

2017 SANTA PAULA BASIN ANNUAL REPORT

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PREPARED FOR:

SANTA PAULA BASIN TECHNICAL ADVISORY COMMITTEE

Cover photo: Eucalyptus trees burned during the Thomas Fire of December 2017 border a citrus orchard just west of the City of Santa Paula (photo taken by John Lindquist, April 2018).

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(UWCD PROFESSIONAL PAPER 2019-01)

FOREWORD

In March 1996, the Superior Court of the State of California for the County of Ventura entered a stipulated judgment to establish pumping allocations and establish a management plan for the Santa Paula groundwater basin (*United Water Conservation District vs. City of San Buenaventura*, original March 7, 1996, amended August 24, 2010 [hereinafter “Judgment”]). Members of the Santa Paula Basin Pumpers Association (SPBPA) and the City of San Buenaventura exercise rights to pump groundwater from the basin for reasonable and beneficial uses. United Water Conservation District (UWCD, or United) does not produce groundwater from the basin, but the basin is located within its boundaries and United is authorized to engage in groundwater management and replenishment activities and to commence actions to protect the water supplies which are of common benefit to the lands within the UWCD or its inhabitants.

The Judgment provides for the creation of a Santa Paula Basin Technical Advisory Committee (TAC) with equal representation from United, the SPBPA, and the City of San Buenaventura. The TAC is charged with establishing a program to “monitor conditions in the basin, including but not necessarily limited to verification of future pumping amounts, measurements of groundwater levels, estimates of inflow to and outflow from the basin, increases and decreases in groundwater storage, and analyses of groundwater quality.” The Judgment also allows for the development of a management plan for the operation of the basin and empowers the TAC to determine the safe yield of the basin.

The Judgment requires annual reports summarizing results of the monitoring program, and further specifically provides that “United Water Conservation District shall have the primary responsibility for collecting, collating, and verifying the data required under the monitoring program, and shall present the results thereof in annual reports to the Technical Advisory Committee.” United submits the draft annual reports to the TAC members for review, comment, and approval. The primary groundwater management objective in the Santa Paula basin is to ensure that production from the basin does not exceed the long-term sustainable yield of suitable-quality groundwater for current and anticipated future uses (i.e., municipal, domestic, agricultural, and industrial). The TAC’s specialty studies and annual monitoring reports provide data and analysis intended to support this objective.

In 2010 the Judgment was amended to join various pumpers that were not previously included as parties to the settlement, and to clarify certain provisions pertaining to shortage conditions, the

responsibilities of the SPBPA and groundwater production by its members, and water-rights transfer procedures. Also in 2010, a Santa Paula Basin TAC Working Group was established consisting of technical experts from United, the SPBPA, and the City of San Buenaventura. Since its formation, the Working Group has completed a series of specialty studies to better understand the factors that affect safe yield in the Santa Paula basin, including a revised safe-yield study in 2017. In addition, the Working Group will continue to conduct future studies to complement the 2017 Safe-Yield Study. The Working Group is currently evaluating metrics (“triggers”) that will be used to evaluate whether and to what extent the basin might be negatively affected by future pumping and considering options to enhance safe yield of the basin.

In 2014, legislation (AB 1739, SB 1168 and SB 1319) was enacted by the State of California requiring every groundwater basin in California to be managed sustainably by the year 2042. These three bills are collectively known as the Sustainable Groundwater Management Act (SGMA). Groundwater basins that have had their water rights adjudicated, such as the Santa Paula basin, are exempt from some SGMA requirements but do have new requirements to report basin conditions to the California Department of Water Resources (DWR). The data presented in this Annual Report will be submitted to DWR (using their online reporting tool) as required to meet the SGMA requirements for adjudicated basins.

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INTRODUCTION

This is the twenty-first annual report presenting key climatic, hydrologic, and hydrogeologic data to support management of groundwater resources in the Santa Paula basin. Relevant geographic features in and near the Santa Paula basin are shown on Figure 1. Data for calendar-year (CY) and water-year (WY) 2017 (the reporting period) are included in this report. This annual report provides the TAC—which consists of representatives from United Water Conservation District (UWCD or United), the City of San Buenaventura (Ventura), and the Santa Paula Basin Pumpers Association (SPBPA)—with monitoring results and other data to be used for management of the basin in accordance with the 1996 Santa Paula basin stipulated judgment by the Superior Court of the State of California for the County of Ventura (*United Water Conservation District vs. City of San Buenaventura*, original March 7, 1996, amended August 24, 2010 [hereinafter “Judgment”]) and with requirements for adjudicated basins under the Sustainable Groundwater Management Act (SGMA). This report summarizes annual precipitation, streamflow, surface water quality, production well installations and destructions, groundwater extractions and pumping allocations, groundwater levels, change in groundwater storage, and groundwater quality data obtained by United for the Santa Paula basin during the reporting period. Sources of the monitoring data and methods of their collection are unchanged from those described in the 2015 Santa Paula Basin Annual Report (United, 2017a); refer to that document for details regarding the sources and methods.

DATA SUMMARY AND EVALUATION

Key hydrologic indicators for Santa Paula basin during the reporting period are summarized and compared to long-term averages in Table 1, below. More detailed information regarding conditions in Santa Paula basin during the reporting period are provided in the following subsections.

Table 1. Key Hydrologic Indicators in Santa Paula Basin

Hydrologic Indicator	2017	Average During Period of Record	Median During Period of Record	Period of Record
Water-Year ^a Precipitation at Santa Paula-UWCD ^b (inches)	21.65	17.19	14.89	1890 through 2017
Calendar-Year Precipitation at Santa Paula-UWCD ^b (inches)	16.73	17.00	15.48	1890 through 2017
Water-Year Discharge in Santa Clara River at Freeman Diversion ^b (AF/yr)	98,800	206,900	114,000	1956 through 2017
Water-Year Discharge in Santa Paula Creek at Mupu Bridge ^b (AF/yr)	15,200	18,000	8,200	1928 through 2017
Reported Calendar-Year Groundwater Extractions in Santa Paula Basin (AF/yr)	21,889	25,660	25,932	1980 through 2017
Groundwater Level Index (ft msl)	175.06	181.02	181.82	1983 through 2017
Change in Groundwater Storage from Previous Year (AF)	+50 to +500	Not applicable	Not applicable	spring 2016 to spring 2017
Notes:				
^a A water year (WY) is defined as the period from October 1 of the previous year through September 30 of the year indicated. For example, WY 2017 includes the period from 10/1/2016 through 9/30/2017.				
^b Locations and identification numbers for rain and stream gages are indicated on Figure 1.				

PRECIPITATION

Annual precipitation at Saticoy and Santa Paula throughout the period of record is shown on Figures 2 and 3; monthly precipitation at these locations during CY and WY 2017 is shown on Figure 4. Appendix A (Table A-1) includes a tabulation of monthly precipitation at Santa Paula-UWCD during the period of record. It should be noted that CY (and WY) 2017 was the first year with above-average precipitation following the driest 5-year period on record in Santa Paula (WYs and CYs 2012 through 2016). As shown on Figure 4, much of the precipitation occurring in CY and WY 2017 fell in just two months, January and February.

SURFACE WATER FLOWS

Annual discharge in the Santa Clara River (at Freeman Diversion) and Santa Paula Creek (near Santa Paula) throughout the period of record is shown on Figures 5 and 6; daily streamflow at these locations during CY and WY 2016 is shown on Figure 7. Appendix A (Tables A-2 and A-3) provides annual total discharge in the Santa Clara River and Santa Paula Creek during the period of record. Annual discharge during WY 2017 in the Santa Clara River at Freeman Diversion was about half the long-term average volume, and discharge in Santa Paula Creek near Santa Paula was slightly below average.

SURFACE WATER QUALITY

Minimum, maximum, and average concentrations of selected major water quality constituents (chloride, nitrate, total dissolved solids [TDS], and sulfate) detected in surface water samples from the Santa Clara River at Freeman Diversion during CY 2017 are summarized in Table 2, below. Concentrations of these constituents detected throughout the period of record are shown on Figure 8. Table 2 indicates that average concentrations of chloride, nitrate, TDS, and sulfate detected in the Santa Clara River during CY 2017 were somewhat higher than long-term average concentrations, except for nitrate (which was less than the long-term average concentration).

Table 2. Summary of Major Surface Water Quality Parameters in Santa Clara River at Freeman Diversion, CY 2017

Statistic	Concentration, milligrams per liter (mg/L)			
	Chloride	Nitrate ^a	TDS	Sulfate
CY 2017 Minimum	28	Less than 0.4	390	190
CY 2017 Maximum	166	8.0	2,080	1,150
CY 2017 Average	84	3.9	1,310	680
Long-Term Average ^b	64	5.9	1,130	530

Notes:
^a As nitrate (NO₃)
^b Includes reported data in United's database from the entire period of record, beginning in CY 1925 for chloride, TDS, and sulfate; beginning in CY 1936 for nitrate.

Minimum, maximum, and average concentrations of selected major water quality constituents (chloride, nitrate, TDS, and sulfate) detected in surface water samples from Santa Paula Creek near Santa Paula during CY 2017 are summarized in Table 3, below. Concentrations of these

constituents detected throughout the period of record are shown on Figure 9. Table 3 indicates that average concentrations of chloride, nitrate, TDS, and sulfate detected in Santa Paula Creek during CY 2017 were higher than long-term average concentrations, similar to trends in the Santa Clara River (with the exception of nitrate).

Table 3. Summary of Major Surface Water Quality Parameters in Santa Paula Creek near Santa Paula, CY 2017

Statistic	Concentration (mg/L)			
	Chloride	Nitrate ^a	TDS	Sulfate
CY 2017 Minimum	32	5.7	800	330
CY 2017 Maximum	80	20	1,240	560
CY 2017 Average	61	11	1,010	450
Long-Term Average ^b	44	9.6	810	370

Notes:
^a As nitrate (NO₃)
^b Includes reported data in United's database from the entire period of record: CY 1980 to present for hardness, sulfate and chloride; CY 1981 to present for nitrate.

PRODUCTION WELL INSTALLATIONS AND DESTRUCTIONS

One production well was replaced within the Santa Paula basin during CY 2017, as listed in Table 4, below. The new production well was a replacement for an existing production well.

Table 4. Production Well Installations and Destructions During CY 2017

Production Wells Destroyed	Production Wells Drilled
02N22W03K03S, Tucker Ranch	02N22W03K05S, Tucker Ranch (replacement for 02N22W03K03S)

GROUNDWATER EXTRACTIONS

Annual groundwater extractions (pumping) reported for Santa Paula basin wells throughout the period of record are summarized in Table 5, below, and illustrated on Figure 10.

Table 5. Historical Santa Paula Basin Groundwater Extractions

Calendar Year	Groundwater Extractions (AF)	Calendar Year	Groundwater Extractions (AF)	Calendar Year	Groundwater Extractions (AF)
1980	26,820	1993	26,998	2006	24,830
1981	27,545	1994	26,244	2007	28,077
1982	22,925	1995	25,042	2008	26,686
1983	16,710	1996	26,008	2009	25,820
1984	29,455	1997	28,961	2010	23,115
1985	26,533	1998	21,622	2011	24,202
1986	21,617	1999	27,700	2012	25,824
1987	24,852	2000	26,798	2013	26,485
1988	25,370	2001	22,530	2014	27,437
1989	29,362	2002	27,259	2015	25,856
1990	33,453	2003	22,280	2016	25,363
1991	27,056	2004	27,306	2017	21,889
1992	24,355	2005	24,700		
				Average	25,660
				Median	25,932
<p>Note: The groundwater extractions shown on this table are based on semi-annual groundwater production statements submitted to United's Finance Department.</p>					

Reported groundwater extractions from the Santa Paula basin during CY 2017 by the City of San Buenaventura, members of the SPBPA, and other pumpers are summarized in Table 6, below. The Judgment governs groundwater production on a seven-year rolling average, which allows parties to produce more or less than their allocation in any particular year so long as their rolling seven-year average does not exceed their allocation. Appendix D summarizes groundwater extractions for the past seven years (CYs 2011 through 2017), as well as Individual Party Allocations (IPAs) for the SPBPA (with transfers, de minimis parties, non parties) and the City of San Buenaventura.

Table 6. Summary of Groundwater Extractions During CY 2017

Pumper	Extractions (AF)
City of San Buenaventura ^a	2806
SPBPA Pumps with Individual Party Allocations (adjusted by SPBPA) ^b	19,042
SPBPA Pumps with Individual Party Allocations (reported to United) ^c	19,042
Non-stipulated Parties ^b	19
De Minimis Pumps ^b	23
Total extractions (adjusted by SPBPA ^b / reported to United ^c)	21,889 / 21,889
Notes: ^a Includes pumping from well 02N/22W-03E01S (Appendix D, Table D-5) ^b From Appendix D, compiled by SPBPA ^c From UWCD Finance Department records	

Reported groundwater extractions during CY 2017, together with estimated imports and exports, are summarized by use and source in Table 7 and graphically illustrated Figure 11. The distribution of groundwater extractions across the basin during CY 2017 is shown on Figure 12.

Table 7. Summary of Groundwater Extractions, Imports, and Exports in Santa Paula Basin, CY 2017

Description	<u>Volume (AF)</u>
Reported groundwater extractions from wells in the Santa Paula basin stipulated area	21,889
Estimated groundwater imports from Fillmore basin (assume 60% of total pumpage from Teague #6 and 100% from FICO #12)	+4,192
Estimated groundwater imports from Oxnard Forebay basin (assume 67% of total pumpage from Alta #3 and Alta #11)	+813
Estimated water exports to Mound basin via the FICO distribution system	-802
Estimated net groundwater use in Santa Paula basin (sum of extractions plus imports, less exports)	= 26,092*

** Does not include potential imports/exports by Ventura to/from other supply sources. Specific volumes of groundwater exported from Ventura's wells in Santa Paula basin, and imported from other sources to the Santa Paula basin, are variable and undetermined. However, the net import or export of water by Ventura to/from Santa Paula basin can be assumed to be relatively small compared to the overall water budget.*

GROUNDWATER LEVELS

Groundwater elevations were monitored during the reporting period at selected wells in and adjacent to the Santa Paula basin, shown on Figure 13. Groundwater elevation hydrographs for selected wells are provided in Appendix B. Two hydrographs are included for each well at different scales, as follows:

- The first hydrograph for each well is scaled with a consistent vertical axis range of -60 to 380 feet so that, for most wells, the relationships between static groundwater levels, top and bottom of well screens, and reference points (RPs) at different wells in the basin can be visually compared. The information provided in these hydrographs displays the relationship between the (static) water level variations and the production zones of wells in the basin.
- The second hydrograph for each well is scaled to allow easier comparison of the magnitude of the static groundwater level changes in the wells. The vertical axis range of 80 feet captures the range of water levels on an expanded scale for visual inspection of groundwater level trends and comparison between wells. These plots include annotations regarding the RP and depth of the screen (which is indicated in parentheses to the right of the well number) at each well.

Groundwater elevation contours for spring and fall of CY 2017 in Santa Paula basin are shown on Figures 14 and 15. The contours were interpolated using groundwater elevation data obtained from wells in the Santa Paula basin and in the adjacent, hydraulically-connected Fillmore, Mound, and Oxnard Forebay basins. The contours represent lines of equal groundwater elevation (total hydraulic head), and generally define the water table (in unconfined portions of the aquifer) or potentiometric surface (in confined portions of the aquifer). Most of the groundwater elevations used for contouring were measured at long-screened wells with total depths greater than 100 feet. The screened interval contoured at United's cluster monitor well sites SP-1 and SP-2 are 370-390 feet below ground surface (bgs), and 290-310 feet bgs, respectively. Groundwater elevations measured at shallow versus deep wells are not contoured independently in this annual report.

Groundwater levels in most wells throughout the basin show a seasonal variation in the range of 10 to 20 feet. Longer-term groundwater level trends have been summarized in Santa Paula basin through the use of a "groundwater level index" (GLI). The GLI is calculated as the average of spring-high groundwater elevations measured each year at nine key wells selected for their relatively long record and their geographic distribution across the basin. This data is included in Appendix B. The GLIs for CYs 1983 through 2017 are shown on Figure 16, together with the cumulative departure from average precipitation over the same period at Santa Paula-UWCD. The CY 2017 GLI is 175.06 feet above mean sea level (ft msl), which is about 11 feet higher than the previous year's GLI (a record low 164.17 ft msl). Calculation of the CY 2017 GLI was affected by the destruction of one of the index wells in 2017. Due to its location in the western part of Santa Paula basin, well 03N21W34R01S typically had lower groundwater elevations than most of the other index wells. Therefore, the GLI increased in 2017 partly because the average groundwater elevation for the remaining wells is simply higher than the average when well 03N21W30F01S is included. This artifact likely accounted for approximately 5 feet of the apparent increase in GLI between 2016 and 2017. The average GLI since 1983, when it was first calculated, is 181.20 ft msl, which is approximately 6 feet above the 2017 GLI. So it can be concluded that water levels rose in 2017.

CHANGE IN GROUNDWATER STORAGE

Geostatistical analysis of year-over-year changes in spring-high groundwater elevations within the Santa Paula basin indicates that, on average, groundwater levels rose by 3.58 ft across the basin from spring 2016 (see UWCD, 2017b) to spring 2017 (Figure 17; Appendix C). This rise is smaller than the increase in GLI of 11 feet that occurred from spring 2015 to spring 2016, as discussed in the previous section. More data points are used for the geostatistical analysis than for the GLI calculation; therefore, the geostatistical analysis likely is more representative of basinwide groundwater-elevation and storage changes from year to year.

The magnitude of the geostatistically-calculated change in storage was based solely on data from wells where groundwater levels were measured both during spring 2016 and spring 2017 in and adjacent to Santa Paula basin. The Kriging method was used to interpolate the estimated groundwater elevation changes across the area of the unconsolidated alluvial deposits in and adjacent to Santa Paula basin. Areas outside of the basin were then “blanked,” removing them from the calculation of average groundwater level change. The area of the unconsolidated alluvial deposits within Santa Paula basin is approximately 13,000 acres, and the average storage coefficient for the aquifer, which is mostly confined, is estimated to be in the range from 0.001 to 0.01. Based on these known data and estimated parameters, the calculated change in groundwater storage within the area of the unconsolidated alluvial deposits between spring 2016 and spring 2017 is an increase of 50 to 500 AF, which may be within the margin of error for the method of analysis.

GROUNDWATER QUALITY

Concentrations of selected water-quality constituents (nitrate, chloride, sulfate, and TDS) detected in groundwater samples obtained during CY 2017 and reported to United are summarized in Table 8, below, together with California primary maximum contaminant levels (MCLs), secondary MCL ranges (MCLRs), and water quality objectives specified by the California Regional Water Quality Control Board, Los Angeles region (1994). Maps showing the maximum reported concentrations of these constituents during CY 2017 are provided on Figures 18 through 21. As noted in past annual reports, concentrations of chloride, TDS, and sulfate generally increase from east to west in the basin.

Table 8. Summary of Chloride, Nitrate, TDS, and Sulfate in Groundwater in Santa Paula Basin, CY 2017

Statistic	Concentration (mg/L)			
	Chloride	Nitrate ^a	TDS	Sulfate
CY 2017 Minimum	25	ND	812	277
CY 2017 Maximum	304	35	3,910	1,900
CY 2017 Average	66	9.3	1,350	566
Long-Term Average ^b	69.8	10.3	1,309	540
Primary MCL	none	45	none	none
Secondary MCLR-“Recommended”	250	none	500	250
Secondary MCLR-“Upper”	500	none	1,000	500
Water Quality Objectives East/West of Peck Rd.	100/110	45/45	1,200/2,000	600/800
Notes: ND = not detected MCL = Maximum Contaminant Level MCLR = Maximum Contaminant Level Range ^a As nitrate (NO ₃) ^b Includes reported data in United’s database from the entire period of record: CY 1903 to present for chloride, TDS, and sulfate; CY 1923 to present for nitrate.				

Reported concentrations of hardness, alkalinity, iron, and manganese for groundwater samples obtained during CY 2017 are summarized in Table 9, together with the secondary MCLs for iron

and manganese, and the micro-irrigation plugging hazard criteria developed by Pitts and Peterson (undated) and the University of California (2015). Iron and manganese occur naturally in groundwater, and any elevated concentrations detected in the Santa Paula basin are thought to be a result of local geochemical conditions rather than man-made sources (e.g. mining or industrial discharges).

Table 9. Summary of Hardness, Alkalinity, Iron, and Manganese in Groundwater in Santa Paula Basin, CY 2017

Statistic		Concentration (mg/L)			
		Hardness ^a	Alkalinity ^a	Iron	Manganese
CY 2017 Minimum		397	180	ND	ND
CY 2017 Maximum		1,240	380	1.18	0.82
CY 2017 Average		631	256	0.09	0.27
Long-Term Average ^b		647	270	0.15	0.24
Secondary MCL		NA	NA	0.3	0.05
Pitts and Peterson Plugging Hazard Potential	Moderate	150-300	100-200	0.1 - 1.0	0.1 - 1.0
	Severe	>300	>200	>1.0	>1.0
Univ. of Calif. Clogging Potential	Moderate	NA	100	0.2 - 1.5	0.1 - 1.5
	Severe	NA	NA	>1.5	>1.5
Notes: ND = not detected NA = not applicable or not reported > = greater than the value shown ^a As calcium carbonate (CaCO ₃). ^b Includes reported data in United's database from the entire period of record: CY 1929 to present for hardness and alkalinity; CY 1937 to present for iron and manganese.					

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(http://micromaintain.ucanr.edu/Prediction/Source/Groundwater/Assessing_Water_Quality_II-50a/)

FIGURES

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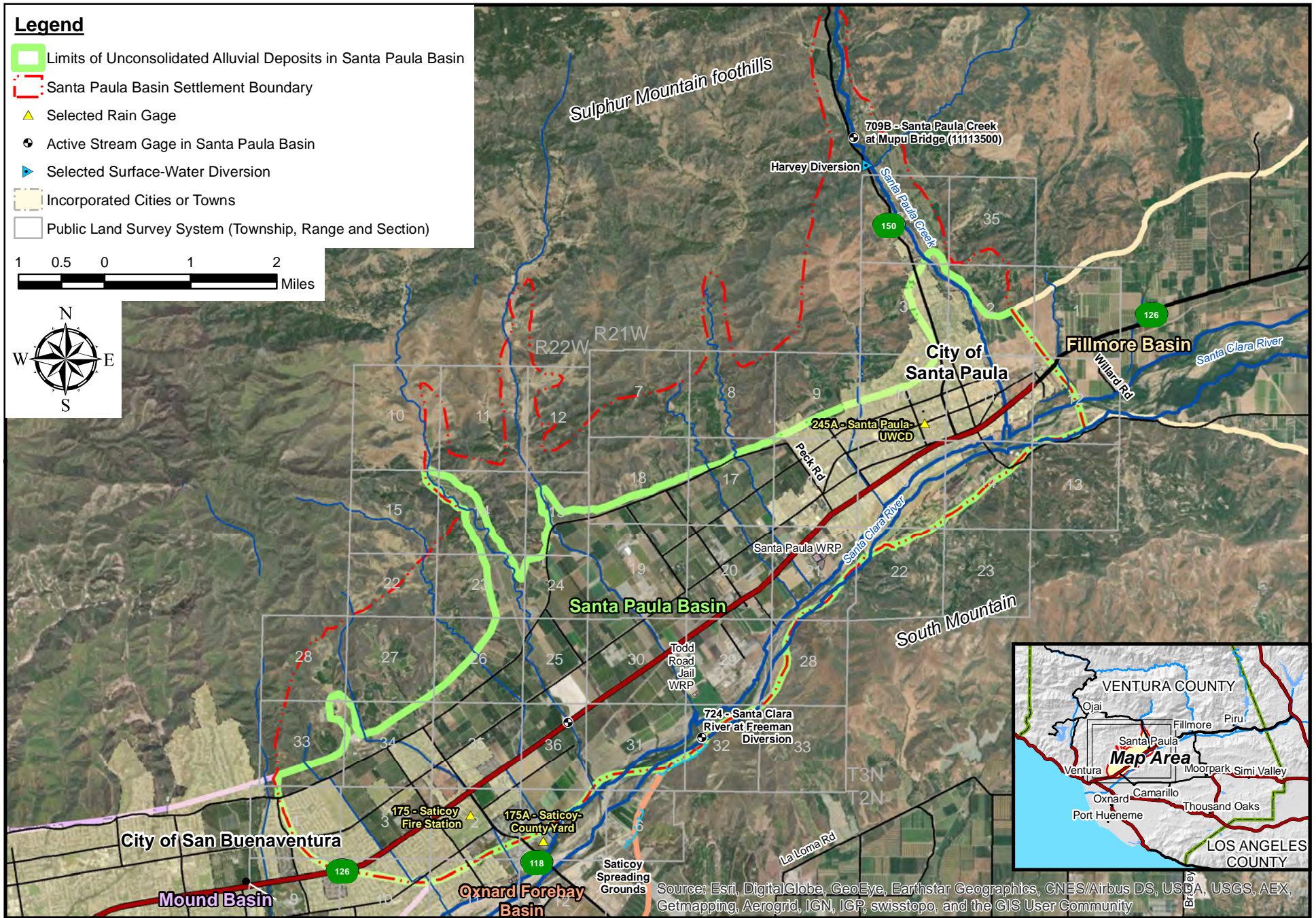


Figure 1. Santa Paula Basin Location Map

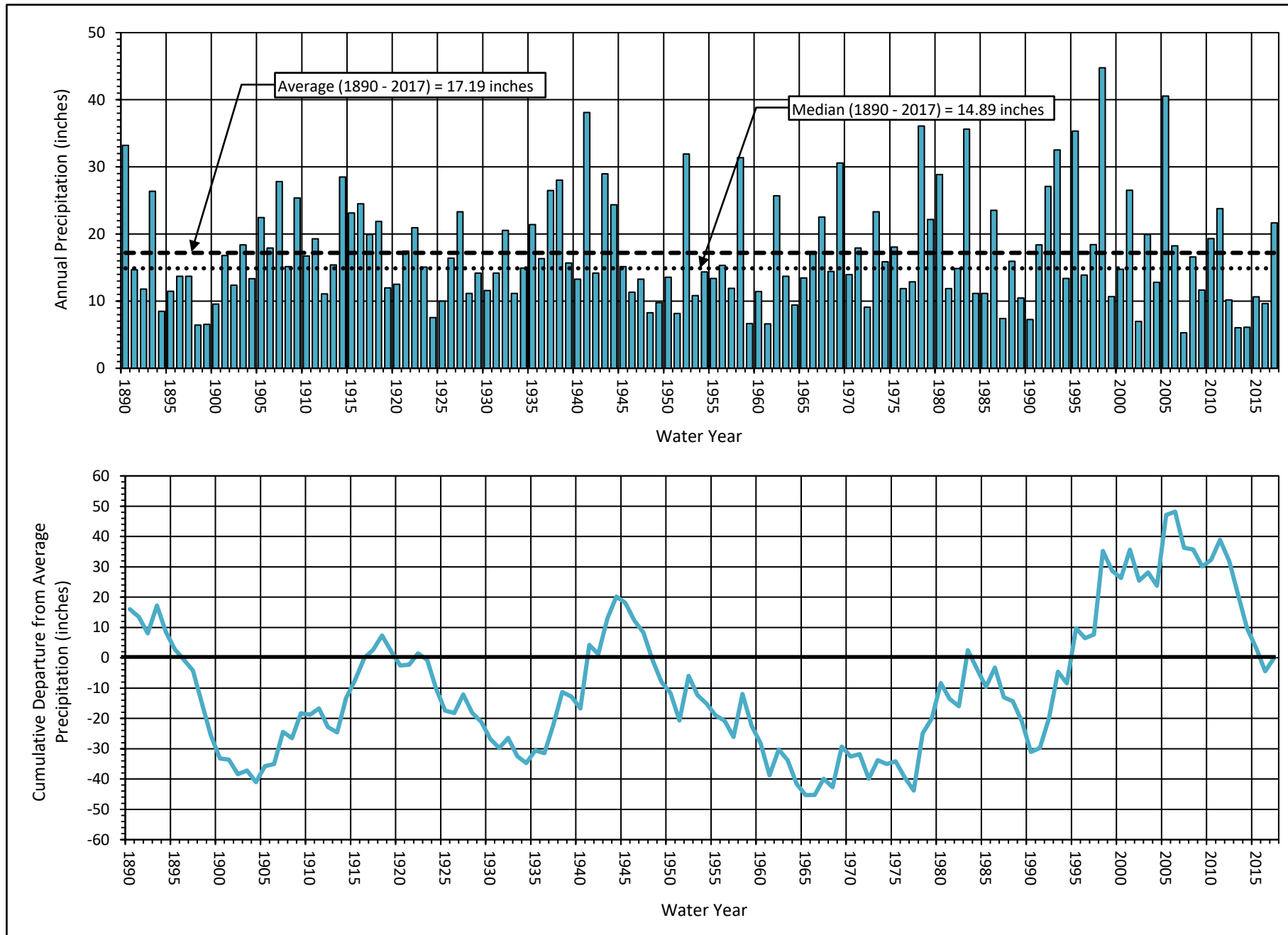


Figure 2. Annual Precipitation at Santa Paula and Cumulative Departure from Average, WYs 1890 through 2017

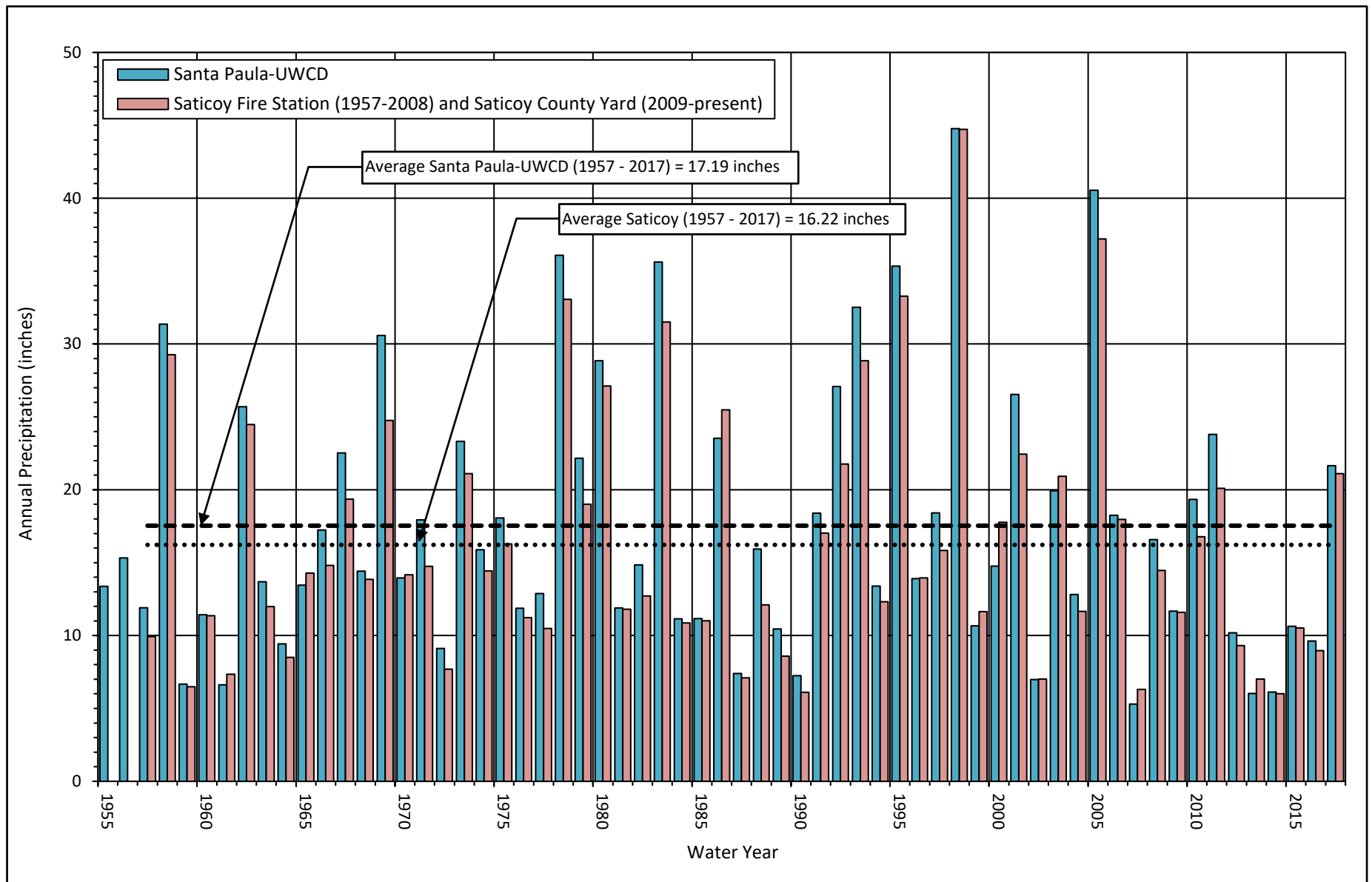


Figure 3. Annual Precipitation at Saticoy and Santa Paula, WYs 1955 through 2017

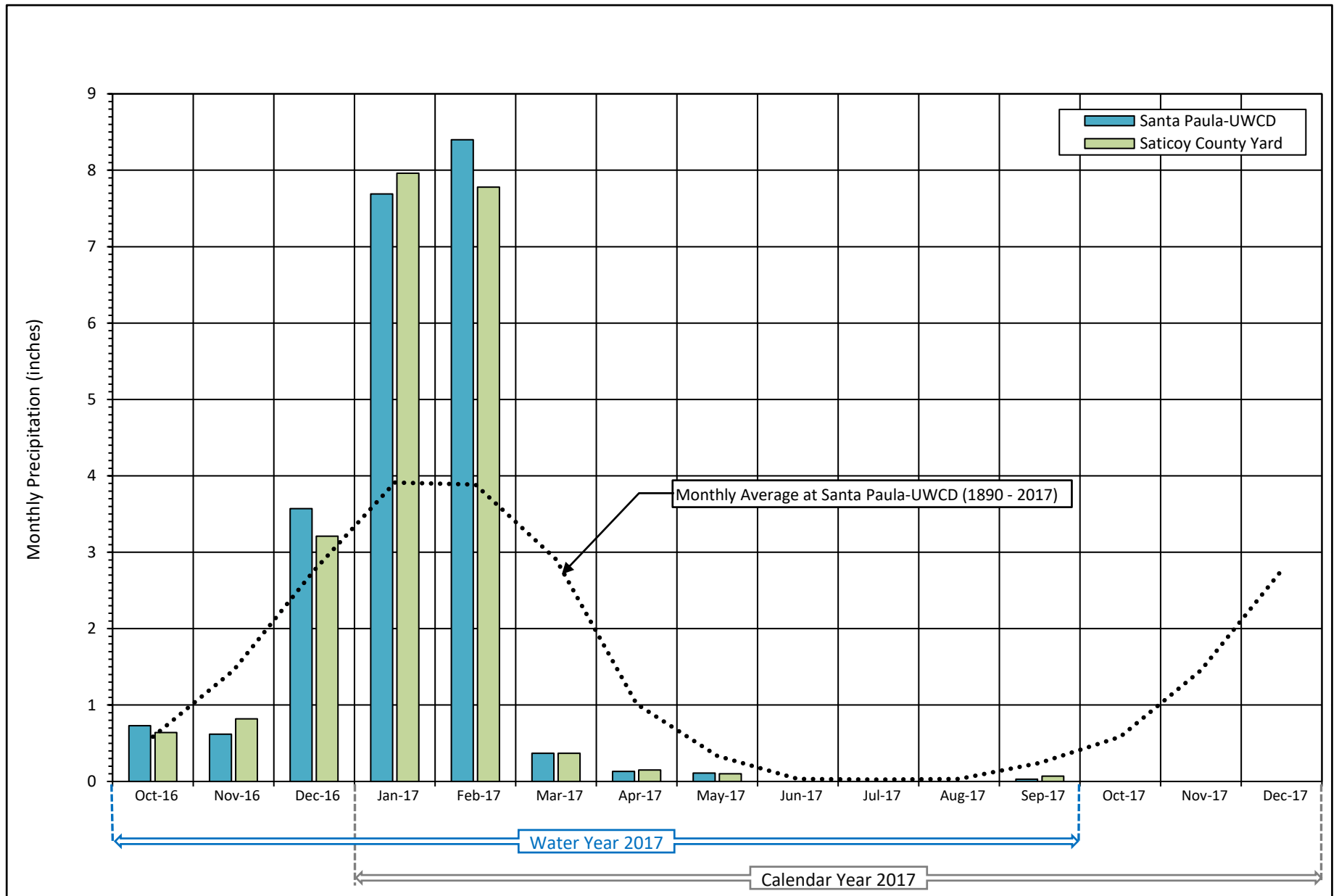


Figure 4. Monthly Precipitation in Santa Paula Basin, WY and CY 2017

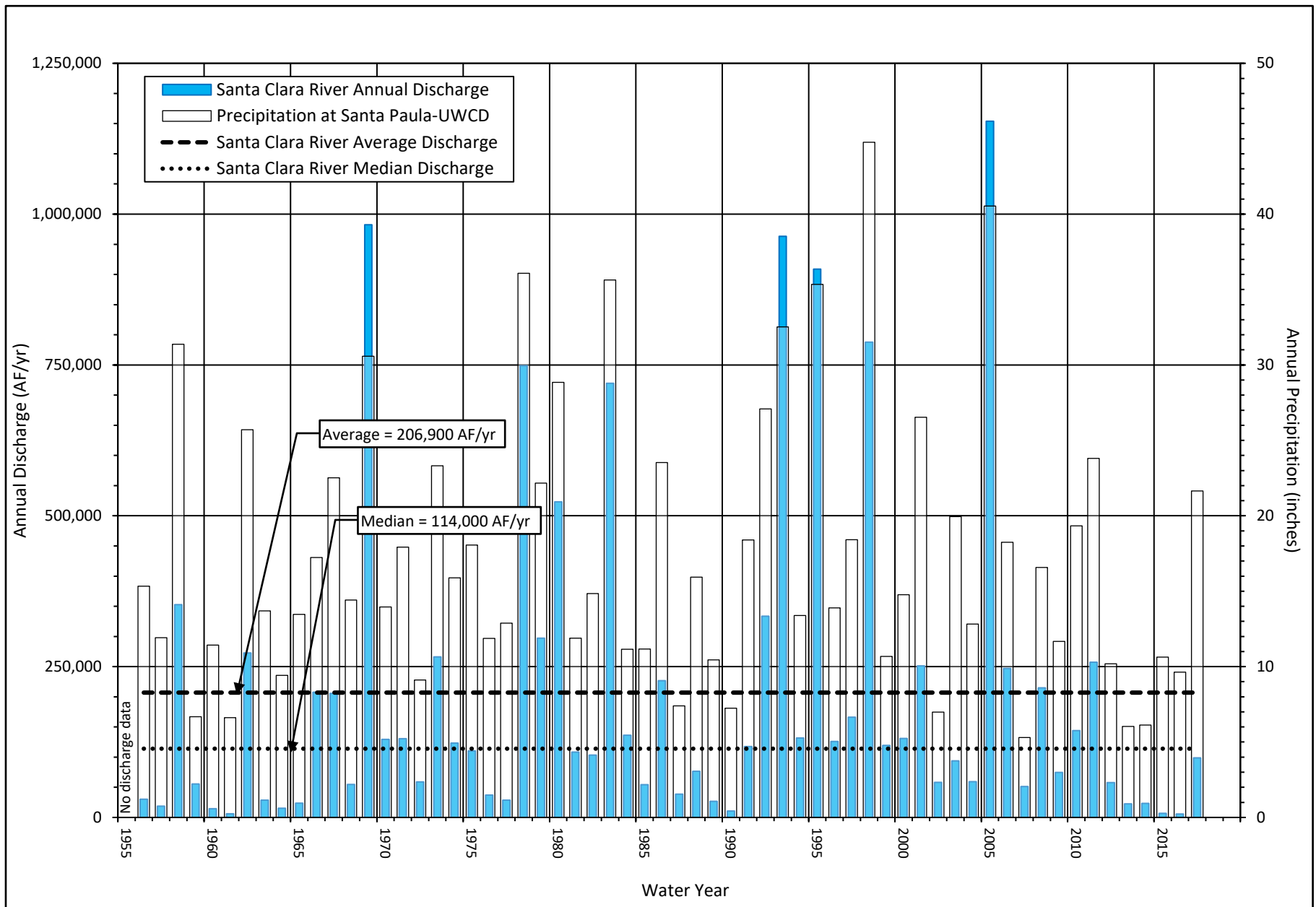


Figure 5. Annual Discharge of Santa Clara River at the Freeman Diversion, WYs 1956 through 2017

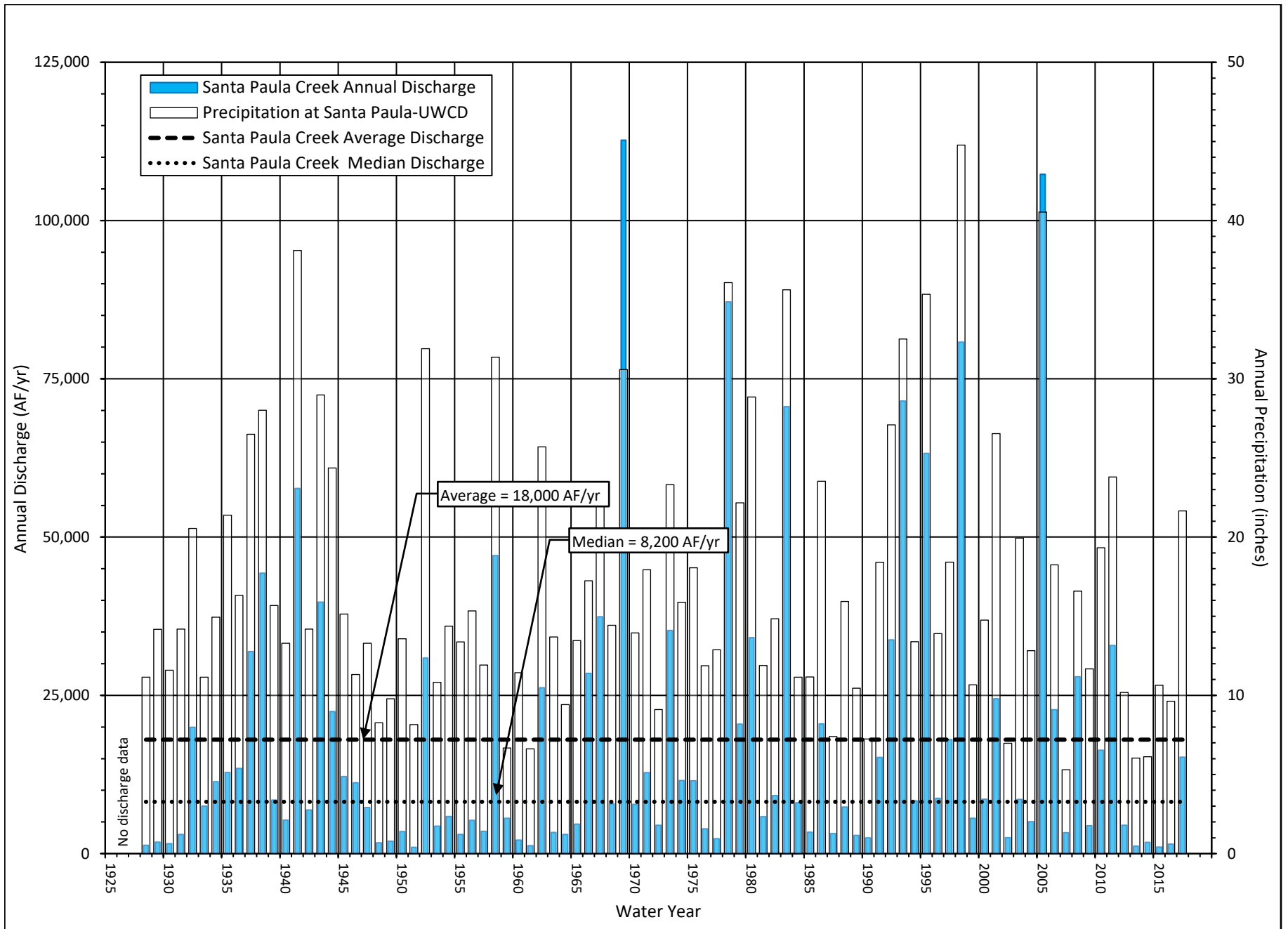


Figure 6. Annual Discharge of Santa Paula Creek Near Santa Paula, WYs 1928 through 2017

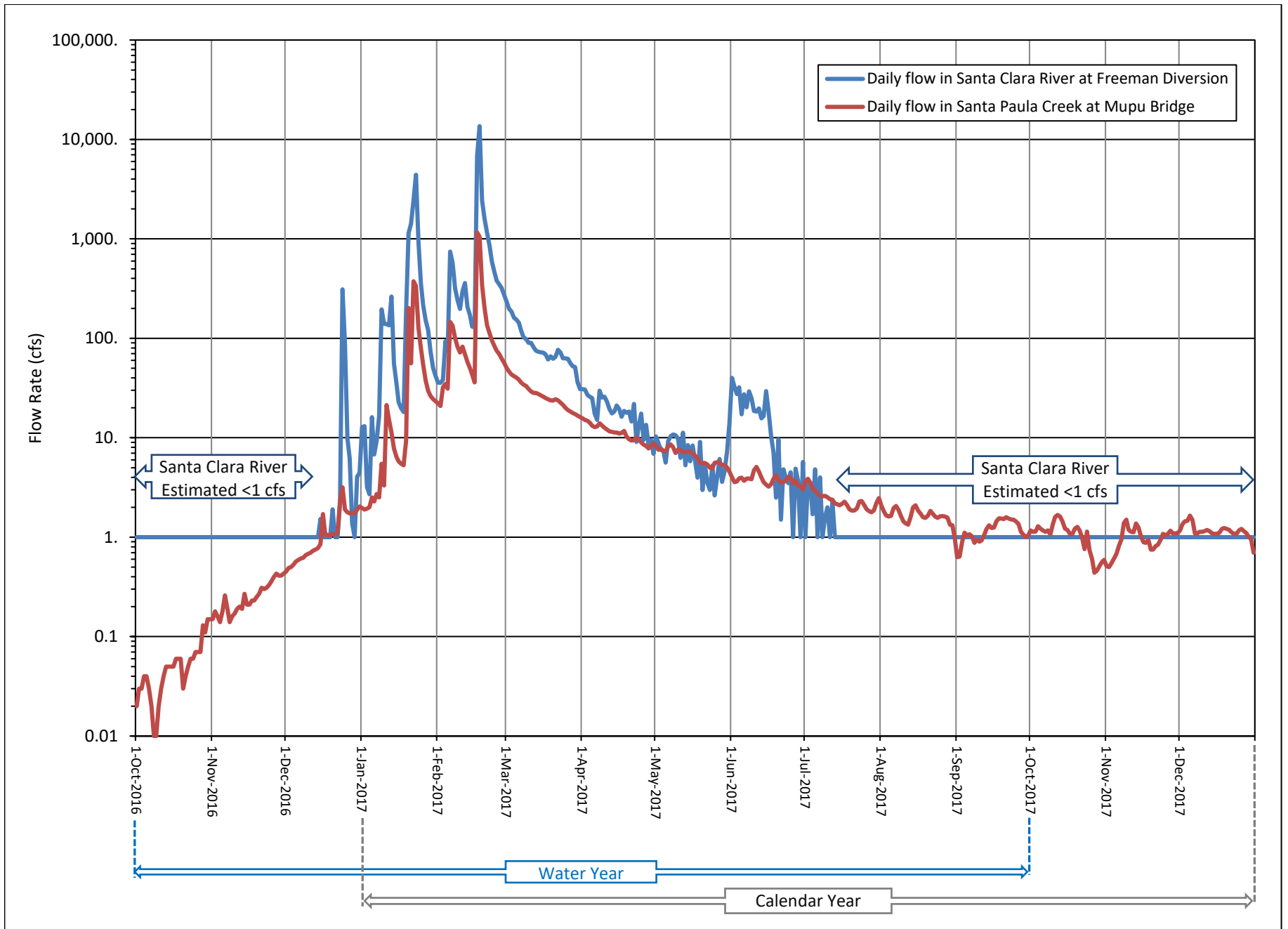


Figure 7. Daily Streamflow in Santa Paula Creek and Santa Clara River, WY and CY 2017

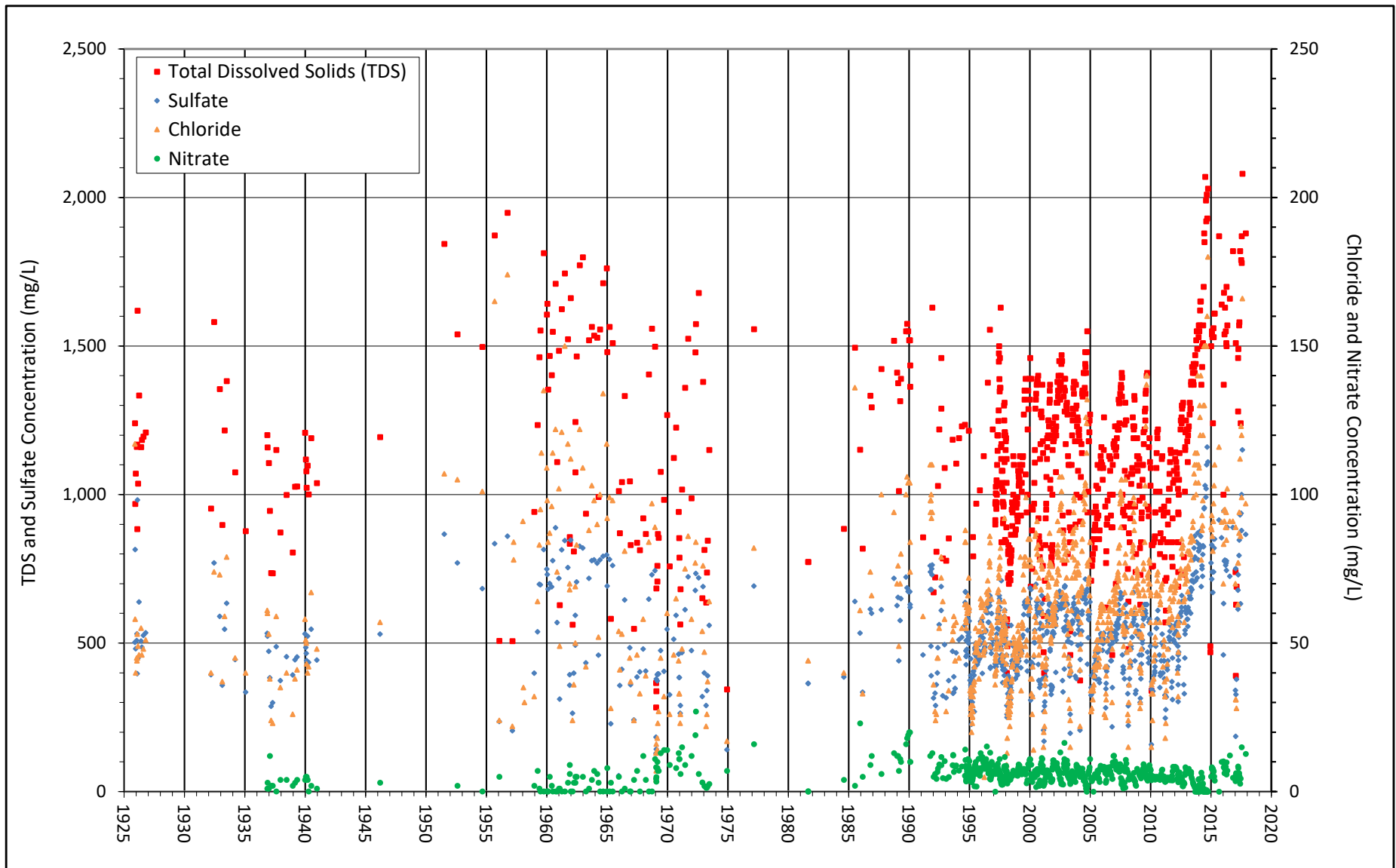


Figure 8. Concentrations of Selected Dissolved Constituents in the Santa Clara River at Freeman Diversion, CYs 1925 through 2017

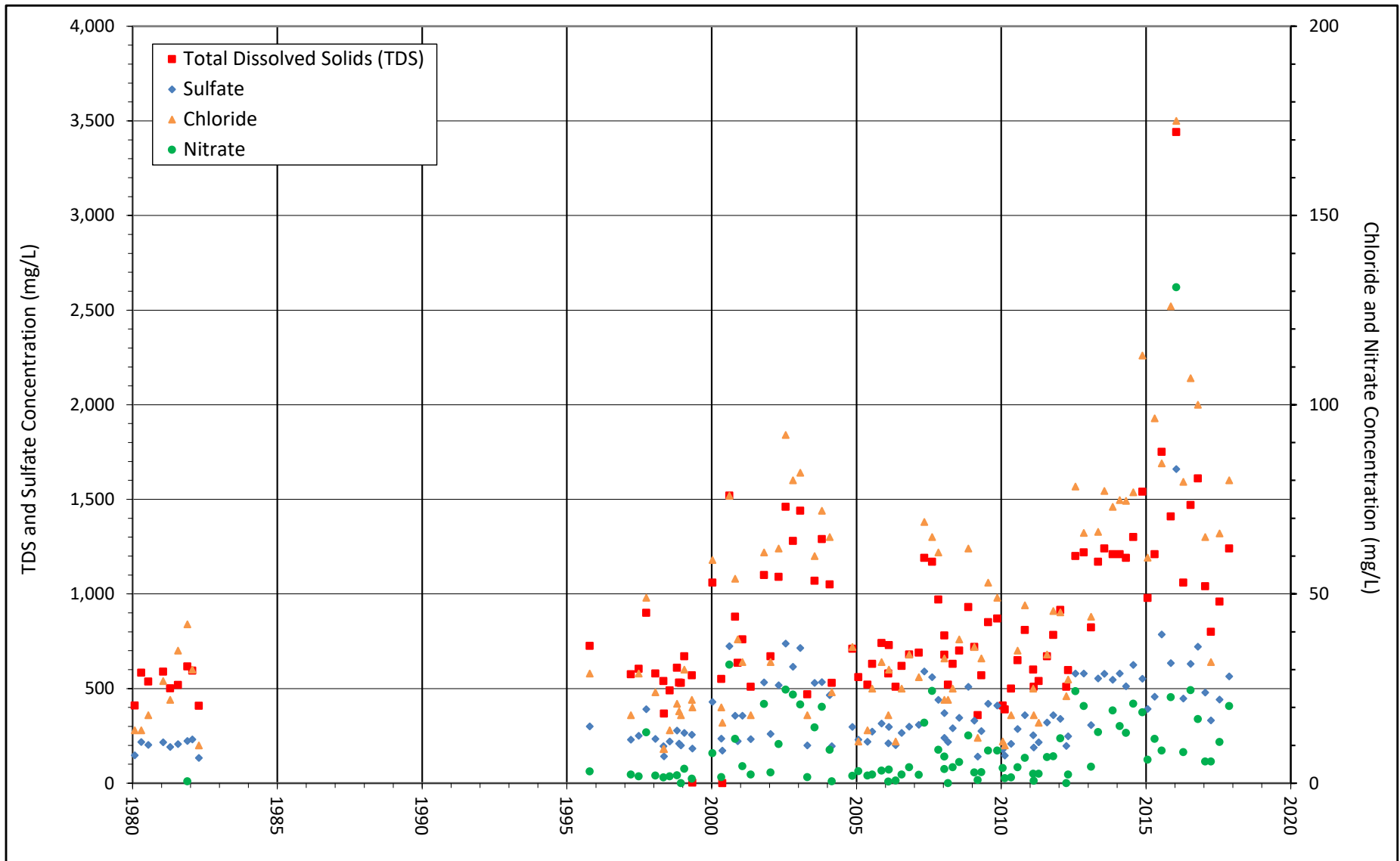


Figure 9. Concentrations of Selected Dissolved Constituents in Santa Paula Creek Near Santa Paula, CYs 1980 through 2017

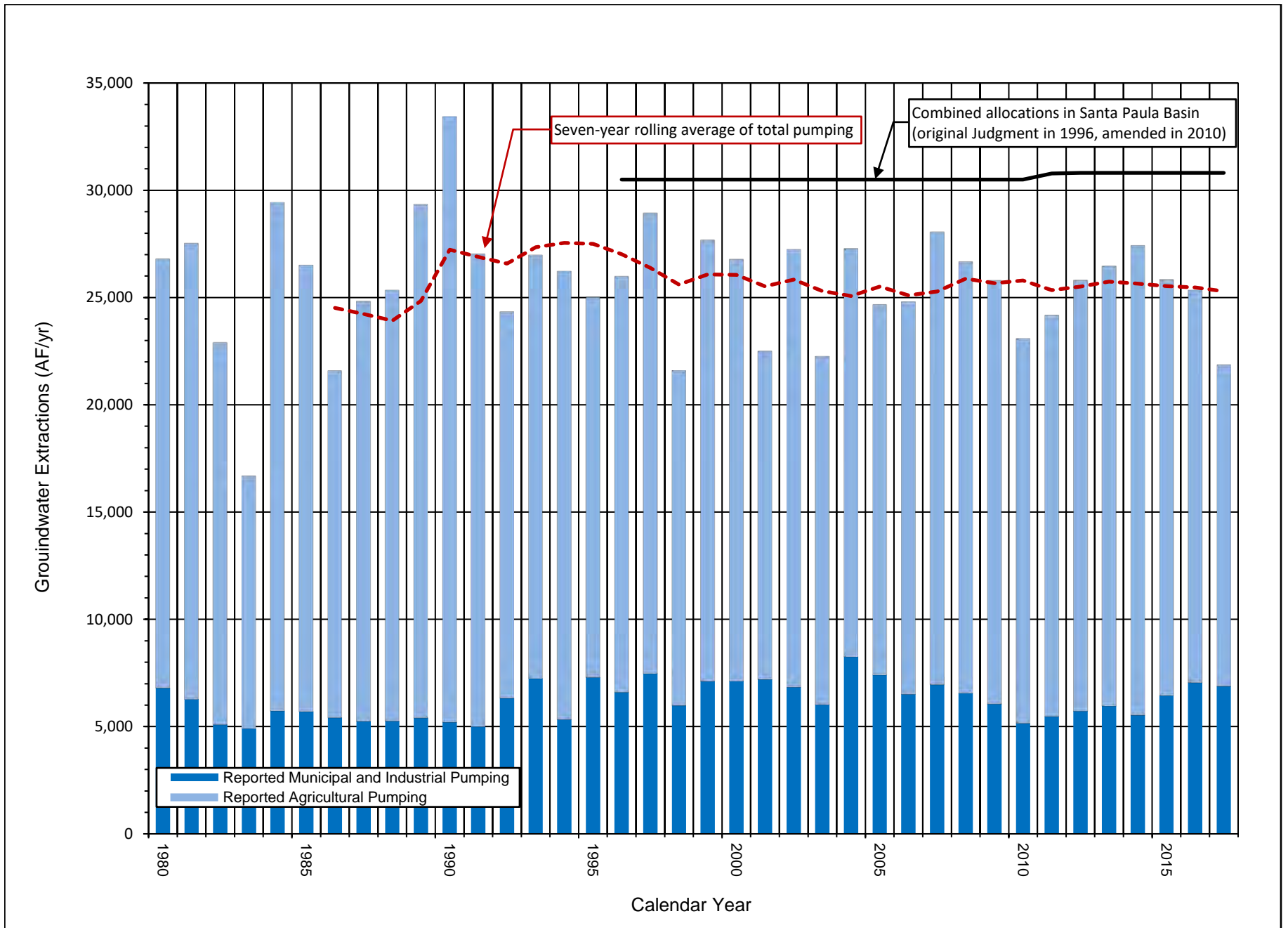


Figure 10. Historical Annual Groundwater Extractions from Santa Paula Basin, CYs 1980 through 2017

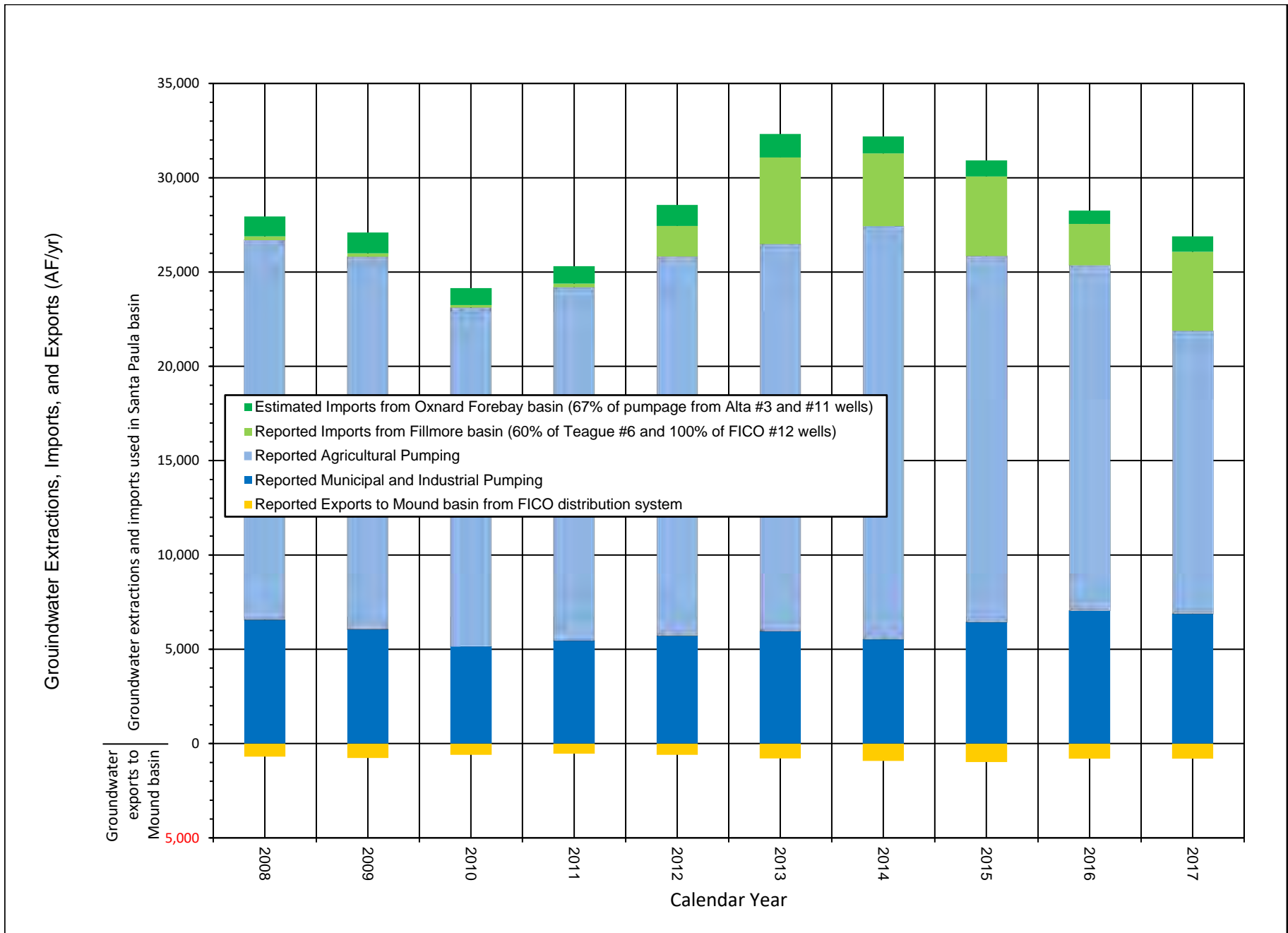


Figure 11. Annual Groundwater Extractions, Imports, and Exports from Santa Paula Basin, CYs 2008 through 2017

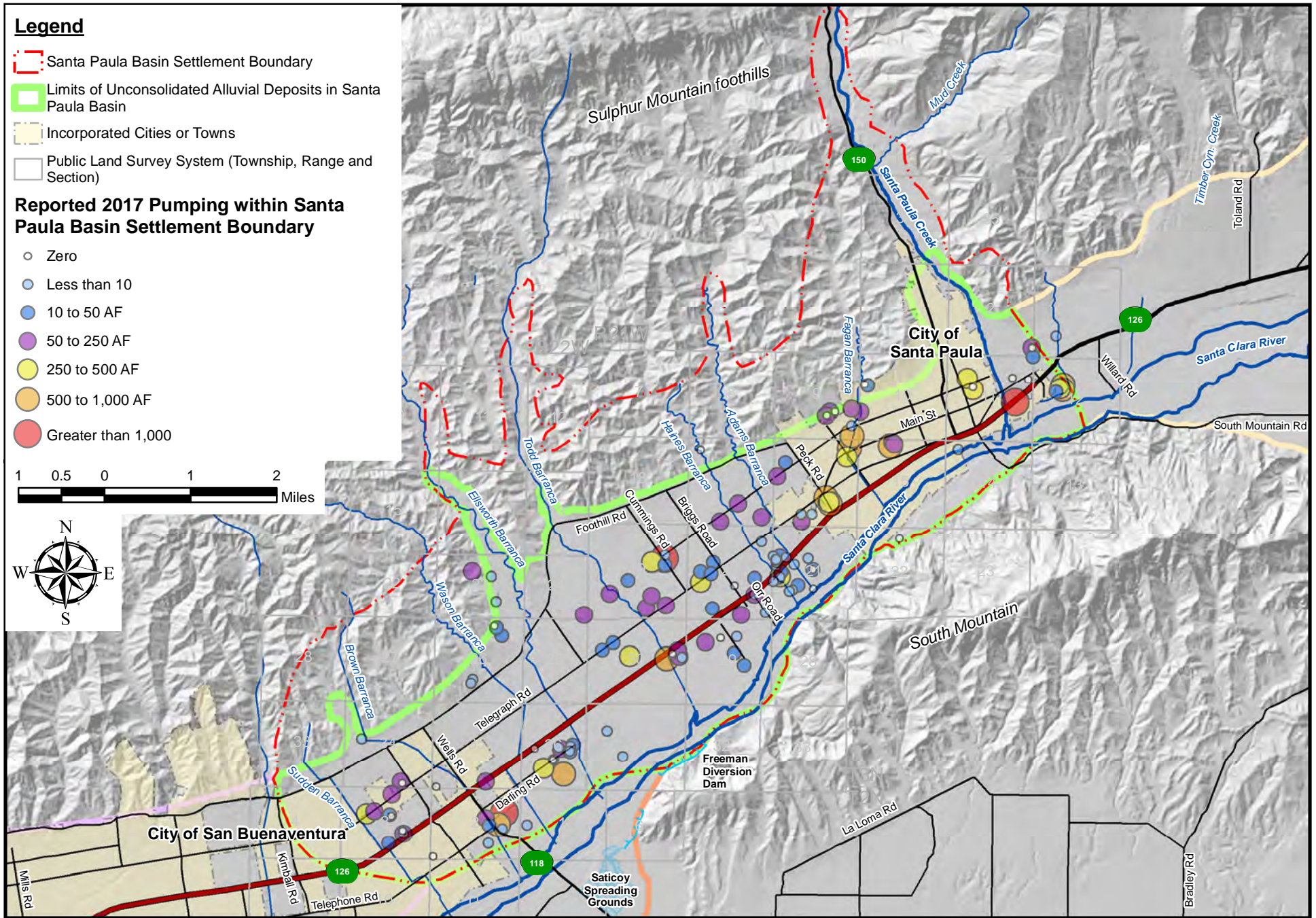


Figure 12. Santa Paula Basin Groundwater Extractions by Well, CY 2017

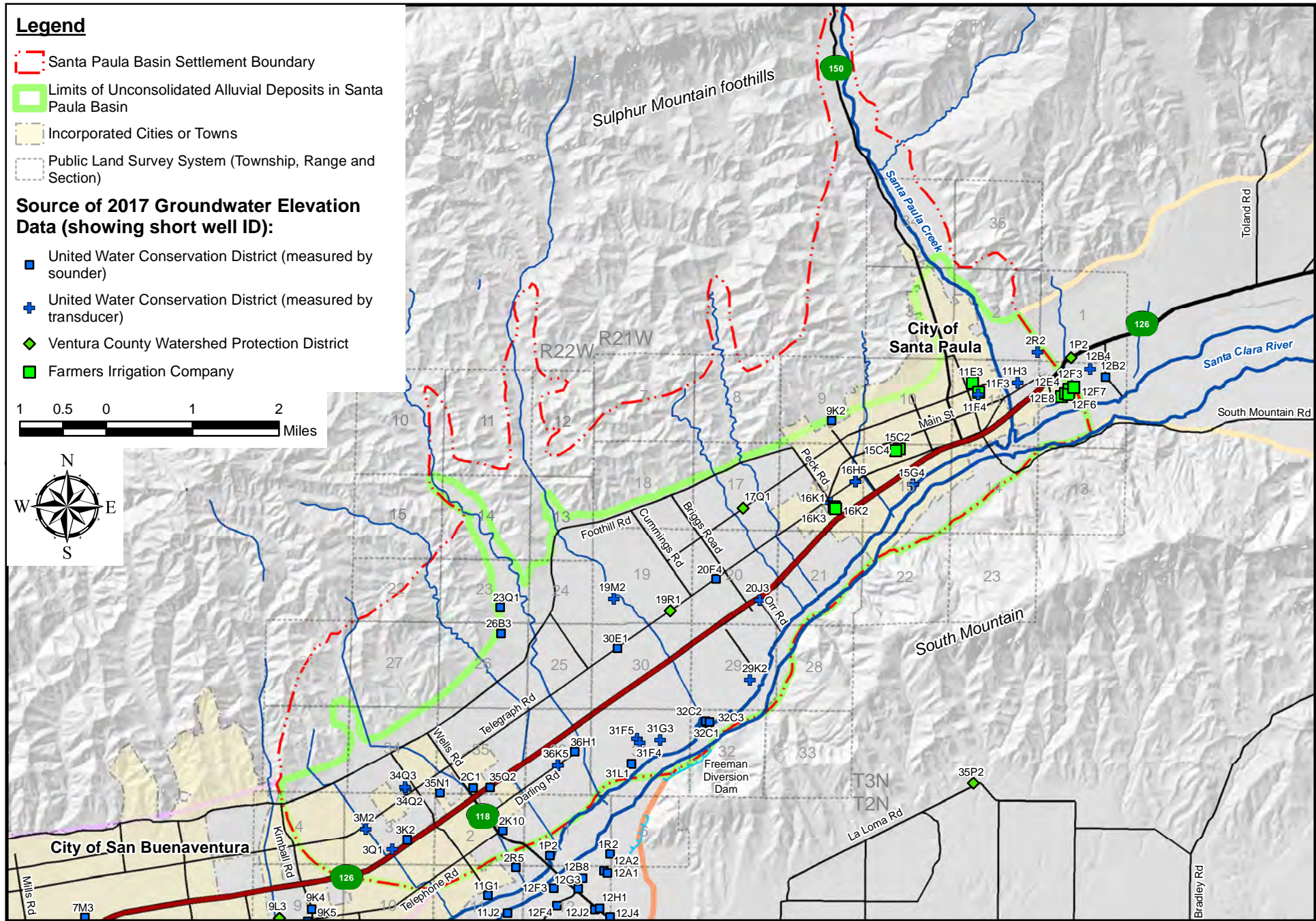


Figure 13. Locations of Wells used to Monitor Groundwater Levels in and Adjacent to Santa Paula Basin, CY 2017

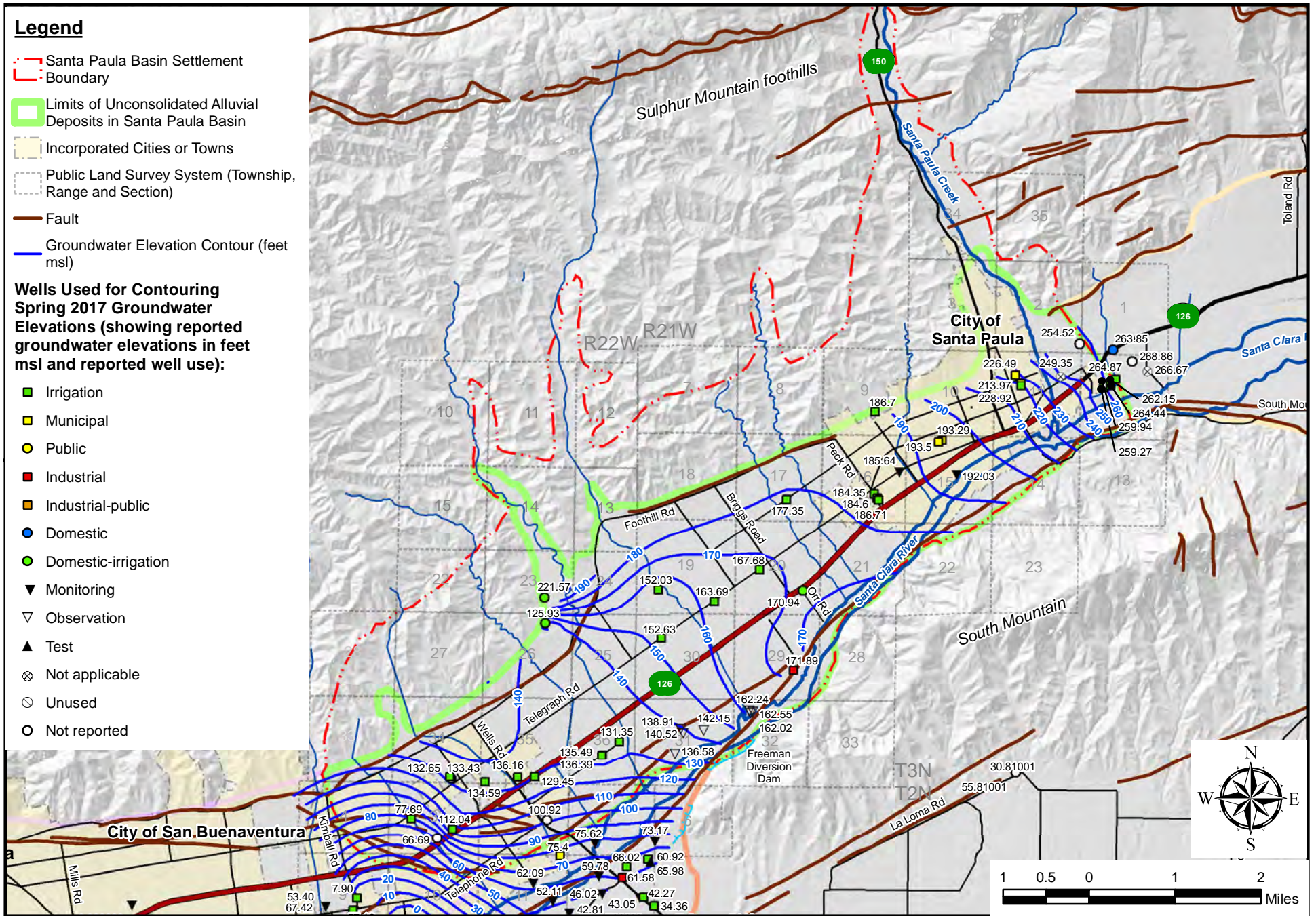


Figure 14. Santa Paula Basin Groundwater Elevation Contours, Spring 2017

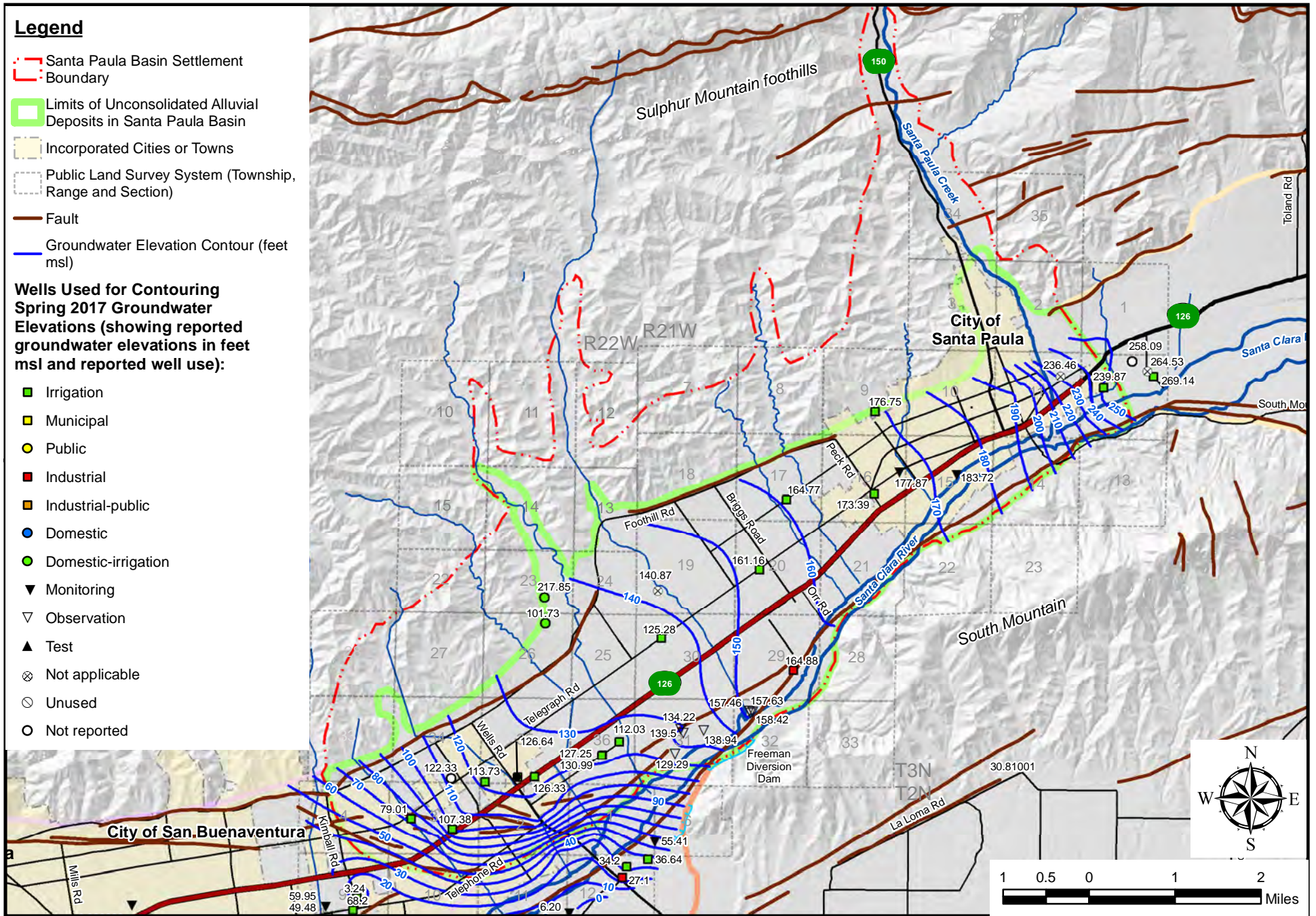


Figure 15. Santa Paula Basin Groundwater Elevation Contours, Fall 2017

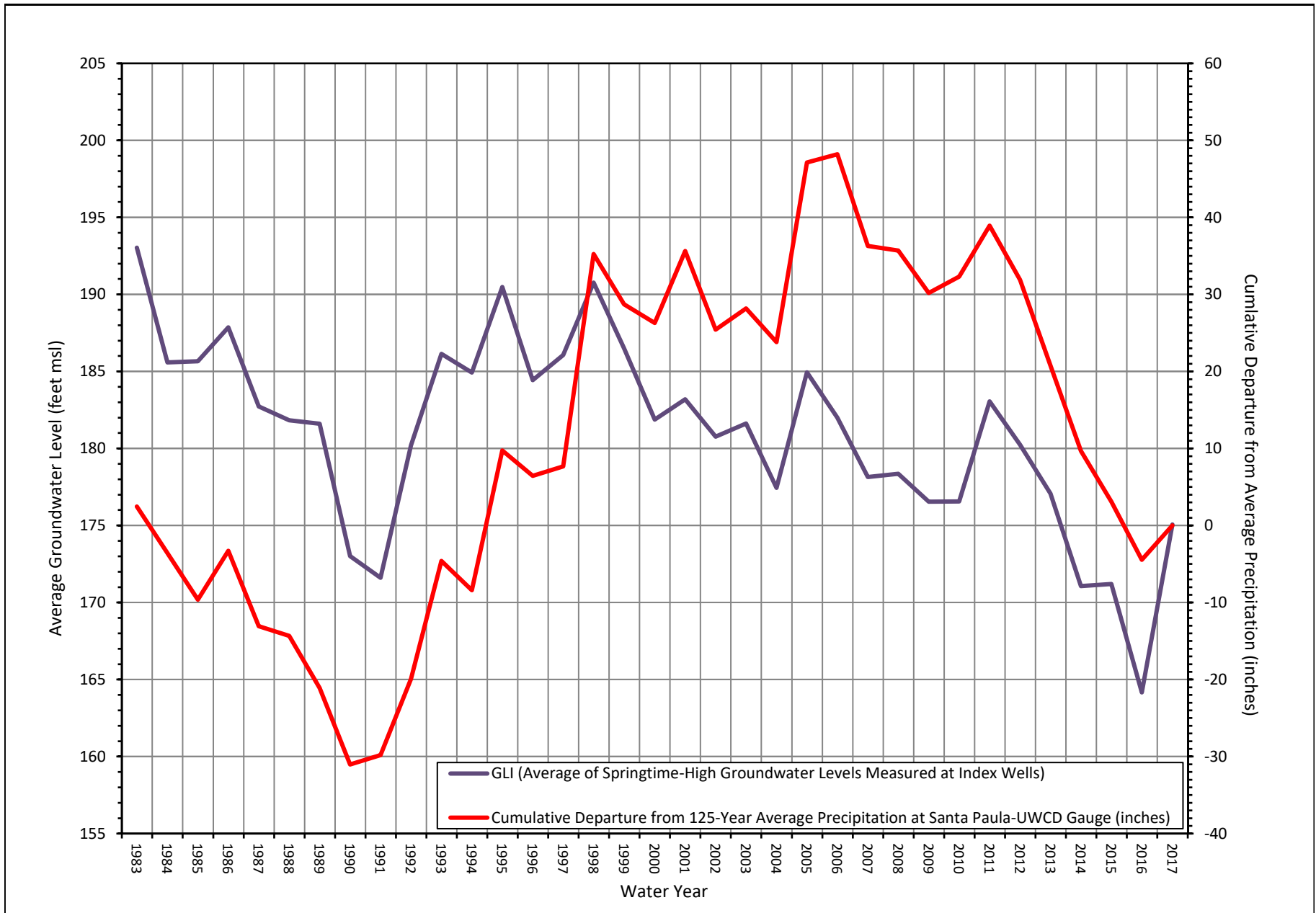


Figure 16. Groundwater Level Index and Cumulative Departure from Average Precipitation in Santa Paula Basin, WYs 1983 through 2016

