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SANTA PAULA BASIN PUMPERS ASSOCIATION

SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF VENTURA

UNITED WATER CONSERVATION DISTRICT, Plaintiff, v. CITY OF SAN BUENAVENTURA and DOES 1 through 1,000, inclusive, Defendant.	Case No. CIV115611 Assigned for All Purposes to the Honorable Mark Borrell Dept.: 40 **SUBMISSION OF THE SANTA PAULA BASIN 2021 ANNUAL REPORT**
LIMONEIRA COMPANY, ALTA MUTUAL WATER COMPANY, et al., Intervenors.	
CITY OF SAN BUENAVENTURA, Cross-Complainant, v. LIMONEIRA COMPANY, ALTA MUTUAL WATER COMPANY, et al., Cross-Defendants.	

Pursuant to the Court's May 11, 2004 order and its continuing jurisdiction over the management of the Santa Paula Groundwater Basin ("Basin"), as set forth in Section 18 of the judgment issued in this case, as amended on August 24, 2010 ("Judgment), the Santa Paula Basin Pumpers Association ("Association"), on behalf of the Santa Paula Basin Technical Advisory

Committee ("TAC"), hereby submits the 2021 Santa Paula Basin Annual Report ("2021 Annual Report"). A true and correct copy of the 2021 Annual Report is attached to the Declaration of Jessica Diaz, filed concurrently herewith.

The TAC, which was established pursuant to Section 3 of the Judgment, is comprised of representatives from United Water Conservation District, the City of Buenaventura, and the Association. The TAC is responsible for monitoring and studying conditions in the Basin.

As part of it monitoring responsibilities, the TAC periodically performs studies on the Basin's hydrogeologic conditions and other management matters and prepares an annual report for submission to the Court. The TAC's 2021 Annual Report sets forth the technical data concerning the Basin for Calendar Year 2021 and Water Year 2021.

The TAC is available to answer any questions posed by the Court with respect to the 2021 Annual Report or to attend a case management conference, if instructed to do so by the Court.

Dated: April 5, 2023

BROWNSTEIN HYATT FARBER SCHRECK, LLP

By: 

STEPHANIE OSLER HASTINGS
JESSICA L. DIAZ
Attorneys for
SANTA PAULA BASIN PUMPERS ASSOCIATION

BROWNSTEIN HYATT FARBER SCHRECK, LLP
1021 Anacapa Street, 2nd Floor
Santa Barbara, CA 93101-2711

DECLARATION OF JESSICA L. DIAZ

I, Jessica Diaz, hereby declare as follows:

1. I am an attorney licensed to practice law before the courts of the state of California. I am a shareholder with Brownstein Hyatt Farber Schreck LLP, counsel of record for the Santa Paula Basin Pumpers Association. I have personal knowledge of the following, and, if called as a witness, I would and could testify competently thereto:

2. A true and correct copy of the *2021 Santa Paula Basin Annual Report* ("Annual Report") is attached hereto as Exhibit "A."

3. The Annual Report was prepared by the United Water Conservation District on behalf of the Santa Paula Basin Technical Advisory Committee. By email dated March 21, 2023, Kathleen Kuepper of the United Water Conservation District transmitted the Annual Report to me.

4. The Annual Report is hereby filed with the Court in accordance with Section 4 of the August 24, 2010 Amended And Restated Judgment in Ventura County Superior Court Case No. 115611, and Paragraph 4 of the Court's preceding May 11, 2004 order therein.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct. Executed on April 5, 2023 at Santa Barbara, California.

JESSICA L. DIAZ

BROWNSTEIN HYATT FARBER SCHRECK, LLP
1021 Anacapa Street, 2nd Floor
Santa Barbara, CA 93101-2711

United Water
CONSERVATION DISTRICT

2021 SANTA PAULA BASIN ANNUAL REPORT

United Water Conservation District
Professional Paper 2022-02
October 2022

PREPARED FOR:

SANTA PAULA BASIN TECHNICAL ADVISORY COMMITTEE

Cover photo: Bridge Rd over Santa Paula Creek and orchards (background) in Santa Paula basin (photo taken by Kathleen Kuepper 2021).

2021 SANTA PAULA BASIN ANNUAL REPORT

(UWCD PROFESSIONAL PAPER 2022-02)

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 United's service area 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 safe 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, as requested by the TAC. 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) annually. 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.

2021 SANTA PAULA BASIN ANNUAL REPORT

TABLE OF CONTENTS

LIST OF TABLES (tables are located at the page numbers indicated)

LIST OF FIGURES (figures are located following the "References" section of this report)

LIST OF APPENDICES (appendices are located following the figures)

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2021 SANTA PAULA BASIN ANNUAL REPORT

(UWCD PROFESSIONAL PAPER 2022-02)

INTRODUCTION

This is the twenty-fifth 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) 2021 (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-basin reporting 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 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 2020 Santa Paula Basin Annual Report (UWCD, 2022); 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	2021	Average During Period of Record	Median During Period of Record	Period of Record
Water-Year[a] Precipitation at Santa Paula (Wilson Ranch)[b] (inches)	4.23	17.05	14.89	1890 through 2021
Calendar-Year Precipitation at Santa Paula (Wilson Ranch)[b] (inches)	14.92	16.96	15.43	1890 through 2021
Water-Year Discharge in Santa Clara River at Freeman Diversion[b] (AF/yr)	18,975	199,252	109,326	1956 through 2021
Water-Year Discharge in Santa Paula Creek at Mupu Bridge[b] (AF/yr)	1,361	17,636	8,184	1928 through 2021
Reported Calendar-Year Groundwater Extractions in Santa Paula Basin (AF/yr)	21,993	25,200	25,822	1980 through 2021
Groundwater Level Index (ft msl)	176.23	180.44	181.61	1983 through 2021
Change in Groundwater Storage from Previous Year (AF)	-75 to -750	Not applicable	Not applicable	spring 2020 to spring 2021

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 2021 includes the period from 10/1/2020 through 9/30/2021.

[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 2021 is shown on Figure 4. Appendix A (Table A-1) includes a tabulation of monthly precipitation at Santa Paula during the period of record. The rain gauge used to report precipitation data for Santa Paula changed in March 2020. Precipitation was measured by UWCD at their offices in the City of Santa Paula from September 1960 through February 2020. UWCD moved out of their Santa Paula office at the end of February 2020 and starting in March 2020, the rainfall measured and recorded at the “Santa Paula - Wilson Ranch” rain gauge has been used to report rainfall in Santa Paula. Rainfall data for Saticoy was reported

from the Saticoy Fire Station rain gauge from 1957 to 2008 before changing to the Saticoy County Yard in 2009.

Precipitation at the Santa Paula-Wilson Ranch rain gauge during WY 2021 was 4.23 inches, which is less than 25 percent of the average annual precipitation rate for WYs 1890 to 2021. It should be noted that this is the record-low water-year annual precipitation reported for Santa Paula. Precipitation at the Santa Paula-Wilson Ranch rain gauge during CY 2021 was 14.92 inches. As shown in Figure 4, the difference between WY and CY annual precipitation totals at Santa Paula during 2021 is a result of almost 75 percent of rainfall reported during CY 2021 occurring during December 2021. Aside from the 11.1 inches of rainfall that fell in December, most of CY 2021 was exceptionally dry.

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 2021 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 2021 in the Santa Clara River at Freeman Diversion was about 10% of the long-term average volume, and discharge in Santa Paula Creek near Santa Paula was about 8% of 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 2021 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 constituents detected in the Santa Clara River during CY 2021 were somewhat higher than long-term average concentrations, except for nitrate (which was less than the long-term average concentration). Elevated concentrations of these constituents in 2021 is consistent with historical patterns during low-rainfall years.

Table 2. Summary of Major Surface Water Quality Parameters in Santa Clara River at Freeman Diversion, CY 2021

Statistic	Concentration, milligrams per liter (mg/L)			
	Chloride	Nitrate[a]	TDS	Sulfate
CY 2021 Minimum	47	Less than 0.4	770	297
CY 2021 Maximum	140	7.1	1,810	820
CY 2021 Average	93	4.9	1,449	636
Long-Term Average[b]	65	5.9	1,149	532

Notes:

[a] As nitrate (NO_3)

[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 2021 are summarized in Table 3, below (location shown on Figure 1). 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 2021 were higher than long-term average concentrations.

Table 3. Summary of Major Surface Water Quality Parameters in Santa Paula Creek near Santa Paula, CY 2021

Statistic	Concentration (mg/L)			
	Chloride	Nitrate[a]	TDS	Sulfate
CY 2021 Minimum	58	6.6	910	354
CY 2021 Maximum	103	36.2	1,610	664
CY 2021 Average	79	14.8	1,233	497
Long-Term Average[b]	47	10.8	871	383

Notes:

[a] As nitrate (NO_3)

[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

Three production wells were destroyed and there were no new wells drilled within the Santa Paula basin during CY 2021, as listed in Table 4, below.

Table 4. Production Well Installations and Destructions During CY 2021

Production Wells Destroyed	Production Wells Drilled
02N22W01M02S, 03N22W35P01S, 03N22W35N01S.	None reported

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. The total volume of reported groundwater extractions in 2021 (21,993 AF) was less than the long-term average (CYs 1980 through 2021) of 25,200 AF/yr; however, their pumping rate is consistent with the average of annual pumping rates reported during the last five years and remains below the long-term historical average.

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	1995	25,042	2010	23,115
1981	27,545	1996	26,008	2011	24,202
1982	22,925	1997	28,961	2012	25,824
1983	16,710	1998	21,622	2013	26,485
1984	29,455	1999	27,700	2014	27,437
1985	26,533	2000	26,798	2015	25,856
1986	21,617	2001	22,530	2016	25,363
1987	24,852	2002	27,259	2017	21,889
1988	25,370	2003	22,280	2018	22,881
1989	29,362	2004	27,306	2019	17,238

Table 5. Historical Santa Paula Basin Groundwater Extractions

Calendar Year	Groundwater Extractions (AF)	Calendar Year	Groundwater Extractions (AF)	Calendar Year	Groundwater Extractions (AF)
1990	33,453	2005	24,700	2020	21,213
1991	27,056	2006	24,830	2021	21,993
1992	24,355	2007	28,077		
1993	26,998	2008	26,686	***Average***	***25,200***
1994	26,244	2009	25,820	***Median***	***25,822***

Note: The groundwater extractions shown on this table are based on semi-annual groundwater production statements submitted to United's Finance Department.

Reported groundwater extractions from the Santa Paula basin during CY 2021 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 2015 through 2021), as well as Individual Party Allocations (IPAs) for the SPBPA (with transfers, de minimis parties, non-parties) and the City of San Buenaventura.

The total combined pumping allocations of the SPBPA (party and non-party) and the City of San Buenaventura are now at 30,771.6 AF/yr. Amendments to the Judgment in 2010 provided the SPBPA with an additional 280.2 AF/yr of allocation, which was granted to pumpers that were not previously parties to, or identified within, the Judgment. The current allocations were calculated and granted using the lesser of the following two options: 1) the average production reported to UWCD from CYs 2002 through 2008; or 2) the average production reported to UWCD prior to the Judgment (CYs 1989 to 1995). Through CY 2021, 345.9 AF/yr of SPBPA allocation has been transferred to the City of San Buenaventura to accommodate new water demands on its system that result from agricultural land conversion to municipal land uses. This amount includes the recent transfer of 85 AF/yr to the City of San Buenaventura that occurred during CY 2021.

Table 6. Summary of Groundwater Extractions During CY 2021

Pumper	Extractions (AF)
City of San Buenaventura[a]	2,506
SPBPA Pumpers with Individual Party Allocations (adjusted by SPBPA)[b]	19,453
SPBPA Pumpers with Individual Party Allocations (reported to United)[c]	19,453
Non-stipulated Parties[b]	15
De Minimis Pumpers[b]	19.79
Total extractions (adjusted by SPBPA[b] / reported to United[c])	21,993

Notes:

[a] Includes pumping from well 02N22W03E01S (Appendix D, Table D-5)

[b] From Appendix D, compiled by SPBPA

[c] From UWCD Finance Department records

Reported groundwater extractions during CY 2021, 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 2021 is shown on Figure 12.

Table 7. Summary of Groundwater Extractions, Imports, and Exports in Santa Paula Basin, CY 2021

Description	Volume (AF)
Reported groundwater extractions from wells in the Santa Paula basin stipulated area	21,993
Estimated groundwater imports from Fillmore basin (assume 100% of total pumpage from FICO #12 well)	+4,266
Estimated net groundwater imports from Oxnard Forebay basin via the Alta distribution system (reported by Alta)	+1,283
Estimated Santa Paula basin groundwater exported to Mound basin via the Alta distribution system (reported by Alta)	-46
Estimated Santa Paula basin groundwater exported to Mound basin via the FICO distribution system (reported by FICO)	-999
Estimated net groundwater use in Santa Paula basin (sum of extractions plus imports, less exports)	**= 26,497***

** 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 2021 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. These data are included in Appendix B. The GLIs for CYs 1983 through 2021 are shown on Figure 16, together with the cumulative departure from average precipitation over the same period at Santa Paula. The CY 2021 GLI is 176.23 feet above mean sea level (ft msl), which is 4.5 feet lower than the previous year's GLI (180.75 ft. msl). Calculation of the GLI has been affected since one of the index wells, well 03N22W34R01S, was destroyed in 2017. Due to its location in the western part of Santa Paula basin, well 03N22W34R01S typically had lower groundwater elevations than most of the other index wells. Therefore, the average groundwater elevation for the remaining wells is higher than the average when well 03N22W34R01S was included. This artifact likely accounted for approximately 5 feet of the apparent increase in GLI between 2016 and 2017 (Figure 16). Another key well 02N22W02C01S was destroyed in 2020 and adjacent well 03N22W35Q02S was added as a key index well. Wells 2C1 and 35Q2 had similar groundwater levels, therefore the replacement is not thought to cause a significant change in the calculation of the GLI. The average GLI since 1983, when it was first calculated, is 180.44 ft msl, which is over 4 feet above the 2021 GLI. It can be concluded that water levels fell in 2021.

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 fell by 5.79 ft across the basin from spring 2020 (see UWCD, 2022) to spring 2021 (Figure 17; Appendix C). This decline is slightly larger than the calculated decrease in GLI over the same period (2020-2021) of 4.52 ft. More data points are used for the geostatistical analysis than for the GLI calculation; therefore, the geostatistical analysis likely is more representative of basin wide 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 2020 and spring 2021 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 2020 and spring 2021 is a decrease of approximately 75 to 750 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 2021 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 2021 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 2021

Statistic	Concentration (mg/L)			
	Chloride	Nitrate[a]	TDS	Sulfate
CY 2021 Minimum	45	ND	904	348
CY 2021 Maximum	312	38	4,390	2,070
CY 2021 Average	85	8	1,380	599
Long-Term Average[b]	70	10	1,309	542
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 2021 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 2021

Statistic		Concentration (mg/L)			
		Hardness[a]	**Alkalinity[a]**	**Iron**	**Manganese**
CY 2021 Minimum		477	220	ND	ND
CY 2021 Maximum		1,310	410	4.64	0.86
CY 2021 Average		750	283	0.16	0.24
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.

REFERENCES

California Regional Water Quality Control Board, Los Angeles Region, 1994, Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties.

Pitts, Donald J., and Peterson, Kevin, undated, Maintaining a Plug-Free Micro-Irrigation System, Cachuma Resource Conservation District.

Superior Court of the State of California for the County of Ventura, 2010, Judgment, Case No. 115611: *United Water Conservation District vs. City of San Buenaventura*, Original March 7, 1996, Amended August 24, 2010.

UWCD (United Water Conservation District), 2022, 2020 Santa Paula Basin Annual Report, United Water Conservation District Professional Paper 2022-01, February.

University of California, 2015, Maintenance of Microirrigation Systems, Division of Agriculture and Natural Resources webpage edited by Lawrence J. Schwankl, Ph.D. (http://micromaintain.ucanr.edu/Prediction/Source/Groundwater/Assessing_Water_Quality_II-50a/)

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FIGURES

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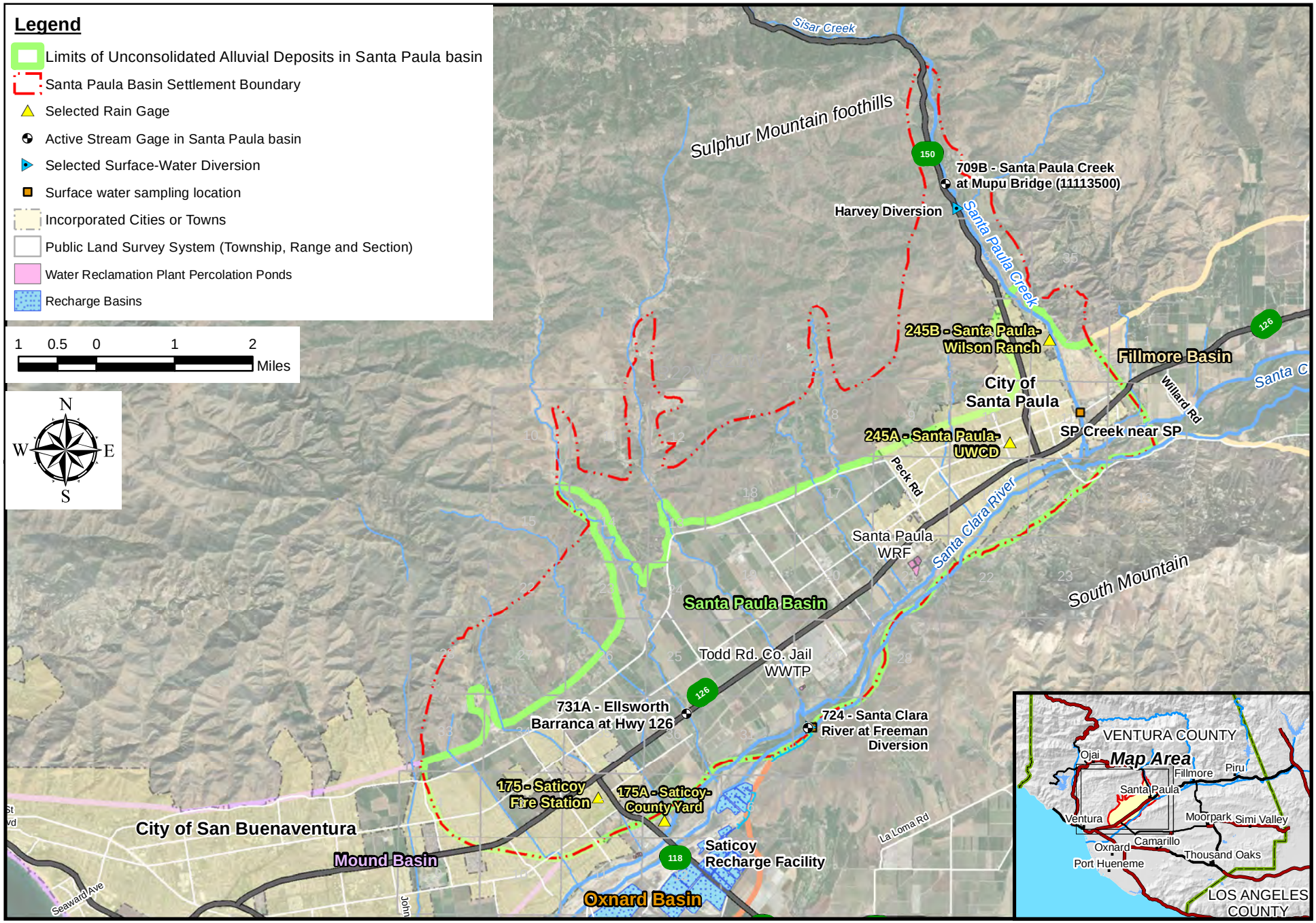


Figure 1. Santa Paula Basin Location Map

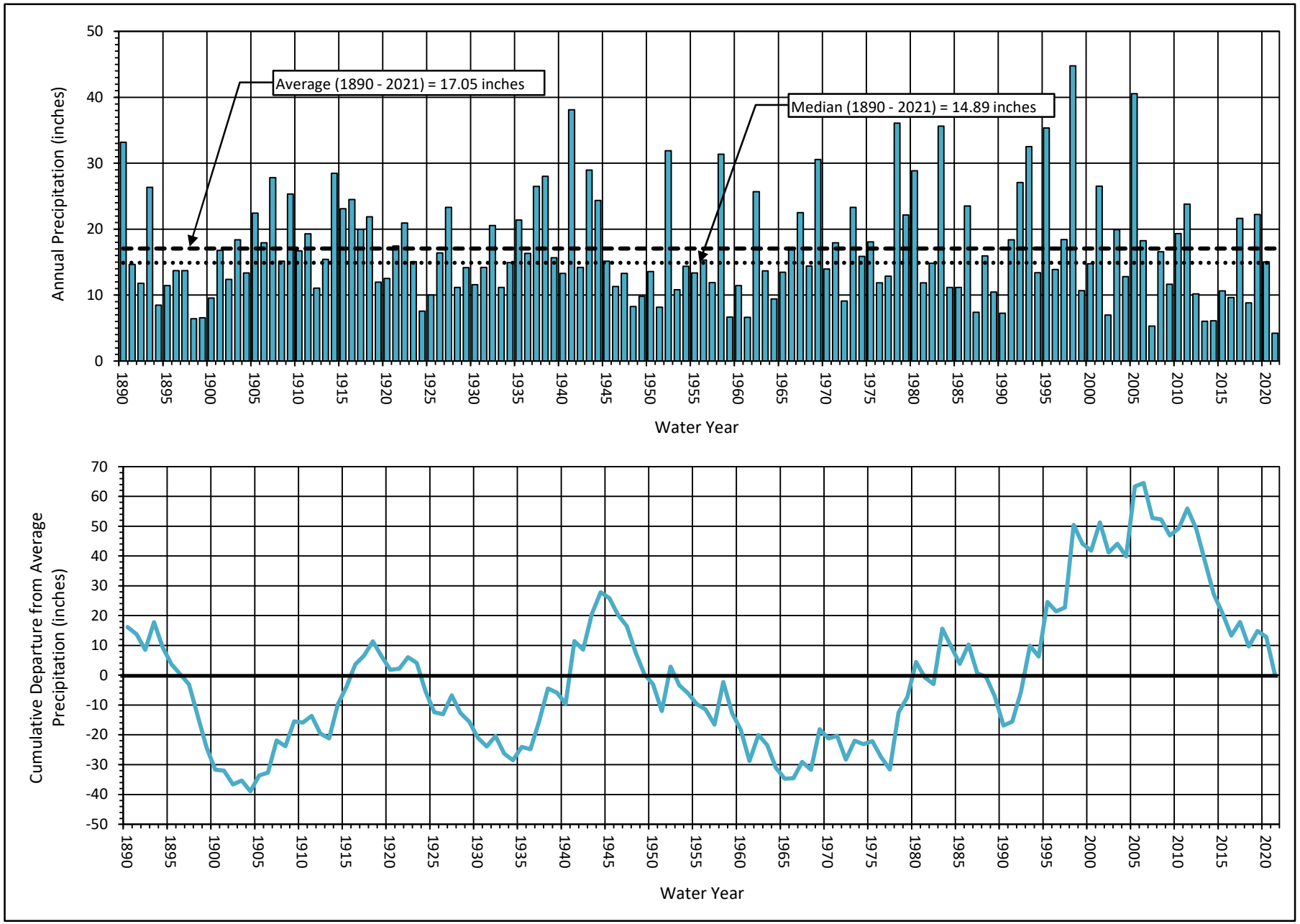


Figure 2. Annual Precipitation at Santa Paula and Cumulative Departure from Average, WYs 1890 through 2021

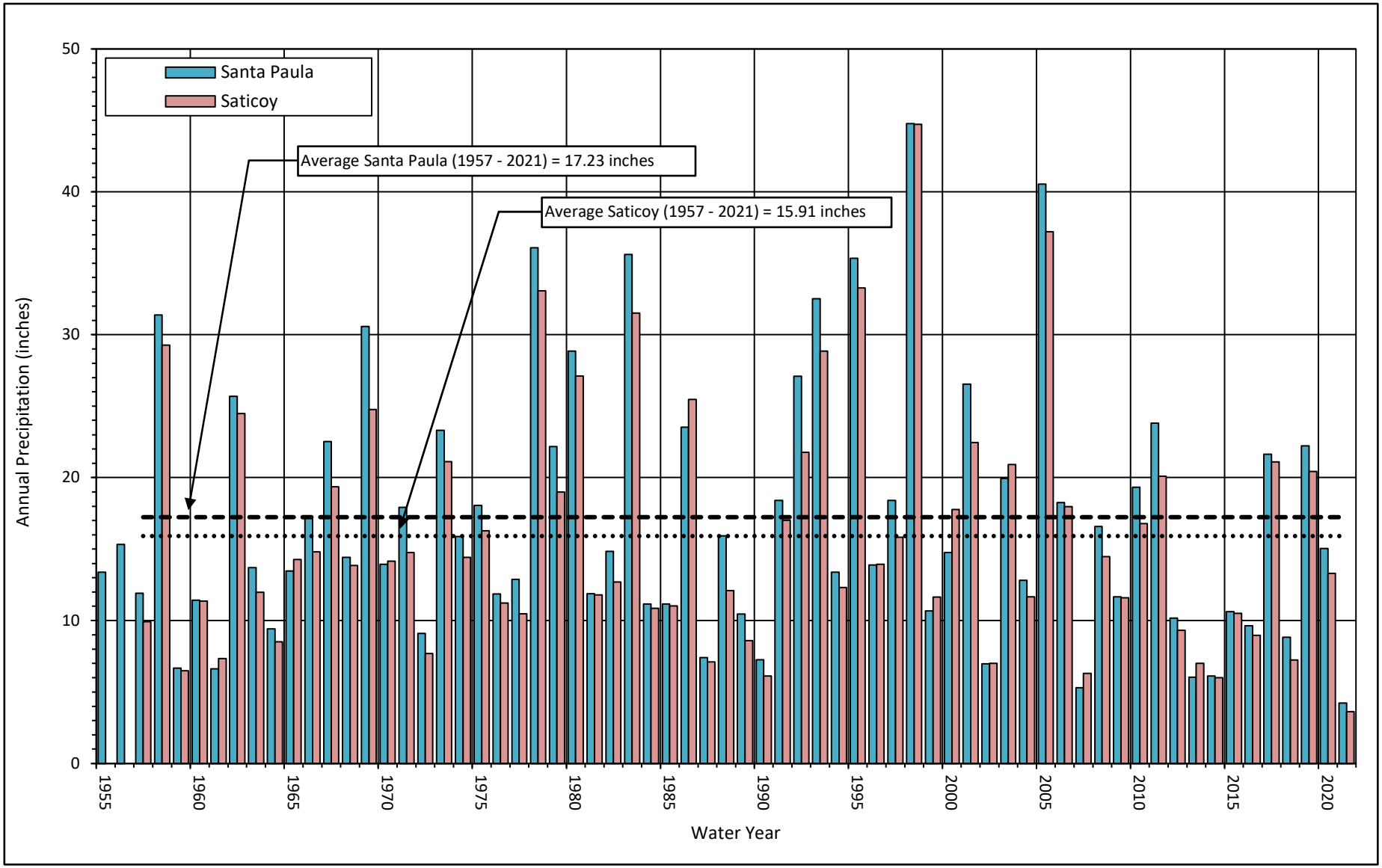


Figure 3. Annual Precipitation at Saticoy and Santa Paula, WYs 1955 through 2021

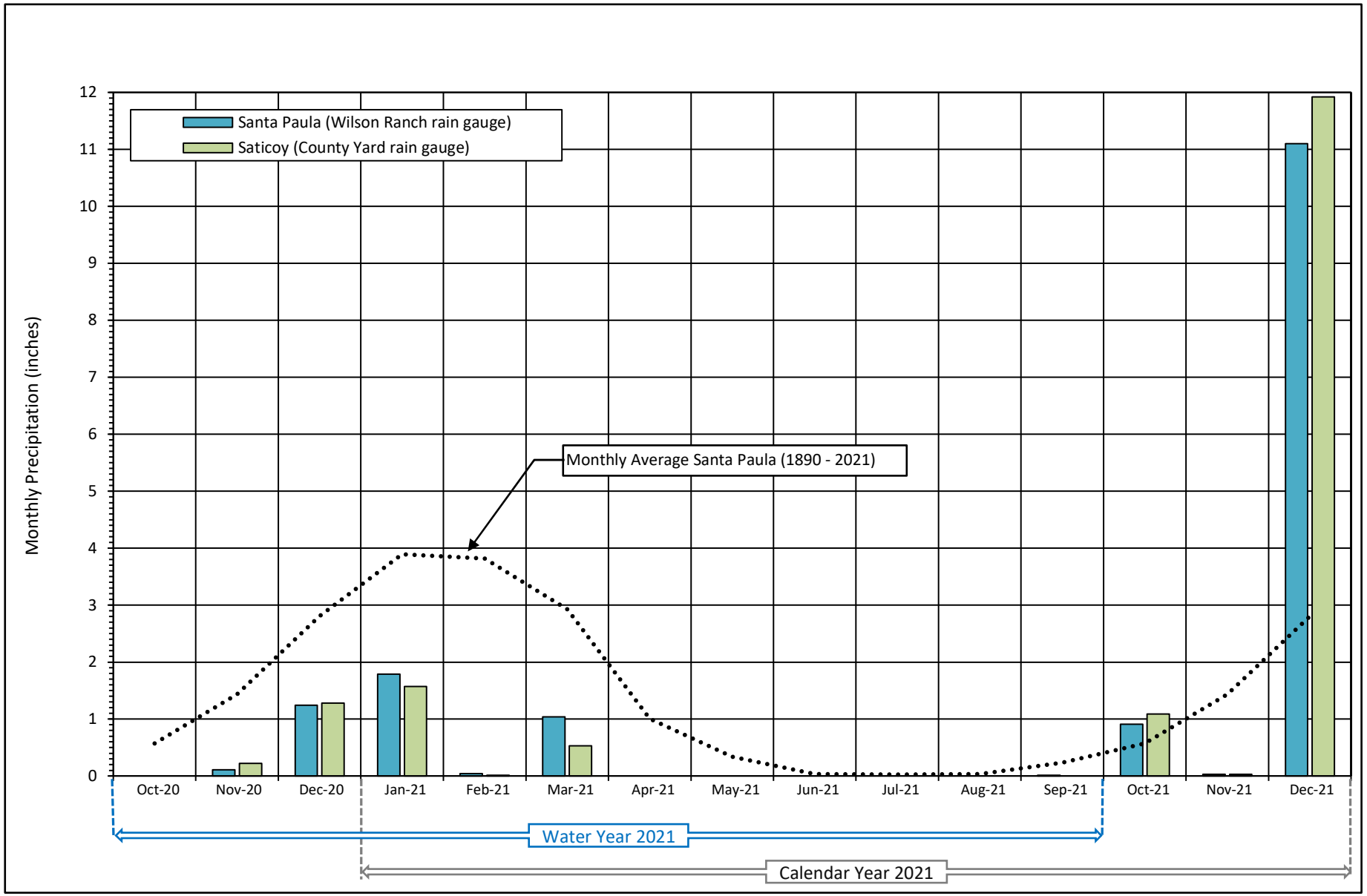


Figure 4. Monthly Precipitation in Santa Paula Basin, WY and CY 2021

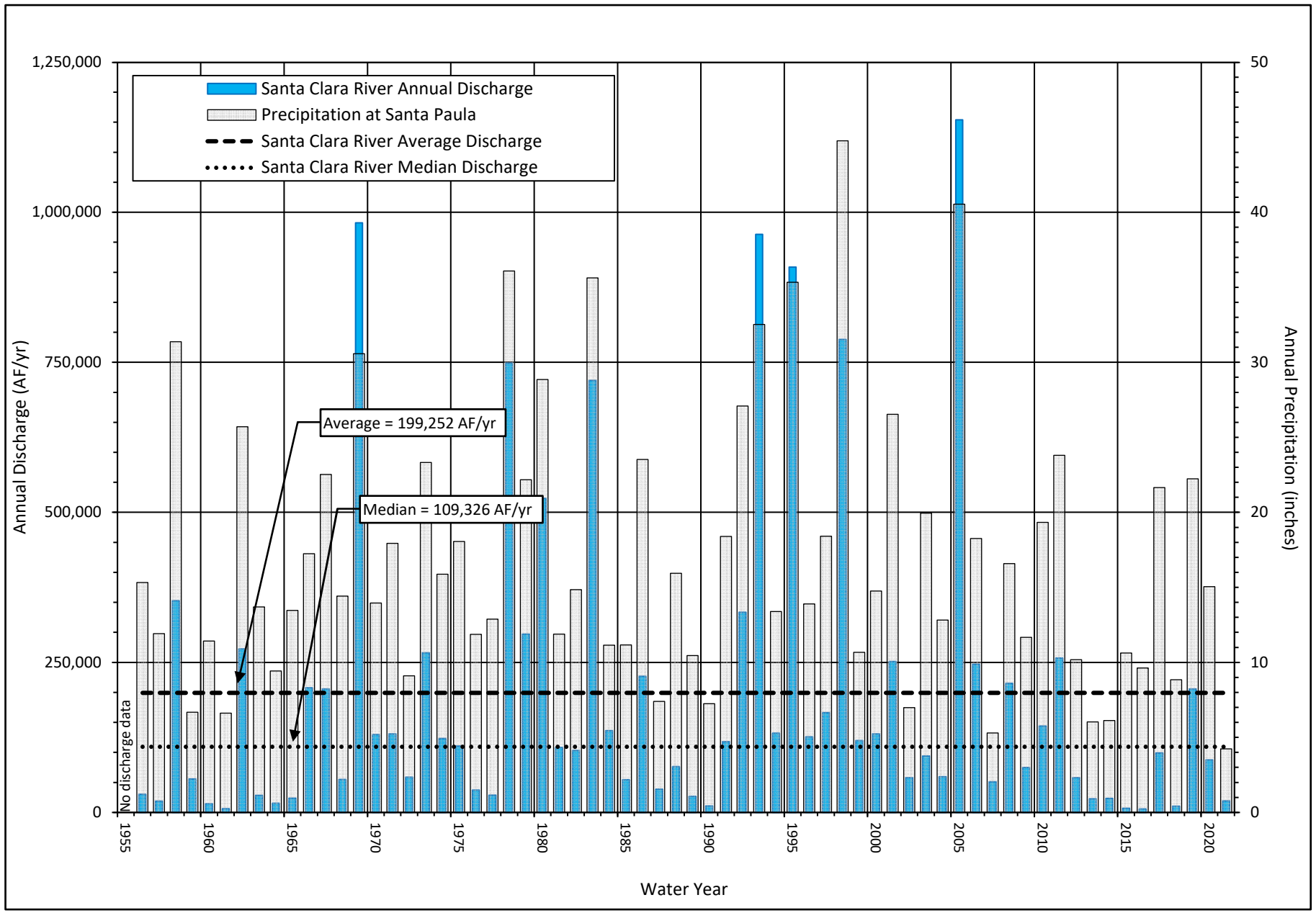


Figure 5. Annual Discharge of Santa Clara River at the Freeman Diversion, WYs 1956 through 2021

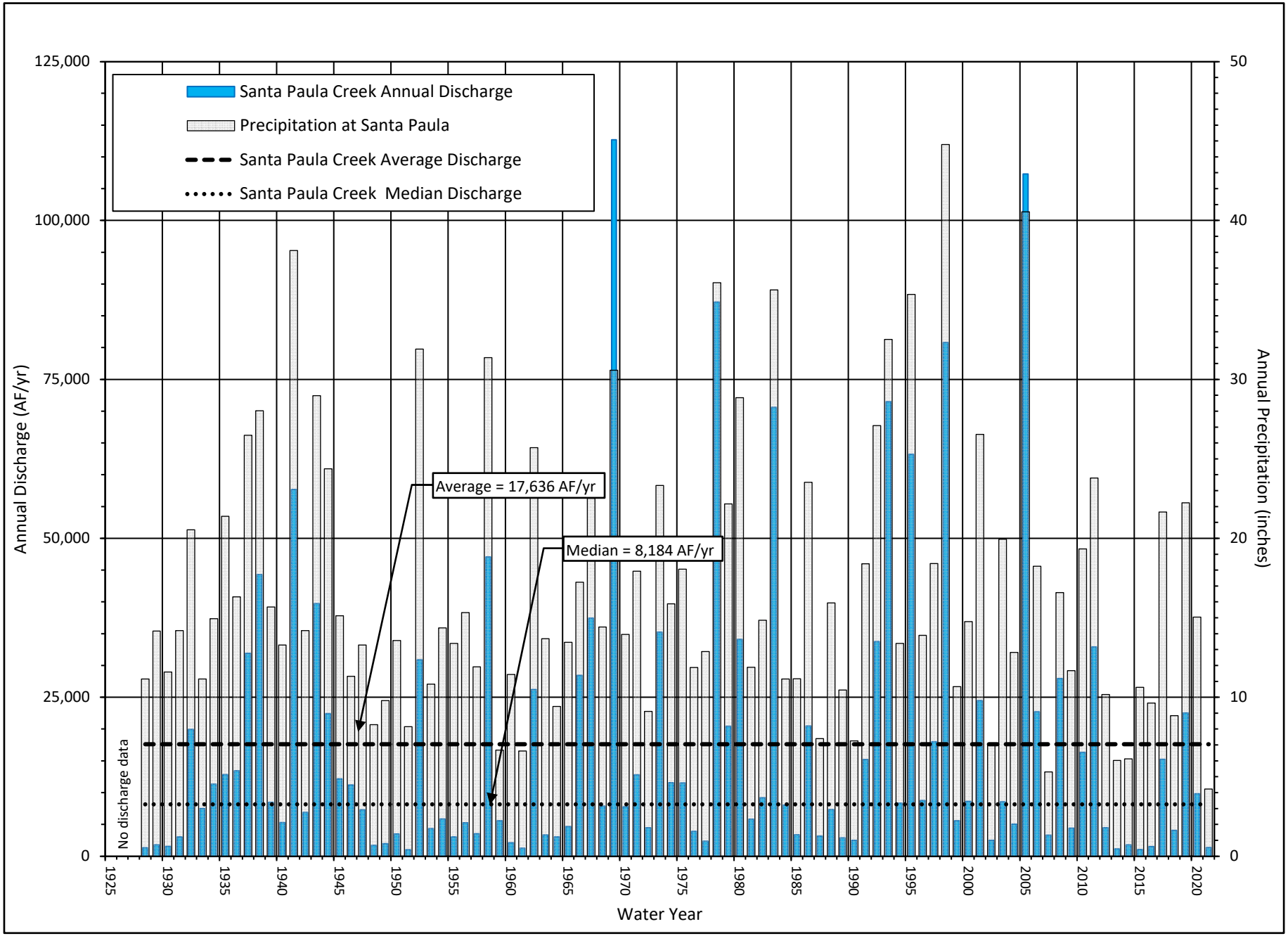


Figure 6. Annual Discharge of Santa Paula Creek Near Santa Paula, WYs 1928 through 2021

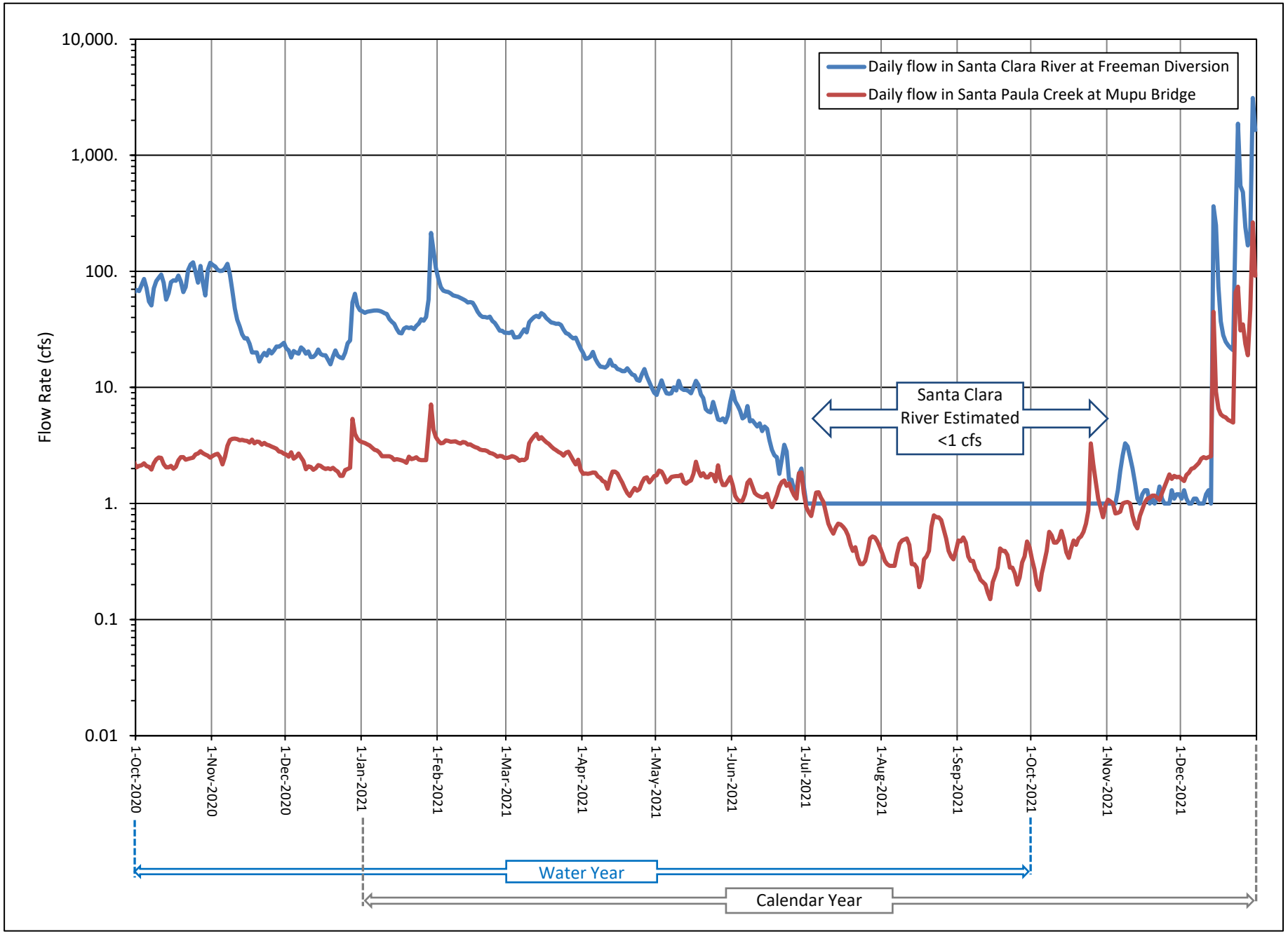


Figure 7. Daily Streamflow in Santa Paula Creek and Santa Clara River, WY and CY 2021

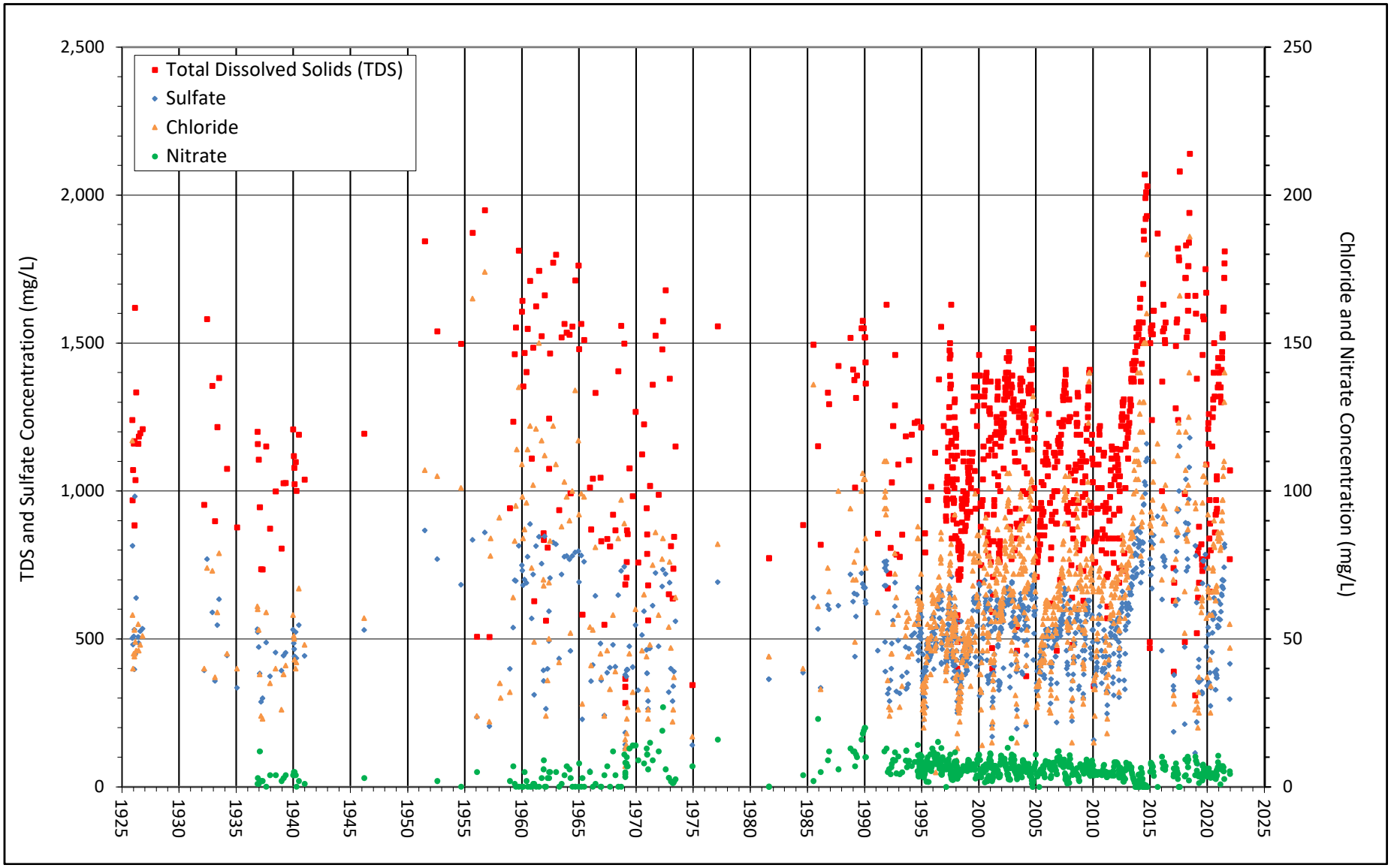


Figure 8. Concentrations of Selected Major Surface Water Quality Parameters in the Santa Clara River at Freeman Diversion, CYs 1925 through 2021

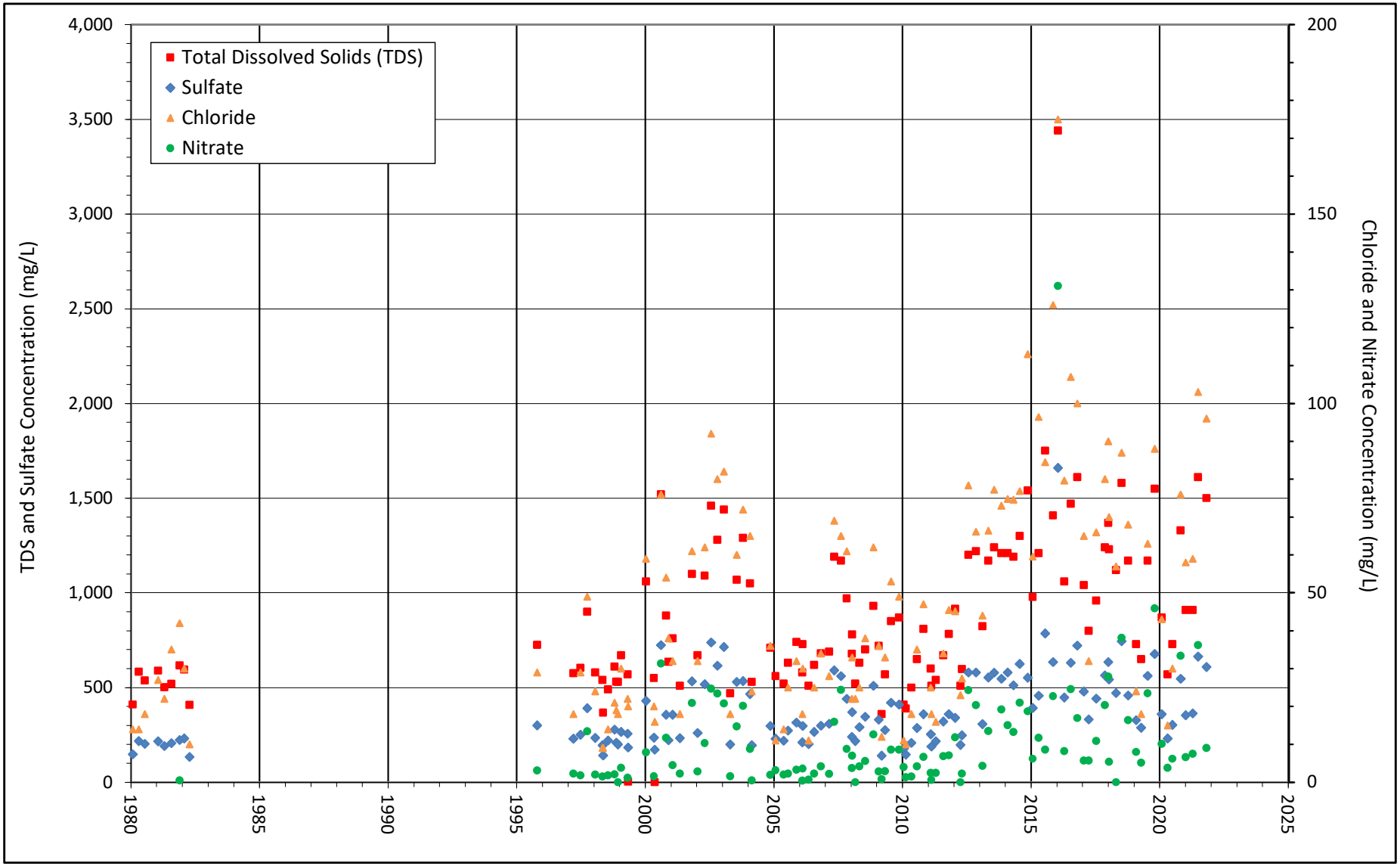


Figure 9. Concentrations of Selected Major Suface Water Quality Parameters in Santa Paula Creek Near Santa Paula, CYs 1980 through 2021

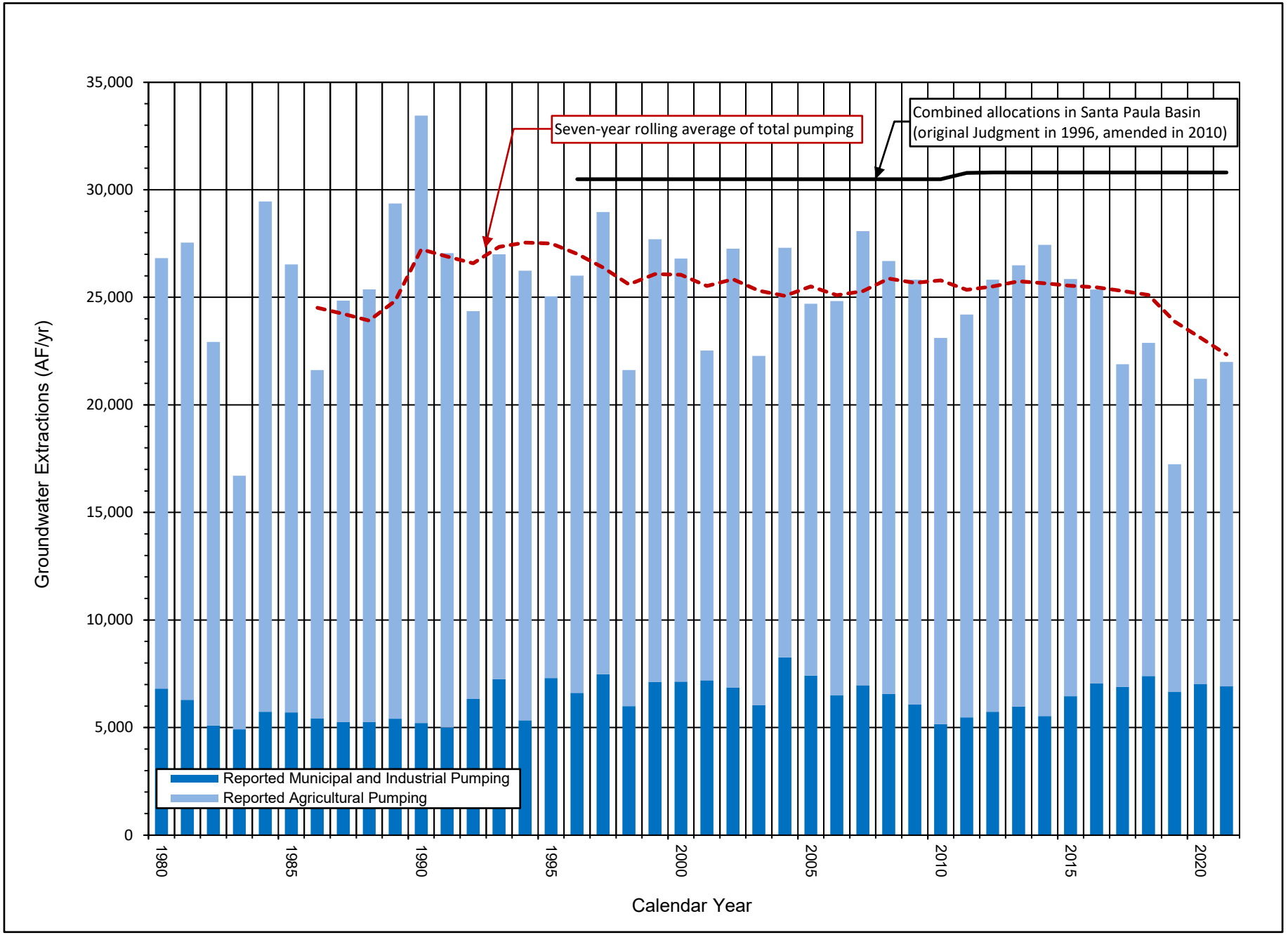
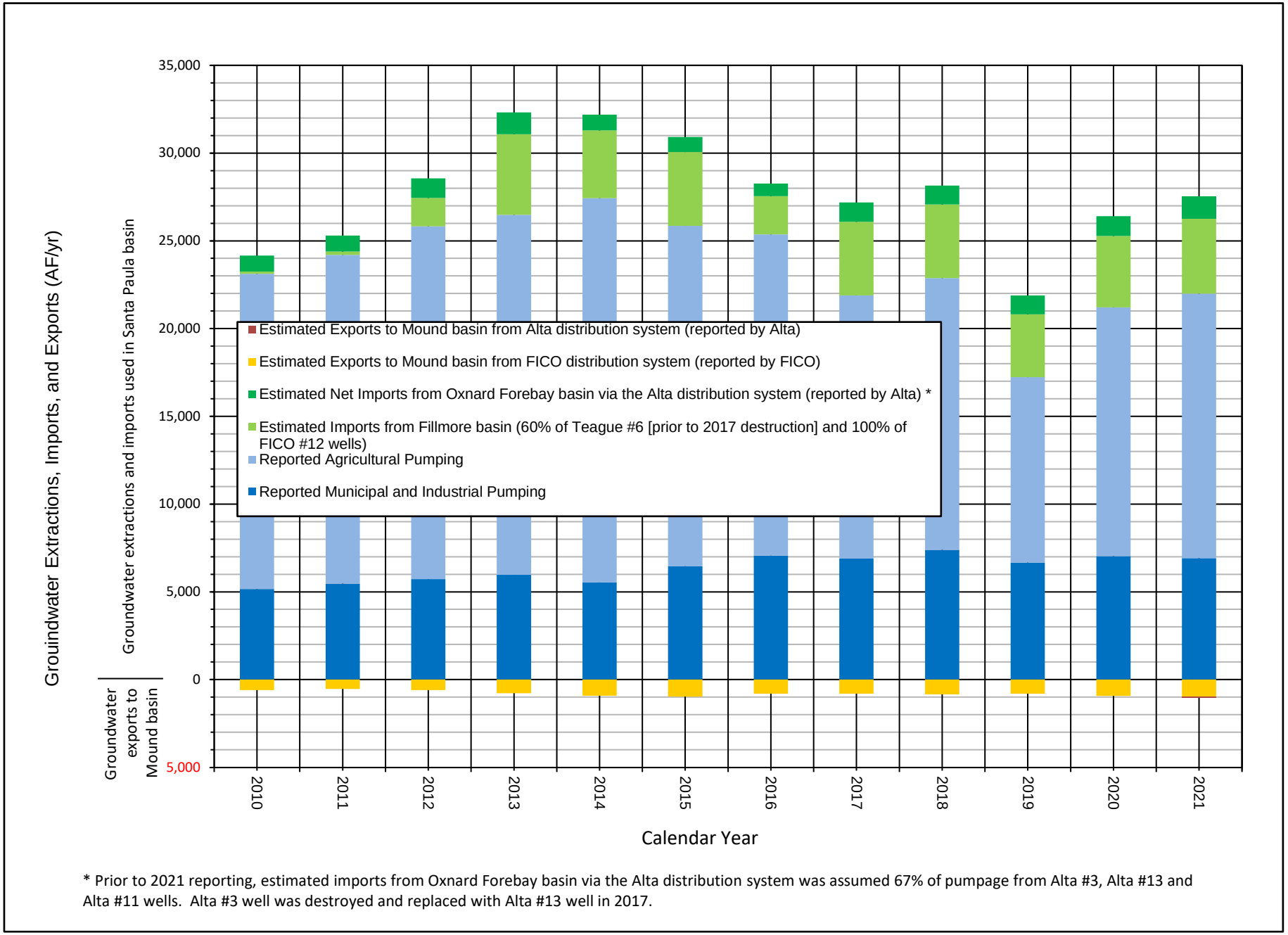


Figure 10. Historical Annual Groundwater Extractions from Santa Paula Basin, CYs 1980 through 2021



* Prior to 2021 reporting, estimated imports from Oxnard Forebay basin via the Alta distribution system was assumed 67% of pumpage from Alta #3, Alta #13 and Alta #11 wells. Alta #3 well was destroyed and replaced with Alta #13 well in 2017.

