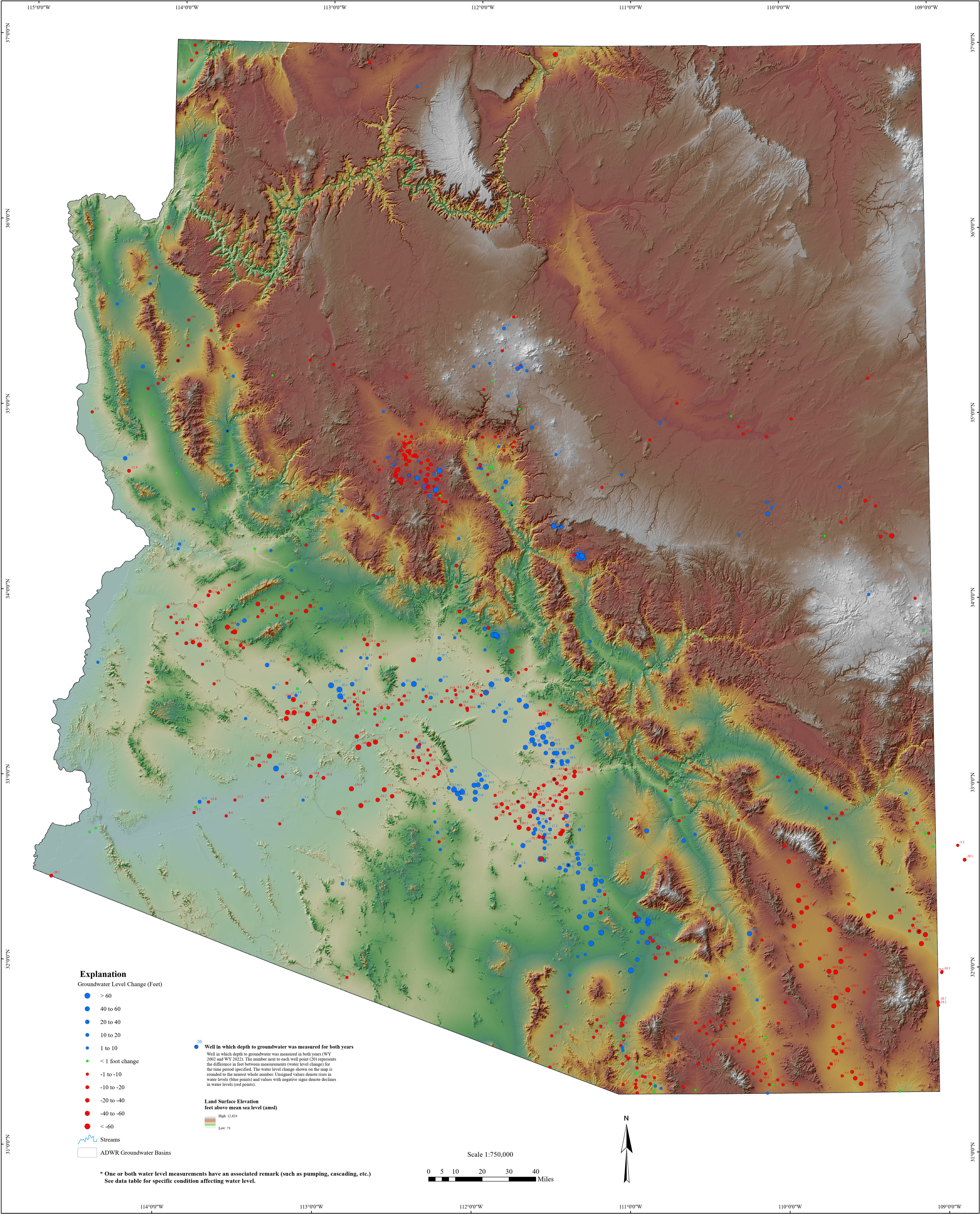


Figure 2 continued.

## **Plate Figures**

**The following plates have been constructed for a visual and spacial reference to the data tables included in this report. The plates are visible within this report on 11 x 17 sheets. However, the original copies can be viewed by opening the companion files link where the report is posted online. Plates (1 – 3 are best viewed at (34 x 44 fold outs which are included with this report.**





For data go to:  
<https://app.azwater.gov/gwsi/SearchGWSI.aspx>

For more information or copies contact:  
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Phoenix, AZ 85007  
(602) 771-8500  
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## GROUNDWATER LEVEL CHANGES IN ARIZONA WATER YEARS 2002 - 2022 (PLATE 1)

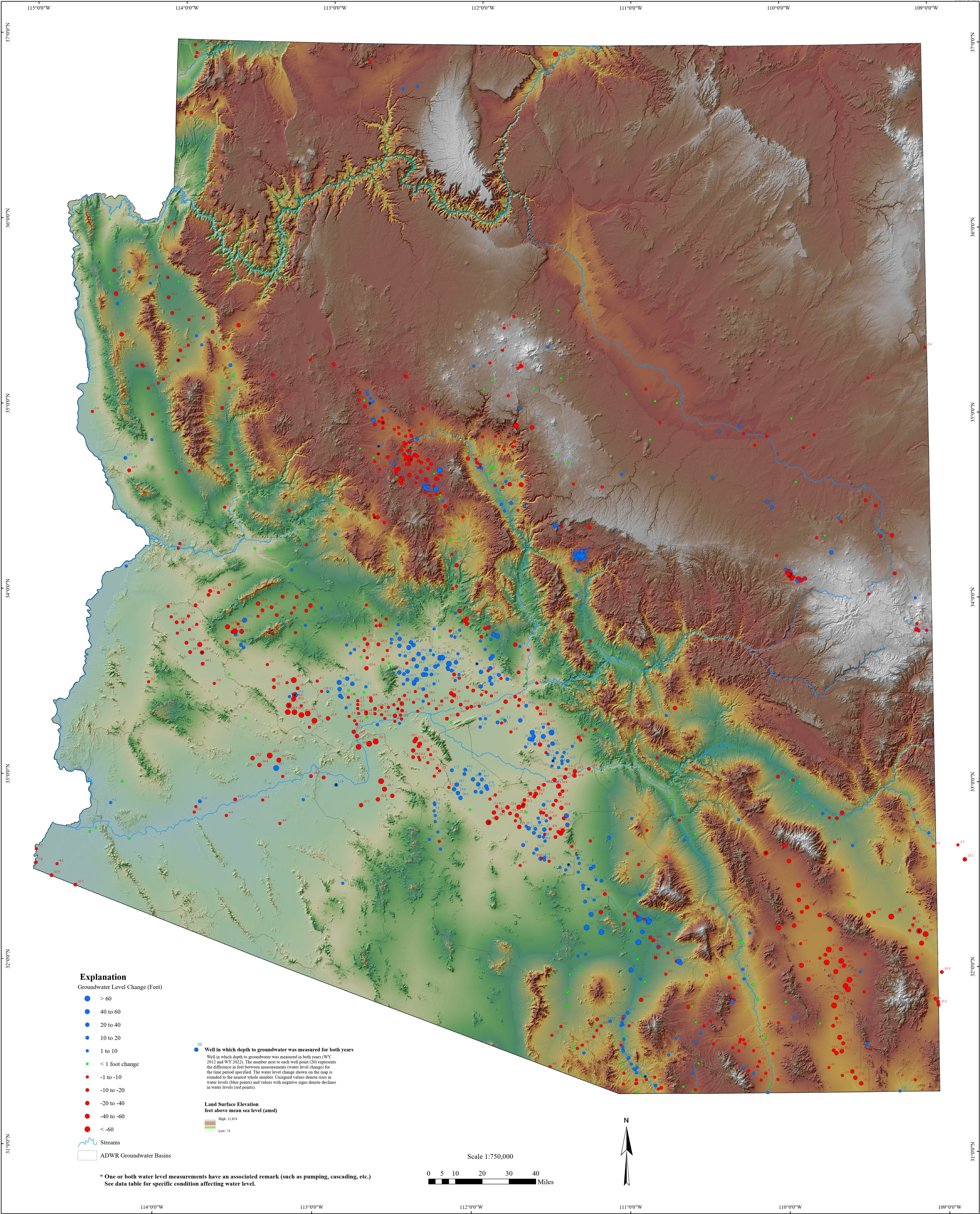
September 2025

North American Datum 1983  
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Water Level Change Report 2022\Maps



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## GROUNDWATER LEVEL CHANGES IN ARIZONA WATER YEARS 2012 - 2022 (PLATE 2)

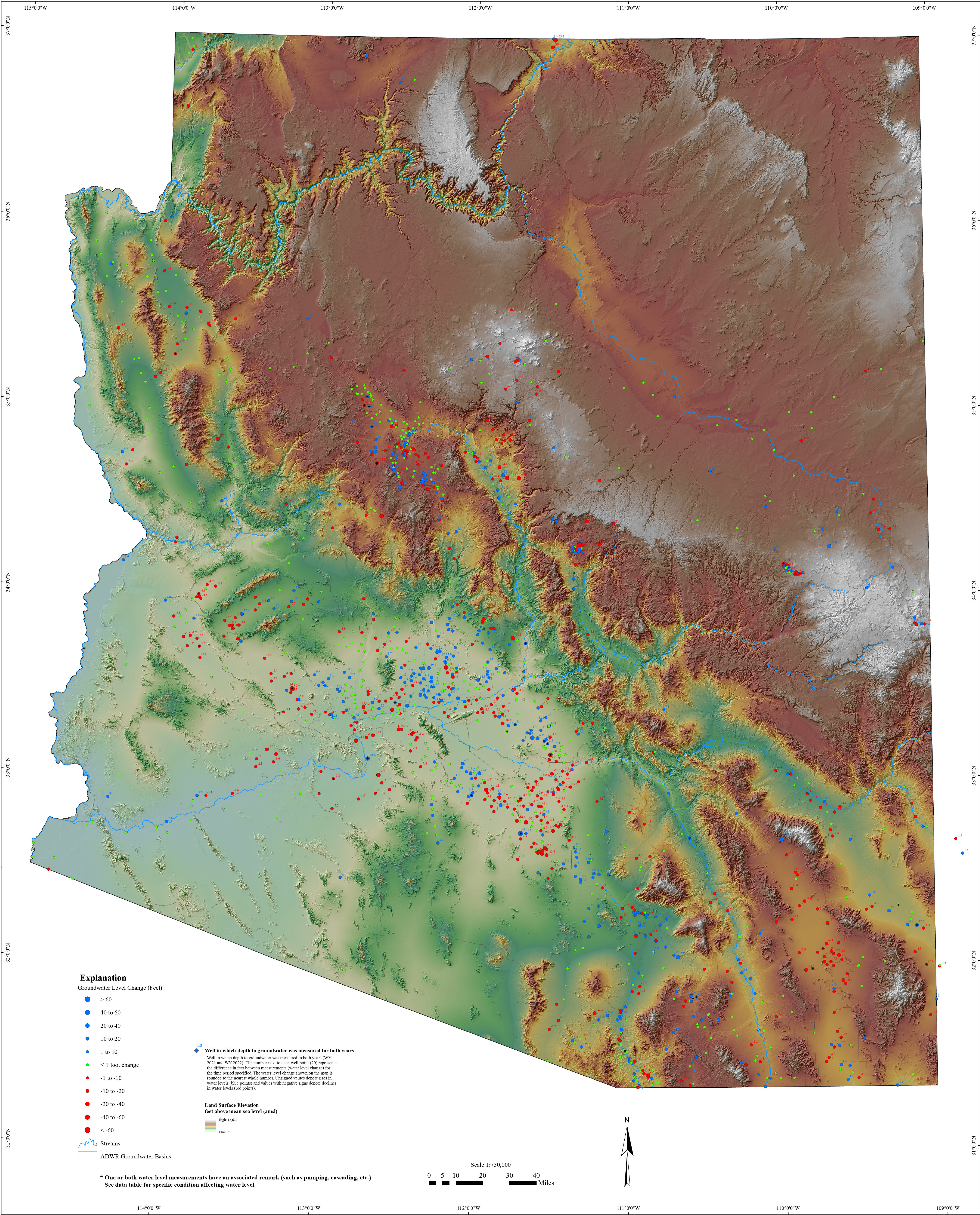
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## GROUNDWATER LEVEL CHANGES IN ARIZONA WATER YEARS 2021 - 2022 (PLATE 3)

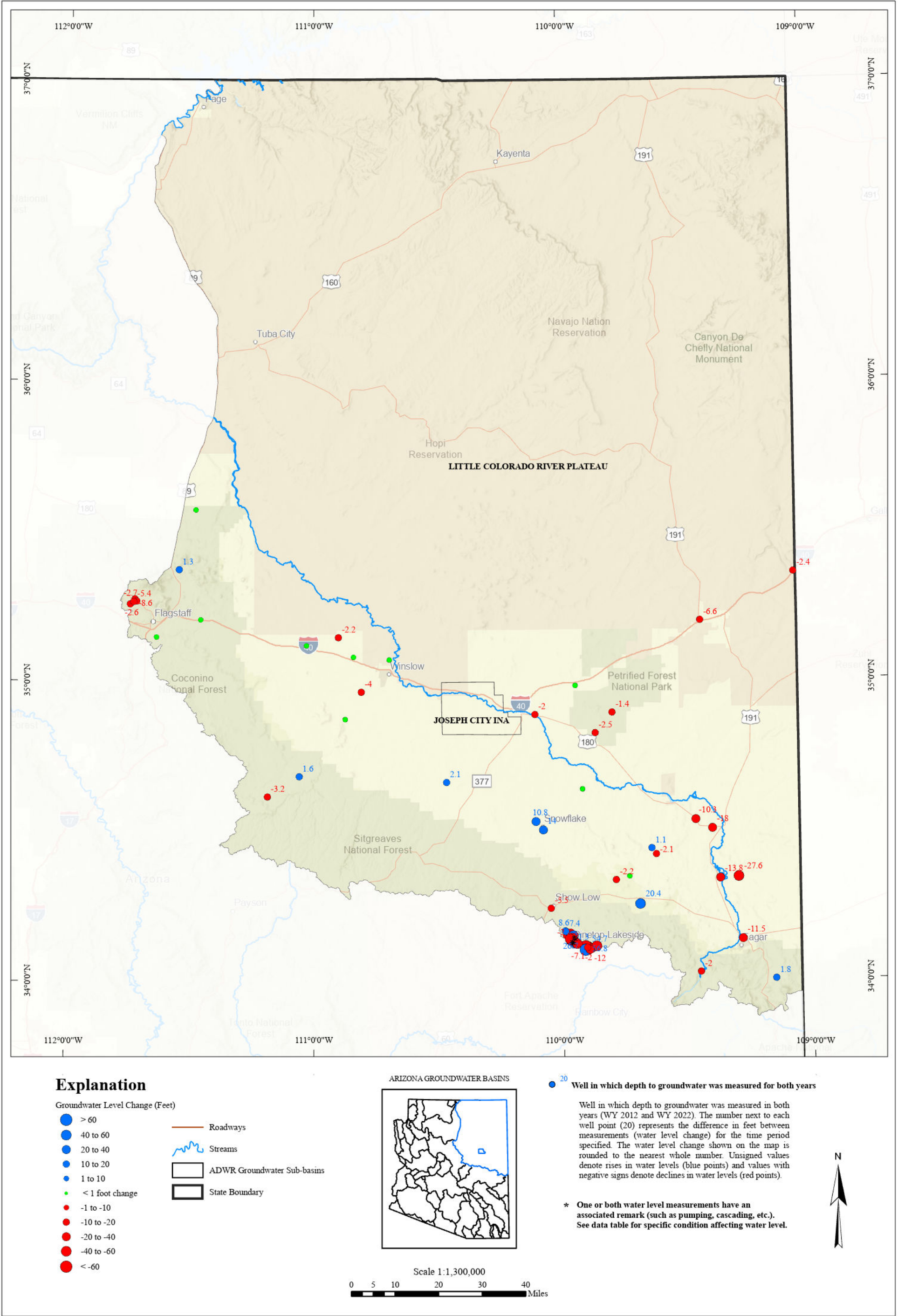
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Water Level Change Reports/  
Water Level Change Report 2022 Maps

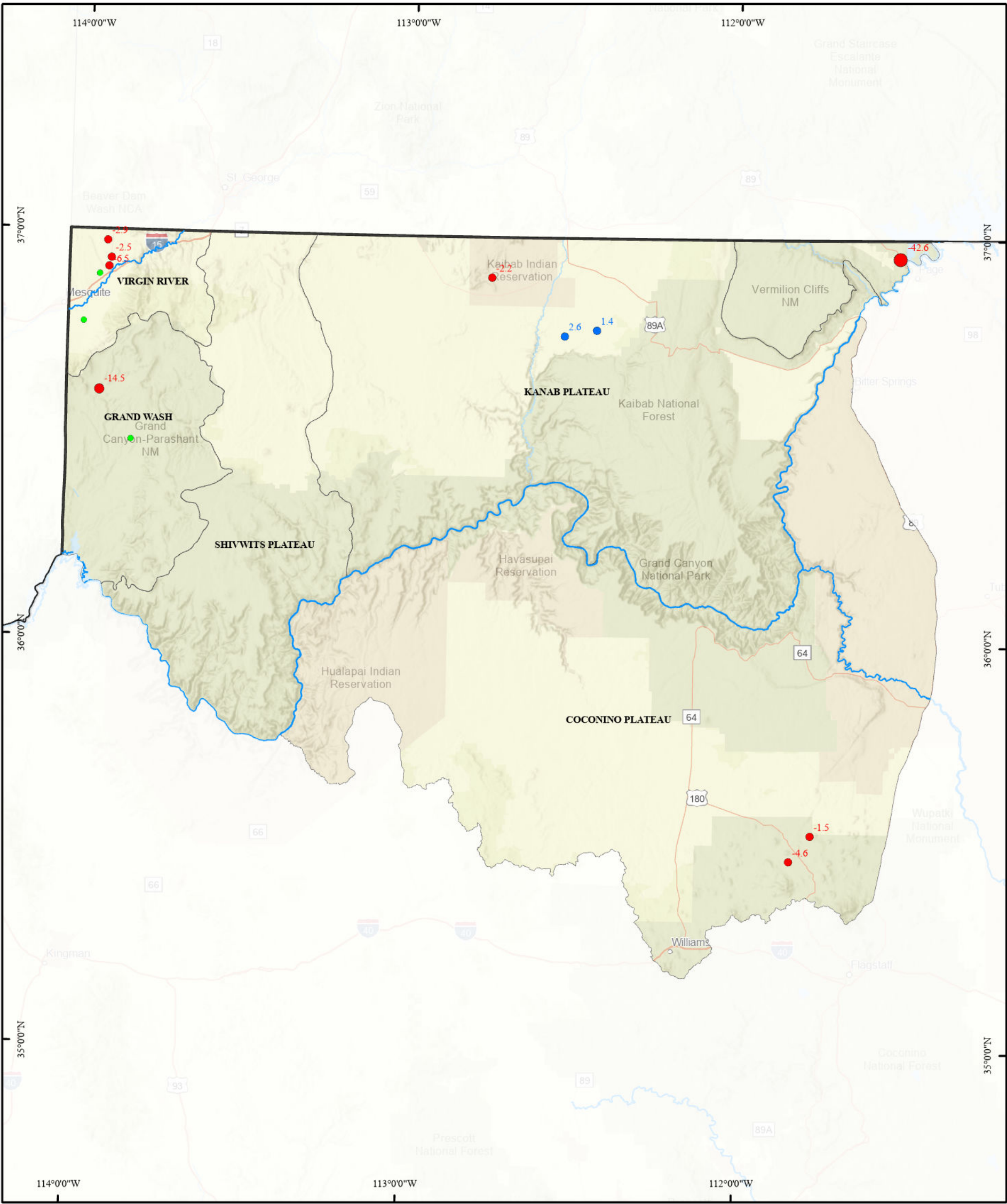


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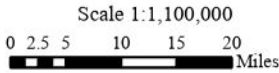
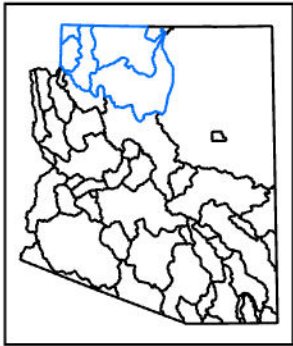




Explanation

- Groundwater Level Change (Feet)
- > 60
  - 40 to 60
  - 20 to 40
  - 10 to 20
  - 1 to 10
  - < 1 foot change
  - 1 to -10
  - 10 to -20
  - 20 to -40
  - 40 to -60
  - < -60
- Roadways
- Streams
- ADWR Groundwater Sub-basins
- State Boundary

ARIZONA GROUNDWATER BASINS



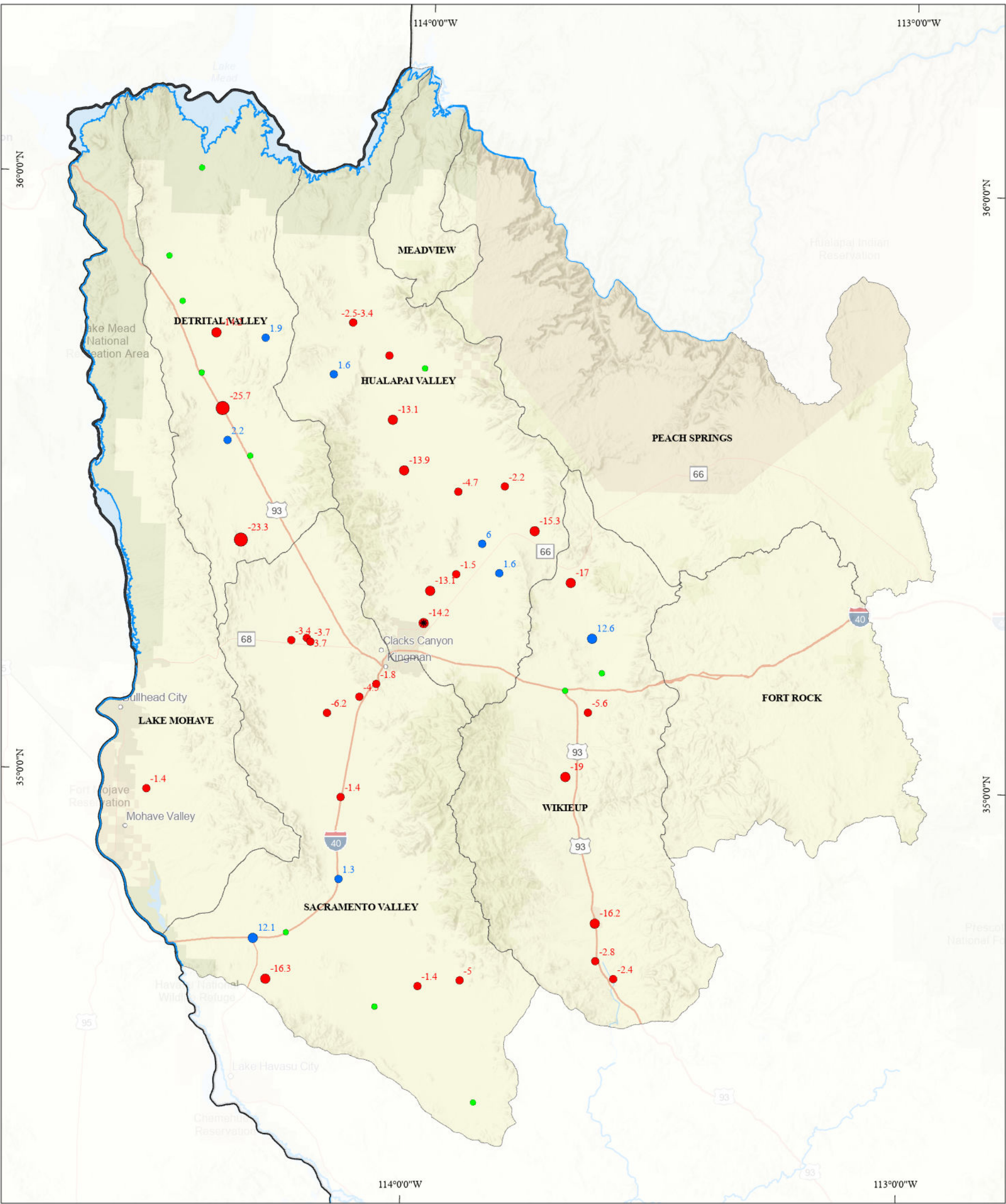
- 20 Well in which depth to groundwater was measured for both years

Well in which depth to groundwater was measured in both years (WY 2012 and WY 2022). The number next to each well point (20) represents the difference in feet between measurements (water level change) for the time period specified. The water level change shown on the map is rounded to the nearest whole number. Unsigned values denote rises in water levels (blue points) and values with negative signs denote declines in water levels (red points).

\* One or both water level measurements have an associated remark (such as pumping, cascading, etc.). See data table for specific condition affecting water level.



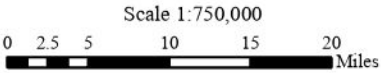




Explanation

- Groundwater Level Change (Feet)
- > 60
  - 40 to 60
  - 20 to 40
  - 10 to 20
  - 1 to 10
  - < 1 foot change
  - 1 to -10
  - 10 to -20
  - 20 to -40
  - 40 to -60
  - < -60
- Legend:
- Roadways
  - Streams
  - ADWR Groundwater Sub-basins
  - State Boundary

ARIZONA GROUNDWATER BASINS



- 20 Well in which depth to groundwater was measured for both years
- Well in which depth to groundwater was measured in both years (WY 2012 and WY 2022). The number next to each well point (20) represents the difference in feet between measurements (water level change) for the time period specified. The water level change shown on the map is rounded to the nearest whole number. Unsigned values denote rises in water levels (blue points) and values with negative signs denote declines in water levels (red points).
- \* One or both water level measurements have an associated remark (such as pumping, cascading, etc.). See data table for specific condition affecting water level.



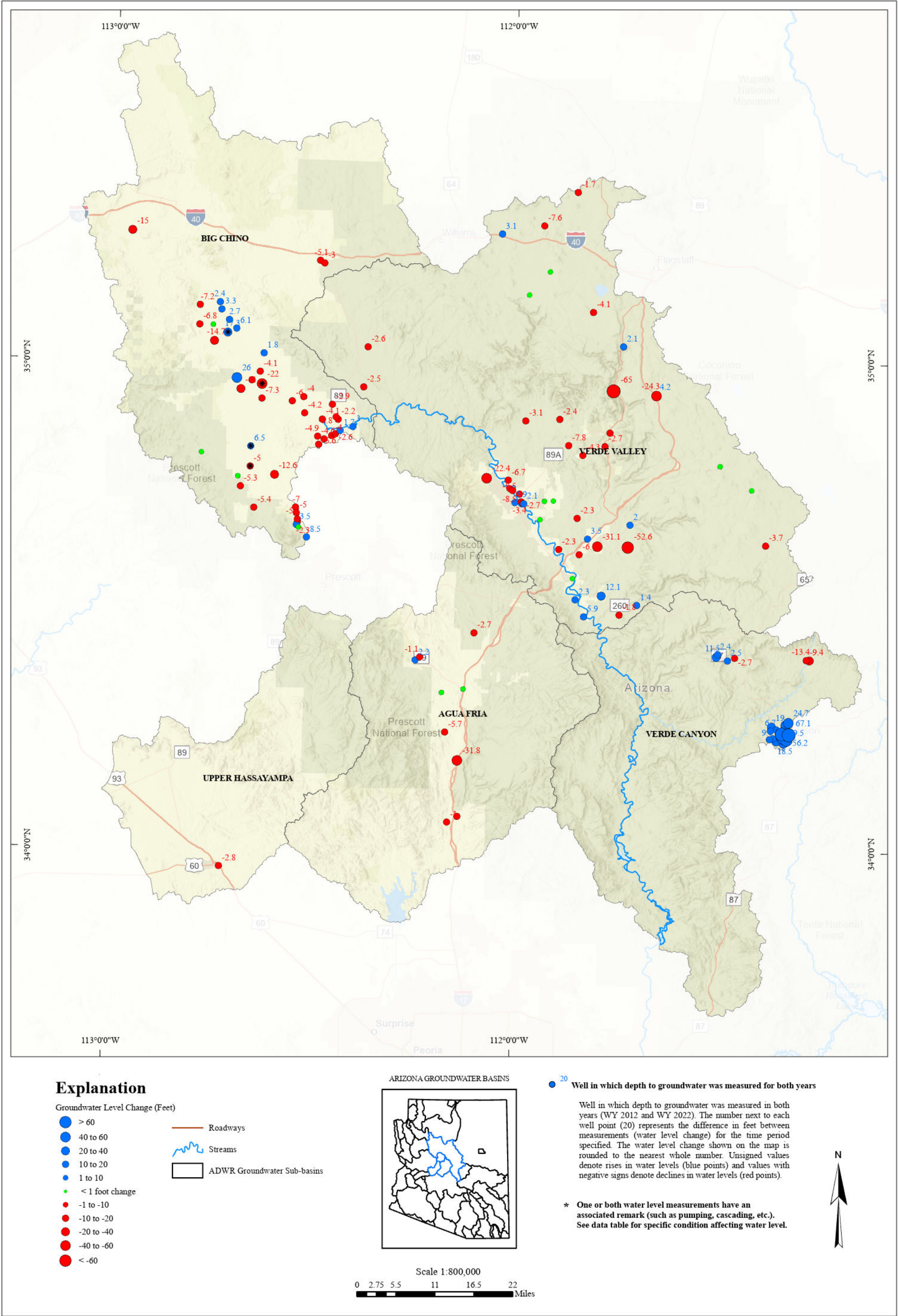
GROUNDWATER LEVEL CHANGES IN ARIZONA  
WATER YEARS 2012 - 2022 (PLATE 6)

September 2025

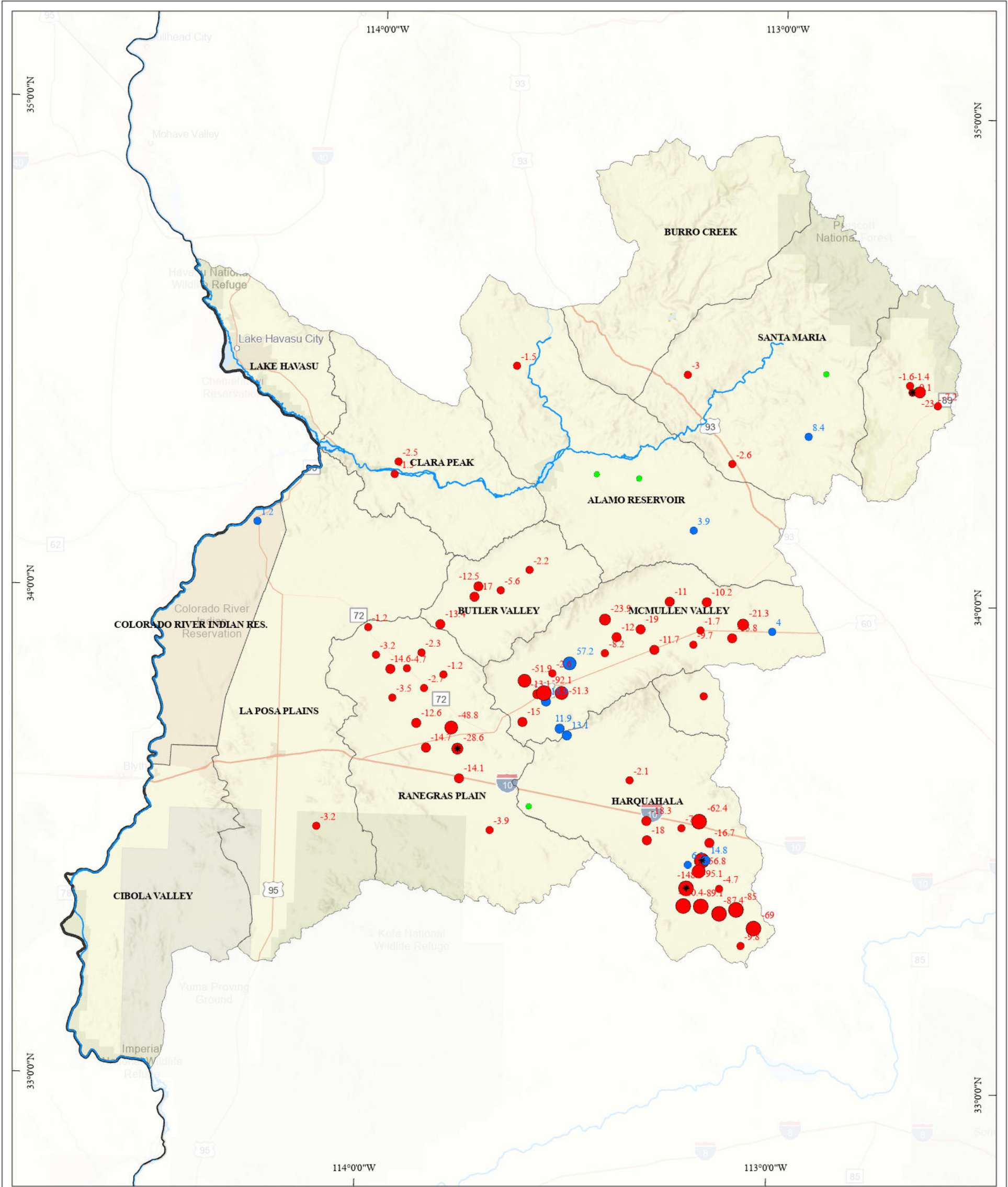


Hydrology Division





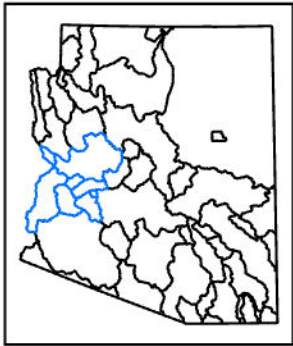




Explanation

- Groundwater Level Change (Feet)
- > 60
  - 40 to 60
  - 20 to 40
  - 10 to 20
  - 1 to 10
  - < 1 foot change
  - 1 to -10
  - 10 to -20
  - 20 to -40
  - 40 to -60
  - < -60
- Roadways
- Streams
- ADWR Groundwater Sub-basins
- State Boundary

ARIZONA GROUNDWATER BASINS



Scale 1:900,000

0 3 6 12 18 24 Miles

- 20 Well in which depth to groundwater was measured for both years
- Well in which depth to groundwater was measured in both years (WY 2012 and WY 2022). The number next to each well point (20) represents the difference in feet between measurements (water level change) for the time period specified. The water level change shown on the map is rounded to the nearest whole number. Unsigned values denote rises in water levels (blue points) and values with negative signs denote declines in water levels (red points).
- \* One or both water level measurements have an associated remark (such as pumping, cascading, etc.). See data table for specific condition affecting water level.



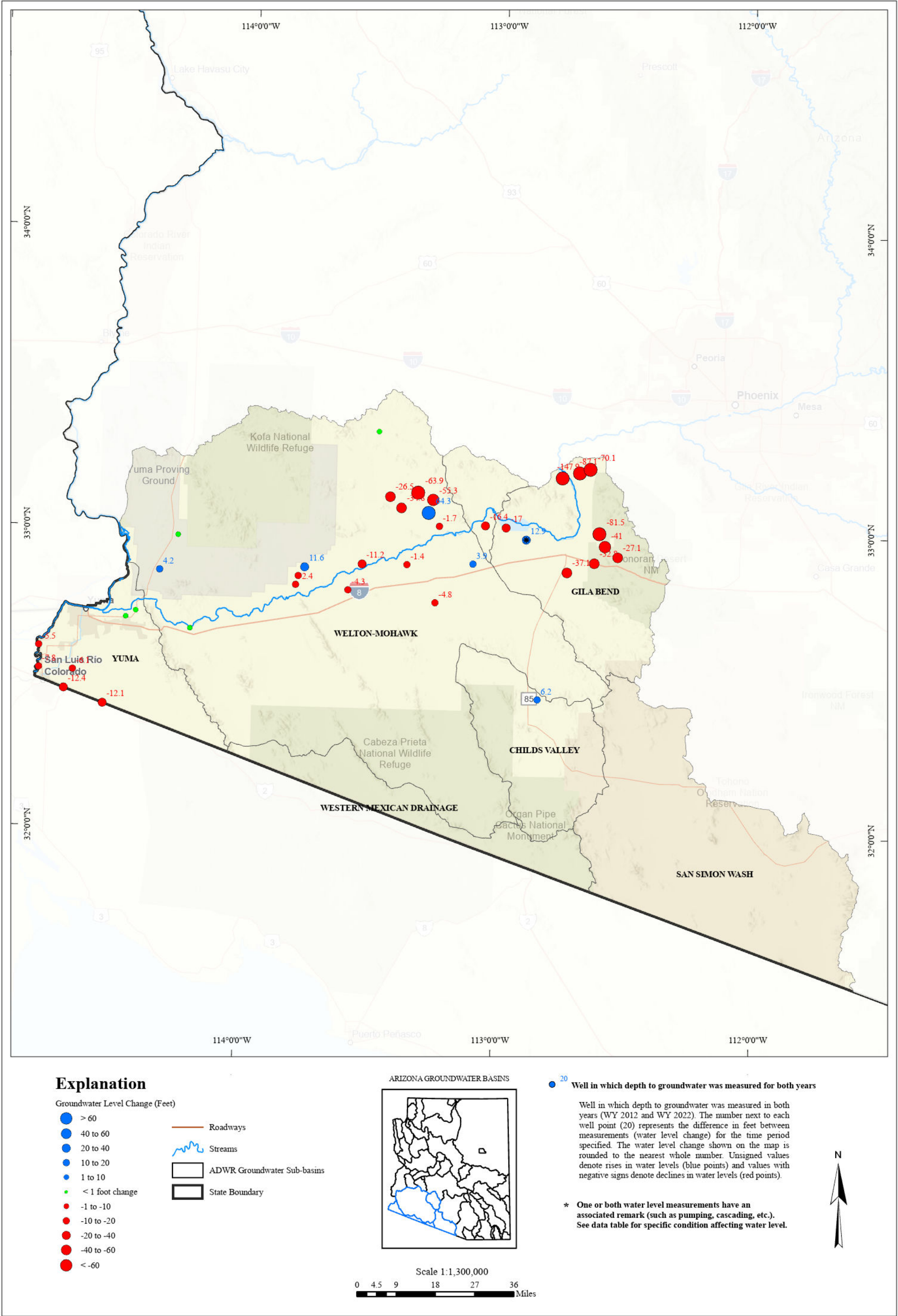
GROUNDWATER LEVEL CHANGES IN ARIZONA  
WATER YEARS 2012 - 2022 (PLATE 8)

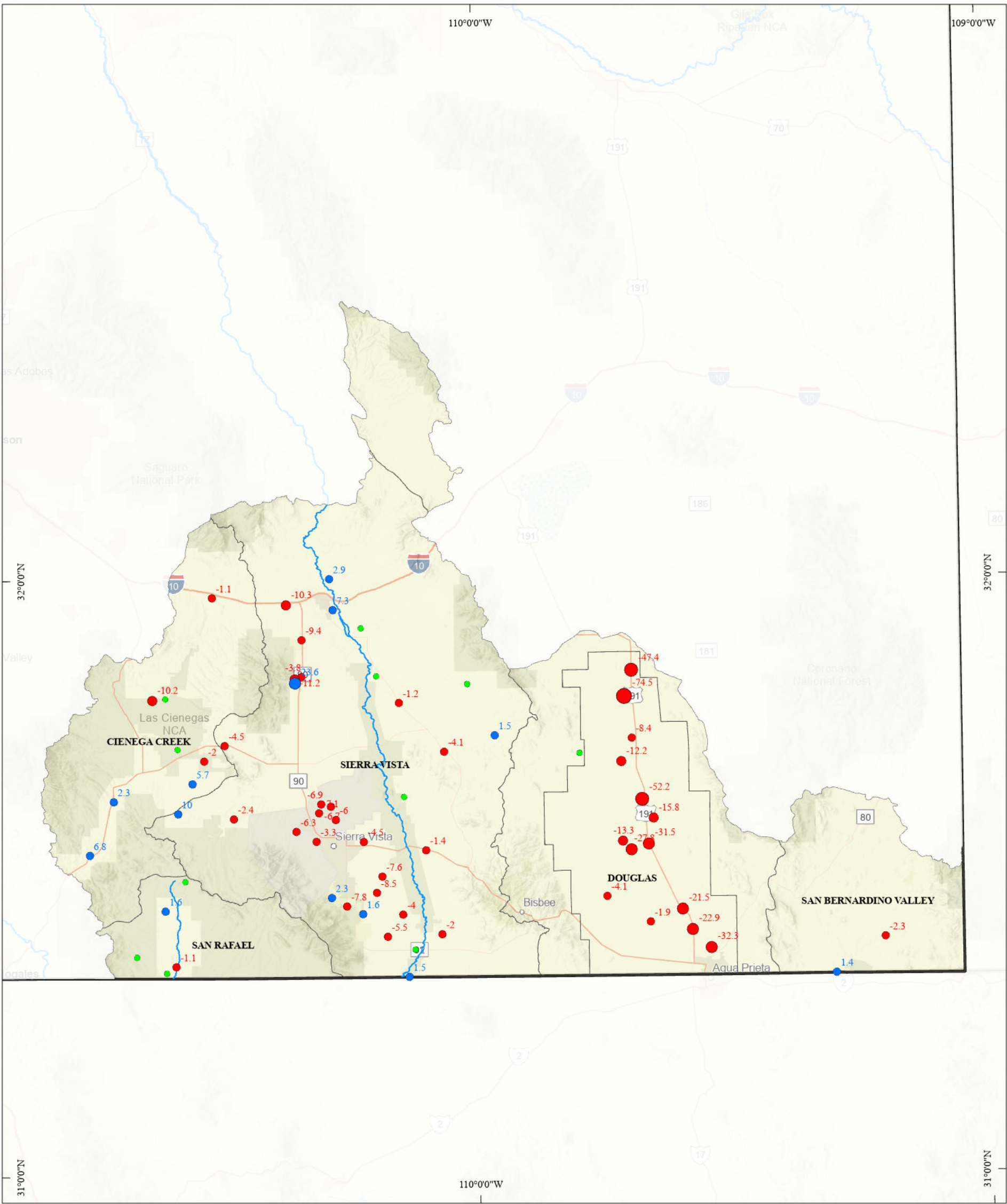
September 2025



Hydrology Division



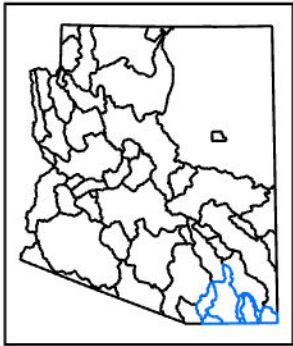




Explanation

- Groundwater Level Change (Feet)
- > 60
  - 40 to 60
  - 20 to 40
  - 10 to 20
  - 1 to 10
  - < 1 foot change
  - 1 to -10
  - 10 to -20
  - 20 to -40
  - 40 to -60
  - < -60
- Roadways
- Streams
- ADWR Groundwater Sub-basins
- State Boundary

ARIZONA GROUNDWATER BASINS



Scale 1:750,000

0 2.5 5 10 15 20 Miles

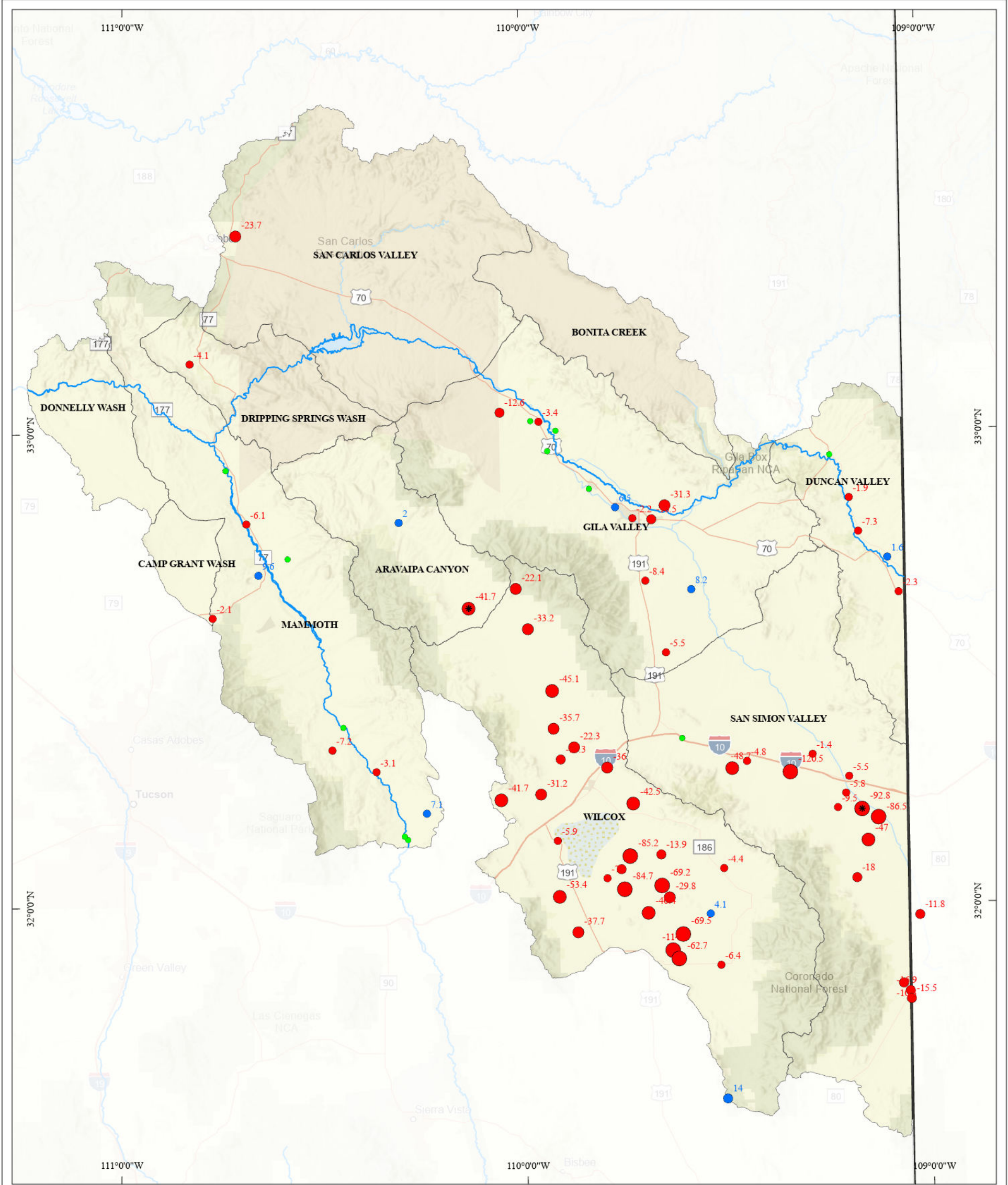
20 Well in which depth to groundwater was measured for both years

Well in which depth to groundwater was measured in both years (WY 2012 and WY 2022). The number next to each well point (20) represents the difference in feet between measurements (water level change) for the time period specified. The water level change shown on the map is rounded to the nearest whole number. Unsigned values denote rises in water levels (blue points) and values with negative signs denote declines in water levels (red points).

\* One or both water level measurements have an associated remark (such as pumping, cascading, etc.). See data table for specific condition affecting water level.



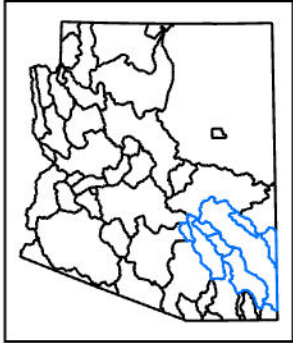




Explanation

- Groundwater Level Change (Feet)
- > 60
  - 40 to 60
  - 20 to 40
  - 10 to 20
  - 1 to 10
  - < 1 foot change
  - 1 to -10
  - 10 to -20
  - 20 to -40
  - 40 to -60
  - < -60
- Roadways
- Streams
- ADWR Groundwater Sub-basins
- State Boundary

ARIZONA GROUNDWATER BASINS



Scale 1:925,000

0 3.25 6.5 13 19.5 26 Miles

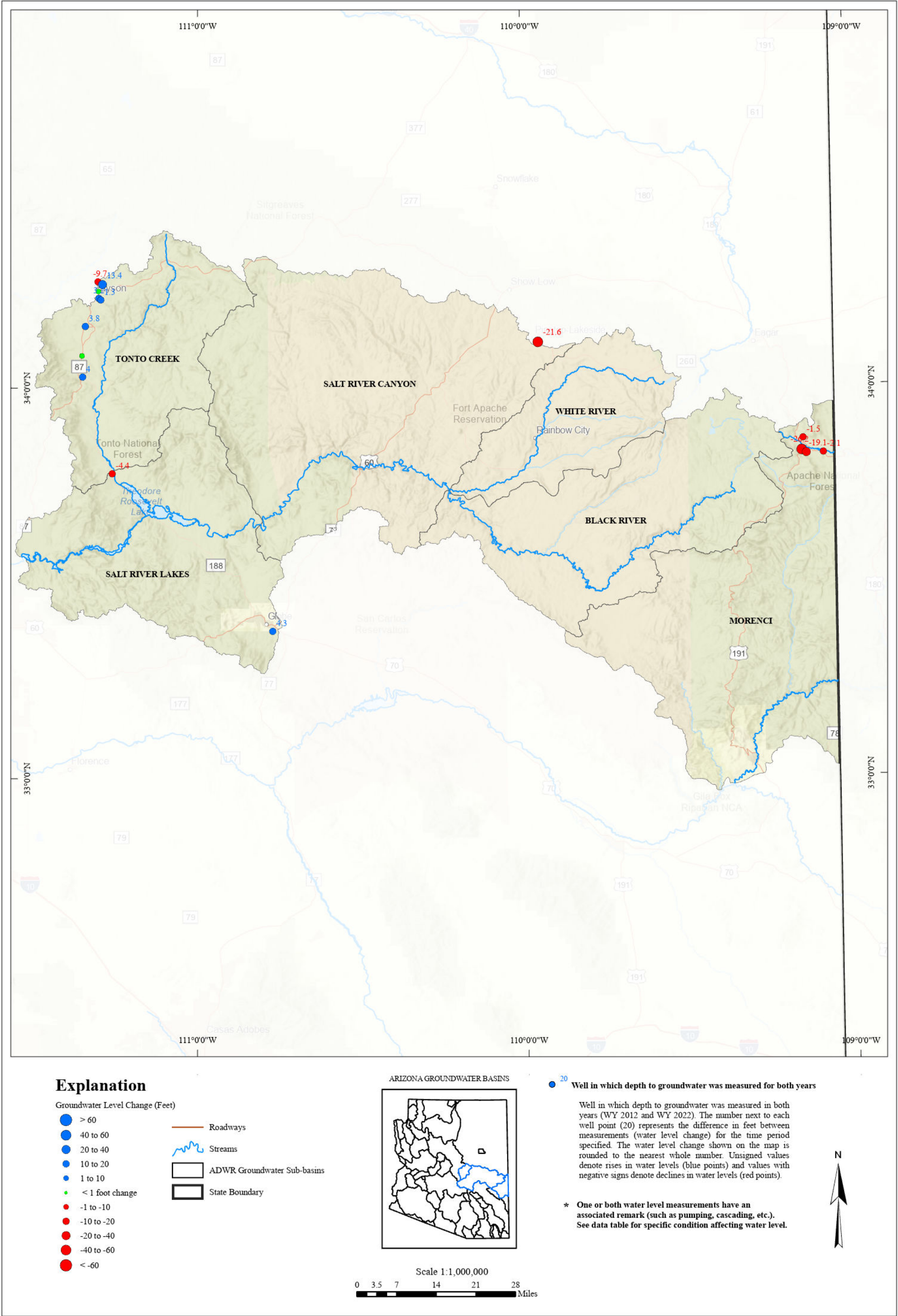
20 Well in which depth to groundwater was measured for both years

Well in which depth to groundwater was measured in both years (WY 2012 and WY 2022). The number next to each well point (20) represents the difference in feet between measurements (water level change) for the time period specified. The water level change shown on the map is rounded to the nearest whole number. Unsigned values denote rises in water levels (blue points) and values with negative signs denote declines in water levels (red points).

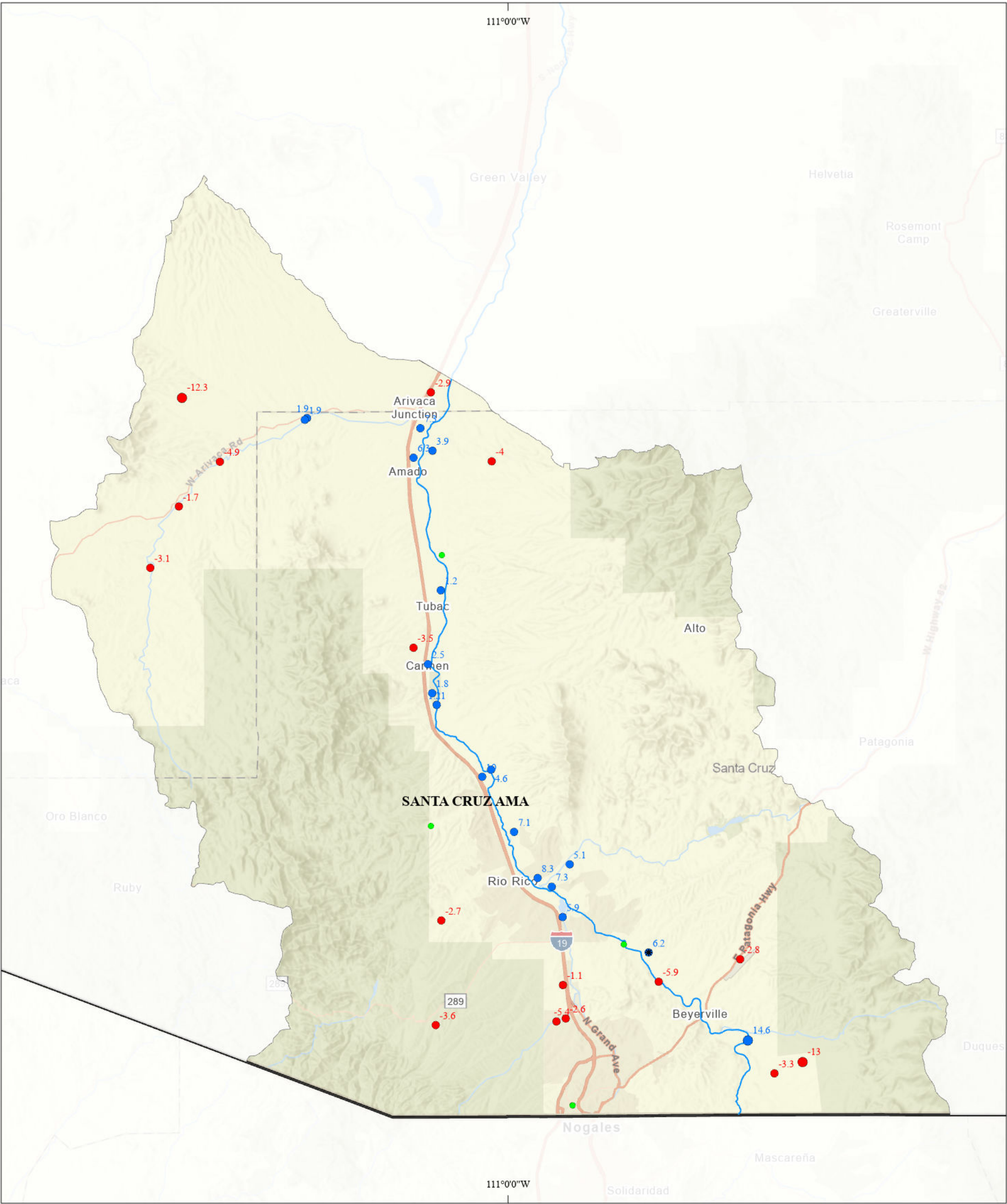
\* One or both water level measurements have an associated remark (such as pumping, cascading, etc.). See data table for specific condition affecting water level.











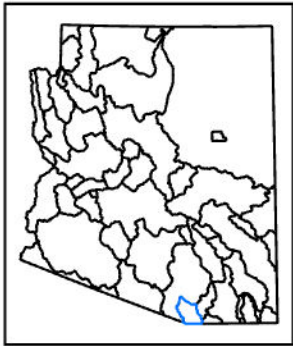
Explanation

Groundwater Level Change (Feet)

- > 60
- 40 to 60
- 20 to 40
- 10 to 20
- 1 to 10
- < 1 foot change
- 1 to -10
- 10 to -20
- 20 to -40
- 40 to -60
- < -60

- Roadways
- Streams
- ADWR Groundwater Sub-basins
- Santa Cruz AMA
- State Boundary

ARIZONA GROUNDWATER BASINS



Scale 1:250,000

0 0.75 1.5 3 4.5 6 Miles

- 20 Well in which depth to groundwater was measured for both years

Well in which depth to groundwater was measured in both years (WY 2012 and WY 2022). The number next to each well point (20) represents the difference in feet between measurements (water level change) for the time period specified. The water level change shown on the map is rounded to the nearest whole number. Unsigned values denote rises in water levels (blue points) and values with negative signs denote declines in water levels (red points).

\* One or both water level measurements have an associated remark (such as pumping, cascading, etc.). See data table for specific condition affecting water level.



For data go to:  
<https://app.azwater.gov/gwsi/SearchGWSI.aspx>

For more information or copies contact:  
ADWR Information Services  
1110 W Washington Street, Suite 310  
Phoenix, AZ 85007  
(602) 771-8500  
[www.azwater.gov](http://www.azwater.gov)

GROUNDWATER LEVEL CHANGES IN ARIZONA  
WATER YEARS 2012 - 2022 (PLATE 13)

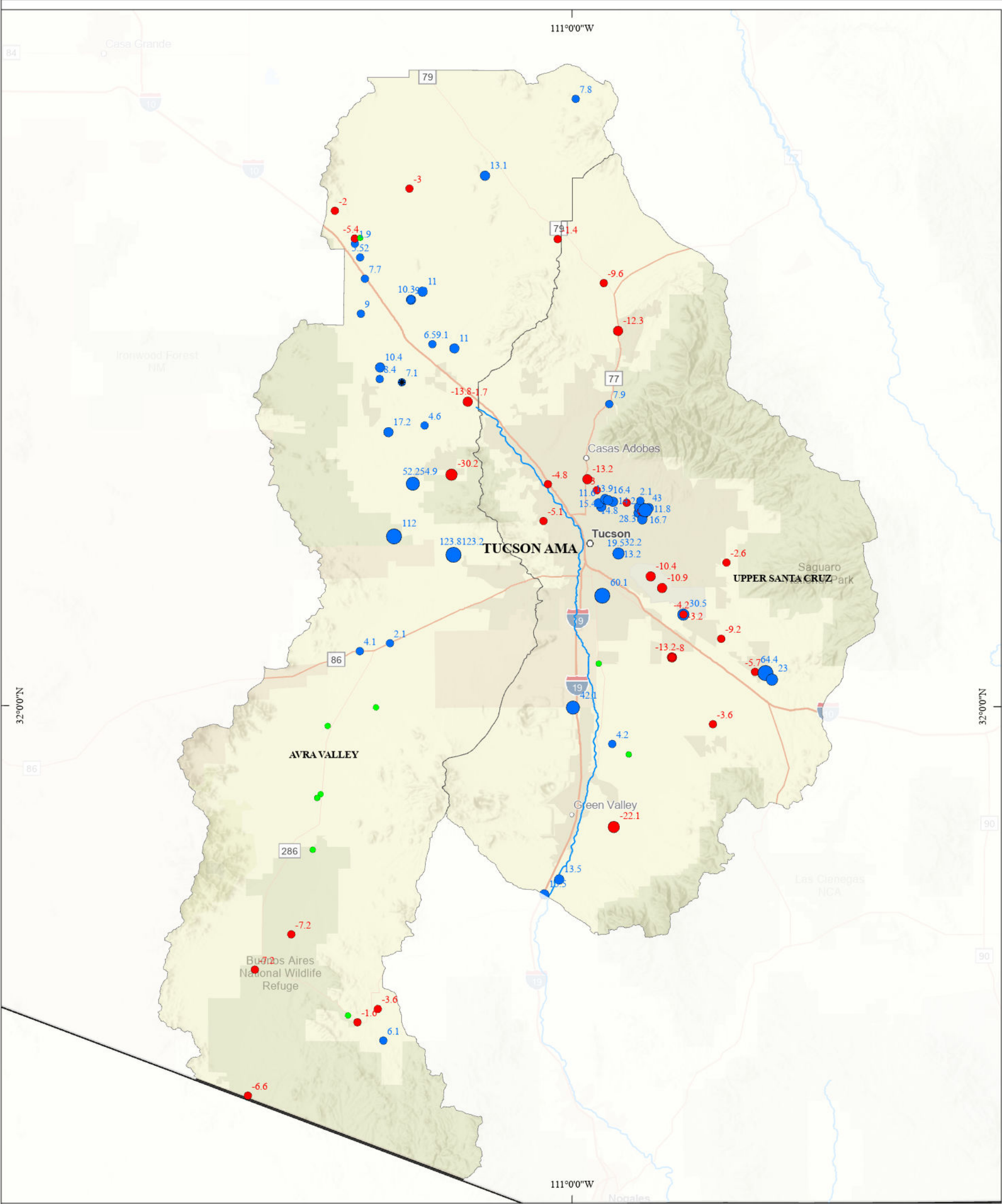
September 2025

North American Datum 1983  
N:\Basic Data\Reports\  
Water Level Change Reports\  
Water Level Change Report 2022\Maps



Hydrology Division





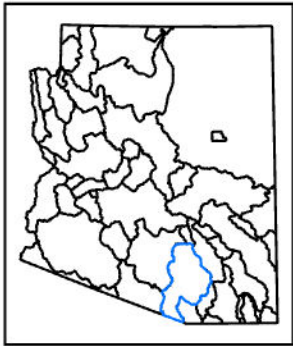
Explanation

Groundwater Level Change (Feet)

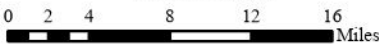
- > 60
- 40 to 60
- 20 to 40
- 10 to 20
- 1 to 10
- < 1 foot change
- 1 to -10
- 10 to -20
- 20 to -40
- 40 to -60
- < -60

- Roadways
- Streams
- ADWR Groundwater Sub-basins
- Tucson AMA
- State Boundary

ARIZONA GROUNDWATER BASINS



Scale 1:600,000



20 Well in which depth to groundwater was measured for both years

Well in which depth to groundwater was measured in both years (WY 2012 and WY 2022). The number next to each well point (20) represents the difference in feet between measurements (water level change) for the time period specified. The water level change shown on the map is rounded to the nearest whole number. Unsigned values denote rises in water levels (blue points) and values with negative signs denote declines in water levels (red points).

\* One or both water level measurements have an associated remark (such as pumping, cascading, etc.). See data table for specific condition affecting water level.