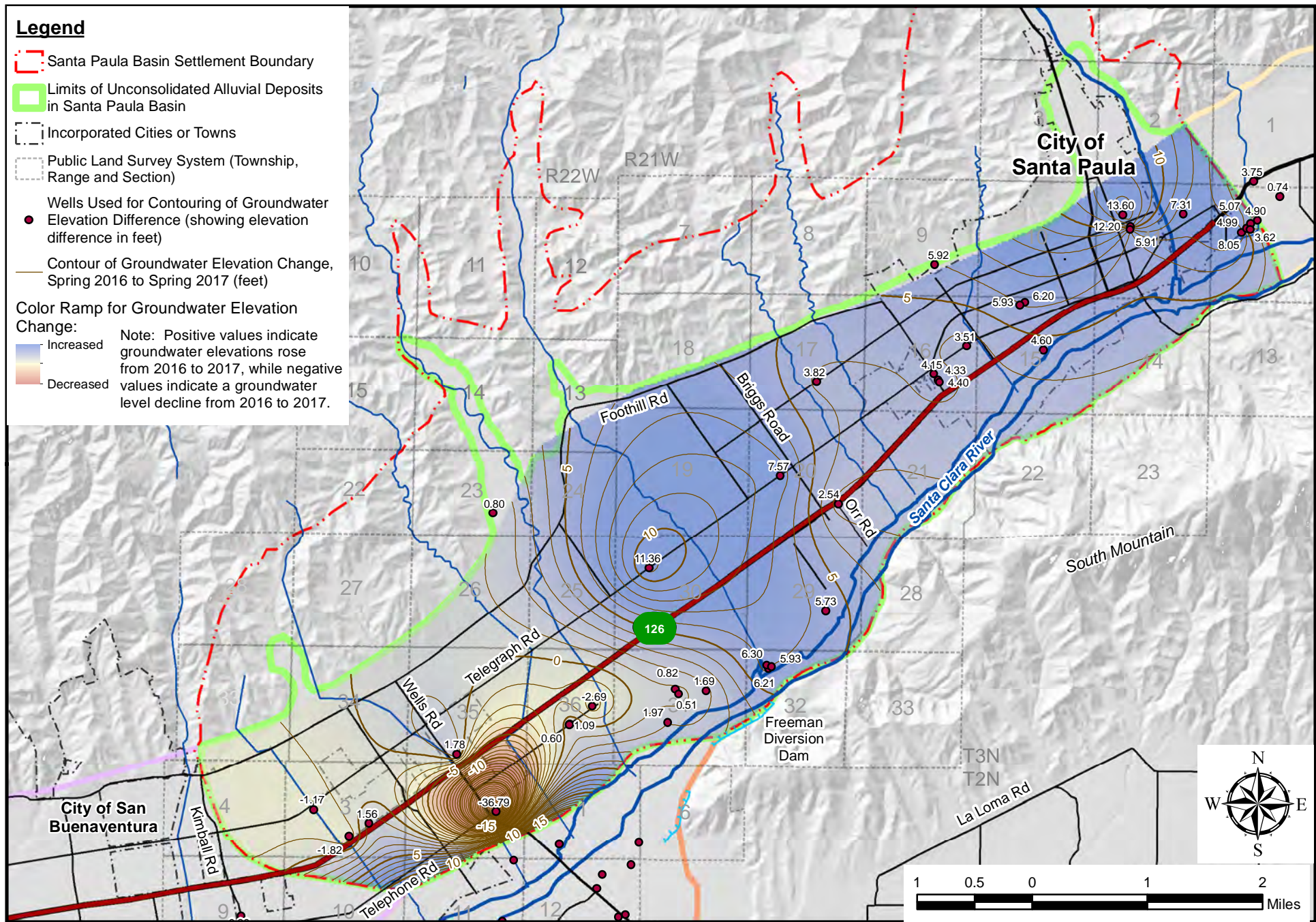


Figure 17. Change in Groundwater Elevation in Unconsolidated Alluvial Deposits of Santa Paula Basin, Spring 2016 to Spring 2017

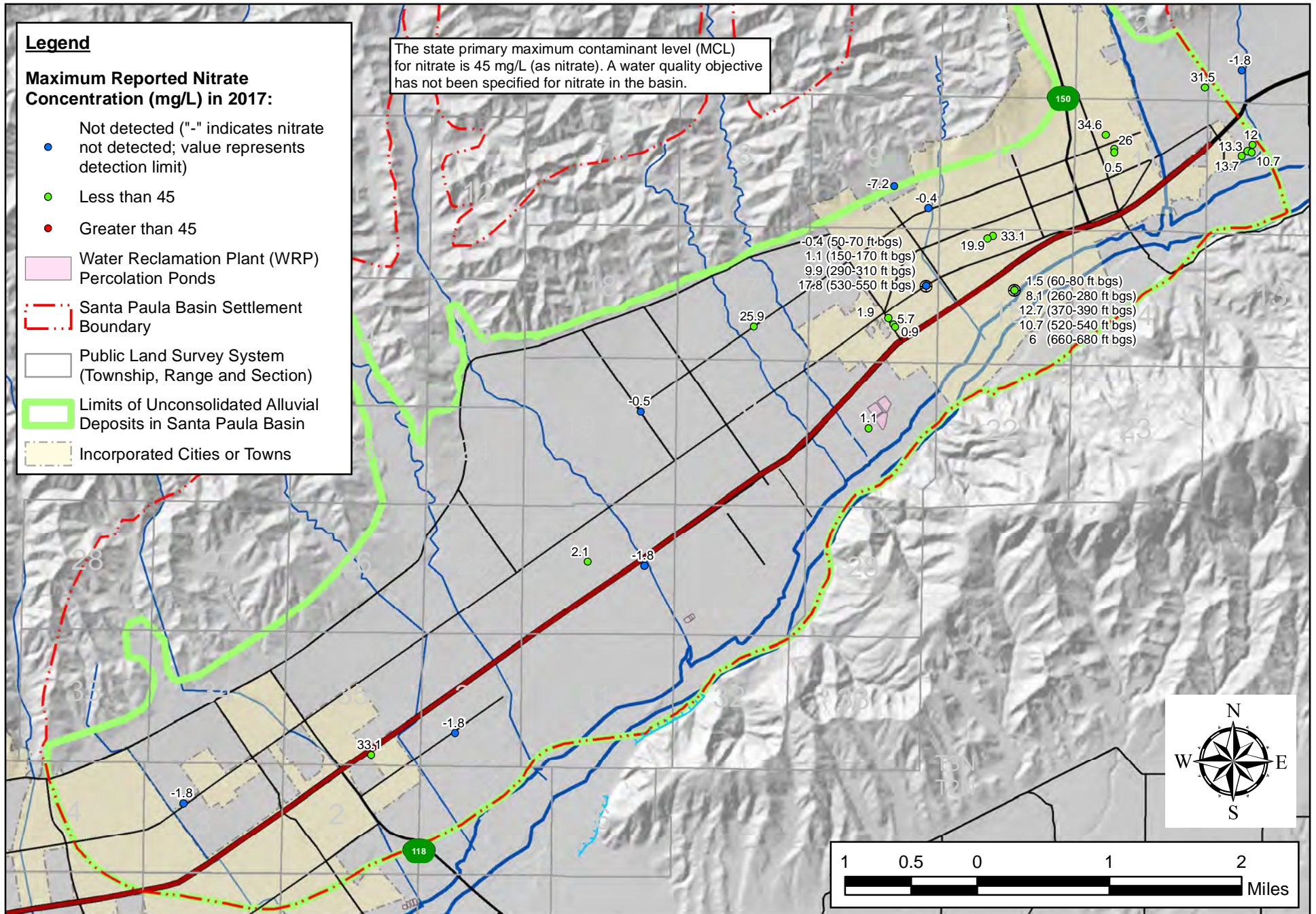


Figure 18. Maximum Reported Nitrate Concentrations in Groundwater, CY 2017

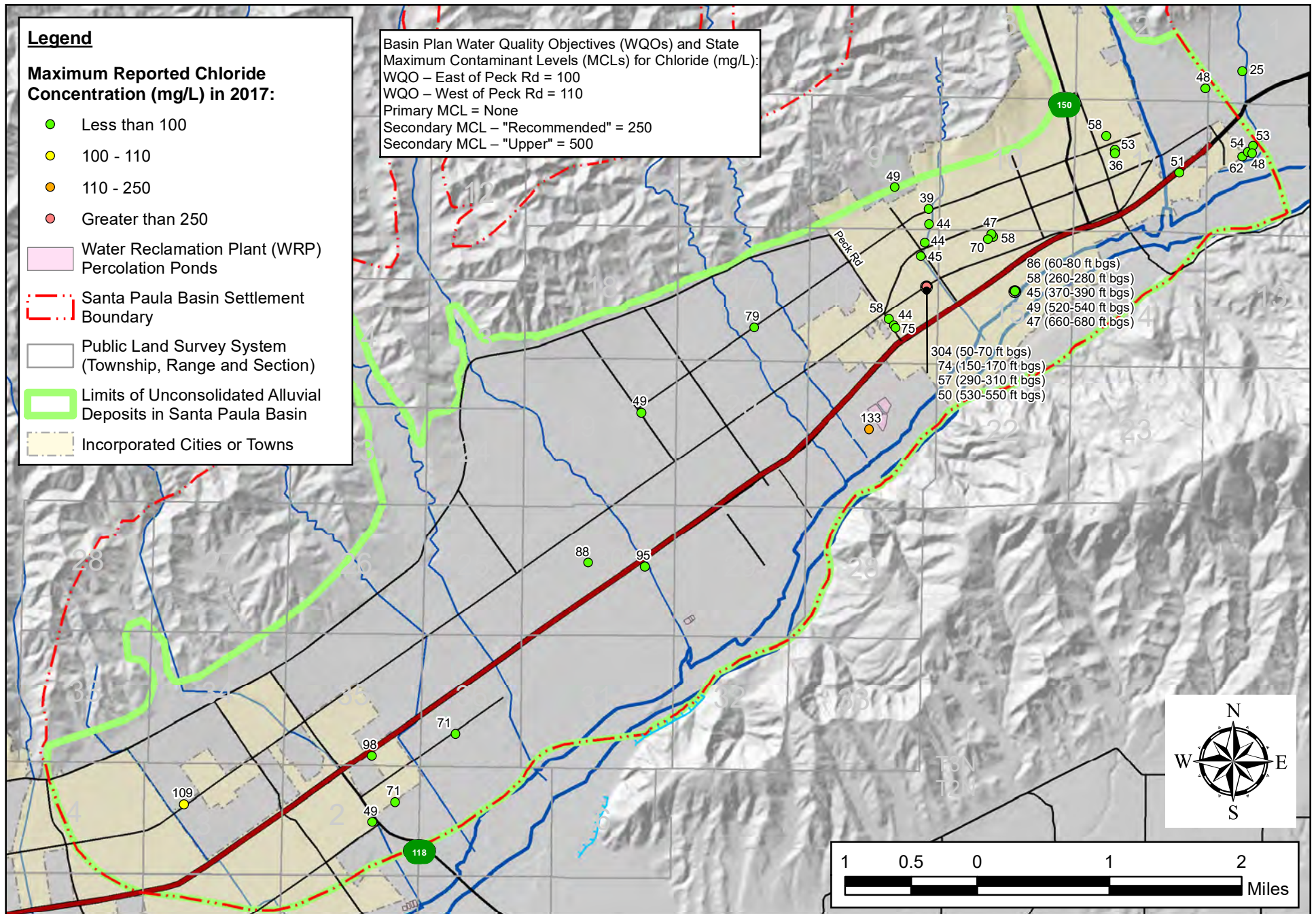


Figure 19. Maximum Reported Chloride Concentrations in Groundwater, CY 2017

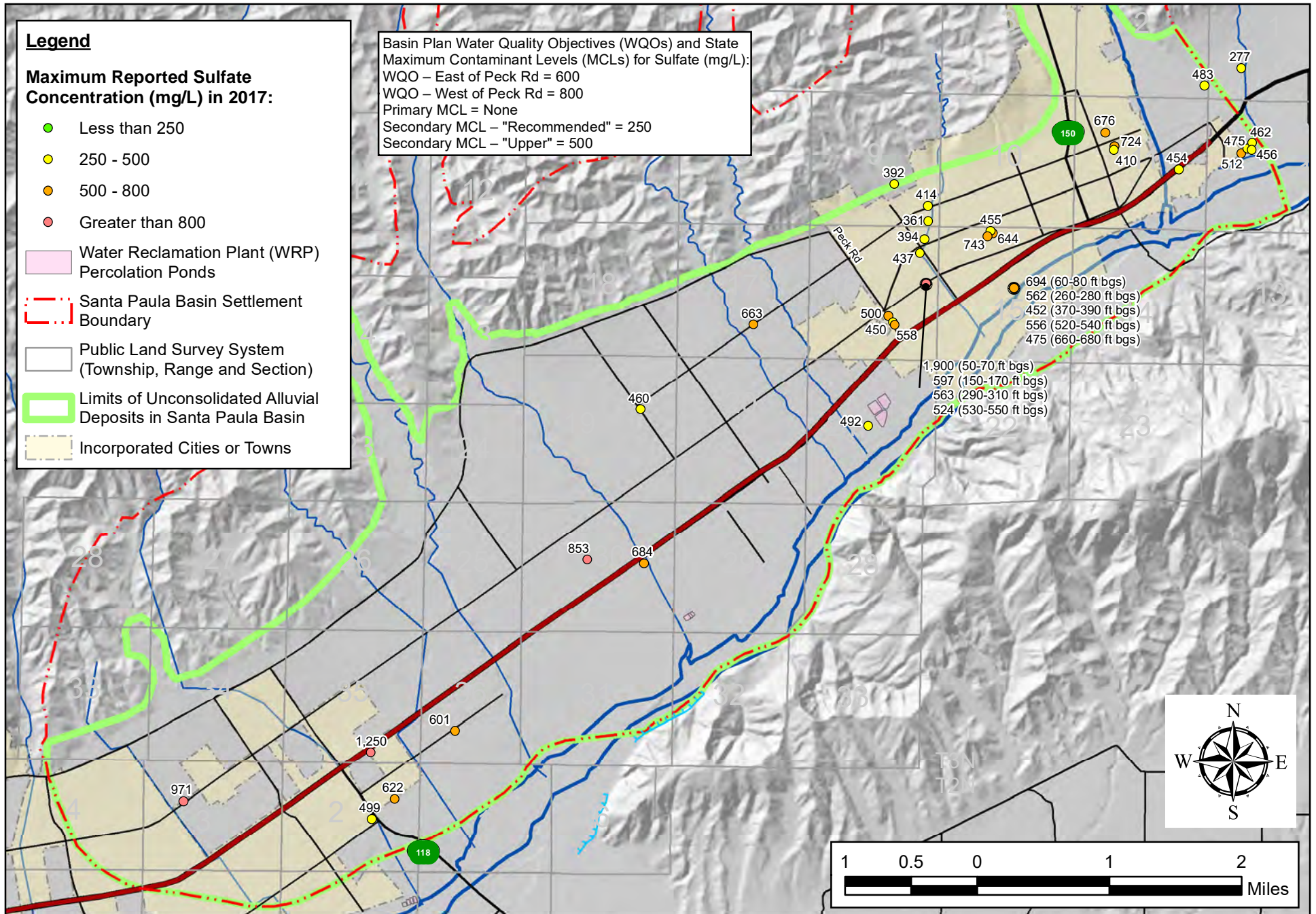


Figure 20. Maximum Reported Sulfate Concentrations in Groundwater, CY 2017

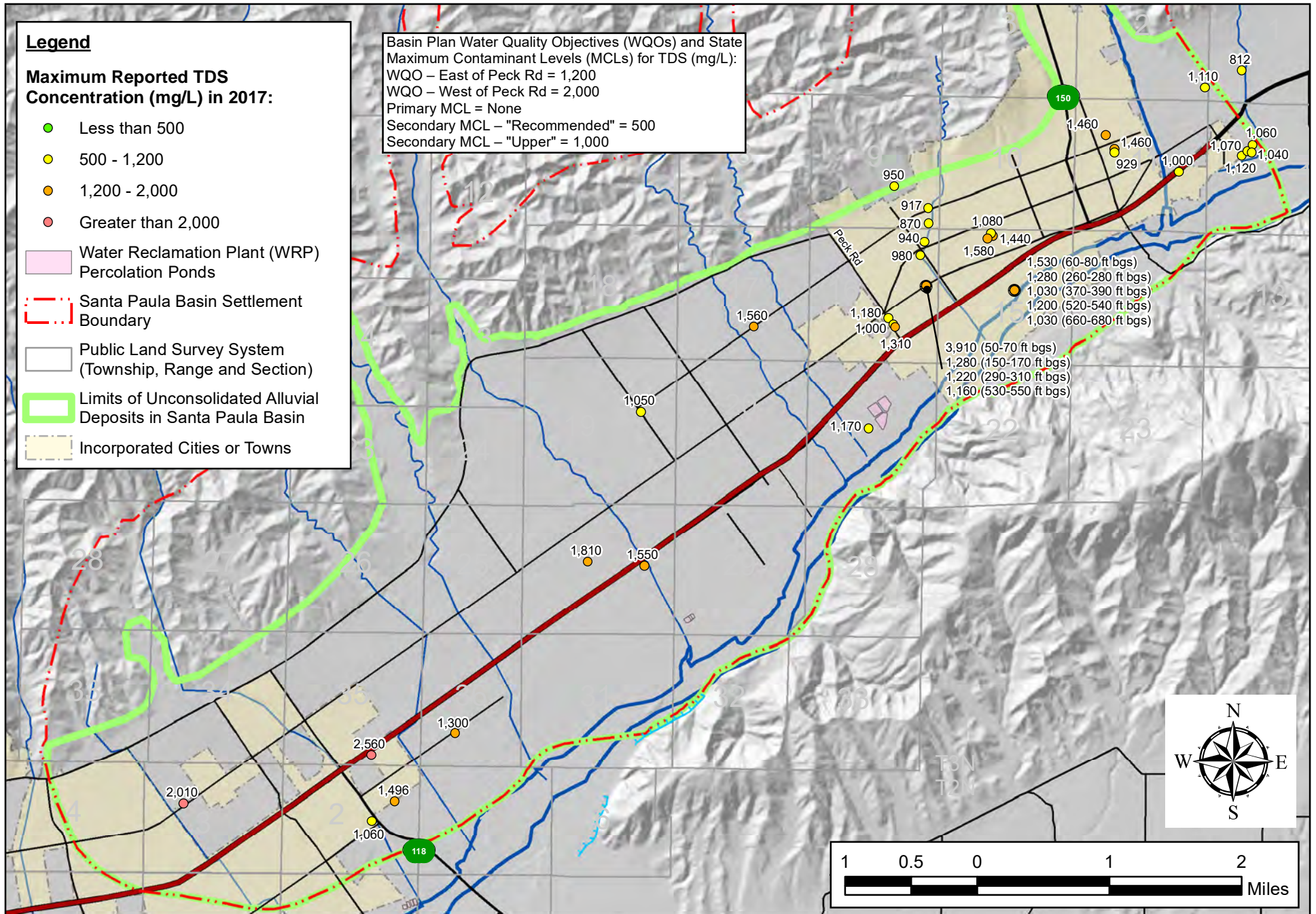


Figure 21. Maximum Reported Total Dissolved Solids (TDS) Concentrations in Groundwater, CY 2017

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APPENDIX A - Historical Precipitation and Streamflow Tables

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APPENDIX A - Table A-1. Santa Paula - UWCD Historical Precipitation

WATER YEAR (WY)	MONTHLY PRECIPITATION (inches)												WY PRECIPITATION (inches)	WY CUMULATIVE DEPARTURE	CALENDAR YEAR PRECIPITATION (inches)
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1890	6.30	1.81	16.55	5.40	2.00	0.47	0.05	0.00	0.00	0.00	0.00	0.62	33.20	16.01	11.46
1891	0.00	0.34	2.58	0.48	8.73	1.40	0.82	0.13	0.00	0.00	0.00	0.19	14.67	13.48	13.27
1892	0.00	0.00	1.52	0.70	3.99	3.24	0.54	1.80	0.00	0.00	0.00	0.00	11.79	8.08	24.31
1893	0.56	7.30	6.18	2.30	2.81	6.81	0.40	0.00	0.00	0.00	0.00	0.00	26.36	17.25	17.03
1894	0.87	0.20	3.64	1.04	0.55	0.42	0.23	0.46	0.00	0.10	0.00	0.98	8.49	8.55	5.05
1895	0.14	0.18	0.95	5.42	0.00	4.77	0.00	0.00	0.00	0.00	0.00	0.00	11.46	2.81	10.19
1896	0.00	0.00	0.00	5.03	4.98	3.24	0.00	0.00	0.00	0.00	0.00	0.45	13.70	-0.68	13.70
1897	0.00	0.00	0.00	5.03	4.98	3.24	0.00	0.00	0.00	0.00	0.00	0.45	13.70	-4.17	14.87
1898	1.17	0.00	0.00	0.92	0.70	1.55	0.00	1.22	0.00	0.00	0.00	0.86	6.42	-14.95	5.59
1899	0.08	0.00	0.26	3.44	0.00	2.41	0.35	0.00	0.00	0.00	0.00	0.00	6.54	-25.60	10.87
1900	1.84	1.17	1.66	1.67	0.00	1.36	0.38	1.49	0.00	0.00	0.00	0.00	9.57	-33.22	9.61
1901	0.00	4.71	0.00	4.57	4.34	0.42	0.91	1.14	0.00	0.00	0.00	0.71	16.80	-33.61	14.87
1902	2.24	0.54	0.00	1.30	4.49	3.31	0.50	0.00	0.00	0.00	0.00	0.00	12.38	-38.43	15.38
1903	0.00	4.75	1.03	1.66	1.98	6.23	2.65	0.10	0.00	0.00	0.00	0.00	18.40	-37.22	12.62
1904	0.00	0.00	0.00	0.31	3.83	5.94	1.46	0.00	0.00	0.00	0.00	1.82	13.36	-41.05	15.92
1905	0.38	0.00	2.18	2.54	8.02	5.50	0.67	3.15	0.00	0.00	0.00	0.00	22.44	-35.81	21.38
1906	0.00	1.50	0.00	3.35	3.60	9.03	0.40	0.05	0.00	0.00	0.00	0.00	17.93	-35.07	22.68
1907	0.00	0.00	6.25	13.23	1.95	6.22	0.18	0.00	0.00	0.00	0.00	0.00	27.83	-24.43	24.88
1908	2.72	0.00	0.58	5.73	4.56	0.05	0.94	0.00	0.00	0.00	0.00	0.55	15.13	-26.49	15.48
1909	0.15	2.40	1.10	10.88	5.94	4.88	0.00	0.00	0.00	0.00	0.00	0.00	25.35	-18.34	30.46
1910	0.13	1.36	7.27	2.82	0.00	2.36	0.00	0.00	0.00	0.00	0.00	2.78	16.72	-18.81	9.23
1911	0.62	0.33	0.32	9.54	2.88	5.53	0.00	0.00	0.00	0.00	0.00	0.07	19.29	-16.71	19.23
1912	0.00	0.00	1.21	0.18	0.00	7.17	1.67	0.84	0.00	0.00	0.00	0.00	11.07	-22.84	10.53
1913	0.56	0.11	0.00	3.79	9.51	0.00	0.47	0.00	0.47	0.00	0.50	0.00	15.41	-24.62	20.16
1914	0.00	3.09	2.33	12.73	8.40	0.66	0.76	0.51	0.00	0.00	0.00	0.00	28.48	-13.33	27.67
1915	0.15	0.13	4.33	5.38	9.30	0.98	1.16	1.69	0.00	0.00	0.00	0.00	23.12	-7.40	21.79
1916	0.00	0.68	2.60	18.17	1.07	0.53	0.00	0.00	0.00	0.00	0.00	1.44	24.49	-0.11	30.00
1917	2.36	0.00	6.43	3.24	7.24	0.12	0.37	0.19	0.00	0.00	0.00	0.00	19.95	2.65	11.46
1918	0.00	0.30	0.00	0.26	13.00	6.28	0.00	0.00	0.00	0.26	0.00	1.78	21.88	7.34	25.76
1919	0.00	3.01	1.17	1.33	1.89	2.65	0.00	0.22	0.00	0.00	0.00	1.71	11.98	2.12	10.43
1920	0.33	0.12	2.18	0.41	2.93	5.74	0.82	0.00	0.00	0.00	0.00	0.00	12.53	-2.54	13.39
1921	0.30	1.86	1.33	6.60	1.02	1.99	0.23	3.95	0.00	0.00	0.00	0.17	17.45	-2.28	24.96
1922	0.34	0.00	10.66	4.55	3.43	1.49	0.00	0.46	0.00	0.00	0.00	0.00	20.93	1.46	19.00
1923	0.43	1.63	7.01	1.86	1.03	0.00	2.97	0.00	0.00	0.00	0.00	0.14	15.07	-0.67	6.76
1924	0.72	0.00	0.04	1.94	0.18	3.46	1.23	0.00	0.00	0.00	0.00	0.00	7.57	-10.29	10.03
1925	1.02	1.12	1.08	0.31	1.25	2.25	2.02	0.88	0.08	0.00	0.00	0.00	10.01	-17.47	10.72
1926	0.81	0.89	2.23	2.04	4.42	0.12	5.72	0.16	0.02	0.00	0.00	0.00	16.41	-18.26	19.38
1927	0.13	5.49	1.28	1.89	10.66	2.34	1.53	0.00	0.00	0.00	0.00	0.00	23.32	-12.13	22.17
1928	1.84	1.27	2.64	0.00	2.27	2.25	0.29	0.59	0.00	0.00	0.00	0.00	11.15	-18.17	10.79
1929	0.06	2.04	3.29	2.47	2.10	1.51	1.89	0.00	0.12	0.00	0.00	0.69	14.17	-21.19	8.78
1930	0.00	0.00	0.00	6.58	0.92	3.14	0.17	0.76	0.00	0.00	0.00	0.02	11.59	-26.80	14.29
1931	0.02	2.68	0.00	3.94	4.09	0.00	2.00	1.25	0.00	0.00	0.21	0.00	14.19	-29.80	25.40
1932	0.05	3.13	10.73	5.78	0.09	0.54	0.02	0.05	0.00	0.00	0.00	0.15	20.54	-26.45	7.77
1933	0.24	0.00	0.90	8.84	0.00	0.23	0.32	0.13	0.40	0.00	0.09	0.00	11.15	-32.50	17.31
1934	0.44	0.00	6.86	3.19	3.85	0.00	0.00	0.00	0.00	0.52	0.00	0.08	14.94	-34.75	17.18
1935	1.62	3.16	4.76	3.97	0.82	3.31	3.50	0.00	0.00	0.00	0.25	0.00	21.39	-30.55	15.08
1936	0.37	1.12	1.74	0.17	10.32	1.91	0.69	0.00	0.00	0.00	0.00	0.00	16.32	-31.42	23.60
1937	4.16	0.00	6.35	3.24	7.93	4.48	0.12	0.21	0.00	0.00	0.00	0.00	26.49	-22.13	20.90
1938	0.00	0.00	4.92	0.87	9.49	11.17	1.23	0.09	0.00	0.00	0.00	0.25	28.02	-11.30	30.09
1939	0.00	0.00	6.99	2.95	1.33	2.29	0.53	0.00	0.00	0.00	0.00	1.59	15.68	-12.81	10.22
1940	0.00	0.31	1.22	3.57	5.24	0.73	2.22	0.00	0.00	0.00	0.00	0.00	13.29	-16.72	21.02
1941	1.80	0.15	7.31	5.97	10.52	8.70	3.66	0.00	0.00	0.00	0.00	0.00	38.11	4.20	36.80
1942	1.01	0.44	6.50	0.47	0.54	1.91	3.32	0.00	0.00	0.00	0.00	0.00	14.19	1.20	8.50
1943	1.07	0.19	1.00	16.53	2.96	6.42	0.81	0.00	0.00	0.00	0.00	0.00	28.98	12.99	34.96
1944	0.14	0.20	7.90	1.44	10.02	3.49	1.18	0.00	0.00	0.00	0.00	0.00	24.37	20.16	20.28
1945	0.00	3.13	1.02	0.02	5.69	5.27	0.00	0.00	0.00	0.00	0.00	0.00	15.13	18.10	16.79
1946	1.00	0.26	4.55	0.25	1.45	3.59	0.22	0.00	0.00	0.00	0.00	0.00	11.32	12.23	16.83
1947	0.45	7.21	3.66	0.46	0.29	0.62	0.08	0.06	0.03	0.00	0.43	0.00	13.29	8.32	3.30
1948	0.05	0.00	1.28	0.00	1.22	3.83	1.79	0.06	0.04	0.00	0.00	0.00	8.27	-0.60	10.18

APPENDIX A - Table A-1. Santa Paula - UWCD Historical Precipitation

WATER YEAR (WY)	MONTHLY PRECIPITATION (inches)											WY PRECIPITATION (inches)	WY CUMULATIVE DEPARTURE	CALENDAR YEAR PRECIPITATION (inches)	
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1949	0.00	0.00	3.24	2.39	1.43	1.54	0.07	1.06	0.06	0.00	0.00	0.00	9.79	-8.00	12.06
1950	0.00	1.18	4.33	3.17	2.59	0.93	1.11	0.00	0.00	0.00	0.00	0.24	13.57	-11.62	9.61
1951	0.45	0.94	0.16	2.53	1.32	0.86	1.89	0.00	0.00	0.00	0.00	0.00	8.15	-20.67	14.92
1952	0.88	2.47	4.97	12.29	0.10	9.52	1.68	0.00	0.00	0.00	0.00	0.00	31.91	-5.95	31.27
1953	0.00	3.38	4.30	1.33	0.00	0.55	1.26	0.00	0.00	0.00	0.00	0.00	10.82	-12.32	5.34
1954	0.00	2.13	0.07	4.85	3.38	3.56	0.38	0.00	0.00	0.00	0.00	0.00	14.37	-15.15	14.21
1955	0.00	0.93	1.11	5.25	1.56	0.33	2.24	1.94	0.00	0.00	0.02	0.00	13.38	-18.96	15.84
1956	0.00	1.38	3.12	6.98	0.72	0.00	2.18	0.95	0.00	0.00	0.00	0.00	15.33	-20.82	11.09
1957	0.01	0.00	0.25	5.75	1.88	2.07	1.17	0.62	0.16	0.00	0.00	0.00	11.91	-26.10	19.05
1958	2.48	0.53	4.39	2.82	7.27	8.14	5.48	0.00	0.00	0.00	0.00	0.26	31.37	-11.93	24.09
1959	0.05	0.07	0.00	2.07	3.91	0.00	0.55	0.00	0.00	0.00	0.00	0.02	6.67	-22.45	8.03
1960	0.09	0.00	1.39	3.95	2.80	0.50	2.70	0.00	0.00	0.00	0.00	0.00	11.43	-28.21	14.75
1961	0.00	4.27	0.53	1.24	0.00	0.49	0.02	0.00	0.00	0.00	0.03	0.04	6.62	-38.79	6.45
1962	0.00	3.57	1.06	2.46	17.26	1.27	0.00	0.07	0.01	0.00	0.00	0.00	25.70	-30.28	21.42
1963	0.31	0.00	0.04	0.69	8.04	0.00	2.47	0.11	0.49	0.00	0.17	1.37	13.69	-33.78	17.18
1964	0.46	3.30	0.08	2.68	0.00	2.00	0.76	0.02	0.11	0.00	0.01	0.00	9.42	-41.55	12.09
1965	0.66	1.30	4.55	0.54	0.07	1.08	4.94	0.00	0.01	0.02	0.11	0.18	13.46	-45.29	21.51
1966	0.00	9.60	4.96	1.52	1.07	0.00	0.00	0.00	0.00	0.00	0.00	0.09	17.24	-45.24	12.76
1967	0.20	3.62	6.26	4.58	0.24	2.24	5.02	0.04	0.00	0.00	0.00	0.32	22.52	-39.91	20.04
1968	0.00	6.39	1.21	0.99	1.24	3.47	0.90	0.03	0.00	0.00	0.19	0.00	14.42	-42.69	9.78
1969	0.80	0.68	1.48	17.95	7.75	0.85	0.96	0.01	0.00	0.09	0.00	0.01	30.58	-29.30	29.49
1970	0.00	1.79	0.08	2.34	3.70	6.04	0.00	0.00	0.00	0.00	0.00	0.00	13.95	-32.54	26.49
1971	0.02	7.09	7.30	1.01	0.71	0.69	0.59	0.51	0.00	0.00	0.00	0.01	17.93	-31.80	12.09
1972	0.11	0.43	8.03	0.12	0.26	0.00	0.08	0.04	0.04	0.00	0.00	0.00	9.11	-39.89	6.35
1973	0.31	4.57	0.93	5.89	9.00	2.61	0.00	0.01	0.00	0.00	0.00	0.00	23.32	-33.76	20.81
1974	0.24	1.95	1.11	9.52	0.06	2.93	0.07	0.00	0.00	0.00	0.00	0.00	15.88	-35.07	20.67
1975	1.03	0.10	6.96	0.00	3.86	4.59	1.46	0.00	0.00	0.00	0.00	0.06	18.06	-34.21	10.22
1976	0.18	0.00	0.07	0.00	5.33	1.39	0.72	0.02	0.10	0.01	0.00	4.05	11.87	-39.53	12.49
1977	0.00	0.22	0.65	6.74	0.21	2.04	0.00	2.03	0.00	0.00	0.99	0.00	12.88	-43.84	16.72
1978	0.03	0.15	4.53	8.11	8.54	11.57	2.25	0.00	0.00	0.00	0.00	0.90	36.08	-24.95	35.90
1979	0.18	2.03	2.32	6.37	3.97	7.17	0.00	0.02	0.02	0.00	0.00	0.09	22.17	-19.98	20.74
1980	0.46	0.83	1.81	8.32	12.95	3.82	0.41	0.23	0.00	0.00	0.00	0.02	28.85	-8.32	27.02
1981	0.00	0.00	1.27	2.26	1.58	6.07	0.68	0.02	0.00	0.00	0.00	0.00	11.88	-13.63	13.87
1982	0.50	2.20	0.56	2.55	0.58	5.66	1.93	0.00	0.00	0.00	0.00	0.86	14.84	-15.99	19.22
1983	0.53	4.53	2.58	9.52	5.35	6.76	4.27	0.10	0.00	0.00	0.97	1.02	35.63	2.45	38.31
1984	2.96	3.36	4.00	0.00	0.00	0.37	0.09	0.00	0.00	0.00	0.04	0.33	11.15	-3.59	7.84
1985	0.22	2.86	3.93	1.84	1.06	1.18	0.00	0.01	0.00	0.02	0.00	0.04	11.16	-9.62	8.91
1986	0.43	3.62	0.71	3.60	8.72	4.59	1.21	0.00	0.00	0.00	0.00	0.65	23.53	-3.29	20.74
1987	0.03	1.64	0.30	1.85	1.02	2.16	0.21	0.02	0.05	0.09	0.00	0.03	7.40	-13.08	12.73
1988	1.48	1.18	4.64	2.63	2.07	0.67	3.22	0.00	0.04	0.00	0.00	0.00	15.93	-14.34	13.98
1989	0	1.08	4.27	0.49	3.50	0.80	0.04	0.22	0.00	0.00	0.00	0.05	10.45	-21.09	5.90
1990	0.27	0.43	0.10	2.74	2.49	0.00	0.44	0.74	0.00	0.00	0.04	0.00	7.25	-31.03	7.03
1991	0.00	0.52	0.06	1.18	2.87	13.64	0.04	0.00	0.03	0.00	0.01	0.05	18.40	-29.82	22.49
1992	0.40	0.17	4.10	2.48	12.51	7.02	0.04	0.01	0.00	0.36	0.00	0.00	27.09	-19.92	29.10
1993	1.65	0.00	5.03	10.62	10.66	3.77	0.00	0.14	0.65	0.00	0.00	0.00	32.52	-4.60	28.59
1994	0.28	0.79	1.68	0.60	6.29	2.98	0.31	0.35	0.00	0.00	0.00	0.11	13.39	-8.40	13.85
1995	0.98	1.05	1.18	19.87	1.34	9.02	0.47	1.04	0.37	0.02	0.00	0.00	35.34	9.75	34.32
1996	0.00	0.15	2.04	1.04	7.85	2.04	0.50	0.28	0.00	0.00	0.00	0.00	13.90	6.45	23.11
1997	2.47	2.57	6.36	6.67	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.12	18.41	7.67	16.10
1998	0.00	2.31	6.78	2.79	20.13	3.87	2.03	6.04	0.01	0.00	0.00	0.81	44.77	35.25	37.13
1999	0.00	0.83	0.62	2.44	1.02	2.65	2.56	0.00	0.38	0.00	0.00	0.17	10.67	28.73	9.98
2000	0.00	0.76	0	1.92	6.76	2.56	2.61	0.00	0.00	0.00	0.00	0.15	14.76	26.29	15.48
2001	1.47	0.00	0.01	7.02	9.21	7.10	1.73	0.00	0.00	0.00	0.00	0.00	26.54	35.64	30.06
2002	0.27	3.21	1.52	1.02	0.38	0.37	0.07	0.09	0.00	0.00	0.00	0.05	6.98	25.42	10.48
2003	0.00	5.22	3.28	0.00	4.75	3.53	1.77	1.30	0.09	0.00	0.00	0.00	19.94	28.17	16.02
2004	0.00	2.73	1.85	0.64	6.78	0.49	0.33	0.00	0.00	0.00	0.00	0.00	12.82	23.80	18.63
2005	4.74	0.03	5.62	15.85	10.56	2.53	0.80	0.25	0.00	0.00	0.00	0.16	40.54	47.14	32.37
2006	1.00	0.70	0.52	3.41	3.58	4.00	3.87	1.17	0.00	0.00	0.00	0.00	18.25	48.20	17.29
2007	0.27	0.10	0.89	2.04	0.79	0.07	0.84	0.00	0.00	0.00	0.00	0.30	5.30	36.31	7.90

APPENDIX A - Table A-1. Santa Paula - UWCD Historical Precipitation

WATER YEAR (WY)	MONTHLY PRECIPITATION (inches)												WY PRECIPITATION (inches)	WY CUMULATIVE DEPARTURE	CALENDAR YEAR PRECIPITATION (inches)
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
2008	0.26	0.15	3.45	10.78	1.85	0.00	0.05	0.04	0.00	0.00	0.00	0.00	16.58	35.70	17.43
2009	0.10	2.34	2.27	0.81	5.45	0.57	0.12	0.00	0.01	0.00	0.00	0.00	11.67	30.17	13.07
2010	2.66	0.00	3.45	7.29	3.51	0.41	1.87	0.13	0.00	0.01	0.00	0.00	19.33	32.31	26.01
2011	2.11	1.07	9.61	0.30	3.64	6.03	0.00	0.89	0.14	0.00	0.00	0.01	23.80	38.92	14.62
2012	1.58	1.87	0.16	1.35	0.03	2.93	2.20	0.00	0.00	0.00	0.05	0.01	10.18	31.90	10.22
2013	0.00	1.60	2.05	1.25	0.09	0.90	0.02	0.11	0.00	0.01	0.00	0.00	6.03	20.74	3.28
2014	0.02	0.56	0.32	0.00	3.32	1.83	0.03	0.03	0.00	0.00	0.01	0.00	6.12	9.67	9.83
2015	0.00	0.85	3.76	1.63	0.63	0.62	0.21	0.37	0.10	1.63	0.00	0.83	10.63	3.11	6.51
2016	0.04	0.02	0.43	5.43	0.45	2.93	0.22	0.11	0.00	0.00	0.00	0.00	9.63	-4.46	14.06
2017	0.73	0.62	3.57	7.69	8.40	0.37	0.13	0.11	0.00	0.00	0.00	0.03	21.65	0.00	16.73
2018	0.00	0.00	0.00										---	---	---
AVERAGE:	0.59	1.46	2.76	3.91	3.89	2.91	1.01	0.34	0.03	0.02	0.03	0.24	17.19	---	17.00
MEDIAN:	0.18	0.78	1.71	2.54	2.84	2.25	0.50	0.02	0.00	0.00	0.00	0.00	14.89	---	15.48

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APPENDIX A - Table A-2. Santa Clara River at Freeman Diversion Historical Annual Streamflow

WATER YEAR	ACRE-FEET	WATER YEAR	ACRE-FEET	WATER YEAR	ACRE-FEET	WATER YEAR	ACRE-FEET
1956	30,140	1972	58,807	1988	76,426	2004	59,397
1957	18,668	1973	265,962	1989	26,610	2005	1,153,883
1958	352,671	1974	123,279	1990	10,787	2006	246,950
1959	55,462	1975	110,294	1991	117,639	2007	51,065
1960	14,557	1976	37,116	1992	333,441	2008	214,847
1961	6,209	1977	28,818	1993	963,059	2009	74,645
1962	272,542	1978	748,780	1994	131,823	2010	143,938
1963	28,495	1979	297,212	1995	908,663	2011	257,205
1964	15,345	1980	523,154	1996	125,982	2012	57,761
1965	23,696	1981	108,357	1997	166,052	2013	22,696
1966	207,602	1982	103,255	1998	788,007	2014	23,213
1967	205,577	1983	719,692	1999	119,559	2015	6,670
1968	54,656	1984	136,205	2000	130,933	2016	5,825
1969	982,425	1985	54,431	2001	251,235	2017	98,843
1970	129,540	1986	226,857	2002	58,072		
1971	130,717	1987	38,796	2003	93,844		
						AVERAGE	206,909
						MEDIAN	113,967

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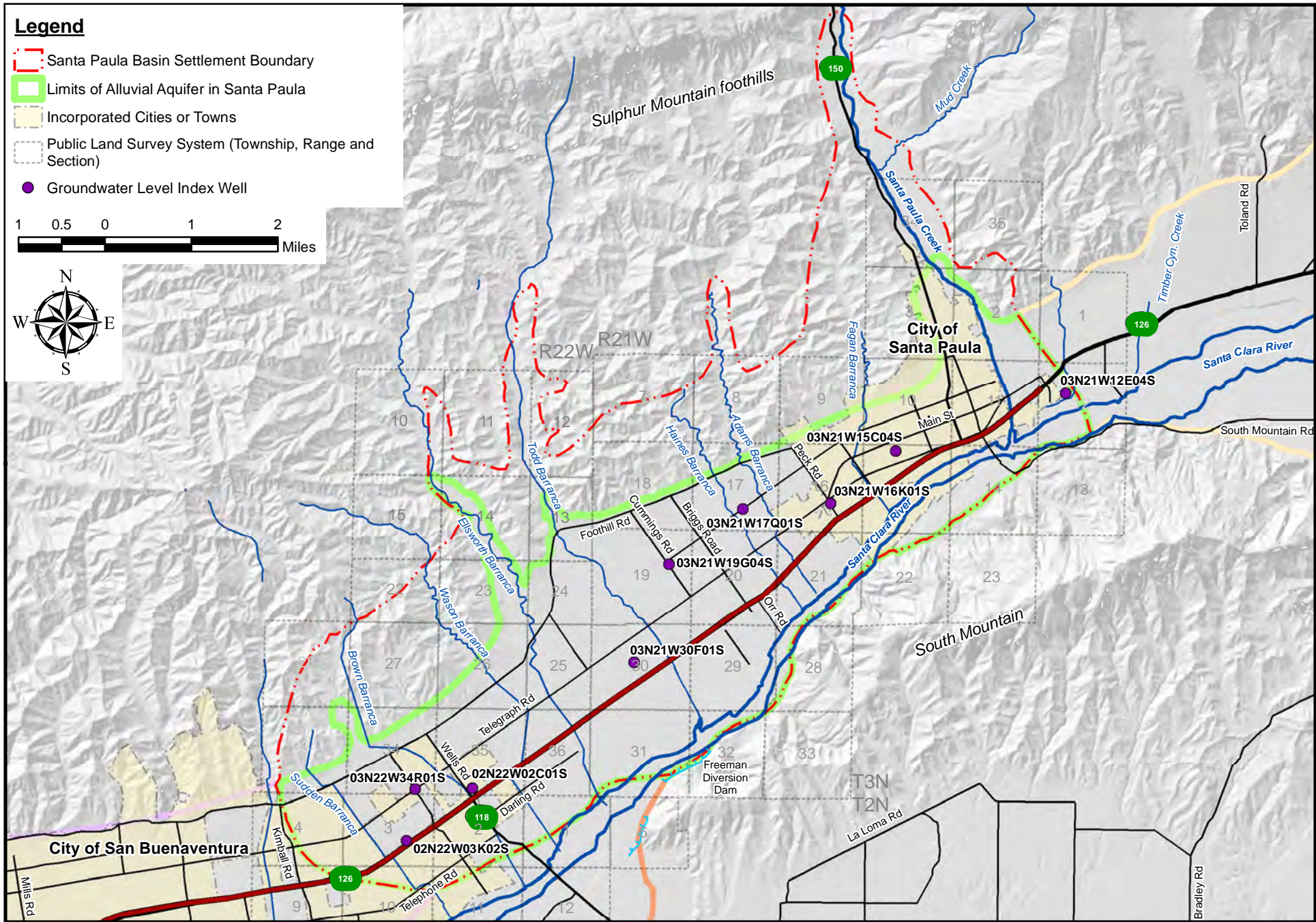
APPENDIX A - Table A-3. Santa Paula Creek Historical Annual Streamflow

WATER YEAR	ACRE-FEET	WATER YEAR	ACRE-FEET	WATER YEAR	ACRE-FEET	WATER YEAR	ACRE-FEET
1928	1,332	1951	992	1974	11,552	1997	18,015
1929	1,801	1952	30,882	1975	11,506	1998	80,799
1930	1,554	1953	4,340	1976	3,906	1999	5,562
1931	3,014	1954	5,861	1977	2,361	2000	8,609
1932	19,958	1955	3,012	1978	87,150	2001	24,461
1933	7,485	1956	5,257	1979	20,453	2002	2,513
1934	11,353	1957	3,527	1980	34,108	2003	8,563
1935	12,830	1958	47,074	1981	5,818	2004	5,054
1936	13,444	1959	5,593	1982	9,177	2005	107,309
1937	31,909	1960	2,123	1983	70,594	2006	22,708
1938	44,310	1961	1,254	1984	8,017	2007	3,305
1939	8,465	1962	26,203	1985	3,394	2008	27,945
1940	5,297	1963	3,340	1986	20,486	2009	4,393
1941	57,682	1964	3,026	1987	3,179	2010	16,342
1942	6,882	1965	4,665	1988	7,361	2011	32,887
1943	39,739	1966	28,458	1989	2,893	2012	4,465
1944	22,425	1967	37,423	1990	2,485	2013	1,168
1945	12,172	1968	7,866	1991	15,214	2014	1,788
1946	11,194	1969	112,696	1992	33,768	2015	1,028
1947	7,295	1970	7,779	1993	71,474	2016	1,502
1948	1,715	1971	12,795	1994	8,351	2017	15,226
1949	1,965	1972	4,492	1995	63,209		
1950	3,492	1973	35,236	1996	8,752		
						AVERAGE	18,001
						MEDIAN	8,184

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APPENDIX B - Groundwater Elevation Hydrographs and Map of Index Well Locations

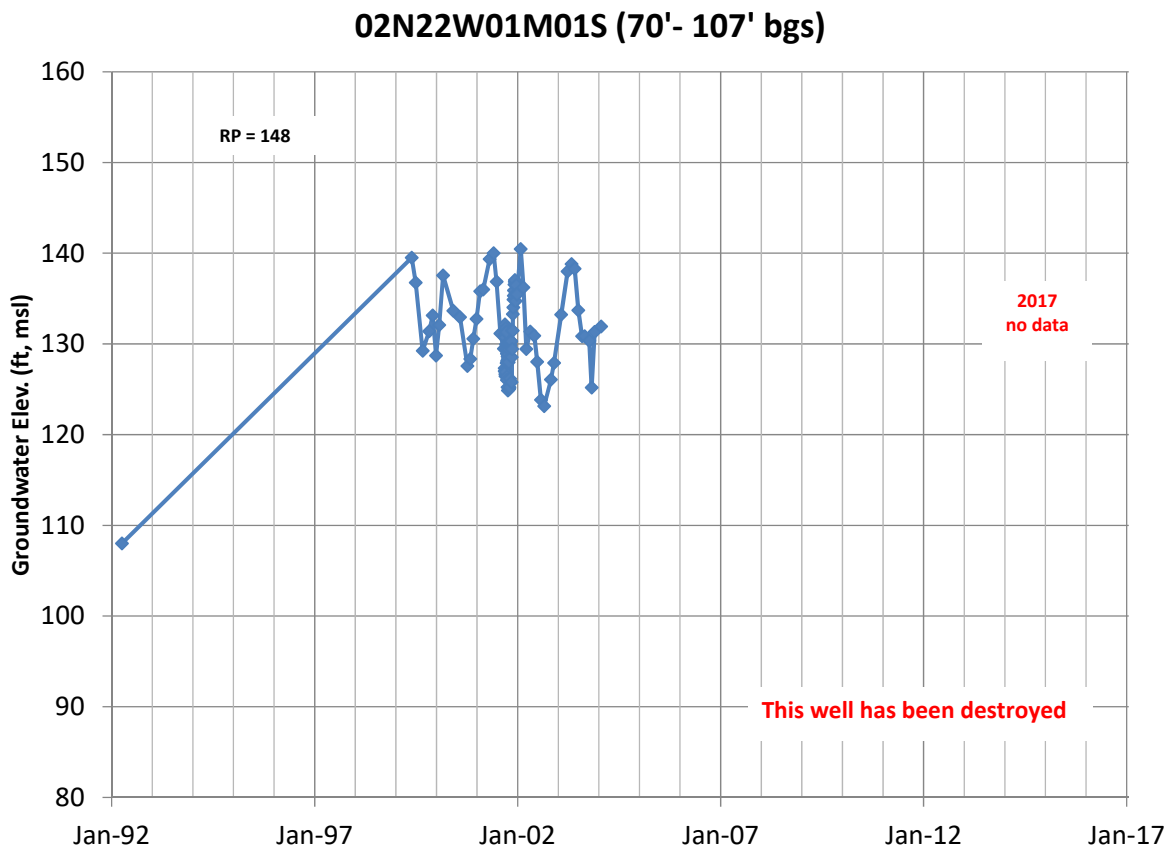
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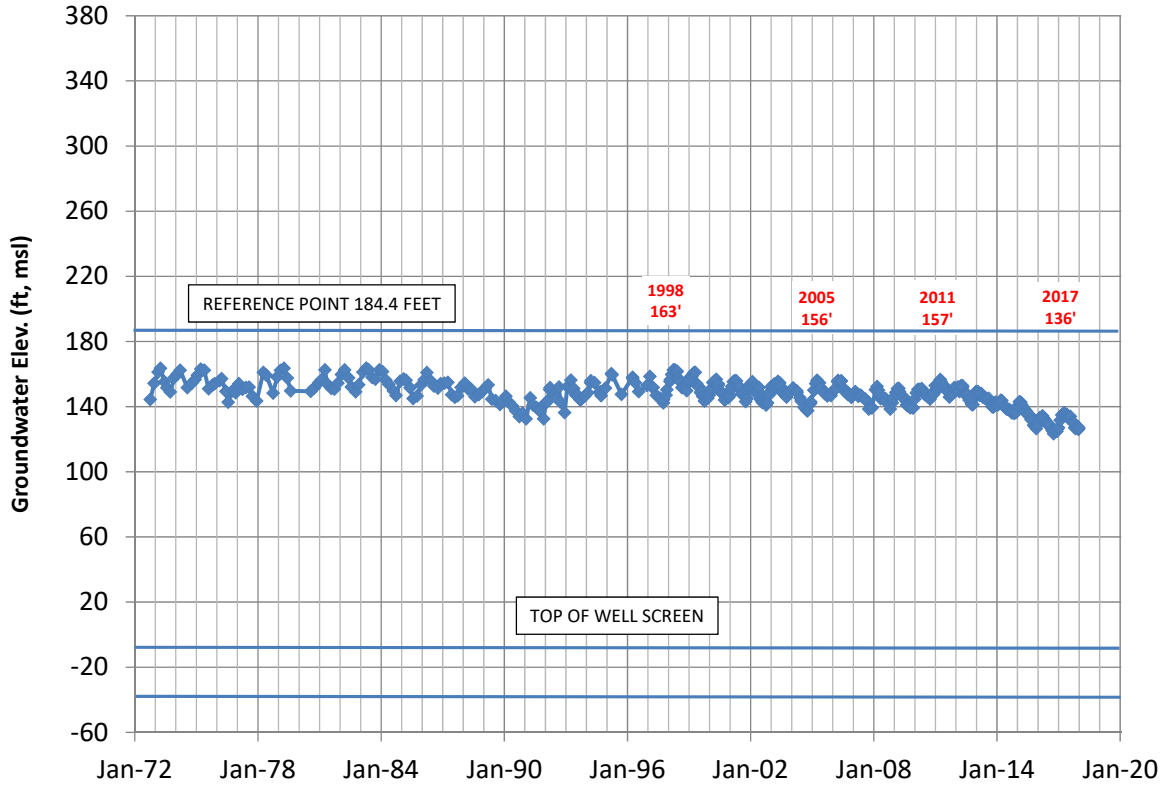
Location of Santa Paula Basin Groundwater Level Index Wells

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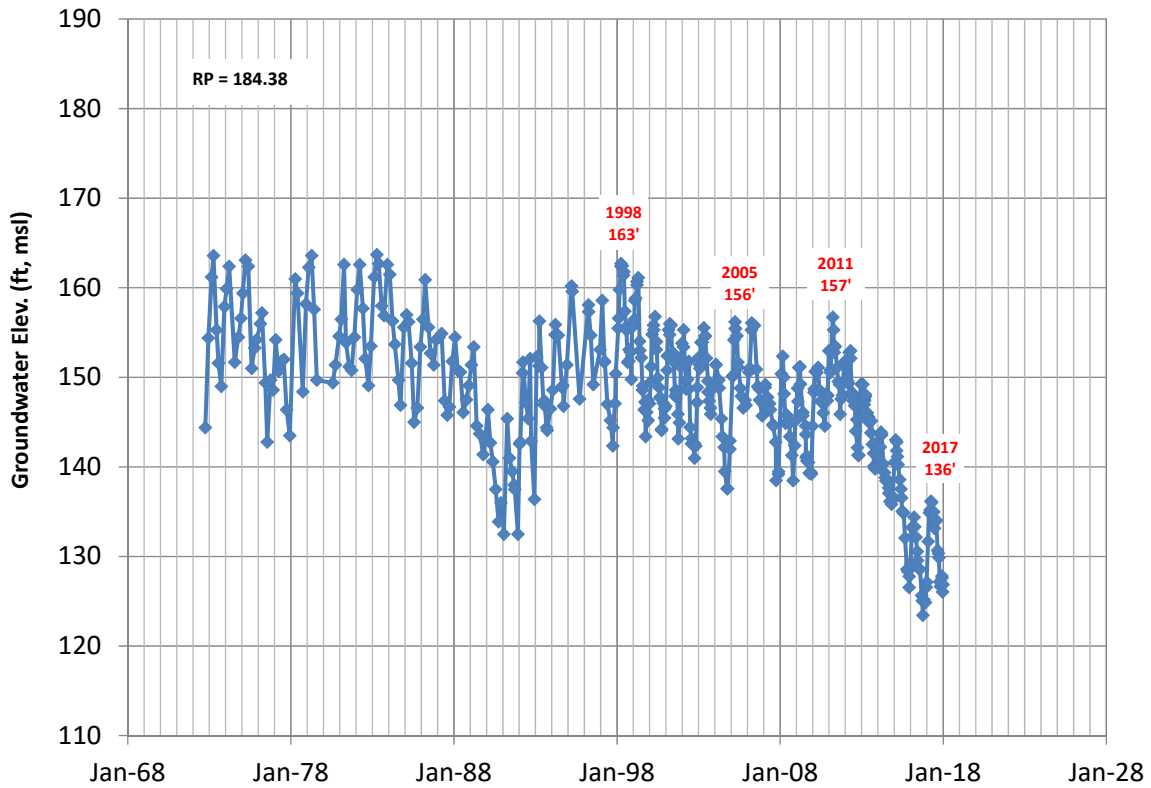
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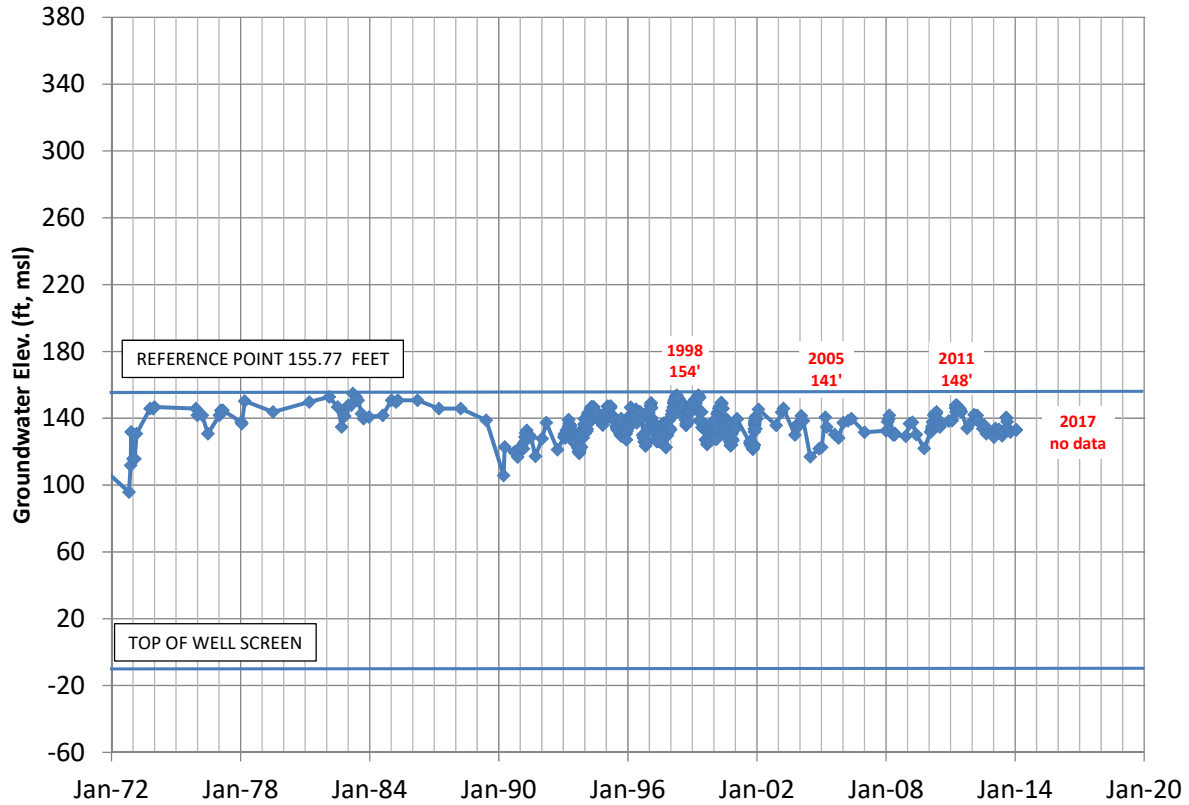
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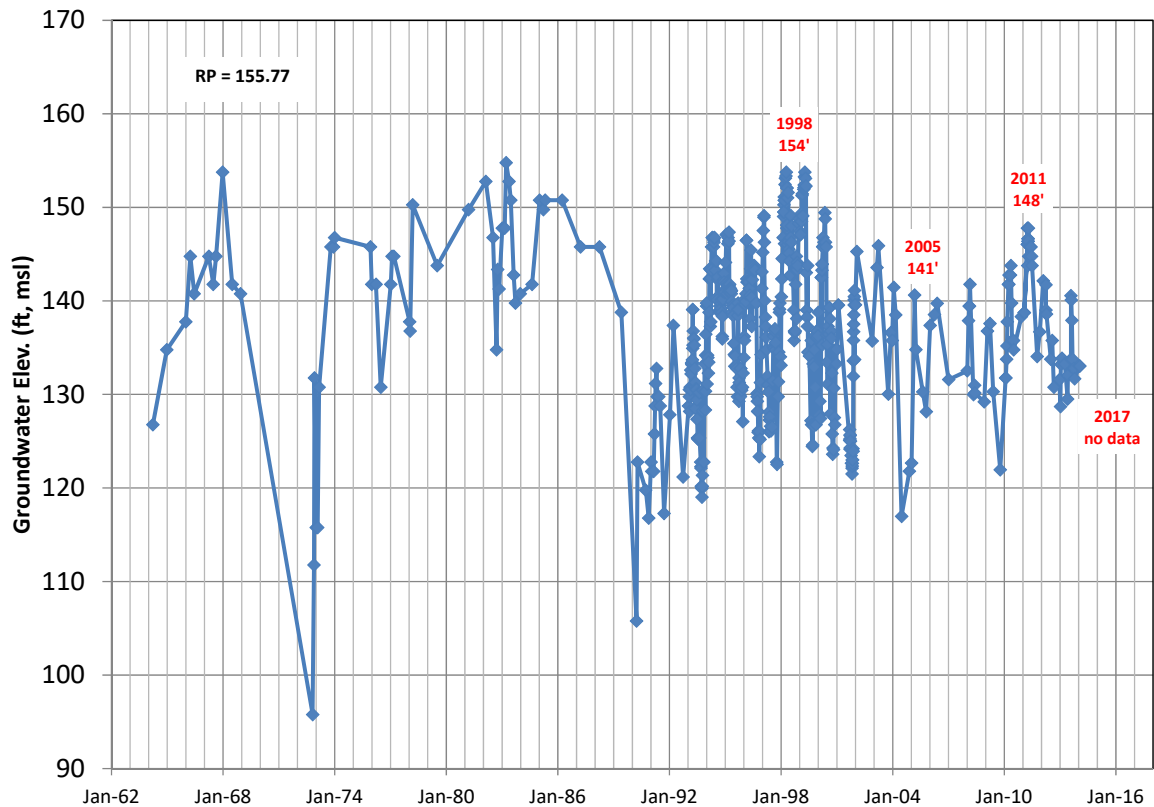
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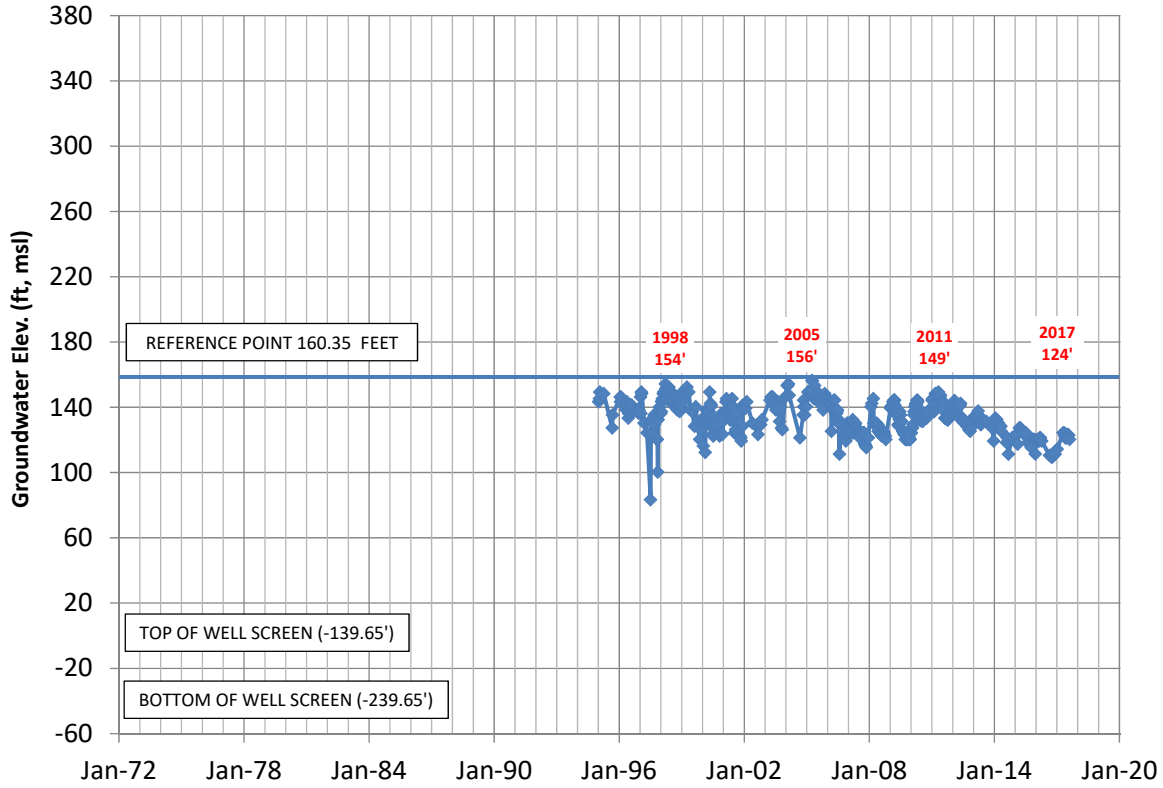
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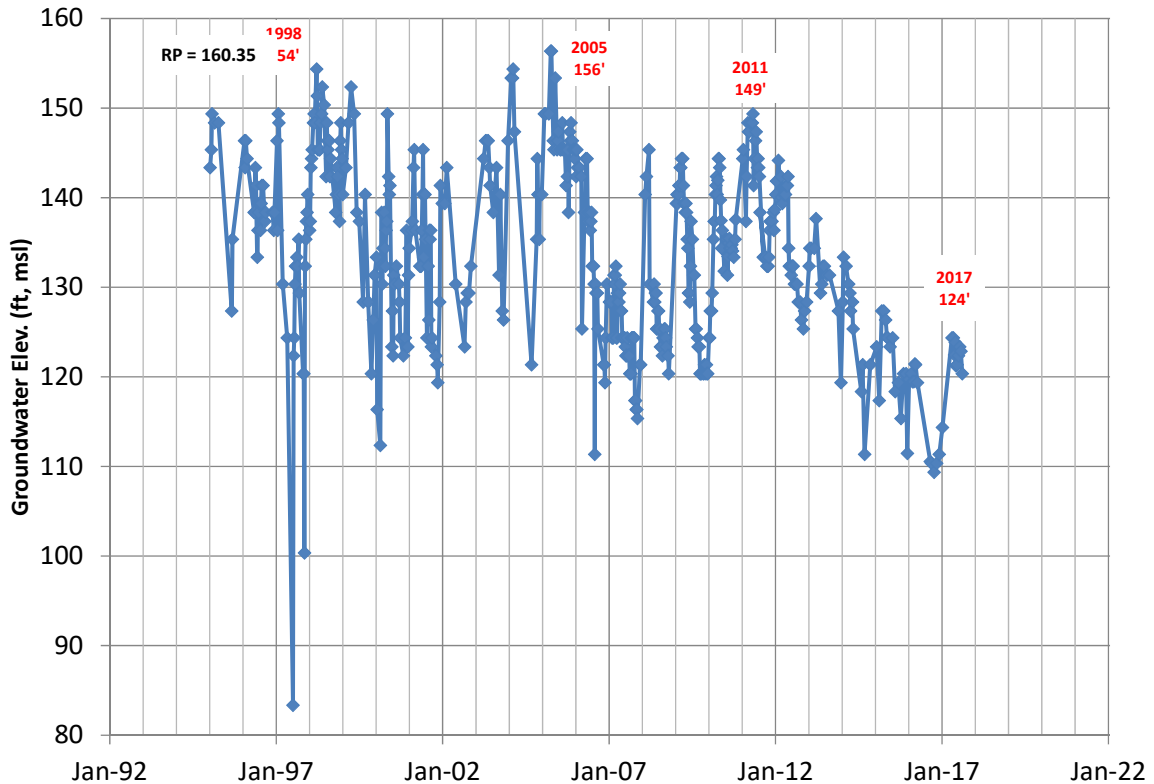
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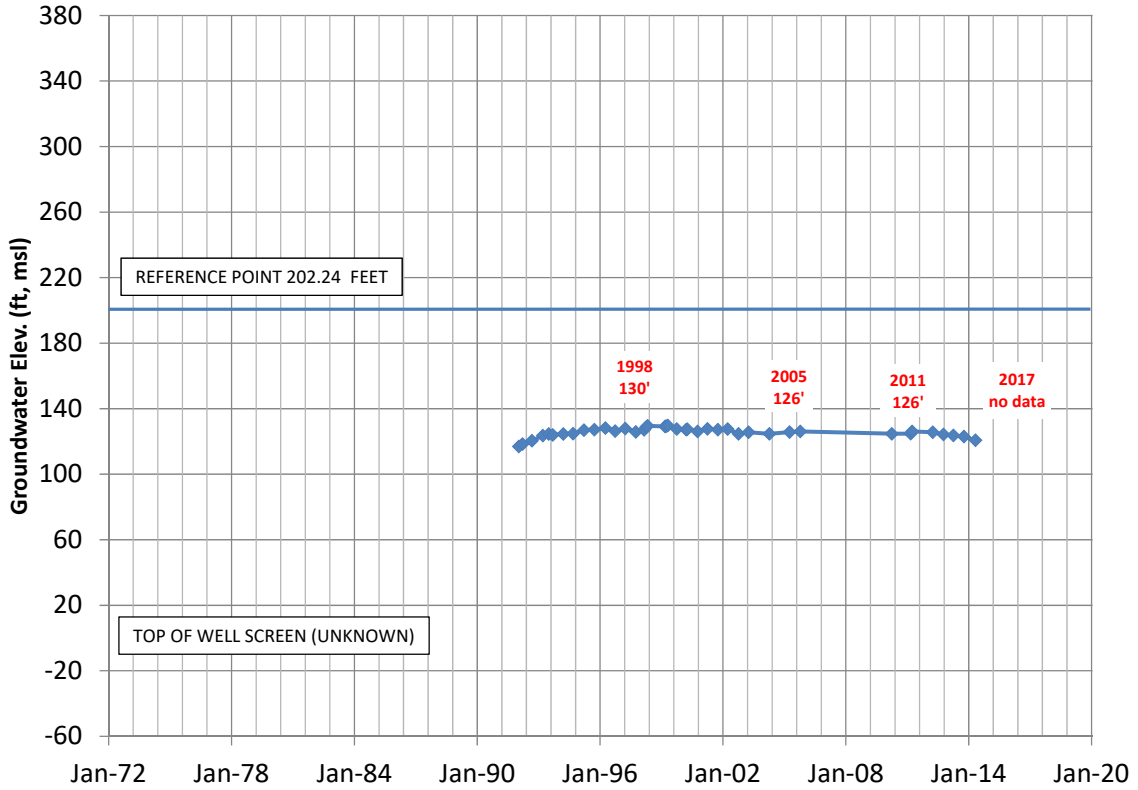
02N22W02K09S (300'-400' bgs)