Figure 11. Annual Groundwater Extractions, Imports, and Exports from Santa Paula Basin, CYs 2010 through 2021

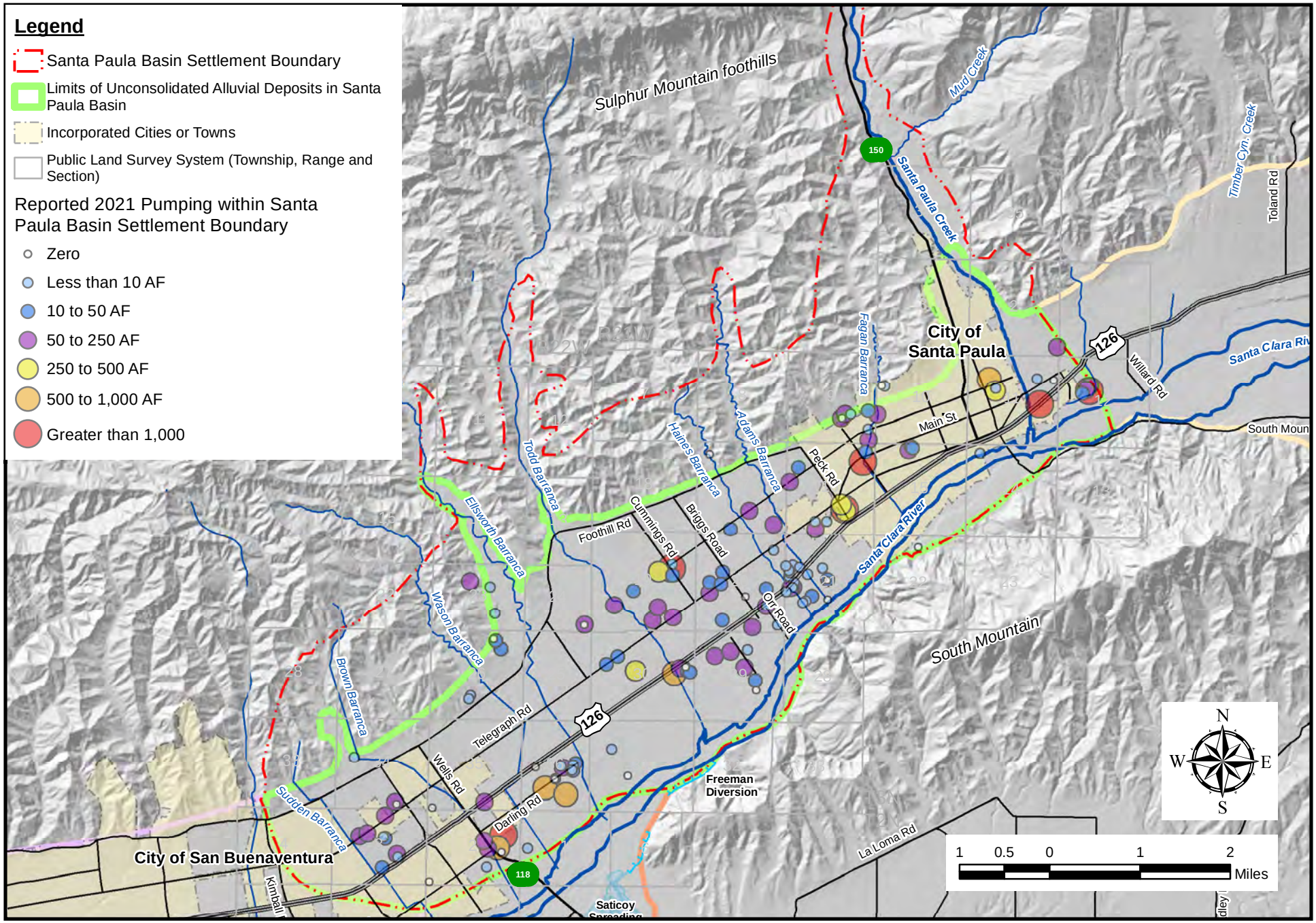


Figure 12. Santa Paula Basin Groundwater Extractions by Well, CY 2021

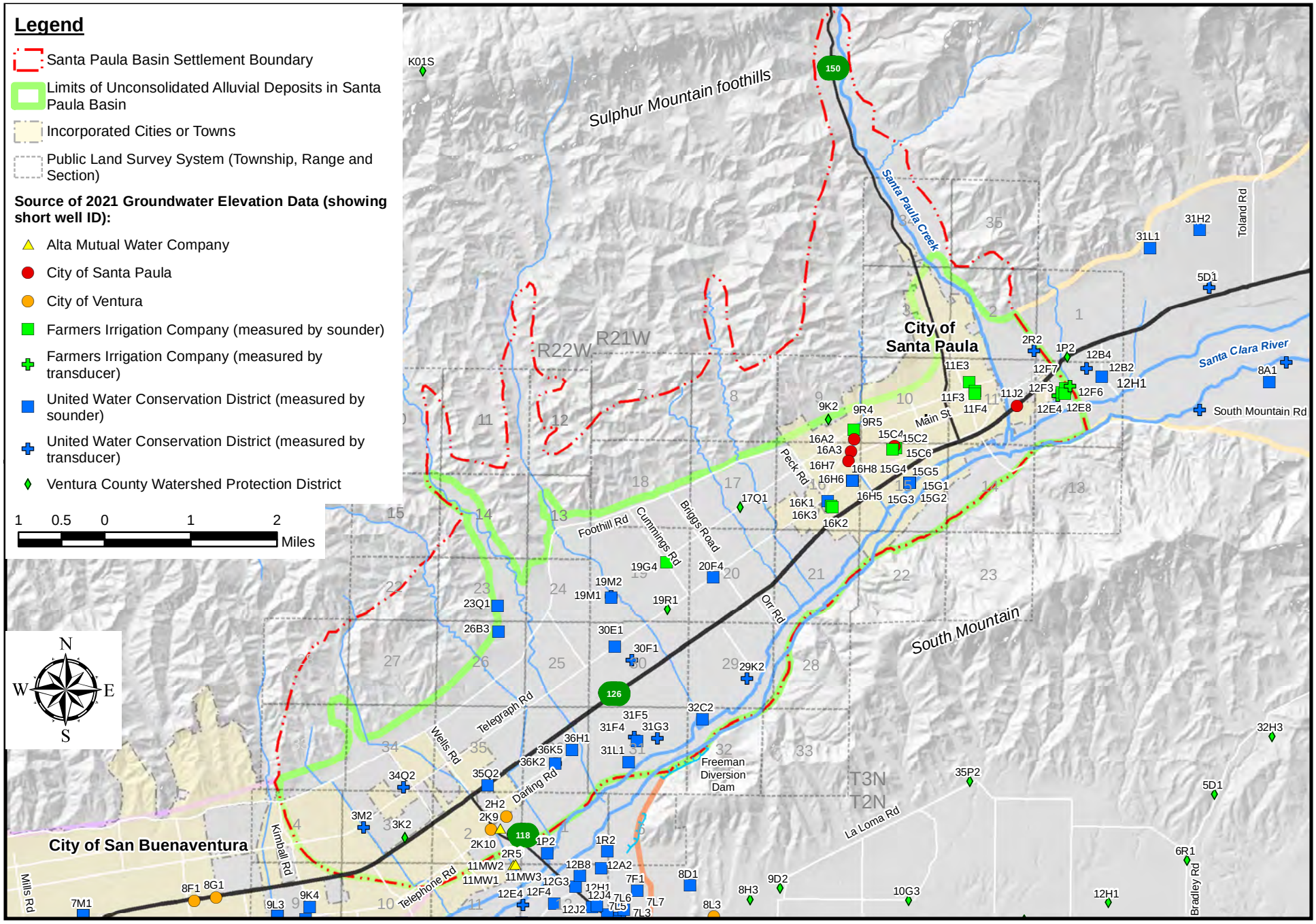


Figure 13. Locations of Wells used to Monitor Groundwater Levels in and Adjacent to Santa Paula Basin, CY 2021

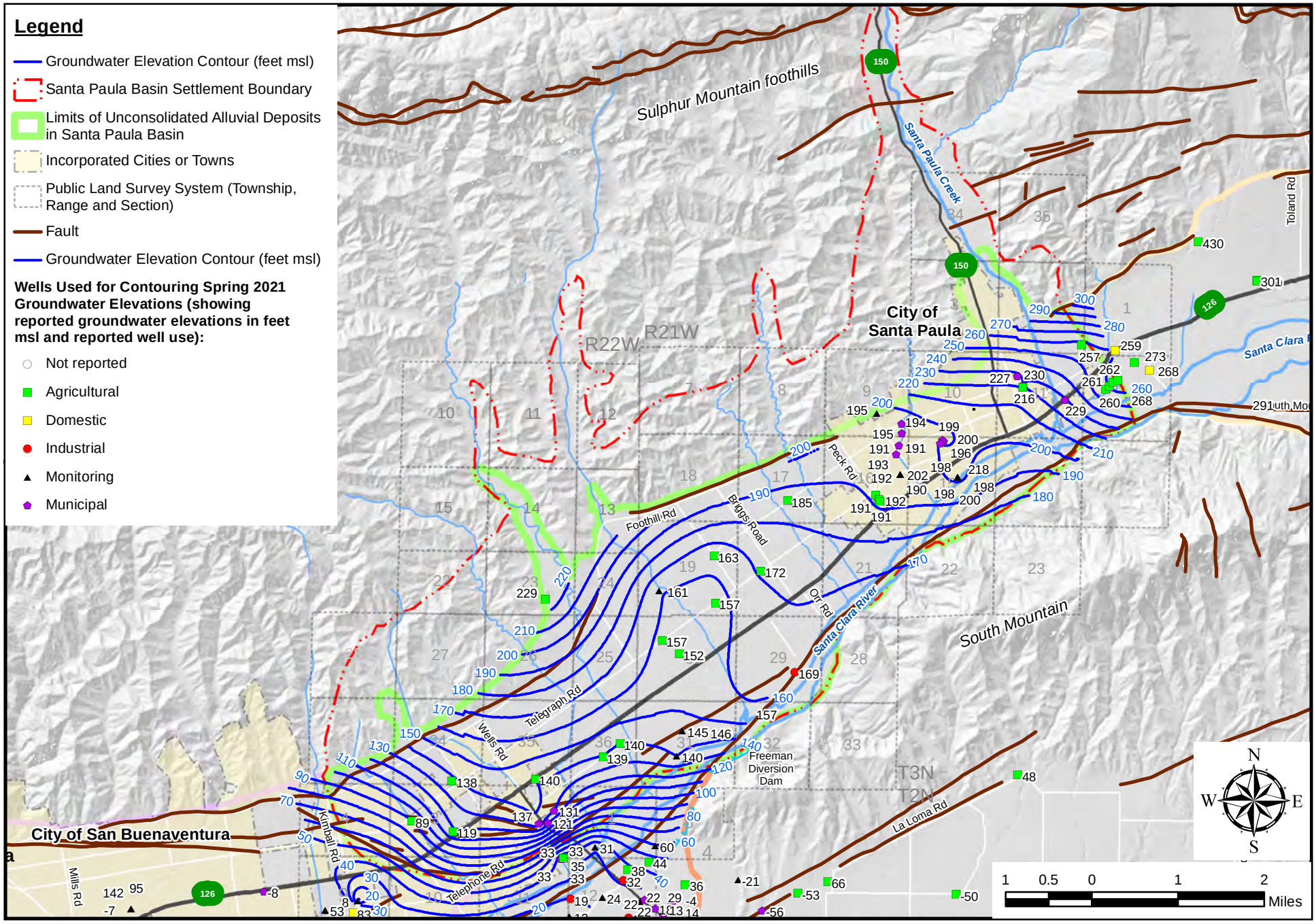


Figure 14. Santa Paula Basin Groundwater Elevation Contours, Spring 2021

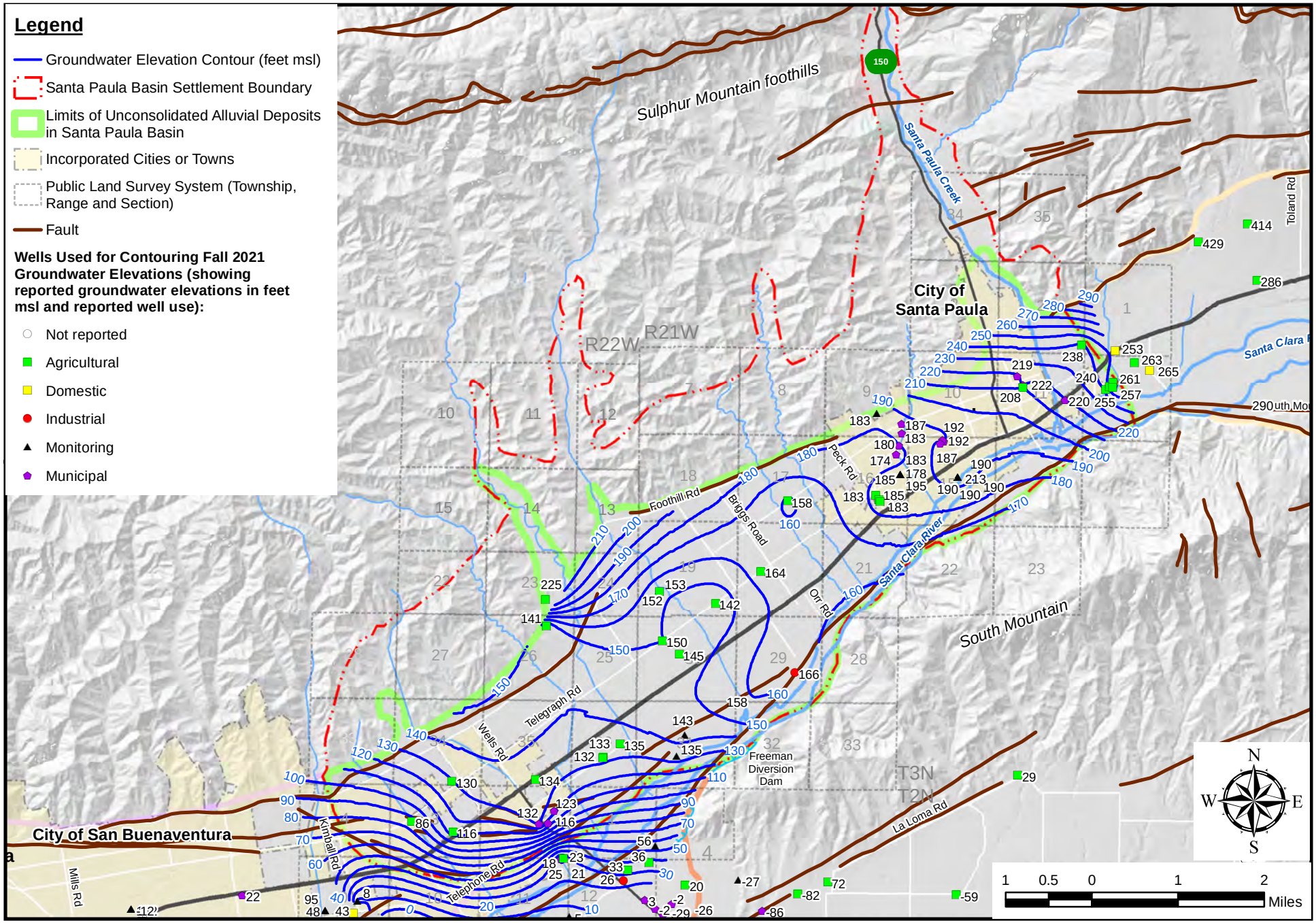


Figure 15. Santa Paula Basin Groundwater Elevation Contours, Fall 2021

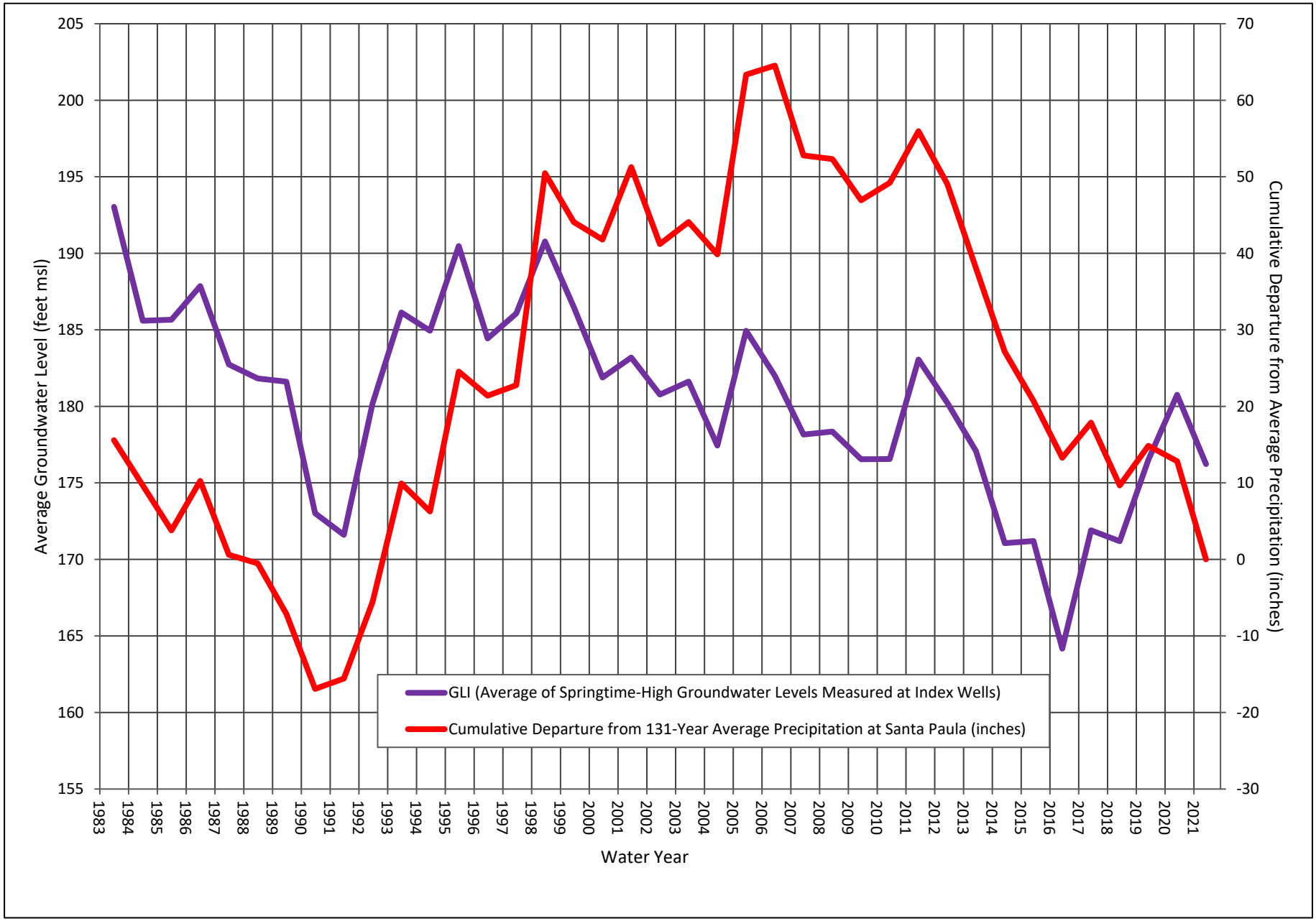


Figure 16. Groundwater Level Index and Cumulative Departure from Average Precipitation in Santa Paula Basin, WYs 1983 through 2021

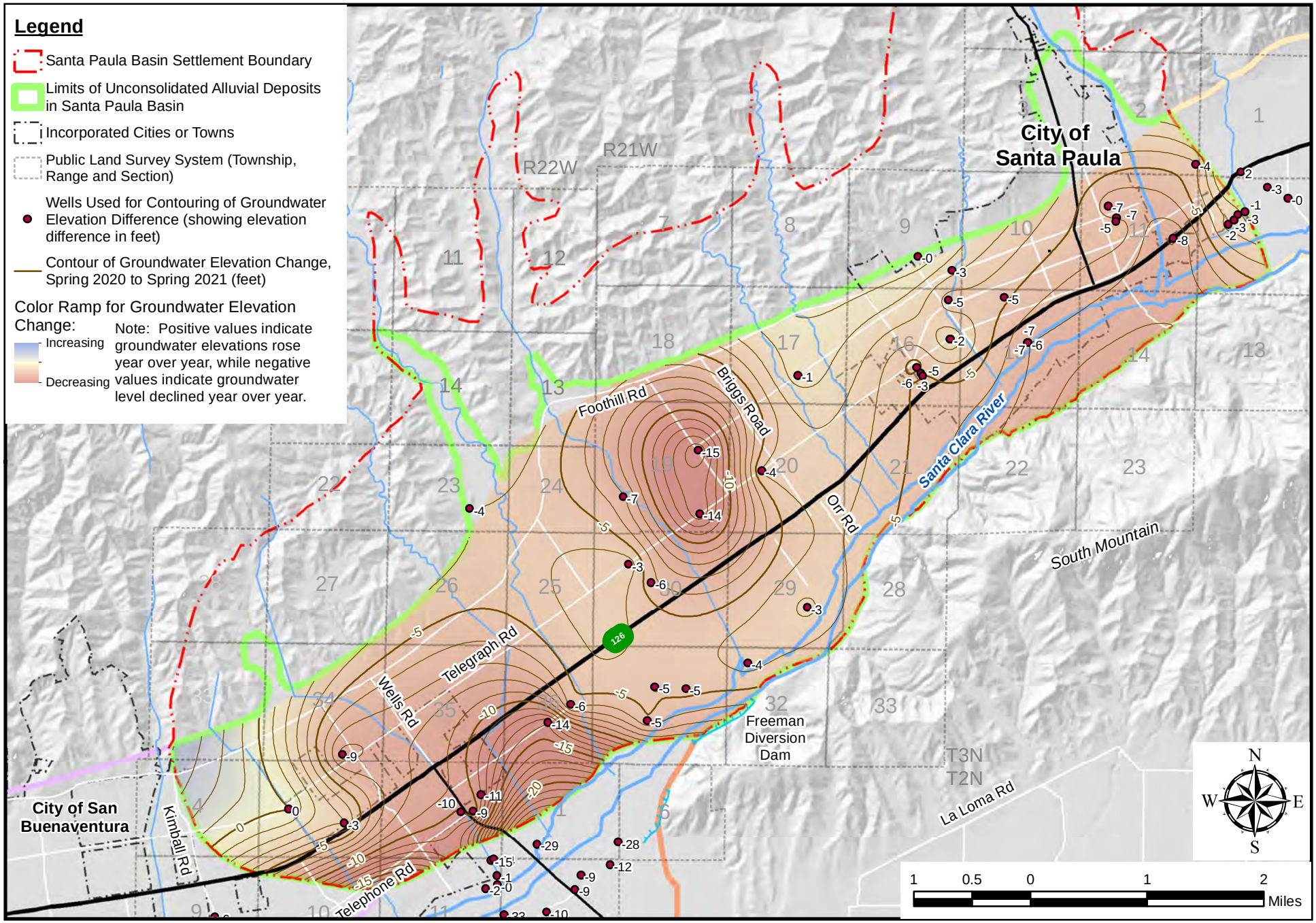


Figure 17. Change in Groundwater Elevation in Unconsolidated Alluvial Deposits of Santa Paula Basin, Spring 2020 to Spring 2021

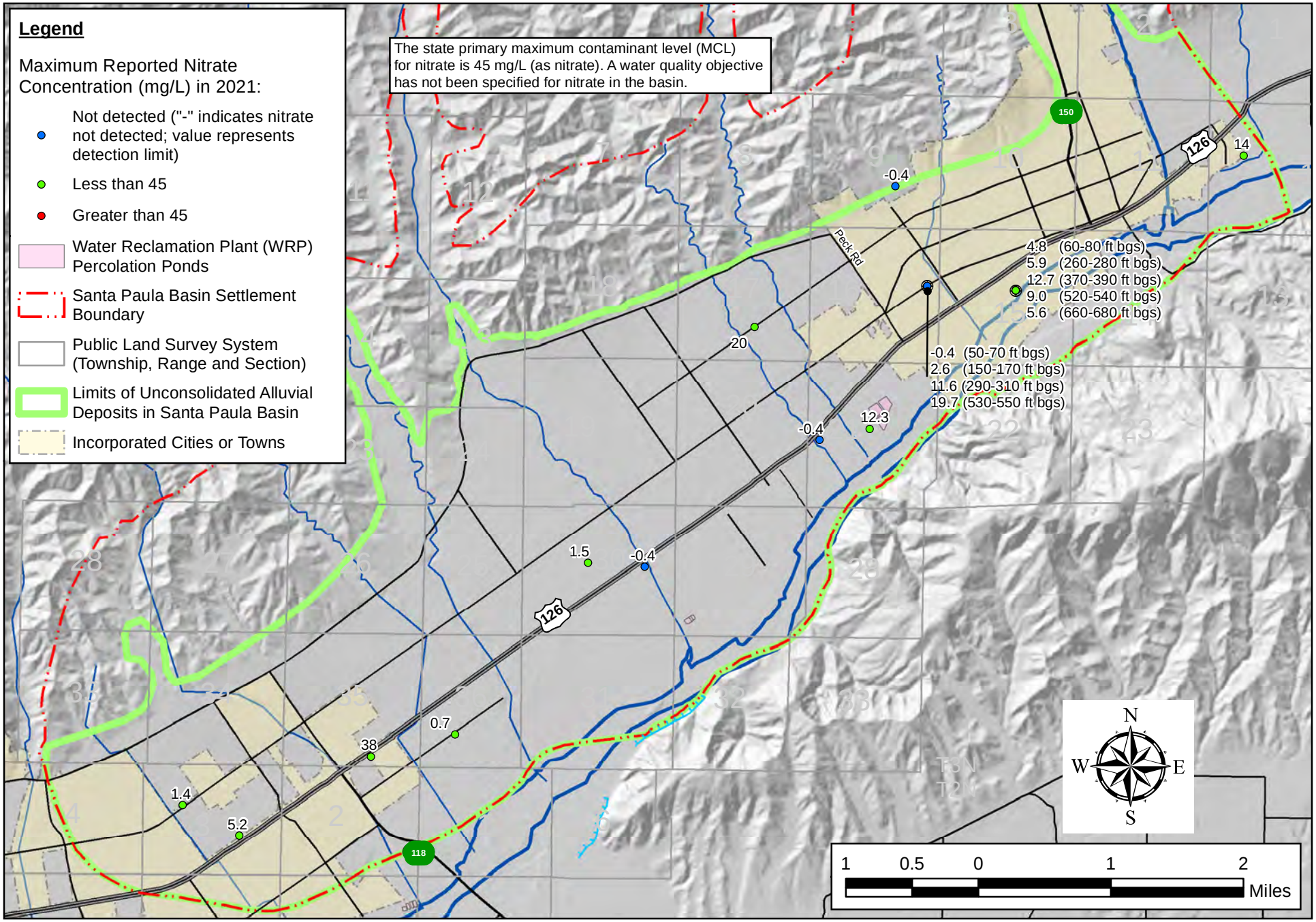


Figure 18. Maximum Reported Nitrate Concentrations in Groundwater, CY 2021

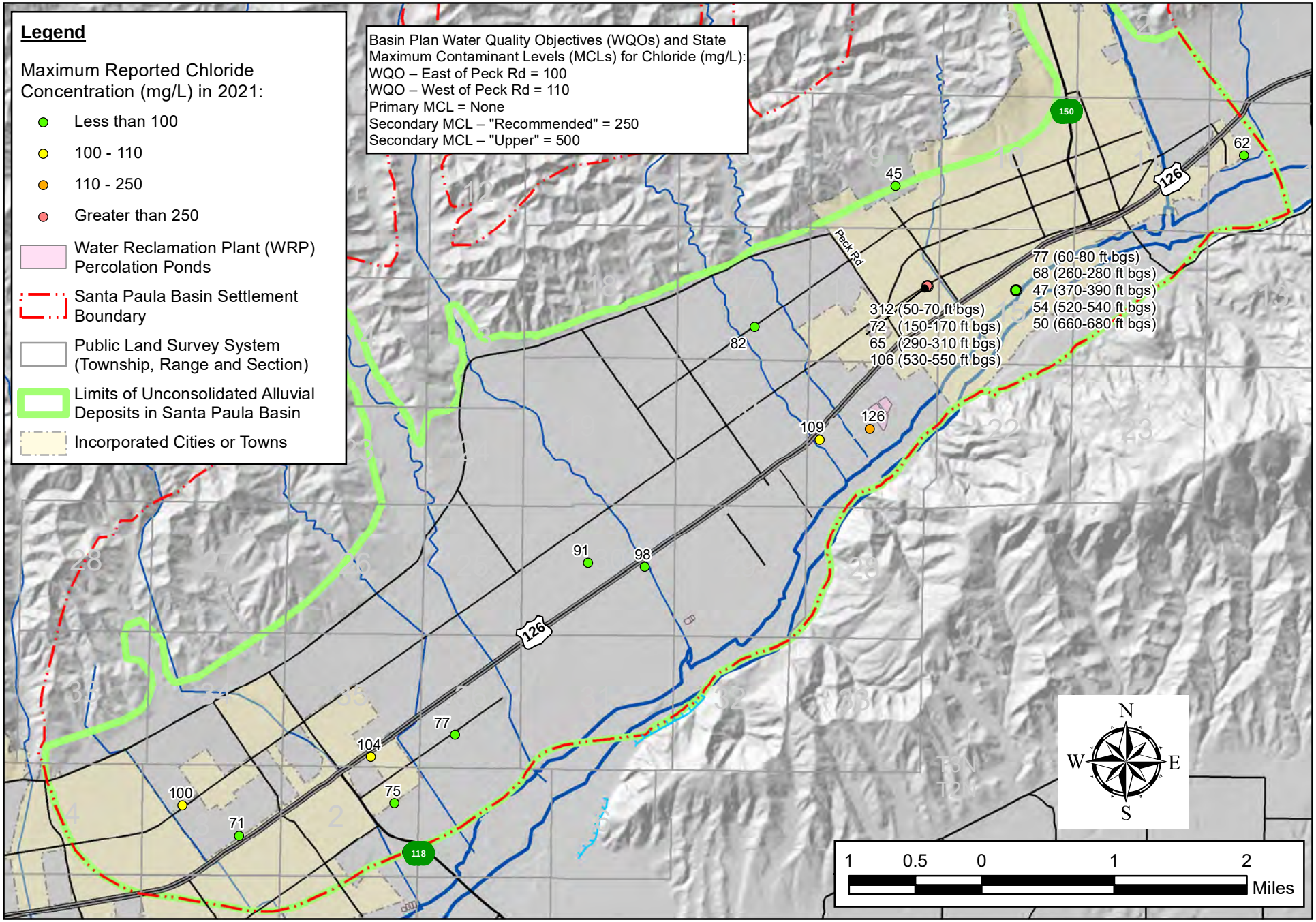


Figure 19. Maximum Reported Chloride Concentrations in Groundwater, CY 2021

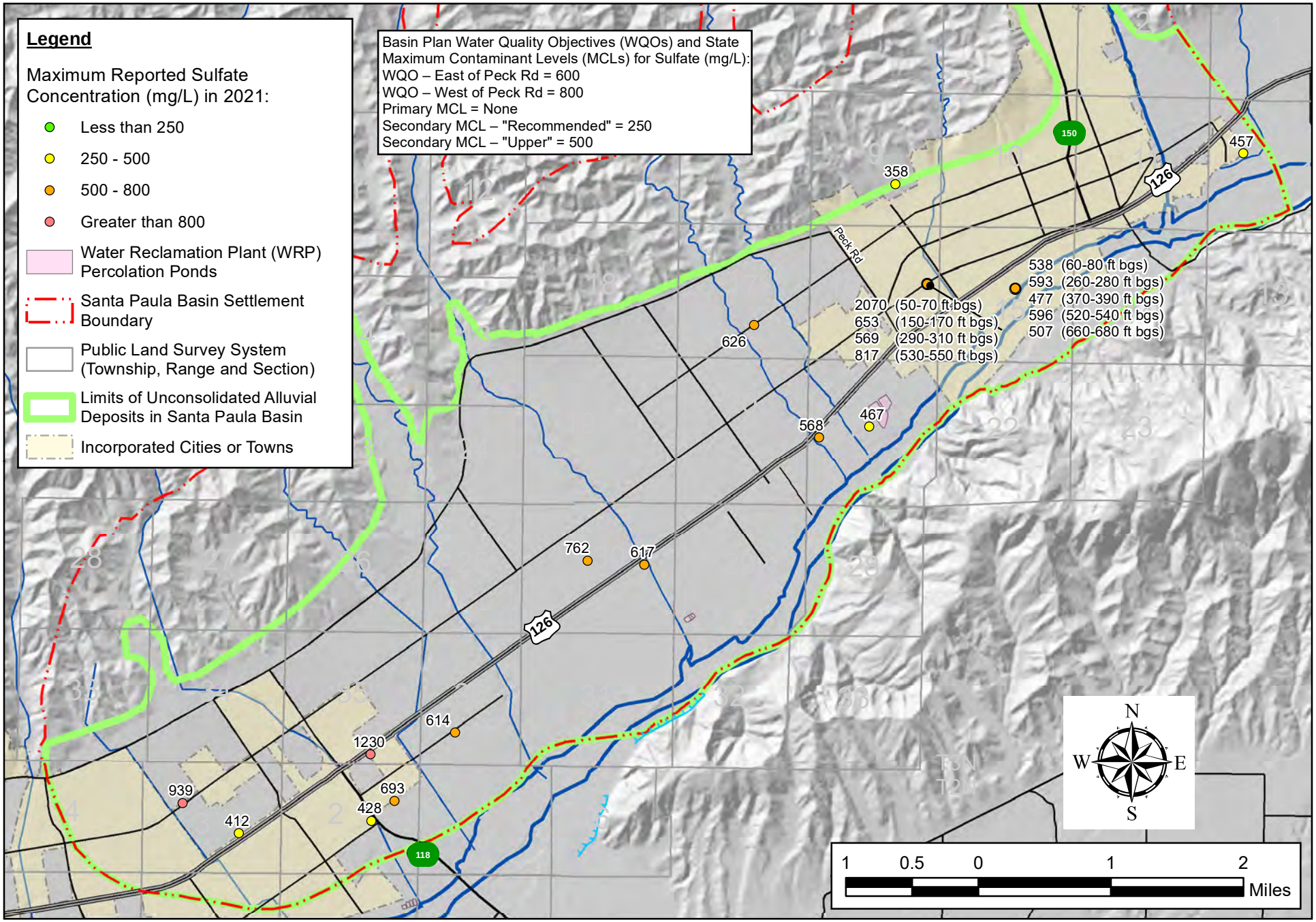


Figure 20. Maximum Reported Sulfate Concentrations in Groundwater, CY 2021

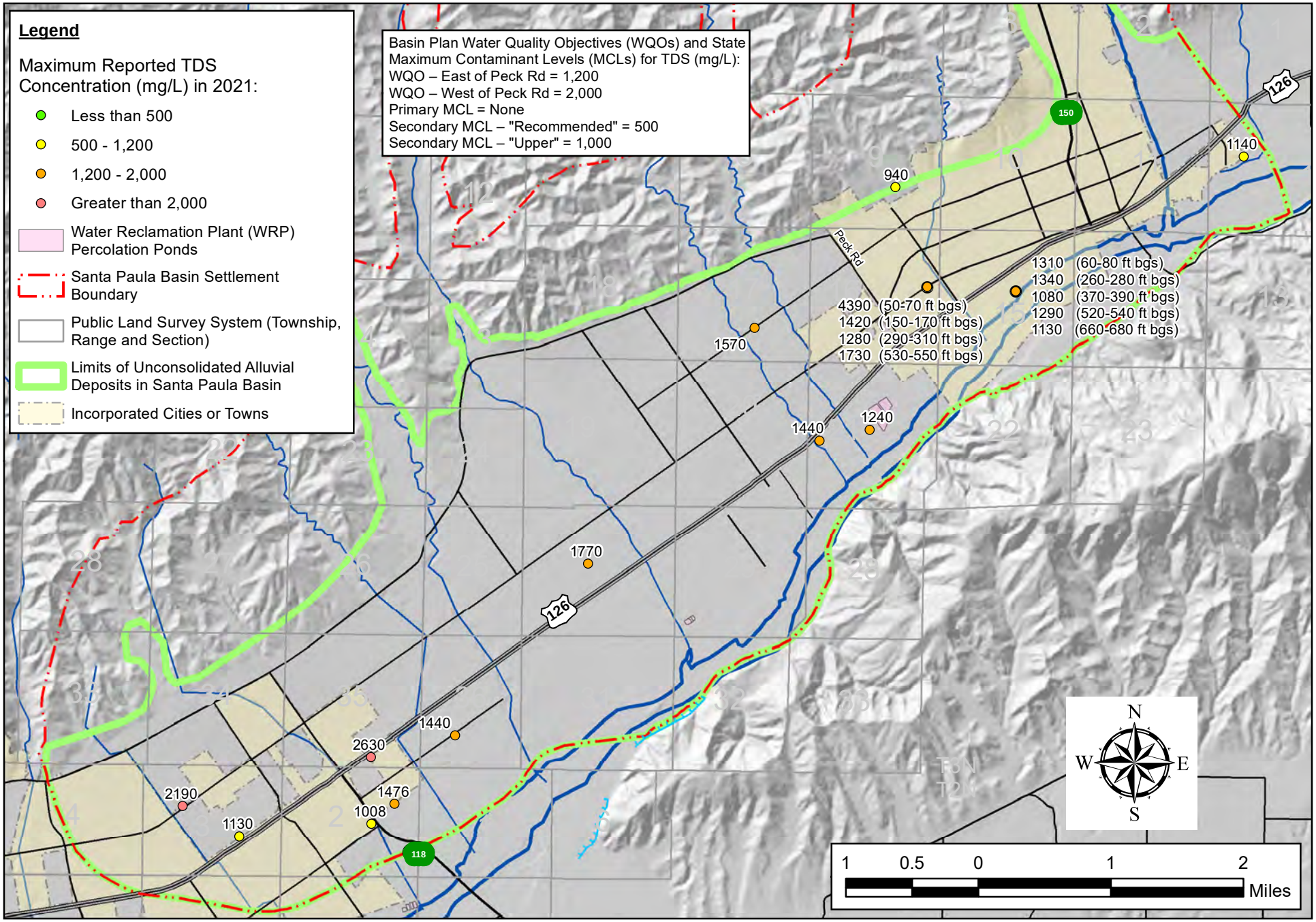


Figure 21. Maximum Reported Total Dissolved Solids (TDS) Concentrations in Groundwater, CY 2021

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APPENDIX A - Historical Precipitation and Streamflow Tables

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

WATER YEAR (WY)	MONTHLY PRECIPITATION (inches)												WATER YEAR PRECIPITATION (inches)	WY CUMULATIVE DEPARTURE (inches)	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	16.15	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	13.76	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	8.50	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	17.81	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	9.24	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	3.65	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	0.30	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	-3.06	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	-13.69	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	-24.20	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	-31.69	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	-31.94	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	-36.61	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	-35.27	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	-38.96	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	-33.57	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	-32.69	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	-21.92	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	-23.84	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	-15.54	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	-15.88	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	-13.64	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	-19.62	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	-21.27	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	-9.84	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	-3.77	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	3.66	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	6.56	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	11.39	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	6.31	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	1.79	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	2.19	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	6.06	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	4.08	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	-5.40	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	-12.45	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	-13.09	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	-6.82	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	-12.73	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	-15.61	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	-21.07	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	-23.94	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	-20.45	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	-26.35	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	-28.46	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	-24.13	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	-24.86	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	-15.42	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	-4.46	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	-5.83	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	-9.59	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	11.46	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	8.60	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	20.53	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	27.84	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	25.92	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	20.19	16.83

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

WATER YEAR (WY)	MONTHLY PRECIPITATION (inches)												WATER YEAR PRECIPITATION (inches)	WY CUMULATIVE DEPARTURE (inches)	CALENDAR YEAR PRECIPITATION (inches)
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
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	16.42	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	7.64	10.18
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	0.38	12.06
1950	0.00	1.18	4.33	3.17	2.59	0.93	1.11	0.00	0.00	0.02	0.00	0.24	13.57	-3.11	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	-12.01	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	2.85	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	-3.39	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	-6.07	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	-9.74	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	-11.47	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	-16.61	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	-2.29	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	-12.68	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	-18.30	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	-28.73	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	-20.09	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	-23.45	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	-31.08	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	-34.67	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	-34.49	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	-29.02	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	-31.65	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	-18.13	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	-21.23	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	-20.35	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	-28.30	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	-22.03	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	-23.20	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	-22.20	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	-27.38	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	-31.55	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	-12.53	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	-7.41	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	4.39	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	-0.79	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	-3.00	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	15.58	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	9.67	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	3.78	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	10.26	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	0.60	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	-0.52	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	-7.12	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	-16.93	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	-15.58	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	-5.54	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	9.93	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	6.26	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	24.55	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	21.40	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	22.75	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	50.47	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	44.09	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	41.79	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	51.27	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	41.20	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	44.09	16.02

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

WATER YEAR (WY)	MONTHLY PRECIPITATION (inches)												WATER YEAR PRECIPITATION (inches)	WY CUMULATIVE DEPARTURE (inches)	CALENDAR YEAR PRECIPITATION (inches)
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
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	39.85	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	63.34	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	64.54	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	52.79	7.90
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	52.31	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	46.93	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	49.21	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	55.95	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	49.08	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	38.06	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	27.12	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	20.70	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	13.28	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	17.87	16.73
2018	0.00	0.00	0.00	2.24	0.06	6.48	0.01	0.05	0.00	0.00	0.00	0.00	8.84	9.66	12.66
2019	0.24	2.14	1.44	8.35	6.26	2.57	0.02	1.21	0.00	0.00	0.00	0.00	22.23	14.84	26.02
2020	0.00	2.42	5.19	0.78	0.01	3.94	2.53	0.12	0.04	0.00	0.00	0.01	15.04	12.82	8.78
2021	0.00	0.11	1.24	1.79	0.04	1.04	0.00	0.00	0.00	0.00	0.00	0.01	4.23	0.00	14.92
2022	0.91	0.03	11.1												
AVERAGE:	**0.57**	**1.44**	**2.80**	**3.89**	**3.82**	**2.93**	**1.00**	**0.34**	**0.03**	**0.02**	**0.03**	**0.23**	**17.05**	**---**	**16.96**
MEDIAN:	**0.18**	**0.76**	**1.68**	**2.51**	**2.81**	**2.25**	**0.49**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**14.89**	**---**	**15.43**

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	**1973**	265,962	**1990**	10,787	**2007**	51,065
1957	18,668	**1974**	123,279	**1991**	117,639	**2008**	214,847
1958	352,671	**1975**	110,294	**1992**	333,441	**2009**	74,645
1959	55,462	**1976**	37,116	**1993**	963,059	**2010**	143,938
1960	14,557	**1977**	28,818	**1994**	131,823	**2011**	257,205
1961	6,209	**1978**	748,780	**1995**	908,663	**2012**	57,761
1962	272,542	**1979**	297,212	**1996**	125,982	**2013**	22,696
1963	28,495	**1980**	523,154	**1997**	166,052	**2014**	23,213
1964	15,345	**1981**	108,357	**1998**	788,007	**2015**	6,670
1965	23,696	**1982**	103,255	**1999**	119,559	**2016**	5,825
1966	207,602	**1983**	719,692	**2000**	130,933	**2017**	98,843
1967	205,577	**1984**	136,205	**2001**	251,235	**2018**	10,116
1968	54,656	**1985**	54,431	**2002**	58,072	**2019**	205,642
1969	982,425	**1986**	226,857	**2003**	93,844	**2020**	87,497
1970	129,540	**1987**	38,796	**2004**	59,397	**2021**	18,975
1971	130,717	**1988**	76,426	**2005**	1,153,883	**AVERAGE**	199,252
1972	58,807	**1989**	26,610	**2006**	246,950	**MEDIAN**	109,326

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	**1952**	30,882	**1976**	3,906	**2000**	8,609
1929	1,801	**1953**	4,340	**1977**	2,361	**2001**	24,461
1930	1,554	**1954**	5,861	**1978**	87,150	**2002**	2,513
1931	3,014	**1955**	3,012	**1979**	20,453	**2003**	8,563
1932	19,958	**1956**	5,257	**1980**	34,108	**2004**	5,054
1933	7,485	**1957**	3,527	**1981**	5,818	**2005**	107,309
1934	11,353	**1958**	47,074	**1982**	9,177	**2006**	22,708
1935	12,830	**1959**	5,593	**1983**	70,594	**2007**	3,305
1936	13,444	**1960**	2,123	**1984**	8,017	**2008**	27,945
1937	31,909	**1961**	1,254	**1985**	3,394	**2009**	4,393
1938	44,310	**1962**	26,203	**1986**	20,486	**2010**	16,342
1939	8,465	**1963**	3,340	**1987**	3,179	**2011**	32,887
1940	5,297	**1964**	3,026	**1988**	7,361	**2012**	4,465
1941	57,682	**1965**	4,665	**1989**	2,893	**2013**	1,168
1942	6,882	**1966**	28,458	**1990**	2,485	**2014**	1,788
1943	39,739	**1967**	37,423	**1991**	15,214	**2015**	1,028
1944	22,425	**1968**	7,866	**1992**	33,768	**2016**	1,502
1945	12,172	**1969**	112,696	**1993**	71,474	**2017**	15,226
1946	11,194	**1970**	7,779	**1994**	8,351	**2018**	4,063
1947	7,295	**1971**	12,795	**1995**	63,209	**2019**	22,518
1948	1,715	**1972**	4,492	**1996**	8,752	**2020**	9,826
1949	1,965	**1973**	35,236	**1997**	18,015	**2021**	1,361
1950	3,492	**1974**	11,552	**1998**	80,799	**AVERAGE**	17,636
1951	992	**1975**	11,506	**1999**	5,562	**MEDIAN**	8,184

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

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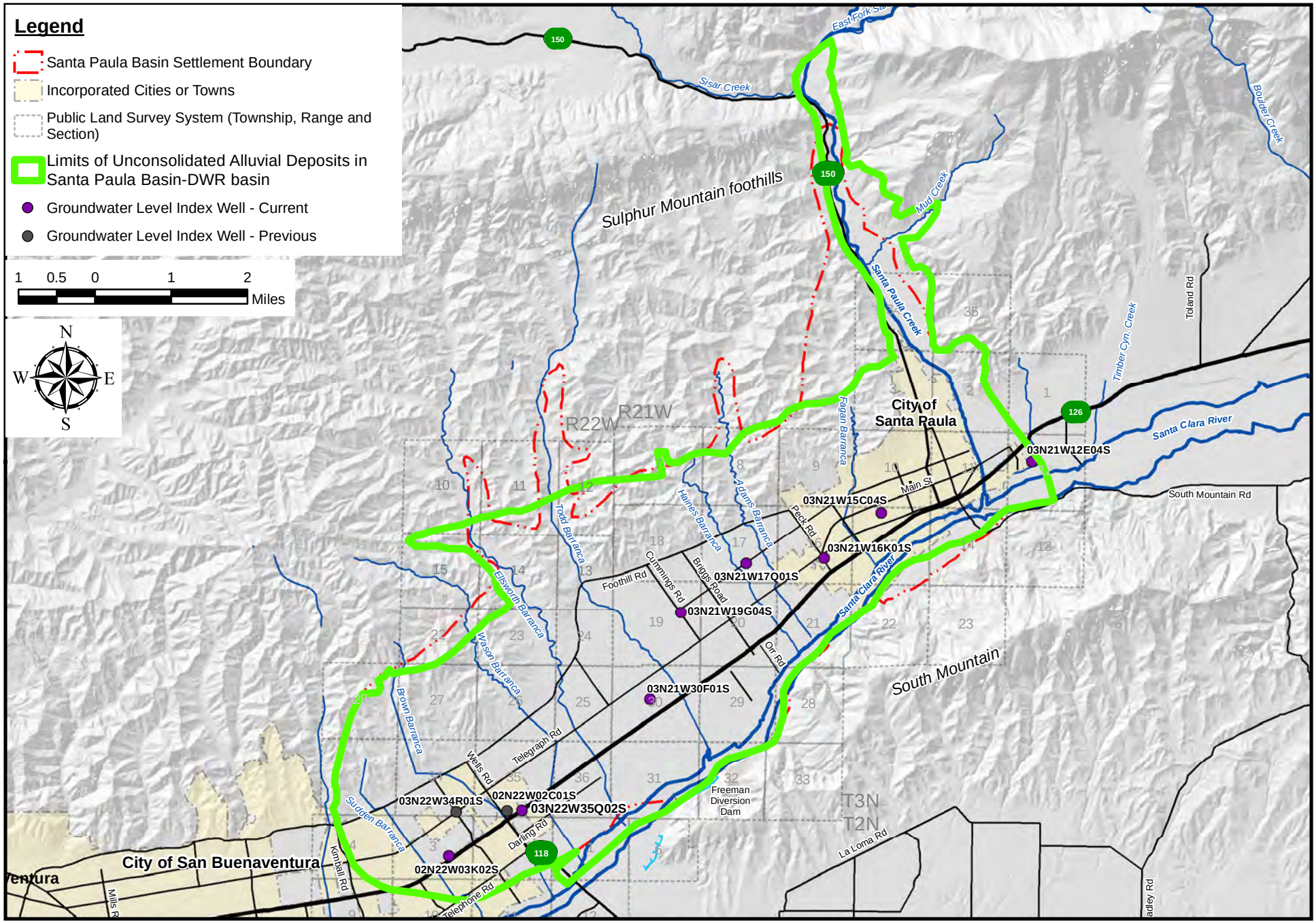

Location of Santa Paula Basin Groundwater Level Index Wells

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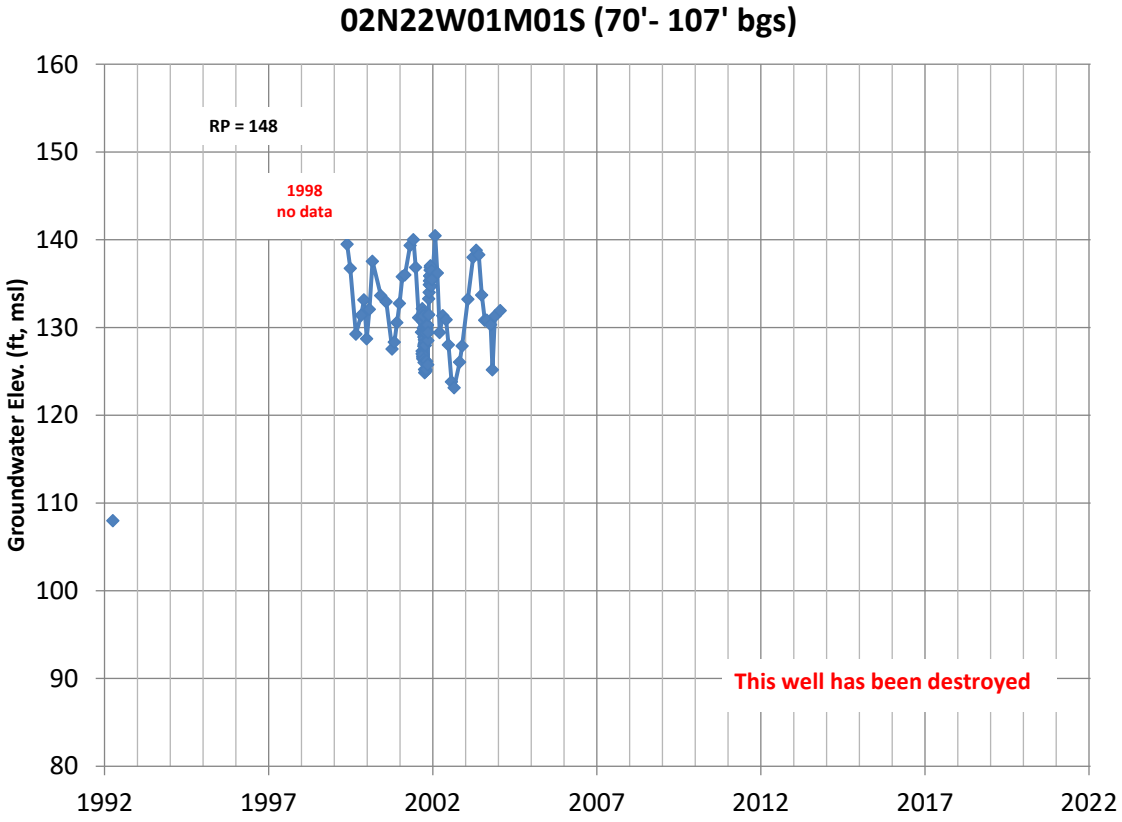
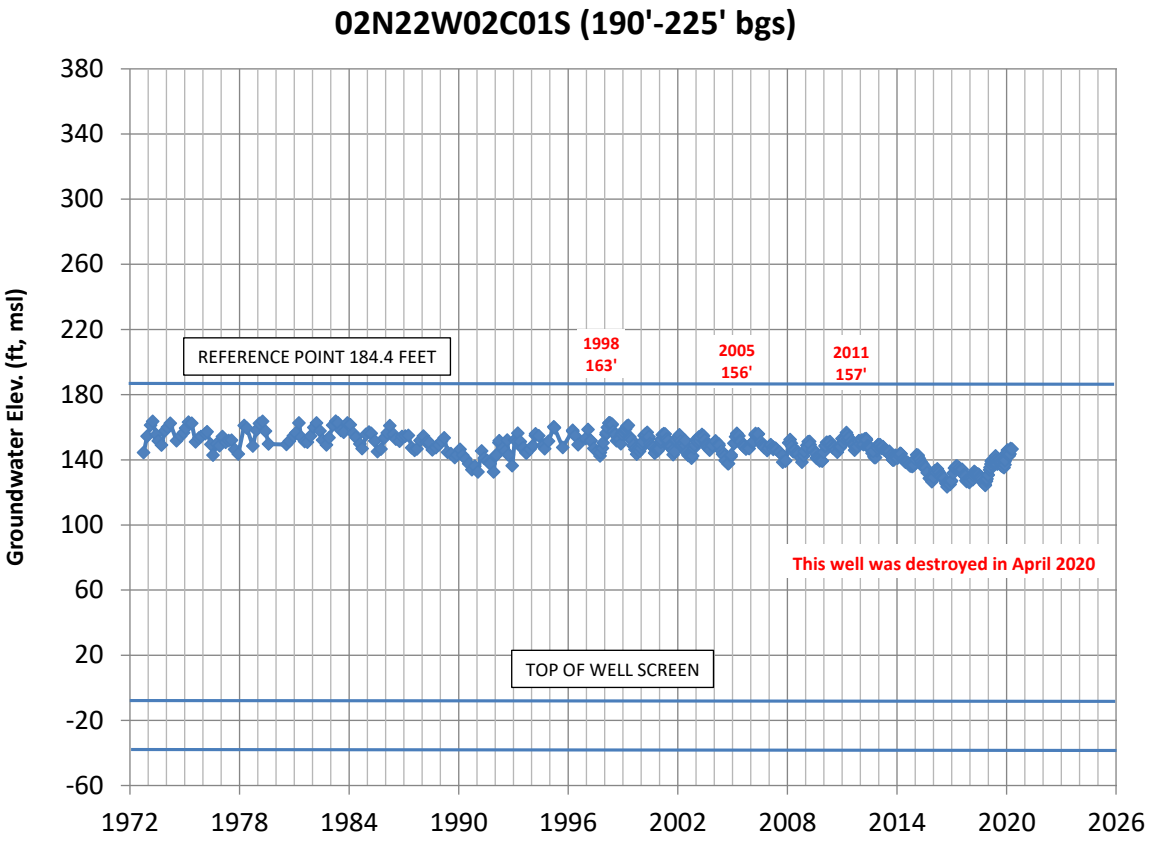
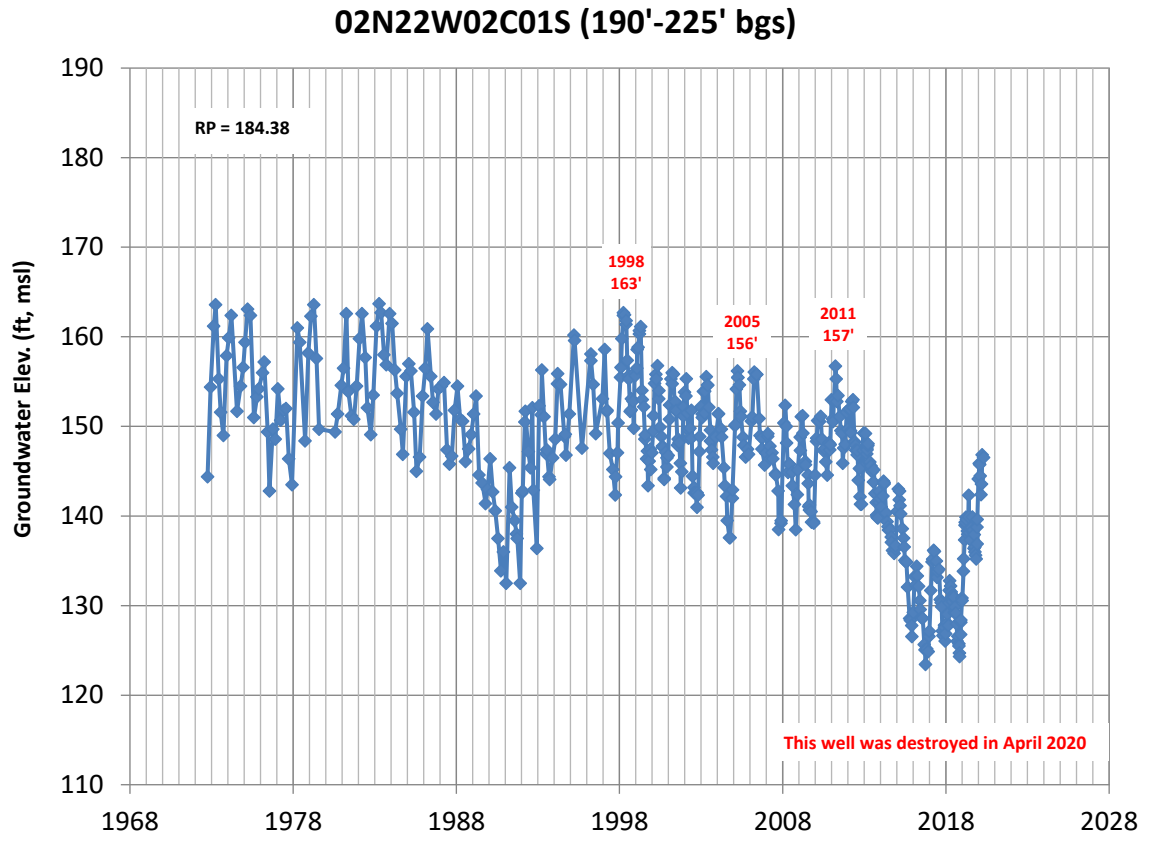



02N22W02C01S (190'-225' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 184.4 FEET
1998
163'
2005
156'
2011
157'
This well was destroyed in April 2020
TOP OF WELL SCREEN


02N22W02C01S (190'-225' bgs)
Groundwater Elev. (ft, msl)
190
180
170
160
150
140
130
120
110
1968
1978
1988
1998
2008
2018
2028
RP = 184.38
1998
163'
2005
156'
2011
157'
This well was destroyed in April 2020

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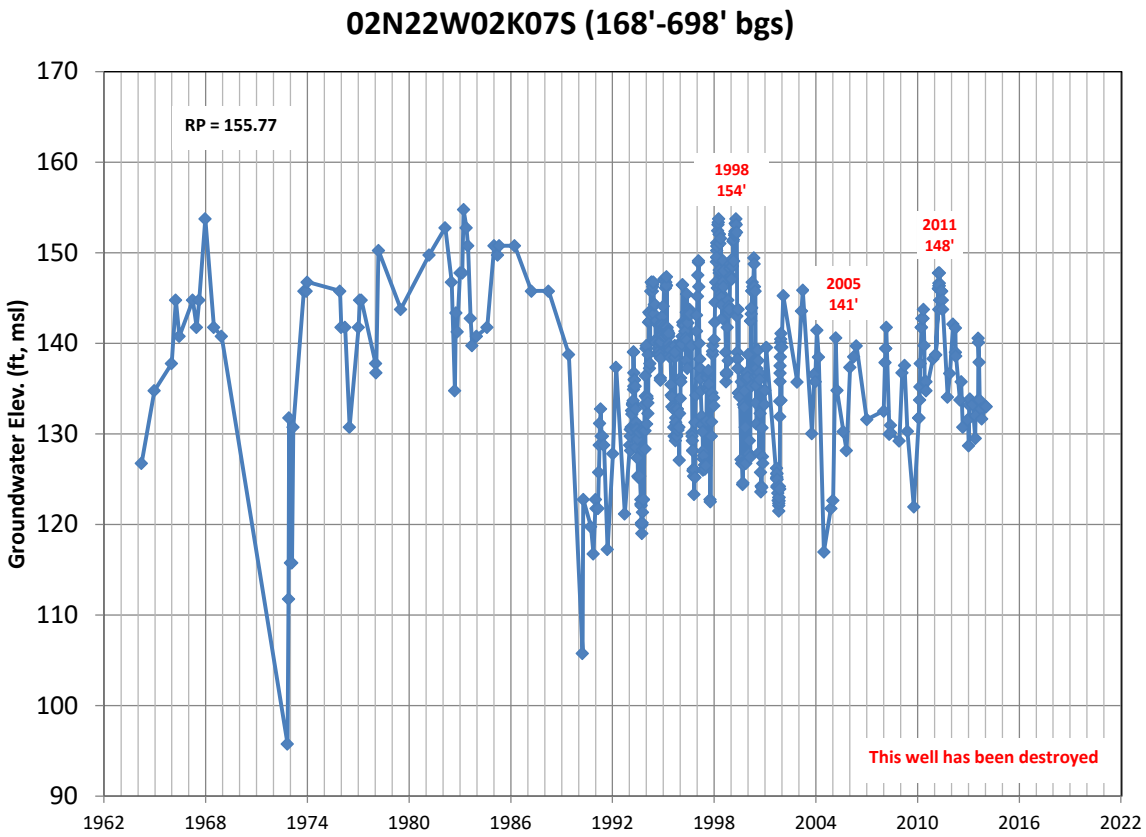
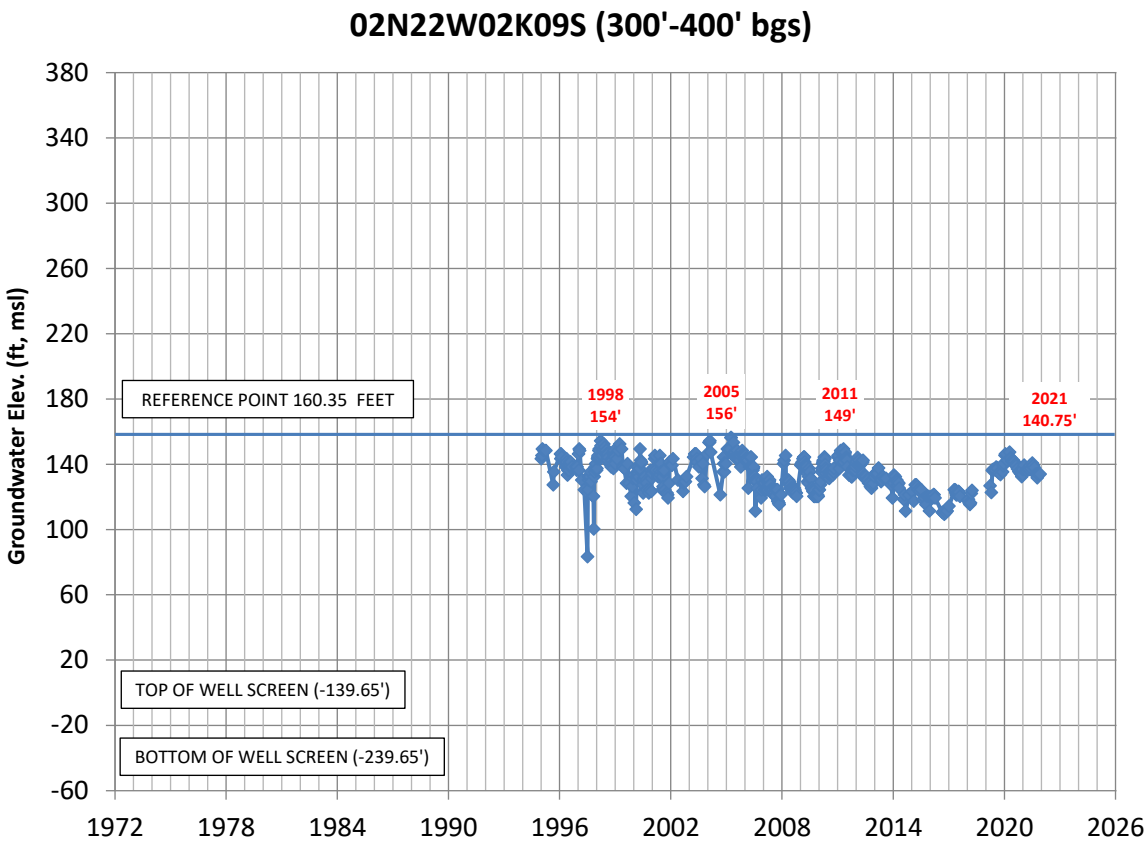
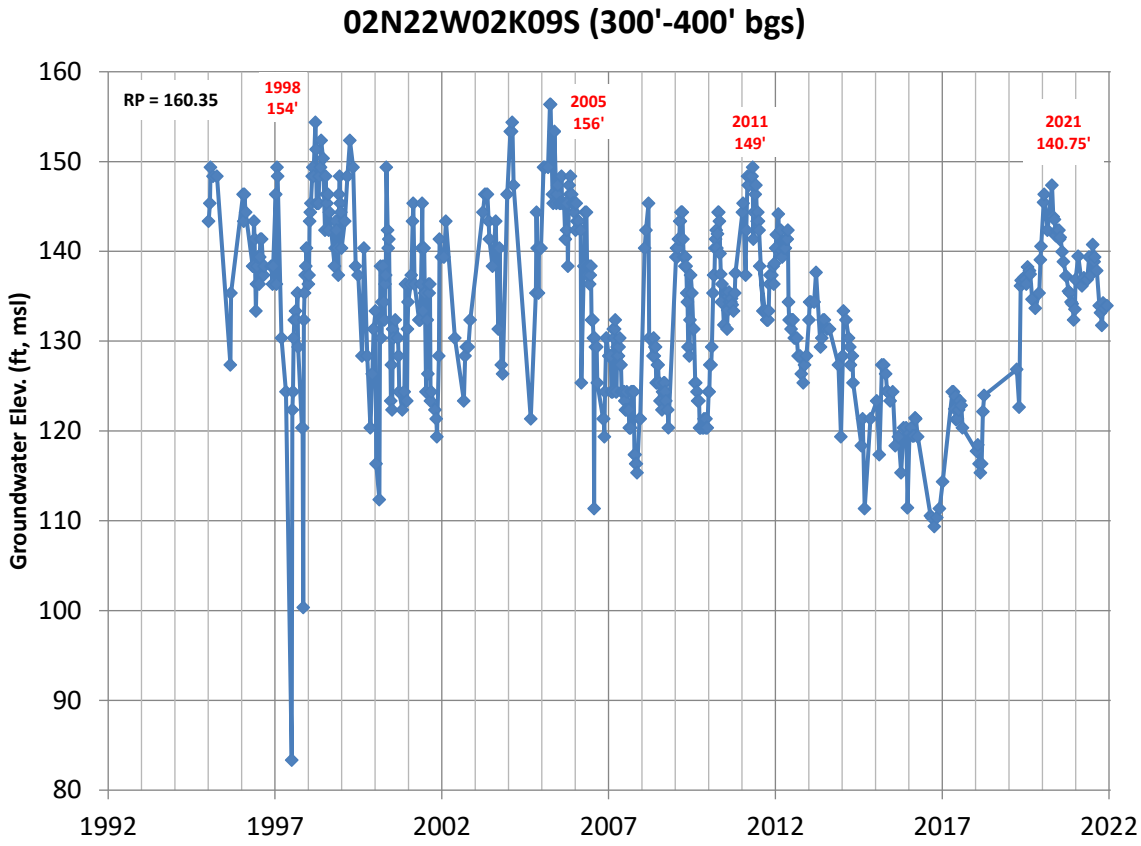
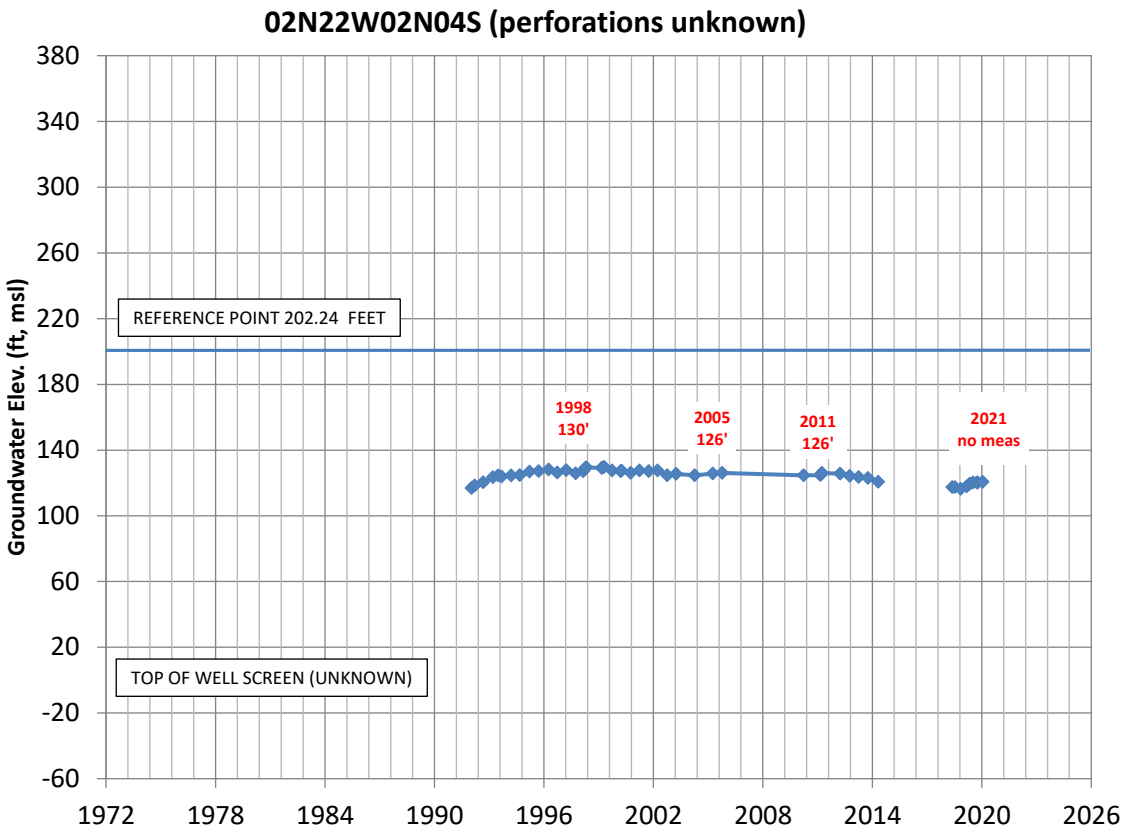
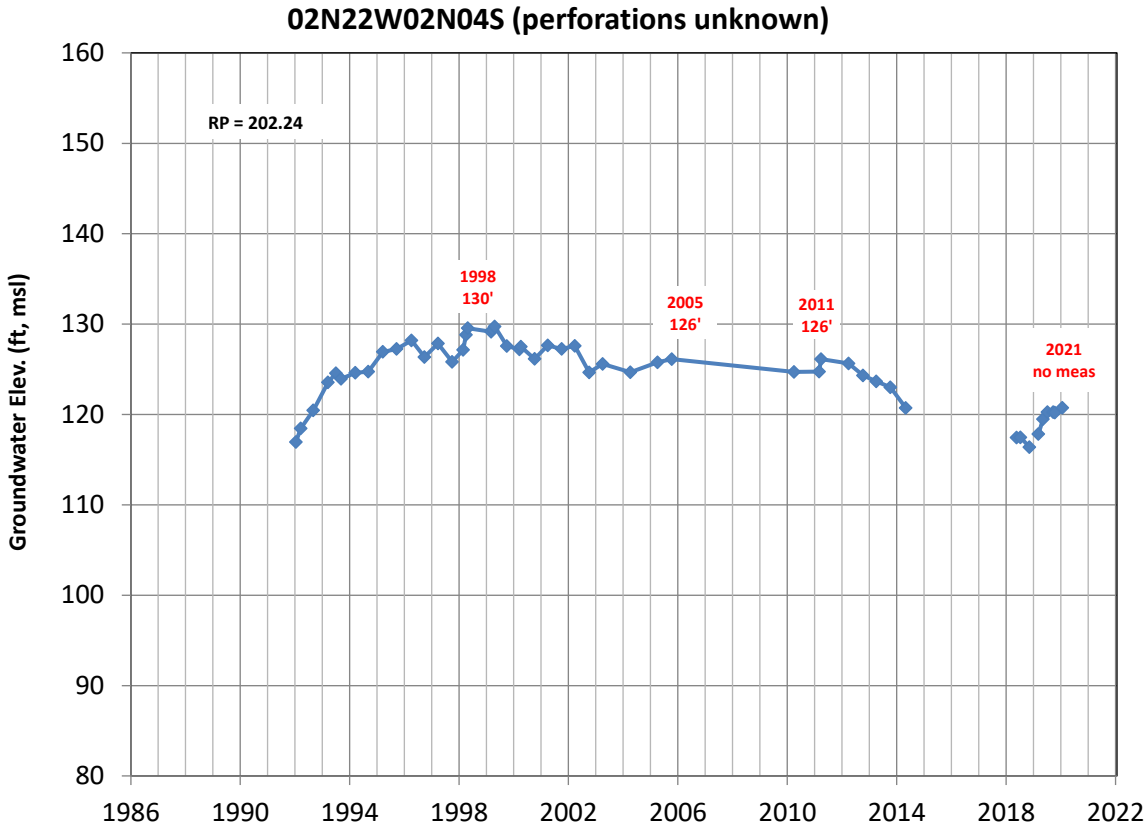



02N22W02K09S (300'-400' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 160.35 FEET
TOP OF WELL SCREEN (-139.65')
BOTTOM OF WELL SCREEN (-239.65')
1998
154'
2005
156'
2011
149'
2021
140.75'


02N22W02K09S (300'-400' bgs)
Groundwater Elev. (ft, msl)
160
150
140
130
120
110
100
90
80
1992
1997
2002
2007
2012
2017
2022
RP = 160.35
1998
154'
2005
156'
2011
149'
2021
140.75'


02N22W02N04S (perforations unknown)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 202.24 FEET
TOP OF WELL SCREEN (UNKNOWN)
1998
130'
2005
126'
2011
126'
2021
no meas


02N22W02N04S (perforations unknown)
Groundwater Elev. (ft, msl)
160
150
140
130
120
110
100
90
80
1986
1990
1994
1998
2002
2006
2010
2014
2018
2022
RP = 202.24
1998
130'
2005
126'
2011
126'
2021
no meas