For data go to:  
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ADWR Information Services  
1110 W Washington Street, Suite 310  
Phoenix, AZ 85007  
(602) 771-8500  
[www.azwater.gov](http://www.azwater.gov)

GROUNDWATER LEVEL CHANGES IN ARIZONA  
WATER YEARS 2012 - 2022 (PLATE 14)

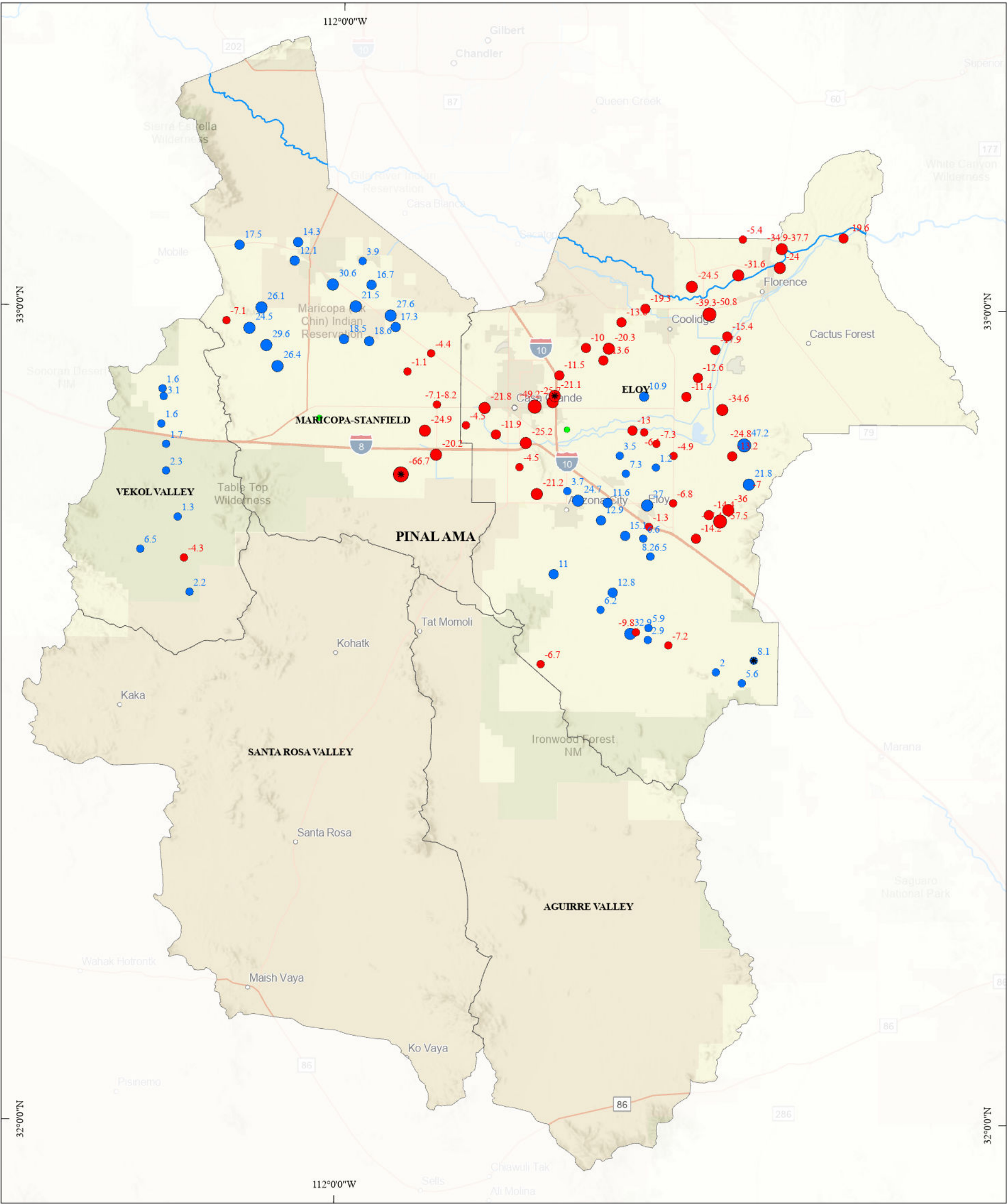
September 2025

North American Datum 1983  
N:\Basic Data\Reports\  
Water Level Change Reports\  
Water Level Change Report 2022\Maps



Hydrology Division

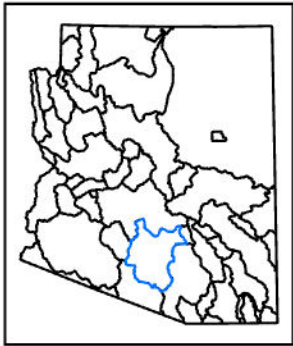




Explanation

- Groundwater Level Change (Feet)
- > 60
  - 40 to 60
  - 20 to 40
  - 10 to 20
  - 1 to 10
  - < 1 foot change
  - 1 to -10
  - 10 to -20
  - 20 to -40
  - 40 to -60
  - < -60
- Roadways
- Streams
- ADWR Groundwater Sub-basins
- Pinal AMA
- State Boundary

ARIZONA GROUNDWATER BASINS



Scale 1:550,000

0 1.75 3.5 7 10.5 14 Miles

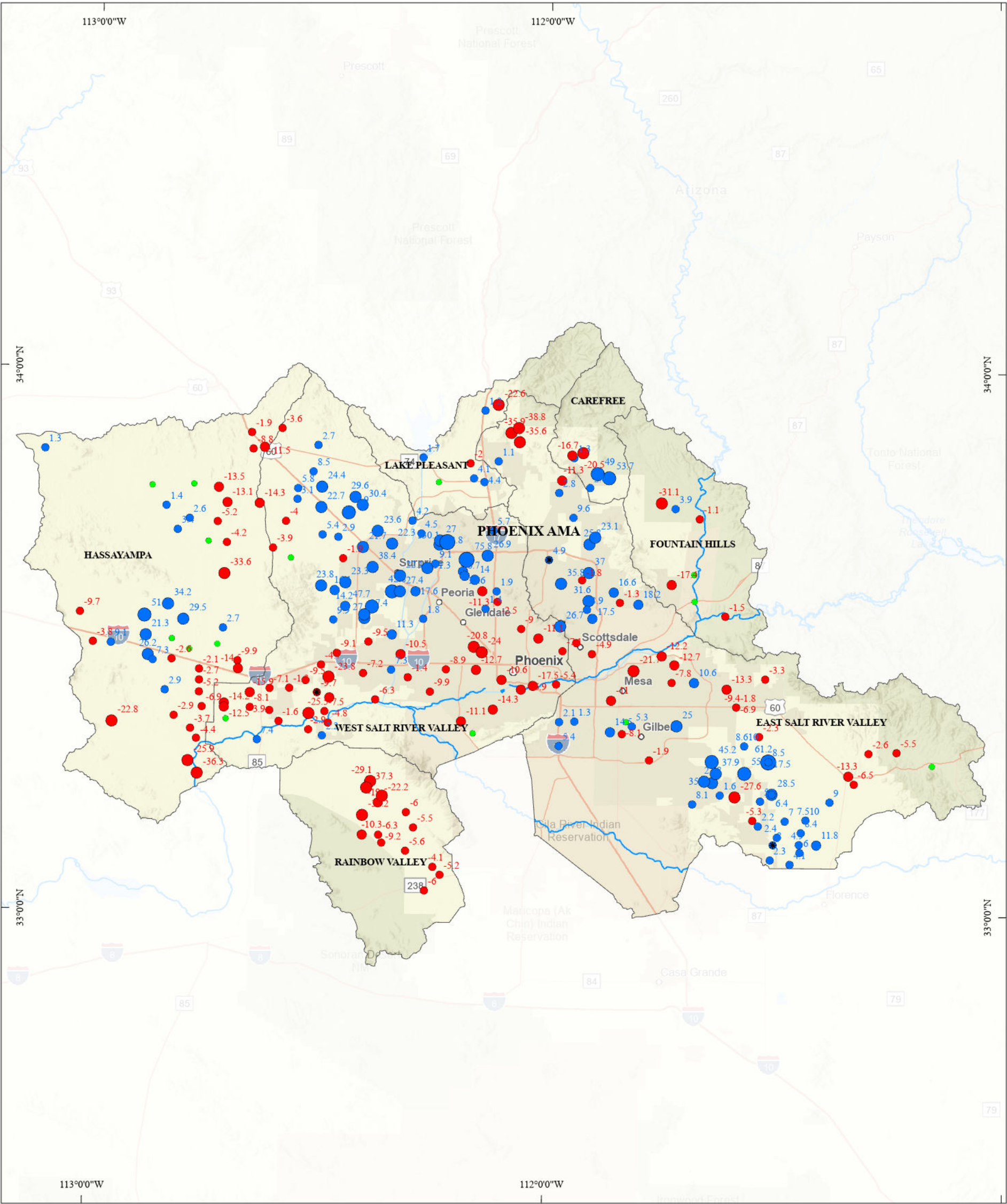
20 Well in which depth to groundwater was measured for both years

Well in which depth to groundwater was measured in both years (WY 2012 and WY 2022). The number next to each well point (20) represents the difference in feet between measurements (water level change) for the time period specified. The water level change shown on the map is rounded to the nearest whole number. Unsigned values denote rises in water levels (blue points) and values with negative signs denote declines in water levels (red points).

\* One or both water level measurements have an associated remark (such as pumping, cascading, etc.). See data table for specific condition affecting water level.







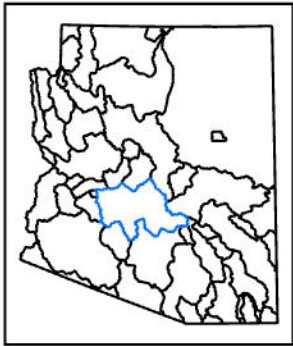
Explanation

Groundwater Level Change (Feet)

- > 60
- 40 to 60
- 20 to 40
- 10 to 20
- 1 to 10
- < 1 foot change
- 1 to -10
- 10 to -20
- 20 to -40
- 40 to -60
- < -60

- Roadways
- Streams
- ADWR Groundwater Sub-basins
- Phoenix AMA

ARIZONA GROUNDWATER BASINS



Scale 1:825,000  
0 2.75 5.5 11 16.5 22 Miles

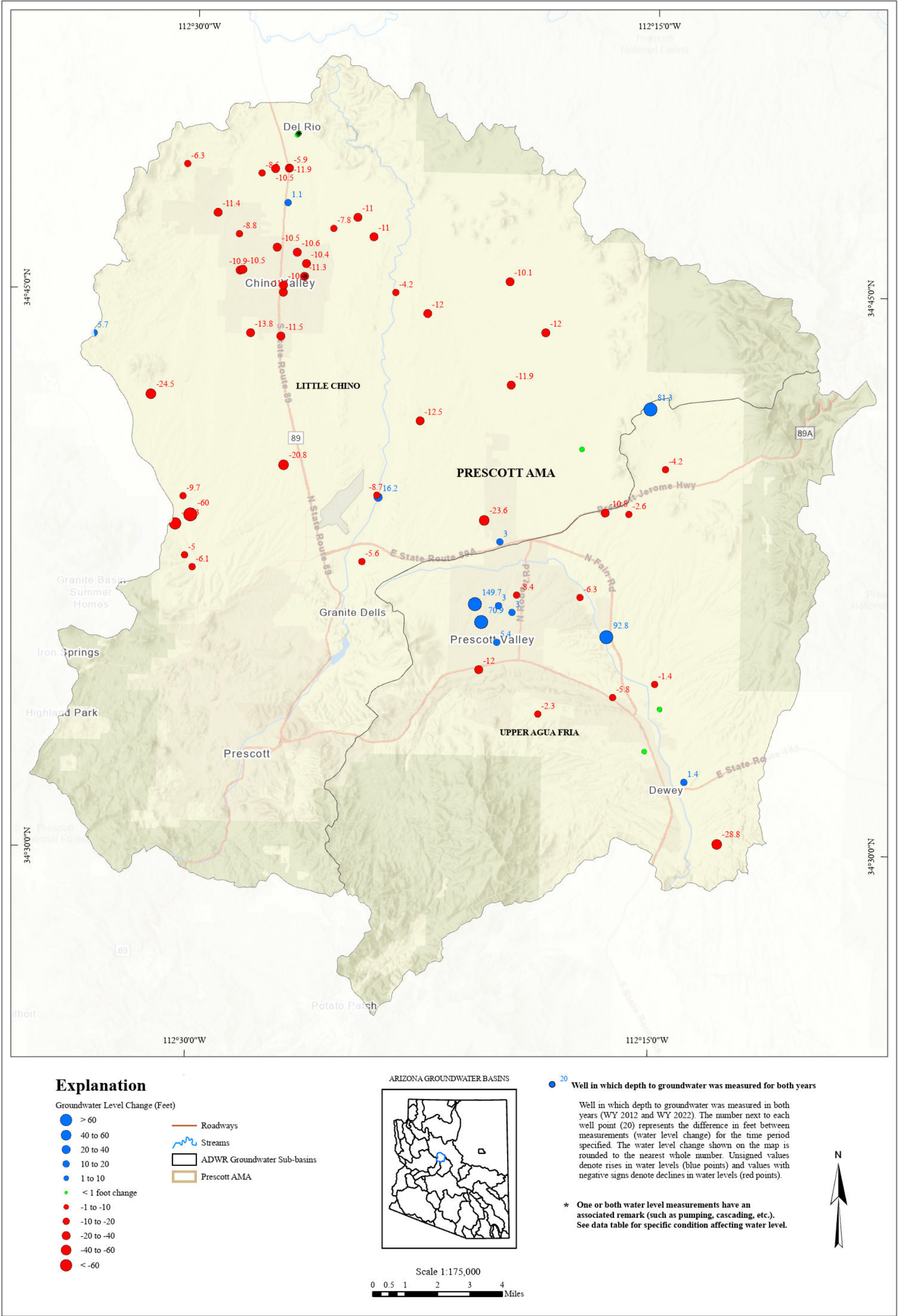
- 20 Well in which depth to groundwater was measured for both years

Well in which depth to groundwater was measured in both years (WY 2012 and WY 2022). The number next to each well point (20) represents the difference in feet between measurements (water level change) for the time period specified. The water level change shown on the map is rounded to the nearest whole number. Unsigned values denote rises in water levels (blue points) and values with negative signs denote declines in water levels (red points).

\* One or both water level measurements have an associated remark (such as pumping, cascading, etc.). See data table for specific condition affecting water level.







## **Appendices**

**The following appendices have been constructed for a special reference to the data tables included in this report. Appendices (1 – 4) can also be viewed by opening the companion files link where the report is posted online.**

## **Appendix 1**

### **20-Year Groundwater level change in Arizona – Water Years 2002 – 2022**

Appendix 1. 20 Year Groundwater level change in Arizona - Water Years 2002 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2002	WL 2002	WL METHOD 2002	WL REMARK 2002	WL COMMENT 2002	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
AGUA FRIA BASIN	AGUA FRIA	A-09-02 34DD	340421112075801	649365	34° 4' 20.4"	112° 7' 58.4"	2030	10/15/2001	41.1	V			11/4/2021	45.1	V			-4.0
AGUA FRIA BASIN	AGUA FRIA	A-09H-02 23CCC	341118112075801	635573	34° 11' 13.5"	112° 8' 2.47"	3395.32	10/15/2001	453.8	V			10/28/2021	480.59	VT			-26.8
AGUA FRIA BASIN	AGUA FRIA	A-11-02 14CAA	341959112071601	628102	34° 19' 59.5"	112° 7' 15.9"	3805	10/15/2001	69.1	V			11/4/2021	68.1	V			1.0
AGUA FRIA BASIN	AGUA FRIA	A-12-01 26BAB1	342353112134501	802822	34° 23' 52.8"	112° 13' 44.8"	4355	10/15/2001	19.8	V			11/4/2021	23	S			-3.2
ARAVAIPA CANYON BASIN	ARAVAIPA CANYON	D-07-20 21BDB	324902110184901	613297	32° 48' 47.6"	110° 18' 29.5"	3515	11/13/2001	52.1	V			11/4/2021	60	V			-7.9
BIG SANDY BASIN	FORT ROCK	B-21-10 17CCD1	351153113214301	610506	35° 11' 57.5"	113° 21' 39.2"	5058	10/15/2001	127.7	V			10/22/2021	126.8	S			0.9
BIG SANDY BASIN	FORT ROCK	B-22-08 15CCB	351712113065401		35° 17' 9.9"	113° 6' 53.9"	5510	10/15/2001	486.9	V			10/22/2021	488.8	V			-1.9
BIG SANDY BASIN	WIKIEUP	B-16-13 36CCC	344040113351001		34° 40' 38.7"	113° 34' 46."	1877	10/15/2001	14.4	V			10/21/2021	16.2	S			-1.8
BIG SANDY BASIN	WIKIEUP	B-16-13 21DDD2	344220113364901	642249	34° 42' 23.3"	113° 37' 0.9"	2040	10/15/2001	104.7	V			10/21/2021	100.6	S			4.1
BIG SANDY BASIN	WIKIEUP	B-18-13 34CCD	345332113390001	614838	34° 53' 30.9"	113° 38' 50.5"	2479	10/15/2001	58.7	V	P		10/21/2021	49.5	S	P		9.2
BIG SANDY BASIN	WIKIEUP	B-21-13 24BCD	351119113370801	614875	35° 11' 20.2"	113° 37' 7.9"	3630	10/15/2001	373.7	V			10/18/2021	371.7	V			2.0
BIG SANDY BASIN	WIKIEUP	B-23-13 32ACA	352010113411501	614897	35° 20' 20.2"	113° 41' 13.2"	3762	11/13/2001	256.6	V			10/18/2021	276.4	V			-19.8
BILL WILLIAMS BASIN	ALAMO RESERVOIR	B-09-09 04CBC	340852113122501	600587	34° 8' 52.1"	113° 12' 25.1"	2360	1/14/2002	642	V			10/27/2021	632.8	V			9.2
BILL WILLIAMS BASIN	ALAMO RESERVOIR	B-11-10 31CBA	341508113203801	809687	34° 15' 7.2"	113° 20' 40.1"	2162	1/14/2002	640.3	V			10/27/2021	639.1	V			1.2
BILL WILLIAMS BASIN	ALAMO RESERVOIR	B-11-11 31BBB1	341531113265801	614664	34° 15' 31"	113° 26' 58"	1350	1/14/2002	51.6	V			2/22/2022	51.7	S			-0.1
BILL WILLIAMS BASIN	ALAMO RESERVOIR	B-13-13 07DDB2	342836113391301	644225	34° 28' 37.8"	113° 39' 12.4"	1756	10/18/2001	139.1	V			11/1/2021	138.7	V			0.4
BILL WILLIAMS BASIN	CLARA PEAK	B-11-16 32CDA	341454113565501	619413	34° 14' 54.2"	113° 56' 54.8"	615	11/15/2001	22	V			10/26/2021	21	V			1.0
BILL WILLIAMS BASIN	CLARA PEAK	B-11-16 29AAA	341624113562401	619426	34° 16' 27.3"	113° 56' 23.6"	695	11/15/2001	101.5	V			10/26/2021	100.1	V			1.4
BILL WILLIAMS BASIN	SANTA MARIA	B-12-06 W31BAD	342044112554101	613951	34° 20' 41.8"	112° 55' 40.4"	3470	10/17/2001	91.8	V			11/5/2021	92.4	V			-0.6
BILL WILLIAMS BASIN	SANTA MARIA	B-11-08 20ADB	341707113063901	614653	34° 17' 9.6"	113° 6' 54.9"	2600	10/17/2001	75.5	V			10/22/2021	77.9	S			-2.4
BILL WILLIAMS BASIN	SANTA MARIA	B-13-09 17BCC	342801113134801	611613	34° 28' 1.2"	113° 13' 48.1"	2590	10/17/2001	46.3	V			10/21/2021	53.7	S			-7.4
BILL WILLIAMS BASIN	SANTA MARIA	B-13-06 09DCD	342828112531801	625722	34° 28' 25.1"	112° 53' 14.2"	3500	10/17/2001	25.9	V			11/5/2021	20.1	S			5.8
BILL WILLIAMS BASIN	SKULL VALLEY	B-13-04 26BCC1 UNSV	342626112391401	613867	34° 26' 24.9"	112° 39' 14.6"	4350	10/18/2001	241.6	V			11/8/2021	267.4	S			-25.8
BILL WILLIAMS BASIN	SKULL VALLEY	B-13-04 27AB UNSPZ1	342639112394201	613860	34° 26' 39.5"	112° 39' 40.4"	4366	10/18/2001	226.3	S			11/8/2021	193.8	S			32.5
BILL WILLIAMS BASIN	SKULL VALLEY	B-13-04 27AB UNSPZ2	342639112394202	613860	34° 26' 39.5"	112° 39' 40.4"	4360	10/18/2001	255.1	V			11/8/2021	250.5	S			4.6
BILL WILLIAMS BASIN	SKULL VALLEY	B-13-04 21DB UNSPZ1	342709112404501	613853	34° 27' 10.5"	112° 40' 44.6"	4260	10/18/2001	104.4	V			11/8/2021	107.1	S			-2.7
BILL WILLIAMS BASIN	SKULL VALLEY	B-13-04 21DB UNSPZ2	342709112404502	613853	34° 27' 10.5"	112° 40' 44.6"	4260	10/18/2001	110.5	V			11/8/2021	113.1	S			-2.6
BUTLER VALLEY BASIN	BUTLER VALLEY	B-07-15 16DCC	335635113493001		33° 56' 35.6"	113° 49' 32.2"	1346	11/15/2001	96.3	V			11/18/2021	119.2	V			-22.9
BUTLER VALLEY BASIN	BUTLER VALLEY	B-08-14 29DCD	340004113443601	807275	34° 0' 4.9"	113° 44' 35.9"	1487	11/15/2001	214.2	V			10/27/2021	236.6	V			-22.4
BUTLER VALLEY BASIN	BUTLER VALLEY	B-08-14 23DDD	340058113404701	614576	34° 0' 57.1"	113° 40' 45.4"	1618	11/15/2001	348	V			10/27/2021	356.2	V			-8.2
BUTLER VALLEY BASIN	BUTLER VALLEY	B-08-14 20DAB	340122113440301	633680	34° 1' 22.3"	113° 44' 3.1"	1522	11/15/2001	249.9	V			10/27/2021	267	V			-17.1
BUTLER VALLEY BASIN	BUTLER VALLEY	B-08-13 04DDD1	340333113363701	614575	34° 3' 33.4"	113° 36' 33.9"	1790	1/14/2002	513.2	V			10/27/2021	516	V			-2.8
CIENEGA CREEK BASIN	CIENEGA CREEK	D-22-15 12AAD2	313225110453301	809433	31° 32' 23.4"	110° 45' 32.7"	4041	11/8/2001	7.17	S			1/27/2022	12.5	S			-5.3
CIENEGA CREEK BASIN	CIENEGA CREEK	D-21-16 09ABA	313748110424501	624881	31° 37' 46.9"	110° 42' 43.5"	4420	11/7/2001	45.71	V			1/26/2022	44.2	V			1.5
CIENEGA CREEK BASIN	CIENEGA CREEK	D-20-18 17BCB	314150110320401	618570	31° 41' 50.7"	110° 32' 4.4"	4810	11/6/2001	171.1	V			1/26/2022	176.6	V			-5.5
CIENEGA CREEK BASIN	CIENEGA CREEK	D-20-17 24CDU	314026110334901	650922	31° 40' 26.5"	110° 33' 47.1"	4810	11/6/2001	151.4	V			1/26/2022	156	V			-4.6
CIENEGA CREEK BASIN	CIENEGA CREEK	D-20-17 02CCC	314301110350901	608620	31° 43' 0.9"	110° 35' 12.7"	4610	12/3/2001	40.5	V			1/25/2022	42.3	V			-1.8
CIENEGA CREEK BASIN	CIENEGA CREEK	D-17-18 09BCC	315816110310601	601585	31° 58' 16.3"	110° 31' 5.5"	3843	11/6/2001	101.5	V			1/24/2022	95	S			6.5
CIENEGA CREEK BASIN	CIENEGA CREEK	D-20-18 33BBB2	313929110312301	616329	31° 39' 27.8"	110° 31' 6.4"	4708	12/6/2001	20.3	V			1/26/2022	23.8	V			-3.5
COCONINO PLATEAU BASIN	COCONINO PLATEAU	A-25-06 20ACC	353210111462401	613880	35° 32' 10.2"	111° 46' 22.2"	6965	10/16/2001	90.3	V			10/22/2021	93	V			-2.7
COCONINO PLATEAU BASIN	COCONINO PLATEAU	A-24-05 11CDB	352823111501301	613870	35° 28' 23.5"	111° 50' 13.5"	7386	10/16/2001	287.5	S			10/22/2021	273.4	V			14.3
DETRITAL VALLEY BASIN	DETRITAL VALLEY	B-25-20 15AAA	353337114235201	637009	35° 33' 38.29"	114° 23' 53.59"	2820	10/16/2001	596.1	V			10/21/2021	592.3	V			3.8
DETRITAL VALLEY BASIN	DETRITAL VALLEY	B-26-20 06ACA	354027114273101	505703	35° 40' 18.46"	114° 27' 21.47"	2499.67	10/16/2001	460.8	V			10/7/2021	460.79	VT			0.0
DETRITAL VALLEY BASIN	DETRITAL VALLEY	B-30-20 06CAD UNSURV	360105114281101	629128	36° 0' 53.2"	114° 28' 12.5"	1337	10/16/2001	57.1	V			10/21/2021	58	S			-0.9
DOUGLAS BASIN	DOUGLAS INA	D-23-27 22DDA2	312433109344901		31° 24' 35.7"	109° 34' 48.2"	4042	1/15/2002	218	V			11/3/2021	259.8	V			-41.8
DOUGLAS BASIN	DOUGLAS INA	D-23-26 13CCC1	312527109395701	625680	31° 25' 24.1"	109° 39' 43.9"	4009	1/16/2002	66.6	V			11/3/2021	71	S			-4.4
DOUGLAS BASIN	DOUGLAS INA	D-23-28 31CCC	312248109323801		31° 22' 45.3"	109° 32' 37.4"	4042	1/17/2002	298.9	V			11/4/2021	354.2	V			-55.3
DOUGLAS BASIN	DOUGLAS INA	D-22-26 31CCC	312803109444501	624411	31° 28' 1.5"	109° 44' 47.9"	4090	1/15/2002	77.7	V			11/3/2021	86.4	S			-8.7
DOUGLAS BASIN	DOUGLAS INA	D-23-27 09DAB	312638109355901	617653	31° 26' 39.8"	109° 35' 56.8"	4055	1/16/2002	201.4	V			11/3/2021	237.2	V			-35.8
DOUGLAS BASIN	DOUGLAS INA	D-22-26 04DAD	313242109415501	809942	31° 32' 41.3"	109° 41' 52.8"	4095	1/15/2002	119.6	V			11/3/2021	156.1	V			-36.5
DOUGLAS BASIN	DOUGLAS INA	D-22-26 29BCC1	312923109434901		31° 29' 20.7"	109° 43' 51.3"	4059	1/15/2002	60.75	V			11/3/2021	74.5	S			-13.8
DOUGLAS BASIN	DOUGLAS INA	D-21-26 24ABB	313550109392001	632767	31° 35' 51.3"	109° 39' 15.4"	4196	1/15/2002	188.6	V			11/2/2021	207.9	V			-19.3
DOUGLAS BASIN	DOUGLAS INA	D-22-26 02AAA	313310109395501	607540	31° 33' 14.9"	109° 39' 51"	4165	1/15/2002	201.7	V			11/3/2021	236.2	V			-34.5
DOUGLAS BASIN	DOUGLAS INA	D-21-26 32DAD	313332109430001	602706	31° 33' 34.09"	109° 42' 53.63"	4077.24	1/15/2002	61.05	V			2/8/2022	90.77	VT			-29.7
DOUGLAS BASIN	DOUGLAS INA	D-21-26 02CCD	313740109403801	609654	31° 37' 45.5"	109° 40' 34.1"	4141	1/16/2002	122.25	V			11/3/2021	180.3	V			-58.1
DOUGLAS BASIN	DOUGLAS INA	D-20-26 17BDC	314139109430401	617290	31° 41' 34.5"	109° 42' 59.2"	4137	1/16/2002	75.15	V			11/2/2021	97.8	S			-22.7
DOUGLAS BASIN	DOUGLAS INA	D-19-26 09BBB	314806109423301	625651	31° 48' 7.9"	109° 42' 33.7"	4237	1/16/2002	187.15	V			11/2/2021	298.7	V			-111.6
DOUGLAS BASIN	DOUGLAS INA	D-18-26 28AAA2	315042109414301	086642	31° 50' 45.4"	109° 41' 41.6"	4268	1/16/2002	211.75	V			11/2/2021	293.1	V			-81.4
DRIPPING SPRING WASH BASIN	DRIPPING SPRING WASH	D-03-15 29BDB	330845110501701	607669	33° 8' 43"	110° 50' 17.6"	2710	11/12/2001	84.8	V			11/23/2021	94.5	S			-9.7
DRIPPING SPRING WASH BASIN	DRIPPING SPRING WASH	D-03-15 29AAB	330858110495101	624276	33° 8' 57.3"	110° 49' 48"	2725	11/12/2001	97.5	V			11/23/2021	102.3	V			-4.8
DUNCAN VALLEY BASIN	DUNCAN VALLEY	D-09-32 15BBB	323922109034501	637313	32° 39' 22.6"	109° 3' 44.7"	3810	11/15/2001	129.8	V			11/2/2021	130.6	V			-0.8
DUNCAN VALLEY BASIN	DUNCAN VALLEY	D-08-32 18CCD	324348109064601	628601	32° 43' 48.5"	109												



Appendix 1. 20 Year Groundwater level change in Arizona - Water Years 2002 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2002	WL 2002	WL METHOD 2002	WL REMARK 2002	WL COMMENT 2002	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
LAKE MOHAVE BASIN	LAKE MOHAVE	B-18-21 05CAC	345824114321901	510925	34° 58' 23.3"	114° 32' 20.8"	801	11/14/2001	336.4	V			11/2/2021	339.7	V			-3.3
LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	A-17-20 06ACB	345414110153601	620722	34° 54' 11.6"	110° 15' 36.4"	5040	10/17/2001	20.1	V			10/18/2021	39.9	V			-19.8
LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	A-18-19 23BBD	345635110173801		34° 56' 32.2"	110° 17' 21.6"	5030	10/16/2001	41.7	V			10/18/2021	46.3	V			-4.6
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-07-30 14BDD	340010109090101	802842	34° 0' 6.6"	109° 8' 59.6"	8032	10/18/2001	155.2	V			10/28/2021	157.2	V			-2.0
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-07-27 01CDB	340135109270001		34° 1' 35"	109° 26' 59.9"	8255	10/18/2001	35.6	S			10/21/2021	27.4	V			8.2
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-11-28 22BDD2	342024109220301	085863	34° 20' 18.53"	109° 22' 2.42"	6062	10/18/2001	81.58	S			2/2/2022	120.68	VT			-39.1
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-11-29 20ABB	342033109174101	611373	34° 20' 33.4"	109° 17' 37.6"	6521	10/18/2001	569.45	V			10/28/2021	653.9	V			-84.5
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-11-25 18DCA	342044109440001	806050	34° 20' 47.46"	109° 43' 54.56"	6422	10/16/2001	27.42	S			10/19/2021	27.7	S			-0.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-12-26 19DDD	342516109372701	532813	34° 25' 10.7"	109° 37' 24.5"	6310	10/16/2001	13.56	S			10/20/2021	16.5	V			-2.9
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-11-19 14ABD	342123110173301	617074	34° 21' 22.3"	110° 17' 33.1"	6365	10/17/2001	428.7	V			10/19/2021	422.9	V			5.8
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-13-21 24CBC	343009110043501	604441	34° 30' 9.5"	110° 4' 35.5"	5618	10/17/2001	103.75	V			10/19/2021	94.65	S			9.1
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-13-28 29BDC	343015109234801		34° 30' 15.1"	109° 23' 47.7"	5790	10/16/2001	24.13	S			10/20/2021	27.1	S			-3.0
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-13-21 34DCC2	342811110061201	649164	34° 28' 10.6"	110° 6' 12.6"	5658	10/17/2001	138.5	V			10/19/2021	116.5	V			22.0
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-13-21 10CDA	343150110063001	600370	34° 31' 50.4"	110° 6' 20.7"	5632	10/17/2001	159.1	V			10/19/2021	151.2	V			7.9
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-13-27 15BDA2	343200109275801	617786	34° 32' 2.6"	109° 27' 47.7"	5840	10/16/2001	266.9	V			10/20/2021	304.3	V			-37.4
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-14-26E 18CBD2	343637109374901	810276	34° 36' 36.2"	109° 37' 52.4"	5433	10/16/2001	42.99	S			10/20/2021	35.1	S			7.9
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-14-11 09ADC	343655111111201	637397	34° 36' 55.6"	111° 11' 13"	6905	10/15/2001	507.4	V			10/20/2021	514.3	V			-6.9
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-15-12 15DDC	344058111033101	631365	34° 40' 58"	111° 3' 31.2"	6503	10/15/2001	666.9	V			10/20/2021	664.1	V			2.8
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-17-14 17ADD	345223110522301	613985	34° 52' 22.3"	110° 52' 23.5"	5539	10/17/2001	403.3	V			10/20/2021	404.6	V			-1.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-17-21 10CBA	345310110062501		34° 53' 12.36"	110° 6' 24.96"	5141	10/16/2001	55.2	V			10/20/2021	57.5	S			-2.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-18-23 07BAA	345901109564001	621425	34° 58' 55.5"	109° 56' 37.4"	5235	10/16/2001	28.4	V			10/18/2021	30.4	V			-2.0
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-19-19 33CCB	345955110202501	521996	35° 0' 0.6"	110° 20' 19.6"	5150	10/17/2001	40.7	V			10/19/2021	40.1	S			0.6
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-18-14 13ABD3	345750110482801	806154	34° 57' 49.6"	110° 48' 28.2"	5162	10/15/2001	286.8	V			10/20/2021	284.4	V			2.4
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-19-16 06CDB1	350417110413301	085761	35° 4' 15.2"	110° 41' 40.9"	4830	10/17/2001	41.7	V			10/18/2021	43.5	V			-1.8
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-21-27 25BBD2	351149109260802	628733	35° 11' 48.6"	109° 26' 8.6"	5785	10/16/2001	57.3	V			10/19/2021	64.1	S			-6.8
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-22-07 32CBB	3514421111410001	808126	35° 14' 41.6"	111° 41' 0.1"	7174	10/18/2001	82.1	V			10/22/2021	79.8	V			2.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-22-06 27DCB2	351523111443801	647022	35° 15' 22.2"	111° 44' 38"	7318	2/11/2002	52.98	V			1/25/2022	31.3	S			21.7
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-22-06 26BDB1	351551111434701	608396	35° 15' 5.1"	111° 43' 47.4"	7300	11/14/2001	81	V			10/18/2021	74.6	S			6.4
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-22-06 25BBC1	351556111430401		35° 15' 56.9"	111° 43' 4.8"	7322	2/11/2002	188.6	V			1/25/2022	186.3	S			2.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-22-06 23DBC3	351620111433201		35° 16' 22.5"	111° 43' 31.4"	7332	2/11/2002	123.71	V			1/25/2022	127.2	S			-3.5
LOWER GILA BASIN	CHILDS VALLEY	C-11-06 24BDA1	322726112502001	600485	32° 27' 27.2"	112° 50' 20.3"	1420	10/19/2001	682.05	V			10/27/2021	667.2	V			14.9
LOWER GILA BASIN	DENDORA VALLEY	C-04-08 35BDD	330202113032101	603564	33° 2' 0.8"	113° 3' 17.4"	543	10/19/2001	77	V			10/29/2021	108.6	S			-31.6
LOWER GILA BASIN	WELLTON - MOHAWK	C-07-10 36BCC	324628113145301	615112	32° 46' 27.8"	113° 14' 53.2"	623	10/18/2001	166.8	V			10/28/2021	173.8	V			-7.0
LOWER GILA BASIN	WELLTON - MOHAWK	C-07-15 16AAA	324929113475501		32° 49' 29.2"	113° 47' 54.9"	335	10/16/2001	33.4	V			10/28/2021	35.7	S			-2.3
LOWER GILA BASIN	WELLTON - MOHAWK	C-07-13 21AAA	324839113353201	803848	32° 48' 38.8"	113° 35' 31.6"	419	10/17/2001	92.9	V			10/28/2021	99.3	V			-6.4
LOWER GILA BASIN	WELLTON - MOHAWK	C-06-15 34DCC	325117113471701		32° 51' 15.4"	113° 47' 20.5"	385	10/17/2001	81.85	V			10/28/2021	81.5	S			0.4
LOWER GILA BASIN	WELLTON - MOHAWK	C-06-12 19BBA	325353113321101		32° 53' 53.6"	113° 32' 17.7"	383	10/16/2001	35.2	V			10/29/2021	47.4	S			-12.2
LOWER GILA BASIN	WELLTON - MOHAWK	C-06-11 14CDD	325356113214201		32° 53' 57.2"	113° 21' 41.6"	463	10/18/2001	58.2	V			10/28/2021	59.6	V			-1.4
LOWER GILA BASIN	WELLTON - MOHAWK	C-06-14 28BAB	325300113423201	627175	32° 53' 0.5"	113° 42' 26.9"	408	10/17/2001	105.9	V			10/28/2021	118.7	S			-12.8
LOWER GILA BASIN	WELLTON - MOHAWK	C-06-15 26AAA	325300113455201		32° 53' 1.2"	113° 45' 52"	410	10/17/2001	106.6	V			10/28/2021	94.8	S			11.8
LOWER GILA BASIN	WELLTON - MOHAWK	C-06-08 17BDD	325422113060801	804050	32° 54' 19.8"	113° 6' 4.9"	708	10/18/2001	230.15	V			10/26/2021	228.8	V			1.4
LOWER GILA BASIN	WELLTON - MOHAWK	C-05-09 06BBB	330140113140901	633678	33° 1' 44.3"	113° 14' 11.3"	501	10/16/2001	48.05	V			10/29/2021	53.1	S			-5.1
LOWER GILA BASIN	WELLTON - MOHAWK	C-04-10 22ABB	330422113164301	619482	33° 4' 23.5"	113° 16' 47.1"	605	10/16/2001	134.25	V			10/29/2021	71.2	S			63.1
LOWER GILA BASIN	WELLTON - MOHAWK	C-03-10 29BCC	330822113192101	614970	33° 8' 23.8"	113° 19' 22.6"	798	10/16/2001	389.9	V			10/29/2021	450	V			-60.1
LOWER GILA BASIN	WELLTON - MOHAWK	C-04-11 15BBA	330514113231001	618118	33° 5' 15.7"	113° 23' 15.4"	693	10/16/2001	294.85	V			10/29/2021	328.2	V			-33.4
LOWER GILA BASIN	WELLTON - MOHAWK	C-03-11 31DBB	330725113260201	804053	33° 7' 26.67"	113° 25' 56.91"	786.34	2/12/2002	385.2	V			2/17/2022	411.4	VT			-26.2
LOWER GILA BASIN	WELLTON - MOHAWK	C-01-12 15CAC UNSURV	332022113285601	513721	33° 20' 21.6"	113° 28' 56.3"	1270	11/7/2001	306	V			10/25/2021	305	V			1.0
LOWER SAN PEDRO BASIN	CAMP GRANT WASH	D-08-14 09AAD	324525110534701	615540	32° 45' 24.7"	110° 53' 46.5"	3965	11/13/2001	128.7	V			11/23/2021	77	S			51.7
LOWER SAN PEDRO BASIN	MAMMOTH	D-14-21 19CAC	321157110143001	615955	32° 11' 56.7"	110° 14' 33.3"	4210	12/12/2001	123.8	V			12/1/2021	79.5	S			44.3
LOWER SAN PEDRO BASIN	MAMMOTH	D-13-18 02BDD	322003110283701		32° 20' 0.3"	110° 28' 34.6"	3230	11/14/2001	106.6	V			12/1/2021	129.5	V			-22.9
LOWER SAN PEDRO BASIN	MAMMOTH	D-09-15 35AAD	323644110461201	649302	32° 36' 44.8"	110° 46' 24.1"	4480	11/13/2001	33.6	V			11/30/2021	45.3	S			-11.7
LOWER SAN PEDRO BASIN	MAMMOTH	D-08-16 25DCD	324208110393301		32° 42' 11.1"	110° 39' 32.5"	2910	11/12/2001	502	V			11/30/2021	481.5	V			20.5
LOWER SAN PEDRO BASIN	MAMMOTH	D-08-17 15DAA1	324418110350001		32° 44' 14.2"	110° 35' 10.1"	2978	11/13/2001	296.1	V			11/30/2021	294.6	V			1.5
LOWER SAN PEDRO BASIN	MAMMOTH	D-07-16 22ADD	324840110412001	610320	32° 48' 40.8"	110° 41' 19.9"	2206.36	11/12/2001	16.6	V			11/23/2021	21.2	S			-4.6
LOWER SAN PEDRO BASIN	MAMMOTH	D-06-16 08CBB1	325513110441001		32° 55' 26.8"	110° 44' 26.2"	2025	11/12/2001	27.8	V			11/23/2021	25.9	S			1.9
LOWER SAN PEDRO BASIN	MAMMOTH	D-05-15 26AAD	325823110463301	612035	32° 58' 23"	110° 46' 32.9"	1925	11/12/2001	22.7	V			11/23/2021	28.2	S			-5.5
MC MULLEN VALLEY BASIN	MC MULLEN VALLEY	B-05-13 28ACC	334452113370401	607056	33° 44' 50"	113° 37' 2.6"	1918.3	11/15/2001	296.8	V			10/25/2021	328.7	V			-31.9
MC MULLEN VALLEY BASIN	MC MULLEN VALLEY	B-05-12 32ADB	334408113313401		33° 44' 7.2"	113° 31' 32.5"	1697	11/15/2001	100	V			10/25/2021	132.2	V			-32.2
MC MULLEN VALLEY BASIN	MC MULLEN VALLEY	B-06-13 28BDD2	334955113365201	634103	33° 49' 55"	113° 36' 52.8"	2009	11/15/2001	553.7	V			10/25/2021	644.5	V			-90.8
MC MULLEN VALLEY BASIN	MC MULLEN VALLEY	B-06-12 19DBB	335053113224001		33° 50' 53.6"	113° 32' 49.1"	1939.09	11/14/2001	50.2	V			10/25/2021	47.4	S	MEAS 2X		2.8
MC MULLEN VALLEY BASIN	MC MULLEN VALLEY	B-05-13 02DBB	334818113350001		33° 48' 17.72"	113° 34' 56.6"	1861.45	2/11/2002	30.15	V			2/16/20					



Appendix 1. 20 Year Groundwater level change in Arizona - Water Years 2002 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2002	WL 2002	WL METHOD 2002	WL REMARK 2002	WL COMMENT 2002	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
PHOENIX AMA	EAST SALT RIVER	D-02-10 21ADB	331440111192401	615236	33° 14' 39.6"	111° 19' 22.9"	1903	10/30/2001	554.9	V			11/29/2021	568.6	V			-13.7
PHOENIX AMA	EAST SALT RIVER	D-02-07 22BBC	331446111380001	609473	33° 14' 46.68"	111° 38' 0.58"	1402.3	4/17/2002	256.55	V			5/31/2022	189.52	VT			67.0
PHOENIX AMA	EAST SALT RIVER	D-02-10 16BCB	331532111200901	610435	33° 15' 33"	111° 20' 6.6"	1884	10/30/2001	348.6	V			11/29/2021	380.5	V			-31.9
PHOENIX AMA	EAST SALT RIVER	D-02-08 E07DDD	331550111334801	619742	33° 15' 49.5"	111° 33' 46.7"	1480	10/29/2001	306.2	V			11/30/2021	220.5	S			85.7
PHOENIX AMA	EAST SALT RIVER	D-01-08 21ADB PZ1	331953111315001		33° 19' 53.1"	111° 31' 51.4"	1565	11/5/2001	442.9	V			11/15/2021	335	V			107.9
PHOENIX AMA	EAST SALT RIVER	D-01-08 21ADB PZ2	331953111315002		33° 19' 53.1"	111° 31' 51.4"	1565	11/5/2001	332	V			11/15/2021	337.2	V			-5.2
PHOENIX AMA	EAST SALT RIVER	D-01-10 35DBA	331803111172901	628140	33° 18' 3.1"	111° 17' 27.1"	2040	10/31/2001	39.7	V			11/29/2021	56.1	S			-16.4
PHOENIX AMA	EAST SALT RIVER	D-01-08 30DAA PZ1	331848111334901	615222	33° 18' 51.1"	111° 33' 49.1"	1489	10/29/2001	349.2	V			10/27/2021	299.9	V			49.3
PHOENIX AMA	EAST SALT RIVER	D-01-08 30DAA PZ2	331848111334902	615222	33° 18' 51.1"	111° 33' 49.1"	1489	10/29/2001	325	V			10/27/2021	299.8	V			25.2
PHOENIX AMA	EAST SALT RIVER	D-01-07 25ADD	331850111350001	803495	33° 18' 48.4"	111° 34' 59.9"	1458	10/29/2001	322.3	V			12/1/2021	283.5	V			38.8
PHOENIX AMA	EAST SALT RIVER	D-01-05 14AAB	332058111483901	634676	33° 20' 57.4"	111° 48' 38.3"	1224	10/29/2001	163.1	V			12/16/2021	139.8	S			23.3
PHOENIX AMA	EAST SALT RIVER	A-01-08 32BBA	332332111333401	800843	33° 23' 32.8"	111° 33' 35.4"	1625	10/29/2001	589.5	V			11/30/2021	607.3	V			-17.8
PHOENIX AMA	EAST SALT RIVER	A-01-05 26DDD	332337111481801	607699	33° 23' 36.38"	111° 48' 18.29"	1224	10/30/2001	137.7	V			11/12/2021	108.5	V			29.2
PHOENIX AMA	EAST SALT RIVER	A-01-05 30BDD	332359111525701	607741	33° 24' 1.5"	111° 53' 3"	1199	10/30/2001	110.1	V			11/12/2021	91.1	V			19.0
PHOENIX AMA	EAST SALT RIVER	A-01-07 36DAA2 PZ1	332308111345001		33° 23' 7.7"	111° 34' 54.23"	1561.35	11/5/2001	531.8	V			10/26/2021	557.3	V			-25.5
PHOENIX AMA	EAST SALT RIVER	A-01-07 36DAA2 PZ2	332308111345002		33° 23' 7.7"	111° 34' 54.23"	1561.35	11/5/2001	535.5	V			10/26/2021	564.15	V			-28.7
PHOENIX AMA	EAST SALT RIVER	A-01-07 36DAA2 PZ3	332308111345003		33° 23' 7.7"	111° 34' 54.23"	1561.35	11/5/2001	509.7	V			10/26/2021	520.5	V			-10.8
PHOENIX AMA	EAST SALT RIVER	A-01-08 10DCC1	332614111311101	614002	33° 26' 14.4"	111° 31' 5.9"	1861	10/29/2001	89.7	V			11/29/2021	95.4	V			-5.7
PHOENIX AMA	EAST SALT RIVER	A-01-05 16ABA	332614111503901	607702	33° 26' 11.76"	111° 50' 42.69"	1245	10/30/2001	153.2	V			11/12/2021	147.8	V			5.4
PHOENIX AMA	EAST SALT RIVER	A-01-07 18ACC	332547111402701	500714	33° 25' 48.8"	111° 40' 28.7"	1479	10/30/2001	435.95	V			12/8/2021	375.2	V			60.8
PHOENIX AMA	EAST SALT RIVER	A-01-06 03ADA	332746111430601	629610	33° 27' 45.4"	111° 43' 5.4"	1400	10/30/2001	332.7	V			12/8/2021	291.3	V			41.4
PHOENIX AMA	EAST SALT RIVER	A-02-04 22BDD	333009111560401		33° 30' 8.1"	111° 56' 2.9"	1290	11/8/2001	274	V			12/7/2021	155.2	V			118.8
PHOENIX AMA	EAST SALT RIVER	A-02-04 01ACC	333248111535801	626816	33° 32' 49.77"	111° 53' 57.18"	1296.92	7/24/2002	310.75	V			6/2/2022	175.64	VT		MAT TOOK MEASUREMENT	135.1
PHOENIX AMA	EAST SALT RIVER	A-03-05 25CAB	333427111475701	600650	33° 34' 26.1"	111° 47' 53.8"	1552	11/8/2001	460.5	V			12/7/2021	401.2	V			59.3
PHOENIX AMA	EAST SALT RIVER	A-03-04 11CBA	333705111552201	626838	33° 37' 5.2"	111° 55' 21.24"	1449.03	7/23/2002	264.4	V			6/1/2022	266.66	VT			-2.3
PHOENIX AMA	EAST SALT RIVER	A-05-04 33DAA	334359111563401	600117	33° 43' 58.54"	111° 56' 34.51"	1976.25	2/13/2002	843.1	V			1/31/2022	838.89	VT			4.2
PHOENIX AMA	EAST SALT RIVER	A-06-02 25BDD1	335010112063001	633646	33° 50' 8.2"	112° 6' 32.7"	1822	11/5/2001	290.2	V			12/6/2021	301.4	V			-11.2
PHOENIX AMA	EAST SALT RIVER	A-06-03 05CCC2	335317112042701		33° 53' 17.9"	112° 4' 53"	2058	10/30/2001	282.6	V			12/15/2021	222.2	V		PUMP OFF 48 HOURS	60.4
FOUNTAIN HILLS	FOUNTAIN HILLS	A-03-07 06CDA	333746111403101		33° 37' 44.7"	111° 40' 33.4"	1415	11/8/2001	26.8	V			12/9/2021	31.2	S			-4.4
PHOENIX AMA	FOUNTAIN HILLS	A-03-06 15ABA	333639111433101	604786	33° 36' 38.4"	111° 43' 30.4"	1674	11/19/2001	341.2	V			1/13/2022	342.5	V			-1.3
PHOENIX AMA	FOUNTAIN HILLS	A-05-06 32CCC	334341111461201	808587	33° 43' 37.4"	111° 46' 7.1"	2342	11/6/2001	518.4	V			12/9/2021	643.9	V			-125.5
PHOENIX AMA	HASSAYAMPA	C-02-05 16DAA	331518112454801	805914	33° 15' 17.4"	112° 45' 49.6"	762	11/2/2001	22.6	V			1/6/2022	63.9	V			-41.3
PHOENIX AMA	HASSAYAMPA	C-01-06 19ABB	332000112543801	629644	33° 20' 0.5"	112° 54' 35.9"	890	11/1/2001	189.5	V			1/7/2022	231.4	V			-41.9
PHOENIX AMA	HASSAYAMPA	C-01-07 14BBB	332053112570801	604464	33° 20' 53.2"	112° 57' 9.8"	938	11/1/2001	237.9	V			1/7/2022	272.9	V			-35.0
PHOENIX AMA	HASSAYAMPA	C-01-05 03BAA1	332236112452001		33° 22' 38.3"	112° 45' 19.9"	928	11/1/2001	94.2	V			12/28/2021	96.7	V			-2.5
PHOENIX AMA	HASSAYAMPA	B-01-05 27BBC	332416112454301	639586	33° 24' 16"	112° 45' 44.2"	978	11/1/2001	72	V			12/16/2021	77.4	V			-5.4
PHOENIX AMA	HASSAYAMPA	B-01-06 23DCD	332427112501301	808647	33° 24' 26.1"	112° 50' 14.8"	987	11/2/2001	156.4	V			12/17/2021	148.2	V			8.2
PHOENIX AMA	HASSAYAMPA	B-01-05 08DAB	332634112470001	800303	33° 26' 33.6"	112° 46' 59.3"	1055	11/2/2001	93.4	V			12/16/2021	97.7	V			-4.3
PHOENIX AMA	HASSAYAMPA	B-01-06 11BCA	332648112504401	629598	33° 26' 46.7"	112° 50' 43.9"	1041	10/31/2001	89.1	V			12/17/2021	93.4	V			-4.3
PHOENIX AMA	HASSAYAMPA	B-01-05 15CBC2	332541112454501	636568	33° 25' 35"	112° 45' 44.4"	980	11/1/2001	44.3	V			12/16/2021	47.4	V			-3.1
PHOENIX AMA	HASSAYAMPA	B-02-06 33CAA	332817112523401	617446	33° 28' 17.9"	112° 52' 32.7"	1075	10/31/2001	211.8	V			12/21/2021	71.7	S			140.1
PHOENIX AMA	HASSAYAMPA	B-01-06 03BBC	332740112515801	800798	33° 27' 44.3"	112° 51' 54.4"	1069	10/31/2001	103.1	V			12/16/2021	94.1	V			9.0
PHOENIX AMA	HASSAYAMPA	B-02-05 29DAC	332858112470701	804481	33° 28' 58.3"	112° 47' 6.6"	1125	11/2/2001	144.1	V			12/21/2021	146	V			-1.9
PHOENIX AMA	HASSAYAMPA	B-02-05 25BAB	332924112433301	588466	33° 29' 33.4"	112° 43' 25.3"	1149	11/2/2001	150.7	V			12/17/2021	152.5	V			-1.8
PHOENIX AMA	HASSAYAMPA	B-02-07 12CBB	33146112560801	802455	33° 31' 45.6"	112° 56' 8.8"	1194	10/31/2001	331.2	V			12/21/2021	176	V			155.2
PHOENIX AMA	HASSAYAMPA	B-02-05 06DDD	333216112475201	524267	33° 32' 16.4"	112° 47' 57"	1232	11/2/2001	286.5	V			12/17/2021	247.8	V			38.7
PHOENIX AMA	HASSAYAMPA	B-02-06 21BBA	333028112525101	804552	33° 30' 28.7"	112° 52' 51.9"	1133	10/31/2001	242.5	V			12/21/2021	160	V			82.5
PHOENIX AMA	HASSAYAMPA	B-03-04 07BBB	333724112423601	517028	33° 37' 23.6"	112° 42' 36.9"	1402	10/30/2001	194	V			1/6/2022	184.4	V			9.6
PHOENIX AMA	HASSAYAMPA	B-04-04 19BAC	334052112421901	800517	33° 40' 49.3"	112° 42' 21.4"	1415	10/30/2001	174.9	V			12/27/2021	171.1	V			3.8
PHOENIX AMA	HASSAYAMPA	B-04-05 22AAA	334056112445001	516565	33° 40' 55.9"	112° 44' 47.7"	1530	10/30/2001	288.1	V			12/29/2021	282.8	V			5.3
PHOENIX AMA	HASSAYAMPA	B-04-04 13CBD	334112112371601		33° 41' 10.4"	112° 37' 15"	1570	10/29/2001	326.6	V			12/27/2021	337.8	V			-11.2
PHOENIX AMA	HASSAYAMPA	B-05-04 24CCC	334513112380501	801046	33° 45' 12.4"	112° 38' 6"	1718	10/29/2001	414.9	V			1/5/2022	439.4	V			-24.5
PHOENIX AMA	HASSAYAMPA	B-05-04 20CCC	334514112422001	504783	33° 45' 14.4"	112° 42' 21.7"	1700	10/29/2001	389.4	V			1/5/2022	413.7	V			-24.3
PHOENIX AMA	HASSAYAMPA	B-05-05 13AAA	334654112433001	510003	33° 46' 54.4"	112° 43' 31.8"	1795	10/29/2001	487.6	V			1/5/2022	509.2	V			-21.6
PHOENIX AMA	HASSAYAMPA	B-04-06 04DBA	334259112522001	505244	33° 43' 1.2"	112° 52' 20.8"	1700	10/30/2001	468	V			12/29/2021	462.7	V			5.3
PHOENIX AMA	HASSAYAMPA	B-05-06 10CDD	334703112521901	629322	33° 47' 1.9"	112° 52' 19"	1916	10/30/2001	655.6	V			1/5/2022	656.2	V			-0.6
PHOENIX AMA	LAKE PLEASANT	A-05-02 10ABA	334750112082001	614028	33° 47' 49.6"	112° 8' 24.1"	1655	10/29/2001	282.6	V			12/14/2021	273.1	V			9.5
PHOENIX AMA	LAKE PLEASANT	A-05-01 10AAB	334750112142901	614032	33° 47' 45.6"	112° 14' 25.5"	1570	10/30/2001	213.8	V			12/14/2021	204.7	V			9.1
PHOENIX AMA	LAKE PLEASANT	A-07-02 24BDA	335623112063601	565329	33° 56' 23.1"	112° 6' 37.3"	2160	10/29/2001	49.2	V			12/15/2021	77.6	S			-28.4
PHOENIX AMA	RAINBOW VALLEY	D-04-01 28CDD	330239112155501	600522	33° 2' 37.6"	112° 15' 45.6"	1338	11/8/2001	429.6	V			12/13/2021	442.7	V			-13.1
PHOENIX AMA	RAINBOW VALLEY	C-04-01 32CDD	330147112230201	513868	33° 1' 47"	112° 23' 2.2"	1428	11/9/2001	568.8	V			12/13/2021	578.9	V			-10.1
PHOENIX AMA	RAINBOW VALLEY	D-04-01 14CDD	330423112134401	804031	33° 4' 22.7"	112° 13'												



Appendix 1. 20 Year Groundwater level change in Arizona - Water Years 2002 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2002	WL 2002	WL METHOD 2002	WL REMARK 2002	WL COMMENT 2002	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
PHOENIX AMA	WEST SALT RIVER	A-02-02 14CBC2	333048112075901	608376	33° 30' 47.52"	112° 7' 59.95"	1142.32	10/26/2001	142.3	V			11/12/2021	151.4	V			-9.1
PHOENIX AMA	WEST SALT RIVER	B-02-01 14CBB	333052112202401		33° 30' 52.5"	112° 20' 24.1"	1057	10/29/2001	200.9	V			12/8/2021	196.8	V			4.1
PHOENIX AMA	WEST SALT RIVER	A-03-01 35ABB	333358112134201	607737	33° 33' 59.2"	112° 13' 41.7"	1128	10/26/2001	229.4	V			11/15/2021	210.8	V			18.6
PHOENIX AMA	WEST SALT RIVER	A-04-01 22AAA	334052112141401	804522	33° 40' 52.7"	112° 14' 14.39"	1280.59	11/1/2001	457.7	V			12/15/2021	428.5	V			29.2
PHOENIX AMA	WEST SALT RIVER	B-04-01 19BDC	334033112242801	612965	33° 40' 30"	112° 24' 21.5"	1320	11/1/2001	400.1	V			1/6/2022	472.5	V			-72.4
PHOENIX AMA	WEST SALT RIVER	C-01-02 08CDA	332102112291201	614938	33° 21' 2.02"	112° 28' 41.06"	898.57	10/31/2001	49.7	V			10/7/2021	56.26	VT			-6.6
PINAL AMA	ELOY	D-10-06 11DD2	323354111422501	620687	32° 33' 53.5"	111° 42' 24"	1588	11/5/2001	353.7	V			11/12/2021	345.9	V			7.8
PINAL AMA	ELOY	D-10-09 10AAD1	323414111235001	620611	32° 34' 13.6"	111° 23' 51"	1800	11/5/2001	276.7	V	S		1/25/2022	249.9	V	S		26.8
PINAL AMA	ELOY	D-10-09 21AAD	323233111245601	622057	32° 32' 33.4"	111° 24' 52.8"	1797	11/5/2001	225.3	V			1/28/2022	190.7	V			34.6
PINAL AMA	ELOY	D-10-09 18AAC2	323321111271001	622069	32° 33' 21.4"	111° 27' 8.2"	1765	11/5/2001	307.3	V			1/27/2022	276.2	V			31.1
PINAL AMA	ELOY	D-09-07 25DDA2	323611111340901	618267	32° 36' 16.79"	111° 34' 7.19"	1652	11/8/2001	413.1	V			11/10/2021	482.1	V		MEAS 2X	-69.0
PINAL AMA	ELOY	D-09-07 25CDD	323611111343401	618276	32° 36' 10.19"	111° 34' 36.4"	1646	11/8/2001	333.2	V			11/10/2021	251.7	V			81.5
PINAL AMA	ELOY	D-09-08 31DAA	323541111330501	615607	32° 35' 43"	111° 33' 4.69"	1666	11/5/2001	401.2	V			11/10/2021	390.5	V			10.7
PINAL AMA	ELOY	D-08-06 35DDD2	324035111412301		32° 40' 32"	111° 41' 18.7"	1542	11/7/2001	159.7	V			11/15/2021	115.8	S			43.9
PINAL AMA	ELOY	D-09-08 06DDD	323943111330801	604061	32° 39' 42.29"	111° 33' 3"	1630	11/13/2001	290.6	V			11/10/2021	271.1	V			19.5
PINAL AMA	ELOY	D-08-08 29BCC	324154111325601	618528	32° 41' 52.1"	111° 32' 54.9"	1607	11/8/2001	360.8	V			11/8/2021	373.5	V			-12.7
PINAL AMA	ELOY	D-08-08 29BCC	324155111325501	618535	32° 41' 52"	111° 32' 52.7"	1607	11/8/2001	257.4	V			11/8/2021	233.3	V			24.1
PINAL AMA	ELOY	D-08-06 31ADD	324102111452801	615508	32° 40' 58.29"	111° 45' 27.2"	1509	11/8/2001	216.4	V			11/15/2021	215.8	V			0.6
PINAL AMA	ELOY	D-08-08 18CDD1	324312111333001	606865	32° 43' 10.9"	111° 33' 31.3"	1583	11/7/2001	262.2	V			11/8/2021	231.6	V			30.6
PINAL AMA	ELOY	D-08-08 18CDD2	324313111333601	626503	32° 43' 11.2"	111° 33' 32.8"	1583	11/7/2001	298.1	V			11/8/2021	302.3	V			-4.2
PINAL AMA	ELOY	D-08-08 14DDD	324314111285501	622438	32° 43' 12.1"	111° 28' 55.29"	1611	11/7/2001	298.4	V			11/15/2021	304.6	V		MEAS 2X	-6.2
PINAL AMA	ELOY	D-08-07 09ADD1	324430111371501		32° 44' 30.9"	111° 37' 12.7"	1538	11/7/2001	229.4	V			11/3/2021	207.6	V			21.8
PINAL AMA	ELOY	D-08-09 07ADD	324432111265201	622278	32° 44' 28.9"	111° 26' 49.1"	1635	11/7/2001	378.6	V			11/15/2021	457	V			-78.4
PINAL AMA	ELOY	D-08-07 14DDA	324320111350801		32° 43' 23"	111° 35' 5.7"	1565	11/7/2001	313.6	V			11/8/2021	345.1	V			-31.5
PINAL AMA	ELOY	D-08-08 07DDD1	324405111330101		32° 44' 3.1"	111° 33' 2.2"	1575	11/7/2001	233.8	V			11/8/2021	214.1	V			19.7
PINAL AMA	ELOY	D-07-08 33DDD	324548111305601		32° 45' 48"	111° 30' 56"	1562	11/6/2001	244.6	V			11/9/2021	227.3	V			17.3
PINAL AMA	ELOY	D-07-07 34CDD2	324548111363901		32° 45' 48.8"	111° 36' 38.8"	1529	11/2/2001	235.8	V			11/8/2021	215.3	V			20.5
PINAL AMA	ELOY	D-07-07 31DDA	324558111391301	608916	32° 45' 57.6"	111° 39' 13.4"	1509	11/2/2001	392.5	V			11/8/2021	441.2	V			-48.7
PINAL AMA	ELOY	D-07-06 34BAD	324626111425001	604516	32° 46' 25.7"	111° 42' 49.09"	1470.28	11/13/2001	357.9	V			11/9/2021	451.38	VT			-93.5
PINAL AMA	ELOY	D-08-09 05ACD PZ1	324523111260701		32° 45' 19.4"	111° 26' 6.7"	1648	11/6/2001	379.8	V			11/15/2021	435.3	V			-55.5
PINAL AMA	ELOY	D-08-09 05ACD PZ2	324523111260702		32° 45' 19.4"	111° 26' 6.7"	1648	11/6/2001	382.7	V			11/15/2021	437.2	V			-54.5
PINAL AMA	ELOY	D-07-07 23ADD	324757111350501		32° 47' 57.7"	111° 35' 4.1"	1513	11/5/2001	206.7	V			11/9/2021	187	V			19.7
PINAL AMA	ELOY	D-07-08 30CDD	324641111333101	604265	32° 46' 40.4"	111° 33' 30"	1536	11/5/2001	213.5	V			11/9/2021	200.7	V			12.8
PINAL AMA	ELOY	D-07-09 27BDA PZ1	324707111241901		32° 47' 12.1"	111° 24' 19.3"	1657	11/6/2001	359.8	V			11/15/2021	348.5	V			11.3
PINAL AMA	ELOY	D-07-09 27BDA PZ2	324707111241902		32° 47' 12.1"	111° 24' 19.3"	1657	11/6/2001	341.2	V			11/15/2021	350.3	V			-9.1
PINAL AMA	ELOY	D-07-09 08DDD PZ1	324917111254701	505967	32° 49' 16.9"	111° 25' 47.3"	1550	11/6/2001	198.6	V			11/15/2021	213.9	V			-15.3
PINAL AMA	ELOY	D-07-07 11CDD	324917111353601		32° 49' 17"	111° 35' 36.6"	1494	11/5/2001	181.6	V			11/9/2021	170.2	V			11.4
PINAL AMA	ELOY	D-07-08 09DDD	324920111305701	621868	32° 49' 17.7"	111° 30' 54.4"	1516	11/6/2001	148.5	V			11/9/2021	157.5	S			-9.0
PINAL AMA	ELOY	D-07-06 17DDD2	324825111442301		32° 48' 24"	111° 44' 21.8"	1441	11/2/2001	115.7	V			11/8/2021	124.6	S			-8.9
PINAL AMA	ELOY	D-07-08 17CDD	324827111323001	621861	32° 48' 25.6"	111° 32' 27.2"	1520	11/6/2001	184.5	V			11/9/2021	180	V			4.5
PINAL AMA	ELOY	D-07-05 01ADA	325047111462501	608209	32° 50' 47.7"	111° 46' 25.7"	1402	11/5/2001	38.6	V			11/9/2021	55.8	V			-17.2
PINAL AMA	ELOY	D-07-07 08BAA	325005111384201	624107	32° 50' 3.9"	111° 38' 41"	1468	11/6/2001	250.8	V			11/8/2021	301.7	V			-50.9
PINAL AMA	ELOY	D-07-09 10BBB PZ1	325007111244801		32° 50' 6"	111° 24' 44.4"	1596	11/6/2001	304.5	V			11/15/2021	343.4	V			-38.9
PINAL AMA	ELOY	D-07-09 10BBB PZ2	325007111244802		32° 50' 6"	111° 24' 44.4"	1596	11/6/2001	258	V			11/15/2021	217.3	V			40.7
PINAL AMA	ELOY	D-06-05 34BDD2	325130111490701		32° 51' 27.4"	111° 49' 3.5"	1369	11/5/2001	63.5	V			11/9/2021	65	S			-1.5
PINAL AMA	ELOY	D-06-07 34BBC	325142111370501	604669	32° 51' 42.3"	111° 37' 4.6"	1461	11/5/2001	218.7	V			11/8/2021	140.1	S			78.6
PINAL AMA	ELOY	D-06-08 31CDD	325102111332901	612214	32° 51' 1"	111° 33' 29"	1485	11/6/2001	136.6	V			11/9/2021	156	S			-19.4
PINAL AMA	ELOY	D-06-09 29BBA4	325243111264001		32° 52' 42.1"	111° 26' 40"	1542	11/5/2001	261.45	V			11/15/2021	315	V			-53.6
PINAL AMA	ELOY	D-06-05 25BBB	325245111472601	801146	32° 52' 45"	111° 47' 25.9"	1375	11/5/2001	39.3	V			11/9/2021	67.7	S			-28.4
PINAL AMA	ELOY	D-06-08 18CDD2	325339111333001	605546	32° 53' 39.2"	111° 33' 30.5"	1451	11/6/2001	95.6	V			11/8/2021	105.6	S			-10.0
PINAL AMA	ELOY	D-06-08 14CCC	325342111294701	625234	32° 53' 38.8"	111° 29' 48.8"	1456	11/5/2001	96	V			11/8/2021	118.6	V			-22.6
PINAL AMA	ELOY	D-06-06 23ADC	325316111412701	621197	32° 53' 13.1"	111° 41' 29.8"	1417	11/8/2001	236.5	V			11/10/2021	318.7	V			-82.2
PINAL AMA	ELOY	D-06-06 09DAD	325448111432201	602811	32° 54' 45.6"	111° 43' 19.3"	1394	11/8/2001	259.5	V	K		11/9/2021	290	V	K		-30.5
PINAL AMA	ELOY	D-06-08 11ADA1	325503111284801	617559	32° 55' 2.8"	111° 28' 48.6"	1473	11/5/2001	66.4	V			11/8/2021	76.5	S			-10.1
PINAL AMA	ELOY	D-06-07 11DD2	325432111350401		32° 54' 31.8"	111° 35' 3.3"	1431	11/5/2001	88.2	V			11/8/2021	99.9	S			-11.7
PINAL AMA	ELOY	D-06-08 S04ADD1	325554111305201	605731	32° 55' 49.5"	111° 30' 53.9"	1429	11/5/2001	56.2	V			11/8/2021	73	S			-16.8
PINAL AMA	ELOY	D-06-09 N04DDD	325617111244801	620899	32° 56' 16.6"	111° 24' 47.3"	1588	11/5/2001	273.7	V			11/8/2021	321.6	V			-47.9
PINAL AMA	ELOY	D-05-07 34DDD	325618111370501	604184	32° 56' 18"	111° 37' 5"	1406	11/5/2001	91.5	V			11/9/2021	106	S			-14.5
PINAL AMA	ELOY	D-05-07 26CDD	325711111363801	622466	32° 57' 10.4"	111° 36' 37"	1402	11/5/2001	84.2	V			11/10/2021	105.6	S			-21.4
PINAL AMA	ELOY	D-05-07 28DCC2	325712111383001	809300	32° 57' 12.8"	111° 38' 36.6"	1410	11/5/2001	119.2	V			11/10/2021	129	S			-9.8
PINAL AMA	ELOY	D-05-06 28CAA	325728111444901	608103	32° 57' 34.9"	111° 44' 53.5"	1464	11/8/2001	326.4	V			11/10/2021	326.4	V			0.0
PINAL AMA	ELOY	D-05-10 27CCD2	325732111190601	621337	32° 57' 36.4"	111° 18' 58.3"	1815	11/7/2001	483.5	V			11/15/2021	527.4	V			-43.9
PINAL AMA	ELOY	D-05-06 28CAB	325733111445701	608102	32° 57' 35.9"	111° 44' 59.4"	1463	11/8/2001	308.7	V			3/7/2022	317.7	V			-9.0
PINAL AMA	ELOY	D-05-09 31ADD	325707111271801	621904	32° 57' 6.8"	111° 27' 18.1"	1505	11/6/2001	158.2	V			11/9/2021	167.7	V			-9.5