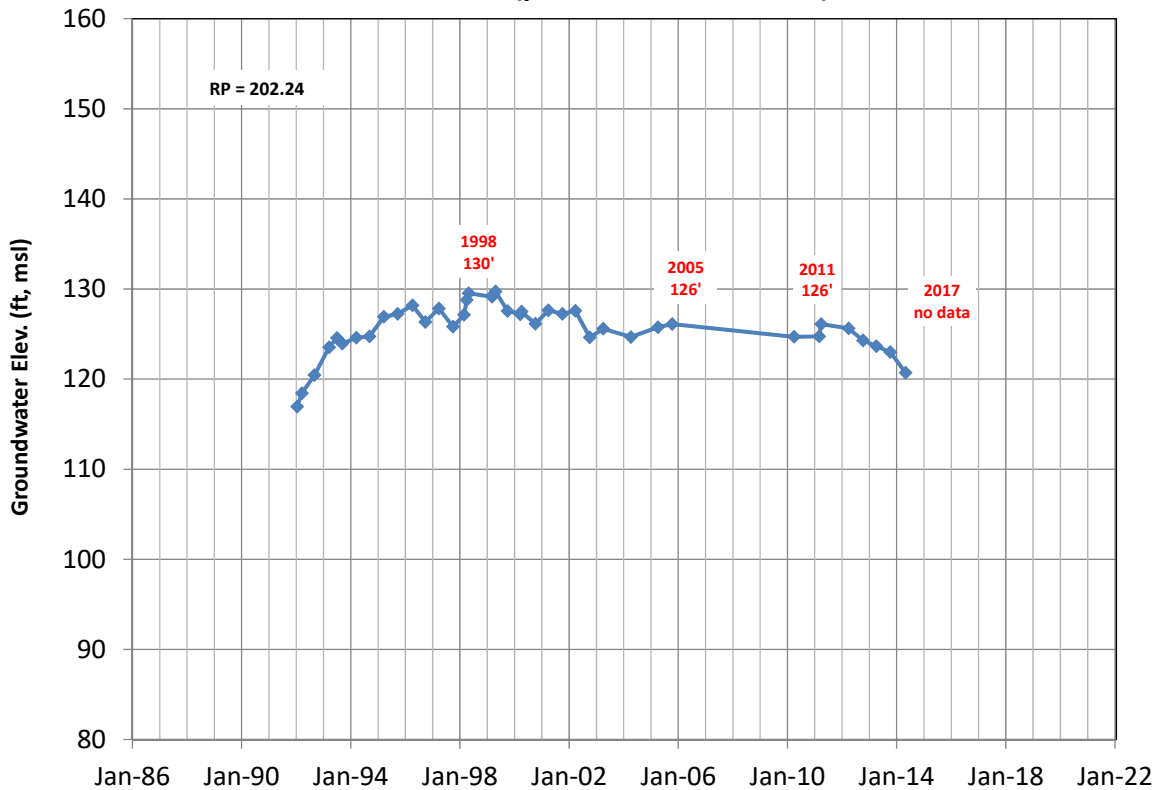
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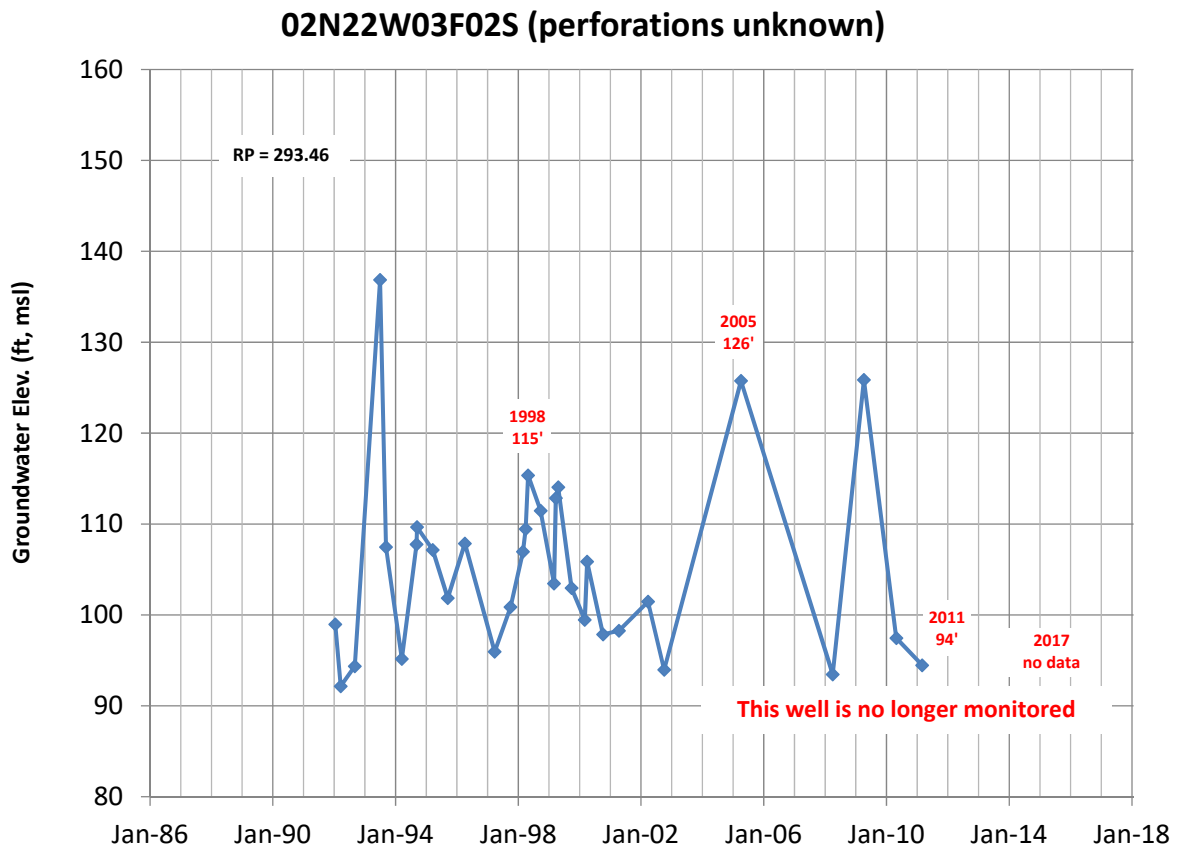
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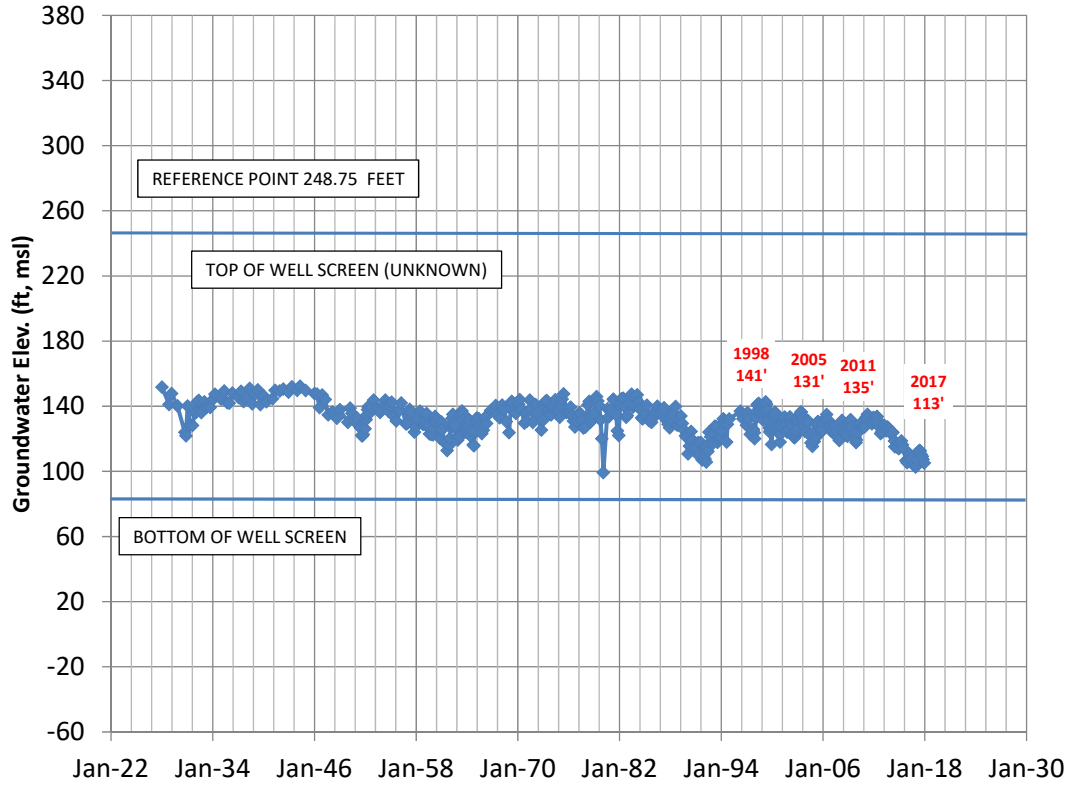
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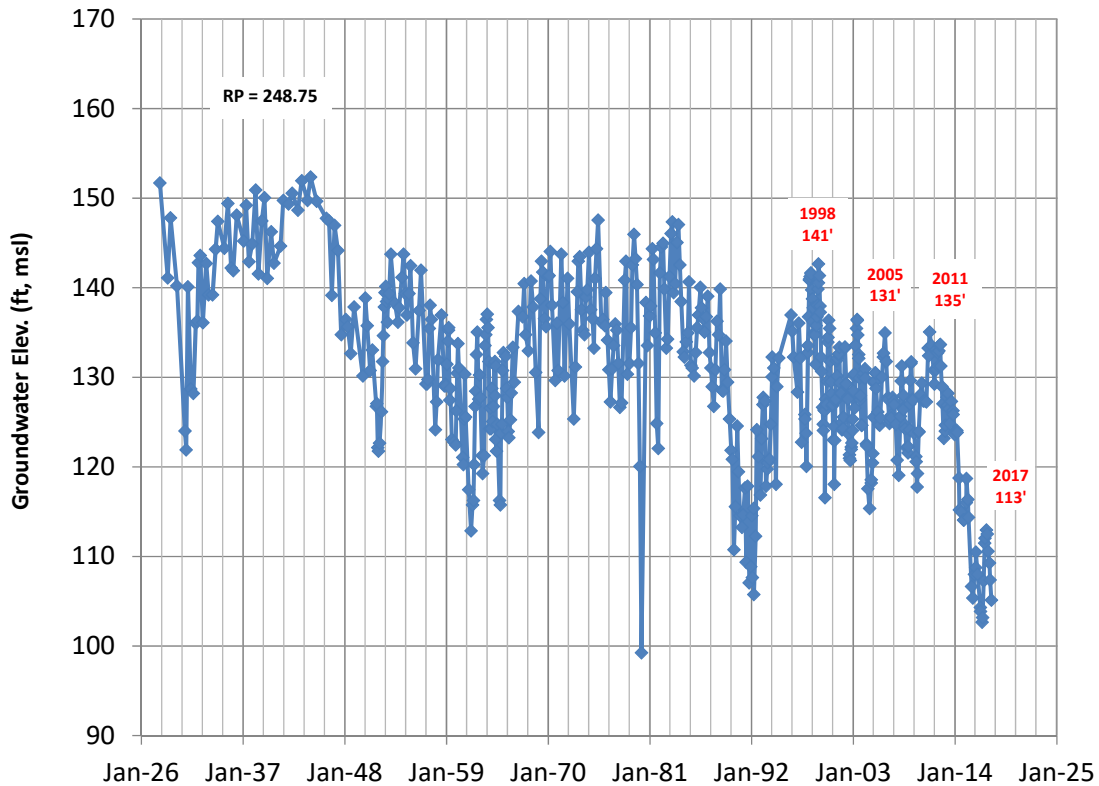
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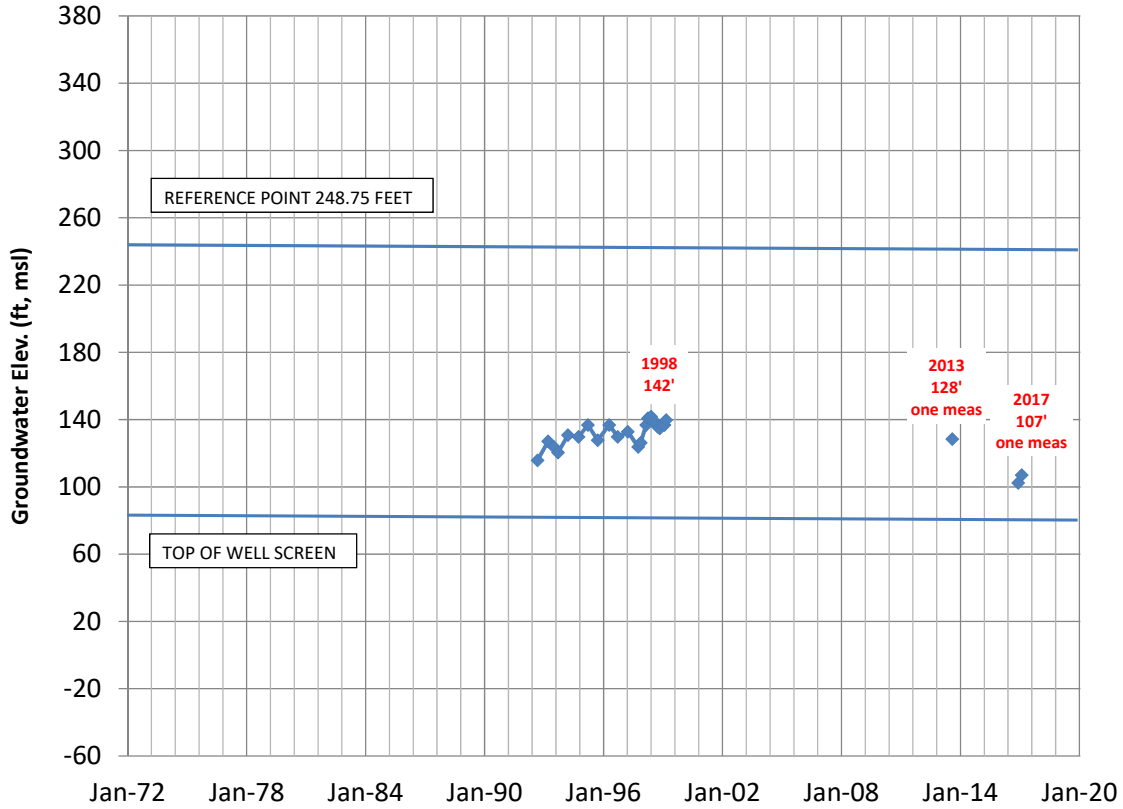
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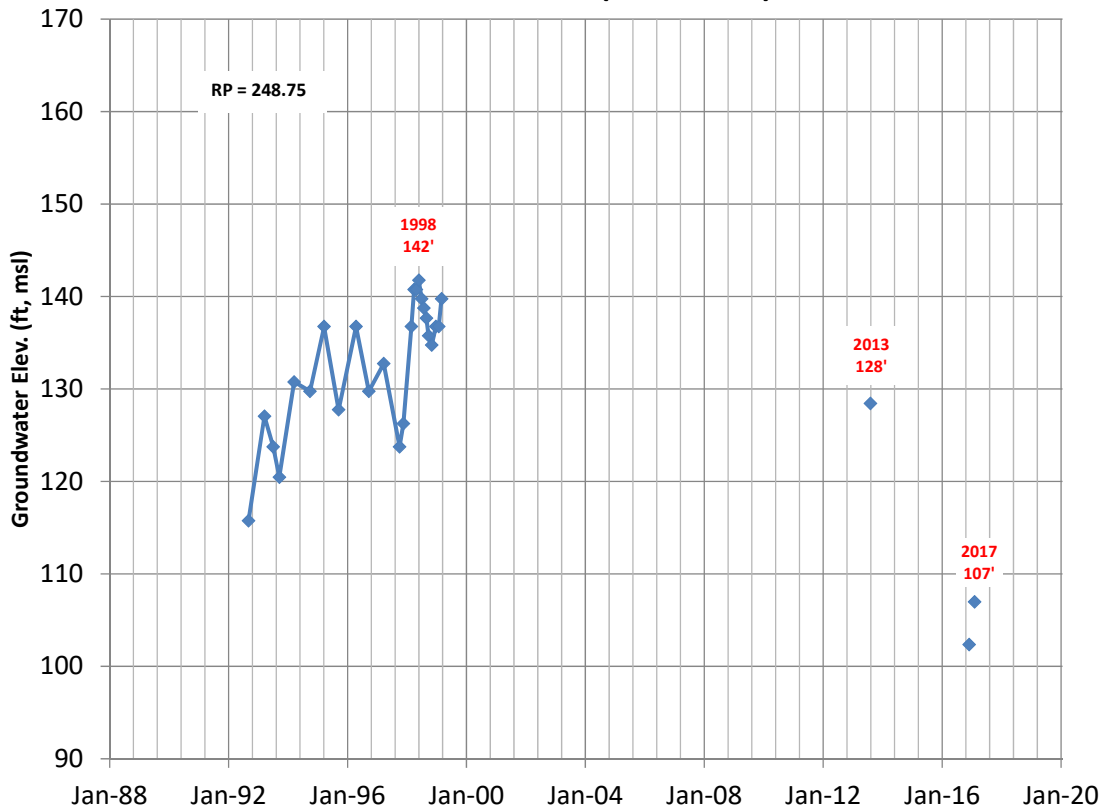
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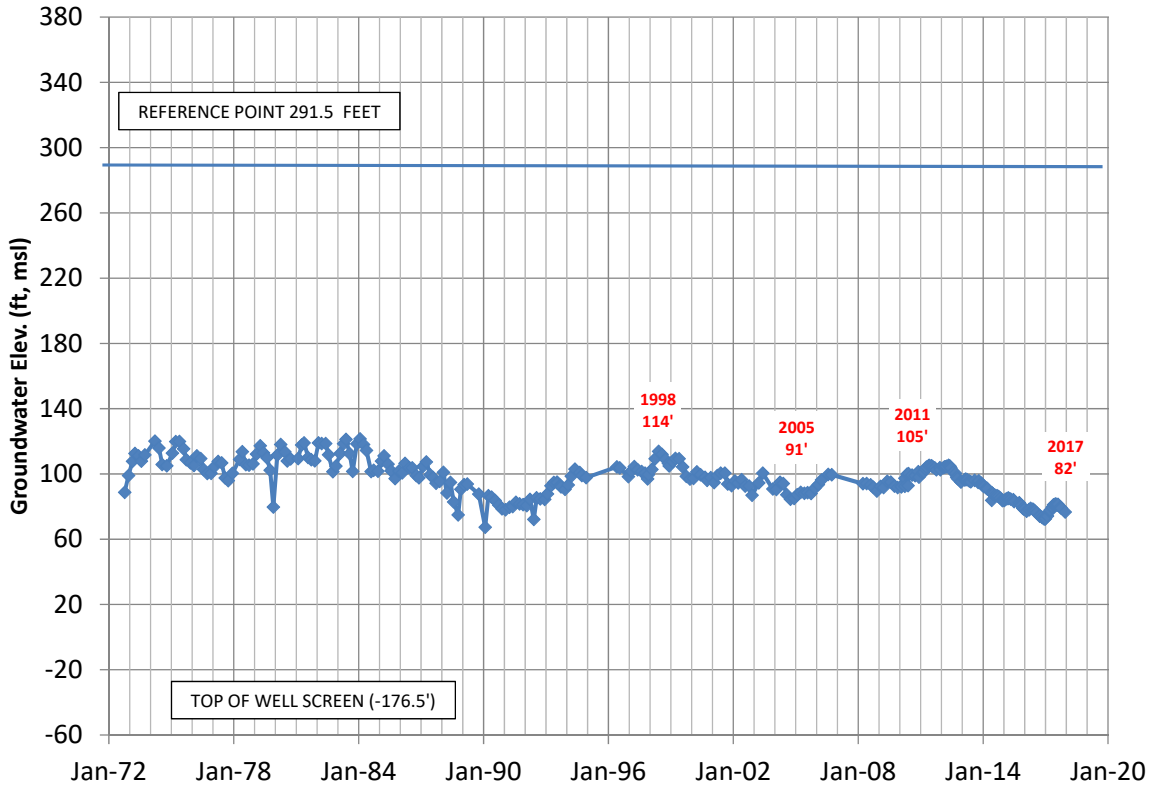
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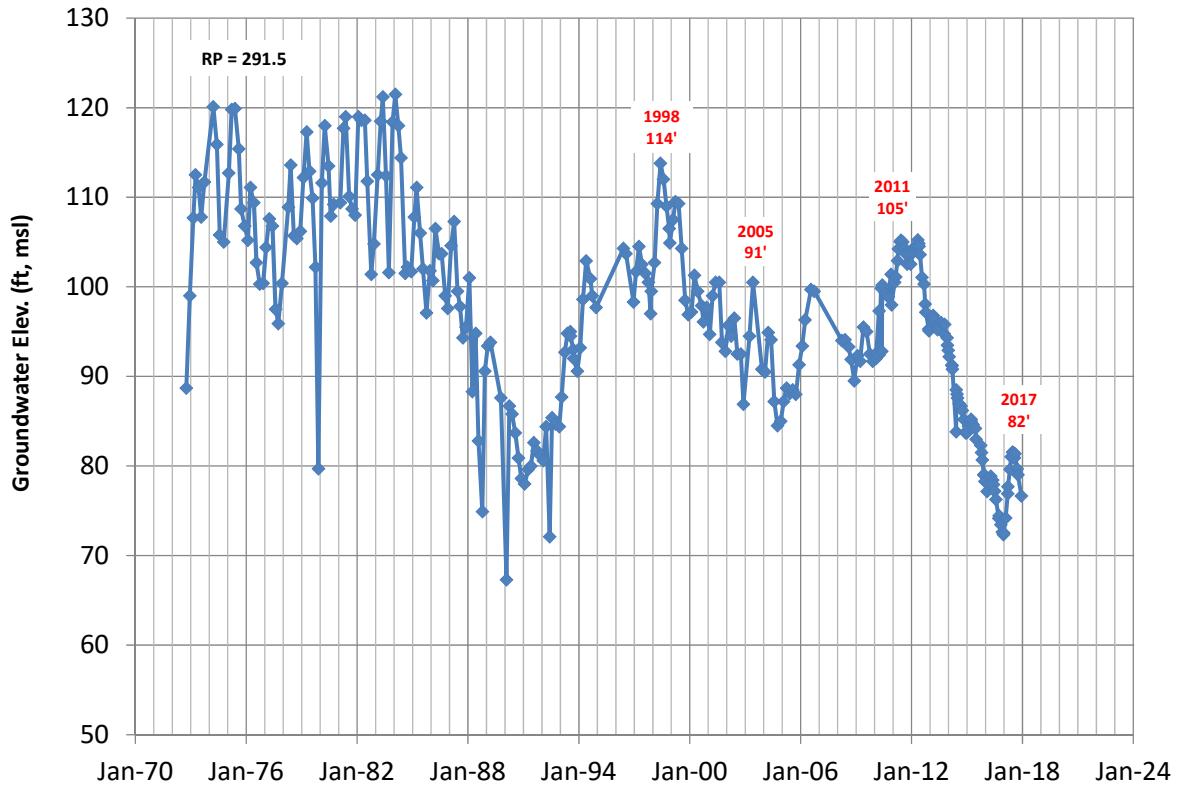
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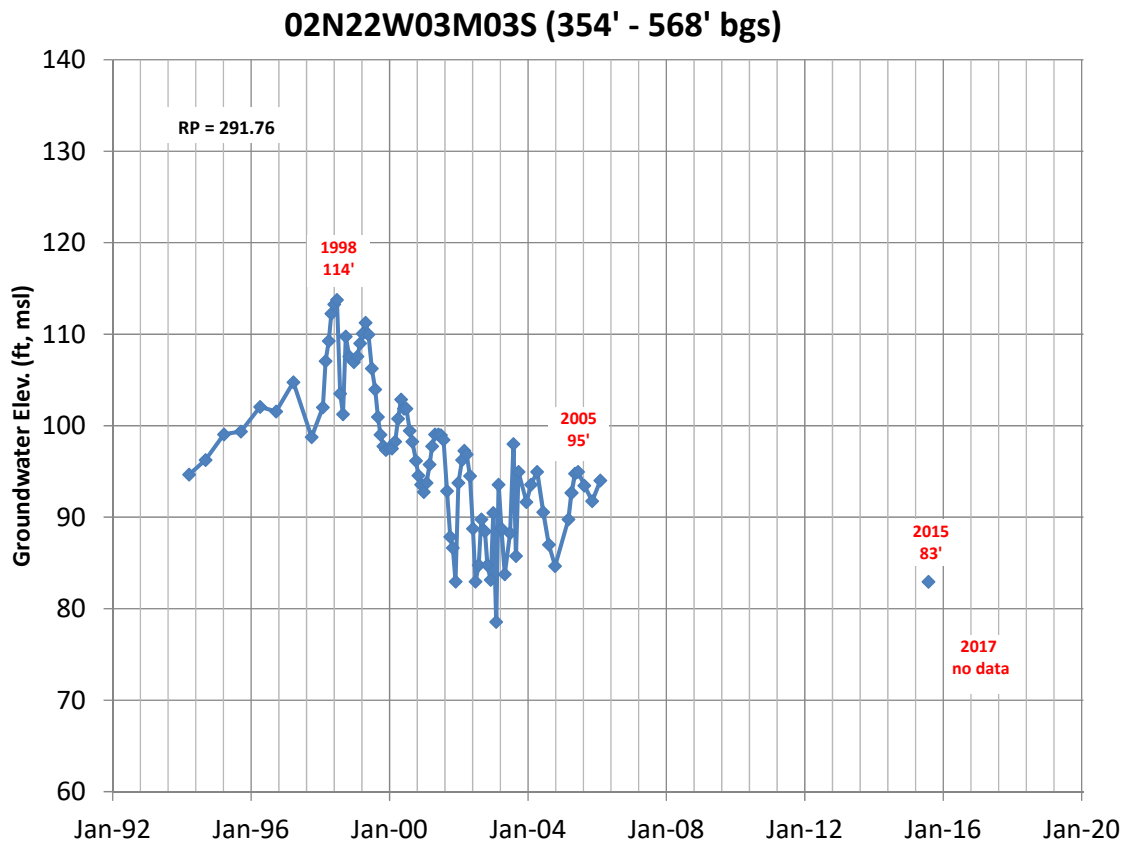
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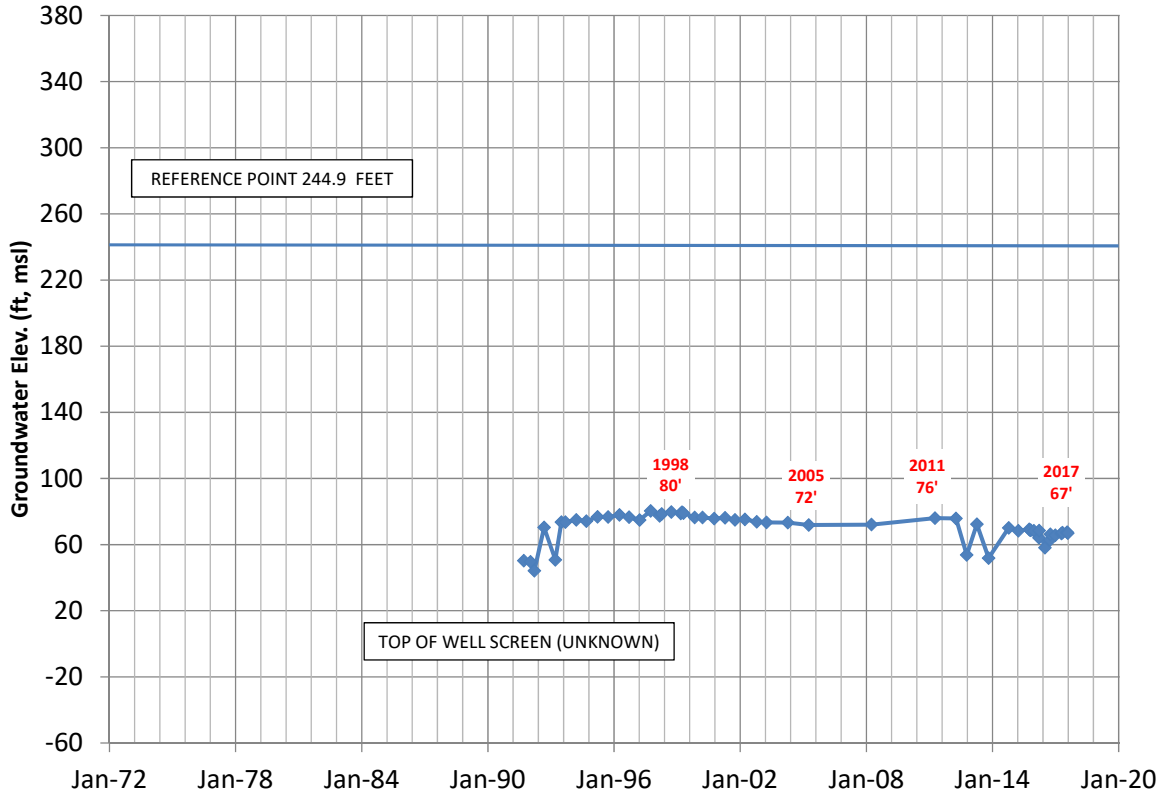
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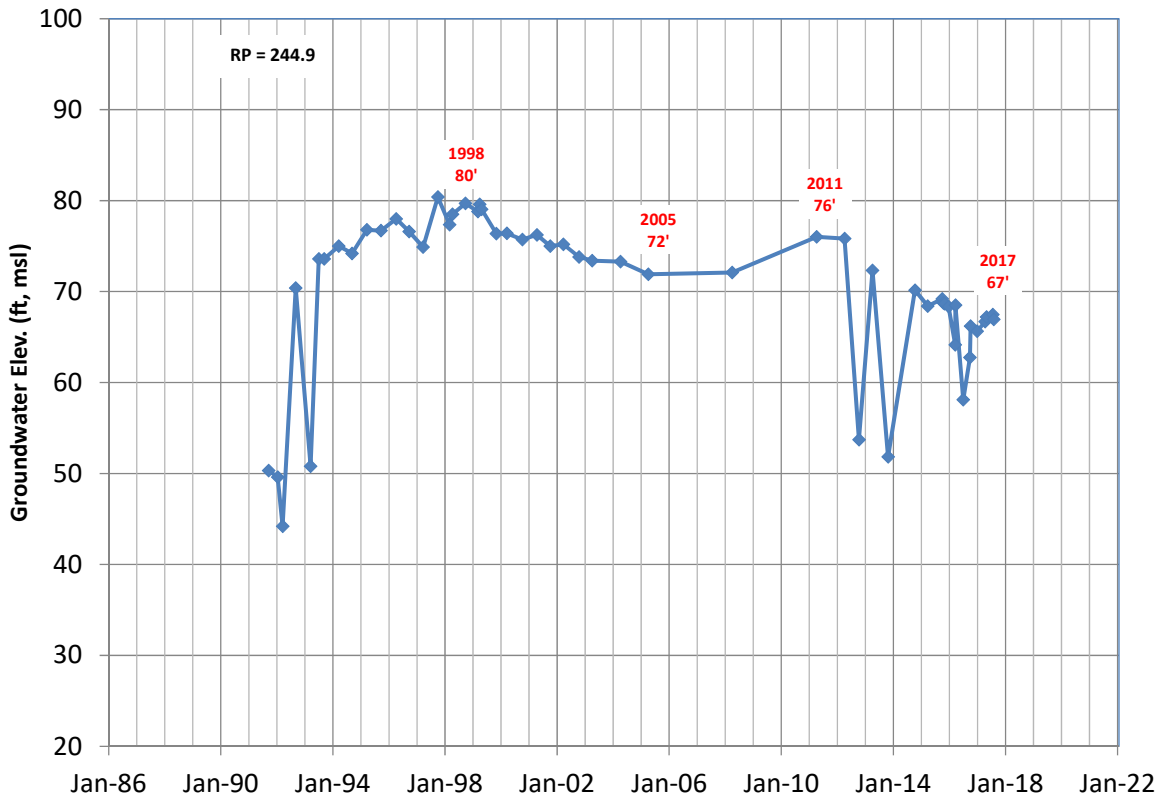
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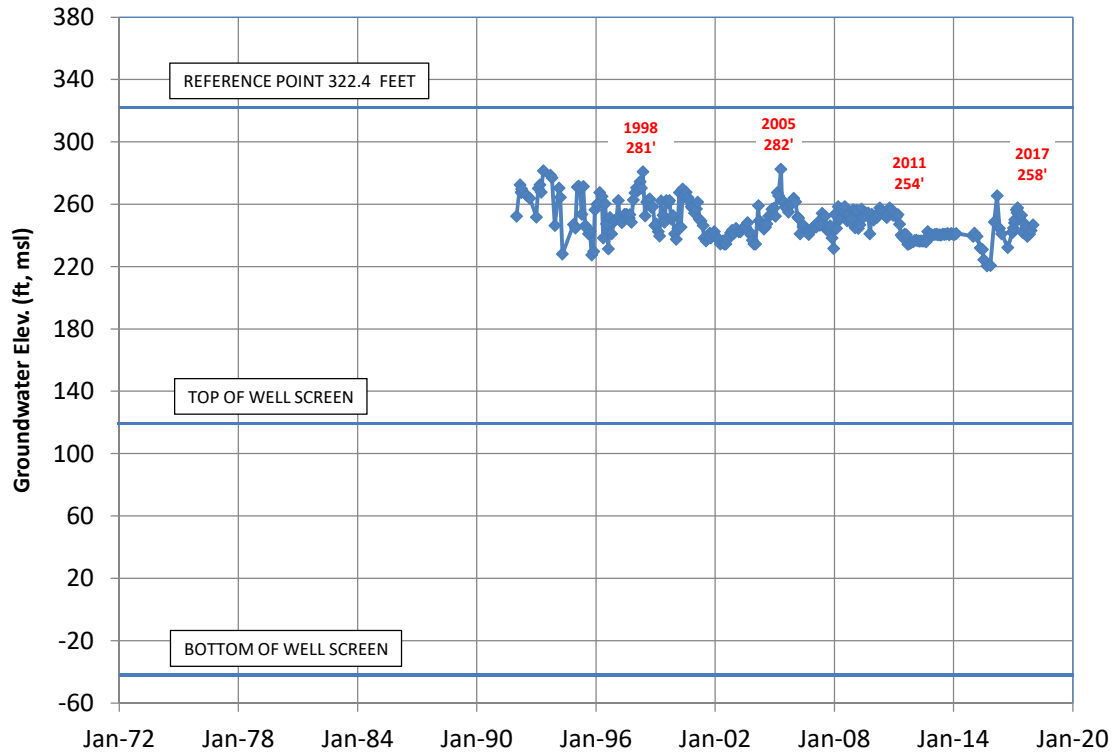
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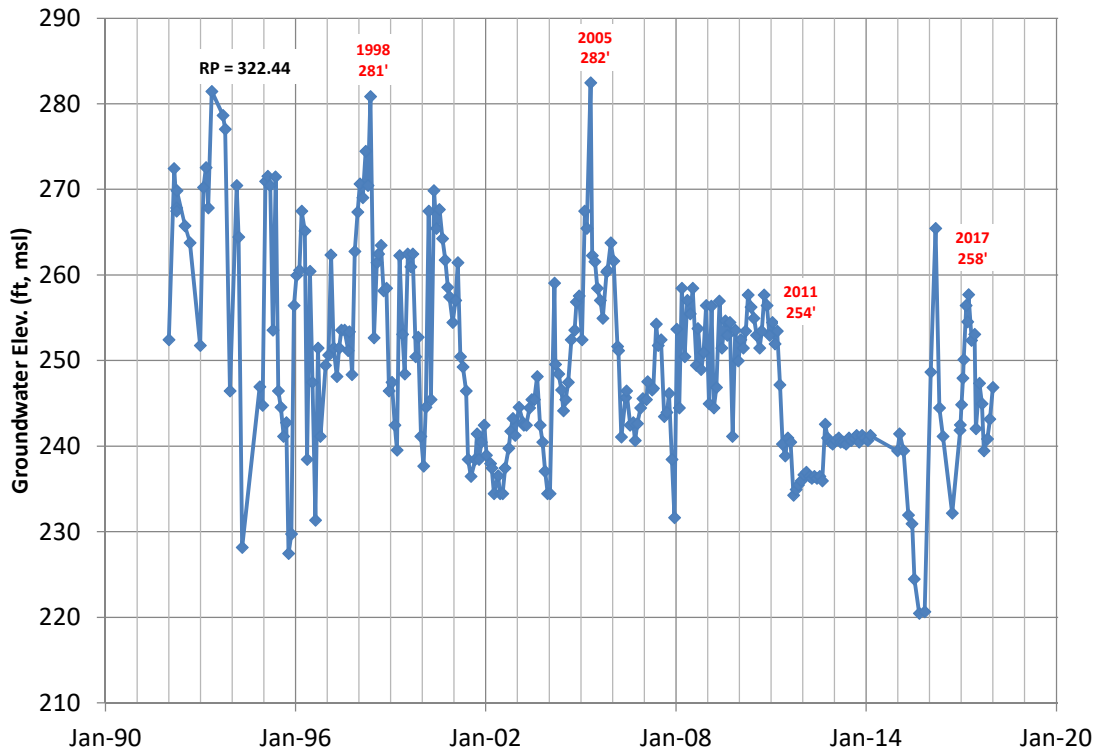
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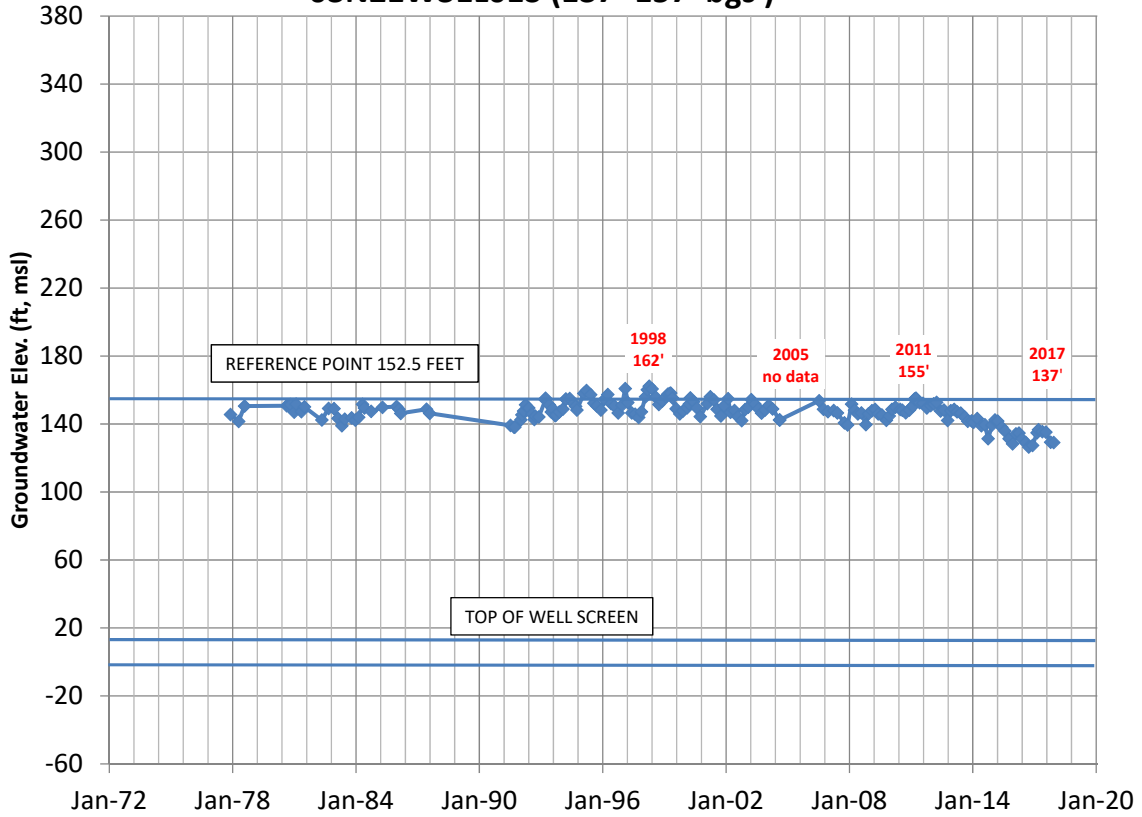
03N21W02R02S (202' - 360' bgs)



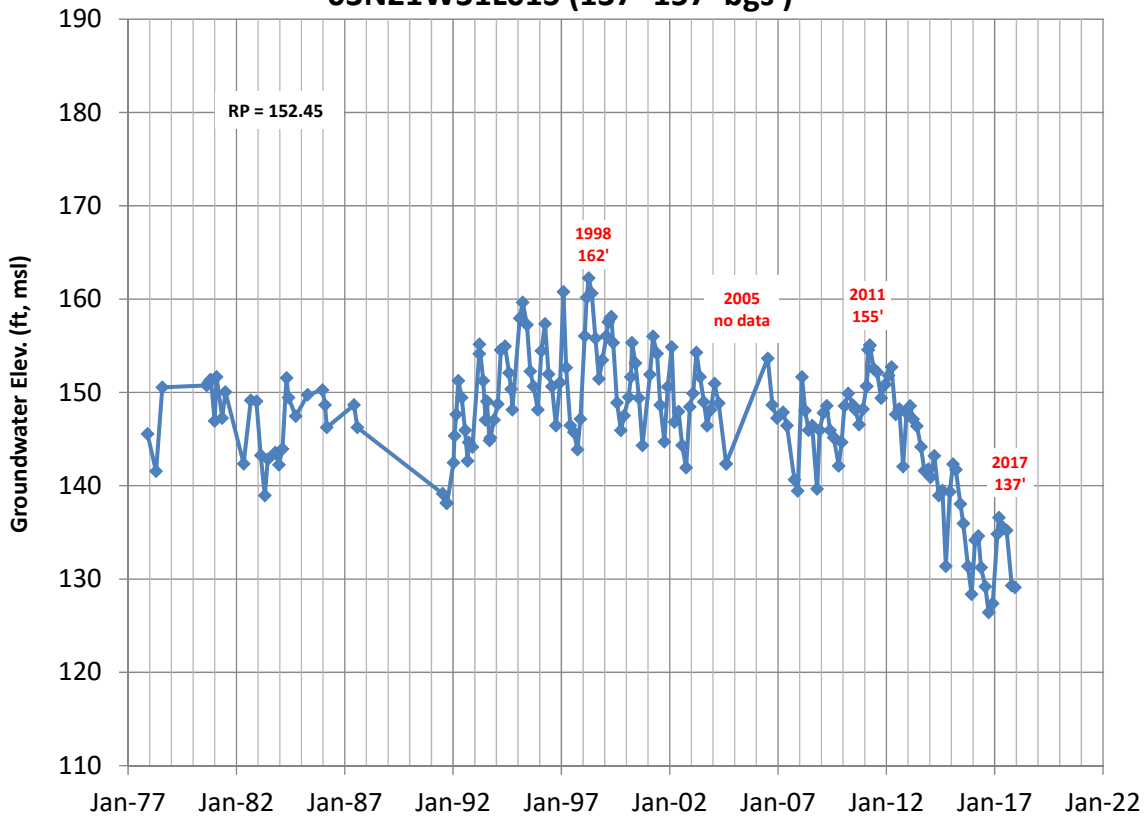
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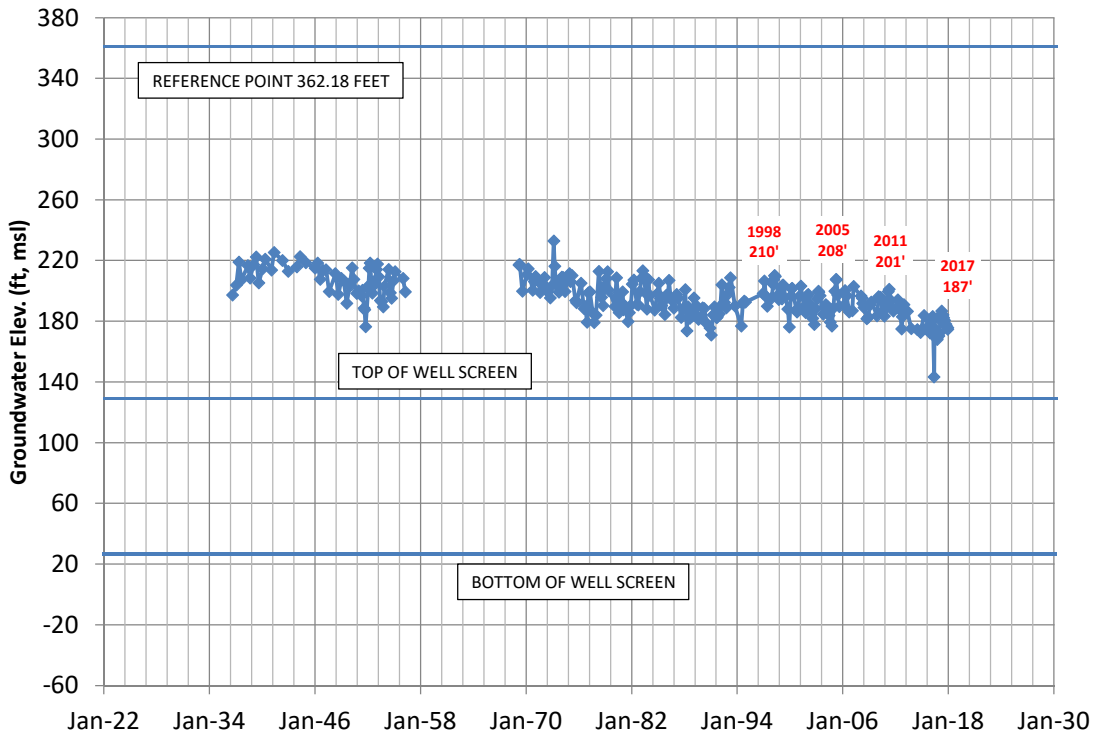
03N21W31L01S (137'-157' bgs)



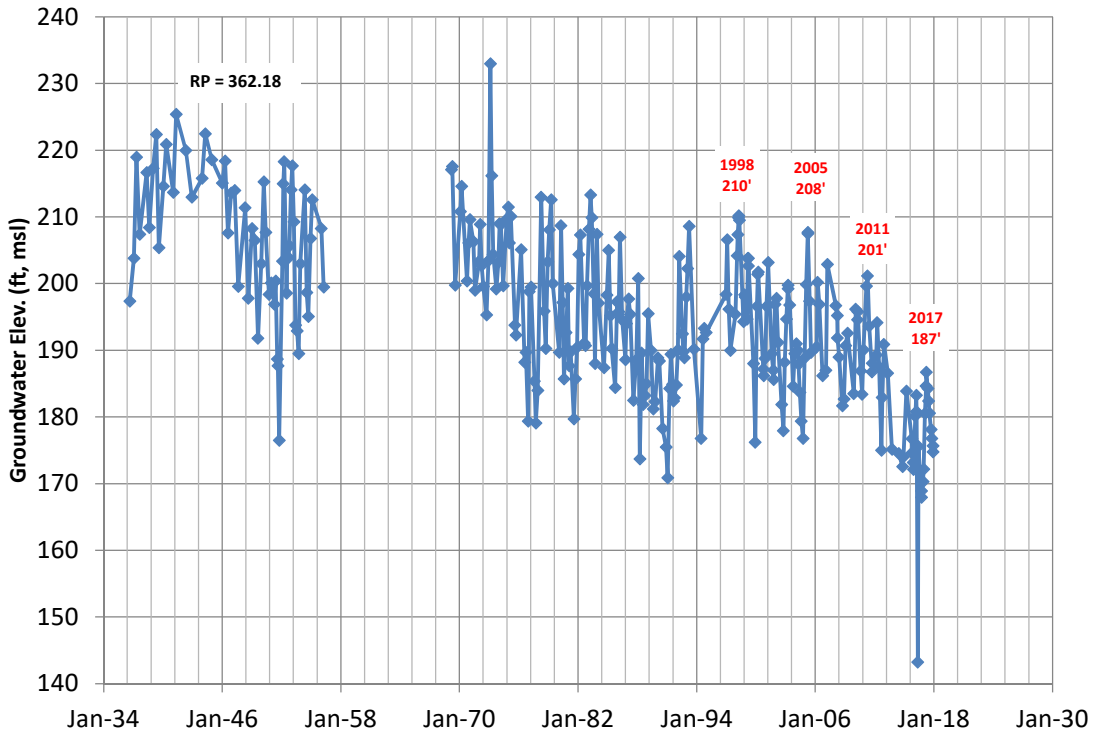
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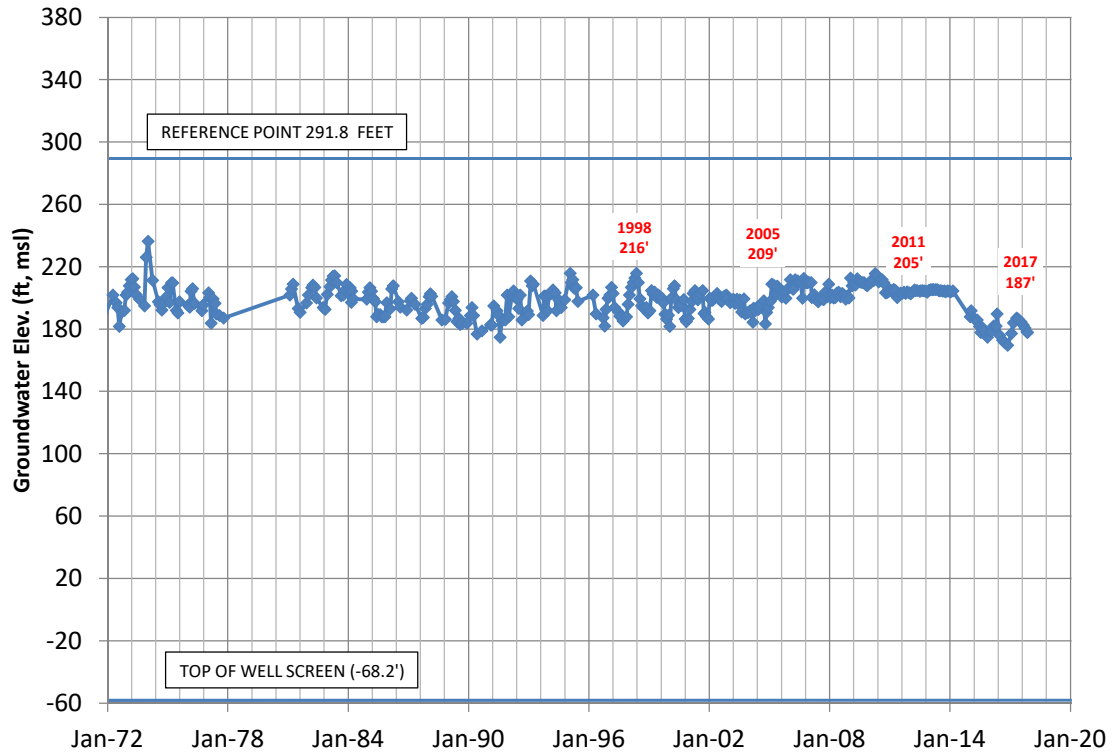
03N21W09K02S (233' - 338' bgs)



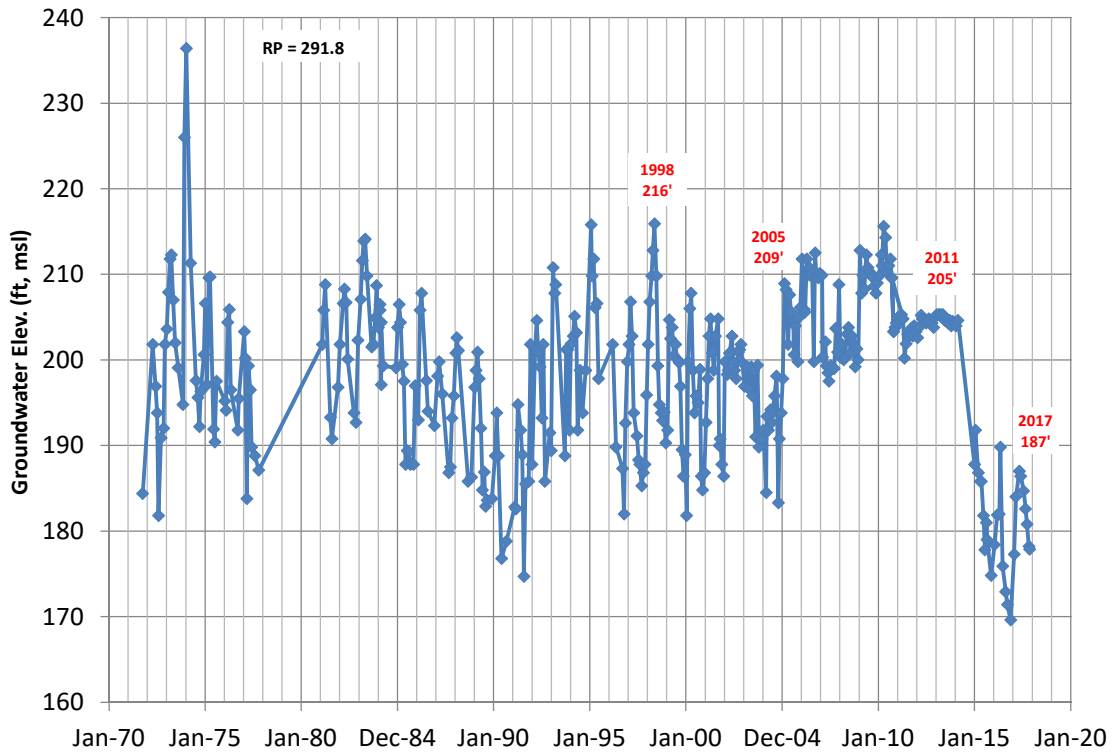
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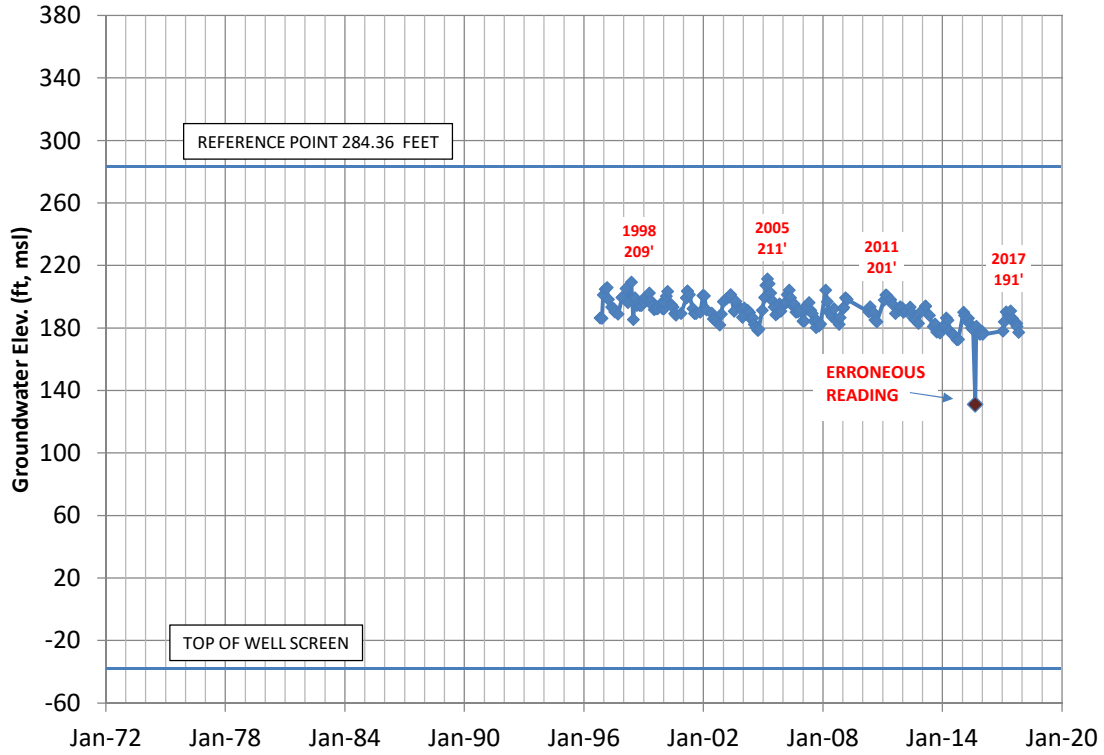
03N21W09R04S (360' - 756' bgs)



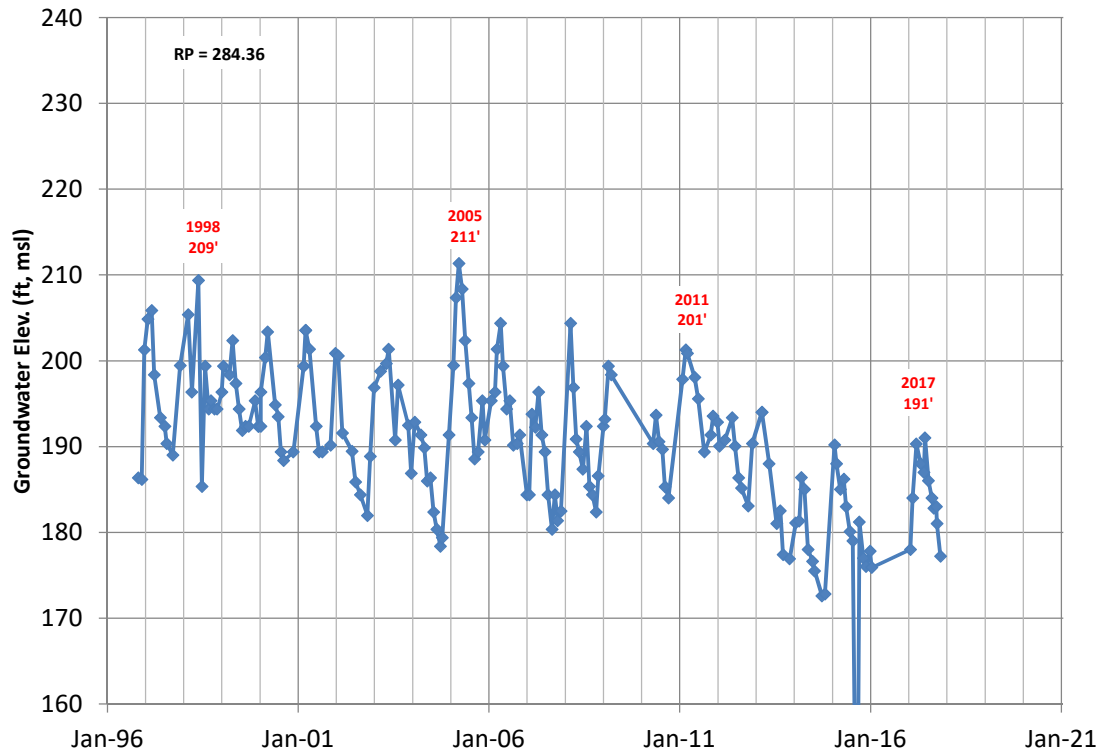
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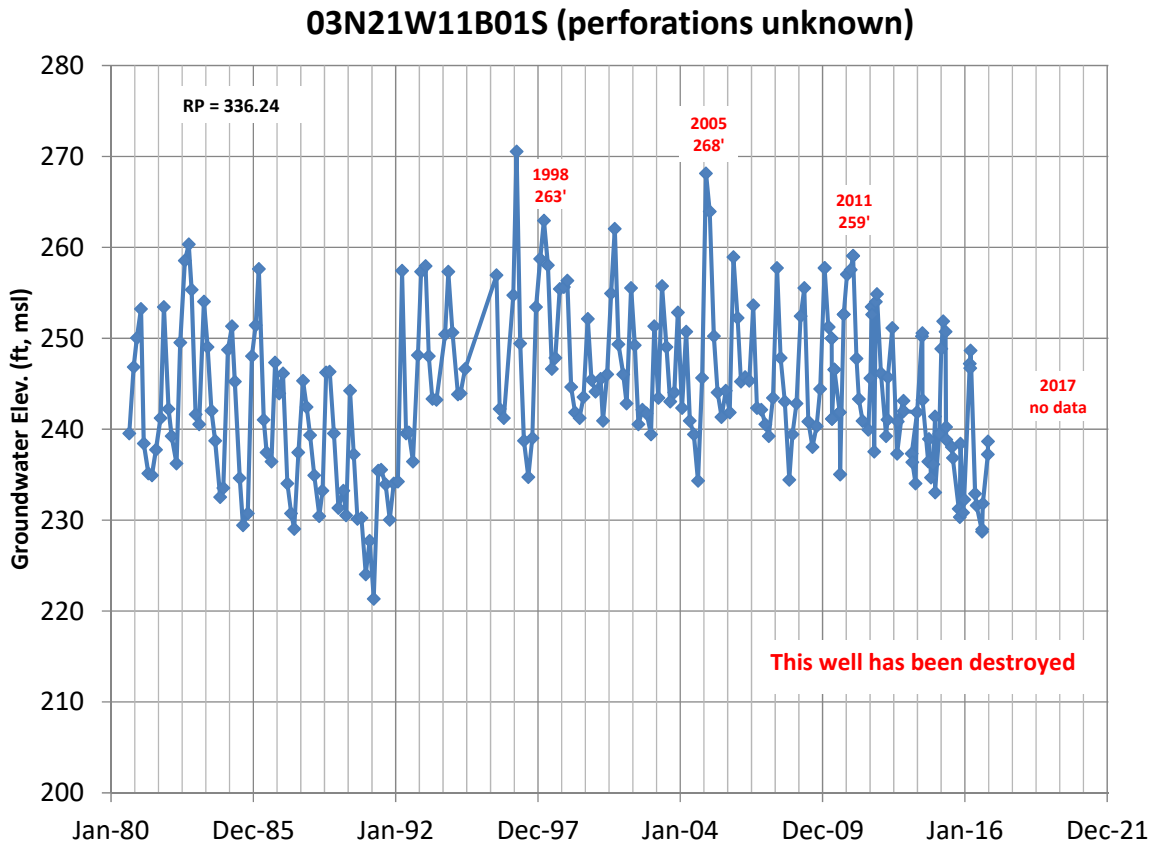
03N21W09R05S (320' - 670' bgs)



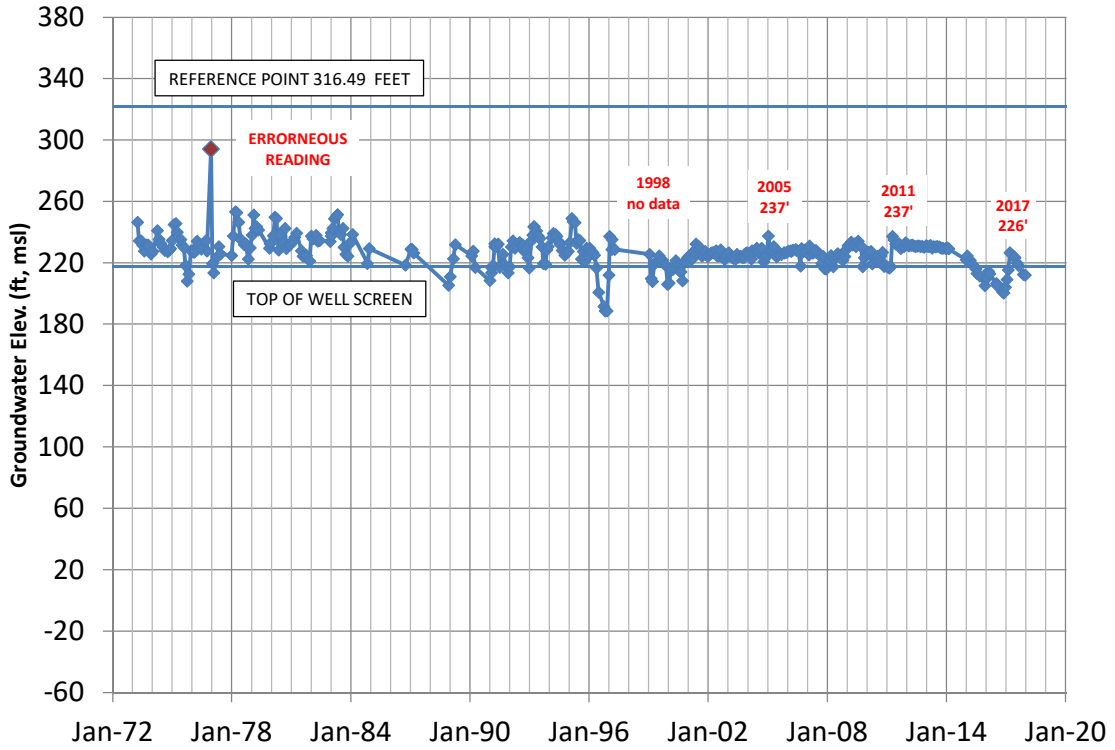
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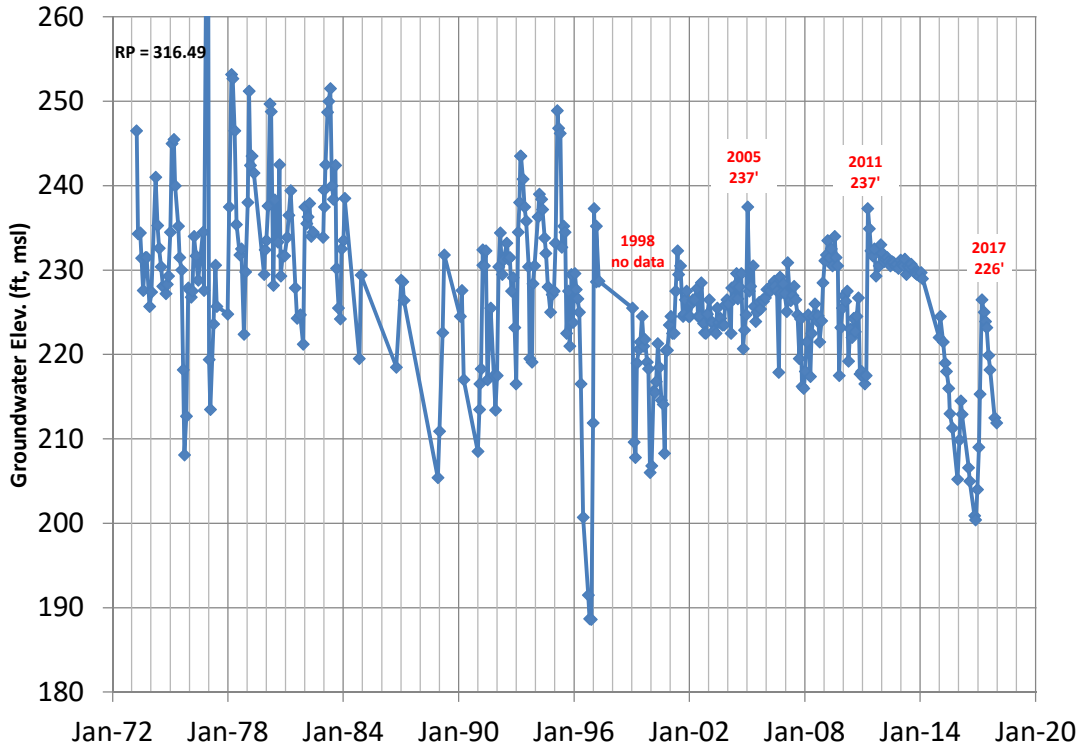
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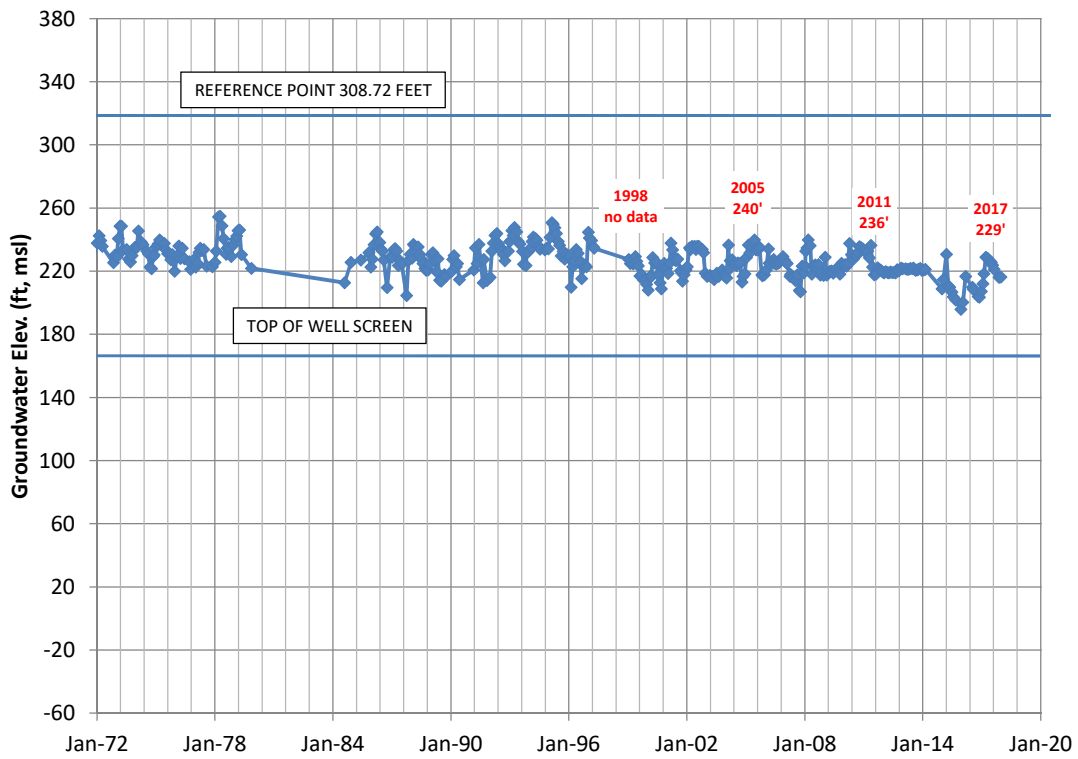
03N21W11E03S (100' - 453' bgs)



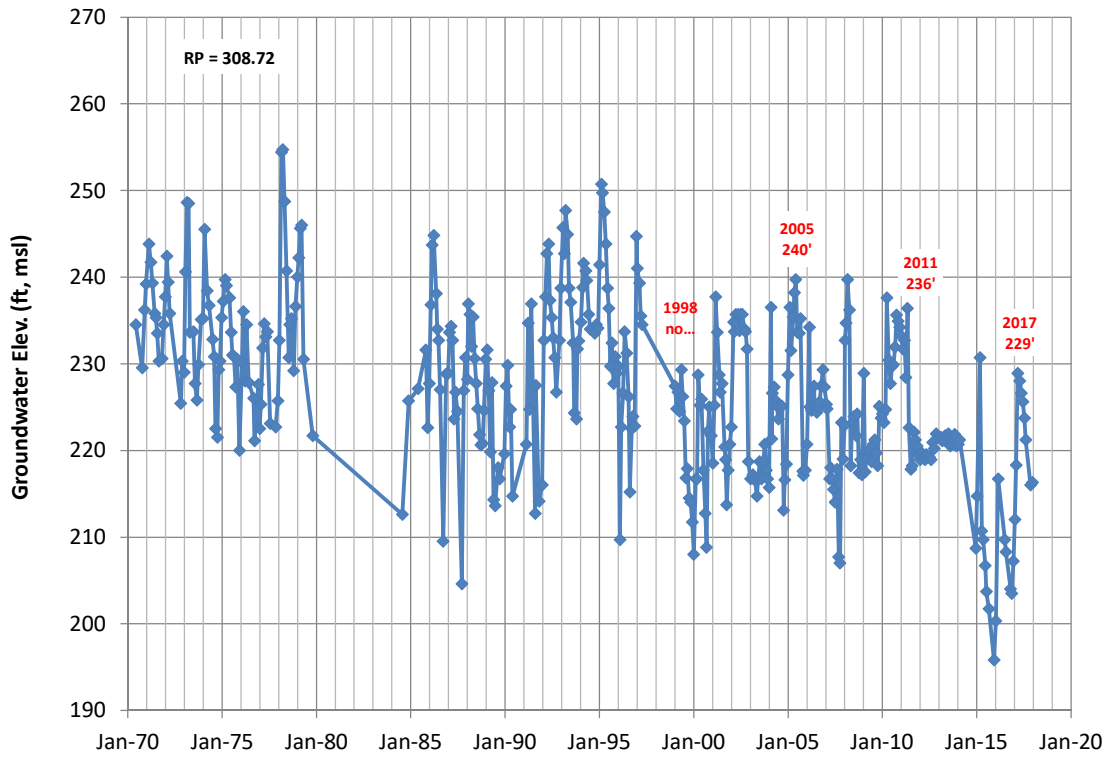
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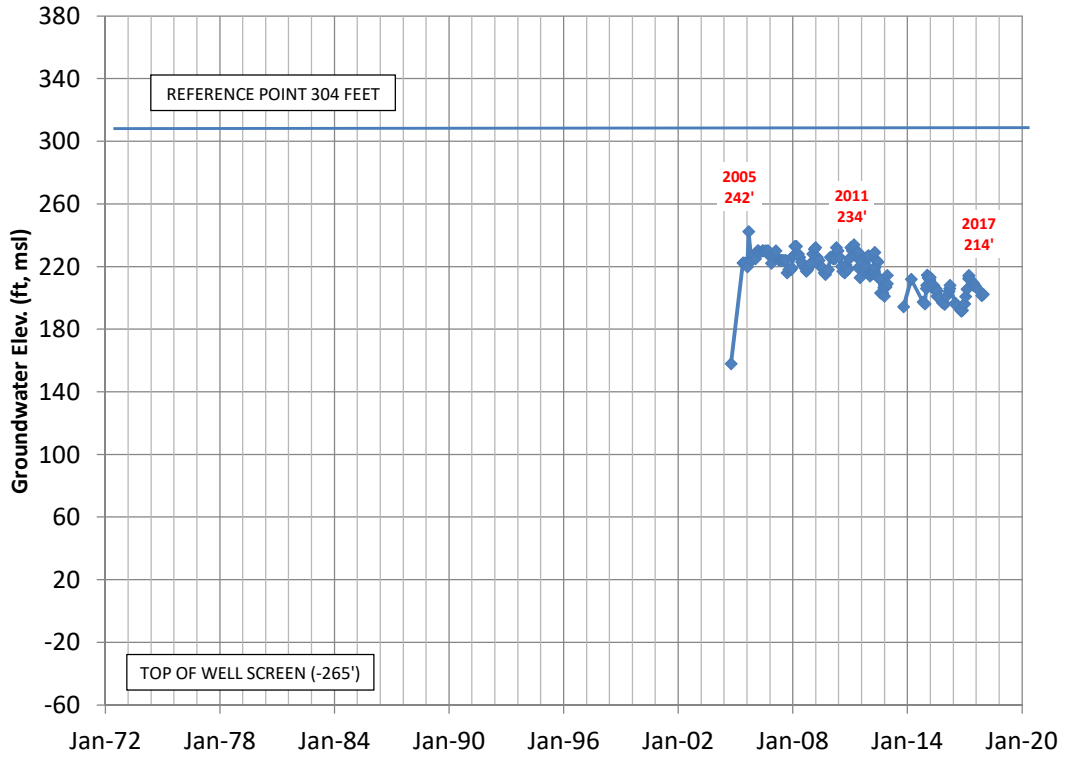
03N21W11F03S (153' -518' bgs)



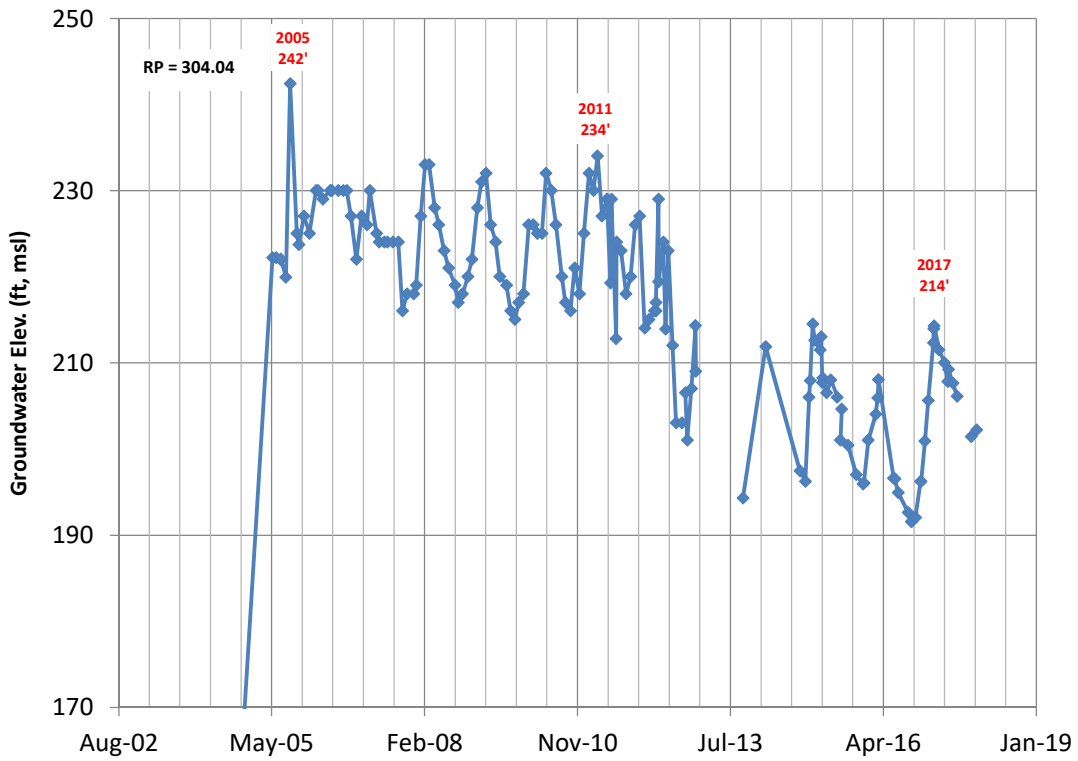
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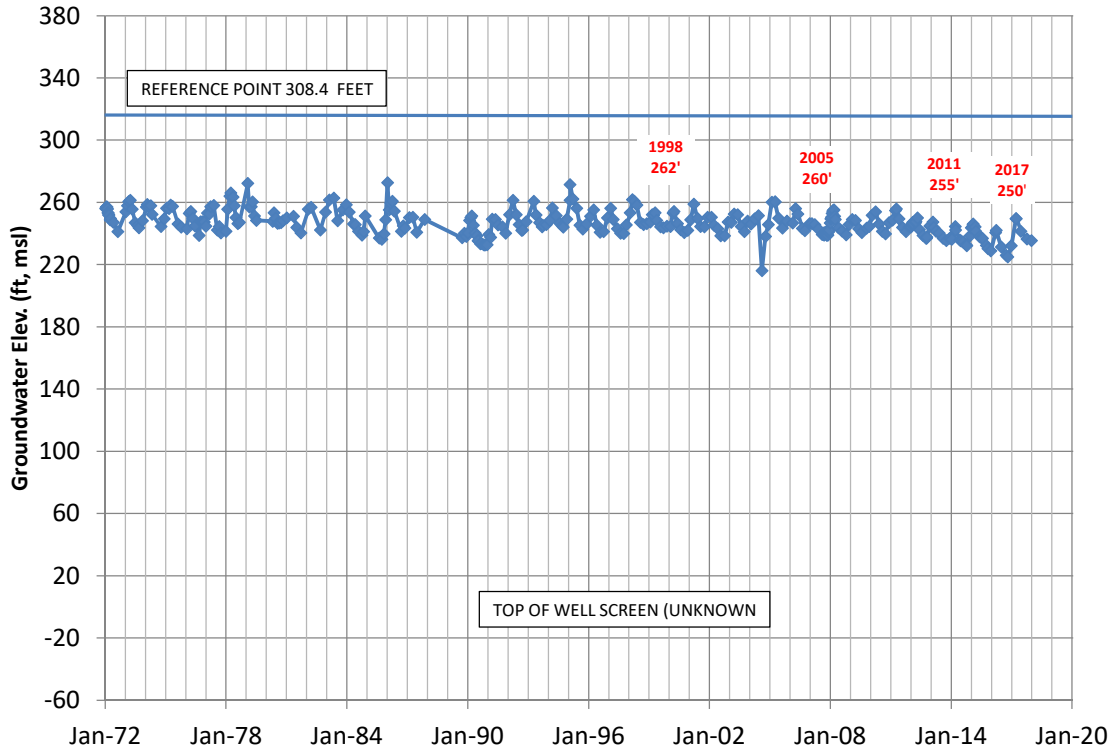
03N21W11F04S (570' - 850' bgs)