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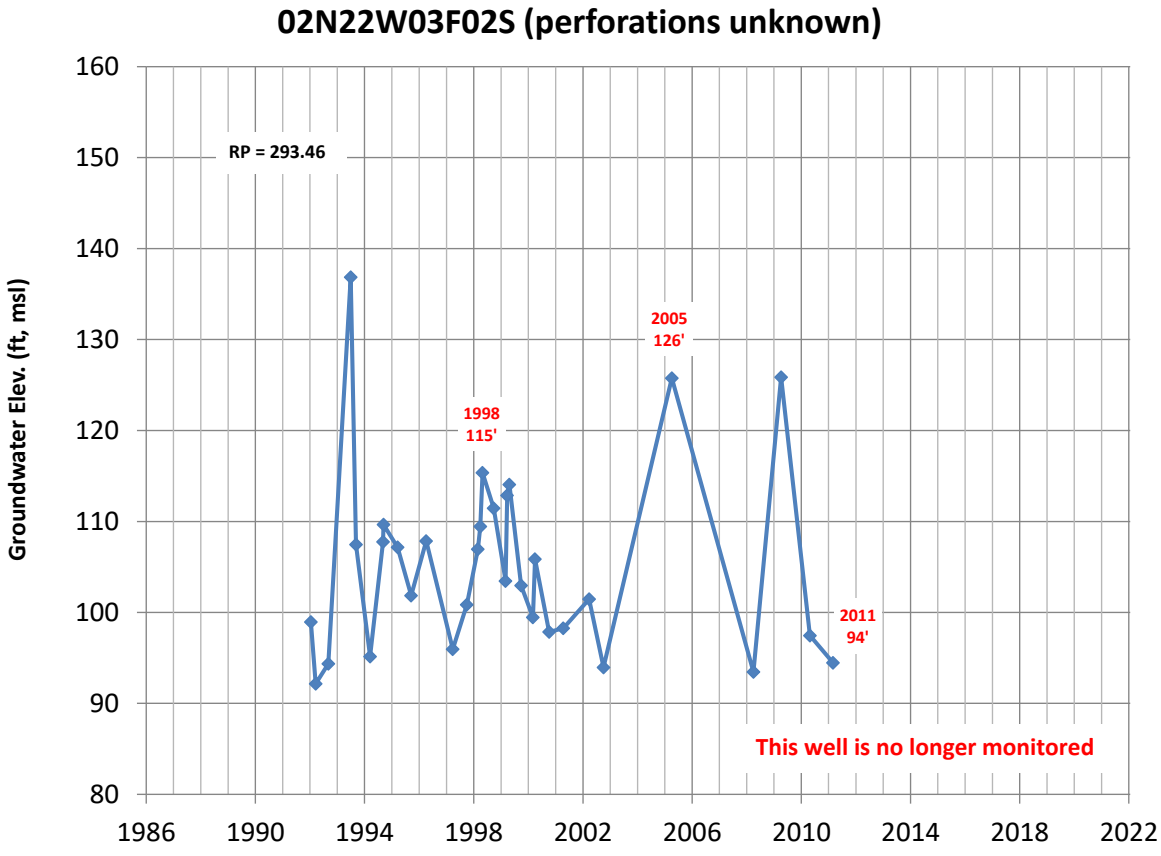
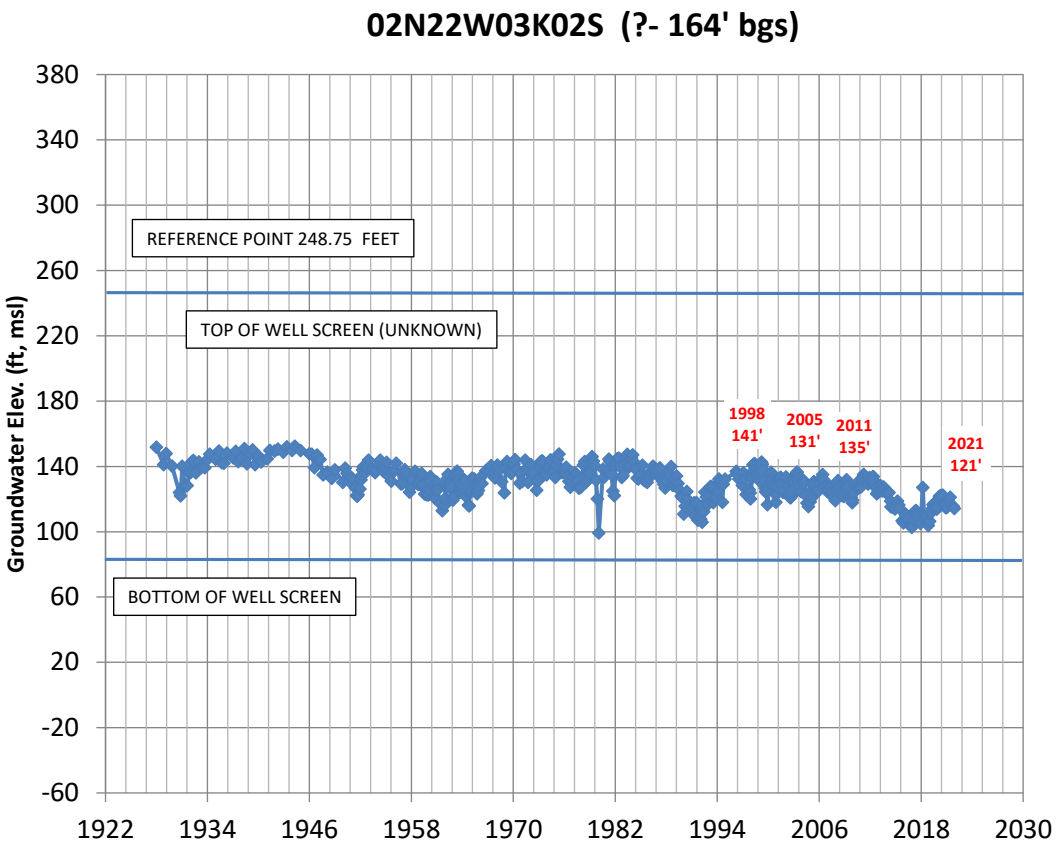
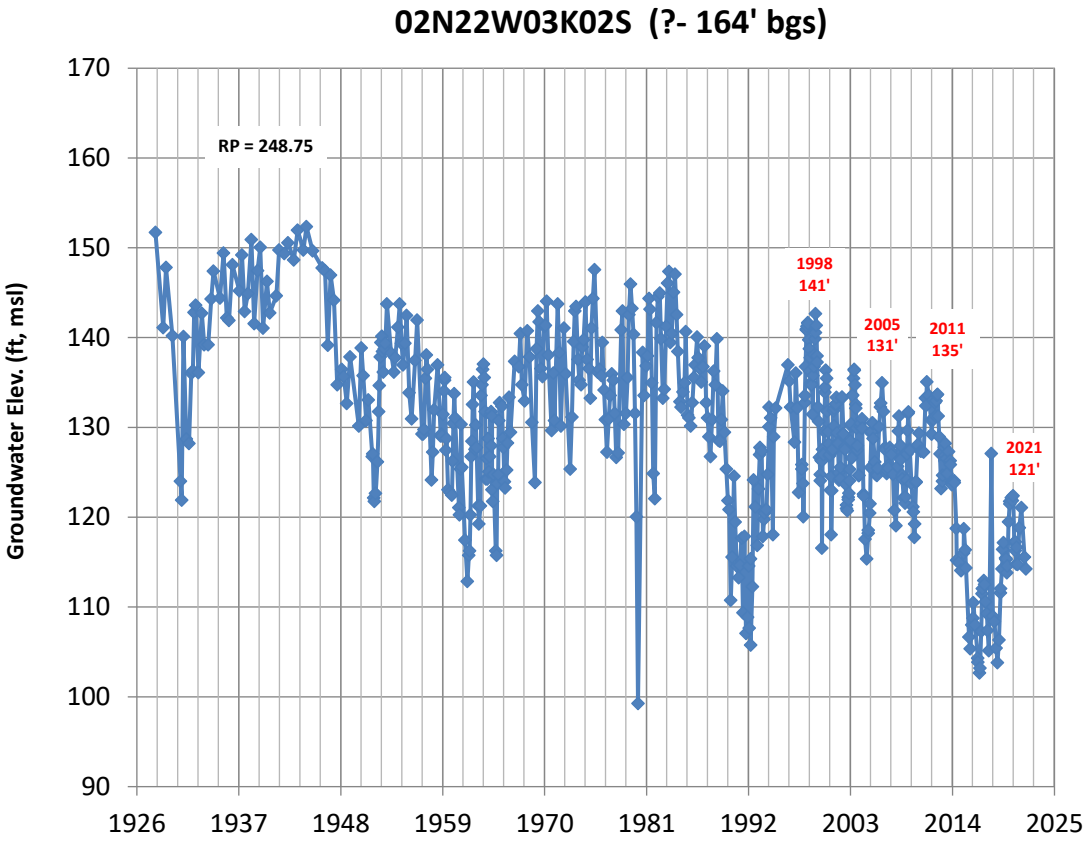
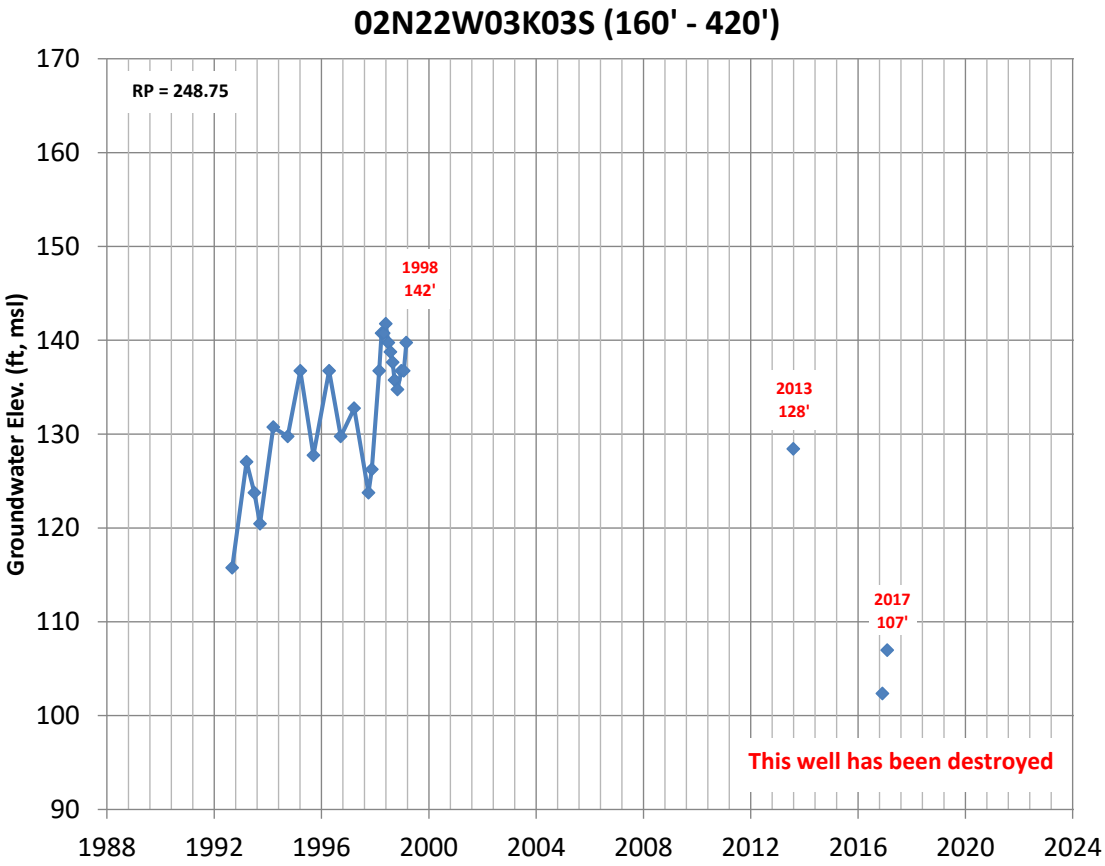
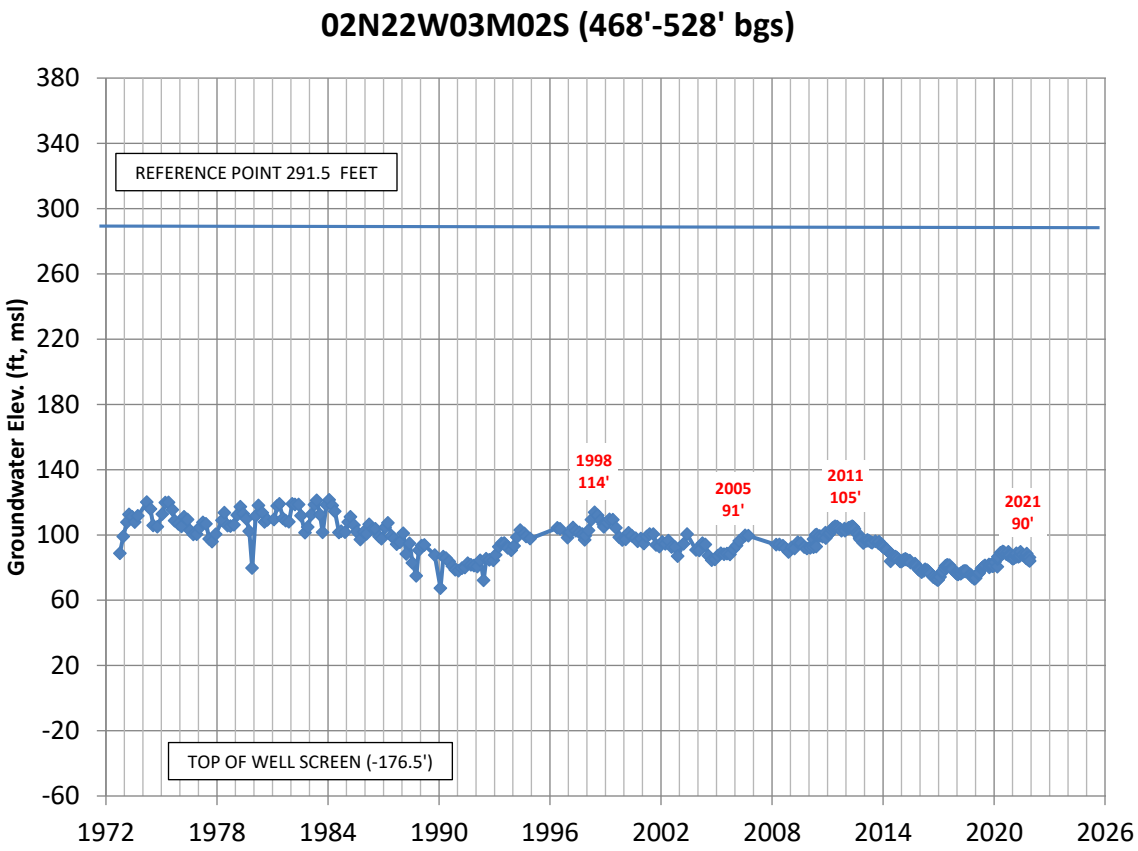


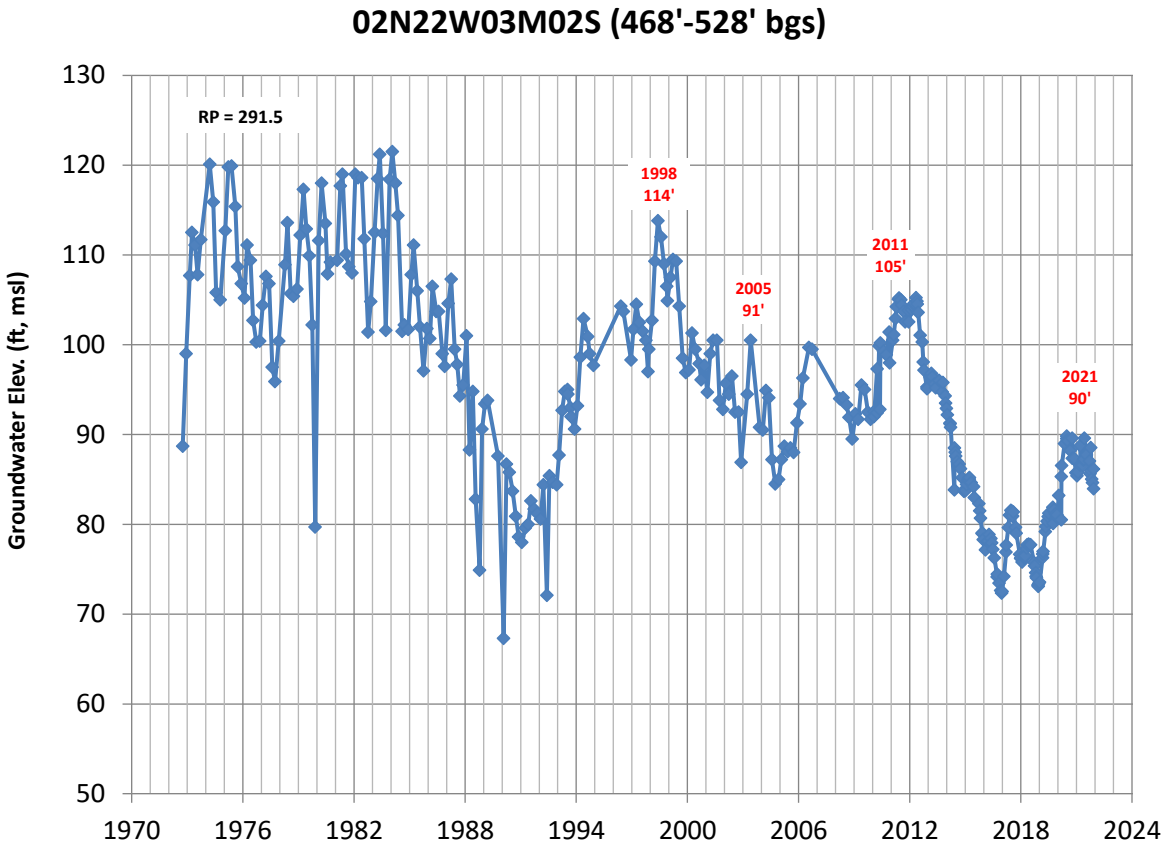

02N22W03K02S (?- 164' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1922
1934
1946
1958
1970
1982
1994
2006
2018
2030
REFERENCE POINT 248.75 FEET
TOP OF WELL SCREEN (UNKNOWN)
BOTTOM OF WELL SCREEN
1998
141'
2005
131'
2011
135'
2021
121'


02N22W03K02S (?- 164' bgs)
Groundwater Elev. (ft, msl)
170
160
150
140
130
120
110
100
90
1926
1937
1948
1959
1970
1981
1992
2003
2014
2025
RP = 248.75
1998
141'
2005
131'
2011
135'
2021
121'

Intentionally Left Blank




02N22W03M02S (468'-528' bgs)
Groundwater Elev. (ft, msl)
REFERENCE POINT 291.5 FEET
TOP OF WELL SCREEN (-176.5')
1998
114'
2005
91'
2011
105'
2021
90'
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026


02N22W03M02S (468'-528' bgs)
Groundwater Elev. (ft, msl)
RP = 291.5
1998
114'
2005
91'
2011
105'
2021
90'
130
120
110
100
90
80
70
60
50
1970
1976
1982
1988
1994
2000
2006
2012
2018
2024

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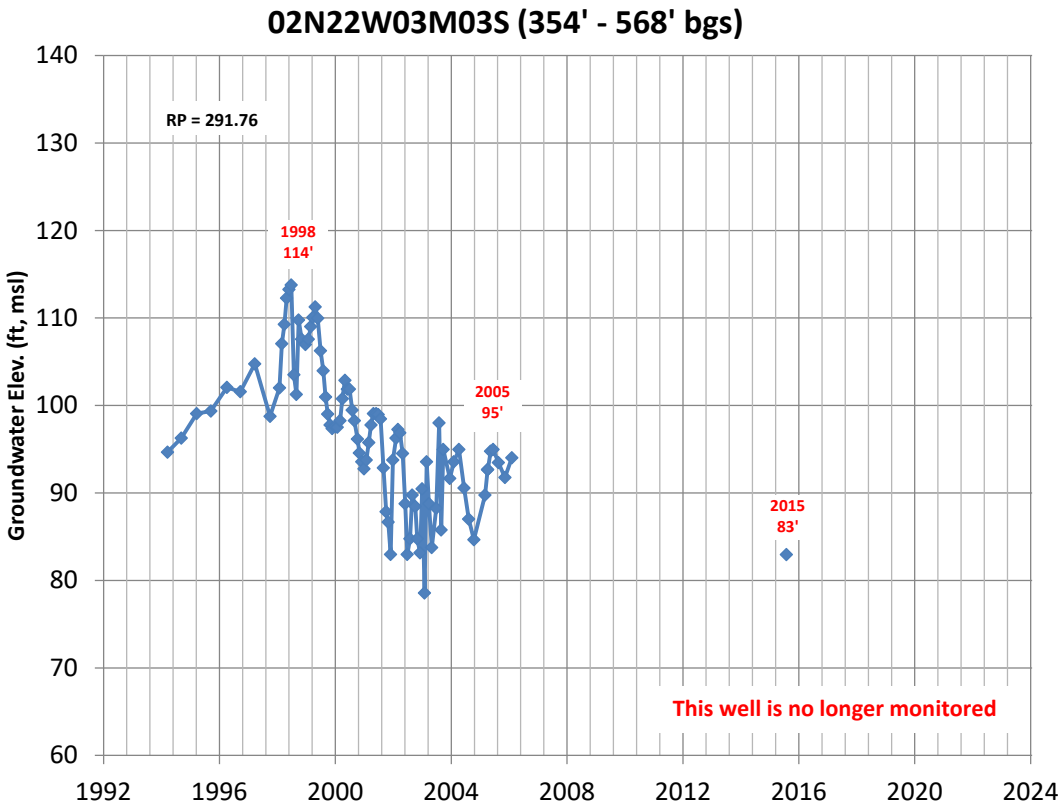
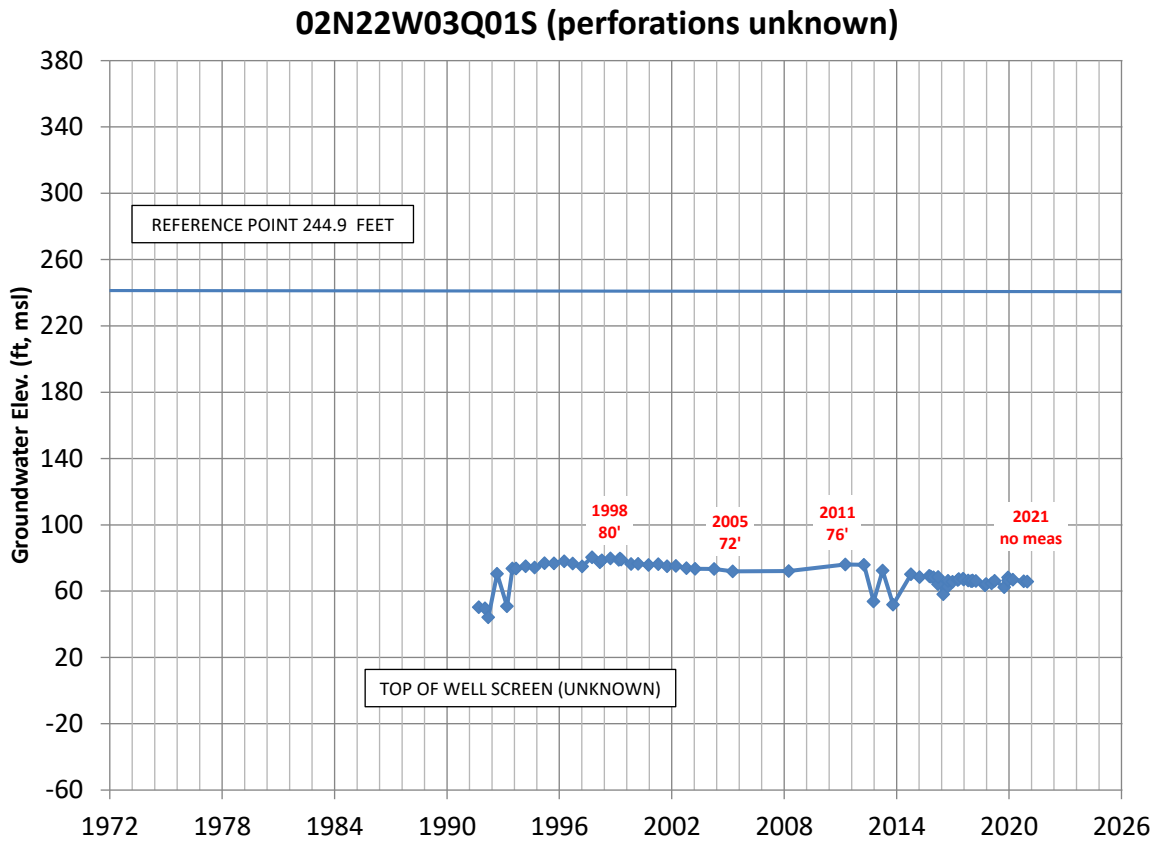
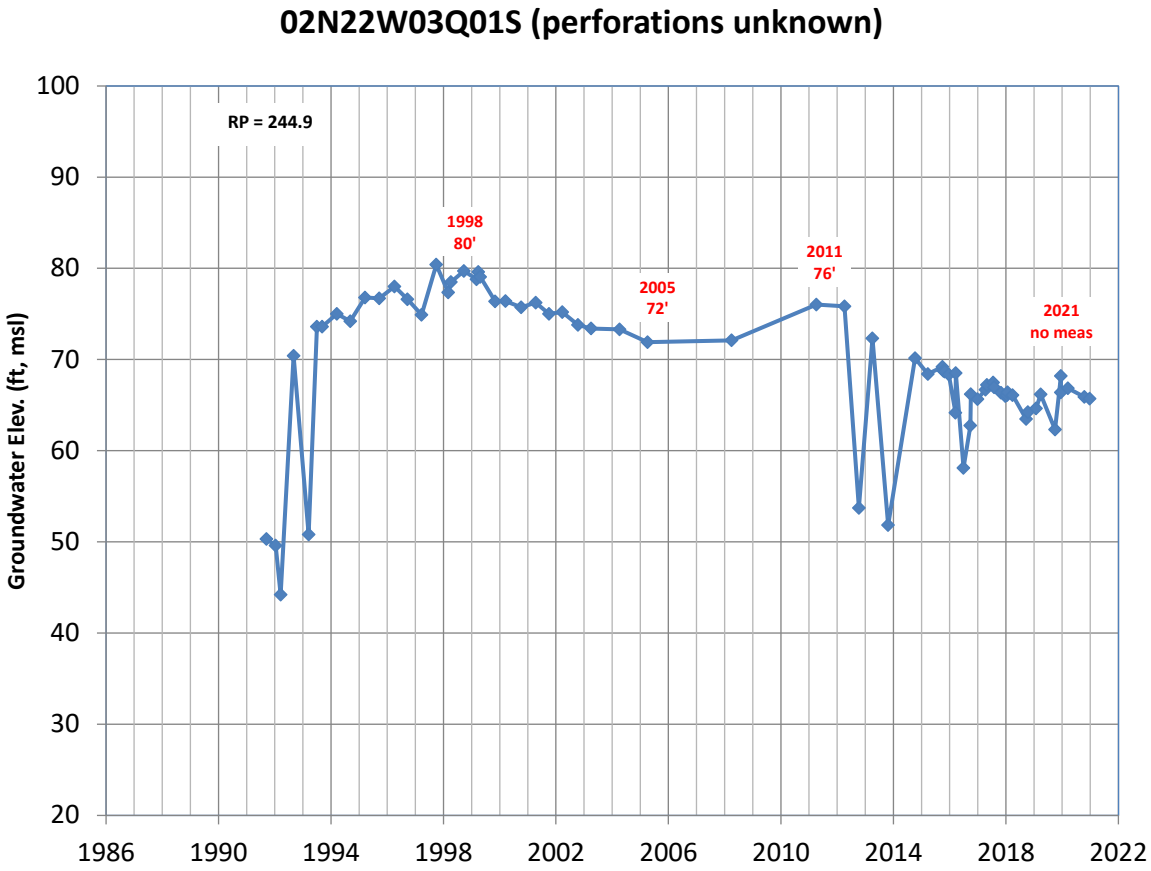
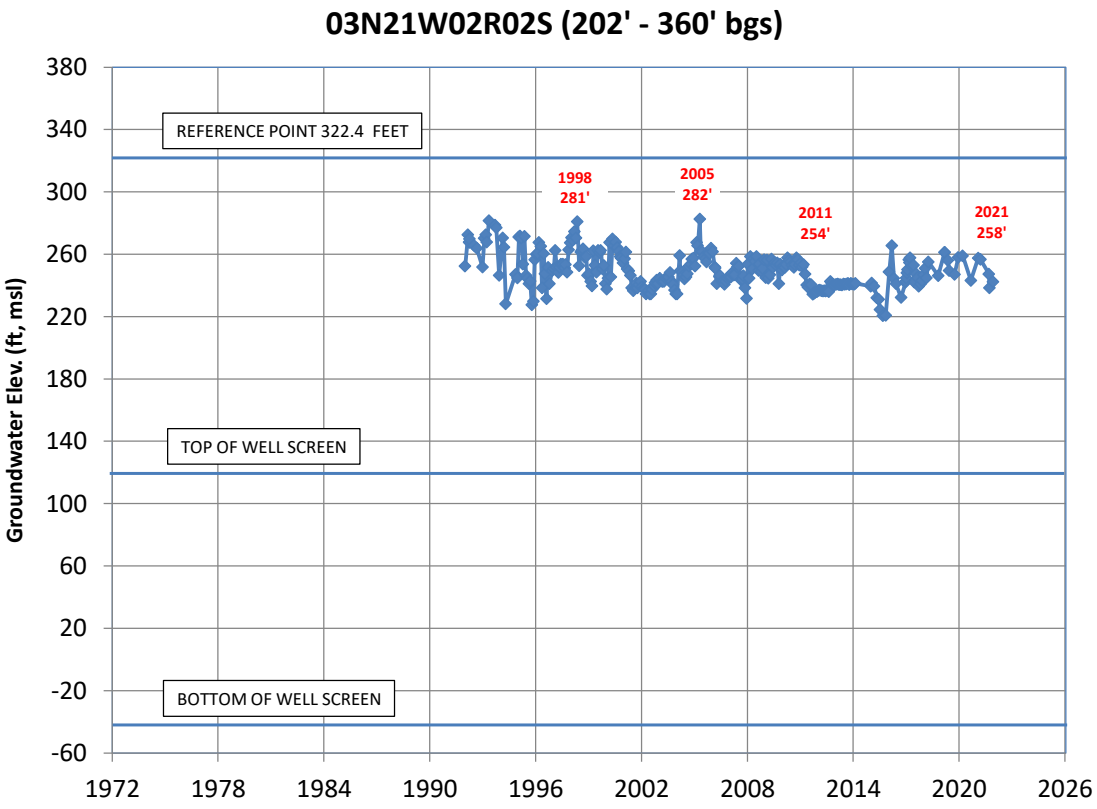
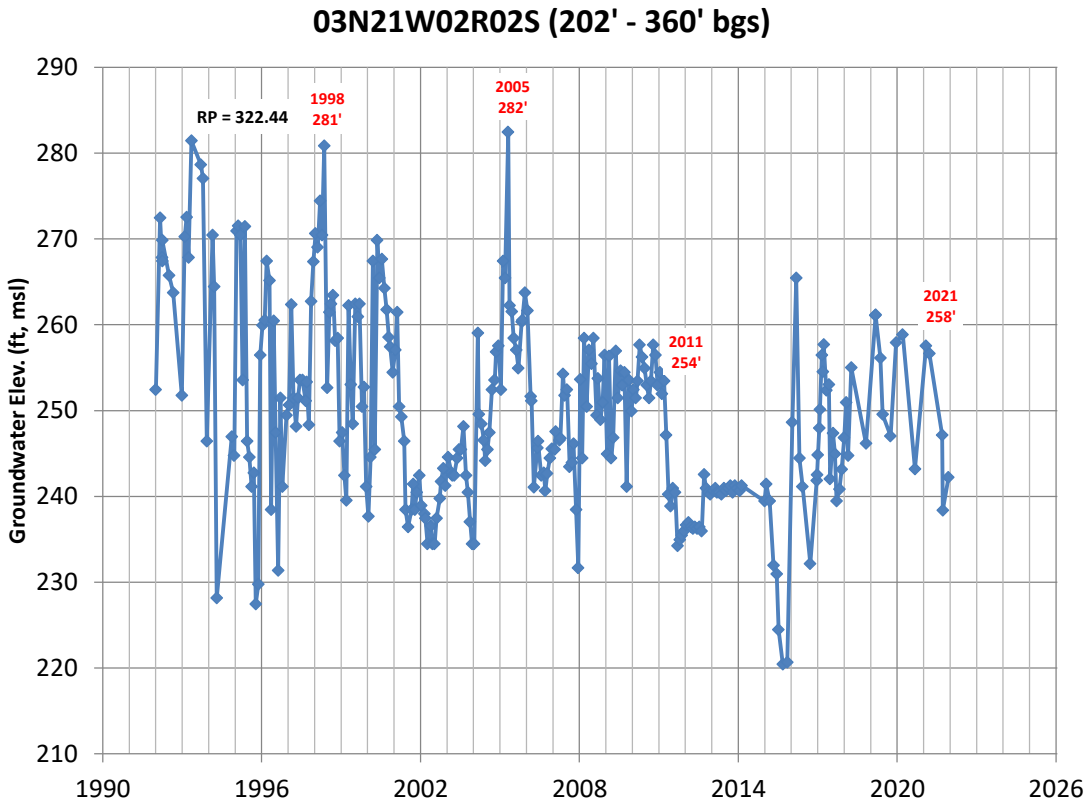
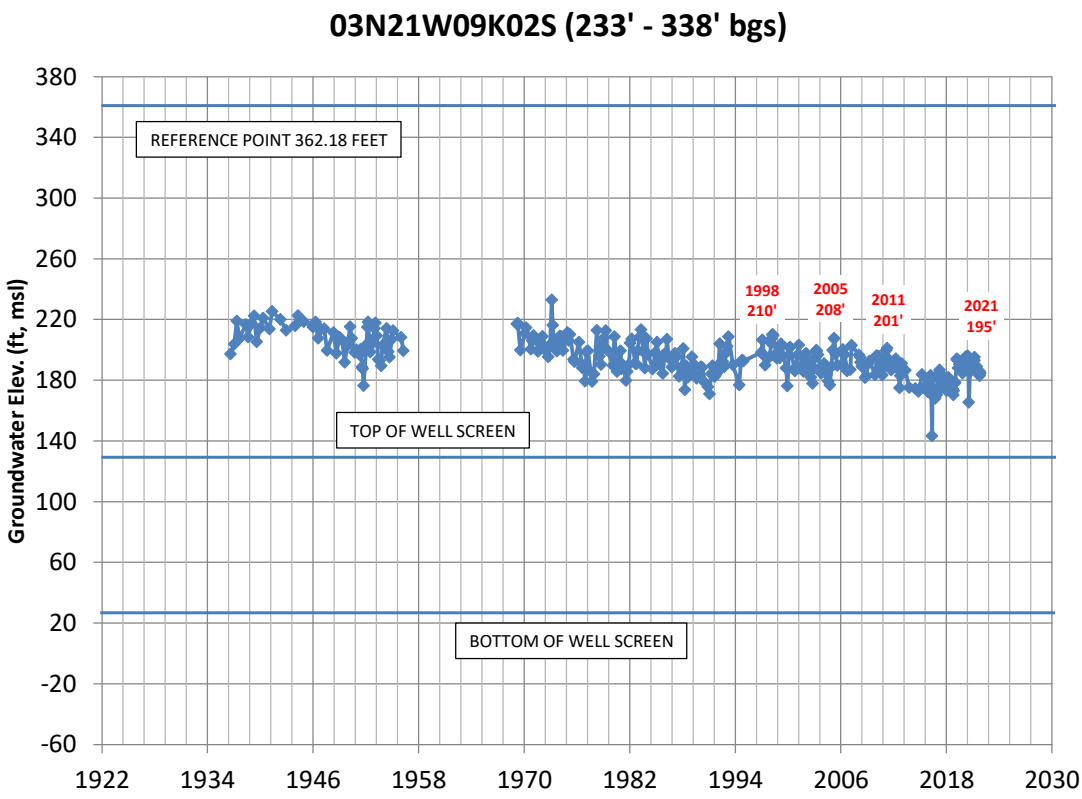


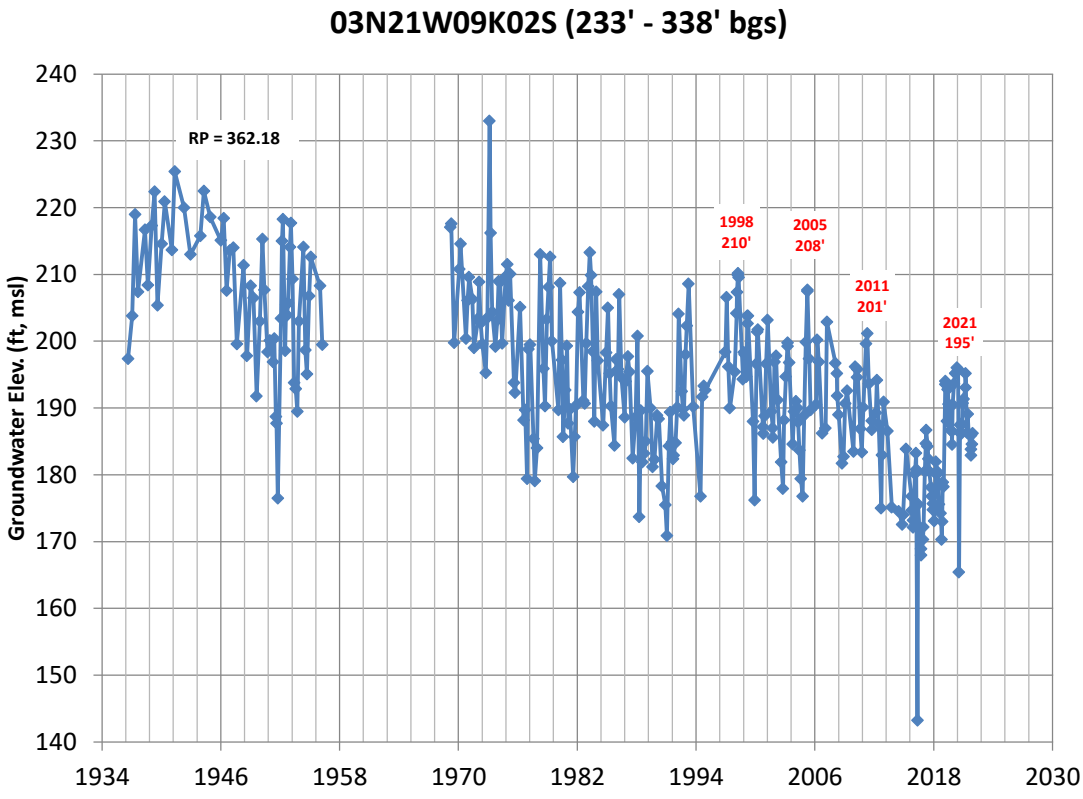

02N22W03Q01S (perforations unknown)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 244.9 FEET
TOP OF WELL SCREEN (UNKNOWN)
1998
80'
2005
72'
2011
76'
2021
no meas

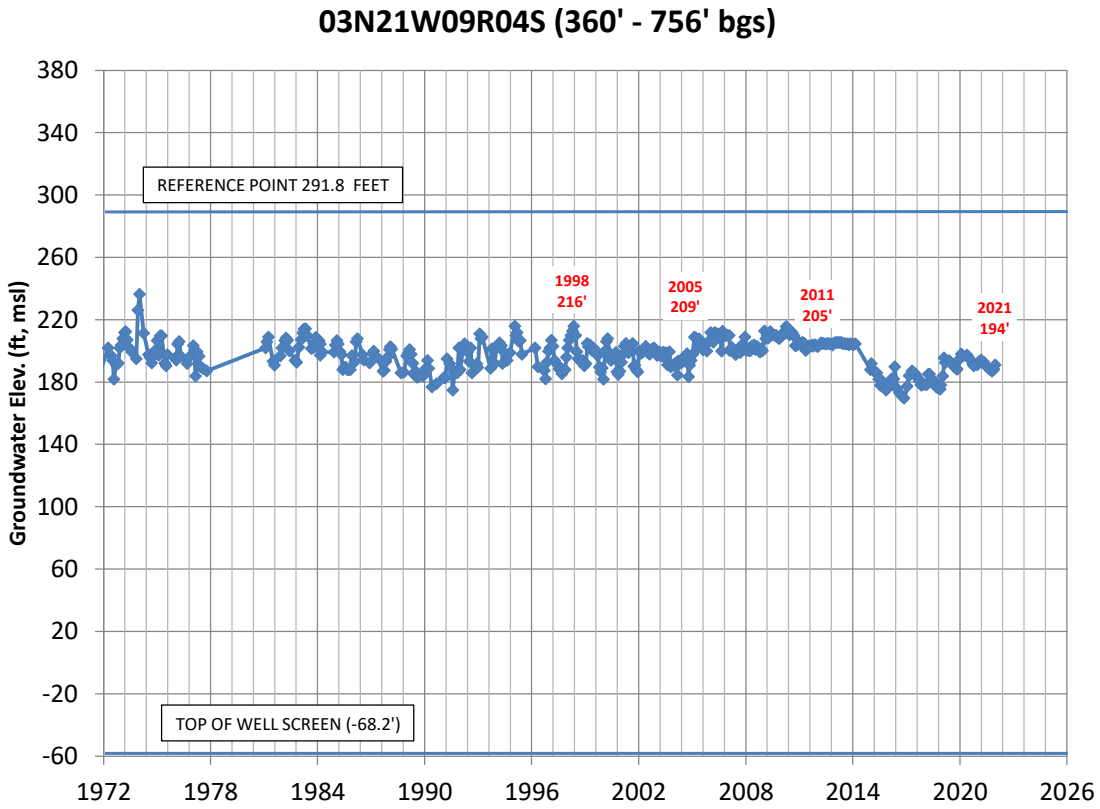

02N22W03Q01S (perforations unknown)
Groundwater Elev. (ft, msl)
100
90
80
70
60
50
40
30
20
1986
1990
1994
1998
2002
2006
2010
2014
2018
2022
RP = 244.9
1998
80'
2005
72'
2011
76'
2021
no meas

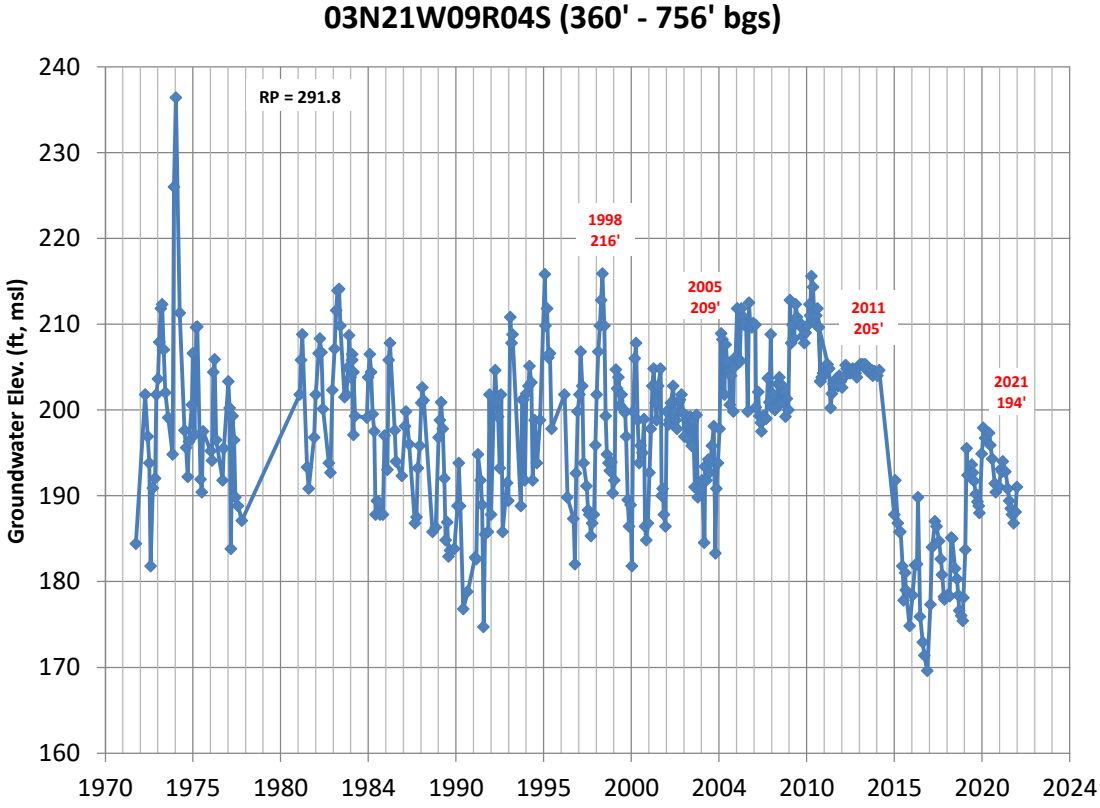

03N21W02R02S (202' - 360' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 322.4 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
1998
281'
2005
282'
2011
254'
2021
258'

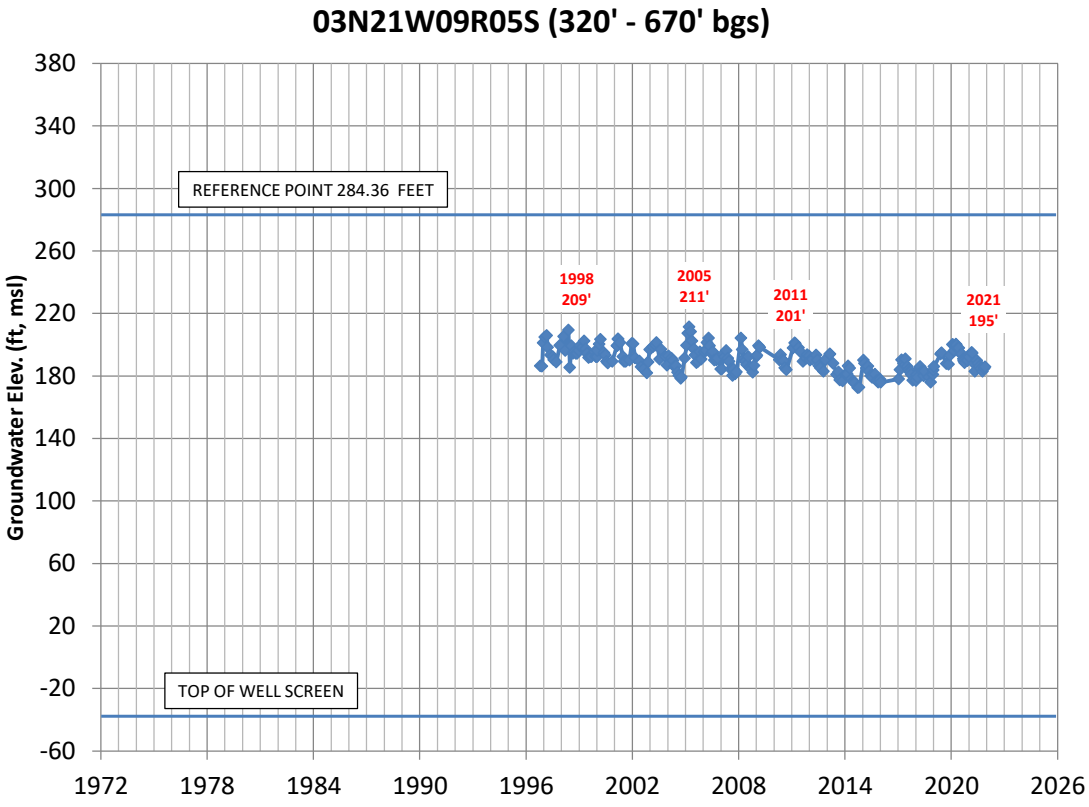

03N21W02R02S (202' - 360' bgs)
Groundwater Elev. (ft, msl)
290
280
270
260
250
240
230
220
210
1990
1996
2002
2008
2014
2020
2026
RP = 322.44
1998
281'
2005
282'
2011
254'
2021
258'

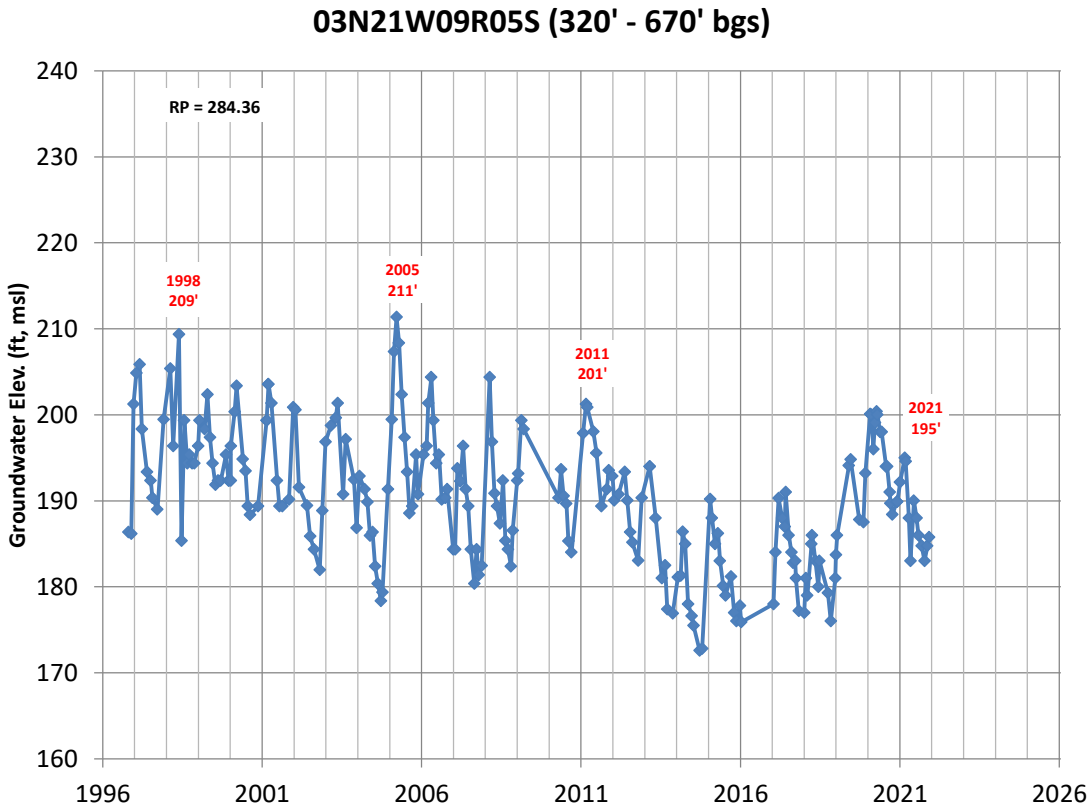

03N21W09K02S (233' - 338' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1922
1934
1946
1958
1970
1982
1994
2006
2018
2030
REFERENCE POINT 362.18 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
1998
210'
2005
208'
2011
201'
2021
195'


03N21W09K02S (233' - 338' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
150
140
1934
1946
1958
1970
1982
1994
2006
2018
2030
RP = 362.18
1998
210'
2005
208'
2011
201'
2021
195'


03N21W09R04S (360' - 756' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 291.8 FEET
TOP OF WELL SCREEN (-68.2')
1998
216'
2005
209'
2011
205'
2021
194'


03N21W09R04S (360' - 756' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1970
1975
1980
1984
1990
1995
2000
2004
2010
2015
2020
2024
RP = 291.8
1998
216'
2005
209'
2011
205'
2021
194'


03N21W09R05S (320' - 670' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 284.36 FEET
TOP OF WELL SCREEN
1998
209'
2005
211'
2011
201'
2021
195'


03N21W09R05S (320' - 670' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1996
2001
2006
2011
2016
2021
2026
RP = 284.36
1998
209'
2005
211'
2011
201'
2021
195'

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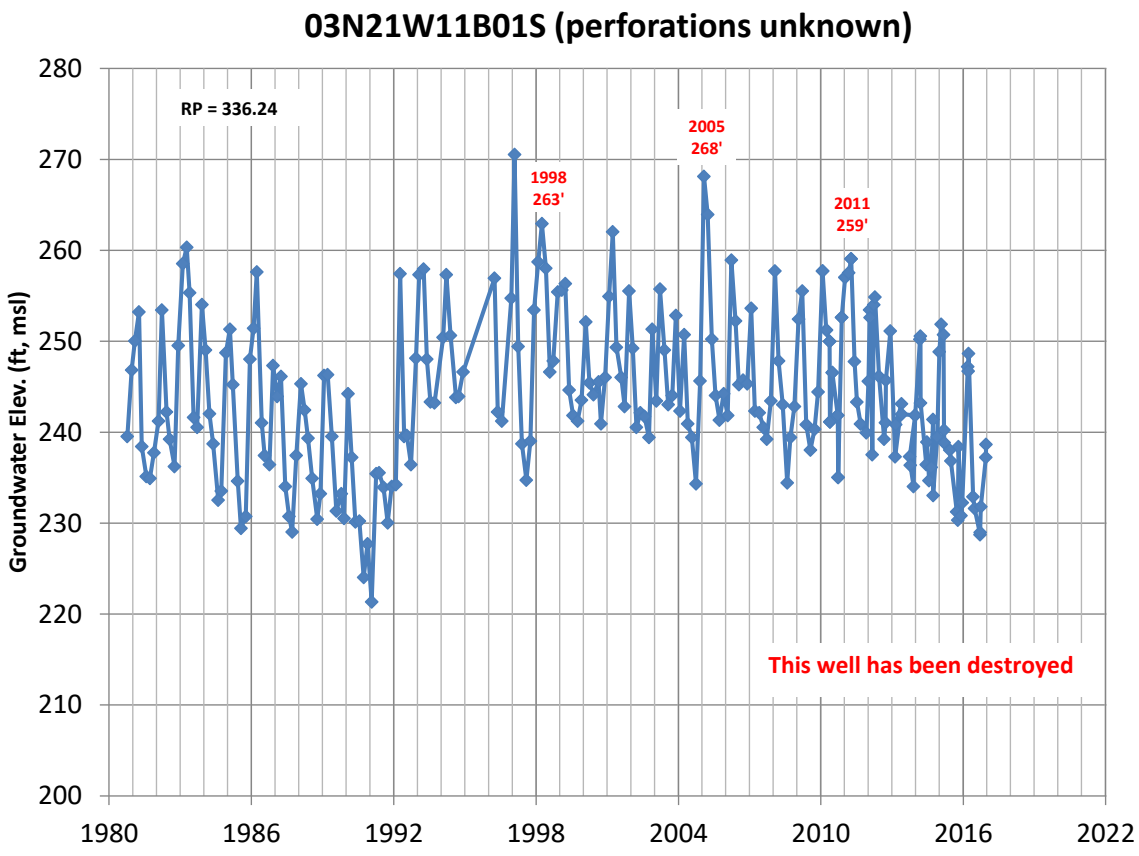
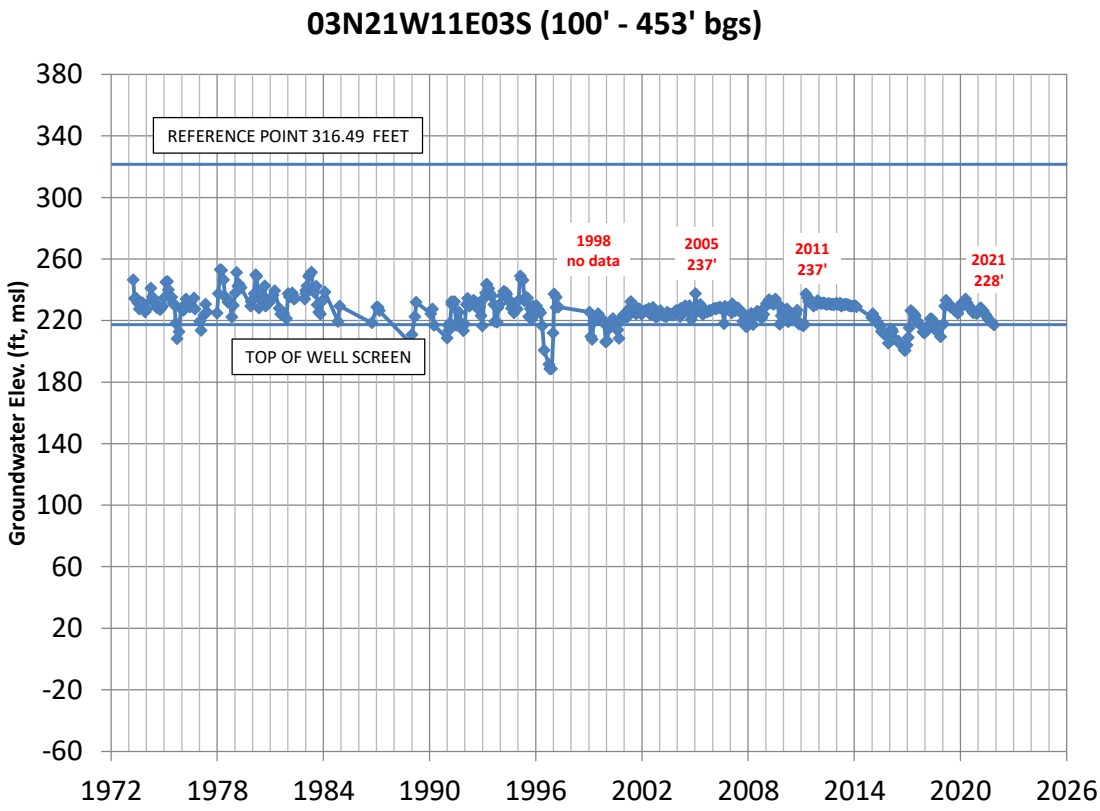
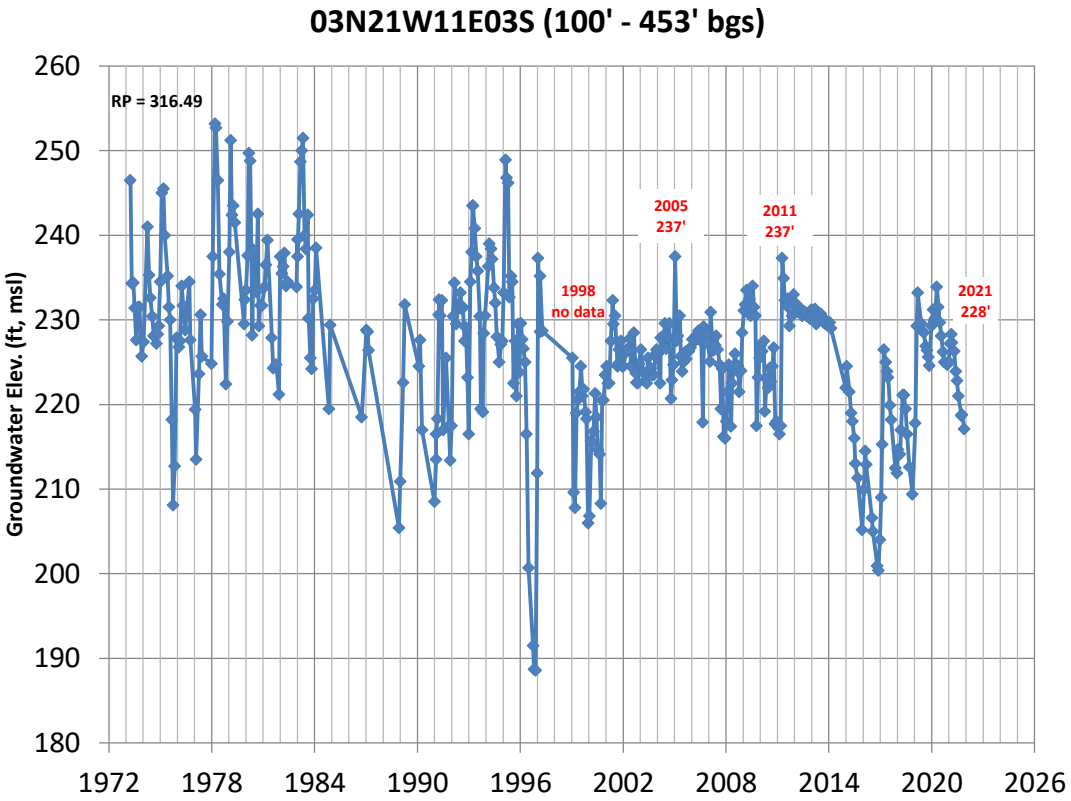
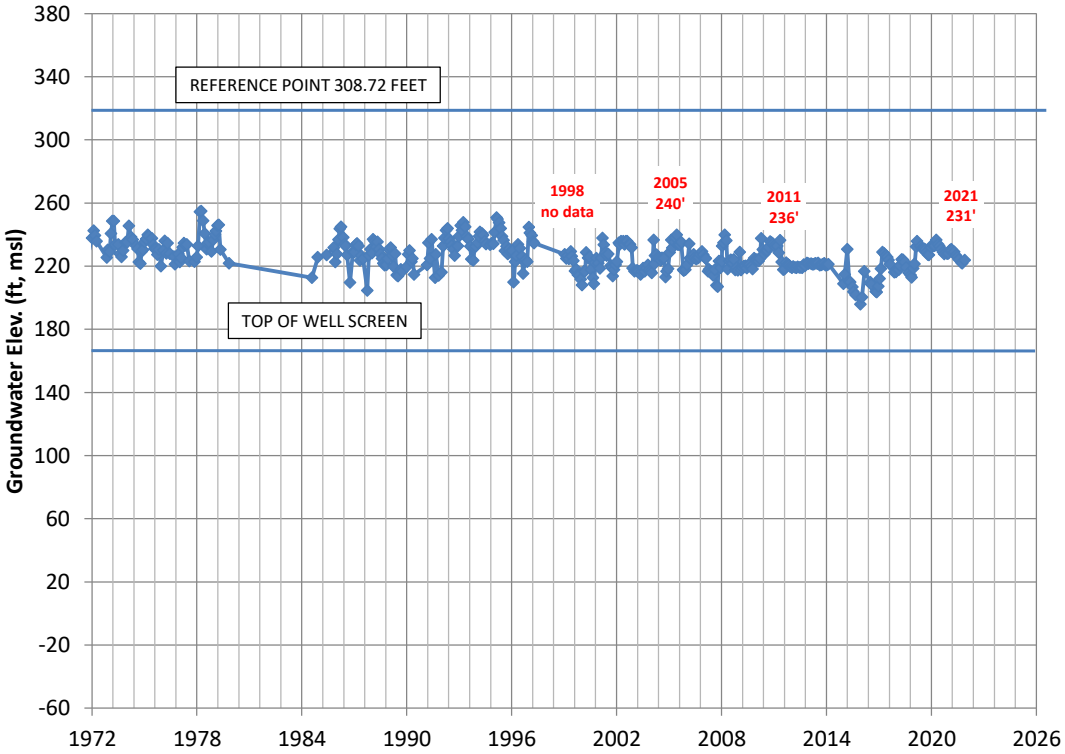


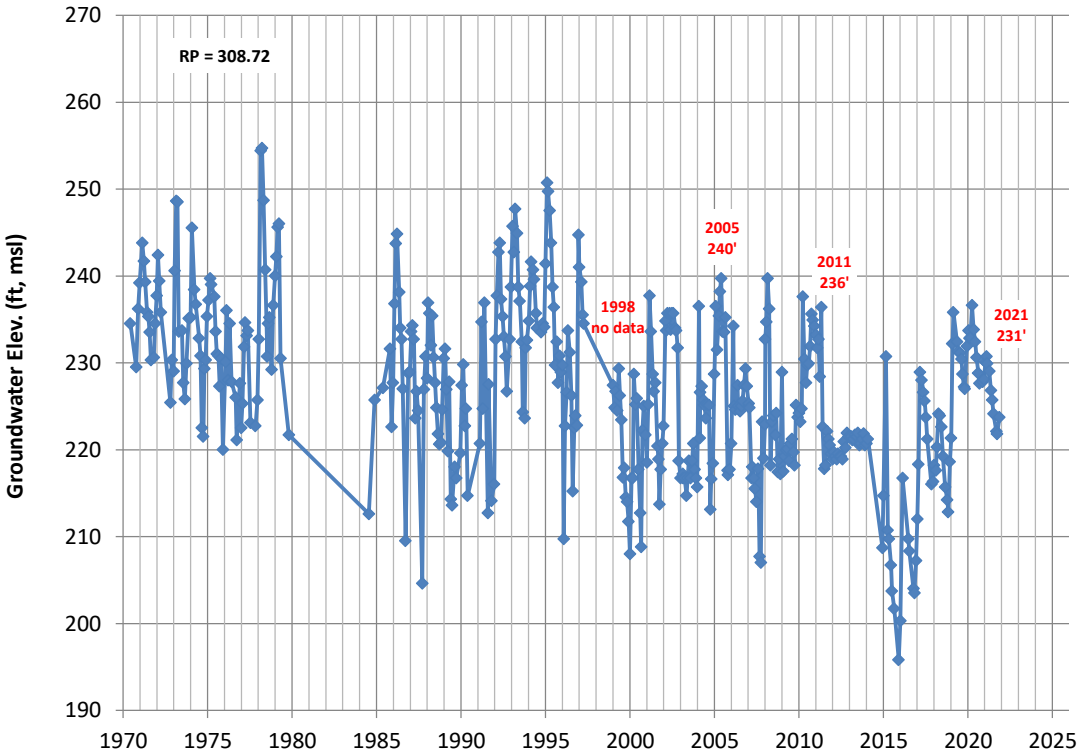

03N21W11E03S (100' - 453' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 316.49 FEET
TOP OF WELL SCREEN
1998
no data
2005
237'
2011
237'
2021
228'