Appendix 1. 20 Year Groundwater level change in Arizona - Water Years 2002 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2002	WL 2002	WL METHOD 2002	WL REMARK 2002	WL COMMENT 2002	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
PINAL AMA	VEKOL VALLEY	D-06-01 16DCD2	325358112153501	804042	32° 53' 57.6"	112° 15' 35.4"	1626	11/8/2001	212.8	V			12/9/2021	211.6	V			1.2
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 12ADD	342658112244601	606295	34° 47' 0.4"	112° 24' 42.3"	4648	5/15/2002	120.2	V			3/21/2022	147.8	V			-27.6
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-01 14DBD	344038112194401	523925	34° 40' 38"	112° 19' 44"	4870	5/14/2002	334.95	V			6/9/2022	363.6	V			-28.7
PRESCOTT AMA	LITTLE CHINO VALLEY	A-15-01 17BCC	344052112171701	524200	34° 40' 51"	112° 17' 18.7"	4979	4/10/2002	314.31	V			3/22/2022	312.8	V			1.5
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-01 31CCD	343746112242601	619664	34° 37' 45.4"	112° 24' 25.2"	5008	4/11/2002	349.8	V			3/23/2022	352.8	V			-3.0
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-02 31BAD1	343829112303501	638196	34° 38' 27.6"	112° 30' 35.8"	5267	2/15/2002	233.31	V			3/24/2022	245.7	V			-12.4
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-02 30DAA	343858112300301	809476	34° 38' 57.7"	112° 30' 0.9"	5198	4/10/2002	161.2	V			3/23/2022	294.4	V			-133.2
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-01 19DCD1	343930112235301	523565	34° 39' 29.5"	112° 23' 55"	4915	4/10/2002	229.5	V			3/22/2022	189.4	V			40.1
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-03 35BBB	344348112331401	602609	34° 43' 48.1"	112° 33' 14.2"	5200	4/10/2002	123.3	V			3/31/2022	115.9	V			7.4
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-01 25DDB	344358112182901	625105	34° 43' 58.3"	112° 18' 32.2"	4961	4/11/2002	420.15	V			3/23/2022	448.3	V			-28.2
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-01 02ADC	344233112193801	524298	34° 42' 33.2"	112° 19' 38.3"	4880	4/11/2002	331.2	V			3/29/2022	360.5	V			-29.3
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-03 01DCD	344241112312201	808811	34° 42' 11.2"	112° 31' 21.5"	5010	4/9/2002	100.3	V			3/24/2022	147.3	V			-47.0
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-01 07CDD	344628112174901	606296	34° 46' 29.4"	112° 24' 10.3"	4701	5/14/2002	171.9	V			3/21/2022	196.5	V			-24.6
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 09CDC	344629112283401	634748	34° 46' 31.2"	112° 28' 33.3"	4685	5/28/2002	185.1	V			3/21/2022	207.6	V			-22.5
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-01 28BCA	344429112222001	625104	34° 44' 26.8"	112° 22' 23.2"	4807	4/11/2002	278.7	V			3/23/2022	306.6	V			-27.9
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 22DBD	344458112270601	606025	34° 44' 57.9"	112° 27' 5.8"	4733	4/9/2002	225.9	V			3/22/2022	248.3	V			-22.4
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-01 20CBD1	344459112232601	625107	34° 45' 0"	112° 23' 26.2"	4777	4/8/2002	51.4	V			3/23/2022	45	V			6.4
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 21BAA1	344534112282901	604724	34° 45' 33.9"	112° 28' 25.5"	4747	3/27/2002	238.2	V			3/21/2022	259.1	V			-20.9
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 08ACA	344704112291601	572110	34° 47' 5.4"	112° 29' 15.5"	4615	5/14/2002	116.2	V			3/21/2022	145	V			-28.8
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 03DDC4	344723112265701	603665	34° 47' 22.5"	112° 26' 59.1"	4590	3/27/2002	55.9	V			3/24/2022	64.2	V			-8.3
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 03BBB1	344809112275201		34° 48' 9.7"	112° 27' 50.9"	4539	3/26/2002	51.8	V			3/24/2022	82.2	V			-30.4
PRESCOTT AMA	LITTLE CHINO VALLEY	B-17-02 S34DDD3	344819112265601	633990	34° 48' 18.4"	112° 26' 55.8"	4515	3/26/2002	42.6	V			3/24/2022	54	V			-11.4
PRESCOTT AMA	LITTLE CHINO VALLEY	B-17-02 S31DCD	344821112301701	802799	34° 48' 23.1"	112° 30' 16.3"	4859	5/28/2002	496.4	V			3/25/2022	513	V			-16.6
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-02 30CDA	343843112303101	511771	34° 38' 42.8"	112° 30' 30.3"	5218	4/9/2002	173.8	V			3/23/2022	291	V			-117.2
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-02 31DDB	343754112301101	635023	34° 37' 52.3"	112° 30' 11.3"	5355	4/9/2002	213.7	V			3/24/2022	228.6	V			-14.9
PRESCOTT AMA	LITTLE CHINO VALLEY	B-14-02 05BBC	343734112295501	540148	34° 37' 33.2"	112° 29' 56.1"	5305	4/10/2002	178.4	V			3/22/2022	197.1	V			-18.7
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-01 35ACB	343820112195701	560334	34° 38' 20.3"	112° 19' 56.5"	4961	4/10/2002	381.5	V			3/22/2022	383.3	V		PROBE RETURNED MUD PLUG IN TIP	-1.8
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-01 23ACA	344520112194301	587404	34° 45' 19.87"	112° 19' 43.2"	4878.63	11/21/2001	342.4	V			10/13/2021	371.41	VT			-29.0
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-02 22AAB PZ1	342020112270102	588619	34° 40' 19.75"	112° 27' 0.52"	5007.63	4/22/2002	335	V			3/17/2022	329.14	VT			5.9
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 21BAA2	344535112283001	604725	34° 45' 32.65"	112° 28' 30.82"	4746.47	5/15/2002	247.13	V			6/9/2022	267.15	VT			-20.0
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 12CBD	344645112253401	606300	34° 46' 42.02"	112° 25' 29"	4601.85	2/13/2002	85.21	V			10/13/2021	112.62	VT			-27.5
PRESCOTT AMA	LITTLE CHINO VALLEY	B-17-02 N34DDD1	344819112265701	608242	34° 48' 18.18"	112° 26' 57.65"	4513.79	2/11/2002	20.71	V			10/13/2021	40.73	VT			-20.0
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-01 08DAA1 PZ1	344134112223501	587403	34° 41' 33.73"	112° 22' 35.25"	4915.24	2/12/2002	377.45	V			10/15/2021	406.07	VT			-28.6
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-02 22AAB	342020112270101	588619	34° 40' 19.75"	112° 27' 0.52"	5007.63	5/15/2002	370.36	V			6/9/2022	399.97	VT			-29.6
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-01 26CBC1	343854112202701	541372	34° 38' 54.55"	112° 20' 27.49"	4949.32	2/12/2002	401.27	V			10/13/2021	443.55	VT			-42.3
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 28DDC	344357112280901	628072	34° 43' 51.9"	112° 28' 8.69"	4818.78	2/11/2002	306.38	V			10/13/2021	335.62	VT			-29.2
PRESCOTT AMA	UPPER AGUA FRIA	A-14-01 34CCA	343244112150901	631279	34° 32' 44.8"	112° 15' 9.9"	4650	4/9/2002	77.26	V			3/21/2022	81.6	V			-4.3
PRESCOTT AMA	UPPER AGUA FRIA	A-13-01 01DCA	343153112122901	803241	34° 31' 53"	112° 12' 29.6"	4738	4/25/2002	208.45	V			3/21/2022	210.4	V			-2.0
PRESCOTT AMA	UPPER AGUA FRIA	A-13-01 02CAD	343157112135401	638550	34° 31' 56.2"	112° 13' 51.8"	4603	3/27/2002	81.1	V			3/21/2022	83.9	V			-2.8
PRESCOTT AMA	UPPER AGUA FRIA	B-14-01 11DAA	343628112193001	612329	34° 36' 26.6"	112° 19' 31.1"	5043.52	4/24/2002	330.5	V			3/22/2022	334.6	V			-4.1
PRESCOTT AMA	UPPER AGUA FRIA	B-14-01 11ACB	343637112195701	612330	34° 36' 37.1"	112° 19' 57.5"	5043.72	4/9/2002	342.33	V			3/22/2022	345.9	V			-3.6
PRESCOTT AMA	UPPER AGUA FRIA	A-14-01 08BBB	343652112172101	536623	34° 36' 52.08"	112° 17' 18.8"	4859.13	2/14/2002	199.87	V			10/13/2021	214.86	VT			-15.0
PRESCOTT AMA	UPPER AGUA FRIA	B-14-01 25DAC	343343112183801	613029	34° 33' 43.9"	112° 18' 38.2"	4933	4/9/2002	61.8	V			3/31/2022	48.5	S			13.3
PRESCOTT AMA	UPPER AGUA FRIA	A-14-01 27ACC	343353112144101	613024	34° 33' 53.08"	112° 14' 41.05"	4660.63	2/12/2002	42.58	V			10/13/2021	41.68	VT			0.9
PRESCOTT AMA	UPPER AGUA FRIA	A-14-01 28BBB	343415112161401	613020	34° 34' 11.5"	112° 16' 12.8"	4714.98	3/27/2002	70.7	V			3/21/2022	102.6	V			-31.9
PRESCOTT AMA	UPPER AGUA FRIA	A-14-01 22CAD	343434112145201	613023	34° 34' 33.5"	112° 14' 51.1"	4720	2/12/2002	76.4	V			3/31/2022	86.7	V			-10.3
PRESCOTT AMA	UPPER AGUA FRIA	B-14-01 22ADA	343453112203401	613045	34° 34' 53.7"	112° 20' 34.4"	5184.1	4/9/2002	331.7	V			3/21/2022	340.2	V			-8.5
PRESCOTT AMA	UPPER AGUA FRIA	A-14-01 17AAD	343529112162201	613025	34° 35' 48.92"	112° 16' 26.23"	4779.25	2/12/2002	117.05	V			10/13/2021	33.8	VT			83.3
PRESCOTT AMA	UPPER AGUA FRIA	B-14-01 01CCC	343655112192201	539499	34° 36' 54.7"	112° 19' 22.5"	5025	4/24/2002	337.9	V			3/22/2022	359.3	V			-21.4
PRESCOTT AMA	UPPER AGUA FRIA	A-15-01 10BBB2	344157112150701	545863	34° 41' 57"	112° 15' 5.6"	5330	4/23/2002	134.7	V			3/22/2022	69.2	V			65.5
PRESCOTT AMA	UPPER AGUA FRIA	A-15-01 29ADB	343909112163201		34° 39' 8.9"	112° 16' 31.8"	5067	4/23/2002	381.5	V			3/22/2022	400.8	V			-19.3
PRESCOTT AMA	UPPER AGUA FRIA	B-14-01 10ADB1 PZ1	343641112204202	519687	34° 36' 40.15"	112° 20' 43.8"	5018.34	11/21/2001	650.87	V			10/15/2021	532.65	VT			118.2
PRESCOTT AMA	UPPER AGUA FRIA	A-15-01 22ABB	344029112143501	519873	34° 40' 20.09"	112° 14' 35.07"	5257.81	2/14/2002	61.98	V			10/13/2021	74.92	VT			-12.9
PRESCOTT AMA	UPPER AGUA FRIA	A-15-01 28ACC	343906112154701	614238	34° 39' 7.09"	112° 15' 45.41"	5067.21	5/13/2002	315.8	V			6/10/2022	324.1	VT			-8.3
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-02-14 10DCD	333121113413001	600171	33° 31' 25.4"	113° 41' 28.3"	1350	11/7/2001	343.7	V			10/25/2021	350.3	V			-6.6
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-03-15 02DAC	333737113460801	601120	33° 37' 41.7"	113° 46' 10.1"	1205	11/8/2001	209.4	V			10/25/2021	228.7	V			-19.3
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-05-15 35BDD2	334357113473201	801955	33° 43' 55.9"	113° 47' 29.9"	1208	1/14/2002	307.5	V			10/25/2021	384.3	V			-76.8
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-05-16 25DCC	334422113524001	614479	33° 44' 21.9"	113° 52' 41"	1123	11/15/2001	156.1	V			10/25/2021	176.9	V			-20.8
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-05-15 29DAA	334446113500601	613116	33° 44' 46.4"	113° 50' 6.7"	1121	1/14/2002	192.8	V			10/25/2021	235.2	V			-42.4
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-06-15 27BBA	335024113485701	614505	33° 50' 24.5"	113° 48' 52.2"	1352	1/14/2002	434.4	V			10/25/2021	438.5	V			-4.1
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-06-16 20ACD	335054113564301	505096	33° 50' 55.3"	113° 56' 43.6"	1055	11/15/2001	117.8	V			10/25/2021	137.4	V		</	



Appendix 1. 20 Year Groundwater level change in Arizona - Water Years 2002 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2002	WL 2002	WL METHOD 2002	WL REMARK 2002	WL COMMENT 2002	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
SAN RAFAEL BASIN	SAN RAFAEL	D-24-17 14BBA	312109110352501		31° 21' 9.5"	110° 35' 25.6"	4645	11/8/2001	7.98	S			12/15/2021	7.4	S			0.6
SAN RAFAEL BASIN	SAN RAFAEL	D-24-16 01CBA UNSURV	312207110400301	640950	31° 22' 6.9"	110° 40' 3.1"	5003	11/8/2001	202.9	V			1/28/2022	212.8	V			-9.9
SAN RAFAEL BASIN	SAN RAFAEL	D-22-17 25BDB2	312941110341601	630082	31° 29' 42.5"	110° 34' 20.7"	5085	11/8/2001	26.9	V			1/27/2022	28.3	V			-1.4
SANTA CRUZ AMA	SANTA CRUZ AMA	D-24-15 04DDD1 UNSUR	312147110482801	625364	31° 21' 46.4"	110° 48' 27.6"	4018	10/25/2001	95.5	V			1/26/2022	93	V			2.5
SANTA CRUZ AMA	SANTA CRUZ AMA	D-24-14 18CBC	312017110573001	603434	31° 20' 19.7"	110° 57' 26.8"	3957	10/25/2001	198	V			1/26/2022	203.7	V			-5.7
SANTA CRUZ AMA	SANTA CRUZ AMA	D-24-15 18BAD UNSURV	312048110504901		31° 20' 41.8"	110° 50' 57.8"	3715	11/20/2001	9.4	V			11/17/2021	9.2	V			0.2
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-13 24DDC	312423110574901	500951	31° 24' 21.7"	110° 57' 49.2"	3597	10/23/2001	50.2	V			1/26/2022	59.6	V			-9.4
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-15 19ABB	312513110505401	805426	31° 25' 13.3"	110° 50' 53.7"	3885	10/22/2001	138.4	V			1/26/2022	144.4	V			-6.0
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-14 15CCB1	312523110542801	607491	31° 25' 27.1"	110° 54' 28.3"	3554	1/16/2002	36.3	V			2/23/2022	49	V			-12.7
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-14 16BCC	312545110552801	619649	31° 25' 43.2"	110° 55' 26.4"	3509	11/20/2001	7.7	V			11/17/2021	17	S			-9.3
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-15 31CAC	312258110510901	625359	31° 22' 57.2"	110° 51' 9.2"	3650	11/20/2001	22.05	S			11/17/2021	22.3	V			-0.3
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-13 31DAB	312301111024801	634030	31° 23' 1.2"	111° 2' 47.4"	4040	10/23/2001	307.8	V			1/26/2022	319.8	V			-12.0
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-13 36BDD	312308110580601	506340	31° 23' 8.38"	110° 58' 4.45"	3700.19	11/20/2001	141.23	S			10/20/2021	158.58	VT			-17.4
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-14 36BCB1	312316110522701	603439	31° 23' 15.8"	110° 52' 26.9"	3620	1/16/2002	42.99	G			2/25/2022	57	S			-14.0
SANTA CRUZ AMA	SANTA CRUZ AMA	D-22-13 36AD UNSURV	312823110573501	619352	31° 28' 24.4"	110° 57' 33.3"	3471	2/26/2002	31.6	V			2/23/2022	44	V			-12.4
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-13 12ACD UNSURV	312630110575301	603437	31° 26' 38.4"	110° 57' 49.7"	3478	10/24/2001	19.3	V			1/26/2022	19.4	V			-0.1
SANTA CRUZ AMA	SANTA CRUZ AMA	D-22-13 09DA2 UNSURV	313137111004301	619348	31° 31' 34.7"	111° 0' 37.8"	3327	10/23/2001	9.5	V			1/25/2022	10.7	S			-1.2
SANTA CRUZ AMA	SANTA CRUZ AMA	D-22-13 05DD2 UNSURV	313211111014001	619360	31° 32' 12.2"	111° 1' 39.8"	3307	10/23/2001	13.2	V			1/25/2022	15.1	S			-1.9
SANTA CRUZ AMA	SANTA CRUZ AMA	D-22-13 19DCC1 UNSUR	312946111025301	524009	31° 29' 41.4"	111° 2' 58.9"	3490	10/24/2001	194.1	V			1/25/2022	199.2	V			-5.1
SANTA CRUZ AMA	SANTA CRUZ AMA	D-22-13 09DCC UNSURV	31312011005801	605206	31° 31' 20.4"	111° 0' 58.5"	3340	11/19/2001	14.9	V			11/16/2021	21.4	S			-6.5
SANTA CRUZ AMA	SANTA CRUZ AMA	D-21-13 19DBC	31350611030701	617995	31° 35' 6.7"	111° 3' 6.1"	3255	10/23/2001	24.2	V			1/25/2022	22.6	S			1.6
SANTA CRUZ AMA	SANTA CRUZ AMA	D-21-12 24AAA	313539111033701	509495	31° 35' 39.8"	111° 3' 40"	3378	10/23/2001	153.1	V			11/16/2021	155	V			-1.9
SANTA CRUZ AMA	SANTA CRUZ AMA	D-21-13 30DCA	313406111330201	629110	31° 34' 8.1"	111° 2' 56"	3250	11/19/2001	11.3	V			11/16/2021	10.1	S			1.2
SANTA CRUZ AMA	SANTA CRUZ AMA	D-20-11 32DDD	313817111141001	616246	31° 38' 19.6"	111° 13' 58.7"	3548	10/24/2001	31.6	V			1/24/2022	45.5	V			-13.9
SANTA CRUZ AMA	SANTA CRUZ AMA	D-20-13 32BBC	313845111023101	610533	31° 38' 46"	111° 2' 33.6"	3149	1/15/2002	22.8	V			2/24/2022	28.9	S			-6.1
SANTA CRUZ AMA	SANTA CRUZ AMA	D-21-13 08CBB	313735111023701	608125	31° 37' 35.27"	111° 2' 36.07"	3180.46	2/12/2002	15	V			2/17/2022	17.92	VT			-2.9
SANTA CRUZ AMA	SANTA CRUZ AMA	D-21-13 06DAA	313747111023901	608112	31° 37' 46.3"	111° 2' 39.5"	3175	10/22/2001	23.1	V			1/25/2022	23.4	S			-0.3
SANTA CRUZ AMA	SANTA CRUZ AMA	D-20-11 11DCC2	314152111111601	801469	31° 41' 53.1"	111° 11' 15.6"	3380	11/19/2001	44.4	V			1/24/2022	51.6	S			-7.2
SANTA CRUZ AMA	SANTA CRUZ AMA	D-20-12 12DAD	314202111034001	801397	31° 42' 1.7"	111° 3' 40.2"	3089	10/23/2001	35.6	V			1/25/2022	45.2	V			-9.6
SANTA CRUZ AMA	SANTA CRUZ AMA	D-20-13 07ACD	314214111025601	617275	31° 42' 15.9"	111° 2' 55.7"	3063	11/19/2001	15.2	S			11/16/2021	31.1	S			-15.9
SANTA CRUZ AMA	SANTA CRUZ AMA	D-20-11 21DAA	314024111125301	606136	31° 40' 23.1"	111° 12' 51.8"	3455	10/24/2001	46.5	V			1/24/2022	62.9	S			-16.4
SANTA CRUZ AMA	SANTA CRUZ AMA	D-19-11 34BCC	314401111124501	616247	31° 44' 1.5"	111° 12' 44.9"	3640	10/24/2001	175.3	V			1/24/2022	189	V			-13.7
SANTA CRUZ AMA	SANTA CRUZ AMA	D-20-13 06CBA	314303111032801	627932	31° 43' 1.1"	111° 3' 24.1"	3064	10/23/2001	37.8	V			1/25/2022	49.4	V			-11.6
SANTA CRUZ AMA	SANTA CRUZ AMA	D-20-12 05ADB2	314318111075401	621510	31° 43' 17.9"	111° 7' 56"	3224	1/15/2002	20.16	S			1/25/2022	20.1	S			0.1
SANTA CRUZ AMA	SANTA CRUZ AMA	D-24-15 06AAD	312230110503301	803465	31° 22' 30"	110° 50' 35.72"	3663.85	10/22/2001	17	S			10/20/2021	14.54	VT			2.5
SANTA CRUZ AMA	SANTA CRUZ AMA	D-24-13 01DBC	312204110575601	571751	31° 22' 2.9"	110° 57' 57.1"	3827	2/27/2002	243.17	V			2/23/2022	273.6	V			-30.4
SANTA CRUZ AMA	SANTA CRUZ AMA	D-19-13 31ABD	314413111030001		31° 44' 13.2"	111° 2' 54.4"	3042	11/20/2001	59.4	S			11/16/2021	88.8	S			-29.4
TONTO CREEK BASIN	TONTO CREEK	A-09-10 32BDB	340458111211801	601022	34° 4' 58.5"	111° 21' 18.1"	3030	10/15/2001	39.36	S			11/15/2021	39.3	S			0.1
TONTO CREEK BASIN	TONTO CREEK	A-10-10 11ACB	341336111174801	509660	34° 13' 35.1"	111° 17' 51.41"	4821.29	2/14/2002	8.93	V			2/3/2022	5.17	VT			3.8
TONTO CREEK BASIN	TONTO CREEK	A-11-10 35CCD	341447111182501	631835	34° 14' 53"	111° 18' 18.9"	5079	2/14/2002	124.7	V			2/25/2022	118.2	V			6.5
TUCSON AMA	AVRA VALLEY	D-22-08 34ABA	3128271111303301	630270	31° 28' 35"	111° 30' 32.1"	3435	11/7/2001	192.9	V			11/16/2021	204.8	V			-11.9
TUCSON AMA	AVRA VALLEY	D-21-08 27ADA1	3134291111301501	604206	31° 34' 27.7"	111° 30' 17.8"	3459	11/7/2001	324.1	V			1/25/2022	333.5	V			-9.4
TUCSON AMA	AVRA VALLEY	D-20-08 35BDB	313850111295701	630265	31° 38' 46.3"	111° 29' 55.8"	3463	11/7/2001	456.3	V			1/25/2022	469	V			-12.7
TUCSON AMA	AVRA VALLEY	D-20-09 17ABA	314135111263101	630266	31° 41' 38.5"	111° 26' 30.3"	3254	11/7/2001	297	V			1/25/2022	311.2	V			-14.2
TUCSON AMA	AVRA VALLEY	D-19-09 03ACA	314830111243101	634260	31° 48' 29.1"	111° 24' 30.5"	3052	11/8/2001	322	V			1/25/2022	322.1	V			-0.1
TUCSON AMA	AVRA VALLEY	D-18-09 11BAC	315257111234501	624829	31° 52' 59"	111° 23' 47"	2915	11/8/2001	244.5	V			1/25/2022	245.7	V			-1.2
TUCSON AMA	AVRA VALLEY	D-17-09 02DDA	315825111230601	612492	31° 58' 30.2"	111° 23' 8.3"	2744	11/8/2001	184.9	V			1/25/2022	183.9	V			1.0
TUCSON AMA	AVRA VALLEY	D-16-10 34BAA	320007111183601	621997	32° 0' 0.9"	111° 18' 33.5"	3096	11/8/2001	601.7	V			11/16/2021	601.2	V			0.5
TUCSON AMA	AVRA VALLEY	D-15-10 33CBC2	320434111200701	603530	32° 4' 33.5"	111° 20' 6.5"	2536	11/8/2001	159.4	V			1/25/2022	151.5	V			7.9
TUCSON AMA	AVRA VALLEY	D-15-10 35AAA	320511111171201	612020	32° 5' 12.8"	111° 17' 14.9"	2529.6	11/8/2001	219.6	V			1/26/2022	217.6	V			2.0
TUCSON AMA	AVRA VALLEY	D-15-11 05CCC	320850111145901	610699	32° 8' 51"	111° 15' 1.1"	2368	1/11/2002	385.1	V			1/26/2022	246.8	V			138.3
TUCSON AMA	AVRA VALLEY	D-14-10 12BAC	321256111162901	633627	32° 13' 51.6"	111° 16' 52.6"	2247	11/8/2001	386	V			1/26/2022	282.5	V			103.5
TUCSON AMA	AVRA VALLEY	D-14-11 14ddb PZ1	321220111111201	509590	32° 12' 23"	111° 11' 12.9"	2374	11/7/2001	463.5	V			11/17/2021	288.2	V			175.3
TUCSON AMA	AVRA VALLEY	D-14-11 14ddb PZ2	321220111111202	509590	32° 12' 23"	111° 11' 12.9"	2374	11/7/2001	464	V			11/17/2021	288	V			176.0
TUCSON AMA	AVRA VALLEY	D-13-11 17BCB PZ1	321806111150401	508422	32° 18' 7.5"	111° 15' 6.09"	2144	11/7/2001	352.5	V			11/17/2021	283.6	V			68.9
TUCSON AMA	AVRA VALLEY	D-13-11 17BCB PZ2	321806111150402	508422	32° 18' 7.5"	111° 15' 6.09"	2144	11/7/2001	356.2	V			11/17/2021	288.2	V			68.0
TUCSON AMA	AVRA VALLEY	D-13-10 16DCD	321728111193401	615881	32° 17' 29.8"	111° 19' 33.4"	2136	11/6/2001	393.7	V			1/26/2022	352.6	V			41.1
TUCSON AMA	AVRA VALLEY	D-13-11 11ACC2	3218511111112601	804090	32° 18' 51.5"	111° 11' 25.6"	2393	11/8/2001	201.5	V			1/26/2022	231.4	V			-29.9
TUCSON AMA	AVRA VALLEY	D-12-10 23DAB	322219111172801	621364	32° 22' 16.9"	111° 17' 26.5"	2025	11/6/2001	268.5	C			1/26/2022	233.8	V			34.7
TUCSON AMA	AVRA VALLEY	D-12-11 20AAA	322245111144041	504485	32° 22' 49.6"	111° 14' 0.3"	2019	11/6/2001	247.4	V			1/26/2022	211	V			36.4
TUCSON AMA	AVRA VALLEY	D-12-11 01DDA PZ1	322444111095401	508652	32° 24' 45.5"	111° 9' 53.7"	2041	11/7/2001	214	V			11/17/2021	208.4	V			5.6
TUCSON AMA	AVRA VALLEY	D-12-11 01DDA PZ2	322444111095402	508652	32° 24' 45.5"	111° 9' 53.7"	2041	11/7/2001	86.4	V			11/17/2021	99.4	V			-13.0
TUCSON AMA	AVRA VALLEY	D-11-11 34ADD2	322554111115801															



Appendix 1. 20 Year Groundwater level change in Arizona - Water Years 2002 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2002	WL 2002	WL METHOD 2002	WL REMARK 2002	WL COMMENT 2002	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 35CCA	321514110531701	620140	32° 15' 14.8"	110° 53' 16.8"	2454	2/19/2002	265.1	V			2/24/2022	214.3	V			50.8
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 26BBB	321647110532201	620156	32° 16' 44.5"	110° 53' 27.4"	2464	2/19/2002	69.79	V			2/24/2022	68.3	S			1.5
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 20CCC	321647110563301	618705	32° 16' 47.84"	110° 56' 31.64"	2348.16	11/16/2001	150.77	S			10/18/2021	134.07	VT			16.7
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 19DDD	321649110564001	618684	32° 16' 48.7"	110° 56' 38.2"	2344	2/22/2002	152	V			2/24/2022	134	V			18.0
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 19DDDB2	321653110564801	618686	32° 16' 53.6"	110° 56' 48.4"	2339	2/22/2002	143.2	V			2/24/2022	130.8	V			12.4
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 19DDA2	321654110564101	618723	32° 16' 54.5"	110° 56' 40.4"	2342	2/22/2002	143	V			2/24/2022	129.6	V			13.4
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 26DCC	321604110525601	519317	32° 15' 59.7"	110° 52' 59.1"	2421	2/19/2002	67.89	S			2/24/2022	36.2	S			31.7
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 26DAC1	321612110524001	801394	32° 16' 9.2"	110° 52' 40"	2426	11/5/2001	20.4	V			1/24/2022	10.9	S			9.5
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 26CBB2	321614110533001	519320	32° 16' 14.1"	110° 53' 28.9"	2411	2/19/2002	59.2	V			2/24/2022	33.9	S			25.3
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 30CAA1	321616110571001	620292	32° 16' 15.5"	110° 57' 10.6"	2357	2/22/2002	204.5	V			2/24/2022	171.9	V			32.6
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 30BBB	321635110572602	620294	32° 16' 33.2"	110° 57' 23.5"	2345	2/22/2002	180.1	V			2/24/2022	162.2	V			17.9
TUCSON AMA	UPPER SANTA CRUZ	D-13-13 13BBA	321830110583201	631710	32° 18' 29.7"	110° 58' 29.9"	2398	2/22/2002	244	V			1/24/2022	265.1	V			-21.1
TUCSON AMA	UPPER SANTA CRUZ	D-13-13 24BDB2	321703110575401	620322	32° 17' 2.5"	110° 57' 54.2"	2320	2/22/2002	147.95	B			2/24/2022	150.9	V			-3.0
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 19BBB1	321735110573301	808475	32° 17' 36"	110° 57' 36.5"	2321.3	2/22/2002	124.8	V			2/24/2022	139.3	V			-14.5
TUCSON AMA	UPPER SANTA CRUZ	D-11-14 04BBC2	323029110553401	807195	32° 30' 29.3"	110° 55' 34.1"	3158	11/9/2001	230.4	V			2/9/2022	256.8	V			-26.4
TUCSON AMA	UPPER SANTA CRUZ	D-10-14 29DCD	323139110550801	615723	32° 31' 39.3"	110° 55' 8.6"	3273	11/9/2001	312.5	V			2/9/2022	341.8	V			-29.3
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-24-22 20BBA	312006110075501		31° 20' 3.7"	110° 8' 5.7"	4295	11/27/2001	40.01	S			11/5/2021	39	V			1.0
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-23-22 25BBC	312421110041001	632053	31° 24' 19.4"	110° 4' 12.5"	4380	11/29/2001	179.5	V			11/3/2021	181.4	V			-1.9
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-24-23 06AAA1	312244110021601	632051	31° 22' 45.2"	110° 2' 14.5"	4423	12/4/2001	214.4	V			11/3/2021	216.9	V			-2.5
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-23-22 34CCD2	312248110060301	509376	31° 22' 48.7"	110° 6' 4.1"	4250	11/28/2001	22.5	S			11/3/2021	22.9	V			-0.4
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-23-24 31CCC	312249109570701	211345	31° 22' 48.2"	109° 57' 6.9"	4780	12/5/2001	293.1	V			11/3/2021	294.1	V			-1.0
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-23-22 32DDD2	312249110072101	806643	31° 22' 48.2"	110° 7' 22.7"	4248	12/7/2001	38.4	V			11/3/2021	39.6	V			-1.2
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-22-21 34ACC	312832110114901	087668	31° 28' 32.1"	110° 11' 50.9"	4410	11/26/2001	198.5	V			11/3/2021	215.1	V			-16.6
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-23-22 07DCC	312619110084801	603003	31° 26' 19.9"	110° 8' 47.5"	4327	11/29/2001	103.7	V			11/4/2021	111.3	V			-7.6
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-23-21 08DDD	312620110132901	640780	31° 26' 24"	110° 13' 29.5"	4660	11/27/2001	132.7	V			11/3/2021	144	V			-11.3
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-23-21 06CCC2	312712110152101		31° 27' 11.2"	110° 15' 22.2"	4840	11/27/2001	19.1	V			11/4/2021	32.2	V			-13.1
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-22-22 08CBC UNSURV	313155110081501	623591	31° 31' 52.3"	110° 8' 15.8"	4075	11/28/2001	6.9	V			11/3/2021	6.8	S			0.1
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-22-22 03CBA	313247110060501	809378	31° 32' 47"	110° 6' 1.9"	4255	11/29/2001	182.4	V			11/3/2021	185	V			-2.6
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-22-21 23CBA	313009110111101	642816	31° 30' 10"	110° 11' 11.8"	4320	11/27/2001	126.6	V			11/3/2021	142.1	V			-15.5
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-22-18 15CDB	313104110302901	640945	31° 31' 3.9"	110° 30' 31"	5120	12/3/2001	38.2	V			1/27/2022	44.4	V			-6.2
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-21-20 30BDB UNSURV	313444110211701		31° 34' 43.1"	110° 21' 15.6"	4748	12/5/2001	582.5	V			11/2/2021	599	V			-16.5
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-21-20 23AAB	313553110163701	626103	31° 35' 34"	110° 16' 37.5"	4440	12/4/2001	299.9	V			11/2/2021	311	V			-11.1
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-21-18 24BBB	313559110283601	628318	31° 36' 0.8"	110° 28' 36.6"	4827	12/3/2001	125.9	V			1/27/2022	128.5	V			-2.6
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-21-20 33ACC UNSURV	313338110185601	626107	31° 33' 42.6"	110° 18' 54.4"	4630	12/4/2001	533.2	V			11/23/2021	542.5	V			-9.3
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-21-21 33CBB1	313341110132101	616677	31° 33' 40.4"	110° 13' 21.29"	4327	11/29/2001	185.8	V			11/3/2021	194.7	V			-8.9
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-21-20 SOSABC	313825110195801	603068	31° 38' 24.4"	110° 19' 52.1"	4335	12/4/2001	209.2	V			11/4/2021	221	V			-11.8
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-21-20 16AAC1	313639110183501		31° 36' 35.15"	110° 18' 36.12"	4429.82	11/29/2001	292.74	V			10/21/2021	305.1	VT			-12.4
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-21-20 11BCD	313706110171601		31° 37' 14.6"	110° 17' 12.1"	4345	12/4/2001	228.1	V			11/2/2021	240.1	V			-12.0
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-21-20 10BBC	313729110182501		31° 37' 28.1"	110° 18' 20"	4355	12/4/2001	230.2	V			11/2/2021	243.4	V			-13.2
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-21-22 06ACD2	313808110083801		31° 38' 9.8"	110° 8' 35.4"	4130	11/26/2001	28.55	V			11/4/2021	29	V			-0.5
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-20-19 17BAD	314158110253901	631036	31° 41' 56.5"	110° 25' 40"	4720	11/6/2001	192.5	V			1/25/2022	210.8	V			-18.3
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-20-22 11ADB	314239110035301	616498	31° 42' 41.5"	110° 3' 49.8"	4550	11/28/2001	410.3	V			11/3/2021	425.8	V			-15.5
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-20-20 07BDB	314239110204301		31° 42' 43.5"	110° 20' 41.4"	4345	2/12/2002	222.95	V			1/25/2022	231.5	V			-8.6
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-20-18 03CAA	314323110293901	642963	31° 43' 24.2"	110° 29' 39.8"	4895	11/6/2001	134.4	V			1/25/2022	143	V			-8.6
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-18-23 32DBB	314927110010301		31° 49' 28.3"	110° 1' 3.3"	4840	12/11/2001	608.6	V			12/2/2021	611.6	V			-3.0
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-19-21 12DBB2	314738110090601	616255	31° 47' 38"	110° 9' 6.7"	4044	12/11/2001	219.7	V			12/2/2021	221.6	V			-1.9
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-18-21 28DAA	315019110115001	612550	31° 50' 19.2"	110° 11' 46.5"	3745	12/11/2001	82.8	V			12/2/2021	79.6	V			3.2
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-18-20 06BDD	315356110203001	623648	31° 54' 0.5"	110° 20' 32.6"	4440	11/30/2001	241.9	V			11/2/2021	274.3	V			-32.4
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-17-20 14CCC	315700110164501	808248	31° 57' 1.4"	110° 16' 50.7"	3582	12/5/2001	6.36	S			12/2/2021	7.2	S			-0.8
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-17-19 14ACA	315734110221301		31° 57' 31.9"	110° 22' 21"	4180	12/12/2001	544.6	V			12/2/2021	562.4	V			-17.8
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-16-20 34ACB	320005110170901	611018	32° 0' 8.4"	110° 17' 14.5"	3533	12/10/2001	76.36	S			12/1/2021	79.7	S			-3.3
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-23-21 26ADC	312405110103101	553330	31° 24' 6.4"	110° 10' 36.2"	4485	11/29/2001	231.2	V			11/3/2021	242.1	V			-10.9
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-15-21 01BBC2	320947110094701	646835	32° 9' 46.8"	110° 9' 46.6"	4365	12/14/2001	158.1	V			12/1/2021	170.9	V			-12.8
VERDE RIVER BASIN	BIG CHINO	B-15H-04 26DAA	344158112384201	649862	34° 41' 59.3"	112° 38' 41.3"	4797	3/28/2002	144.3	V			8/15/2022	152.3	V			-8.0
VERDE RIVER BASIN	BIG CHINO	B-16-04 27BCB	344435112404301	631901	34° 44' 35.7"	112° 40' 43.9"	4682	3/28/2002	37.8	S			3/8/2022	45.3	S			-7.5
VERDE RIVER BASIN	BIG CHINO	B-17-02 06BBB	345338112311801	603912	34° 53' 40.51"	112° 31' 19.62"	4388.33	3/27/2002	132.8	V			3/8/2022	138.87	VT			-6.1
VERDE RIVER BASIN	BIG CHINO	B-17-02 20ABD	345048112292201	801489	34° 50' 49.8"	112° 29' 21.1"	4467	5/28/2002	184.9	V			3/25/2022	194	V			-9.1
VERDE RIVER BASIN	BIG CHINO	B-17-02 804CDA1	345301112283701	609267	34° 52' 56.4"	112° 28' 40.64"	4358.63	3/27/2002	104.1	V			3/8/2022	109.82	VT			-5.7
VERDE RIVER BASIN	BIG CHINO	B-19-03 19CDB	350059112373101	611027	35° 0' 57.7"	112° 37' 31"	4530	3/27/2002	58.8	V			3/14/2022	57.4	S			1.4
VERDE RIVER BASIN	BIG CHINO	B-21-02 14BCC	351207112283701	604624	35° 12' 7"	112° 28' 38.7"	5110	3/28/2002	997.45	V			4/25/2022	999.6	V			-2.2
VERDE RIVER BASIN	BIG CHINO	B-22-07 E25ADC	351552112572901	608304	35° 15' 50.3"	112° 57' 28.8"	5076	3/27/2002	202.6	V			3/9/2022	204.6	S			-2.0
VERDE RIVER BASIN	BIG CHINO	B-15-03 11DBB	344122112322201	569850	34° 41' 23.2"	112° 32' 20.9"	5060	4/11/2002	70.9	V	</							



Appendix 1. 20 Year Groundwater level change in Arizona - Water Years 2002 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2002	WL 2002	WL METHOD 2002	WL REMARK 2002	WL COMMENT 2002	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
VERDE RIVER BASIN	VERDE VALLEY	A-17-05 20CCC1	345001111514801		34° 50' 1.5"	111° 51' 55.1"	4040	3/28/2002	407	V			4/21/2022	398.9	V			8.1
VERDE RIVER BASIN	VERDE VALLEY	A-16-08 10ABC	344733111292201	641798	34° 47' 33"	111° 29' 19.9"	7370	3/26/2002	10.09	S			4/28/2022	4.3	S			5.8
VERDE RIVER BASIN	VERDE VALLEY	A-17-01 15CDB UNSURV	345057112145201	631883	34° 50' 57.8"	112° 14' 52.3"	4540	3/27/2002	413.3	V			3/23/2022	420	V			-6.7
VERDE RIVER BASIN	VERDE VALLEY	A-17-06 18AAB	3451371111454801	522853	34° 51' 36.4"	111° 45' 46.3"	4220	3/14/2002	11	V			4/22/2022	12	S			-1.0
VERDE RIVER BASIN	VERDE VALLEY	A-17-04 06ADD	3453021111582201		34° 53' 1.3"	111° 58' 20.8"	4345	3/28/2002	670	V			4/26/2022	676.2	V			-6.2
VERDE RIVER BASIN	VERDE VALLEY	A-17-04 01ABD	3453121111532001	512462	34° 53' 14.36"	111° 53' 16.89"	4429.18	3/28/2002	730.1	V			5/12/2022	739.9	V			-9.8
VERDE RIVER BASIN	VERDE VALLEY	A-19-06 W14BAB	350159111435701	637391	35° 2' 12.8"	111° 43' 50.9"	6510	3/29/2002	814.1	V			4/22/2022	814.5	V			-0.4
VERDE RIVER BASIN	VERDE VALLEY	A-18-07 15CCB2	345619111385501	630882	34° 56' 18.8"	111° 38' 55"	6455	3/29/2002	132.8	V			4/27/2022	114.6	V			18.2
VERDE RIVER BASIN	VERDE VALLEY	B-18-01 17AAA	345653112223701	511557	34° 56' 57.7"	112° 22' 34.6"	4643	3/29/2002	423.45	V			4/25/2022	426.6	V			-3.2
VERDE RIVER BASIN	VERDE VALLEY	A-20-04 03CBB	350829111575601	522705	35° 8' 29.1"	111° 57' 57.4"	6709	3/28/2002	52.9	V			4/25/2022	54.6	V			-1.7
VERDE RIVER BASIN	VERDE VALLEY	A-20-06 19BBB	350624111482501	500322	35° 6' 24.8"	111° 48' 23"	7163	3/28/2002	105.3	V			5/4/2022	99.8	S			5.5
VERDE RIVER BASIN	VERDE VALLEY	A-21-04 24AAC	351121111545601	522559	35° 11' 20.8"	111° 54' 53"	6828	3/28/2002	149.3	V			4/25/2022	149.2	V			0.1
VERDE RIVER BASIN	VERDE VALLEY	A-22-03 24CCC	351557112020401	618481	35° 15' 56.7"	112° 2' 5.9"	6887	5/9/2002	10.04	S			4/25/2022	5.2	S			4.8
VERDE RIVER BASIN	VERDE VALLEY	A-22-04 14DAD2	351702111555001	565702	35° 16' 59.5"	111° 55' 47.3"	7298	5/8/2002	160.4	V			4/25/2022	158.5	V			1.9
VERDE RIVER BASIN	VERDE VALLEY	A-23-05 27AAC	3521081115504801	613888	35° 21' 8.1"	111° 50' 48.1"	7661	5/8/2002	709.7	V			4/27/2022	713.1	V			-3.4
VERDE RIVER BASIN	VERDE VALLEY	A-14-05 E17AAC	343638111501301	629124	34° 36' 37.6"	111° 50' 13.7"	3190	3/25/2002	52.6	V			4/20/2022	49.5	V			3.1
VIRGIN RIVER BASIN	VIRGIN RIVER	B-41-15 28ABD	365547113552101	536967	36° 55' 47.4"	113° 55' 21.3"	2070	10/16/2001	200.6	V			10/19/2021	201.9	V			-1.3
VIRGIN RIVER BASIN	VIRGIN RIVER	B-41-15 08ADA	365819113560701	536968	36° 58' 19.3"	113° 56' 7.2"	2284	10/16/2001	378.8	V			10/19/2021	380.7	V			-1.9
VIRGIN RIVER BASIN	VIRGIN RIVER	B-39-16 15DDD	364622114000101	516994	36° 46' 22.2"	114° 0' 8.2"	1936	10/17/2001	311.9	V			10/19/2021	313.7	S			-1.8
VIRGIN RIVER BASIN	VIRGIN RIVER	B-40-15 06CDD	365321113572401	540950	36° 53' 21.53"	113° 57' 25.03"	2040.93	11/13/2001	266.35	V			10/7/2021	267.86	VT			-1.5
WESTERN MEXICAN DRAINAGE BASIN	WESTERN MEXICAN DRAINAGE	C-17-05 17ABC UNSURV	315702112480401	629090	31° 57' 1.4"	112° 48' 3.2"	1660	10/18/2001	335.8	V			10/27/2021	353.6	V			-17.8
WILLCOX BASIN	WILLCOX	D-18-28 17BAA	315228109310301	505333	31° 52' 26.1"	109° 31' 1.7"	4750	1/30/2002	376.8	V			11/2/2021	386.8	V			-10.0
WILLCOX BASIN	WILLCOX	D-18-27 08BAC	315318109372101	648836	31° 53' 18.7"	109° 37' 13.9"	4395	1/14/2002	219.3	V			11/2/2021	320.1	V			-100.8
WILLCOX BASIN	WILLCOX	D-17-26 04ADD1	315910109414501	620777	31° 59' 8.2"	109° 41' 42.9"	4301	1/29/2002	258.9	V			11/2/2021	325.4	V			-66.5
WILLCOX BASIN	WILLCOX	D-17-26 06BAD	315920109441601	805118	31° 59' 23.2"	109° 44' 14.4"	4254	1/29/2002	229.7	V			11/2/2021	299.6	V			-69.9
WILLCOX BASIN	WILLCOX	D-16-24 21CCC	320119109545901	606236	32° 1' 17.2"	109° 54' 53"	4273	1/14/2002	203.6	V			11/1/2021	307.6	V			-104.0
WILLCOX BASIN	WILLCOX	D-16-25 09ADD	320330109475101	574801	32° 3' 33.9"	109° 47' 46.2"	4186	1/29/2002	73.3	V			11/3/2021	102.1	S			-28.8
WILLCOX BASIN	WILLCOX	D-16-26 14DAA	320232109394201	809034	32° 2' 35.2"	109° 39' 39"	4374	1/29/2002	350.2	V			11/3/2021	456.6	V			-106.4
WILLCOX BASIN	WILLCOX	D-16-28 04BBB	320445109302401		32° 4' 40.3"	109° 30' 25.2"	4709	1/30/2002	337.3	V			11/2/2021	343.9	V			-6.6
WILLCOX BASIN	WILLCOX	D-15-24 08CDA	320830109550901	629684	32° 8' 22.2"	109° 55' 6.3"	4171	1/14/2002	65.9	V			11/1/2021	79.4	S			-13.5
WILLCOX BASIN	WILLCOX	D-15-26 23DCC2	320633109393901	611586	32° 6' 30.8"	109° 39' 43.6"	4461	1/29/2002	332.9	V			11/3/2021	359	V			-26.1
WILLCOX BASIN	WILLCOX	D-14-26 18CAA1	321303109435201		32° 12' 59.8"	109° 43' 48.2"	4245	1/29/2002	211.9	V			11/2/2021	299.3	V			-87.4
WILLCOX BASIN	WILLCOX	D-14-23 12BBB2	321414109573001	608286	32° 14' 15.7"	109° 57' 30.9"	4357	1/28/2002	261.6	V			11/3/2021	314.2	V			-52.6
WILLCOX BASIN	WILLCOX	D-13-24 16BBB	321834109543001	805474	32° 18' 40.1"	109° 54' 33.1"	4212	1/28/2002	116.3	V			11/1/2021	158	V			-41.7
WILLCOX BASIN	WILLCOX	D-13-24 03ADA	322008109523401	616780	32° 20' 11.7"	109° 52' 31.8"	4219	1/28/2002	120.1	V			11/1/2021	167.3	S			-47.2
WILLCOX BASIN	WILLCOX	D-12-24 20CBB	322234109553001	626856	32° 22' 34.9"	109° 55' 34.3"	4246	1/31/2002	166.4	V			11/1/2021	232.9	V			-66.5
WILLCOX BASIN	WILLCOX	D-11-24 30AAA	322718109554101	604191	32° 27' 22.1"	109° 55' 43.2"	4369	1/31/2002	286	V			11/1/2021	361.9	V			-75.9
WILLCOX BASIN	WILLCOX	D-10-23 10BBA	323511109591401	627747	32° 35' 12.7"	109° 59' 15.7"	4543	1/31/2002	396.7	V			11/1/2021	449.3	V			-52.6
WILLCOX BASIN	WILLCOX	D-09-23 08BAA	324018110005401	805360	32° 40' 20.3"	110° 1' 1.3"	5158	2/13/2002	224.8	V			11/1/2021	253.3	V			-28.5
YUMA BASIN	YUMA	C-11-24 23BCB	322737114415301		32° 27' 36.77"	114° 41' 53.71"	159.4	2/6/2002	97.9	V			2/17/2022	134.1	S			-36.2
YUMA BASIN	YUMA	C-08-22 25DAC3	324212114274801		32° 42' 12"	114° 27' 48.2"	155	2/5/2002	16.3	V			10/26/2021	16.6	S			-0.3
YUMA BASIN	YUMA	C-08-21 21BCA	324330114252601	612897	32° 43' 28.96"	114° 25' 29.3"	169.26	2/6/2002	23.5	V			10/26/2021	23.7	S			-0.2



## **Appendix 2**

### **10-Year Groundwater level change in Arizona – Water Years 2012 – 2022**



Appendix 2. 10 Year Groundwater level change in Arizona - Water Years 2012 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	BEG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2012	WL 2012	WL METHOD 2012	WL REMARK 2012	WL COMMENT 2012	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
AGUA FRIA BASIN	AGUA FRIA	A-09-02 34DD0	340421112075801	649365	34° 4' 20.4"	112° 7' 58.4"	2030	12/9/2011	44.1	V			11/4/2021	45.1	V			-1.0
AGUA FRIA BASIN	AGUA FRIA	A-08-02 04DCD1	340338112092701		34° 3' 37.7"	112° 9' 28.2"	1943	12/9/2011	24.14	S			11/4/2021	25.15	S			-1.0
AGUA FRIA BASIN	AGUA FRIA	A-09H-02 23CCC	341118112075801	635753	34° 11' 13.5"	112° 8' 2.47"	3395.32	12/9/2011	448.8	V			10/28/2021	480.59	VT			-31.8
AGUA FRIA BASIN	AGUA FRIA	A-11-02 20BAB	341953112103001	614152	34° 19' 52.1"	114° 19' 28.2"	3020	8/28/2012	72.5	V			11/4/2021	74.1	V			-0.5
AGUA FRIA BASIN	AGUA FRIA	A-11-02 11CAA	341959112071601	628102	34° 19' 59.5"	112° 7' 15.9"	3805	12/9/2011	69	V			11/4/2021	68.1	V			0.9
AGUA FRIA BASIN	AGUA FRIA	A-10-02 17DBA	341440112095501	642335	34° 14' 41.1"	112° 9' 55"	2925	8/28/2012	4.8	V			11/4/2021	10.5	S			-5.7
AGUA FRIA BASIN	AGUA FRIA	A-12-01 27DBA2	342331112142501	618019	34° 23' 30.32"	112° 14' 24.85"	4483.76	2/6/2012	16.65	VT			2/1/2022	14.47	VT			2.2
AGUA FRIA BASIN	AGUA FRIA	A-13-01 26BAB1	342353112134501	802822	34° 23' 52.8"	112° 15' 44.8"	4555	12/9/2011	21.9	V			11/4/2021	23	S			-1.1
AGUA FRIA BASIN	AGUA FRIA	A-12-02 01DAC	34265311205501	646578	34° 26' 54.37"	112° 5' 43.8"	2124	12/9/2011	21.4	V			11/4/2021	20.1	V			-1.3
ARAVAIPA CANYON BASIN	ARAVAIPA CANYON	D-09-22 19DCD	323753110089001	627711	32° 37' 53.5"	110° 8' 6"	4380	11/29/2011	133	V	P		11/4/2021	174.7	V	P		-41.7
ARAVAIPA CANYON BASIN	ARAVAIPA CANYON	D-07-20 21DBDC	324902110184901	613297	32° 48' 47.6"	110° 18' 29.5"	3515	11/29/2011	62	V			11/4/2021	60	V			2.0
BIG SANDY BASIN	FORT ROCK	B-21-10 17CCD1	351153113231401	616906	35° 11' 57.5"	113° 21' 39.2"	5058	10/24/2011	123.6	V			10/22/2021	126.8	S			-3.2
BIG SANDY BASIN	FORT ROCK	B-26-20 1ACCB	351712113861001	61510	35° 17' 9.9"	113° 4' 53.9"	5510	10/21/2011	406.3	V			10/22/2021	488.8	V			-2.5
BIG SANDY BASIN	WIKIEUP	B-21-13 31DAA	340923113413401	641875	35° 9' 28.8"	113° 41' 34"	3641	10/24/2011	519.6	V			10/21/2021	520.2	V			-0.6
BIG SANDY BASIN	WIKIEUP	B-16-13 36CCC	344040113351001		34° 40' 38.7"	113° 34' 46"	1877	10/24/2011	13.8	V			10/21/2021	16.2	S			-2.4
BIG SANDY BASIN	WIKIEUP	B-16-13 21DDDB	344220113364901	642249	34° 42' 23.3"	113° 37' 0.9"	2040	10/24/2011	97.8	V			10/21/2021	100.6	S			-2.8
BIG SANDY BASIN	WIKIEUP	B-16H-13 33DAB	34461131370901	373406	34° 46' 10.3"	113° 37' 11.1"	2078	10/24/2011	23.5	V			10/22/2021	39.7	S			-16.2
BIG SANDY BASIN	WIKIEUP	B-19-13 19DAA1	350019113411401	637441	35° 0' 49.2"	113° 41' 14.8"	3065	10/24/2011	133.1	V			10/22/2021	152.1	S			-19.0
BIG SANDY BASIN	WIKIEUP	B-20-13 15BAA	350719113384201	608169	35° 7' 20.6"	113° 38' 42.4"	3300	10/24/2011	160.5	V			10/18/2021	166.1	S			-5.6
BIG SANDY BASIN	WIKIEUP	B-21-13 24BCD	351119113370801	614875	35° 11' 20.2"	113° 37' 7.9"	3630	10/24/2011	371.9	V			10/18/2021	371.7	V			0.2
BIG SANDY BASIN	WIKIEUP	B-23-13 32ACA	352010113411501	614897	35° 20' 20.2"	113° 41' 13.2"	3762	10/24/2011	259.4	V			10/18/2021	276.4	V			-17.0
BIG SANDY BASIN	WIKIEUP	B-25-13 30DAA	351447113382601		35° 14' 47.1"	113° 38' 25.7"	3852	10/24/2011	547.3	V			10/18/2021	534.7	V			12.6
BILL WILLIAMS BASIN	ALAMO RESERVOIR	B-09-09 06CBC	340852113121501	600987	34° 8' 52.1"	113° 12' 25.1"	2360	11/3/2011	636.7	V			10/27/2021	632.8	V			3.9
BILL WILLIAMS BASIN	ALAMO RESERVOIR	B-11-10 31CBA	341508113203801	809687	34° 15' 7.2"	113° 20' 40.1"	2162	11/3/2011	639.7	V			10/27/2021	639.1	V			0.6
BILL WILLIAMS BASIN	ALAMO RESERVOIR	B-11-11 31BBB1	341511113265801	614664	34° 15' 31"	113° 26' 58"	1350	11/3/2011	51.2	V			10/27/2021	51.8	S			-0.6
BILL WILLIAMS BASIN	ALAMO RESERVOIR	B-13-13 07DDB2	342856113391301	644225	34° 28' 37.8"	113° 59' 12.4"	1756	10/26/2011	137.2	V			11/1/2021	138.7	V			-1.5
BILL WILLIAMS BASIN	CLARA PEAK	B-11-06 32CBA	34145411336501	619183	34° 14' 54.37"	113° 56' 54.8"	615	11/2/2011	20.1	V			10/26/2021	21.7	V			-1.6
BILL WILLIAMS BASIN	CLARA PEAK	B-11-16 29AAA	341624113562401	619426	34° 16' 27.3"	113° 56' 23.6"	695	11/1/2011	97.58	S			10/26/2021	100.1	V			-2.5
BILL WILLIAMS BASIN	SANTA MARIA	B-12-06 W31BAD	342044112541101	613951	34° 20' 41.8"	112° 55' 40.4"	3470	12/14/2011	100.8	S			11/5/2021	92.4	V			8.4
BILL WILLIAMS BASIN	SANTA MARIA	B-11-08 20ADB	341707113063901	614653	34° 17' 9.6"	113° 6' 54.9"	2600	10/24/2011	75.3	V			10/22/2021	77.9	S			-2.6
BILL WILLIAMS BASIN	SANTA MARIA	B-13-09 17BBC	342801113154801	61613	34° 28' 1.2"	113° 15' 48.1"	2590	10/24/2011	50.7	V			10/21/2021	53.7	S			-3.0
BILL WILLIAMS BASIN	SANTA MARIA	B-13-08 09CCD	342831113251801	62722	34° 28' 25.1"	113° 28' 25.1"	3500	12/14/2011	25.7	V			11/5/2021	25.7	V			0.0
BILL WILLIAMS BASIN	SKULL VALLEY	B-13-04 28DA UNSURV	342621112402301	615852	34° 26' 21.1"	112° 40' 22.5"	4215	12/15/2011	76.8	V	P		11/8/2021	85.9	S	P		-9.1
BILL WILLIAMS BASIN	SKULL VALLEY	B-13-04 26BCC1 UNSV	342626112391401	613867	34° 26' 24.9"	112° 39' 14.6"	4350	12/15/2011	243.9	V			11/8/2021	267.4	S			-23.5
BILL WILLIAMS BASIN	SKULL VALLEY	B-13-04 27AB UNSP22	342639112394202	613860	34° 26' 39.5"	112° 39' 40.4"	4360	12/15/2011	250.3	V			11/8/2021	250.5	S			-0.2
BILL WILLIAMS BASIN	SKULL VALLEY	B-13-04 21DB UNSP21	342709112404501	613853	34° 27' 10.5"	112° 40' 44.6"	4260	12/15/2011	105.7	S			11/8/2021	107	V			-1.4
BILL WILLIAMS BASIN	SKULL VALLEY	B-13-04 21DB UNSP22	342709112404502	613853	34° 27' 10.5"	112° 40' 44.6"	4260	12/15/2011	111.5	S			11/8/2021	113.1	S			-1.6
BILL WILLIAMS BASIN	SKULL VALLEY	B-12-05 06ACC	342444112363401	502258	34° 24' 43.9"	112° 36' 34"	4650	12/16/2011	485.5	V			11/8/2021	492.7	V			-7.2
BUTLER VALLEY BASIN	BUTLER VALLEY	B-07-15 16DCD	335653113493001		33° 56' 35.6"	113° 49' 32.2"	1346	11/1/2011	105.6	V			10/26/2021	119	V			-13.4
BUTLER VALLEY BASIN	BUTLER VALLEY	B-08-14 29CCD	340004113443601	807275	34° 0' 4.9"	113° 44' 35.9"	1487	11/1/2011	219.6	V			10/27/2021	236.6	V			-17.0
BUTLER VALLEY BASIN	BUTLER VALLEY	B-08-14 23DDB	340058113404701	61418	34° 0' 57.1"	113° 40' 57.6"	1418	11/1/2011	236.2	V			10/27/2021	256.2	V			-5.6
BUTLER VALLEY BASIN	BUTLER VALLEY	B-08-14 20DAB	340122113440301	635680	34° 1' 22.3"	113° 44' 3.1"	1522	11/1/2011	254.5	V			10/27/2021	267	V			-12.5
BUTLER VALLEY BASIN	BUTLER VALLEY	B-08-13 04DDD1	340331113363701	614575	34° 3' 33.4"	113° 36' 33.9"	1790	11/1/2011	513.8	V			10/27/2021	516	V			-2.2
CENEGA CREEK BASIN	CENEGA CREEK	D-22-15 12AAB2	313225110453301	809433	31° 32' 23.4"	110° 45' 32.7"	4041	11/1/2012	19.3	S			1/27/2022	12.5	S			6.8
CENEGA CREEK BASIN	CENEGA CREEK	D-20-07 23DDB	31393110332801	62884	31° 39' 33.24"	110° 35' 27.6"	4838	11/2/2012	124	V			1/26/2022	124	V			5.7
CENEGA CREEK BASIN	CENEGA CREEK	D-21-16 09ABA	313748110424501	624881	31° 37' 46.9"	110° 42' 45.5"	4200	1/26/2012	46.45	S			1/26/2022	44.2	S			2.3
CENEGA CREEK BASIN	CENEGA CREEK	D-20-18 17BCB	314150110320401	618570	31° 41' 50.7"	110° 32' 4.4"	4810	1/10/2012	174.6	V			1/26/2022	176.6	V			-2.0
CENEGA CREEK BASIN	CENEGA CREEK	D-20-17 02CCC	314301110350901	608620	31° 43' 0.9"	110° 35' 12.7"	4610	1/10/2012	42.9	V			1/25/2022	42.3	V			0.6
CENEGA CREEK BASIN	CENEGA CREEK	D-19-17 08BCC	314759110381001	634285	31° 47' 38.3"	110° 38' 10"	4492	1/10/2012	131	S			1/25/2022	141.2	S			-10.2
CENEGA CREEK BASIN	CENEGA CREEK	D-19-17 09ABB	314800110363901	63418	31° 48' 7.08"	110° 38' 26.96"	4437.44	1/10/2012	54.9	V			1/25/2022	54.9	V			0.0
CENEGA CREEK BASIN	CENEGA CREEK	D-17-18 09BCC	315816110310601	601585	31° 58' 16.3"	110° 31' 5.5"	3843	1/9/2012	93.9	V			1/24/2022	95	S			-1.1
COCONINO PLATEAU BASIN	COCONINO PLATEAU	A-25-06 20ACC	353210111462401	613880	35° 32' 10.2"	111° 46' 23.2"	6965	11/18/2011	91.5	V			10/22/2021	93	V			-1.5
COCONINO PLATEAU BASIN	COCONINO PLATEAU	A-24-05 11CDB	352823111501301	613870	35° 28' 23.5"	111° 50' 13.5"	7386	11/18/2011	268.8	V			10/22/2021	273.4	V			-4.6
DETRITAL VALLEY BASIN	DETRITAL VALLEY	B-25-20 15AAA	353357114235201	637009	35° 33' 38.29"	114° 25' 33.99"	2820	10/25/2011	594.5	V			10/21/2021	592.3	V			2.2
DETRITAL VALLEY BASIN	DETRITAL VALLEY	B-26-20 27BDC	353658114241401	503441	35° 36' 49.9"	114° 24' 37"	3675	10/25/2011	450.1	V			10/21/2021	458	V			-8.7
DETRITAL VALLEY BASIN	DETRITAL VALLEY	B-26-20 06ACA	354027114273101	505703	35° 40' 18.46"	114° 27' 21.47"	2499.67	2/1/2012	461.24	VT			2/2/2022	460.92	VT			0.3
DETRITAL VALLEY BASIN	DETRITAL VALLEY	B-27-19 17AAA	354402114194001	642196	35° 44' 1.9"	114° 19' 38"	3640	10/25/2011	624.8	V			10/21/2021	622.9	V			1.9
DETRITAL VALLEY BASIN	DETRITAL VALLEY	B-28-21 28BBD	354728114390501	501132	35° 47' 26"	114° 30' 1.3"	2186	10/25/2011	195.8	V			10/21/2021	195.5	V			0.3
DETRITAL VALLEY BASIN	DETRITAL VALLEY	B-29-21 28BDD	355155114311501	543711	35° 51' 56.46"	114° 31' 41.3"	2000	10/25/2011	57.4	V			10/21/2021	57.7	S			-0.3
DETRITAL VALLEY BASIN	DETRITAL VALLEY	B-30-20 09CAD UNSURV	360105114281101	629128	36° 0' 53.2"	114° 28' 12.5"	1337	10/25/2011	57.4	V			10/21/2021	58	V			-0.6
DETRITAL VALLEY BASIN	DETRITAL VALLEY	B-23-20 12DBA2	352341114215001	536683	35° 23' 41.3"	114° 21' 49.7"	3500	10/25/2011	226.4	V			10/21/2021	249.7	V			-23.3
DETRITAL VALLEY BASIN	DETRITAL VALLEY	B-25-19 02CAA	353207114210301	582738	35° 32' 7.3"	114° 21' 3.1"</												