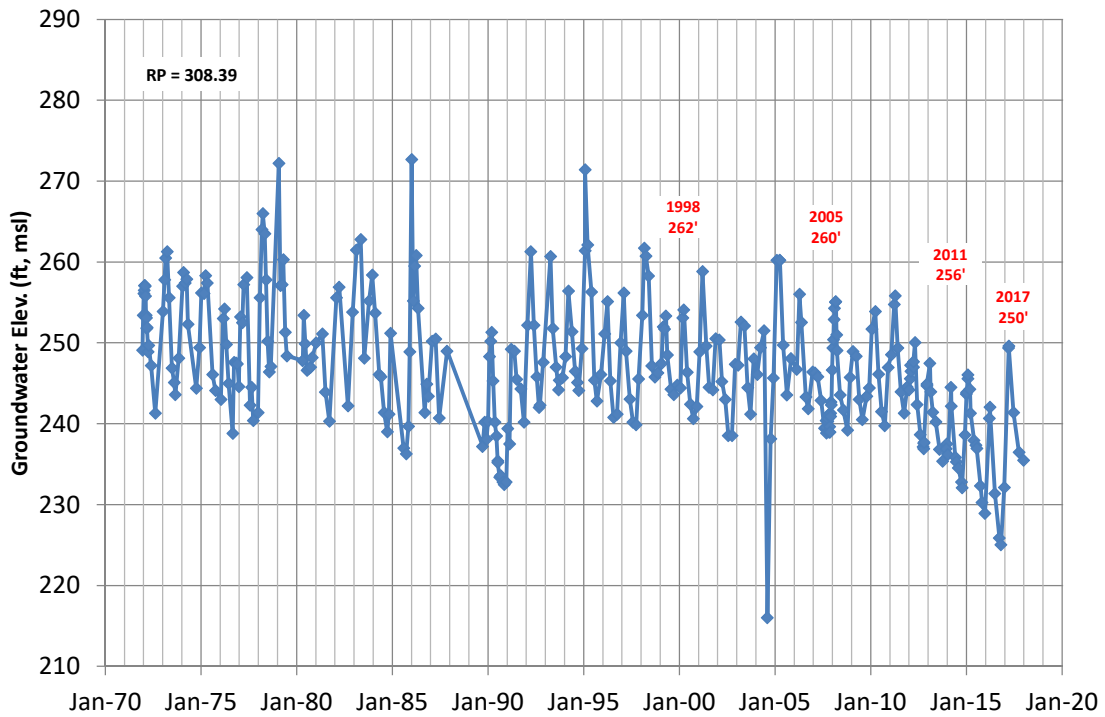
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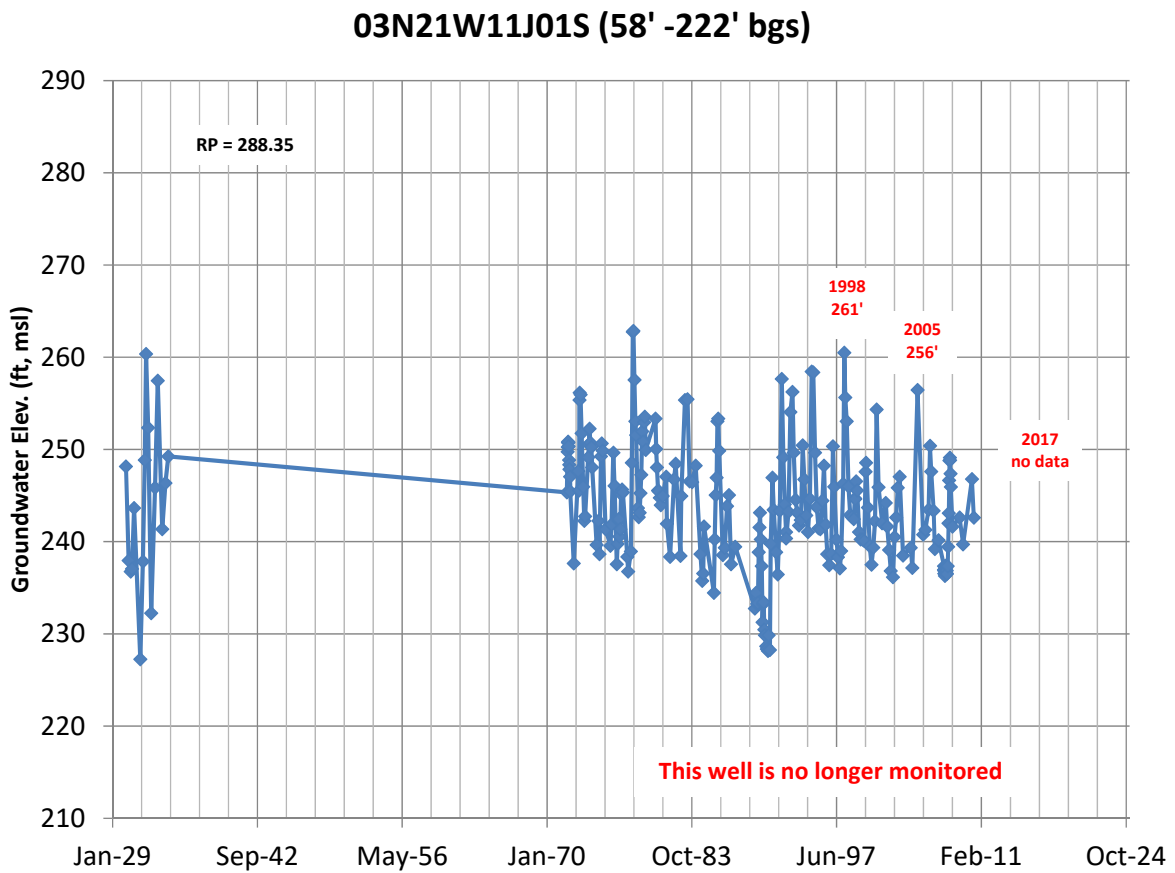
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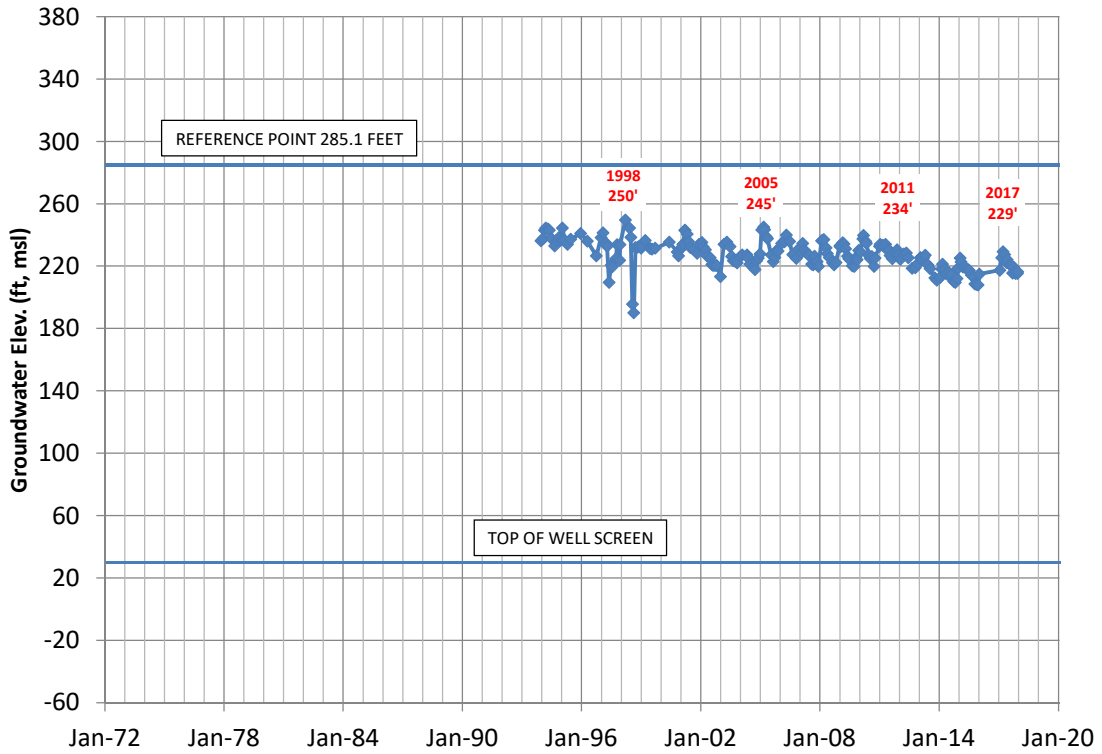
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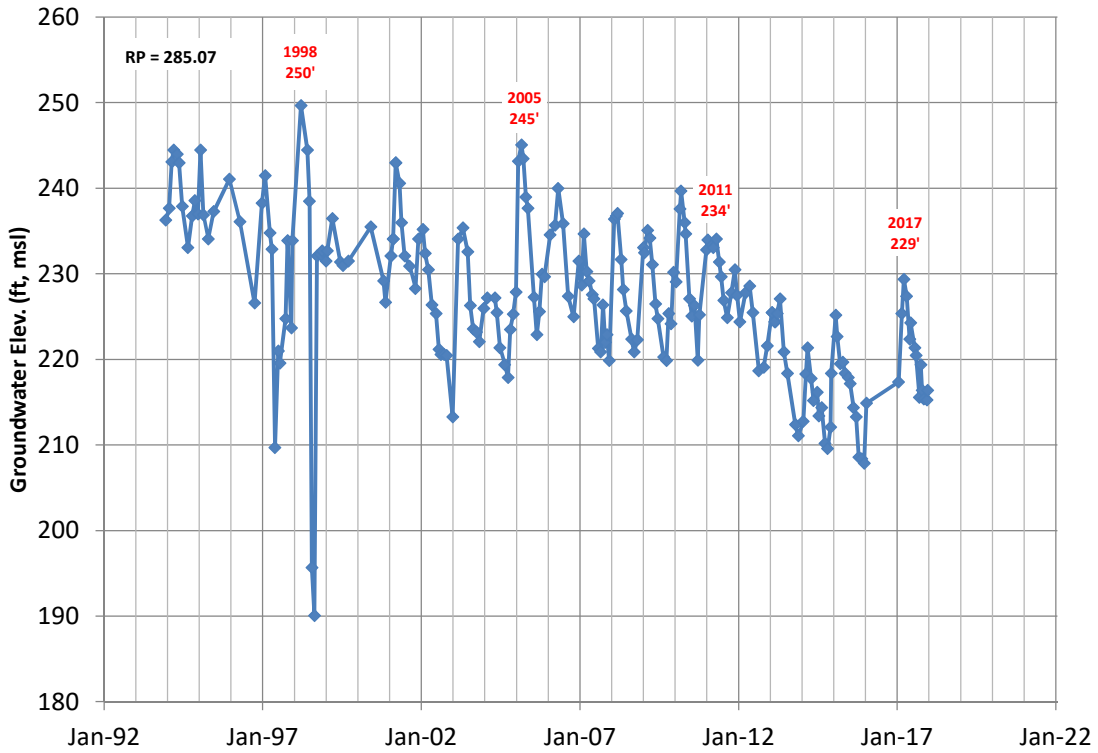
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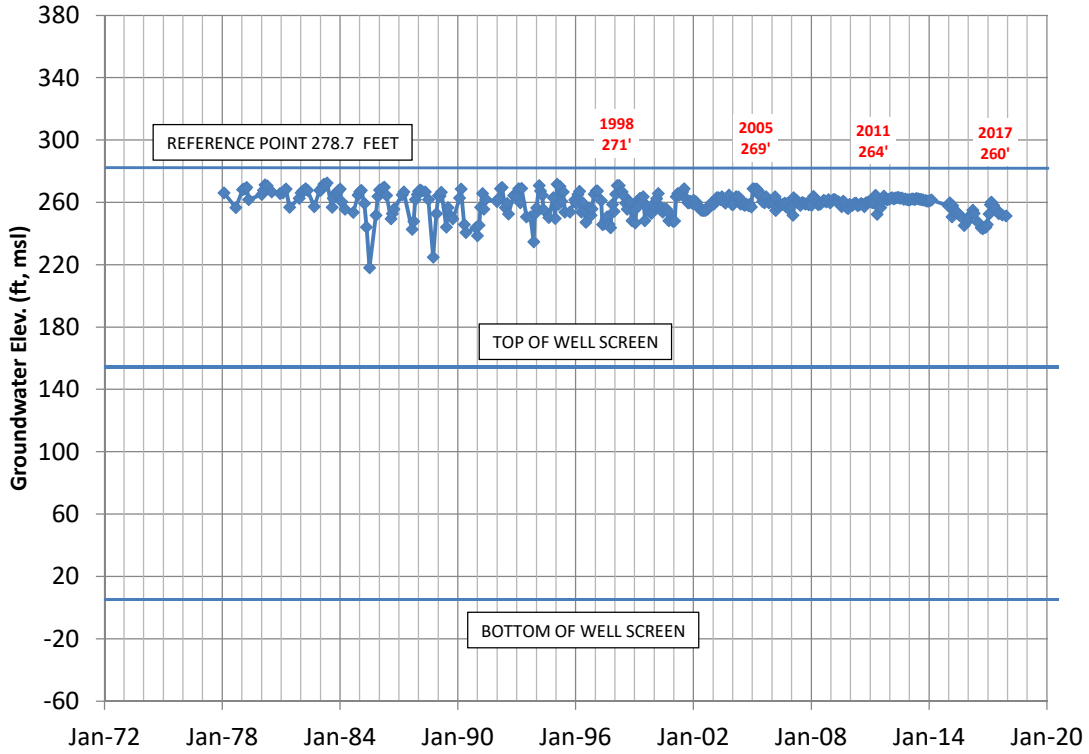
03N21W11J02S (260' - 770' bgs)



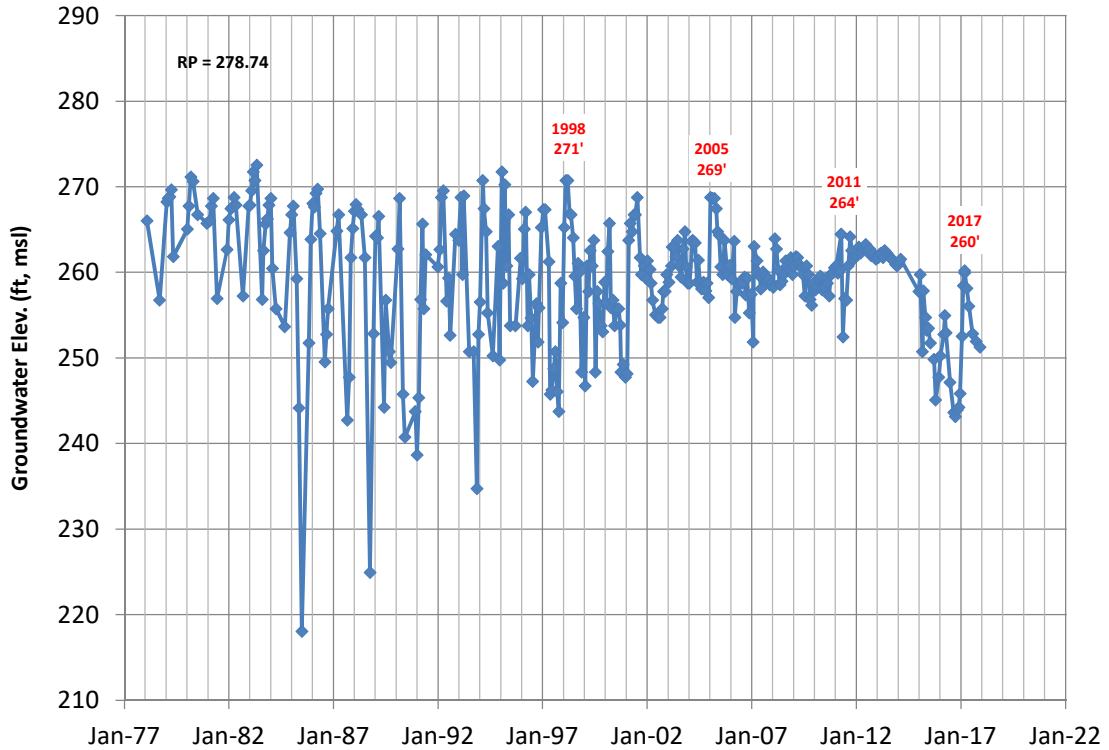
03N21W11J02S (260' - 700' bgs)



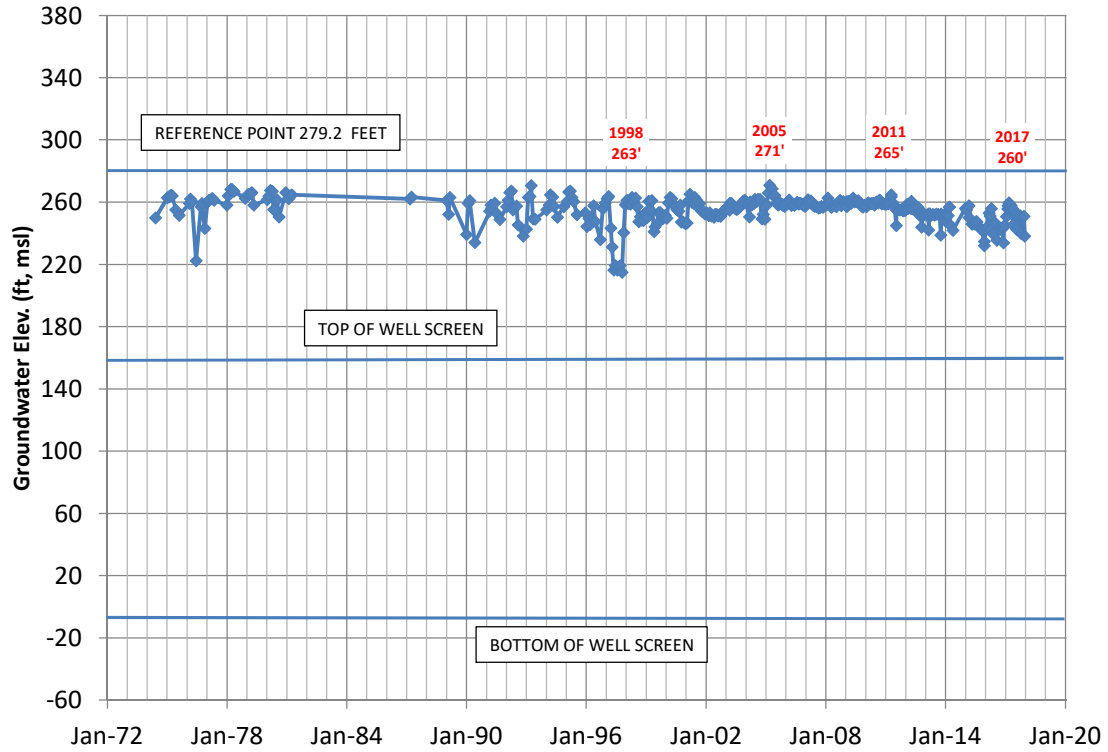
03N21W12E04S (120' - 284' bgs)



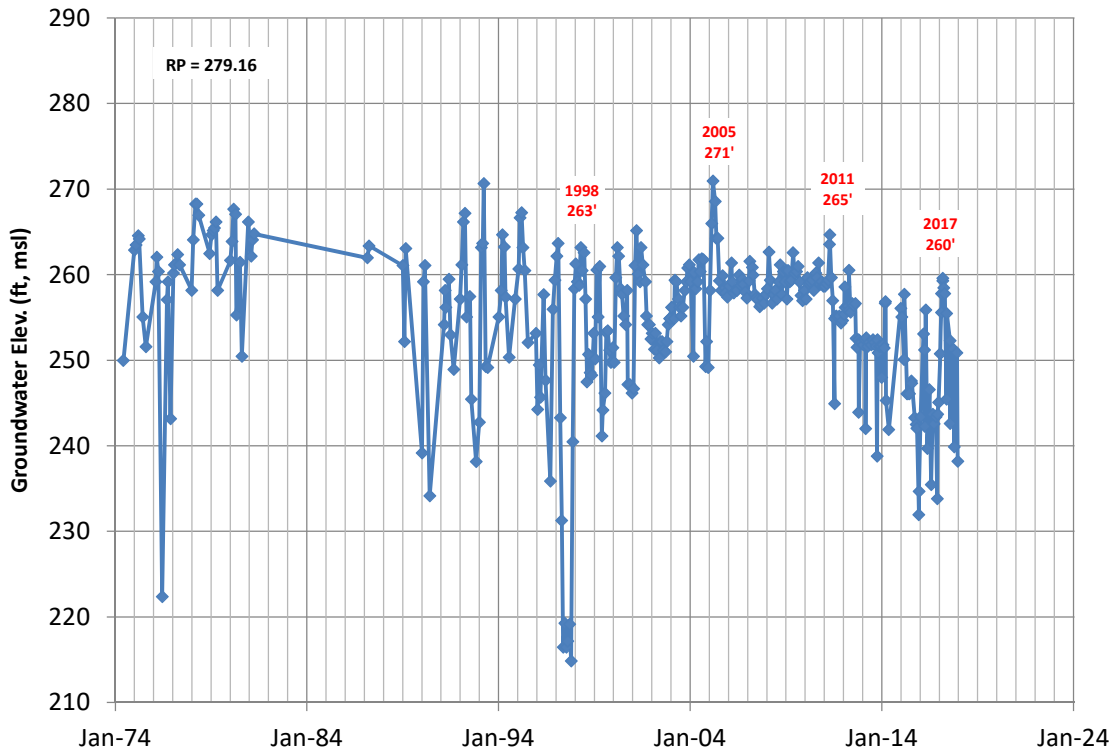
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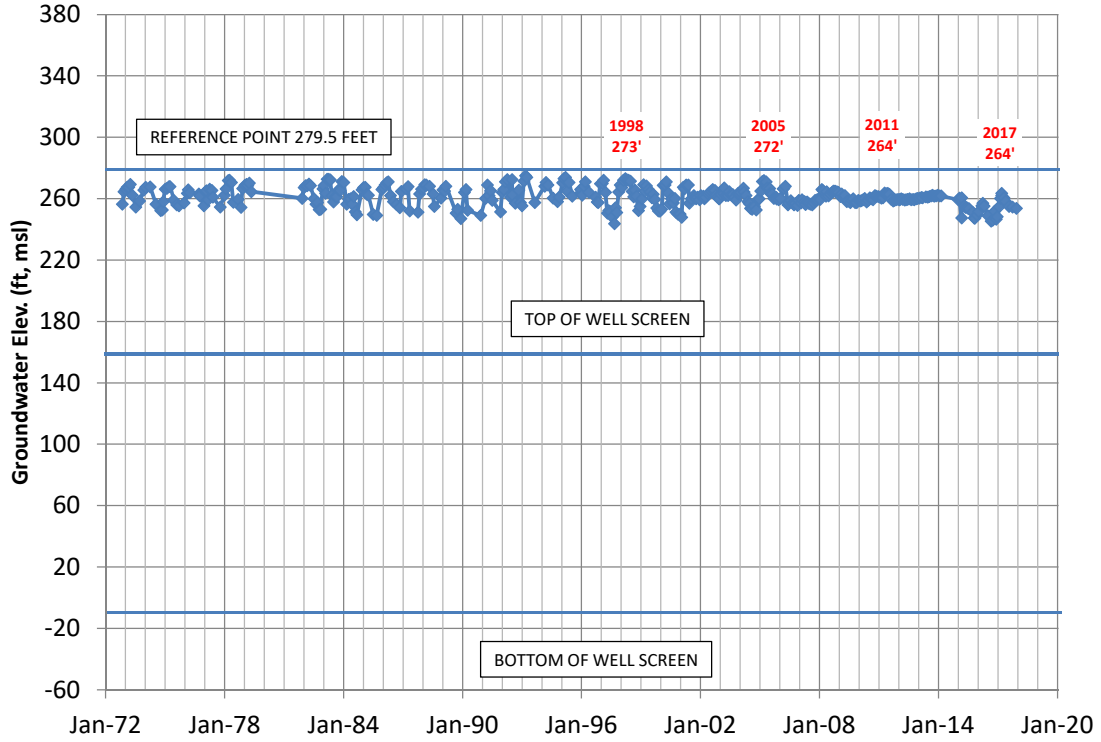
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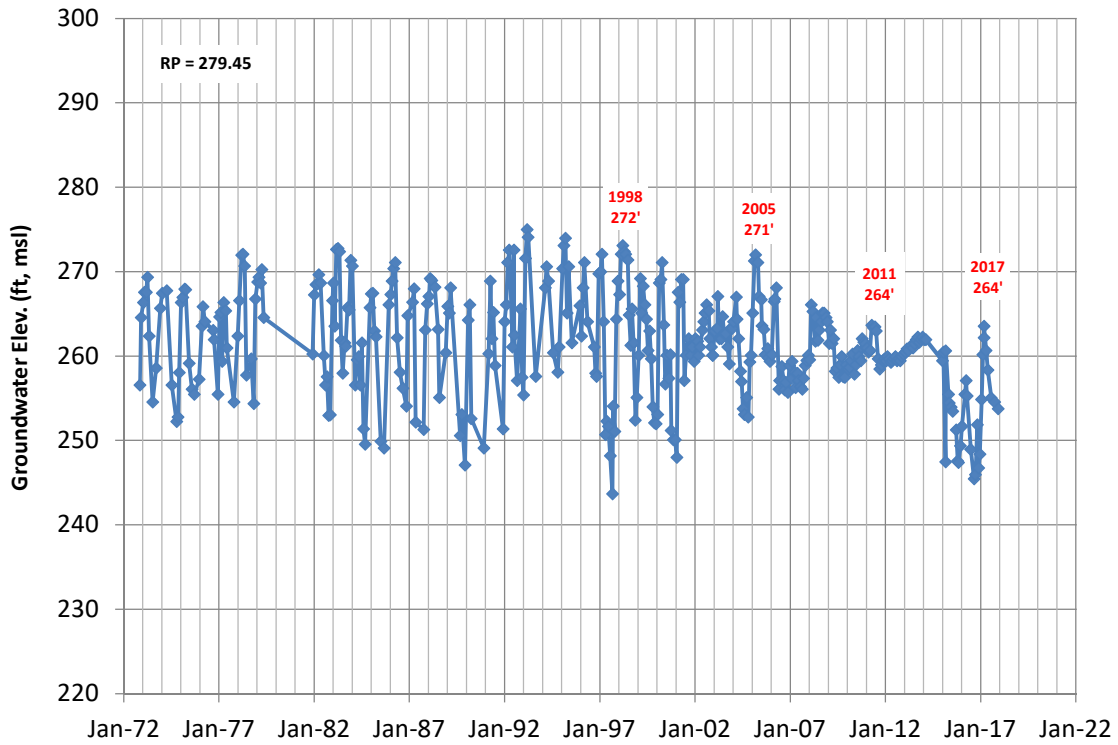
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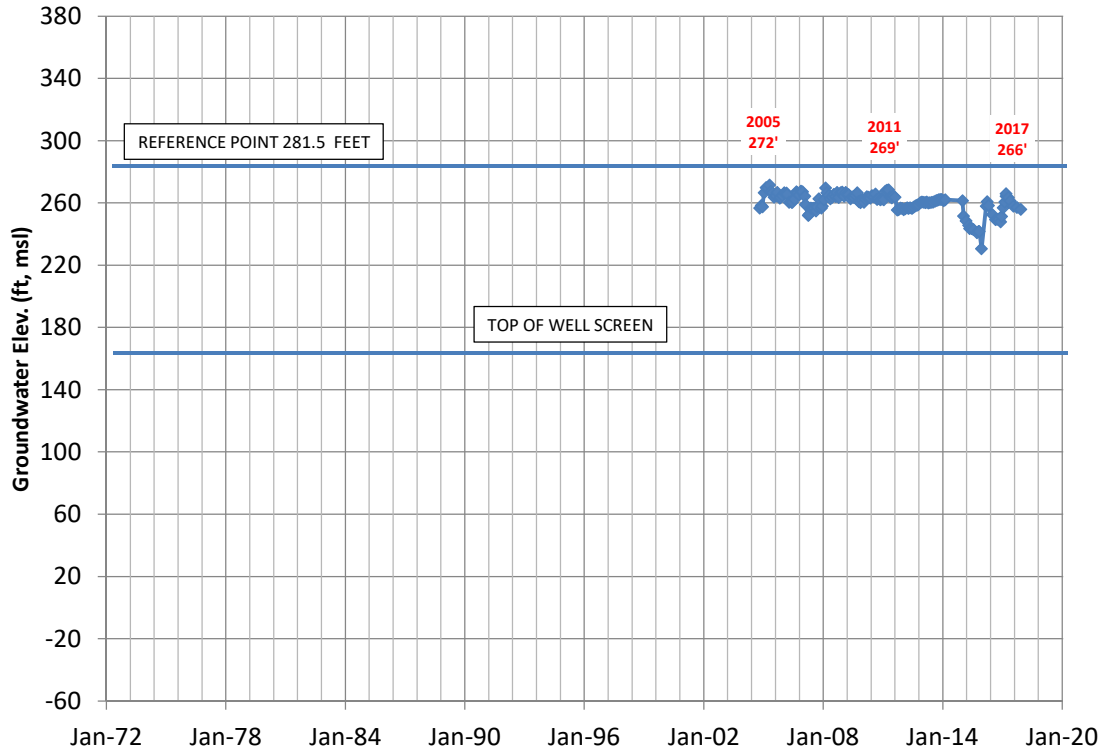
03N21W12F03S (120' - 284' bgs)



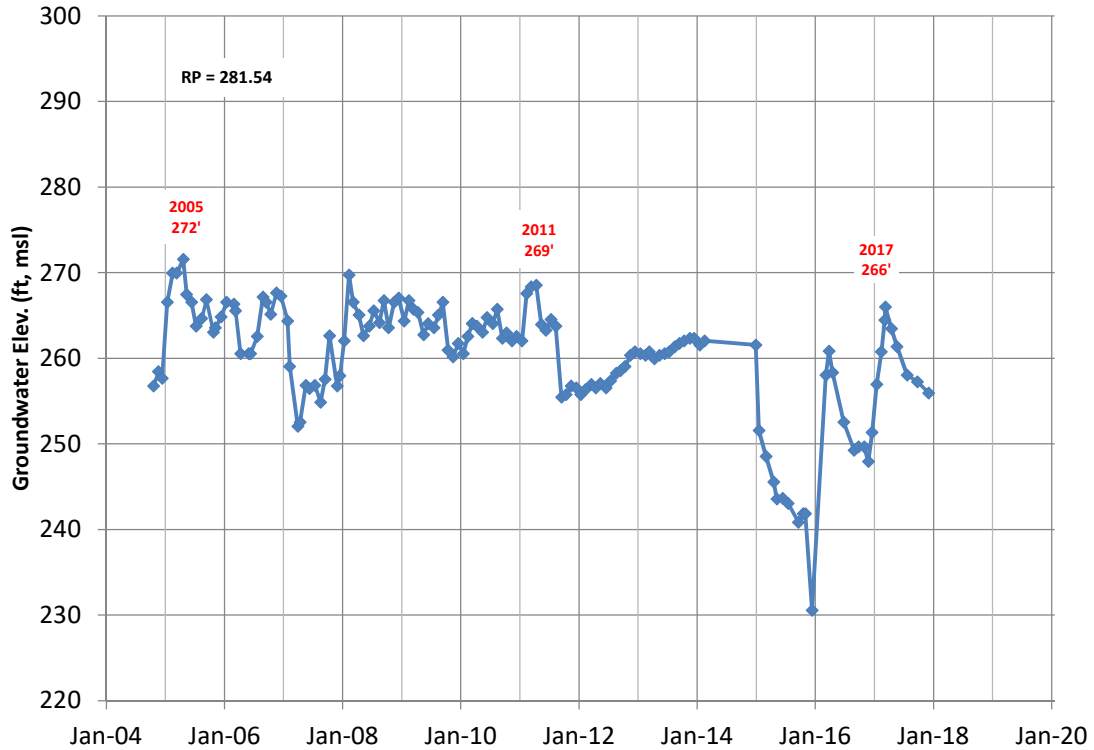
03N21W12F03S (120' - 284' bgs)



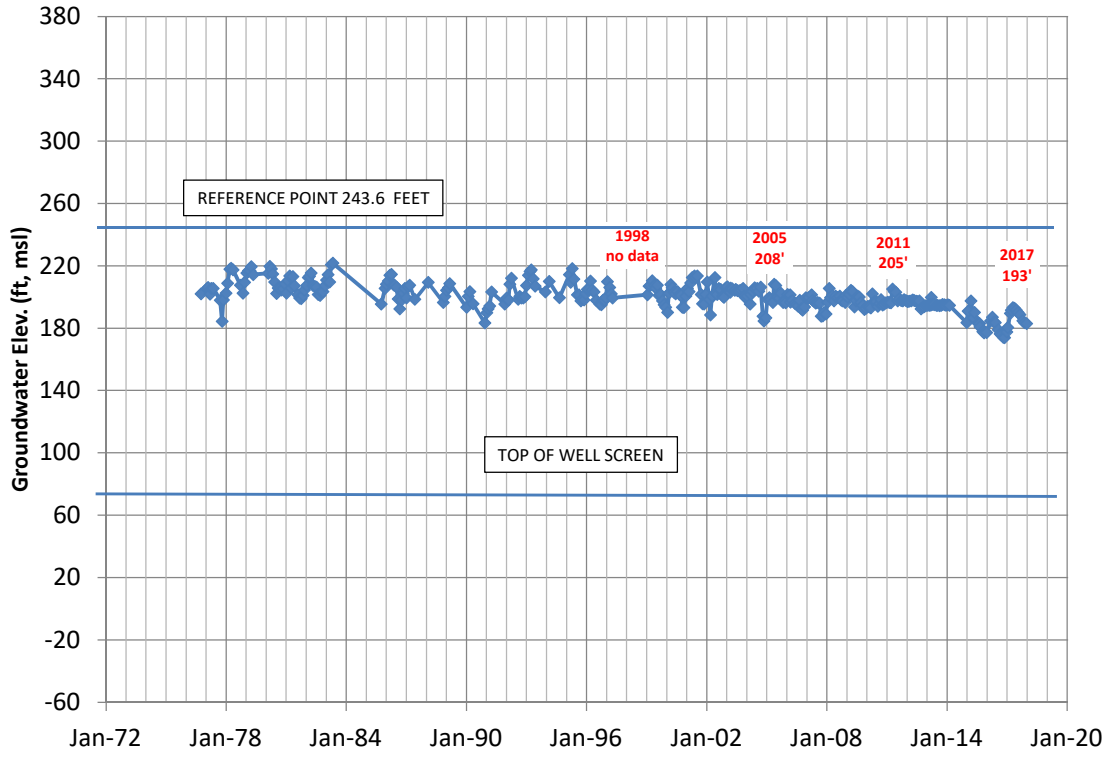
03N21W12F06S (120' - 395' bgs)



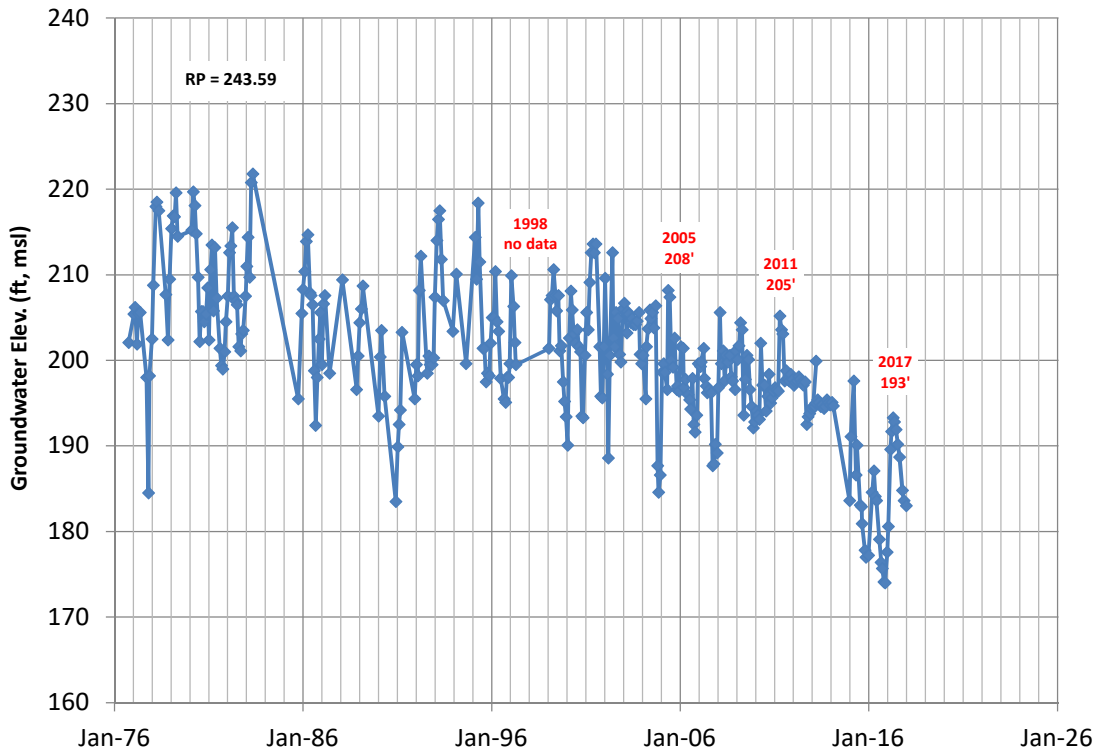
03N21W12F06S (120' - 395' bgs)



03N21W15C02S (176' - 372' bgs)

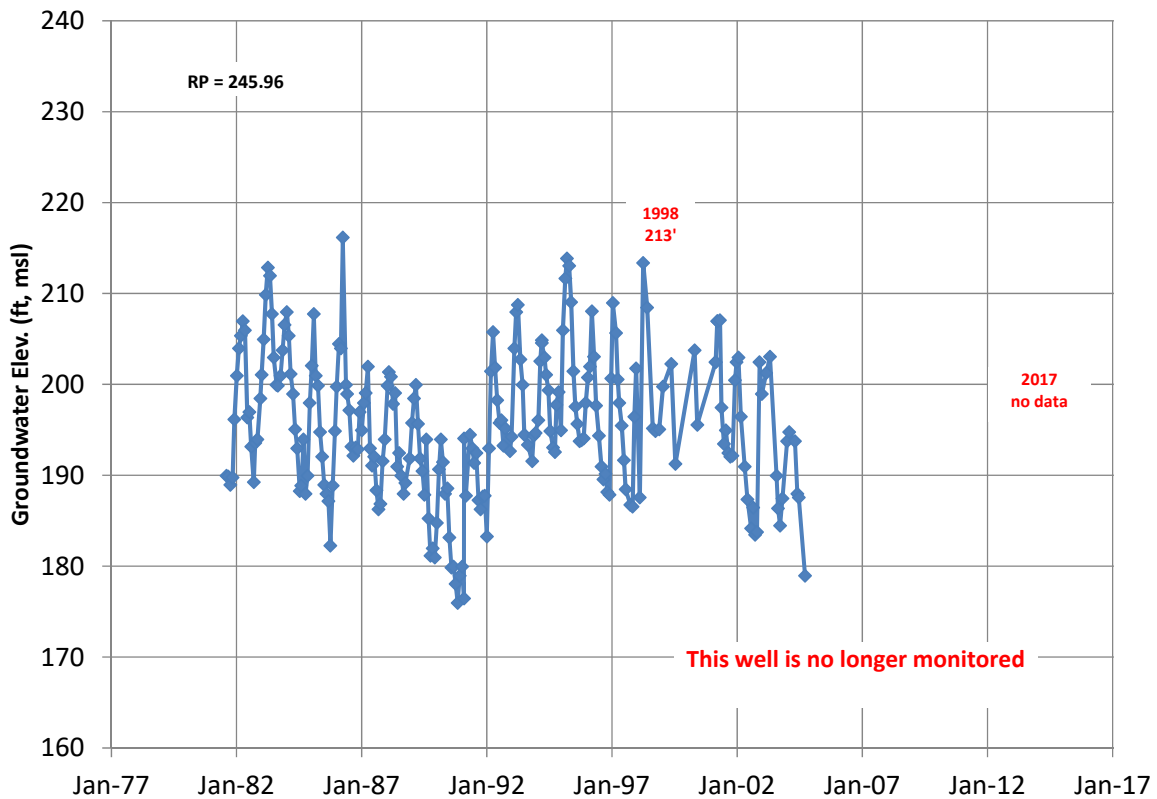


03N21W15C02S (176' - 322' bgs)

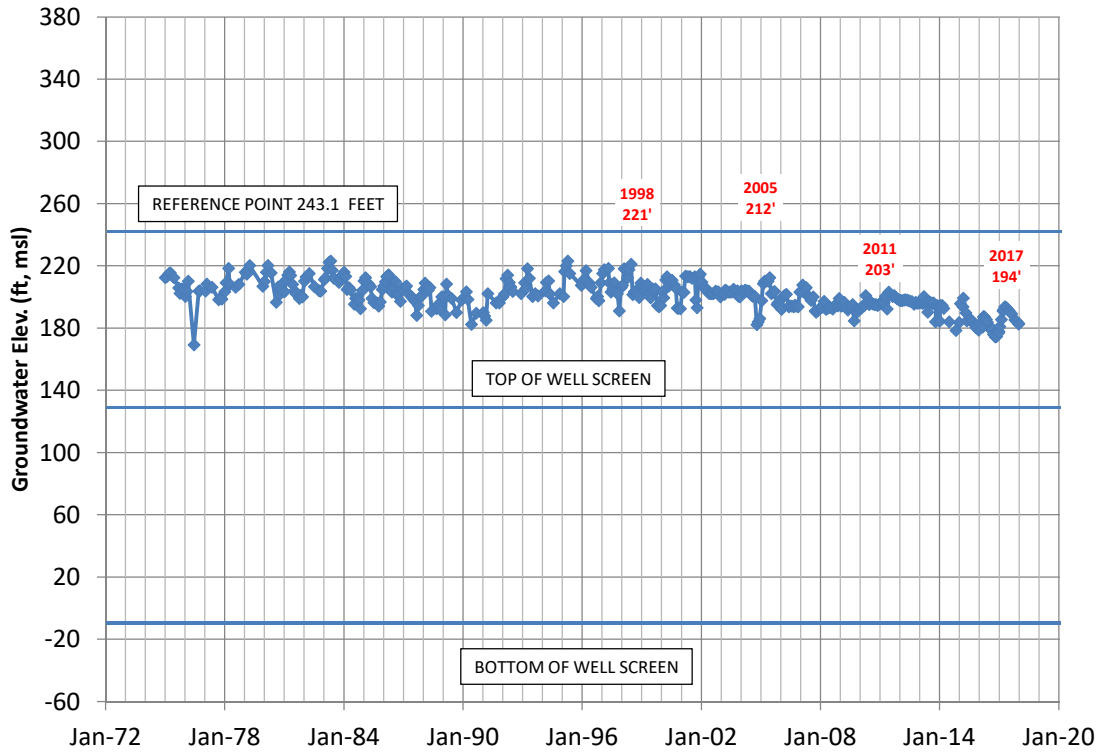


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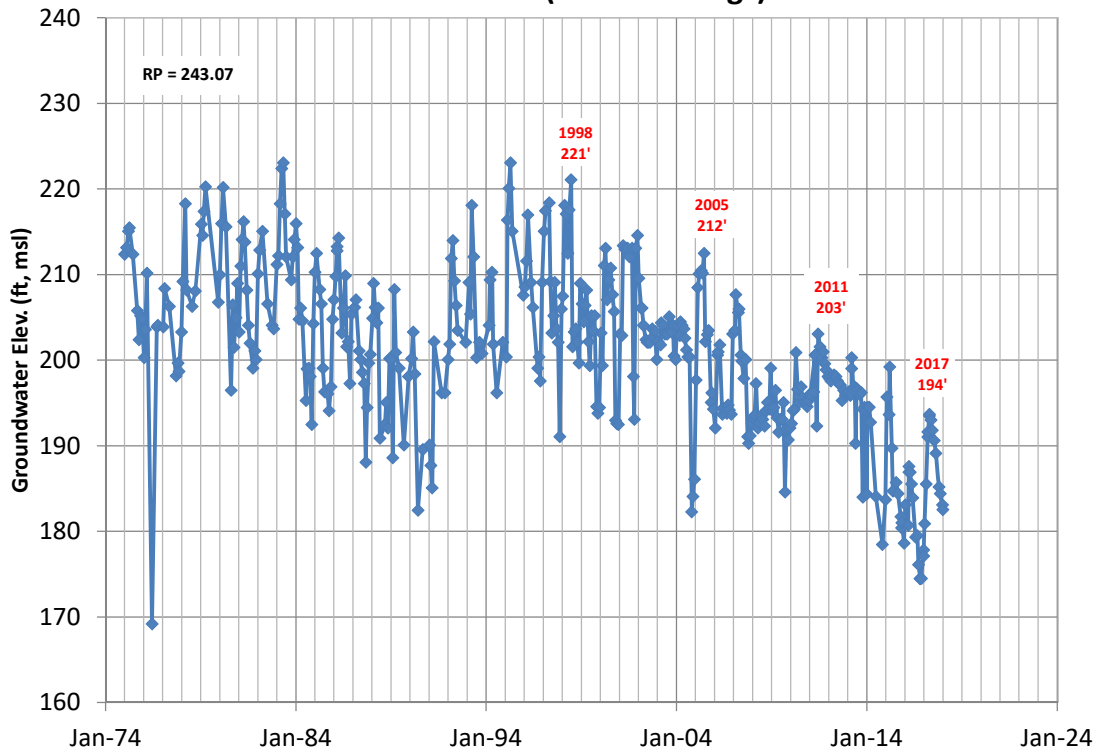
03N21W15C03S (depth 272' bgs)



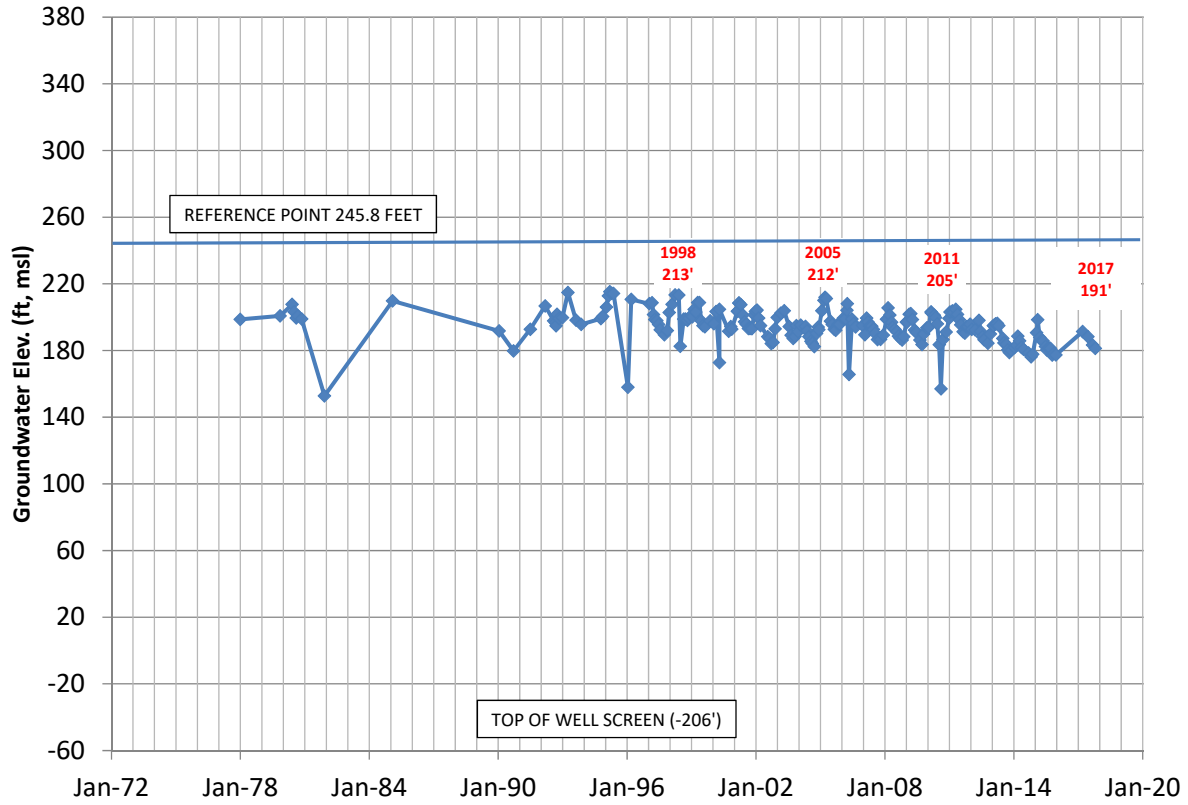
03N21W15C04S (112' - 254' bgs)



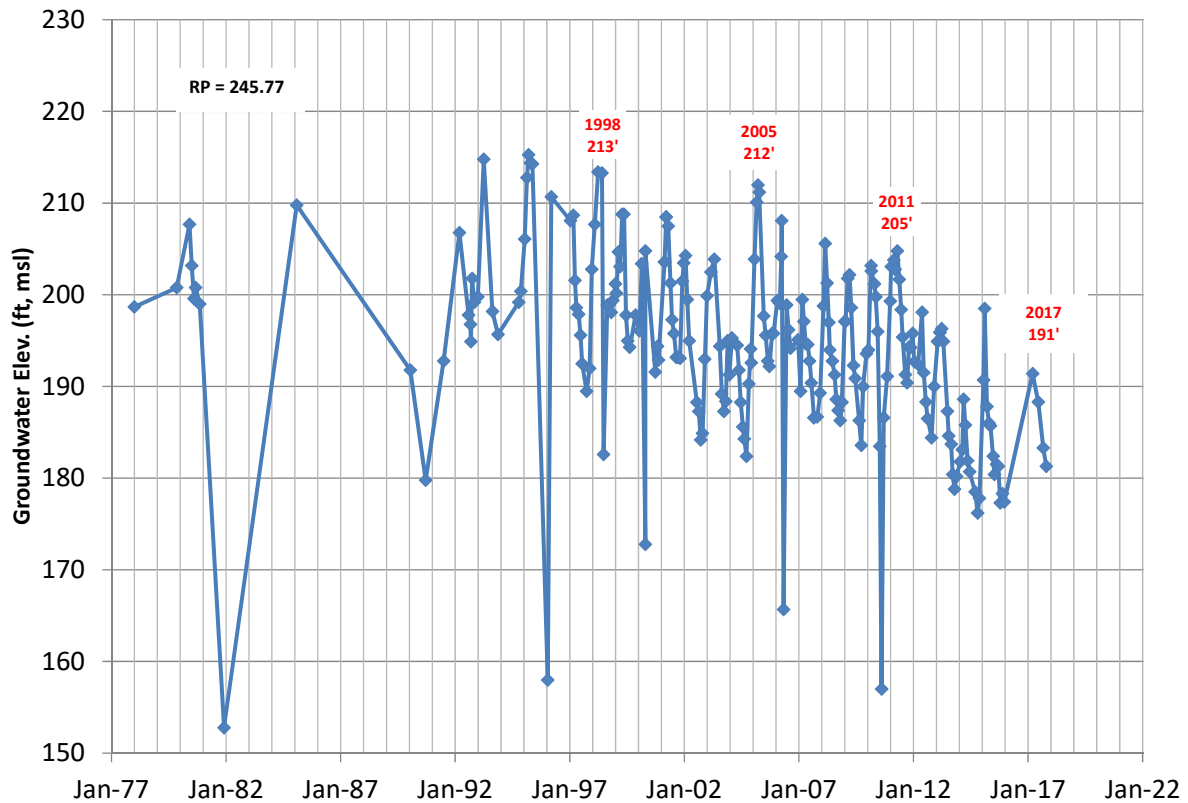
03N21W15C04S (112' - 253' bgs)



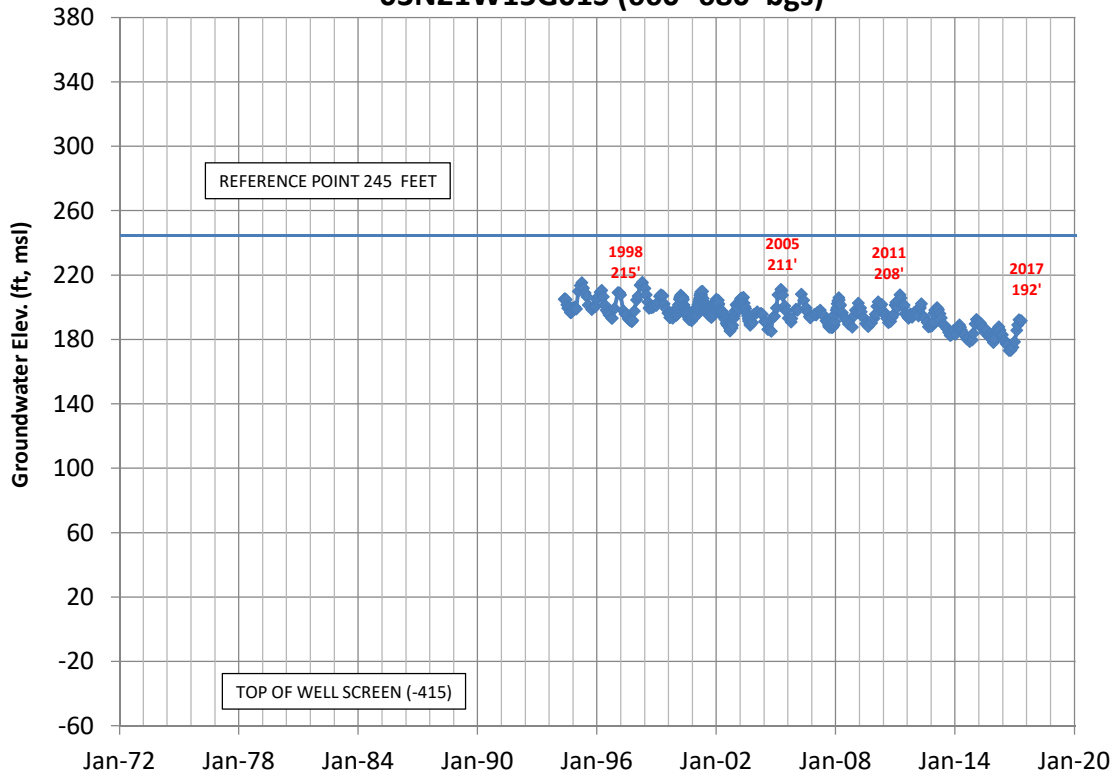
03N21W15C06S (452' - 653' bgs)



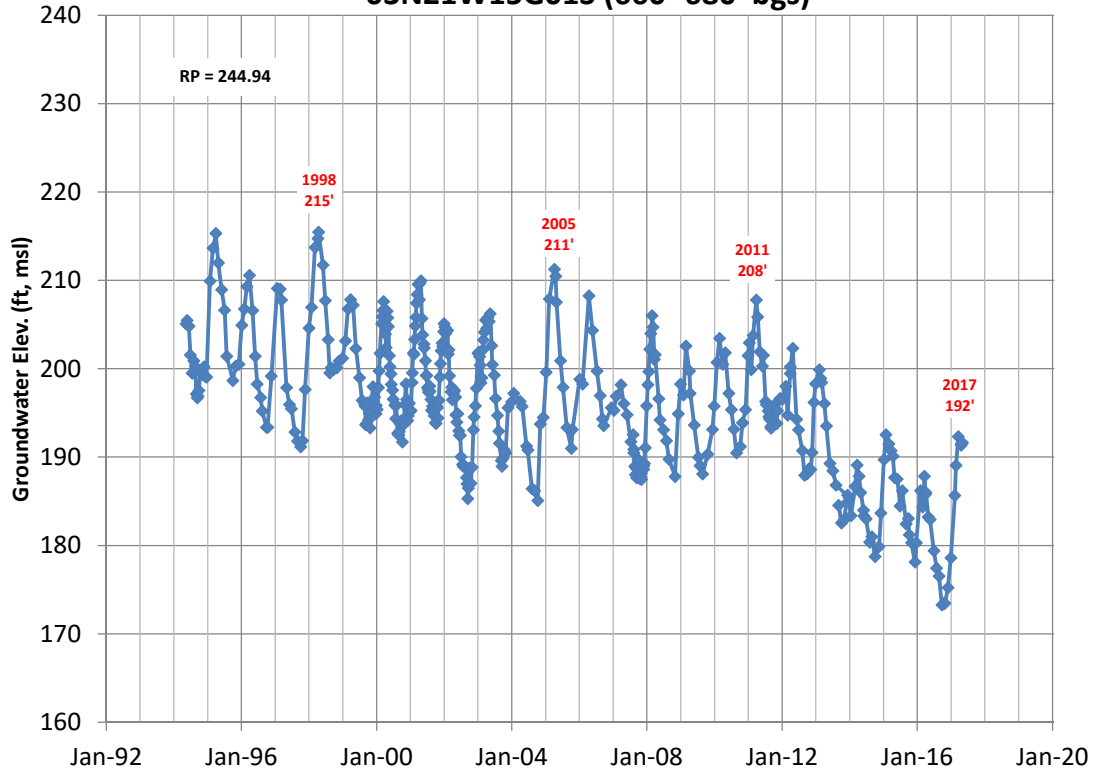
03N21W15C06S (452' - 653' bgs)



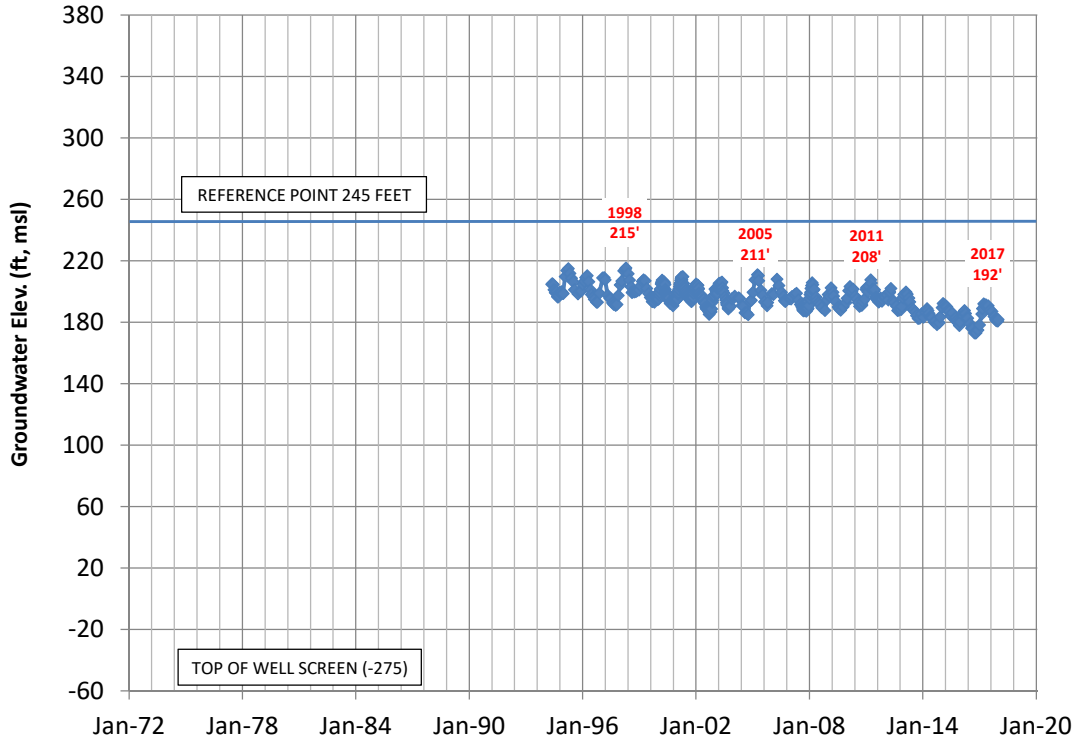
03N21W15G01S (660'-680' bgs)



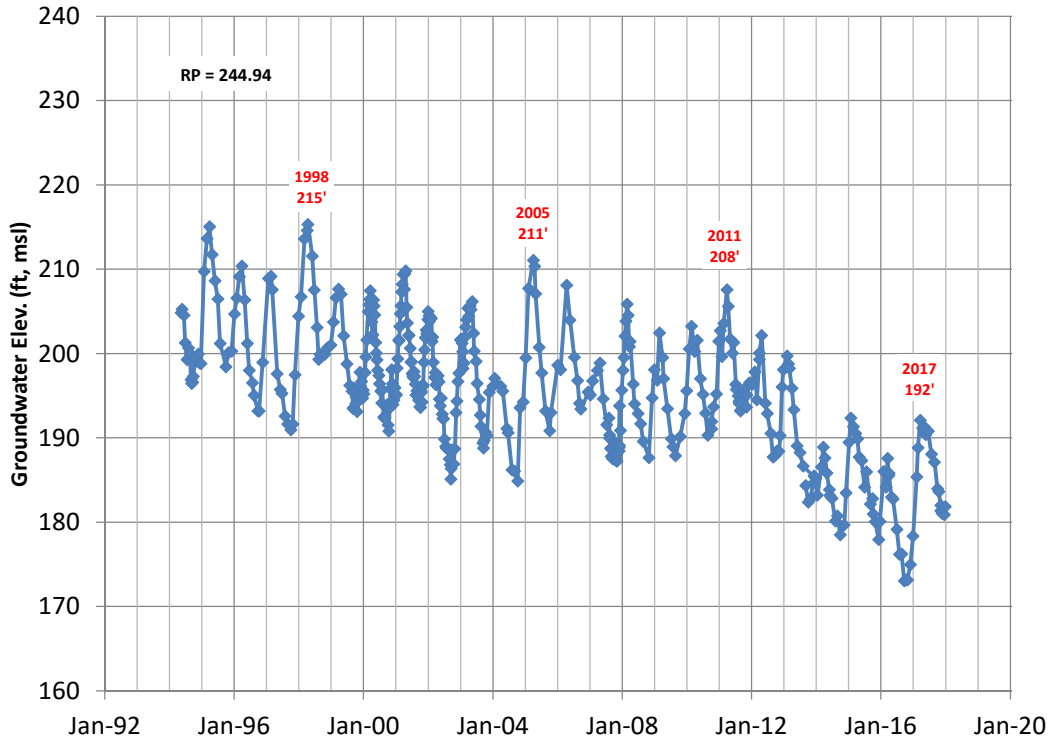
03N21W15G01S (660'-680' bgs)



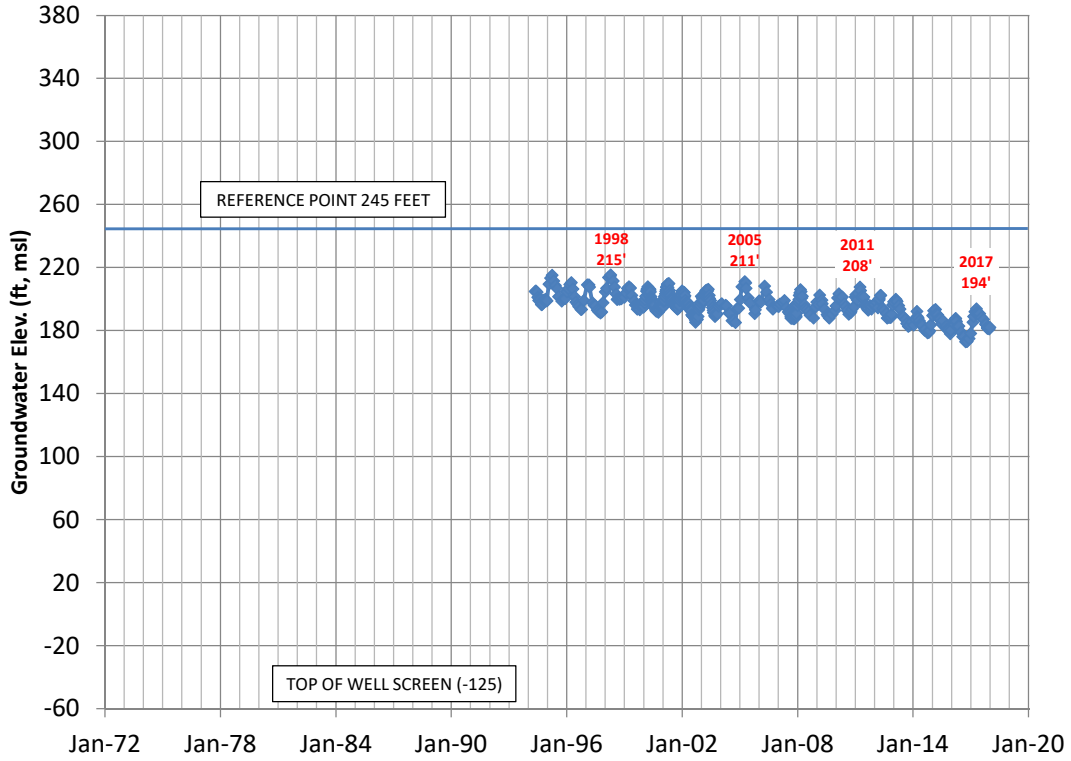
03N21W15G02S (520' - 540' bgs)



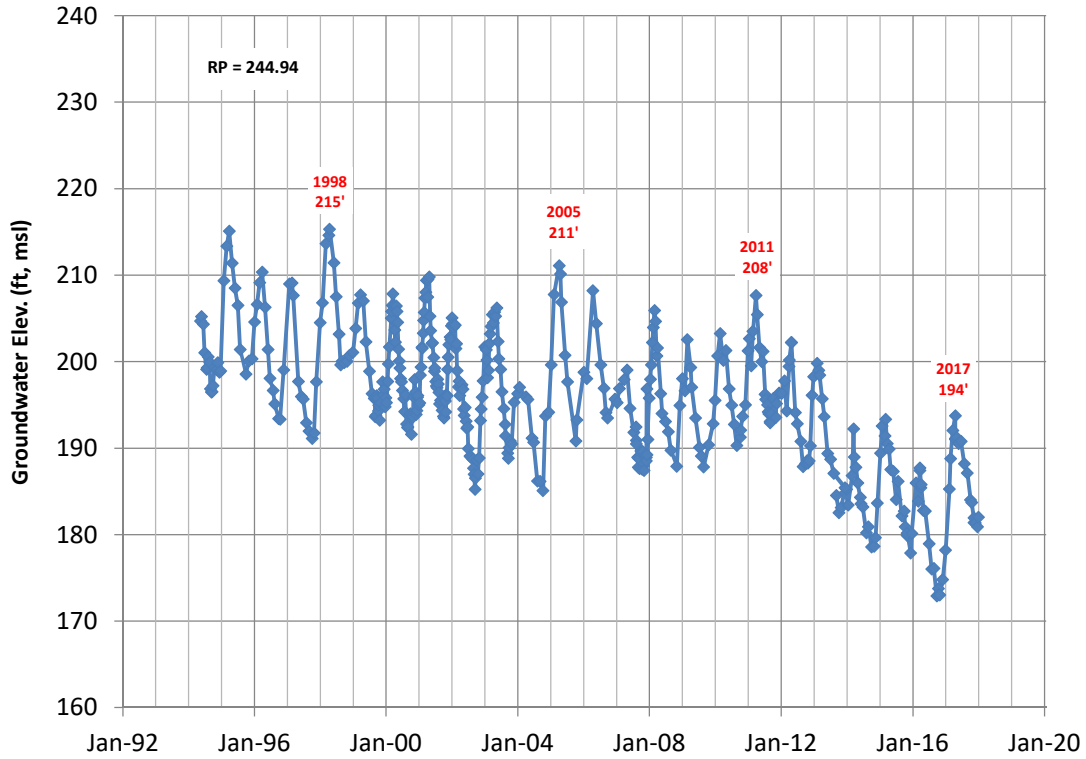
03N21W15G02S (520' - 540' bgs)



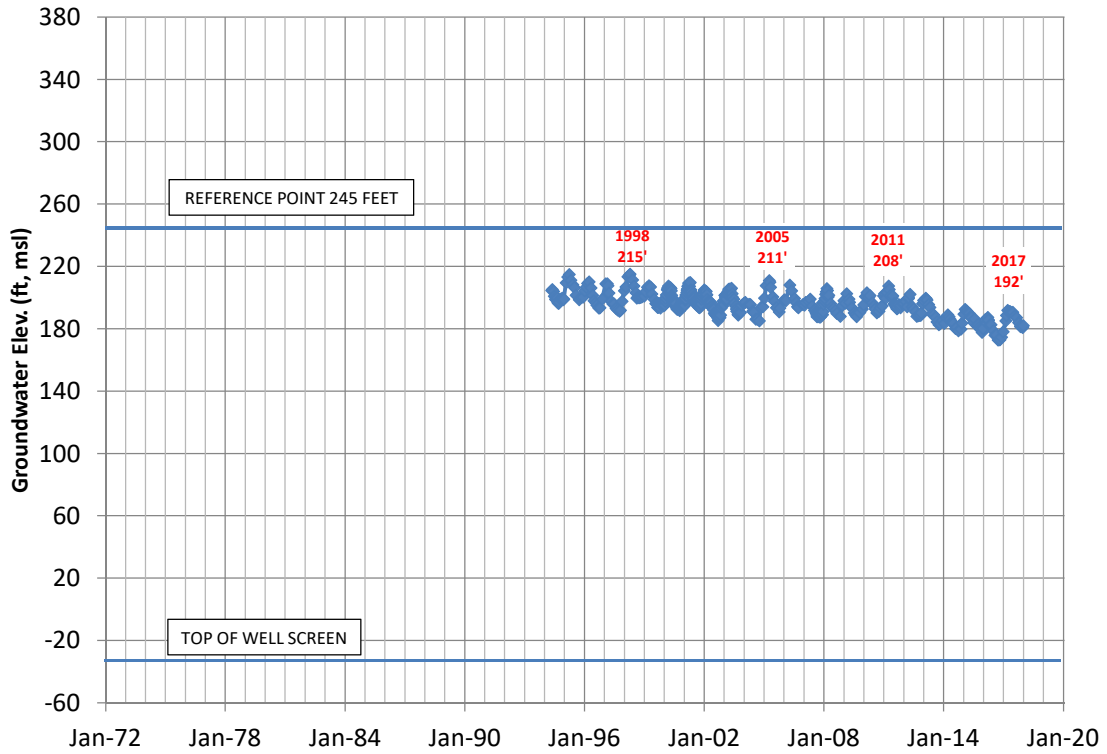
03N21W15G03S (370' - 390' bgs)



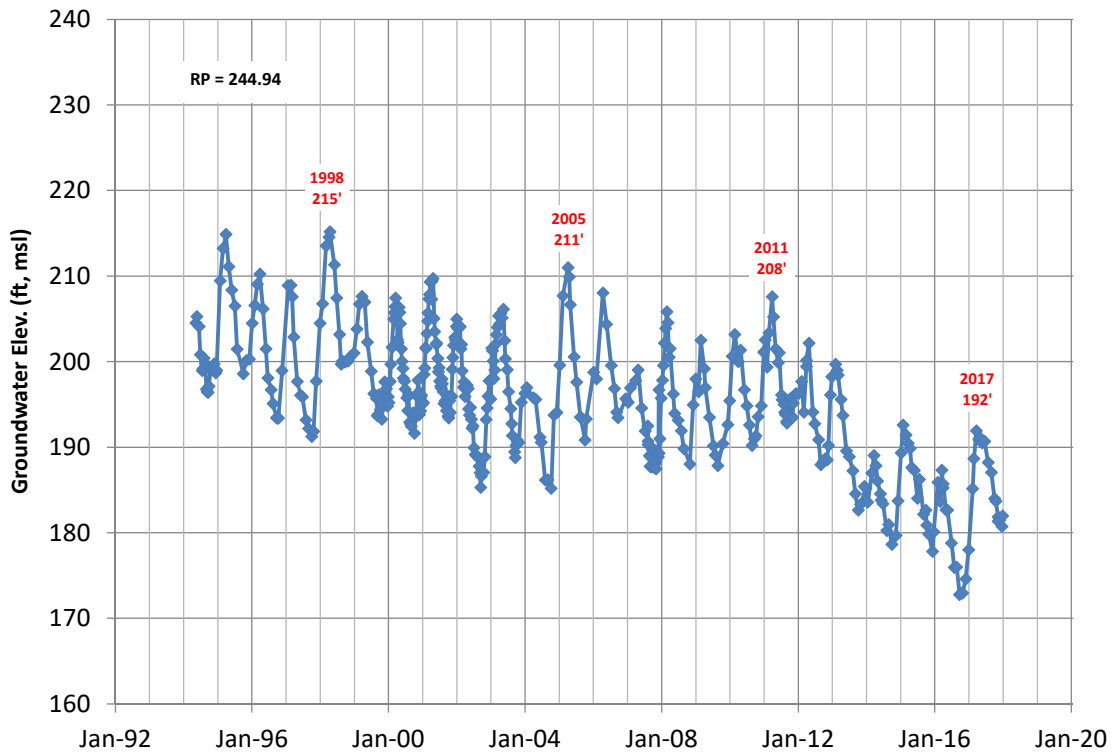
03N21W15G03S (370' - 390' bgs)

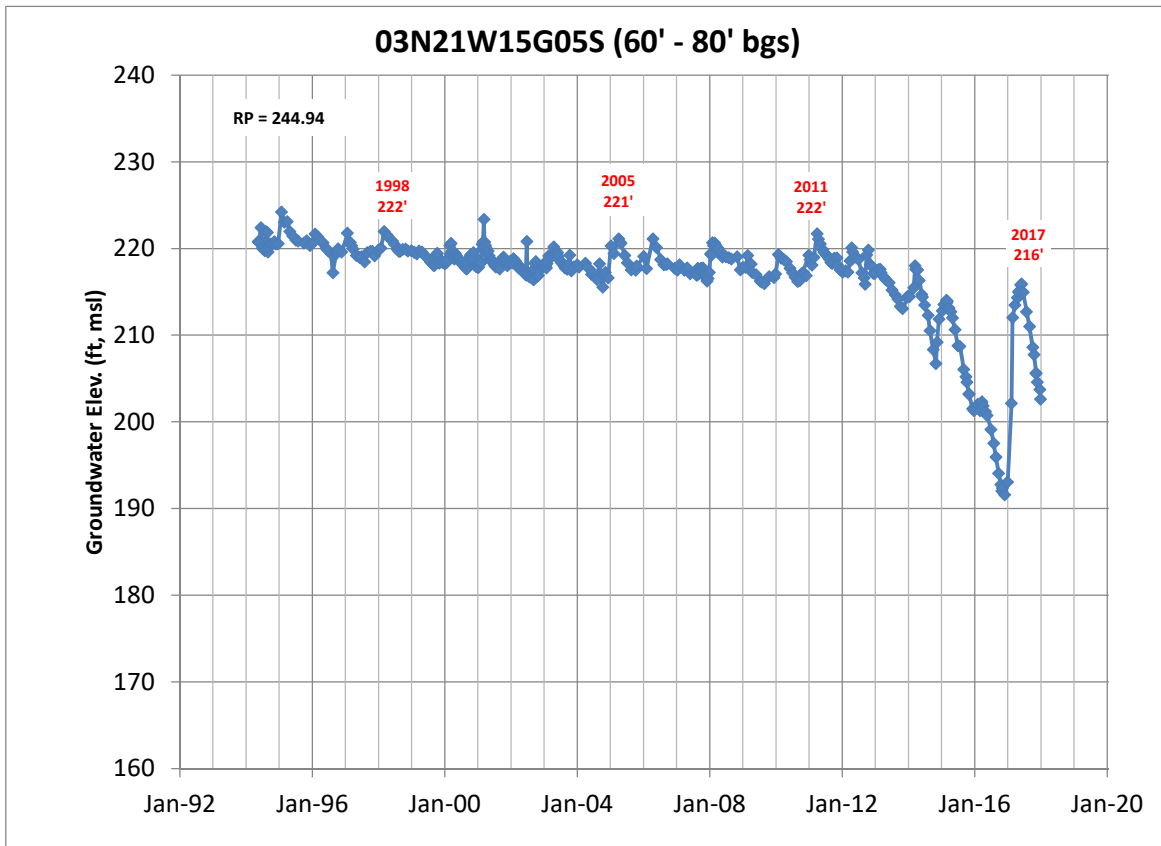
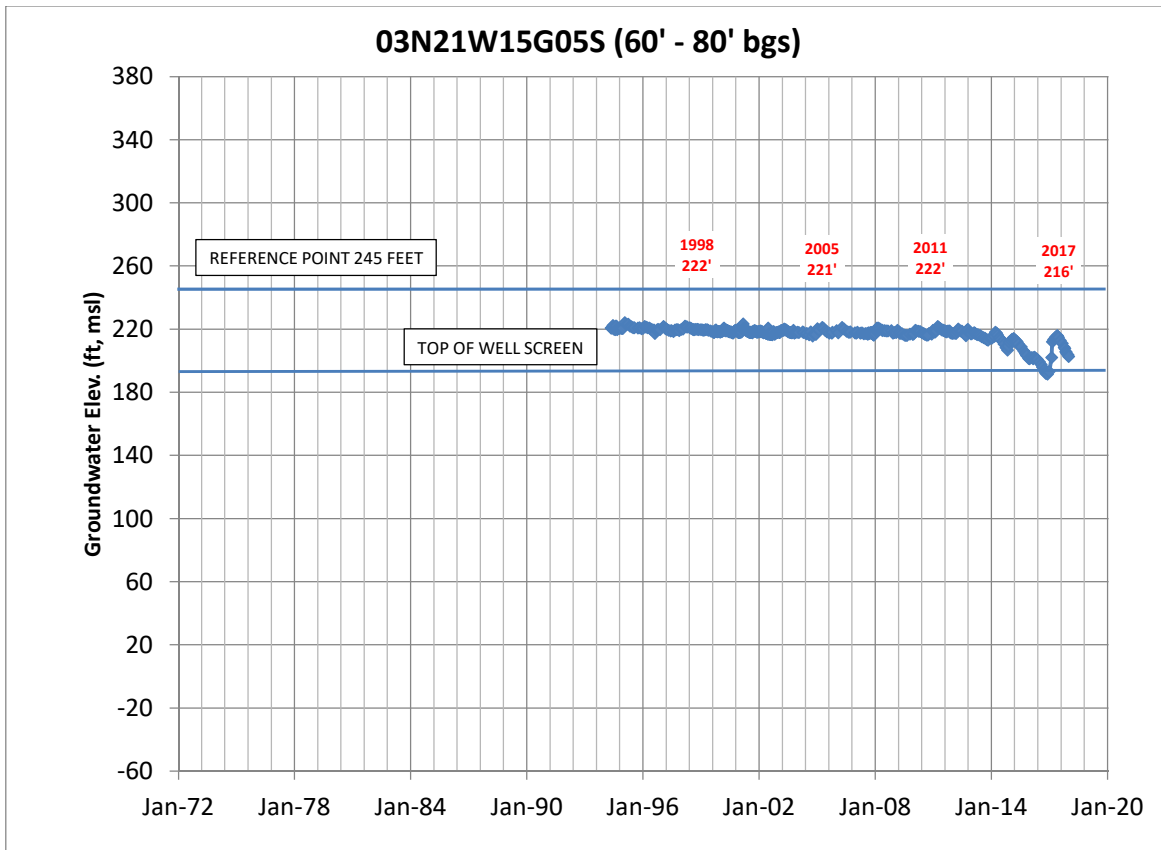


03N21W15G04S (260' - 280' bgs)

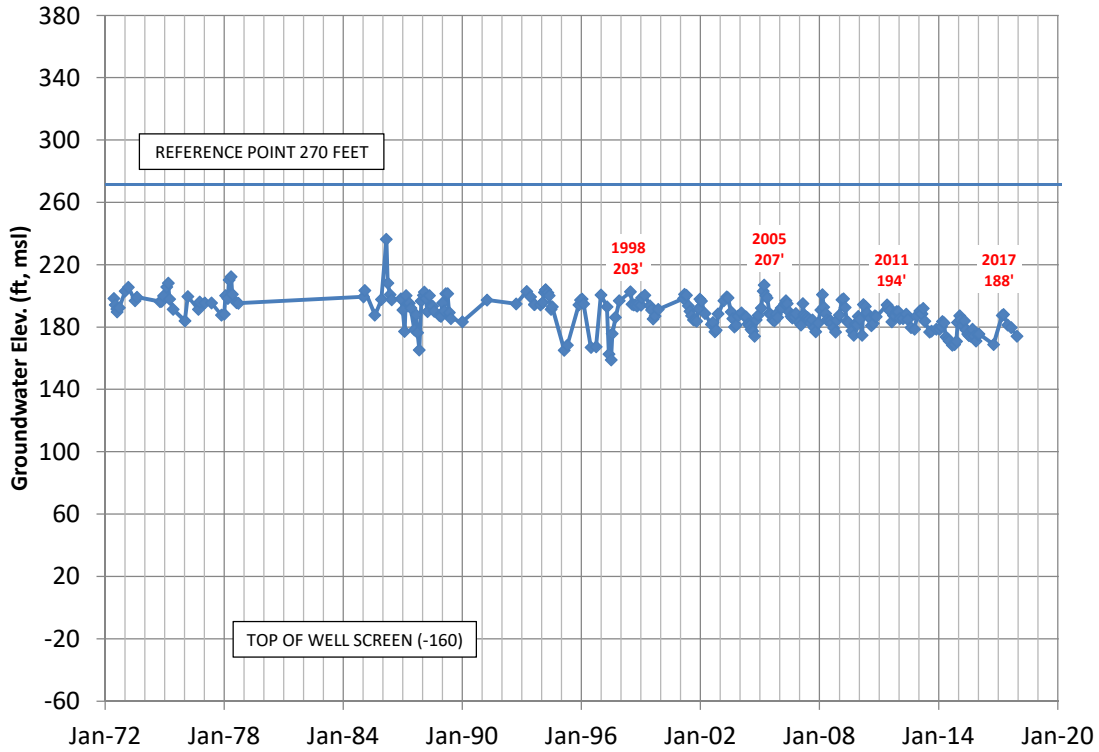


03N21W15G04S (260' - 280' bgs)