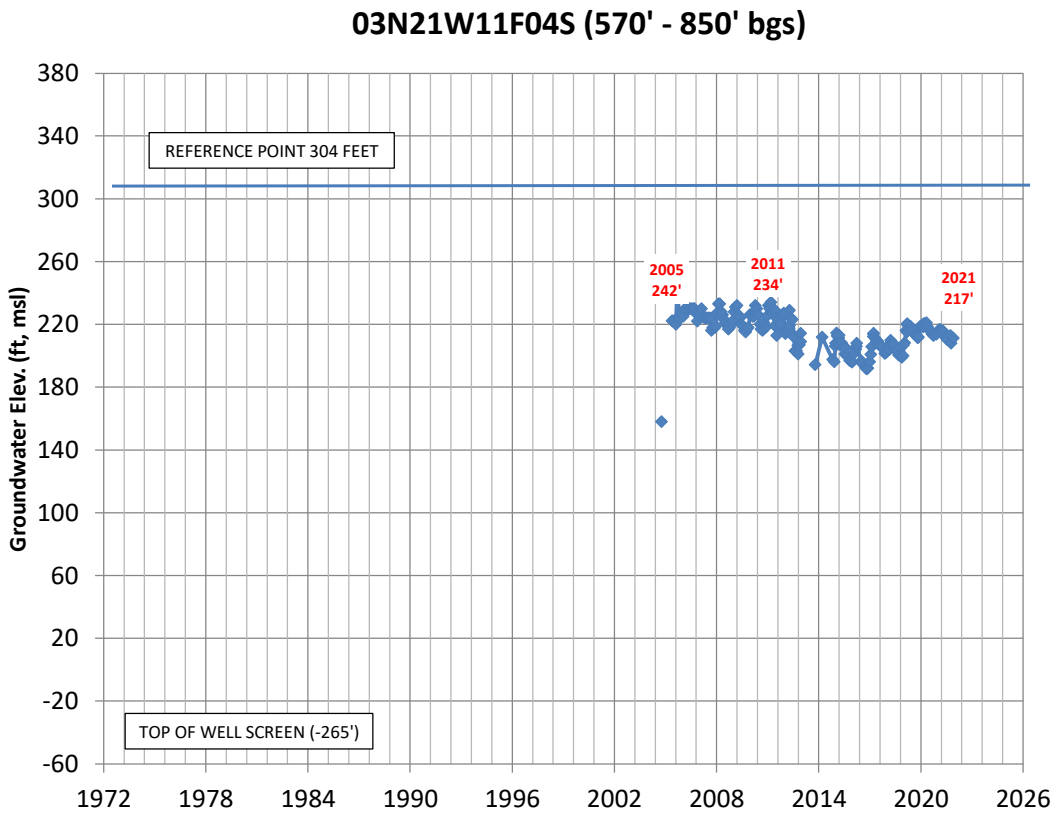

03N21W11E03S (100' - 453' bgs)
Groundwater Elev. (ft, msl)
260
250
240
230
220
210
200
190
180
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
RP = 316.49
1998
no data
2005
237'
2011
237'
2021
228'

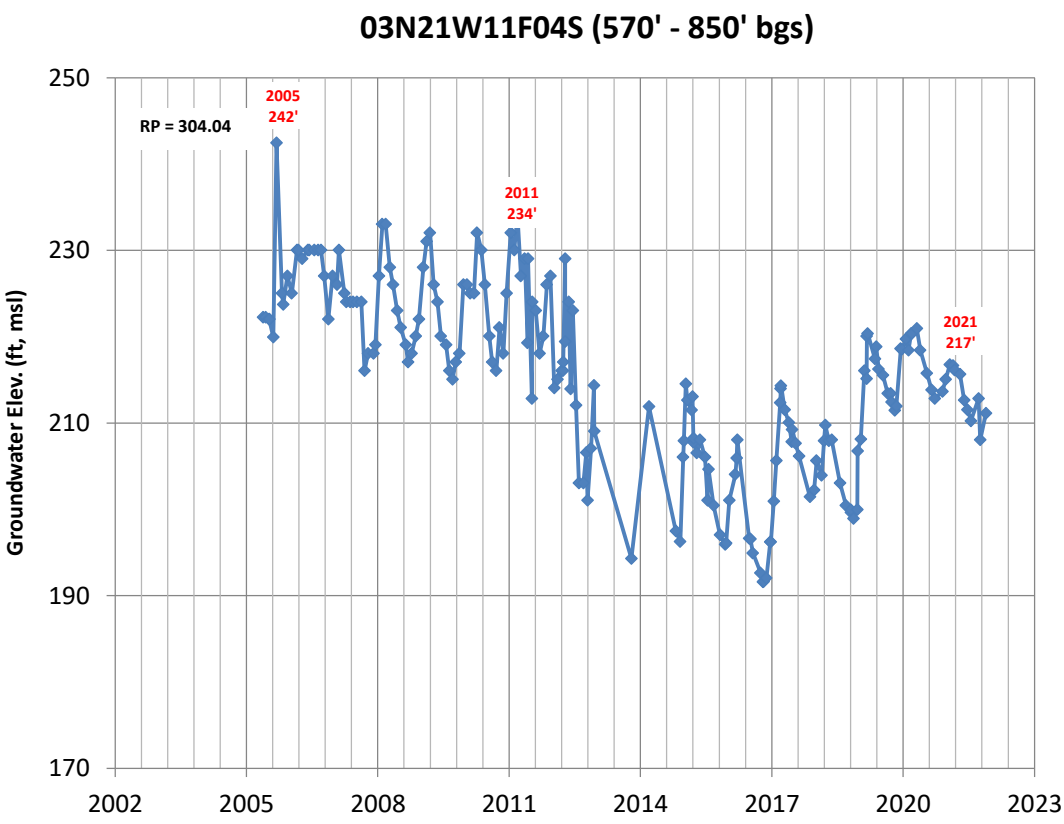
03N21W11F03S (153' -518' bgs)

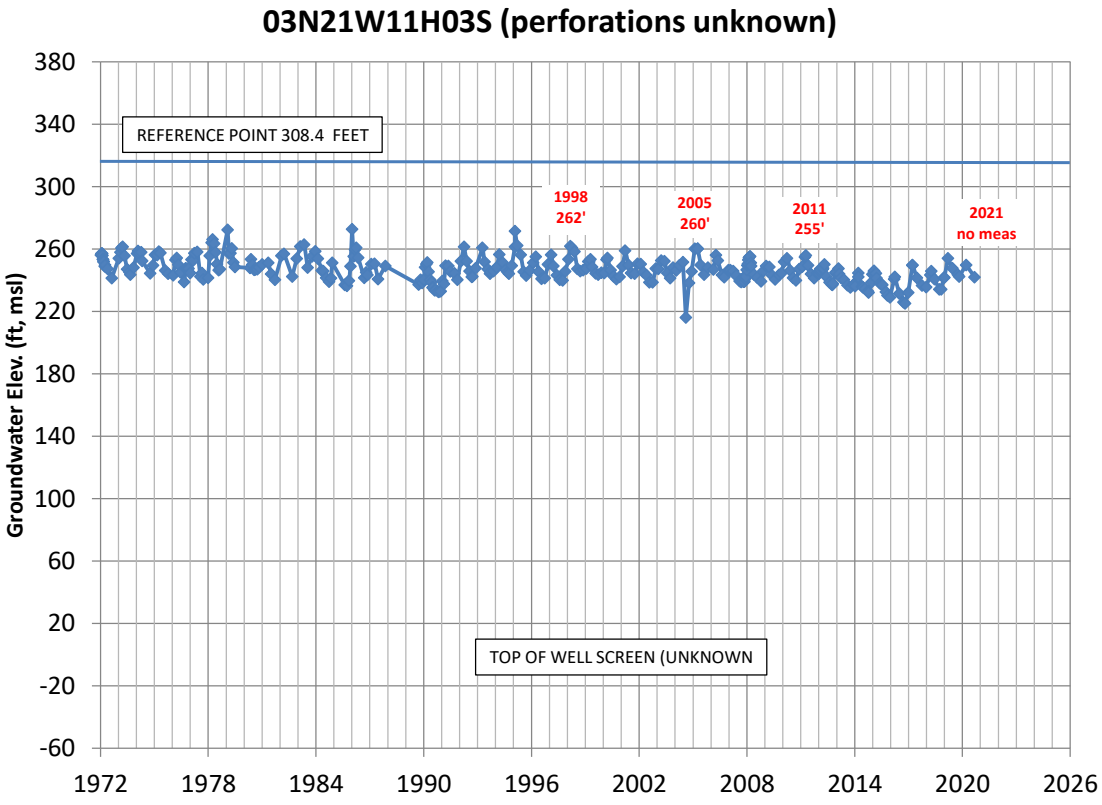


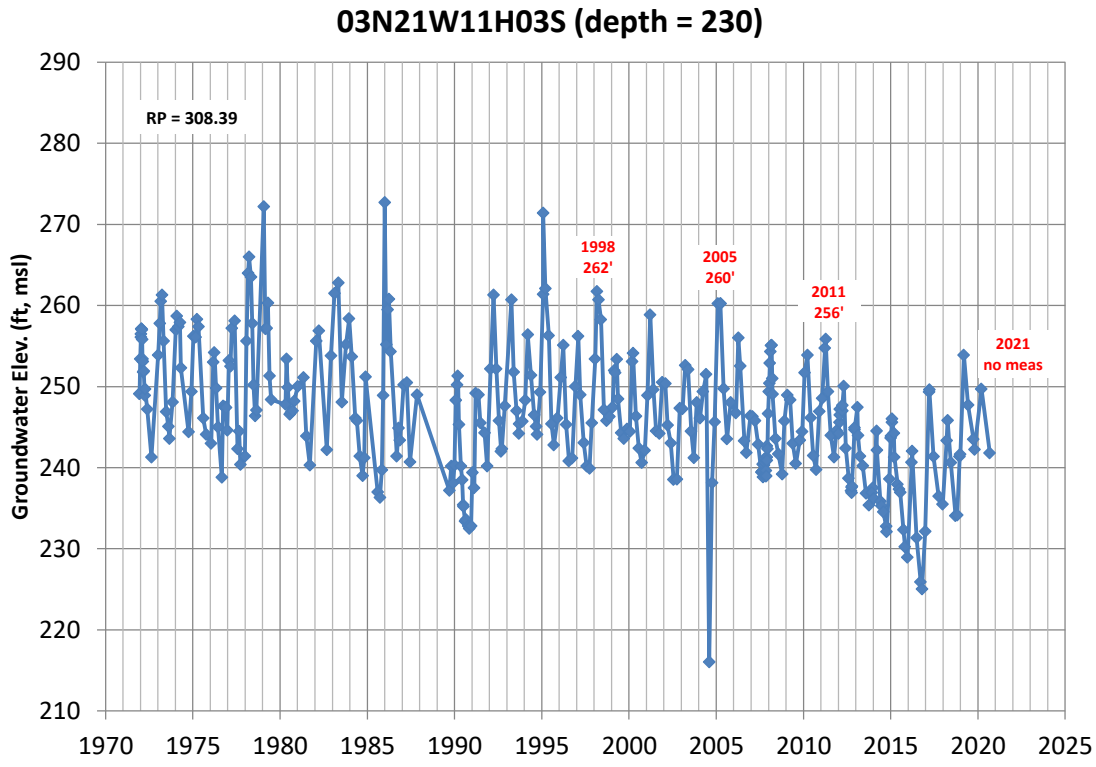
03N21W11F03S (153' -518' bgs)




03N21W11F04S (570' - 850' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 304 FEET
TOP OF WELL SCREEN (-265')
2005
242'
2011
234'
2021
217'


03N21W11F04S (570' - 850' bgs)
Groundwater Elev. (ft, msl)
250
230
210
190
170
2002
2005
2008
2011
2014
2017
2020
2023
RP = 304.04
2005
242'
2011
234'
2021
217'


03N21W11H03S (perforations unknown)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 308.4 FEET
1998
262'
2005
260'
2011
255'
2021
no meas
TOP OF WELL SCREEN (UNKNOWN


03N21W11H03S (depth = 230)
Groundwater Elev. (ft, msl)
290
280
270
260
250
240
230
220
210
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
RP = 308.39
1998
262'
2005
260'
2011
256'
2021
no meas

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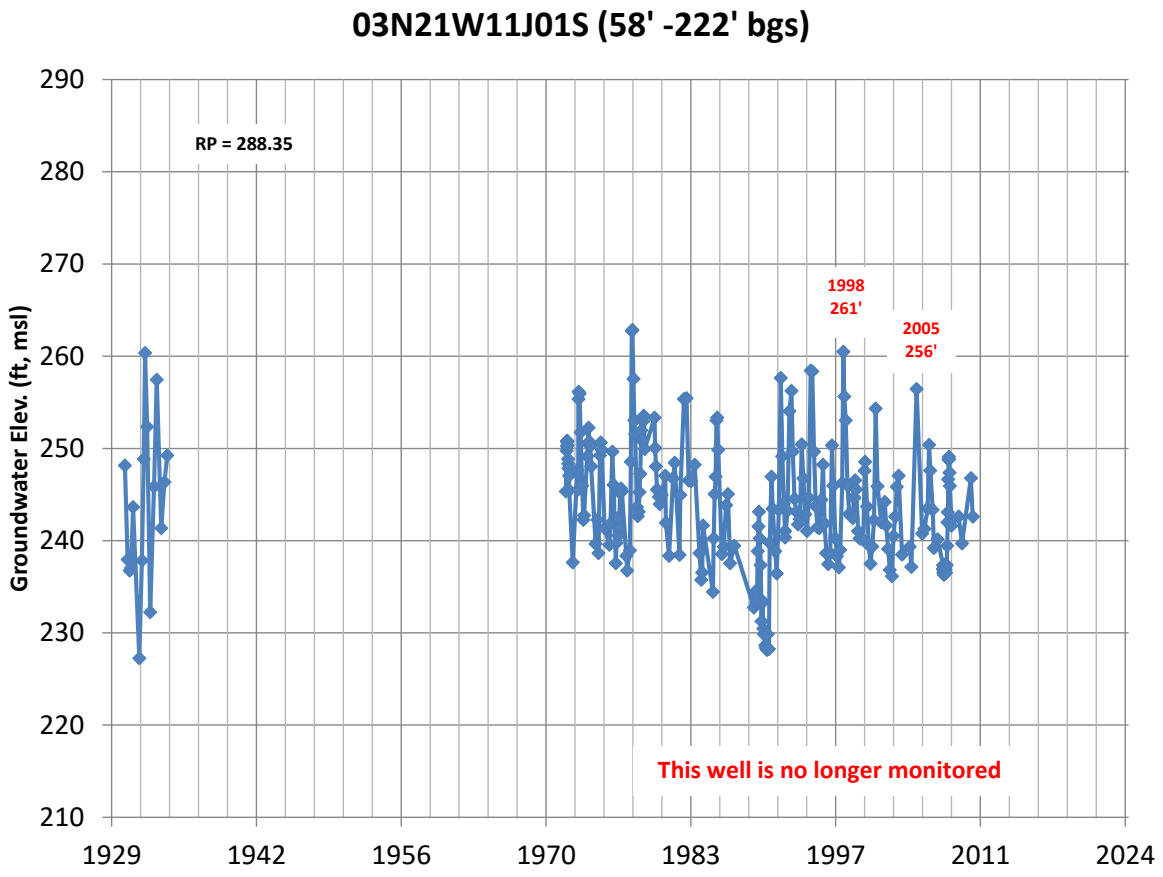
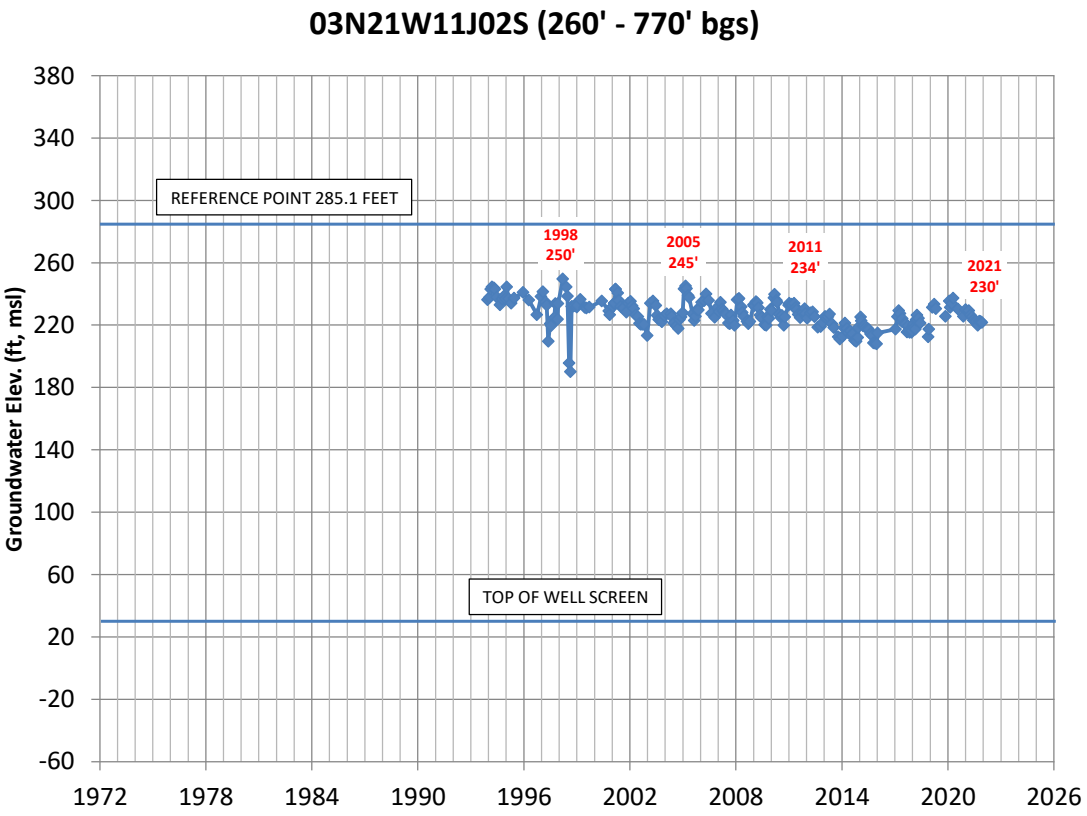
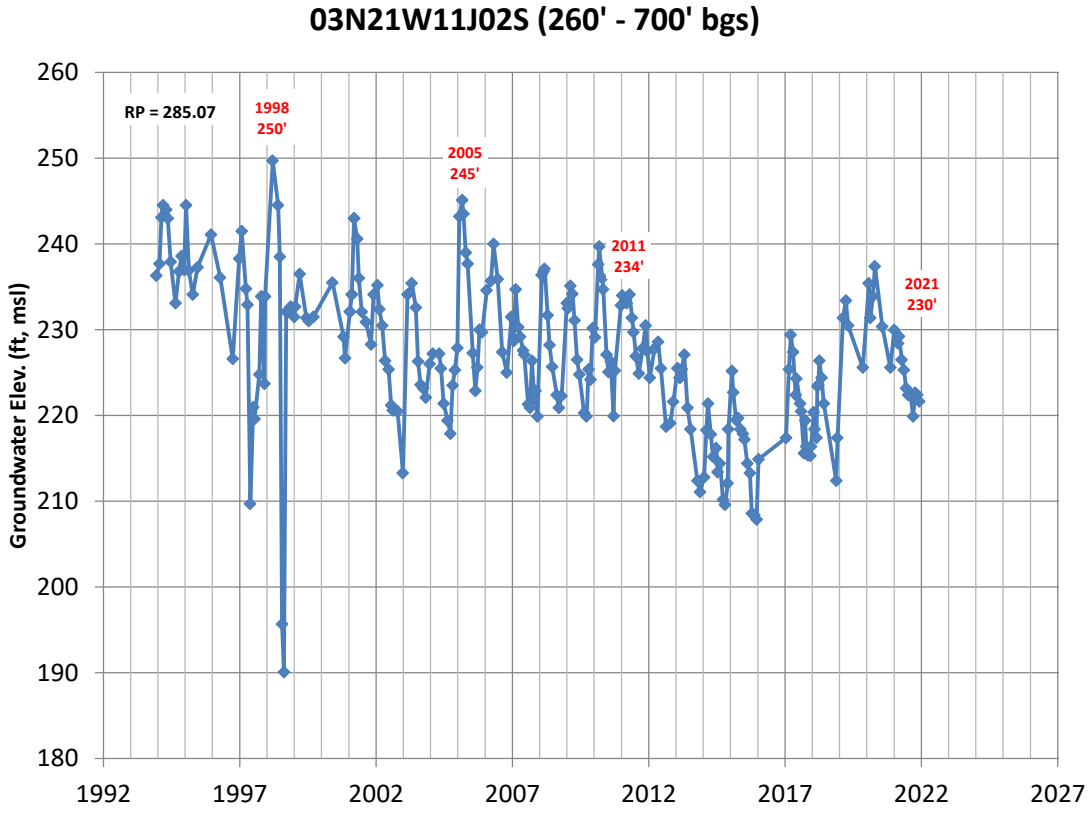
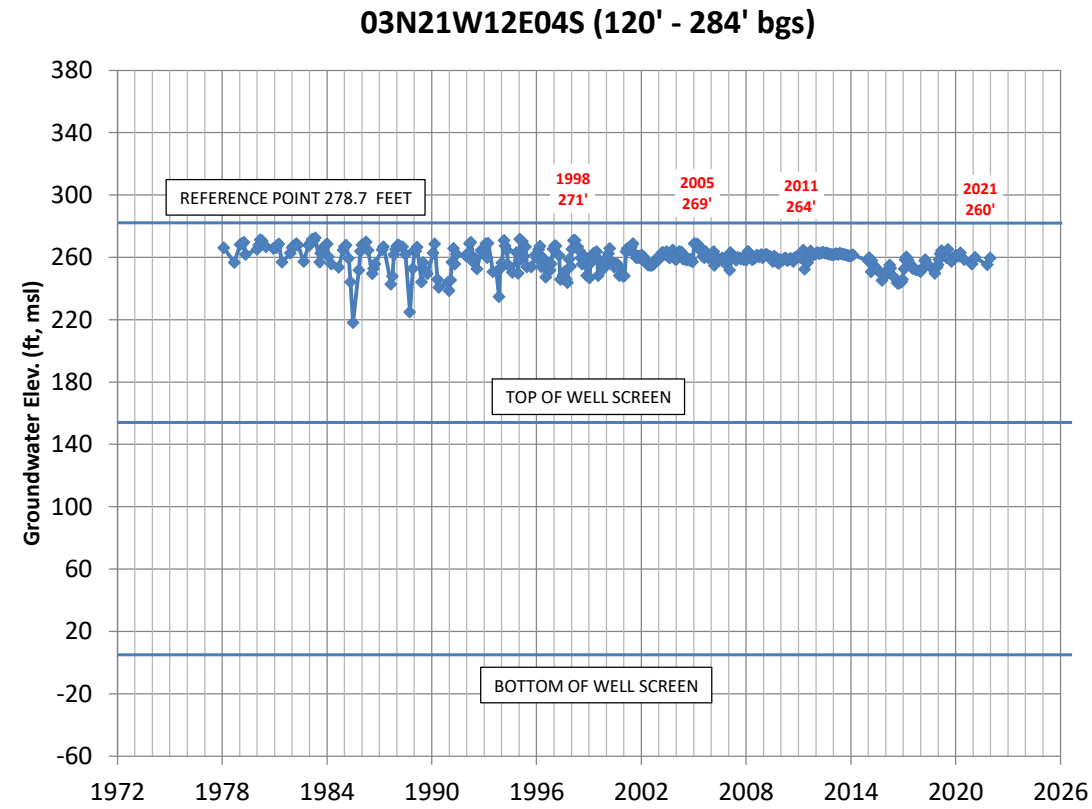
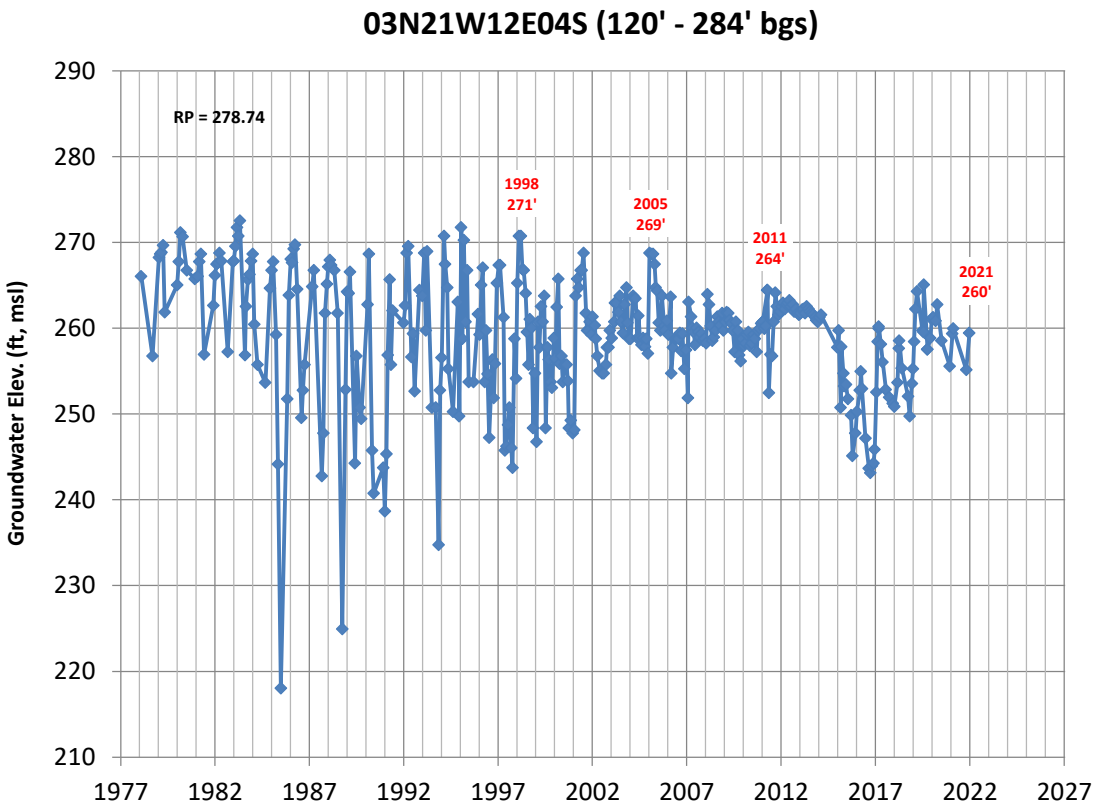
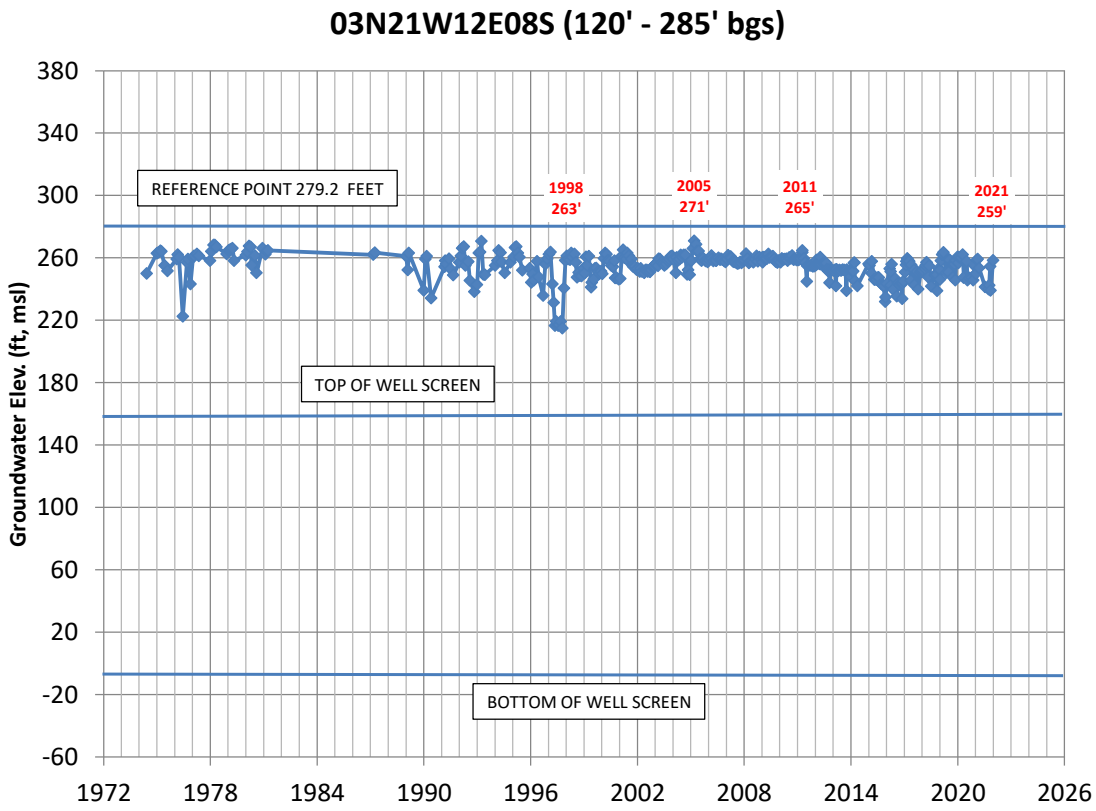


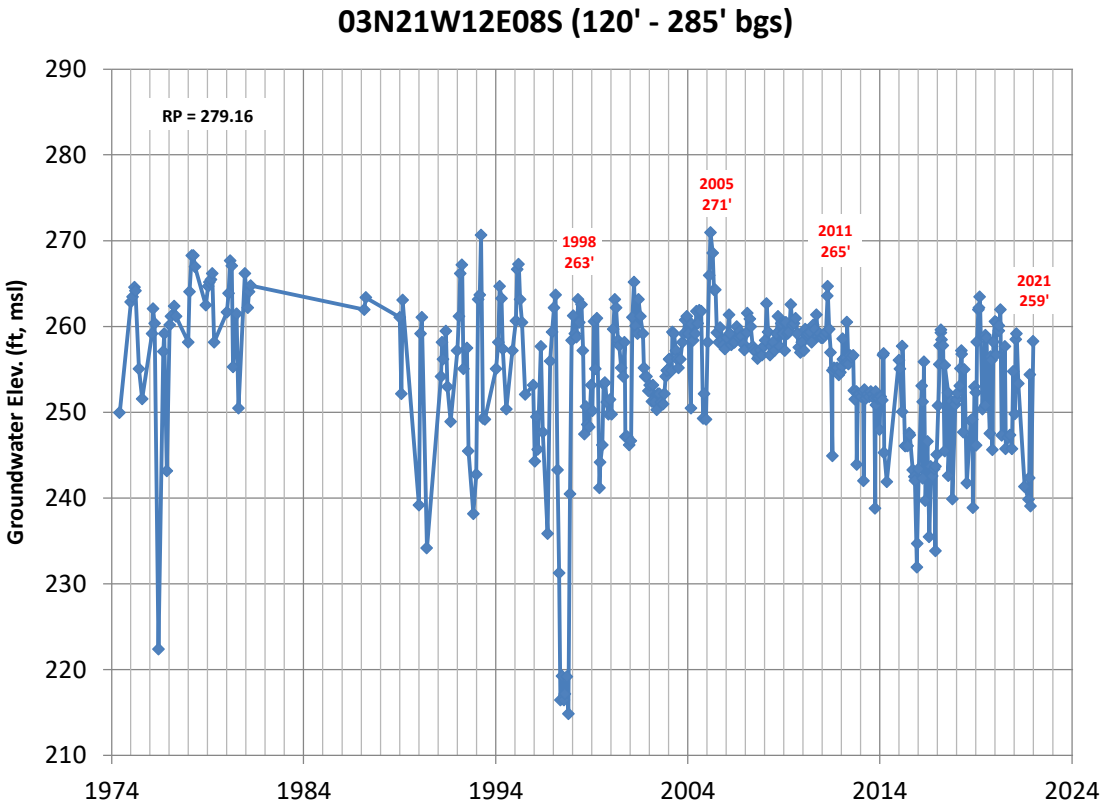

03N21W11J02S (260' - 770' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 285.1 FEET
TOP OF WELL SCREEN
1998
250'
2005
245'
2011
234'
2021
230'

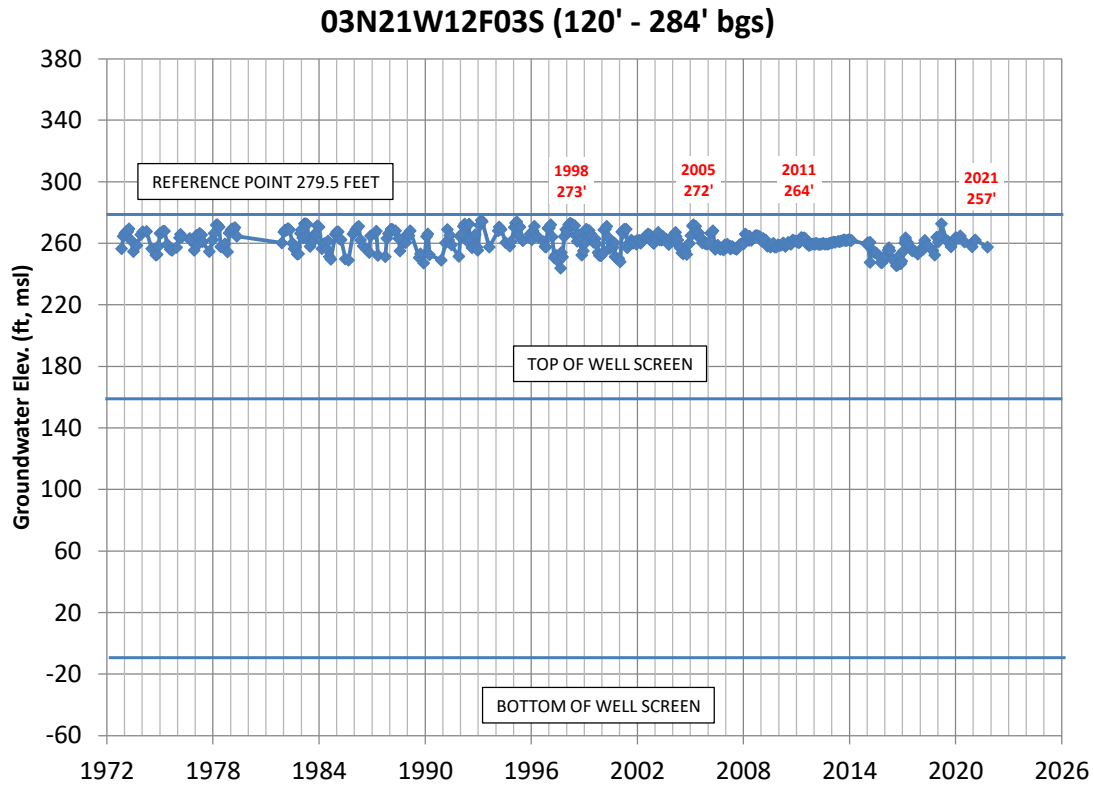

03N21W11J02S (260' - 700' bgs)
Groundwater Elev. (ft, msl)
260
250
240
230
220
210
200
190
180
1992
1997
2002
2007
2012
2017
2022
2027
RP = 285.07
1998
250'
2005
245'
2011
234'
2021
230'

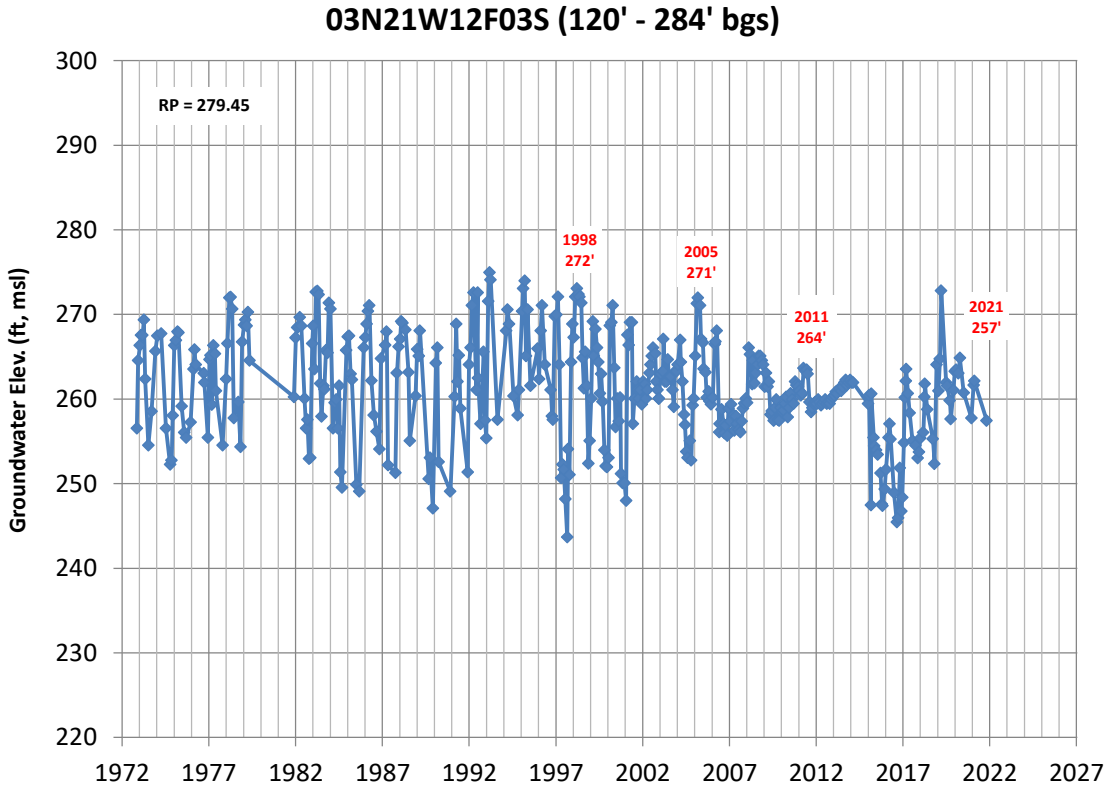

03N21W12E04S (120' - 284' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 278.7 FEET
1998
271'
2005
269'
2011
264'
2021
260'
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN

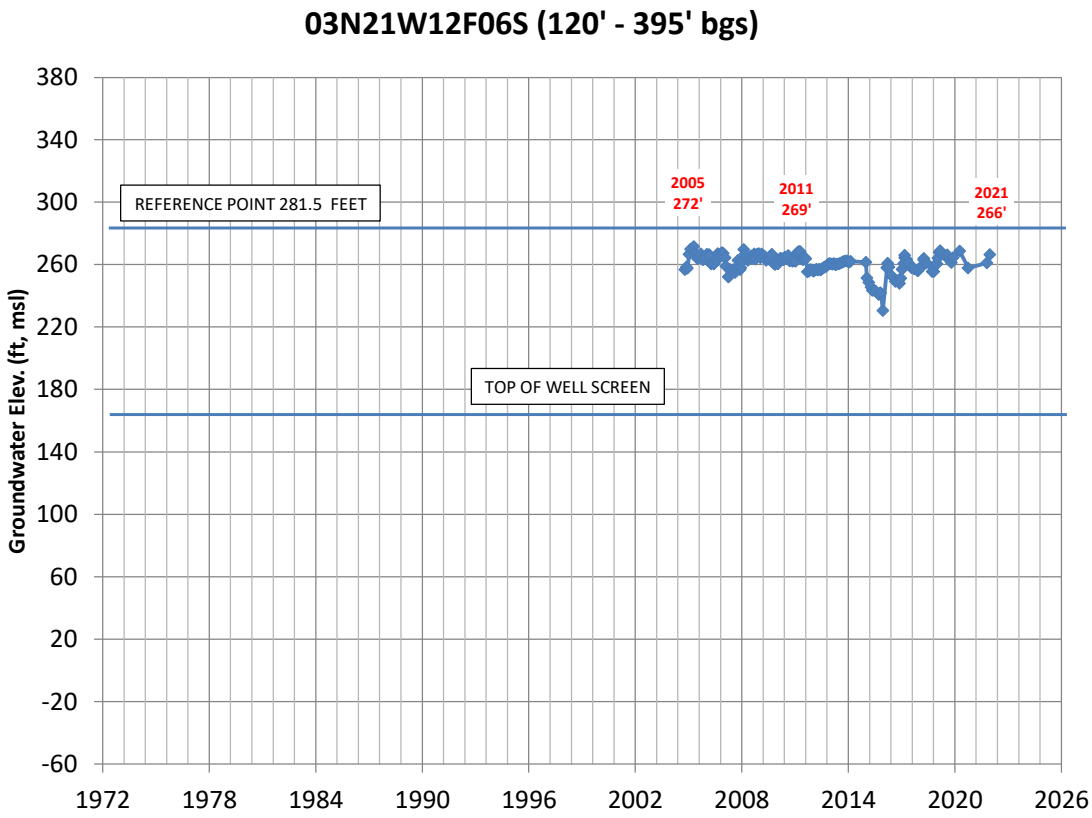

03N21W12E04S (120' - 284' bgs)
Groundwater Elev. (ft, msl)
290
280
270
260
250
240
230
220
210
1977
1982
1987
1992
1997
2002
2007
2012
2017
2022
2027
RP = 278.74
1998
271'
2005
269'
2011
264'
2021
260'

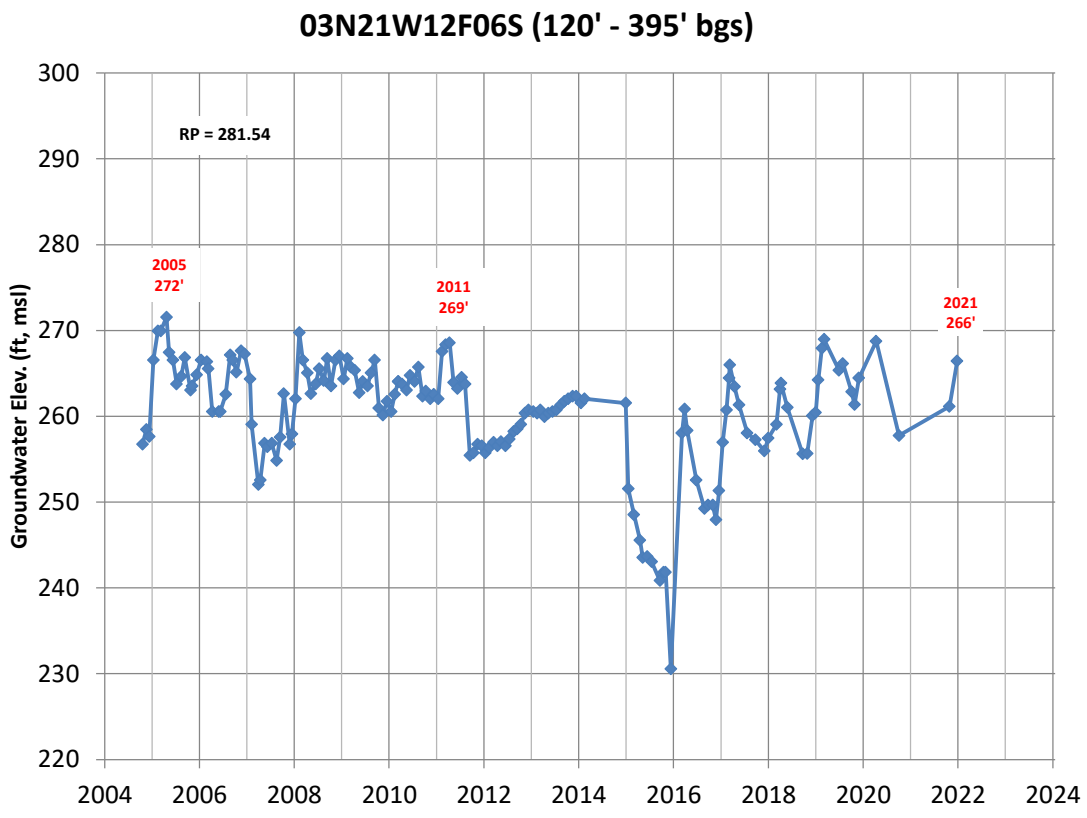

03N21W12E08S (120' - 285' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 279.2 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
1998
263'
2005
271'
2011
265'
2021
259'

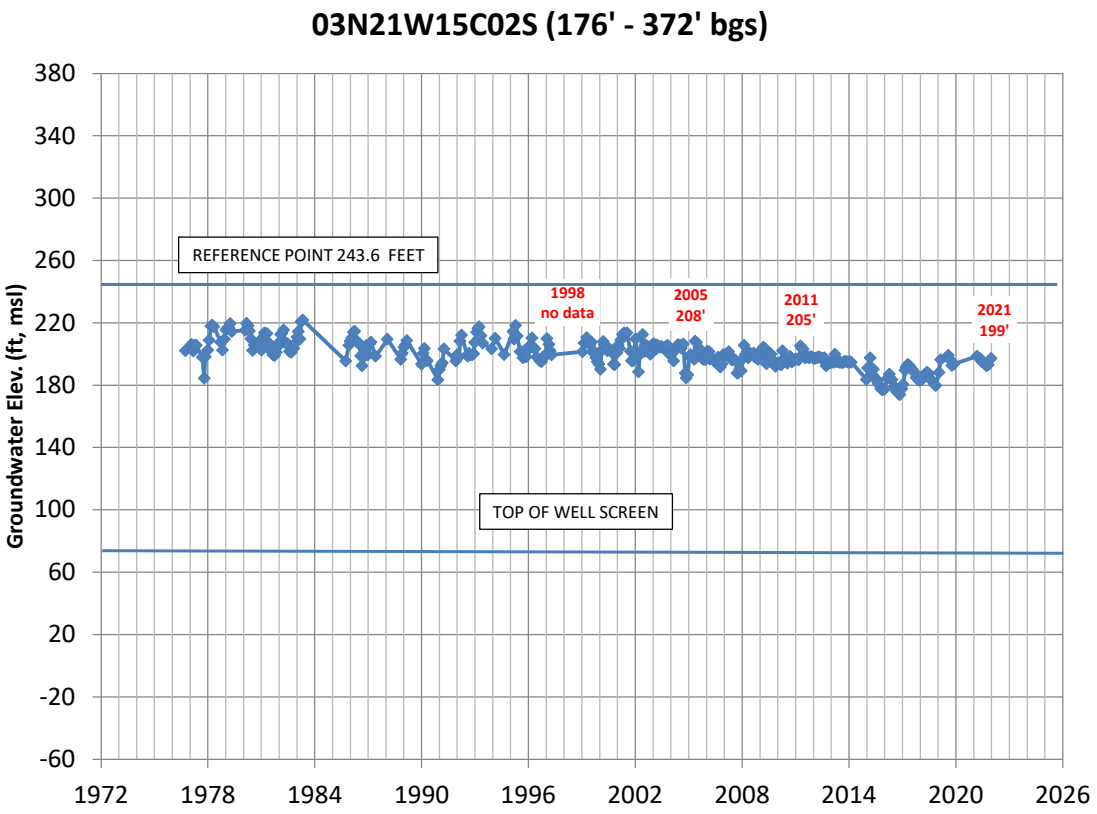

03N21W12E08S (120' - 285' bgs)
Groundwater Elev. (ft, msl)
290
280
270
260
250
240
230
220
210
1974
1984
1994
2004
2014
2024
RP = 279.16
1998
263'
2005
271'
2011
265'
2021
259'

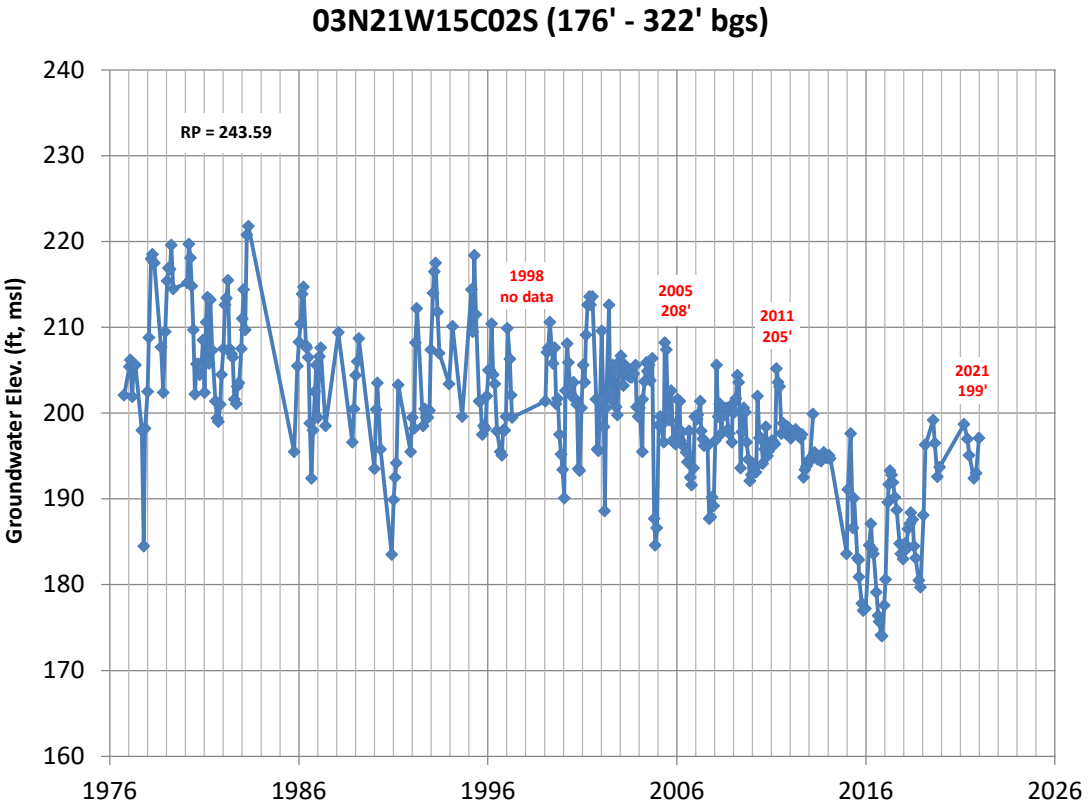

03N21W12F03S (120' - 284' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 279.5 FEET
1998
273'
2005
272'
2011
264'
2021
257'
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN


03N21W12F03S (120' - 284' bgs)
Groundwater Elev. (ft, msl)
300
290
280
270
260
250
240
230
220
1972
1977
1982
1987
1992
1997
2002
2007
2012
2017
2022
2027
RP = 279.45
1998
272'
2005
271'
2011
264'
2021
257'

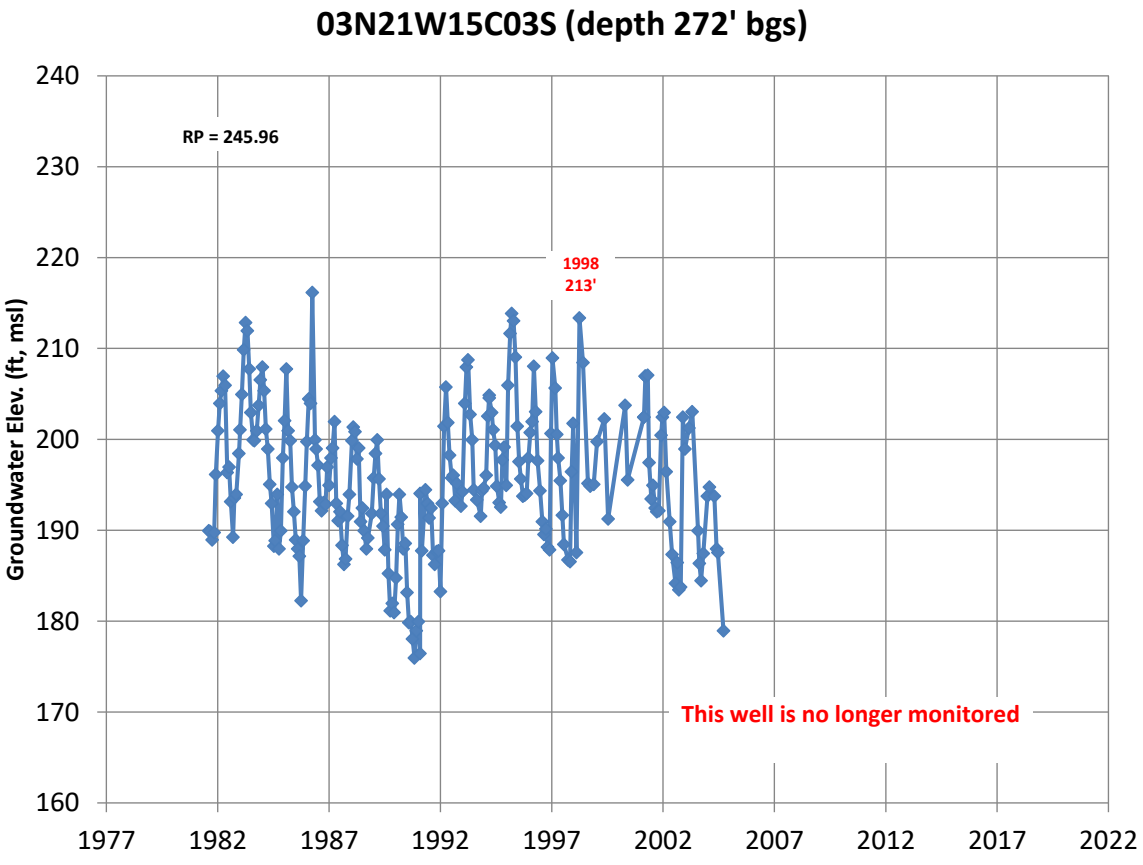

03N21W12F06S (120' - 395' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 281.5 FEET
TOP OF WELL SCREEN
2005
272'
2011
269'
2021
266'

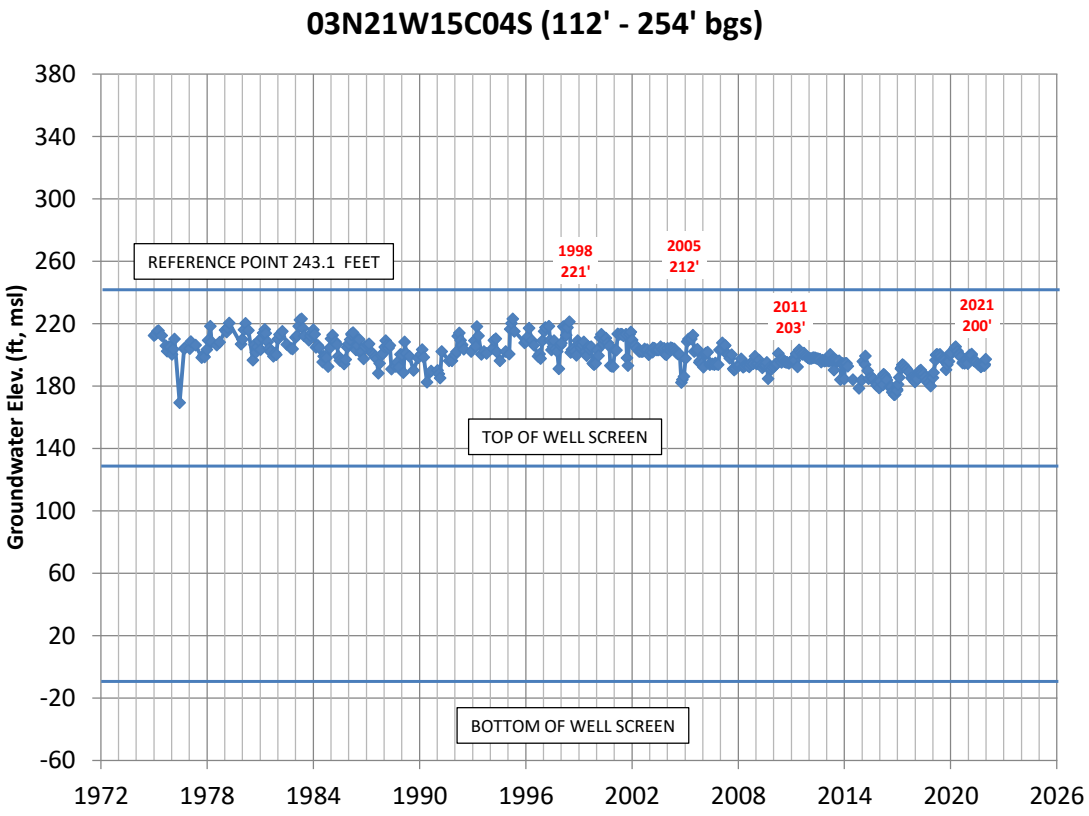

03N21W12F06S (120' - 395' bgs)
Groundwater Elev. (ft, msl)
300
290
280
270
260
250
240
230
220
2004
2006
2008
2010
2012
2014
2016
2018
2020
2022
2024
RP = 281.54
2005
272'
2011
269'
2021
266'

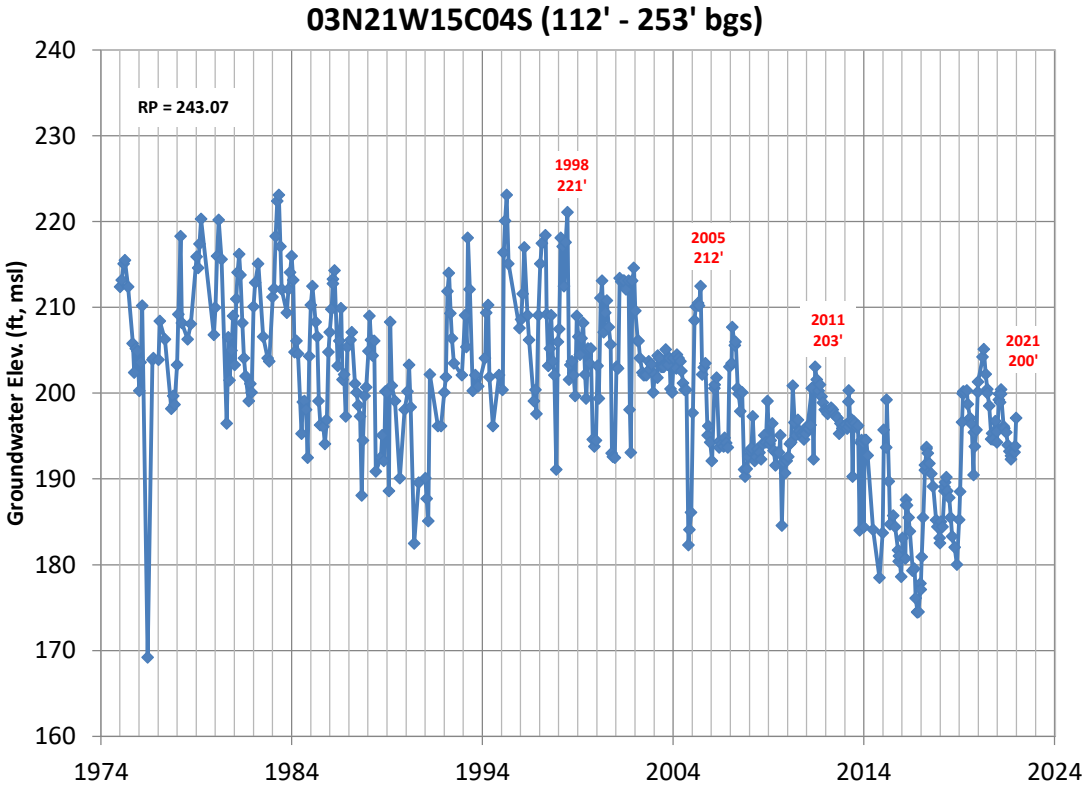

03N21W15C02S (176' - 372' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 243.6 FEET
TOP OF WELL SCREEN
1998
no data
2005
208'
2011
205'
2021
199'

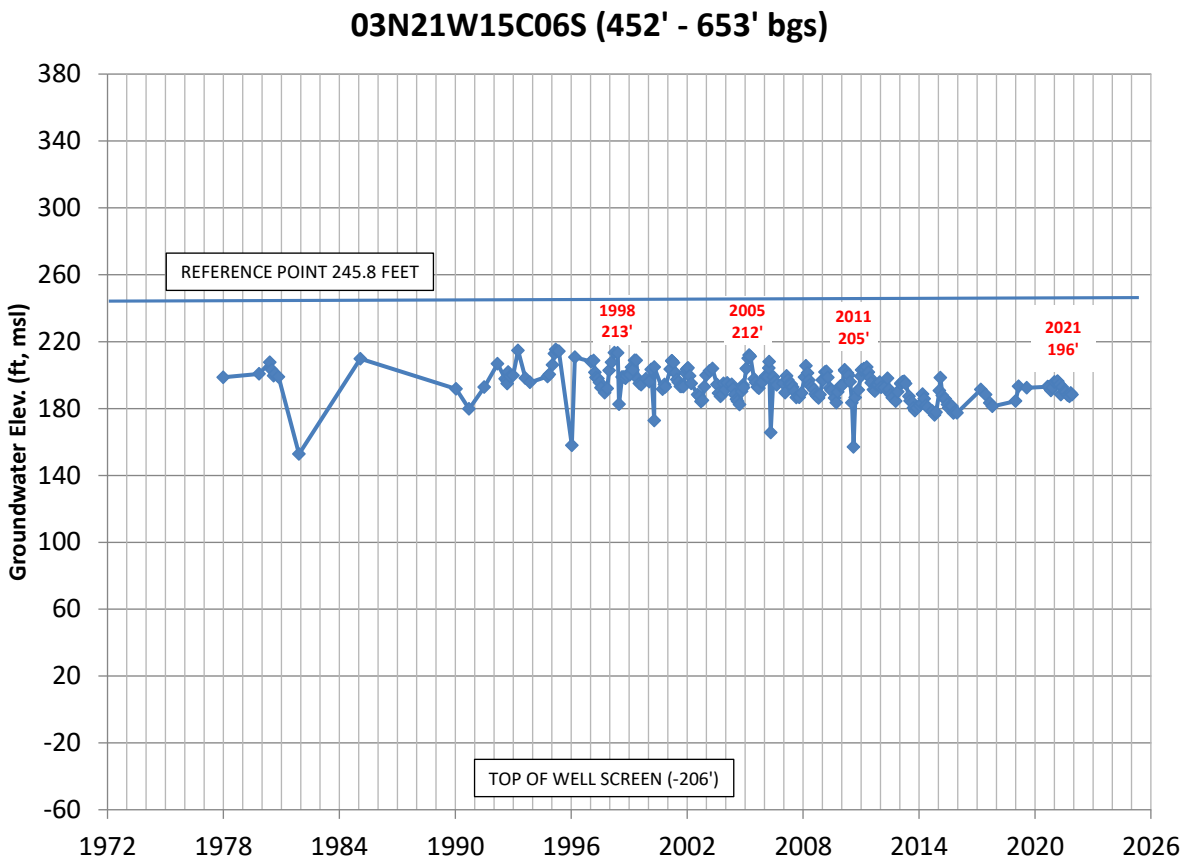

03N21W15C02S (176' - 322' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1976
1986
1996
2006
2016
2026
RP = 243.59
1998
no data
2005
208'
2011
205'
2021
199'

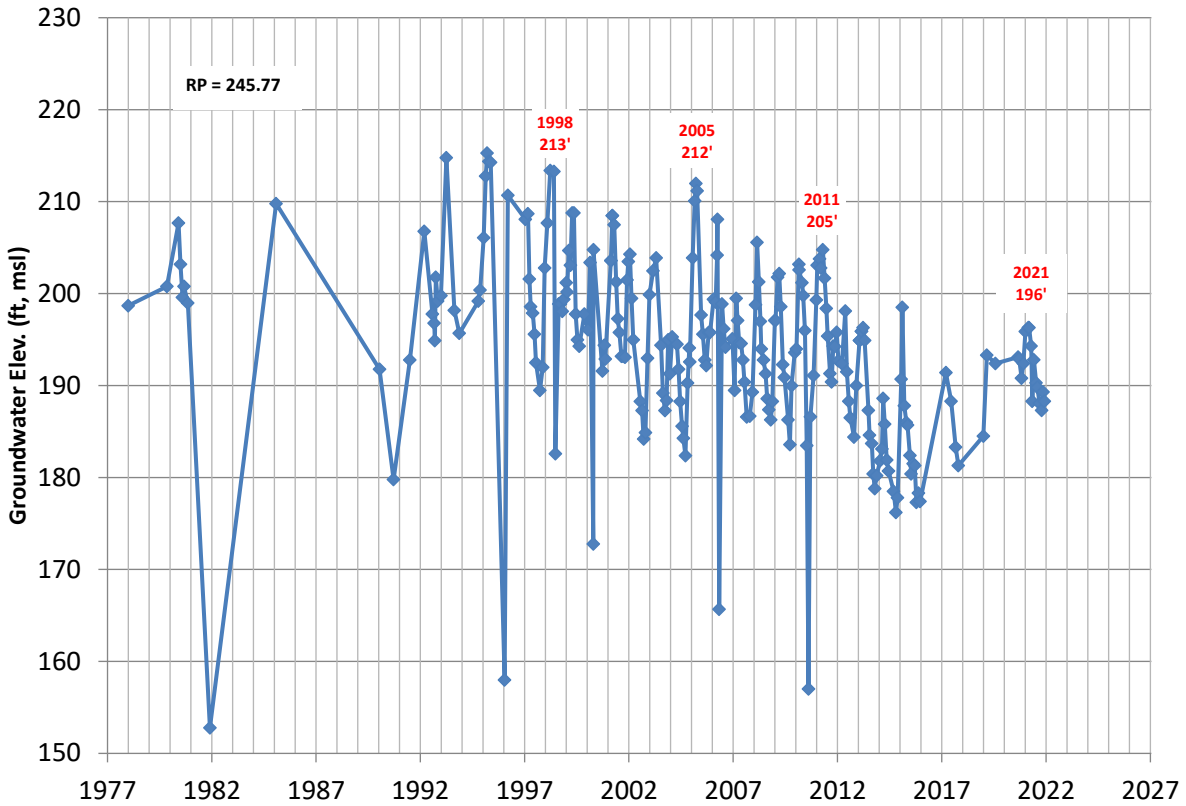
Intentionally Left Blank

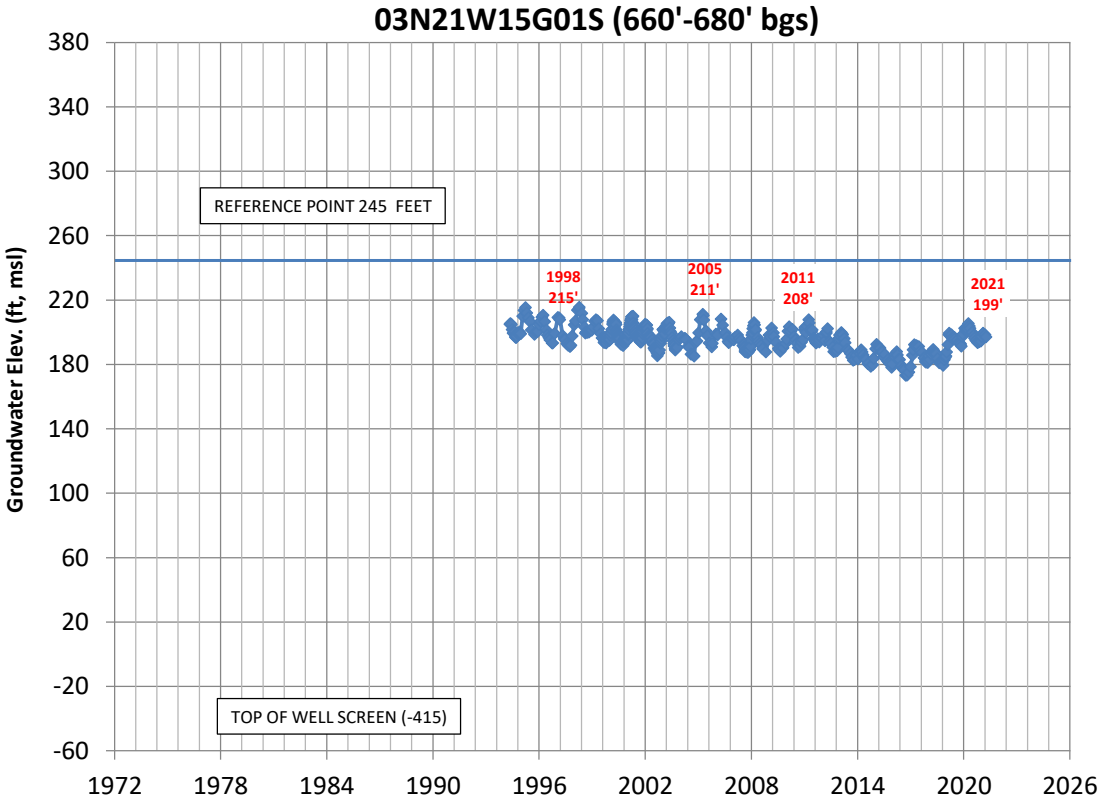


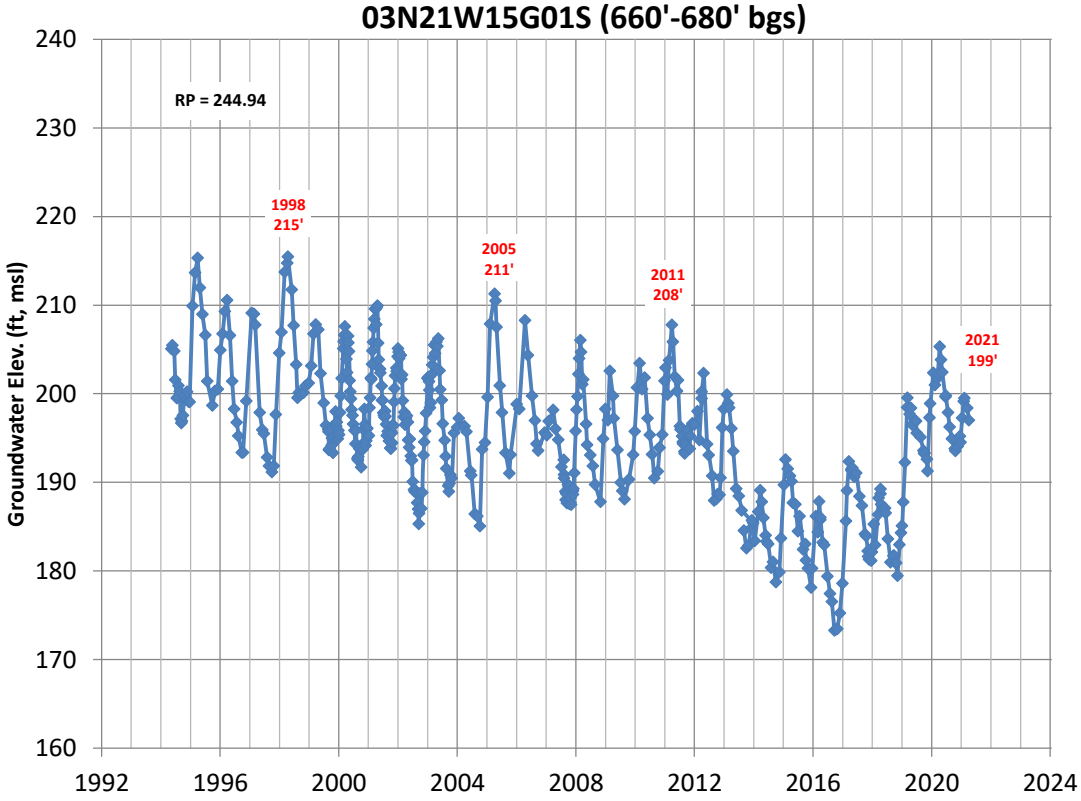

03N21W15C04S (112' - 254' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 243.1 FEET
1998
221'
2005
212'
2011
203'
2021
200'
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN

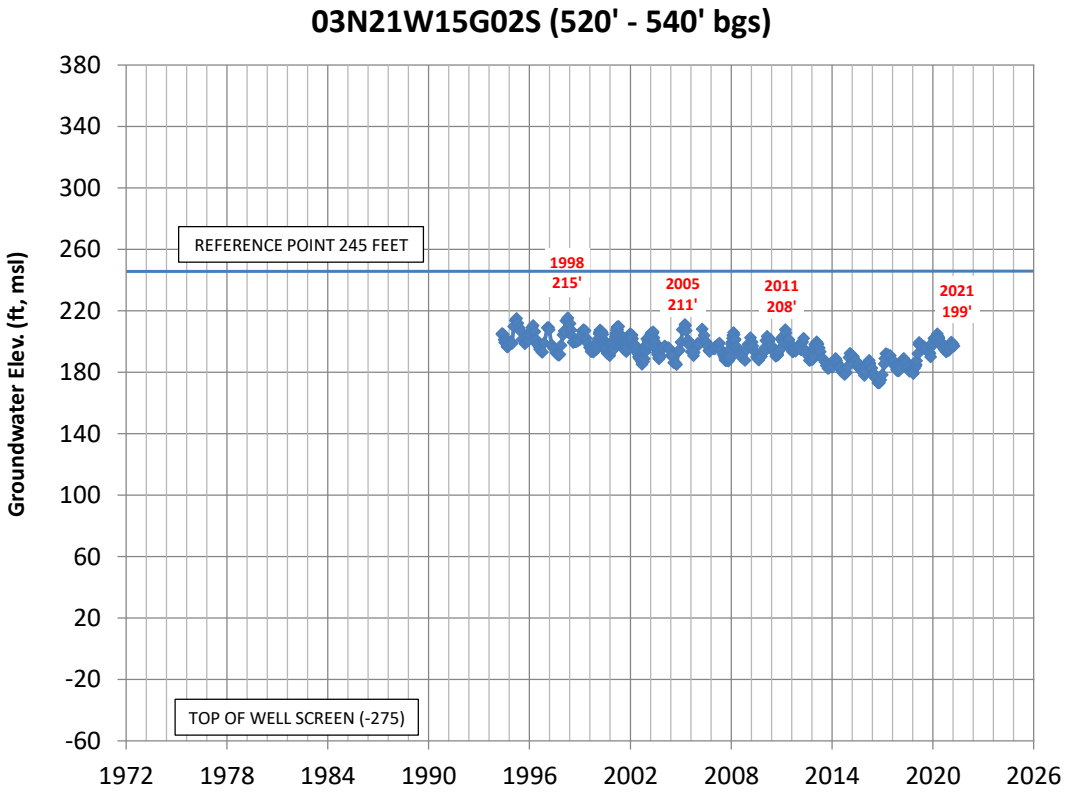

03N21W15C04S (112' - 253' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1974
1984
1994
2004
2014
2024
RP = 243.07
1998
221'
2005
212'
2011
203'
2021
200'

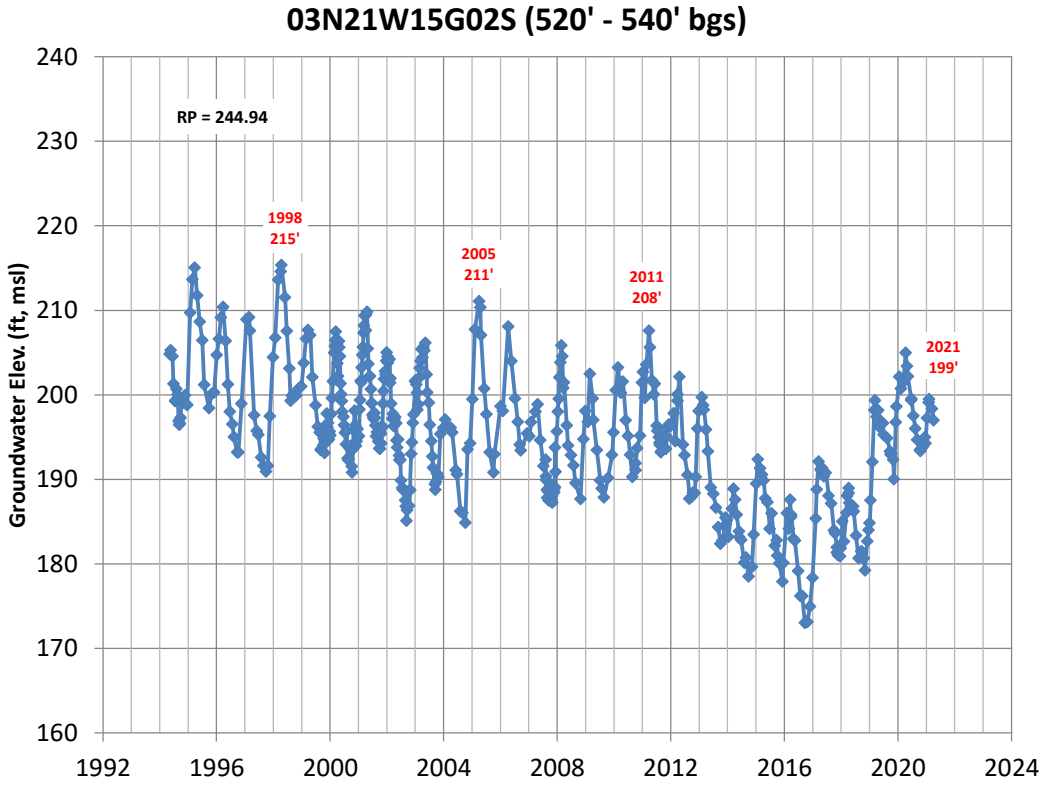

03N21W15C06S (452' - 653' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 245.8 FEET
TOP OF WELL SCREEN (-206')
1998
213'
2005
212'
2011
205'
2021
196'

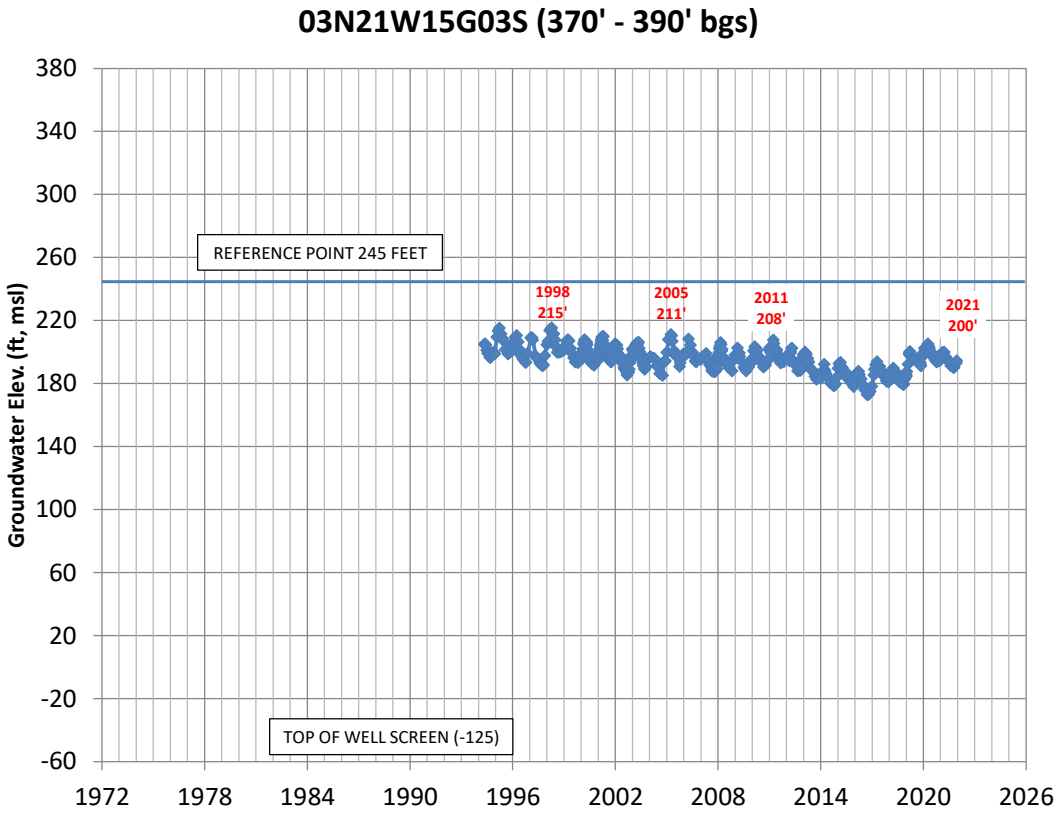

03N21W15C06S (452' - 653' bgs)
Groundwater Elev. (ft, msl)
230
220
210
200
190
180
170
160
150
1977
1982
1987
1992
1997
2002
2007
2012
2017
2022
2027
RP = 245.77
1998
213'
2005
212'
2011
205'
2021
196'

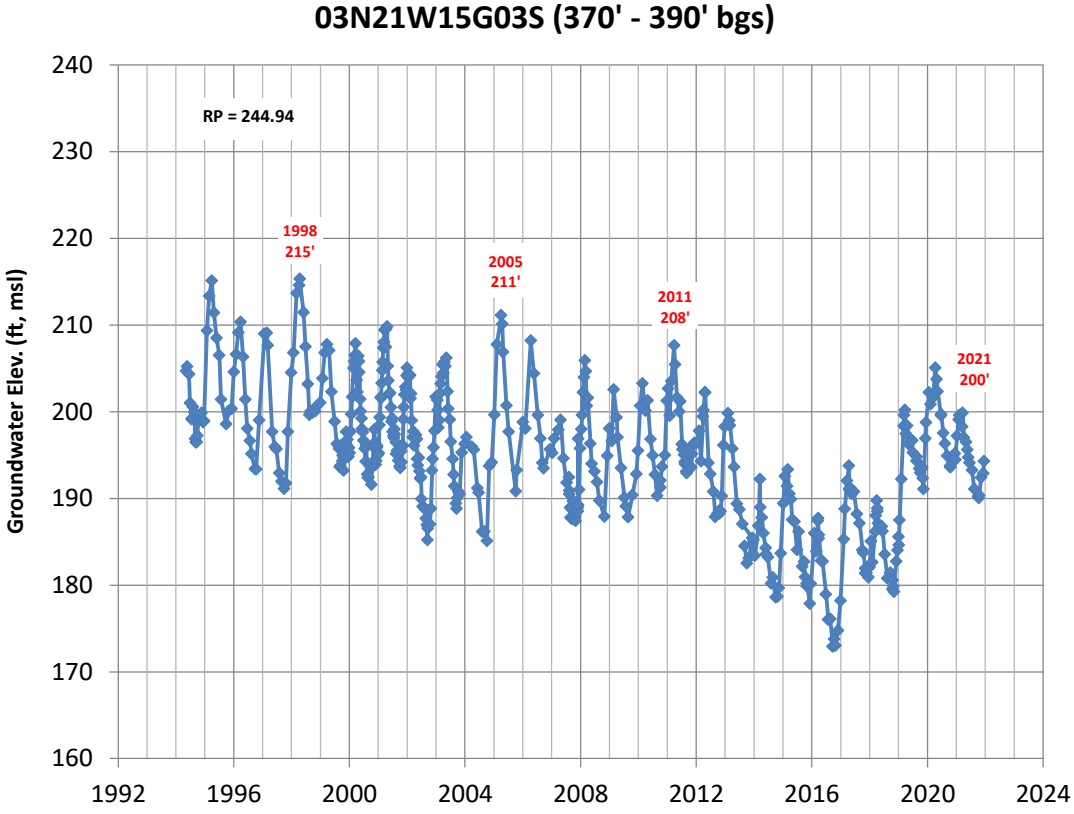

03N21W15G01S (660'-680' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 245 FEET
TOP OF WELL SCREEN (-415)
1998
215'
2005
211'
2011
208'
2021
199'

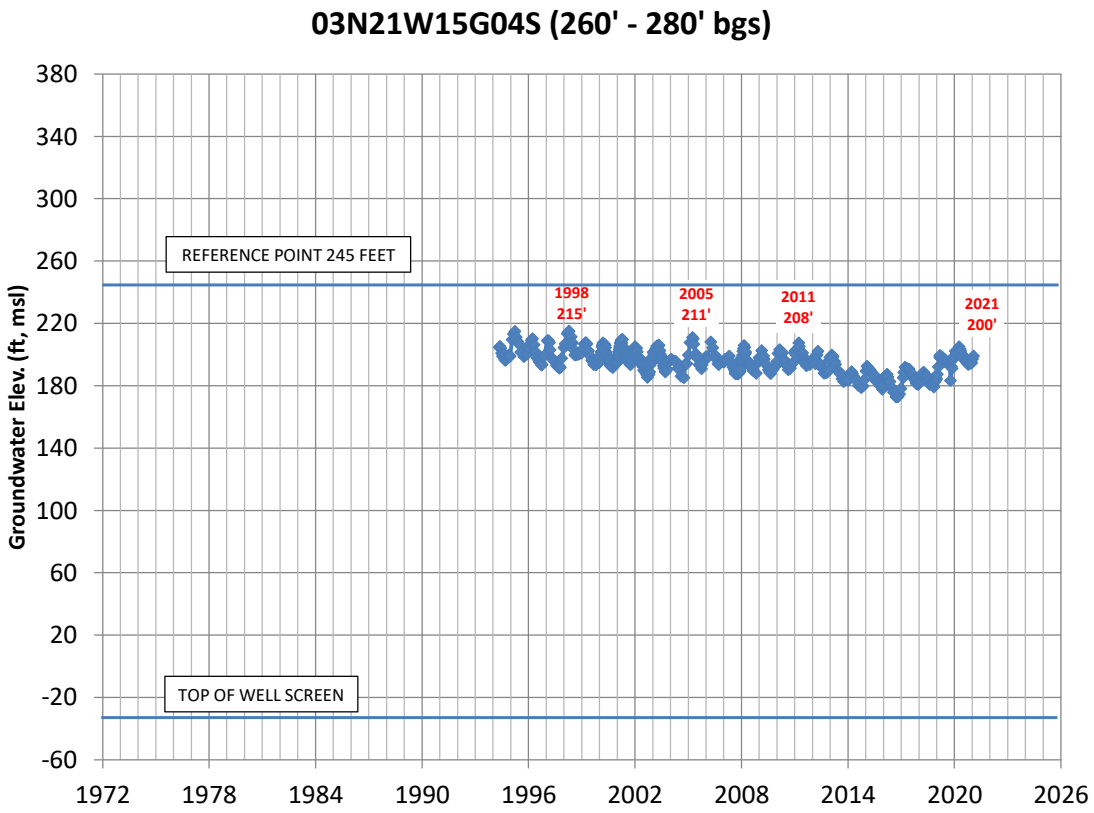

03N21W15G01S (660'-680' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1992
1996
2000
2004
2008
2012
2016
2020
2024
RP = 244.94
1998
215'
2005
211'
2011
208'
2021
199'

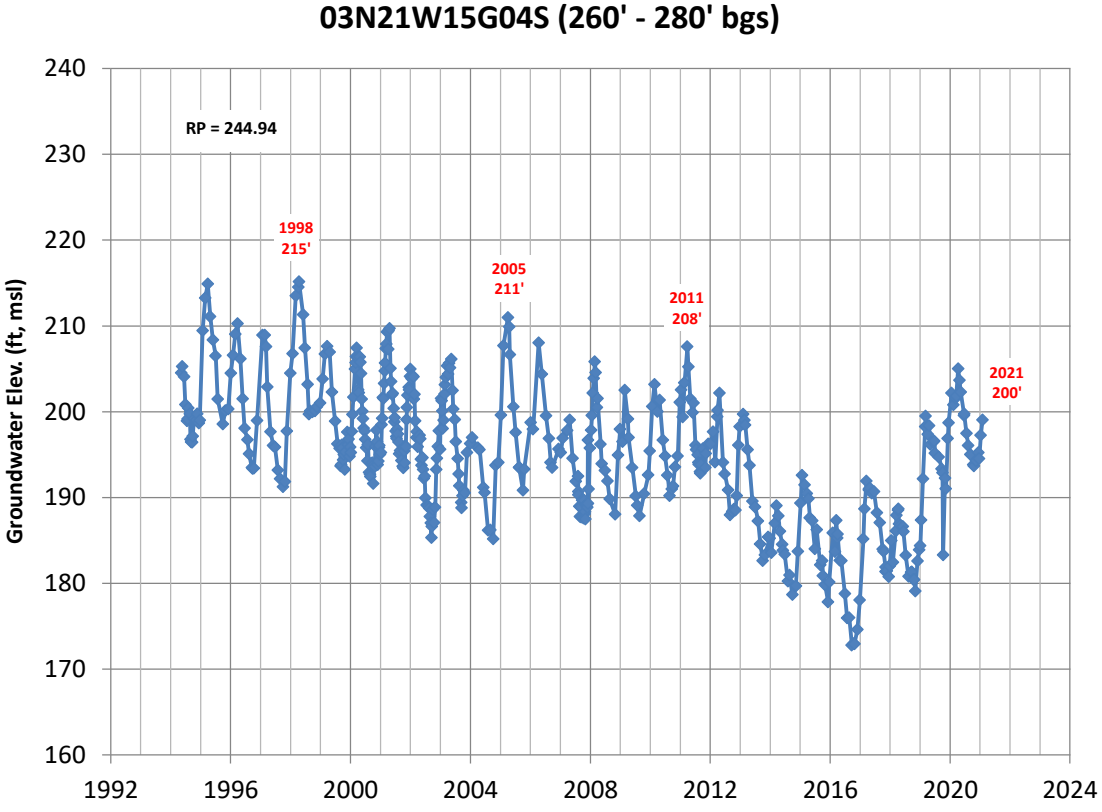

03N21W15G02S (520' - 540' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 245 FEET
TOP OF WELL SCREEN (-275)
1998
215'
2005
211'
2011
208'
2021
199'

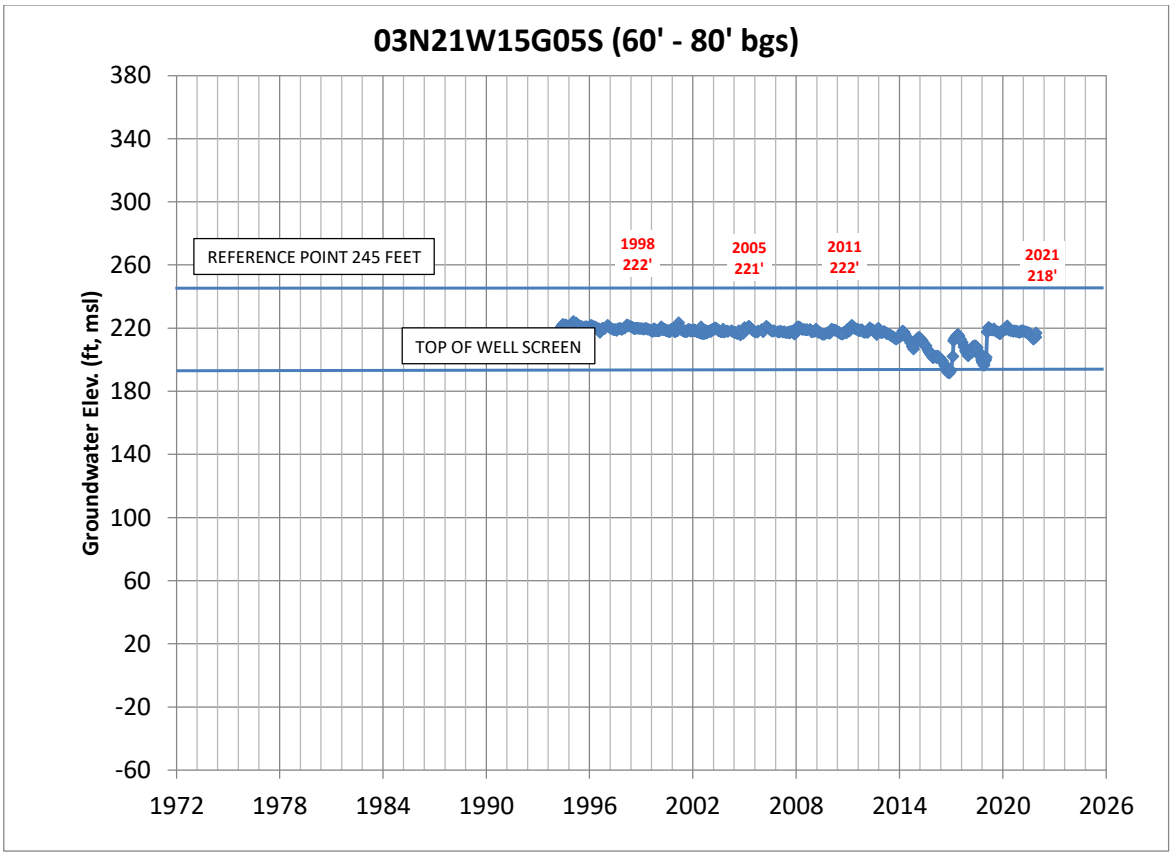

03N21W15G02S (520' - 540' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1992
1996
2000
2004
2008
2012
2016
2020
2024
RP = 244.94
1998
215'
2005
211'
2011
208'
2021
199'

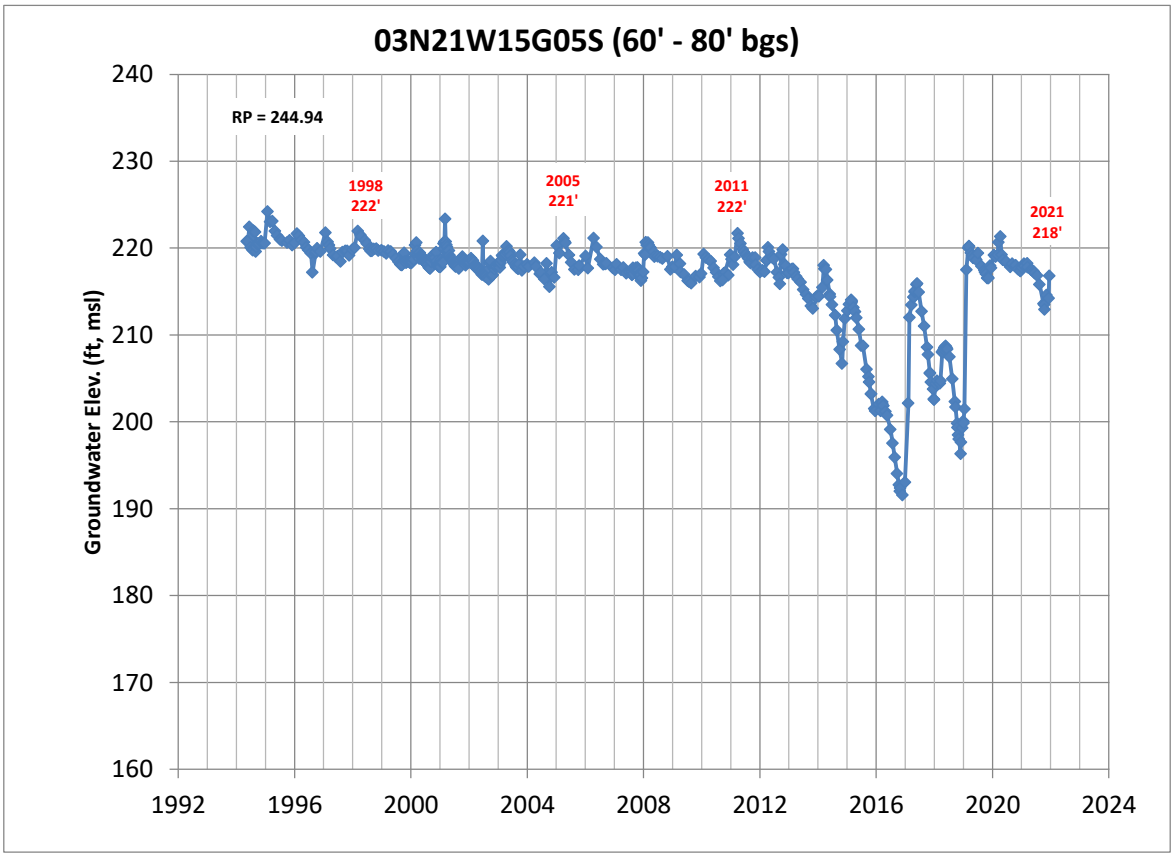

03N21W15G03S (370' - 390' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 245 FEET
TOP OF WELL SCREEN (-125)
1998
215'
2005
211'
2011
208'
2021
200'

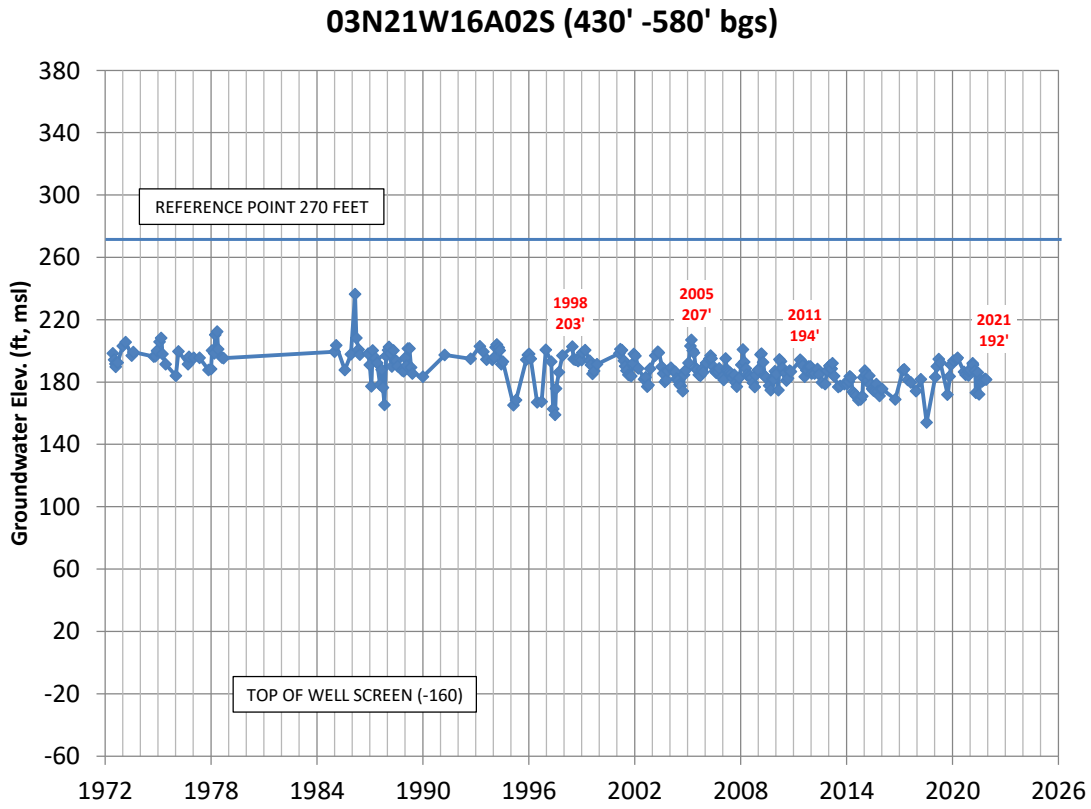

03N21W15G03S (370' - 390' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1992
1996
2000
2004
2008
2012
2016
2020
2024
RP = 244.94
1998
215'
2005
211'
2011
208'
2021
200'

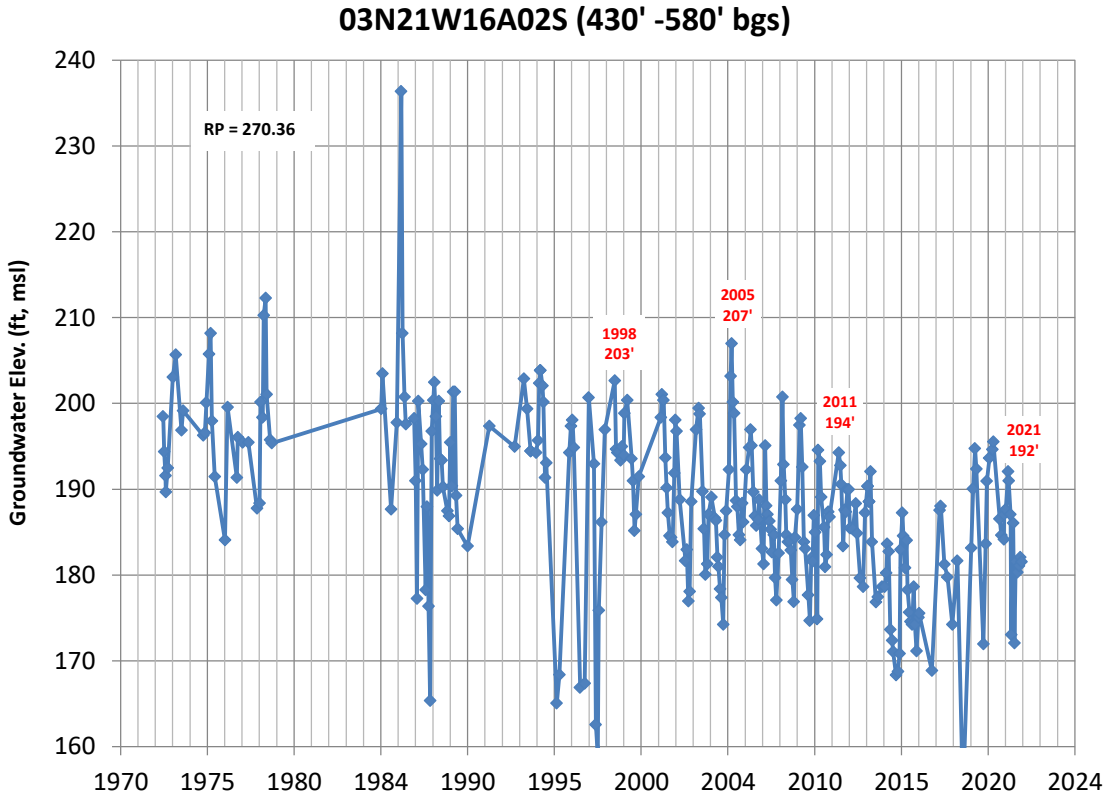

03N21W15G04S (260' - 280' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 245 FEET
TOP OF WELL SCREEN
1998
215'
2005
211'
2011
208'
2021
200'

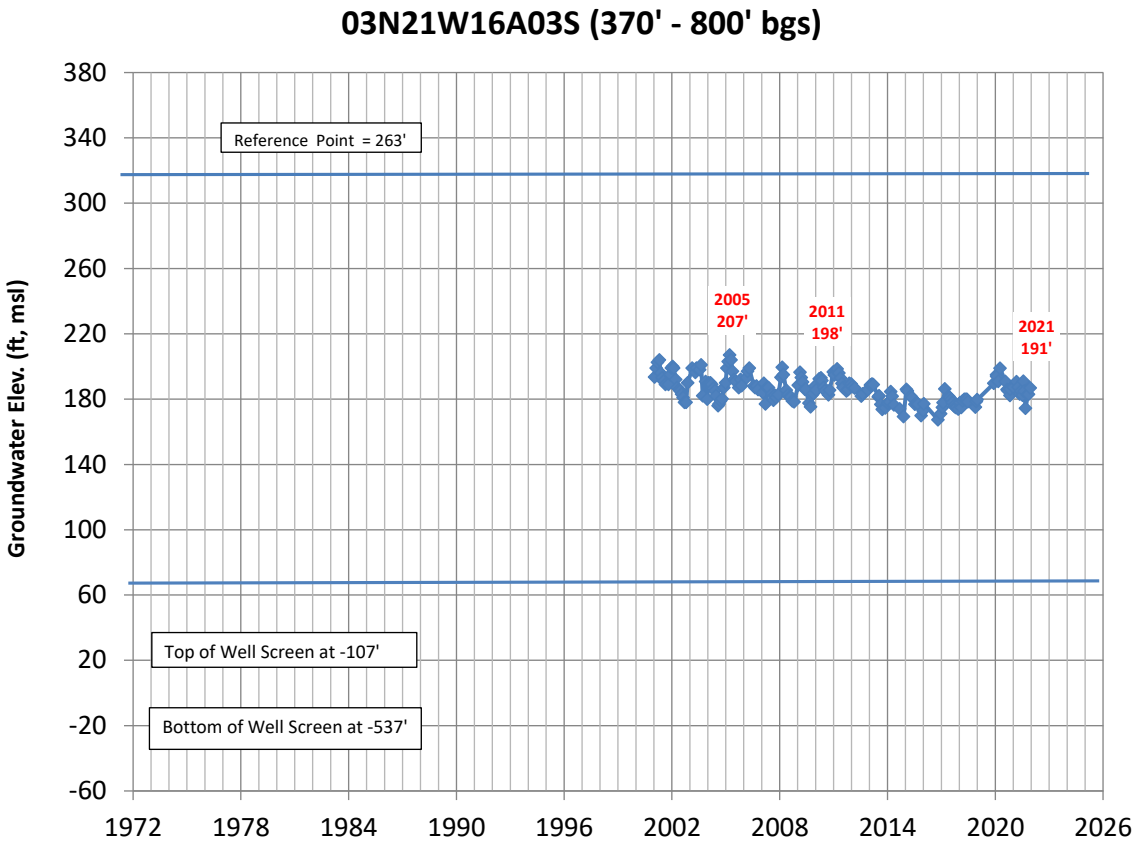

03N21W15G04S (260' - 280' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1992
1996
2000
2004
2008
2012
2016
2020
2024
RP = 244.94
1998
215'
2005
211'
2011
208'
2021
200'

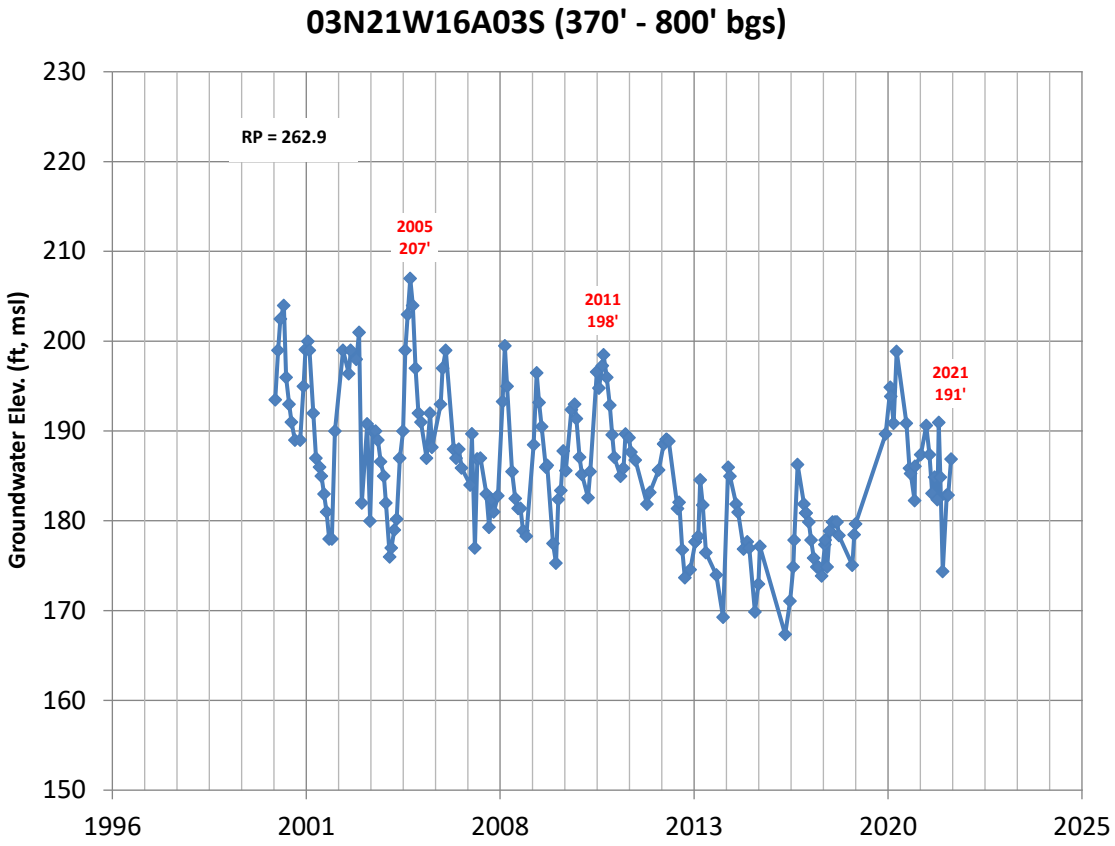

03N21W15G05S (60' - 80' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 245 FEET
TOP OF WELL SCREEN
1998
222'
2005
221'
2011
222'
2021
218'


03N21W15G05S (60' - 80' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1992
1996
2000
2004
2008
2012
2016
2020
2024
RP = 244.94
1998
222'
2005
221'
2011
222'
2021
218'

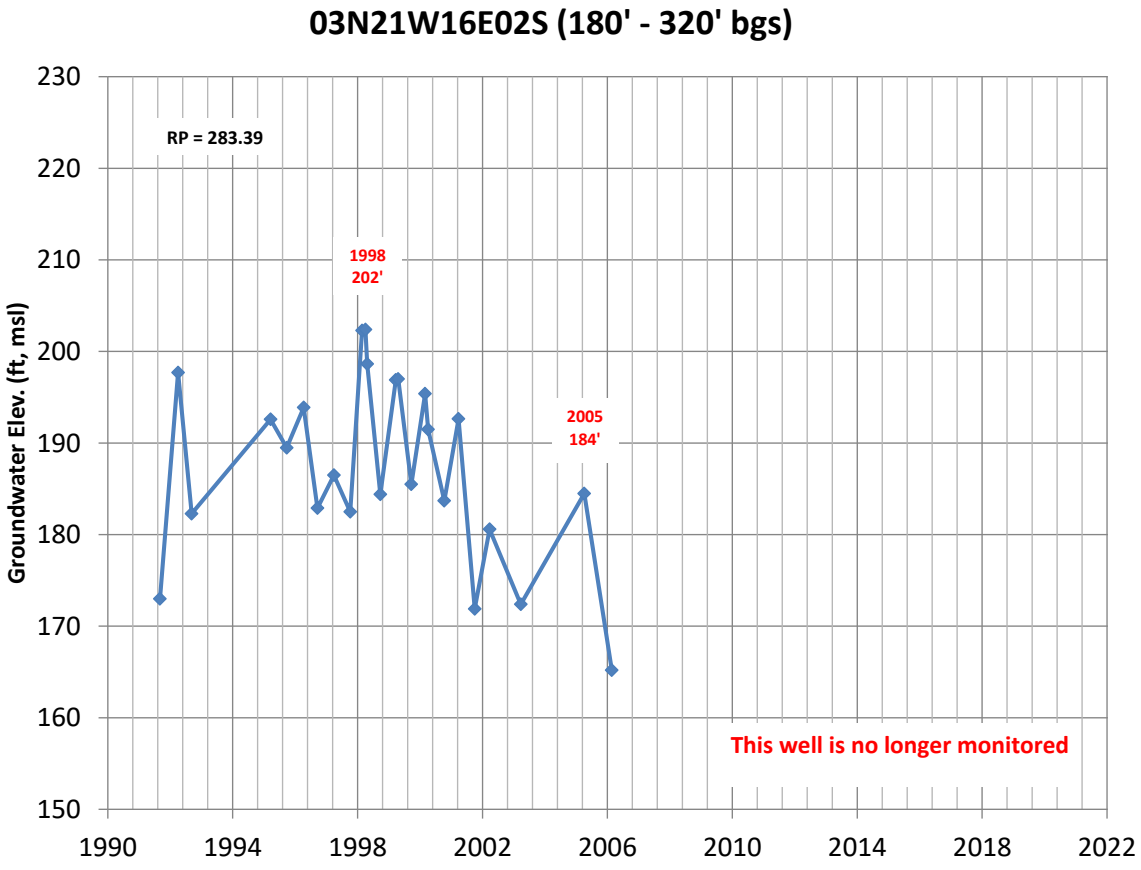

03N21W16A02S (430' -580' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 270 FEET
TOP OF WELL SCREEN (-160)
1998
203'
2005
207'
2011
194'
2021
192'


03N21W16A02S (430' -580' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1970
1975
1980
1984
1990
1995
2000
2004
2010
2015
2020
2024
RP = 270.36
1998
203'
2005
207'
2011
194'
2021
192'

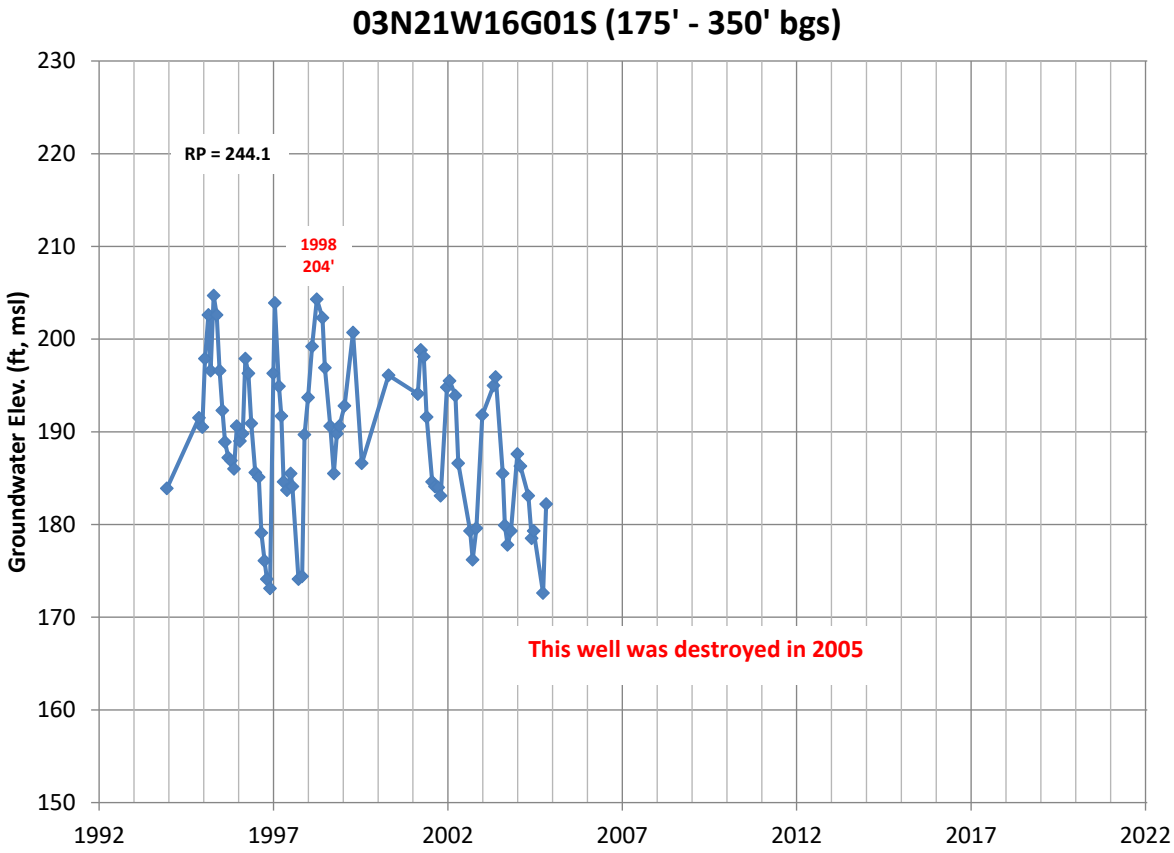

03N21W16A03S (370' - 800' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
Reference Point = 263'
Top of Well Screen at -107'
Bottom of Well Screen at -537'
2005
207'
2011
198'
2021
191'

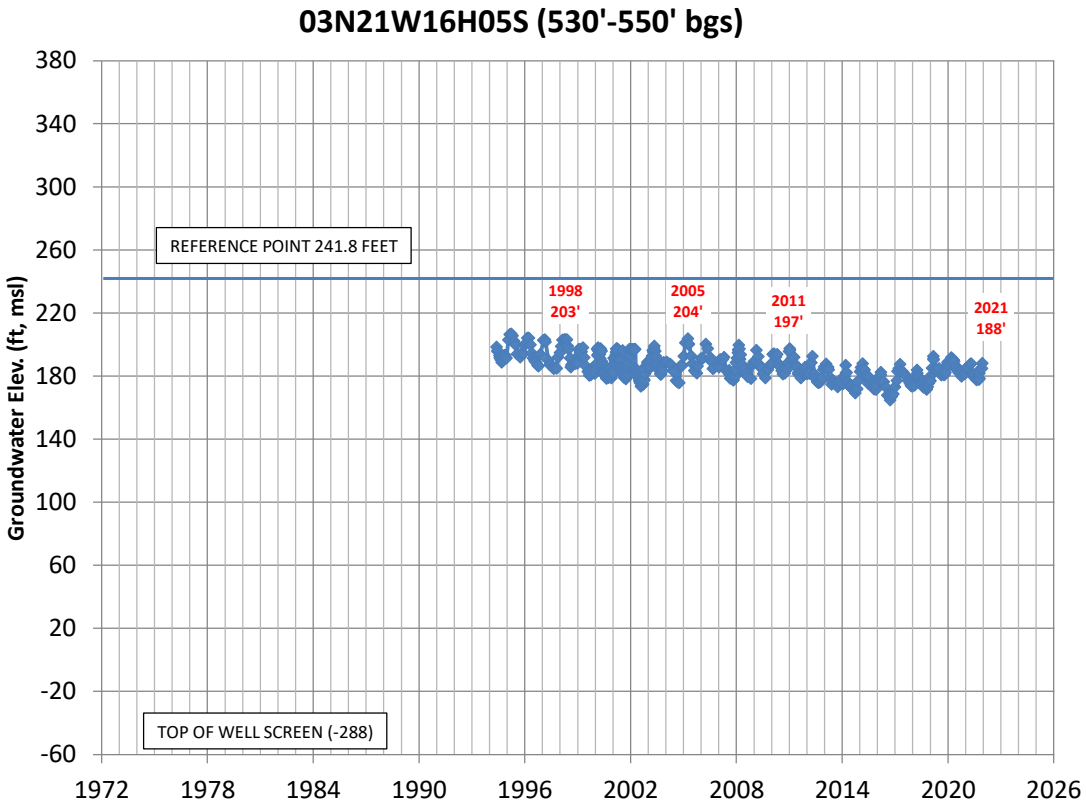

03N21W16A03S (370' - 800' bgs)
Groundwater Elev. (ft, msl)
230
220
210
200
190
180
170
160
150
1996
2001
2008
2013
2020
2025
RP = 262.9
2005
207'
2011
198'
2021
191'

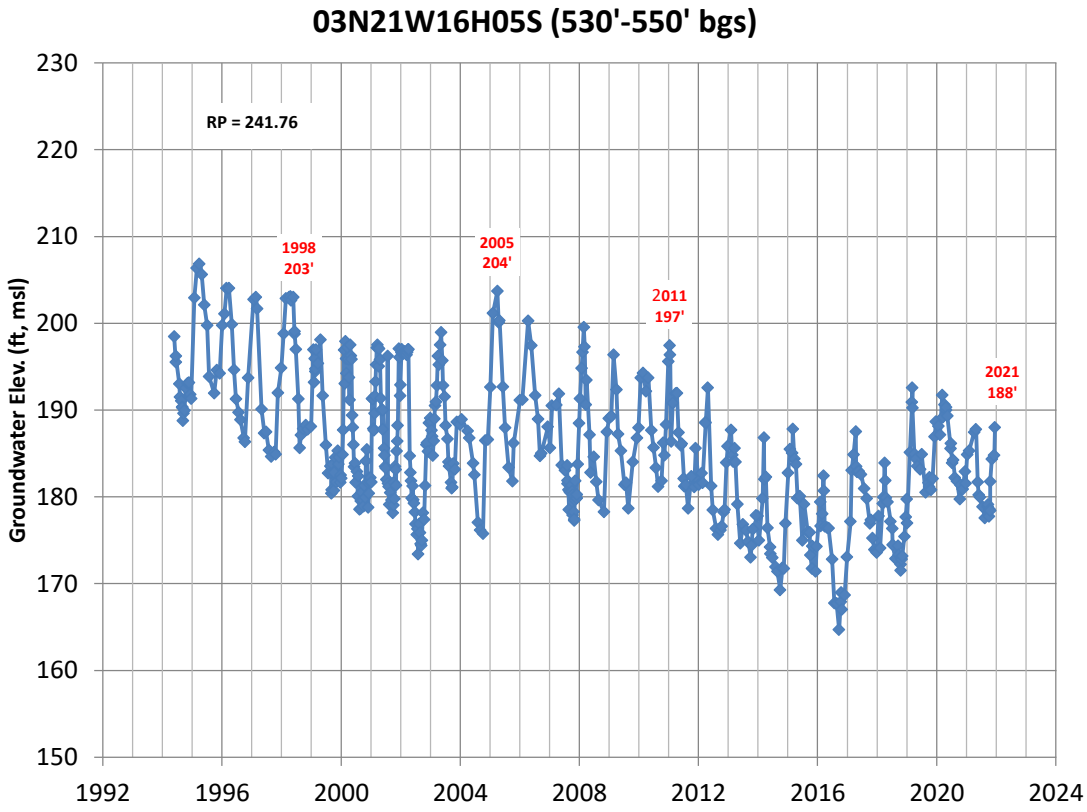
Intentionally Left Blank

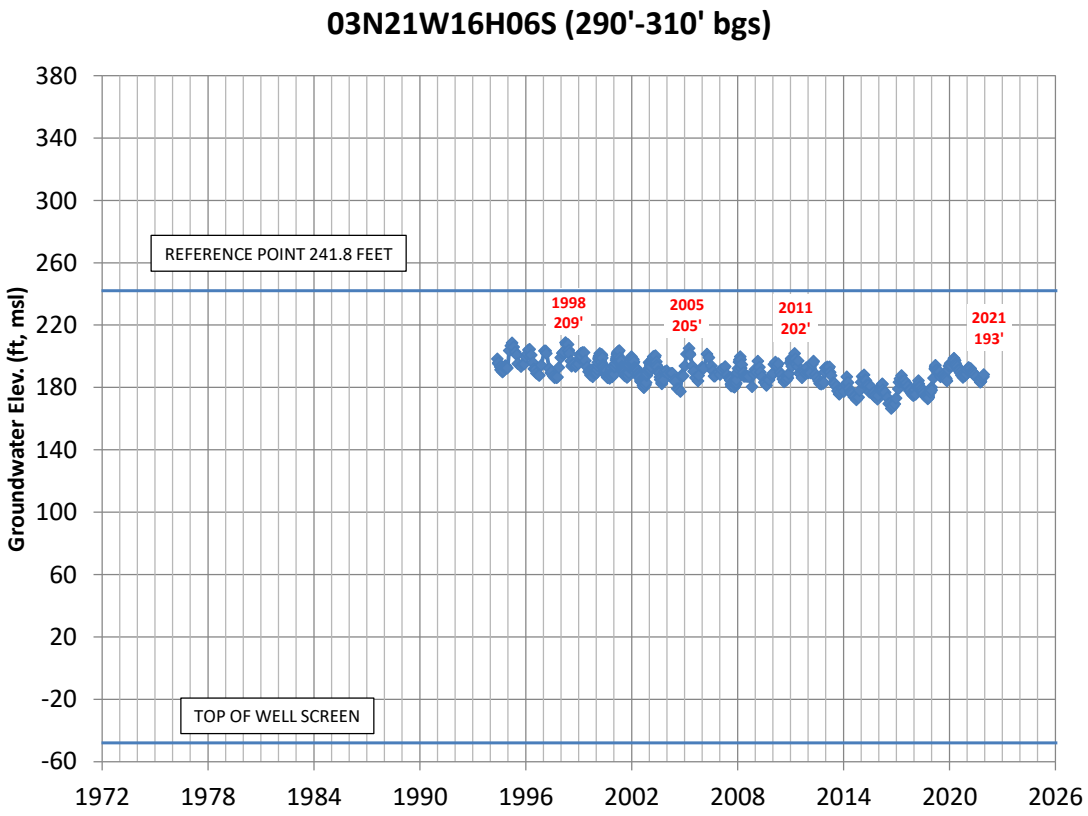


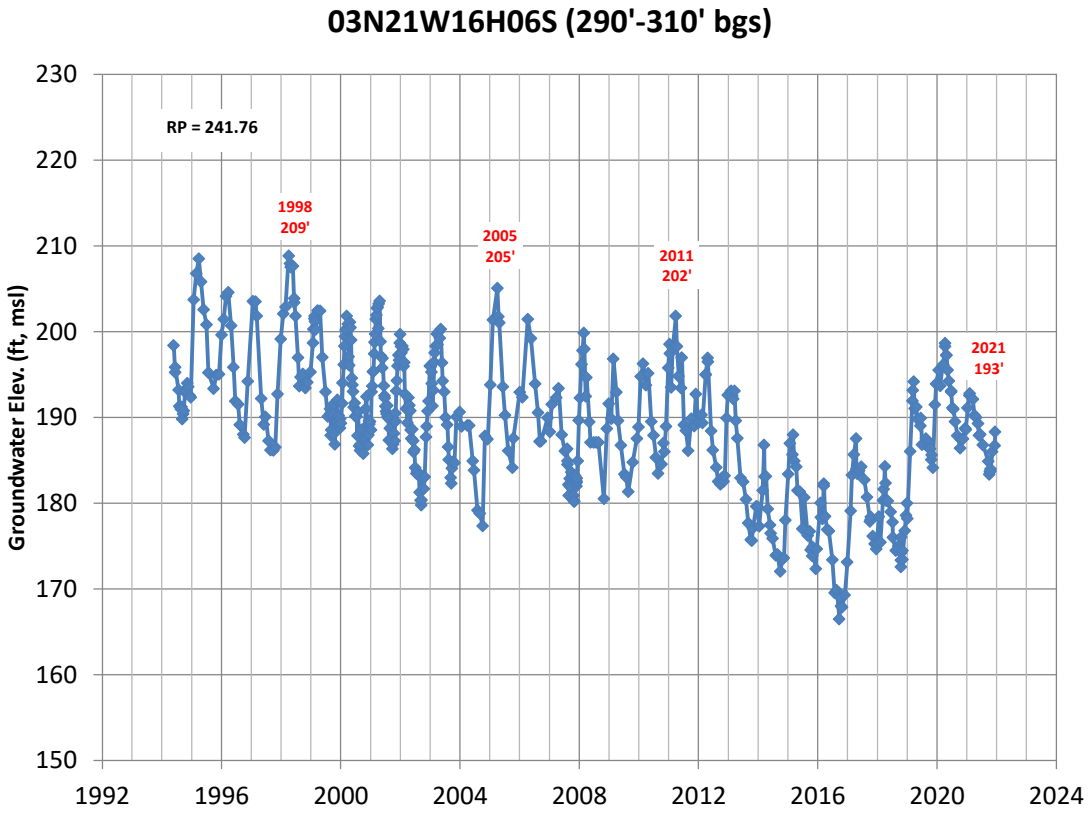
Intentionally Left Blank

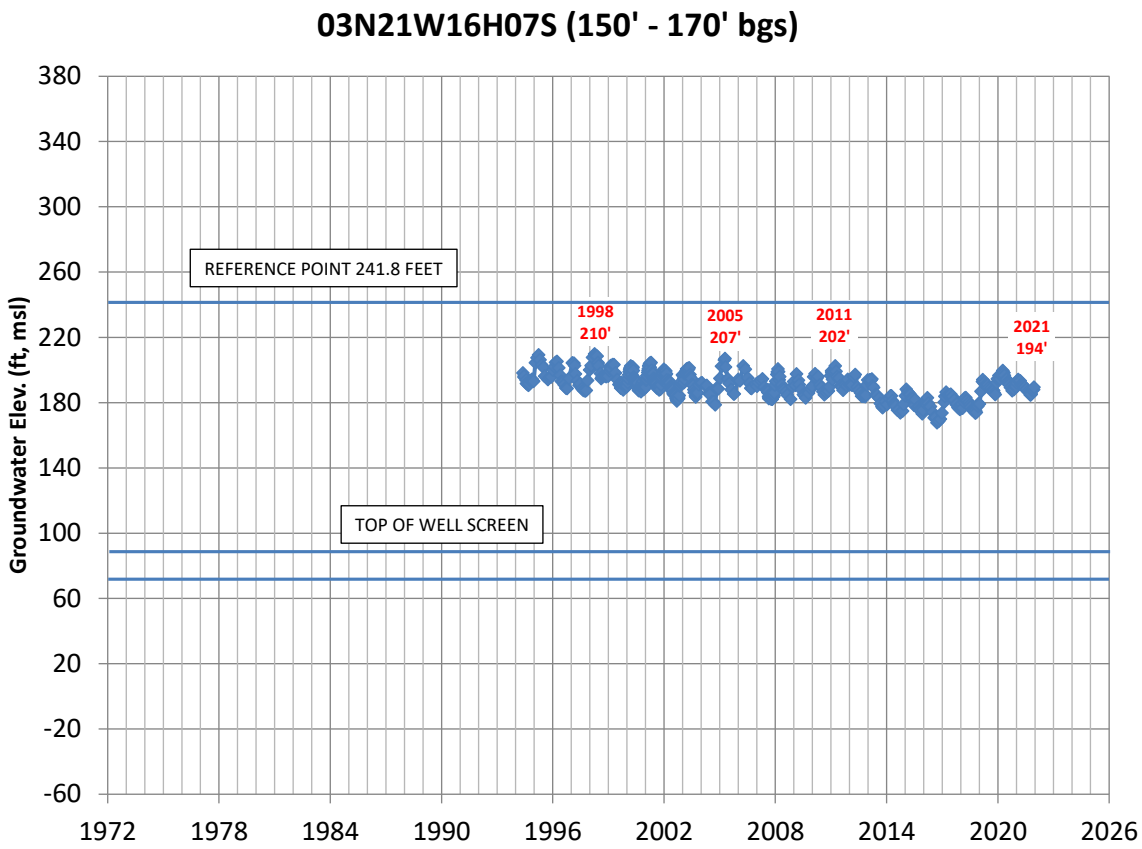


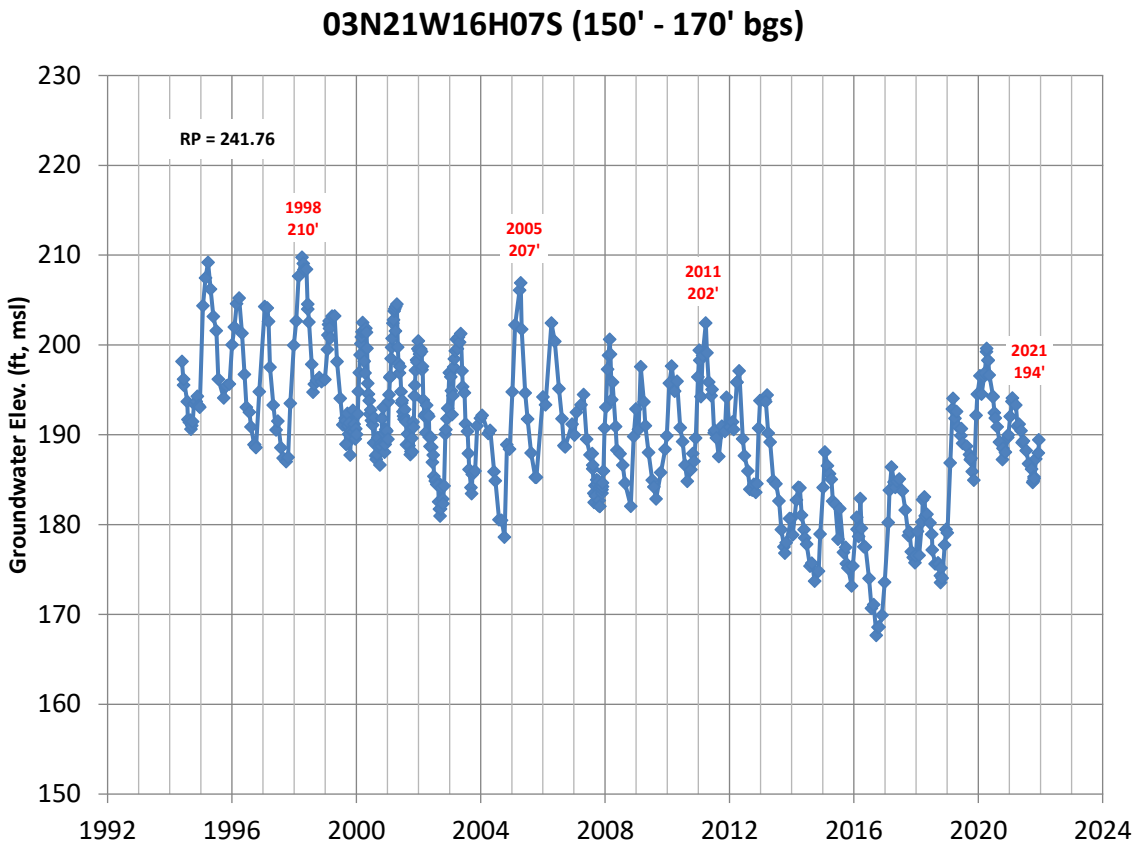

03N21W16H05S (530'-550' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 241.8 FEET
TOP OF WELL SCREEN (-288)
1998
203'
2005
204'
2011
197'
2021
188'