## Appendix 2. 10 Year Groundwater level change in Arizona - Water Years 2012 - 2022

BASIN	SUB-BASIN	CADASTRAL	IGWS SITE ID	REG 55 No	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2012	WL 2012	WL METHOD 2012	WL REMARK 2012	WL COMMENT 2012	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
LAKE MOHAVE BASIN	LAKE MOHAVE	B-18-21 05CAC	345824114321091	510925	34° 58' 23.1"	114° 12' 20.8"	381	10/27/2011	338.3	V			11/2/2022	339.7	V			-1.4
LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	A-17-20 26DBC	34502311011401	632990	34° 50' 21.54"	110° 11' 11.04"	5361.75	2/6/2012	306.48	VT			2/2/2022	308.19	VT			-1.7
LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	A-17-20 06ACB	34541410153601	620722	34° 54' 11.6"	110° 15' 36.4"	5040	11/16/2011	31.46	S			10/18/2021	39.9	V			-8.4
LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	A-18-19 23BDD	34565310173801		34° 56' 32.3"	110° 17' 21.6"	5030	11/16/2011	50.8	V			10/18/2021	46.3	V			4.5
LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	A-18-18 34DAB	34545310245401	808212	34° 54' 51.8"	110° 24' 52.4"	4988	1/9/2012	18.4	V			2/7/2022	15.3	V			2.9
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 09ACC1	340618109550401	605035	34° 6' 19"	109° 55' 41.1"	7150	4/24/2012	65.4	V			10/18/2021	67.4	V			-2.0
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 09ACC2	340618109550402	605048	34° 6' 18.6"	109° 55' 3.8"	7150	4/24/2012	65.5	V			10/18/2021	67.7	V			-2.2
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 10BAA	340638109541501	606182	34° 6' 37.2"	109° 54' 14.8"	7179	10/11/2011	104.7	V			10/20/2021	111.8	V			-7.1
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-07-30 14BDD	340010109990101	802842	34° 0' 6.6"	109° 8' 59.6"	8032	11/7/2011	139	V			10/28/2021	157.2	V			-1.8
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-07-27 01CDB	34015310927001		34° 1' 25.5"	109° 26' 39.9"	8255	11/7/2011	58.4	V			10/21/2021	64.4	V			-2.0
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-10-22 30ABA	341429110025201	620773	34° 14' 29.5"	110° 2' 53"	6520	11/16/2011	533.3	V			10/21/2021	538.8	V			-5.5
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-22 36CB2	340752109581701	620708	34° 7' 52.1"	109° 58' 16.5"	6748	11/15/2011	29.75	S			10/19/2021	45.5	V			-15.8
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-29 35BDA	340808109165001	623223	34° 8' 8.6"	109° 16' 49.3"	6070	11/17/2011	114.6	V			10/21/2021	126.1	V			-11.5
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-22 25CC1	34083810957301	630191	34° 8' 29.2"	109° 57' 53.2"	6758	4/23/2012	106.5	V			10/18/2021	145.4	V			-38.9
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-22 25DD01	340829109571601		34° 8' 28.3"	109° 57' 17.9"	6825	10/12/2011	70.1	V	S		4/22/2022	74.6	V	S		-4.5
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-22 24CCB	340929109581601	616613	34° 9' 30.1"	109° 58' 13"	6720	10/12/2011	46.7	V			10/18/2021	60	V			-13.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-22 22ADD	340948109592901	624078	34° 9' 48.3"	109° 59' 25.9"	6770	4/24/2012	145.2	V			4/21/2022	137.8	V			7.4
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-22 22AAC	340958109593201	617190	34° 9' 57.5"	109° 59' 30.7"	6720	10/12/2011	101.2	V			10/19/2021	92.6	V			8.6
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-11-24 22DBC	342006109270801	801337	34° 20' 5.8"	109° 47.84"	6650	11/15/2011	709.9	V			10/19/2021	711.1	V			-2.2
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-11-28 22BDD2	342024109292301	085863	34° 20' 18.53"	109° 22' 2.42"	6062	2/6/2012	106.85	VT			2/2/2022	120.68	VT			-13.8
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-11-29 20ABB	342033109174101	611373	34° 20' 33.4"	109° 17' 37.6"	6521	11/16/2011	626.3	V			10/28/2021	653.9	V			-27.6
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-11-25 18DCA	342044109440001	806509	34° 20' 47.46"	109° 43' 54.56"	6422	11/15/2011	28.19	S			10/19/2021	27.7	S			0.5
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-10-25 22BDD02	341536109941201	60917	34° 18' 15.224"	109° 14' 24.5"	6911	11/16/2011	271.4	V			10/19/2021	285	V			-20.4
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-12-26 10DD0	342516109372701	532813	34° 25' 10.7"	109° 37' 24.5"	6310	11/15/2011	14.45	S			10/20/2021	16.5	V			-2.1
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-12-26 18CBB	342623109382901	600014	34° 26' 22.9"	109° 38' 29"	6390	11/15/2011	552.8	V			10/20/2021	551.7	V			1.1
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-13-21 24CBC	343009110041501	604441	34° 30' 9.5"	110° 4' 35.5"	5618	11/15/2011	108.65	V			10/19/2021	94.65	V			14.0
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-13-28 29BDC	343015109234801		34° 30' 15.1"	109° 23' 47.7"	5790	11/16/2011	9.07	S			10/20/2021	27.1	S			-18.0
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-13-21 04CBA	343150110063901	600770	34° 31' 50.1"	109° 2' 50.1"	5623	11/15/2011	146.2	V			10/19/2021	150.3	V			-10.8
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-13-27 15BDA2	343200109275801	617786	34° 32' 2.6"	109° 27' 47.7"	5840	11/15/2011	294	V			10/20/2021	304.3	V			-10.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-14-11 09ADC	34365311111201	637397	34° 36' 55.6"	111° 11' 11.3"	6905	11/17/2011	511.1	V			10/20/2021	514.3	V			-3.2
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-15-12 15DDC	344058111031101	631365	34° 40' 58"	111° 3' 31.2"	6501	2/9/2012	665.7	V			10/20/2021	664.1	V			1.6
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-17-14 17ADD	345223110522301	613985	34° 52' 22.3"	110° 52' 23.5"	5539	11/17/2011	404.3	V			10/20/2021	404.6	V			-0.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-17-21 04CBA	345310110063501		34° 53' 12.36"	109° 6' 24.96"	5141	1/9/2012	53.8	V			1/26/2022	53.8	V			-2.0
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-18-23 07BAA	345901109564001	621425	34° 58' 55.5"	109° 56' 37.4"	5235	11/16/2011	29.61	S			10/18/2021	30.4	V			-0.8
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-18-14 13ABD3	345750110482801	806154	34° 57' 49.6"	110° 48' 28.2"	5162	11/17/2011	280.4	V			10/20/2021	284.4	V			-4.0
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-20-12H 13CBB	35070611014701	613568	35° 7' 5.5"	111° 1' 46.5"	5349	10/12/2011	561.8	V			10/18/2021	562.7	V			-0.9
LITTLE COLORADO RIVER PLATEAU BASIN	A-20-10 05CAD UNSURV	350845110540101	601271		35° 8' 44.2"	110° 54' 1.27"	4845.96	9/13/2012	166.3	V			6/15/2022	168.53	VT			-2.2
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-19-16 06CDB1	35041710413301	085761	35° 4' 15.2"	110° 41' 40.9"	4830	11/17/2011	43.8	V			10/18/2021	43.5	V			0.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-19-14 03AAC1	350447110502301	618121	35° 4' 47.6"	110° 50' 21.8"	5120	1/9/2012	398.9	V			1/26/2022	398.9	V			0.0
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-21-27 25BDD2	351149109260802	628733	35° 11' 48.6"	109° 26' 8.6"	5785	11/16/2011	57.5	S			10/19/2021	64.1	S			-6.6
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-21-09 17ACD	351213111274001	637392	35° 12' 14.11"	111° 27' 29.83"	6434	1/9/2012	1311	V			1/24/2022	1311.2	V			-0.2
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-22-06 27ACB2	351523111443801		35° 15' 22.78"	111° 22' 38"	7318	10/12/2011	80.1	V			10/18/2021	81.5	V			-2.6
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-22-06 28BDB1	351551111434701	608396	35° 15' 51.1"	111° 43' 47.4"	7300	10/12/2011	69.2	V			10/18/2021	74.6	S			-5.4
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-22-06 28BDC1	351556111430401		35° 15' 56.9"	111° 43' 4.8"	7322	1/9/2012	183.6	V			1/25/2022	186.3	S			-2.7
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-22-06 23DB3	351620111433201		35° 16' 22.5"	111° 43' 31.4"	7332	1/9/2012	118.6	V			1/25/2022	127.2	S			-8.6
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-23-09 04CBA	353410111284901	649814	35° 34' 10.98"	111° 35' 48.98"	5379.95	1/8/2012	1587	V			1/25/2022	1586.5	V			0.5
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-23-11 33AAB	353110109031601	628217	35° 21' 19.1"	109° 2' 16.79"	6091	11/16/2011	42.1	V			10/19/2021	44.1	V			-2.4
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-23-08 21ABA	353214111324601	649813	35° 22' 14.71"	111° 32' 46.42"	6923.25	10/11/2011	1960.5	V			10/19/2021	1959.2	V			1.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-15-18 29CBB	343946110275401	600439	34° 39' 45.3"	109° 27' 53.7"	5919	9/19/2012	574	V			10/21/2021	571.9	V			2.1
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-17-23 35DAA	344929109514901	306605	34° 49' 28.8"	109° 51' 31.8"	5611	1/9/2012	306.4	V			1/26/2022	308.9	V			-2.5
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-20-04 04CBA	350841113817901	559871	34° 8' 46.23"	110° 48' 14.83"	4966	2/6/2012	108.15	VT			10/19/2021	109.5	V			-0.9
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-17-24 09ABD	345333109474501	506603	34° 53' 33.47"	109° 47' 44.28"	5595.72	2/6/2012	263.19	VT			2/2/2022	264.6	VT			-1.4
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-14-25 04CBA	343816109550401	200197	34° 38' 15.58"	109° 55' 4.06"	5493.25	2/7/2012	169.45	VT			2/2/2022	170.25	VT			-0.8
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-22 23CAA	340941109585601	609725	34° 9' 41.4"	109° 58' 56.1"	6719	10/12/2011	29.9	S			10/18/2021	31.9	V			-2.0
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-22 25ACAC	340859109575701	593730	34° 8' 59"	109° 57' 37.1"	6812	10/12/2011	193.5	V			10/19/2021	166.8	V			26.7
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-23 35AAA	340901109583401	590453	34° 8' 20.3"	109° 58' 20.3"	6720	10/12/2011	31.6	V			10/18/2021	31.2	V			-0.4
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-22 26CBC	340901109591601	601140	34° 9' 0.5"	109° 59' 16.5"	6715	10/12/2011	62.7	V			10/19/2021	67.6	V			-4.9
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-22 36CDD	340736109574801		34° 7' 35.5"	109° 57' 48.4"	6800	10/11/2011	141.6	V	R		10/19/2021	144.8	V	R		-3.2
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 06BDD	34079109572001	578532	34° 7' 8.9"	109° 57' 19.7"	6007	10/11/2011	272.4	V			10/19/2021	271.1	V			1.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 09DAA	340614109541901	513936	34° 6' 13.4"	109° 14' 14.83"	5136	10/11/2011	136.3	V			10/18/2021	141.8	S			-15.8
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER																	



Appendix 2. 10 Year Groundwater level change in Arizona - Water Years 2012 - 2022

	BASIN	SUB-BASIN	CADASTRAL	IGWS SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2012	WL 2012	WL METHOD 2012	WL REMARK 2012	WL COMMENT 2012	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
	PHOENIX AMA	CAREFREE	A-05-04 12CCB	334716111542501		33° 47' 17.2"	111° 54' 23.3"	2380	12/22/2011	25.5	V			12/10/2021	22.9	V			-2.6
	PHOENIX AMA	CAREFREE	A-06-05 31CCC2	334850111524001	604782	33° 48' 50.4"	111° 53' 23.9"	2558	12/21/2011	255.5	V			12/15/2021	206.5	V			-49.0
	PHOENIX AMA	CAREFREE	A-06-04 23BCA	335108111551901	636832	33° 51' 8.6"	111° 55' 20"	2396	12/22/2011	156.5	V			12/10/2021	177	V			-20.5
	PHOENIX AMA	CAREFREE	A-05-05 05CAA	334822111515401	087599	33° 48' 23.47"	111° 51' 52.03"	2670.16	11/16/2011	348.05	VT			10/26/2021	294.39	VT			53.7
	PHOENIX AMA	EAST SALT RIVER	D-03-09 34AAA	330753111241901	619399	33° 7' 55.4"	111° 24' 17.5"	1612	12/8/2011	390.6	V			12/10/2021	378.8	V			11.8
	PHOENIX AMA	EAST SALT RIVER	D-03-09 32ABA	330757111263401		33° 7' 57.9"	111° 26' 35.3"	1566	12/8/2011	341.7	V			11/30/2021	336.8	V			4.9
	PHOENIX AMA	EAST SALT RIVER	D-03-08 35BAA	33075711130001	615302	33° 7' 55.7"	111° 30' 0.3"	1518	12/7/2011	292	V	K		11/30/2021	284	V	K		8.0
	PHOENIX AMA	EAST SALT RIVER	D-03-08 26AAA	330846111302801	615294	33° 8' 45.8"	111° 29' 27.8"	1537	12/7/2011	319.1	V			11/30/2021	316.7	V			2.4
	PHOENIX AMA	EAST SALT RIVER	D-03-09 20DAA	330916111262901	610703	33° 9' 16.5"	111° 26' 20"	1595	12/8/2011	377.5	V			12/10/2021	369.1	V			8.4
	PHOENIX AMA	EAST SALT RIVER	D-04-09 07DBB	330547111274701	623858	33° 5' 46.7"	111° 27' 47.3"	1510	12/8/2011	271	V			11/30/2021	266.9	V			4.1
	PHOENIX AMA	EAST SALT RIVER	D-04-08 02CCC	330617111302201	610414	33° 6' 15.1"	111° 30' 24.1"	1532	12/8/2011	241.3	V			11/30/2021	239	V			2.3
	PHOENIX AMA	EAST SALT RIVER	D-04-09 05AAB2	330701111262601	612176	33° 7' 5.3"	111° 26' 29"	1556	12/8/2011	323.9	V			11/30/2021	317.9	V			6.0
	PHOENIX AMA	EAST SALT RIVER	D-02-07 25DD03	331313111350301	612290	33° 13' 12.5"	111° 33' 3.3"	1464	12/5/2011	274.7	V			11/30/2021	302.3	V			-27.6
	PHOENIX AMA	EAST SALT RIVER	D-02-07 27DAD	331324111370001		33° 13' 23.8"	111° 37' 0.5"	1427	12/5/2011	257.8	V			11/30/2021	256.2	V			1.6
	PHOENIX AMA	EAST SALT RIVER	D-03-08 26CAD1 P22	331329111301202		33° 13' 31.3"	111° 30' 10.5"	1569	12/6/2012	378.8	V			12/6/2022	372.4	V			6.4
	PHOENIX AMA	EAST SALT RIVER	D-03-08 26CAD1 P23	331329111301203		33° 13' 31.3"	111° 30' 10.5"	1569	12/6/2012	396.1	V			12/6/2022	367.6	V			28.5
	PHOENIX AMA	EAST SALT RIVER	D-03-08 16DBD	331001111315801	615283	33° 9' 59.9"	111° 31' 59"	1506	12/7/2011	304	V			11/30/2021	301.8	V			2.2
	PHOENIX AMA	EAST SALT RIVER	D-03-08 13AAA2	331033111282901	603383	33° 10' 33.4"	111° 28' 27.2"	1568	12/7/2011	361.3	V			12/10/2021	354.3	V			7.0
	PHOENIX AMA	EAST SALT RIVER	D-03-08 08DDD	331037111324201	615279	33° 10' 36.7"	111° 32' 42.7"	1491	12/7/2011	302.8	V			11/30/2021	308.1	V			-5.3
	PHOENIX AMA	EAST SALT RIVER	D-03-09 09DDC P21	331042111254301		33° 10' 40.5"	111° 25' 43.1"	1628	12/8/2011	418.7	V			11/30/2021	411.2	V			7.5
	PHOENIX AMA	EAST SALT RIVER	D-03-09 09DDC P22	331042111254302		33° 10' 40.5"	111° 25' 43.1"	1628	12/8/2011	419.7	V			11/30/2021	409.7	V			10.0
	PHOENIX AMA	EAST SALT RIVER	D-02-07 31CDA2	331224111403701	608807	33° 12' 23.8"	111° 40' 37.2"	1442	12/15/2011	345.7	V			12/9/2021	337.6	V			8.1
	PHOENIX AMA	EAST SALT RIVER	D-02-09 04DBD	331236111223901	615235	33° 12' 40.5"	111° 22' 33.5"	1752	12/8/2011	539.1	V			11/30/2021	530.1	V			9.0
	PHOENIX AMA	EAST SALT RIVER	D-02-08 33DAA	331245111314201	608535	33° 12' 44.8"	111° 31' 42.2"	1524	12/5/2011	329.7	V			11/30/2021	324.6	V			5.1
	PHOENIX AMA	EAST SALT RIVER	D-02-12 07ABA	331640111090801	624605	33° 16' 39.4"	111° 9' 6.3"	2460	12/8/2011	11.8	V			11/29/2021	10.8	S			1.0
	PHOENIX AMA	EAST SALT RIVER	D-02-08 02CBB P21	331703111303401		33° 17' 6.6"	111° 30' 37.67"	1572.84	2/2/2012	414.3	V			12/6/2022	405.8	V			8.5
	PHOENIX AMA	EAST SALT RIVER	D-02-08 02CBB P22	331703111303402		33° 17' 6.6"	111° 30' 37.67"	1572.84	2/2/2012	409.3	V			12/6/2022	348.1	V			61.2
	PHOENIX AMA	EAST SALT RIVER	D-02-08 02CBB P23	331703111303403		33° 17' 6.6"	111° 30' 37.67"	1572.84	2/2/2012	409.3	V			12/6/2022	381.2	V			17.5
	PHOENIX AMA	EAST SALT RIVER	D-02-07 04ADD	331708111380501	613581	33° 17' 7.3"	111° 38' 4.2"	1395	12/15/2011	228.7	V			5/2/2022	193.5	V			45.2
	PHOENIX AMA	EAST SALT RIVER	D-02-06 06ADA	331713111462001	620524	33° 17' 13.9"	111° 46' 20.4"	1264	12/14/2011	155.1	V			1/4/2022	157	V			-1.9
	PHOENIX AMA	EAST SALT RIVER	D-02-10 21ADB	331440111192401	615236	33° 14' 39.6"	111° 19' 22.9"	1903	12/8/2011	562.1	V			11/29/2021	568.6	V			-6.5
	PHOENIX AMA	EAST SALT RIVER	D-02-07 22BBC	33144611138001	609473	33° 14' 46.68"	111° 38' 0.58"	1402.3	2/21/2012	220.65	VT			2/3/2022	185.49	VT			35.2
	PHOENIX AMA	EAST SALT RIVER	D-02-07 17DDD	331456111390501	801577	33° 14' 55.9"	111° 39' 4.4"	1384	12/5/2011	397	V			11/30/2021	384.2	V			22.8
	PHOENIX AMA	EAST SALT RIVER	D-02-10 16BCC	331532111200901	610435	33° 15' 33"	111° 20' 6.6"	1884	12/8/2011	367.2	V			11/29/2021	380.5	V			-13.3
	PHOENIX AMA	EAST SALT RIVER	D-02-07 10CDD0	331548111373201	607839	33° 15' 48.3"	111° 37' 32"	1412	12/15/2011	239.5	V			12/9/2021	210.6	V			37.9
	PHOENIX AMA	EAST SALT RIVER	D-02-08 07DDD	331550111334801	619742	33° 15' 49.5"	111° 33' 46.7"	1480	12/5/2011	275.9	V			11/30/2021	220.5	S			55.4
	PHOENIX AMA	EAST SALT RIVER	D-01-08 21ADB P22	331953111315901	628858	33° 19' 53.1"	111° 31' 51.4"	1565	1/26/2012	334.9	V			11/15/2021	337.2	V			-2.3
	PHOENIX AMA	EAST SALT RIVER	D-01-05 15CDD0	332008111495801	617083	33° 20' 7.13"	111° 49' 56.92"	1217.73	2/21/2012	108.86	VT			2/3/2022	116.94	VT			-8.



Appendix 2. 10 Year Groundwater level change in Arizona - Water Years 2012 - 2022

BASIN		SUB-BASIN	CADASTRAL	IGWS SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2012	WL 2012	WL METHOD 2012	WL REMARK 2012	WL COMMENT 2012		WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
PHOENIX AMA	A-06-01 2BDDC	LAKE PLACANT	350028112163001			33° 50' 28.9"	112° 10' 29.8"	1570	12/6/2011	88.1	V				12/14/2021	88.1	V			1.7
PHOENIX AMA	D-04-01 28CDD	RAINBOW VALLEY	350239112155201	600522		33° 2' 37.6"	112° 15' 45.6"	1338	12/28/2011	436.7	V				12/13/2021	442.7	V			-6.0
PHOENIX AMA	D-04-01 14CDD	RAINBOW VALLEY	350423112134401	804031		33° 4' 22.7"	112° 13' 44.3"	1288	12/28/2011	389.7	V				12/13/2021	394.9	V			-5.2
PHOENIX AMA	C-03-01 28DDC	RAINBOW VALLEY	350751112113401	614966		33° 7' 51.5"	112° 21' 26.8"	1208	12/28/2011	373.2	V				12/15/2021	382.4	V			-9.2
PHOENIX AMA	C-03-01 21DDC	RAINBOW VALLEY	350846112110101	629411		33° 8' 43.7"	112° 21' 52.7"	1182	12/28/2011	352.4	V				12/13/2021	358.7	V			-6.3
PHOENIX AMA	C-03-01 1DDCC	RAINBOW VALLEY	350846112235501	629000		33° 8' 43.7"	112° 24' 0.9"	1225	12/28/2011	396.5	V				12/13/2021	406.8	V			-10.3
PHOENIX AMA	D-03-01 19AAA	RAINBOW VALLEY	350934112171801	611915		33° 9' 34.6"	112° 17' 17.7"	1293	12/27/2011	447.2	V				12/13/2021	452.7	V			-5.5
PHOENIX AMA	D-04-01 10DDC	RAINBOW VALLEY	350515112141101			33° 5' 14.7"	112° 14' 41.6"	1275	12/28/2011	411.1	V				12/13/2021	415.2	V			-4.1
PHOENIX AMA	D-03-01 31CCC	RAINBOW VALLEY	350700112181801			33° 6' 59.4"	112° 18' 18.2"	1214.4	12/28/2011	368.8	V				12/13/2021	372.4	V			-3.6
PHOENIX AMA	C-02-01 30AAA	RAINBOW VALLEY	351354112233301	610920		33° 15.44112233301	112° 15' 55.79"	1103	1/4/2012	350.89	V				12/13/2021	357.3	V			-6.5
PHOENIX AMA	C-03-01 07ACC	RAINBOW VALLEY	351057112235801			33° 10' 54.7"	112° 24' 0.6"	1153	12/27/2011	319.2	V				12/13/2021	356.4	V			-37.2
PHOENIX AMA	D-03-01 07BBB2	RAINBOW VALLEY	3511114112181701	615271		33° 11' 15.2"	112° 18' 15.6"	1272.3	12/27/2011	433.1	V				12/15/2021	439.1	V			-6.0
PHOENIX AMA	C-02-01 38CDD	RAINBOW VALLEY	351214112235501	625645		33° 12' 18"	112° 21' 57.7"	1142	12/27/2011	243.3	V				12/13/2021	262.8	V			-19.5
PHOENIX AMA	C-02-01 35AAA	RAINBOW VALLEY	351380112213201	605576		33° 13' 3.2"	112° 21' 26.6"	1169	12/27/2011	357.3	V				12/13/2021	379.5	V			-22.2
PHOENIX AMA	C-02-01 20BAD	RAINBOW VALLEY	351435112230201			33° 14' 39.2"	112° 22' 59.7"	1130	1/4/2012	335	V				12/7/2021	364.1	V			-29.1
PHOENIX AMA	C-01-02 19ACD1	WEST SALT RIVER	351937112292701	611625		33° 19' 37.5"	112° 29' 26.89"	922	1/4/2012	82	V			PUMP SHUT-OFF @ 12:00 PM; MEASURED @ 3:53 PM.	12/13/2021	79.8	V			2.2
PHOENIX AMA	D-01-02 16CDD	WEST SALT RIVER	352002112093601	626598		33° 20' 37"	112° 9' 36.4"	1071	1/8/2012	65.2	V				12/21/2021	64.4	S			0.8
PHOENIX AMA	C-01-01 14DAD	WEST SALT RIVER	352016112311601	618942		33° 20' 16"	112° 31' 15.9"	883	1/4/2012	47.7	V				12/7/2021	50.6	V			-2.9
PHOENIX AMA	C-01-04 06BBB	WEST SALT RIVER	351906112380801	620186		33° 19' 43.9"	112° 37' 59.8"	823	12/21/2011	33.7	S				12/6/2021	26.3	V			7.4
PHOENIX AMA	C-01-03 02DAD	WEST SALT RIVER	352203112311801	619811		33° 22' 3.9"	112° 31' 14.9"	862	12/6/2011	15.9	V				12/27/2021	41.4	V			-25.5
PHOENIX AMA	C-01-02 06ADD	WEST SALT RIVER	352218112291001	619807		33° 22' 18.2"	112° 29' 9.2"	876	12/6/2011	25.8	V				12/27/2021	33.3	V			-7.5
PHOENIX AMA	C-01-03 06BCC	WEST SALT RIVER	352223112362201	619815		33° 22' 20.4"	112° 36' 25.6"	879	12/6/2011	39	V				12/27/2021	42.9	V			-3.9
PHOENIX AMA	C-01-03 06BCDD	WEST SALT RIVER	352213112351301			33° 21' 8.73"	112° 35' 13.37"	839.66	12/21/2011	15.5	V				12/6/2021	17.1	S			-1.6
PHOENIX AMA	D-01-02 07ADD	WEST SALT RIVER	352121112110901	626355		33° 21' 20.5"	112° 11' 28.8"	1020	1/8/2012	31.6	V				12/21/2021	42.7	S			-11.1
PHOENIX AMA	C-01-04 07BDD	WEST SALT RIVER	352125112420301	619803		33° 21' 20.5"	112° 42' 9.7"	867	12/7/2011	39.7	V				12/27/2021	39.9	V			-0.2
PHOENIX AMA	B-01-01 29DDA2	WEST SALT RIVER	352342112232301	619782		33° 23' 39.7"	112° 22' 29.29"	916.24	12/6/2011	25.4	V				12/27/2021	31.7	V			-6.3
PHOENIX AMA	B-01-02 28CDD	WEST SALT RIVER	352348112283201	619794		33° 23' 49.8"	112° 28' 32"	890	12/6/2011	31.1	V				12/27/2021	44.6	V			-13.5
PHOENIX AMA	C-01-04 06BBB	WEST SALT RIVER	352236112422901	607189		33° 22' 38.49"	112° 42' 34.97"	919.17	10/19/2011	63.9	VT				12/6/2021	78.66	V			-14.2
PHOENIX AMA	C-01-04 03ABB	WEST SALT RIVER	352228112385901			33° 22' 38.79"	112° 38' 59.7"	900	12/21/2011	53.7	V				12/6/2021	61.8	V			-8.9
PHOENIX AMA	A-01-02 35DDC	WEST SALT RIVER	352343112065801	604323		33° 22' 41.9"	112° 6' 57.59"	1084	1/8/2012	98.4	V				12/21/2021	112.7	S			-14.3
PHOENIX AMA	B-01-04 31BCD	WEST SALT RIVER	352302112423801	607190		33° 23' 5.3"	112° 42' 25"	928	12/6/2011	66.7	V				12/28/2021	79.2	V			-12.5
PHOENIX AMA	B-01-03 21DBB	WEST SALT RIVER	352452112335001	605474		33° 24' 49.59"	112° 33' 50.55"	993.68	10/19/2011	159.2	VT				10/7/2021	160.46	VT			-1.3
PHOENIX AMA	A-01-02 21ACC	WEST SALT RIVER	352451112031801	626523		33° 24' 56.03"	112° 17' 17.91"	1081	1/8/2012	73.1	V				12/19/2021	85.3	V			-16.9
PHOENIX AMA	B-01-04 27ABB	WEST SALT RIVER	352416112390101	604631		33° 24' 17"	112° 39' 1.5"	928	12/21/2011	116.6	V				12/6/2021	132.5	V			-15.9
PHOENIX AMA	B-01-02 30ABB	WEST SALT RIVER	352423112301201	629903		33° 24' 23"	112° 30' 11.6"	930	12/21/2011	73.3	V				12/6/2021	83	V			-9.7
PHOENIX AMA	A-01-01 21DDA5	WEST SALT RIVER	352456112151801	607464		33° 24' 35.9"	112° 15' 17.4"	993	1/9/2012	55	V				12/6/2021	64.9	V			-9.9
PHOENIX AMA	B-01-03 19CDB	WEST SALT RIVER	352465112362601	607153		33° 24' 46.2"	112° 36' 25.7"	995	12/6/2011	131.1	V				12/28/2021	138.2	V			-7.1
PHOENIX AMA	B-01-01 07CAA2	WEST SALT RIVER	352633112240801	607164		33° 26' 33.8"	112° 24' 7.4"	983	12/6/2011	109.4	V				12/28/2021	116.6	V			-7.2
PHOENIX AMA	A-01-03 14CCC	WEST SALT RIVER	352521112014401	625890		33° 25' 21.6"	112° 1' 43.57"	1102	1/8/2012	78.1	V				12/15/2021	95.6	S			-17.5
PHOENIX AMA	A-01-04 1DDAD	WEST SALT RIVER	352523111584001	700244		33° 25' 32.12"	111° 58' 39.99"	1130.44	12/12/2011	30.9	V				12/10/2021	36.3	S			-5.4
PHOENIX AMA	B-01-03 14DBB	WEST SALT RIVER	352542112314201	618447		33° 25' 41.9"	112° 31' 42.1"	1024	1/4/2012	208.3	V				12/16/2021	217.8	V			-9.5
PHOENIX AMA	A-01-03 14BBB	WEST SALT RIVER	352601112054801	607201		33° 25' 59.17"	112° 1' 21.7"	1058	12/28/2011	59.7	V				12/16/2021	97.1	V			-10.6
PHOENIX AMA	B-01-02 16BBB	WEST SALT RIVER	352607112284001	625579		33° 26' 7.58"	112° 28' 40.22"	988.37	12/21/2011	131.5	V				12/6/2021	155.3	V			-23.8
PHOENIX AMA	A-01-01 07CCD	WEST SALT RIVER	352609112181501	600101		33° 26' 9.5"	112° 18' 13.9"	987	1/11/2012	72.2	V				12/6/2021	73.6	V			-1.4
PHOENIX AMA	B-01-01 10AAA2	WEST SALT RIVER	352658112302701	607158		33° 26' 58.8"	112° 20' 26.15"	1022	12/7/2011	88.7	V				12/28/2021	81.4	V			7.3
PHOENIX AMA	A-01-02 09AAA8	WEST SALT RIVER	352703112091601	607201		33° 27' 4.13"	112° 9' 14.72"	1060.3	12/28/2011	123.7	V				12/28/2021	136.4	V			-12.7
PHOENIX AMA	A-01-01 12BBB	WEST SALT RIVER	352703112310901	607206		33° 27' 5.37"	112° 13' 12.9"	1023.51	12/28/2011	110.4	V				12/6/2021	135.3	V			-24.9
PHOENIX AMA	B-01-02 05CBB	WEST SALT RIVER	352725112294301	804205		33° 27' 26.3"	112° 29' 41.2"	1065	12/21/2011	212.4	V				12/6/2021	217.1	V			-4.7
PHOENIX AMA	A-02-02 28ABB2	WEST SALT RIVER	352958112093401	626576		33° 29' 37.25"	112° 9' 33.61"	1113.02	2/21/2012	163.49	VT				2/10/2022	184.27	VT			-20.8
PHOENIX AMA	B-02-01 20BCC	WEST SALT RIVER	353006112232601	611717		33° 30' 3.5"	112° 23' 29.3"	1042	1/11/2012	197.4	V				12/20/2021	206.9	V			-9.5
PHOENIX AMA	B-02-01 36BBB3	WEST SALT RIVER	352843112191601	608292		33° 28' 42.17"	112° 26' 42.17"	997	1/4/2012	127.3	V				12/13/2021	142.7	V			-10.5
PHOENIX AMA	B-02-02 27CCC	WEST SALT RIVER	352846112273601	613016		33° 28' 45.4"	112° 27' 38.1"	1084	12/8/2011	247.1	V				1/6/2022	256.2	V			-9.1
PHOENIX AMA	A-02-02 27DCB1	WEST SALT RIVER	352902112083101	626552		33° 29' 1.35"	112° 8' 30.16"	1100.19	2/21/2012	139.86	VT				2/10/2022	163.86	VT			-24.0
PHOENIX AMA	A-02-04 29DAB	WEST SALT RIVER	352913111575301	633954		33° 29' 13.3"	111° 57' 51.7"	1241	12/12/2011	20.5	V				12/10/2021	27.6	S			-7.1
PHOENIX AMA	A-02-01 09CDA	WEST SALT RIVER	353153112032501	638750		33° 31' 37.96"	112° 3' 20.55"	1181.75	2/23/2012	121.68	VT				2/24/2022	130.71	VT			-9.0
PHOENIX AMA	A-02-04 08BDD	WEST SALT RIVER	353158111581201	61346		33° 31' 57.4"	112° 28/28' 11.1"	1136	12/28/2011	252	V				1/6/2022	337	V			-9.9
PHOENIX AMA	B-02-02 04DCB	WEST SALT RIVER	353231112280901	612958		33° 32' 26.1"	112° 28' 8.9"	1204	12/8/2011	346.9	V				1/6/2022	337	V			-9.0
PHOENIX AMA	A-02-01 04CBB2	WEST SALT RIVER	353238112161601	607248		33° 32' 39"	112° 16' 17.5"	1076	12/7/2011	143.4	V				12/28/2021	141.6	V			1.8
PHOENIX AMA	B-02-01 06DBB1	WEST SALT RIVER	35329112240301			33° 32' 39.3"	112° 24' 2.9"	1117	1/11/2012	273.6	V				12/8/2021	246.				



Appendix 2. 10 Year Groundwater level change in Arizona - Water Years 2012 - 2022

BASIN		SUB-BASIN	CADASTRAL	IGWS SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2012	WL 2012	WL METHOD 2012	WL REMARK 2012	WL COMMENT 2012	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
PNAL	AMA		D-07-07 30CC	32460111401001		32° 46' 39"	111° 40' 10.3"	1245	11/7/2011		V			11/7/2021	170	S			3.7
PNAL	AMA		D-07-09 27BDA PZ1	324707111241901		32° 47' 12.1"	111° 24' 19.3"	1657	1/27/2012	370.3	V			11/15/2021	348.5	V			21.8
PNAL	AMA		D-07-09 27BDA PZ2	324707111241902		32° 47' 12.1"	111° 24' 19.3"	1657	1/27/2012	343.3	V			11/15/2021	350.3	V			-7.0
PNAL	AMA		D-07-09 08DDO PZ1	324917111254701	505967	32° 49' 16.9"	111° 35' 47.3"	1550	1/27/2012	200.7	V			11/15/2021	213.9	V			-13.2
PNAL	AMA		D-07-07 11CCD	324917111353601		32° 49' 17.3"	111° 35' 36.6"	1494	11/7/2011	173.7	V			11/9/2021	170.2	V			3.5
PNAL	AMA		D-07-08 09DDO	32492011305701	621868	32° 49' 17.7"	111° 30' 54.4"	1516	11/7/2011	152.6	S			11/9/2021	157.5	S			-4.9
PNAL	AMA		D-07-06 17DDO2	324825111442301		32° 48' 24"	111° 44' 21.8"	1441	11/7/2011	120.1	S			11/8/2021	124.6	S			-4.5
PNAL	AMA		D-07-08 17CDD	324827111323001	621861	32° 48' 25.6"	111° 32' 27.2"	1520	11/7/2011	181.2	V			11/9/2021	180	V			1.2
PNAL	AMA		D-07-05 01ADA	325047111462501	608209	32° 50' 47.7"	111° 46' 25.7"	1402	11/8/2011	43.9	V			11/9/2021	55.8	V			-11.9
PNAL	AMA		D-07-09 10BBB PZ1	325007111244801		32° 50' 6"	111° 33' 44.4"	1596	1/27/2012	316.6	V			11/10/2021	318	V			-24.8
PNAL	AMA		D-07-09 10BBB PZ2	325007111244802		32° 50' 6"	111° 34' 44.4"	1596	1/27/2012	264.5	V			11/15/2021	217.3	V			47.2
PNAL	AMA		D-07-08 05DC	32501111322501	800830	32° 50' 10.5"	111° 32' 25"	1501	11/7/2011	145.1	V			3/29/2022	152.4	S			-7.3
PNAL	AMA		D-07-06 04KCC	32501211454801		32° 50' 11.2"	111° 43' 48.6"	1432	11/7/2011	86.5	V			11/8/2021	111.7	S			-25.2
PNAL	AMA		D-06-05 34RDD2	32513011490701		32° 51' 27.4"	111° 49' 3.5"	1369	11/8/2011	60.5	V			11/9/2021	65	S			-4.5
PNAL	AMA		D-06-08 31CDD	32510211332901	612214	32° 51' 1"	111° 33' 29"	1485	11/7/2011	149.9	V			11/9/2021	156	S			-6.1
PNAL	AMA		D-06-06 36DDA	32511211401701	605666	32° 51' 10.8"	111° 40' 13.8"	1443	11/9/2011	134	V			11/10/2021	134.2	V			-0.2
PNAL	AMA		D-06-09 29BBA4	325243111264001		32° 52' 42.1"	111° 26' 40"	1542	1/27/2012	280.4	V			11/15/2021	315	V			-34.6
PNAL	AMA		D-06-05 25BBB	325245111475601	801146	32° 52' 45"	111° 47' 25.9"	1375	11/8/2011	45.9	V			11/9/2021	67.7	S			-21.8
PNAL	AMA		D-06-06 22CC	32520111430301	50113	32° 52' 52.3"	111° 43' 2.1"	1410	11/7/2011	119	S			11/10/2021	293.9	V			-49.2
PNAL	AMA		D-06-08 18CDD2	32533911333001	605546	32° 53' 39.2"	111° 33' 30.5"	1451	11/8/2011	116.5	V			11/8/2021	105.6	S			10.9
PNAL	AMA		D-06-06 14DDO2	32534011411801	621201	32° 53' 40.2"	111° 41' 18.6"	1415	11/9/2011	292.9	V	K		11/10/2021	314	V	K		-21.1
PNAL	AMA		D-06-08 14CCC	325342111294701	625234	32° 53' 38.8"	111° 29' 48.8"	1456	11/8/2011	107.2	V			11/8/2021	118.6	V			-11.4
PNAL	AMA		D-06-06 23ADD	32534611442701	621197	32° 53' 13.1"	111° 41' 29.8"	1417	11/9/2011	293	V			11/10/2021	318.7	V			-25.5
PNAL	AMA		D-06-08 11DA1	325350111284801	617559	32° 55' 2.8"	111° 28' 48.6"	1473	11/8/2011	63.9	S			11/8/2021	76.5	S			-12.6
PNAL	AMA		D-05-07 34DDO	32561811370501	604184	32° 56' 18"	111° 37' 5"	1406	11/7/2011	92.4	V			11/9/2021	106	S			-13.6
PNAL	AMA		D-06-06 12BDB	32550911405501	606052	32° 55' 10.9"	111° 40' 55.6"	1416	11/9/2011	111.8	V			11/10/2021	123.3	S			-11.5
PNAL	AMA		D-05-07 26CDD	32571111363801	623466	32° 57' 10.4"	111° 36' 37"	1402	11/7/2011	85.3	V			11/10/2021	105.6	S			-20.3
PNAL	AMA		D-05-07 26CC2	32571211383001	809390	32° 57' 12.8"	111° 38' 36.6"	1410	11/7/2011	12	S			11/10/2021	119	V			-10.0
PNAL	AMA		D-05-09 31ADD	32570711271801	621904	32° 57' 6.8"	111° 27' 18.1"	1505	11/9/2011	149.8	V			11/9/2021	167.7	V			-17.9
PNAL	AMA		D-05-07 W13CAD	32590811335701		32° 59' 7.2"	111° 35' 31.1"	1386	11/7/2011	74.1	V			11/10/2021	87.7	S			-13.6
PNAL	AMA		D-05-09 29ADA	325807111261601	635611	32° 58' 6.8"	111° 26' 16.2"	1520	11/9/2011	169.5	V			11/9/2021	184.9	V			-15.4
PNAL	AMA		D-05-09 18BDD2	32594411275601	601789	32° 59' 45.4"	111° 27' 49.8"	1464	11/8/2011	178.4	V			11/9/2021	217.7	V			-39.3
PNAL	AMA		D-05-09 18BDD1	32594511275701	601792	32° 59' 44.6"	111° 27' 49.6"	1464	11/8/2011	159.4	V			11/9/2021	207.2	V			-50.8
PNAL	AMA		D-05-08 17BBB2	33000811332601	621935	33° 0' 7.6"	111° 33' 26"	1409	11/8/2011	114.2	V			11/9/2021	133.5	V			-19.3
PNAL	AMA		D-04-09 33AAD	33023511252101	627609	33° 2' 37.3"	111° 25' 19.1"	1456	11/7/2011	178	V			11/17/2021	209.6	V			-31.6
PNAL	AMA		D-05-08 02AAA	330146111292301	621952	33° 1' 45.8"	111° 29' 22.7"	1418	11/7/2011	114.5	V			11/9/2021	139	V			-24.5
PNAL	AMA		D-04-10 18XCD PZ1	330455111212601		33° 4' 34.21"	111° 21' 30.97"	1562.49	1/26/2012	238.6	V			1/26/2022	276.3	V			-37.7
PNAL	AMA		D-04-10 18XCD PZ2	330455111212602		33° 4' 34.21"	111° 21' 30.97"	1562.49	1/26/2012	241.2	V			1/26/2022	276.1	V			-34.9
PNAL	AMA		D-04-10 30BDD	33031111214201	605530	33° 3' 10.8"	111° 21' 40.8"	1490	11/7/2011	177.6	V			11/9/2021	201.6	V			-24.0
PNAL	AMA		D-04-09 15BCA2 PZ1	330515111245601		33° 5' 15.58"	111° 24' 56.27"	1572.98	1/26/2012	316	V			1/26/2022	321.4	V			-5.4
PNAL	AMA		D-04-10 12DDO	33052211116601	621947	33° 5' 2.2"	111° 16' 7.1"	1553.8	11/7/2011	35.7	V			11/15/2021	53.3	S			-19.6
PNAL	AMA		D-09-08 20BCC	3236351133001	615602	32° 36' 36	118° 31' 59"	1663.71	11/18/2011	369.88	VT			11/18/2021	369.88	VT			5.9
PNAL	AMA		D-06-07 36DCB	325117111342801		32° 51' 8.77"	111° 34' 30.4"	1477.02	2/28/2012	131	VT			1/28/2022	144.02	VT			-13.0
PNAL	AMA	MARICOPA - STANFIELD	D-07-04 23DDO	324750111544301	624090	32° 47' 48.6"	111° 54' 41.6"	1359	11/8/2011	405.3	V	K		3/1/2022	472	V	K		-66.7
PNAL	AMA	MARICOPA - STANFIELD	D-07-06 07DDO	324917111513801	613932	32° 49' 16.3"	111° 31' 38.7"	1368	11/8/2011	434.2	V			11/9/2021	454.4	V			-20.2
PNAL	AMA	MARICOPA - STANFIELD	D-06-04 34BDD	32510211152801	629477	32° 51' 24.7"	111° 52' 3.87"	1347	11/8/2011	461.9	V			11/9/2021	486	V			-24.9
PNAL	AMA	MARICOPA - STANFIELD	D-06-03 27CC1	32519611201501	615407	32° 51' 54.14"	112° 1' 52.03"	1374.26	1/28/2012	664	VT			1/28/2022	663.03	VT			1.0
PNAL	AMA	MARICOPA - STANFIELD	D-06-05 19DDA PZ1	325256111514001	635943	32° 52' 58"	111° 51' 36.6"	1338	11/8/2011	329.7	V			11/9/2021	337.9	V			-8.2
PNAL	AMA	MARICOPA - STANFIELD	D-06-05 19DDA PZ2	325256111514002		32° 52' 58"	111° 51' 36.6"	1338	11/8/2011	318.2	V			11/9/2021	325.3	V			-7.1
PNAL	AMA	MARICOPA - STANFIELD	D-06-04 30CDD	325525111541401	609664	32° 55' 23.1"	111° 54' 12"	1294	11/9/2011	515.5	V			11/8/2021	516.6	V			-1.1
PNAL	AMA	MARICOPA - STANFIELD	D-05-04 19CDD2	32554211205301	61706	32° 55' 41.8"	111° 42' 34.5"	1316	11/8/2011	418.5	V			11/8/2021	420.1	V			-1.6
PNAL	AMA	MARICOPA - STANFIELD	D-05-05 23BDD	325659111522101	806657	32° 56' 44"	111° 52' 8.8"	1335	11/10/2011	376.1	V			11/9/2021	380.5	V			-4.4
PNAL	AMA	MARICOPA - STANFIELD	D-05-04 23BDD2	325840111551501	623811	32° 58' 39.4"	111° 55' 16.1"	1276	12/1/2011	419.3	V			12/9/2021	402	V			17.3
PNAL	AMA	MARICOPA - STANFIELD	D-05-02 21BDD	325901112100401	605935	32° 59' 2.1"	112° 10' 4.3"	1339	11/29/2011	298.6	V			12/8/2021	305.7	V			-7.1
PNAL	AMA	MARICOPA - STANFIELD	D-05-02 25ADD	325746111955201		32° 53' 44"	111° 59' 46.4"	1240	11/30/2011	120.1	V			2/24/2022	101.6	V			18.5
PNAL	AMA	MARICOPA - STANFIELD	D-05-02 22ADD	325853112080401	605938	32° 58' 29.6"	112° 8' 13"	1322	2/8/2012	491.8	V			2/24/2022	499.8	V			-24.5
PNAL	AMA	MARICOPA - STANFIELD	D-05-04 15ADD	325928111554401	601127	32° 59' 30.1"	111° 55' 42.6"	1266	11/30/2011	217.5	V			12/9/2021	189.9	V			27.6
PNAL	AMA	MARICOPA - STANFIELD	D-05-02 11DDO2	330001112070101	623847	33° 0' 0.7"	112° 7' 0.6"	1268	11/29/2011	434.5	V			12/8/2021	408.4	V			26.1
PNAL	AMA	MARICOPA - STANFIELD	D-05-04 07DDA	330008111584501	623829	33° 0' 8.9"	111° 58' 46.2"	1227	11/30/2011	113.5	V			12/8/2021	92	S			21.5
PNAL	AMA	MARICOPA - STANFIELD	D-04-03 34BDD	33014711206901	612706	33° 1' 44.87"	111° 44' 24.5"	1208	11/30/2011	87.4	V			11/7/2021	440.8	S			30.6
PNAL	AMA	MARICOPA - STANFIELD	D-04-04 33CDD	330148111572101	616515	33° 1' 44.9"	111° 57' 24.5"	1215	11/30/2011	237.1	V			1/28/2022	220.4	V			16.7
PNAL	AMA	MARICOPA - STANFIELD	D-04-02 15CBB	330435112085801	612602	33° 4' 36.3"	112° 8' 59.7"	1227	11/29/2011	348.9	V			12/7/2021	331.4	V			17.5
PNAL	AMA	MARICOPA - STANFIELD	D-04-03 17ADD	330441															



Appendix 2. 10 Year Groundwater level change in Arizona - Water Years 2012 - 2022

BASIN	SUB-BASIN	CADASTRAL	IGWS SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2012	WL 2012	WL METHOD 2012	WL REMARK 2012	WL COMMENT 2012	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
PRESCOTT AMA	UPPER AGUA FRIA	A-15-01 22ABR	340021122ABR	519873	34° 40' 21.09"	112° 14' 13.07"	5257.81	2/8/2012	20.7	VT			10/13/2021	14.02	V			-4.2
PRESCOTT AMA	UPPER AGUA FRIA	A-15-01 28ACC	34390611254701	614238	34° 39' 7.09"	112° 15' 45.41"	5067.21	5/21/2012	321.51	VT			6/10/2022	324.1	VT			-2.6
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-02-14 10CDC	333121113413001	600171	33° 31' 25.4"	113° 41' 28.3"	1350	1/2/2011	346.4	V			10/25/2021	350.3	V			-3.9
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-03-15 02DAC	33377111346801	601120	33° 37' 41.7"	113° 46' 10.1"	1205	11/3/2011	214.6	V			10/25/2021	228.7	V			-14.1
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-04-15 18BRC	33412111351001	620833	33° 41' 21.3"	113° 51' 21.3"	1153	11/3/2011	144.3	V			10/25/2021	159	V			-14.7
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-05-15 35BDD2	334357113473201	801955	33° 43' 55.9"	113° 47' 29.9"	1208	10/31/2011	335.5	V			10/25/2021	384.3	V			-48.8
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-05-16 25DCC	334422113524001	614479	33° 44' 21.9"	113° 52' 41"	1123	10/31/2011	164.3	V			10/25/2021	176.9	V			-12.6
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-06-15 27BBA	335024113485701	614505	33° 50' 24.5"	113° 48' 52.2"	1352	10/31/2011	437.3	V			10/25/2021	438.5	V			-1.2
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-06-16 20ACD	335054113564301	505906	33° 50' 55.3"	113° 56' 43.6"	1055	10/31/2011	122.8	V			10/25/2021	137.4	V			-14.6
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-05-16 09BCC	334722113562001	600166	33° 47' 23.6"	113° 54' 19"	1083	10/31/2011	141.8	V			10/25/2021	145.3	V			-3.5
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-05-15 06BA1	334840113514101	618772	33° 48' 40.8"	113° 51' 40.4"	1156	10/31/2011	241	V			10/25/2021	243.7	V			-2.7
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-06-16 22ADA	335102113541301	613119	33° 51' 3.1"	113° 54' 16.6"	1121	10/31/2011	192.1	V			10/25/2021	196.8	V			-4.7
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-06-17 12DDB1	335251113585701	502760	33° 52' 36.6"	113° 58' 53.8"	1005	10/31/2011	84.8	V			10/25/2021	88	V			-3.2
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-06-16 12AA	335257113526001	613120	33° 51' 2.1"	113° 52' 11.8"	1207	10/31/2011	286	V			10/25/2021	288.3	V			-2.3
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-07-17 23CAC2	335556114000101	645951	33° 55' 38.4"	114° 0' 10.3"	952	11/2/2011	77.1	V			10/26/2021	78.3	S			-1.2
RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	B-04-15 14CAA	334118113463501	600129	33° 41' 20.62"	113° 46' 30.91"	1181.1	10/7/2011	294.23	VT	K		10/22/2021	322.84	VT	K		-28.6
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	B-13-15 17CBD	342753113511901		34° 27' 51.3"	113° 51' 23.9"	2080	10/26/2011	666.3	V			10/27/2021	665.9	V			0.4
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	B-15-16 07BDD	343923113583301	611808	34° 39' 23.9"	113° 58' 32.9"	2341	10/26/2011	934.1	V			10/27/2021	935.5	V			-1.4
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	B-15-10 01AAB	343940114710301	629451	34° 39' 39.8"	114° 17' 41.7"	1472	10/27/2011	485.6	V			10/26/2021	501.9	V			-16.3
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	B-15-16 01CAB	344005113532701		34° 40' 5.7"	113° 53' 27"	3074	10/26/2011	100.8	V			10/27/2021	105.8	S			-5.0
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	B-16-30 13BCD	344347114180601	616522	34° 43' 43.4"	114° 18' 45.1"	980	10/25/2011	38.9	V			10/26/2021	26.8	S			12.1
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	B-16-19 10CBC	344424114144301		34° 44' 23.6"	114° 14' 44.2"	1162	10/25/2011	63.8	V			10/26/2021	64.2	S			-0.4
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	B-17-18 25ADB1	344944114084101	628122	34° 49' 54.91"	114° 18' 33.33"	1745.99	2/1/2012	297.39	VT			2/1/2022	296.08	VT			1.3
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	B-18-10 10DCD	345801114082801		34° 58' 8.9"	114° 8' 58.9"	2181	10/25/2011	526	V			10/26/2021	527.4	V			-1.4
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	B-20-18 22AAC	350633114103701		35° 6' 33.72"	114° 10' 36.15"	2495.57	2/1/2012	743.54	VT			2/1/2022	751.71	VT			-6.2
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	B-20-17 070AAB2	350818114063901	529524	35° 8' 17.1"	114° 6' 42.7"	2858	10/25/2011	177.9	V			10/26/2021	182.4	S			-4.5
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	B-21-18 09BBA	351340114125401	610757	35° 13' 39.8"	114° 12' 54.6"	2832	10/25/2011	1041.4	V			11/2/2021	1045.1	V			-3.7
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	B-21-19 01DAD	351344114151501		35° 14' 41.51"	114° 15' 42.96"	2814	10/25/2011	45.3	V			11/2/2021	44.2	V			-3.4
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	B-21-18 05BDD	351401114132401	610756	35° 14' 1.24"	114° 13' 21.91"	2855.82	1/51/2012	1065.94	VT			2/1/2022	1069.61	VT			-3.7
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	B-21-17 34DDB2	350937114044201	646882	35° 9' 37.6"	114° 4' 41.8"	3047	10/25/2011	60.9	V			10/26/2021	62.7	S			-1.8
SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	B-15-17 20DCC	343712114034501	590022	34° 37' 12.2"	114° 3' 42.4"	1890	10/26/2011	496.8	V			10/27/2021	496.7	V			0.1
SAFFORD BASIN	GILA VALLEY	D-10-26 25CBA	325240109384601	644135	32° 52' 5.1"	109° 38' 39.2"	4089	11/28/2011	637.9	V			11/4/2021	643.4	V			-5.5
SAFFORD BASIN	GILA VALLEY	D-09-27 09ADD	324002109345101	807397	32° 40' 2.6"	109° 34' 45.5"	3280	11/28/2011	153.6	S			11/4/2021	153.6	S			8.2
SAFFORD BASIN	GILA VALLEY	D-07-26 22BAB	324855109403301	629291	32° 48' 58"	109° 40' 36.6"	2951.16	12/2/2011	41.5	V			11/3/2021	52	S			-10.5
SAFFORD BASIN	GILA VALLEY	D-07-26 18CDA1	324908109433001	611966	32° 49' 7.1"	109° 43' 27.1"	2961.14	12/2/2011	59	V			11/3/2021	61.2	S			-2.2
SAFFORD BASIN	GILA VALLEY	D-07-25 10AAD	325033109460101	533141	32° 50' 31.9"	109° 46' 1.6"	2924	11/28/2011	69.15	S			11/3/2021	62.7	S			6.5
SAFFORD BASIN	GILA VALLEY	D-07-26 04CCD	325045109436101	619945	32° 50' 43.4"	109° 38' 38.6"	3135	12/1/2011	78.45	S			11/3/2021	109.7	V			-31.3
SAFFORD BASIN	GILA VALLEY	D-06-25 30CBA	325253109495501	611078	32° 52' 54.3"	109° 40' 55.2"	2890	12/2/2011	38	V			11/3/2021	37.2	V			0.8
SAFFORD BASIN	GILA VALLEY	D-05-23 25DCC	325742109506901	803164	32° 57' 43.2"	109° 56' 7.7"	2778	11/29/2011	53.8	V			11/1/2021	54.3	S			-0.5
SAFFORD BASIN	GILA VALLEY	D-05-24 18AAA	330018109545301	620674	33° 0' 17.9"	109° 54' 51.4"	2730	11/29/2011	34.38	S			11/1/2021	34.7	S			-0.3
SAFFORD BASIN	GILA VALLEY	D-04-23 15ADA	330420110031101	611941	33° 2' 39.7"	110° 5' 13.1"	2857.54	11/29/2011	22.9	S			11/5/2021	35.5	S			-12.6
SAFFORD BASIN	GILA VALLEY	D-05-23 03CAB1	330523109583801	624721	33° 1' 32.5"	110° 29' 31.8"	2790	11/29/2011	32.5	S			11/3/2021	31.3	S			0.4
SAFFORD BASIN	GILA VALLEY	D-05-23 02DDB2	330128109572301		33° 1' 27.8"	109° 57' 23.4"	2720	11/29/2011	29.2	S			11/1/2021	32.6	S			-3.4
SAFFORD BASIN	GILA VALLEY	D-08-26 33CCD1	324113109415401		32° 41' 11.91"	109° 41' 37.56"	3341.21	10/27/2011	43.96	VT			10/22/2021	52.38	VT			-8.4
SAFFORD BASIN	SAN CARLOS VALLEY	A-01-16 19BAD	325207110425001	623061	33° 25' 10.8"	110° 42' 51.5"	3730	12/2/2011	724.3	V			11/5/2021	748	V			-23.7
SAFFORD BASIN	SAN SIMON VALLEY	D-18-32 35CBA	314854109625601		31° 48' 51.8"	110° 45' 18.3"	4153	11/30/2011	121.3	V			11/4/2021	138.2	V			-16.9
SAFFORD BASIN	SAN SIMON VALLEY	D-18-32 7CBA	314943109640001	605458	31° 49' 40.9"	109° 3' 59.1"	4142	11/30/2011	93.9	V			11/4/2021	104.2	V			-10.3
SAFFORD BASIN	SAN SIMON VALLEY	298 22W 11 243A	314750109024501		31° 47' 50.7"	109° 2' 51.2"	4164	11/30/2011	135.1	V			11/4/2021	150.58	V			-15.5
SAFFORD BASIN	SAN SIMON VALLEY	278 21W 07 232A	315836109011501		31° 58' 27.7"	109° 1' 23.1"	4018	11/30/2011	131.2	V			11/3/2021	143	V			-11.8
SAFFORD BASIN	SAN SIMON VALLEY	D-15-31 14ABB	320803109083001	605266	32° 6' 1"	109° 8' 53.1"	3994	12/1/2011	256	V			11/3/2021	303	V			-47.0
SAFFORD BASIN	SAN SIMON VALLEY	D-14-32 30CBA	321053109071801	619136	32° 10' 43.3"	109° 7' 18.2"	3736	12/1/2011	23.39	V			11/3/2021	29.3	V			-6.5
SAFFORD BASIN	SAN SIMON VALLEY	D-14-31 22ADC	321200109094501	612633	32° 11' 57.9"	109° 9' 44.2"	3693	12/1/2011	204.2	V			11/3/2021	297	V			-92.8
SAFFORD BASIN	SAN SIMON VALLEY	D-14-31 19BAC	321210109132001	615982	32° 12' 10.4"	109° 13' 20.3"	3713	12/1/2011	79.6	V			11/2/2021	89.1	S			-9.5
SAFFORD BASIN	SAN SIMON VALLEY	D-14-31 08ABC1	321355109120501	810297	32° 13' 59.8"	109° 12' 5.5"	3632	12/1/2011	55.8	V			11/2/2021	61.6	V			-5.8
SAFFORD BASIN	SAN SIMON VALLEY	D-13-29 24DC2	321648109262001	621310	32° 16' 46.7"	109° 20' 10.9"	3655	11/29/2011	151.6	V			11/2/2021	272.1	V			-120.5
SAFFORD BASIN	SAN SIMON VALLEY	D-13-31 20DCA	321667109114101	805665	32° 16' 6.8"	109° 11' 35.7"	3621	11/29/2011	45.7	V			11/2/2021	52.2	V			-5.5
SAFFORD BASIN	SAN SIMON VALLEY	D-13-28 13BCD	321812109264401	610988	32° 18' 12.11"	109° 26' 46.79"	3732.16	10/27/2011	111.1	VT			10/22/2021	115.85	VT			-4.8
SAFFORD BASIN	SAN SIMON VALLEY	D-13-28 28CCE	321721109286001	618342	32° 17' 19.6"	109° 28' 59.6"	3840	11/29/2011	540.4	V			11/2/2021	589.1	V			-48.7
SAFFORD BASIN	SAN SIMON VALLEY	D-13-30 09ACD2	321857109170101		32° 18' 58.3"	109° 16' 59.6"	3566	11/29/2011	50.1	V			11/2/2021	51.5	V			-1.4
SAFFORD BASIN	SAN SIMON VALLEY	D-12-32 22AAB1	322110109362701	809568	32° 21' 11.6"	109° 36' 24.5"	3979	11/29/2011	47.8	V			11/2/2021	46.6	V			-0.8
SAFFORD BASIN	SAN SIMON VALLEY	D-16-31 09ACB	32016109103801	616118	32° 15.59"	109° 10' 38.4"	4310	12/1/2011	584.5	V			11/3/2021	602.5	V			-18.0
SALT RIVER BASIN	SALT RIVER CANYON	A-08-23 06DDB	340655109570701	521646	34° 6' 55.2"</													