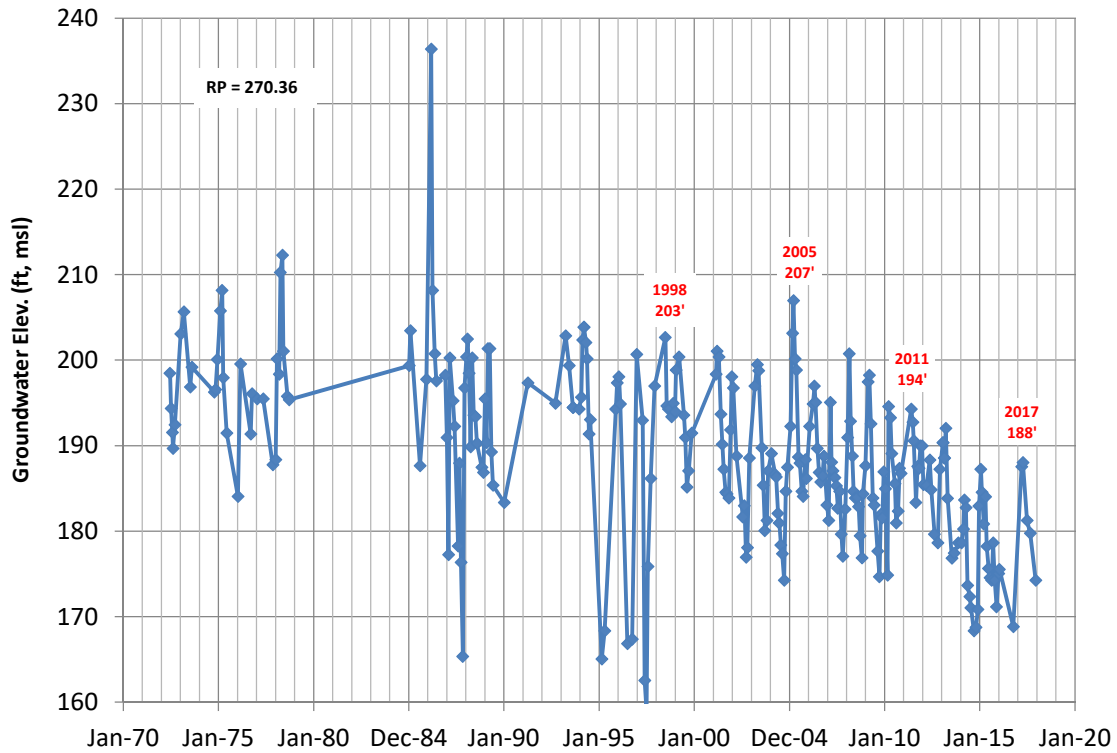




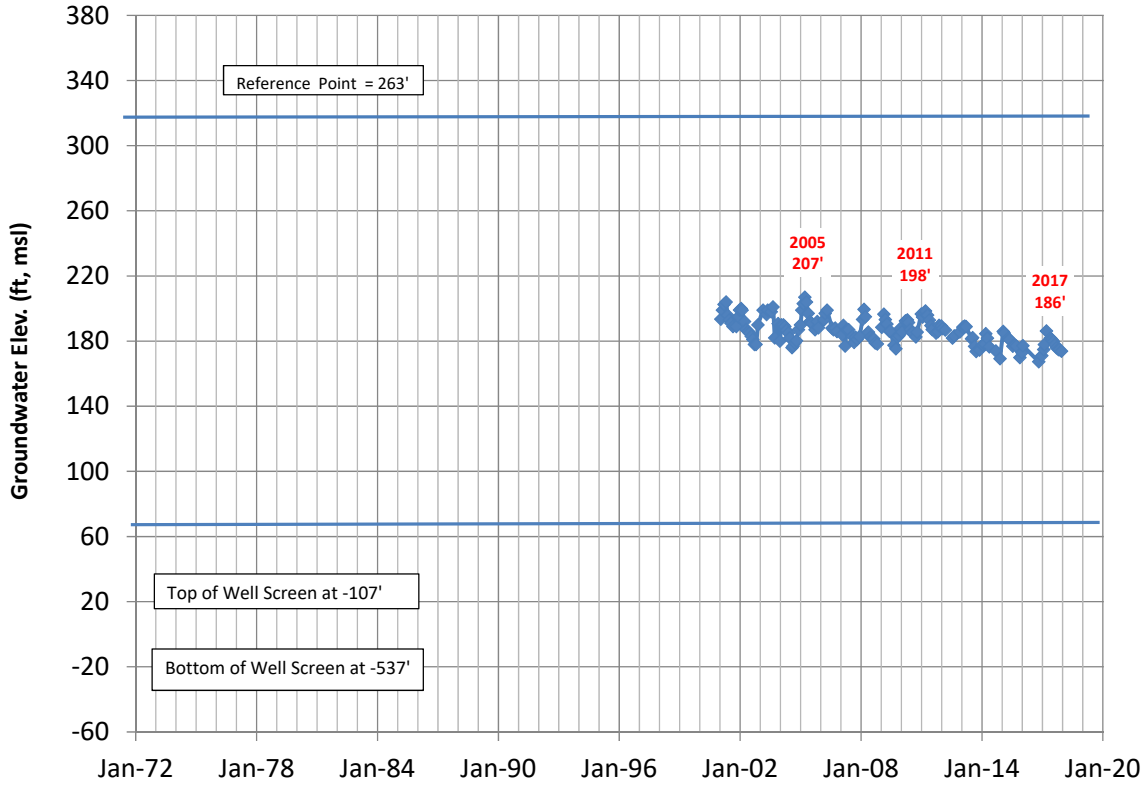
03N21W16A02S (430' -580' bgs)



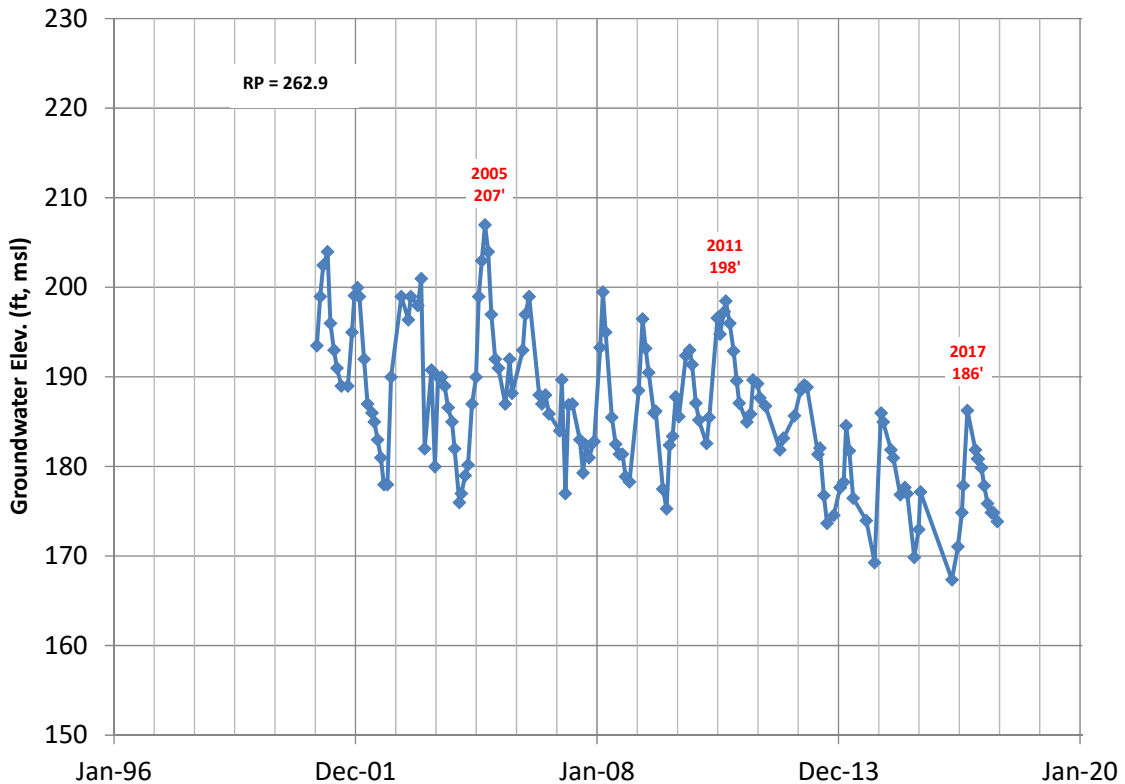
03N21W16A02S (430' -580' bgs)



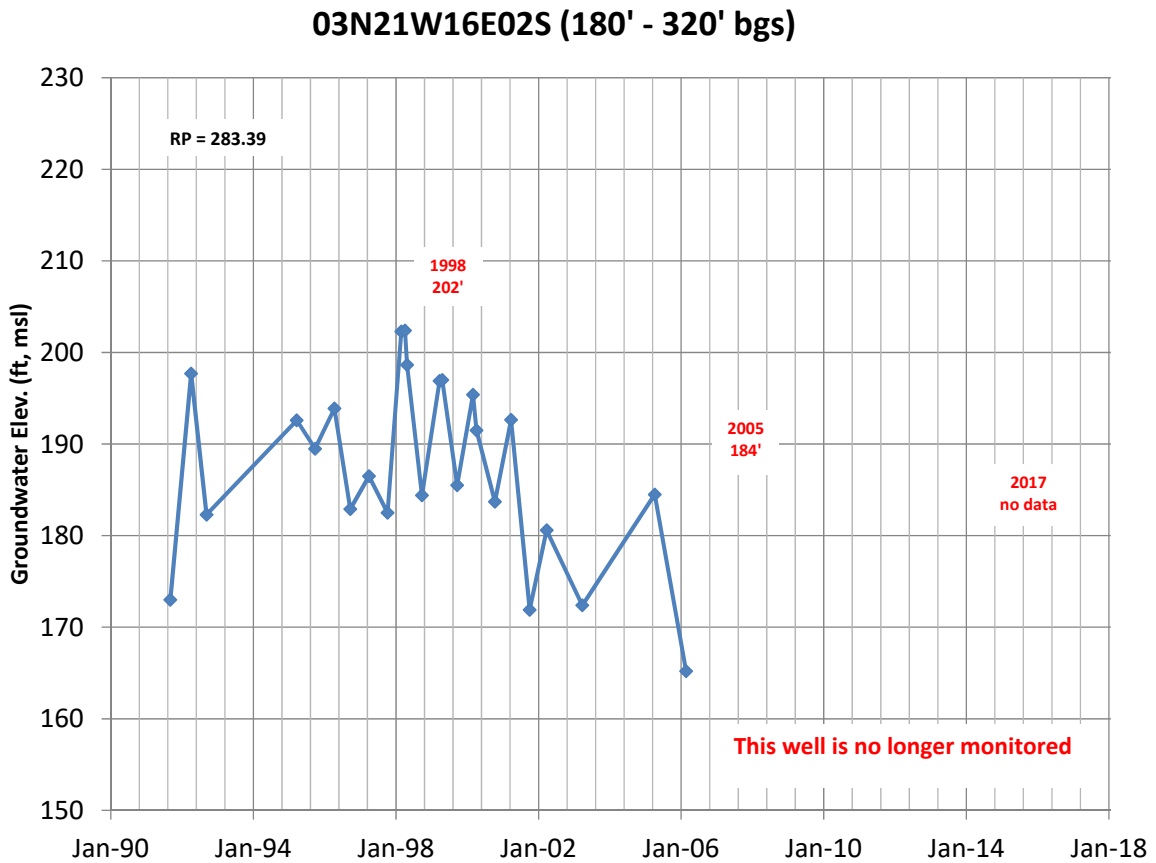
03N21W16A03S (370' - 800' bgs)



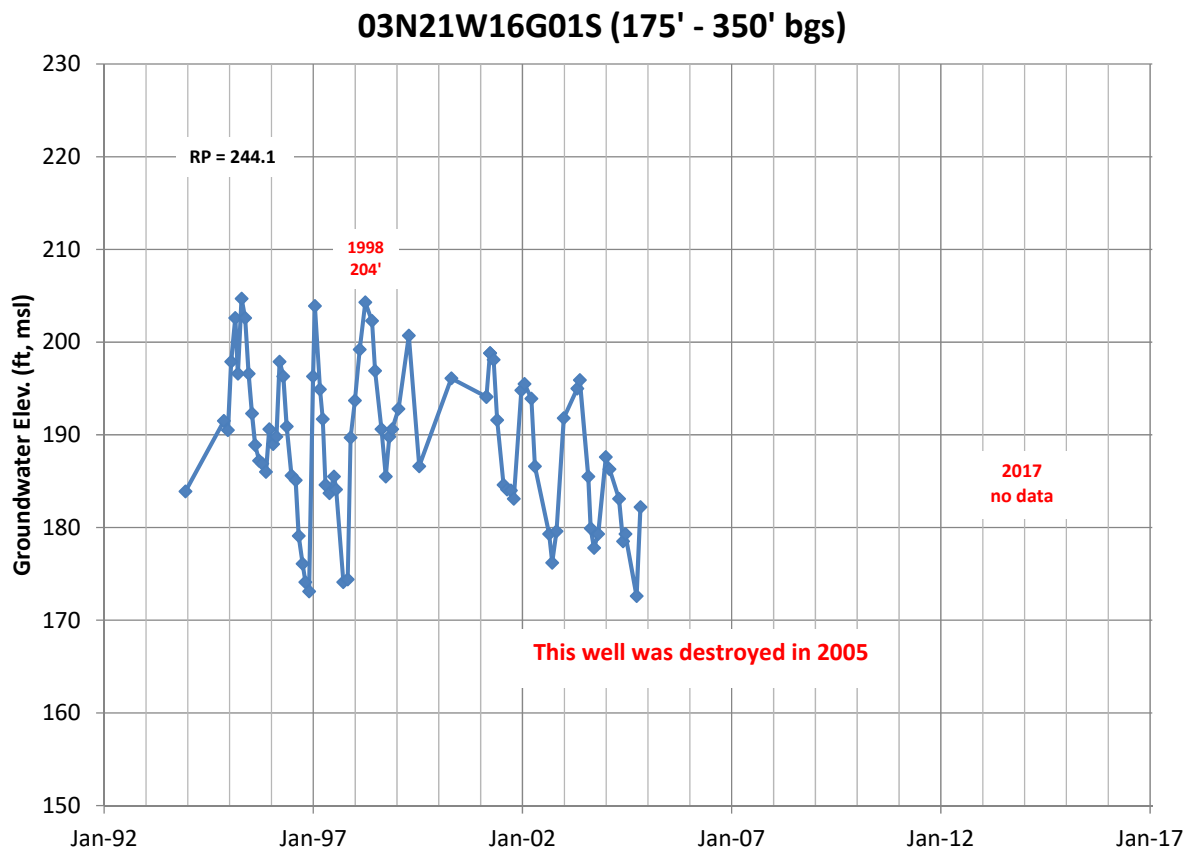
03N21W16A03S (370' - 800' bgs)



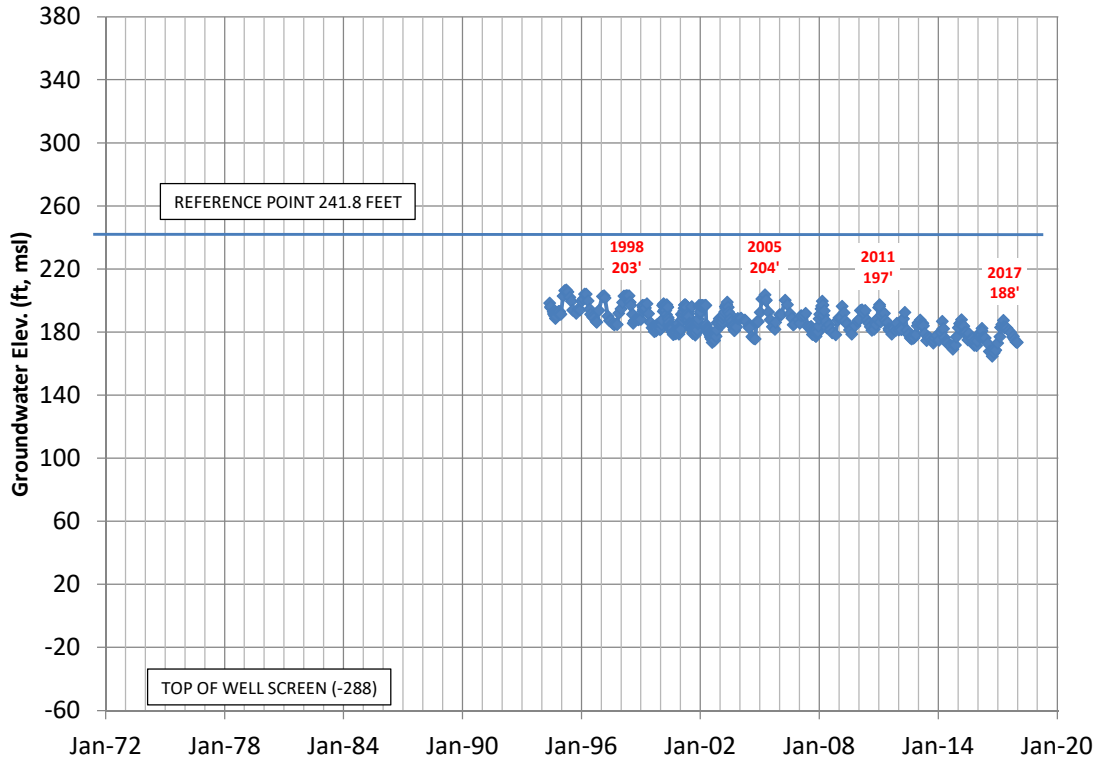
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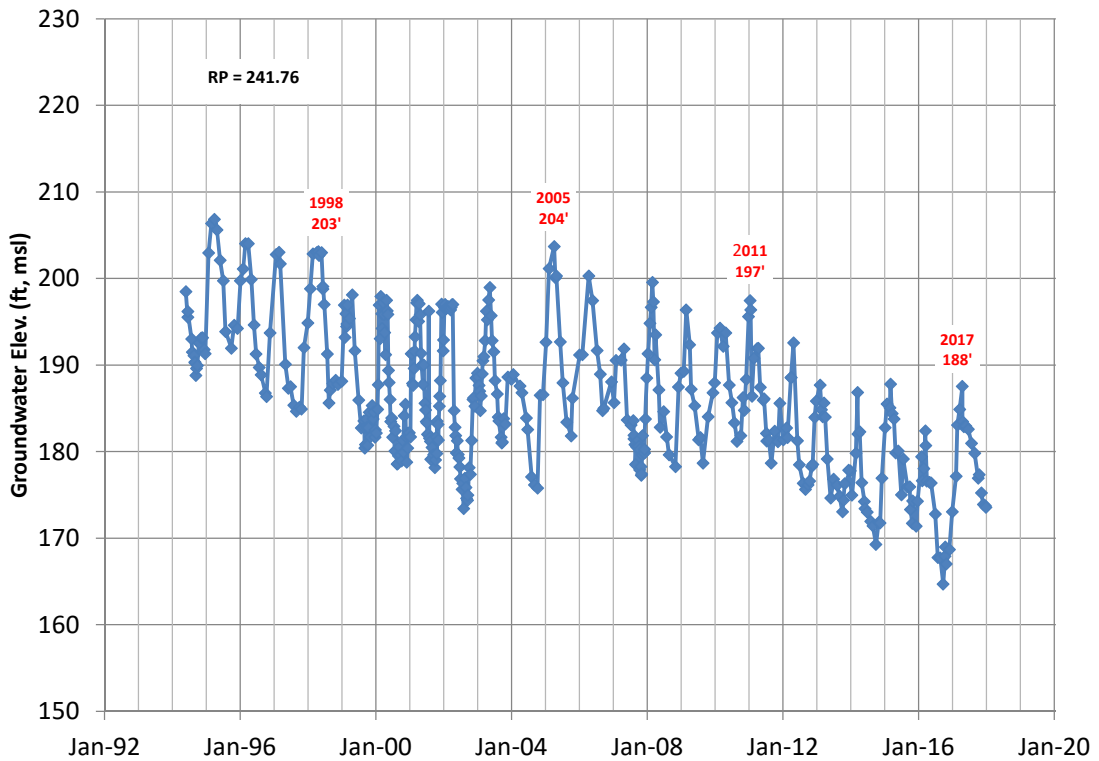
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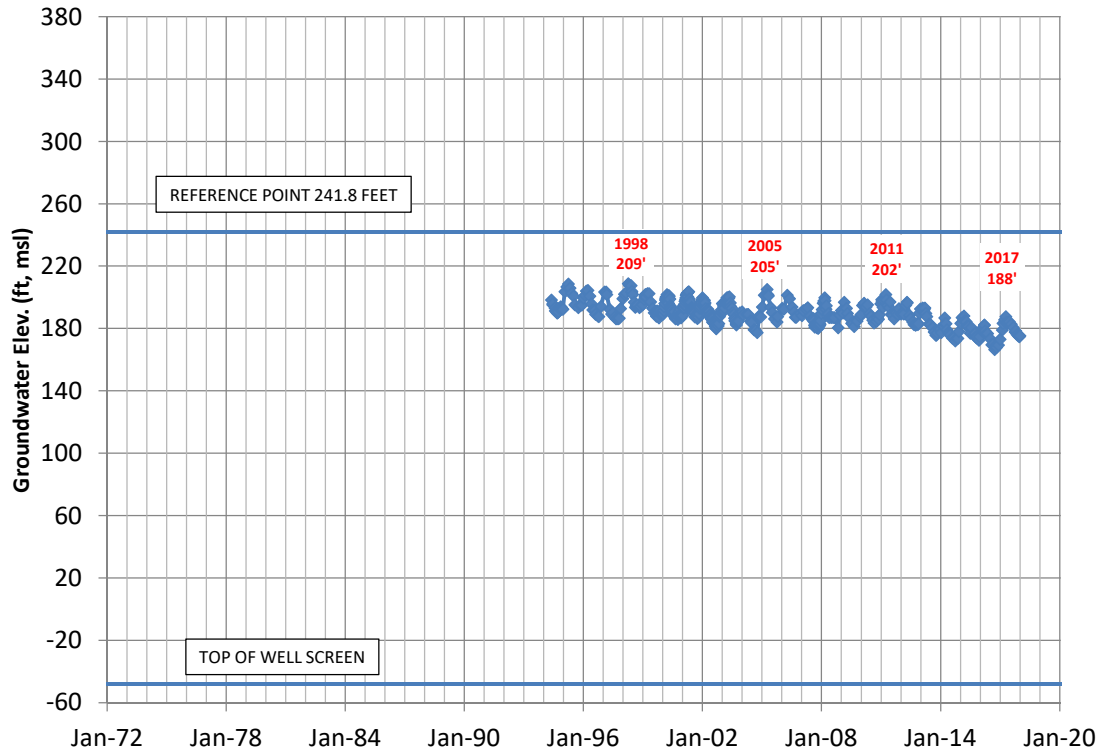
03N21W16H05S (530'-550' bgs)



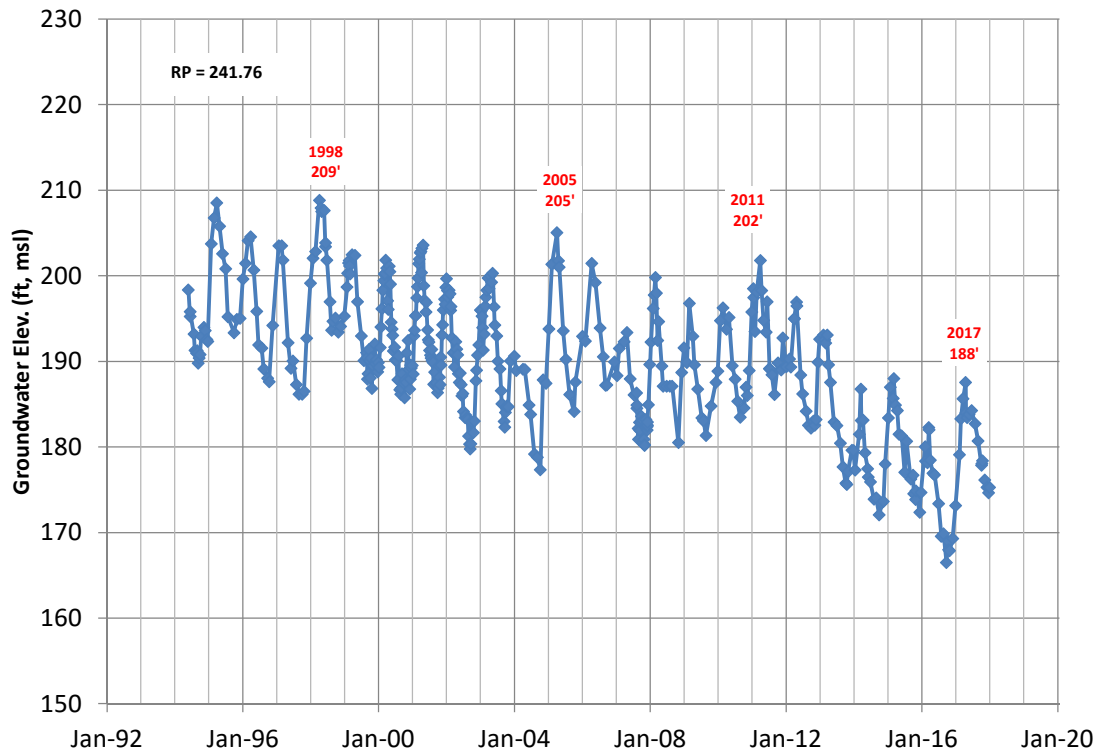
03N21W16H05S (530'-550' bgs)



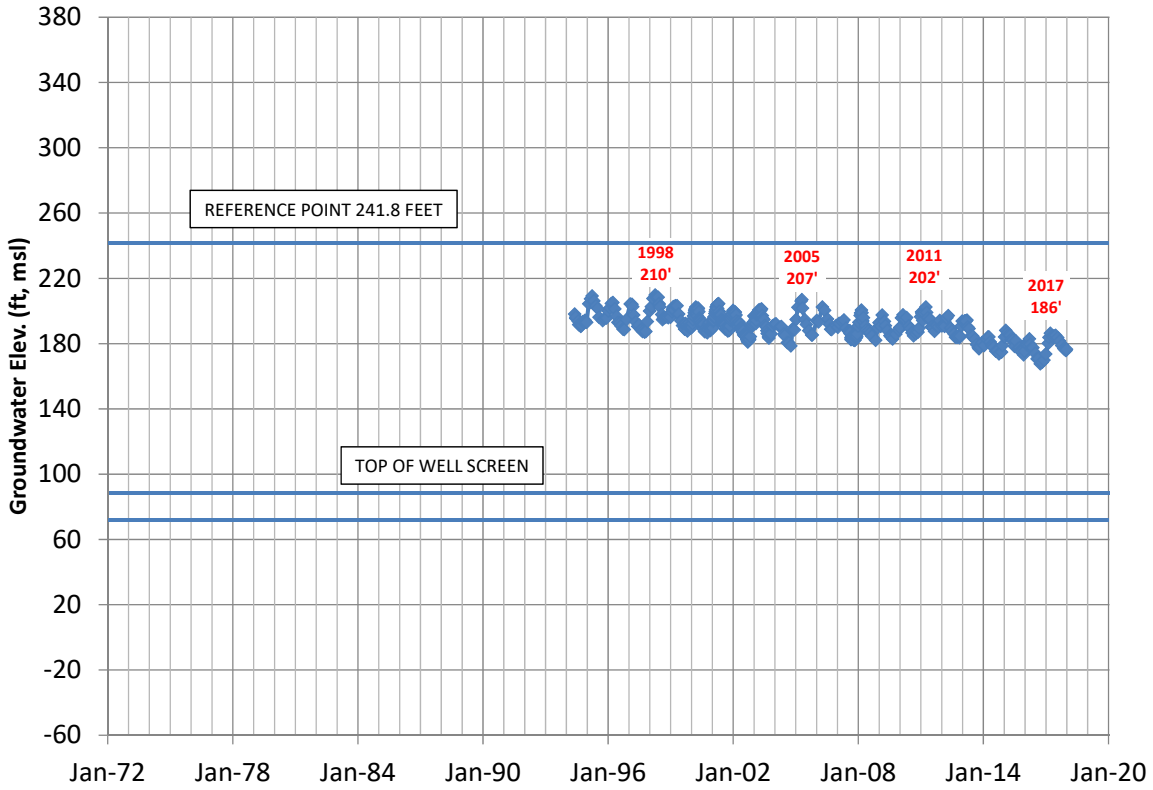
03N21W16H06S (290'-310' bgs)



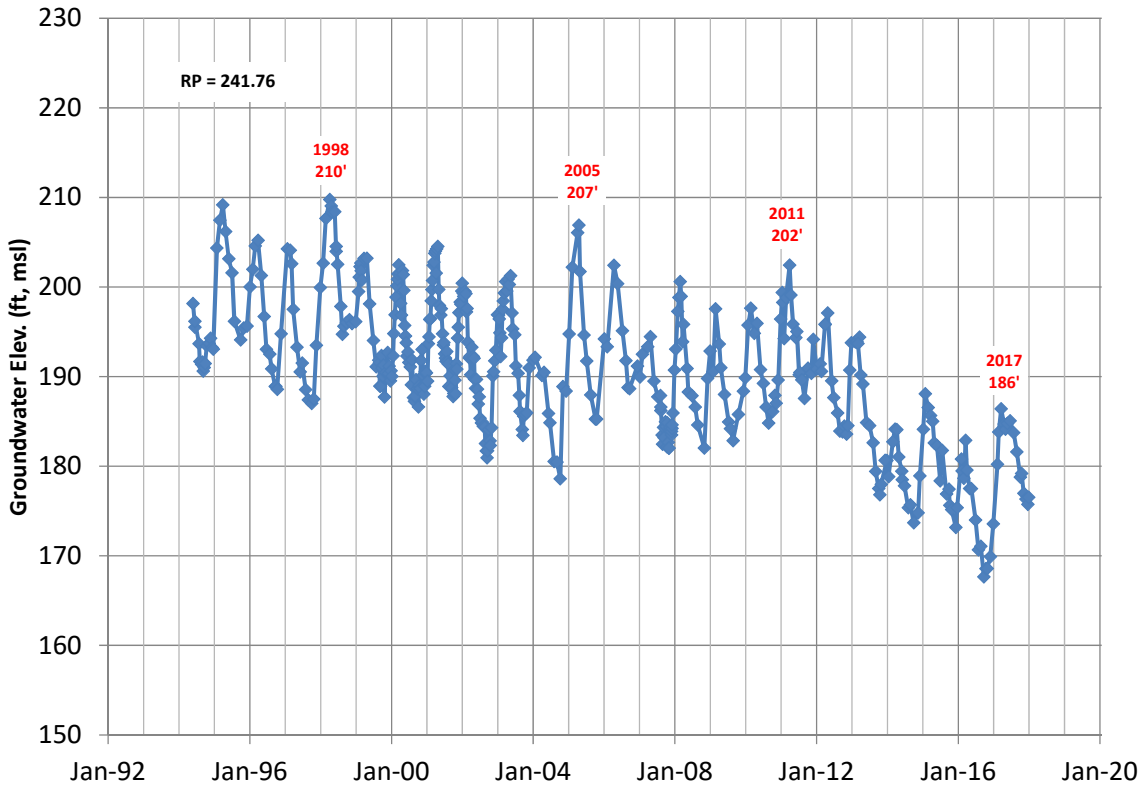
03N21W16H06S (290'-310' bgs)



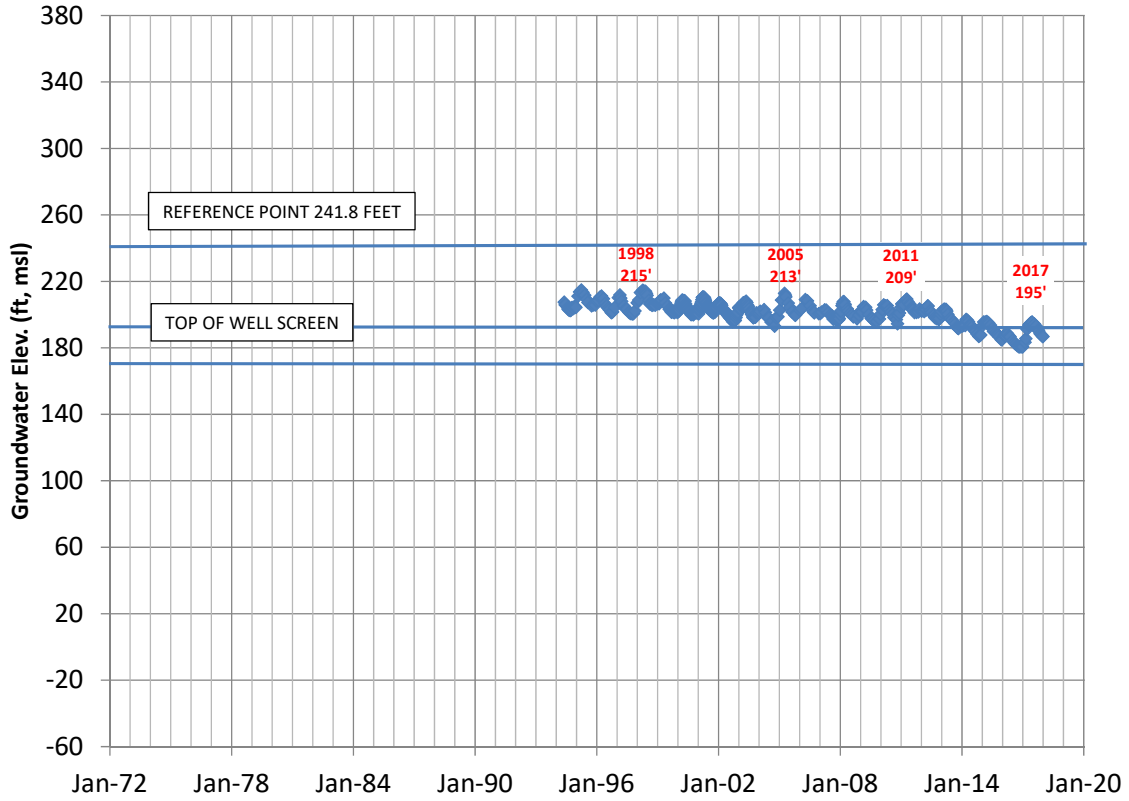
03N21W16H07S (150' - 170' bgs)



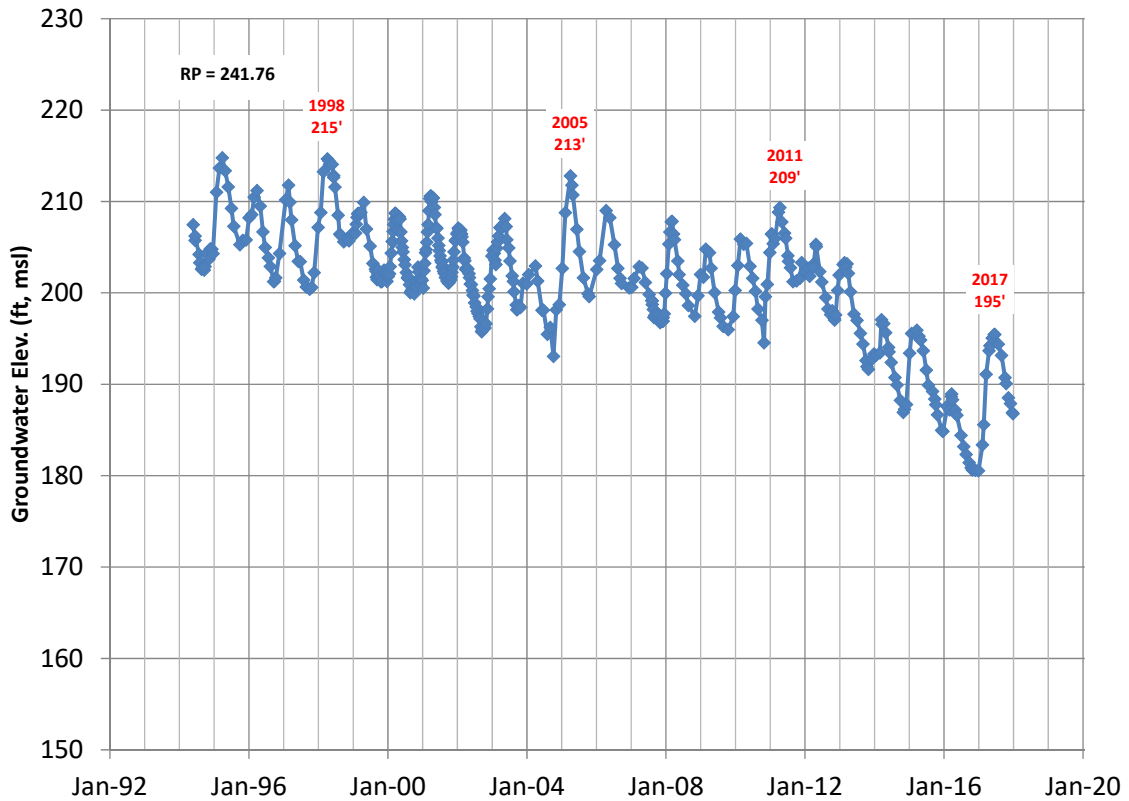
03N21W16H07S (150' - 170' bgs)



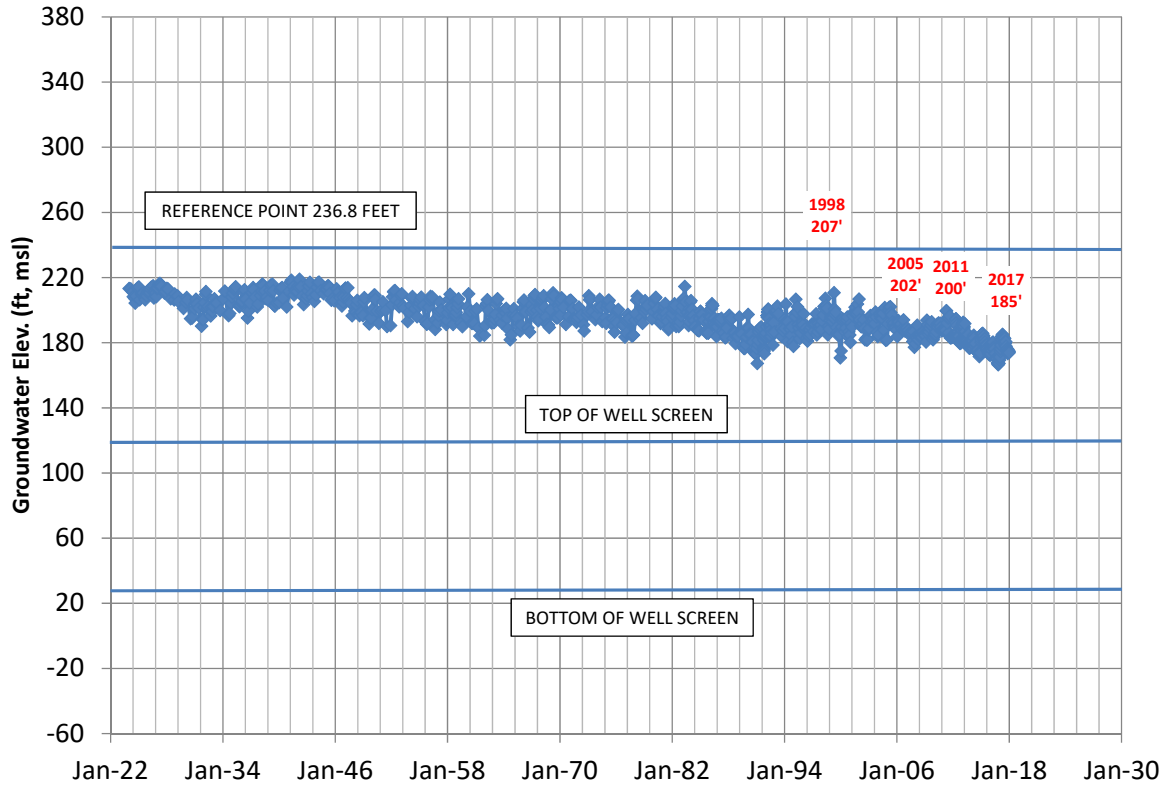
03N21W16H08S (50'- 70' bgs)



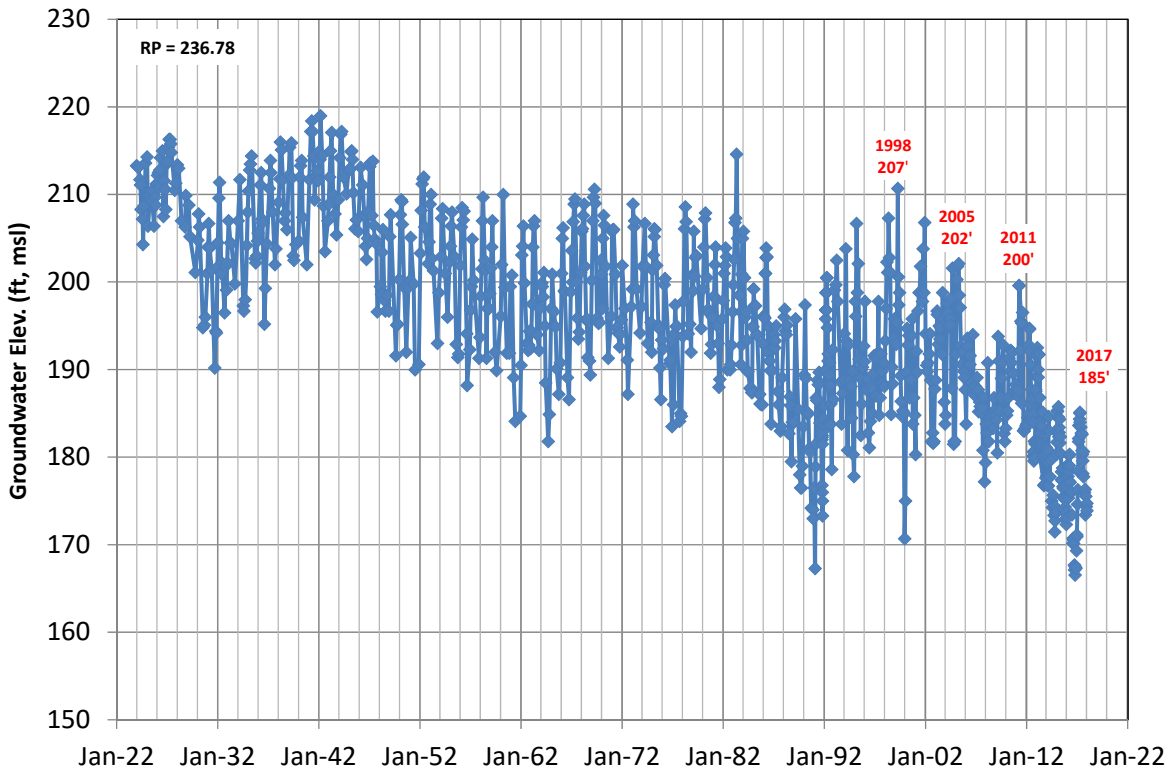
03N21W16H08S (50'- 70' bgs)



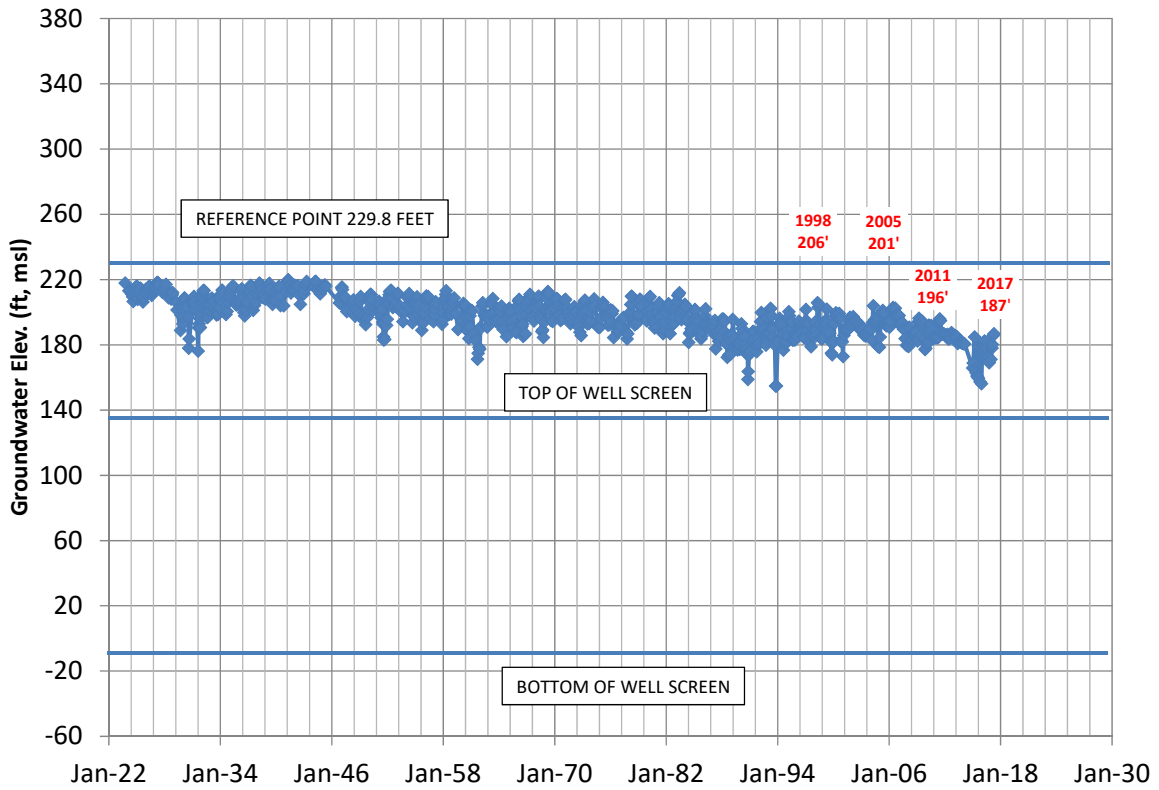
03N21W16K01S (119' - 214' bgs)



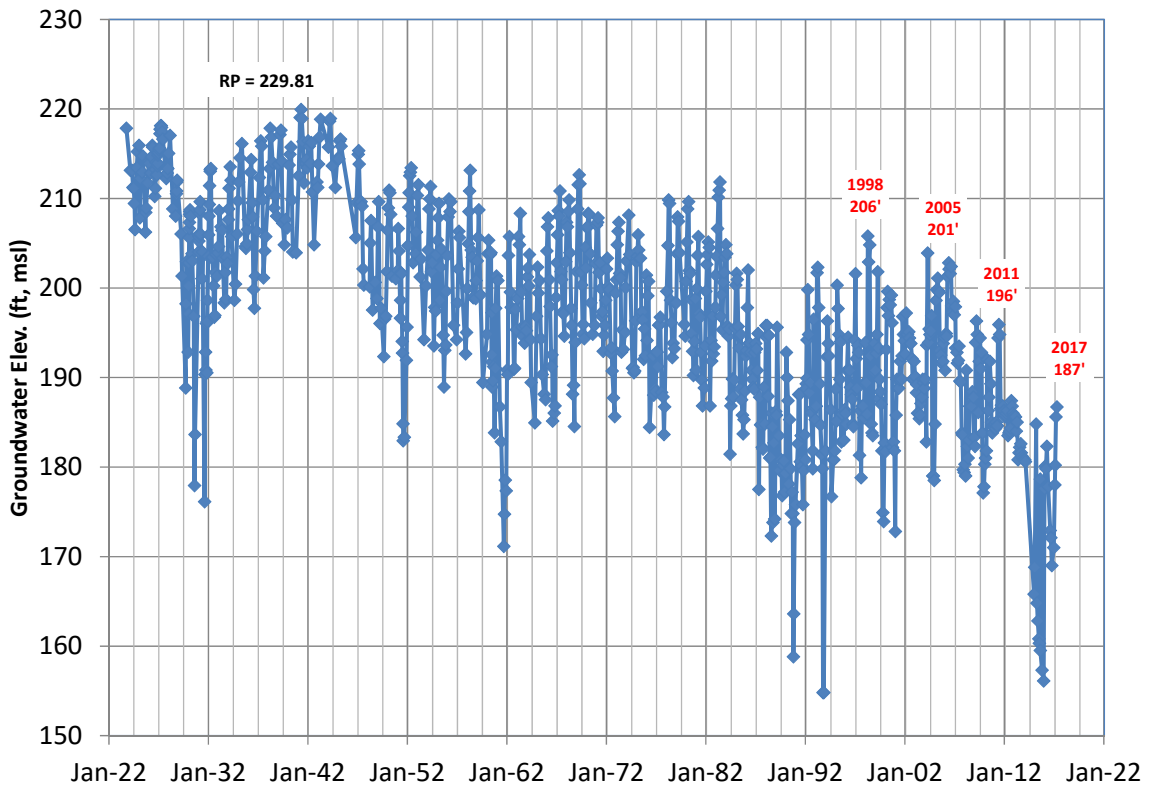
03N21W16K01S (119' - 214' bgs)



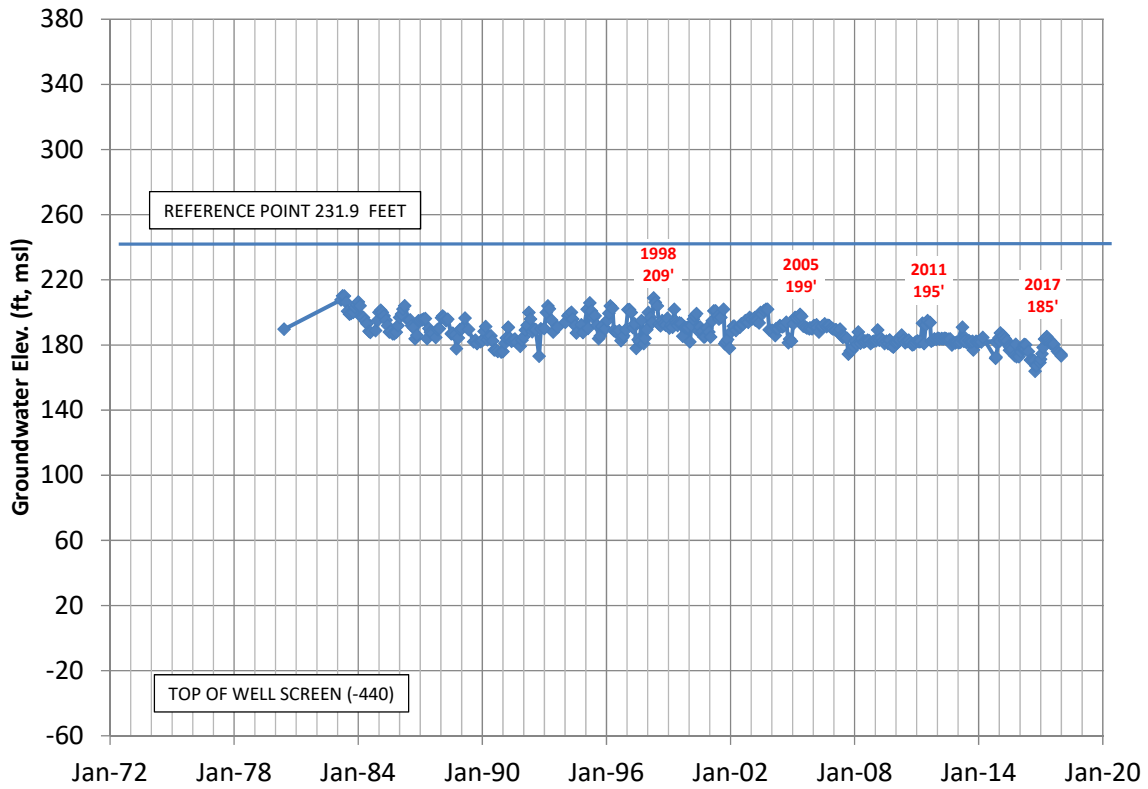
03N21W16K02S (92' - 243' bgs)



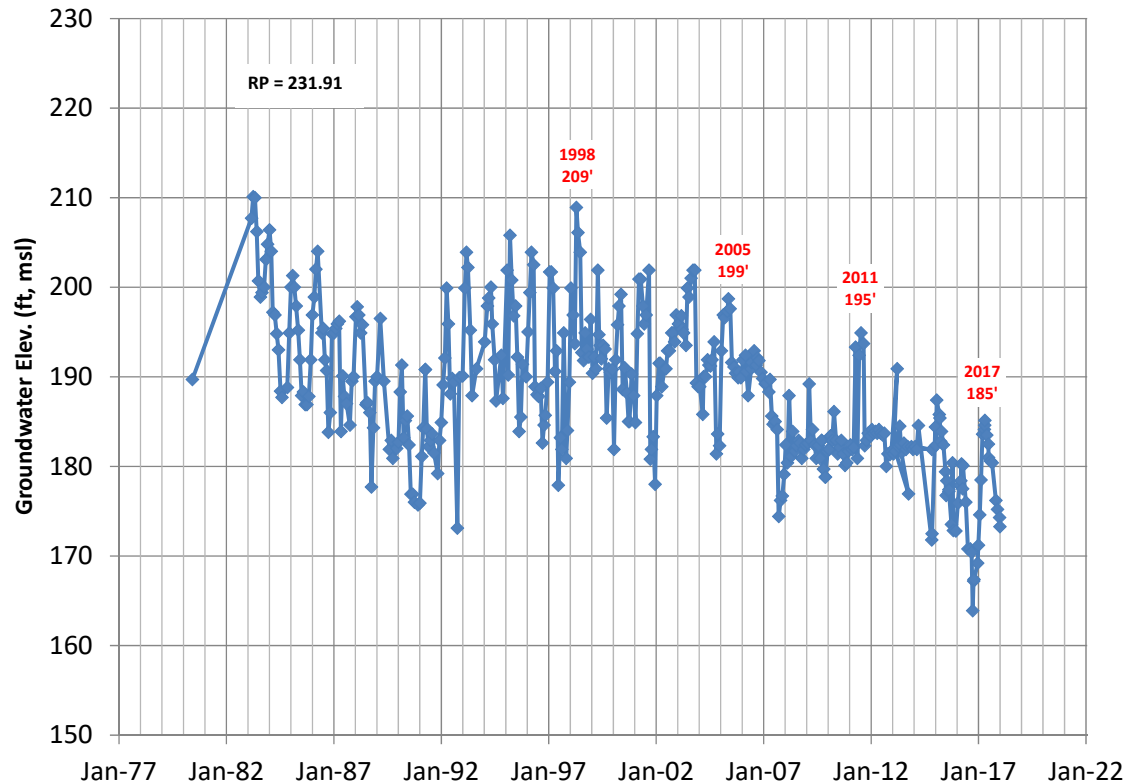
03N21W16K02S (92' - 243' bgs)



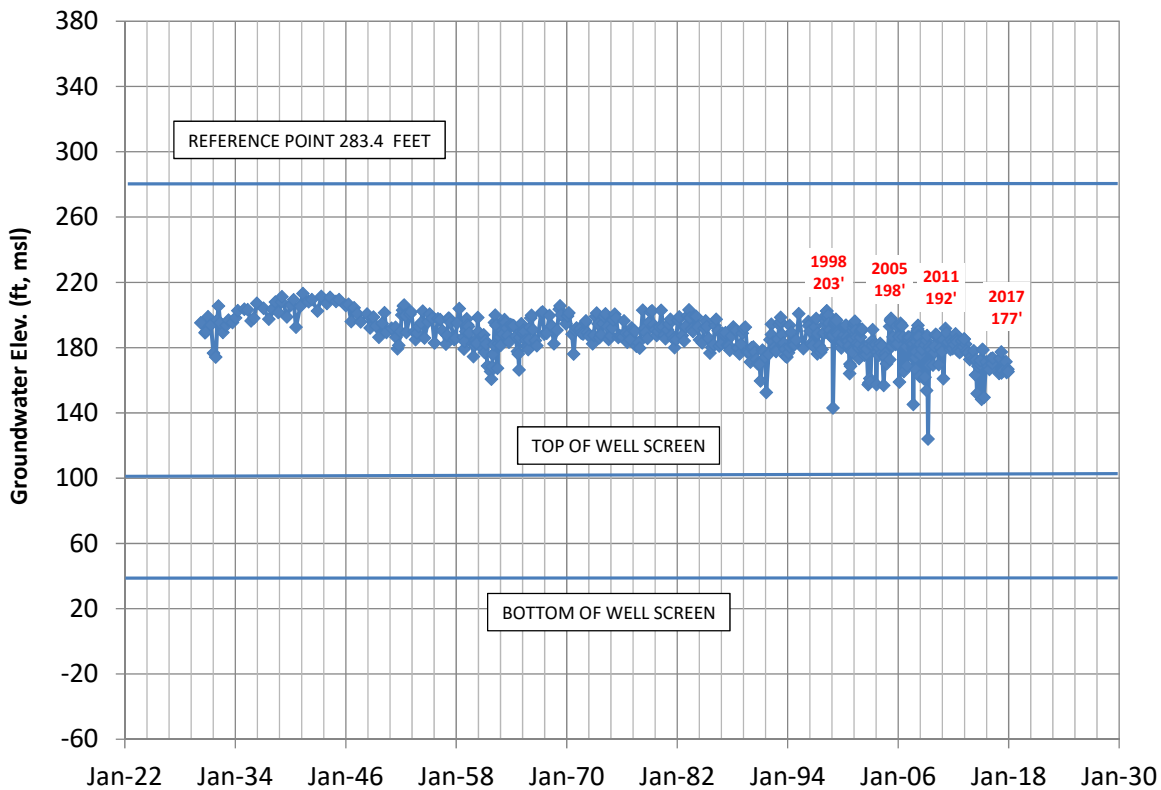
03N21W16K03S (672' - 760' bgs)



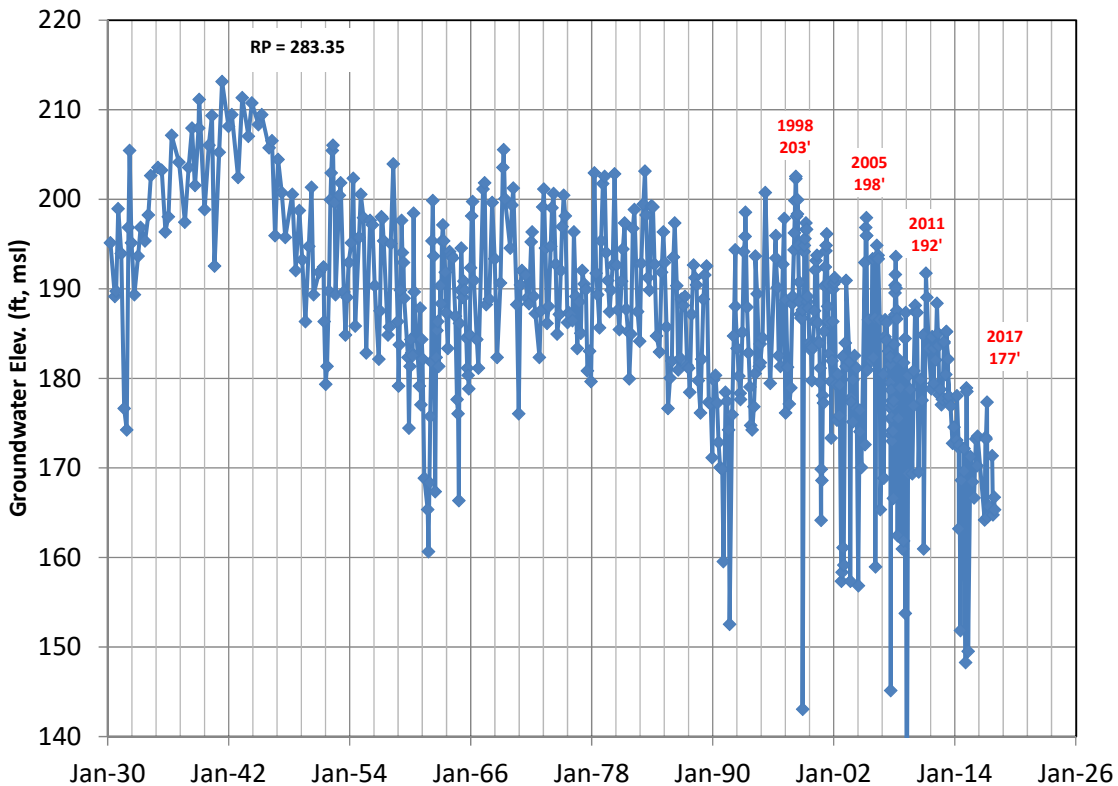
03N21W16K03S (672' - 760' bgs)



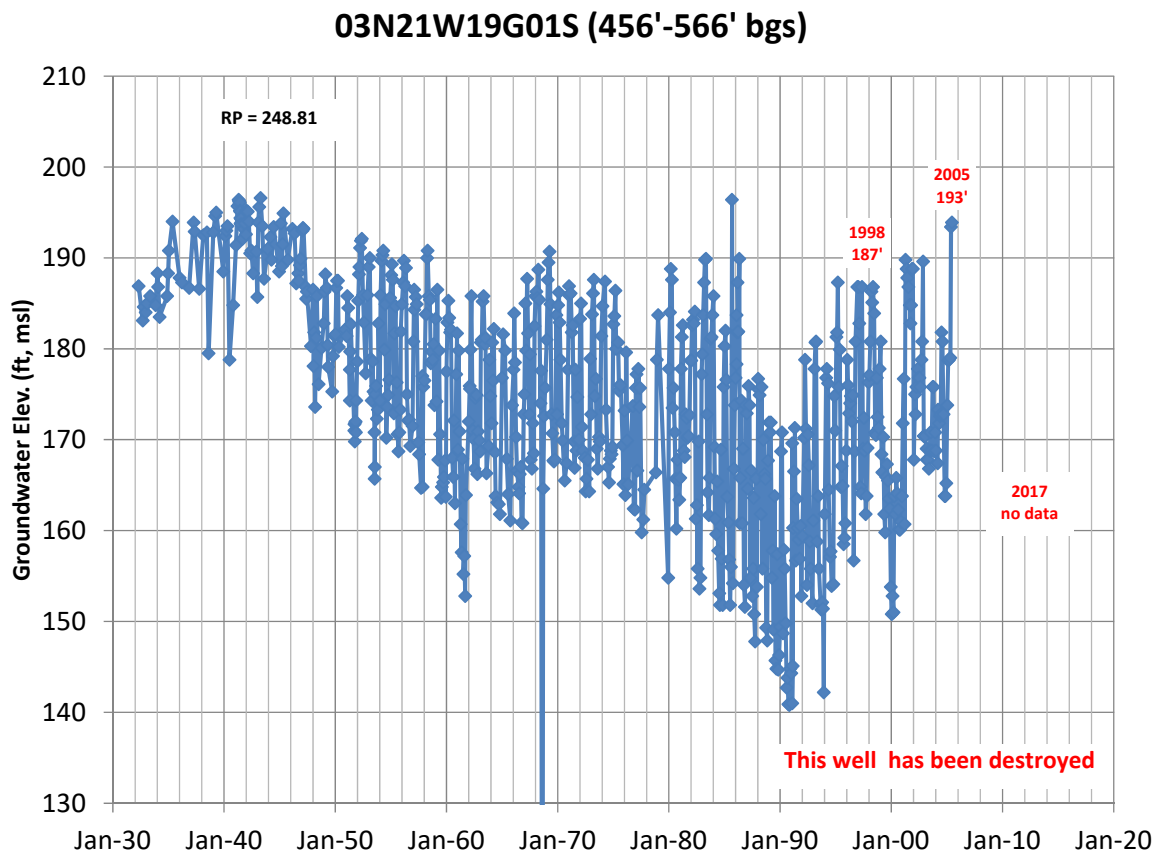
03N21W17Q01S (183' - 243' bgs)



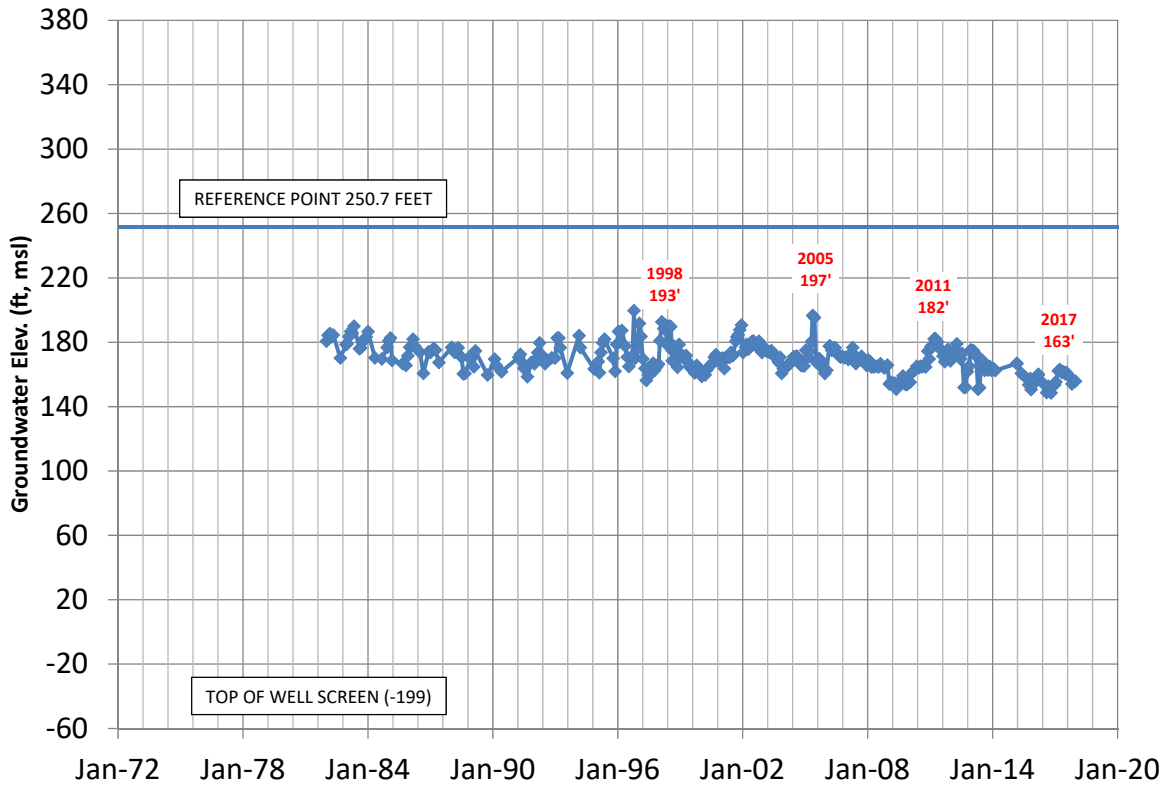
03N21W17Q01S (183' - 243' bgs)



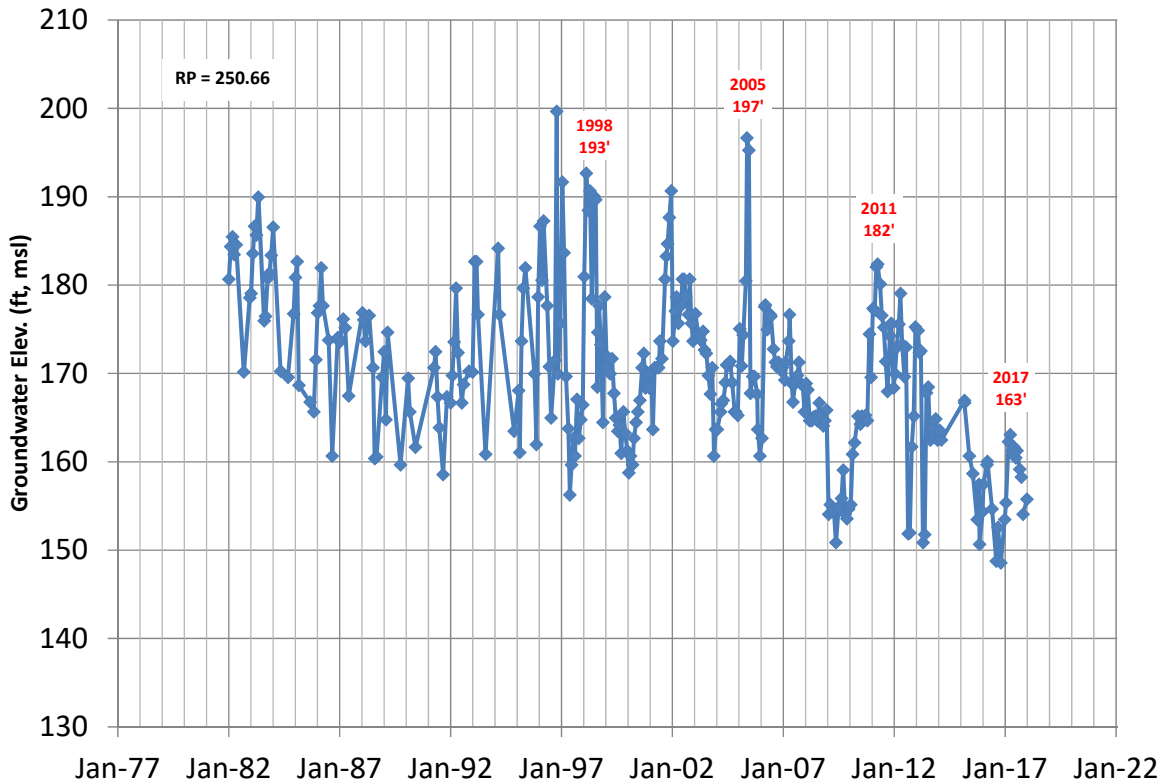
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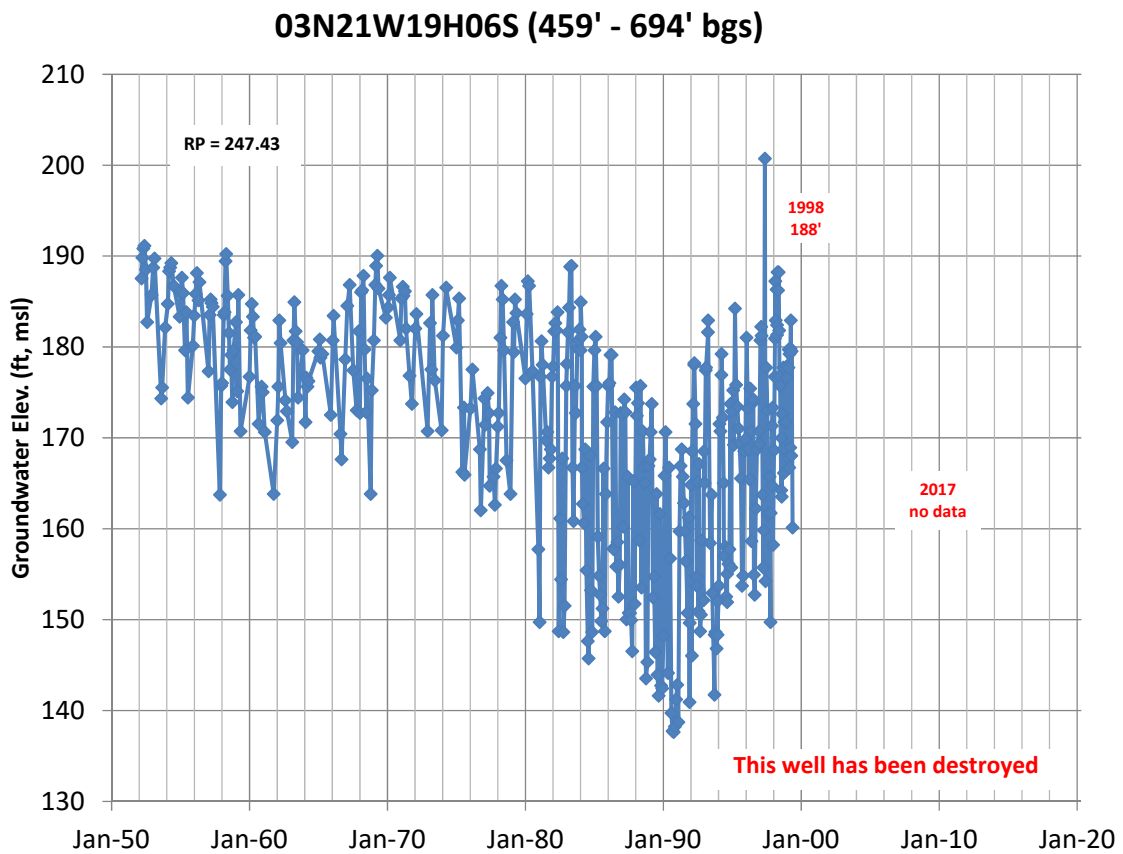
03N21W19G04S (450' - 720' bgs)



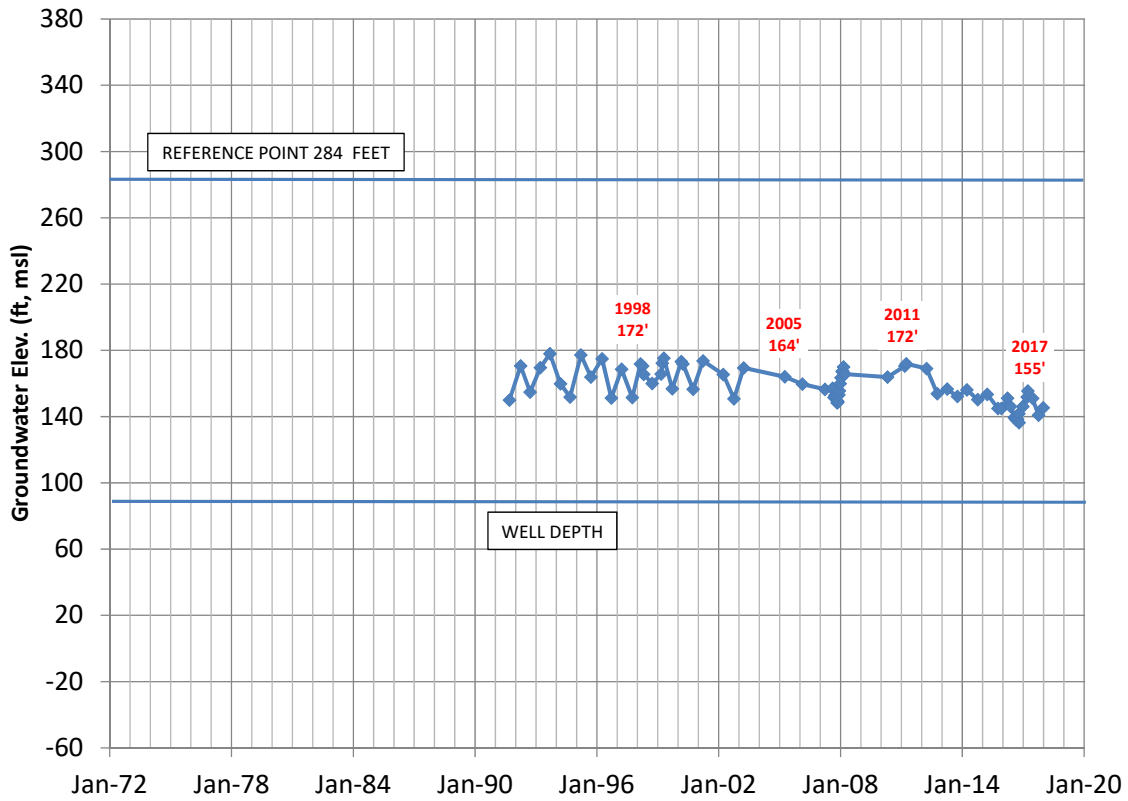
03N21W19G04S (450' - 720' bgs)



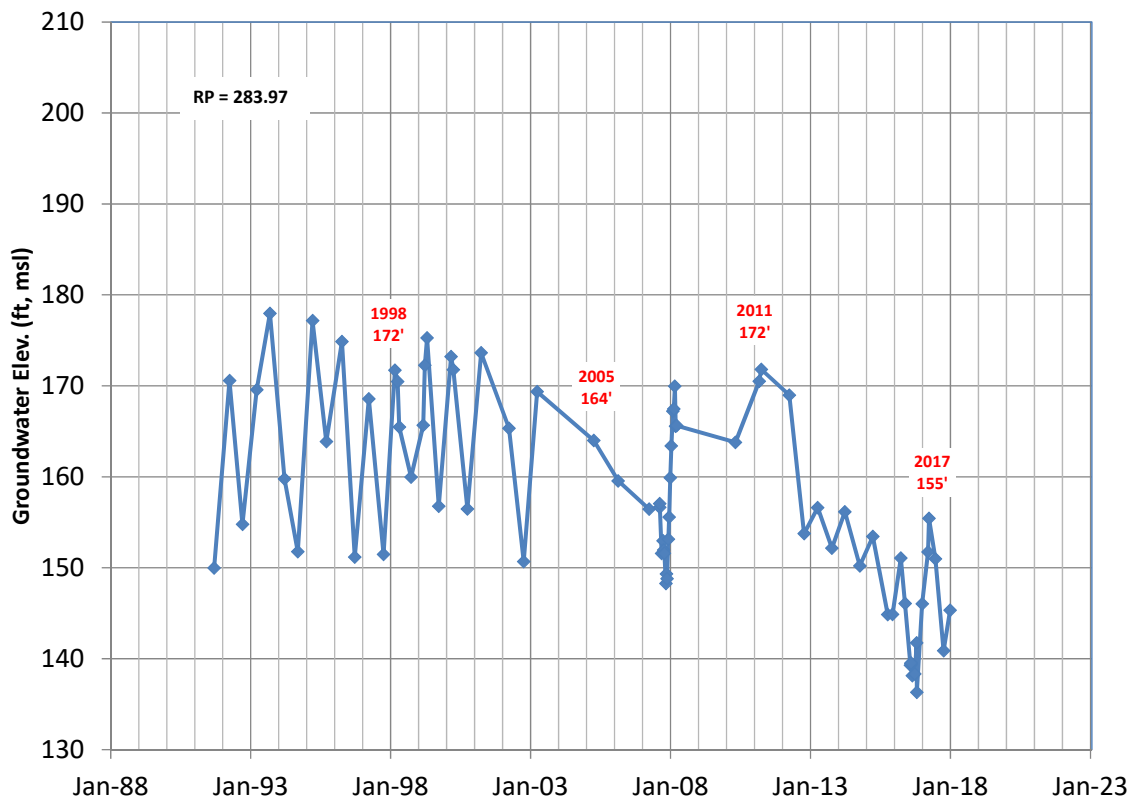
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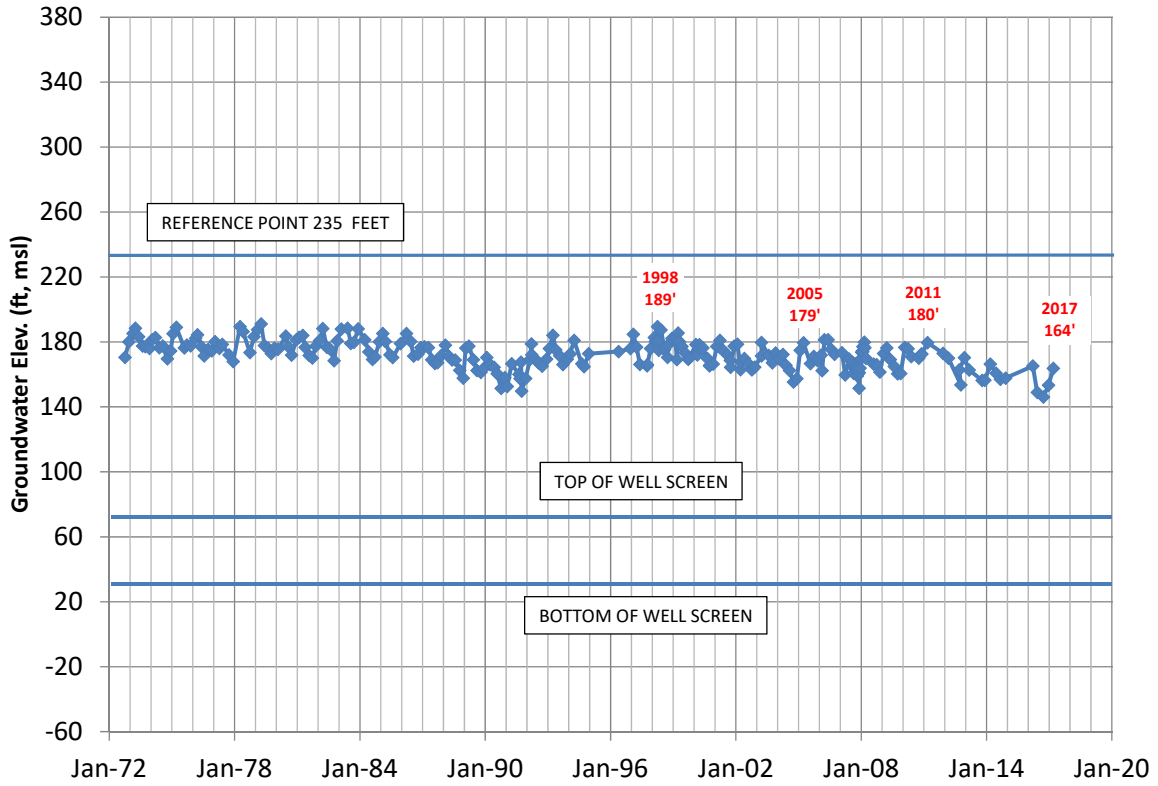
03N21W19M01S (depth 197')