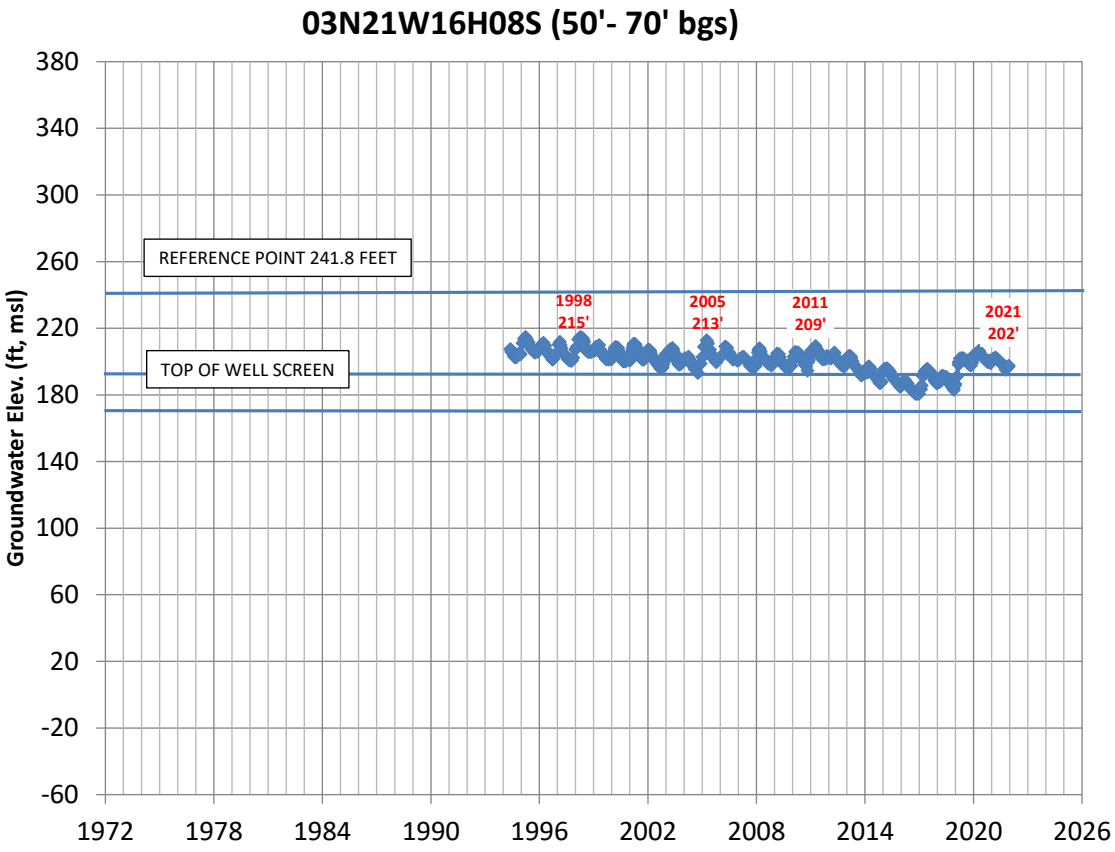

03N21W16H05S (530'-550' bgs)
Groundwater Elev. (ft, msl)
230
220
210
200
190
180
170
160
150
1992
1996
2000
2004
2008
2012
2016
2020
2024
RP = 241.76
1998
203'
2005
204'
2011
197'
2021
188'

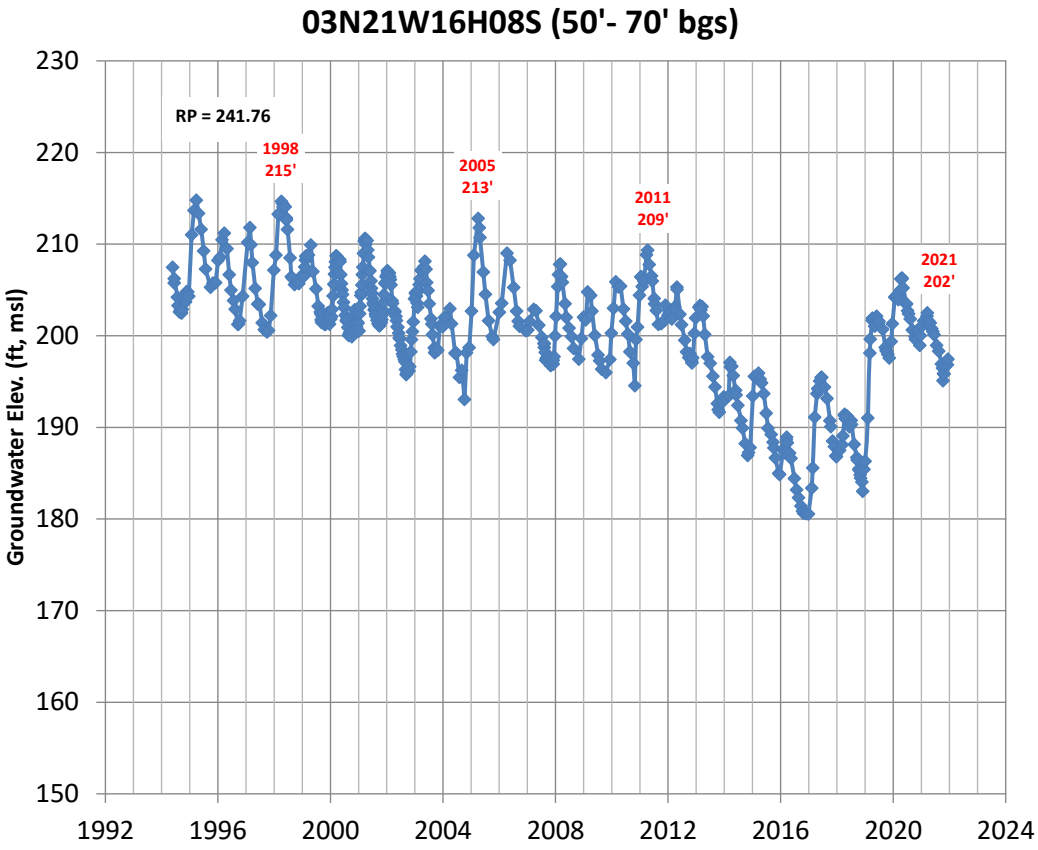

03N21W16H06S (290'-310' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 241.8 FEET
TOP OF WELL SCREEN
1998
209'
2005
205'
2011
202'
2021
193'

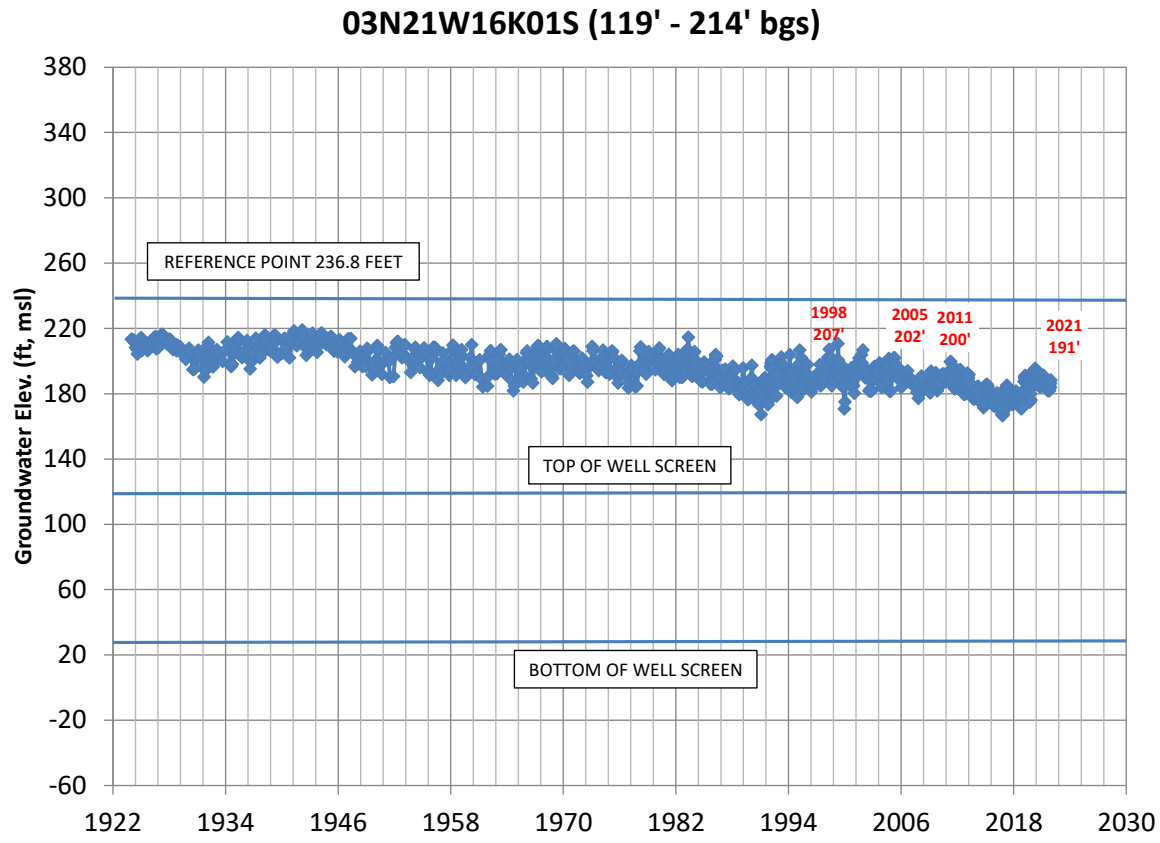

03N21W16H06S (290'-310' bgs)
Groundwater Elev. (ft, msl)
230
220
210
200
190
180
170
160
150
1992
1996
2000
2004
2008
2012
2016
2020
2024
RP = 241.76
1998
209'
2005
205'
2011
202'
2021
193'

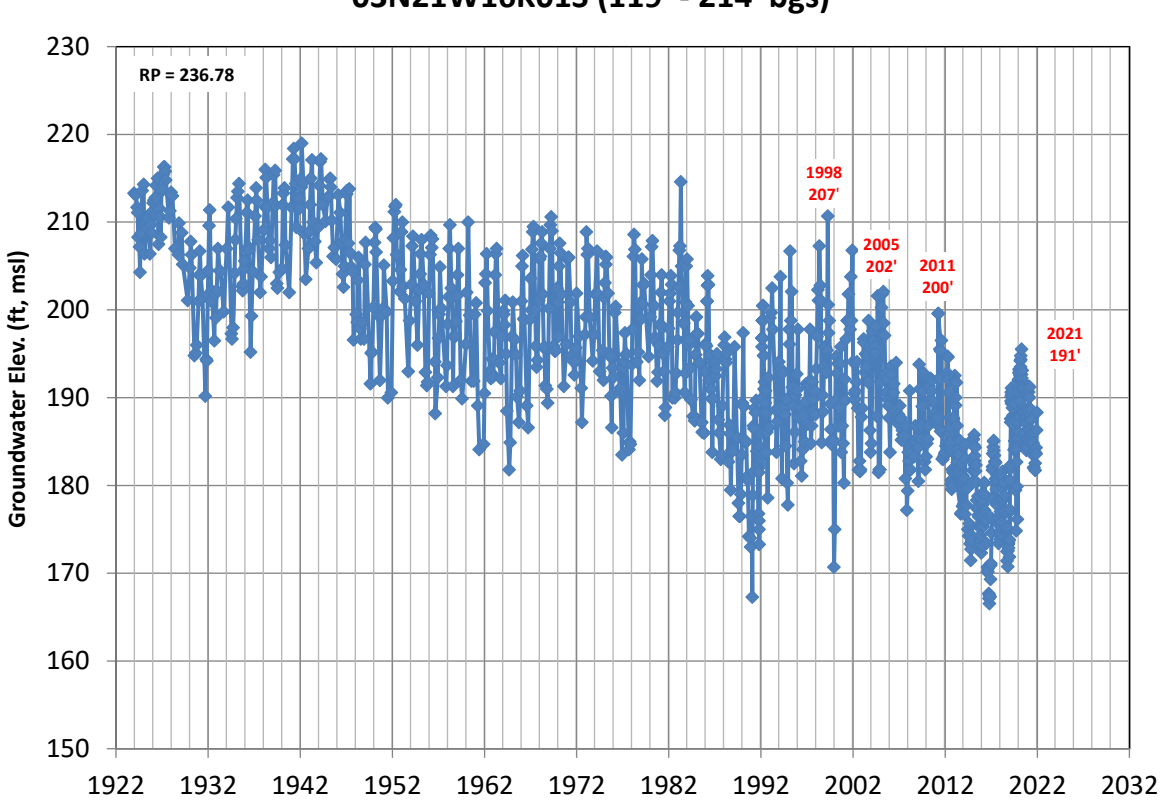

03N21W16H07S (150' - 170' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 241.8 FEET
TOP OF WELL SCREEN
1998
210'
2005
207'
2011
202'
2021
194'


03N21W16H07S (150' - 170' bgs)
Groundwater Elev. (ft, msl)
230
220
210
200
190
180
170
160
150
1992
1996
2000
2004
2008
2012
2016
2020
2024
RP = 241.76
1998
210'
2005
207'
2011
202'
2021
194'

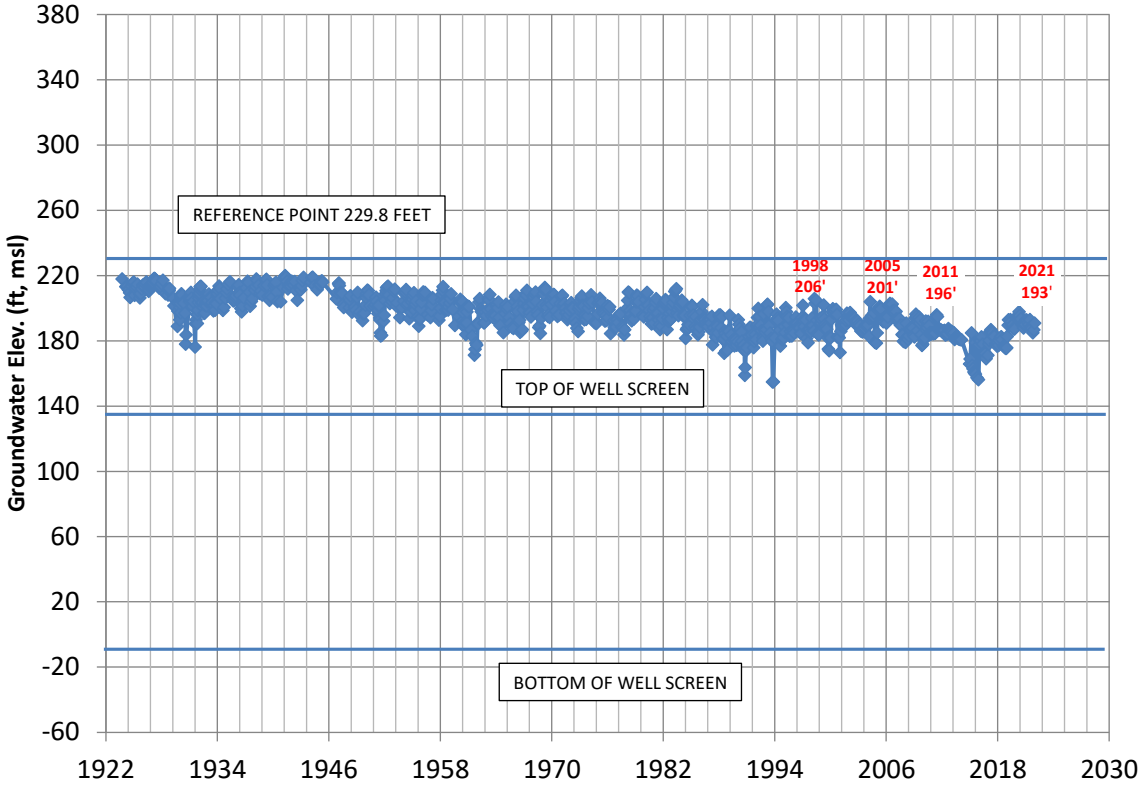

03N21W16H08S (50'- 70' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 241.8 FEET
TOP OF WELL SCREEN
1998
215'
2005
213'
2011
209'
2021
202'


03N21W16H08S (50'- 70' bgs)
Groundwater Elev. (ft, msl)
230
220
210
200
190
180
170
160
150
1992
1996
2000
2004
2008
2012
2016
2020
2024
RP = 241.76
1998
215'
2005
213'
2011
209'
2021
202'

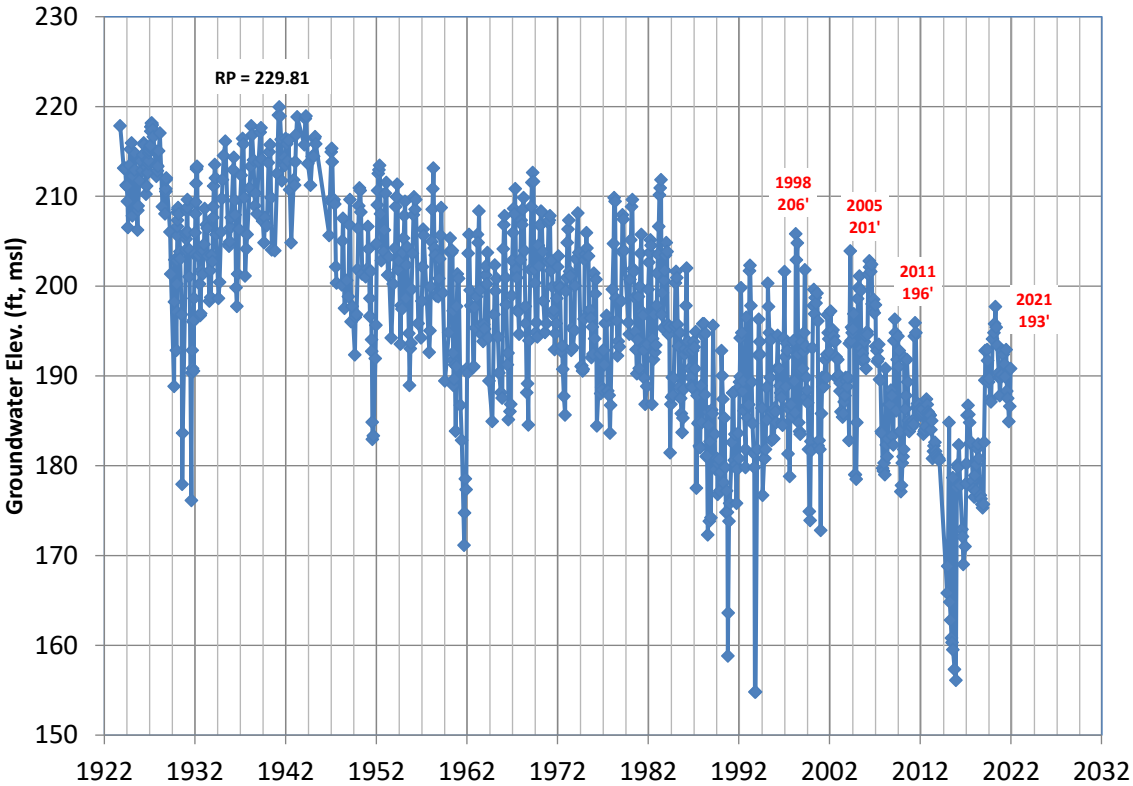

03N21W16K01S (119' - 214' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1922
1934
1946
1958
1970
1982
1994
2006
2018
2030
REFERENCE POINT 236.8 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
1998
207'
2005
202'
2011
200'
2021
191'


03N21W16K01S (119' - 214' bgs)
Groundwater Elev. (ft, msl)
RP = 236.78
230
220
210
200
190
180
170
160
150
1922
1932
1942
1952
1962
1972
1982
1992
2002
2012
2022
2032
1998
207'
2005
202'
2011
200'
2021
191'

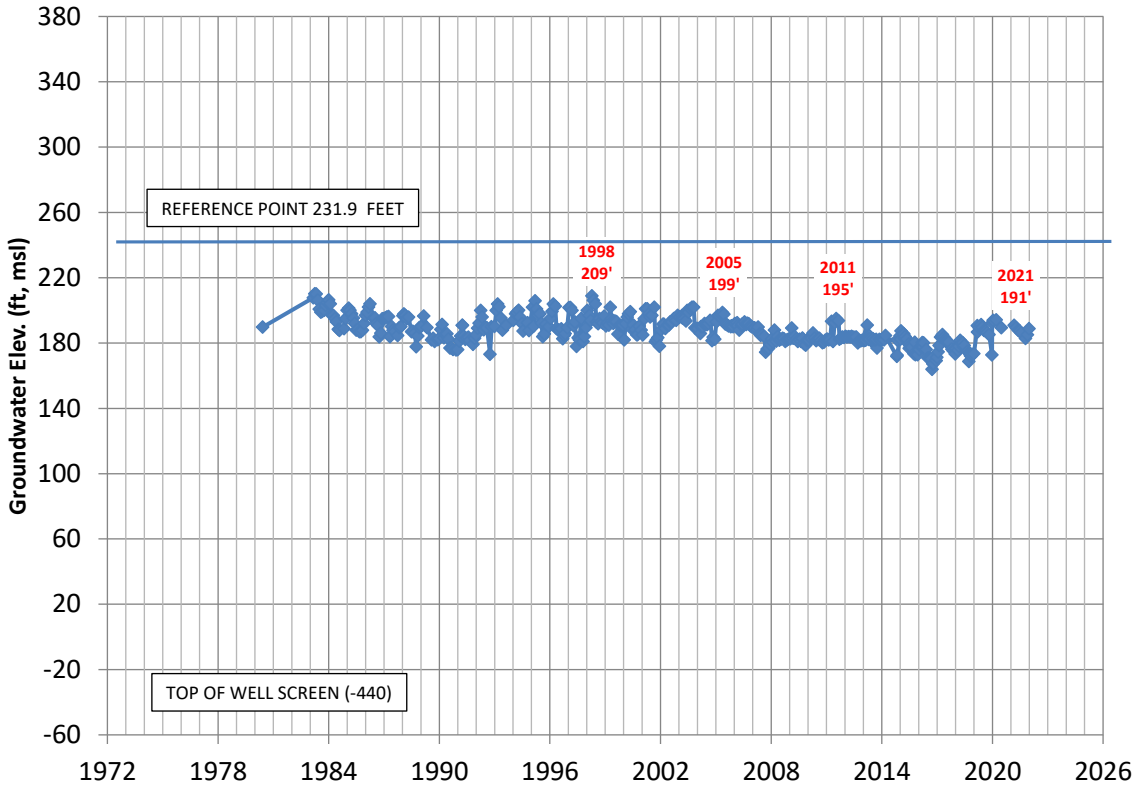
03N21W16K02S (92' - 243' bgs)



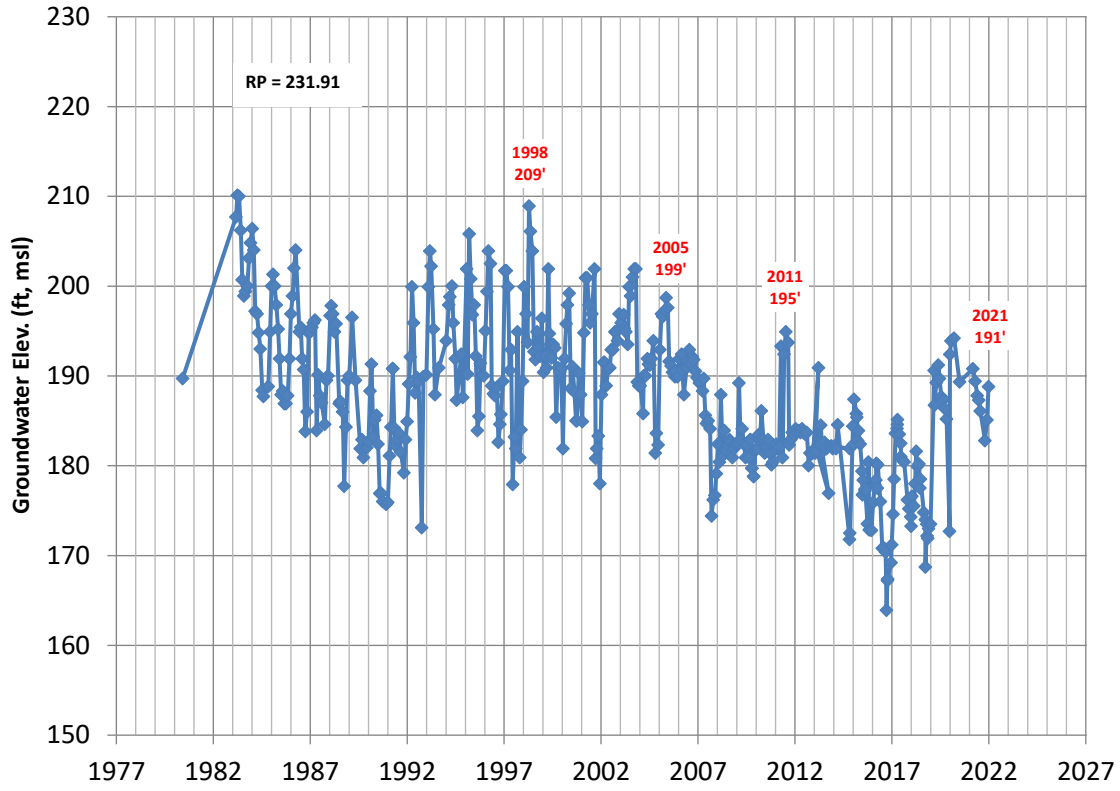
03N21W16K02S (92' - 243' bgs)

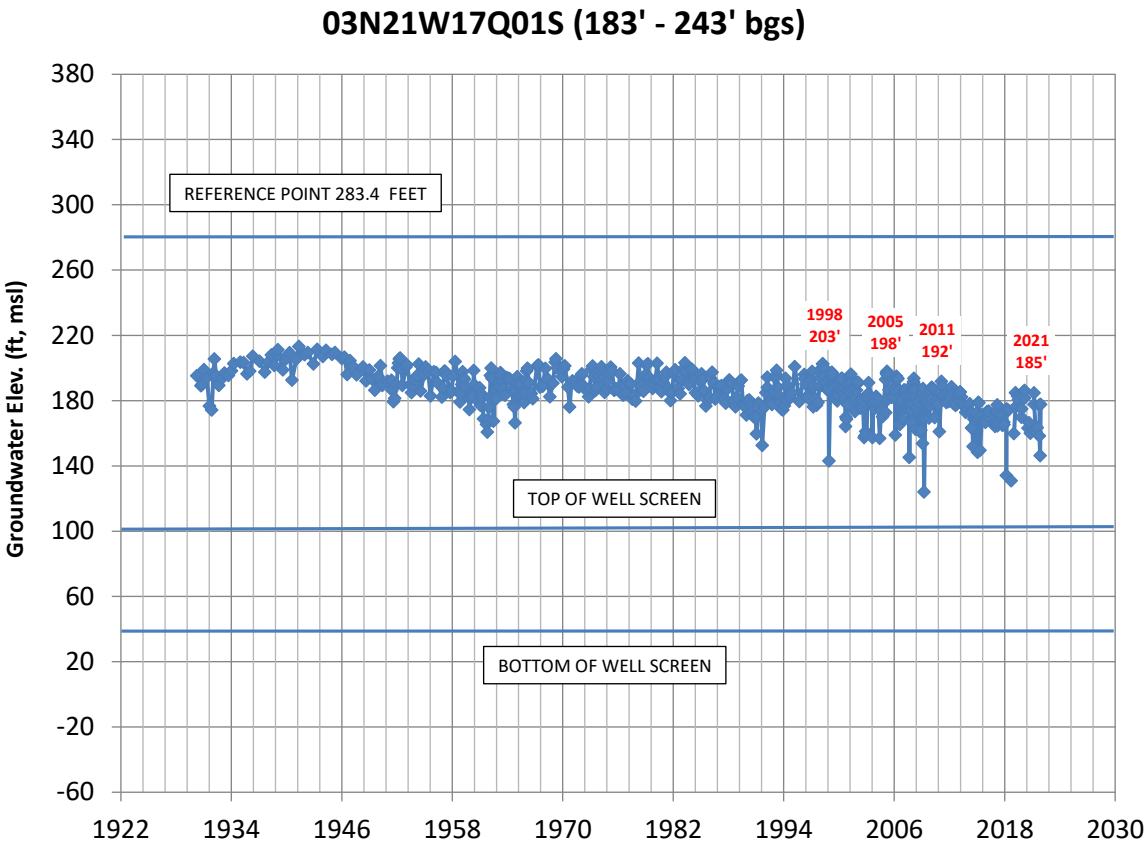


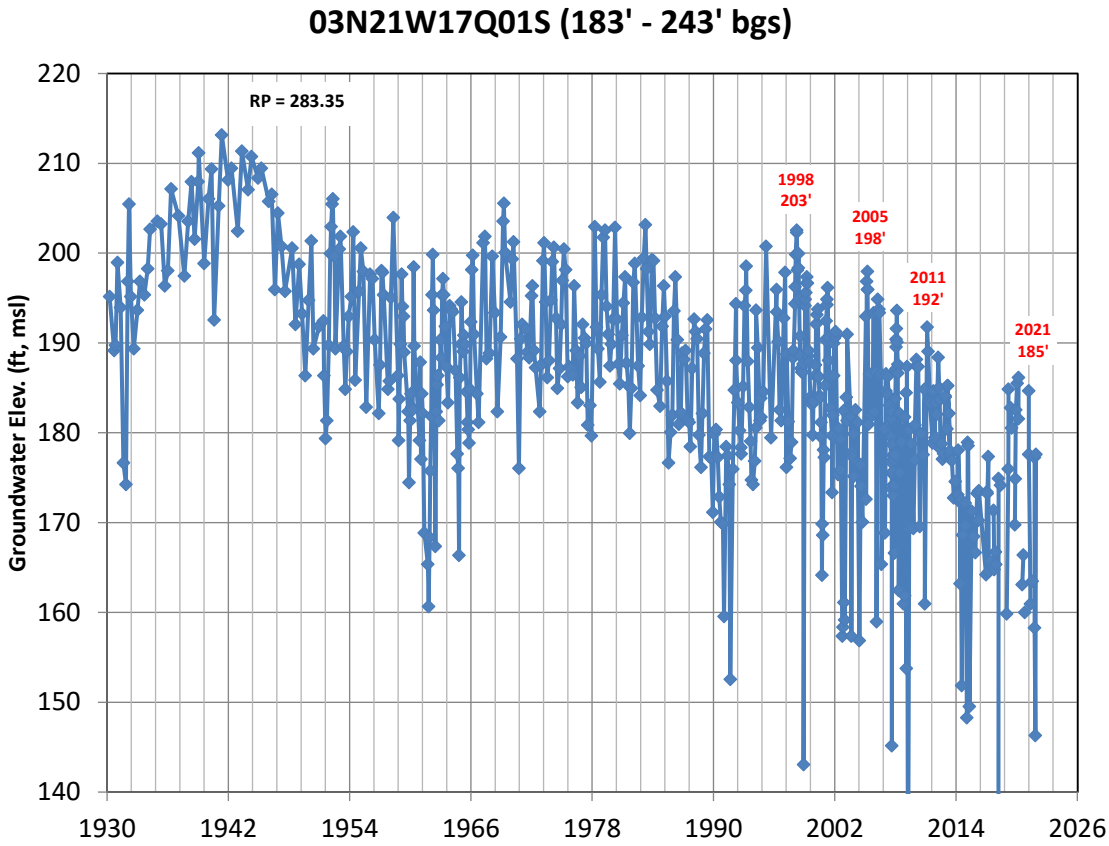
03N21W16K03S (672' - 760' bgs)



03N21W16K03S (672' - 760' bgs)




03N21W17Q01S (183' - 243' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1922
1934
1946
1958
1970
1982
1994
2006
2018
2030
REFERENCE POINT 283.4 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
1998
203'
2005
198'
2011
192'
2021
185'


03N21W17Q01S (183' - 243' bgs)
Groundwater Elev. (ft, msl)
220
210
200
190
180
170
160
150
140
1930
1942
1954
1966
1978
1990
2002
2014
2026
RP = 283.35
1998
203'
2005
198'
2011
192'
2021
185'

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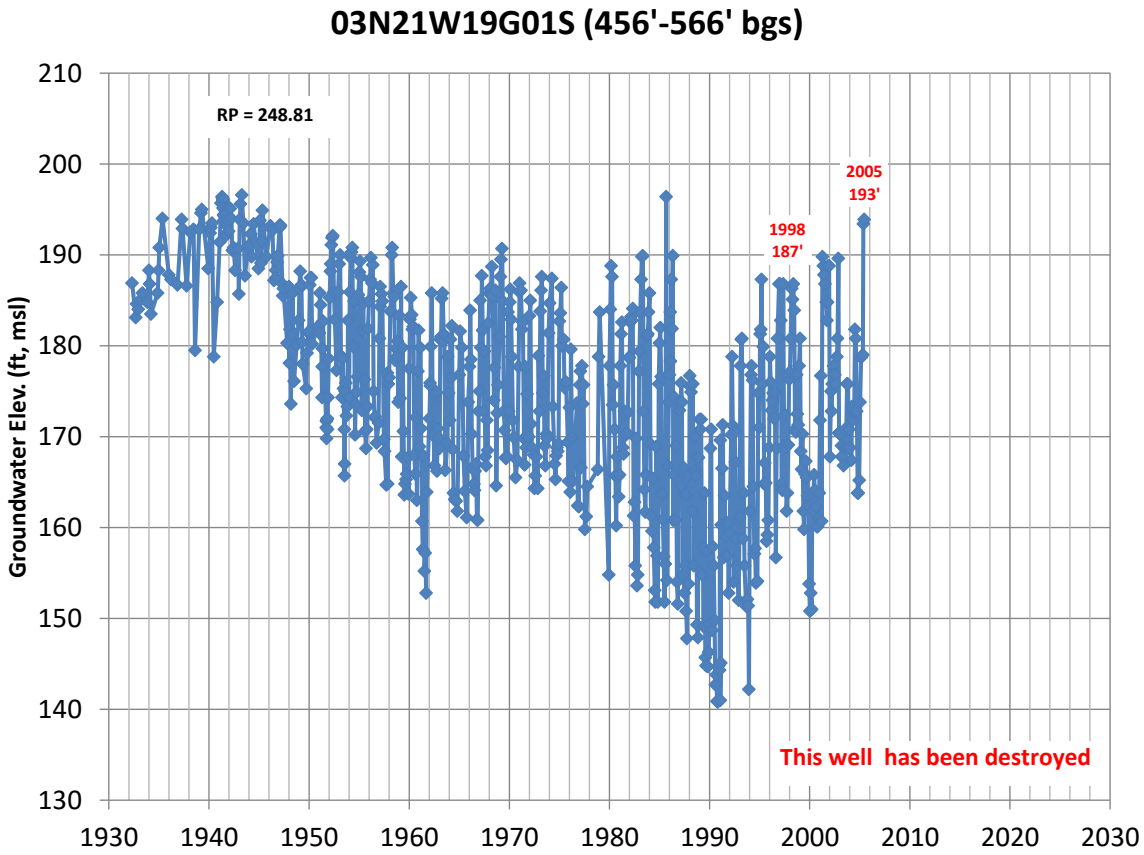
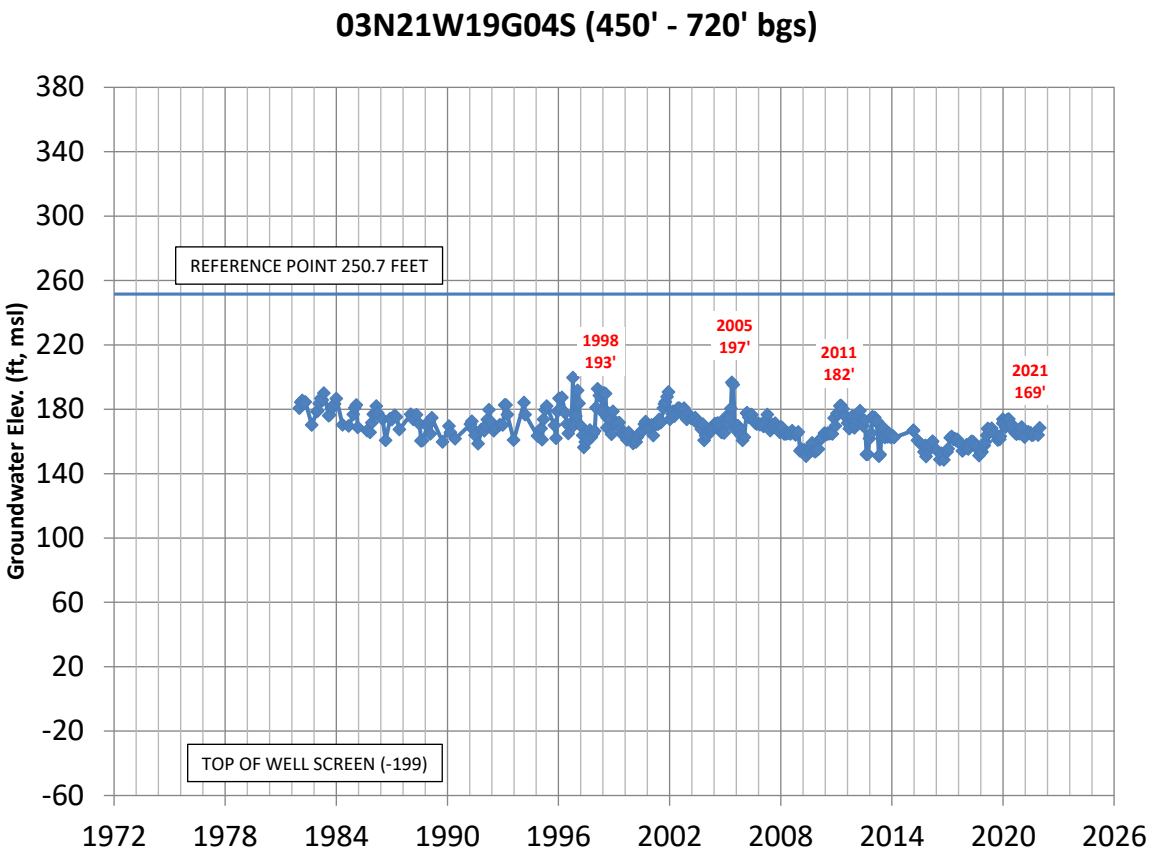
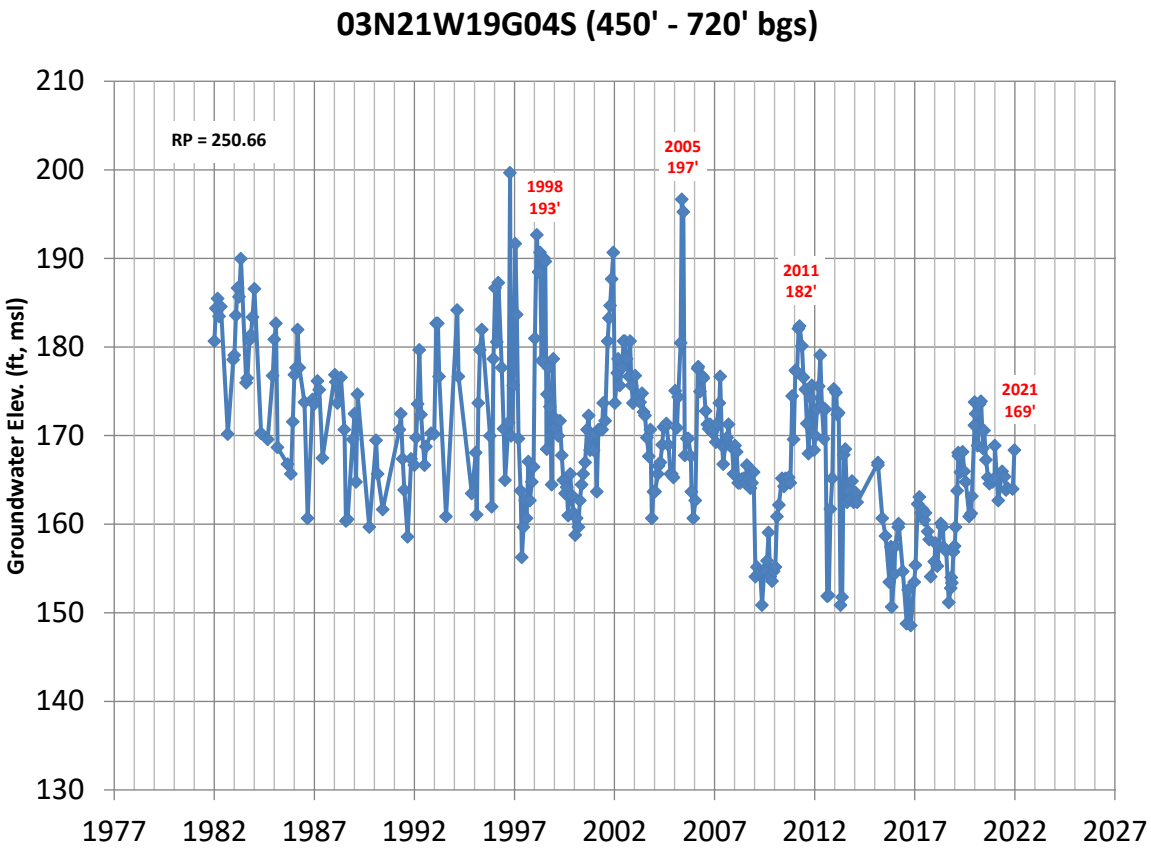
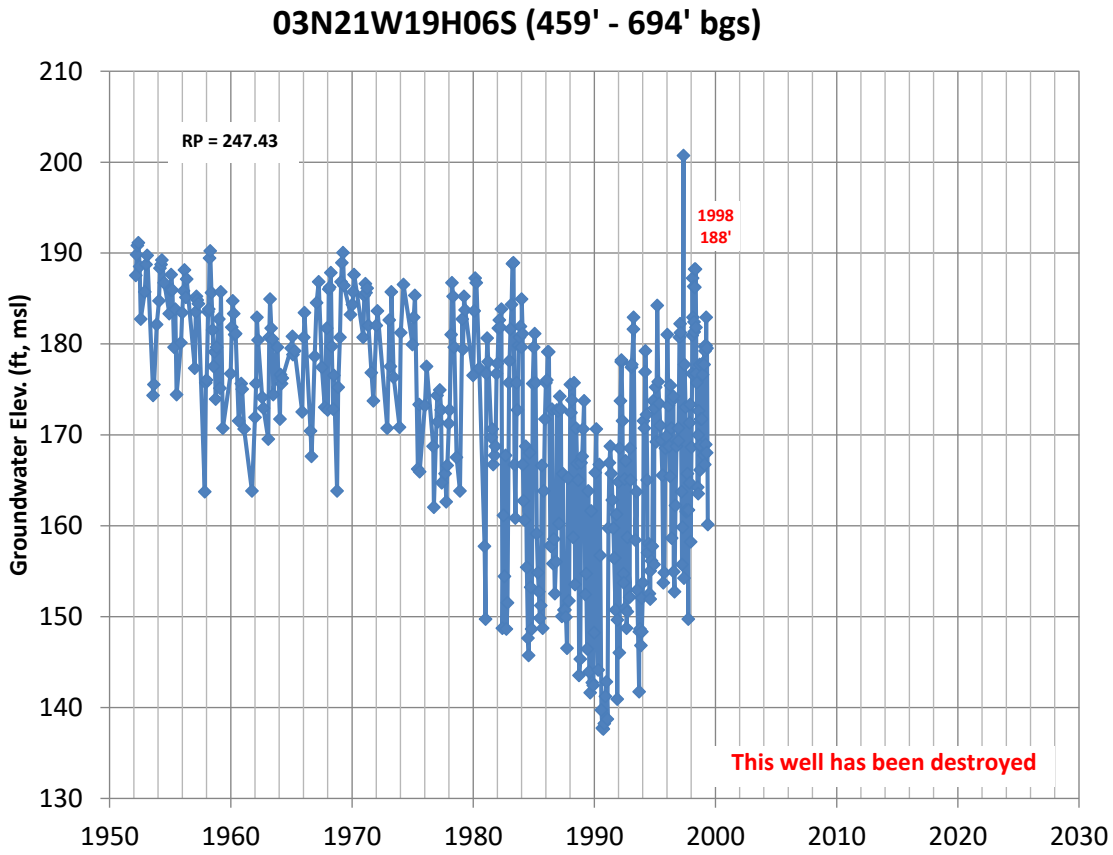
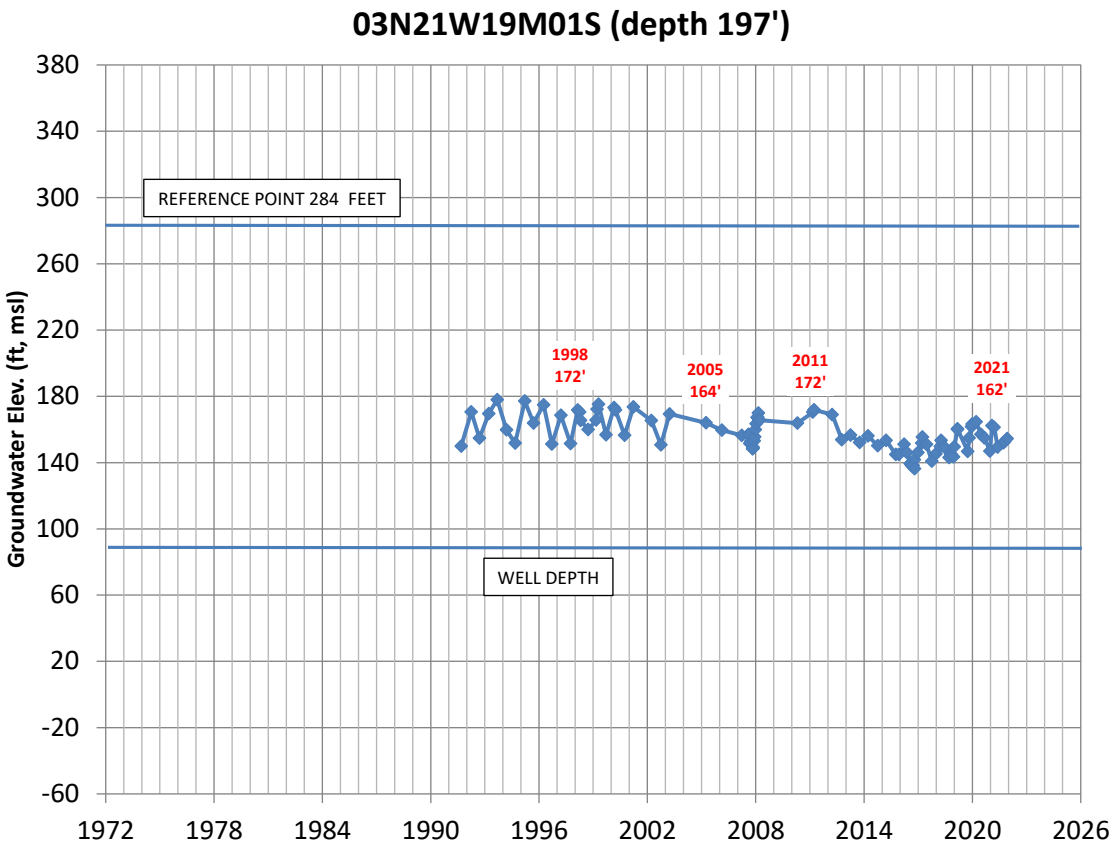


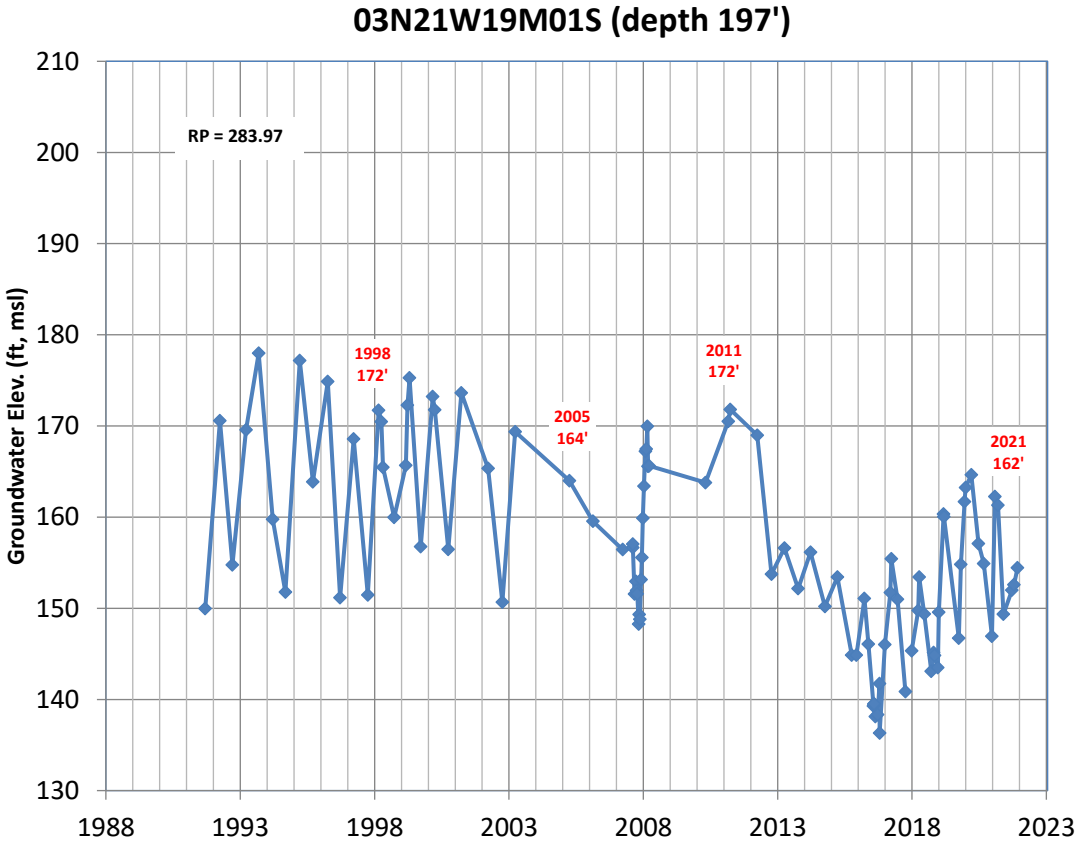

03N21W19G04S (450' - 720' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 250.7 FEET
TOP OF WELL SCREEN (-199)
1998
193'
2005
197'
2011
182'
2021
169'

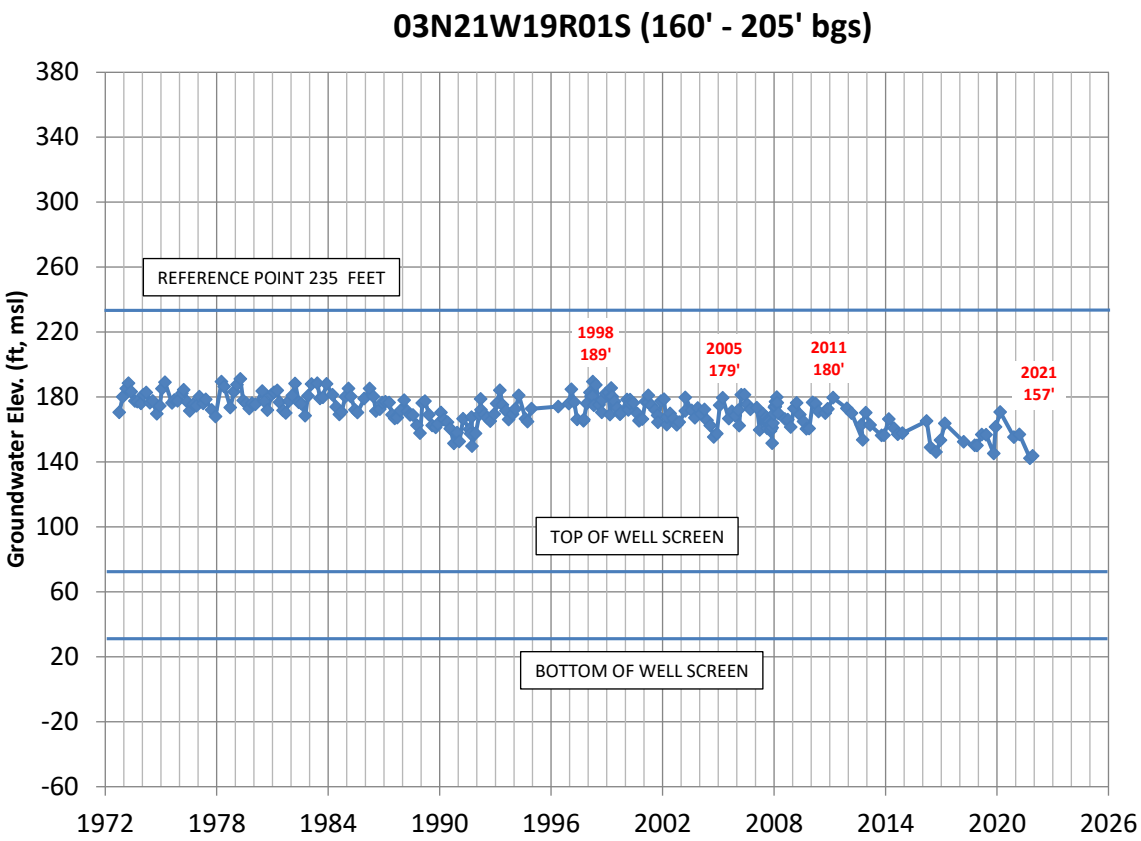

03N21W19G04S (450' - 720' bgs)
Groundwater Elev. (ft, msl)
210
200
190
180
170
160
150
140
130
1977
1982
1987
1992
1997
2002
2007
2012
2017
2022
2027
RP = 250.66
1998
193'
2005
197'
2011
182'
2021
169'

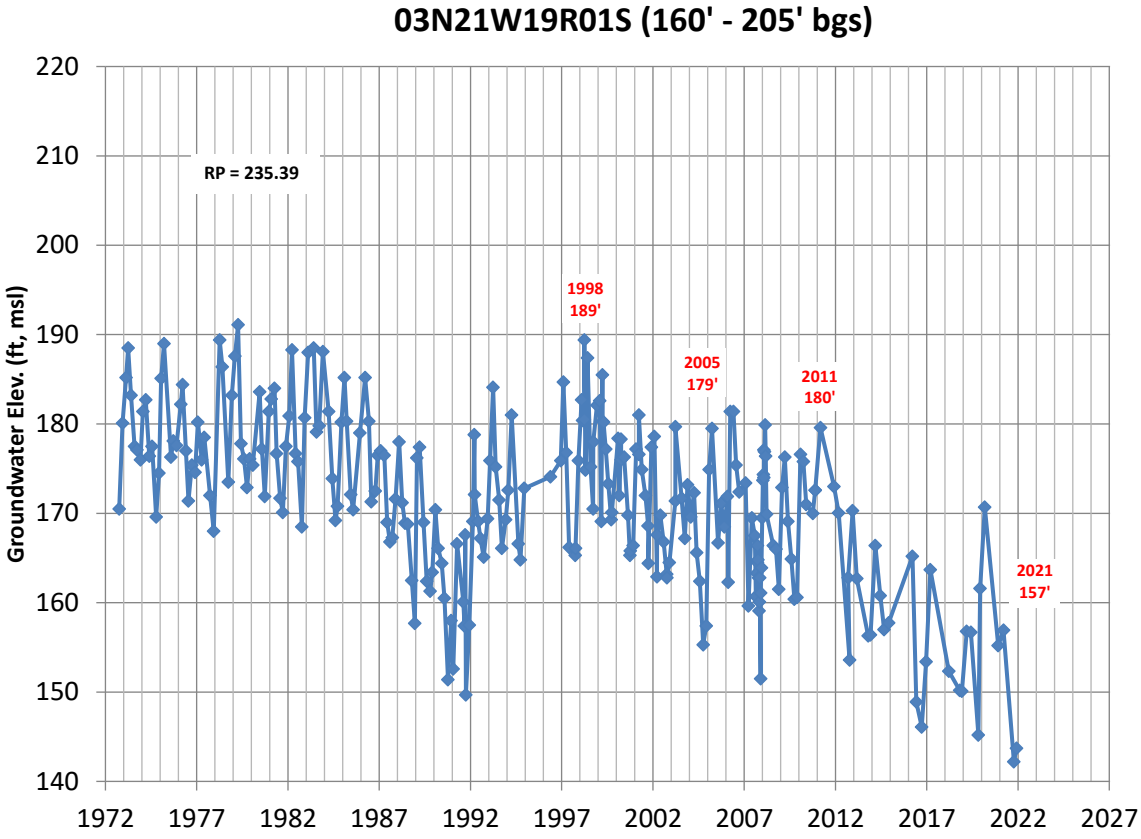
Intentionally Left Blank

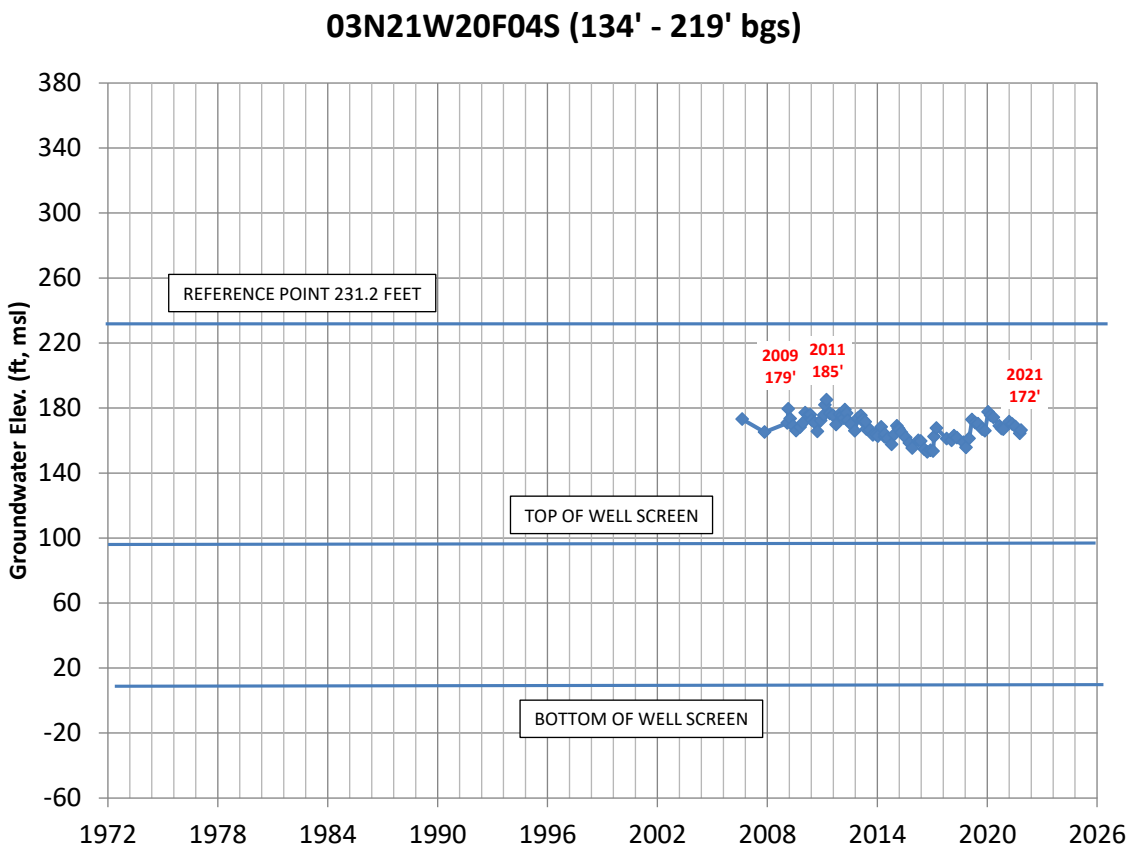


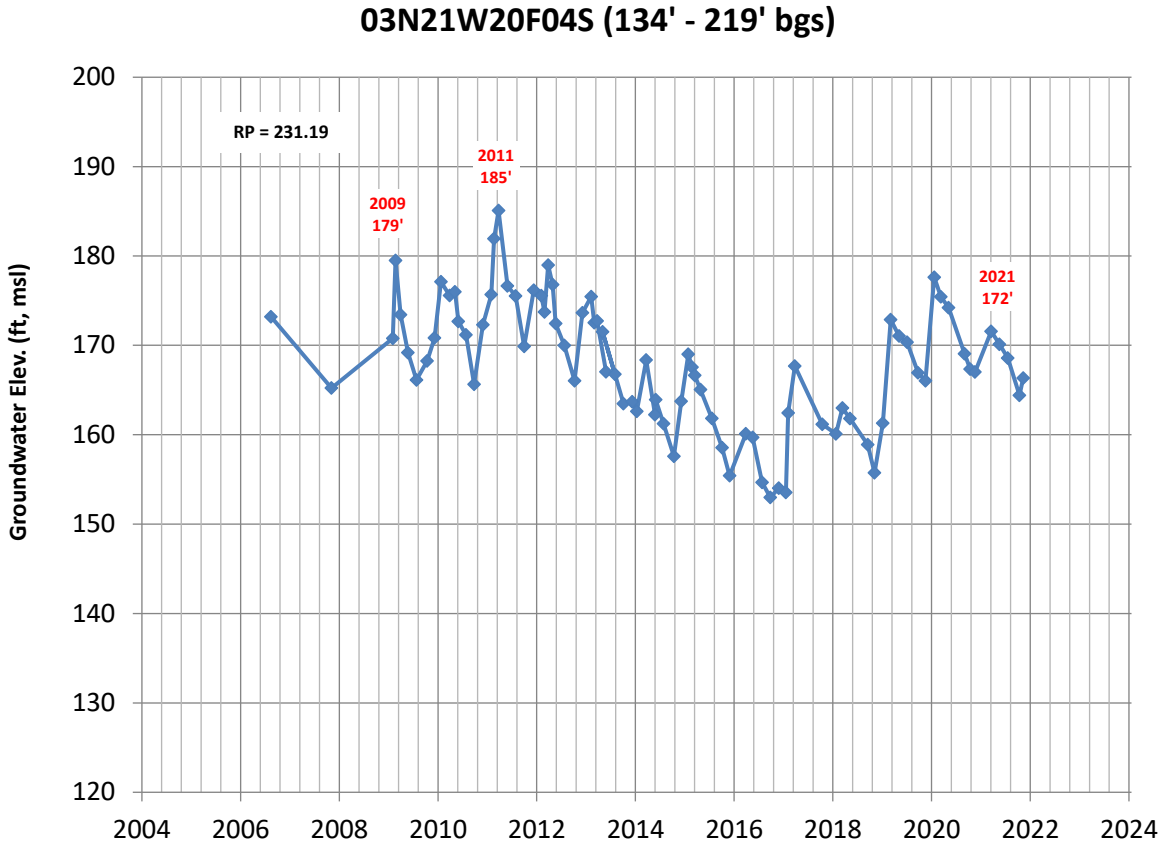

03N21W19M01S (depth 197')
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 284 FEET
WELL DEPTH
1998
172'
2005
164'
2011
172'
2021
162'

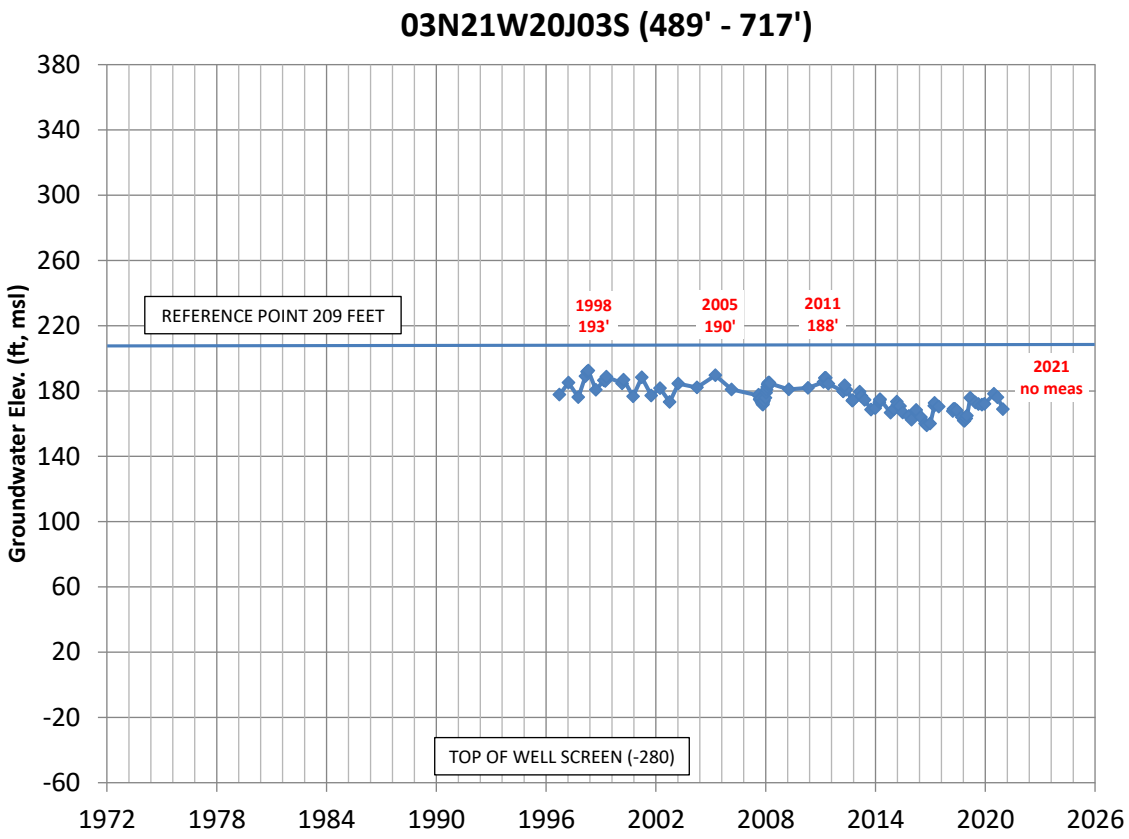

03N21W19M01S (depth 197')
Groundwater Elev. (ft, msl)
210
200
190
180
170
160
150
140
130
1988
1993
1998
2003
2008
2013
2018
2023
RP = 283.97
1998
172'
2005
164'
2011
172'
2021
162'

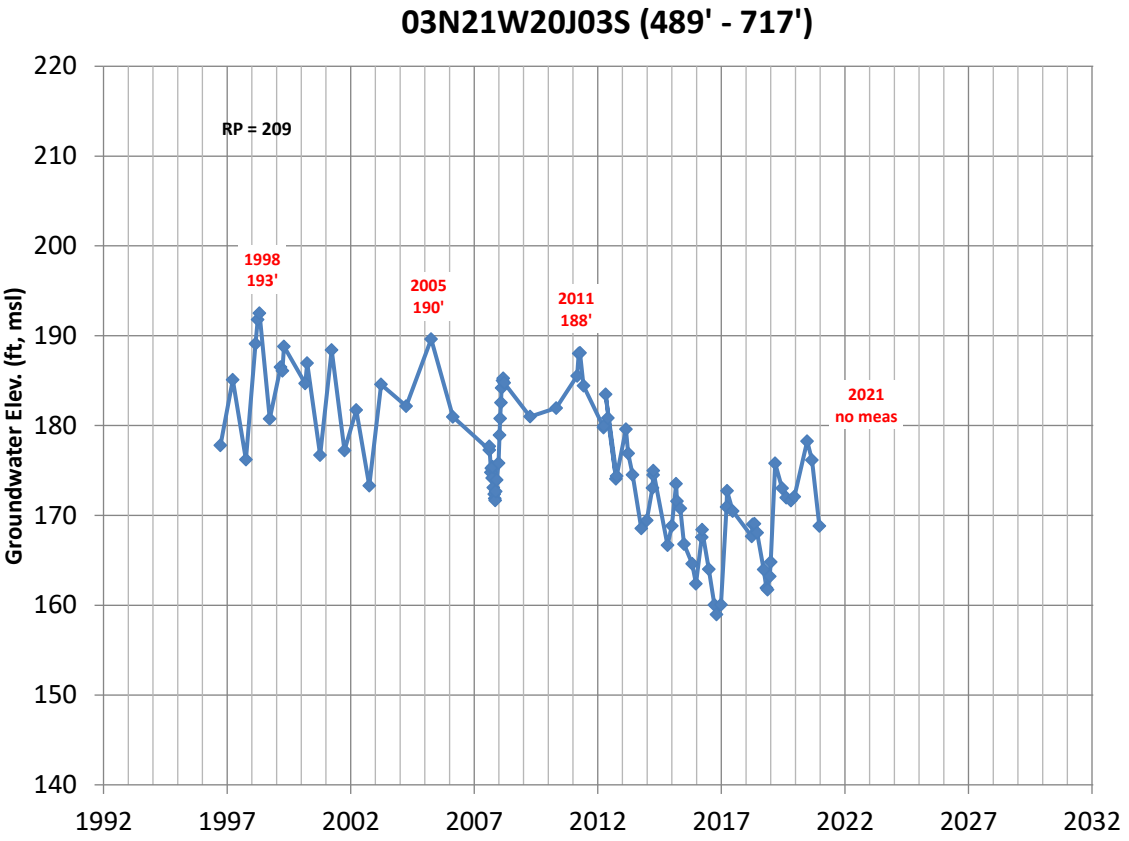

03N21W19R01S (160' - 205' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 235 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
1998
189'
2005
179'
2011
180'
2021
157'