Appendix 2. 10 Year Groundwater level change in Arizona - Water Years 2012 - 2022

BASIN	SUB-BASIN	CADASTRAL	IGWS SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2012	WL 2012	WL METHOD 2012	WL REMARK 2012	WL COMMENT 2012	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
TUCSON AMA	AVRA VALLEY	D-12-11 2BAAA	32244111409401	50485	32° 24' 49.3"	111° 9' 23.5"	2015	1/10/2012	215.6	V			1/26/2022	211	V			-4.6
TUCSON AMA	AVRA VALLEY	D-12-11 01DDA P21	32244411095401	508652	32° 24' 45.5"	111° 9' 53.7"	2041	2/1/2012	206.7	V			11/17/2021	208.4	V			-1.7
TUCSON AMA	AVRA VALLEY	D-12-11 01DDA P22	32244411095402	508652	32° 24' 45.5"	111° 9' 53.7"	2041	2/1/2012	85.6	V			11/17/2021	99.4	V			-13.8
TUCSON AMA	AVRA VALLEY	D-11-10 25DDA2	32262111161301	615764	32° 26' 18.9"	111° 16' 11.1"	1953	1/10/2012	170.3	V	V		1/26/2022	163.2	V	V		7.1
TUCSON AMA	AVRA VALLEY	D-11-10 27DDA	32264611181401	566418	32° 26' 34.6"	111° 18' 17.2"	1933	1/10/2012	181.4	V			1/26/2022	173.7	V			8.4
TUCSON AMA	AVRA VALLEY	D-11-10 22ADD1	32272311181701	626687	32° 27' 30.6"	111° 18' 15.5"	1914	1/10/2012	158.2	V			1/26/2022	147.8	V			10.4
TUCSON AMA	AVRA VALLEY	D-11-11 11DOB	32292311112101	600235	32° 29' 3.9"	111° 11' 10.3"	2148	1/1/2012	409.2	V			1/28/2022	398.2	V			11.0
TUCSON AMA	AVRA VALLEY	D-11-11 09ACD P21	32292411131801	504996	32° 29' 24.1"	111° 13' 16.7"	2043	1/31/2012	317.2	V			11/17/2021	308.1	V			9.1
TUCSON AMA	AVRA VALLEY	D-11-11 09ACD P22	32292411131802	504996	32° 29' 24.1"	111° 13' 16.7"	2043	1/31/2012	296.9	V			11/17/2021	290.4	V			6.5
TUCSON AMA	AVRA VALLEY	D-10-11 17CAB	3233811141501	638306	32° 33' 38.8"	111° 23' 38.8"	2186	1/28/2012	432.6	V			1/25/2022	426.6	V			6.0
TUCSON AMA	AVRA VALLEY	D-10-10 20DCC	32352111200401	618728	32° 31' 50.8"	111° 20' 6.5"	1862	1/1/2012	175.2	V			1/25/2022	166.2	V			9.0
TUCSON AMA	AVRA VALLEY	D-10-11 19BDB P21	32330711151901	504994	32° 32' 59.59"	111° 15' 19.6"	2043	1/31/2012	349.1	V			11/17/2021	339.2	V			9.9
TUCSON AMA	AVRA VALLEY	D-10-11 19BDB P22	32330711151902	504994	32° 32' 59.6"	111° 15' 19.6"	2043	1/31/2012	349.4	V			11/17/2021	339.1	V			10.3
TUCSON AMA	AVRA VALLEY	D-09-10 29CDA P21	323623111201201	504993	32° 36' 24.1"	111° 20' 11.8"	1850	1/31/2012	249.7	V			11/15/2021	247.7	V			2.0
TUCSON AMA	AVRA VALLEY	D-09-10 29CDA P22	323623111201202	504993	32° 36' 24.1"	111° 20' 11.8"	1850	1/31/2012	199.2	V			11/15/2021	193.7	V			5.5
TUCSON AMA	AVRA VALLEY	D-10-10 05DAD	32343811194501	624751	32° 34' 40.8"	111° 19' 43.9"	1855	1/9/2012	200.7	V			1/25/2022	193	V			7.7
TUCSON AMA	AVRA VALLEY	D-09-10 19ADD	323730111204501	615627	32° 37' 30.9"	111° 20' 42.1"	1836	1/9/2012	200.7	V			1/25/2022	198.8	V			1.9
TUCSON AMA	AVRA VALLEY	D-09-10 19AAA	323753111204601	804195	32° 37' 55.4"	111° 20' 42.9"	1840	1/9/2012	177.9	V			1/25/2022	183.3	V			-5.4
TUCSON AMA	AVRA VALLEY	D-09-12 20BDB	323759111011501	615648	32° 37' 54.3"	111° 19' 19.5"	1340	1/10/2012	206.1	V			1/31/2022	307.5	V			-1.4
TUCSON AMA	AVRA VALLEY	D-09-10 17CDD P21	323759111201201	504992	32° 37' 58.7"	111° 20' 11.6"	1854	1/31/2012	250.1	V			11/15/2021	250.4	V			-0.3
TUCSON AMA	AVRA VALLEY	D-09-10 17CDD P22	323759111201202	504992	32° 37' 58.7"	111° 20' 11.6"	1854	1/31/2012	221.8	V			11/15/2021	221.4	V			0.4
TUCSON AMA	AVRA VALLEY	D-09-09 01BCC P21	324007111224501	504989	32° 40' 9.8"	111° 22' 37.4"	1858	1/31/2012	291.8	V			11/15/2021	293.8	V			-2.0
TUCSON AMA	AVRA VALLEY	D-08-11 11BDB	32415711151801	615648	32° 41' 58.5"	111° 15' 30.7"	2108	1/1/2012	452.2	V			6/1/2022	456.2	V			-3.0
TUCSON AMA	AVRA VALLEY	D-08-12 10BDA	32430411082101	804174	32° 43' 2.1"	111° 8' 16.7"	2072	1/2/2012	19.2	V			1/31/2022	63.1	V			13.9
TUCSON AMA	AVRA VALLEY	D-07-13 15CAC1	32491910885701		32° 49' 14.8"	110° 59' 36.7"	3510	1/10/2012	43.1	V			1/31/2022	35.3	S			7.8
TUCSON AMA	AVRA VALLEY	D-21-10 19BDA	313506111210901		31° 35' 5.88"	111° 21' 6.94"	3576.84	1/23/2012	27.3	VT			2/17/2022	26.39	VT			0.9
TUCSON AMA	AVRA VALLEY	D-21-10 35CCD	313305111714901		31° 33' 47.3"	111° 17' 46.48"	3699.36	1/23/2012	34.8	VT			2/17/2022	28.7	VT			6.1
TUCSON AMA	AVRA VALLEY	D-21-10 29ADB	313431111201401		31° 34' 32.143"	111° 24' 23.143"	3609.3	1/23/2012	12.3	VT			2/17/2022	12.3	VT			-1.6
TUCSON AMA	UPPER SANTA CRUZ	D-19-13 29BCC	31445411023701	623122	31° 44' 55.39"	111° 2' 35.36"	3014.8	1/24/2012	84.8	VT			2/17/2022	69.31	VT			15.5
TUCSON AMA	UPPER SANTA CRUZ	D-19-13 21BAA	314606111011301	623123	31° 46' 7.91"	111° 1' 10.27"	2966.39	1/24/2012	102.91	VT			2/17/2022	89.42	VT			13.5
TUCSON AMA	UPPER SANTA CRUZ	D-17-15 02DCD	315840110463701		31° 58' 40.3"	110° 46' 36.4"	3198	1/17/2012	555.7	V			1/24/2022	559.3	V			-3.6
TUCSON AMA	UPPER SANTA CRUZ	D-16-13 34AAB2	31595810959201	407785	32° 0' 2.1"	110° 59' 51.8"	2818	1/12/2012	336.2	V			1/26/2022	294.1	V			42.1
TUCSON AMA	UPPER SANTA CRUZ	D-16-14 50BCC	31035110572701	632091	32° 5' 34.6"	110° 57' 34.6"	2580	1/12/2012	358	V			1/25/2022	57.6	V			0.4
TUCSON AMA	UPPER SANTA CRUZ	D-16-16 09CDD	320253110423701	504558	32° 2' 53.8"	110° 42' 35.9"	3235	1/13/2012	584.5	V			1/25/2022	590.2	V			-5.7
TUCSON AMA	UPPER SANTA CRUZ	D-15-15 25DBC2	320533110454901	615639	32° 5' 34.6"	110° 45' 47.8"	3029	1/12/2012	446.7	V			1/24/2022	455.9	V			-9.2
TUCSON AMA	UPPER SANTA CRUZ	D-16-15 05CBC P22	320402110502802		32° 4' 5.1"	110° 50' 28.4"	2867	1/1/2012	326.07	V			1/24/2022	339.27	V			-13.2
TUCSON AMA	UPPER SANTA CRUZ	D-16-15 05CBC P23	320402110502803		32° 4' 5.1"	110° 50' 28.4"	2867	1/1/2012	303.45	V			1/24/2022	311.45	V			-8.0
TUCSON AMA	UPPER SANTA CRUZ	D-15-15 10CBB P21	320732110492201		32° 7' 32.8"	110° 49' 22.9"	2842	1/12/2012	340.19	V			1/25/2022	344.39	V			-4.2
TUCSON AMA	UPPER SANTA CRUZ	D-15-15 16CBB P22	320732110492202		32° 7' 32.8"	110° 49' 22.9"	2842	1/12/2012	340.75	V			1/25/2022	343.95	V			-3.2
TUCSON AMA	UPPER SANTA CRUZ	D-15-15 16CBB P23	320732110492203		32° 7' 32.8"	110° 49' 22.9"	2842	1/12/2012	400.74	V			1/25/2022	370.24	V			30.5
TUCSON AMA	UPPER SANTA CRUZ	D-14-14 35AAA	321035110523601	621581	32° 10' 38.3"	110° 52' 29"	2643	1/12/2012	333.7	V			1/26/2022	344.1	V			-10.4
TUCSON AMA	UPPER SANTA CRUZ	D-15-14 06CBB	320904110570401	616564	32° 9' 5.1"	110° 57' 12.6"	2528	1/12/2012	213.6	V			1/26/2022	215.5	V			-60.1
TUCSON AMA	UPPER SANTA CRUZ	D-15-15 06BBB1	320941110512201	621584	32° 9' 41.7"	110° 51' 24.1"	2715	1/12/2012	365.7	V			1/26/2022	376.6	V			-10.9
TUCSON AMA	UPPER SANTA CRUZ	D-14-16 19CBC	321140110451501	808558	32° 11' 44.2"	110° 45' 47.1"	2962	1/1/2012	246.6	V			1/24/2022	249.2	V			-2.6
TUCSON AMA	UPPER SANTA CRUZ	D-14-14 16CCC P21	321229110553201		32° 12' 29.5"	110° 55' 32.5"	2480	1/10/2012	246.6	V			1/24/2022	233.4	V			13.2
TUCSON AMA	UPPER SANTA CRUZ	D-14-14 16CCC P22	321229110553202		32° 12' 29.5"	110° 55' 32.5"	2480	1/10/2012	245.9	V			1/24/2022	233.7	V			22.2
TUCSON AMA	UPPER SANTA CRUZ	D-14-14 16CCC P24	321229110553204		32° 12' 29.5"	110° 55' 32.5"	2480	1/10/2012	249.7	V			1/24/2022	230.2	V			19.5
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 28AAC	321635110544601		32° 16' 35.2"	110° 54' 45.8"	2387	1/12/2012	106.7	VT			1/3/2022	107.8	V			-1.1
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 35BAD	321545110530401	636082	32° 15' 44.8"	110° 53' 4.8"	2430	1/12/2012	142.3	V			1/3/2022	125.6	V			16.7
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 34AAD	321546110533701	806473	32° 15' 47.1"	110° 53' 37.5"	2420	1/12/2012	156.1	V			1/3/2022	146	V			10.1
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 24CCD1	321554110531901	616544	32° 15' 12.6"	110° 52' 16.8"	2414	1/12/2012	141.7	V			1/24/2022	143.6	V			-14.6
TUCSON AMA	UPPER SANTA CRUZ	D-13-13 33CCC	321507111024001	635619	32° 15' 6.9"	111° 2' 40.6"	2468	1/10/2012	232.1	V			1/24/2022	237.2	V			-5.1
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 35CCA	321514110531701	620140	32° 15' 14.8"	110° 53' 16.8"	2454	1/12/2012	233.5	V			1/3/2022	215.6	V			17.9
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 26BBB	321647110522201	620156	32° 16' 44.5"	110° 53' 27.4"	2464	1/12/2012	70.6	V			1/3/2022	68.5	V			2.1
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 20CCC	321647110563301	618705	32° 16' 47.8"	110° 56' 31.6"	2348.16	1/24/2012	150.46	VT			10/18/2021	134.07	VT			16.4
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 19DDA	321649110564001	618684	32° 16' 48.7"	110° 56' 38.3"	2344	1/12/2012	149.4	V			1/3/2022	130.9	V			14.8
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 19DDB2	321653110564801	618686	32° 16' 53.6"	110° 56' 48.4"	2339	1/12/2012	144.8	V			1/3/2022	130.9	V			13.9
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 26DCC	321604110526401	519317	32° 15' 59.7"	110° 52' 59.1"	2421	1/12/2012	82.6	V			1/3/2022	39.6	V			43.0
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 26DAB1	321612110524001	801394	32° 16' 9.2"	110° 52' 40"	2426	1/10/2012	22.7	V			1/24/2022	10.9	S			11.8
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 26CBAB2	321614110533901	519230	32° 16' 14.1"	110° 53' 28.9"	2411	1/12/2012	36.8	V			1/3/2022	36.8	V			28
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 30CAA1	321616110571001	620292	32° 16' 15.5"	110° 57' 10.6"	2357	1/12/2012	198.5	V			1/3/2022	173.1	V			15.4
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 30BBD	321635110572602	620294	32° 16' 33.2"	110° 57' 23.5"	2345	1/12/2012	175.1	V			1/3/2022	163.5	V			11.6
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 29ABD	321639110560401	616524	32° 16' 40.3"	110° 56' 3.												



Appendix 2. 10 Year Groundwater level change in Arizona - Water Years 2012 - 2022

BASIN	SUB-BASIN	CADASTRAL	IGWS SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2012	WL 2012	WL METHOD 2012	WL REMARK 2012	WL COMMENT 2012	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
VERDE RIVER BASIN	BIG CHINO	B-15-03 11DBB	3411211232201	569850	34° 41' 23.9"	112° 12' 20.9"	5060	3/15/2012	94.2	V			3/24/2022	84.9	V			-9.3
VERDE RIVER BASIN	BIG CHINO	B-15-02 31BBD	343827112304801	511301	34° 38' 25.6"	112° 30' 47.5"	5300	3/30/2012	195.5	V			3/23/2022	187	V			-8.5
VERDE RIVER BASIN	BIG CHINO	B-15-03 23ADC	343977112322001	526935	34° 39' 57.6"	112° 32' 19.6"	5085	3/15/2012	64.4	V			3/25/2022	60.9	V			-3.5
VERDE RIVER BASIN	BIG CHINO	B-15-03 24CCB	343938112320101	511633	34° 39' 37.8"	112° 31' 59.9"	5120	3/15/2012	96.8	V			3/25/2022	96.4	V			-0.4
VERDE RIVER BASIN	BIG CHINO	B-17-02 29AAC	344950112291101	574763	34° 49' 49.8"	112° 29' 10.5"	4465	3/16/2012	240.3	V			3/24/2022	241.9	S			-1.6
VERDE RIVER BASIN	BIG CHINO	B-15-03 14DAD	344038112321101	573968	34° 40' 37.7"	112° 32' 10.9"	5075	3/14/2012	59	V			3/25/2022	64.8	V			-5.8
VERDE RIVER BASIN	BIG CHINO	B-17-02 22ABB	345056112271601	606020	34° 50' 56.5"	112° 27' 15.9"	4375	3/13/2012	29.6	V			8/18/2022	33.6	S			-4.0
VERDE RIVER BASIN	BIG CHINO	B-17-02 21ACC	345050112282301	541015	34° 50' 30.1"	112° 28' 22.9"	4485	3/13/2012	119.3	V			3/25/2022	123.9	S			-4.6
VERDE RIVER BASIN	BIG CHINO	B-17-02 16DDCA	345256112261901	527679	34° 52' 56.4"	112° 26' 19.4"	4575	3/13/2012	325.8	V			2/28/2022	328	V			-2.2
VERDE RIVER BASIN	BIG CHINO	B-15-02 23AAA	344017112321101	589987	34° 40' 12.7"	112° 32' 12.9"	5038	3/15/2012	21.9	V			3/25/2022	24.3	V			-2.3
VERDE RIVER BASIN	BIG CHINO	B-17-02 14CCA	345109112264401	548995	34° 51' 9.4"	112° 36' 42.9"	4400	3/13/2012	96.1	V			3/25/2022	98.7	S			-2.6
VERDE RIVER BASIN	BIG CHINO	B-15-03 10DCD	344205112322901	569837	34° 42' 5.3"	112° 32' 29.4"	5075	3/15/2012	94.9	V			3/25/2022	101.9	V			-7.0
VERDE RIVER BASIN	BIG CHINO	B-16-03 17DAB	344664112354301	525910	34° 46' 3.9"	112° 35' 40.7"	4842	8/14/2012	109.7	VT			8/15/2022	122.3	V			-12.6
VERDE RIVER BASIN	BIG CHINO	B-17-02 15BAA	341227112291701	598951	35° 12' 26.3"	112° 29' 71.5"	5064	3/8/2012	965.2	V			2/28/2022	970.3	V			-5.1
VERDE RIVER BASIN	BIG CHINO	B-17-02 02CAA1	345314112263801	908192	34° 53' 13.7"	112° 26' 58.2"	4575	2/27/2012	323.3	V			3/22/2022	327.1	V			-3.8
VERDE RIVER BASIN	BIG CHINO	B-18-04 11AAC	345738112391501	200027	34° 57' 38.17"	112° 39' 14.98"	4615.7	2/6/2012	320.87	VT			10/14/2021	328.57	VT		VT07	-7.7
VERDE RIVER BASIN	BIG CHINO	B-20-05 34BCB	350423112471201	579656	35° 4' 23.3"	112° 47' 11.8"	4960	3/8/2012	165.8	V			3/2/2022	172.6	V			-6.8
VERDE RIVER BASIN	BIG CHINO	B-18-04 25AAA2	345524112374401	211839	34° 55' 24.29"	112° 37' 43.88"	4572.77	2/6/2012	262.53	VT			10/14/2021	269.87	VT		VT07	-7.3
VERDE RIVER BASIN	BIG CHINO	B-18-04 01ACA2	345842112380201	905773	34° 58' 42.12"	112° 38' 2.6"	4555.68	2/6/2012	158.15	VT			10/14/2021	162.26	VT			-4.1
VERDE RIVER BASIN	BIG CHINO	B-17-01 07DBB	345205112240601		34° 52' 4.3"	112° 24' 6.4"	4242	8/15/2012	42.7	S			8/17/2022	39.7	S			3.0
VERDE RIVER BASIN	VERDE CANYON	A-10-10 09OAC	34133811194401	631255	34° 13' 38.4"	111° 19' 46.9"	4905	11/14/2011	94.8	S			11/16/2021	64.9	V			29.9
VERDE RIVER BASIN	VERDE CANYON	A-10-10 08ABD	341347111205401	620874	34° 13' 46.3"	111° 20' 54"	4865	11/14/2011	61	S			11/16/2021	42.5	V			18.5
VERDE RIVER BASIN	VERDE CANYON	A-10-10 08CCD	34135611191901	514341	34° 13' 57.21"	111° 19' 19.75"	4917.63	2/7/2012	109.83	VT			2/7/2022	53.63	VT			56.2
VERDE RIVER BASIN	VERDE CANYON	A-10-10 08CCA	341408111212001	620875	34° 14' 8.6"	111° 21' 20.2"	4830	11/14/2011	34.1	S			11/16/2021	31.1	V			3.0
VERDE RIVER BASIN	VERDE CANYON	A-10-10 04D8A	34141811194901		34° 14' 18.3"	111° 19' 48.7"	4961	11/14/2011	197.5	V			11/16/2021	126	V			71.5
VERDE RIVER BASIN	VERDE CANYON	A-10-10 03BAD1	34143611190901	512430	34° 14' 36.5"	111° 18' 59.7"	4990	11/14/2011	201.4	V			11/16/2021	134.3	V			67.1
VERDE RIVER BASIN	VERDE CANYON	A-11-10 31DAC1	341504111214601	809394	34° 15' 5.3"	111° 21' 43.8"	5060	11/14/2011	193.6	V			11/15/2021	186.9	V			6.7
VERDE RIVER BASIN	VERDE CANYON	A-11-10 31ACD1	341518111201201	659591	34° 15' 14.3"	111° 20' 51.4"	5120	11/14/2011	209.1	V			11/15/2021	290.1	V			-9.6
VERDE RIVER BASIN	VERDE CANYON	A-11-10 27CCB	341547111192501	620877	34° 15' 46.7"	111° 19' 25.7"	5002	11/14/2011	186.3	V			11/15/2021	148.4	V			37.9
VERDE RIVER BASIN	VERDE CANYON	A-12-08 26DAD2	342344111280701	635775	34° 23' 41.5"	111° 28' 7.5"	5620	2/16/2012	95.5	V			2/22/2022	93	V			2.5
VERDE RIVER BASIN	VERDE CANYON	A-12-08 27BAC	342406111293901	570666	34° 24' 7.2"	111° 29' 47.5"	5961	11/14/2011	353.6	V			11/15/2021	342.1	V			11.5
VERDE RIVER BASIN	VERDE CANYON	A-12-08 25CDA	342477111293401	644149	34° 24' 26.8"	111° 29' 33.9"	5880	11/14/2011	131.3	V			11/15/2021	128.9	V			2.4
VERDE RIVER BASIN	VERDE CANYON	A-12-10 26CBB	342477111624101	641886	34° 23' 45.9"	111° 16' 35.9"	5590	3/6/2012	401.8	V			3/12/2022	413.3	V			-9.4
VERDE RIVER BASIN	VERDE CANYON	A-12-08 25DAD2	342408111270301		34° 24' 2"	111° 27' 3.3"	5559	11/14/2011	101.6	V			11/15/2021	104.3	V			-2.7
VERDE RIVER BASIN	VERDE CANYON	A-12-10 26CAA	342344111558801	521343	34° 23' 43.8"	111° 15' 58.6"	5455	3/6/2012	258.9	V			4/26/2022	272.3	V			-13.4
VERDE RIVER BASIN	VERDE CANYON	A-11-10 27CAA	341605111190301	518735	34° 16' 4.6"	111° 19' 3.4"	5040	11/14/2011	231.3	V			11/15/2021	206.6	V			24.7
VERDE RIVER BASIN	VERDE CANYON	A-10-10 04ABB	341442111200101	571659	34° 14' 42.36"	111° 20' 1.34"	4924.6	2/7/2012	156.68	VT			2/7/2022	87.2	VT			69.5
VERDE RIVER BASIN	VERDE CANYON	A-10-10 06DCD	341402111215101	569710	34° 14' 2.4"	111° 21' 50.89"	4778.22	2/7/2012	18.7	VT			2/3/2022	16.93	VT			1.8
VERDE RIVER BASIN	VERDE CANYON	A-11-10 32BBB	341535111213601	568987	34° 15' 35.24"	111° 21' 33.79"	5096	2/7/2012	250.55	VT			2/3/2022	231.55	VT			19.0
VERDE RIVER BASIN	VERDE VALLEY	A-13-06 21BBC	343028111413801	627339	34° 30' 27.2"	111° 41' 38.3"	4410	3/8/2012	339.1	V			4/29/2022	337.7	V			1.4
VERDE RIVER BASIN	VERDE VALLEY	A-13-06 17CAA2	343105111504601	686280	34° 31' 5"	111° 50' 46.7"	3055	3/5/2012	37.7	V			4/29/2022	35.4	S			2.3
VERDE RIVER BASIN	VERDE VALLEY	A-13-06 28CCD1	342859111492901	689970	34° 29' 0.17"	111° 49' 30.1"	3860	3/5/2012	133.8	V			4/29/2022	133	V			0.8
VERDE RIVER BASIN	VERDE VALLEY	A-13-06 29DBB	342914111441601	627333	34° 29' 14.3"	111° 44' 14.8"	3492	7/9/2012	302.5	V			5/4/2022	304.3	V			-1.8
VERDE RIVER BASIN	VERDE VALLEY	A-13-05 12CCC2	343134111465301	646829	34° 31' 34.4"	111° 46' 54.1"	3178	3/5/2012	18.7	S			4/26/2022	6.6	S			12.1
VERDE RIVER BASIN	VERDE VALLEY	A-14-04 11DAA1	343721111531301	630281	34° 37' 15.1"	111° 53' 16.6"	3200	3/6/2012	89	V			4/16/2022	91.3	S			-2.3
VERDE RIVER BASIN	VERDE VALLEY	A-14-06 09AAB	343731111452801	525310	34° 37' 34.51"	111° 45' 45.8"	3925	3/6/2012	87.1	V			4/19/2022	139.7	V			-52.6
VERDE RIVER BASIN	VERDE VALLEY	A-14-05 15CB2	343341111511201	609836	34° 33' 41.1"	111° 51' 12.5"	3138	3/6/2012	70.8	V			4/19/2022	71.4	V			-0.6
VERDE RIVER BASIN	VERDE VALLEY	A-15-06 21DCD	344019111424301	627282	34° 40' 18.2"	111° 42' 42.2"	3810	3/8/2012	31.7	V			5/19/2022	29.7	S			2.0
VERDE RIVER BASIN	VERDE VALLEY	A-15-04 21CBA2	344052111560601	631840	34° 40' 52.9"	111° 56' 5.4"	3225	3/7/2012	59.65	V			4/25/2022	59.75	V			-0.1
VERDE RIVER BASIN	VERDE VALLEY	A-15-05 20BAA	344105111503401	519065	34° 41' 5.7"	111° 50' 34.6"	3600	3/8/2012	274.1	V			4/25/2022	276.4	V			-2.3
VERDE RIVER BASIN	VERDE VALLEY	A-14-05 08CCD	343731111472301	525310	34° 37' 34.51"	111° 45' 45.8"	3925	3/6/2012	87.1	V			4/19/2022	85.9	V			1.1
VERDE RIVER BASIN	VERDE VALLEY	A-14-09 02CCB	343750111223101	519226	34° 37' 49.7"	111° 22' 30.9"	6791	7/17/2012	766.9	V			4/28/2022	770.6	V			-2.7
VERDE RIVER BASIN	VERDE VALLEY	A-14-05 04AAA	343833111490101	806134	34° 38' 33.6"	111° 49' 0.7"	3480	3/8/2012	327.8	V			4/19/2022	324.3	V			3.5
VERDE RIVER BASIN	VERDE VALLEY	A-15-04 02CCB4	344312111540801	605684	34° 43' 11.4"	111° 54' 8.3"	3418	3/7/2012	97.45	V			4/20/2022	98	V			-0.6
VERDE RIVER BASIN	VERDE VALLEY	A-16-03 36CCD	344359111591101	614257	34° 44' 1.21"	111° 59' 11"	3428.04	2/6/2012	84.46	VT			2/1/2022	92.96	VT			-8.5
VERDE RIVER BASIN	VERDE VALLEY	A-15-03 12ADB1	344250111581801	638099	34° 42' 49.3"	111° 58' 32.7"	3265	3/7/2012	41.2	V			4/1/2022	41.3	V			-0.1
VERDE RIVER BASIN	VERDE VALLEY	A-15-03 12ADB3	344250111584101	802787	34° 42' 50.1"	111° 58' 39.9"	3265	3/7/2012	42.6	V			4/20/2022	45.3	V			-2.7
VERDE RIVER BASIN	VERDE VALLEY	A-15-03 11ABA	344258111595501	613162	34° 42' 58.3"	111° 59' 51.5"	3310	3/7/2012	65.9	V			4/20/2022	62	V			3.9
VERDE RIVER BASIN	VERDE VALLEY	A-15-03 01DCD2	344304111585601	509579	34° 43' 4"	111° 58' 55.2"	3270	3/7/2012	59.4	V			4/20/2022	62.8	V			-3.4
VERDE RIVER BASIN	VERDE VALLEY	A-15-04 04DCD1	344307111552701	621454	34° 43' 03.154"	111° 45' 27.8"	3360	3/7/2012	40.3	V			4/20/2022	39.5	V			0.8
VERDE RIVER BASIN	VERDE VALLEY	A-16-03 19DBD	344556112040501	525162	34° 45' 56.18"	112° 4' 5.06"	3660	3/7/2012	278.8	V			4/21/2022	301.5	V			-25.4
VERDE RIVER BASIN	VERDE VALLEY	A-16-03 34ADC1	344428112044801	609079	34° 44' 27.1"	112° 0' 13.3"	3340	3/7/2012	67.8	V								



## **Appendix 3**

### **1-Year Groundwater level change in Arizona – Water Years 2021 – 2022**



Appendix 3. 1 Year Groundwater level change in Arizona - Water Years 2021 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2021	WL 2021	WL METHOD 2021	WL REMARK 2021	WL COMMENT 2021	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
AGUA FRIA BASIN	AGUA FRIA	A-08-02 04DCD1	340338112092701		34° 3' 37.7"	112° 9' 28.2"	1943	10/19/2020	25.05	S			11/4/2021	25.15	S			-0.1
AGUA FRIA BASIN	AGUA FRIA	A-09H-02 23CCC	341181121365801	635573	34° 11' 13.5"	112° 8' 2.47"	3395.32	10/27/2020	479.15	VT		BLUE 500 1090	10/29/2021	480.59	VT			-1.4
AGUA FRIA BASIN	AGUA FRIA	A-11-02 20BAB	34193112103001	614152	34° 19' 32.1"	112° 10' 28.2"	3920	10/19/2020	77	S			11/4/2021	74	V			3.0
AGUA FRIA BASIN	AGUA FRIA	A-11-02 14CAA	341959112071601	628102	34° 19' 59.5"	112° 7' 15.9"	3805	10/19/2020	69.5	S			11/4/2021	68.1	V			1.4
AGUA FRIA BASIN	AGUA FRIA	A-10-02 17DBA	341440112095501	642335	34° 14' 41.1"	112° 9' 55"	2925	10/19/2020	8.4	S			11/4/2021	10.5	S			-2.1
AGUA FRIA BASIN	AGUA FRIA	A-12-01 27DBA2	342331112142501	618019	34° 23' 30.32"	112° 14' 24.85"	4483.76	10/27/2020	15.15	VT			10/15/2021	11.83	VT			3.3
AGUA FRIA BASIN	AGUA FRIA	A-12-01 26BAB1	342353112134501	802822	34° 23' 52.8"	112° 13' 44.8"	4355	10/19/2020	21.2	S			11/4/2021	23	S			-1.8
ARAVAIPA CANYON BASIN	ARAVAIPA CANYON	D-07-20 21BDB	324902110184901	613297	32° 48' 47.6"	110° 18' 29.5"	3515	11/3/2020	65.9	V			11/4/2021	60	V			5.9
BIG SANDY BASIN	FORT ROCK	B-21-10 17CCD1	351153113214301	610506	35° 11' 57.5"	113° 21' 39.2"	5058	10/30/2020	126.2	V			10/22/2021	126.8	S			-0.6
BIG SANDY BASIN	FORT ROCK	B-21-09 15AAA	351241113121601	608301	35° 12' 41.2"	113° 12' 15.5"	5231	10/30/2020	358.3	V			10/21/2021	359	V			-0.7
BIG SANDY BASIN	FORT ROCK	B-22-08 15CCB	351712113065401		35° 17' 9.9"	113° 6' 53.9"	5510	10/30/2020	491.7	V			11/1/2021	491.5	V			0.2
BIG SANDY BASIN	WIKIEUP	B-21-13 31DAA	340923113413401	641875	35° 9' 28.8"	113° 41' 34"	3641	10/22/2020	519.9	V			10/21/2021	520.2	V			-0.3
BIG SANDY BASIN	WIKIEUP	B-16-13 36CCC	344040113351001		34° 40' 38.7"	113° 34' 46"	1877	10/19/2020	16	S			10/21/2021	16.2	S			-0.2
BIG SANDY BASIN	WIKIEUP	B-16-13 21DDDD2	344220113364901	642249	34° 42' 23.3"	113° 37' 0.9"	2040	10/19/2020	100.5	S			10/21/2021	100.6	S			-0.1
BIG SANDY BASIN	WIKIEUP	B-16H-13 33DAB	344613113370901	573406	34° 46' 10.3"	113° 37' 11.1"	2078	10/19/2020	38.4	S			10/22/2021	39.7	S			-1.3
BIG SANDY BASIN	WIKIEUP	B-17-13 31DAB2	344839113412801	642234	34° 48' 42.1"	113° 41' 26.6"	2715	10/23/2020	106.1	S			10/22/2021	123.7	S			-17.6
BIG SANDY BASIN	WIKIEUP	B-18-13 34CCD	345332113390001	614838	34° 53' 30.9"	113° 38' 50.5"	2479	10/19/2020	49.9	S	P	LIGHT BREEZE	10/21/2021	49.5	S	P		0.4
BIG SANDY BASIN	WIKIEUP	B-19-13 19DAA1	350049113411401	637441	35° 0' 49.2"	113° 41' 14.8"	3065	10/19/2020	151.9	S			10/22/2021	152.1	S			-0.2
BIG SANDY BASIN	WIKIEUP	B-20-13 15BAA	350719113384201	608169	35° 7' 20.6"	113° 38' 42.4"	3300	10/22/2020	165.2	S			10/18/2021	166.1	S			-0.9
BIG SANDY BASIN	WIKIEUP	B-21-13 24BCD	351119113370801	614875	35° 11' 20.2"	113° 37' 7.9"	3630	10/22/2020	371.9	V			10/18/2021	371.7	V			0.2
BIG SANDY BASIN	WIKIEUP	B-22-13 34DAA	351447113382601		35° 14' 47.1"	113° 38' 25.7"	3852	10/22/2020	535.6	V			10/18/2021	534.7	V			0.9
BILL WILLIAMS BASIN	ALAMO RESERVOIR	B-09-09 04CBC	340852113122501	600587	34° 8' 52.1"	113° 12' 25.1"	2360	10/26/2020	632.2	V			10/27/2021	632.8	V			-0.6
BILL WILLIAMS BASIN	ALAMO RESERVOIR	B-11-10 31CBA	341508113203801	896687	34° 15' 7.2"	113° 20' 40.1"	2162	10/26/2020	640.1	V			10/27/2021	639.1	V			1.0
BILL WILLIAMS BASIN	ALAMO RESERVOIR	B-11-13 31BDB1	341531113265801	614664	34° 15' 31"	113° 26' 58"	1350	10/26/2020	51.5	S			10/27/2021	51.8	S			-0.3
BILL WILLIAMS BASIN	ALAMO RESERVOIR	B-13-13 07DDB1	342836113391301	644225	34° 28' 37.8"	113° 39' 12.4"	1756	10/23/2020	139.8	V			11/1/2021	138.7	V			1.1
BILL WILLIAMS BASIN	CLARA PEAK	B-11-16 32CDA	341454113565501	619413	34° 14' 54.2"	113° 56' 54.8"	615	10/28/2020	19.7	S			10/26/2021	21	V			-1.3
BILL WILLIAMS BASIN	CLARA PEAK	B-11-16 29AAA	341624113562401	619426	34° 16' 27.3"	113° 56' 23.6"	695	10/28/2020	97.3	V			10/26/2021	100.1	V			-2.8
BILL WILLIAMS BASIN	SANTA MARIA	B-12-06 W31BAD	342044112554101	613951	34° 20' 41.8"	112° 55' 40.4"	3470	10/22/2020	90.3	S			11/5/2021	92.4	V			-2.1
BILL WILLIAMS BASIN	SANTA MARIA	B-11-08 20ADB	341707113063901	614653	34° 17' 9.6"	113° 6' 54.9"	2600	10/19/2020	78.8	S			10/22/2021	77.9	S			0.9
BILL WILLIAMS BASIN	SANTA MARIA	B-13-09 17BCC	342801113134801	611613	34° 28' 1.2"	113° 13' 48.1"	2590	10/19/2020	50.8	S			10/21/2021	53.7	S			-2.9
BILL WILLIAMS BASIN	SANTA MARIA	B-13-06 09DCD	342828112531801	625722	34° 28' 25.1"	112° 53' 14.2"	3500	10/22/2020	24.4	S			11/5/2021	20.1	S			4.3
BILL WILLIAMS BASIN	SKULL VALLEY	B-12-04 06ABB1	342444112444001	631578	34° 24' 57.8"	112° 42' 36.7"	3920	10/21/2020	79.1	S			11/5/2021	79.1	V			0.0
BILL WILLIAMS BASIN	SKULL VALLEY	B-13-04 26BCC1 UNSV	342626112391401	613867	34° 26' 24.9"	112° 39' 14.6"	4350	2/4/2021	248.6	V			2/15/2022	249	V			-0.4
BILL WILLIAMS BASIN	SKULL VALLEY	B-13-04 27AB UNSPZ1	342639112394201	613860	34° 26' 39.5"	112° 39' 40.4"	4366	2/4/2021	191.6	V			2/15/2022	192.5	V			-0.9
BILL WILLIAMS BASIN	SKULL VALLEY	B-13-04 27AB UNSPZ2	342639112394202	613860	34° 26' 39.5"	112° 39' 40.4"	4360	2/4/2021	249.2	V			2/15/2022	248.4	V			0.8
BILL WILLIAMS BASIN	SKULL VALLEY	B-13-04 21DB UNSPZ1	342709112404501	613853	34° 27' 10.5"	112° 40' 44.6"	4260	10/21/2020	107.7	S			11/8/2021	107.1	S			0.6
BILL WILLIAMS BASIN	SKULL VALLEY	B-13-04 21DB UNSPZ2	342709112404502	613853	34° 27' 10.5"	112° 40' 44.6"	4260	2/4/2021	112.8	S			2/15/2022	112.5	S			0.3
BILL WILLIAMS BASIN	SKULL VALLEY	B-12-03 06ACC	342444112363401	502258	34° 24' 43.9"	112° 36' 34"	4650	10/21/2020	470.6	V			11/8/2021	492.7	V			-22.1
BILL WILLIAMS BASIN	SKULL VALLEY	B-12-04 06ABA2	342458112423801	631575	34° 24' 57.7"	112° 42' 38.2"	3920	10/21/2020	75.1	S			11/5/2021	77.5	V			-2.4
BUTLER VALLEY BASIN	BUTLER VALLEY	B-07-15 11DDD	335733113470301	614539	33° 57' 29.3"	113° 47' 0.1"	1442	10/29/2020	306.3	V			10/28/2021	318.4	V			-12.1
BUTLER VALLEY BASIN	BUTLER VALLEY	B-07-15 11AAB	335823113471501	614536	33° 58' 19.8"	113° 47' 13"	1423	10/28/2020	253.5	V	S	PUMP OFF 12HRS	10/27/2021	258.4	V	S		-4.9
BUTLER VALLEY BASIN	BUTLER VALLEY	B-07-15 16DCB	335635113493001		33° 56' 35.6"	113° 49' 32.2"	1346	10/27/2020	118.7	S			10/26/2021	119	V			-0.3
BUTLER VALLEY BASIN	BUTLER VALLEY	B-07-15 13DCB	335648113462101	614544	33° 56' 48"	113° 46' 26.3"	1490	10/29/2020	361.4	V			10/28/2021	370.6	V			-9.2
BUTLER VALLEY BASIN	BUTLER VALLEY	B-07-15 15AAD1	335718113480301	614546	33° 57' 17.8"	113° 48' 0.6"	1405	10/29/2020	271.1	V			10/27/2021	273.7	V			-2.6
BUTLER VALLEY BASIN	BUTLER VALLEY	B-08-14 29DCD	340604113443601	807275	34° 0' 4.9"	113° 44' 35.9"	1487	10/28/2020	236.4	V			10/27/2021	236.6	V			-0.2
BUTLER VALLEY BASIN	BUTLER VALLEY	B-08-14 23DD1	340650113404701	614576	34° 0' 57.1"	113° 40' 45.4"	1618	10/28/2020	354.1	V			10/27/2021	356.2	V			-2.1
BUTLER VALLEY BASIN	BUTLER VALLEY	B-08-14 20DAB	340122113440301	633680	34° 1' 22.3"	113° 44' 3.1"	1522	10/28/2020	265.3	V			10/27/2021	267	V			-0.7
BUTLER VALLEY BASIN	BUTLER VALLEY	B-08-13 04DDDD1	340333113363701	614575	34° 3' 33.4"	113° 36' 33.9"	1790	10/26/2020	515.5	V			10/27/2021	516	V			-0.5
CIENEGA CREEK BASIN	CIENEGA CREEK	D-22-15 12AAD2	313225110453301	809433	31° 32' 23.4"	110° 45' 32.7"	4041	1/28/2021	15	S			1/27/2022	12.5	S			2.5
CIENEGA CREEK BASIN	CIENEGA CREEK	D-20-17 25DDC	313933110332801	632894	31° 39' 33.4"	110° 33' 27.6"	4838	1/27/2021	124.2	V			1/26/2022	124	V			0.2
CIENEGA CREEK BASIN	CIENEGA CREEK	D-21-16 09ABA	313748110424501	624881	31° 37' 46.9"	110° 42' 43.5"	4420	1/28/2021	46.5	S			1/26/2022	44.2	V			2.3
CIENEGA CREEK BASIN	CIENEGA CREEK	D-20-18 17BCB	314150110320401	618570	31° 41' 50.7"	110° 32' 4.4"	4810	1/27/2021	177.8	V			1/26/2022	176.6	V			1.2
CIENEGA CREEK BASIN	CIENEGA CREEK	D-20-17 24CDD	314026110334901	650922	31° 40' 26.5"	110° 33' 47.1"	4810	1/27/2021	156	V			1/26/2022	156	V			0.0
CIENEGA CREEK BASIN	CIENEGA CREEK	D-20-17 02CCC	314301110350901	608620	31° 43' 0.9"	110° 35' 12.7"	4610	1/27/2021	44.5	S			1/25/2022	42.3	V			2.2
CIENEGA CREEK BASIN	CIENEGA CREEK	D-19-16 04DBA	314834110423701	504726	31° 48' 36"	110° 42' 38.6"	5115	2/24/2021	408.7	V			2/23/2022	409	V			-0.3
CIENEGA CREEK BASIN	CIENEGA CREEK	D-19-17 03ADB	314849110353901	608619	31° 48' 48.29"	110° 35' 27.76"	4345.13	8/26/2021	-0.7	S	F		8/24/2022	0	O	F		-0.7
CIENEGA CREEK BASIN	CIENEGA CREEK	D-18-17 36CCB	314916110340401	634356	31° 49' 17.6"	110° 34' 6.4"	4442	1/29/2021	139.6	V	P		1/24/2022	138.1	V	P		1.5
CIENEGA CREEK BASIN	CIENEGA CREEK	D-18-17 34BDA	314936110355301	634334	31° 49' 38.53"	110° 35' 50.84"	4370	2/24/2021	64.4	S			2/23/2022	59.6	S			4.8
CIENEGA CREEK BASIN	CIENEGA CREEK	D-18-17 33ADA	314937110362301	616221	31° 49' 37.8"	110° 36' 22.5"	4438	1/26/2021	97.7	V			1/14/2022	94.8	V			2.9
CIENEGA CREEK BASIN	CIENEGA CREEK	D-19-17 10BCD	314756110360601	608606	31° 47' 52.63"	110° 36' 0.06"	4417.93	2/24/2021	37	S			2/23/2022	35.5	S			1.5
CIENEGA CREEK BASIN	CIENEGA CREEK	D-19-17 08BCB	314759110381001	634285	31° 47' 58.3"	110° 38' 10"	4592	1/26/2021	138.8	S			1/25/2022	141.2	S			-2.4



Appendix 3. 1 Year Groundwater level change in Arizona - Water Years 2021 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2021	WL 2021	WL METHOD 2021	WL REMARK 2021	WL COMMENT 2021	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
GILA BEND BASIN	GILA BEND	C04-07 34CDC	330143112582201	628201	33° 1' 39.6"	112° 58' 22.4"	580	1/27/2021	47.5	S			2/16/2022	51.8	S			-4.3
GILA BEND BASIN	GILA BEND	C04-04 09BAA1	330604112403101		33° 6' 3.9"	112° 40' 29"	707	10/29/2021	270.9	V	K	NEARBY PUMPING @ 09BAA3	11/12/2021	253.4	V			26.5
GILA BEND BASIN	GILA BEND	C02-04 26BDA	331337112383401		33° 13' 35.9"	112° 38' 33.2"	900	10/26/2020	386.1	V			11/10/2021	401.7	V			-15.6
GILA BEND BASIN	GILA BEND	C03-05 02CBB	331143112450801		33° 11' 47"	112° 45' 8.7"	730	10/26/2020	206.8	V			11/12/2021	228.7	V			-21.9
GILA BEND BASIN	GILA BEND	C02-04 32ADA	331246112410801	605994	33° 12' 50.4"	112° 41' 3.5"	822	10/26/2020	382.1	V			11/10/2021	390.9	V			-8.8
GILA BEND BASIN	GILA BEND	C06-07 16BDD	325421112585601	906803	32° 54' 20.9"	112° 58' 56.3"	727	10/30/2020	105	V			11/18/2021	106	S			-1.0
GRAND WASH BASIN	GRAND WASH	B-36-15 25DCD	362908113505501	801704	36° 29' 7.8"	113° 50' 57"	2739	10/28/2020	507.7	V			10/20/2021	507.5	V			0.2
GRAND WASH BASIN	GRAND WASH	B-37-15 18DBC	363620113565501		36° 36' 19"	113° 56' 54.8"	3570	10/28/2020	9.1	V			10/20/2021	20.3	S			-11.2
HARQUAHALA BASIN	HARQUAHALA INA	C-01-08 14DDD	332005113022801		33° 20' 3.4"	113° 2' 23.6"	991	10/28/2020	272.3	S			10/26/2021	281.3	V			-9.0
HARQUAHALA BASIN	HARQUAHALA INA	C-01-08 34BCD	331753113041001	634099	33° 17' 51.6"	113° 4' 16.5"	1054	10/26/2020	224.3	V			10/26/2021	225	V			-0.7
HARQUAHALA BASIN	HARQUAHALA INA	C-01-08 06CCC2	332148113073401	606835	33° 21' 47.13"	113° 7' 28.83"	1091.2	2/4/2021	440.1	VT		TAKEN AT 12:45 WITH BLACK 500	2/16/2022	448.69	VT		XD HOLE MP=0.0 FT	-8.6
HARQUAHALA BASIN	HARQUAHALA INA	C-01-08 04BDA1	332216113050501		33° 22' 18.8"	113° 5' 1.2"	1065	10/28/2020	399.2	V			10/26/2021	408.3	V			-9.1
HARQUAHALA BASIN	HARQUAHALA INA	C-01-09 18ACB	332040113131401	625970	33° 20' 41.2"	113° 13' 11.4"	1305	10/28/2020	653.3	V			10/26/2021	661.4	V			-8.1
HARQUAHALA BASIN	HARQUAHALA INA	B-01-08 19BCC	332450113073501	600200	33° 24' 50.1"	113° 7' 34.8"	1093	10/27/2020	32.2	S			10/25/2021	30.2	V			2.0
HARQUAHALA BASIN	HARQUAHALA INA	B-02-09 35CBB	332819113094101	803520	33° 28' 17.9"	113° 9' 38.5"	1142	10/27/2020	20.2	S			10/25/2021	22.6	S			-2.4
HARQUAHALA BASIN	HARQUAHALA INA	B-02-09 34DBB	332820113101201		33° 28' 17.7"	113° 10' 10.5"	1149	10/27/2020	490.9	V	K		10/25/2021	537	V	K		-46.1
HARQUAHALA BASIN	HARQUAHALA INA	B-01-09 10BBB	332658113104001	800152	33° 26' 57.6"	113° 10' 36.7"	1148	10/27/2020	429.3	V			10/25/2021	435	V			-5.7
HARQUAHALA BASIN	HARQUAHALA INA	B-01-09 05ABC	332743113121801	805455	33° 27' 42.5"	113° 12' 15.1"	1172	10/27/2020	83.5	V			10/25/2021	81.8	V			1.7
HARQUAHALA BASIN	HARQUAHALA INA	B-02-09 07ABB	333212113131801	627169	33° 32' 12.5"	113° 13' 17.7"	1260	10/26/2020	303.3	V			10/25/2021	304.8	V			-1.5
HARQUAHALA BASIN	HARQUAHALA INA	B-02-09 23ABB	333027113091001	611131	33° 30' 28.5"	113° 9' 8.1"	1169	10/27/2020	76.9	S			10/25/2021	76.7	S			0.2
HARQUAHALA BASIN	HARQUAHALA INA	B-02-10 17DCA	333035113181701	621523	33° 30' 38.2"	113° 18' 19.5"	1295	10/27/2020	360.2	V			11/16/2021	365.5	V			-3.3
HARQUAHALA BASIN	HARQUAHALA INA	B-02-10 05ABB	333301113182601	648614	33° 33' 0.35"	113° 18' 27.92"	1330.37	10/13/2020	384.69	VT		TAKEN AT 9:00 WITH BLACK 500	10/22/2021	387.12	VT			-2.4
HARQUAHALA BASIN	HARQUAHALA INA	B-02-09 03BBB	333305113104301	808833	33° 33' 5.2"	113° 10' 41.6"	1261	10/26/2020	574.7	V			10/27/2021	581.7	V			-7.0
HARQUAHALA BASIN	HARQUAHALA INA	B-03-13 28ADC	333425113454901	603145	33° 34' 27"	113° 35' 49.3"	1336	10/30/2020	316.8	V			10/25/2021	317	V			0.2
HARQUAHALA BASIN	HARQUAHALA INA	B-03-11 01BCC	333802113210301	520474	33° 37' 57.7"	113° 21' 4.4"	1486	10/26/2020	511.1	V			10/27/2021	513.2	V			-2.1
HARQUAHALA BASIN	HARQUAHALA INA	B-04-09 30AAC	334000113130301	612687	33° 39' 56.5"	113° 12' 59.1"	1765	10/26/2020	328.5	V			10/27/2021	327.9	V			0.6
HARQUAHALA BASIN	HARQUAHALA INA	B-04-12 04BBD	334326113303401		33° 43' 18.9"	113° 30' 27.4"	1663.8	10/29/2020	496.2	V			10/27/2021	482.8	V			13.4
HARQUAHALA BASIN	HARQUAHALA INA	B-01-09 24DBB	332449113080901	635439	33° 24' 49"	113° 8' 6.7"	1100	10/27/2020	191.9	V			10/25/2021	198.7	V			-6.8
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-26-17 33CBB	353549114064801	223728	35° 35' 48.8"	114° 6' 47.8"	2997	1/21/2021	502.74	VT			2/28/2022	502.5	V			0.2
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-24-16 16AAA	352816113583301	908213	35° 28' 16.4"	113° 58' 33"	2937	2/25/2021	452.9	VT			2/18/2022	453.7	V			-0.8
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-22-16 03CBB	351907113582801	805941	35° 19' 8.5"	113° 58' 25.8"	3321	10/22/2020	592.1	V			10/18/2021	597.5	V			-5.4
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-23-15 30CBB	352052113551801	606421	35° 20' 52.7"	113° 55' 18.2"	3153	10/22/2020	378.8	V			10/18/2021	379.1	V			-0.3
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-23-15 25BBC	352108113500201		35° 21' 6.61"	113° 50' 1.31"	3790	10/19/2020	957.2	V			10/18/2021	956.9	V			0.3
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-22-16 28BDA	351554113590701	612659	35° 15' 52.97"	113° 59' 6.94"	3300.13	10/20/2020	598.41	VT	S	BLACK 1500 17:30	10/7/2021	601.09	VT	S		-2.7
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-25-15 29CCC	353103113550201	606907	35° 31' 2.1"	113° 55' 2.4"	2942	10/22/2020	438.9	V			10/19/2021	440.6	V			-1.7
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-25-16 30CDA	353105114021001	809833	35° 31' 9.5"	114° 2' 4.4"	2945	10/21/2020	446	V			10/21/2021	447.6	V			-1.6
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-26-17 35AAA	353610114033501	600500	35° 36' 12.6"	114° 3' 39.3"	2768	10/21/2020	275.9	V			10/21/2021	275.7	V			0.2
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-26-18 03AAA1	354036114110601	641124	35° 40' 35"	114° 11' 6"	3300	10/21/2020	556.9	V			10/19/2021	556.3	V			0.6
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-27-16 33BAA	354130113595601	800970	35° 41' 27.6"	113° 59' 53.9"	2794	10/21/2020	348.7	V			10/19/2021	348.9	V			-0.2
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-27-17 23CAC	354238114042201	640651	35° 42' 38.6"	114° 4' 19"	2765	10/21/2020	363.8	V			10/19/2021	365.4	V			-1.6
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-23-15 04DDD	352400113521401	624997	35° 24' 0.9"	113° 52' 13.4"	3172	10/22/2020	449.9	V			10/18/2021	450.1	V			-0.2
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-24-14 35ADA	352518113454001		35° 25' 26.12"	113° 45' 49.5"	3374.85	10/21/2020	551.96	VT		1500 BLACK 09:30	10/7/2021	553.51	VT			-1.6
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-24-14 28CAD	352555113462001	624981	35° 25' 58.78"	113° 46' 18.93"	3353.65	10/21/2020	546.8	V			10/18/2021	552.1	V			-5.3
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-24-16 01DDD1	352910111553001	619553	35° 29' 10.8"	113° 55' 20.9"	2961	10/22/2020	455.3	V			10/19/2021	453.2	V			2.1
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-28-17 31CCC1	354552114085901	805894	35° 45' 50.6"	114° 8' 55.8"	3010	10/21/2020	652.8	V			10/19/2021	654.4	V			-1.6
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-24-15 01BAC	352951113493901	575024	35° 29' 50.9"	113° 49' 39"	3135	10/22/2020	620	V			10/19/2021	621	V			-1.8
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-28-17 31CCC2	354551114085401	208802	35° 45' 50.74"	114° 8' 54.6"	3004.87	2/18/2021	654.26	VT		BLACK 1500 13:30	2/1/2022	654.7	VT			-0.4
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-24-16 26ABD	352624113564601	558814	35° 26' 23.6"	113° 56' 46.5"	3026	10/22/2020	540.2	V			10/21/2021	539.9	V			0.3
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-28-18 25BAA	354734114093301	212227	35° 47' 33.5"	114° 9' 33.4"	2928	10/21/2020	610.1	V			10/19/2021	610.4	V			-0.3
HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	B-29-18 25BCA	355231114101601	212231	35° 52' 31.4"	114° 10' 16.3"	2520	10/21/2020	411.7	V			10/19/2021	412.1	V			-0.4
KANAB PLATEAU BASIN	KANAB PLATEAU	B-39-02 20CDD	364540112315501	805803	36° 45' 33.7"	112° 31' 56.5"	5272	10/26/2020	610.4	V			10/18/2021	608.7	V			1.7
KANAB PLATEAU BASIN	KANAB PLATEAU	B-39-01 18DDB	364632112261001	637621	36° 46' 28.6"	112° 26' 4.5"	5585	10/26/2020	483	V			10/18/2021	483.4	V			-0.4
KANAB PLATEAU BASIN	KANAB PLATEAU	B-40-04 06AAC	365403112452801		36° 54' 3.6"	112° 45' 25.8"	5140	10/27/2020	94.1	V			10/19/2021	89.7	S			4.4
LAKE MOHAVE BASIN	LAKE MOHAVE	B-18-21 05CAC	345824114321901	510925	34° 58' 23.3"	114° 32' 20.8"	801	10/21/2020	340	V			11/2/2021	339.7	V			0.3
LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	A-17-20 26DBC	345023110111401	632990	34° 50' 21.54"	110° 11' 11.04"	5361.75	10/28/2020	309.04	VT		BLUE 500 10:00	10/27/2021	308.91	VT		VT07	0.1
LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	A-18-19 23DBD	345635110173801		34° 56' 32.2"	110° 17' 21.6"	5030	10/21/2020	46.5	S			10/18/2021	46.3	V			0.2
LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	A-18-18 34DAB	345452110245401	808212	34° 54' 51.8"	110° 24' 53.4"	4968	2/3/2021	15.7	S			2/7/2022	15.5	S			0.2
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 09ACC1	340618109550401	605035	34° 6' 19"	109° 55' 4.1"	7150	10/20/2020	87	V			10/18/2021	67.4	V			19.6
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 09ACC2	340618109550402	605048	34° 6' 18.6"	109° 55' 3.8"	7150	10/20/2020	73	V			10/18/2021	67.7	V			5.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 10BAA	340638109541501	606182	34° 6' 37.2"	109° 54' 14.8"	7179	4/20/2021	108.1	V			4/21/2022	112.7	V			-4.6
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-07-30 14BDD	340010109090101	802842	34° 0' 6.6"	109° 8												