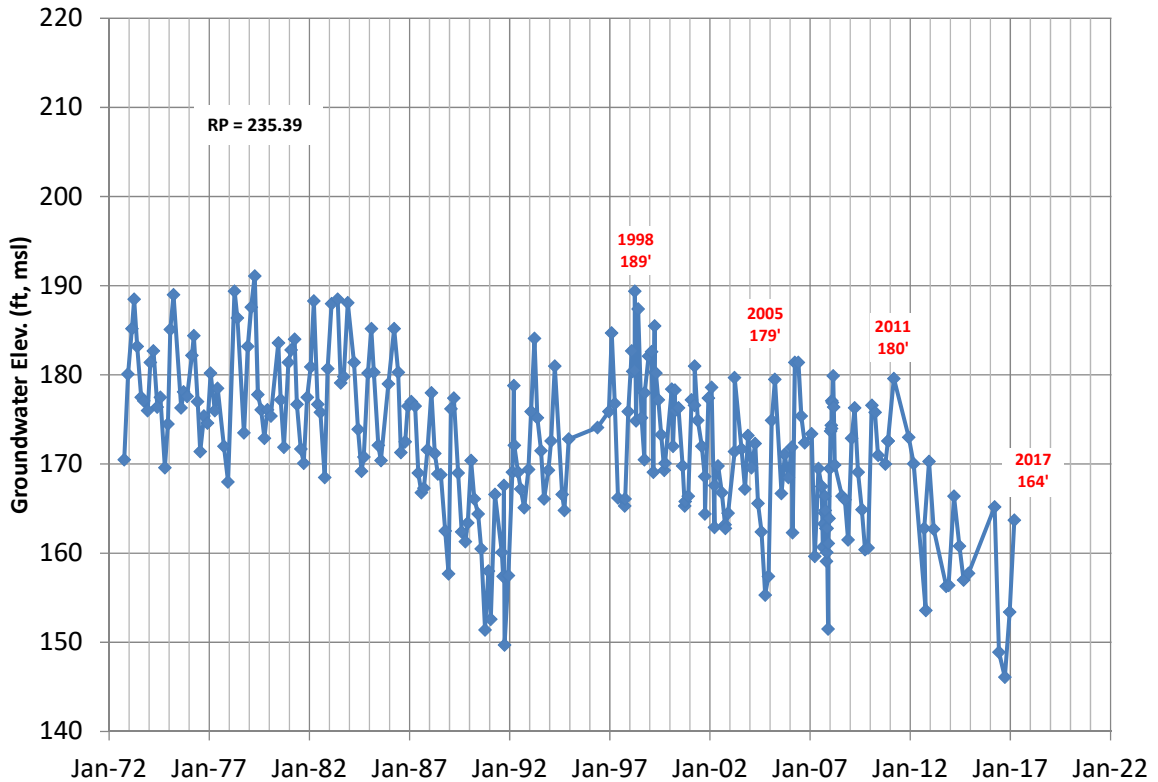
03N21W19M01S (depth 197')



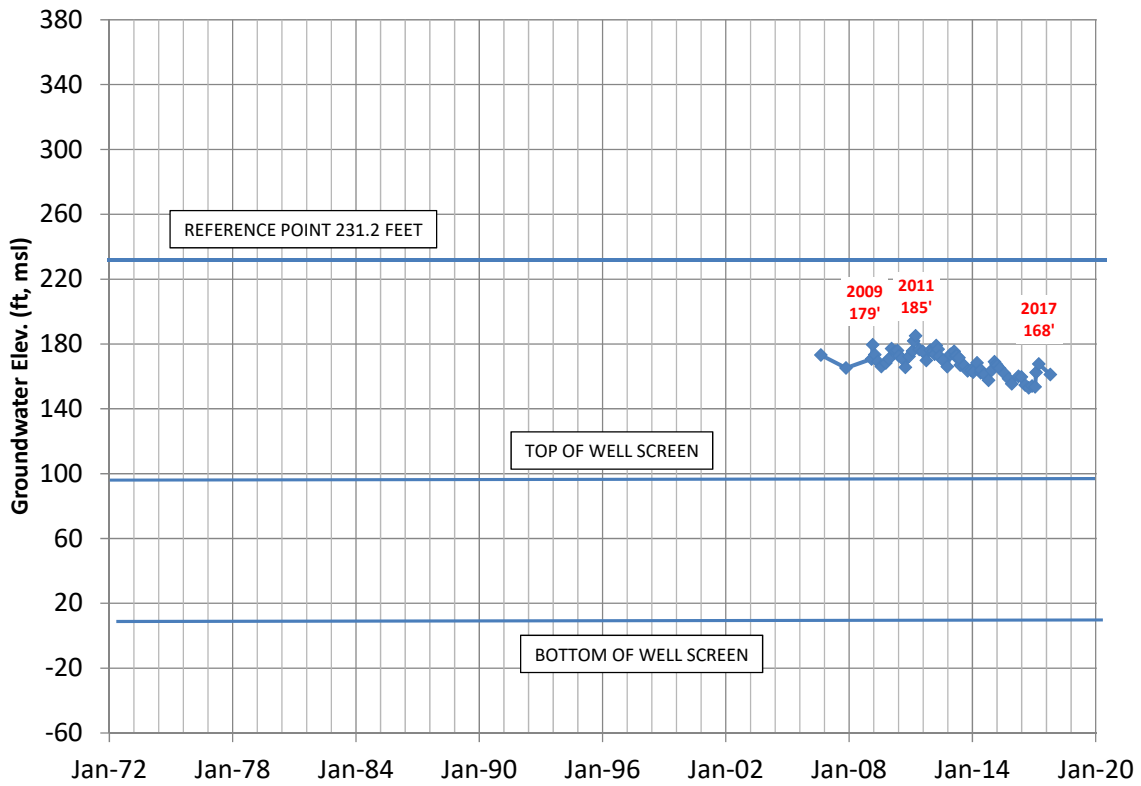
03N21W19R01S (160' - 205' bgs)



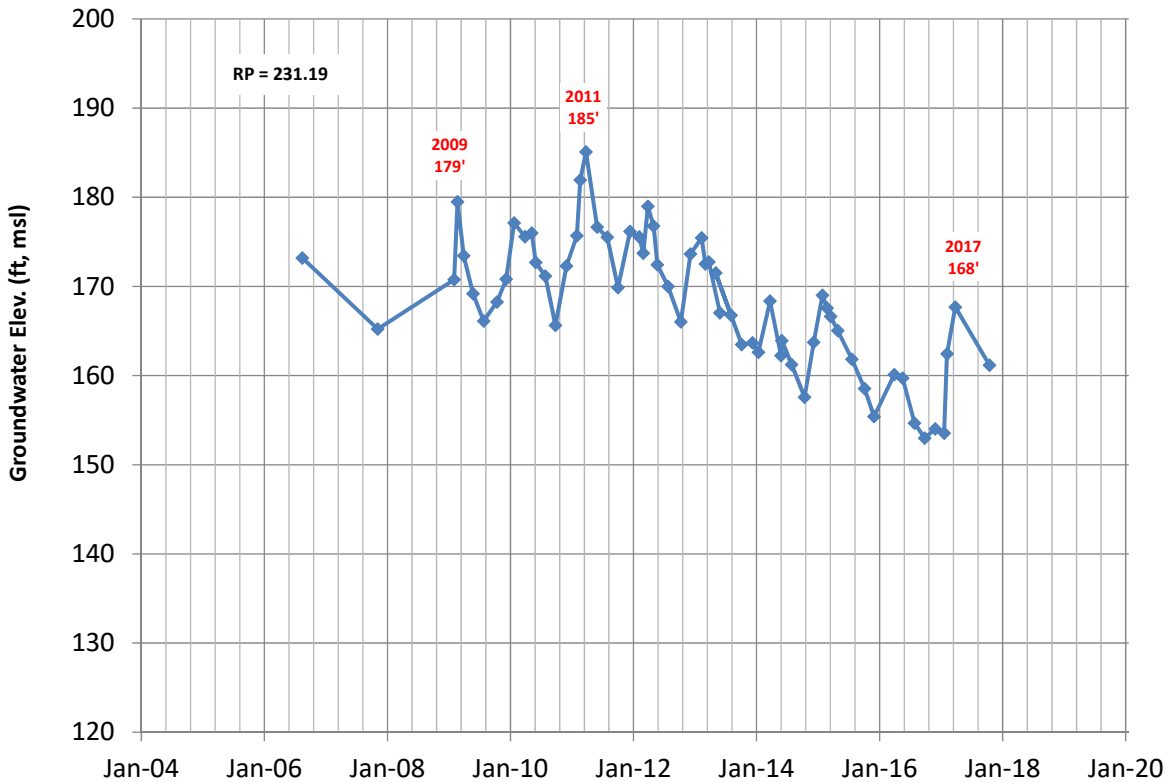
03N21W19R01S (160' - 205' bgs)



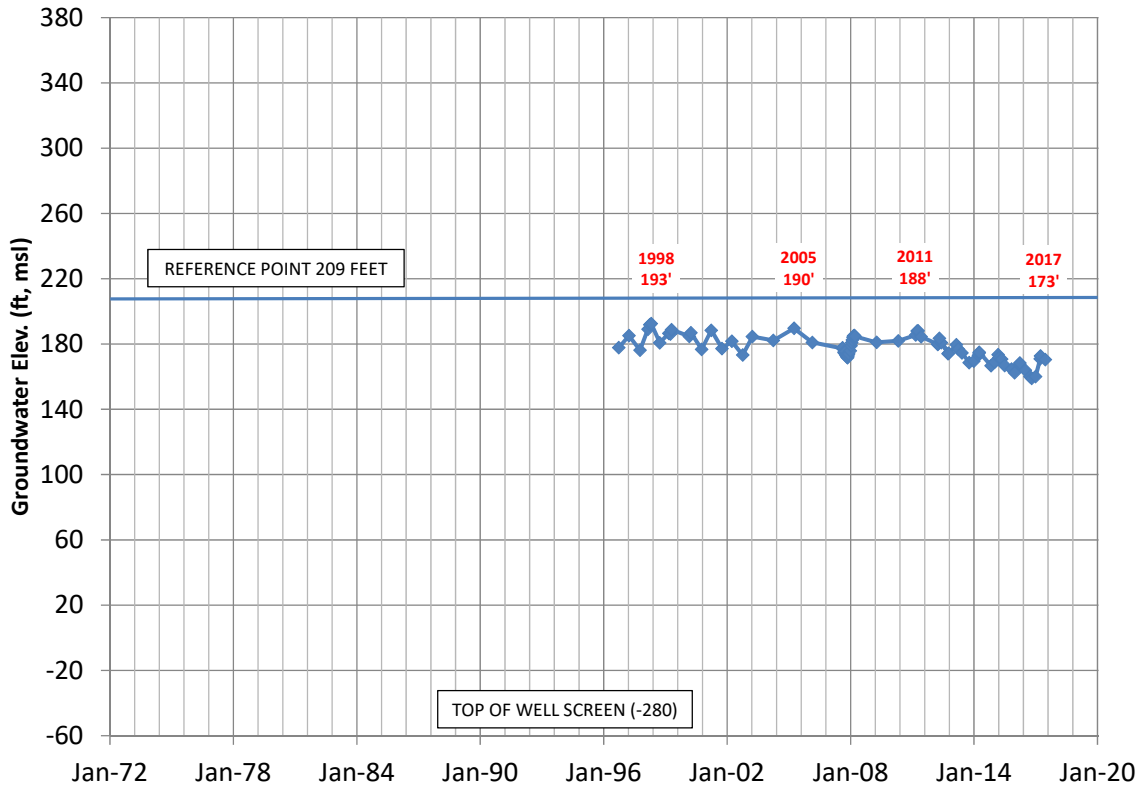
03N21W20F04S (134' - 219' bgs)



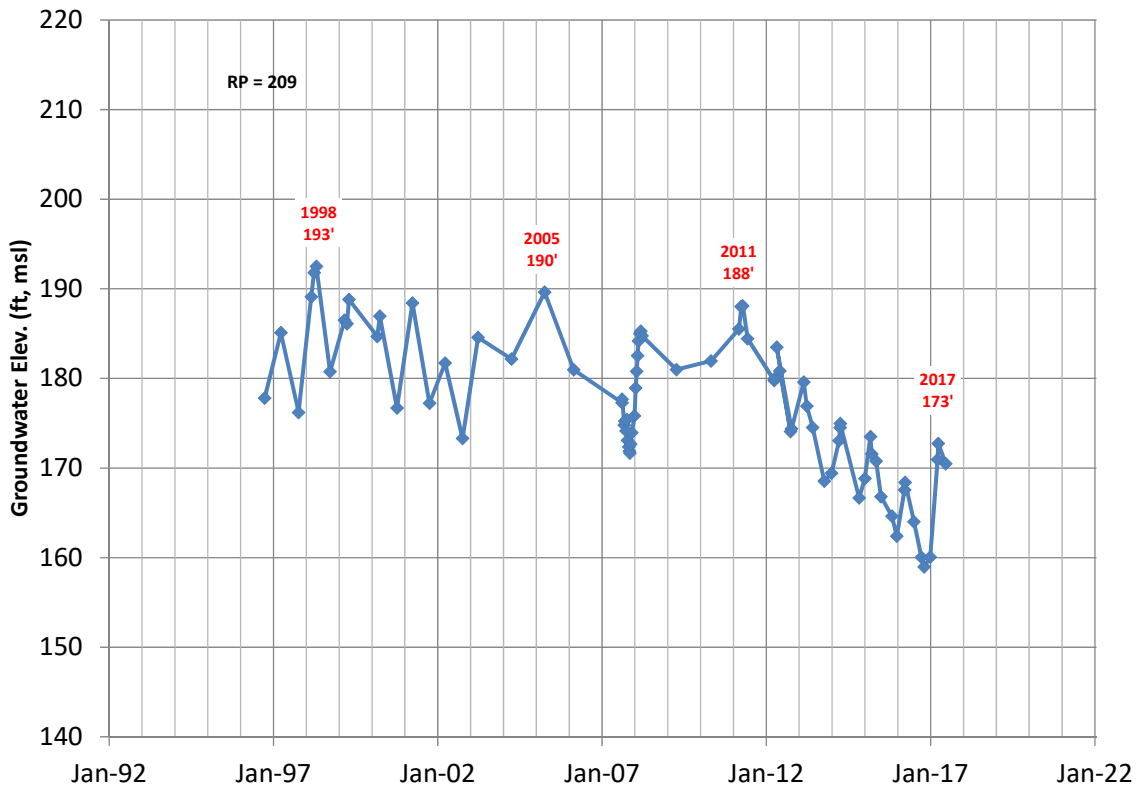
03N21W20F04S (134' - 219' bgs)



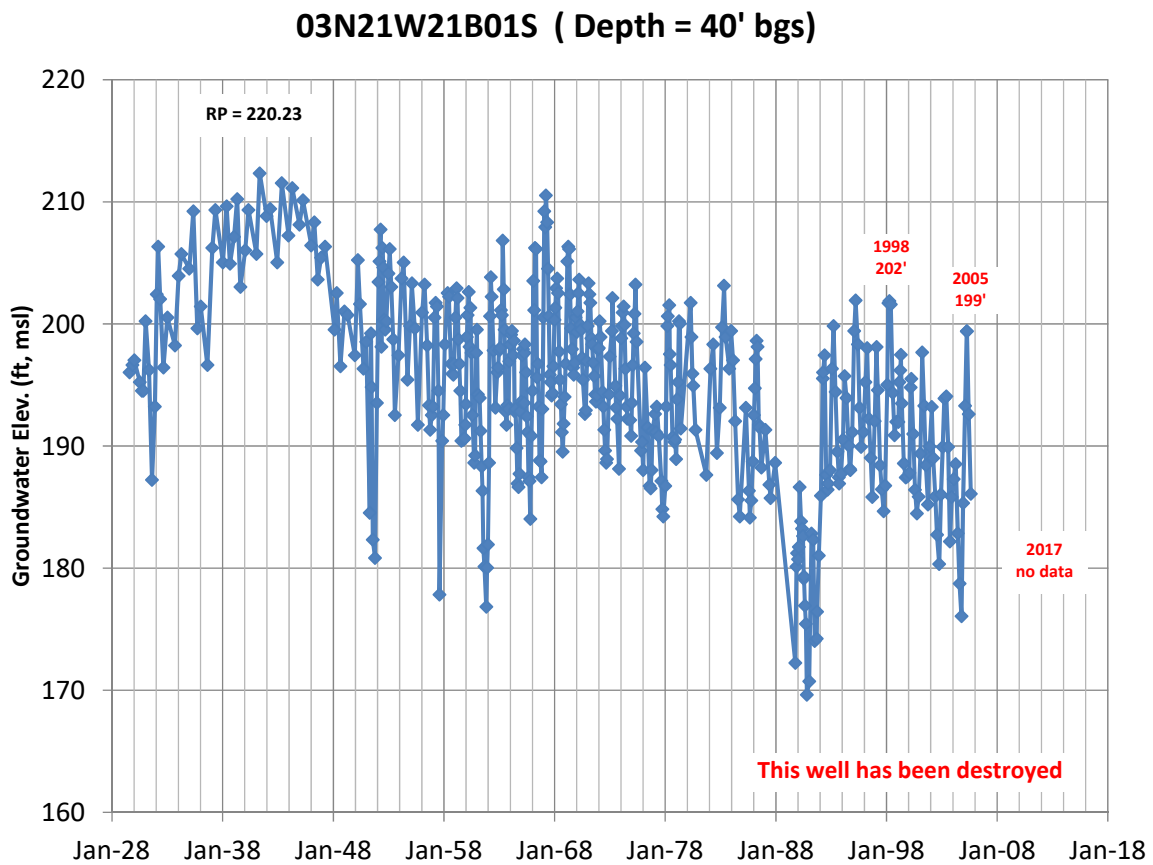
03N21W20J03S (489' - 717')



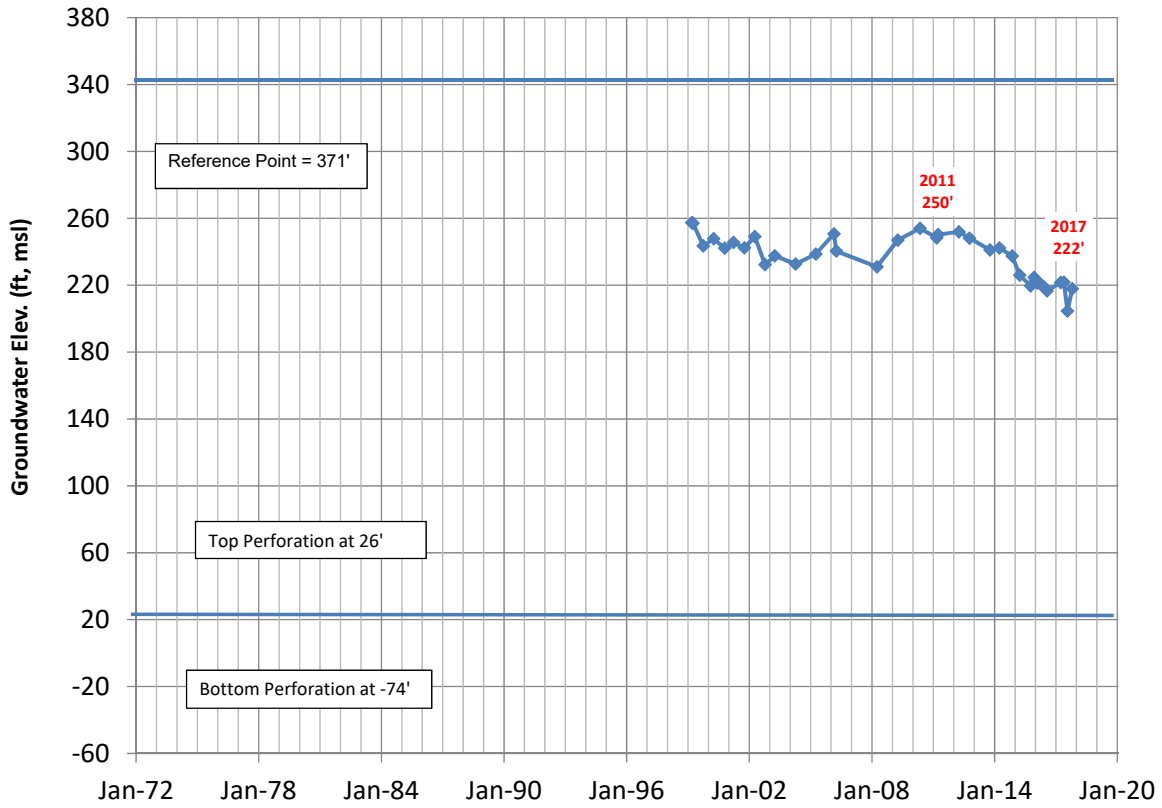
03N21W20J03S (489' - 717')



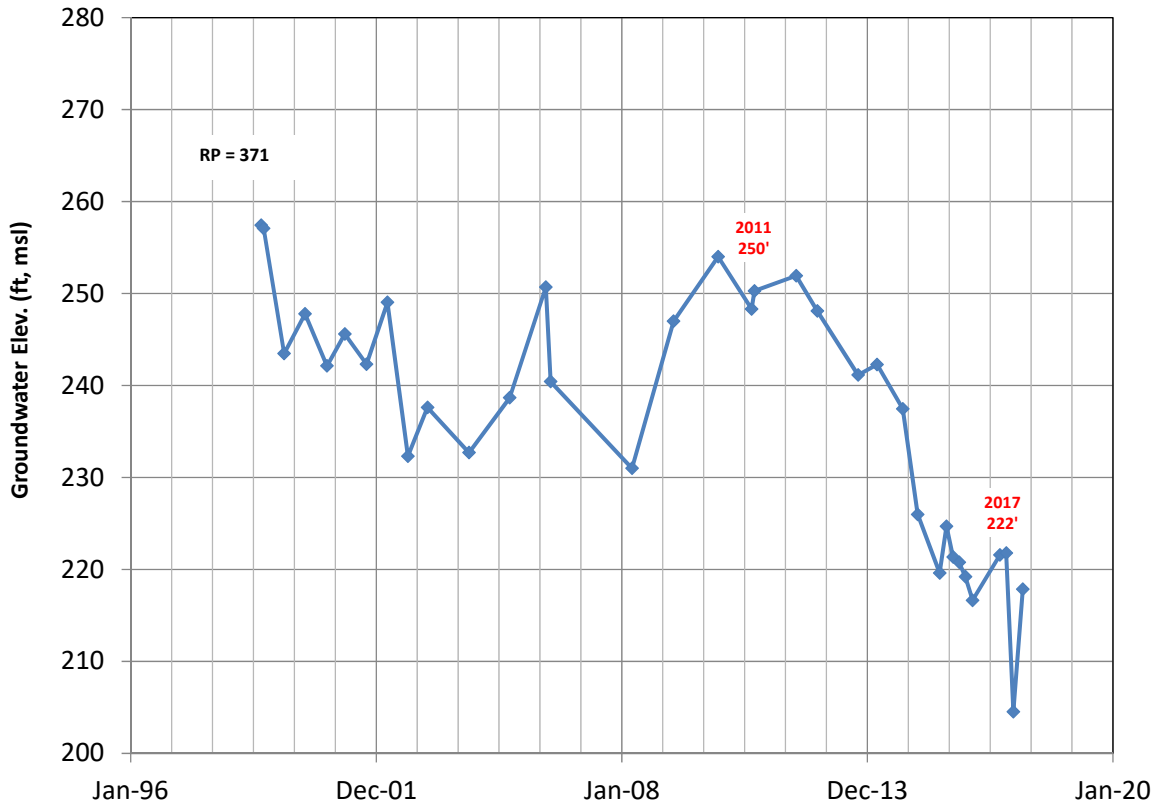
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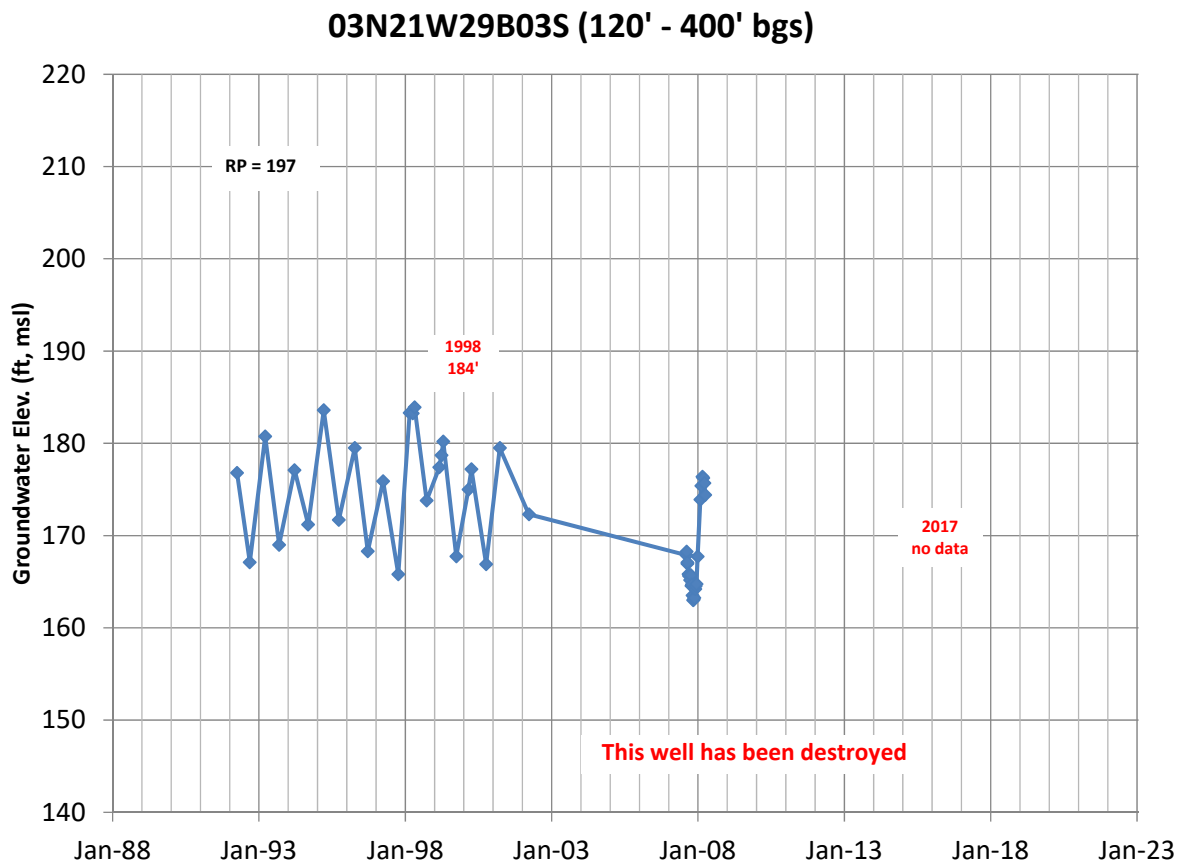
03N22W23Q01S (345' - 445' bgs)



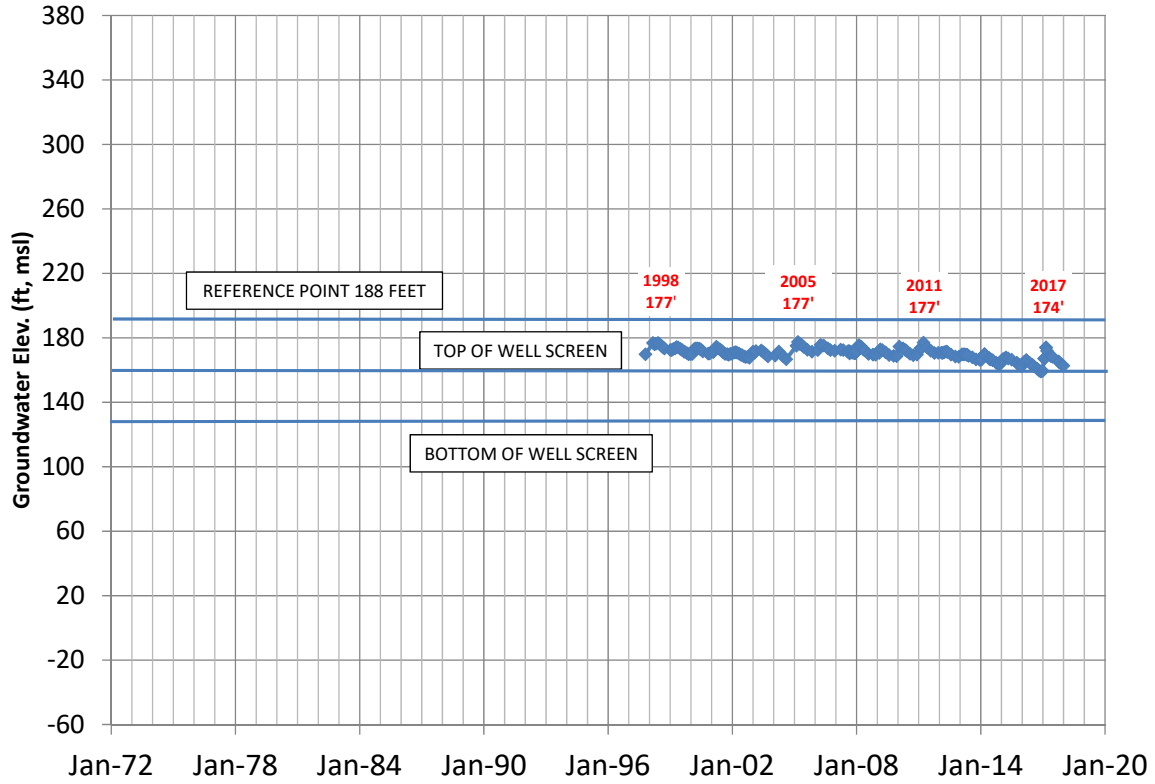
03N22W23Q01S (345' - 445' bgs)



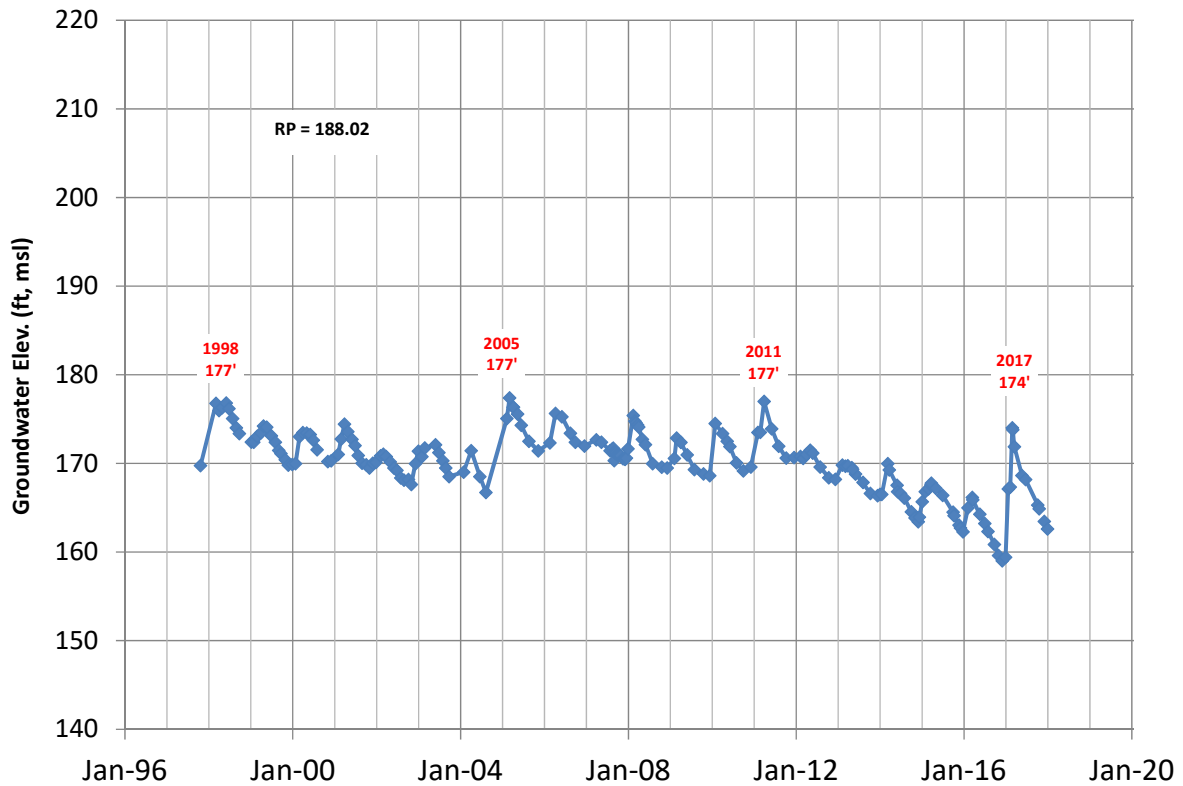
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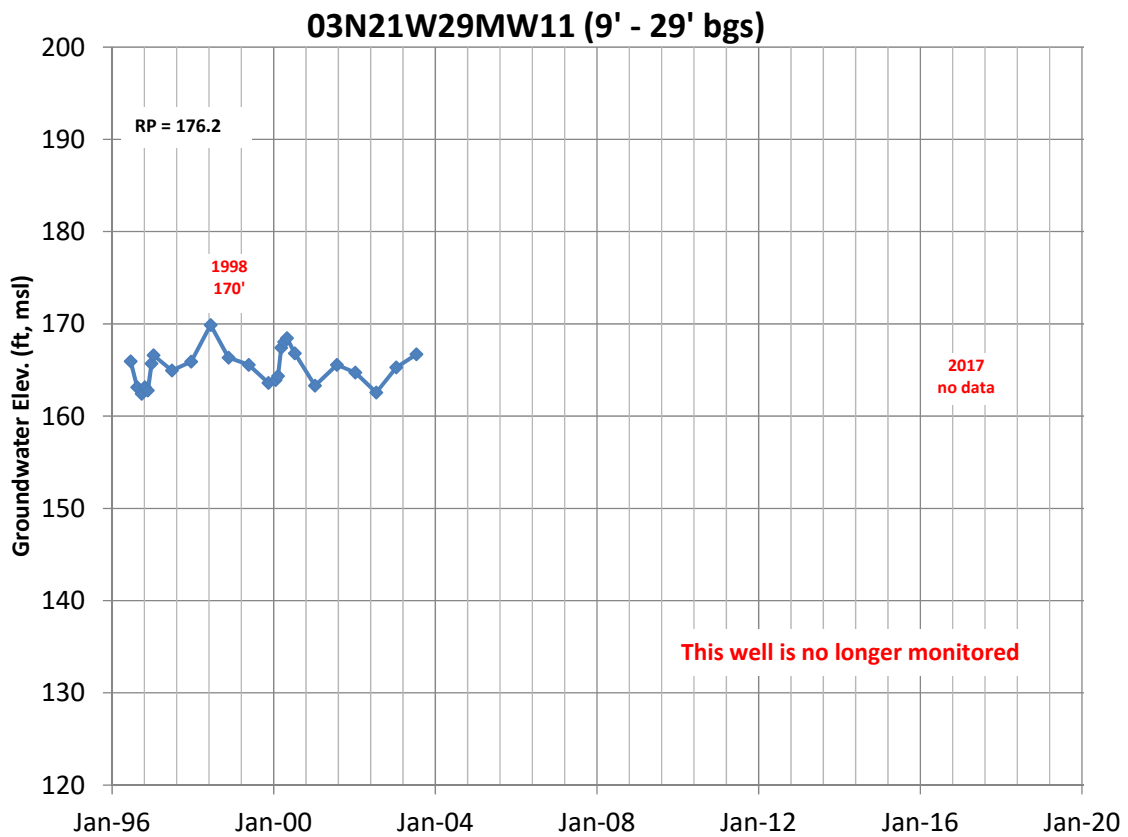
03N21W29K02S (28' - 58' bgs)



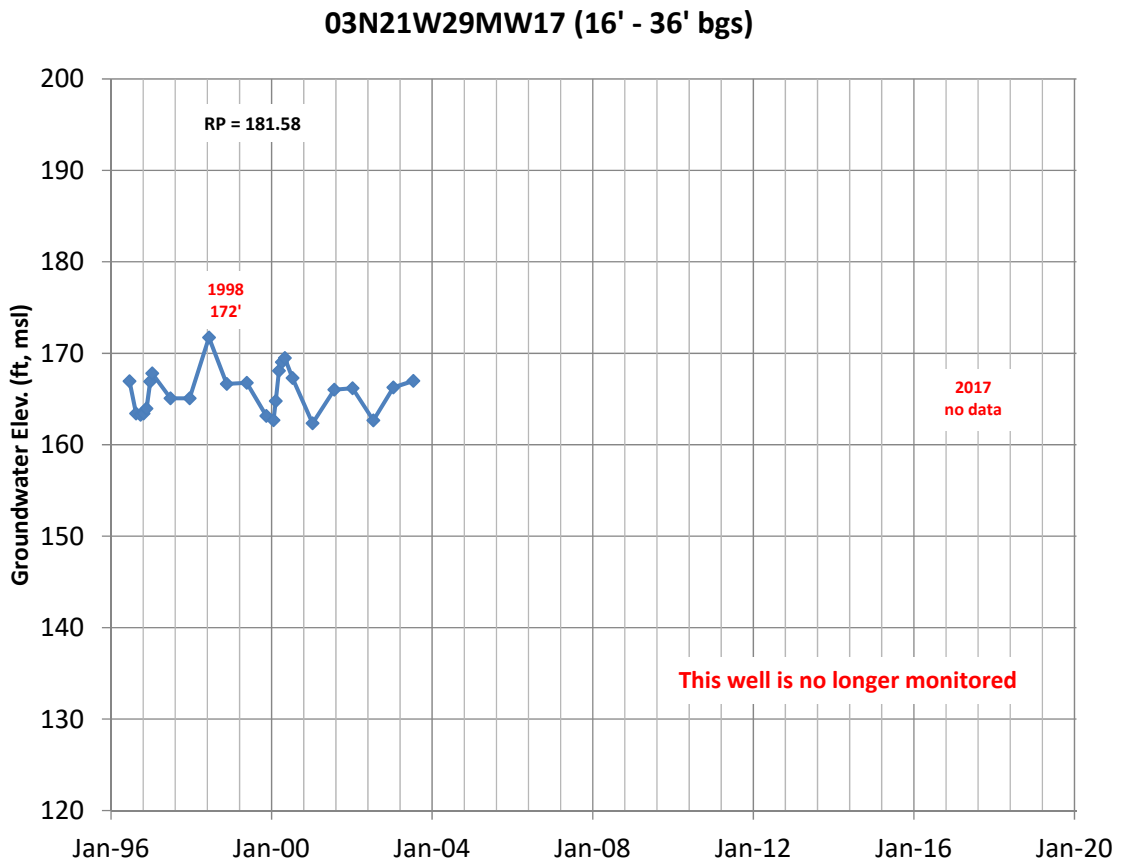
03N21W29K02S (28' - 58' bgs)



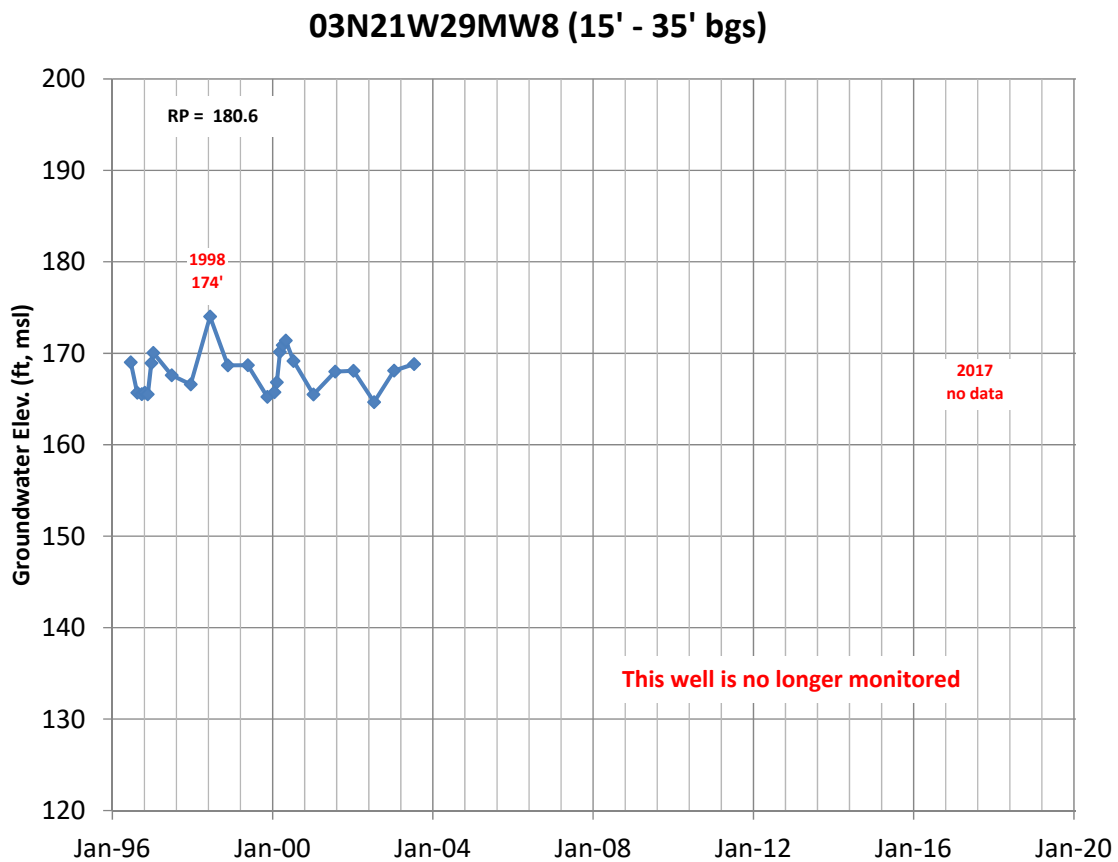
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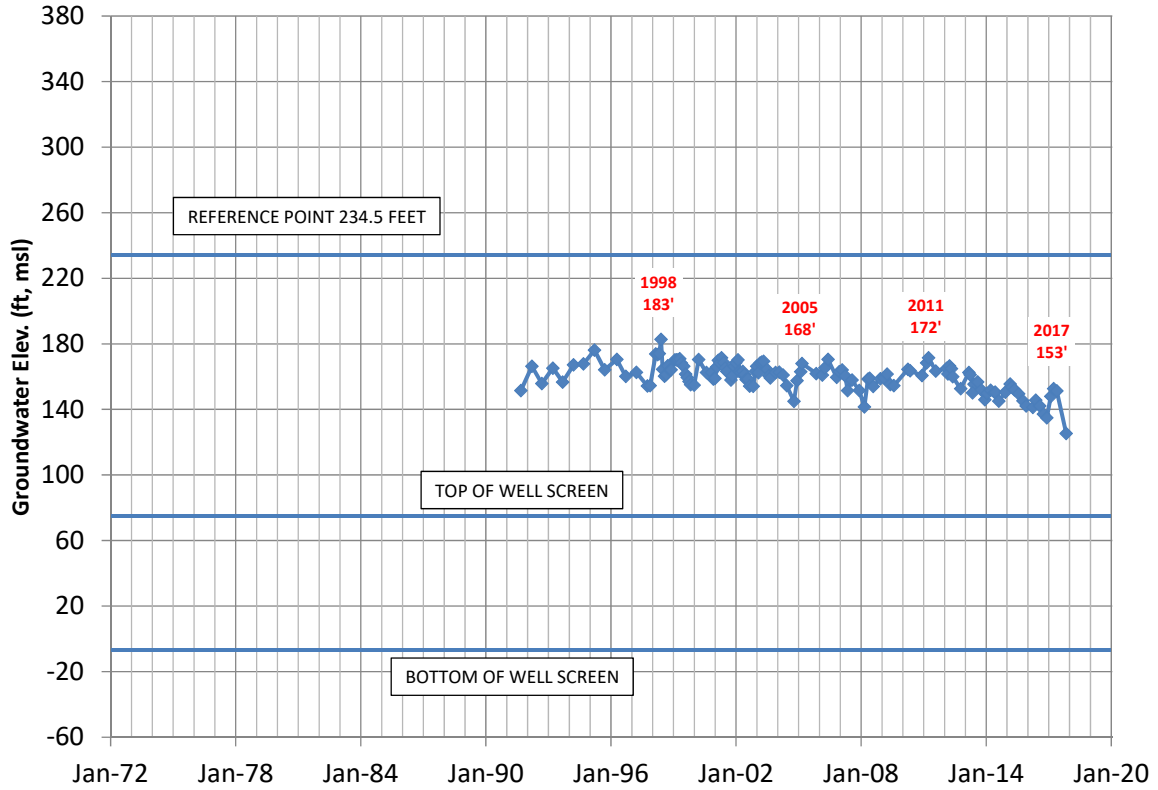
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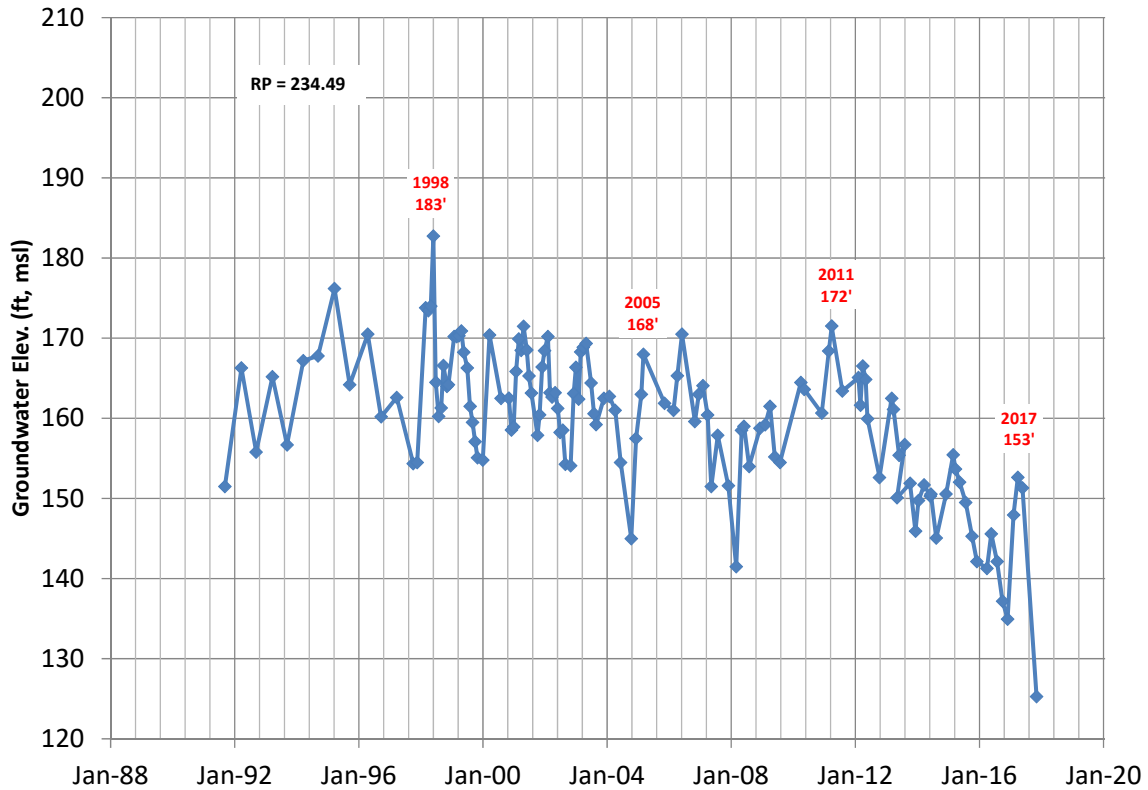
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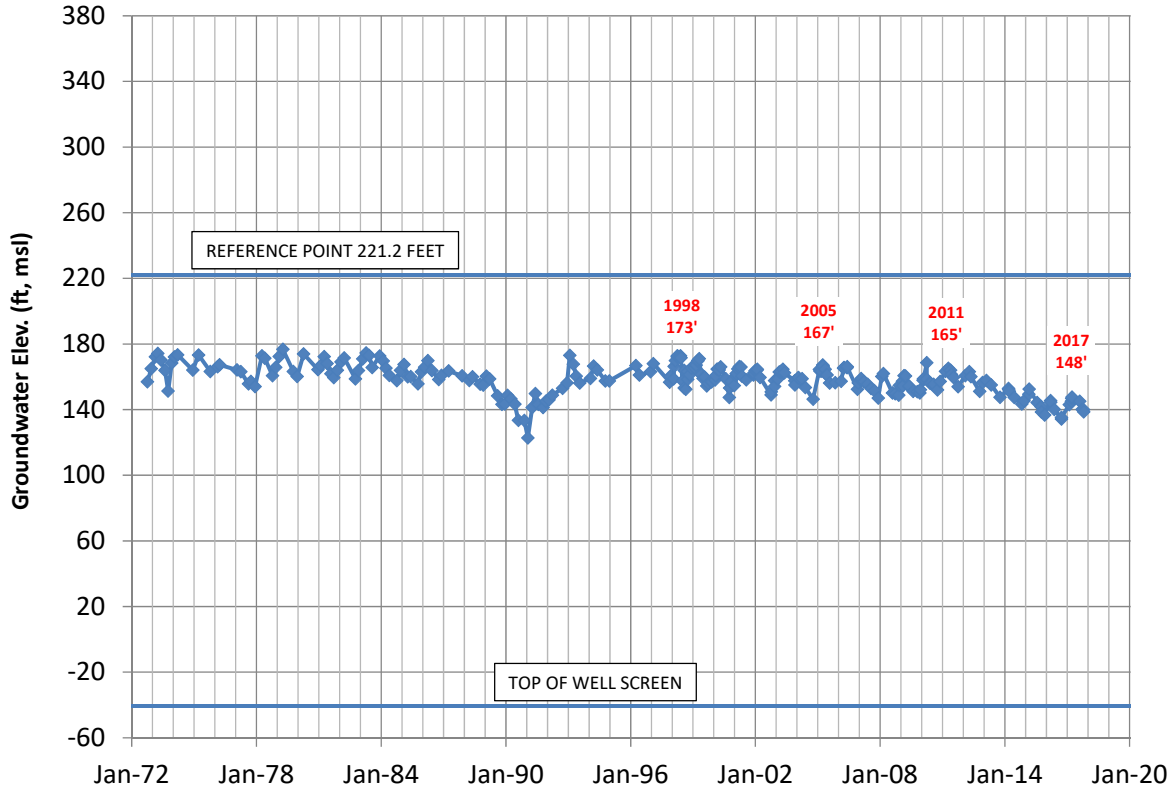
03N21W30E01S (160'- 240' bgs)



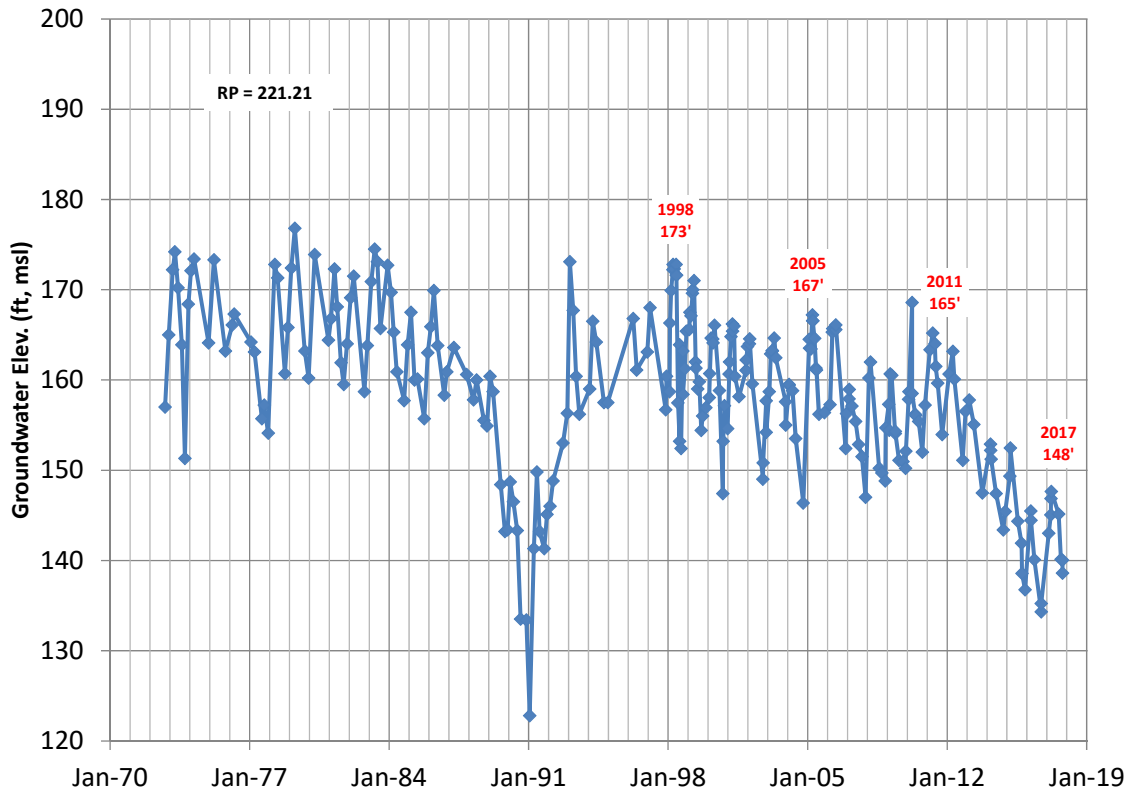
03N21W30E01S (160'- 240' bgs)



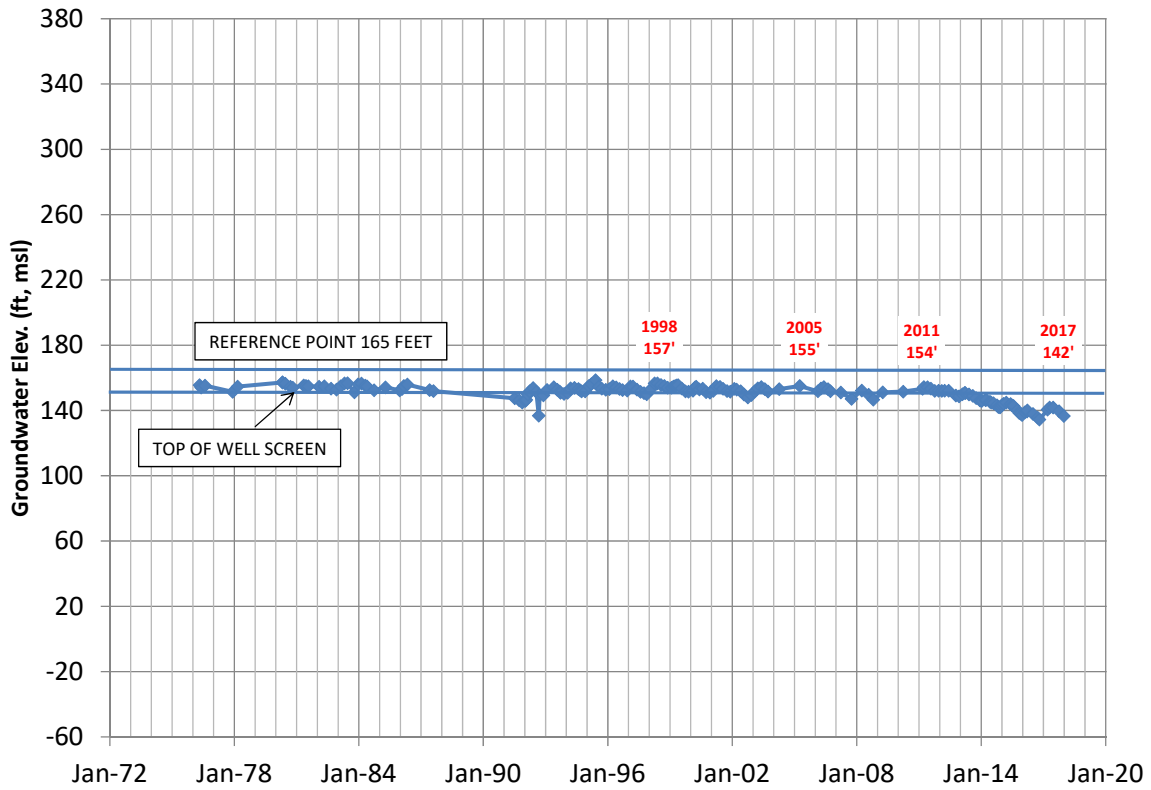
03N21W30F01S (260' - 424' bgs)



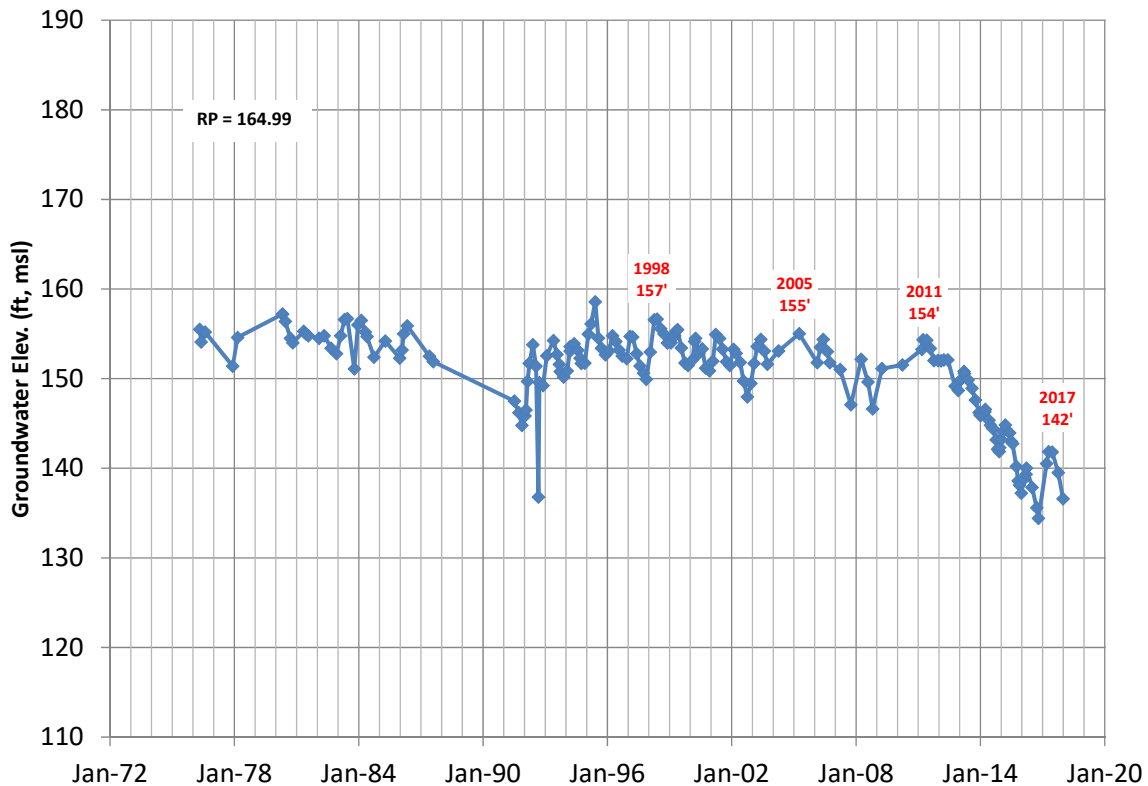
03N21W30F01S (260' - 424' bgs)



03N21W31F04S (17' - 37' bgs)

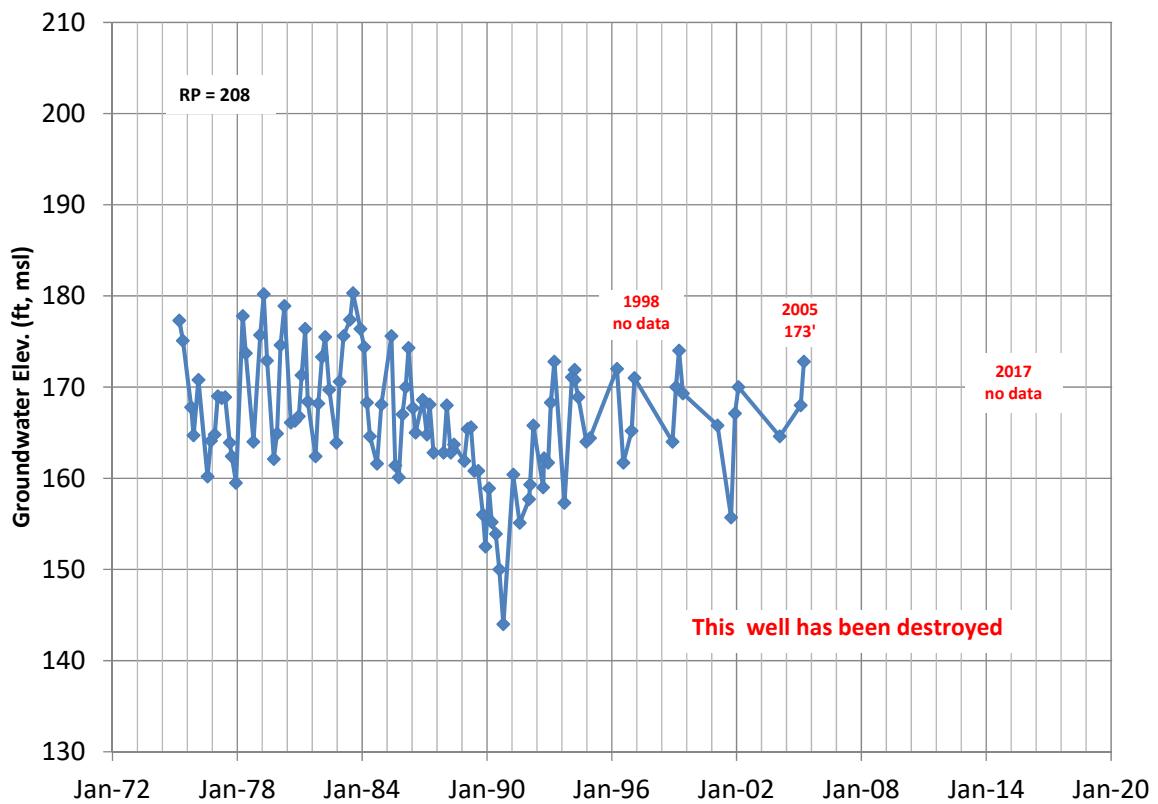


03N21W31F04S (17' - 37' bgs)



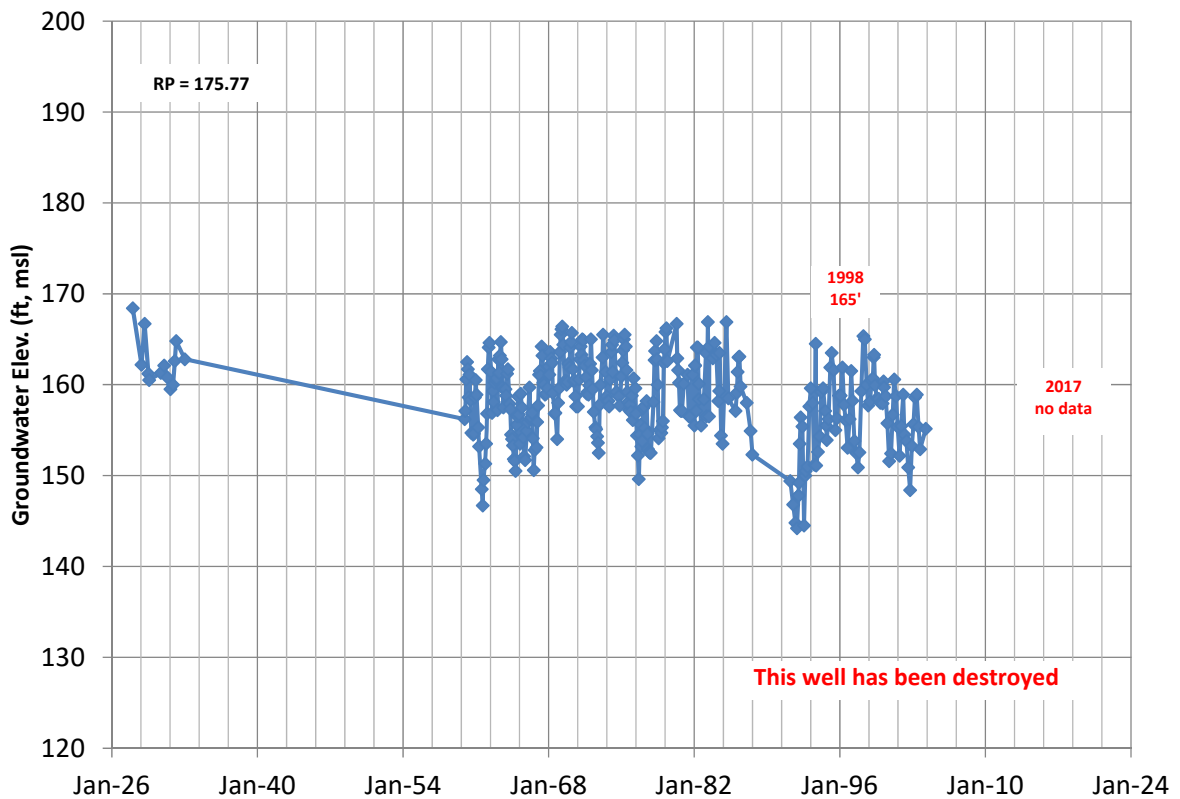
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03N21W30H04S (100' - 400' bgs)

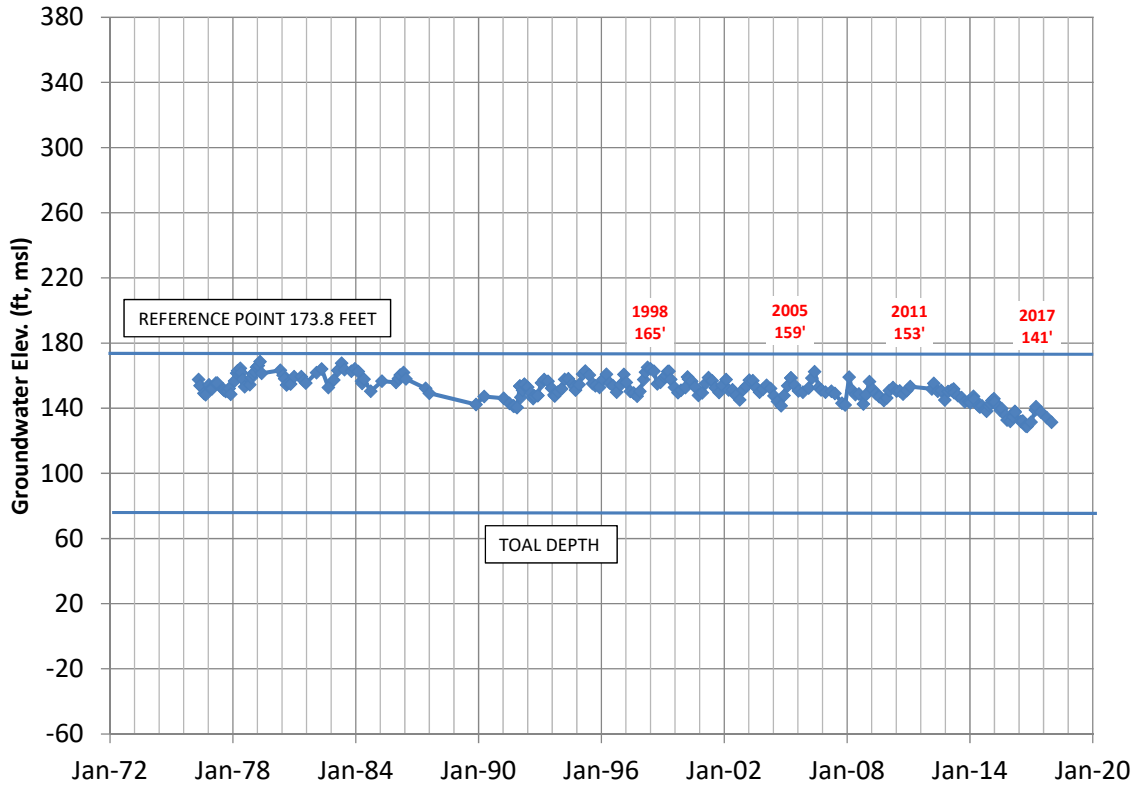


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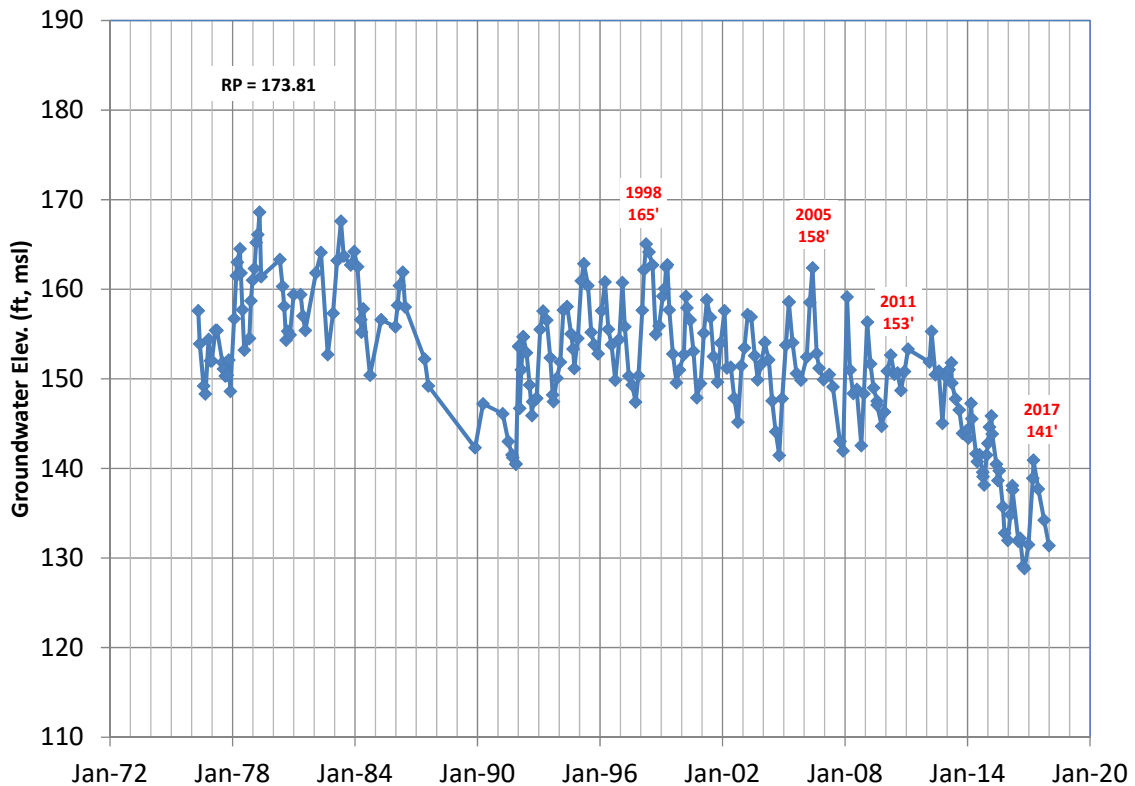
03N21W31B01S (perforations unknown)



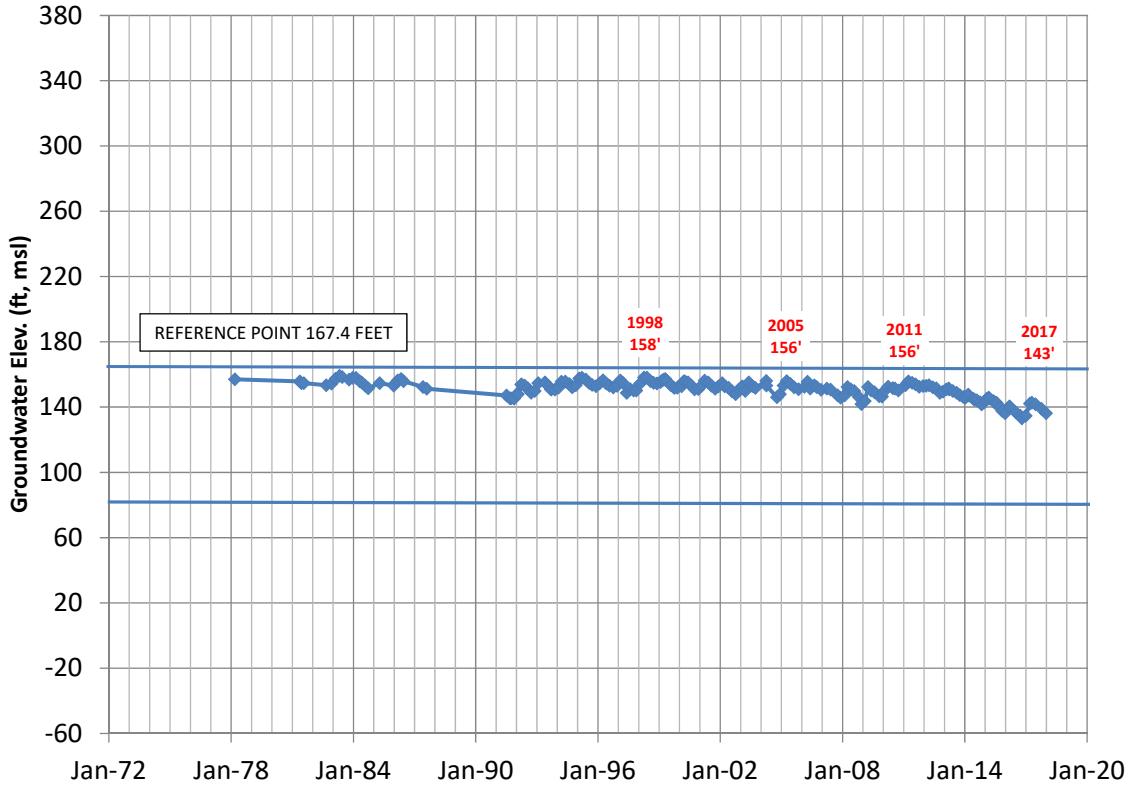
03N21W31F05S (depth 102' bgs)



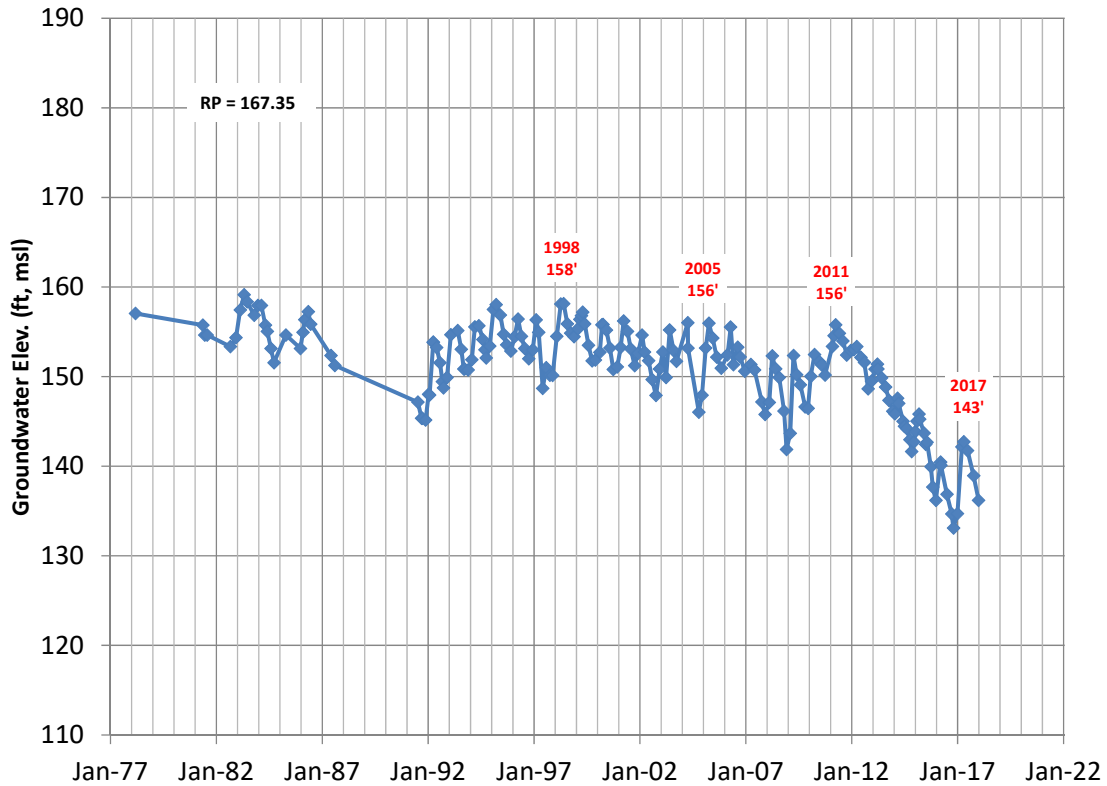
03N21W31F05S (92'- 102' bgs)