03N21W19R01S (160' - 205' bgs)
Groundwater Elev. (ft, msl)
220
210
200
190
180
170
160
150
140
1972
1977
1982
1987
1992
1997
2002
2007
2012
2017
2022
2027
RP = 235.39
1998
189'
2005
179'
2011
180'
2021
157'


03N21W20F04S (134' - 219' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 231.2 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
2009
179'
2011
185'
2021
172'


03N21W20F04S (134' - 219' bgs)
Groundwater Elev. (ft, msl)
200
190
180
170
160
150
140
130
120
2004
2006
2008
2010
2012
2014
2016
2018
2020
2022
2024
RP = 231.19
2009
179'
2011
185'
2021
172'


03N21W20J03S (489' - 717')
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 209 FEET
TOP OF WELL SCREEN (-280)
1998
193'
2005
190'
2011
188'
2021
no meas


03N21W20J03S (489' - 717')
Groundwater Elev. (ft, msl)
220
210
200
190
180
170
160
150
140
1992
1997
2002
2007
2012
2017
2022
2027
2032
RP = 209
1998
193'
2005
190'
2011
188'
2021
no meas

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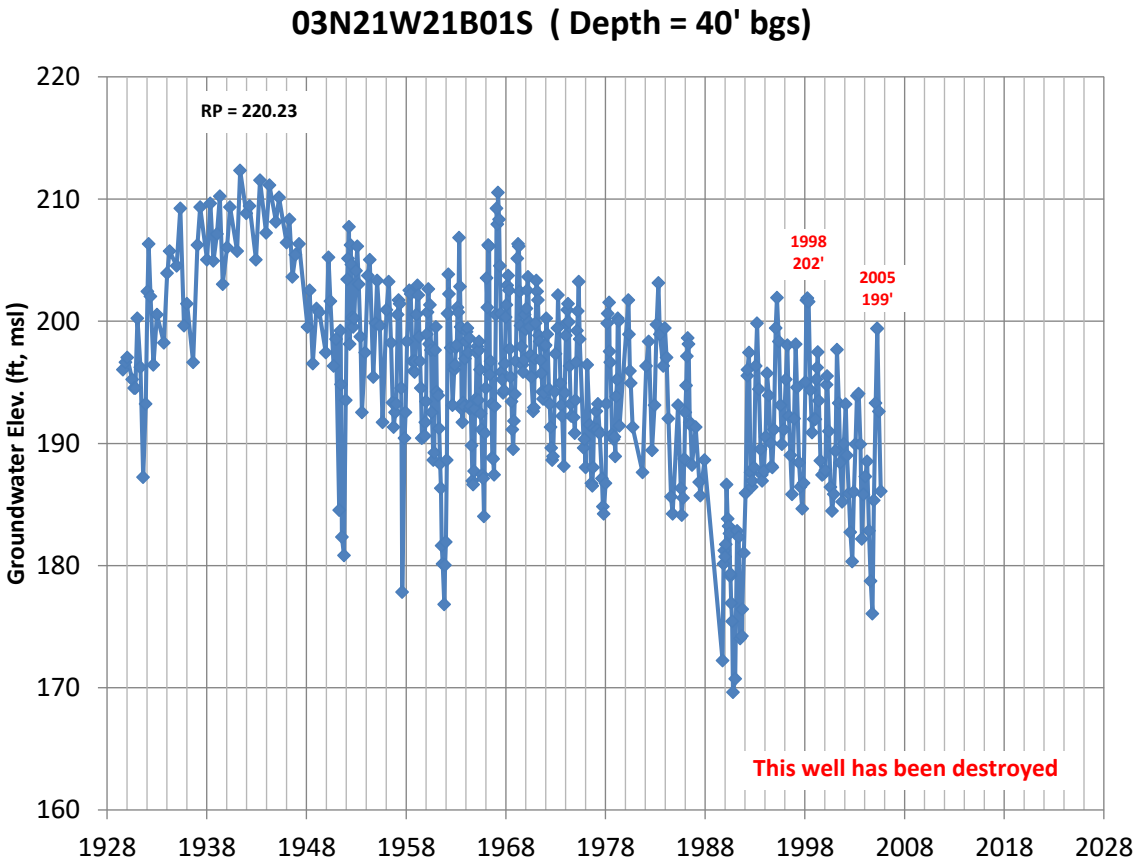

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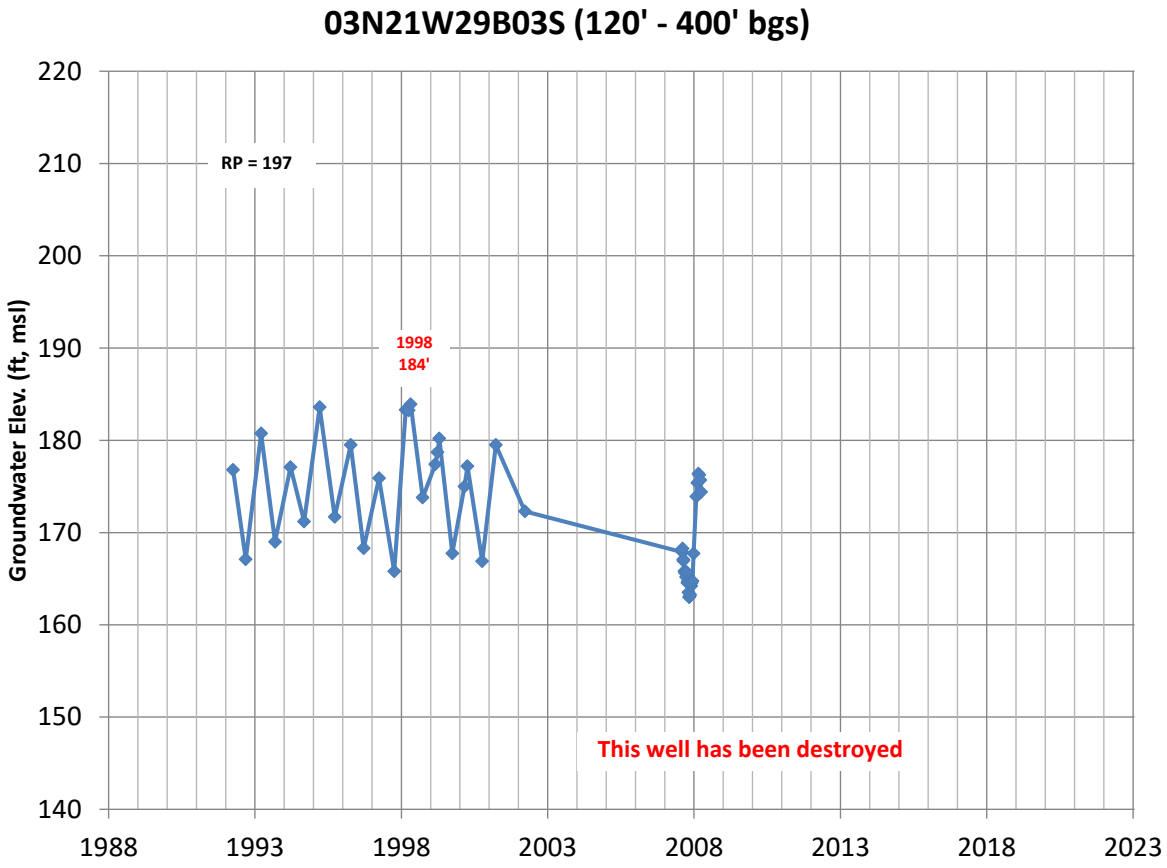
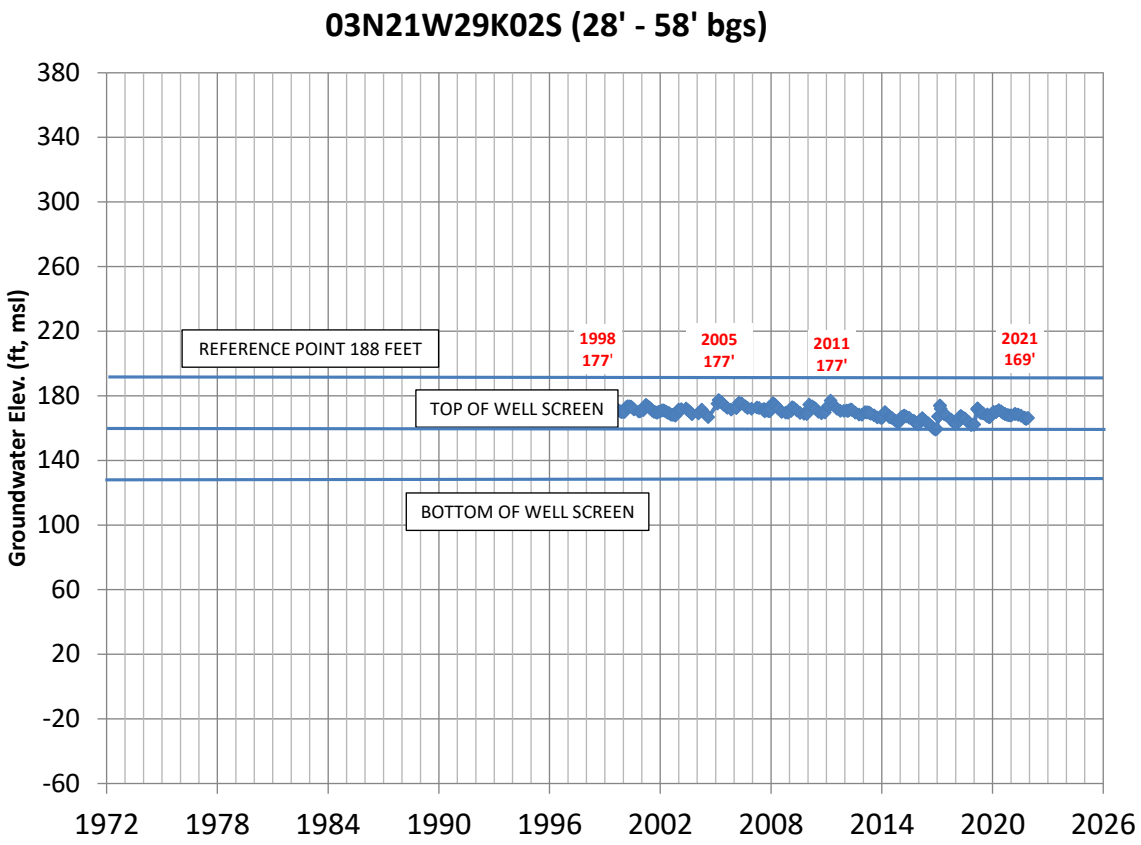
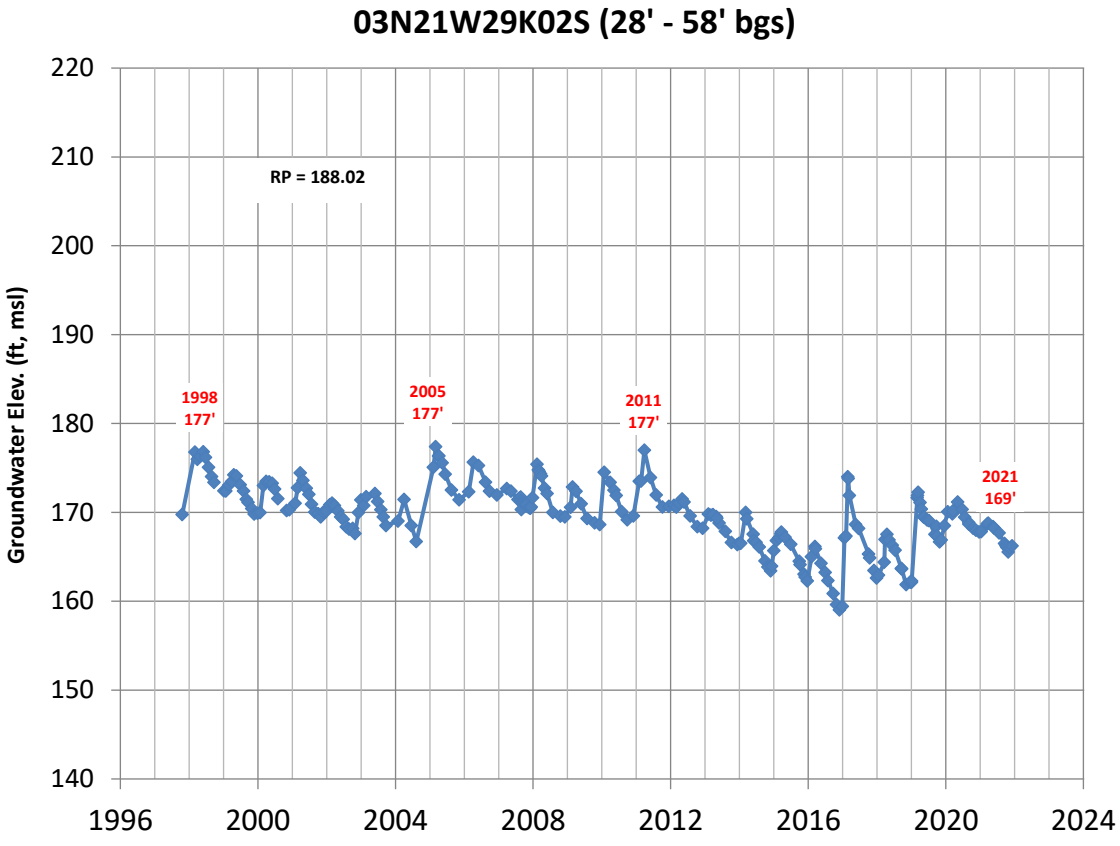
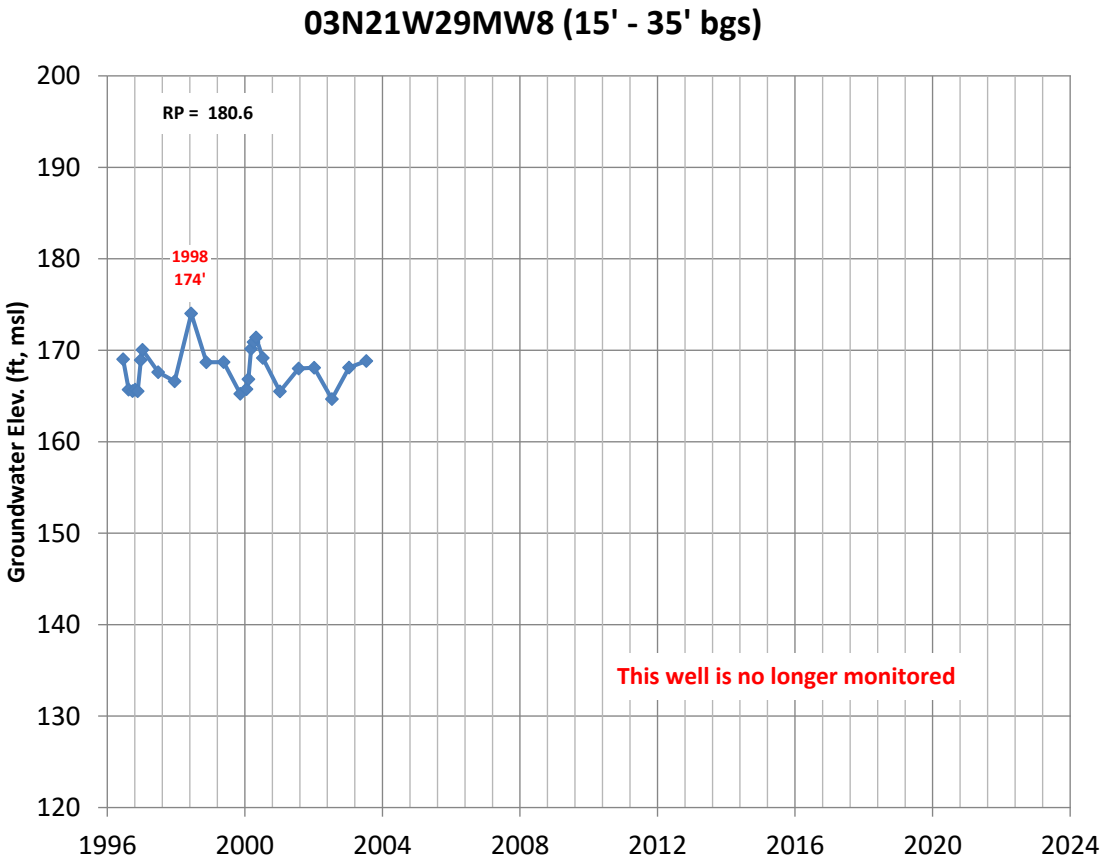



03N21W29K02S (28' - 58' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 188 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
1998
177'
2005
177'
2011
177'
2021
169'


03N21W29K02S (28' - 58' bgs)
Groundwater Elev. (ft, msl)
220
210
200
190
180
170
160
150
140
1996
2000
2004
2008
2012
2016
2020
2024
RP = 188.02
1998
177'
2005
177'
2011
177'
2021
169'

Intentionally Left Blank



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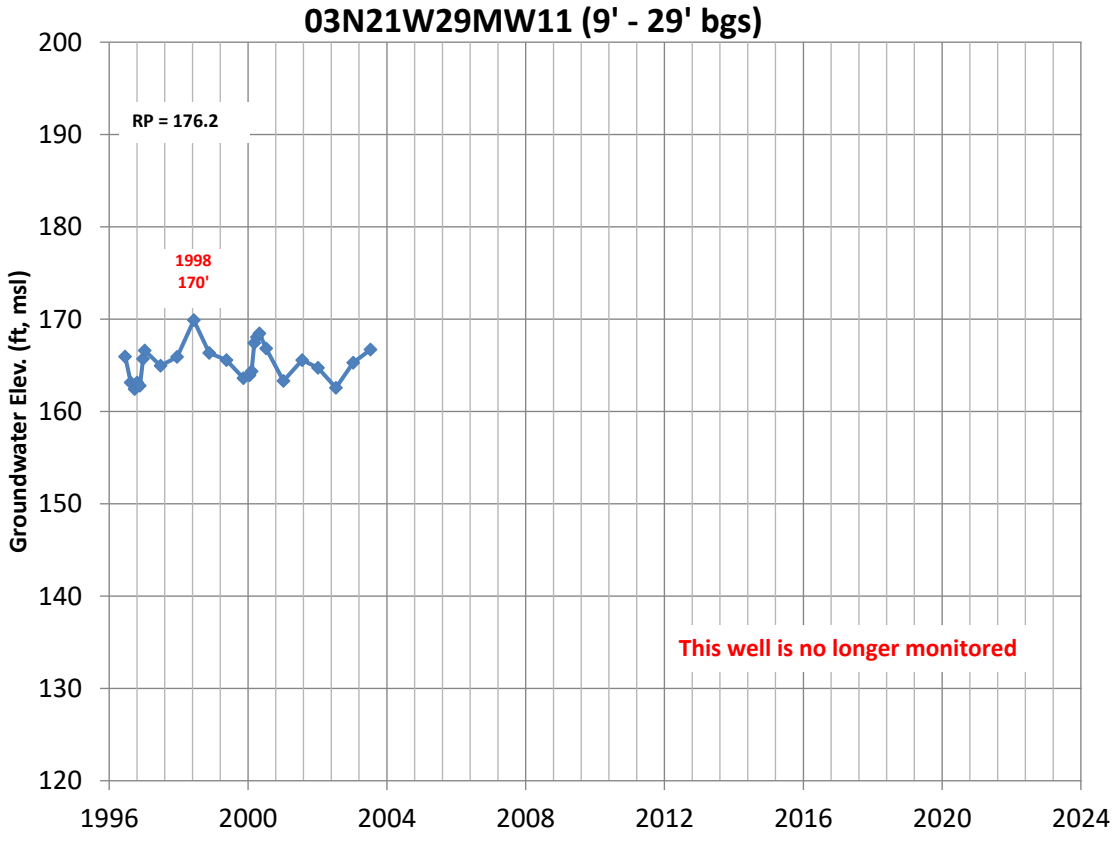

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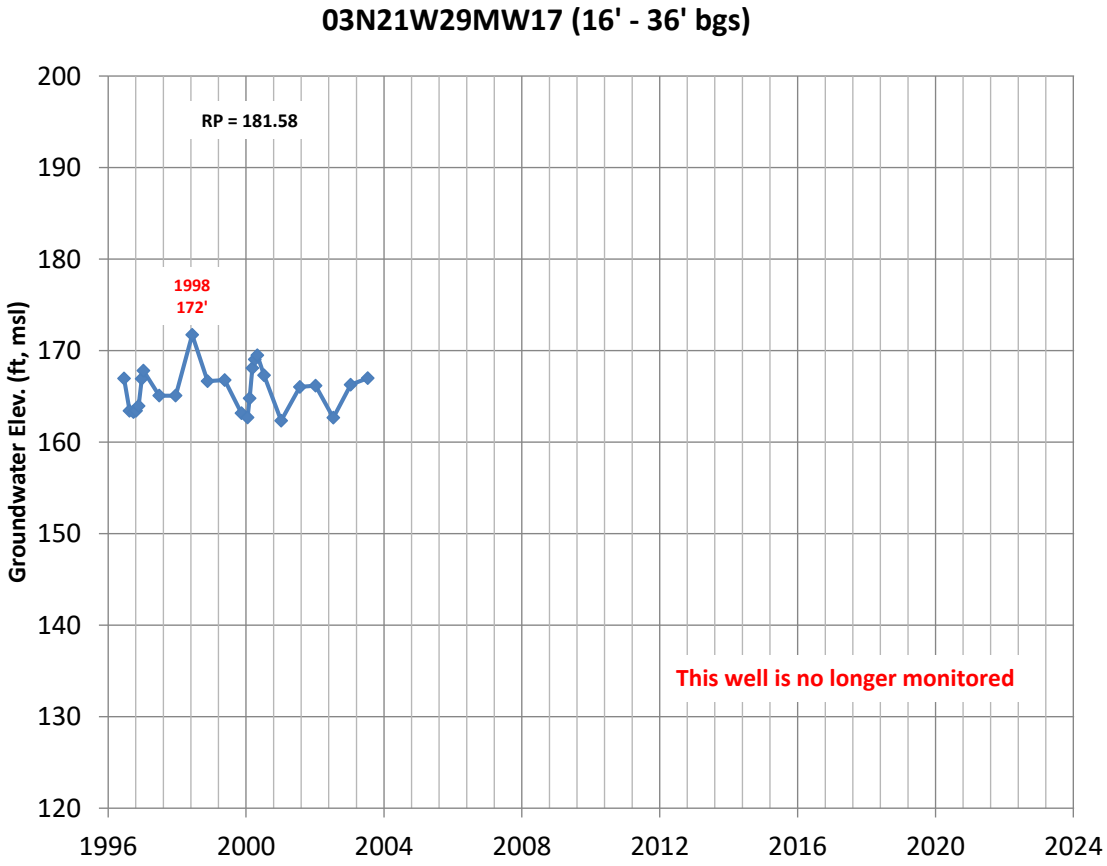
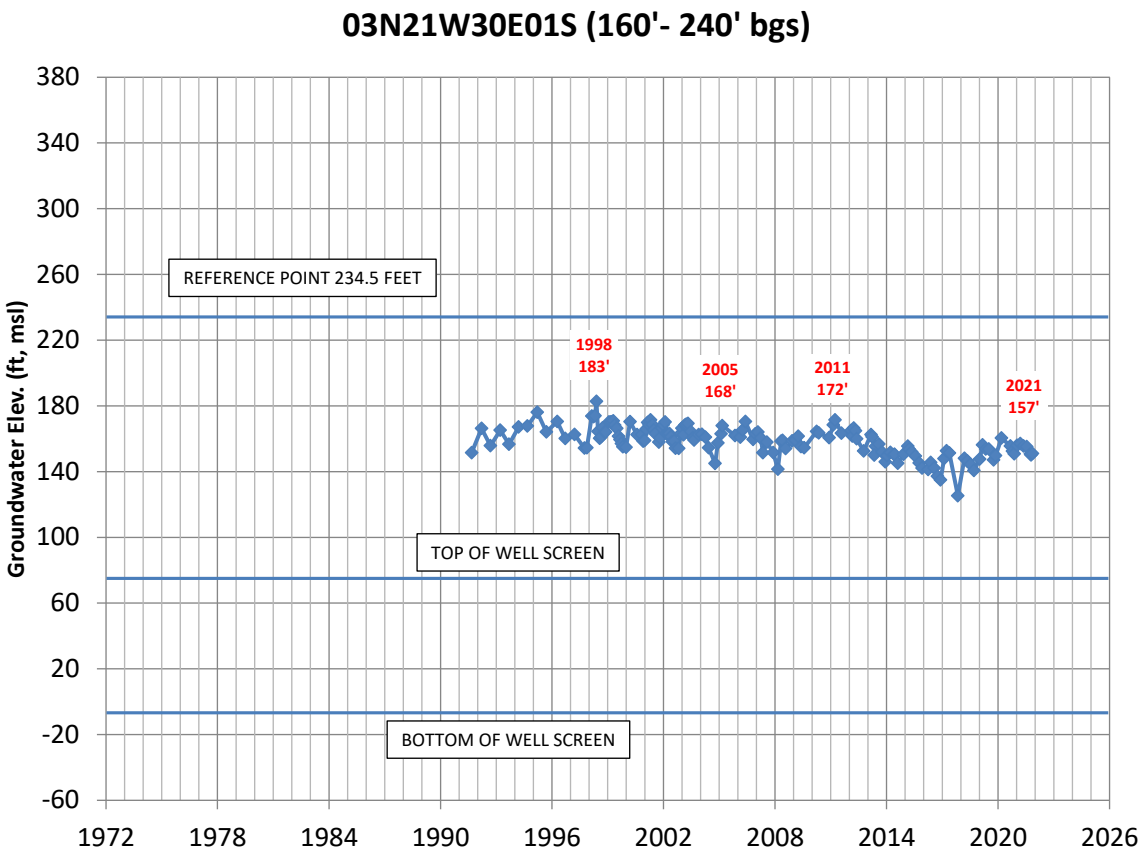
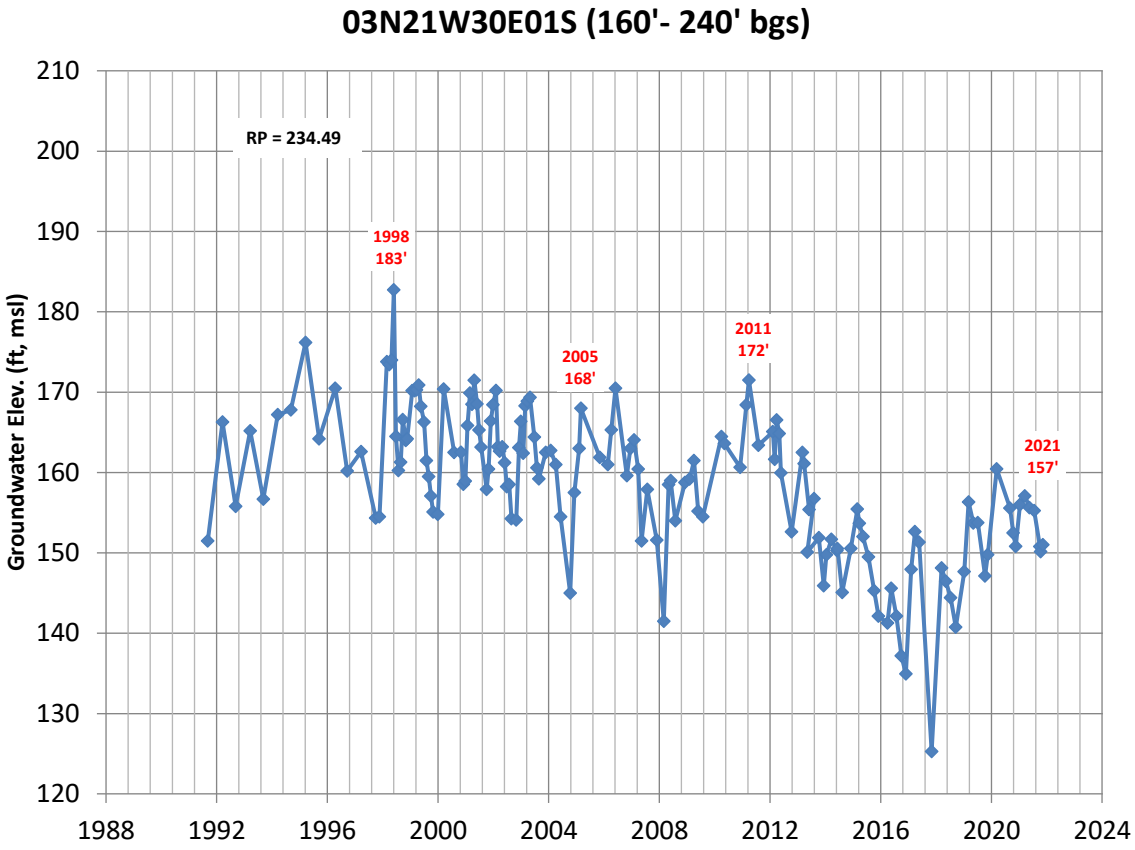
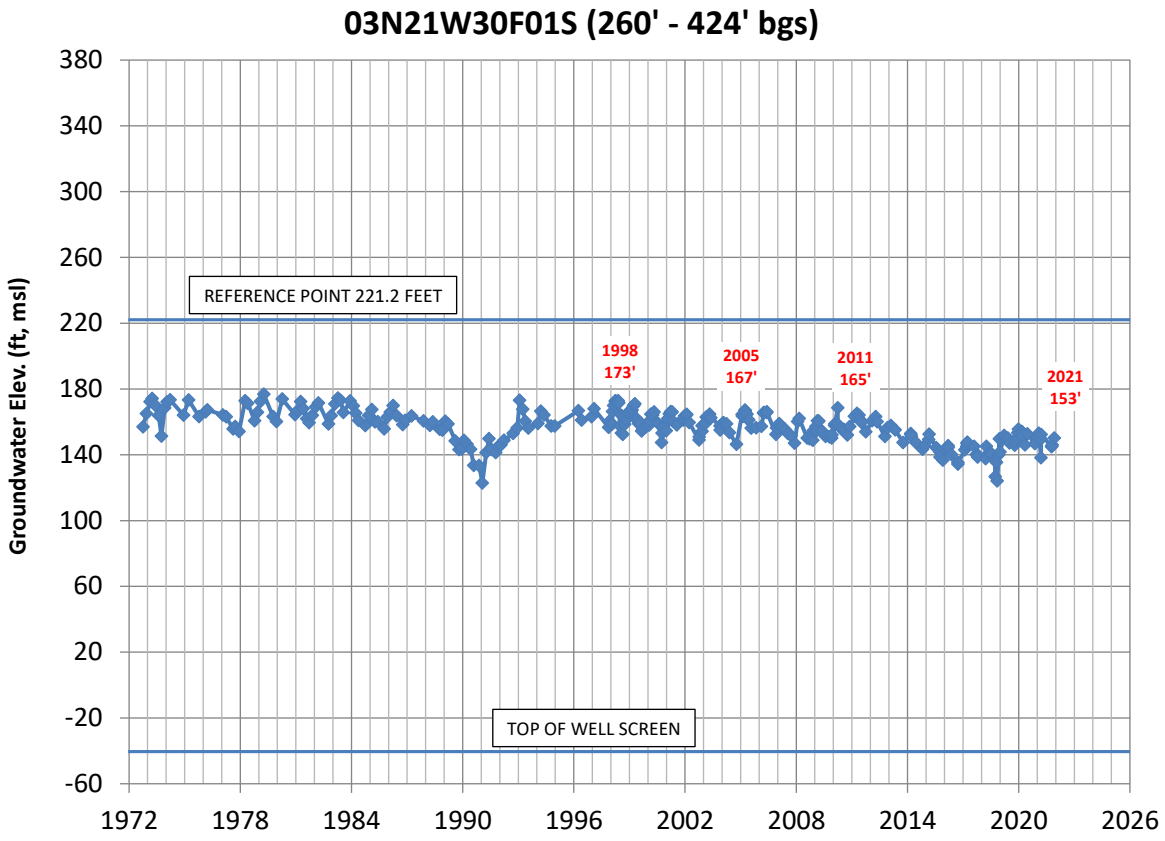
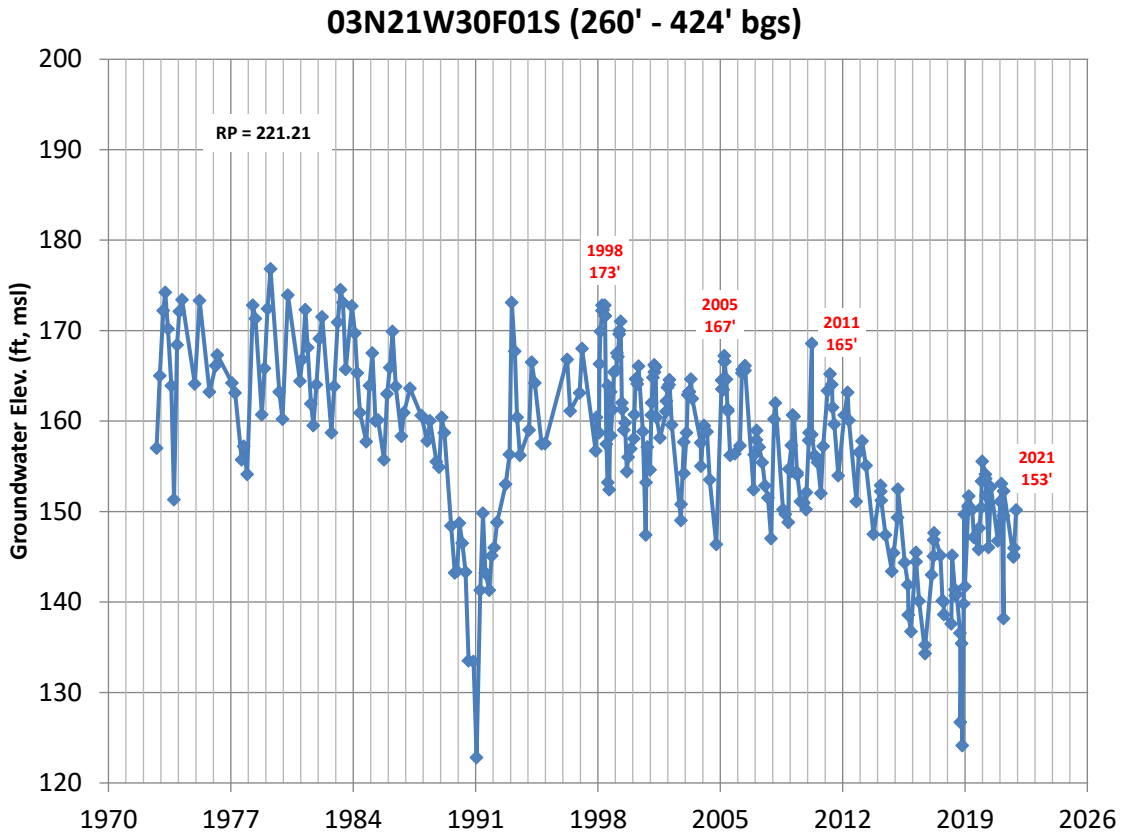


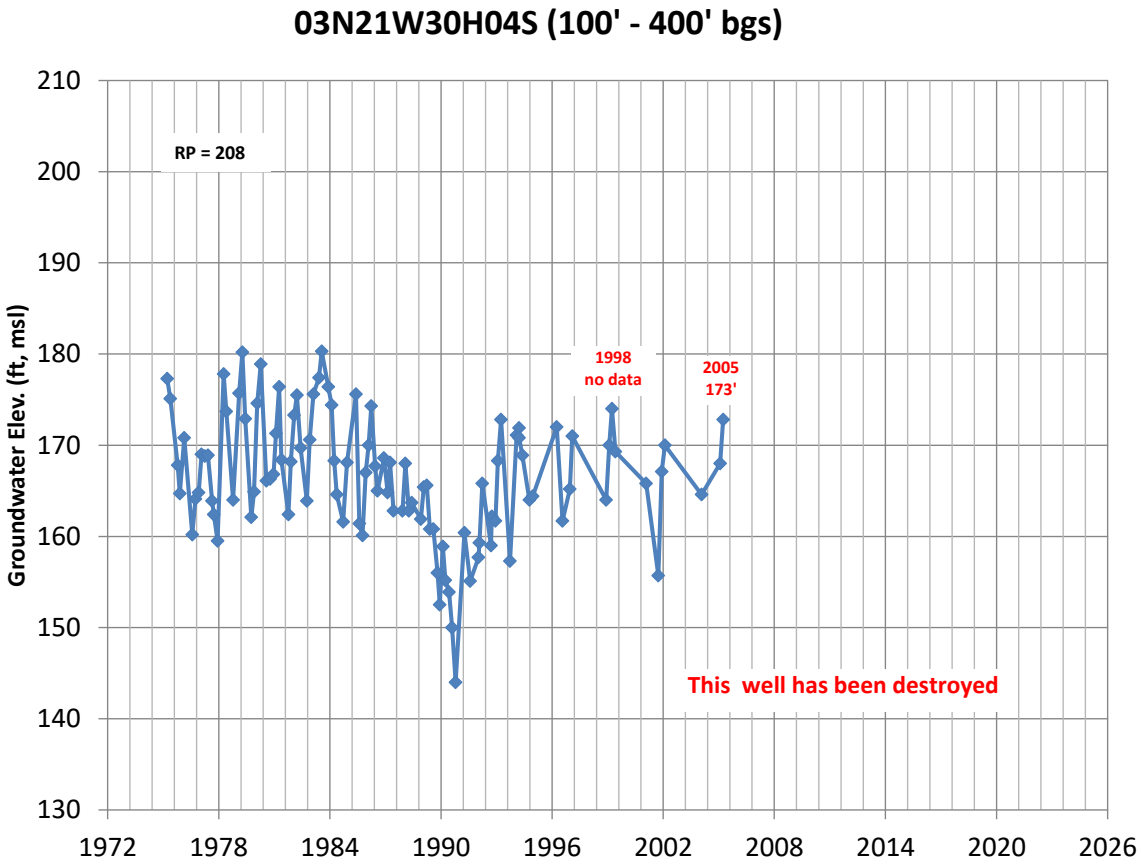

03N21W30E01S (160'- 240' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 234.5 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
1998
183'
2005
168'
2011
172'
2021
157'


03N21W30E01S (160'- 240' bgs)
Groundwater Elev. (ft, msl)
210
200
190
180
170
160
150
140
130
120
1988
1992
1996
2000
2004
2008
2012
2016
2020
2024
RP = 234.49
1998
183'
2005
168'
2011
172'
2021
157'


03N21W30F01S (260' - 424' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 221.2 FEET
TOP OF WELL SCREEN
1998
173'
2005
167'
2011
165'
2021
153'


03N21W30F01S (260' - 424' bgs)
Groundwater Elev. (ft, msl)
200
190
180
170
160
150
140
130
120
1970
1977
1984
1991
1998
2005
2012
2019
2026
RP = 221.21
1998
173'
2005
167'
2011
165'
2021
153'

Intentionally Left Blank



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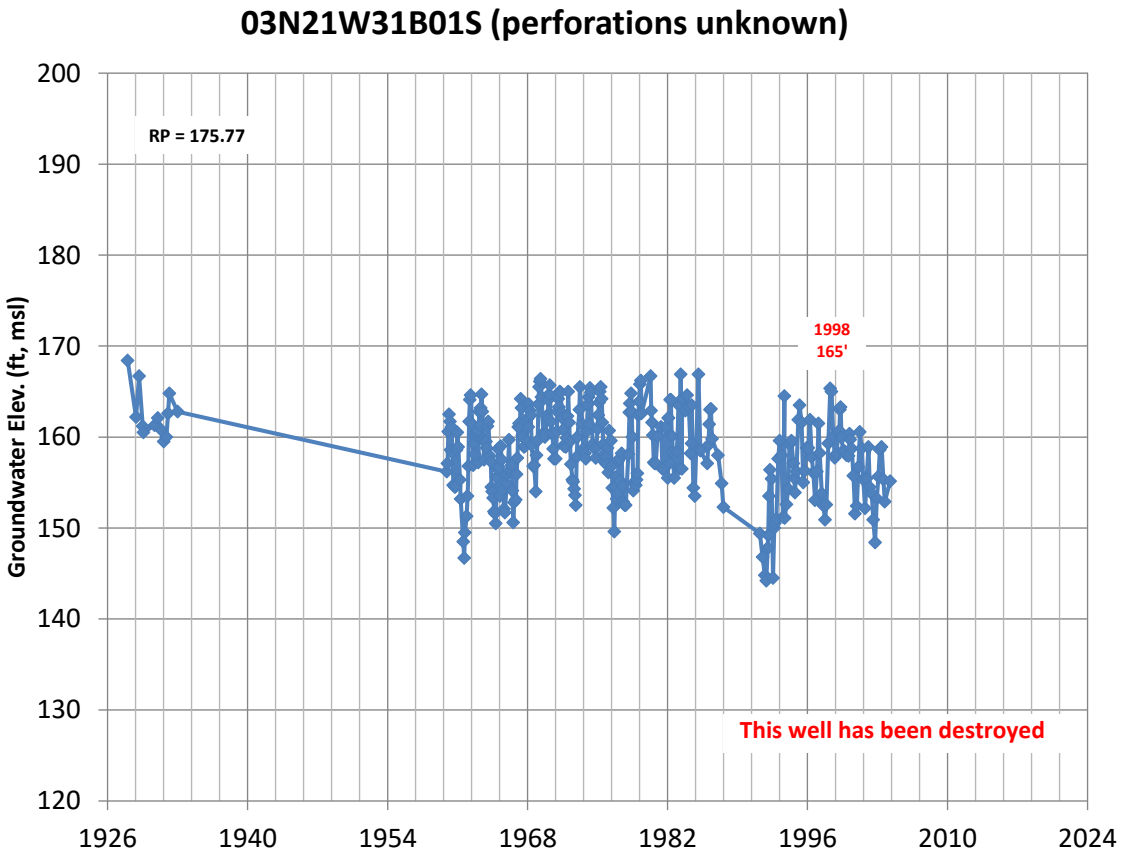
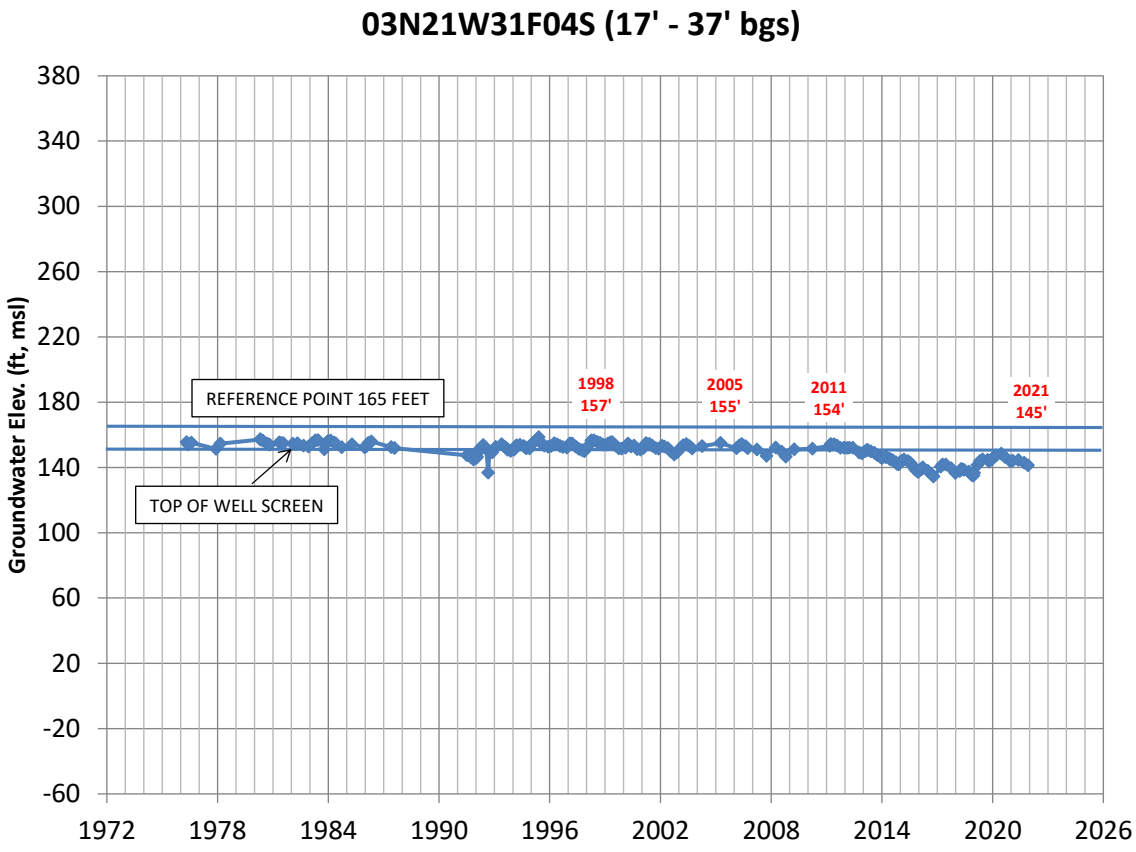
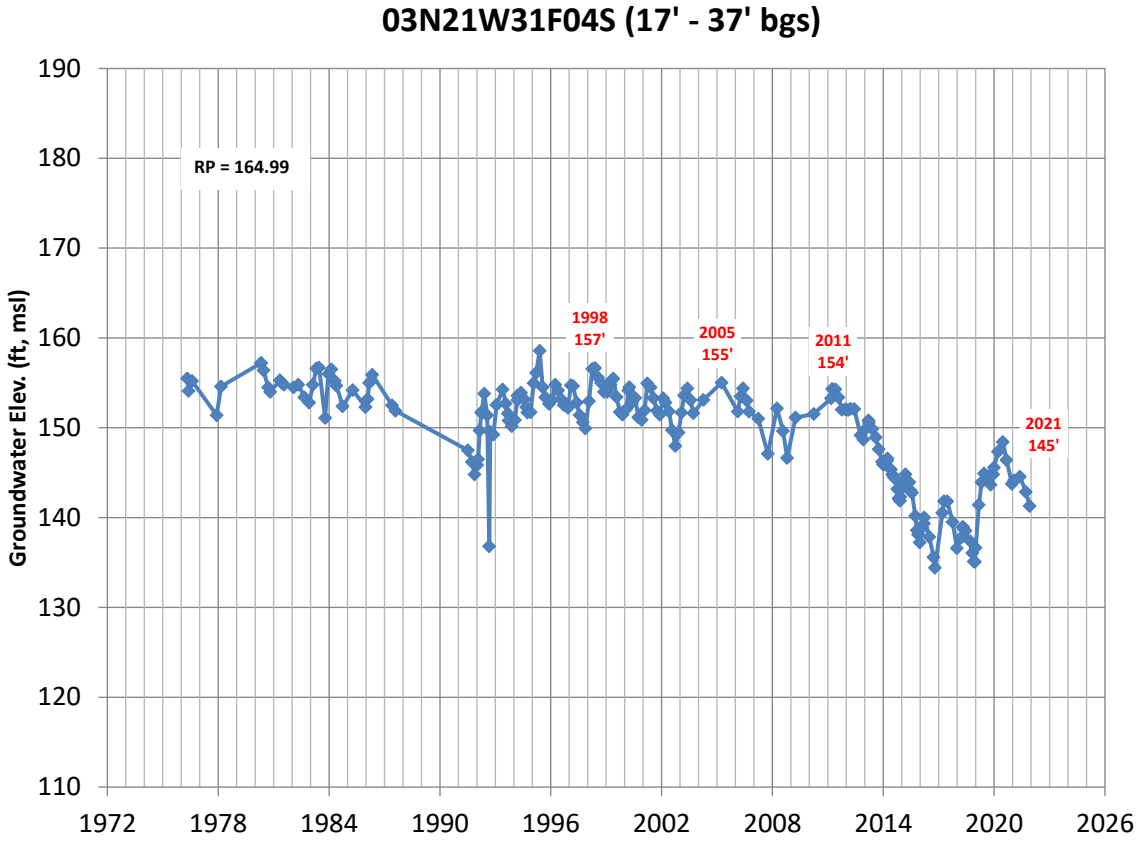
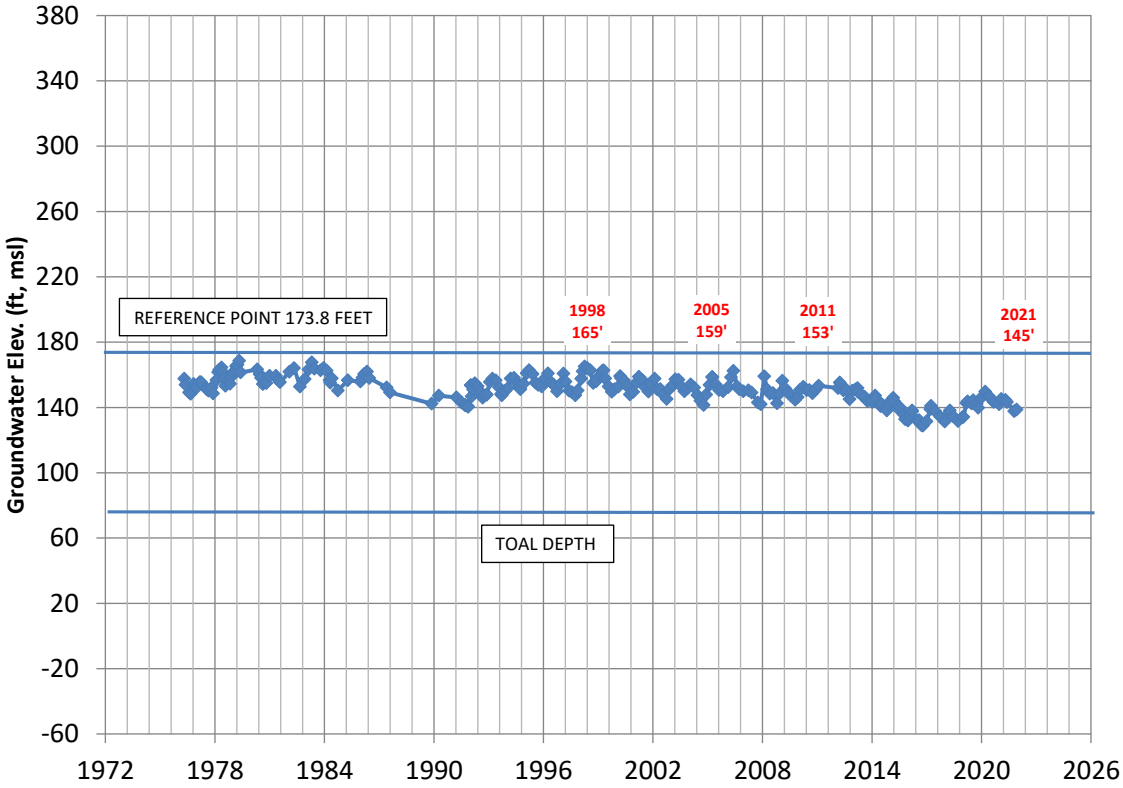


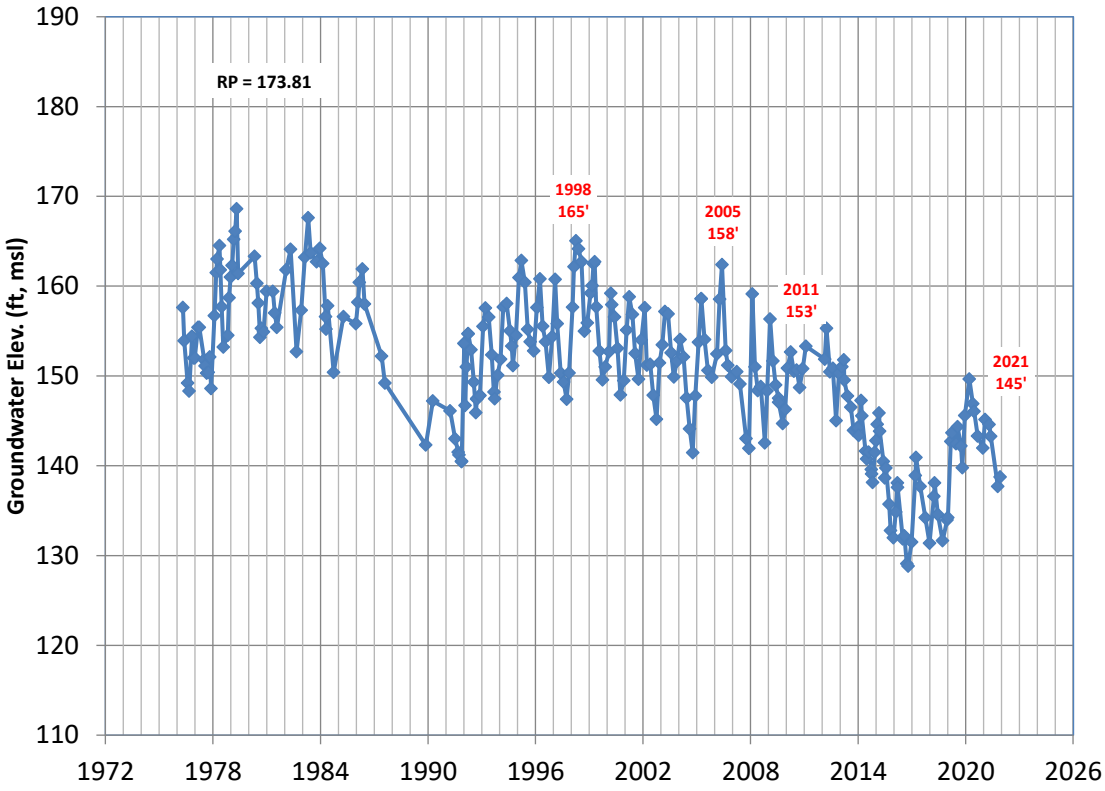

03N21W31F04S (17' - 37' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 165 FEET
TOP OF WELL SCREEN
1998
157'
2005
155'
2011
154'
2021
145'

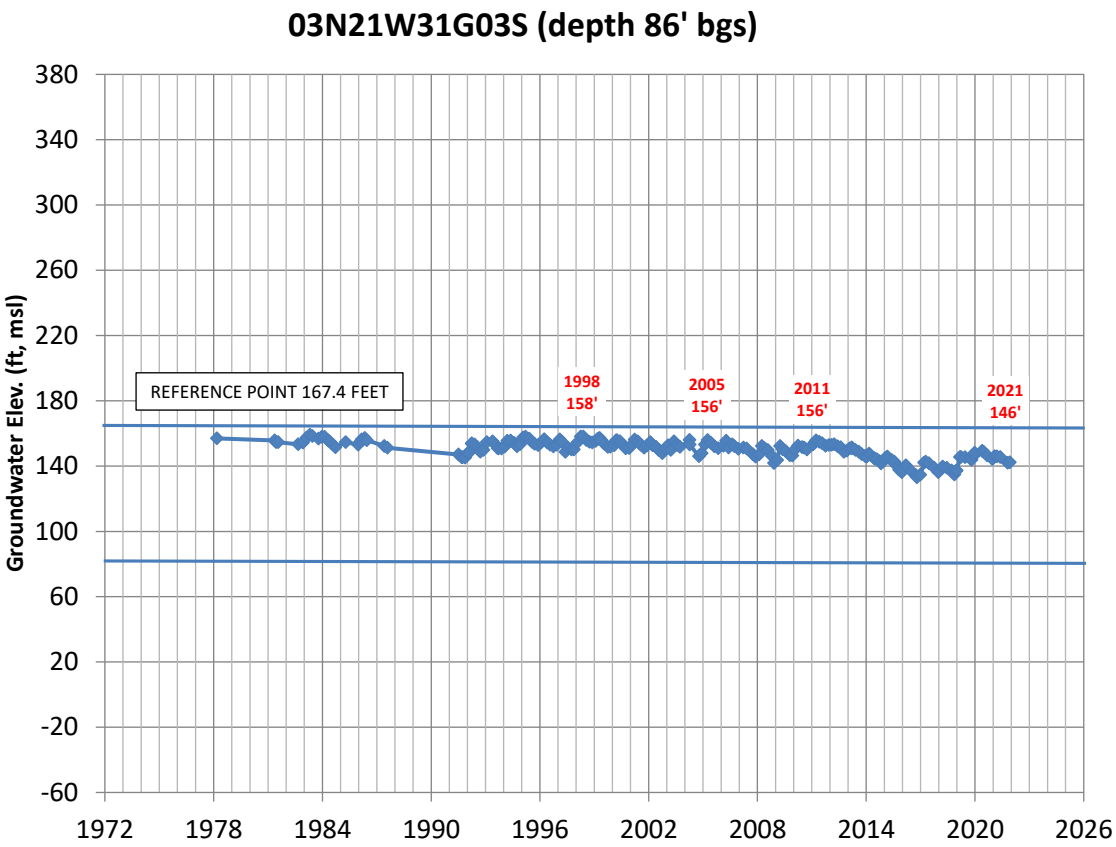

03N21W31F04S (17' - 37' bgs)
Groundwater Elev. (ft, msl)
190
180
170
160
150
140
130
120
110
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
RP = 164.99
1998
157'
2005
155'
2011
154'
2021
145'

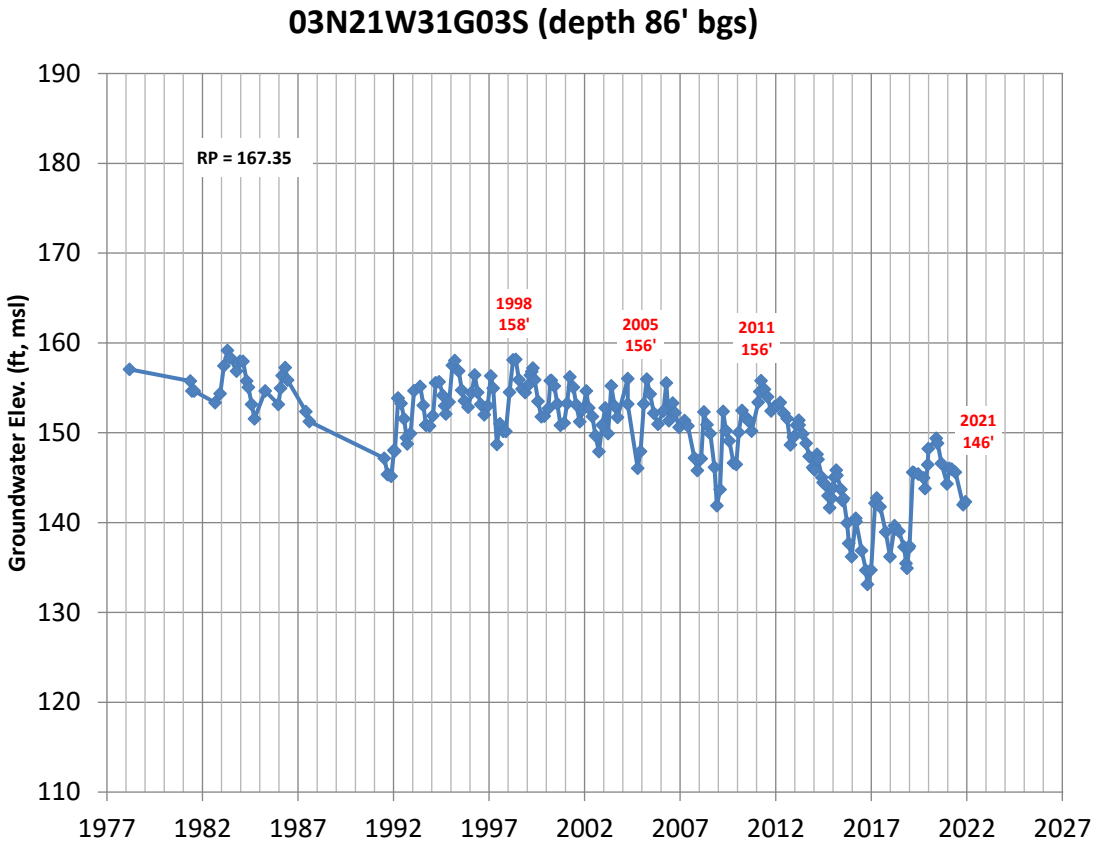
03N21W31F05S (depth 102' bgs)

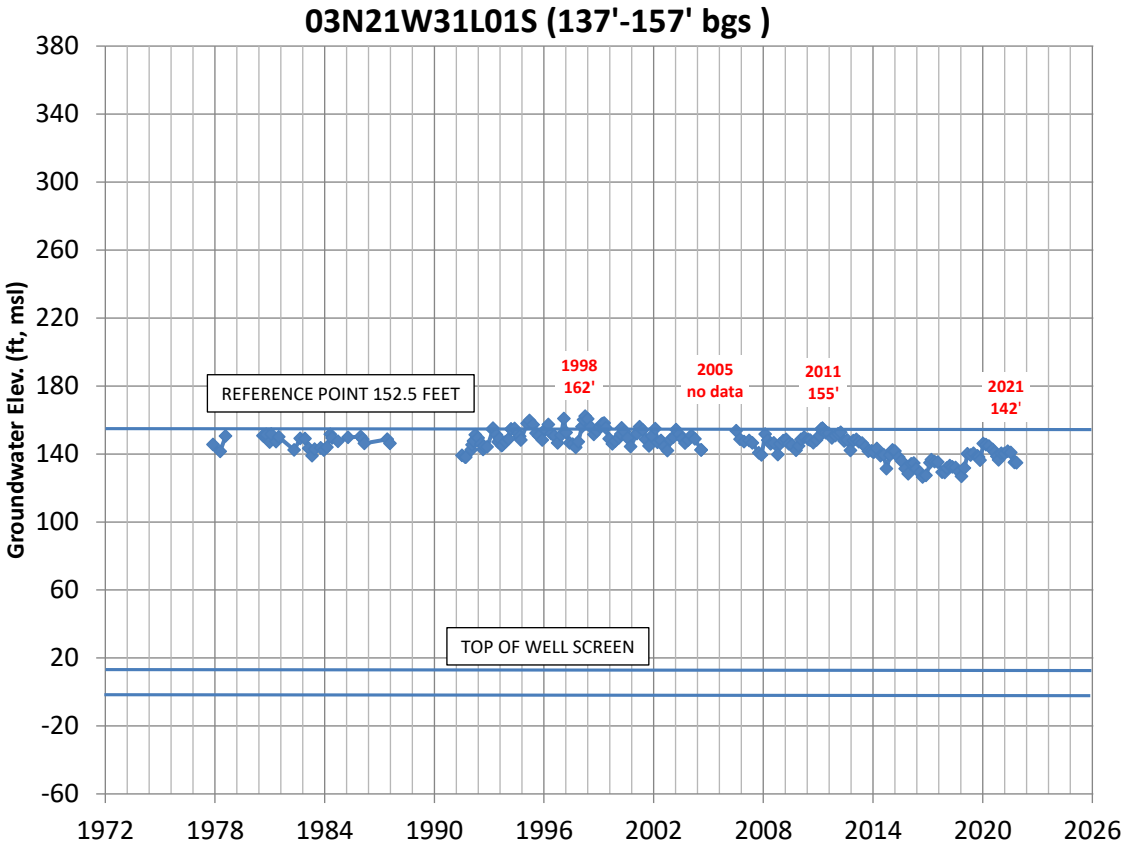


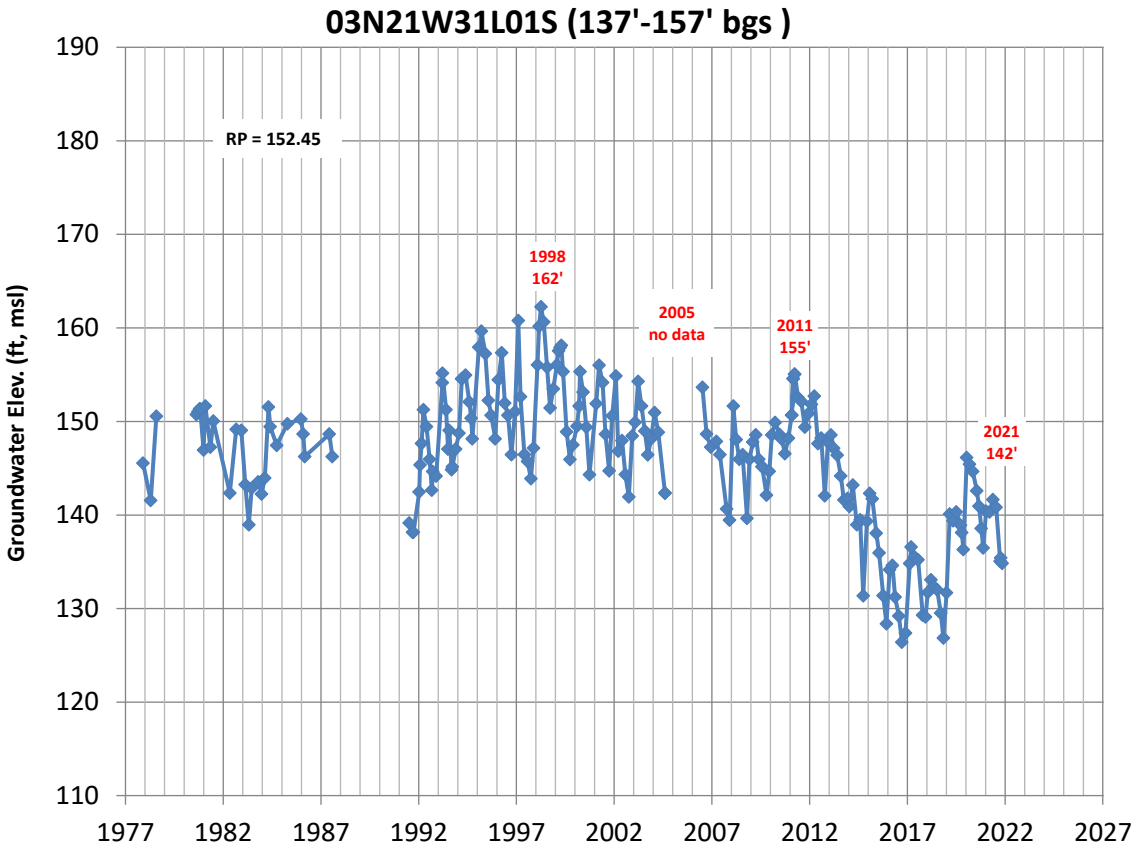
03N21W31F05S (92'- 102' bgs)