Appendix 3. 1 Year Groundwater level change in Arizona - Water Years 2021 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2021	WL 2021	WL METHOD 2021	WL REMARK 2021	WL COMMENT 2021	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-23-08 21ABA	352214111324601	649813	33° 22' 14.71"	111° 32' 46.42"	6923.25	10/20/2021	1959.5	V			10/19/2021	1959.2	V			0.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-20-07 25DB1	354541111361701	533599	33° 4' 54.54"	111° 36' 13.34"	164.5	10/19/2021	164.5	S			10/19/2021	169.3	S			-4.8
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-12-17 32AAD	342356110325601	579785	34° 23' 55.9"	110° 32' 56.1"	6575	10/20/2020	500.8	V			10/18/2021	501.1	V			-0.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-22 25DD2	340827109571701	574627	34° 8' 27.8"	109° 57' 17.8"	6825	4/20/2021	220.9	V			10/18/2021	215.6	V		R	5.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-15-18 29CBR	343946110275401	600439	34° 39' 45.3"	110° 27' 53.7"	5919	10/20/2020	574.8	V			10/21/2021	571.9	V			2.9
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-17-23 35DDA	344929109514901	506605	34° 49' 28.8"	109° 51' 51.8"	5611	10/22/2020	308.5	V			10/20/2021	309.9	V			-1.4
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-20-07 03ACA	350848111381701	559571	35° 8' 46.05"	111° 38' 14.43"	6914.66	10/27/2020	927.38	VT		BLACK 1500 1500 SPOTTY MEASUREMENT. NO RESET.	10/28/2021	927.72	VT			-0.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-17-24 09ABD	345333109474501	506603	34° 53' 33.47"	109° 47' 44.28"	5595.72	10/28/2020	265.2	VT		BLUE 500 1100	10/27/2021	265.53	VT			-0.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-14-23 04CBA	343816109550401	200197	34° 38' 15.58"	109° 55' 4.06"	5493.25	10/28/2020	172.09	VT		BLUE 500 1500	10/27/2021	172.09	VT			0.0
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-22 23CAA	340941109585601	609725	34° 9' 41.4"	109° 58' 56.1"	6719	10/21/2020	33.3	V			10/18/2021	31.9	V			1.4
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-22 25ACA2	340859109573701	593730	34° 8' 59"	109° 57' 37.1"	6812	10/21/2020	152.2	V			10/19/2021	166.8	V			-14.6
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-23 35AAA2	340820109582401	590483	34° 8' 20.2"	109° 58' 24.4"	6720	10/21/2020	68.1	V			10/19/2021	68.7	V			-0.6
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-22 26BCB	340901109591601	601140	34° 9' 0.5"	109° 59' 16.5"	6715	10/20/2020	69	V			10/19/2021	67.6	V			1.4
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 06BDD	340709109572001	578532	34° 7' 8.9"	109° 57' 19.7"	6937	10/21/2020	267	V			10/19/2021	271.1	V			-4.1
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 09DAA	340614109544501	513936	34° 6' 13.4"	109° 54' 45.2"	7202	10/20/2020	148.9	S			10/18/2021	138.1	S			10.8
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 10CBB	340609109544001	569560	34° 6' 10.1"	109° 54' 39.2"	7210	4/20/2021	367.9	V			10/18/2021	376.7	V			-8.8
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 10DAA1	340614109534101	563506	34° 6' 13.5"	109° 53' 41.5"	7238	10/21/2020	100.9	V			10/19/2021	101.2	V			-0.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 10DAA2	340611109533801	565161	34° 6' 11.6"	109° 53' 37.9"	7255	10/21/2020	100.4	V			10/19/2021	110	V			-9.6
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 03CCB2	340651109543901	573600	34° 6' 51.2"	109° 54' 39.1"	7175	10/22/2020	118.1	V			10/20/2021	147.8	V			-29.7
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 10BAD3	340630109541301	529522	34° 6' 30"	109° 54' 13"	7190	4/20/2021	184.5	V			10/20/2021	164.2	V			20.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 11ABC2	340630109530001		34° 6' 29.9"	109° 53' 0.5"	7265	10/21/2020	98.6	V			10/20/2021	106.1	V			-7.5
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 11ABD	340628109525301		34° 6' 28.1"	109° 52' 52.9"	7281	10/21/2020	117	V			10/20/2021	119.3	V			-2.3
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 01DBC	340655109515901	559106	34° 6' 55.3"	109° 51' 59.2"	7318	10/21/2020	226	V			10/20/2021	221.5	V			4.5
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-08-23 05BAD	340723109561801	905200	34° 7' 21.8"	109° 56' 18.5"	6930	10/21/2020	101.2	V			10/19/2021	99.4	V			1.8
LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	A-09-22 26ADB2	340903109582602		34° 9' 2.7"	109° 58' 26.5"	6742	10/20/2020	26.3	V			10/19/2021	28.5	V			-2.2
LOWER GILA BASIN	CHILD'S VALLEY	C-11-06 24BDA1	322726112502001	600485	32° 27' 27.2"	112° 50' 20.3"	1420	11/3/2020	668.4	V			10/27/2021	667.2	V			1.2
LOWER GILA BASIN	WELLTON - MOHAWK	C-09-19 04DAA	324014114123601	609429	32° 40' 14.1"	114° 12' 35.2"	208.1	10/29/2020	13.9	S			10/26/2021	13.5	S			0.4
LOWER GILA BASIN	WELLTON - MOHAWK	C-09-16 06BBC	324037113570401	516372	32° 40' 37.5"	113° 57' 2.4"	401	10/29/2020	151.1	V			10/26/2021	150.6	V			0.5
LOWER GILA BASIN	WELLTON - MOHAWK	C-08-17 33BBB	324135114011701		32° 41' 34.7"	114° 1' 16.7"	315	10/29/2020	77.4	V			10/26/2021	77.1	V			0.3
LOWER GILA BASIN	WELLTON - MOHAWK	C-08-17 21CBD2	324243114010702		32° 42' 43.5"	114° 1' 6.6"	245	10/29/2020	16.3	V			10/26/2021	15.7	V			0.6
LOWER GILA BASIN	WELLTON - MOHAWK	C-08-15 09DAA	324440113475501	616560	32° 44' 41.4"	113° 47' 54.8"	409	10/29/2020	135.5	V			10/26/2021	135.8	V			-0.3
LOWER GILA BASIN	WELLTON - MOHAWK	C-07-10 36BCC	324628113145301	615112	32° 46' 27.8"	113° 14' 53.2"	623	11/4/2020	173.8	V			10/28/2021	173.8	V			0.0
LOWER GILA BASIN	WELLTON - MOHAWK	C-07-15 16AAA	324929113475501		32° 49' 29.2"	113° 47' 54.9"	335	10/29/2020	35.2	V			11/8/2021	35	V			0.2
LOWER GILA BASIN	WELLTON - MOHAWK	C-07-13 21AAA	324839113353201	803848	32° 48' 38.8"	113° 35' 31.6"	419	10/29/2020	99.4	V			10/28/2021	99.3	V			0.1
LOWER GILA BASIN	WELLTON - MOHAWK	C-06-15 34DCC	325117113471701		32° 51' 15.4"	113° 47' 20.5"	385	10/29/2020	81	V			10/28/2021	81.5	S			-0.5
LOWER GILA BASIN	WELLTON - MOHAWK	C-06-20 32ACA2UNSURV	325157114200700	808688	32° 51' 46.7"	114° 20' 7.4"	410	10/28/2020	238.2	V			10/26/2021	234.4	V			3.8
LOWER GILA BASIN	WELLTON - MOHAWK	C-06-12 19BBA	325353113321101		32° 53' 53.6"	113° 32' 17.7"	383	10/29/2020	45.8	S			10/29/2021	47.4	S			-1.6
LOWER GILA BASIN	WELLTON - MOHAWK	C-06-11 14CDD	325356113214201		32° 53' 57.2"	113° 21' 41.6"	463	11/4/2020	59.7	V			10/28/2021	59.6	V			0.1
LOWER GILA BASIN	WELLTON - MOHAWK	C-06-14 28BAB	325300113423201	627175	32° 53' 0.5"	113° 42' 26.9"	408	10/29/2020	117.6	S			10/28/2021	118.7	S			-1.1
LOWER GILA BASIN	WELLTON - MOHAWK	C-06-15 26AAA	325300113455201		32° 53' 1.2"	113° 45' 52"	410	10/29/2020	96.4	V			10/28/2021	94.8	S			1.6
LOWER GILA BASIN	WELLTON - MOHAWK	C-06-08 17BDD	325422113060801	804050	32° 54' 19.8"	113° 6' 4.9"	708	10/27/2020	229.4	V			10/26/2021	228.8	V			0.6
LOWER GILA BASIN	WELLTON - MOHAWK	C-05-19 19BCB UNSURV	325841114155401		32° 58' 48.1"	114° 15' 59.7"	835	10/28/2020	634	V			10/26/2021	633.9	V			0.1
LOWER GILA BASIN	WELLTON - MOHAWK	C-04-11 34BBB	330239113232801	615043	33° 2' 39.1"	113° 23' 28.5"	603	10/27/2020	224.1	V			10/29/2021	226.9	V			-2.8
LOWER GILA BASIN	WELLTON - MOHAWK	C-05-09 06BBB	330140113140901	633678	33° 1' 44.3"	113° 14' 11.3"	501	10/27/2020	53	S			10/29/2021	53.1	S			-0.1
LOWER GILA BASIN	WELLTON - MOHAWK	C-04-10 22ABB	330423113164301	619482	33° 4' 23.5"	113° 16' 47.1"	605	10/27/2020	67.6	S			10/29/2021	71.2	S			-3.6
LOWER GILA BASIN	WELLTON - MOHAWK	C-03-10 29BCC	330823113192101	614970	33° 8' 23.8"	113° 19' 22.6"	798	10/27/2020	43.2	V			10/29/2021	45.0	V			-1.8
LOWER GILA BASIN	WELLTON - MOHAWK	C-04-11 15BBA	330514113231001	618118	33° 5' 15.7"	113° 23' 15.4"	693	10/27/2020	324.2	V			10/29/2021	328.2	V			-4.0
LOWER GILA BASIN	WELLTON - MOHAWK	C-04-10 02BAA	330700113154701	614990	33° 7' 0.3"	113° 15' 46.5"	732	10/27/2020	352.6	V			10/29/2021	364.8	V			-12.2
LOWER GILA BASIN	WELLTON - MOHAWK	C-03-11 31DBB	330725113260201	804053	33° 7' 26.67"	113° 25' 56.91"	786.34	10/14/2020	411.55	VT		TAKEN WITH BLACK 500 AT 13:30	10/21/2021	412.3	VT			-0.8
LOWER GILA BASIN	WELLTON - MOHAWK	C-01-12 15CAC UNSURV	332022113285601	513721	33° 20' 21.6"	113° 28' 56.3"	1270	10/30/2020	304.9	V			10/25/2021	305	V			-0.1
LOWER GILA BASIN	WELLTON - MOHAWK	C-08-17 12DD3	324415113571201	226666	32° 44' 14.9"	113° 57' 11.8"	263	10/29/2020	29	S			10/26/2021	21.9	V			7.1
LOWER SAN PEDRO BASIN	CAMP GRANT WASH	D-08-14 09AAD	324525110534701	615540	32° 45' 24.7"	110° 53' 46.5"	3965	11/4/2020	74.6	S			11/23/2021	77	S			-2.4
LOWER SAN PEDRO BASIN	MAMMOTH	D-15-20 10CAB2	320836110172301	808718	32° 8' 36.9"	110° 17' 23.8"	3319	11/5/2020	44.4	S			12/1/2021	43.8	S			0.6
LOWER SAN PEDRO BASIN	MAMMOTH	D-15-20 09AAB2	320901110175301	607752	32° 9' 2.74"	110° 17' 53.34"	3306.85	2/10/2021	34.1	VT		TAKEN AT 8:55 WITH BLACK 500	2/9/2022	33.78	VT			0.3
LOWER SAN PEDRO BASIN	MAMMOTH	D-14-21 19CAC	321157110143001	615955	32° 11' 56.7"	110° 14' 33.3"	4210	11/5/2020	78.8	S			12/1/2021	79.5	S			-0.7
LOWER SAN PEDRO BASIN	MAMMOTH	D-13-18 02BDD	322003110283701		32° 20' 0.3"	110° 28' 34.6"	3230	11/4/2020	124.7	S			12/1/2021	129.5	V			-4.8
LOWER SAN PEDRO BASIN	MAMMOTH	D-12-19 19BBC	322253110270001	613528	32° 22' 52.3"	110° 26' 56.1"	2950	11/4/2020	79.1	S			11/30/2021	80.9	S			-1.8
LOWER SAN PEDRO BASIN	MAMMOTH	D-11-18 10CAC	322924110294501	613762	32° 29' 24.2"	110° 29' 46"	2795	11/4/2020	23.7	S			11/30/2021	23	S			0.7
LOWER SAN PEDRO BASIN	MAMMOTH	D-09-15 35AAD	323644110461201	649302	32° 36' 44.8"	110° 46' 24.1"	4480	11/3/2020	45.8	S			11/30/2021	45.3	S			0.5
LOWER SAN PEDRO BASIN	MAMMOTH	D-09-17 04ADC1	324058110361201	607867	32° 40' 54"	110° 36' 24.1"	2448.39	11/4/2020	55.4	S		P	11/30/2021	54.2	S		P	1.2
LOWER SAN PEDRO BASIN	MAMMOTH	D-08-16 25DCD	324208110393301		32° 42' 11.1"	110° 39												



Appendix 3. 1 Year Groundwater level change in Arizona - Water Years 2021 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2021	WL 2021	WL METHOD 2021	WL REMARK 2021	WL COMMENT 2021	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
PHOENIX AMA	EAST SALT RIVER	D-03-09 32ABA	330757111263401		33° 7' 57.9"	111° 26' 35.3"	1566	12/7/2020	337.3	V			11/30/2021	336.8	V			0.5
PHOENIX AMA	EAST SALT RIVER	D-03-08 35BA	330757111300001	615302	33° 7' 55.7"	111° 30' 0.3"	1518	12/7/2020	258	V	K		11/30/2021	264	V		K	-6.0
PHOENIX AMA	EAST SALT RIVER	D-03-08 26AAA	330846111302801	615294	33° 8' 45.8"	111° 29' 27.8"	1537	12/7/2020	317.7	V			11/30/2021	316.7	V			1.0
PHOENIX AMA	EAST SALT RIVER	D-03-09 20DAA	330916111262001	610703	33° 9' 16.5"	111° 26' 20"	1595	12/8/2020	369.9	V			12/10/2021	369.1	V			0.8
PHOENIX AMA	EAST SALT RIVER	D-04-09 07DBB	330547111274701	623858	33° 5' 46.7"	111° 27' 47.3"	1510	12/7/2020	265.6	V			11/30/2021	266.9	V			-1.3
PHOENIX AMA	EAST SALT RIVER	D-04-08 02CCC	330617111302201	610414	33° 6' 15.1"	111° 30' 24.1"	1532	12/7/2020	237.7	V			11/30/2021	239	V			-1.3
PHOENIX AMA	EAST SALT RIVER	D-04-09 05AAB2	330704111262601	612176	33° 7' 5.3"	111° 26' 29"	1556	12/7/2020	318.3	V			11/30/2021	317.9	V			0.4
PHOENIX AMA	EAST SALT RIVER	D-02-07 25DDDD3	331313111350301	612290	33° 13' 12.5"	111° 35' 3.3"	1464	12/7/2020	315.2	V			11/30/2021	302.3	V			12.9
PHOENIX AMA	EAST SALT RIVER	D-02-07 27DAD	331324111370001		33° 13' 23.8"	111° 37' 0.5"	1427	12/7/2020	282.9	V			11/30/2021	256.2	V			26.7
PHOENIX AMA	EAST SALT RIVER	D-02-08 26CAD1 PZ2	331329111301202		33° 13' 31.3"	111° 30' 10.5"	1569	2/22/2021	371.4	V			2/22/2022	372.6	V			-1.2
PHOENIX AMA	EAST SALT RIVER	D-02-08 26CAD1 PZ3	331329111301203		33° 13' 31.3"	111° 30' 10.5"	1569	2/22/2021	368.4	V			2/22/2022	367.5	V			0.9
PHOENIX AMA	EAST SALT RIVER	D-03-08 16DBD	331001111315801	615283	33° 9' 59.9"	111° 31' 59"	1506	12/7/2020	302.4	V			11/30/2021	301.8	V			0.6
PHOENIX AMA	EAST SALT RIVER	D-03-08 13AAA2	331033111282901	603383	33° 10' 33.4"	111° 28' 27.2"	1568	12/8/2020	356.2	V			12/10/2021	354.3	V			1.9
PHOENIX AMA	EAST SALT RIVER	D-03-08 08DDD	331037111324201	615279	33° 10' 36.7"	111° 32' 42.7"	1491	12/7/2020	309	V			11/30/2021	308.1	V			0.9
PHOENIX AMA	EAST SALT RIVER	D-03-09 09DCD PZ1	331042111254301		33° 10' 40.5"	111° 25' 43.1"	1628	12/10/2020	411.9	V			11/30/2021	411.2	V			0.7
PHOENIX AMA	EAST SALT RIVER	D-03-09 09DCD PZ2	331042111254302		33° 10' 40.5"	111° 25' 43.1"	1628	12/10/2020	410.3	V			11/30/2021	409.7	V			0.6
PHOENIX AMA	EAST SALT RIVER	D-03-08 10ABB	331127111310201	603378	33° 11' 26.7"	111° 31' 7.2"	1529	12/8/2020	327.9	V	K		11/30/2021	325.7	V		K	2.2
PHOENIX AMA	EAST SALT RIVER	D-03-08 04BBA	331219111322901	615275	33° 12' 18.8"	111° 32' 29.8"	1510	12/8/2020	260.9	V	K		11/30/2021	258	V		K	2.9
PHOENIX AMA	EAST SALT RIVER	D-02-07 31CDA2	331224111403701	608807	33° 12' 23.8"	111° 40' 37.2"	1442	12/8/2020	339.6	V			12/9/2021	337.6	V			2.0
PHOENIX AMA	EAST SALT RIVER	D-02-09 36DBD	331236111223901	615235	33° 12' 40.5"	111° 22' 33.5"	1752	12/10/2020	529.8	V			11/30/2021	530.1	V			-0.3
PHOENIX AMA	EAST SALT RIVER	D-02-08 33DAA	331245111314201	608535	33° 12' 44.8"	111° 31' 42.2"	1524	12/8/2020	328.3	V			11/30/2021	324.6	V			3.7
PHOENIX AMA	EAST SALT RIVER	D-02-12 07ABA	331640111090801	624605	33° 16' 39.4"	111° 9' 6.3"	2460	1/8/2021	10.6	S			11/29/2021	10.8	S			-0.2
PHOENIX AMA	EAST SALT RIVER	D-02-08 02CBB PZ1	331703111303401		33° 17' 6.6"	111° 30' 37.67"	1572.84	10/27/2020	405.7	V			10/26/2021	405.8	V			-0.1
PHOENIX AMA	EAST SALT RIVER	D-02-08 02CBB PZ2	331703111303402		33° 17' 6.6"	111° 30' 37.67"	1572.84	10/27/2020	366.8	V			10/26/2021	351.7	V			15.1
PHOENIX AMA	EAST SALT RIVER	D-02-08 02CBB PZ3	331703111303403		33° 17' 6.6"	111° 30' 37.67"	1572.84	10/27/2020	381.4	V			10/26/2021	381.9	V			-0.5
PHOENIX AMA	EAST SALT RIVER	D-02-06 06ADA	331713111462001	620524	33° 17' 13.9"	111° 46' 20.4"	1264	12/9/2020	159.2	V			1/4/2022	157	V			2.2
PHOENIX AMA	EAST SALT RIVER	D-02-10 21ADB	331440111192401	615236	33° 14' 39.6"	111° 19' 22.9"	1903	1/8/2021	572.8	V			11/29/2021	568.6	V			4.2
PHOENIX AMA	EAST SALT RIVER	D-02-07 22BRC	331446111380001	609473	33° 14' 46.68"	111° 38' 0.58"	1402.3	10/13/2020	195.27	VT		BLUE 500 11:15	10/27/2021	190.97	VT			4.3
PHOENIX AMA	EAST SALT RIVER	D-02-07 17DDD	331456111390501	801577	33° 14' 55.9"	111° 39' 4.4"	1384	12/7/2020	169.5	S			11/30/2021	166.4	V			3.1
PHOENIX AMA	EAST SALT RIVER	D-02-06 18CAA2	331517111465501	620535	33° 15' 19.9"	111° 46' 51.1"	1264	12/9/2020	65.8	V	V		1/4/2022	65.5	V		V	0.3
PHOENIX AMA	EAST SALT RIVER	D-02-10 16BCB	331532111200901	610435	33° 15' 33"	111° 20' 6.6"	1884	12/10/2020	378.6	V			11/29/2021	380.5	V			-1.9
PHOENIX AMA	EAST SALT RIVER	D-02-07 10CDD2	331548111373201	607839	33° 15' 48.3"	111° 37' 32"	1412	12/8/2020	206.5	V			12/9/2021	201.6	V			4.9
PHOENIX AMA	EAST SALT RIVER	D-02-08 E07DDD	331550111334801	619742	33° 15' 49.5"	111° 33' 46.7"	1480	12/8/2020	224	S			11/30/2021	220.5	S			3.5
PHOENIX AMA	EAST SALT RIVER	D-01-08 21ADB PZ1	331953111315001		33° 19' 53.1"	111° 31' 51.4"	1565	11/9/2020	336.4	V			11/15/2021	335	V			1.4
PHOENIX AMA	EAST SALT RIVER	D-01-08 21ADB PZ2	331953111315002		33° 19' 53.1"	111° 31' 51.4"	1565	11/9/2020	336.8	V			11/15/2021	337.2	V			-0.4
PHOENIX AMA	EAST SALT RIVER	D-01-05 15CDD2	332008111495801	617083	33° 20' 7.13"	111° 49' 56.92"	1217.73	2/9/2021	130.3	VT		TAKEN AT 15:46 WITH BLUE 500	2/3/2022	116.94	VT			13.4
PHOENIX AMA	EAST SALT RIVER	D-01-05 17DDA	332019111513101	625830	33° 20' 18.8"	111° 51' 30.6"	1201	12/7/2020	87.2	V			12/8/2021	91.9	S			-4.7
PHOENIX AMA	EAST SALT RIVER	D-01-06 34CDD	331734111434501	620522	33° 17' 33.5"	111° 43' 44.7"	1294	12/9/2020	153	V	V		1/4/2022	145.6	V		V	7.4
PHOENIX AMA	EAST SALT RIVER	D-01-05 35ADC	331800111483501	618622	33° 17' 57.17"	111° 48' 31.15"	1235	11/10/2020	114.2	V			11/12/2021	131	V			-16.8
PHOENIX AMA	EAST SALT RIVER	D-01-10 35DBA	331803111172901	628140	33° 18' 3.1"	111° 17' 27.1"	2040	1/8/2021	49.1	V			11/29/2021	56.1	S			-7.0
PHOENIX AMA	EAST SALT RIVER	D-01-11 34BCB UNSURV	331810111134501	600936	33° 18' 9.6"	111° 13' 45.7"	2180	1/8/2021	20.1	S			11/29/2021	22.6	V			-2.5
PHOENIX AMA	EAST SALT RIVER	D-01-04 29DBB	331844111581501	626841	33° 18' 44.79"	111° 58' 15.19"	1198	12/7/2020	113.8	V			12/10/2021	114.5	S			-0.7
PHOENIX AMA	EAST SALT RIVER	D-01-08 30DAA PZ1	331848111334901	615222	33° 18' 51.1"	111° 33' 49.1"	1489	2/22/2021	300.1	V			2/22/2022	298.1	V			2.0
PHOENIX AMA	EAST SALT RIVER	D-01-08 30DAA PZ2	331848111334902	615222	33° 18' 51.1"	111° 33' 49.1"	1489	2/22/2021	300.9	V			2/22/2022	294.3	V			6.6
PHOENIX AMA	EAST SALT RIVER	D-01-05 14AAB	332058111483901	634676	33° 20' 57.4"	111° 48' 38.3"	1224	12/7/2020	134.5	V			12/16/2021	139.8	S			-5.3
PHOENIX AMA	EAST SALT RIVER	D-01-04 08ACC1	332123111581401	517997	33° 21' 23.2"	111° 58' 13.6"	1275	12/7/2020	196.1	S			4/15/2022	197.5	V			-1.4
PHOENIX AMA	EAST SALT RIVER	D-01-05 10ADD	332127111492801	624351	33° 21' 25.6"	111° 49' 26.1"	1212	12/7/2020	98.1	S			12/8/2021	98.3	S			-0.2
PHOENIX AMA	EAST SALT RIVER	A-01-08 32BBA	332332111333401	800843	33° 23' 32.8"	111° 33' 35.4"	1625	1/29/2021	605.8	V			11/30/2021	607.3	V			-1.5
PHOENIX AMA	EAST SALT RIVER	A-01-05 26DDD	332337111481801	607699	33° 23' 36.38"	111° 48' 18.29"	1224	11/10/2020	105	V			11/12/2021	108.5	V			-3.5
PHOENIX AMA	EAST SALT RIVER	A-01-05 29DDA	332346111512801	701744	33° 23' 47.7"	111° 51' 23.9"	1214.46	2/9/2021	101.7	VT		TAKEN AT 12:48 WITH BLUE 500	2/3/2022	101.4	VT			0.3
PHOENIX AMA	EAST SALT RIVER	A-01-05 30BDD	332359111525701	607741	33° 24' 1.5"	111° 53' 3"	1199	11/10/2020	88.4	V			11/12/2021	91.1	V			-2.7
PHOENIX AMA	EAST SALT RIVER	D-01-04 03BBB2	332240111564201	617852	33° 22' 40.3"	111° 56' 38.4"	1182	11/10/2020	86	V			11/10/2021	90.6	V			-4.6
PHOENIX AMA	EAST SALT RIVER	A-01-07 36DAA2 PZ1	332308111345001		33° 23' 7.7"	111° 34' 54.23"	1561.35	10/27/2020	559.2	V			10/26/2021	557.3	V			1.9
PHOENIX AMA	EAST SALT RIVER	A-01-07 36DAA2 PZ2	332308111345002		33° 23' 7.7"	111° 34' 54.23"	1561.35	10/27/2020	564.15	V			10/26/2021	564.15	V			0.0
PHOENIX AMA	EAST SALT RIVER	A-01-07 36DAA2 PZ3	332308111345003		33° 23' 7.7"	111° 34' 54.23"	1561.35	10/27/2020	520	V			10/26/2021	520.5	V			-0.5
PHOENIX AMA	EAST SALT RIVER	A-01-08 21ACB	332506111321101		33° 25' 6.3"	111° 32' 11.3"	1758	12/10/2020	422.5	V			11/29/2021	421.5	V			1.0
PHOENIX AMA	EAST SALT RIVER	A-01-07 23ACA	332507111361001	613969	33° 25' 6.8"	111° 36' 10.6"	1601	12/10/2020	610.1	V			11/29/2021	609.9	V			0.2
PHOENIX AMA	EAST SALT RIVER	A-01-08 10DCC1	332614111311101	614002	33° 26' 14.4"	111° 31' 5.9"	1861	12/10/2020	93.4	V			11/29/2021	95.4	V			-2.0
PHOENIX AMA	EAST SALT RIVER	A-01-05 16ABA	332614111503901	607702	33° 26' 11.76"	111° 50' 42.69"	1245	11/9/2020	143.7	V			11/12/2021	147.8	V			-4.1
PHOENIX AMA	EAST SALT RIVER	A-01-07 18ACC	332547111402701	500714	33° 25' 48.8"	111° 40' 28.7"	1479	12/8/2020	376.2	V			12/8/2021	375.2	V			1.0
PHOENIX AMA	EAST SALT RIVER	A-01-06 15ACD1	332549111432601	500994	33° 25' 49.17"	111° 43' 26.2"	1356.67	2/9/2021	250.95	VT		TAKEN AT 15:02 WITH BLUE 500	2/3/2022	250.67</				



Appendix 3. 1 Year Groundwater level change in Arizona - Water Years 2021 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2021	WL 2021	WL METHOD 2021	WL REMARK 2021	WL COMMENT 2021	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
PHOENIX AMA	HASSAYAMPA	B-01-06 01ABB	332752112492301	805547	33° 27' 52"	112° 49' 24.9"	1083	12/1/2020	119.2	V			12/16/2021	119.3	V			-0.1
PHOENIX AMA	HASSAYAMPA	B-02-06 35CAA	332861112534001	617446	33° 28' 17.9"	112° 52' 32.7"	1075	12/1/2020	75	V			12/21/2021	71.7	S			3.3
PHOENIX AMA	HASSAYAMPA	B-01-06 03BBC	332740112515801	800798	33° 27' 44.3"	112° 51' 54.4"	1069	12/1/2020	95.3	V			12/16/2021	94.1	V			1.2
PHOENIX AMA	HASSAYAMPA	B-01-04 05AAA	332745112404501	802329	33° 27' 46.04"	112° 40' 43.55"	1138.63	2/9/2021	234.31	VT		BLUE 500 15:00	2/9/2022	235.51	VT			-1.2
PHOENIX AMA	HASSAYAMPA	B-02-07 20CDD	332939112594901	600209	33° 29' 38.2"	112° 59' 49.9"	1189	12/2/2020	185.8	V			12/22/2020	179.2	V			6.6
PHOENIX AMA	HASSAYAMPA	B-02-06 24BDD	333006112492701	639855	33° 30' 5.6"	112° 49' 25.6"	1156	12/2/2020	185	V			12/21/2021	184.5	V			0.5
PHOENIX AMA	HASSAYAMPA	B-02-05 29DAC	332858112470701	804481	33° 28' 58.3"	112° 47' 6.6"	1125	12/1/2020	146	V			12/21/2021	146	V			0.0
PHOENIX AMA	HASSAYAMPA	B-02-05 25BAB	332924112433301	588466	33° 29' 33.4"	112° 43' 25.3"	1149	12/9/2020	152.4	V			12/17/2021	152.5	V			-0.1
PHOENIX AMA	HASSAYAMPA	B-02-07 27AAB	332934112572801	600199	33° 29' 34.5"	112° 57' 27.7"	1146	12/1/2020	163.9	V			12/22/2021	158.2	V			5.7
PHOENIX AMA	HASSAYAMPA	B-02-07 12CBB	333146112560801	802455	33° 31' 45.6"	112° 56' 8.8"	1194	12/1/2020	184.1	V			12/21/2021	176	V			8.1
PHOENIX AMA	HASSAYAMPA	B-02-05 06DDD	333216112475201	524267	33° 32' 16.4"	112° 47' 57"	1232	12/2/2020	250.1	V			12/17/2021	247.8	V			2.3
PHOENIX AMA	HASSAYAMPA	B-02-07 22BBB	333027112581201	802146	33° 30' 28.7"	112° 58' 14.3"	1194	12/1/2020	189.4	V			12/22/2021	182.8	V			6.6
PHOENIX AMA	HASSAYAMPA	B-02-04 07CCC2	333122112424101	517029	33° 31' 22.4"	112° 42' 41.4"	1233	12/9/2020	207	V			12/17/2021	206.8	V			0.2
PHOENIX AMA	HASSAYAMPA	B-03-05 26ADD	333430112435001	638915	33° 34' 30.8"	112° 43' 46.3"	1237	12/9/2020	76.6	V			12/22/2021	77.4	V			-0.8
PHOENIX AMA	HASSAYAMPA	B-02-08 01AAC	333252113013801	501700	33° 32' 55.5"	113° 1' 36.2"	1380	12/1/2020	365.4	V			1/6/2022	358.5	V			6.9
PHOENIX AMA	HASSAYAMPA	B-03-06 35AAA	333353112500201	524266	33° 33' 55.9"	112° 49' 59.2"	1288	12/2/2020	335.2	V			12/27/2021	333.4	V			1.8
PHOENIX AMA	HASSAYAMPA	B-03-04 07BBB	333724112423601	517028	33° 37' 23.6"	112° 42' 36.9"	1402	12/9/2020	183.9	V			1/6/2022	184.4	V			-0.5
PHOENIX AMA	HASSAYAMPA	B-04-04 19BAC	334052112421901	800517	33° 40' 49.3"	112° 42' 21.4"	1415	12/9/2020	170.8	V			12/27/2021	171.1	V			-0.3
PHOENIX AMA	HASSAYAMPA	B-04-05 22AAA	334056112445001	516565	33° 40' 55.9"	112° 44' 47.7"	1530	12/9/2020	282.7	V			12/29/2021	282.8	V			-0.1
PHOENIX AMA	HASSAYAMPA	B-04-04 13CBD	334112112371601		33° 41' 10.4"	112° 37' 15"	1570	12/10/2020	336.4	V			12/27/2021	337.8	V			-1.4
PHOENIX AMA	HASSAYAMPA	B-05-06 25BDC	334452112502801	609851	33° 44' 49.2"	112° 50' 25.9"	1726	12/10/2020	460.3	V			1/5/2022	460.2	V			0.1
PHOENIX AMA	HASSAYAMPA	B-05-04 24CCC	334513112380501	801046	33° 45' 12.4"	112° 38' 6"	1718	12/10/2020	438.2	V			1/5/2022	439.4	V			-1.2
PHOENIX AMA	HASSAYAMPA	B-05-04 20CCC	334514112422001	504783	33° 45' 14.4"	112° 42' 21.7"	1700	12/10/2020	413	V			1/5/2022	413.7	V			-0.7
PHOENIX AMA	HASSAYAMPA	B-05-05 13AAA	334654112433001	510003	33° 46' 54.4"	112° 43' 31.8"	1795	12/10/2020	907.9	V			1/5/2022	909.2	V			-1.3
PHOENIX AMA	HASSAYAMPA	B-04-05 07CBB	334212112485101	516564	33° 42' 10.7"	112° 48' 53"	1581	12/9/2020	349.1	V			12/29/2021	349.1	V			0.0
PHOENIX AMA	HASSAYAMPA	B-04-06 04DBA	334259112522001	505244	33° 43' 1.2"	112° 52' 20.8"	1700	12/10/2020	462.9	V			12/29/2021	462.7	V			0.2
PHOENIX AMA	HASSAYAMPA	B-04-05 01CBA	334306112433801	516563	33° 43' 7.01"	112° 43' 36.67"	1600.64	2/11/2021	337.05	VT		RED 500 12:30	2/11/2022	337.58	VT			-0.5
PHOENIX AMA	HASSAYAMPA	B-04-05 05ABB	334325112472001	802175	33° 43' 25.5"	112° 47' 19.8"	1617	12/9/2020	373.2	V			12/29/2021	372.7	V			0.5
PHOENIX AMA	HASSAYAMPA	B-05-06 10CDD	334703112521901	629322	33° 47' 1.9"	112° 52' 19"	1916	12/10/2020	654.3	V			1/5/2022	656.2	V			-1.9
PHOENIX AMA	HASSAYAMPA	B-06-04 23BBA	335113112390301	633262	33° 51' 12.2"	112° 39' 2.1"	1835	12/8/2020	131.8	V			12/9/2021	141.7	V			-9.9
PHOENIX AMA	HASSAYAMPA	B-06-08 20ADC	335124113063701	614493	33° 50' 54.1"	113° 6' 37.3"	2199	10/26/2020	258.3	V			10/27/2021	258.2	V			0.1
PHOENIX AMA	HASSAYAMPA	B-06-04 11BBB	335303112391601	800585	33° 53' 0.9"	112° 39' 15.7"	1970	12/9/2020	189.8	V			12/10/2021	186.5	V			3.3
PHOENIX AMA	HASSAYAMPA	B-05-05 09DAC	334713112464901	537998	33° 47' 13.6"	112° 46' 48.7"	1841	12/10/2020	529.7	V			1/5/2022	529.8	V			-0.1
PHOENIX AMA	HASSAYAMPA	C-01-06 12AAD	332137112490001	598717	33° 21' 37.5"	112° 49' 0"	905	11/30/2020	93	V			1/6/2022	91	V			2.0
PHOENIX AMA	LAKE PLEASANT	A-06-02 29DAD	334953112101001	800512	33° 49' 53"	112° 10' 15.69"	1713	12/9/2020	211.1	V			12/15/2021	207	V			4.1
PHOENIX AMA	LAKE PLEASANT	A-05-02 10ABA	334750112082001	614028	33° 47' 49.6"	112° 8' 24.1"	1655	12/1/2020	276	V			12/14/2021	273.1	V			2.9
PHOENIX AMA	LAKE PLEASANT	A-05-01 10AAB	334750112142901	614032	33° 47' 45.6"	112° 14' 25.5"	1570	12/1/2020	204.9	V			12/14/2021	204.7	V			0.2
PHOENIX AMA	LAKE PLEASANT	A-05-02 04CAB	334814112094701	623553	33° 48' 13.5"	112° 9' 46.8"	1615	12/9/2020	213.6	V			12/14/2021	210.2	V			3.4
PHOENIX AMA	LAKE PLEASANT	A-07-02 27ABA	335544112082201	623759	33° 55' 43.7"	112° 8' 21.5"	2062	12/1/2020	29.9	V			12/15/2021	20.3	S			9.6
PHOENIX AMA	LAKE PLEASANT	A-07-02 24BDA	335623112063601	565329	33° 56' 23.1"	112° 6' 37.3"	2160	12/1/2020	72.4	S			12/15/2021	77.6	S			-5.2
PHOENIX AMA	LAKE PLEASANT	A-06-02 16ACC	335155112093301	572510	33° 51' 52.8"	112° 9' 35.6"	1846	12/9/2020	237.1	V			12/16/2021	234.9	V			2.2
PHOENIX AMA	LAKE PLEASANT	A-06-01 20DDC	335028112163001		33° 50' 28.5"	112° 16' 29.8"	1570	12/8/2020	89.2	V			12/14/2021	88.1	V			1.1
PHOENIX AMA	LAKE PLEASANT	A-05-01 23BAA	334606112134801	510224	33° 46' 5.9"	112° 13' 47.7"	1460	12/9/2020	126.9	V			12/14/2021	125.6	V			1.3
PHOENIX AMA	RAINBOW VALLEY	D-04-01 28CDD	330239112155201	600522	33° 2' 37.6"	112° 15' 45.6"	1338	12/8/2020	442.5	V			12/13/2021	442.7	V			-0.2
PHOENIX AMA	RAINBOW VALLEY	C-04-01 32CDD	330147112230201	513868	33° 1' 47"	112° 23' 2.2"	1428	12/8/2020	579.7	V			12/13/2021	578.9	V			0.8
PHOENIX AMA	RAINBOW VALLEY	D-04-01 14CDD	330423112134401	804031	33° 4' 22.7"	112° 13' 44.3"	1288	12/8/2020	394.8	V			12/13/2021	394.9	V			-0.1
PHOENIX AMA	RAINBOW VALLEY	D-04-01 26BBB	330324112140901	616754	33° 3' 22.9"	112° 14' 8.5"	1308	12/21/2020	401.2	V			12/13/2021	401.4	V			-0.2
PHOENIX AMA	RAINBOW VALLEY	C-04-01 23CDB	330338112200201	639910	33° 3' 37.7"	112° 20' 1.8"	1345	12/8/2020	497.6	V			12/13/2021	498.9	V			-1.3
PHOENIX AMA	RAINBOW VALLEY	C-03-01 19DCC	330846112235501	629000	33° 8' 43"	112° 24' 0.9"	1225	12/7/2020	405.4	V			12/13/2021	406.8	V			-1.4
PHOENIX AMA	RAINBOW VALLEY	D-03-01 19AAA	330934112171801	611915	33° 9' 34.6"	112° 17' 17.7"	1293	12/7/2020	452	V			12/13/2021	452.7	V			-0.7
PHOENIX AMA	RAINBOW VALLEY	D-04-01 10DCC	330515112144101		33° 5' 14.7"	112° 14' 41.6"	1275	12/8/2020	416.9	V			12/13/2021	415.2	V			1.7
PHOENIX AMA	RAINBOW VALLEY	D-03-01 31CCC	330700112181801		33° 6' 59.4"	112° 18' 18.2"	1214.4	12/21/2020	371.8	V			12/13/2021	372.4	V			-0.6
PHOENIX AMA	RAINBOW VALLEY	C-02-01 30AAA	331354112233301	610920	33° 13' 55.79"	112° 23' 30.89"	1103	12/2/2020	345.5	V			12/7/2021	347.3	V			-1.8
PHOENIX AMA	RAINBOW VALLEY	C-02-01 19DAA	331423112233501		33° 14' 22.1"	112° 23' 30.89"	1107	3/23/2021	345.8	V			12/7/2021	348.5	V			-2.7
PHOENIX AMA	RAINBOW VALLEY	C-03-01 07ACC	331057112235801		33° 10' 54"	112° 24' 0.6"	1153	12/7/2020	355.7	V			12/13/2021	356.4	V			-0.7
PHOENIX AMA	RAINBOW VALLEY	D-03-01 07BBB2	331114112181701	615271	33° 11' 15.2"	112° 18' 15.6"	1272.3	12/7/2020	438.3	V			12/13/2021	439.1	V			-0.8
PHOENIX AMA	RAINBOW VALLEY	C-02-01 33CDD	331214112215501	625645	33° 12' 18"	112° 21' 57.7"	1142	12/7/2020	261.7	V			12/13/2021	262.8	V			-1.1
PHOENIX AMA	RAINBOW VALLEY	C-02-01 33AAA	331300112213201	605576	33° 13' 3.2"	112° 21' 26.6"	1169	12/7/2020	378.1	V			12/13/2021	379.5	V			-1.4
PHOENIX AMA	RAINBOW VALLEY	C-02-01 20BAD	331435112230201		33° 14' 39.2"	112° 22' 59.7"	1130	12/2/2020	361.7	V			12/7/2021	364.1	V			-2.4
PHOENIX AMA	RAINBOW VALLEY	C-02-02 09CCC	331543112283801	624775	33° 15' 41.6"	112° 28' 39"	1023	12/2/2020	343	V			12/7/2021	354.9	V			-11.9
PHOENIX AMA	RAINBOW VALLEY	C-02-02 10CCC	331545112273201	601928	33° 15' 41.59"	112° 27' 37.2"	1015	12/3/2020	347.2	V			12/13/2021	349.7	V			-2.5
PHOENIX AMA	WEST SALT RIVER	C-01-03 08CDD	332101121345301	578927	33° 21' 1.49"	112° 34' 53.19"	840.81	2/9/2021	12.97	VT		BLUE 500 11:45	2/9/2022					



Appendix 3. 1 Year Groundwater level change in Arizona - Water Years 2021 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2021	WL 2021	WL METHOD 2021	WL REMARK 2021	WL COMMENT 2021	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
PHOENIX AMA	WEST SALT RIVER	A-02-03 35BBC	33280211201301	607726	33° 28' 37.57"	112° 1' 44.67"	1132	11/13/2020	88.7	V			11/15/2021	88.1	V			0.6
PHOENIX AMA	WEST SALT RIVER	B-02-01 36BBA3	332843112191601	608792	33° 28' 42.4"	112° 19' 12.7"	1352	12/3/2020	997	V			12/15/2021	127.8	V			7.7
PHOENIX AMA	WEST SALT RIVER	B-02-02 27CCC	332846112273601	613016	33° 28' 45.4"	112° 37' 38.1"	1084	1/28/2021	254.7	V			1/6/2022	256.2	V			-1.5
PHOENIX AMA	WEST SALT RIVER	A-02-02 27DCB1	332902112083101	626552	33° 29' 1.35"	112° 8' 30.16"	1100.19	2/10/2021	158.16	VT		BLUE 500 09:15	2/10/2022	163.86	VT			-5.7
PHOENIX AMA	WEST SALT RIVER	A-02-04 29DAB	332913111575301	633954	33° 29' 13.3"	111° 57' 51.7"	1241	12/7/2020	26.9	V			12/10/2021	27.6	S			-0.7
PHOENIX AMA	WEST SALT RIVER	A-02-02 26BDC	332919112073901	608377	33° 29' 19.45"	112° 7' 39.04"	1111.17	11/12/2020	167.1	V			11/12/2021	162.3	V			4.8
PHOENIX AMA	WEST SALT RIVER	A-02-01 28AAA1	332936112152101	608358	33° 29' 36.5"	112° 15' 16.7"	1046	11/12/2020	149	V			11/12/2021	145.2	V			3.8
PHOENIX AMA	WEST SALT RIVER	A-02-03 09CDA	333135112032501		33° 31' 37.96"	112° 3' 20.55"	1181.75	10/14/2020	131.26	VT		BLUE 500 11:00 MP TRANSDUCER HOLE: MP=1.66FT	10/26/2021	131.4	VT			-0.1
PHOENIX AMA	WEST SALT RIVER	B-02-01 07CAD	333135112240201		33° 31' 35.04"	112° 24' 2.17"	1079.45	2/11/2021	228.37	VT		BLUE 500 09:45	2/11/2022	223.99	VT			4.4
PHOENIX AMA	WEST SALT RIVER	A-02-04 08BDD	333158111581201	638750	33° 31' 57.4"	111° 58' 11.1"	1346	12/8/2020	239.8	V			12/7/2021	225.3	V			14.5
PHOENIX AMA	WEST SALT RIVER	B-02-01 01CCCC	333213112192001	609883	33° 32' 15"	112° 19' 22.6"	1069	12/1/2020	229.2	V			12/8/2021	219.7	V			9.5
PHOENIX AMA	WEST SALT RIVER	B-02-02 04DCB	333223112280901	612958	33° 32' 26.1"	112° 28' 8.9"	1204	12/9/2020	338.2	V			1/6/2022	337	V			1.2
PHOENIX AMA	WEST SALT RIVER	A-02-01 04CBB2	333238112161601	607248	33° 32' 39"	112° 16' 17.5"	1076	12/8/2020	151.9	V			12/28/2021	141.6	V			10.3
PHOENIX AMA	WEST SALT RIVER	A-02-03 14DCD	333036112010401	643681	33° 30' 36.2"	112° 1' 3.6"	1196	12/9/2020	82.7	S			12/15/2021	82.7	V			0.0
PHOENIX AMA	WEST SALT RIVER	A-02-02 18DDD	333036112111001	607674	33° 30' 36.1"	112° 11' 9.22"	1120.55	11/12/2020	196.8	V			11/12/2021	196.7	V			0.1
PHOENIX AMA	WEST SALT RIVER	B-05-03 22ADD	333038112330101	087570	33° 45' 42.4"	112° 33' 6.59"	1652	12/8/2020	424.1	V			12/9/2021	423.4	V			0.7
PHOENIX AMA	WEST SALT RIVER	A-02-02 14CBC2	333048112075901	608376	33° 30' 47.52"	112° 7' 59.95"	1142.32	11/12/2020	150.7	V			11/12/2021	151.4	V			-0.7
PHOENIX AMA	WEST SALT RIVER	B-02-01 14CBB	333052112202401		33° 30' 52.5"	112° 20' 24.1"	1057	12/1/2020	197.9	V			12/8/2021	196.8	V			1.1
PHOENIX AMA	WEST SALT RIVER	B-02-02 14BCC	333056112263601	601872	33° 30' 55.7"	112° 26' 35.7"	1118	3/23/2021	270.8	V			12/8/2021	267.2	V			3.6
PHOENIX AMA	WEST SALT RIVER	A-02-01 14BBA	333122112140901	617098	33° 31' 19.2"	112° 14' 1"	1085	11/12/2020	181.7	V			11/12/2021	182.3	V			-0.6
PHOENIX AMA	WEST SALT RIVER	A-02-01 08DDD	333126112162201	608411	33° 31' 23.3"	112° 16' 19.5"	1056	11/12/2020	126.1	V			11/12/2021	113.3	V		CHECKED 2X	12.8
PHOENIX AMA	WEST SALT RIVER	A-03-02 25BDA	333434112063201	626600	33° 34' 36.62"	112° 6' 30.07"	1240.05	2/10/2021	234.47	VT		TAKEN AT 10:19 WITH BLUE 500	1/31/2022	236.9	VT			-2.4
PHOENIX AMA	WEST SALT RIVER	A-03-02 24CBB	333505112064501	624791	33° 35' 2.29"	112° 6' 55.9"	1257	11/30/2020	273.4	V			12/15/2021	273.2	V			0.2
PHOENIX AMA	WEST SALT RIVER	A-03-01 24CBB	333517112130701	608413	33° 35' 18.5"	112° 13' 9.6"	1163	11/13/2020	261.6	V			11/15/2021	261.9	V			-0.3
PHOENIX AMA	WEST SALT RIVER	A-03-01 20BDB	333539112172001	606537	33° 35' 40.49"	112° 17' 20.64"	1132.83	10/23/2020	302.73	VT		TAKEN WITH BLUE 500 AT 1115	4/7/2022	291.95	VT			10.8
PHOENIX AMA	WEST SALT RIVER	B-03-01 24BDB3	333539112192301	603822	33° 35' 39.09"	112° 19' 24.2"	1118	12/16/2020	332.9	V			12/16/2021	314.1	V		PUMP OFF 72 HOURS	18.8
PHOENIX AMA	WEST SALT RIVER	B-03-01 23BBB1	333540112202701		33° 35' 38.2"	112° 20' 26.79"	1134	12/7/2020	231.7	V			12/10/2021	229.3	V			2.4
PHOENIX AMA	WEST SALT RIVER	A-02-02 03AAD	333258112080201	608419	33° 32' 58.21"	112° 8' 1.92"	1196.03	11/12/2020	204.4	V			11/12/2021	223.4	V		CHECKED 2X	-19.0
PHOENIX AMA	WEST SALT RIVER	B-02-01 06ABB2	333304112240401	620810	33° 33' 3.62"	112° 24' 4.39"	1113.56	2/11/2021	261.84	VT		BLUE 500 10:15	2/11/2022	254.6	VT			7.2
PHOENIX AMA	WEST SALT RIVER	B-03-01 34DBB1	333330112205801		33° 33' 29.89"	112° 20' 57.4"	1100	12/7/2020	208.4	V			12/13/2021	205.3	V			3.1
PHOENIX AMA	WEST SALT RIVER	A-03-02 34ADA	333347112080401	626566	33° 33' 49.61"	112° 8' 4.49"	1214.45	2/10/2021	210.92	VT		BLUE 500 10:00	2/10/2022	209.45	VT			1.5
PHOENIX AMA	WEST SALT RIVER	B-03-01 32BAA	333357112230401	610105	33° 33' 56.6"	112° 23' 3.8"	1135	12/7/2020	288.7	V			12/13/2021	282.8	V			5.9
PHOENIX AMA	WEST SALT RIVER	A-03-01 35ABB	333358112134201	607737	33° 33' 59.2"	112° 13' 41.7"	1128	11/13/2020	211.4	V			11/15/2021	210.8	V			0.6
PHOENIX AMA	WEST SALT RIVER	A-03-02 29DDA2	333415112100701	608402	33° 34' 15.39"	112° 10' 6.59"	1195	11/13/2020	242.4	V			11/15/2021	244.1	V			-1.7
PHOENIX AMA	WEST SALT RIVER	A-03-02 06DAA	333756112110201	604120	33° 37' 55.72"	112° 11' 6.62"	1242.19	2/10/2021	336.24	VT		BLUE 500 11:00	2/10/2022	334.75	VT			1.5
PHOENIX AMA	WEST SALT RIVER	B-03-01 05ABB	333818112230401	623681	33° 38' 18.3"	112° 23' 2.8"	1238	12/7/2020	363.4	V			12/10/2021	364.2	V			-0.8
PHOENIX AMA	WEST SALT RIVER	A-04-01 34BDD2	333844112144501	622789	33° 38' 45.27"	112° 14' 45.33"	1214.22	2/10/2021	369.83	VT		BLUE 500 11:45	2/10/2022	372.85	VT			-3.0
PHOENIX AMA	WEST SALT RIVER	B-03-02 21ABA	333541112280101	612994	33° 35' 41.7"	112° 28' 1.5"	1332	12/9/2020	393.3	V			1/6/2022	391.9	V			1.4
PHOENIX AMA	WEST SALT RIVER	A-03-02 24BAB2	333546112064001	626585	33° 35' 45.61"	112° 6' 38.08"	1274.79	2/10/2021	308.02	VT		TAKEN AT 10:36 WITH BLUE 500	1/31/2022	306.89	VT			1.1
PHOENIX AMA	WEST SALT RIVER	A-03-02 22BAA	333546112083201	617992	33° 35' 46"	112° 8' 31.4"	1249	11/30/2020	288.9	V			12/15/2021	288.8	V			0.1
PHOENIX AMA	WEST SALT RIVER	A-03-02 17DCB	333556112103501	607743	33° 35' 57.29"	112° 10' 35.5"	1220.3	11/13/2020	271.2	V			11/15/2021	299.3	V			-28.1
PHOENIX AMA	WEST SALT RIVER	B-03-02 18ADD	333611112294501	503408	33° 36' 11.4"	112° 29' 48.6"	1470	12/7/2020	568.4	V			12/13/2021	567.9	V			0.5
PHOENIX AMA	WEST SALT RIVER	B-03-02 15AAA	333633112263801	612992	33° 36' 34.1"	112° 26' 37.2"	1287	12/9/2020	398.4	V			1/6/2022	404.7	V			-6.3
PHOENIX AMA	WEST SALT RIVER	A-03-02 09DBB	333703112091801	626611	33° 37' 1.4"	112° 9' 31.49"	1254.91	2/10/2021	312.33	VT		BLUE 500 10:40	2/10/2022	312.99	VT			-0.7
PHOENIX AMA	WEST SALT RIVER	B-03-01 12BBB2	333723112192501	608647	33° 37' 23"	112° 19' 24.6"	1151	1/5/2021	358.3	V			12/16/2021	358.3	V			0.0
PHOENIX AMA	WEST SALT RIVER	A-03-02 08BBA2	333730112110201	618731	33° 37' 37.1"	112° 10' 52.8"	1236	12/2/2020	327.4	V			12/20/2021	317.9	V			9.5
PHOENIX AMA	WEST SALT RIVER	A-04-01 22AAA	334052112141401	804522	33° 40' 52.7"	112° 14' 14.39"	1280.59	12/1/2020	432	V			12/15/2021	428.5	V			3.5
PHOENIX AMA	WEST SALT RIVER	A-04-01 14DAD	334109112131201	616944	33° 41' 10"	112° 13' 12.2"	1291	12/1/2020	441.8	V			12/15/2021	427.1	V		PUMP OFF - 1 YEAR	17.7
PHOENIX AMA	WEST SALT RIVER	A-04-01 14CBB	334119112140901	617657	33° 41' 19.65"	112° 14' 10.29"	1294.57	2/10/2021	441.75	VT		BLUE 500 12:20	2/10/2022	439.23	VT			2.5
PHOENIX AMA	WEST SALT RIVER	B-04-02 16AAD	334136112273901	614444	33° 41' 35.1"	112° 27' 38"	1413	12/15/2020	332.1	V			12/10/2021	331.8	V			0.3
PHOENIX AMA	WEST SALT RIVER	B-04-02 07DDD	334147112294401	511308	33° 41' 48.7"	112° 29' 43.5"	1460	12/21/2020	319.4	V			12/14/2021	319.2	V			0.2
PHOENIX AMA	WEST SALT RIVER	B-04-03 14ABA	334147112320301	505327	33° 41' 47.8"	112° 32' 3.1"	1501	12/15/2020	311.6	V			12/10/2021	311.3	V			0.3
PHOENIX AMA	WEST SALT RIVER	A-04-01 08DBD	334205112163801	629296	33° 42' 3.9"	112° 16' 40.1"	1308	12/15/2020	264.8	V			12/8/2021	260.6	V			4.2
PHOENIX AMA	WEST SALT RIVER	B-04-03 28DDD	333912112233501	614445	33° 39' 13.2"	112° 33' 52.1"	1628	12/7/2020	415.9	V			12/10/2021	414.2	V			1.7
PHOENIX AMA	WEST SALT RIVER	A-04-02 32BAA2	333915112104001	604123	33° 39' 14.7"	112° 10' 37.6"	1278	12/8/2020	373.3	V			12/21/2021	371.5	V			1.8
PHOENIX AMA	WEST SALT RIVER	A-04-02 26CBA	333943112075101	626639	33° 39' 42.5"	112° 7' 51.4"	1346	11/30/2020	393.8	V			12/15/2021	390.4	V			3.4
PHOENIX AMA	WEST SALT RIVER	B-04-03 19CDD	334028112361401	621513	33° 40' 17.5"	112° 36' 15"	1620	12/7/2020	388.1	V			12/10/2021	388.7	V			-0.6
PHOENIX AMA	WEST SALT RIVER	B-05-03 15AAA	334654112330401	640010	33° 46' 54.4"	112° 33' 2.79"	1711	12/8/2020	480.9	V			12/9/2021	477.4	V			3.5
PHOENIX AMA	WEST SALT RIVER	B-04-01 09BCD	334218112222701	612953	33° 42' 18.7"	112° 22' 25.6"	1341	4/6/2021	347.9	V			1/6/2022	346.6	V			1.3
PHOENIX AMA	WEST SALT RIVER	A-04-02 11ADB	334230112070901	614010	33° 42' 28.39"	112° 7' 8.1"	1430	12/1/2020	350.5	V			12/15/2021	348.6	V		P	



Appendix 3. 1 Year Groundwater level change in Arizona - Water Years 2021 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2021	WL 2021	WL METHOD 2021	WL REMARK 2021	WL COMMENT 2021	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
PNAL AMA	ELOY	D-07-09 27BDA PZ2	324707111341902		32° 47' 12.1"	111° 24' 19.3"	1657	11/10/2020	349.4	V			11/15/2021	350.3	V			-0.9
PNAL AMA	ELOY	D-07-09 08DD2	32491711135701	505967	32° 49' 16.9"	111° 25' 47.3"	1550	11/9/2020	213.6	V			11/15/2021	213.9	V			-0.3
PNAL AMA	ELOY	D-07-07 11CDD	324917111353601		32° 49' 17"	111° 35' 36.6"	1494	11/12/2020	169.5	V			11/9/2021	170.2	V			-0.7
PNAL AMA	ELOY	D-07-08 09DDD	324920111305701	621868	32° 49' 17.7"	111° 30' 54.4"	1516	11/10/2020	157.8	V			11/9/2021	157.5	S			0.3
PNAL AMA	ELOY	D-07-06 17DDD2	324825111442301		32° 48' 24"	111° 44' 21.8"	1441	11/10/2020	124.6	V			11/8/2021	124.6	S			0.0
PNAL AMA	ELOY	D-07-08 17CDD	324827111323001	621861	32° 48' 25.6"	111° 32' 27.2"	1520	11/10/2020	181.1	V			11/9/2021	180	V			1.1
PNAL AMA	ELOY	D-07-05 01ADA	325047111462501	608309	32° 50' 47.7"	111° 46' 25.7"	1402	11/10/2020	51.7	S			11/9/2021	55.8	V			-4.1
PNAL AMA	ELOY	D-07-07 08BAA	325005111384201	624107	32° 50' 3.9"	111° 38' 41"	1468	11/12/2020	304.4	V			11/8/2021	301.7	V			2.7
PNAL AMA	ELOY	D-07-09 10BBB PZ1	325007111244801		32° 50' 6"	111° 24' 44.4"	1596	11/9/2020	339.2	V			11/15/2021	343.4	V			-4.2
PNAL AMA	ELOY	D-07-09 10BBB PZ2	325007111244802		32° 50' 6"	111° 24' 44.4"	1596	11/9/2020	215.6	V			11/15/2021	217.3	V			-1.7
PNAL AMA	ELOY	D-07-08 05DCC	325011111322501	800830	32° 50' 10.5"	111° 32' 25"	1501	11/10/2020	152.8	V			3/29/2022	152.4	S			0.4
PNAL AMA	ELOY	D-07-06 04DCC	325012111434801		32° 50' 11.2"	111° 43' 48.6"	1432	11/10/2020	106.5	S			11/8/2021	111.7	S			-5.2
PNAL AMA	ELOY	D-06-05 34BDD2	325130111490701		32° 51' 27.4"	111° 49' 3.5"	1369	11/10/2020	79.3	S			11/9/2021	65	S			14.3
PNAL AMA	ELOY	D-06-07 34BBC	325142111370501	604669	32° 51' 42.3"	111° 37' 4.6"	1461	11/10/2020	130.9	V			11/8/2021	140.1	S			-9.2
PNAL AMA	ELOY	D-06-08 31CDD	325102111332901	612214	32° 51' 1"	111° 33' 29"	1485	12/11/2020	147.5	V			11/9/2021	156	S			-8.5
PNAL AMA	ELOY	D-06-06 36DDA	325112111401701	605666	32° 51' 10.8"	111° 40' 13.8"	1443	11/10/2020	133.1	V			11/10/2021	134.2	V			-1.1
PNAL AMA	ELOY	D-06-11 27CAD	325242111120001	804201	32° 52' 41.9"	111° 12' 0.3"	2370	11/10/2020	20.2	V			11/15/2021	25.5	S			-5.3
PNAL AMA	ELOY	D-06-09 29BBA4	325243111264001		32° 52' 42.1"	111° 26' 40"	1542	11/9/2020	312.2	V			11/15/2021	315	V			-2.8
PNAL AMA	ELOY	D-06-05 25BBB	325245111472601	801146	32° 52' 45"	111° 47' 25.9"	1375	11/10/2020	63.1	S			11/9/2021	67.7	S			-4.6
PNAL AMA	ELOY	D-06-06 22CDD	325201111430301	503113	32° 52' 52.3"	111° 43' 3.1"	1410	11/13/2020	293.9	V		PUMP OFF ONE HOUR BEE SUT	11/10/2021	293.9	V			0.0
PNAL AMA	ELOY	D-06-08 18CDD2	325339111333001	605546	32° 53' 39.2"	111° 33' 30.5"	1451	12/10/2020	102.7	V			11/8/2021	105.6	S			-2.9
PNAL AMA	ELOY	D-06-06 14DDD2	325340111411801	621201	32° 53' 40.2"	111° 41' 18.6"	1415	11/10/2020	309.7	V	K		11/10/2021	314	V	K		-4.3
PNAL AMA	ELOY	D-06-06 23ADC	325316111412701	621197	32° 53' 13.1"	111° 41' 29.8"	1417	11/10/2020	312	V			11/10/2021	318.7	V			-6.7
PNAL AMA	ELOY	D-06-08 11ADA1	325503111284801	617559	32° 55' 2.8"	111° 28' 48.8"	1473	11/12/2020	73.2	V			11/8/2021	76.5	S			-3.3
PNAL AMA	ELOY	D-06-07 08ADD	325503111375701		32° 55' 2.3"	111° 38' 7.7"	1414	11/12/2020	95.7	V			11/8/2021	96.4	S			-0.7
PNAL AMA	ELOY	D-06-07 11DDD2	325432111350401		32° 54' 31.8"	111° 35' 3.3"	1431	11/12/2020	97	V			11/8/2021	99.9	S			-2.9
PNAL AMA	ELOY	D-06-08 S04ADD1	325554111305201	605731	32° 53' 49.5"	111° 30' 53.9"	1429	11/12/2020	70.7	S			11/8/2021	73	S			-2.3
PNAL AMA	ELOY	D-06-09 N04DDD	325617111244801	620899	32° 56' 16.6"	111° 24' 47.3"	1588	12/16/2020	320.7	V			11/8/2021	321.6	V			-0.9
PNAL AMA	ELOY	D-05-07 34DDD	325618111370501	604184	32° 56' 18"	111° 37' 5"	1406	11/10/2020	102.1	V			11/9/2021	106	S			-3.9
PNAL AMA	ELOY	D-05-07 33DDD	325618111380801	609618	32° 56' 17.7"	111° 38' 8"	1403	11/10/2020	110	V			11/9/2021	110.2	V			-0.2
PNAL AMA	ELOY	D-06-08 S02DAA	325532111285201	617565	32° 55' 48.5"	111° 28' 47.9"	1472	11/12/2020	254.8	V			11/8/2021	253	V			1.8
PNAL AMA	ELOY	D-05-07 26CDD	325711111363801	622466	32° 57' 10.4"	111° 36' 37"	1402	11/10/2020	97.5	V			11/10/2021	105.6	S			-8.1
PNAL AMA	ELOY	D-05-07 28DCC2	325712111383001	809300	32° 57' 12.8"	111° 38' 36.6"	1410	11/10/2020	126.1	S			11/10/2021	129	S			-2.9
PNAL AMA	ELOY	D-05-06 28CAA	325728111444901	608103	32° 57' 34.9"	111° 44' 53.5"	1464	11/10/2020	325.5	V			11/10/2021	326.4	V			-0.9
PNAL AMA	ELOY	D-05-09 31ADD	325707111271801	621904	32° 57' 6.8"	111° 27' 18.1"	1505	11/13/2020	166.2	V			11/9/2021	167.7	V			-1.5
PNAL AMA	ELOY	D-05-09 22CBA	325848111251101	621911	32° 58' 50"	111° 25' 6"	1529	12/2/2020	259.8	S			11/17/2021	265.5	S			-5.7
PNAL AMA	ELOY	D-05-10 22BBC1	325906111190601	532446	32° 59' 6.8"	111° 19' 6"	1768	11/12/2020	484.2	V			11/15/2021	485.4	V			-1.2
PNAL AMA	ELOY	D-05-07 W13CAD	325908111355701		32° 59' 7.2"	111° 35' 31.1"	1386	11/10/2020	85.4	V			11/10/2021	87.7	S			-2.3
PNAL AMA	ELOY	D-06-09 N06AAA2	325635111264801	222563	32° 56' 34.7"	111° 26' 48.5"	1522	12/11/2020	270.3	V			11/8/2021	272.1	V			-1.8
PNAL AMA	ELOY	D-05-09 29ADA	325807111261601	635611	32° 58' 6.8"	111° 26' 16.2"	1520	11/13/2020	186.8	V			11/9/2021	184.9	V			1.9
PNAL AMA	ELOY	D-05-09 18BDD2	325944111275001	601789	32° 59' 45.4"	111° 27' 49.8"	1464	11/13/2020	220	V			11/9/2021	217.7	V			2.3
PNAL AMA	ELOY	D-05-09 18BDD1	325945111275101	601792	32° 59' 44.6"	111° 27' 49.6"	1464	11/13/2020	203.7	V			11/9/2021	207.2	V			-3.5
PNAL AMA	ELOY	D-05-08 17BBB2	330008111332601	621935	33° 0' 7.6"	111° 33' 26"	1409	11/10/2020	116.9	V			11/9/2021	133.5	V			-16.6
PNAL AMA	ELOY	D-04-09 33AAD	330235111252101	627609	33° 2' 37.3"	111° 25' 19.1"	1456	11/10/2020	207.1	V			11/17/2021	209.6	V			-2.5
PNAL AMA	ELOY	D-06-09 02AAC	330143111233201	627616	33° 1' 39.6"	111° 23' 28.4"	1495	11/13/2020	233.7	V			11/9/2021	234.9	V			-1.2
PNAL AMA	ELOY	D-05-08 02AAA	330146111292301	621952	33° 1' 45.8"	111° 39' 22.7"	1418	11/10/2020	127.7	V			11/9/2021	139	V			-11.3
PNAL AMA	ELOY	D-04-10 18DCD PZ1	330435111212601		33° 4' 34.21"	111° 21' 30.97"	1562.49	1/25/2021	274.1	V			1/26/2022	276.3	V			-2.2
PNAL AMA	ELOY	D-04-10 18DCD PZ2	330435111212602		33° 4' 34.21"	111° 21' 30.97"	1562.49	2/24/2021	274	V			2/23/2022	277.2	V			-3.2
PNAL AMA	ELOY	D-04-10 30BDD	330311111214201	605530	33° 3' 10.8"	111° 21' 40.8"	1490	11/10/2020	203.1	V			11/9/2021	201.6	V			1.5
PNAL AMA	ELOY	D-04-09 15BCA2 PZ1	330515111245601		33° 5' 15.58"	111° 24' 56.27"	1572.98	2/24/2021	319.3	V			2/23/2022	319.3	V			0.0
PNAL AMA	ELOY	D-04-10 12DDD	330522111160601	621947	33° 5' 22"	111° 16' 7.1"	1553.8	11/10/2020	46.4	V			11/15/2021	53.3	S			-6.9
PNAL AMA	ELOY	D-05-10 31BBA PZ1	335733111220201		32° 57' 25.04"	111° 22' 7.05"	1654.55	2/24/2021	383	V			2/23/2022	386.5	V			-3.5
PNAL AMA	ELOY	D-05-10 31BBA PZ2	335733111220202		32° 57' 25.04"	111° 22' 7.05"	1654.55	2/24/2021	383.1	V			2/23/2022	385.9	V			-2.8
PNAL AMA	ELOY	D-05-10 31BBA PZ3	335733111220203		32° 57' 25.04"	111° 22' 7.05"	1654.55	2/24/2021	383.3	V			2/23/2022	385.7	V			-2.4
PNAL AMA	ELOY	D-09-08 29BCC	323635111330001	615602	32° 36' 36"	111° 33' 1.59"	1663.71	2/4/2021	341.62	VT		NO CASCADING BLUE 500 1300	1/28/2022	356.69	VT			-15.1
PNAL AMA	ELOY	D-06-07 36DCB	325117111342801		32° 51' 8.77"	111° 34' 30.4"	1477.02	2/4/2021	135.76	VT			1/28/2022	144.02	VT			-8.3
PNAL AMA	ELOY	D-06-06 22DDD2	325248111422001	208822	32° 52' 47.8"	111° 42' 20.1"	1414	11/13/2020	322.3	V			11/10/2021	325.7	V			-3.4
PNAL AMA	MARICOPA - STANFIELD	D-06-05 09ADD2	325503111493301	916442	32° 55' 2.5"	111° 49' 33.2"	1332	11/10/2020	28.5	V			11/9/2021	24.2	S			4.3
PNAL AMA	MARICOPA - STANFIELD	D-07-05 07DDD	324917111513801	613932	32° 49' 16.3"	111° 51' 38.7"	1368	11/10/2020	452.4	V			11/9/2021	454.4	V			-2.0
PNAL AMA	MARICOPA - STANFIELD	D-06-04 36DDD	325102111523901	629477	32° 51' 2.5"	111° 52' 37.8"	1347	11/12/2020	479.3	V			11/9/2021	486.8	V			-7.5
PNAL AMA	MARICOPA - STANFIELD	D-06-03 27CCC	325156112015101	615407	32° 51' 54.14"	112° 1' 52.03"	1374.26	2/4/2021	660.01	VT		BLACK 1500 10-45	1/28/2022	663.03	VT			-3.0
PNAL AMA	MARICOPA - STANFIELD	D-06-04 15DDD1	325339111544201	605517	32° 53' 38.6"	111° 54' 42.2"	1305	11/12/2020	551.1	V			11/9/2021	552	V			-0.9
PNAL AMA	MARICOPA - STANFIELD	D-06-05 16DAD	325356111493202	622028	32° 53' 56.7"	111° 49' 32.6"	1346	11/10/2020	54.5	V			11/23/2021	65.4	V			-10.9
PNAL AMA	MARICOPA - STANFIELD	D-06-05																