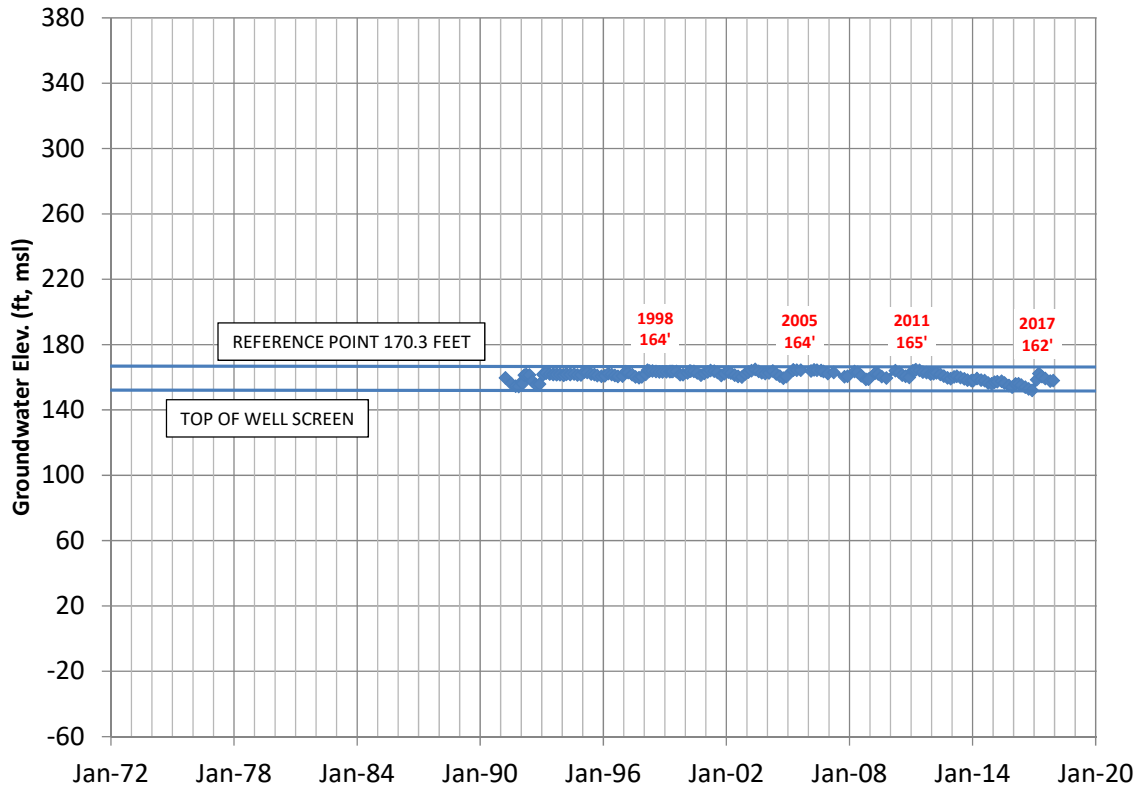
03N21W31G03S (depth 86' bgs)



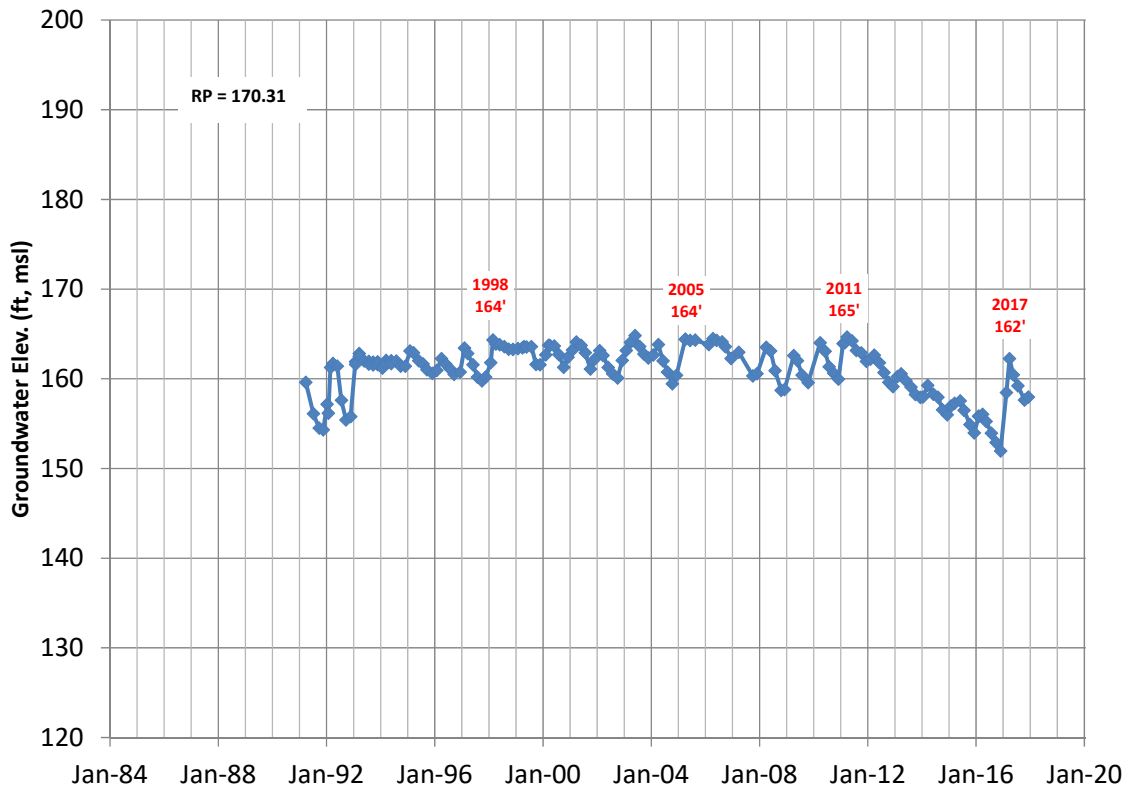
03N21W31G03S (depth 86' bgs)



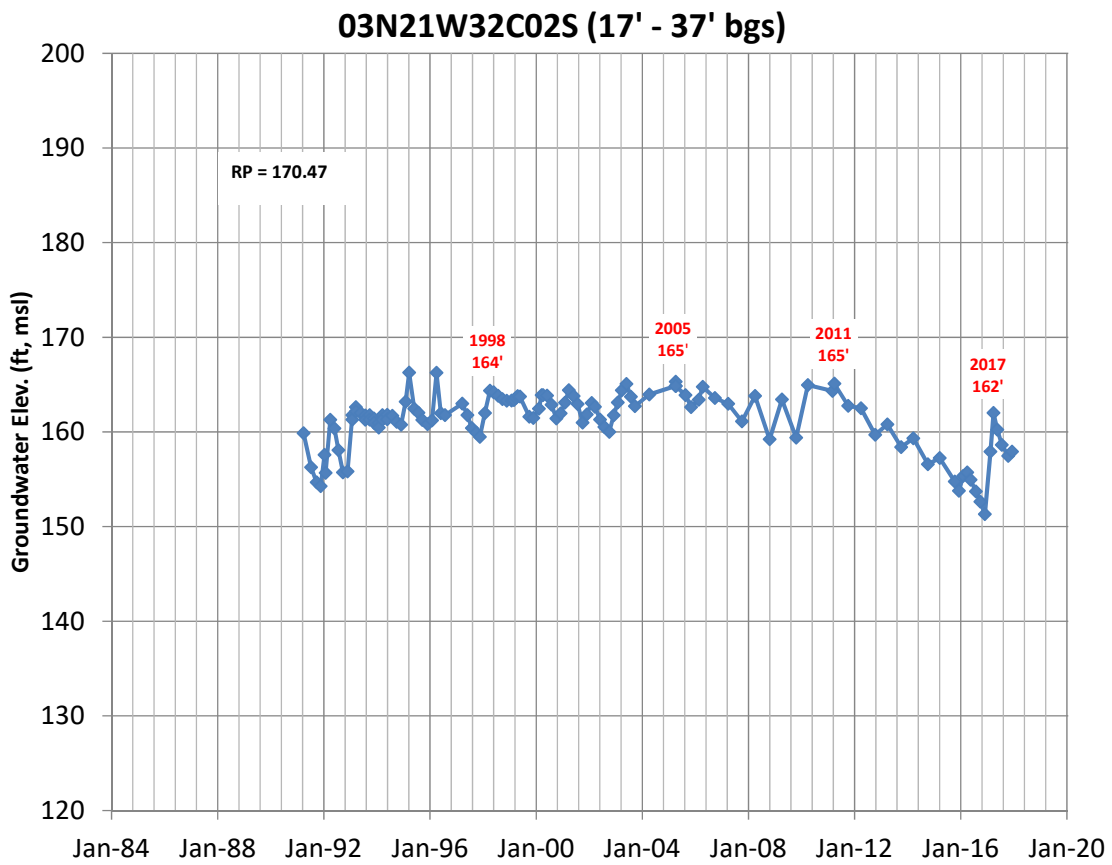
03N21W32C01S (12' - 32' bgs)



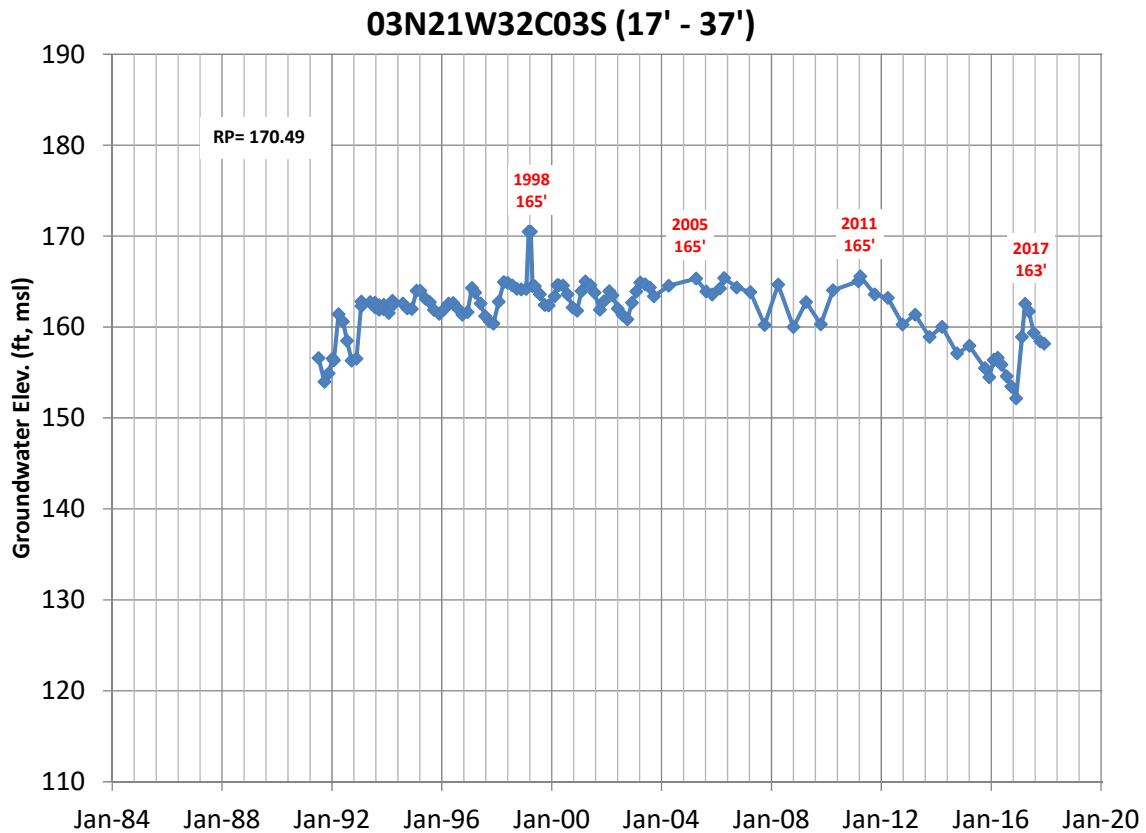
03N21W32C01S (12' - 32' bgs)



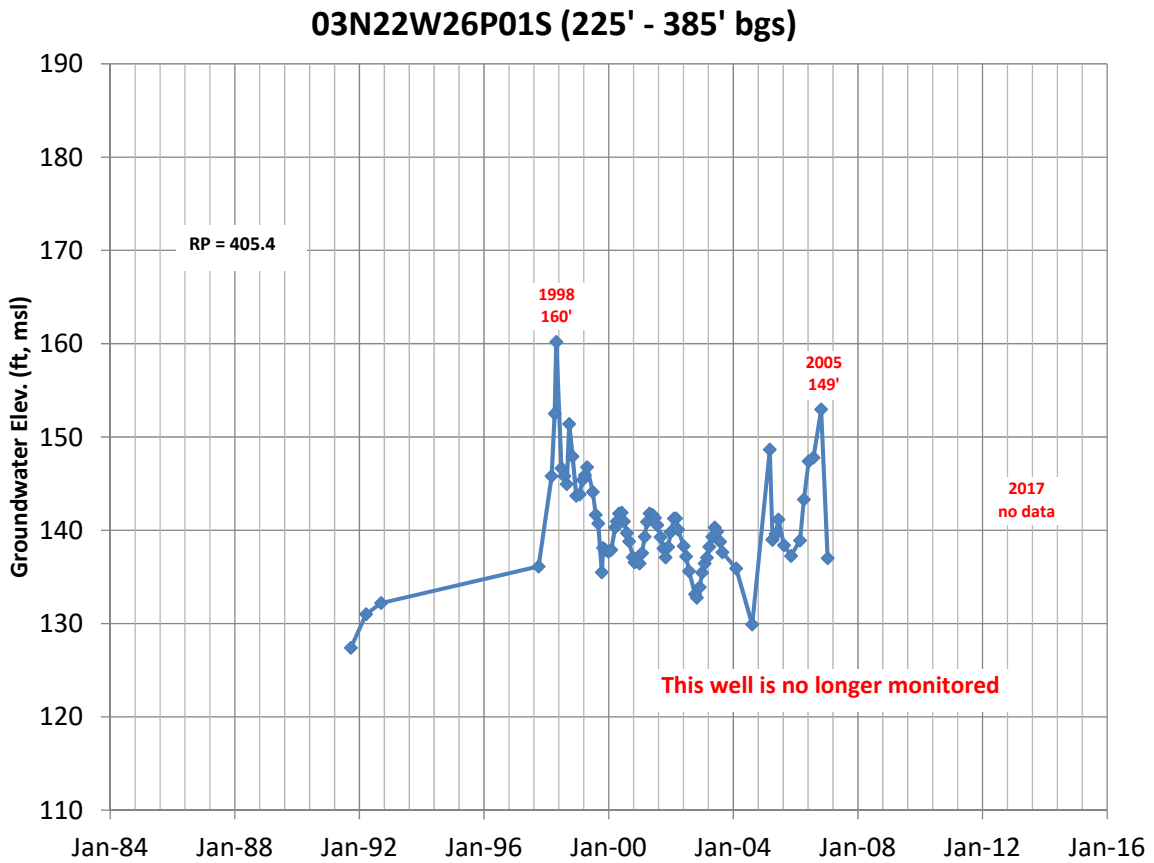
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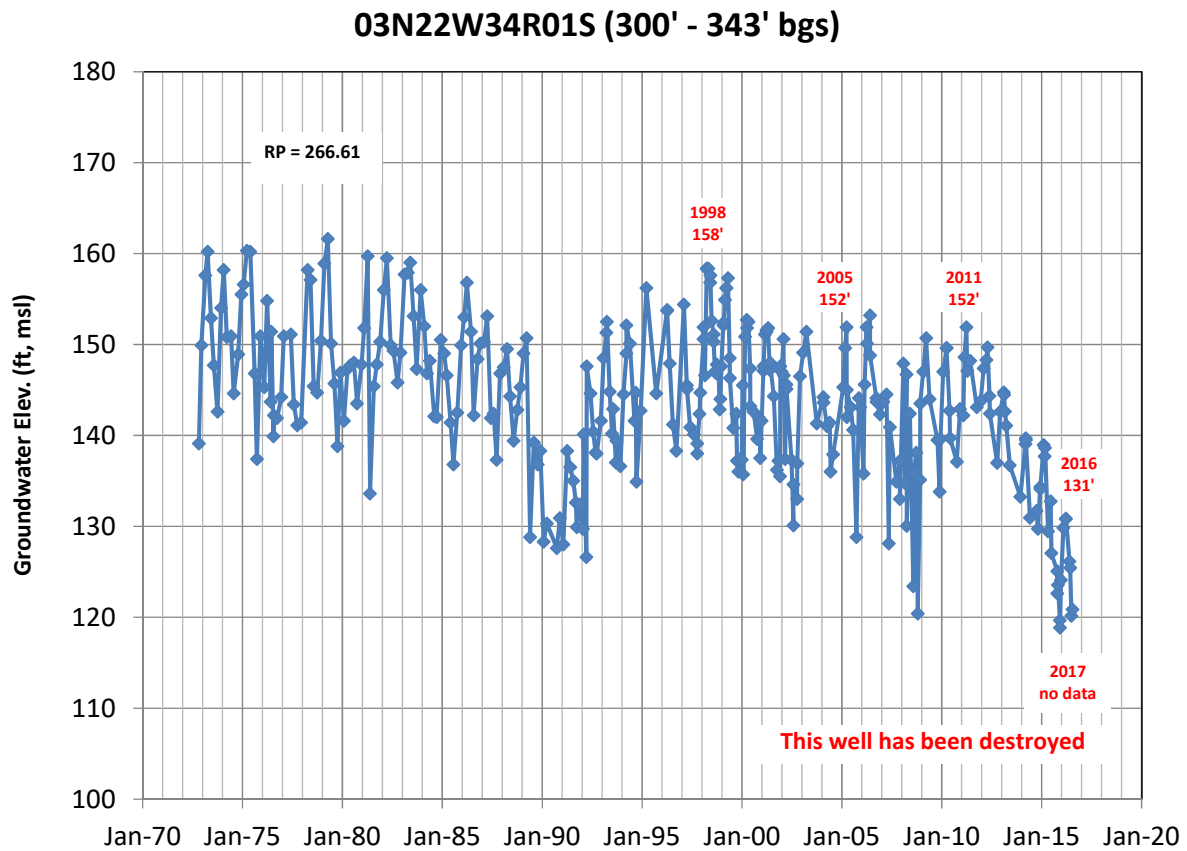
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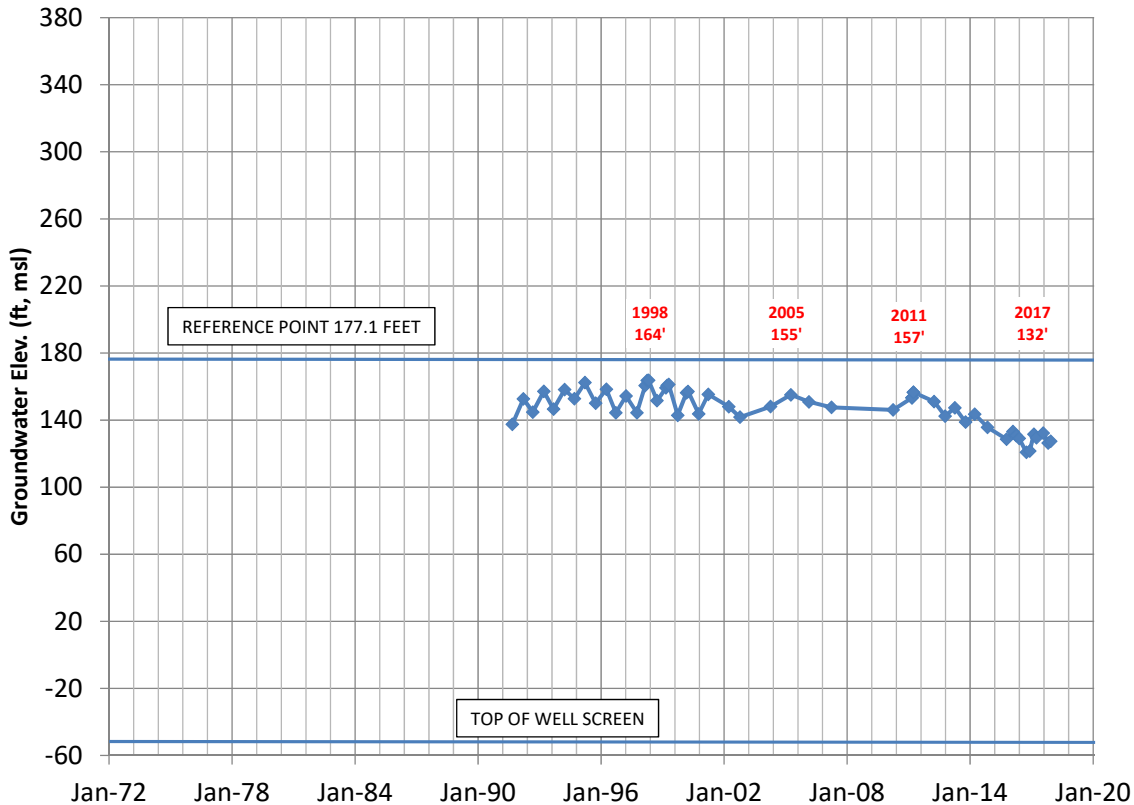
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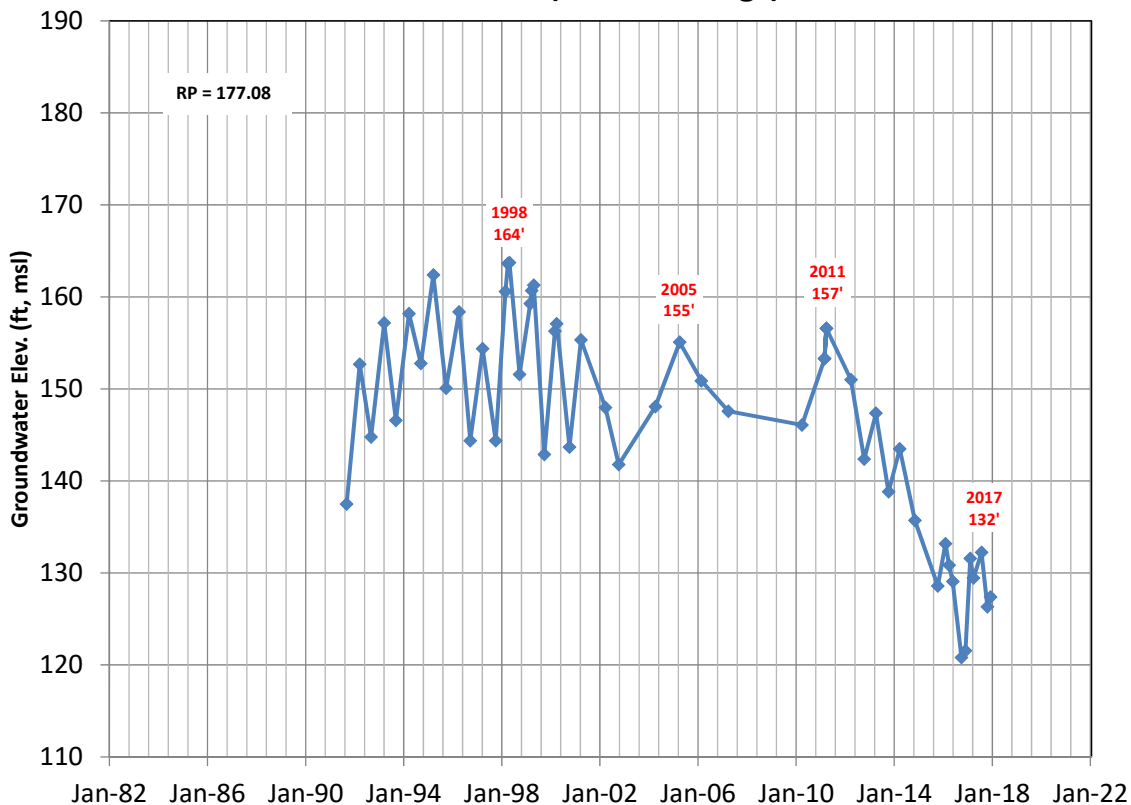
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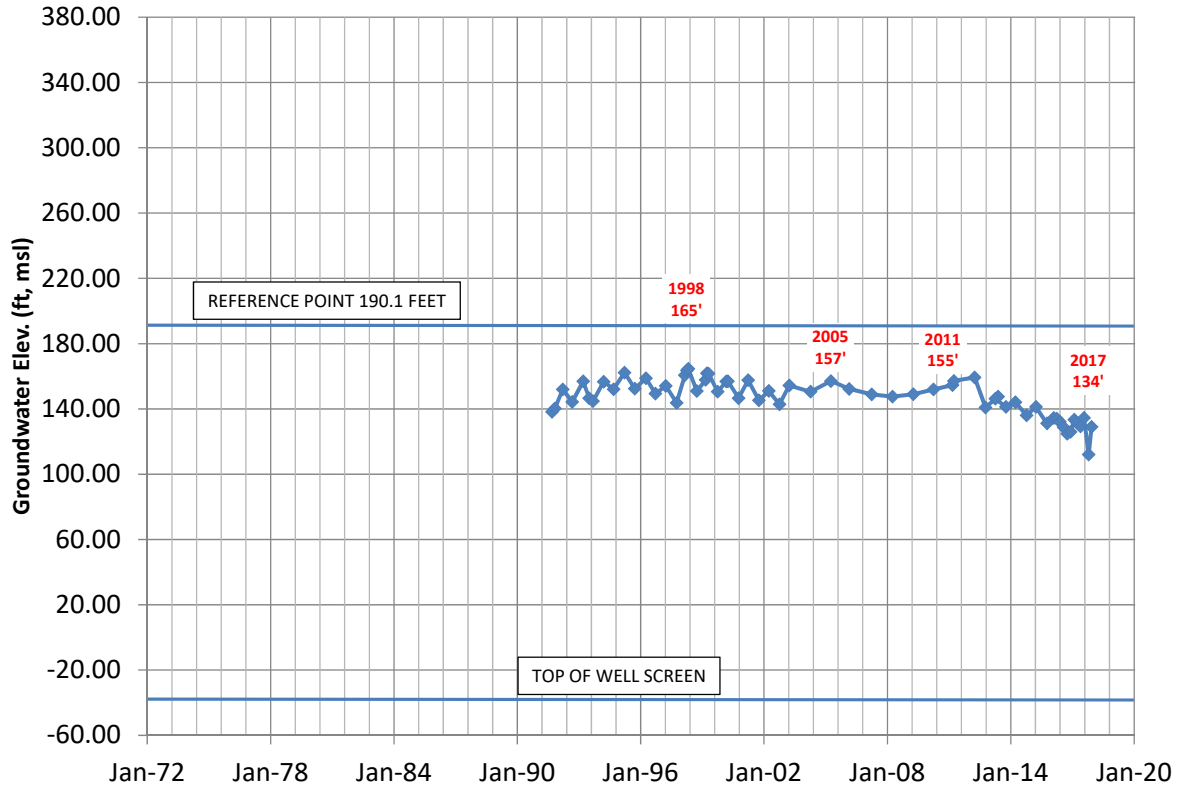
03N22W35Q02S (222' - 366' bgs)



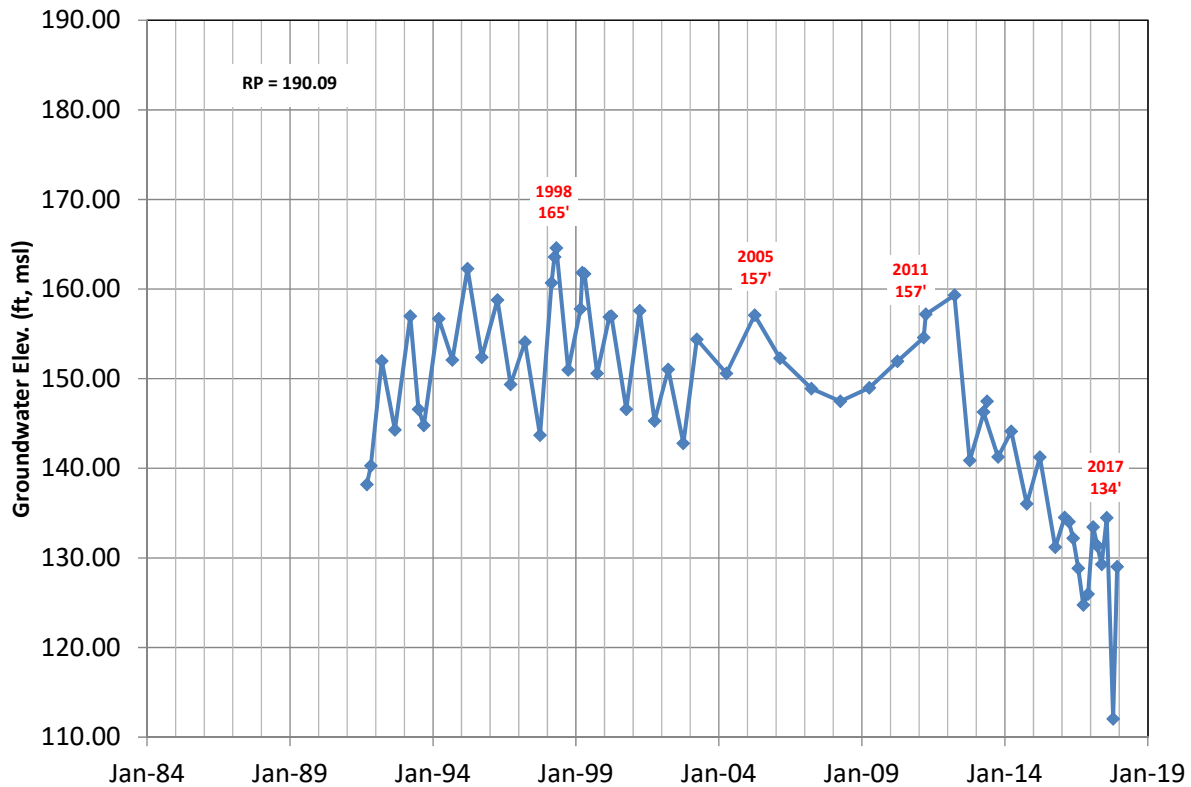
03N22W35Q02S (222' - 366' bgs)



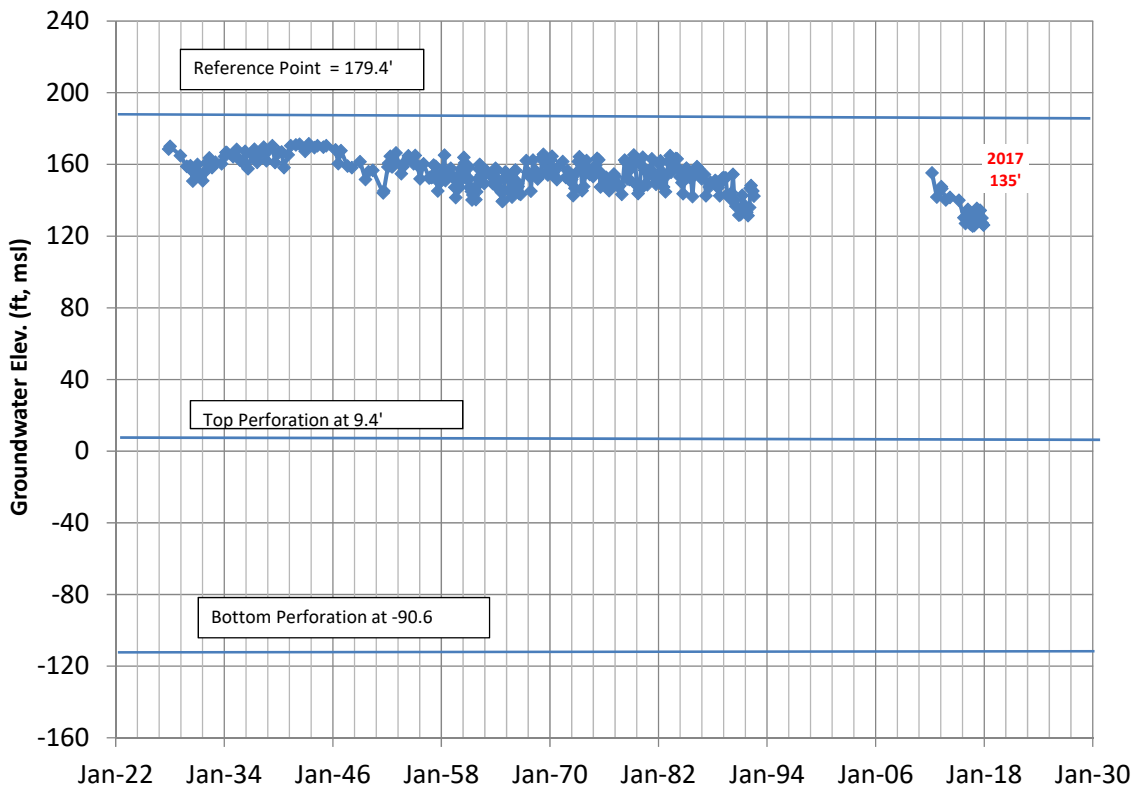
03N22W36H01S (226' - 442' bgs)



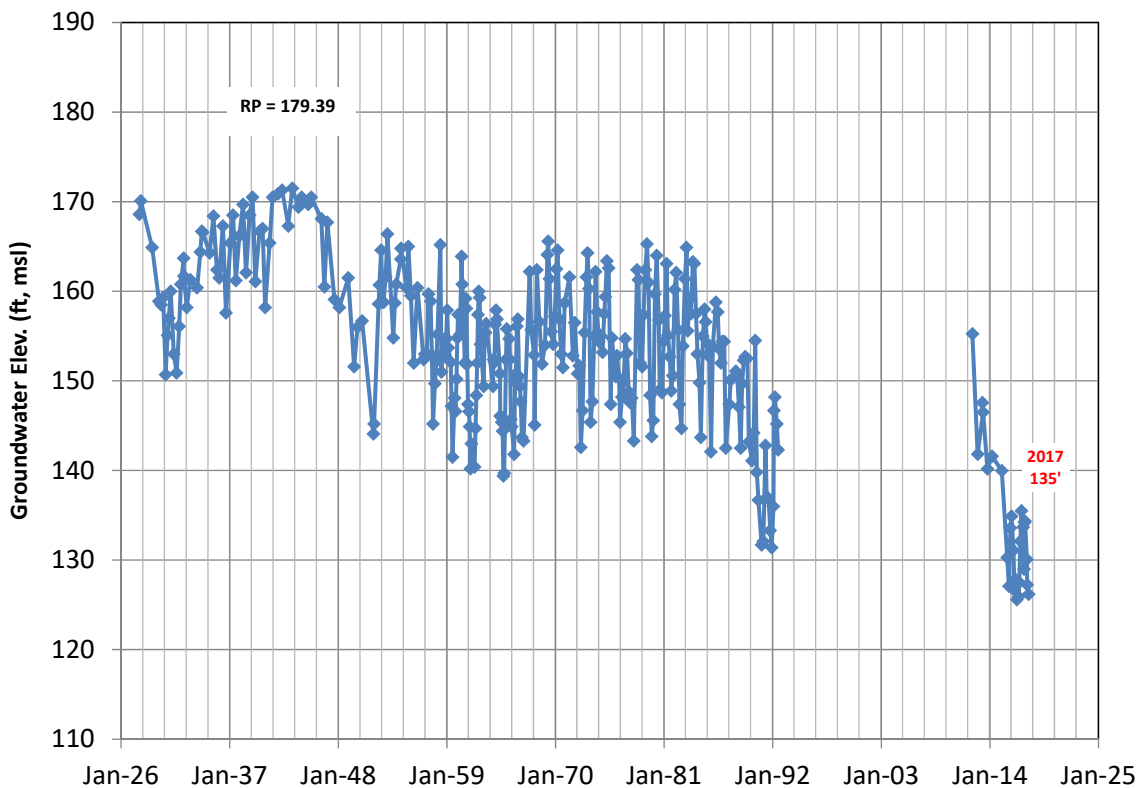
03N22W36H01S (226' - 442' bgs)



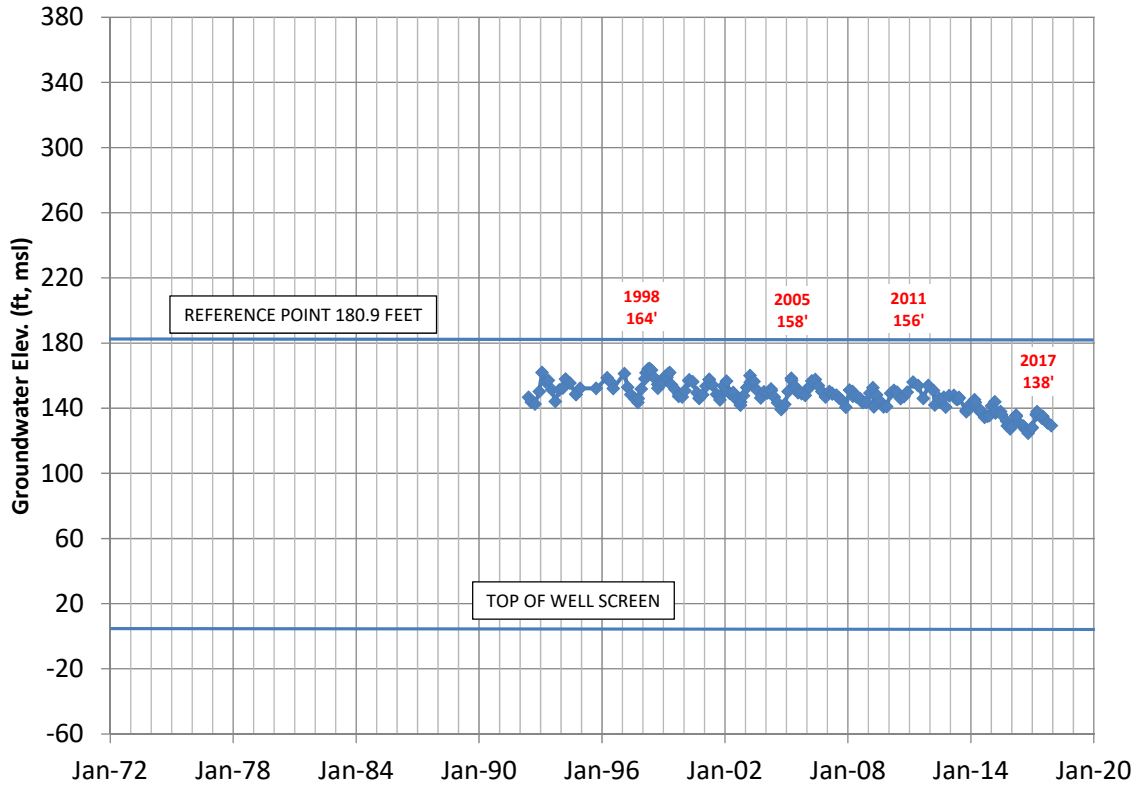
03N22W36K02S (170' - 270' bgs)



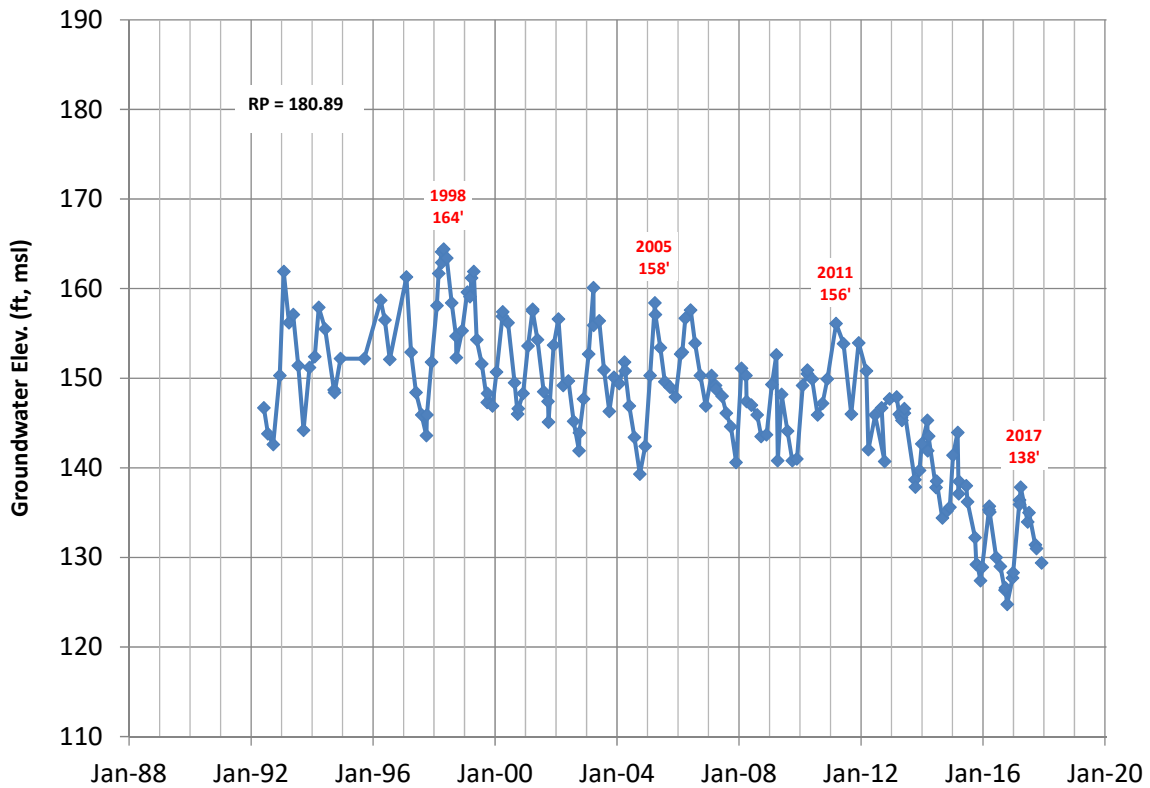
03N22W36K02S (170' - 270' bgs)



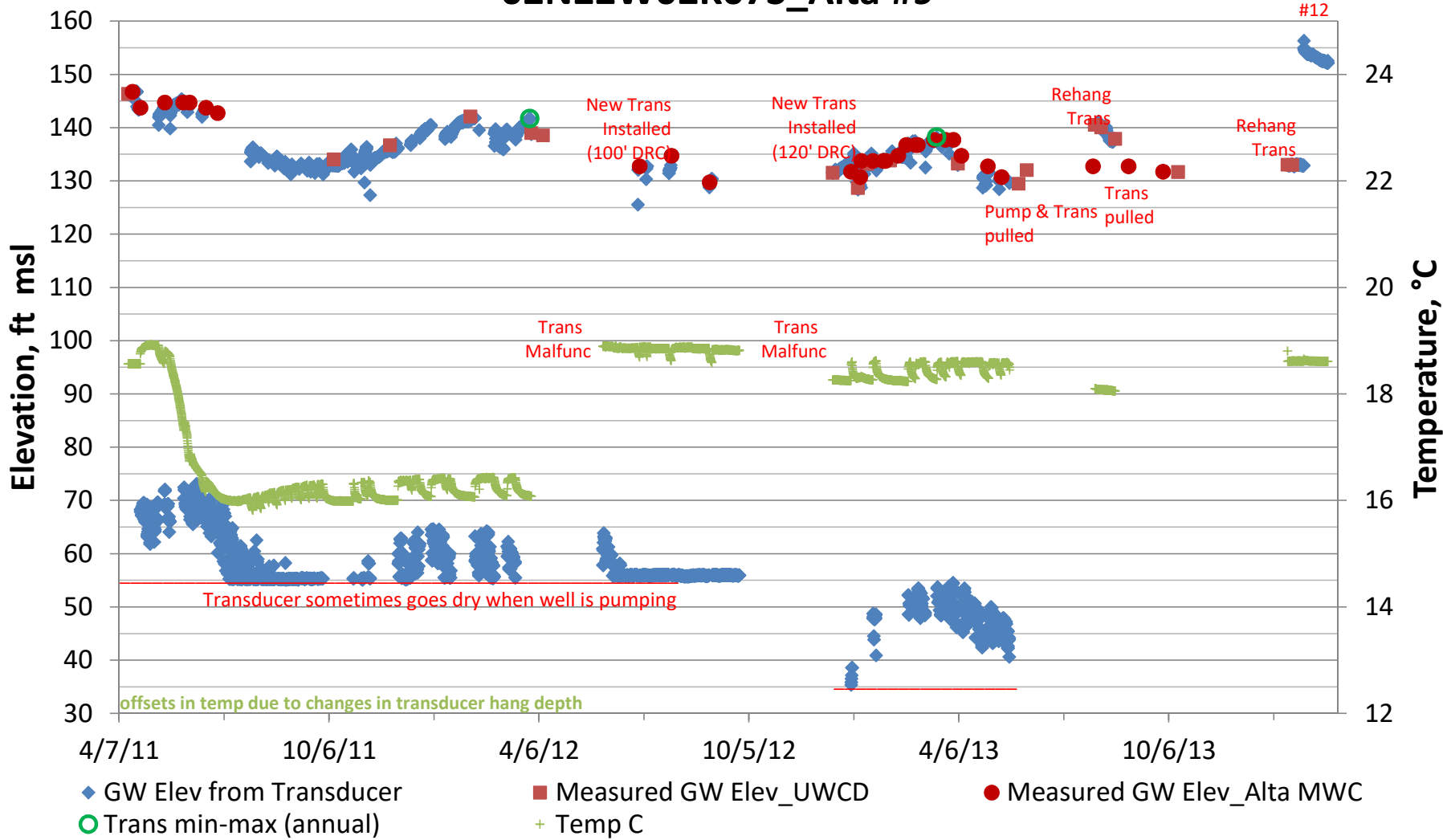
03N22W36K05S (175' - 265' bgs)



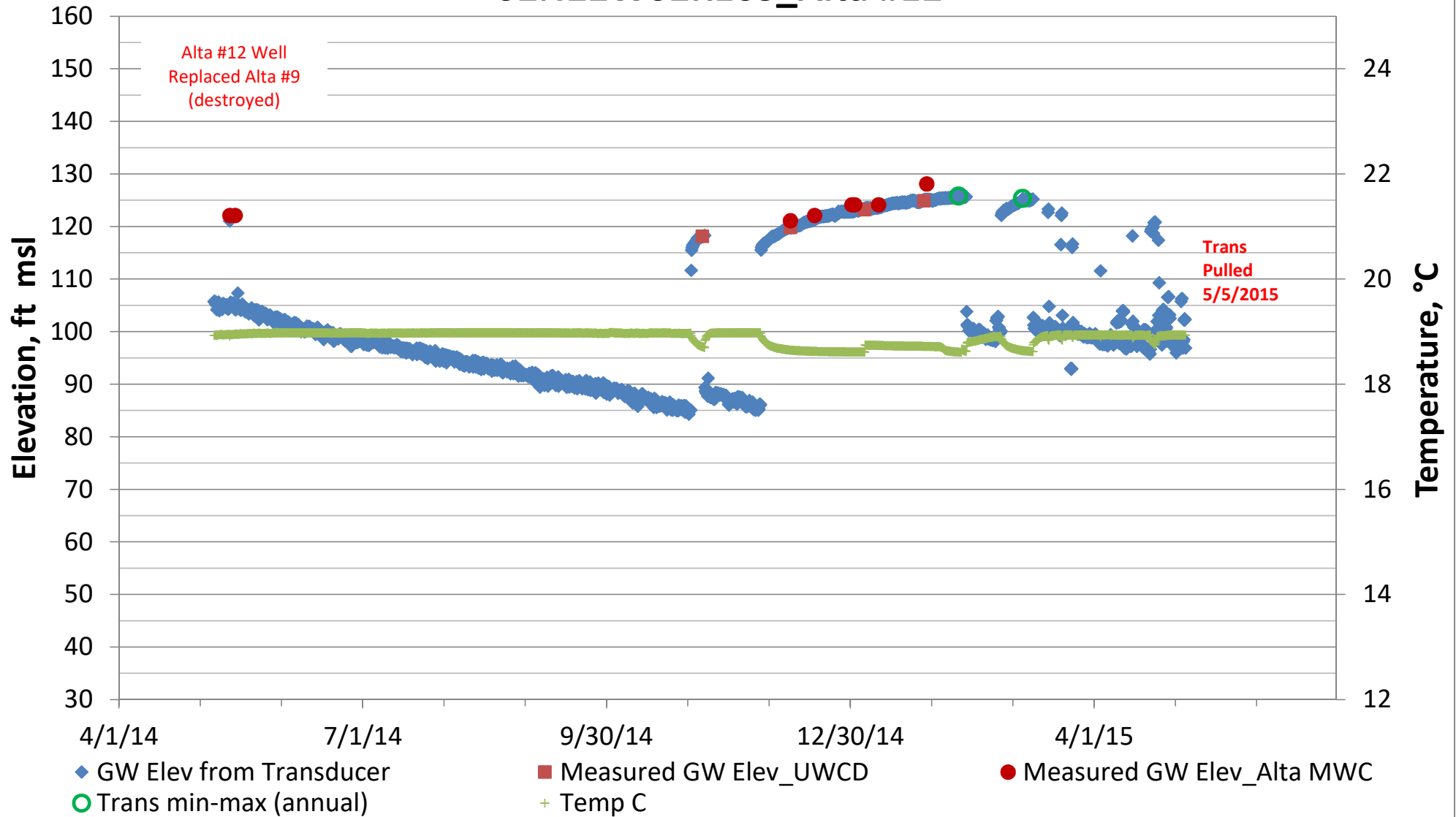
03N22W36K05S (175' - 265' bgs)



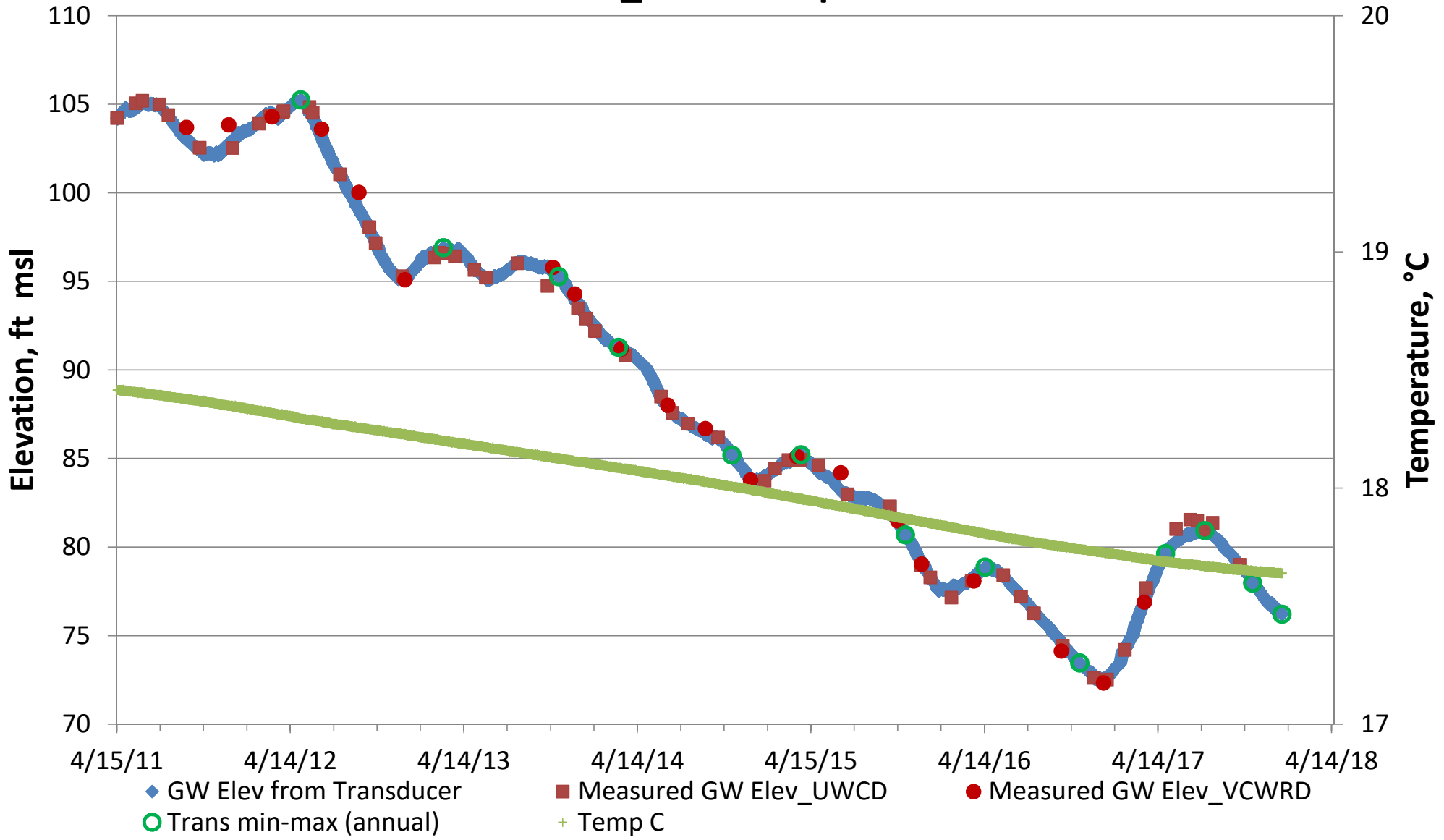
02N22W02K07S_Alta #9



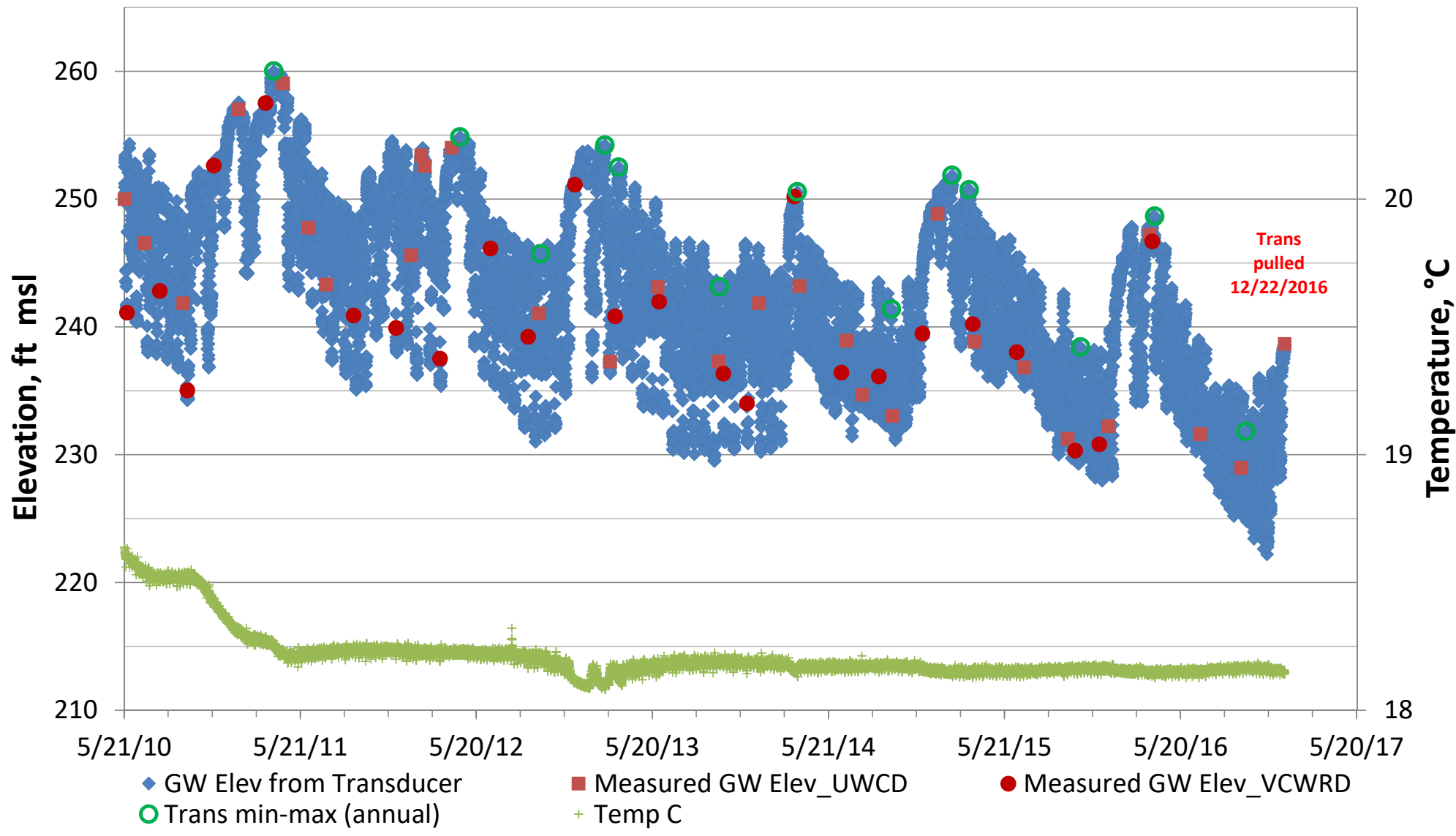
02N22W02K10S_Alta #12



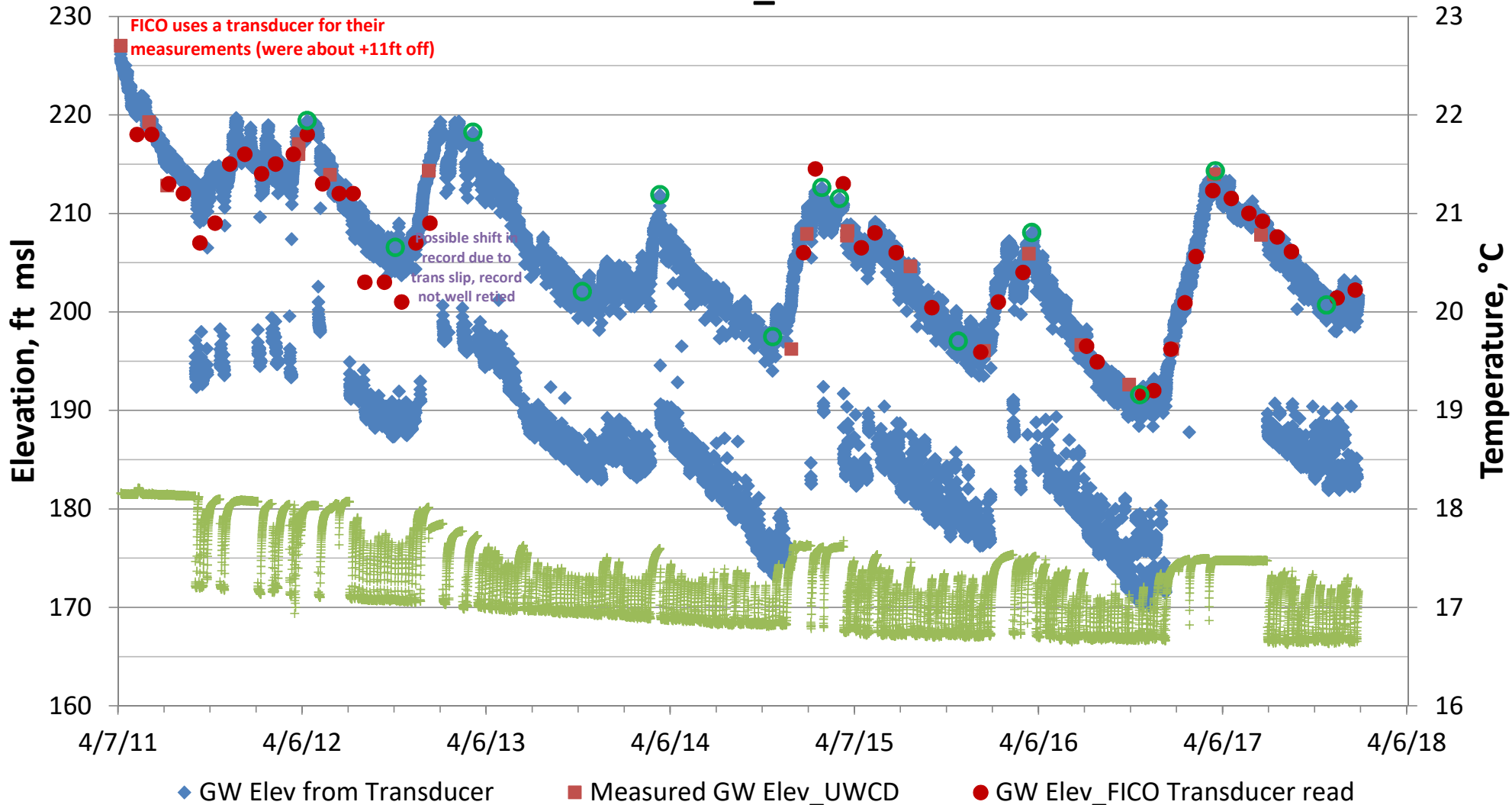
02N22W03M02S_Leavens Apartments



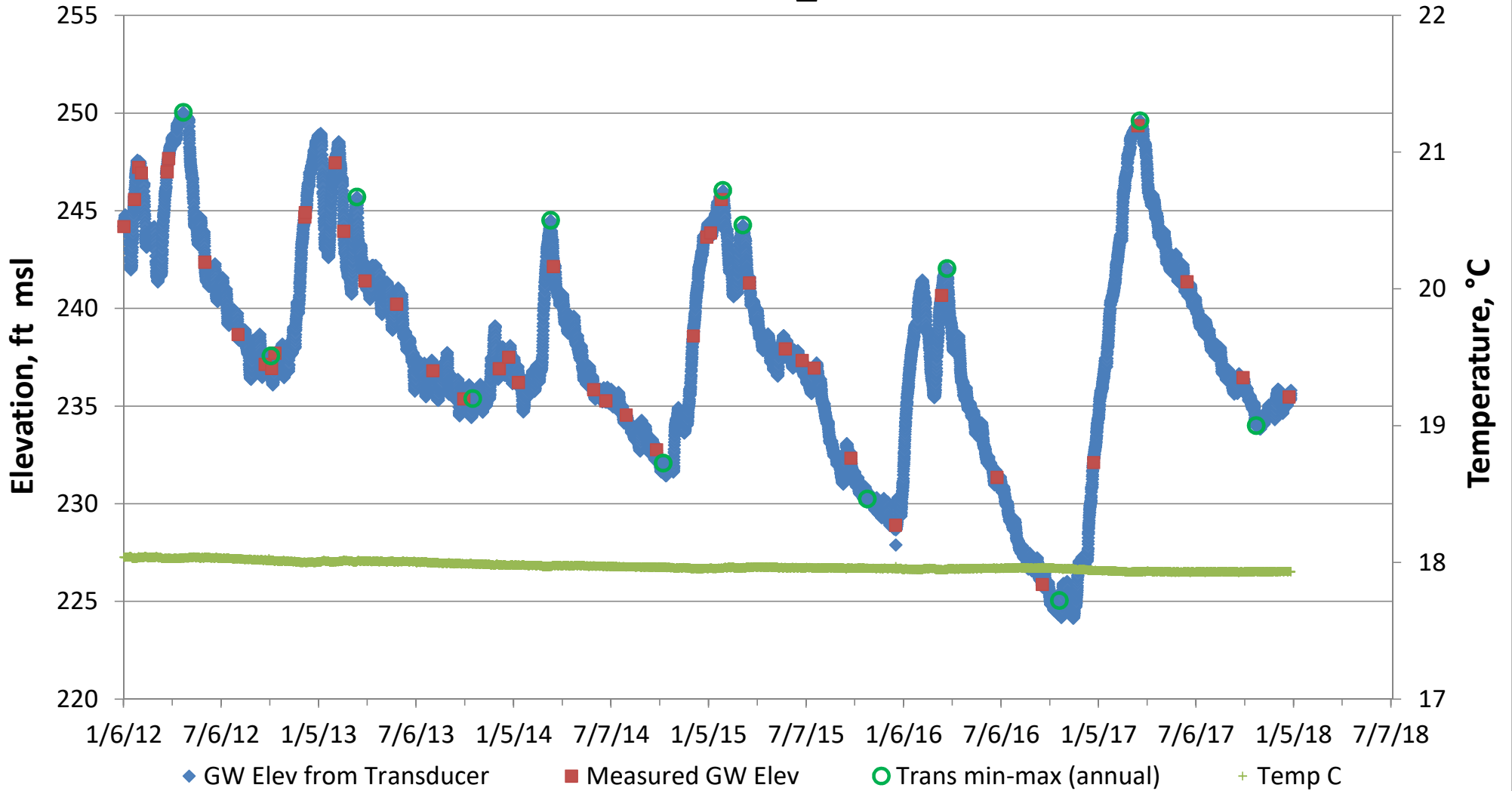
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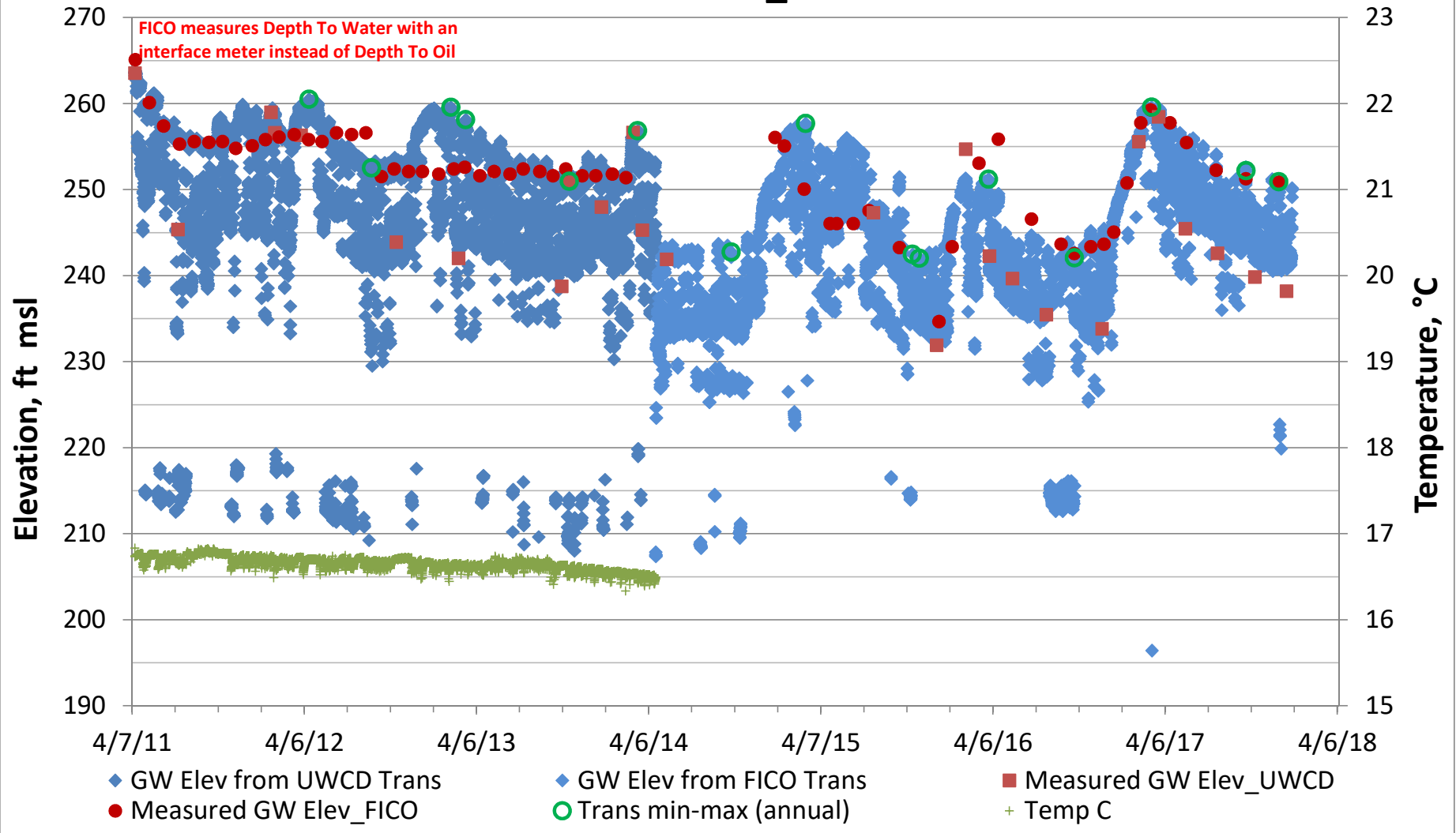
03N21W11F04S_CANYON #10



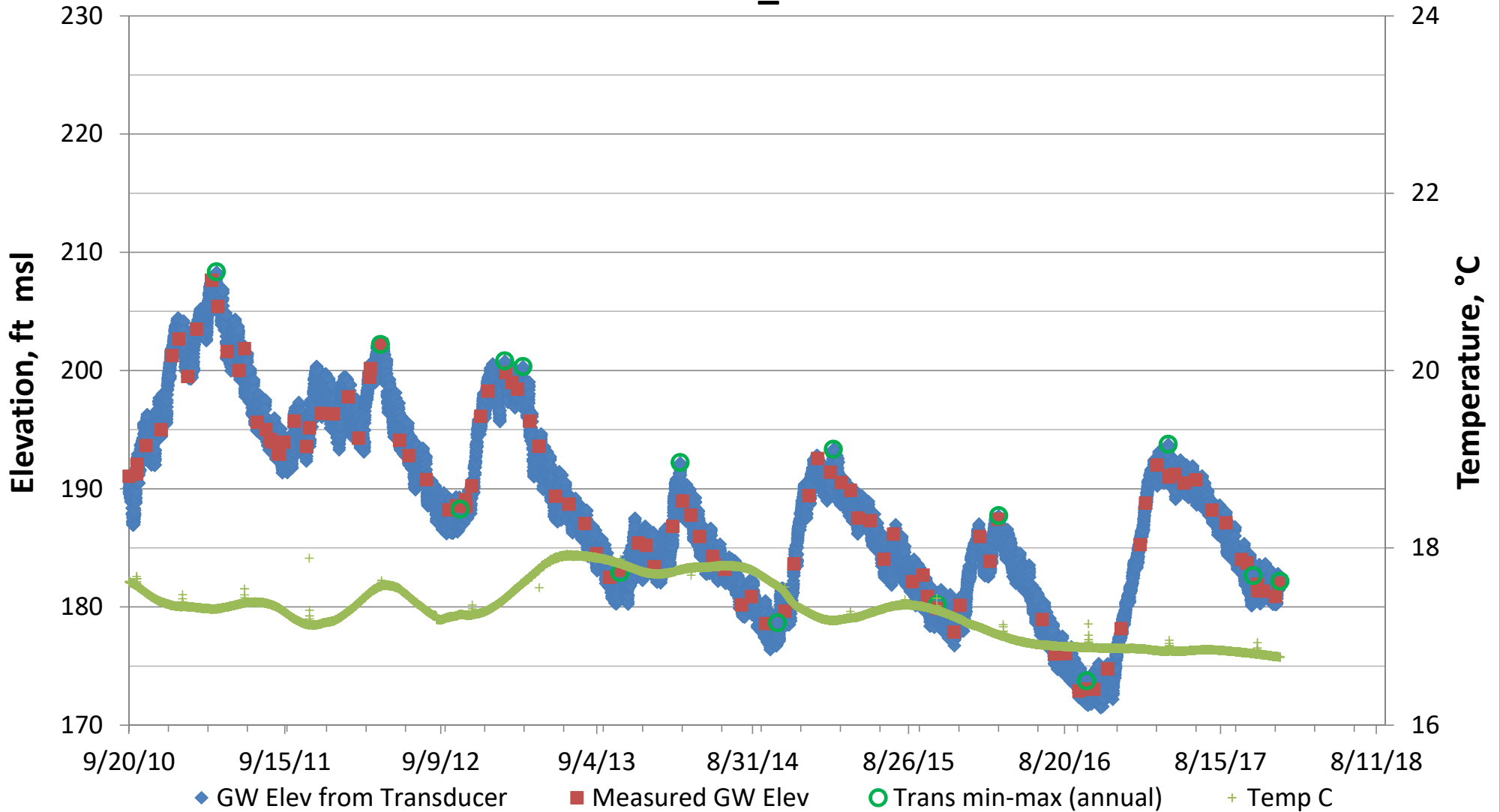
03N21W11H03S_Kimura



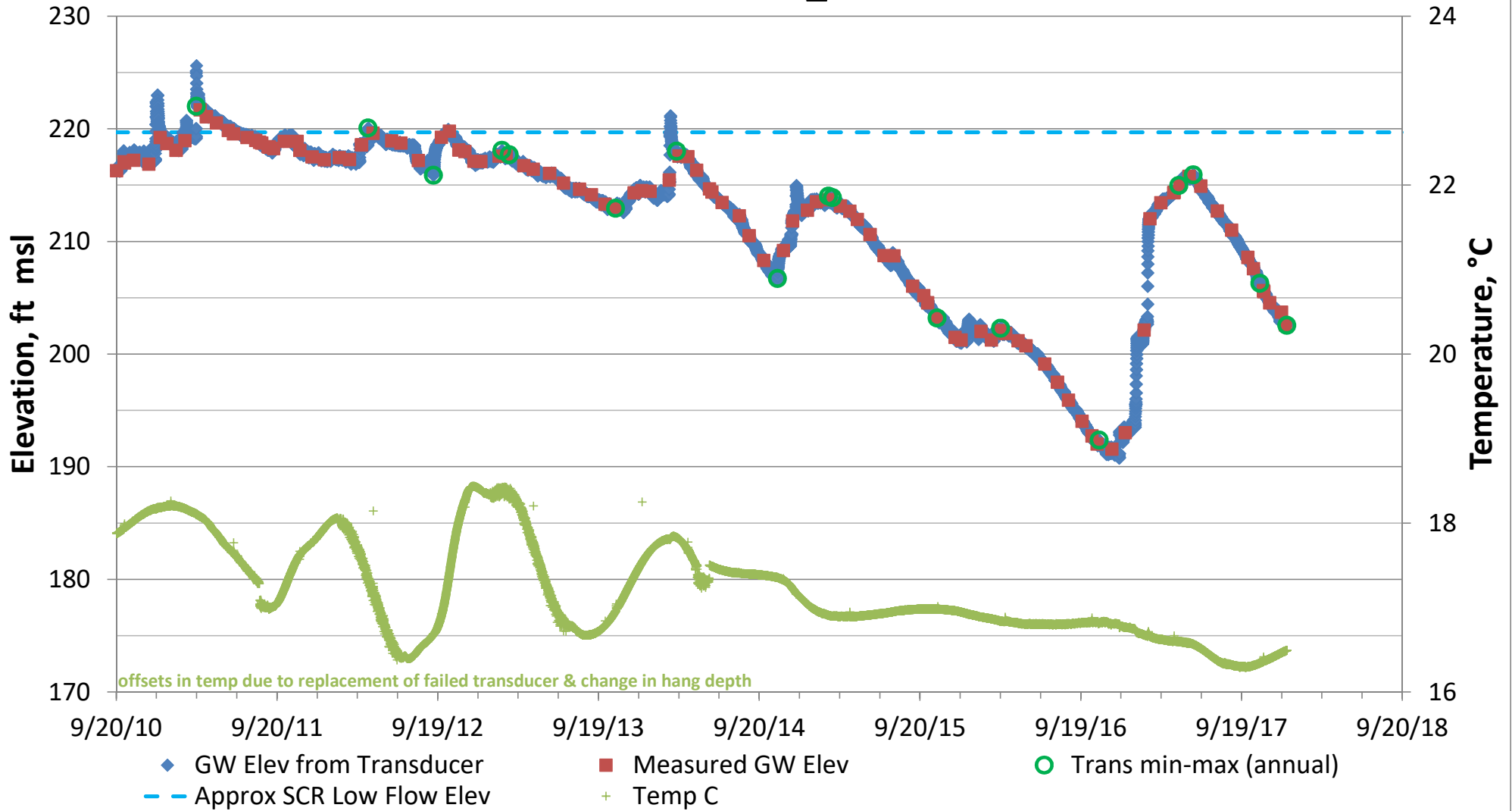
03N21W12E08S_FICO 7A



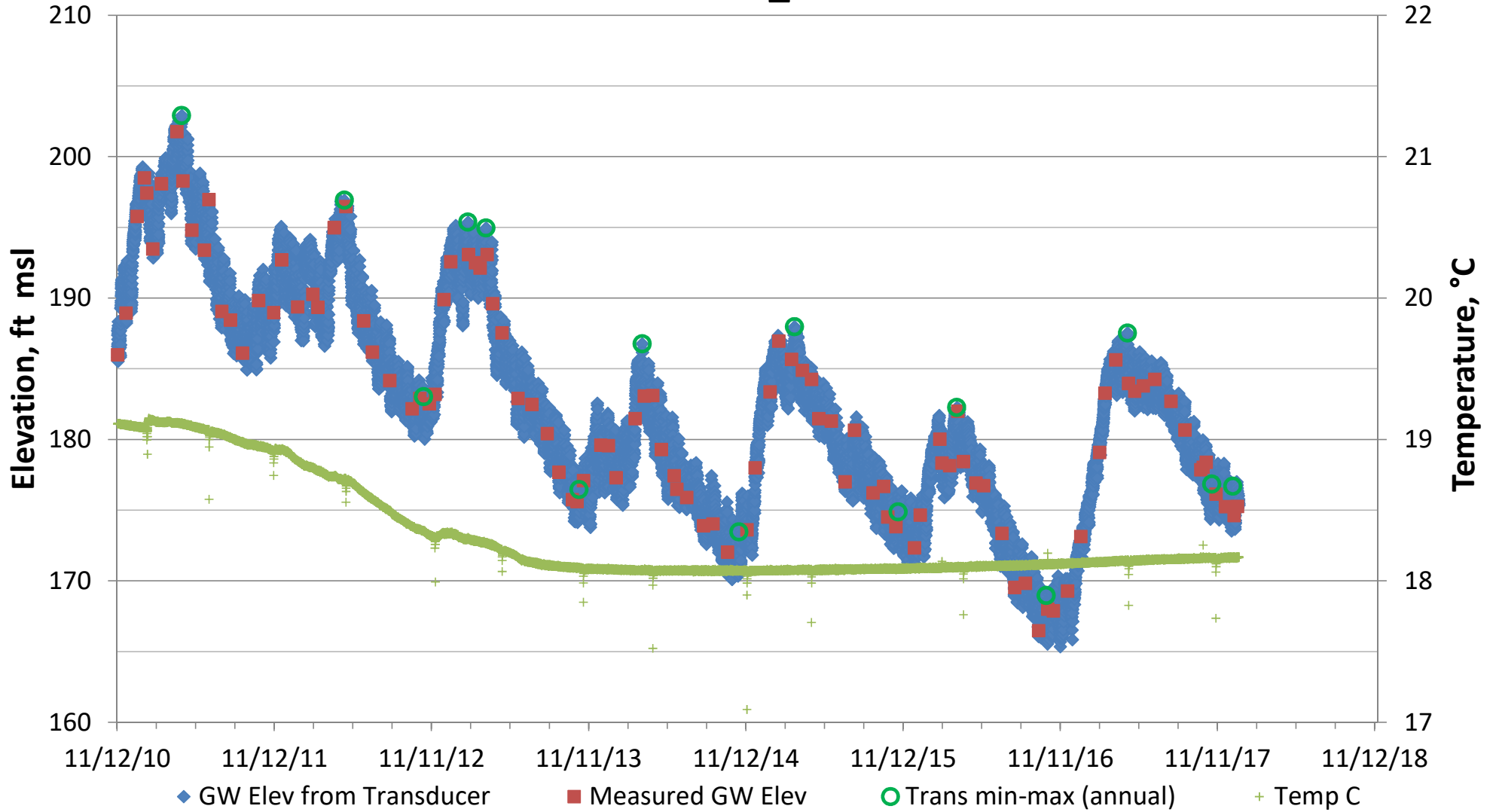
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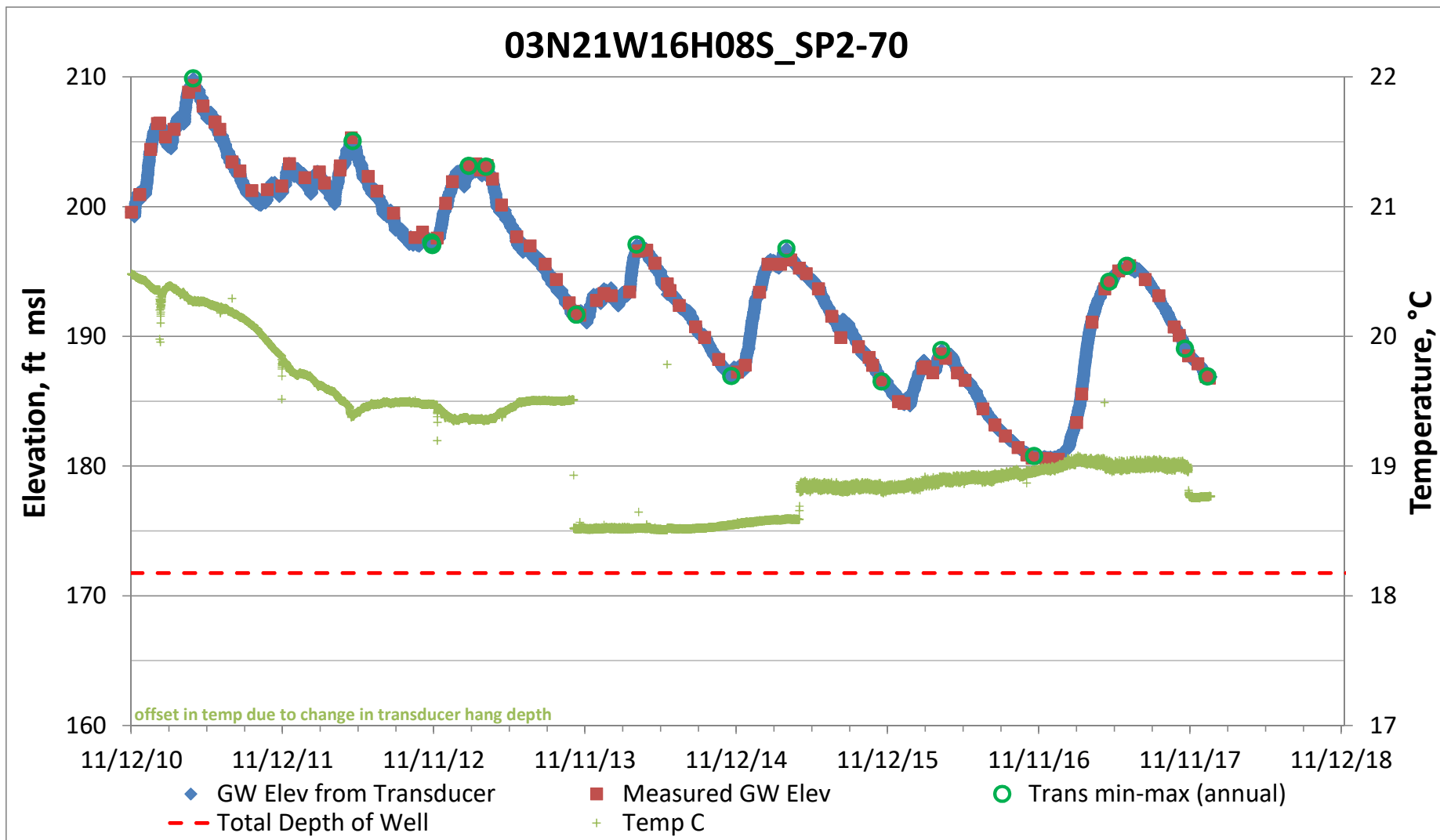


03N21W15G05S_SP1-80

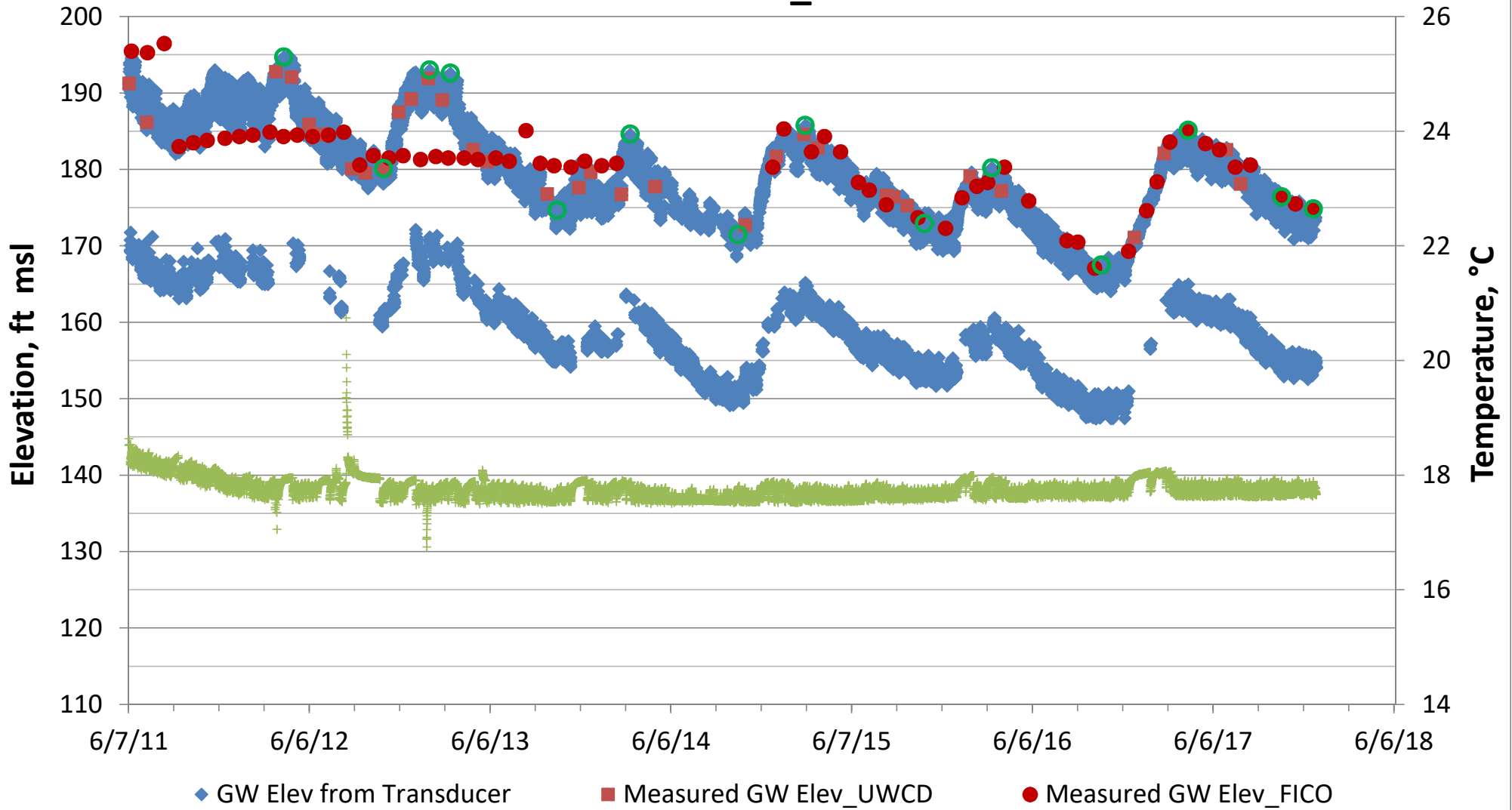


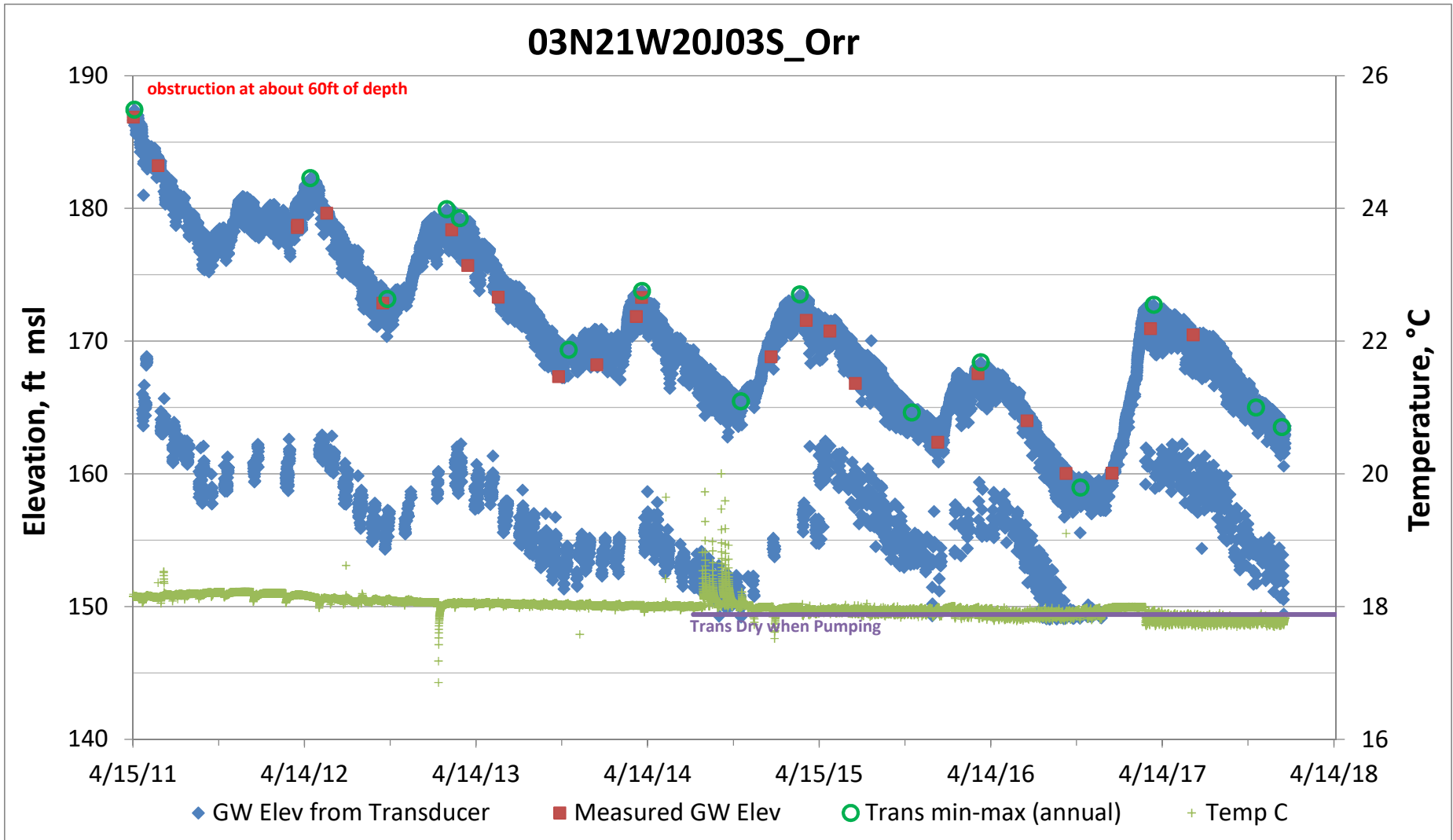
03N21W16H06S_SP2-310



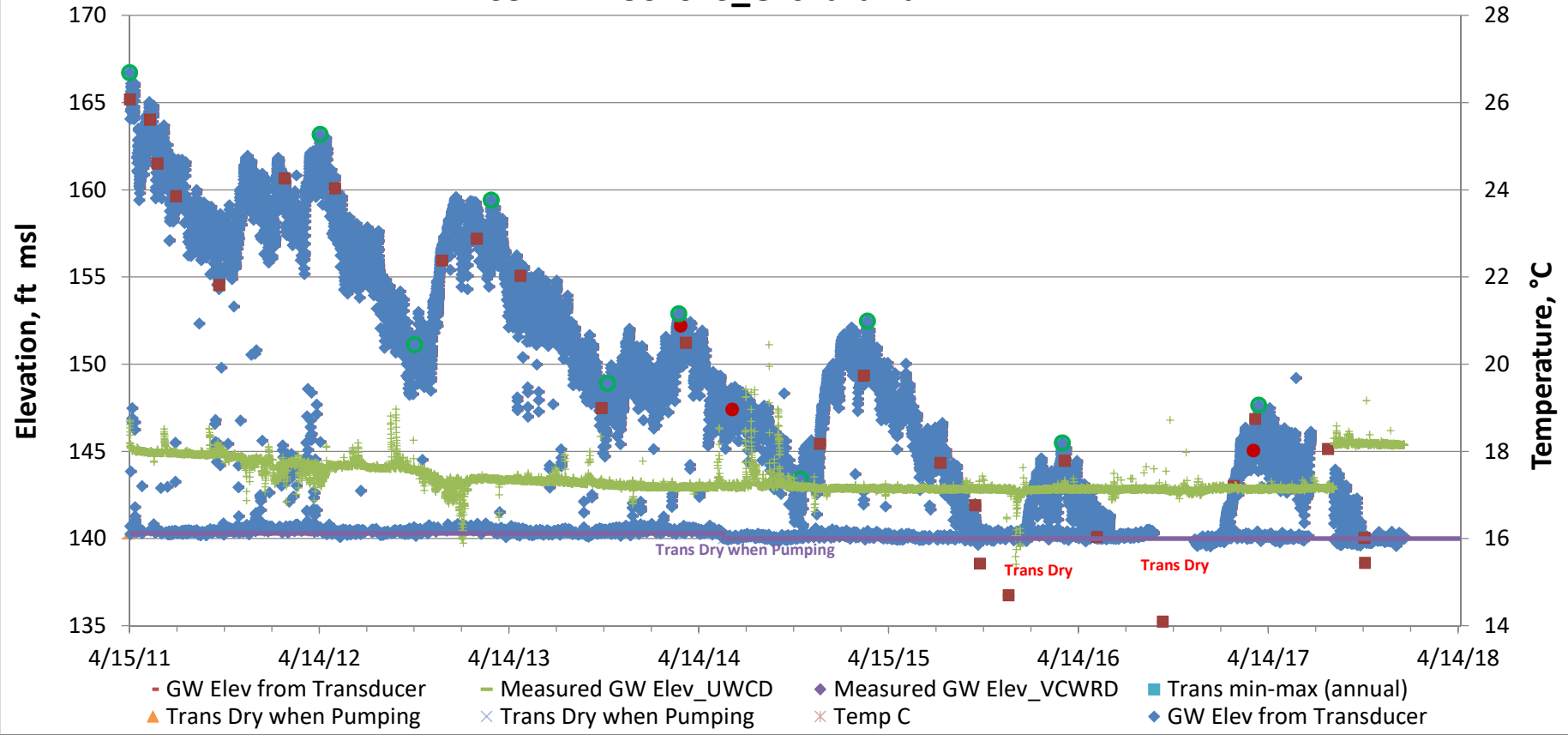


03N21W16K01S_Reese 1

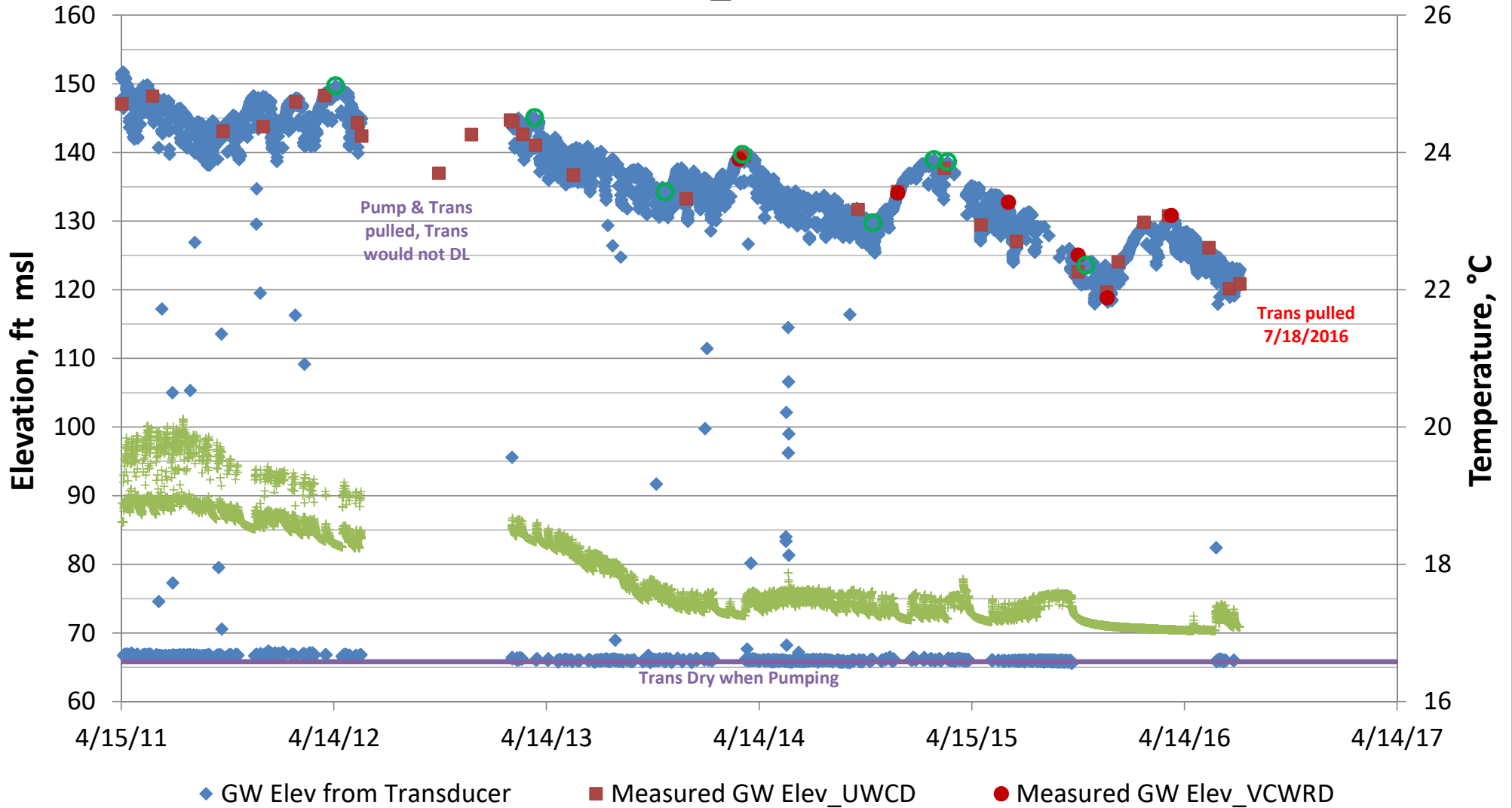




03N21W30F01S_Orchard Farm



03N22W34R01S_Leavens Sat/Tel



**APPENDIX C - Spring 2016 to Spring 2017 Groundwater
Elevation Change Measured in Wells**

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<u>WELLID</u>	<u>WELL_NO</u>	<u>TOPPERF</u>	<u>BTMPERF</u>	<u>YEAR</u>	<u>DEPTH</u>	<u>CODE</u>	<u>WELL_USE</u>	<u>BASIN_NAME</u>	<u>WLESpring2017</u>	<u>WLESpring2016</u>	<u>Difference</u>
02N22W01P02S	NB1	62	102	2011	UPPR		MONITORING	FOREBAY	75.62	35.53	40.09
02N22W01R02S	HR1	63	103	2011	UPPR		MONITORING	FOREBAY	73.17	64.64	8.53
02N22W02C01S	Greg Well	190	225	1935	UPPR		IRRIGATION	SANTA PAULA	136.16	134.38	1.78
02N22W02K10S	Alta #12	125	700	2014	BOTH			SANTA PAULA	100.92	137.71	-36.79
02N22W02R05S	Alta #11	106	520	1984	BOTH		MUNICIPAL	FOREBAY	75.40	33.35	42.05
02N22W03K02S		0	164	1915	UPPR		IRRIGATION	SANTA PAULA	112.04	110.48	1.56
02N22W03M02S	by apts sub pump	468	528	1946	LOWR		IRRIGATION	SANTA PAULA	77.69	78.86	-1.17
02N22W03Q01S		0	0		UPPR			SANTA PAULA	66.69	68.51	-1.82
02N22W07M03S	CP-280	210	280	1995	PRCH		MONITORING	MOUND	144.70	145.09	-0.39
02N22W09K04S		0	0	1935	BOTH		IRRIGATION	MOUND	7.90	8.38	-0.48
02N22W09K05S		625	1455	1975	LOWR		IRRIGATION	MOUND	66.44	57.16	9.28
02N22W11J01S	FERRO A	35	145	1986	UPPR		MONITORING	FOREBAY	42.81	10.42	32.39
02N22W11J02S	HR3	59	99	2011	UPPR		MONITORING	FOREBAY	52.11	31.40	20.71
02N22W11Q01S	FERRO D	35	145	1986	UPPR		MONITORING	FOREBAY	46.96	4.81	42.15
02N22W12A02S		40	121	1971	UPPR		IRRIGATION	FOREBAY	65.98	48.57	17.41
02N22W12B08S	Dos Diegos- Shop	115	355	1997	UPPR		IRRIGATION	FOREBAY	66.02	40.77	25.25
02N22W12G03S		80	141		UPPR		INDUSTRIAL	FOREBAY	61.58	32.98	28.60
02N22W12H01S	Saticoy #1	100	365	2003	UPPR		IRRIGATION	FOREBAY	42.27	14.80	27.47
02N22W12J02S	ROSE #1	35	125	1992	UPPR		MONITORING	FOREBAY	43.05	17.44	25.61
02N22W12J04S	Saticoy #2	100	320	2003	UPPR		IRRIGATION	FOREBAY	34.36	16.55	17.81
02N22W12N03S		276	456	1961	BOTH		IRRIGATION	FOREBAY	29.50	12.23	17.27
02N22W13N02S	El Rio #12	752	1092	1983	LOWR		MUNICIPAL	FOREBAY	-72.76	-84.84	12.08
02N22W13N05S	Central-219	199	219	2000	UPPR		MONITORING	FOREBAY	-19.72	-27.95	8.23
02N22W13N06S	Central-175	155	175	2000	UPPR		MONITORING	FOREBAY	-20.39	-26.29	5.90
02N22W14F03S	FERRO C	35	145	1986	UPPR		MONITORING	FOREBAY	-9.64	-30.88	21.24
02N22W14G07S	NAW-150	130	150	1990	UPPR		MONITORING	FOREBAY	-7.38	-28.57	21.19
02N22W14P03S		162	306	1981	UPPR		MUNICIPAL	FOREBAY	-24.97	-52.91	27.94
02N22W15R02S	SP MILLING NE	50	140	1998	UPPR		MONITORING	FOREBAY	-24.51	-30.54	6.03
02N22W16K01S		292	345	1934	UPPR		INDUSTRIAL	MOUND	-32.59	-35.88	3.29
02N22W16R02S	TNC2	68	108	2011	UPPR		MONITORING	FOREBAY	-23.93	-22.85	-1.08
02N22W17M02S	Ivy Lawn	550	850	2001	LOWR		IRRIGATION	MOUND	10.38	5.14	5.24
02N22W17Q05S	Valentine	360	478	1965	BOTH		IRRIGATION	MOUND	-35.80	-38.97	3.17
02N22W22R02S		124	224		UPPR		MUNICIPAL	FOREBAY	-24.88	-25.15	0.27
02N22W23B02S	El Rio #5	163	277	1955	UPPR		MUNICIPAL	FOREBAY	-26.51	-32.37	5.86

<u>WELLID</u>	<u>WELL_NO</u>	<u>TOPPERF</u>	<u>BTMPERF</u>	<u>YEAR</u>	<u>DEPTH</u>	<u>CODE</u>	<u>WELL_USE</u>	<u>BASIN_NAME</u>	<u>WLESpring2017</u>	<u>WLESpring2016</u>	<u>Difference</u>
02N22W23B08S	SG-155	135	155	2000	UPPR		MONITORING	FOREBAY	-24.13	-19.18	-4.95
02N22W23C01S	El Rio #7	100	300	1955	UPPR		MUNICIPAL	FOREBAY	-26.85	-32.77	5.92
02N22W23C05S	El Rio #15	140	310	2000	UPPR		MUNICIPAL	FOREBAY	-25.76	-27.18	1.42
02N22W23C06S	El Rio #17	150	290	2014	UPPR		MUNICIPAL	FOREBAY	-25.46	-29.76	4.30
02N22W23D06S		130	370	1991	UPPR		IRRIGATION	FOREBAY	-55.13	-41.65	-13.48
02N22W23G03S	El Rio #2A	100	300	1984	UPPR		MUNICIPAL	FOREBAY	-26.92	-29.33	2.41
02N22W23G04S	El Rio #16	115	340	2009	UPPR		MUNICIPAL	FOREBAY	-28.17	-28.80	0.63
02N22W23H04S	El Rio #13	850	1390	1983	LOWR		MUNICIPAL	FOREBAY	-68.85	-77.73	8.88
02N22W23H06S	Rose-165	145	165	2000	UPPR		MONITORING	FOREBAY	-23.48	-24.39	0.91
02N22W26B03S	El Rio #14	575	1475	1983	BOTH		MUNICIPAL	FOREBAY	-78.24	-44.50	-33.74
02N22W26E01S		150	292	1957	UPPR		MUNICIPAL	FOREBAY	-23.09	-22.44	-0.65
03N21W01P02S		75	104	1945	UPPR		DOMESTIC	FILLMORE	263.85	260.10	3.75
03N21W09K02S		233	338	1935	UPPR		IRRIGATION	SANTA PAULA	186.70	180.78	5.92
03N21W11E03S	Santa Paula #8	100	453	1956	UPPR		MUNICIPAL	SANTA PAULA	226.49	212.89	13.60
03N21W11F03S	Santa Paula #9	153	518	1958	UPPR		MUNICIPAL	SANTA PAULA	228.92	216.72	12.20
03N21W11F04S	CIC #10	570	850	2004			IRRIGATION	SANTA PAULA	213.97	208.06	5.91
03N21W11H03S		0	0			BOTH	N/A	SANTA PAULA	249.35	242.04	7.31
03N21W12B04S	Van Wingerden	120	360					FILLMORE	268.86	268.12	0.74
03N21W12E04S	FICO #8	120	284	1954	UPPR			SANTA PAULA	259.94	254.95	4.99
03N21W12E08S	FICO 7A	120	285	1967	UPPR		IRRIGATION	SANTA PAULA	259.27	251.22	8.05
03N21W12F03S	FICO #9	120	284	1954	UPPR			SANTA PAULA	262.15	257.08	5.07
03N21W12F06S	FICO #11	120	395	2001	UPPR		IRRIGATION	SANTA PAULA	264.44	260.82	3.62
03N21W12F07S	FICO 12	120	400	2012			IRRIGATION	FILLMORE	264.87	259.97	4.90
03N21W15C02S	Santa Paula #2	176	322	1951	UPPR		MUNICIPAL	SANTA PAULA	193.29	187.09	6.20
03N21W15C04S		112	253		UPPR		MUNICIPAL	SANTA PAULA	193.50	187.57	5.93
03N21W15G04S	SP1-280	260	280	1994	UPPR		MONITORING	SANTA PAULA	191.91	187.31	4.60
03N21W16H07S	SP2-170	150	170	1994	UPPR		MONITORING	SANTA PAULA	186.40	182.89	3.51
03N21W16K01S	Reese 1	119	214	1923	UPPR		IRRIGATION	SANTA PAULA	184.35	180.20	4.15
03N21W16K02S	Reese 2	92	243	1923	UPPR		IRRIGATION	SANTA PAULA	186.71	182.31	4.40
03N21W16K03S	Reese 5	672	760	1962	LOWR		IRRIGATION	SANTA PAULA	184.60	180.27	4.33
03N21W17Q01S		183	243		UPPR		IRRIGATION	SANTA PAULA	177.35	173.53	3.82
03N21W20F04S	Hansen Ag Ctr	134	219	2006	UPPR		IRRIGATION	SANTA PAULA	167.68	160.11	7.57
03N21W20J03S		489	717	1967	UPPR		DOM-IRRIGAT	SANTA PAULA	170.94	168.40	2.54
03N21W29K02S		30	60	1971	UPPR		INDUSTRIAL	SANTA PAULA	171.89	166.16	5.73

<u>WELLID</u>	<u>WELL_NO</u>	<u>TOPPERF</u>	<u>BTMPERF</u>	<u>YEAR</u>	<u>DEPTH_CODE</u>	<u>WELL_USE</u>	<u>BASIN_NAME</u>	<u>WLESpring2017</u>	<u>WLESpring2016</u>	<u>Difference</u>
03N21W30E01S		160	240	1981	UPPR	IRRIGATION	SANTA PAULA	152.63	141.27	11.36
03N21W31F04S	Becker 31F4	17	37	1976	UPPR	OBSERVATION	SANTA PAULA	140.52	140.01	0.51
03N21W31F05S	Becker 31F5	92	102	1976	UPPR	OBSERVATION	SANTA PAULA	138.91	138.09	0.82
03N21W31G03S	EdwardRch-Orchrd	0	0	1977	UPPR	OBSERVATION	SANTA PAULA	142.15	140.46	1.69
03N21W31L01S	Becker 31L1	137	157	1977	UPPR	OBSERVATION	SANTA PAULA	136.58	134.61	1.97
03N21W32C01S	Freeman Becker A	12	32		UPPR	OBSERVATION	SANTA PAULA	162.24	156.03	6.21
03N21W32C02S	Freeman Becker B	17	37		UPPR	OBSERVATION	SANTA PAULA	162.02	155.72	6.30
03N21W32C03S	Freeman Becker C	17	37		UPPR	OBSERVATION	SANTA PAULA	162.55	156.62	5.93
03N22W23Q01S		345	445	1982	UPPR	DOM-IRRIGAT	SANTA PAULA	221.57	220.77	0.80
03N22W36H01S		226	442	1961	UPPR	IRRIGATION	SANTA PAULA	131.35	134.04	-2.69
03N22W36K02S		170	270	1924	UPPR	IRRIGATION	SANTA PAULA	135.49	134.89	0.60
03N22W36K05S		175	265	1947	UPPR	IRRIGATION	SANTA PAULA	136.39	135.30	1.09

Notes: "TOPPERF" and "BOTPERF" are top and bottom, respectively, of the screened interval of the well, in feet below land surface. Values of "0" are inserted where the top or bottom of the screened interval was not reported.

"WLESpring2017" and "WLESpring2016" are springtime-high groundwater elevations measured in the well, in feet above mean sea level.

"Difference" is the change in groundwater elevations measured in the well between spring of the previous year to spring of the reporting period, in feet.

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**APPENDIX C - Individual Party Allocations and
Groundwater Extractions (from Frank B & Associates)**

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Table "D-1"
IPA's 2011 - 2017 Production & Averages

3/22/2019

2011 (2)	2012 (2)	2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
										18004 Telegraph Road Properties LLC (33)	03N/21W-11H03
									0.0	ABC Rubarb Farms	03N/21W-16P01
0.7	0.7	1.0	0.8	0.6	1.0	0.7	0.8	(1.0)	1.8	Aliso Vista Ranch	03N/22W-23Q01
									0.0	Alsono, Andrew	03N/21W-21M01
595.9	757.6	241.0	1,018.4	1,175.1	1,386.5	709.1	840.5	77.42	763.1	Alta Mutual Water Company, Inc.	02N/22W-02K07, 02N/22W-02K10
10.7	10.3	10.3	6.2	4.4	2.9	5.1	7.1	4.2	2.9	Arambula, Pedro	03N/21W-21E02
									0.0	Associated Concrete Products, Inc.	3N/21W-29K03 D
									0.0	Axell, Randall as Trustee of the Dorthey E. Axell Trust	3N/21W16P02, 3N/21W16P03
0.0	0.0	0.0					0.0	0.0	0	Basso Properties	03N/21W-09J01
-8.2	-8.2	-3.6					0.7	0.7	0	Bender Farms (23) (29)	03N/21W-16P01
241.3	306.5	391.1	273.7	247.8	188.2	221.9	267.2	(25.3)	292.56	Bender Realty LTD (19) (29)	3N/21W16P02, 3N/21W16P03, 3N21W17R01 (4) 03N/21W-17R01
33.0	61.6	70.6	62.1	46.5	52.4	71.3	56.8	(44.0)	100.8	Billiwhack Ranch LLC	03N/22W-23F02
									0.0	Birky, Angie E. Trustee	3N/21W-10E01
									0.0	Brucker, Frank R. as Trustee of the Frank R. Brucker Trust	03N/21W-29E1, 3N/21W-29C3
2.4	2.4	2.4	2.5	2.5	2.2	2.5	2.4	(3.6)	6.0	Bratcher Family Revocable Tr 1-24-02 & Cutright Revocable Tr 8-18-03 (22)	03N/21W-16P01
388.0	379.0	363.0	561.9	237.0	266.7	242.8	348.3	71.8	276.5	Brucker Family Trust (29)	3N/21W-19Q1, 3N/21W-29E1, 3N/21W-29C3 03N/21W-29E1, 3N/21W-29C3
101.5	76.1	128.8	137.0	165.6	91.4	174.8	125.0	(157.3)	282.3	Campbell Dan	03N/21W-19R01
3.9	0.9	0.8	0.6	0.4	0.4	0.3	1.0	(0.1)	1.1	Canine Adoption and Rescue League	03N/21W-29B02
238.7	1,442.4	2,069.1	2,013.9	1,526.5	1,342.9	772.5	1,343.7	670.7	673.0	Canyon Irrigation Company	03N/21W-11F03, 3N/21W-11E3, 3N/21W-11F4
28.1	35.6	40.1	46.5	42.3	37.0	43.2	39.0	(60.3)	99.3	Casa De Oro Ranch	03N/21W-20F01

Table "D-1"
IPA's 2011 - 2017 Production & Averages

3/22/2019

2011 (2)	2012 (2)	2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
85.0	44.7	63.8	88.0	140.0	65.6	71.1	79.7	(21.7)	101.4	Castaneda, Albert and Mary	03N/21W-19L01 (1), 3N21W19K01
											03N/21W-19L01
										Coffman, Laura K. McAvoy, Successor Trustee of the Gladys Daily Coffman Trust dated June 16, 1993	03N/22W-35N01
4,523.1	4,771.4	5,054.0	4,691.7	4,012.9	3,932.1	4,105.0	4,441.4	(1,118.7)	5,560.1	City of Santa Paula	03N/21W-21B03
											3N/21W9R5, 03N/21W11J02, 03N/21W15C06, 03N/21W16A02, 3N/21W16A3
51.6	63.6	26.4	39.0	50.8	33.3	40.6	43.6	(50.0)	93.6	Clow, The Roger D. Clow Trust, Dated September 15, 1994	3N/21W20J04 (17)
											03N/21W-20A02, 03N21WL02S
110.4	111.1	142.5	127.2	74.2	96.0	82.0	106.2	(52.5)	158.7	Cole, Lecil E. Trustee of the Lecil E. ar	3N/21W-16E02
									0.0	Conklin, Patricia	03N/21W-21D02
6.4	5.94	9.87	8.85	11.76	13.2	10.4	9.5	(0.1)	9.6	The Judson T. Cook & Suzette H. Cook Revocable Trust dated December 5, 2007 (28)	3N/22W-26B1
155.0	70.1	175.2	168.2	142.3	121.3	238.6	152.9	(19.3)	172.2	County of Ventura, General Services Agency (26)	03N/21W-30H08, 3N/21W-30H02
100.2	67.6	142.4	134.6	115.7	110.8	81.0	107.5	(70.8)	178.3	County of Ventura, General Services Agency	02N/22W-02G01
									0.0	Cummings, Paul R. and Irene & Sons	03N/21W-19L01
										Dabney, George & Rebecca Trust Inter Vivos	3N/22W-26B1
212.5	212.5	212.5	295.5	286.6	222.0	246.0	241.1	(80.1)	321.2	Dickenson, D&P Dickenson Family Revocable Trust, Louise Dickenson, Bruce E. Dickenson, Virginia Dickenson, Reed and Diana G. Dickenson as undivided co-owners	03N/21W-10M01
										Dominguez, G. (6)	03N/21W-12E07
									0.0	Evergreen Ranch AKA San Miguel Products	03N/21W-19R01
31.2	28.5	33.7	9.3		5.9		15.5	(69.5)	85.0	Fam, J. LLC	03N/22W-35N01

Table "D-1"
IPA's 2011 - 2017 Production & Averages

3/22/2019

2011 (2)	2012 (2)	2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
9,567.0	9,443.5	8,294.6	9,543.8	7,431.2	7,730.0	5,459.6	8,209.9	(1,703.3)	9,913.2	Farmers Irrigation Company, Inc.	03N/21W09R04, 03N/21W12E04, 03N/21W12E08, 03N/21W12F03, 03N/21W16K01, 03N/21W16K02, 03N/21W16K03, 03N/21W19H07, 3N/21W19G4, 3N/21W12F6, 03N21W15C04, 3N21W15C02
75.0	27.2	44.7	33.8	43.3	30.1	14.7	38.4	38.4	0.0	Fiano, Michael (21)	3N/22W26B02 & 3
											03N/21W-15C02, 03N/21W-15C04
129.4	154.5	205.4	211.3	193.1	171.2	167.9	176.1	(37.3)	213.4	Finch, J.J. & H.H.	3N/22W-34Q02, 3N22W34Q03
									0.0	Galbreath Brothers, Inc.	03N/21W-17Q01
3.1	13.31	13.45	13.89	6.75	6.51	20.70	11.1	1.51	9.6	Garcia, Elias & Guadalupe (15)	3N/22W-26B1
25.0	25.0	25.0	18.4	18.8	16.7	11.2	20.0	(22.8)	42.8	Gilbert, Patricia L., Trustee of the Gilbert Family Survivor's Trust	03N/21W-16E01
152.5	115.6	128.9	136.3	125.1	34.3	136.6	118.5	16.7	101.8	Gooding Ranch (John F. Gooding)	03N/21W-09K02, 03N/21W- 09K05
60.0	60.0	36.6	41.5	31.4	31.6	44.2	43.6	(9.3)	52.9	Grant Family Ranches, LLC (20) (30)	3N22W3E01, 3N21W20E01
									0.0	Gregory, Eva as Trustee of the Gregory Family Trust	
62.7	55.7	59.4	62.2	83.2	47.6	72.7	63.4	(34.3)	97.6	Grether, Elizabeth Broome, Ann B. Priske, John S. Broome Jr. as Trustee of the John S. Broome Jr. Trust	03N/22W-35Q02
10.8	12.3	12.9	11.1	8.2	10.7	10.0	10.9	(2.1)	13.0	Guzman, Yeisi Brayen, Trustee of the Brayen And Mesa Guzman Revocable Family Trust, dated July 24, 2015	03N/21W-19G03
128.2	128.2	128.2	91.4	128.9	136.9	119.7		(129.2)	129.2	Hadley-Williams Partnership	02N/22W-03E01 (9)
										Hampton Canyon Ranch (Leslie) (32)	03N/21W-19A02
0.0	0.0	0.0	0.0	0.0			0.0	(7.9)	7.9	Held, Family Trust dtd 1-16-03	03N/22W-23F02
											03N/22W-23F02
0.0	0.0	0.0	0.0	0.0				(33.8)	33.8	Held, Joann	
							0.0	(45.1)	45.1	JAKRAN VILLC (36)	02N/22W-01M03, 02N/22W-01M04
125.0	125.0	125.0	125.0	34.0	77.14	83.80	99.3	(25.7)	125.0	JKJ Farms, LLC (29)	3N/21W-16P01 3N/21W-16P02&3
									0.0	Juanamaria Land Company	02N/22W-03E01

Table "D-1"
IPA's 2011 - 2017 Production & Averages

3/22/2019

2011 (2)	2012 (2)	2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
									2.0	JVP Citrus, Inc.	
										Kimura, Albert	03N/21W-11H03
									0.0	Kimura, Tama	03N/21W-11H01
									0.0	La Mesa Partnership #1	3N/21W-17R01
									0.0	Lassich, Madeline	03N/21W-29B02
161.6	178.5	176.5	235.5	195.0	159.1	171.3	182.5	(12.8)	195.3	Leavens Ranches	03N/22W-24R01 (13), 2N22W03F02
2,138.8	2,348.2	2,808.2	2,419.4	2,723.0	2,248.2	1,796.8	2,354.6	(1,194.4)	3,549.0	Limoneira Company	03N/21W-01N02, 03N/21W- 02Q01, 03N/21W-02R02, 03N/21W-19G02, 03N/21W- 30F01, 03N/21W-30H04, 03N/21W-31E03, 3N/21W-31L2
											03N/21W-11A01
											See Limoneira
0.5	3.8	1.2	1.1	0.5	1.0	1.6	1.4	(8.6)	10.0	Little Clara Ranch LLC (30)	3N22W34E01
											3N22W34E01
30.3	30.3	30.3	7.2	8.9	18.7	20.6	20.9	(15.4)	36.3	Malzacher, Fred H. & Elaine C., Trustees of the Fred H. Malzacher and Elaine C. Malzacher Revocable Trust dated January 16, 1992 U/D/T dated November 25, 2009, as amended	03N/21W-21G03
31.5	31.5	31.5	31.5	31.5	47.3	32.7	33.9	(0.4)	34.3	Martinez, Esther	3N21W-29G02
20.9	20.3	22.3	23.8	17.3	25.2	22.8	21.8	(2.9)	24.7	McConica, John II	2N/22W-3Q1
										McConica, John R. et al.	3N/21W21B3
										McConica, John R. II et al.	03N/21W-21B03
122.9	176.5	149.6	124.8	162.9	123.74	85.80	135.2	(46.4)	181.6	McGaelic Group	03N/21W17R01 (4), 3N/21W11H01
288.9	356.8	570.6	392.0	479.9	296.6	447.3	404.6	121.0	283.6	McGrath, John & Sons (18)	03N/21W21E05, 3N/21W21E11, 3N/21W-20J04 (17) & 3N/21W- 20R3
										Mondol, J.K.	03N/21W-10E01, 3N/21W-10E2

Table "D-1"
IPA's 2011 - 2017 Production & Averages

3/22/2019

2011 (2)	2012 (2)	2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
									0.0	Newsom, Alice C. as Trustee of the Newsom Family Trust	03N/21W-11A01
20.9	23.3	31.8	27.4	35.8	18.5	27.3	26.4	(20.3)	46.7	Nichols Associates	03N/22W36H01, 03N/22W36H02
31.1	25.9	33.5	28.1	25.5	23.4	19.3	26.7	(99.7)	126.4	Nutwood Farms	03N/22W-36J01, 36J02 & 36J03
0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	(7.8)	7.9	Oba Family Trust dtd 12-22-92	03N/22W23F02, 3N/21W17D03(10)
12.5	9.4	12.5	6.3	12.3	10.3	11.8	10.7	(4.4)	15.1	Ohst, Gary	03N/21W-10E01, 3N/21W-10E2
0.0	0.0	0.0					0.0	0.0		Orr, Roger as Trustee of the Orr Family Trust	03N/21W-20J03, 3N/21W-20J2
159.9	159.9	159.9	261.3	108.5	159.0	126.2	162.1	(31.8)	193.9	Orr Ranch Co. (25)	03N/21W-20J03, 3N/21W-20J2
92.40	116.32	95.01	89.82	101.97	115.8	91.0	100.3	61.7	38.6	Ortiz Trust - Joseph & Sons (3)	03N/21W-30E01 3N/21W-30E2, 3N/21W-20H1
255.4	303.4	406.7	445.8	392.7	299.3	343.8	349.6	(60.7)	410.3	Panamerican Seed, aka Ball Horticultural	3N/21W20K01, 3N/21W20M01 03N/21W20P01 & 3N/21W20F4
										Pear Blossom Town & Country Market	03N/21W-10E01, 3N/21W-10E2
66.0	73.1	85.5	86.8	63.6	42.1	62.6	68.5	(47.5)	116.0	Petty Ranch LP	03N/22W-36K04, 3N/22W-36K6
							0.0			Pinkerton, Dan C. and Susan V. Pinkerton, Co-Trustees of the Pinkerton Family Living Trust dated March 19, 1990	03N/21W-17P02
							0.0	(39.1)	39.1	Pinkerton, Arlene	3N21W17Q01 (5)
									2	Pinkerton, Jennifer Paulene	
25.5	46.5	41.1	59.2	41.5	1.6	33.8	35.6	(26.3)	61.9	Pinkerton, Murray	03N/21W-21E01
									2	Pinkerton Ranch Trust	
									0.0	Pinkerton, W. B. Limited Partnership	3N21W17Q01
										Pinkerton, W. J. Estate Ranch 1 & 2	03N/21W-16E02, 3N/21W-29B4
							0.0	0.0	0	Pinkerton, W. J. Estate Ranch	3N/21W-16E02
									0.0	Pinkerton, Wesley Estate	03N/21W-21E01
									0.0	Rancho Attilio	2N/22W-2Q01
116.5	130.2	157.9	160.6	172.6	143.7	159.0	148.6	29.0	119.6	Rancho Filoso, LLC	03N/21W-09K03, 3N/21W-9K4
2.4	2.4	0.5	0.5	0.5	2.4	2.4	1.5	1.4	0.1	Ray, Richard T. and Ruth L.	03N/22W026P01
0.0	0.0	0.0	0.0				0.0	0.0	0	Regents of the University of California (31)	3N/22W-34R1
1,252.6	1,225.2	1,017.1	1,092.2	1,114.4	1,268.1	1,343.5	1,187.6	424.1	763.5	Riverbank Citrus, LLC	3N/22W36K7 & 3N/22W36Q1, 3N22W36K05

Table "D-1"
IPA's 2011 - 2017 Production & Averages

3/22/2019

2011 (2)	2012 (2)	2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
							0.0	(16.2)	16.2	Riverpark A LLC (35)	02N/22W-01M03, 02N/22W-01M04
									0.0	R.F. Robertson as Trustee of the Robertson Family Trust	03N/21W-17Q01
229.5	185.1	439.2	245.4	325.7	268.44	198.25	270.2	(93.6)	363.8	Santana, Jamie, L. Trustee of the Survivor's Trust Under the Jamime L. Santana Family Trust dated May 30, 1984 as amended	3N/22W-24R01 (13)
											03N/21W-17Q01 (5)
											03N/21W-17Q01 (5)
											3N21W17R01 (4)
											3N21W9J01 (24)
2N22W03E01											
7.0	4.2	3.6	8.3	5.0	10.4	7.9	6.6	(15.3)	21.9	Santa Paula Hay & Grain and Ranches	03N/21W-19A02
89.5	119.9	101.1	75.9	63.5	64.1	63.1	82.4	(51.6)	134.0	Saticoy Foods Corp.	03N/21W-30H05 (7), 3N/21W-30H6, 3N/21W-30H9
81.1	80.0	115.2	114.4	95.5	0.0	167.5	93.4	(73.9)	167.3	Sharp, J. M. Company	03N/21W-19M01, 19M02
										Shores, John Family Partnership	03N/21W-20J04 (17), 3N/21W-20R2
59.7	69.9	85.1	87.6	80.4	81.4	69.6	76.2	4.0	72.2	Shozi Ventura, LLC	02N/22W-03B01, 02N/22W-03B02
							0.0	0.0	0	Silva, Frank	02N/22W-01M03, 02N/22W-01M04
									0.0	Southern California Edison Co.	3N/22W-27M02 D
54.7	51.4	64.1	103.6	72.9	73.3	78.2	71.2	9.1	62.1	Strata Holdings LP	03N/21W-17P02
						44.9	6.4	(101.1)	107.5	The Nature Conservancy	3N/21W29K1, 29K02 & 29K4
									0.0	Thermal Belt Mutual Water Co. Inc.	03N/21W-15C02, 03N/21W-15C04
										Torres, George 2013 Trust (32)	03N/21W-19A02
										Trademark Concrete Systems, Inc.	03N/21W-11H03
									0.0	Tri-Leaf Nursery (Bruce Arikawa)	3N/21W-30E01
93.3	103.6	162.3	134.4	148.1	74.38	71.76	112.6	44.6	68.0	Tucker Ranch	02N/22W-03K02, 2N/22W-3K3
102.1	206.3	315.4	206.0	247.6	187.2	206.5	210.2	77.7	132.5	TVC Pinkerton Ranch LLC	3N21W-29B4
										Twyford Plant Laboratories, Inc Fedes	03N/21W-17R01
							0.0	(5.8)	5.8	Utility Vault (Newbasis is Parent Co)	3N/21W-29K03 D (8)
1.0	1.1	1.2	1.2	1.2	1.0	1.0	1.1	(6.9)	8.0	Vanoni, David or Mary - Mary Vanoni	02N/22W-02Q01

Table "D-1"
IPA's 2011 - 2017 Production & Averages

3/22/2019

2011 (2)	2012 (2)	2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	Walking Beam Ranches	03N/21W-19G03
									0.0	Wallace, William	3N/21W-21E01
11.3	11.5	46.8	23.87	28.22	44.3	8.1	24.9	15.1	9.8	We 5 Properties (35)	02N/22W-02J03
										WH Ventura 165 LLC (31)	3N/22W-34R1, 3N21W20F04
1.8	1.3	2.0	2.2	1.5	1.0	1.0	1.5	(26.1)	27.6	Williams, James W. III	03N/22W-23G01
										Wittenberg-Livingston Inc. (30)	02N/22W-02Q01
17.1	20.4	19.8	16.5	4.6	0.5		11.3	(26.2)	37.5	Wright, Scott	03N/21W-11H03
										Von Chmielewski, Wolfgang (15)	03N/21W-10E01, 3N/21W-10E2
4.8	4.8	4.8	2.4	16.7	79.1	40.4	21.9	(9.1)	31.0	Yoon Family Trust, (Soo Han Yoon)	2N/22W-3L01
13.6	13.2	11.7	15.0	15.7	14.9	23.7	15.4	(5.4)	20.8	Zimmerman, Wade N. III and Patricia B. Zimmerman Trust	3N/21W-21E08 03N/21W-21D02
22,855.2	24,743.0	25,456.5	26,504.2	23,181.8	22,168.7	19,041.5	23,761.5	(4,205.5)	27,510.7	Total Basin IPA Stipulated Parties	
27,554.4	27,586.5	27,586.5	27,586.5	27,586.5	27,586.5	27,586.5	27,577.3		27,551.4	Historical Association IPA With Non-Parties (40.7 AF)	

19 1,669.2 IPA Over Production

55 (5,874.70) IPA Under Production

23,947	25,823	26,462	27,426	25,856	25,363	21,889	25,295			Total IPA, Ventura, Non-Parties and De Minimus
24,202	25,823	26,479	27,445	25,856	25,363	21,889				United Water Conservation District Totals
(254.21)	(0.00)	(16.94)	(19.14)	0.00	0.00	0.00				Over/Under Amounts (1) (3) (19)

(1) Albert and Mary Casteneda (03N21W19L01S) used the UWCD crop factor estimating 2011 production at 271.25 ac-ft. Subsequent to 2011 they installed a water meter which indicates that their production is likely much lower. The SPBPA then lowered their 2011 production by 186.25 ac-ft to 85 ac-ft which they feel more accurately reflects 2011 production. UWCD does not accept the reduction of the 2011 production for Albert and Mary Castaneda as they did not have a meter installed in 2011.

(2) Source of production data for 2011, 2012, 2013, 2014, 2015, 2016 and 2017 was the United Water Conservation District, reviewed by the Association.

(3) Ortiz-Trust – Joseph and Sons (03N21W30E01S, 03N21W30E02S, 03N21W20H01S) according to the SPBPA used the wrong meter readings and over reported 2011 production by 131.08 ac-ft. UWCD accepts only 63.8 ac-ft the reduction of the 2011 production for Ortiz Trust-Joseph and Sons for a total 2011 production of 159.68 ac-ft.

(4) Shared well among Bender Realty LTD, Santana, Jamie L. and McGaelic Group. Production is split in accordance with each parties metered use.

(5) Shared well need to determine how to allocate production between Santana and Pinkerton, Arlene.

(6) G. Dominguez was a listed non-party in the original Judgment and the 0.9 acre-feet has been removed from this list reducing the total by 0.9 acre-feet.

(7) Well number 3N/21W-30H3 should be changed to 3N/21W-30H5.

(8) Newbasis is the reporting party, Utility Vault is parent.

(9) Shared well allocated 356.0 AF/Year of production for 2007 to 2013 between City of San Buenaventura and Hadley Williams Partnership by 64/36% of allocation, production meter should be installed to allocate produced water.

Table "D-1"

IPA's 2011 - 2017 Production & Averages

3/22/2019

2011 (2)	2012 (2)	2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
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- (10) Well number was added Oba.
- (11) Deleted
- (12) Source of well productin data for 2009: United Water Conservation District 2009SPbasinbywell.xls
- (13) Shared well (3N/22W-24R01) between Leavens Ranches and Jamie Santana Family Trust. Production is reported separately.
- (14) Deleted
- (15) Spelling correction
- (16) Deleted
- (17) Roger Clow is a 1/3 owner of the Shores well; however, Clow used 100% of the water for 2007 and 2008. Clow's usage totals 30.5 AF for 2007 and 61 AF for 2008 were reallocated from Shores.
- (18) Deleted
- (19) Bender Reality 2010 production (03N21W16P02S, 03N21W16P03S) has been reduced by the SPBPA from 1,356.63 ac-ft (UWCD records) to 532.7 ac-ft for a reduction of 823.93 ac-ft. UWCD does not accept the reduction of the 2010 production of Bender Reality as no documentation was presented to UWCD within 6 month adjustment period.
- (20) Deleted
- (21) Michael Fiano stipulated in 2012 and will be leasing all water pumped annually going forward, transfers to date have been estimated and any remaining balances will be made current with 2014 recorded production.
- (22) Bratcher Cutright IPA From Bender Farms, 6 acre-feet
- (23) Bender Reality and Bender Farms are owned by the same person, Bender Farms transferred 4.6 AF to the City of Santa Paula in 2012 and 6.0 AF to Bratcher in 2014, minus numbers reflect remaining allocation for prior years, plus Bratcher reported production for the years reported to United Water Conservation District.
- (24) Basso Properties Sold to Jaime Santana Trust 43.4 acre-feet with property
- (25) Roger Orr as Trustee of the Orr Family Trust so the Orr Ranch Co. to Bryce R. and Elaine V. Bannatyne Co Trustees of the Bannatyne Trust
- (26) County of Ventura over reported 158.62 acre-feet in 2013, (331.2+2.67-158.62=175.2) United Water Conservation Distrcit did not recognize that production correction in their records.
- (27) Pinkerton, W. J. Estate Ranch 1 & 2, Sold to Pinkerton W. J. Estate Ranch 158.7 AF of IPA and 132.5 AF of IPA to TVC Pinkerton Ranch LLC in 2014, combined over production is reflected on TVC Pinkerton
- (28) The Judson T. Cook & Suzette H. Cook Revocable Trust dated December 5, 2007 Purchased the Dabney, George and Rebecca Trust Inter Vivos in January 2017
- (29) Bender Reality and Bender Farms sold property to JKJ Farms LLC with 225 acre-feet of allocation and JKJ later transferred 100 acre-feet to Brucker Family Trust
- (30) Wittenberg-Livingston, Inc. sold 4 acre-feet to Little Clara Ranch and 20.8 acre-feet to Grant Family Ranches
- (31) Regents of California sold property and water rights to WH Ventura 165 LLC
- (32) Hampton Canyon Ranch Sold property and water rights to Torres, George 2013 Turst, 21.9 acre-feet
- (33) Albert Kimura sold property and water rights to 18004 Telegraph Road Properties, LLC 37.5 acre-feet
- (34) Silva allocation of 108.6 Acre-Feet was distributed to County of Ventura 47.3
- (35) Silva allocation of 108.6 Acre-Feet was distributed to Riverpark A LLC 16.2
- (36) Silva Allocation of 108.6 Acre-Feet was sistributed to Jakran IV LLC 45.1

Table "D-2"
De Minimus 2011-2017 Production & Averages
(Production Not to Exceed 5 AFY)

2011	2012	2013	2014	2015	2016	2017	7 Year Average	Party Name	Well Number
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	Chapman, Kenneth	3N/21W21F1
3.5	3.5	3.5	3.4	2.2	2.2	2.6	3.0	Chavez, Joel and Carmen	3N/21W21E07
0.0	0.0	0.0	0.0	0.0	1.0	2.6	0.5	Loza, Jesus and Veronica	3N/22W26L01S
4.3	8.6	4.3	4.3	3.3	3.9	8.1	5.3	Rogers, Charles W., Jason C. Rogers, and Aaron W. Rogers	2N/22W-1M2
3.6	3.6	3.6	4.1	4.2	4.2	4.7	4.0	Santa Paula Airport Association	3N21W14D01
3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	Sullivan, Russell J.	3N21W21L1
15.9	20.2	15.9	16.3	14.2	15.8	22.5	17.3	Total De Minimus Producers	

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Table "D-3"

Non-Party 2011-2017 Production & Averages

2011 (7)	2012 (7)	2013 (7)	2014 (7)	2015 (7)	2016 (7)	2017 (7)	2011-17 Average AFY Production	Name	Well Number
4.0	4.0	3.2	3.2	3.2	3.0	2.4	3.3	Davis, Linda Trust	3N21W21E04, 3N/21W-21E10 (2)
								Dominguez, G.(5) (0.9 AF)	03N/21W-12E07
							Stipulated in 2012	Fiano, Michael	3N/22W26B02 & 3
0.0	0.0	0.0		0.0	0.0		0.0	Garman, William (5) (2.0 AF)	02N/22W-02N04
							Stipulated in 2012	Grant Family Ranches, LLC	3N22W3E01 (1), 3N21W20E01 (2)
1.3	1.5	1.4	2.0	1.6	2.0	1.6	1.6	Minero, Gilbert (5) (1.1 AF)	03N/21W-21M01
3.6	3.6	3.8	4.4	6.3	10.6	11.0	6.2	Sanchez, Martin	3N/21W-21E6
					3.5			Sullivan, Russell J.	3N21W21L1
								Ventura Unified School District (5) (30.8 AF)	02N/22W-03P01
1.0	2.0	1.0	2.0	1.8	2.0	1.9	1.7	Vint, Thomas H. (5) (4.9 AF)	03N/21W-21E03
5.0	5.0	5.0	5.0	1.6	1.1	2.2	3.6	Westerdale Trust (5) 1.0 AF)	03N/21W-21G01
14.9	16.1	14.4	16.6	14.5	22.2	19.1	16.3	Total Average AFY Production (Average 2011-2017)	

Footnotes to Non-Stipulating Pumpers

40.7 Acre-Feet for Non Parties from original Judgment

(1) Incorrect well number.

(2) Added well number.

(3) Source of well production data: Santa Paula Basin 2008 Annual Report, Appendix D - Groundwater Allocations and Pumpage, Table D-1 and Table D-2.

(4) Source of well production data: United Water Conservation District 2009SPbasinbywell.xls

(5) Non-party individuals named in the Original Judgment, 40.7 Acre-Feet 7/28/2011

(6) Source of well production data: United Water Conservation District SP 10-1 and SP 10-2

(7) Source of production data for 2011, 2012, 2013, 2014, 2015, 2016 and 2017 was the United Water Conservation District, reviewed by the Association.

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Table "D-4"

Temporary Water Transfers

3/22/2019

2011	2012	2013	2014	2015	2016	2017	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transferring Parties
2,139	2,348	2,808	2,419	2,723	2,248	1,797	2,354.6	(1,194)	3,549	Limoneira Company
	689.5	1,242.0	674.0	756.2	441.0	364.9				To: Canyon Irrigation Company
	72.5	120.4	136.1	79.8						To: Canyon Irrigation Company for Rancho La Cuesta
394.0	413.0	160.7	231.0	250.0	526.4					To: Riverbank Citrus LLC
	20.0	37.0	49.0							To: Fiano, Michael J. Trust
			135.1							To: Leavens Ranches
			74.5							To: Regents of the University of California
-62.2	-62.2	(62.2)	(62.2)	(62.2)	(62.2)					To: City of Santa Paula (2016 Permanent Transfer)
	2.0									To: Dabney/Cook
		146.2	90.0	132.0	43.0					To: Tucker Ranch
		28.1	35.0	24.0		17.0				To: Gooding Ranch
2532.8	3483.0	4,452.3	3,781.8	3,902.8	3,196.4	2,178.7	3,361.1	(188)	3,549	Limoneira Company Balance
75.0	27.2	44.7	33.8	43.3	30.1	14.7	32.3	32	-	Fiano, Michael J. Trust
	-20.0	-37.0	-49.0							From: Limoneira Company
						-87.84				From: Malzacher, Fred H & Elaine C. Trustees, Fred H.
75.0	7.2	7.7	-15.2	43.3	30.1	-73.1	0.0	0.00	-	Fiano, Michael J. Trust Balance
9,567.0	9,443.5	8,294.6	9,543.8	7,431.2	7,730.0	5,459.6	8,209.9	(1,703)	9,913	Farmers Irrigation Company
214.9				33.0						To: Canyon Irrigation Company
4.0			185.4	5.6						To: Brucker Family Trust
53.8	77.7	56.4	51.2	63.4	77.2	52.4				To: Ortiz Trust - Joseph & Sons
		98.9								To: Bender Reality LTD
		32.9								To: Rancho Filoso, LLC
						28.3				To: Schozi Ventura
	190.0	306.0	150.0	170.0	85.0	85.0				To: McGrath, John & Sons
					426.3	145.8				To: Alta Mutual Water Company
		3.9	3.3			3.7				To: Aramblua, Pedro
						295.6				To: Riverbank Citrus
			100.0	100.0						To: Strata Holdings LP
		4.5	9.4							To: Grant Family Ranches
		113.4			116.1					To: TVC Pinkerton Ranch LLC
9,839.7	9,711.2	8,910.6	10,043.1	7,803.1	8,434.6	6,070.4	8,687.5	(1,225.7)	9,913	Farmers Irrigation Company Balance
238.7	1442.4	2069.1	2013.9	1,526.5	1,342.9	772.5	1,343.7	671	673	Canyon Irrigation Company
-214.9	0.0	0.0	0.0							To: City of Santa Paula
	0.0	0.0	0.0							Returned to Creek
214.9	0.0	0.0	0.0							From: Farmers Irrigation Company
	-72.5	-120.4	-136.1	-79.8						From: Limoneira Company for La Cuesta over

Table "D-4" Temporary Water Transfers

3/22/2019

2011	2012	2013	2014	2015	2016	2017	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transferring Parties
	-689.5	-1242.0	-674.0	-756.2	-441.0	-364.9				From: Limoneira Company
238.7	680.4	706.6	1203.8	690.5	901.9	407.6	689.9	16.92	673	Canyon Irrigation Company Balance
4,523.1	4,771.4	5,054.0	4,691.7	4,012.9	3,932.1	4,105.0	4,441.4	(1,119)	5,560	City of Santa Paula
-214.9				-33.0						From: Canyon Irrigation Company
62.2	62.2	62.2	62.2	62.2	62.2	62.2				From: Limoneira Company (62.2 Permenant Transfer '16
4,370.4	4,833.6	5,116.2	4,753.9	4,042.1	3,994.3	4,105.0	4,459.3	(1,101)	5,560	City of Santa Paula Balance
212.5	212.5	212.5	295.51	286.57	221.98	245.96	241.1	(80)	321.2	Dickenson, D&P Dickenson Family Revocable Tr.
51.0	13.8									To: Gooding Ranch (John F. Gooding)
263.5	226.3	212.5	295.51	286.57	221.98	245.96	250.3	(71)	321.2	Dickenson, D&P Dickenson Family Rev. Tr Balance
152.5	115.6	128.9	136.29	125.06	34.3	136.57	118.5	17	101.8	Gooding Ranch (John F. Gooding)
-51.0	-13.8									From: Dickeson, D&P Dickenson Family Rev. Tr.
		-28.1	-35.0	-24.0		-17.0				From: Limoneira Company
101.5	101.8	100.8	101.29	101.06	34.3	119.57	94.3	(7.5)	101.8	Gooding Ranch (John F. Gooding) Balance
122.9	176.5	149.6	124.8	162.9	123.7	85.8	135.2	(46)	181.6	McGaelic Group
			48.8			75.0				To: McGrath, John & Sons (Permanent Transfer of 55.9)
122.9	176.5	149.6	173.6	162.9	123.7	160.8	152.9	(29)	181.6	McGaelic Group Balance
59.7	69.9	85.1	87.6	80.4	81.4	69.6	76.2	4	72.2	Shozi Ventura, LLC
						-28.3				From: Farmers Irrigaton Company
59.7	69.9	85.1	87.6	80.4	81.4	41.3	72.2	(0.0)	72.2	Shozi Ventura, LLC Balance
0	0	0	0				-	-	0.0	From: Shores, John Family Partnership
0.0	85.4	-439.7								To: McGrath, John & Sons (Permanent Transfer of 126.7
0.0	85.4	-439.7	0.0				(0.0)	(0)	0.0	Shores, John Family Partnership Balance
288.9	356.8	570.6	392.0	479.9	296.6	447.3	404.6	121	283.6	McGrath, John & Sons
			-48.8			-75				From: McGaelic Group
						-100				From: The Nature Conservency
										From: Shores, John Family Partnership
	-190	-306.0	-150.0	-170.0	-85.0	-85.0	(116.6)			From: Farmers Irrigation Company
288.9	166.8	264.6	193.2	309.9	211.6	187.3	231.8	(51.8)	283.6	McGrath, John & Sons Balance
0.0	0.0	0.0	0.0				-	-	0.0	Regents of the University of California
0.0	0.0	0.0	0.0							From: Leavens Ranches
0.0	0.0	0.0	0.0				-	-	0.0	Regents of the University of California Balance
0.0	0.0	0.0	0.0	0.0			-	-	0.0	WH Ventura 165 LLC (Regents)

Table "D-4"
Temporary Water Transfers

3/22/2019

2011	2012	2013	2014	2015	2016	2017	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transferring Parties
-60.0	-60.0	-52.0	172.0				(10.6)			From: Leavens Ranches
			-74.5	0.0			(10.6)			From: Limoneira Company
-60.0	-60.0	-52.0	97.5	0.0			(21.2)	(21)	0.0	WH Ventura 165 LLC
161.6	178.5	176.5	235.5	195.0	159.1	171.3	182.5	(13)	195.3	From: Leavens Ranches
0.0	0.0	0.0								To: Regents of the University of California
			-135.1							From: Limoneira Company
161.6	178.5	176.5	100.4	195.0	159.1	171.3	163.2	(32.1)	195.3	Leavens Ranches Balance
1252.6	1225.2	1017.1	1092.2	1114.4	1268.1	1343.5	1,187.6	424	763.5	Riverbank Citrus LLC
-394.0	-413.0	-160.7	-231.0	-250.0	-526.4					From: Limoneira Company
						-295.6				From: Farmers Irrigation Company
-95.3	-48.7	-141.9	-98.3	-100.9	-105.6	-107.1				From: Nutwood Farms
763.3	763.5	714.5	762.9	763.5	636.1	940.8	763.5	-	763.5	Riverbank Citrus LLC Balance
31.1	25.9	33.5	28.1	25.5	23.4	19.3	26.7	(100)	126.4	Nutwood Farms
95.3	48.7	141.9	98.3	100.9	105.6	107.1				To: Riverbank Citrus LLC
126.4	74.6	175.4	126.4	126.4	129.0	126.4	126.4	(0)	126.4	Nutwood Farms Balance
0.5	3.8	1.2	1.1	0.5	1.0	1.6	1.4	(9)	10.0	Little Clara Ranch LLC
5.2										To: We 5 Properties
5.7	3.8	1.2	1.1	0.5	1.0	1.6	2.1	(8)	10.0	Little Clara Ranch Balance
11.3	11.5	46.8	23.9	28.2	44.3	8.1	24.9	15	9.8	We 5 Properties
-5.2										From: Little Clara Ranch LLC
		-30.2	0.0	-42.98	-28.77					From: Alta Mutual Water Company
6.1	11.5	16.6	23.9	-14.8	15.5	8.1	9.6	(0.24)	9.8	We 5 Properties Balance
6.4	0.0	0.0	0.0	0.0	0.0	44.9	7.3	(100)	107.5	The Nature Conservancy
				70.0						To: County of Ventura Gen Services Agency Jail
					100.0	62.0				To: McGrath, John and Sons
107.5	107.5	107.5	100.0							To: Brucker Family Trust
113.9	107.5	107.5	100.0	70.0	100.0	106.9	100.8	(6.7)	107.5	The Nature Conservancy Balance
388.0	379.0	363.0	561.9	237.0	266.7	242.8	348.3	72	276.5	Brucker Family Trust
-107.5	-107.5	-107.5	-100							From: The Nature Conservancy
-4.0			-185.4	-5.6	-51.7					From: Farmers Irrigation Company
276.5	271.5	255.5	276.5	231.5	215.1	242.8	252.8	(23.74)	276.5	Brucker Family Trust Balance
92.4	116.3	95.0	89.8	102.0	115.8	91.0	100.3	62	38.6	Ortiz Trust - Joseph & Sons
-53.8	-77.7	-56.4	-51.2	-63.4	-77.2	-52.4				From: Farmers Irrigation Company

Table "D-4"
Temporary Water Transfers

3/22/2019

2011	2012	2013	2014	2015	2016	2017	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transferring Parties
38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	0.01	38.6	Ortiz Trust - Joseph & Sons Balance
6.4	5.9	9.9	8.9	11.8	13.2	10.4	9.5	(0)	9.6	The Judson T. Cook & Suzette H. Cook Revocable Trust
	-2.0				-11.6					From: Limoneira Company
6.4	3.9	9.9	8.9	11.8	1.6	10.4	7.5	(2.06)	9.6	The Judson T. Cook & Suzette H. Cook Revocable Trust da
595.9	757.6	241.0	1,018.4	1,175.1	1,386.5	709.1	840.5	77	763.1	Alta Mutual Water Company
		30.2								To: We 5 Properties
					-426.3	-145.8				From: Farmers Irrigation Company
595.9	757.6	271.2	1018.4	1175.1	960.2	563.3	763.1	0.0	763.1	Alta Mutual Water Company Balance
93.31	103.6	162.34	134.36	148.11	74.38	71.76	112.6	45	68.0	Tucker Ranch
		-146.2	-90.0	-132.0	-43.0					From: Limoneira Company
					37.5	2.1				To: Yoon Family Trust
93.31	103.6	16.1	44.4	16.1	68.9	73.8	59.5	(8.536)	68.0	Tucker Ranch Balance
10.7	10.3	10.3	6.21	4.43	2.91	5.08	4.1	1	2.9	Arambula, Pedro
		-3.9	-3.3			-3.7				From: Farmers Irrigation Company
		-3.5								From: Correction of Reporting to United (3)
10.7	10.3	2.9	2.9	4.4	2.9	1.4	2.1	(0.83)	2.9	Arambula, Pedro Balance
233.1	298.3	387.5	273.7	247.8	188.2	221.9	264.4	(28)	292.6	Bender Reality, LTD & Bender Farms
		-98.9								From: Farmers Irrigation Company
233.09	298.28	288.6	273.7	247.8	188.2	221.9	250.2	(42)	292.6	Bender Reality, LTD & Bender Farms
3.1	13.3	13.5	13.9	6.8	6.5	20.7	11.1	2	9.6	Garcia, Elias & Guadalupe
		-3.9	-4.3			-2.4				From: Castaneda, Albert & Mary
3.14	13.31	9.6	9.6	6.8	6.5	18.3	9.6	(0.00)	9.6	Garcia, Elias Balance
85.0	44.7	63.8	88.0	140.0	65.6	71.1	79.7	(22)	101.4	Castaneda, Albert & Mary
		3.9	4.3			2.4				To: Garcia, Elias & Guadalupe
84.95	44.67	67.7	92.3	140.0	65.6	73.5	81.2	(20)	101.4	Castaneda, Albert & Mary
60.0	60.0	36.6	41.5	31.4	31.6	44.2	43.6	(9)	52.9	Grant Family Ranches
		-4.5	-9.4							From: Farmers Irrigation Company
60	60	32.1	32.1	31.4	31.6	44.2	41.6	(11)	52.9	Grant Family Ranches Balance
116.5	130.2	157.9	160.6	172.6	143.7	159.0	148.6	29	119.6	Rancho Filoso, LLC
			-11.2	-65.0	-28.7	-65.5				From: JM Sharp Company
		-32.9								From: Farmers Irrigation Company
116.52	130.22	125.0	149.4	107.6	115.0	93.5	119.6	-	119.6	Ranch Filoso, LLC Balance
81.09	79.99	115.15	114.37	95.47	0	167.48	93.4	(73.9)	167.3	Sharp, JM Compnay

Table "D-4" Temporary Water Transfers

3/22/2019

2011	2012	2013	2014	2015	2016	2017	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transferring Parties
			11.2	65.0	28.7	65.5				To: Rancho Filloso
					15.0					Cook, The Judson T. Cook & Suzette H. Cook
81.09	79.99	115.15	125.57	160.47	43.7	233.01	119.9	(47.4)	167.3	Sharp, JM Company Balance
6.4	5.9	9.9	8.9	11.8	13.2	10.4	9.5	(0.1)	9.6	Cook, The Judson T. Cook & Suzette H. Cook
					-15.0					From: Sharp, JM Company
6.4	5.9	9.9	8.9	11.8	(1.8)	10.4	7.3	(2.3)	9.6	Cook, The Judson T. Balance
102.11	206.31	315.42	206.04	247.64	187.17	206.53	210.2	77.7	132.5	TVC Pinkerton Ranch LLC
-48.31	-47.65	-16.23	-31.47							From: Pinkerton, W. J. Estate Ranch
		-113.4	-69.8	-116.1	-116.1					From: Farmers Irrigation Company
53.8	158.66	185.79	104.77	131.50	71.12	206.53	130.3	(2.2)	132.5	TVC Pinkerton Ranch LLC Balance
110.39	111.05	142.47	127.23	0	0	0	70.2	88.5	158.7	From: Pinkerton W. J. Estate Ranch
48.31	47.65	16.23	31.47				289.3			To: TVC Pinkerton Ranch LLC
158.7	158.7	158.7	158.7	0.0	0.0	0.0	90.7	(68.0)	158.7	TVC Pinkerton Ranch LLC Balance
54.67	51.44	64.07	103.6	72.93	73.31	78.24	71.2	0.0	62.1	Strata Holdings LP
			-100.0	-100.0						From: Farmers Irrigation Company
54.67	51.44	64.07	3.6	-27.07	73.31	78.24	42.6	(19.5)	62.1	Strata Holding LP Balance
154.99	70.05	175.15	168.18	142.3	121.33	238.58	152.9	(19.3)	172.2	County of Ventura, General Services Agency
				-70						From: The Nature Conservancy
154.99	70.05	175.15	168.18	72.3	121.33	238.58	142.9	(29.3)	172.2	County of Ventura, General Services Agency Jail Bal
4.8	4.8	4.8	2.4	16.66	79.09	40.41	21.9	(9.1)	31.0	Yoon Family Trust
					-37.54	-2.05	(5.4)			From: Tucker Ranch
4.8	4.8	4.8	2.4	16.66	41.55	38.36	16.2	(14.8)	31.0	Yoon Family Trust Balance
30.26	30.26	30.26	7.16	8.85	18.71	20.63	20.9	(15.4)	36.3	Malzacher, Fred H & Elaine C. Trustees, Fred H.
						87.84				To: Fiano, Michael J. Trust
30.26	30.26	30.26	7.16	8.85	18.71	108.47	33.4	(2.9)	36.3	Malzacher, Fred H & Elaine C. Trustees, Balance

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Table "D-5"

Original and Acquired Allocation of the City of San Buenaventura

2011	2012	2013	2014	2015	2016	2017	7 Year Average	Over (+) Under (-)	Acre Feet	Party Name	Well Number
(7)	(7)	(7)	(7)	(7)	(7)	(7)					
227.8	227.8	227.8	162.4	229.1	243.4	212.8	218.75	(1.3)	220.0	City of San Buenaventura	02N/22W-03E01 (1)
									5.8	City of San Buenaventura	3N/21W-21B3
100.5	61.0	74.5	97.6	97.8	15.4		63.82	40.7	23.1	City of San Buenaventura	3N/22W-34R1, 3N21W20F04
									12.0	City of San Buenaventura	03N/22W-35N01
328.3	288.8	302.3	260.0	326.9	258.8	212.8	282.57	21.7	260.9	Total Aquired by City of San Buenaventura	
733.2	754.7	672.9	629.0	2,318.3	2,897.6	2,593.3	1,514.14	(1,485.9)	3,000.0	City of San Buenaventura	02N/22W-02K09 (2) 2N/22W-02H02 (8)
1,061.5	1,043.5	975.2	889.0	2,645.2	3,156.3	2,806.1	1,796.71	(1,464.2)	3,260.9	Total City of San Buenaventura	

- (1) Shared well allocated 356.0 AF/Year of production for 2007 to 2013 between City of San Buenaventura and Hadley Williams Partnership by 64/36% of allocation a production meter s
- (2) Well number was added.
- (3) McConica allocation transfer.
- (4) Source of well production data: Santa Paula Basin 2008 Annual Report (2004-2008), Appendix D - Groundwater Allocations and Pumpage, Table D-1 and Table D-2.
- (5) Source of well productin data for 2009: United Water Conservation District 2009SPbasinbywell.xls
- (6) Source of well production data for 2010: United Water Conservation District SP 10-1 and SP 10-2.
- (7) Source of production data for 2011, 2012, 2013, 2014, 2015, 2016 and 2017 was the United Water Conservation District, reviewed by the Association.
- (8) New well put online in 2015.
- (9) Permanent water transfer from J Fam, LLC to City of Ventura in 2015 (12.0 AF)
- (10) Permanent water transfer from WH Ventura 165 LLC to City of Ventura, 2016 (23.1 AF)

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