Appendix 3. 1 Year Groundwater level change in Arizona - Water Years 2021 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2021	WL 2021	WL METHOD 2021	WL REMARK 2021	WL COMMENT 2021	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-03 35BBB	344348112331401	602609	34° 43' 48.1"	112° 33' 14.2"	5200	3/23/2021	115.2	V			3/31/2022	115.9	V			-0.7
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-01 25DOB	344358112182901	625105	34° 43' 58.3"	112° 18' 32.2"	4961	3/24/2021	446.6	V			3/23/2022	448.3	V			-1.7
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-03 01DCD	344241112312201	808811	34° 42' 11.2"	112° 31' 21.5"	5010	3/23/2021	146.7	V			3/24/2022	147.3	V			-0.6
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 14BCB	344603112264001	606022	34° 46' 2.7"	112° 26' 39.7"	4659	3/23/2021	176.7	V			3/22/2022	178.6	V			-1.9
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 15ACB	344613112271901	606691	34° 46' 10.4"	112° 27' 19"	4670	3/23/2021	195.1	V			3/22/2022	196.3	V			-1.2
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-01 07CDD	344628112174901	606296	34° 46' 29.4"	112° 24' 10.3"	4701	3/22/2021	195.2	V			3/21/2022	196.5	V			-1.3
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 09CDD	344629112283401	634748	34° 46' 31.2"	112° 28' 33.3"	4685	3/25/2021	207.1	V			3/21/2022	207.6	V			-0.5
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-01 28BCA	344429112222001	625104	34° 44' 26.8"	112° 22' 23.2"	4807	3/22/2021	304.9	V			3/23/2022	306.6	V			-1.7
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 21CCC1	344448112285601	536853	34° 44' 48.5"	112° 28' 51.6"	4810	8/24/2021	328.3	V			3/25/2022	322.8	V			5.5
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-01 20CBD1	344459112232601	625107	34° 45' 0"	112° 23' 26.2"	4777	3/22/2021	40.8	S			3/23/2022	45	V			-4.2
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 22DBA	344507112270101	606024	34° 45' 9.4"	112° 27' 5.6"	4716	3/25/2021	234	V			3/24/2022	235.3	V			-1.3
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 21BAA1	344534112282901	604724	34° 45' 33.9"	112° 28' 25.5"	4747	3/22/2021	258.1	V			3/21/2022	259.1	V			-1.0
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 14CCC	344540112264501	606023	34° 45' 36.4"	112° 26' 42.5"	4690	3/23/2021	213.7	V	V		3/24/2022	206.6	V	V	49.2' OF OIL	7.1
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 14CDA	344543112262201	606021	34° 45' 44.7"	112° 26' 21.4"	4670	3/25/2021	193.3	V			3/22/2022	194.2	V			-0.9
PRESCOTT AMA	LITTLE CHINO VALLEY	B-17-02 S34BCD	344849112280601	619376	34° 48' 43.7"	112° 27' 41.3"	4501	3/25/2021	50.1	S			3/24/2022	47.4	V			2.7
PRESCOTT AMA	LITTLE CHINO VALLEY	B-17-02 26CCC1	344912112264801		34° 49' 11.9"	112° 26' 42.7"	4463	3/24/2021	3.3	S			3/22/2022	2.9	S			0.4
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 08ACA	344704112291601	572110	34° 47' 5.4"	112° 29' 15.5"	4615	3/25/2021	143.9	V			3/21/2022	145	V			-1.1
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 03BBB1	344809112275201		34° 48' 9.7"	112° 27' 50.9"	4539	3/25/2021	84.2	S			3/24/2022	82.2	V			2.0
PRESCOTT AMA	LITTLE CHINO VALLEY	B-17-02 S34DDDB3	344819112265601	633990	34° 48' 18.4"	112° 26' 55.8"	4515	3/23/2021	53.9	S			3/24/2022	54	V			-0.1
PRESCOTT AMA	LITTLE CHINO VALLEY	B-17-02 S34CDD	344820112272701	609766	34° 48' 17.1"	112° 27' 24.4"	4516	3/25/2021	30.1	S			3/24/2022	31.2	V			-1.1
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-01 19DCD2	343930112235601	562286	34° 39' 32.8"	112° 23' 57.7"	4920	3/22/2021	397.5	V			3/22/2022	398.2	V			-0.7
PRESCOTT AMA	LITTLE CHINO VALLEY	B-17-02 S31DCD	344821112301701	802799	34° 48' 23.1"	112° 30' 16.3"	4519	5/25/2021	512	V			3/25/2022	513	V			-1.0
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-02 30CDA	343843112303101	511771	34° 38' 42.8"	112° 30' 30.3"	5288	3/23/2021	290.1	V			3/23/2022	291	V			-0.9
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-02 31DBB	343754112301101	635023	34° 37' 52.3"	112° 30' 11.3"	5355	3/23/2021	228.2	V			3/24/2022	228.6	V			-0.4
PRESCOTT AMA	LITTLE CHINO VALLEY	B-14-02 05BBC	343734112295901	540148	34° 37' 33.2"	112° 29' 56.1"	5305	3/23/2021	196.7	V			3/22/2022	197.1	V			-0.4
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-01 35ACB	343820112195701	560334	34° 38' 20.3"	112° 19' 56.5"	4961	3/23/2021	412.4	V			3/22/2022	383.3	V		PROBE RETURNED MUD PLUG IN TIP	29.1
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-01 23ACA	344520112194301	587404	34° 45' 19.87"	112° 19' 43.2"	4878.63	10/28/2020	370.08	VT			10/13/2021	371.41	VT			-1.3
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-02 22AAB PZ1	342020112270102	588619	34° 40' 19.75"	112° 27' 0.52"	5007.63	6/3/2021	329.36	VT		BLUE 500	6/9/2022	329.15	VT			0.2
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 21BAA2	344535112283001	604725	34° 45' 32.65"	112° 28' 30.82"	4746.47	6/3/2021	266.37	VT		BLUE 500 10:45	6/9/2022	267.15	VT			-0.8
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 12CBD	344645112253401	606300	34° 46' 42.02"	112° 25' 29"	4601.85	10/28/2020	113.16	VT			10/13/2021	112.62	VT			0.5
PRESCOTT AMA	LITTLE CHINO VALLEY	B-17-02 N34DDDB1	344819112265701	608242	34° 48' 18.18"	112° 26' 57.65"	4513.79	10/28/2020	42.15	VT			10/13/2021	40.73	VT			1.4
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-01 08DAA1 PZ1	344134112223501	587403	34° 41' 33.73"	112° 22' 35.25"	4915.24	10/29/2020	404.33	VT			10/15/2021	406.07	VT			-1.7
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-02 22AAB	342020112270101	588619	34° 40' 19.75"	112° 27' 0.52"	5007.63	6/3/2021	399.18	VT		RED 500 12:00	6/9/2022	399.97	VT			-0.8
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 22BCC1	344515112275101	231426	34° 45' 15.3"	112° 27' 48.1"	4735	9/22/2021	263.1	V			3/3/2022	255.7	V			7.4
PRESCOTT AMA	LITTLE CHINO VALLEY	B-15-01 26CBC1	343854112202701	541372	34° 38' 54.55"	112° 20' 27.49"	4949.32	6/3/2021	443.7	VT		RED 500 13:15	6/9/2022	437.2	VT			6.5
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 28DDC	344357112280901	628072	34° 43' 51.9"	112° 28' 8.69"	4818.78	10/28/2020	335.09	VT			10/13/2021	335.62	VT			-0.5
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 04DAD2	344738112280101	923332	34° 47' 38.5"	112° 27' 58.1"	4582	9/22/2021	118.2	V			3/2/2022	117.1	V			1.1
PRESCOTT AMA	LITTLE CHINO VALLEY	B-14-02 16BCC	343538112284901	231748	34° 35' 37.8"	112° 28' 46.2"	5240	9/14/2021	157.1	V			2/25/2022	170.7	V			-13.6
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 07BBA	344722112305601	232010	34° 47' 22.3"	112° 30' 53.6"	4822	9/22/2021	335.9	V			3/10/2022	336.3	V			-0.4
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 05CAC	344741112294201	232206	34° 47' 40.7"	112° 29' 39.3"	4640	9/22/2021	189.9	V			3/1/2022	188.5	V			1.4
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 27BBA3	344438112274501	232335	34° 44' 37.7"	112° 27' 42.7"	4760	9/21/2021	284.8	V			3/15/2022	277	V			7.8
PRESCOTT AMA	LITTLE CHINO VALLEY	B-14-02 20CDD	343420112293801	231838	34° 34' 20.5"	112° 29' 35.8"	5560	9/13/2021	76	V			3/9/2022	52.7	V			23.3
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-03 25ADC	344104112124601	924703	34° 45' 12.1"	112° 32' 22.8"	5020	9/21/2021	77.8	V			3/10/2022	76.1	S			1.7
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 21BAD	344524112283401	924641	34° 45' 24.4"	112° 28' 31.1"	4759	9/21/2021	282.3	V			3/3/2022	275	V			7.3
PRESCOTT AMA	LITTLE CHINO VALLEY	B-16-02 16AAD2	344619112275601	543909	34° 46' 19.1"	112° 27' 56.3"	4678	3/22/2021	195.6	V			3/21/2022	197.3	V			-1.7
PRESCOTT AMA	UPPER AGUA FRIA	A-15-01 11DBB	344123112131701	566091	34° 41' 22.5"	112° 13' 14.7"	5460	3/25/2021	202.1	V			3/22/2022	203.6	V			-1.5
PRESCOTT AMA	UPPER AGUA FRIA	A-13-01 13BBB	343047112131301	575377	34° 30' 46.4"	112° 13' 9.9"	4580	3/25/2021	90.4	V			3/21/2022	88.2	V			2.2
PRESCOTT AMA	UPPER AGUA FRIA	A-14-01 34CCA	343244112150901	631279	34° 32' 44.8"	112° 15' 9.9"	4650	3/23/2021	83.8	V			3/21/2022	81.6	V			2.2
PRESCOTT AMA	UPPER AGUA FRIA	A-13-01 01DCA	343153112122901	803241	34° 31' 53"	112° 12' 29.6"	4738	3/25/2021	210.7	V			3/21/2022	210.4	V			0.3
PRESCOTT AMA	UPPER AGUA FRIA	B-14-01 15ABA	343601112205301	613028	34° 35' 59"	112° 20' 48.3"	5117.42	3/24/2021	61.1	V			3/22/2022	586.2	V			24.9
PRESCOTT AMA	UPPER AGUA FRIA	B-14-01 10DDA	343610112203201	523346	34° 36' 10.7"	112° 20' 30.6"	5082	3/24/2021	506.7	V			3/22/2022	475.4	V			31.3
PRESCOTT AMA	UPPER AGUA FRIA	B-14-01 11DAA	343628112193001	612329	34° 36' 26.6"	112° 19' 31.1"	5043.52	3/24/2021	337.7	V			3/22/2022	334.6	V			3.1
PRESCOTT AMA	UPPER AGUA FRIA	B-14-01 11ACB	343637112195701	612330	34° 36' 37.1"	112° 19' 57.5"	5043.72	3/24/2021	349.4	V			3/22/2022	345.9	V			3.5
PRESCOTT AMA	UPPER AGUA FRIA	A-14-01 08BBB	343652112172101	536623	34° 36' 52.08"	112° 17' 18.8"	4859.13	10/28/2020	214.14	VT			10/13/2021	214.86	VT			-0.7
PRESCOTT AMA	UPPER AGUA FRIA	A-14-01 25DAC	343343112183801	613029	34° 33' 43.9"	112° 18' 38.2"	4933	3/23/2021	45.4	S			3/31/2022	48.5	S			-3.1
PRESCOTT AMA	UPPER AGUA FRIA	A-14-01 27ACC	343353112144101	613024	34° 33' 53.08"	112° 14' 41.05"	4660.63	10/28/2020	42.5	VT			10/13/2021	41.68	VT			0.8
PRESCOTT AMA	UPPER AGUA FRIA	A-14-01 28BBB	343415112161401	613020	34° 34' 11.5"	112° 16' 12.8"	4714.98	3/23/2021	99.5	S			3/21/2022	102.6	V			-3.1
PRESCOTT AMA	UPPER AGUA FRIA	A-14-01 22CAD	343434112145201	613023	34° 34' 33.5"	112° 14' 51.1"	4720	3/23/2021	86.9	S			3/31/2022	86.7	V			0.2
PRESCOTT AMA	UPPER AGUA FRIA	B-14-01 22ADA	343453112203401	613045	34° 34' 53.7"	112° 20' 34.4"	5184.1	3/22/2021	338	V			3/21/2022	340.2	V			-2.2
PRESCOTT AMA	UPPER AGUA FRIA	A-14-01 17AAD	343529112162201	613025	34° 35' 48.92"	112° 16' 26.23"	4779.25	10/28/2020	35.64	VT			10/13/2021	33.8	VT			1.8
PRESCOTT AMA	UPPER AGUA FRIA	B-14-01 14ACC	343540112195701	613042	34° 35' 38.2"	112° 20' 0"	5111.16	3/24/2021	370.9	V			3/22/2022	368.6	V			2.3
PRESCOTT AMA	UPPER AGUA FRIA	B-																



### Appendix 3. 1 Year Groundwater level change in Arizona - Water Years 2021 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2021	WL 2021	WL METHOD 2021	WL REMARK 2021	WL COMMENT 2021	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
SAFFORD BASIN	GILA VALLEY	D-05-24 18AAA	33001810954301	620674	33° 0' 17.9"	109° 54' 51.4"	2730	11/5/2020	34.2	S			11/1/2021	34.7	S			-0.5
SAFFORD BASIN	GILA VALLEY	D-04-22 35ADA	330240110031101	611941	33° 2' 39.7"	110° 3' 13.1"	2857.54	11/5/2020	31.1	S			11/5/2021	35.5	S			-4.4
SAFFORD BASIN	GILA VALLEY	D-05-23 03CAB1	330135109583801	624721	33° 1' 32.5"	109° 58' 37.8"	2790	11/5/2020	74	S			11/1/2021	71.3	S			2.7
SAFFORD BASIN	GILA VALLEY	D-05-23 02DBC2	330128109572301		33° 1' 27.8"	109° 57' 23.4"	2720	11/5/2020	31.6	S			11/1/2021	32.6	S			-1.0
SAFFORD BASIN	GILA VALLEY	D-08-26 33CDC1	324113109415401		32° 41' 11.91"	109° 41' 37.56"	3341.21	2/9/2021	48.93	VT		TAKEN WITH BLACK 500 AT 10:30	2/8/2022	50.14	VT			-1.2
SAFFORD BASIN	SAN SIMON VALLEY	D-20-32 09BBB	314238109050701	602723	31° 42' 39.2"	109° 5' 7"	4297	11/5/2020	198.8	V			11/4/2021	200.2	S			-1.4
SAFFORD BASIN	SAN SIMON VALLEY	29S 22W 11 243A	314750109024501		31° 47' 50.7"	109° 2' 51.2"	4164	11/5/2020	151.6	V			11/4/2021	150.58	V			1.0
SAFFORD BASIN	SAN SIMON VALLEY	D-17-32 N06AAB	315901109062301	621601	31° 59' 4"	109° 6' 21.4"	4219	11/4/2020	336.1	V	P		11/3/2021	338.2	V	P		-2.1
SAFFORD BASIN	SAN SIMON VALLEY	27S 21W 07 232A	315836109011501		31° 58' 27.7"	109° 1' 23.1"	4018	11/5/2020	141.4	V			11/3/2021	143	V			-1.6
SAFFORD BASIN	SAN SIMON VALLEY	27S 21W S06 443	315846109011601		31° 58' 46.3"	109° 1' 15.6"	4001	11/5/2020	135.6	V			11/3/2021	136.2	V			-0.6
SAFFORD BASIN	SAN SIMON VALLEY	D-14-32 30CCB	321053109071801	613339	32° 10' 53.6"	109° 7' 18.3"	3730	11/4/2020	314.2	V			11/3/2021	319.5	V			-5.3
SAFFORD BASIN	SAN SIMON VALLEY	D-14-31 22ADC	321200109094501	612633	32° 11' 57.9"	109° 9' 44.2"	3693	11/4/2020	309.6	V	K		11/3/2021	297	V	K		12.6
SAFFORD BASIN	SAN SIMON VALLEY	D-14-31 19BAC	321210109132001	615982	32° 12' 10.4"	109° 13' 20.3"	3713	11/4/2020	93.6	S			11/2/2021	89.1	S			4.5
SAFFORD BASIN	SAN SIMON VALLEY	D-14-31 08ABC1	321355109120501	810297	32° 13' 59.8"	109° 12' 5.5"	3632	11/3/2020	61.4	V			11/2/2021	61.6	V			-0.2
SAFFORD BASIN	SAN SIMON VALLEY	D-13-29 24DCC2	321648109202001	621310	32° 16' 46.7"	109° 20' 19.9"	3655	11/3/2020	289.1	V			11/2/2021	272.1	V			17.0
SAFFORD BASIN	SAN SIMON VALLEY	D-13-31 29DDA	321607109114101	805565	32° 16' 6.8"	109° 11' 35.7"	3621	11/3/2020	52.8	V			11/2/2021	52.2	V			0.6
SAFFORD BASIN	SAN SIMON VALLEY	D-13-28 13BCD	321812109264401	610898	32° 18' 12.11"	109° 26' 46.79"	3732.16	2/9/2021	114.76	VT		TAKEN WITH BLACK 500 AT 11:25	2/8/2022	116.03	VT			-1.3
SAFFORD BASIN	SAN SIMON VALLEY	D-13-30 15BBB	321830109165001	622807	32° 18' 29.1"	109° 16' 41.6"	3569	11/3/2020	63	V	P		11/2/2021	63.1	V	P		-0.1
SAFFORD BASIN	SAN SIMON VALLEY	D-13-28 22BCC	321721109286001	618342	32° 17' 19.6"	109° 28' 59.6"	3840	11/3/2020	580.6	V			11/2/2021	589.1	V			-8.5
SAFFORD BASIN	SAN SIMON VALLEY	D-13-30 09ACD2	321857109170101		32° 18' 58.3"	109° 16' 59.6"	3566	11/3/2020	51.1	V			11/2/2021	51.5	V			-0.4
SAFFORD BASIN	SAN SIMON VALLEY	D-12-27 32AAB1	322110109362701	809568	32° 21' 11.6"	109° 36' 24.5"	3979	11/2/2020	132.6	V			11/1/2021	132.6	V			0.0
SAFFORD BASIN	SAN SIMON VALLEY	D-12-28 26BCA2	322152109274701		32° 21' 54.1"	109° 27' 42.1"	3666	11/3/2020	210.5	V			11/1/2021	208.9	V			1.6
SAFFORD BASIN	SAN SIMON VALLEY	D-16-31 09ACB	3203161091035801	616118	32° 3' 15.9"	109° 10' 38.4"	4310	11/4/2020	600.7	V			11/3/2021	602.5	V			-1.8
SALT RIVER BASIN	SALT RIVER CANYON	A-08-23 06DBD	340655109570701	521646	34° 6' 55.2"	109° 57' 7.1"	6918	10/21/2020	168.4	V			10/19/2021	168.7	V			-0.3
SALT RIVER BASIN	SALT RIVER LAKES	D-01-15 01BBA	332241110461201	703145	33° 22' 41.26"	110° 46' 11.69"	3603.72	2/9/2021	27.13	VT		TAKEN AT 8:15 WITH BLACK 500	2/8/2022	18.29	VT			8.8
SALT RIVER BASIN	SALT RIVER LAKES	A-05-11 18AAA	334653111154101	600998	33° 46' 54.1"	111° 15' 40.4"	2145	10/19/2020	5.5	S			10/18/2021	8.8	S			-3.3
SAN BERNADINO VALLEY BASIN	SAN BERNADINO VALLEY	D-24-30 16CCC	312006109180601	616444	31° 20' 5"	109° 17' 59.8"	3796	11/3/2020	31.5	V			11/4/2021	29.9	S			1.6
SAN BERNADINO VALLEY BASIN	SAN BERNADINO VALLEY	D-23-31 29DDC	312340109121601	640715	31° 23' 40.1"	109° 12' 12.4"	4020	11/3/2020	205.6	V			11/4/2021	206.1	V			-0.5
SAN RAFAEL BASIN	SAN RAFAEL	D-24-17 14BBA	312109110352501		31° 21' 9.5"	110° 35' 25.6"	4645	2/24/2021	7.8	S			2/23/2022	7	S			0.8
SAN RAFAEL BASIN	SAN RAFAEL	D-24-16 01CBA UNSURV	312207110400301	640950	31° 22' 6.9"	110° 40' 3.1"	5003	1/29/2021	211.7	V			1/28/2022	212.8	V			-1.1
SAN RAFAEL BASIN	SAN RAFAEL	D-24-17 15CCA	312031110363201	602673	31° 20' 30.3"	110° 36' 32.3"	4680	1/26/2021	13.7	V			1/28/2022	14.7	V			-1.0
SAN RAFAEL BASIN	SAN RAFAEL	D-23-17 10CBC2	312647110364101	624898	31° 26' 45.4"	110° 36' 40.7"	4946	1/29/2021	123.6	V			1/27/2022	123.3	V			0.3
SAN RAFAEL BASIN	SAN RAFAEL	D-22-17 25BDB2	312941110341601	630082	31° 29' 42.5"	110° 34' 20.7"	5085	1/29/2021	31.3	V			1/27/2022	28.3	V			3.0
SANTA CRUZ AMA	SANTA CRUZ AMA	D-24-15 08ADC UNSURV	312124110493301	510018	31° 21' 23.69"	110° 49' 33.71"	3836.21	11/19/2020	89.5	V			11/17/2021	89.24	V			0.3
SANTA CRUZ AMA	SANTA CRUZ AMA	D-24-15 04DDD1 UNSUR	312147110482801	625364	31° 21' 46.4"	110° 48' 27.6"	4018	1/28/2021	93.8	S			1/26/2022	93	V			0.8
SANTA CRUZ AMA	SANTA CRUZ AMA	D-24-14 18CBC	312017110573001	603434	31° 20' 19.7"	110° 57' 26.8"	3957	1/28/2021	203.9	S			1/26/2022	203.7	V			0.2
SANTA CRUZ AMA	SANTA CRUZ AMA	D-24-14 17ACD	312032110555101	603396	31° 20' 31.9"	110° 55' 50.7"	3825	11/19/2020	11.6	S			11/17/2021	10.2	S			1.4
SANTA CRUZ AMA	SANTA CRUZ AMA	D-24-15 18BAD UNSURV	312048110504901		31° 20' 41.8"	110° 50' 57.8"	3715	11/19/2020	9.8	S			11/17/2021	9.2	V			0.6
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-13 24DDC	312423110574901	500951	31° 24' 21.7"	110° 57' 49.2"	3597	1/27/2021	61.2	V			1/26/2022	59.6	V			1.6
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-14 22CDD2	312426110540201		31° 24' 28.3"	110° 54' 4.7"	3570	11/19/2020	25.5	S			11/17/2021	31.4	S			-5.9
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-15 19ABB	312513110505401	805426	31° 25' 13.3"	110° 50' 53.7"	3885	1/28/2021	143.6	S			1/26/2022	144.4	V			-0.8
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-14 15CCB1	312523110542801	607491	31° 25' 27.1"	110° 54' 28.3"	3554	2/19/2021	46.8	V			2/23/2022	49	V			-2.2
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-14 16BCC	312545110552801	619649	31° 25' 43.2"	110° 55' 26.4"	3509	11/19/2020	16.9	S			11/17/2021	17	S			-0.1
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-15 31CAC	312258110510901	625359	31° 22' 57.2"	110° 51' 9.2"	3650	11/19/2020	24.8	V			11/17/2021	22.3	V			2.5
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-13 31DAB	312301111024801	634030	31° 23' 1.2"	111° 2' 47.4"	4040	1/27/2021	319.6	V			1/26/2022	319.8	V			-0.2
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-13 36BDD	312308110580601	506340	31° 23' 8.38"	110° 58' 44.8"	3700.19	11/16/2020	159.3	VT		TAKEN AT 10:15 WITH BLACK 500	10/20/2021	158.58	VT			0.7
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-14 36BCB1	312316110532701	603439	31° 23' 15.8"	110° 52' 26.9"	3620	11/19/2020	48.1	S			2/25/2022	57	S			-8.9
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-13 36ADB	312316110574801	603432	31° 23' 14.4"	110° 57' 42.7"	3675	1/28/2021	130.4	V			1/26/2022	130.3	V			0.1
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-14 25CBB	312353110522401	800221	31° 23' 52.6"	110° 52' 24.1"	3604	11/19/2020	43.1	V			11/17/2021	48.1	V			-5.0
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-14 26ACD	312359110524801	801262	31° 23' 58.9"	110° 52' 48.9"	3610	11/19/2020	52.6	V			11/17/2021	57.4	V			-4.8
SANTA CRUZ AMA	SANTA CRUZ AMA	D-22-13 35DDB UNSURV	312756110584801	619351	31° 27' 56.9"	110° 58' 48.5"	3435	1/26/2021	20.3	S			1/25/2022	19.3	S			1.0
SANTA CRUZ AMA	SANTA CRUZ AMA	D-22-13 34ADD UNSURV	312818110594501	619367	31° 28' 19.7"	110° 59' 39.7"	3401	1/26/2021	15.8	S			1/25/2022	14.1	V			1.7
SANTA CRUZ AMA	SANTA CRUZ AMA	D-22-13 36AD UNSURV	312823110573501	619352	31° 28' 24.4"	110° 57' 33.3"	3471	2/19/2021	29.2	V			2/23/2022	44	V			-14.8
SANTA CRUZ AMA	SANTA CRUZ AMA	D-23-13 08CB UNSURV	312633111023301		31° 26' 31.5"	111° 2' 34.5"	3575	2/19/2021	13.8	S			2/23/2022	13.3	V			0.5
SANTA CRUZ AMA	SANTA CRUZ AMA	D-22-13 09DA2 UNSURV	313137111004301	619348	31° 31' 34.7"	111° 0' 37.8"	3327	1/26/2021	10.9	S			1/25/2022	10.7	S			0.2
SANTA CRUZ AMA	SANTA CRUZ AMA	D-22-13 05DD2 UNSURV	313211111014001	619360	31° 32' 12.2"	111° 1' 39.8"	3307	1/26/2021	15.8	S			1/25/2022	15.1	S			0.7
SANTA CRUZ AMA	SANTA CRUZ AMA	D-22-13 27AAB UNSURV	312929110594201	619353	31° 29' 29.5"	110° 59' 43.7"	3379	1/26/2021	13.1	S			1/25/2022	10.5	S			2.6
SANTA CRUZ AMA	SANTA CRUZ AMA	D-22-13 09BDD4 UNSUR	313148111011201	221955	31° 31' 48.4"	111° 1' 12.6"	3321	11/19/2020	26.6	S	P		11/16/2021	26.4	S	P		0.2
SANTA CRUZ AMA	SANTA CRUZ AMA	D-22-13 19DCC1 UNSUR	312946111025301	524009	31° 29' 41.4"	111° 2' 58.9"	3490	1/26/2021	199.6	S			1/25/2022	199.2	V			0.4
SANTA CRUZ AMA	SANTA CRUZ AMA	D-22-13 09DCC UNSURV	313120111005801	605206	31° 31' 20.4"	111° 0' 58.5"	3340	2/25/2021	18.2	V			2/24/2022	19.1	S			-0.9
SANTA CRUZ AMA	SANTA CRUZ AMA	D-21-13 19DBC	313506111030701	617995	31° 35' 6.7"	111° 3' 6.1"	3255	1/26/2021	20.9	S			1/25/2022	22.6	S			-1.7
SANTA CRUZ AMA	SANTA CRUZ AMA	D-21-12 24AAA																



Appendix 3. 1 Year Groundwater level change in Arizona - Water Years 2021 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2021	WL 2021	WL METHOD 2021	WL REMARK 2021	WL COMMENT 2021	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
TUCSON AMA	AVRA VALLEY	D-14-11 14DDB PZ2	32122011111202	509590	32° 12' 23"	111° 11' 12.9"	2374	11/13/2020	302.5	V			11/17/2021	298	V			14.5
TUCSON AMA	AVRA VALLEY	D-13-11 17B8CB PZ1	32180611150401	508422	32° 18' 7.5"	111° 15' 6.09"	2144	11/13/2020	291.4	V			11/17/2021	285.6	V			7.8
TUCSON AMA	AVRA VALLEY	D-13-11 17B8CB PZ2	32180611150402	508422	32° 18' 7.5"	111° 15' 6.09"	2144	11/13/2020	295.1	V			11/17/2021	288.2	V			6.9
TUCSON AMA	AVRA VALLEY	D-13-11 11AC22	32185111112601	804090	32° 18' 51.5"	111° 11' 25.6"	3393	1/26/2021	239.2	V			1/26/2022	231.4	V			7.8
TUCSON AMA	AVRA VALLEY	D-12-11 20AAA	322245111140401	504485	32° 22' 49.6"	111° 14' 0.3"	2019	1/26/2021	211.5	V			1/26/2022	211	V			0.5
TUCSON AMA	AVRA VALLEY	D-12-11 01DDA PZ1	32244411095401	508652	32° 24' 45.5"	111° 9' 53.7"	2041	11/12/2020	212.5	S			11/17/2021	208.4	V			4.1
TUCSON AMA	AVRA VALLEY	D-12-11 01DDA PZ2	32244411095402	508652	32° 24' 45.5"	111° 9' 53.7"	2041	11/12/2020	96.4	S			11/17/2021	99.4	V			-3.0
TUCSON AMA	AVRA VALLEY	D-11-11 34ADD2	32255411115801	604805	32° 25' 55"	111° 11' 57.7"	2009	1/26/2021	206.8	V			1/26/2022	206.1	V			0.7
TUCSON AMA	AVRA VALLEY	D-11-11 16CDD2	322805111133101	604802	32° 28' 4.7"	111° 13' 30.2"	1968	1/26/2021	193.9	V			1/26/2022	189.1	V			4.8
TUCSON AMA	AVRA VALLEY	D-11-10 17ADD	322825111202001	615763	32° 28' 27.8"	111° 20' 17.9"	1884	1/26/2021	156.1	V			1/26/2022	152.9	V			3.2
TUCSON AMA	AVRA VALLEY	D-11-10 27DAA	322636111181401	566419	32° 26' 34.6"	111° 18' 17.2"	1935	1/26/2021	177.2	V			1/26/2022	173	V			4.2
TUCSON AMA	AVRA VALLEY	D-11-10 22ADD1	322732111181701	626687	32° 27' 30.6"	111° 18' 15.5"	1914	1/26/2021	150.3	V			1/26/2022	147.8	V			2.5
TUCSON AMA	AVRA VALLEY	D-11-11 11DDB	32292311112101	600235	32° 29' 3.9"	111° 11' 10.3"	2148	1/28/2021	399.4	V			1/28/2022	398.2	V			1.2
TUCSON AMA	AVRA VALLEY	D-11-11 09ACD PZ1	322924111131801	504996	32° 29' 24.1"	111° 13' 16.7"	2043	11/12/2020	310.5	V			11/17/2021	308.1	V			2.4
TUCSON AMA	AVRA VALLEY	D-11-11 09ACD PZ2	322924111131802	504996	32° 29' 24.1"	111° 13' 16.7"	2043	11/12/2020	293.3	V			11/17/2021	290.4	V			2.9
TUCSON AMA	AVRA VALLEY	D-10-11 17CAB2	323338111141501	638306	32° 33' 38.8"	111° 14' 13.3"	2136	1/27/2021	427.4	V			1/28/2022	426.6	V			0.8
TUCSON AMA	AVRA VALLEY	D-10-10 20DCC	323152111200401	618728	32° 31' 50.8"	111° 20' 6.5"	1862	1/27/2021	168.2	V			1/25/2022	166.2	V			2.0
TUCSON AMA	AVRA VALLEY	D-10-11 19BDB PZ1	323307111151901	504994	32° 32' 59.59"	111° 15' 19.6"	2043	11/12/2020	341	V			11/17/2021	339.2	V			1.8
TUCSON AMA	AVRA VALLEY	D-10-11 19BDB PZ2	323307111151902	504994	32° 32' 59.6"	111° 15' 19.6"	2043	11/12/2020	341	V			11/17/2021	339.1	V			1.9
TUCSON AMA	AVRA VALLEY	D-09-10 29CDA PZ1	323623111201201	504993	32° 36' 24.1"	111° 20' 11.8"	1850	11/12/2020	248.8	V			11/15/2021	247.7	V			1.1
TUCSON AMA	AVRA VALLEY	D-09-10 29CDA PZ2	323623111201202	504993	32° 36' 24.1"	111° 20' 11.8"	1850	11/12/2020	195.1	V			11/15/2021	193.7	V			1.4
TUCSON AMA	AVRA VALLEY	D-10-10 05DAD	323438111194501	624751	32° 34' 40.8"	111° 19' 43.9"	1855	1/25/2021	195	V			1/25/2022	193	V			2.0
TUCSON AMA	AVRA VALLEY	D-09-10 19ADD	323730111204501	615627	32° 37' 30.59"	111° 20' 42.1"	1836	1/25/2021	199.7	V			1/25/2022	198.8	V			0.9
TUCSON AMA	AVRA VALLEY	D-09-10 19AAA	323733111204601	804195	32° 37' 55.4"	111° 20' 42.9"	1840	1/25/2021	194.8	V			1/25/2022	183.3	V			11.5
TUCSON AMA	AVRA VALLEY	D-09-13 20DBD	323759111011501	615648	32° 37' 54.3"	111° 1' 19.5"	3340	1/26/2021	307.6	V			1/31/2022	307.5	V			0.1
TUCSON AMA	AVRA VALLEY	D-09-10 17CDD PZ1	323759111201201	504992	32° 37' 58.7"	111° 20' 11.6"	1854	11/10/2020	250.6	V			11/15/2021	250.4	V			0.2
TUCSON AMA	AVRA VALLEY	D-09-10 17CDD PZ2	323759111201202	504992	32° 37' 58.7"	111° 20' 11.6"	1854	11/10/2020	221.7	V			11/15/2021	221.4	V			0.3
TUCSON AMA	AVRA VALLEY	D-09-09 01BCC PZ1	324007111224501	504989	32° 40' 9.8"	111° 22' 37.4"	1858	11/10/2020	292.5	V			11/15/2021	293.8	V			-1.3
TUCSON AMA	AVRA VALLEY	D-08-11 31BBB	324157111153101	607144	32° 41' 58.5"	111° 15' 30.1"	2105	1/28/2021	454.9	V			6/1/2022	455.2	V			-0.3
TUCSON AMA	AVRA VALLEY	D-08-12 19DDA	32430411082101	804174	32° 43' 2.1"	111° 8' 16.7"	2672	1/26/2021	20.1	S			1/31/2022	6.1	S			14.0
TUCSON AMA	AVRA VALLEY	D-07-13 15CAC1	324919110585701		32° 49' 14.8"	110° 59' 36.7"	3510	1/26/2021	30.8	S			1/31/2022	35.3	S			-4.5
TUCSON AMA	AVRA VALLEY	D-21-10 19DAD	313506111210901		31° 35' 5.88"	111° 21' 6.94"	3576.84	2/18/2021	29.11	VT		TAKEN AT 14:20 WITH BLACK 500	2/17/2022	26.39	VT			2.7
TUCSON AMA	AVRA VALLEY	D-21-10 35CCD	313305111174901		31° 33' 4.73"	111° 17' 46.48"	3699.36	2/18/2021	36.58	VT		TAKEN WITH BLACK 500 AT 15:55	2/17/2022	28.7	VT			7.9
TUCSON AMA	AVRA VALLEY	D-21-10 29ADB	313433111201601		31° 34' 32.74"	111° 20' 13.63"	3609.3	2/18/2021	12.68	VT		TAKENT AT 15:10 WITH BLACK 500	2/17/2022	12.03	VT			0.7
TUCSON AMA	UPPER SANTA CRUZ	D-19-13 29BCC	314454111023701	623122	31° 44' 55.39"	111° 2' 35.36"	3014.8	2/18/2021	73.95	VT		TAKEN WITH BLACK 500 AT 17:30	2/17/2022	69.31	VT			4.6
TUCSON AMA	UPPER SANTA CRUZ	D-19-13 21BAA	314606111011301	623123	31° 46' 7.91"	111° 1' 10.27"	2966.59	2/18/2021	96.07	VT		TAKEN WITH BLACK 500 AT 17:10	2/17/2022	89.42	VT			6.7
TUCSON AMA	UPPER SANTA CRUZ	D-18-13 24BCB2 UNSRV	315106110583401	624011	31° 51' 2.3"	110° 58' 31.4"	2870	2/2/2021	251.3	V			1/25/2022	253.7	V			-2.4
TUCSON AMA	UPPER SANTA CRUZ	D-18-13 01CDB	315313110580801	608591	31° 53' 15.4"	110° 58' 18.9"	2799	1/28/2021	245.2	V			1/25/2022	245	V			0.2
TUCSON AMA	UPPER SANTA CRUZ	D-14-15 01ADD7	321436110451801		32° 14' 35.6"	110° 45' 19.1"	2600	12/3/2020	29.4	S			12/2/2021	22.7	S			6.7
TUCSON AMA	UPPER SANTA CRUZ	D-17-15 02DCD	315840110463701		31° 58' 40.3"	110° 46' 36.4"	3198	1/27/2021	558.8	V			1/24/2022	559.3	V			-0.5
TUCSON AMA	UPPER SANTA CRUZ	D-16-13 34AAB2	315958110595201	607785	32° 0' 2.1"	110° 59' 51.8"	2818	1/28/2021	293.5	V			1/26/2022	294.1	V			-0.6
TUCSON AMA	UPPER SANTA CRUZ	D-16-14 506CCD	320353110572701	632691	32° 3' 34.6"	110° 57' 25.9"	2580	1/27/2021	55.8	V			1/25/2022	57.6	V			-1.8
TUCSON AMA	UPPER SANTA CRUZ	D-16-16 09DCD2	320253110425701	504558	32° 2' 53.8"	110° 42' 35.9"	3235	1/27/2021	598.8	V			1/25/2022	590.2	V			8.6
TUCSON AMA	UPPER SANTA CRUZ	D-15-15 25DBC2	320533110454901	615639	32° 5' 34.6"	110° 45' 47.8"	3029	1/27/2021	457	V			1/24/2022	455.9	V			1.1
TUCSON AMA	UPPER SANTA CRUZ	D-16-15 05CBC PZ2	320402110502802		32° 4' 5.1"	110° 50' 28.4"	2867	1/27/2021	341.17	V			1/24/2022	339.27	V			1.9
TUCSON AMA	UPPER SANTA CRUZ	D-16-15 05CBC PZ3	320402110502803		32° 4' 5.1"	110° 50' 28.4"	2867	1/27/2021	311.45	V			1/24/2022	311.45	V			0.0
TUCSON AMA	UPPER SANTA CRUZ	D-15-15 16CBB PZ1	320732110492201		32° 7' 32.8"	110° 49' 22.9"	2842	1/27/2021	341.79	V			1/25/2022	344.39	V			-2.6
TUCSON AMA	UPPER SANTA CRUZ	D-15-15 16CBB PZ2	320732110492202		32° 7' 32.8"	110° 49' 22.9"	2842	1/27/2021	342.75	V			1/25/2022	343.95	V			-1.2
TUCSON AMA	UPPER SANTA CRUZ	D-15-15 16CBB PZ3	320732110492203		32° 7' 32.8"	110° 49' 22.9"	2842	1/27/2021	381.34	V			1/25/2022	370.24	V			11.1
TUCSON AMA	UPPER SANTA CRUZ	D-15-14 06DCB2	320904110570401	616565	32° 9' 5.1"	110° 57' 4.2"	2528	1/26/2021	167.6	V			1/26/2022	183.5	V			-15.9
TUCSON AMA	UPPER SANTA CRUZ	D-15-14 03DAD	320910110533001	611361	32° 9' 11"	110° 53' 31"	2646	2/2/2021	368.6	V			1/25/2022	363.9	V			4.7
TUCSON AMA	UPPER SANTA CRUZ	D-15-14 06CAA	320916110570701	616564	32° 9' 16.8"	110° 57' 6.4"	2524	1/26/2021	96.4	V			1/26/2022	95.3	V			1.1
TUCSON AMA	UPPER SANTA CRUZ	D-15-15 06BBB1	320941110512201	621584	32° 9' 41.7"	110° 51' 24.1"	2715	1/29/2021	369.5	V			1/26/2022	376.6	V			-7.1
TUCSON AMA	UPPER SANTA CRUZ	D-14-16 19CBC	321140110451501	808558	32° 11' 44.2"	110° 45' 17.1"	2962	1/27/2021	248.5	V			1/24/2022	249.2	V			-0.7
TUCSON AMA	UPPER SANTA CRUZ	D-14-14 16CCC PZ1	321229110553201		32° 12' 29.5"	110° 55' 32.5"	2480	1/26/2021	231.8	V			1/24/2022	233.4	V			-1.6
TUCSON AMA	UPPER SANTA CRUZ	D-14-14 16CCC PZ2	321229110553202		32° 12' 29.5"	110° 55' 32.5"	2480	1/26/2021	219.8	V			1/24/2022	213.7	V			6.1
TUCSON AMA	UPPER SANTA CRUZ	D-14-14 16CCC PZ3	321229110553203		32° 12' 29.5"	110° 55' 32.5"	2480	1/26/2021	233.3	V			1/24/2022	230	V			3.3
TUCSON AMA	UPPER SANTA CRUZ	D-14-14 16CCC PZ4	321229110553204		32° 12' 29.5"	110° 55' 32.5"	2480	1/26/2021	232.9	V			1/24/2022	230.2	V			2.7
TUCSON AMA	UPPER SANTA CRUZ	D-14-15 15CAA	321245110475601		32° 12' 42.8"	110° 47' 52.5"	2718	12/3/2020	314.2	V			12/2/2021	307.9	V			6.3
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 28AAC	321635110544601		32° 16' 35.2"	110° 54' 45.8"	2387	12/3/2020	104.4	S			12/2/2021	107.9	S			-3.5
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 35BAD	321545110530401	636082	32° 15' 44.8"	110° 53' 4.8"	2430	12/3/2020	138.6	S			12/2/2021	146.8	S			-8.2
TUCSON AMA	UPPER SANTA CRUZ	D-13-14 34AAD	321546110533701	806473	32° 15' 47.1"	110° 53' 37.5"	2420	12/3/2020	148.2	S			12/2/2021	147.8	S			0.4
TUCSON AMA	UPPER SANTA CRUZ	D-13-																



Appendix 3. 1 Year Groundwater level change in Arizona - Water Years 2021 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2021	WL 2021	WL METHOD 2021	WL REMARK 2021	WL COMMENT 2021	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-20-20 07BDB	314239110204301		31° 42' 43.5"	110° 20' 41.4"	4345	1/27/2021	231.7	V			1/25/2022	231.5	V			0.2
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-20-18 05CAA	314233110203901	642963	31° 43' 24.2"	110° 29' 39.8"	4895	1/27/2021	142.6	V			1/25/2022	143	V			-0.4
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-20-18 03AAC	314342110291501	647680	31° 43' 42.3"	110° 29' 20.2"	4922	1/27/2021	183.4	V			1/25/2022	182.6	V			0.8
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-18-23 32DBB	314927110010301		31° 49' 28.3"	110° 1' 3.3"	4840	11/5/2020	611.6	V			12/2/2021	611.6	V			0.0
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-19-21 12DBB2	314738110090601	616255	31° 47' 38"	110° 9' 6.7"	4044	11/5/2020	221.4	V			12/2/2021	221.6	V			-0.2
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-18-21 28DAA	315019110115001	612550	31° 50' 19.2"	110° 11' 46.5"	3745	11/5/2020	82.6	S			12/2/2021	79.6	V			3.0
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-18-20 06BDD	315356110203001	623648	31° 54' 0.5"	110° 20' 32.6"	4440	11/2/2020	273.3	V			11/2/2021	274.3	V			-1.0
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-17-20 14CCC	315700110164501	808248	31° 57' 1.4"	110° 16' 50.7"	3582	11/5/2020	9.5	S			12/2/2021	7.2	S			2.3
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-17-21 32BBA	315508110133401	623646	31° 55' 9.5"	110° 13' 33.1"	3697	11/6/2020	71.8	S			12/2/2021	60.8	V			11.0
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-17-19 14ACA	315734110221301		31° 57' 31.9"	110° 22' 21"	4180	11/6/2020	558.3	V			12/2/2021	562.4	V			-4.1
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-16-20 34ACB	320005110170901	611018	32° 0' 8.4"	110° 17' 14.5"	3533	11/6/2020	76.6	S			12/1/2021	79.7	S			-3.1
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-16-20 21DDD	320119110175301	213251	32° 1' 19"	110° 17' 53.4"	3505	11/5/2020	38	S			12/1/2021	36.6	S			1.4
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-23-21 26ADC	312405110103101	553330	31° 24' 6.4"	110° 10' 36.2"	4485	11/3/2020	243.2	V			11/3/2021	242.1	V			1.1
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-15-21 01BBC2	320947110094701	646835	32° 9' 46.8"	110° 9' 46.6"	4365	11/5/2020	180.1	V			12/1/2021	170.9	V			9.2
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-18-20 30CAB	315019110203501	598675	31° 50' 18.65"	110° 20' 35.19"	4541.22	10/21/2020	410.36	VT		TAKEN WITH BLACK 500	10/21/2021	409.89	VT			0.5
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-18-19 36ADC	314940110212301	593469	31° 49' 40.17"	110° 21' 20"	4702.6	2/10/2021	232.65	VT		TAKEN AT 11:00 WITH BLACK 500	2/9/2022	229.35	VT			3.3
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-18-19 25DCB1	315005110212501	626887	31° 50' 4.65"	110° 21' 22.45"	4699.21	10/21/2020	83.73	VT		TAKEN WITH BLACK 500	10/21/2021	84.55	VT			-0.8
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-21-21 33BCA	313351110130901	085049	31° 33' 51"	110° 13' 9.2"	4310	3/24/2021	170	V			11/4/2021	170.9	V			-0.9
UPPER SAN PEDRO BASIN	SIERRA VISTA	D-22-21 36CDC	312808110100201	501215	31° 28' 7.5"	110° 10' 1.6"	4343	3/24/2021	137.7	V			11/23/2021	140.7	V			-3.0
VERDE RIVER BASIN	BIG CHINO	B-17-02 15BAA	345153112273201	526611	34° 51' 53.1"	112° 27' 32.5"	4364	10/27/2020	110.42	VT			10/14/2021	110.47	VT		VT07	-0.1
VERDE RIVER BASIN	BIG CHINO	B-18-03 26ACC	345502112325501	921236	34° 55' 1.93"	112° 32' 55.46"	4402.78	10/27/2020	152.61	VT			10/14/2021	152.59	VT		VT07	0.0
VERDE RIVER BASIN	BIG CHINO	B-18-04 01ABD	345845112380301	921256	34° 58' 45.25"	112° 38' 3.41"	4547.6	10/22/2020	271.02	VT			10/14/2021	271.77	VT		VT07	-0.8
VERDE RIVER BASIN	BIG CHINO	B-18-03 31ACD	345330112343401	228262	34° 53' 30.45"	112° 24' 34.1"	4998.28	10/27/2020	363.56	VT			10/21/2021	363.6	VT		VT07	0.0
VERDE RIVER BASIN	BIG CHINO	B-18-01 19ADC	345542112335101	228265	34° 55' 42.2"	112° 23' 51.01"	4637.71	10/27/2020	410.59	VT			10/14/2021	410.87	VT		VT07	-0.3
VERDE RIVER BASIN	BIG CHINO	B-18-01 28BCD	345450112222301	228266	34° 54' 50.44"	112° 22' 23.46"	4548.09	10/27/2020	342.79	VT			10/14/2021	343.07	VT			-0.3
VERDE RIVER BASIN	BIG CHINO	B-17-02 11ABA	345230112261101	228472	34° 53' 30.1"	112° 26' 11.2"	4518.08	10/27/2020	282.3	VT			10/14/2021	282.35	VT		VT07	0.0
VERDE RIVER BASIN	BIG CHINO	B-17-02 12CBD	345203112253901	228263	34° 52' 2.96"	112° 25' 39.35"	4459.72	10/27/2020	227.74	VT			10/14/2021	227.77	VT		VT07	0.0
VERDE RIVER BASIN	BIG CHINO	B-18-03 35CCA	345353112331301	622503	34° 53' 52.8"	112° 33' 13.3"	4412	3/25/2021	139.1	V			5/24/2022	141.4	S			-2.3
VERDE RIVER BASIN	BIG CHINO	B-17-02 14ADA	342600112513401		34° 51' 34.5"	112° 26' 0.2"	4250	11/19/2020	6.3	S			11/17/2021	3.8	S			2.5
VERDE RIVER BASIN	BIG CHINO	B-15H-04 26DAA	344158112384201	649862	34° 41' 59.3"	112° 38' 41.3"	4797	3/23/2021	139.8	V	P		3/21/2022	155.6	V	P		-15.8
VERDE RIVER BASIN	BIG CHINO	B-16-04 16DCD	344549112410901	614807	34° 45' 48.8"	112° 41' 9"	4643	8/23/2021	25.1	V			8/16/2022	16.9	S			8.2
VERDE RIVER BASIN	BIG CHINO	B-16-04 27BCB	344435112404301	631901	34° 44' 35.7"	112° 40' 43.9"	4682	8/23/2021	41.6	V			8/15/2022	45.5	V			-3.9
VERDE RIVER BASIN	BIG CHINO	B-16-04 23BBA	344544112393401	605218	34° 45' 41.7"	112° 39' 30.9"	4625	8/23/2021	24.6	V			8/15/2022	7.4	V			17.2
VERDE RIVER BASIN	BIG CHINO	B-17-04 26DBC UNSURV	344930112391901	614821	34° 49' 31"	112° 39' 17.1"	4634	3/23/2021	72.6	V			8/17/2022	69.5	V			3.1
VERDE RIVER BASIN	BIG CHINO	B-16-04 11CAA	344703112392201	605598	34° 47' 2.5"	112° 39' 19.4"	4601	3/23/2021	10.4	S			3/8/2022	7.9	S			2.5
VERDE RIVER BASIN	BIG CHINO	B-17-05 34DBB	344841112463701	802802	34° 48' 41.2"	112° 46' 36.7"	4875	3/23/2021	14.6	V			3/21/2022	18.6	S			-4.0
VERDE RIVER BASIN	BIG CHINO	B-17-02 06BBB	345338112311801	603912	34° 53' 40.51"	112° 31' 19.62"	4388.33	10/22/2020	138.98	VT			10/14/2021	139.21	VT		VT07	-0.2
VERDE RIVER BASIN	BIG CHINO	B-18-04 33DDD	345347112405801	622514	34° 53' 46"	112° 40' 56.1"	4654	8/24/2021	184.4	V	P		5/24/2022	182.2	V	P		2.2
VERDE RIVER BASIN	BIG CHINO	B-18-02 31BCB	345423112311901	803390	34° 54' 15.7"	112° 31' 20.2"	4395	3/24/2021	143.5	V			3/22/2022	145.1	V			-1.6
VERDE RIVER BASIN	BIG CHINO	B-18-02 27DDA	345449112271101	614831	34° 54' 46.1"	112° 27' 12.6"	4482	3/24/2021	229.6	V			3/22/2022	230	V			-0.4
VERDE RIVER BASIN	BIG CHINO	B-17-02 20ABD	345048112292201	801489	34° 50' 49.8"	112° 29' 21.1"	4467	3/25/2021	193.2	V			3/25/2022	194	V			-0.8
VERDE RIVER BASIN	BIG CHINO	B-17-02 504DCB PZ1	345300112283701	524078	34° 52' 55.57"	112° 28' 39.78"	4357.82	10/27/2020	108.76	VT			10/13/2021	108.84	VT		VT07	-0.1
VERDE RIVER BASIN	BIG CHINO	B-17-02 504DCB PZ2	345300112283702	524078	34° 52' 55.57"	112° 28' 39.78"	4357.82	10/27/2020	108.8	VT			10/13/2021	108.86	VT		VT07	0.0
VERDE RIVER BASIN	BIG CHINO	B-17-02 504DCB PZ3	345300112283703	524078	34° 52' 55.57"	112° 28' 39.78"	4357.82	10/27/2020	108.82	VT			10/13/2021	108.86	VT		VT07	-0.1
VERDE RIVER BASIN	BIG CHINO	B-17-02 504DCDA1	345301112283701	609267	34° 52' 56.4"	112° 28' 40.64"	4358.63	10/27/2020	109.99	VT			10/13/2021	110.01	VT		VT07	0.0
VERDE RIVER BASIN	BIG CHINO	B-17-02 504DCDA2	345302112283701	524077	34° 52' 56.87"	112° 28' 40.61"	4358.94	10/27/2020	109.71	VT			10/13/2021	109.72	VT		VT07	0.0
VERDE RIVER BASIN	BIG CHINO	B-18-04 08BBB	345804112425701	631897	34° 58' 2.3"	112° 42' 57"	4795	3/24/2021	341.7	V			3/3/2022	341.6	V			0.1
VERDE RIVER BASIN	BIG CHINO	B-18-03 03AAA	345856112333201	622519	34° 58' 54.4"	112° 33' 32.3"	4630	3/25/2021	164.3	V			5/24/2022	164.9	V			-0.6
VERDE RIVER BASIN	BIG CHINO	B-19-04 29DAB	350016112421001	624146	35° 0' 15.1"	112° 42' 10"	4642	8/26/2021	367.5	V	P	CASCADING	3/3/2022	359.4	V	P	HEAVY CASCADING	8.1
VERDE RIVER BASIN	BIG CHINO	B-19-05 25AAA	350037112440301	624141	35° 0' 35.8"	112° 44' 3.5"	4770	8/25/2021	139.8	V	P	CASCADING	3/3/2022	146.3	V	P		-6.5
VERDE RIVER BASIN	BIG CHINO	B-19-03 19CBD	350059112373101	611027	35° 0' 57.7"	112° 37' 31"	4530	8/17/2021	54.7	V			8/17/2022	54.3	S			0.4
VERDE RIVER BASIN	BIG CHINO	B-18-03 26BDD	345500112324501	803378	34° 55' 2.03"	112° 32' 55.99"	4403.39	10/27/2020	18.99	VT			10/14/2021	17.66	VT		VT07	1.3
VERDE RIVER BASIN	BIG CHINO	B-18-03 26BDB1	345507112330901	557247	34° 55' 8"	112° 33' 11.6"	4405	3/24/2021	141.3	V			3/22/2022	141.4	V			-0.1
VERDE RIVER BASIN	BIG CHINO	B-18-03 24DAC	345542112312801		34° 55' 39.7"	112° 31' 30"	4435	3/24/2021	174.2	V			3/22/2022	173.6	V			0.6
VERDE RIVER BASIN	BIG CHINO	B-18-05 20BDD2	345543112483501		34° 55' 43.6"	112° 48' 34.9"	5090	8/24/2021	31.2	V			8/15/2022	29.8	S			1.4
VERDE RIVER BASIN	BIG CHINO	B-18-03 22ABB1	345615112340301	622522	34° 56' 14.5"	112° 33' 58.9"	4418	3/25/2021	15.3	S			5/24/2022	15.6	S			-0.3
VERDE RIVER BASIN	BIG CHINO	B-18-04 16DDA	345629112405201	622506	34° 56' 32.5"	112° 40' 53.2"	4655	3/25/2021	404.2	V			5/24/2022	404.6	V			-0.4
VERDE RIVER BASIN	BIG CHINO	B-20-05 15CCC	350647112471101	624139	35° 6' 46.9"	112° 47' 10.7"	4984	8/25/2021	192.8	V			3/3/2022	192.4	V			0.4
VERDE RIVER BASIN	BIG CHINO	B-20-05 13DAA	350709112441101	624124	35° 7' 9.7"	112° 44' 10.8"	4606	8/17/2021	69	V			8/17/2022	69	S			0.0
VERDE RIVER BASIN	BIG CHINO	B-19-05 13BBA	350224112445801	624143	35° 2' 24.1"	112° 44' 57.4"	4902	4/5/2021	239.1	V			3/3/2022	241.6	V			-2.5
VERDE RIVER BASIN	BIG CHINO	B-19-04 05CCB	350327112425901	624147	35° 3' 26.8"	112° 42' 58.7"	4649	3/24/2021	148.5	V								



Appendix 3. 1 Year Groundwater level change in Arizona - Water Years 2021 - 2022

BASIN	SUB-BASIN	CADASTRAL	GWSI SITE ID	REG 55 No.	LATITUDE (NAD27)	LONGITUDE (NAD27)	SITE ELEVATION	WL DATE 2021	WL 2021	WL METHOD 2021	WL REMARK 2021	WL COMMENT 2021	WL DATE 2022	WL 2022	WL METHOD 2022	WL REMARK 2022	WL COMMENT 2022	WL CHANGE
VERDE RIVER BASIN	VERDE VALLEY	A-13-06 23BBC	3430281114413801	627339	34° 30' 27.2"	111° 41' 38.3"	4410	4/19/2021	337.4	V			4/29/2022	337.7	V			-0.3
VERDE RIVER BASIN	VERDE VALLEY	A-13-05 17CAA2	343105111504601	086280	34° 31' 57"	111° 50' 46.7"	3055	4/19/2021	37.7	S			4/29/2022	35.4	S			2.3
VERDE RIVER BASIN	VERDE VALLEY	A-13-05 28DCD1	342859111492901	085970	34° 29' 0.2"	111° 49' 30.1"	3060	4/19/2021	133.3	V			4/29/2022	133	V			0.3
VERDE RIVER BASIN	VERDE VALLEY	A-13-06 29DBB	342914111441601	627333	34° 29' 14.3"	111° 44' 14.8"	3492	4/19/2021	306	V			5/4/2022	304.3	V			1.7
VERDE RIVER BASIN	VERDE VALLEY	A-13-05 12CCC2	343134111465301	646829	34° 31' 34.4"	111° 46' 54.1"	3178	4/19/2021	7.4	S			4/26/2022	6.6	S			0.8
VERDE RIVER BASIN	VERDE VALLEY	A-14-04 11DAA1	343712111531301	630281	34° 37' 15.1"	111° 53' 16.6"	3200	4/19/2021	88.9	V			4/16/2022	91.3	S			-2.4
VERDE RIVER BASIN	VERDE VALLEY	A-14-06 09AAB	343733111425801	522310	34° 37' 34"	111° 42' 59.9"	3925	4/23/2021	105.9	V		PUMP OFF 24 HRS	4/19/2022	139.7	V			-33.8
VERDE RIVER BASIN	VERDE VALLEY	A-14-05 32CBB2	343341111511201	605030	34° 33' 41.1"	111° 51' 12.5"	3138	4/19/2021	73	S			4/19/2022	71.4	V			1.6
VERDE RIVER BASIN	VERDE VALLEY	A-14-04 24BCB2	343535111531001	505167	34° 35' 36.3"	111° 53' 8.6"	3121	4/19/2021	31.3	V			4/19/2022	30.8	V			0.5
VERDE RIVER BASIN	VERDE VALLEY	A-15-04 21CBA2	344052111560601	631840	34° 40' 52.9"	111° 56' 5.4"	3225	4/22/2021	63.15	S			4/25/2022	59.75	V			3.4
VERDE RIVER BASIN	VERDE VALLEY	A-15-05 20BAA	344105111503401	519065	34° 41' 5.7"	111° 50' 34.6"	3600	4/22/2021	264.6	V			4/25/2022	276.4	V			-11.8
VERDE RIVER BASIN	VERDE VALLEY	A-14-05 02CDC	343739111473301	603359	34° 37' 38.8"	111° 47' 31.8"	3380	4/19/2021	55.7	V			4/19/2022	85	V			-29.3
VERDE RIVER BASIN	VERDE VALLEY	A-14-05 04AAA	343833111490101	806134	34° 38' 33.6"	111° 49' 0.7"	3480	4/19/2021	336.7	V			4/19/2022	324.3	V			12.4
VERDE RIVER BASIN	VERDE VALLEY	A-15-06 31CBA2	343854111453301	629125	34° 38' 54.3"	111° 45' 32.2"	3515	4/23/2021	142	V			4/26/2022	142	V			0.0
VERDE RIVER BASIN	VERDE VALLEY	A-15-04 02CCB4	344312111540801	605684	34° 43' 11.4"	111° 54' 8.3"	3418	4/22/2021	106.1	V			4/20/2022	98	V			8.1
VERDE RIVER BASIN	VERDE VALLEY	A-16-03 36CDC	344359111591101	614257	34° 44' 1.21"	111° 59' 11"	3428.04	3/3/2021	91.96	VT		TAKEN AT 15:55 WITH BLUE 500	2/1/2022	92.96	VT			-1.0
VERDE RIVER BASIN	VERDE VALLEY	A-15-03 12ADB1	344250111583401	630899	34° 42' 49.3"	111° 58' 32.7"	3265	4/20/2021	49.2	V		CHECKED WITH V AND S	4/20/2022	41.1	V			8.1
VERDE RIVER BASIN	VERDE VALLEY	A-15-03 12ADB3	344250111584101	802787	34° 42' 50.1"	111° 58' 39.9"	3265	4/19/2021	48.7	V			4/20/2022	45.3	V			3.4
VERDE RIVER BASIN	VERDE VALLEY	A-15-03 11ABA	344258111595501	613162	34° 42' 58.3"	111° 59' 51.5"	3310	4/19/2021	60.7	V			4/20/2022	62	V			-1.3
VERDE RIVER BASIN	VERDE VALLEY	A-15-04 04DDC1	344307111552701	621154	34° 43' 8.7"	111° 55' 27.8"	3360	4/22/2021	59.3	V			4/20/2022	59.5	V			-0.2
VERDE RIVER BASIN	VERDE VALLEY	A-16-03 19DBD	344556112040501	525162	34° 45' 56.18"	112° 4' 5.09"	3660	4/20/2021	299.5	V			4/21/2022	301.2	V			-1.7
VERDE RIVER BASIN	VERDE VALLEY	A-16-03 34ADC1	344428112004801	690979	34° 44' 27.1"	112° 0' 13.3"	3440	4/20/2021	72.2	V			4/20/2022	76.3	V			-4.1
VERDE RIVER BASIN	VERDE VALLEY	A-16-09 28CBC3	344435111243501	627289	34° 44' 36.3"	111° 24' 37.4"	7390	4/23/2021	21.9	S			4/28/2022	21.3	S			0.6
VERDE RIVER BASIN	VERDE VALLEY	A-16-03 34AAD	344440112003801	699076	34° 44' 40.1"	112° 0' 36.6"	3310	4/20/2021	40.1	V			4/20/2022	42.7	V			-2.6
VERDE RIVER BASIN	VERDE VALLEY	A-16-03 20PDC	344544112025001	642366	34° 45' 44.1"	112° 2' 49.6"	3640	4/20/2021	275	V			4/22/2022	274.8	V			0.2
VERDE RIVER BASIN	VERDE VALLEY	A-16-03 22DCD	344545112005401	629211	34° 45' 42.9"	112° 0' 52.71"	3421.95	6/17/2021	50.73	VT		TAKEN AT 11:42 WITH BLUE 500	6/16/2022	49.62	VT			1.1
VERDE RIVER BASIN	VERDE VALLEY	A-17-05 33ADA1	344850111494801	614282	34° 48' 50.1"	111° 49' 47.8"	3860	4/21/2021	218.4	V			4/22/2022	224.3	V			-5.9
VERDE RIVER BASIN	VERDE VALLEY	A-17-05 26BCA1	344943111483201	632376	34° 49' 42.1"	111° 48' 30.7"	3980	4/22/2021	114.3	V			4/21/2022	115.5	V			-1.2
VERDE RIVER BASIN	VERDE VALLEY	A-17-06 30BBB	344957111463102		34° 49' 56.5"	111° 46' 30"	4300	4/21/2021	457.3	V			4/22/2022	458.5	V			-1.2
VERDE RIVER BASIN	VERDE VALLEY	A-17-05 20CCC1	345001111514801		34° 50' 1.5"	111° 51' 55.1"	4040	4/21/2021	393.6	V			4/21/2022	398.9	V			-5.3
VERDE RIVER BASIN	VERDE VALLEY	A-16-08 10ABC	344733111292201	641798	34° 47' 33"	111° 29' 19.9"	7370	4/22/2021	7.9	S			4/28/2022	4.3	S			3.6
VERDE RIVER BASIN	VERDE VALLEY	A-18-07 27CBA	345452111384001	637398	34° 54' 52.4"	111° 38' 40.8"	6485	4/22/2021	340.8	V			4/27/2022	341.5	V			-0.7
VERDE RIVER BASIN	VERDE VALLEY	A-17-01 15CDB UNSURV	345057112145201	631883	34° 50' 57.8"	112° 14' 52.3"	4540	3/22/2021	419.1	V			3/23/2022	420	V			-0.9
VERDE RIVER BASIN	VERDE VALLEY	A-17-06 18AAB	345137111454801	522853	34° 51' 36.4"	111° 45' 46.3"	4220	4/21/2021	10.7	S			4/22/2022	12	S			-1.3
VERDE RIVER BASIN	VERDE VALLEY	A-17-05 15AAB	345137111485601	616662	34° 51' 37.2"	111° 48' 56.6"	4375	4/8/2021	519.8	V			3/3/2022	522.6	V			-2.8
VERDE RIVER BASIN	VERDE VALLEY	A-17-04 06ADD	345302111582201		34° 53' 1.3"	111° 58' 20.8"	4345	4/22/2021	675.3	V			4/26/2022	676.2	V			-0.9
VERDE RIVER BASIN	VERDE VALLEY	A-17-04 01ABD	345312111532001	512462	34° 53' 14.36"	111° 53' 16.89"	4429.18	10/20/2020	739.2	V			10/21/2021	740.8	V			-1.6
VERDE RIVER BASIN	VERDE VALLEY	B-19-01 16ACB	350154112220001	645843	35° 1' 53.8"	112° 21' 59.8"	4790	4/21/2021	557	V			4/25/2022	557.9	V			-0.9
VERDE RIVER BASIN	VERDE VALLEY	A-19-06 W14BAB	350159111435701	637391	35° 2' 12.8"	111° 43' 50.9"	6510	4/20/2021	819.1	V			4/22/2022	814.5	V			4.6
VERDE RIVER BASIN	VERDE VALLEY	B-18-01 27ABD	345505112204501	631886	34° 55' 5"	112° 20' 44.3"	4407	11/19/2020	192.4	V			11/15/2021	192.8	S			-0.4
VERDE RIVER BASIN	VERDE VALLEY	A-18-04 15DBC	345616111553602		34° 56' 19.2"	111° 55' 36.5"	4760	10/20/2020	694.7	V			11/4/2021	707.2	V			-12.4
VERDE RIVER BASIN	VERDE VALLEY	A-18-07 15CCB2	345619111385501	630882	34° 56' 18.8"	111° 38' 55"	6455	4/19/2021	118	S			4/27/2022	114.6	V			3.4
VERDE RIVER BASIN	VERDE VALLEY	B-18-01 17AAA	345653112225701	511557	34° 56' 57.7"	112° 22' 34.6"	4643	4/21/2021	426.1	V			4/25/2022	426.6	V			-0.5
VERDE RIVER BASIN	VERDE VALLEY	A-20-04 03CBB	350829111575601	522705	35° 8' 29.1"	111° 57' 57.4"	6709	4/21/2021	55.3	S			4/25/2022	54.6	V			0.7
VERDE RIVER BASIN	VERDE VALLEY	A-20-06 19BBB	350624111482501	500322	35° 6' 24.8"	111° 48' 23"	7163	4/20/2021	93.7	S			4/24/2022	99.8	S			-6.1
VERDE RIVER BASIN	VERDE VALLEY	A-21-04 24AAC	351121111545601	522559	35° 11' 20.8"	111° 54' 53"	6828	4/21/2021	149.3	S			4/25/2022	149.2	V			0.1
VERDE RIVER BASIN	VERDE VALLEY	A-22-04 28BDA	351537111582301	645743	35° 15' 38.4"	111° 58' 27.4"	6993	10/21/2020	3.7	S			4/7/2022	4.4	S			-0.7
VERDE RIVER BASIN	VERDE VALLEY	A-22-03 24CCC	351557112020401	618481	35° 15' 56.7"	112° 2' 5.9"	6887	4/21/2021	11.65	S			4/25/2022	5.2	S			6.5
VERDE RIVER BASIN	VERDE VALLEY	A-22-04 14DAD2	351702111555001	565702	35° 16' 59.5"	111° 55' 47.3"	7298	4/21/2021	143.4	V			4/25/2022	158.5	V			-15.1
VERDE RIVER BASIN	VERDE VALLEY	A-18-07 15CC5	345612111385301	568934	34° 56' 12.3"	111° 38' 52.3"	6440	4/22/2021	734.4	V			4/27/2022	738.5	V			-4.1
VERDE RIVER BASIN	VERDE VALLEY	A-23-05 27AAC	352108111504801	613888	35° 21' 8.1"	111° 50' 48.1"	7661	4/20/2021	711.8	V			4/27/2022	713.1	V			-1.3
VERDE RIVER BASIN	VERDE VALLEY	A-14-05 E17AAC	343638111501301	629124	34° 36' 37.6"	111° 50' 13.7"	3190	4/23/2021	39.8	V			4/20/2022	49.5	V			-9.7
VERDE RIVER BASIN	VERDE VALLEY	A-16-03 27BAC2	344532112011901	925391	34° 45' 31.9"	112° 1' 18.8"	3360	4/20/2021	38.7	S			3/10/2022	39.1	S			-0.4
VIRGIN RIVER BASIN	VIRGIN RIVER	B-41-15 33CAC	365429113554501	628107	36° 54' 29.5"	113° 55' 45"	1895	10/27/2020	50.5	V			10/19/2021	52.9	V			-2.4
VIRGIN RIVER BASIN	VIRGIN RIVER	B-41-15 28ABD	365547113552101	536967	36° 55' 47.4"	113° 55' 21.3"	2070	10/27/2020	202.1	V			10/19/2021	201.9	V			0.2
VIRGIN RIVER BASIN	VIRGIN RIVER	B-41-15 08ADA	365819113560701	536968	36° 58' 19.3"	113° 56' 7.2"	2284	10/27/2020	380.3	V			10/19/2021	380.7	V			-0.4
VIRGIN RIVER BASIN	VIRGIN RIVER	B-40-16 34BDC	364928114004801	604108	36° 49' 28.8"	114° 0' 48.9"	1762	10/27/2020	145.6	V			10/19/2021	146	V			-0.4
VIRGIN RIVER BASIN	VIRGIN RIVER	B-40-15 06CDD	365321113572401	540950	36° 53' 21.53"	113° 57' 25.03"	2040.93	10/22/2020	267.84	VT		BLUE 500 09:45	10/7/2021	267.86	VT			0.0
WESTERN MEXICAN DRAINAGE BASIN	WESTERN MEXICAN DRAINAGE	C-17-05 17ABC2UNSURV	315702112480401	629090	31° 57' 1.4"	112° 48' 3.2"	1660	11/3/2020	352.7	V			10/27/2021	353.6	V			-0.9
WILLCOX BASIN	WILLCOX	D-18-28 17BAA	315228109310301	505333	31° 52' 26.1"	109° 31' 1.7"	4750	11/5/2020	386.1	V			11/2/2021	386.8	V			-0.7
WILLCOX BASIN	WILLCOX	D-17-27 31CDD2	315421109380401	618485	31° 54' 22.8"	109° 38' 7.4"	4366	11/5/2020	368.8	V			11/2/2021	386.2	V			-17.4
WILLCOX BASIN	WILLCOX	D-18-27 08BAC	315318109372101	648836	31° 53' 18.7"	109° 37' 13.9"	4395											



## **Appendix 4**

**Statewide groundwater level change statistics in  
Arizona by sub-basin – Water Years  
2002 - 2022, 2012 - 2022, 2021 - 2022**



Appendix 4. Statewide Groundwater level change statistics in Arizona by Sub-basin - Water Years 2002 - 2022, 2012 - 2022, and 2021 - 2022

WL Change	WL Change Time Period	Basin/AMA	Sub-basin	WL Change Count	Wells w/ Rising WLs	Wells w/ Declining WLs	Wells w/ No Change in WLs	Range of WL Change [ft]	Median WL Change [ft]	Mean WL Change [ft]	Standard Deviation of WL Change [ft]	Mean Rate of WL Change [ft/yr]	Median Rate of WL Change [ft/yr]
20 Year	9/30/2002 - 10/1/2022	AGUA FRIA BASIN	AGUA FRIA	4	0	3	1	-26.8 to 1	-3.6	-8.2	12.6	-0.4	-0.2
10 Year	9/30/2012 - 10/1/2022	AGUA FRIA BASIN	AGUA FRIA	9	1	5	3	-31.8 to 2.2	-1.0	-4.5	10.5	-0.5	-0.1
1 Year	9/30/2021 - 10/1/2022	AGUA FRIA BASIN	AGUA FRIA	7	3	3	1	-2.1 to 3.3	-0.1	0.3	2.3	0.3	-0.1
20 Year	9/30/2002 - 10/1/2022	ARAVAIPA CANYON BASIN	ARAVAIPA CANYON	1	0	1	0	-7.9 to -7.9	-7.9	-7.9	N/A	-0.4	-0.4
10 Year	9/30/2012 - 10/1/2022	ARAVAIPA CANYON BASIN	ARAVAIPA CANYON	1	1	0	0	2 to 2	2.0	2.0	N/A	0.2	0.2
1 Year	9/30/2021 - 10/1/2022	ARAVAIPA CANYON BASIN	ARAVAIPA CANYON	1	1	0	0	5.9 to 5.9	5.9	5.9	N/A	5.9	5.9
20 Year	9/30/2002 - 10/1/2022	BIG SANDY BASIN	FORT ROCK	2	0	1	1	-1.9 to 0.9	-0.5	-0.5	2.0	0.0	0.0
10 Year	9/30/2012 - 10/1/2022	BIG SANDY BASIN	FORT ROCK	2	0	2	0	-3.2 to -2.5	-2.9	-2.9	0.5	-0.3	-0.3
1 Year	9/30/2021 - 10/1/2022	BIG SANDY BASIN	FORT ROCK	3	0	0	3	-0.7 to 0.2	-0.6	-0.4	0.5	-0.4	-0.6
20 Year	9/30/2002 - 10/1/2022	BIG SANDY BASIN	WIKIEUP	4	2	2	0	-19.8 to 4.1	0.1	-3.9	10.9	-0.2	0.0
10 Year	9/30/2012 - 10/1/2022	BIG SANDY BASIN	WIKIEUP	9	1	6	2	-19 to 12.6	-2.8	-5.6	10.2	-0.6	-0.3
1 Year	9/30/2021 - 10/1/2022	BIG SANDY BASIN	WIKIEUP	9	0	2	7	-17.6 to 0.9	-0.2	-2.2	5.8	-2.2	-0.2
20 Year	9/30/2002 - 10/1/2022	BILL WILLIAMS BASIN	ALAMO RESERVOIR	4	2	0	2	-0.1 to 9.2	0.8	2.7	4.4	0.1	0.0
10 Year	9/30/2012 - 10/1/2022	BILL WILLIAMS BASIN	ALAMO RESERVOIR	4	1	1	2	-1.5 to 3.9	0.0	0.6	2.4	0.1	0.0
1 Year	9/30/2021 - 10/1/2022	BILL WILLIAMS BASIN	ALAMO RESERVOIR	4	1	0	3	-0.6 to 1.1	0.4	0.3	0.9	0.3	0.4
20 Year	9/30/2002 - 10/1/2022	BILL WILLIAMS BASIN	BURRO CREEK	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	BILL WILLIAMS BASIN	BURRO CREEK	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
1 Year	9/30/2021 - 10/1/2022	BILL WILLIAMS BASIN	BURRO CREEK	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
20 Year	9/30/2002 - 10/1/2022	BILL WILLIAMS BASIN	CLARA PEAK	2	1	0	1	1 to 1.4	1.2	1.2	0.3	0.1	0.1
10 Year	9/30/2012 - 10/1/2022	BILL WILLIAMS BASIN	CLARA PEAK	2	0	2	0	-2.5 to -1.3	-1.9	-1.9	0.8	-0.2	-0.2
1 Year	9/30/2021 - 10/1/2022	BILL WILLIAMS BASIN	CLARA PEAK	2	0	2	0	-2.8 to -1.3	-2.1	-2.1	1.1	-2.1	-2.1
20 Year	9/30/2002 - 10/1/2022	BILL WILLIAMS BASIN	SANTA MARIA	4	1	2	1	-7.4 to 5.8	-1.5	-1.2	5.5	-0.1	-0.1
10 Year	9/30/2012 - 10/1/2022	BILL WILLIAMS BASIN	SANTA MARIA	4	1	2	1	-3 to 8.4	-1.0	0.9	5.3	0.1	-0.1
1 Year	9/30/2021 - 10/1/2022	BILL WILLIAMS BASIN	SANTA MARIA	4	1	2	1	-2.9 to 4.3	-0.6	0.1	3.3	0.1	-0.6
20 Year	9/30/2002 - 10/1/2022	BILL WILLIAMS BASIN	SKULL VALLEY	5	2	3	0	-25.8 to 32.5	-2.6	1.2	20.9	0.1	-0.1
10 Year	9/30/2012 - 10/1/2022	BILL WILLIAMS BASIN	SKULL VALLEY	5	0	4	1	-23.5 to -0.2	-1.6	-6.8	9.7	-0.7	-0.2
1 Year	9/30/2021 - 10/1/2022	BILL WILLIAMS BASIN	SKULL VALLEY	8	0	2	6	-22.1 to 0.8	-0.2	-3.0	7.8	-3.0	-0.2
20 Year	9/30/2002 - 10/1/2022	BONITA CREEK BASIN	BONITA CREEK	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	BONITA CREEK BASIN	BONITA CREEK	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
1 Year	9/30/2021 - 10/1/2022	BONITA CREEK BASIN	BONITA CREEK	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
20 Year	9/30/2002 - 10/1/2022	BUTLER VALLEY BASIN	BUTLER VALLEY	5	0	5	0	-22.9 to -2.8	-17.1	-14.7	8.9	-0.7	-0.9
10 Year	9/30/2012 - 10/1/2022	BUTLER VALLEY BASIN	BUTLER VALLEY	5	0	5	0	-17 to -2.2	-12.5	-10.1	6.1	-1.0	-1.3
1 Year	9/30/2021 - 10/1/2022	BUTLER VALLEY BASIN	BUTLER VALLEY	8	0	5	3	-12.1 to -0.2	-1.9	-3.6	4.5	-3.6	-1.9
20 Year	9/30/2002 - 10/1/2022	CIENEGA CREEK BASIN	CIENEGA CREEK	7	2	5	0	-5.5 to 6.5	-3.5	-1.8	4.4	-0.1	-0.2
10 Year	9/30/2012 - 10/1/2022	CIENEGA CREEK BASIN	CIENEGA CREEK	8	3	3	2	-10.2 to 6.8	0.8	0.4	5.3	0.0	0.1
1 Year	9/30/2021 - 10/1/2022	CIENEGA CREEK BASIN	CIENEGA CREEK	16	8	3	5	-4 to 4.8	0.9	0.8	2.5	0.8	0.9
20 Year	9/30/2002 - 10/1/2022	COCONINO PLATEAU BASIN	COCONINO PLATEAU	2	1	1	0	-2.7 to 14.3	5.8	5.8	12.0	0.3	0.3
10 Year	9/30/2012 - 10/1/2022	COCONINO PLATEAU BASIN	COCONINO PLATEAU	2	0	2	0	-4.6 to -1.5	-3.1	-3.1	2.2	-0.3	-0.3
1 Year	9/30/2021 - 10/1/2022	COCONINO PLATEAU BASIN	COCONINO PLATEAU	2	0	1	1	-2.4 to -0.5	-1.5	-1.5	1.3	-1.5	-1.5
20 Year	9/30/2002 - 10/1/2022	DETRITAL VALLEY BASIN	DETRITAL VALLEY	3	1	0	2	-0.9 to 3.8	0.0	1.0	2.5	0.0	0.0
10 Year	9/30/2012 - 10/1/2022	DETRITAL VALLEY BASIN	DETRITAL VALLEY	10	2	3	5	-25.7 to 2.2	-0.1	-5.9	10.9	-0.6	0.0
1 Year	9/30/2021 - 10/1/2022	DETRITAL VALLEY BASIN	DETRITAL VALLEY	9	1	1	7	-6.9 to 3.2	-0.4	-0.6	2.7	-0.6	-0.4
20 Year	9/30/2002 - 10/1/2022	DONNELLY WASH BASIN	DONNELLY WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	DONNELLY WASH BASIN	DONNELLY WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
1 Year	9/30/2021 - 10/1/2022	DONNELLY WASH BASIN	DONNELLY WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
20 Year	9/30/2002 - 10/1/2022	DOUGLAS BASIN	DOUGLAS	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	DOUGLAS BASIN	DOUGLAS	1	0	0	1	0.9 to 0.9	0.9	0.9	N/A	0.1	0.1
1 Year	9/30/2021 - 10/1/2022	DOUGLAS BASIN	DOUGLAS	5	3	0	2	-0.8 to 3.2	1.4	1.1	1.6	1.1	1.4
20 Year	9/30/2002 - 10/1/2022	DOUGLAS BASIN	DOUGLAS INA	14	0	14	0	-111.6 to -4.4	-35.2	-39.5	29.4	-2.0	-1.8
10 Year	9/30/2012 - 10/1/2022	DOUGLAS BASIN	DOUGLAS INA	14	0	14	0	-74.5 to -1.9	-22.2	-26.1	20.4	-2.6	-2.2
1 Year	9/30/2021 - 10/1/2022	DOUGLAS BASIN	DOUGLAS INA	13	3	8	2	-6.2 to 4.2	-1.6	-1.4	3.2	-1.4	-1.6
20 Year	9/30/2002 - 10/1/2022	DRIPPING SPRING WASH BASIN	DRIPPING SPRING WASH	2	0	2	0	-9.7 to -4.8	-7.3	-7.3	3.5	-0.4	-0.4
10 Year	9/30/2012 - 10/1/2022	DRIPPING SPRING WASH BASIN	DRIPPING SPRING WASH	1	0	1	0	-4.1 to -4.1	-4.1	-4.1	N/A	-0.4	-0.4
1 Year	9/30/2021 - 10/1/2022	DRIPPING SPRING WASH BASIN	DRIPPING SPRING WASH	2	0	1	1	-2.6 to 0.3	-1.2	-1.2	2.1	-1.2	-1.2
20 Year	9/30/2002 - 10/1/2022	DUNCAN VALLEY BASIN	DUNCAN VALLEY	6	1	3	2	-16.2 to 1.3	-2.0	-4.4	6.5	-0.2	-0.1
10 Year	9/30/2012 - 10/1/2022	DUNCAN VALLEY BASIN	DUNCAN VALLEY	5	1	3	1	-7.3 to 1.6	-1.9	-1.8	3.5	-0.2	-0.2
1 Year	9/30/2021 - 10/1/2022	DUNCAN VALLEY BASIN	DUNCAN VALLEY	5	1	2	2	-2.2 to 1.4	0.1	-0.4	1.6	-0.4	0.1
20 Year	9/30/2002 - 10/1/2022	DUNCAN VALLEY BASIN	VIRDEN VALLEY, NEW MEXICO ( DUNCAN - NM)	2	0	2	0	-20.1 to -3.3	-11.7	-11.7	12	-1	-0.6
10 Year	9/30/2012 - 10/1/2022	DUNCAN VALLEY BASIN	VIRDEN VALLEY, NEW MEXICO ( DUNCAN - NM)	2	0	2	0	-25.2 to -1.2	-13.2	-13.2	17.0	-1.3	-1.3
1 Year	9/30/2021 - 10/1/2022	DUNCAN VALLEY BASIN	VIRDEN VALLEY, NEW MEXICO ( DUNCAN - NM)	2	1	1	0	-1.5 to 1.6	0.1	0.1	2.2	0.1	0.1
20 Year	9/30/2002 - 10/1/2022	GILA BEND BASIN	GILA BEND	10	0	10	0	-198.5 to -23.9	-74.6	-90.9	52.8	-4.5	-3.7
10 Year	9/30/2012 - 10/1/2022	GILA BEND BASIN	GILA BEND	9	0	9	0	-147.9 to -17	-41.0	-60.2	41.2	-6.0	-4.1
1 Year	9/30/2021 - 10/1/2022	GILA BEND BASIN	GILA BEND	11	0	10	1	-37.5 to -1	-5.0	-10.1	11.0	-10.1	-5.0
20 Year	9/30/2002 - 10/1/2022	GRAND WASH BASIN	GRAND WASH	1	0	1	0	-1.1 to -1.1	-1.1	-1.1	N/A	-0.1	-0.1
10 Year	9/30/2012 - 10/1/2022	GRAND WASH BASIN	GRAND WASH	2	0	1	1	-14.5 to 0.5	-7.0	-7.0	10.6	-0.7	-0.7
1 Year	9/30/2021 - 10/1/2022	GRAND WASH BASIN	GRAND WASH	2	0	1	1	-11.2 to 0.2	-5.5	-5.5	8.1	-5.5	-5.5
20 Year	9/30/2002 - 10/1/2022	HARQUAHALA BASIN	HARQUAHALA INA	16	4	11	1	-124.1 to 23.3	-9.2	-34.6	50.9	-1.7	-0.5
10 Year	9/30/2012 - 10/1/2022	HARQUAHALA BASIN	HARQUAHALA INA	18	3	14	1	-110.4 to 14.8	-17.4	-33.6	40.7	-3.4	-1.7
1 Year	9/30/2021 - 10/1/2022	HARQUAHALA BASIN	HARQUAHALA INA	19	3	12	4	-9.1 to 13.4	-2.4	-2.6	5.4	-2.6	-2.4
20 Year	9/30/2002 - 10/1/2022	HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	5	1	4	0	-4.7 to 1.1	-2.1	-2.2	2.2	-0.1	-0.1
10 Year	9/30/2012 - 10/1/2022	HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	14	3	9	2	-15.3 to 6	-2.4	-4.4	6.7	-0.4	-0.2
1 Year	9/30/2021 - 10/1/2022	HUALAPAI VALLEY BASIN	HUALAPAI VALLEY	21	1	7	13	-5.4 to 2.1	-0.4	-0.9	1.7	-0.9	-0.4
20 Year	9/30/2002 - 10/1/2022	KANAB PLATEAU BASIN	KANAB PLATEAU	2	1	1	0	-5 to 1.9	-1.6	-1.6	4.9	-0.1	-0.1
10 Year	9/30/2012 - 10/1/2022	KANAB PLATEAU BASIN	KANAB PLATEAU	3	2	1	0	-2.2 to 2.6	1.4	0.6	2.5	0.1	0.1
1 Year	9/30/2021 - 10/1/2022	KANAB PLATEAU BASIN	KANAB PLATEAU	3	2	0	1	-0.4 to 4.4	1.7	1.9	2.4	1.9	1.7
20 Year	9/30/2002 - 10/1/2022	LAKE HAVASU BASIN	LAKE HAVASU	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	LAKE HAVASU BASIN	LAKE HAVASU	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
1 Year	9/30/2021 - 10/1/2022	LAKE HAVASU BASIN	LAKE HAVASU	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
20 Year	9/30/2002 - 10/1/2022	LAKE MOHAVE BASIN	LAKE MOHAVE	1	0	1	0	-3.3 to -3.3	-3.3	-3.3	N/A	-0.2	-0.2
10 Year	9/30/2012 - 10/1/2022	LAKE MOHAVE BASIN	LAKE MOHAVE	1	0	1	0	-1.4 to -1.4	-1.4	-1.4	N/A	-0.1	-0.1
1 Year	9/30/2021 - 10/1/2022	LAKE MOHAVE BASIN	LAKE MOHAVE	1	0	0	1	0.3 to 0.3	0.3	0.3	N/A	0.3	0.3



Appendix 4. Statewide Groundwater level change statistics in Arizona by Sub-basin - Water Years 2002 - 2022, 2012 - 2022, and 2021 - 2022

WL Change	WL Change Time Period	Basin/AMA	Sub-basin	WL Change Count	Wells w/ Rising WLs	Wells w/ Declining WLs	Wells w/ No Change in WLs	Range of WL Change [ft]	Median WL Change [ft]	Mean WL Change [ft]	Standard Deviation of WL Change [ft]	Mean Rate of WL Change [ft/yr]	Median Rate of WL Change [ft/yr]
20 Year	9/30/2002 - 10/1/2022	LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	2	0	2	0	-19.8 to -4.6	-12.2	-12.2	10.7	-0.6	-0.6
10 Year	9/30/2012 - 10/1/2022	LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	4	2	2	0	-8.4 to 4.5	0.6	-0.7	5.8	-0.1	0.1
1 Year	9/30/2021 - 10/1/2022	LITTLE COLORADO RIVER PLATEAU BASIN	JOSEPH CITY INA	3	0	0	3	0.1 to 0.2	0.2	0.2	0.0	0.2	0.2
20 Year	9/30/2002 - 10/1/2022	LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	27	12	13	2	-84.5 to 22	-0.3	-3.5	20.8	-0.2	0.0
10 Year	9/30/2012 - 10/1/2022	LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	65	14	41	10	-146.4 to 56.8	-2.2	-6.1	24.4	-0.6	-0.2
1 Year	9/30/2021 - 10/1/2022	LITTLE COLORADO RIVER PLATEAU BASIN	LITTLE COLORADO RIVER	78	22	23	33	-29.7 to 25.8	-0.1	0.1	7.0	0.1	-0.1
20 Year	9/30/2002 - 10/1/2022	LOWER GILA BASIN	CHILDS VALLEY	1	1	0	0	14.9 to 14.9	14.9	14.9	N/A	0.7	0.7
10 Year	9/30/2012 - 10/1/2022	LOWER GILA BASIN	CHILDS VALLEY	1	1	0	0	6.2 to 6.2	6.2	6.2	N/A	0.6	0.6
1 Year	9/30/2021 - 10/1/2022	LOWER GILA BASIN	CHILDS VALLEY	1	1	0	0	1.2 to 1.2	1.2	1.2	N/A	1.2	1.2
20 Year	9/30/2002 - 10/1/2022	LOWER GILA BASIN	DENDORA VALLEY	1	0	1	0	-31.6 to -31.6	-31.6	-31.6	N/A	-1.6	-1.6
10 Year	9/30/2012 - 10/1/2022	LOWER GILA BASIN	DENDORA VALLEY	1	0	1	0	-16.4 to -16.4	-16.4	-16.4	N/A	-1.6	-1.6
1 Year	9/30/2021 - 10/1/2022	LOWER GILA BASIN	DENDORA VALLEY	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
20 Year	9/30/2002 - 10/1/2022	LOWER GILA BASIN	WELLTON - MOHAWK	15	3	10	2	-60.1 to 63.1	-5.1	-6.0	26.0	-0.3	-0.3
10 Year	9/30/2012 - 10/1/2022	LOWER GILA BASIN	WELLTON - MOHAWK	18	4	10	4	-63.9 to 64.3	-1.6	-6.9	27.3	-0.7	-0.2
1 Year	9/30/2021 - 10/1/2022	LOWER GILA BASIN	WELLTON - MOHAWK	25	3	7	15	-17.8 to 7.1	0.0	-1.2	4.7	-1.2	0.0
20 Year	9/30/2002 - 10/1/2022	LOWER SAN PEDRO BASIN	CAMP GRANT WASH	1	1	0	0	51.7 to 51.7	51.7	51.7	N/A	2.6	2.6
10 Year	9/30/2012 - 10/1/2022	LOWER SAN PEDRO BASIN	CAMP GRANT WASH	1	0	1	0	-5.8 to -5.8	-5.8	-5.8	N/A	-0.6	-0.6
1 Year	9/30/2021 - 10/1/2022	LOWER SAN PEDRO BASIN	CAMP GRANT WASH	1	0	1	0	-2.4 to -2.4	-2.4	-2.4	N/A	-2.4	-2.4
20 Year	9/30/2002 - 10/1/2022	LOWER SAN PEDRO BASIN	MAMMOTH	8	4	4	0	-22.9 to 44.3	-1.6	2.9	20.8	0.1	-0.1
10 Year	9/30/2012 - 10/1/2022	LOWER SAN PEDRO BASIN	MAMMOTH	11	2	4	5	-7.2 to 9.6	-0.6	-0.3	5.0	0.0	-0.1
1 Year	9/30/2021 - 10/1/2022	LOWER SAN PEDRO BASIN	MAMMOTH	12	1	3	8	-4.8 to 2.4	0.2	-0.4	1.9	-0.4	0.2
20 Year	9/30/2002 - 10/1/2022	MCMULLEN VALLEY BASIN	MCMULLEN VALLEY	18	3	15	0	-138.4 to 21	-22.4	-30.5	36.4	-1.5	-1.1
10 Year	9/30/2012 - 10/1/2022	MCMULLEN VALLEY BASIN	MCMULLEN VALLEY	21	4	17	0	-92.1 to 57.2	-11.7	-13.3	28.8	-1.3	-1.2
1 Year	9/30/2021 - 10/1/2022	MCMULLEN VALLEY BASIN	MCMULLEN VALLEY	22	6	14	2	-10.5 to 12.7	-2.2	-1.8	5.8	-1.8	-2.2
20 Year	9/30/2002 - 10/1/2022	MEADVIEW BASIN	MEADVIEW	1	0	1	0	-28.7 to -28.7	-28.7	-28.7	N/A	-1.4	-1.4
10 Year	9/30/2012 - 10/1/2022	MEADVIEW BASIN	MEADVIEW	2	0	2	0	-9.6 to -1.1	-5.3	-5.3	6.0	-0.5	-0.5
1 Year	9/30/2021 - 10/1/2022	MEADVIEW BASIN	MEADVIEW	2	1	1	0	-1.4 to 1.9	0.3	0.3	2.3	0.3	0.3
20 Year	9/30/2002 - 10/1/2022	MORENCI BASIN	MORENCI	1	0	0	1	-0.2 to -0.2	-0.2	-0.2	N/A	0.0	0.0
10 Year	9/30/2012 - 10/1/2022	MORENCI BASIN	MORENCI	4	0	4	0	-26.2 to -1.5	-10.6	-12.2	12.4	-1.2	-1.1
1 Year	9/30/2021 - 10/1/2022	MORENCI BASIN	MORENCI	5	2	3	0	-14 to 2	-1.7	-4.4	7.1	-4.4	-1.7
20 Year	9/30/2002 - 10/1/2022	PARIA BASIN	PARIA	1	0	1	0	-68.3 to -68.3	-68.3	-68.3	N/A	-3.4	-3.4
10 Year	9/30/2012 - 10/1/2022	PARIA BASIN	PARIA	1	0	1	0	-42.6 to -42.6	-42.6	-42.6	N/A	-4.3	-4.3
1 Year	9/30/2021 - 10/1/2022	PARIA BASIN	PARIA	3	1	2	0	-23.2 to 1.3	-16.7	-12.9	12.7	-12.9	-16.7
20 Year	9/30/2002 - 10/1/2022	PARKER BASIN	CIBOLA VALLEY	1	1	0	0	7.5 to 7.5	7.5	7.5	N/A	0.4	0.4
10 Year	9/30/2012 - 10/1/2022	PARKER BASIN	CIBOLA VALLEY	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
1 Year	9/30/2021 - 10/1/2022	PARKER BASIN	CIBOLA VALLEY	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
20 Year	9/30/2002 - 10/1/2022	PARKER BASIN	COLORADO RIVER INDIAN RESERVATION	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	PARKER BASIN	COLORADO RIVER INDIAN RESERVATION	1	1	0	0	1.2 to 1.2	1.2	1.2	N/A	0.1	0.1
1 Year	9/30/2021 - 10/1/2022	PARKER BASIN	COLORADO RIVER INDIAN RESERVATION	1	1	0	0	1.6 to 1.6	1.6	1.6	N/A	1.6	1.6
20 Year	9/30/2002 - 10/1/2022	PARKER BASIN	LA POSA PLAINS	1	0	1	0	-2.4 to -2.4	-2.4	-2.4	N/A	-0.1	-0.1
10 Year	9/30/2012 - 10/1/2022	PARKER BASIN	LA POSA PLAINS	1	0	1	0	-3.2 to -3.2	-3.2	-3.2	N/A	-0.3	-0.3
1 Year	9/30/2021 - 10/1/2022	PARKER BASIN	LA POSA PLAINS	2	0	0	2	-0.8 to -0.6	-0.7	-0.7	0.1	-0.7	-0.7
20 Year	9/30/2002 - 10/1/2022	PEACH SPRINGS BASIN	PEACH SPRINGS	1	0	1	0	-22.5 to -22.5	-22.5	-22.5	N/A	-1.1	-1.1
10 Year	9/30/2012 - 10/1/2022	PEACH SPRINGS BASIN	PEACH SPRINGS	1	0	1	0	-23.1 to -23.1	-23.1	-23.1	N/A	-2.3	-2.3
1 Year	9/30/2021 - 10/1/2022	PEACH SPRINGS BASIN	PEACH SPRINGS	2	1	1	0	-8.3 to 1.8	-3.3	-3.3	7.1	-3.3	-3.3
20 Year	9/30/2002 - 10/1/2022	PHOENIX AMA	CAREFREE	5	4	1	0	-35.4 to 147.8	100.2	70.9	75.9	3.5	5.0
10 Year	9/30/2012 - 10/1/2022	PHOENIX AMA	CAREFREE	6	4	2	0	-20.5 to 53.7	2.0	11.6	32.2	1.2	0.2
1 Year	9/30/2021 - 10/1/2022	PHOENIX AMA	CAREFREE	8	3	3	2	-18 to 5.2	-0.6	-2.1	7.0	-2.1	-0.6
20 Year	9/30/2002 - 10/1/2022	PHOENIX AMA	EAST SALT RIVER	46	35	11	0	-31.9 to 135.1	30.1	29.8	37.2	1.5	1.5
10 Year	9/30/2012 - 10/1/2022	PHOENIX AMA	EAST SALT RIVER	75	46	26	3	-38.8 to 61.2	4.1	5.6	18.5	0.6	0.4
1 Year	9/30/2021 - 10/1/2022	PHOENIX AMA	EAST SALT RIVER	83	31	23	29	-16.8 to 26.7	0.6	1.3	5.7	1.3	0.6
20 Year	9/30/2002 - 10/1/2022	PHOENIX AMA	FOUNTAIN HILLS	3	0	3	0	-125.5 to -1.3	-4.4	-43.7	70.8	-2.2	-0.2
10 Year	9/30/2012 - 10/1/2022	PHOENIX AMA	FOUNTAIN HILLS	7	1	4	2	-31.1 to 3.9	-1.1	-6.8	12.7	-0.7	-0.1
1 Year	9/30/2021 - 10/1/2022	PHOENIX AMA	FOUNTAIN HILLS	6	2	1	3	-21.1 to 3.8	0.5	-2.4	9.3	-2.4	0.5
20 Year	9/30/2002 - 10/1/2022	PHOENIX AMA	HASSAYAMPA	25	10	14	1	-41.9 to 155.2	-1.9	9.4	48.6	0.5	-0.1
10 Year	9/30/2012 - 10/1/2022	PHOENIX AMA	HASSAYAMPA	43	13	24	6	-36.3 to 51.2	-2.6	-1.5	16.1	-0.1	-0.3
1 Year	9/30/2021 - 10/1/2022	PHOENIX AMA	HASSAYAMPA	53	15	13	25	-9.9 to 9.1	0.0	0.4	3.5	0.4	0.0
20 Year	9/30/2002 - 10/1/2022	PHOENIX AMA	LAKE PLEASANT	3	2	1	0	-28.4 to 9.5	9.1	-3.3	21.8	-0.2	0.5
10 Year	9/30/2012 - 10/1/2022	PHOENIX AMA	LAKE PLEASANT	7	4	2	1	-22.6 to 4.4	1.2	-1.8	9.4	-0.2	0.1
1 Year	9/30/2021 - 10/1/2022	PHOENIX AMA	LAKE PLEASANT	9	7	1	1	-5.2 to 9.6	2.2	2.2	3.9	2.2	2.2
20 Year	9/30/2002 - 10/1/2022	PHOENIX AMA	RAINBOW VALLEY	17	1	16	0	-38.6 to 20.8	-10.6	-11.3	11.1	-0.6	-0.5
10 Year	9/30/2012 - 10/1/2022	PHOENIX AMA	RAINBOW VALLEY	14	0	14	0	-37.3 to -4.1	-7.8	-14.5	12.2	-1.5	-0.8
1 Year	9/30/2021 - 10/1/2022	PHOENIX AMA	RAINBOW VALLEY	18	1	9	8	-11.9 to 1.7	-1.0	-1.5	2.8	-1.5	-1.0
20 Year	9/30/2002 - 10/1/2022	PHOENIX AMA	WEST SALT RIVER	34	7	25	2	-72.4 to 98.9	-8.2	-4.7	25.4	-0.2	-0.4
10 Year	9/30/2012 - 10/1/2022	PHOENIX AMA	WEST SALT RIVER	93	48	42	3	-25.5 to 130.1	1.8	6.9	22.6	0.7	0.2
1 Year	9/30/2021 - 10/1/2022	PHOENIX AMA	WEST SALT RIVER	120	49	31	40	-28.1 to 18.8	0.3	1.0	6.1	1.0	0.3
20 Year	9/30/2002 - 10/1/2022	PINAL AMA	AGUIRRE VALLEY	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	PINAL AMA	AGUIRRE VALLEY	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
1 Year	9/30/2021 - 10/1/2022	PINAL AMA	AGUIRRE VALLEY	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
20 Year	9/30/2002 - 10/1/2022	PINAL AMA	ELOY	69	20	46	3	-93.5 to 81.5	-11.7	-12.2	33.8	-0.6	-0.6
10 Year	9/30/2012 - 10/1/2022	PINAL AMA	ELOY	69	23	45	1	-57.5 to 47.2	-7.3	-8.6	19.8	-0.9	-0.7
1 Year	9/30/2021 - 10/1/2022	PINAL AMA	ELOY	97	11	62	24	-32.1 to 14.3	-2.3	-3.9	6.7	-3.9	-2.3
20 Year	9/30/2002 - 10/1/2022	PINAL AMA	MARICOPA - STANFIELD	20	13	6	1	-21.6 to 126.3	25.7	33.8	45.6	1.7	1.3
10 Year	9/30/2012 - 10/1/2022	PINAL AMA	MARICOPA - STANFIELD	23	15	7	1	-24.9 to 30.6	16.7	10.1	16.2	1.0	1.7
1 Year	9/30/2021 - 10/1/2022	PINAL AMA	MARICOPA - STANFIELD	34	12	11	11	-33.3 to 17.8	0.3	-0.7	7.9	-0.7	0.3
20 Year	9/30/2002 - 10/1/2022	PINAL AMA	SANTA ROSA	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	PINAL AMA	SANTA ROSA	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
1 Year	9/30/2021 - 10/1/2022	PINAL AMA	SANTA ROSA	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
20 Year	9/30/2002 - 10/1/2022	PINAL AMA	VEKOL VALLEY	7	5	1	1	-3.3 to 7.6	1.8	2.0	3.2	0.1	0.1
10 Year	9/30/2012 - 10/1/2022	PINAL AMA	VEKOL VALLEY	9	8	1	0	-4.3 to 6.5	1.7	1.8	2.8	0.2	0.2
1 Year	9/30/2021 - 10/1/2022	PINAL AMA	VEKOL VALLEY	9	3	0	6	-0.4 to 8.6	0.4	1.6	2.9	1.6	0.4
20 Year	9/30/2002 - 10/1/2022	PRESCOTT AMA	LITTLE CHINO VALLEY	35	5	30	0	-133.2 to 40.1	-22.5	-24.0	30.2	-1.2	-1.1



Appendix 4. Statewide Groundwater level change statistics in Arizona by Sub-basin - Water Years 2002 - 2022, 2012 - 2022, and 2021 - 2022

WL Change	WL Change Time Period	Basin/AMA	Sub-basin	WL Change Count	Wells w/ Rising WLs	Wells w/ Declining WLs	Wells w/ No Change in WLs	Range of WL Change [ft]	Median WL Change [ft]	Mean WL Change [ft]	Standard Deviation of WL Change [ft]	Mean Rate of WL Change [ft/yr]	Median Rate of WL Change [ft/yr]
10 Year	9/30/2012 - 10/1/2022	PRESCOTT AMA	LITTLE CHINO VALLEY	41	4	35	2	-60 to 16.2	-10.5	-10.8	12.4	-1.1	-1.1
1 Year	9/30/2021 - 10/1/2022	PRESCOTT AMA	LITTLE CHINO VALLEY	55	15	17	23	-13.6 to 29.1	-0.5	1.0	5.9	1.0	-0.5
20 Year	9/30/2002 - 10/1/2022	PRESCOTT AMA	UPPER AGUA FRIA	18	4	13	1	-31.9 to 118.2	-4.2	7.6	39.8	0.4	-0.2
10 Year	9/30/2012 - 10/1/2022	PRESCOTT AMA	UPPER AGUA FRIA	20	8	10	2	-28.8 to 149.7	-0.4	16.3	45.1	1.6	0.0
1 Year	9/30/2021 - 10/1/2022	PRESCOTT AMA	UPPER AGUA FRIA	23	10	5	8	-17.1 to 31.3	0.4	3.2	10.2	3.2	0.4
20 Year	9/30/2002 - 10/1/2022	RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	12	0	11	1	-76.8 to -0.7	-7.7	-17.7	22.0	-0.9	-0.4
10 Year	9/30/2012 - 10/1/2022	RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	13	0	13	0	-48.8 to -1.2	-3.9	-9.8	12.9	-1.0	-0.4
1 Year	9/30/2021 - 10/1/2022	RANEGRAS PLAIN BASIN	RANEGRAS PLAIN	13	2	6	5	-5.3 to 1.6	-0.2	-1.2	2.2	-1.2	-0.2
20 Year	9/30/2002 - 10/1/2022	SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	9	3	4	2	-21.9 to 21.5	-0.9	0.7	12.3	0.0	0.0
10 Year	9/30/2012 - 10/1/2022	SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	15	2	10	3	-16.3 to 12.1	-1.8	-2.3	5.8	-0.2	-0.2
1 Year	9/30/2021 - 10/1/2022	SACRAMENTO VALLEY BASIN	SACRAMENTO VALLEY	16	1	4	11	-5.4 to 4.5	-0.3	-0.6	2.1	-0.6	-0.3
20 Year	9/30/2002 - 10/1/2022	SAFFORD BASIN	GILA VALLEY	10	2	8	0	-30.2 to 17.4	-11.5	-8.8	13.4	-0.4	-0.6
10 Year	9/30/2012 - 10/1/2022	SAFFORD BASIN	GILA VALLEY	13	2	7	4	-31.3 to 8.2	-2.2	-4.5	10.0	-0.5	-0.2
1 Year	9/30/2021 - 10/1/2022	SAFFORD BASIN	GILA VALLEY	19	3	8	8	-6.1 to 6.3	-0.6	-0.6	2.7	-0.6	-0.6
20 Year	9/30/2002 - 10/1/2022	SAFFORD BASIN	SAN CARLOS VALLEY	1	0	1	0	-28.8 to -28.8	-28.8	-28.8	N/A	-1.4	-1.4
10 Year	9/30/2012 - 10/1/2022	SAFFORD BASIN	SAN CARLOS VALLEY	1	0	1	0	-23.7 to -23.7	-23.7	-23.7	N/A	-2.4	-2.4
1 Year	9/30/2021 - 10/1/2022	SAFFORD BASIN	SAN CARLOS VALLEY	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
20 Year	9/30/2002 - 10/1/2022	SAFFORD BASIN	SAN SIMON VALLEY	14	0	14	0	-154.6 to -2.3	-18.7	-41.8	49.1	-2.1	-0.9
10 Year	9/30/2012 - 10/1/2022	SAFFORD BASIN	SAN SIMON VALLEY	15	0	14	1	-120.5 to -0.8	-11.8	-26.9	34.9	-2.7	-1.2
1 Year	9/30/2021 - 10/1/2022	SAFFORD BASIN	SAN SIMON VALLEY	15	4	6	5	-8.5 to 17	-0.4	0.2	5.5	0.2	-0.4
20 Year	9/30/2002 - 10/1/2022	SALT RIVER BASIN	BLACK RIVER	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	SALT RIVER BASIN	BLACK RIVER	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
1 Year	9/30/2021 - 10/1/2022	SALT RIVER BASIN	BLACK RIVER	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
20 Year	9/30/2002 - 10/1/2022	SALT RIVER BASIN	SALT RIVER CANYON	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	SALT RIVER BASIN	SALT RIVER CANYON	1	0	1	0	-21.6 to -21.6	-21.6	-21.6	N/A	-2.2	-2.2
1 Year	9/30/2021 - 10/1/2022	SALT RIVER BASIN	SALT RIVER CANYON	1	0	0	1	-0.3 to -0.3	-0.3	-0.3	N/A	-0.3	-0.3
20 Year	9/30/2002 - 10/1/2022	SALT RIVER BASIN	SALT RIVER LAKES	1	1	0	0	3.1 to 3.1	3.1	3.1	N/A	0.2	0.2
10 Year	9/30/2012 - 10/1/2022	SALT RIVER BASIN	SALT RIVER LAKES	2	1	1	0	-4.4 to 4.3	0.0	0.0	6.1	0.0	0.0
1 Year	9/30/2021 - 10/1/2022	SALT RIVER BASIN	SALT RIVER LAKES	2	1	1	0	-3.3 to 8.8	2.8	2.8	8.6	2.8	2.8
20 Year	9/30/2002 - 10/1/2022	SALT RIVER BASIN	WHITE RIVER	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	SALT RIVER BASIN	WHITE RIVER	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
1 Year	9/30/2021 - 10/1/2022	SALT RIVER BASIN	WHITE RIVER	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
20 Year	9/30/2002 - 10/1/2022	SAN BERNADINO VALLEY BASIN	SAN BERNADINO VALLEY	1	0	0	1	0.1 to 0.1	0.1	0.1	N/A	0.0	0.0
10 Year	9/30/2012 - 10/1/2022	SAN BERNADINO VALLEY BASIN	SAN BERNADINO VALLEY	2	1	1	0	-2.3 to 1.4	-0.5	-0.5	2.6	0.0	0.0
1 Year	9/30/2021 - 10/1/2022	SAN BERNADINO VALLEY BASIN	SAN BERNADINO VALLEY	2	1	0	1	-0.5 to 1.6	0.6	0.6	1.5	0.6	0.6
20 Year	9/30/2002 - 10/1/2022	SAN RAFAEL BASIN	SAN RAFAEL	3	0	2	1	-9.9 to 0.6	-1.4	-3.6	5.6	-0.2	-0.1
10 Year	9/30/2012 - 10/1/2022	SAN RAFAEL BASIN	SAN RAFAEL	5	1	1	3	-1.1 to 1.6	-0.8	-0.3	1.1	0.0	-0.1
1 Year	9/30/2021 - 10/1/2022	SAN RAFAEL BASIN	SAN RAFAEL	5	1	1	3	-1.1 to 3	0.3	0.4	1.7	0.4	0.3
20 Year	9/30/2002 - 10/1/2022	SAN SIMON WASH BASIN	SAN SIMON WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	SAN SIMON WASH BASIN	SAN SIMON WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
1 Year	9/30/2021 - 10/1/2022	SAN SIMON WASH BASIN	SAN SIMON WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
20 Year	9/30/2002 - 10/1/2022	SANTA CRUZ AMA	SANTA CRUZ AMA	34	4	25	5	-30.4 to 2.5	-6.3	-7.8	8.2	-0.4	-0.3
10 Year	9/30/2012 - 10/1/2022	SANTA CRUZ AMA	SANTA CRUZ AMA	38	18	16	4	-13 to 14.6	0.6	0.5	5.7	0.1	0.1
1 Year	9/30/2021 - 10/1/2022	SANTA CRUZ AMA	SANTA CRUZ AMA	50	15	13	22	-14.8 to 13.2	0.4	-0.1	4.6	-0.1	0.4
20 Year	9/30/2002 - 10/1/2022	SHIVWITS PLATEAU BASIN	SHIVWITS PLATEAU	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	SHIVWITS PLATEAU BASIN	SHIVWITS PLATEAU	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
1 Year	9/30/2021 - 10/1/2022	SHIVWITS PLATEAU BASIN	SHIVWITS PLATEAU	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
20 Year	9/30/2002 - 10/1/2022	TIGER WASH BASIN	TIGER WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	TIGER WASH BASIN	TIGER WASH	1	0	0	1	-1 to -1	-1.0	-1.0	N/A	-0.1	-0.1
1 Year	9/30/2021 - 10/1/2022	TIGER WASH BASIN	TIGER WASH	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
20 Year	9/30/2002 - 10/1/2022	TONTO CREEK BASIN	TONTO CREEK	3	2	0	1	0.1 to 6.5	3.8	3.4	3.2	0.2	0.2
10 Year	9/30/2012 - 10/1/2022	TONTO CREEK BASIN	TONTO CREEK	8	5	1	2	-9.7 to 13.4	2.2	2.0	6.4	0.2	0.2
1 Year	9/30/2021 - 10/1/2022	TONTO CREEK BASIN	TONTO CREEK	11	4	6	1	-7.4 to 12.7	-1.2	0.1	5.3	0.1	-1.2
20 Year	9/30/2002 - 10/1/2022	TUCSON AMA	AVRA VALLEY	43	31	8	4	-29.9 to 176	28.7	30.5	45.5	1.5	1.4
10 Year	9/30/2012 - 10/1/2022	TUCSON AMA	AVRA VALLEY	45	25	12	8	-30.2 to 123.8	2.1	12.0	32.0	1.2	0.2
1 Year	9/30/2021 - 10/1/2022	TUCSON AMA	AVRA VALLEY	49	26	5	18	-4.5 to 14.7	1.2	2.6	4.2	2.6	1.2
20 Year	9/30/2002 - 10/1/2022	TUCSON AMA	UPPER SANTA CRUZ	37	21	15	1	-32.3 to 105.5	9.5	7.5	31.1	0.4	0.5
10 Year	9/30/2012 - 10/1/2022	TUCSON AMA	UPPER SANTA CRUZ	46	25	19	2	-22.1 to 64.4	6.1	8.4	19.1	0.8	0.6
1 Year	9/30/2021 - 10/1/2022	TUCSON AMA	UPPER SANTA CRUZ	57	27	18	12	-15.9 to 26.3	0.3	1.9	6.8	1.9	0.3
20 Year	9/30/2002 - 10/1/2022	UPPER HASSAYAMPA BASIN	UPPER HASSAYAMPA	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	UPPER HASSAYAMPA BASIN	UPPER HASSAYAMPA	1	0	1	0	-2.8 to -2.8	-2.8	-2.8	N/A	-0.3	-0.3
1 Year	9/30/2021 - 10/1/2022	UPPER HASSAYAMPA BASIN	UPPER HASSAYAMPA	1	0	1	0	-3.7 to -3.7	-3.7	-3.7	N/A	-3.7	-3.7
20 Year	9/30/2002 - 10/1/2022	UPPER SAN PEDRO BASIN	ALLEN FLAT	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
10 Year	9/30/2012 - 10/1/2022	UPPER SAN PEDRO BASIN	ALLEN FLAT	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
1 Year	9/30/2021 - 10/1/2022	UPPER SAN PEDRO BASIN	ALLEN FLAT	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A
20 Year	9/30/2002 - 10/1/2022	UPPER SAN PEDRO BASIN	SIERRA VISTA	37	2	30	5	-32.4 to 3.2	-8.6	-8.3	7.4	-0.4	-0.4
10 Year	9/30/2012 - 10/1/2022	UPPER SAN PEDRO BASIN	SIERRA VISTA	35	8	22	5	-11.2 to 23.6	-3.3	-2.1	6.5	-0.2	-0.3
1 Year	9/30/2021 - 10/1/2022	UPPER SAN PEDRO BASIN	SIERRA VISTA	39	11	6	22	-7 to 11	0.0	0.4	3.0	0.4	0.0
20 Year	9/30/2002 - 10/1/2022	VERDE RIVER BASIN	BIG CHINO	21	3	17	1	-14.1 to 3.7	-6.1	-5.4	5.0	-0.3	-0.3
10 Year	9/30/2012 - 10/1/2022	VERDE RIVER BASIN	BIG CHINO	43	10	29	4	-15 to 26	-4.0	-2.7	6.7	-0.3	-0.4
1 Year	9/30/2021 - 10/1/2022	VERDE RIVER BASIN	BIG CHINO	70	14	8	48	-4 to 17.2	-0.1	0.5	3.0	0.5	-0.1
20 Year	9/30/2002 - 10/1/2022	VERDE RIVER BASIN	VERDE CANYON	12	10	2	0	-21.1 to 79.9	9.8	23.1	33.0	1.2	0.5
10 Year	9/30/2012 - 10/1/2022	VERDE RIVER BASIN	VERDE CANYON	19	16	3	0	-13.4 to 71.5	11.5	21.4	27.0	2.1	1.2
1 Year	9/30/2021 - 10/1/2022	VERDE RIVER BASIN	VERDE CANYON	18	10	6	2	-43.6 to 39.2	1.4	0.9	15.7	0.9	1.4
20 Year	9/30/2002 - 10/1/2022	VERDE RIVER BASIN	VERDE VALLEY	33	11	13	9	-29.9 to 29	-0.4	-0.4	9.4	0.0	0.0
10 Year	9/30/2012 - 10/1/2022	VERDE RIVER BASIN	VERDE VALLEY	46	11	26	9	-65 to 12.1	-2.3	-5.4	13.7	-0.5	-0.2
1 Year	9/30/2021 - 10/1/2022	VERDE RIVER BASIN	VERDE VALLEY	53	13	21	19	-33.8 to 12.4	-0.7	-1.9	7.6	-1.9	-0.7
20 Year	9/30/2002 - 10/1/2022	VIRGIN RIVER BASIN	VIRGIN RIVER	4	0	4	0	-1.9 to -1.3	-1.7	-1.6	0.3	-0.1	-0.1
10 Year	9/30/2012 - 10/1/2022	VIRGIN RIVER BASIN	VIRGIN RIVER	5	0	3	2	-6.5 to -0.7	-2.5	-2.7	2.3	-0.3	-0.3
1 Year	9/30/2021 - 10/1/2022	VIRGIN RIVER BASIN	VIRGIN RIVER	5	0	1	4	-2.4 to 0.2	-0.4	-0.6	1.0	-0.6	-0.4
20 Year	9/30/2002 - 10/1/2022	WESTERN MEXICAN DRAINAGE BASIN	WESTERN MEXICAN DRAINAGE	1	0	1	0	-17.8 to -17.8	-17.8	-17.8	N/A	-0.9	-0.9
10 Year	9/30/2012 - 10/1/2022	WESTERN MEXICAN DRAINAGE BASIN	WESTERN MEXICAN DRAINAGE	0	0	0	0	0 to 0	N/A	N/A	N/A	N/A	N/A



Appendix 4. Statewide Groundwater level change statistics in Arizona by Sub-basin - Water Years 2002 - 2022, 2012 - 2022, and 2021 - 2022

WL Change	WL Change Time Period	Basin/AMA	Sub-basin	WL Change Count	Wells w/ Rising WLs	Wells w/ Declining WLs	Wells w/ No Change in WLs	Range of WL Change [ft]	Median WL Change [ft]	Mean WL Change [ft]	Standard Deviation of WL Change [ft]	Mean Rate of WL Change [ft/yr]	Median Rate of WL Change [ft/yr]
1 Year	9/30/2021 - 10/1/2022	WESTERN MEXICAN DRAINAGE BASIN	WESTERN MEXICAN DRAINAGE	1	0	0	1	-0.9 to -0.9	-0.9	-0.9	N/A	-0.9	-0.9
20 Year	9/30/2002 - 10/1/2022	WILLCOX BASIN	WILLCOX	18	0	18	0	-106.4 to -6.6	-52.6	-54.7	32.2	-2.7	-2.6
10 Year	9/30/2012 - 10/1/2022	WILLCOX BASIN	WILLCOX	28	2	26	0	-114.6 to 14	-34.5	-36.0	29.8	-3.6	-3.4
1 Year	9/30/2021 - 10/1/2022	WILLCOX BASIN	WILLCOX	36	2	28	6	-19.2 to 25.8	-3.9	-5.0	7.9	-5.0	-3.9
20 Year	9/30/2002 - 10/1/2022	YUMA BASIN	YUMA	3	0	1	2	-36.2 to -0.2	-0.3	-12.2	20.8	-0.6	0.0
10 Year	9/30/2012 - 10/1/2022	YUMA BASIN	YUMA	7	0	5	2	-12.4 to 0.8	-6.1	-6.1	5.3	-0.6	-0.6
1 Year	9/30/2021 - 10/1/2022	YUMA BASIN	YUMA	7	0	1	6	-1.1 to 0.5	-0.2	-0.3	0.6	-0.3	-0.2