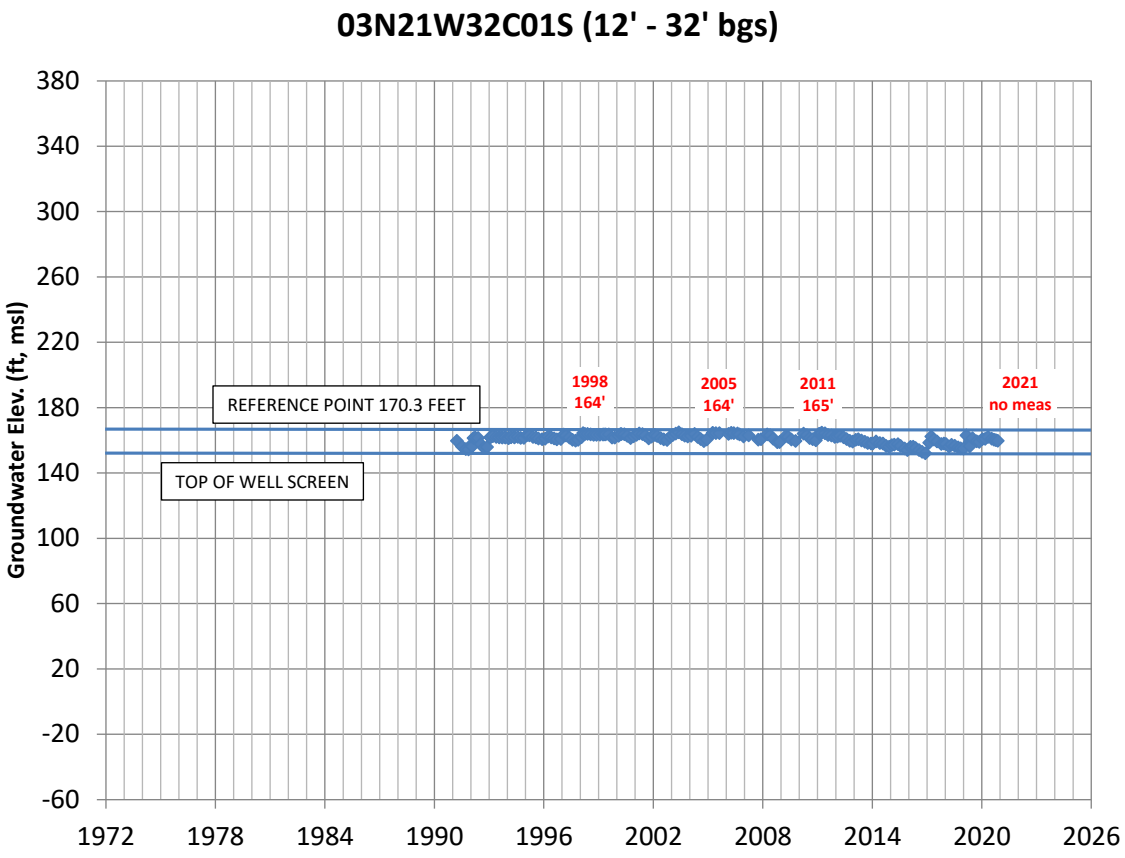


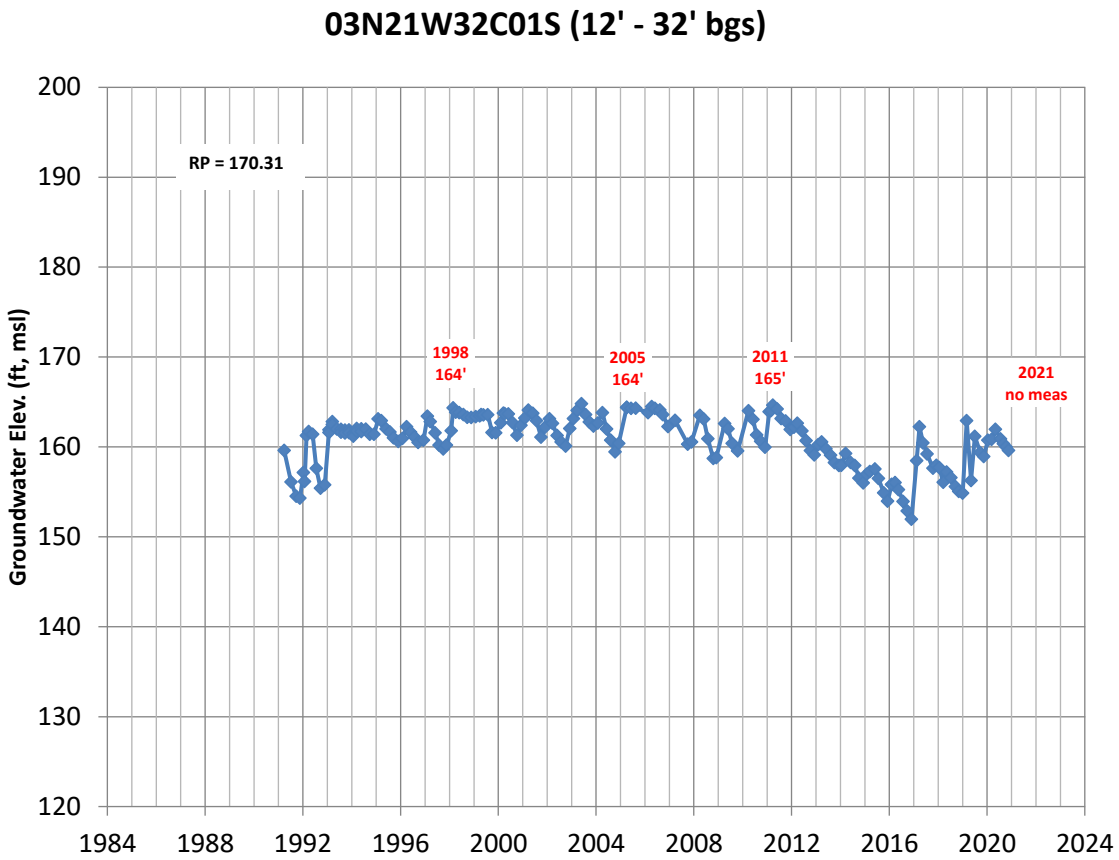

03N21W31G03S (depth 86' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 167.4 FEET
1998
158'
2005
156'
2011
156'
2021
146'


03N21W31G03S (depth 86' bgs)
Groundwater Elev. (ft, msl)
190
180
170
160
150
140
130
120
110
1977
1982
1987
1992
1997
2002
2007
2012
2017
2022
2027
RP = 167.35
1998
158'
2005
156'
2011
156'
2021
146'


03N21W31L01S (137'-157' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 152.5 FEET
1998
162'
2005
no data
2011
155'
2021
142'
TOP OF WELL SCREEN


03N21W31L01S (137'-157' bgs)
Groundwater Elev. (ft, msl)
190
180
170
160
150
140
130
120
110
1977
1982
1987
1992
1997
2002
2007
2012
2017
2022
2027
RP = 152.45
1998
162'
2005
no data
2011
155'
2021
142'


03N21W32C01S (12' - 32' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 170.3 FEET
TOP OF WELL SCREEN
1998
164'
2005
164'
2011
165'
2021
no meas


03N21W32C01S (12' - 32' bgs)
Groundwater Elev. (ft, msl)
200
190
180
170
160
150
140
130
120
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
2024
RP = 170.31
1998
164'
2005
164'
2011
165'
2021
no meas

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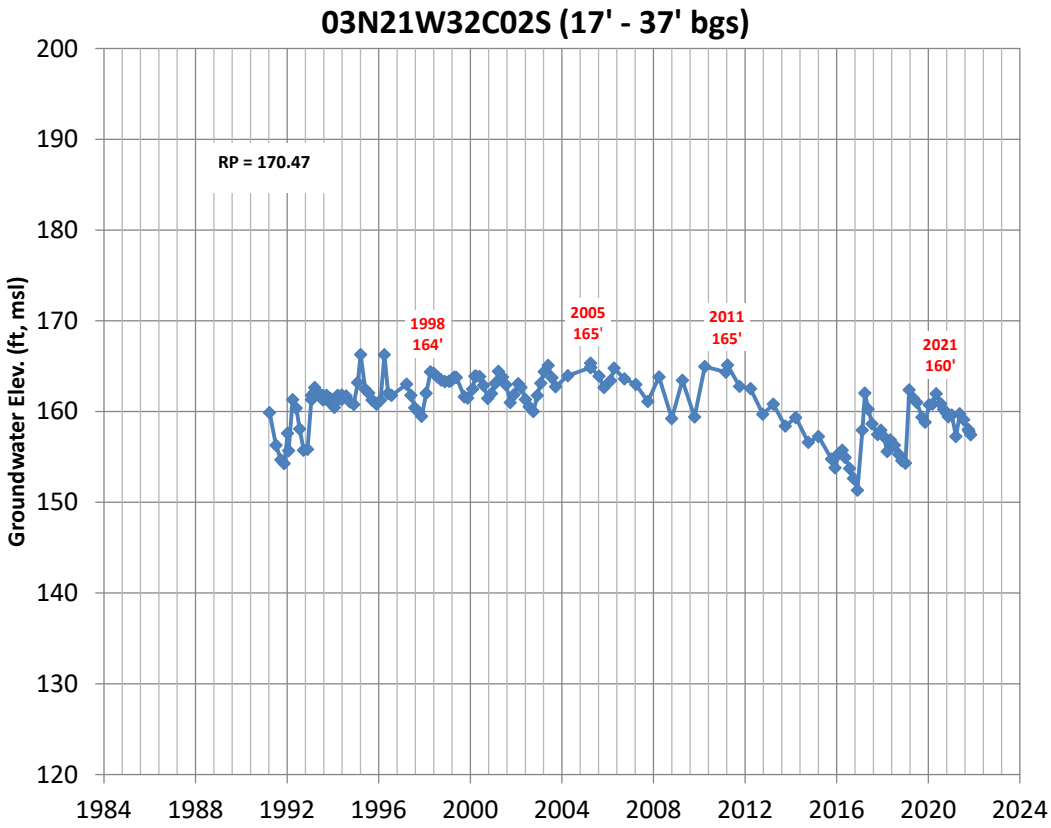

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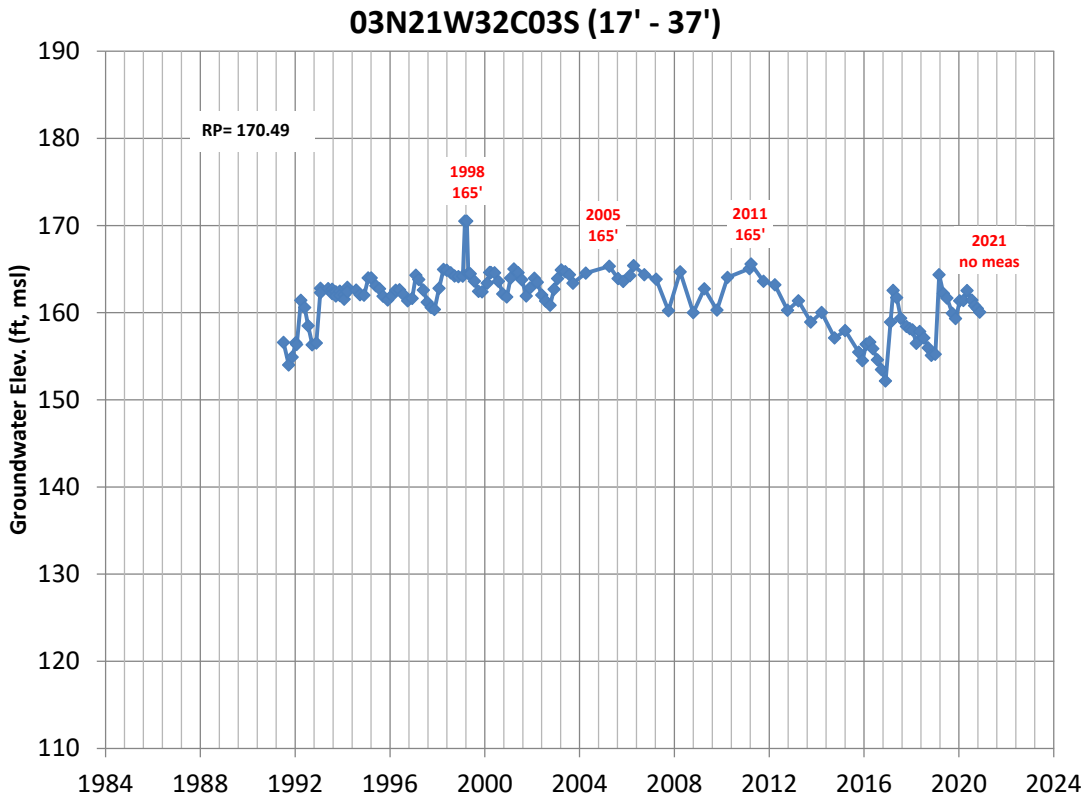
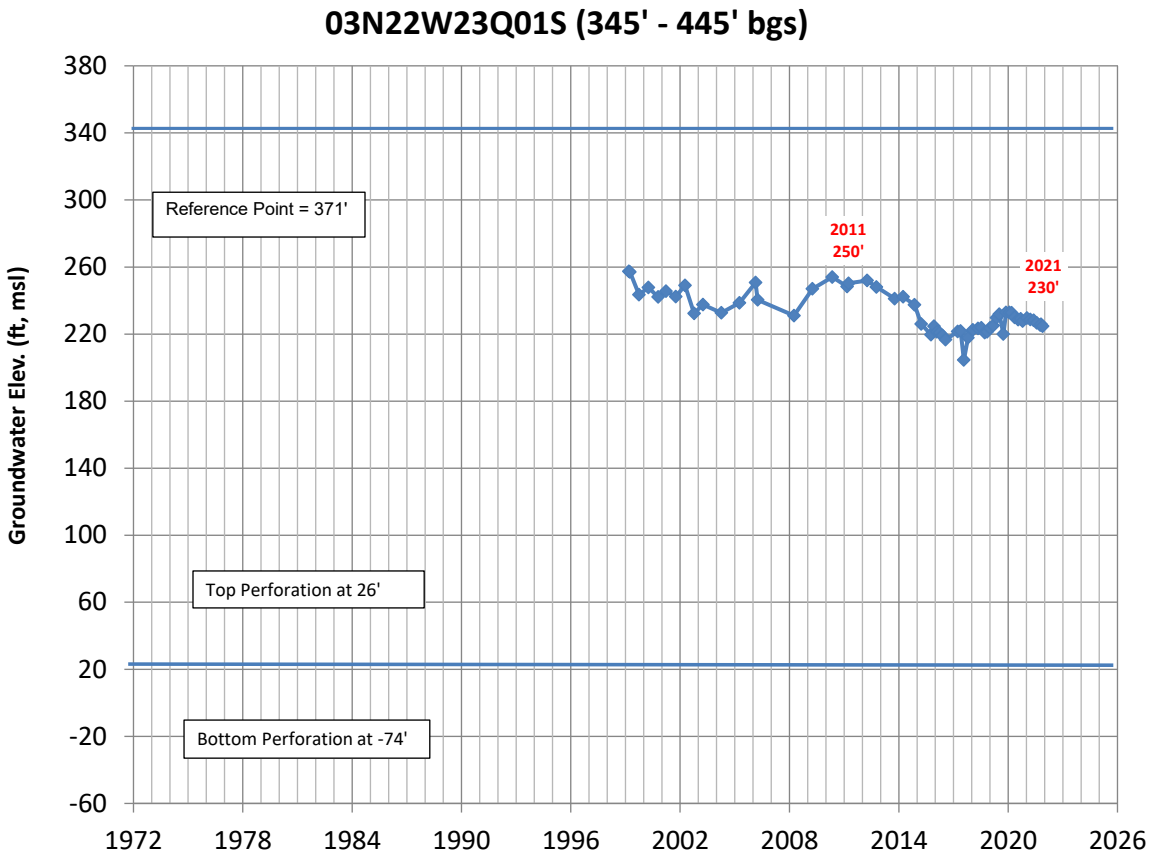
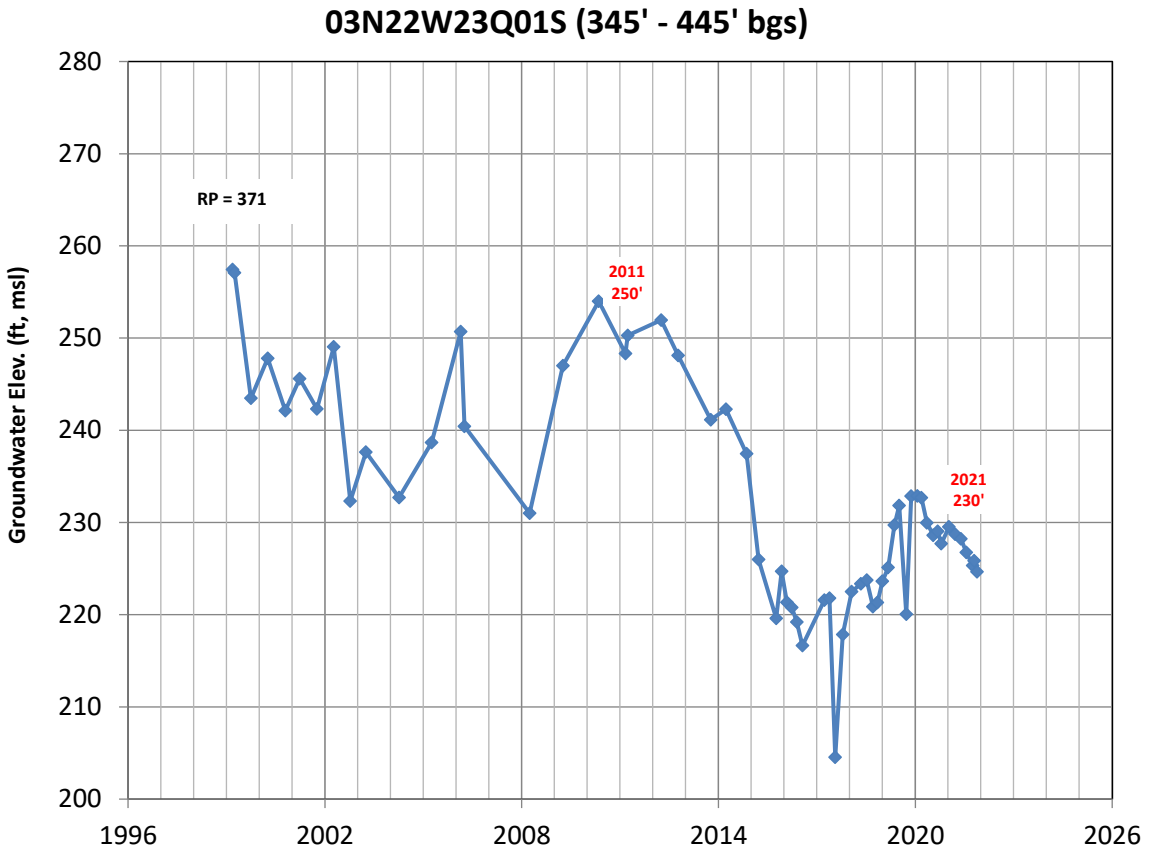
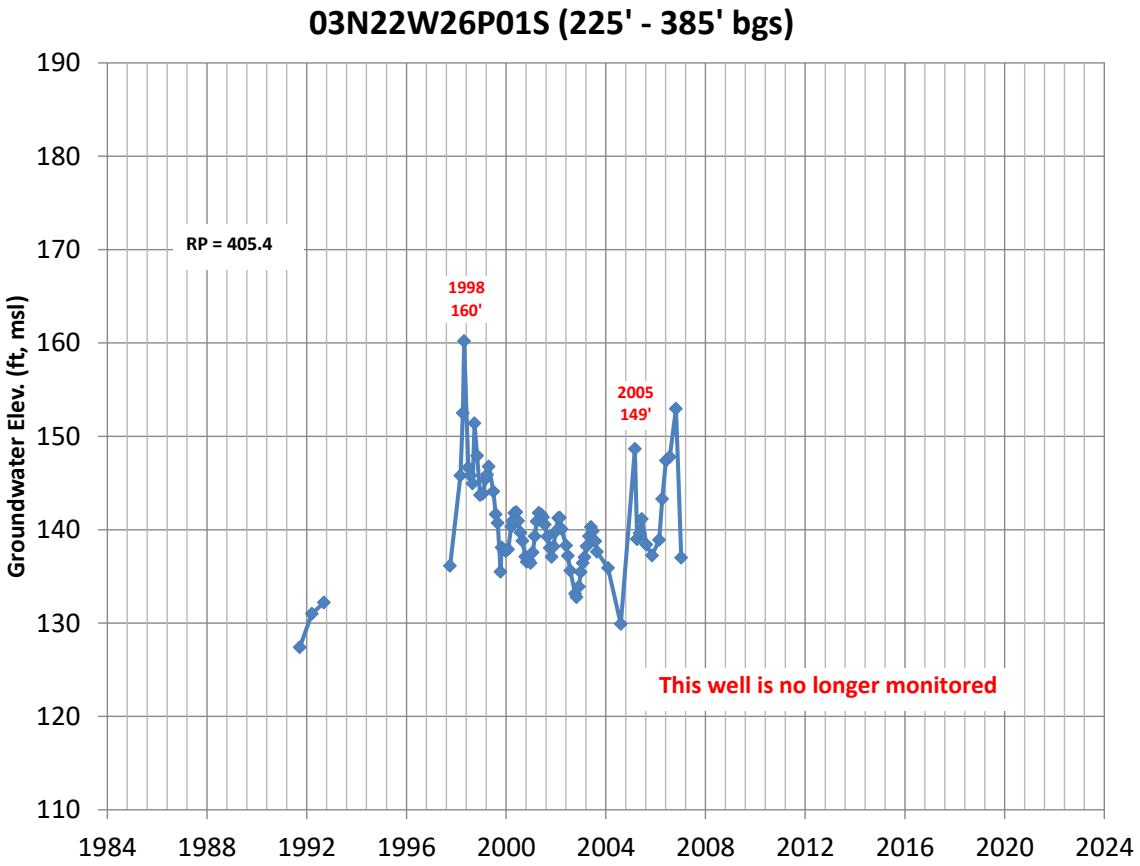



03N22W23Q01S (345' - 445' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
Reference Point = 371'
Top Perforation at 26'
Bottom Perforation at -74'
2011
250'
2021
230'


03N22W23Q01S (345' - 445' bgs)
Groundwater Elev. (ft, msl)
280
270
260
250
240
230
220
210
200
1996
2002
2008
2014
2020
2026
RP = 371
2011
250'
2021
230'

Intentionally Left Blank



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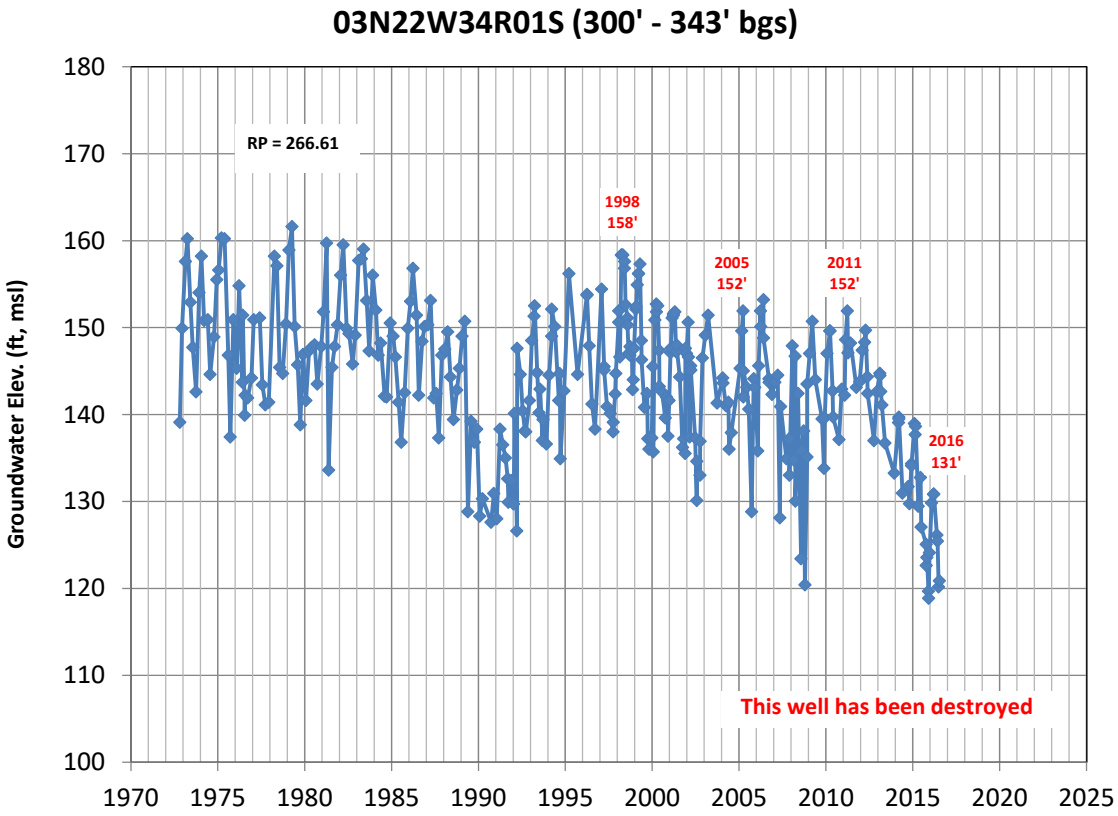
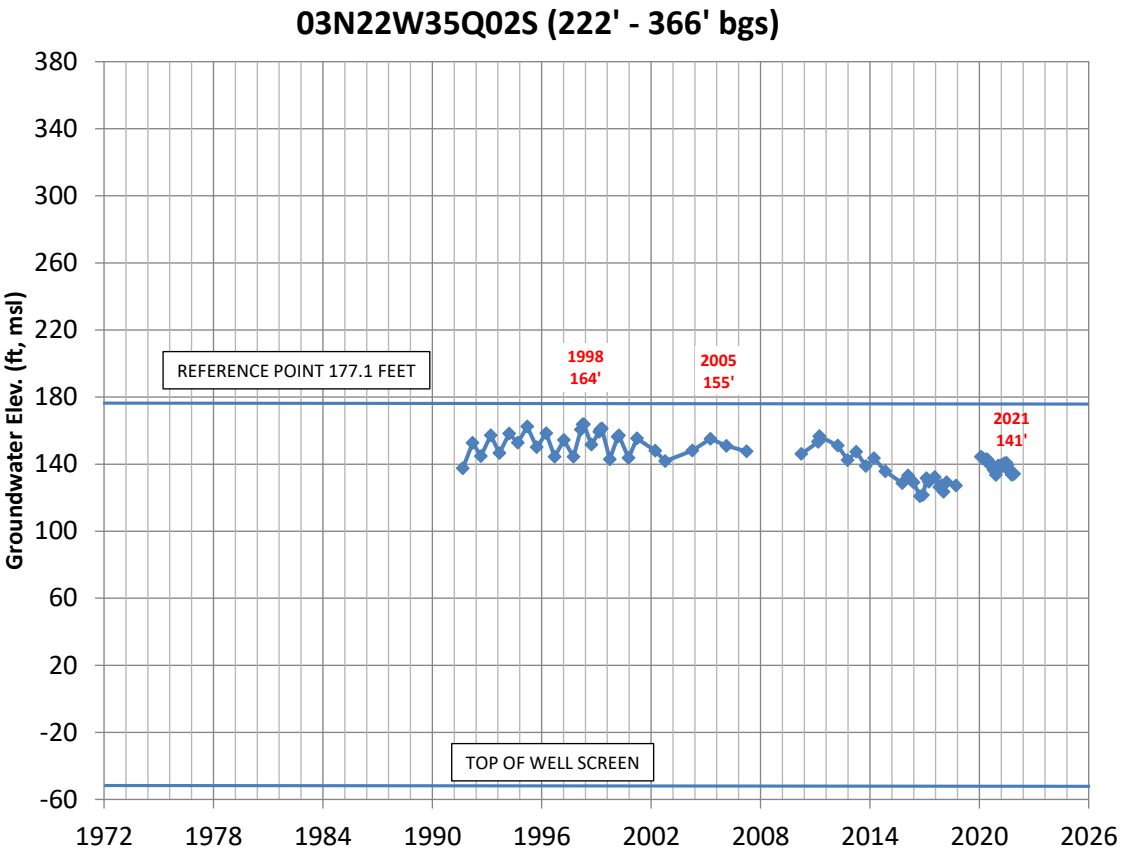
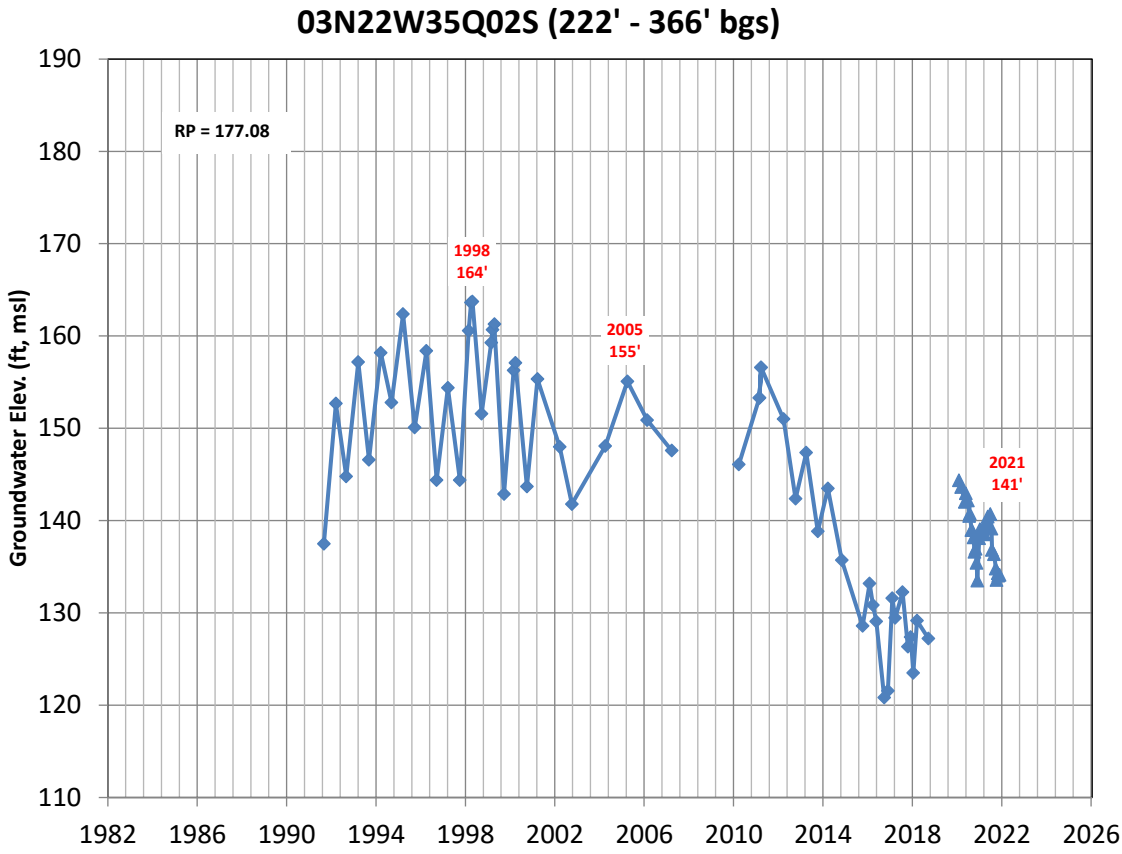
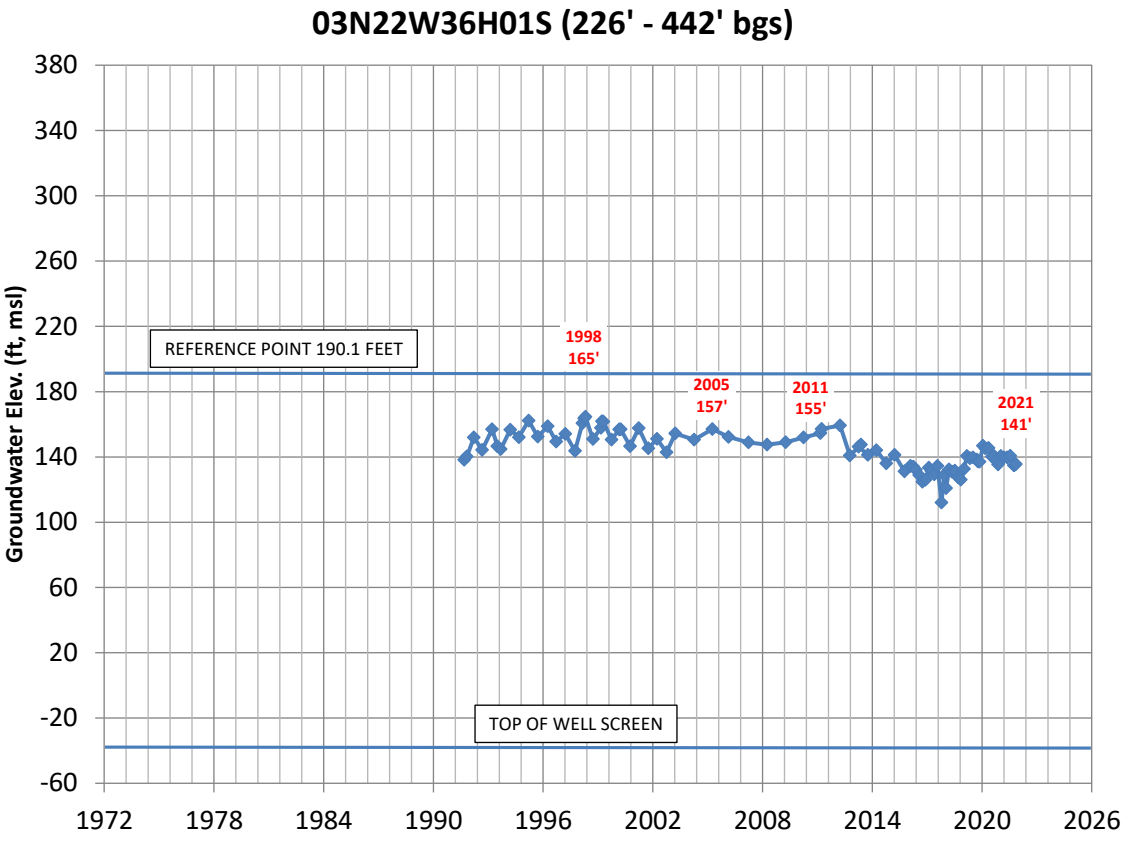
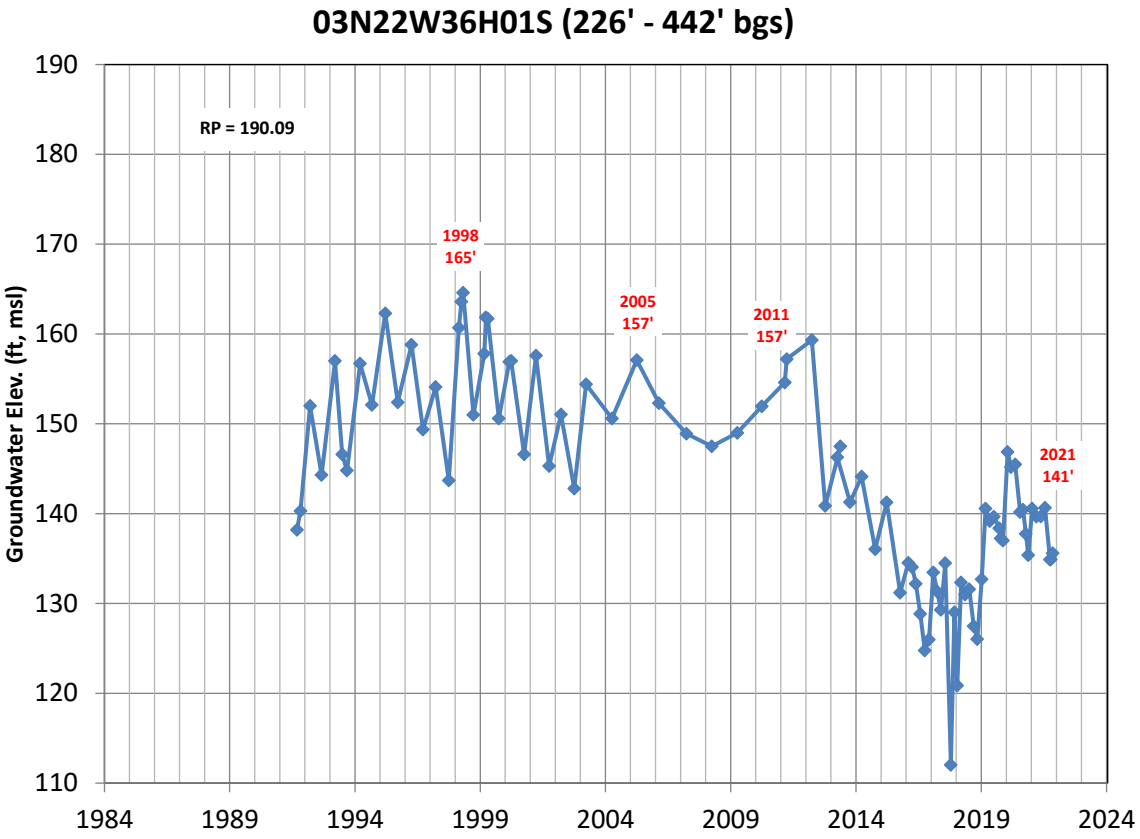
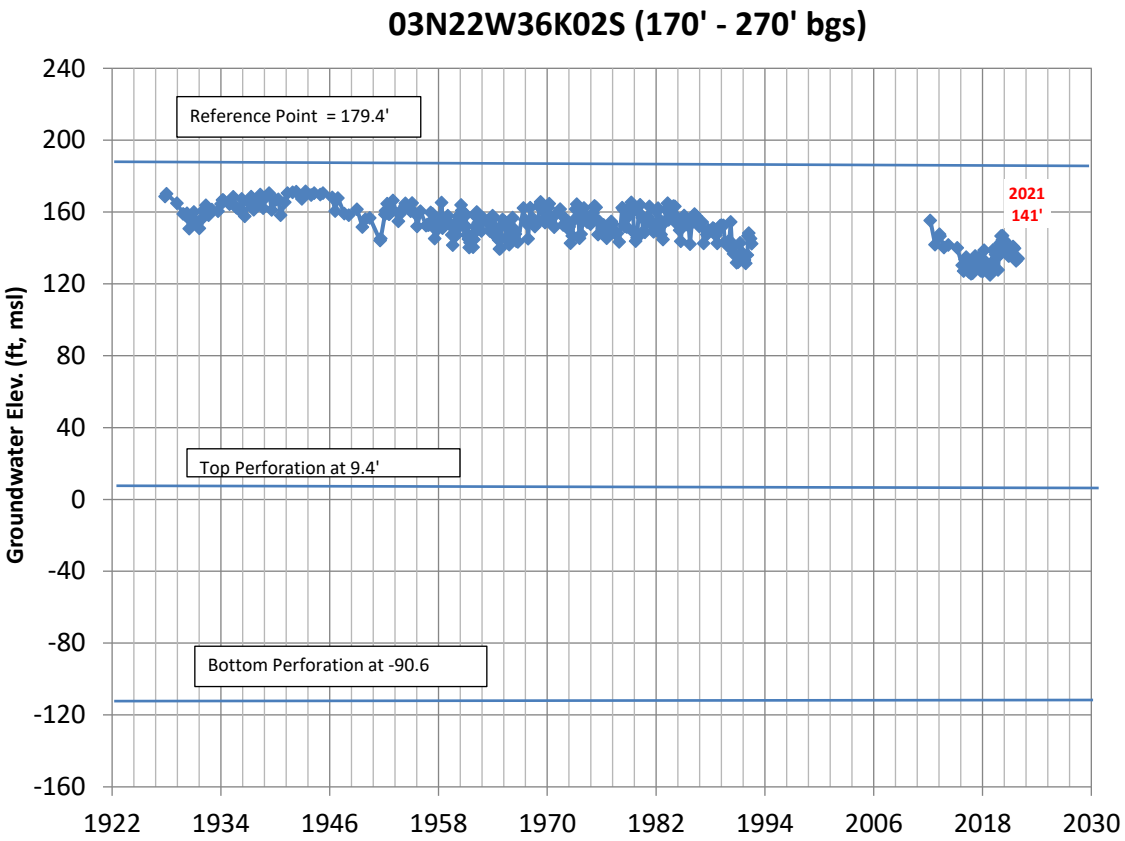


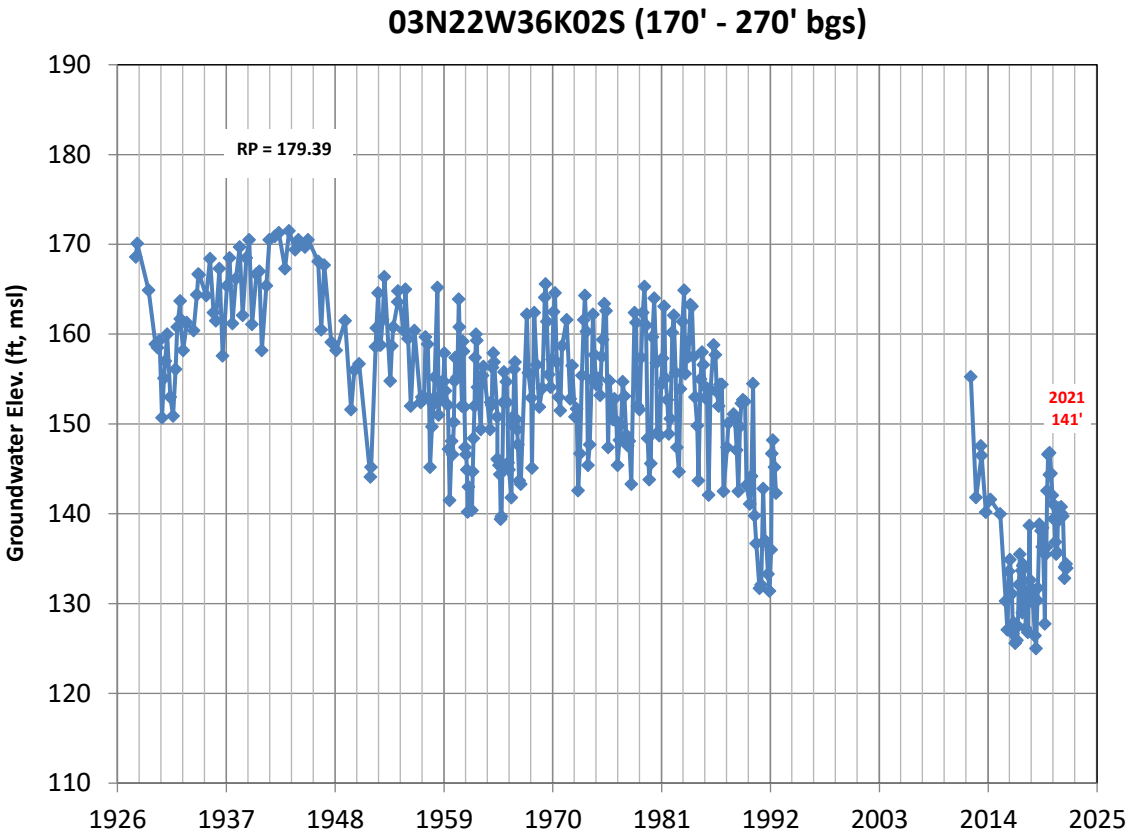

03N22W35Q02S (222' - 366' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 177.1 FEET
TOP OF WELL SCREEN
1998
164'
2005
155'
2021
141'

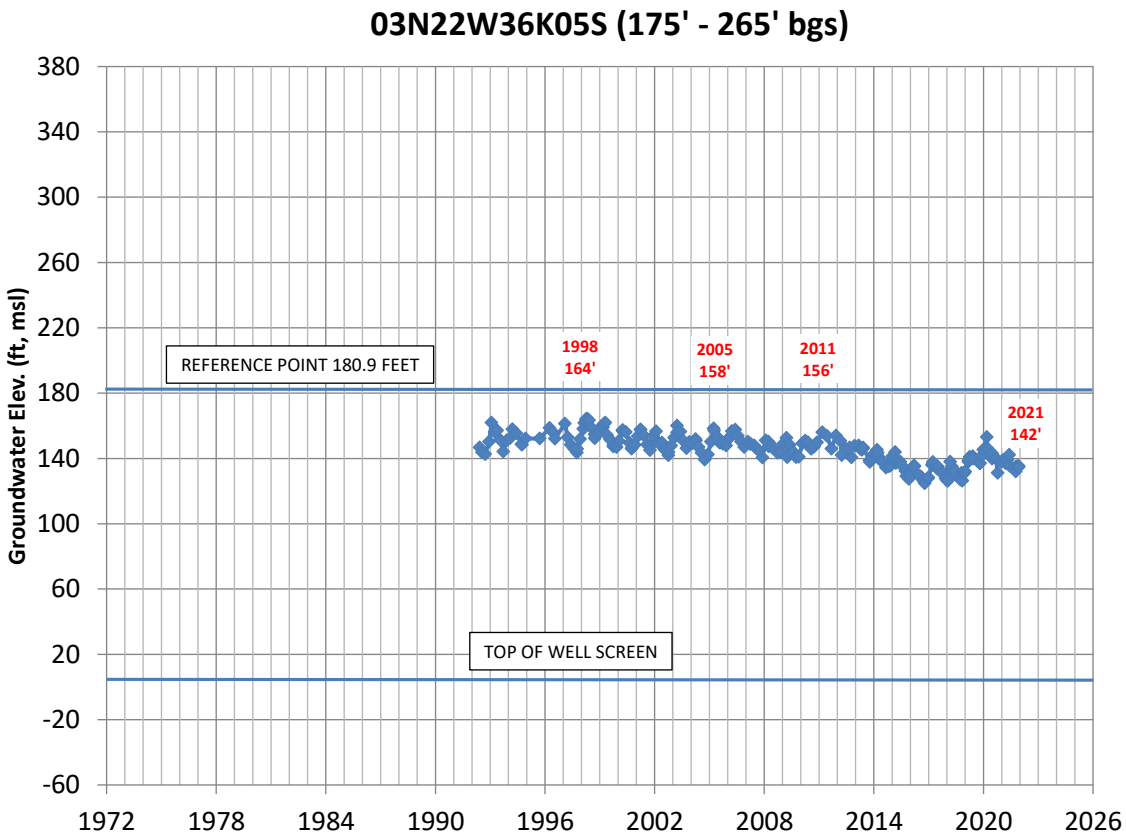

03N22W35Q02S (222' - 366' bgs)
Groundwater Elev. (ft, msl)
190
180
170
160
150
140
130
120
110
1982
1986
1990
1994
1998
2002
2006
2010
2014
2018
2022
2026
RP = 177.08
1998
164'
2005
155'
2021
141'

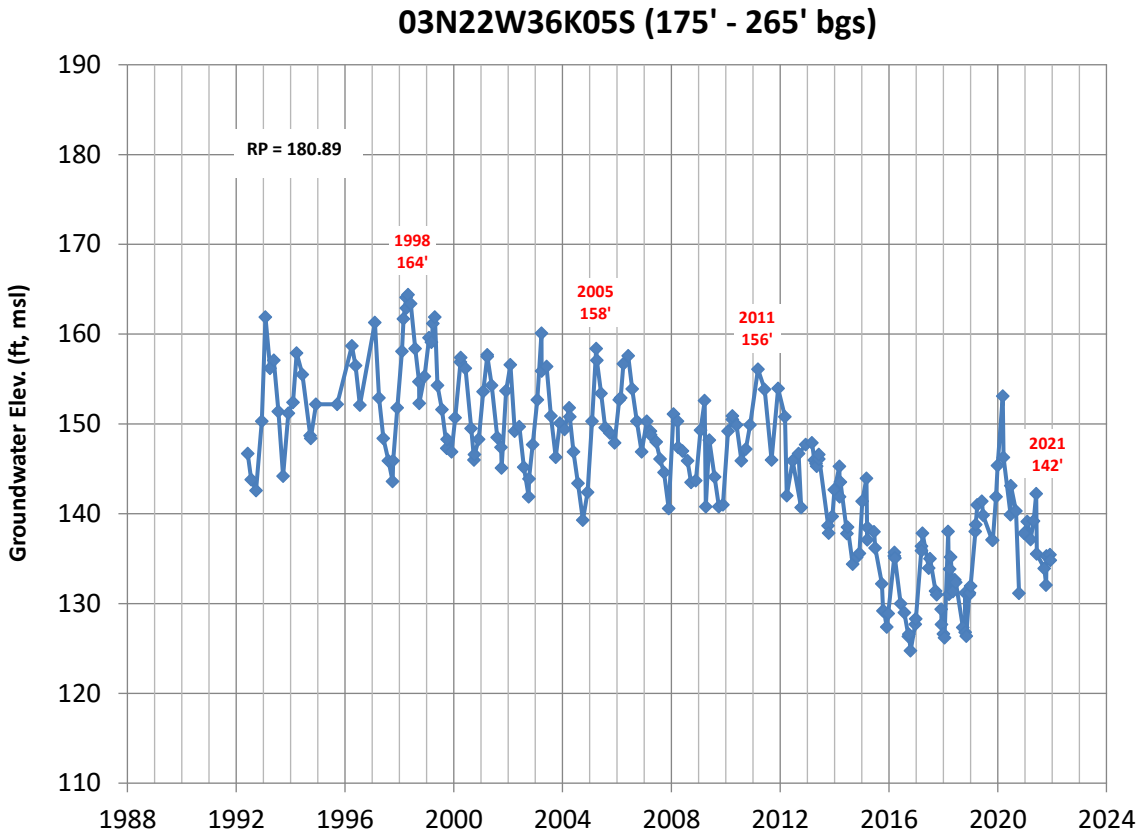

03N22W36H01S (226' - 442' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 190.1 FEET
TOP OF WELL SCREEN
1998
165'
2005
157'
2011
155'
2021
141'

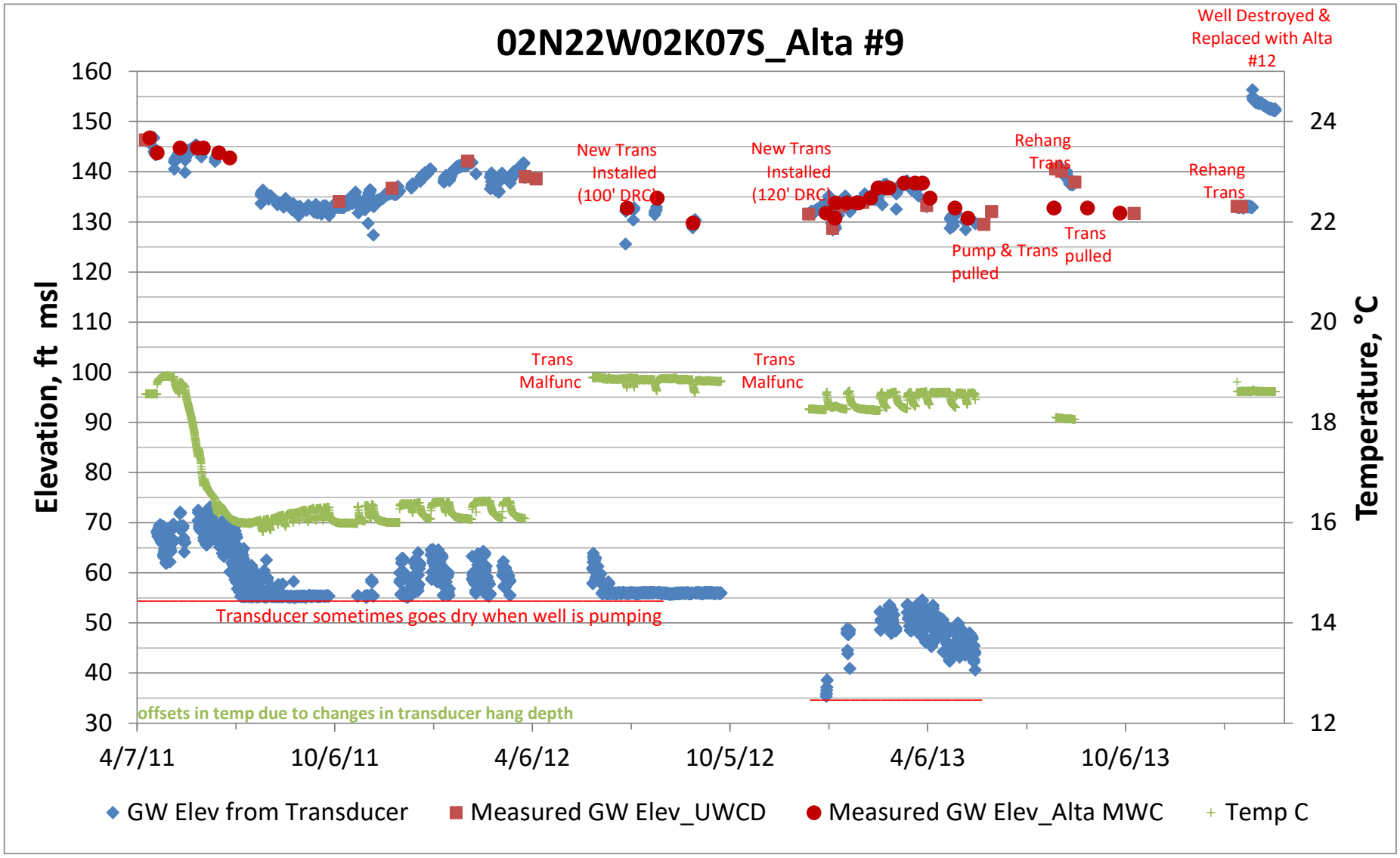

03N22W36H01S (226' - 442' bgs)
Groundwater Elev. (ft, msl)
RP = 190.09
190
180
170
160
150
140
130
120
110
1984
1989
1994
1999
2004
2009
2014
2019
2024
1998
165'
2005
157'
2011
157'
2021
141'

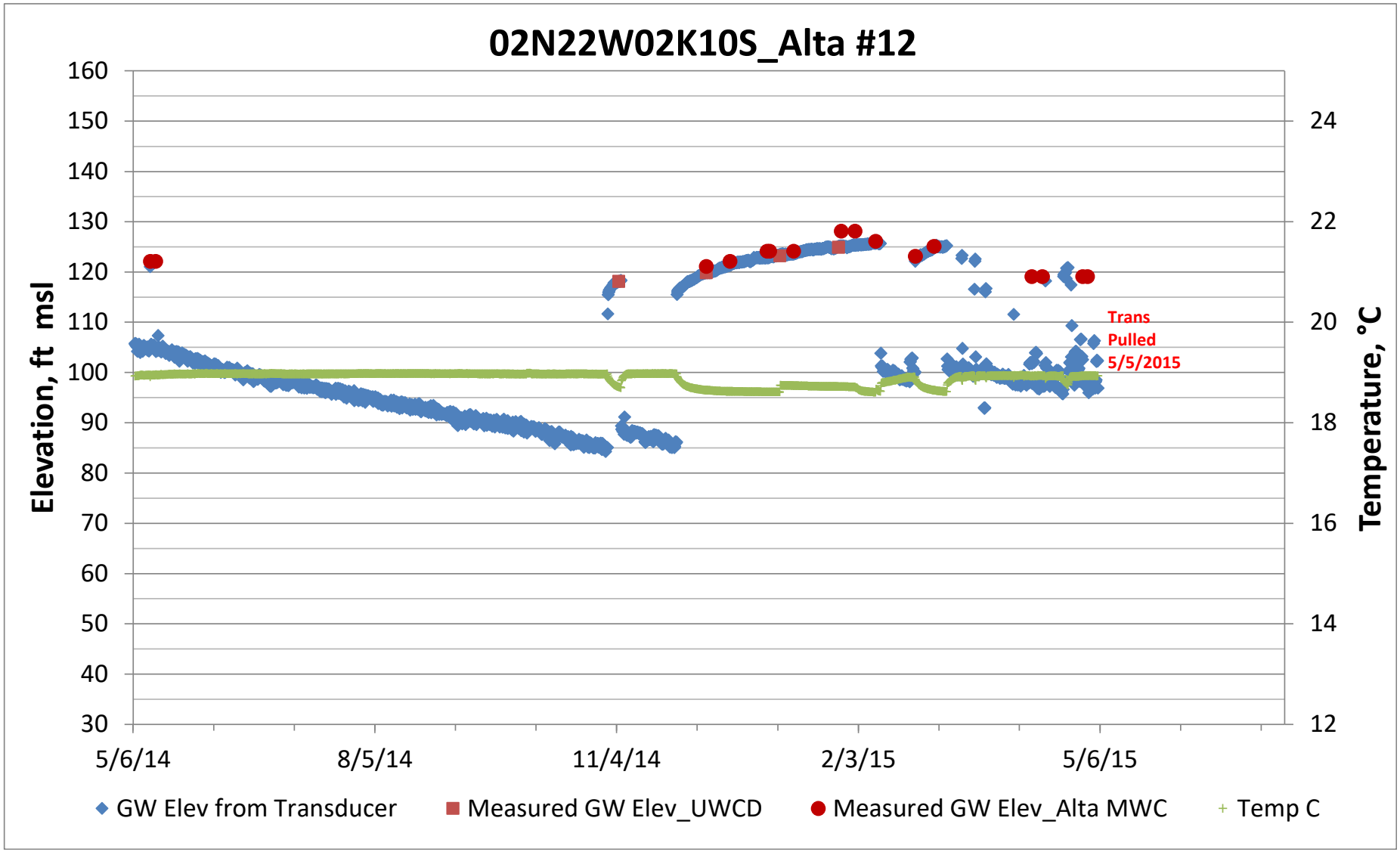

03N22W36K02S (170' - 270' bgs)
Groundwater Elev. (ft, msl)
240
200
160
120
80
40
0
-40
-80
-120
-160
1922
1934
1946
1958
1970
1982
1994
2006
2018
2030
Reference Point = 179.4'
Top Perforation at 9.4'
Bottom Perforation at -90.6
2021
141'

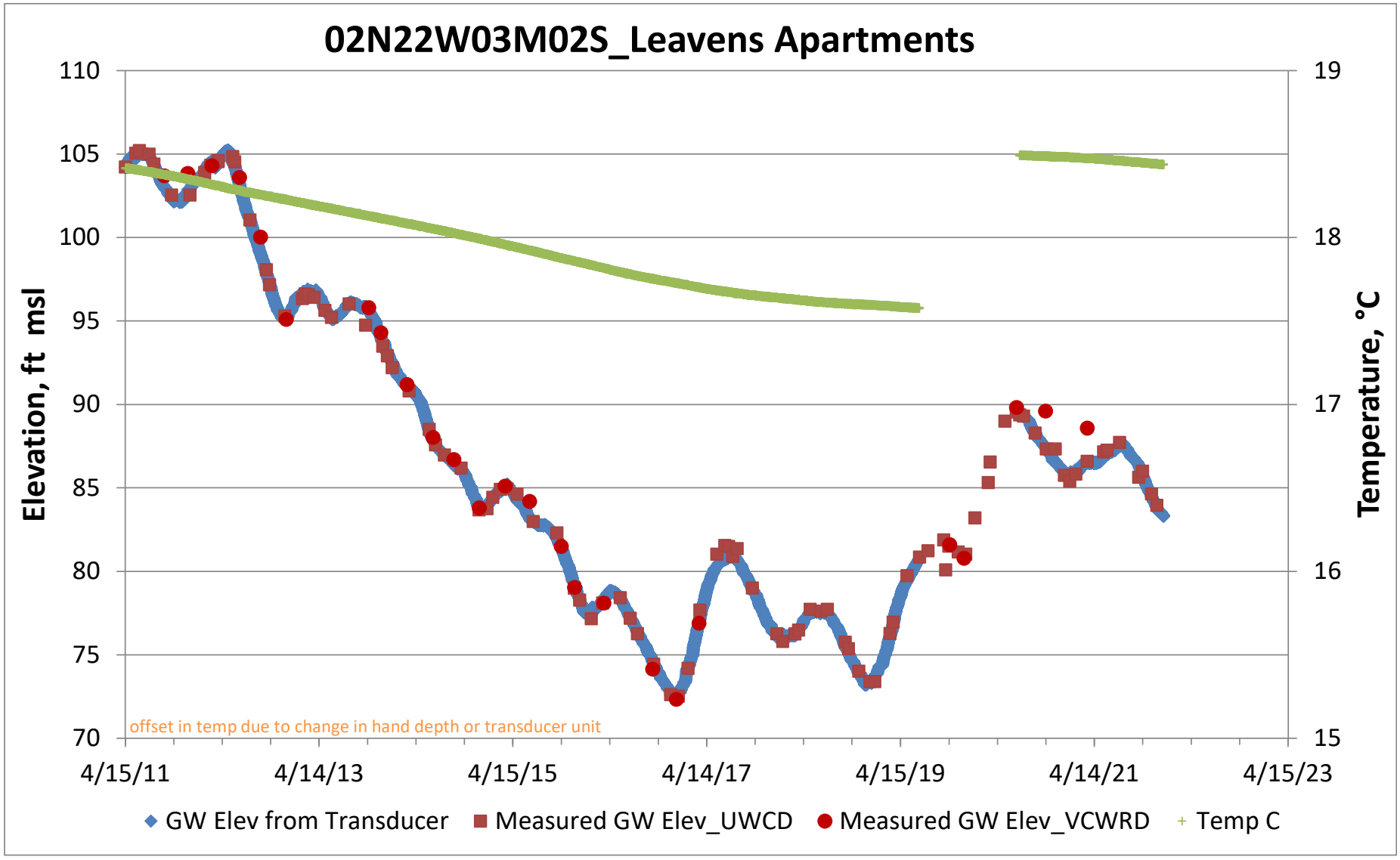

03N22W36K02S (170' - 270' bgs)
Groundwater Elev. (ft, msl)
190
180
170
160
150
140
130
120
110
1926
1937
1948
1959
1970
1981
1992
2003
2014
2025
RP = 179.39
2021
141'


03N22W36K05S (175' - 265' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 180.9 FEET
TOP OF WELL SCREEN
1998
164'
2005
158'
2011
156'
2021
142'

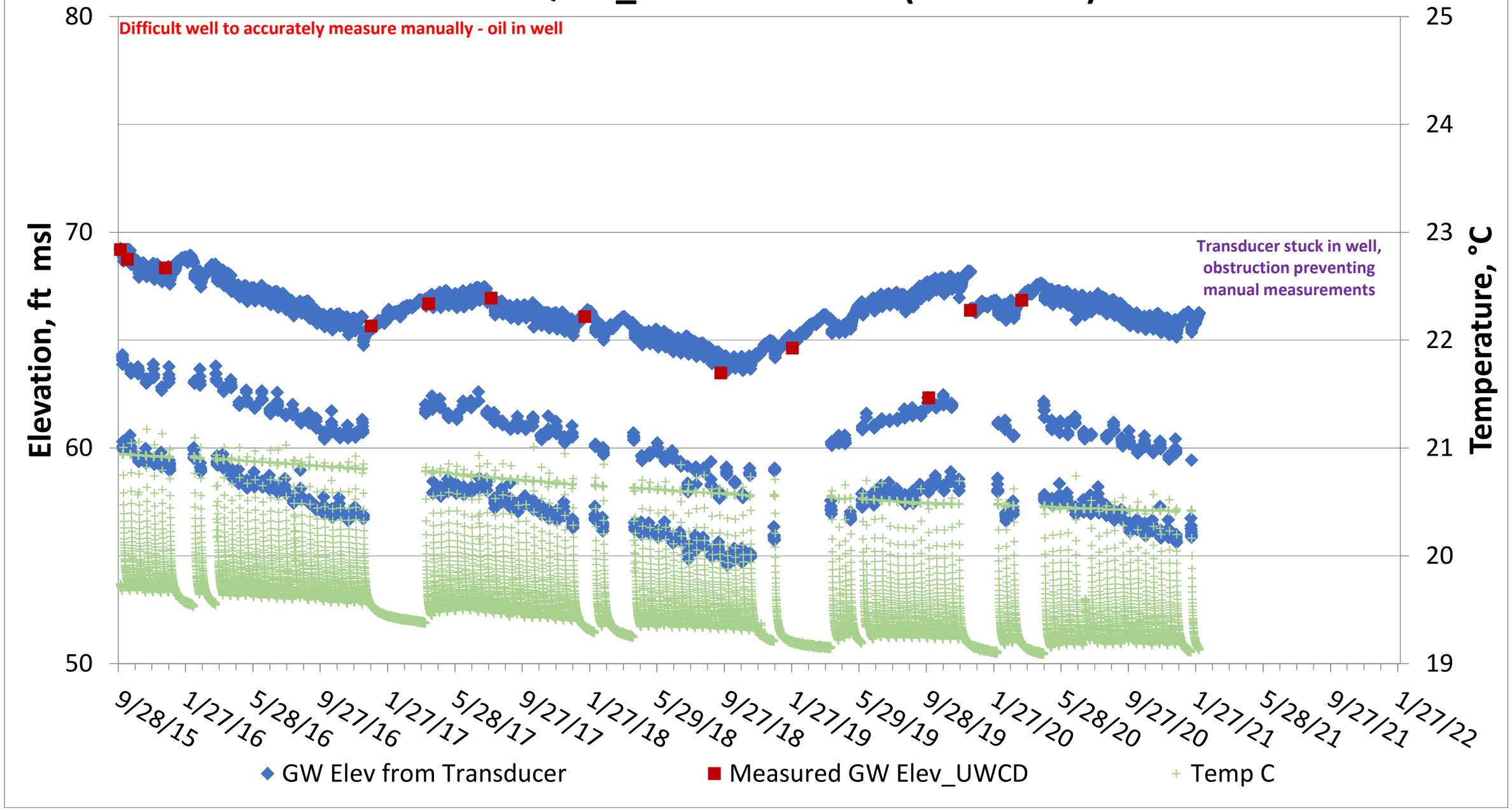

03N22W36K05S (175' - 265' bgs)
Groundwater Elev. (ft, msl)
190
180
170
160
150
140
130
120
110
1988
1992
1996
2000
2004
2008
2012
2016
2020
2024
RP = 180.89
1998
164'
2005
158'
2011
156'
2021
142'

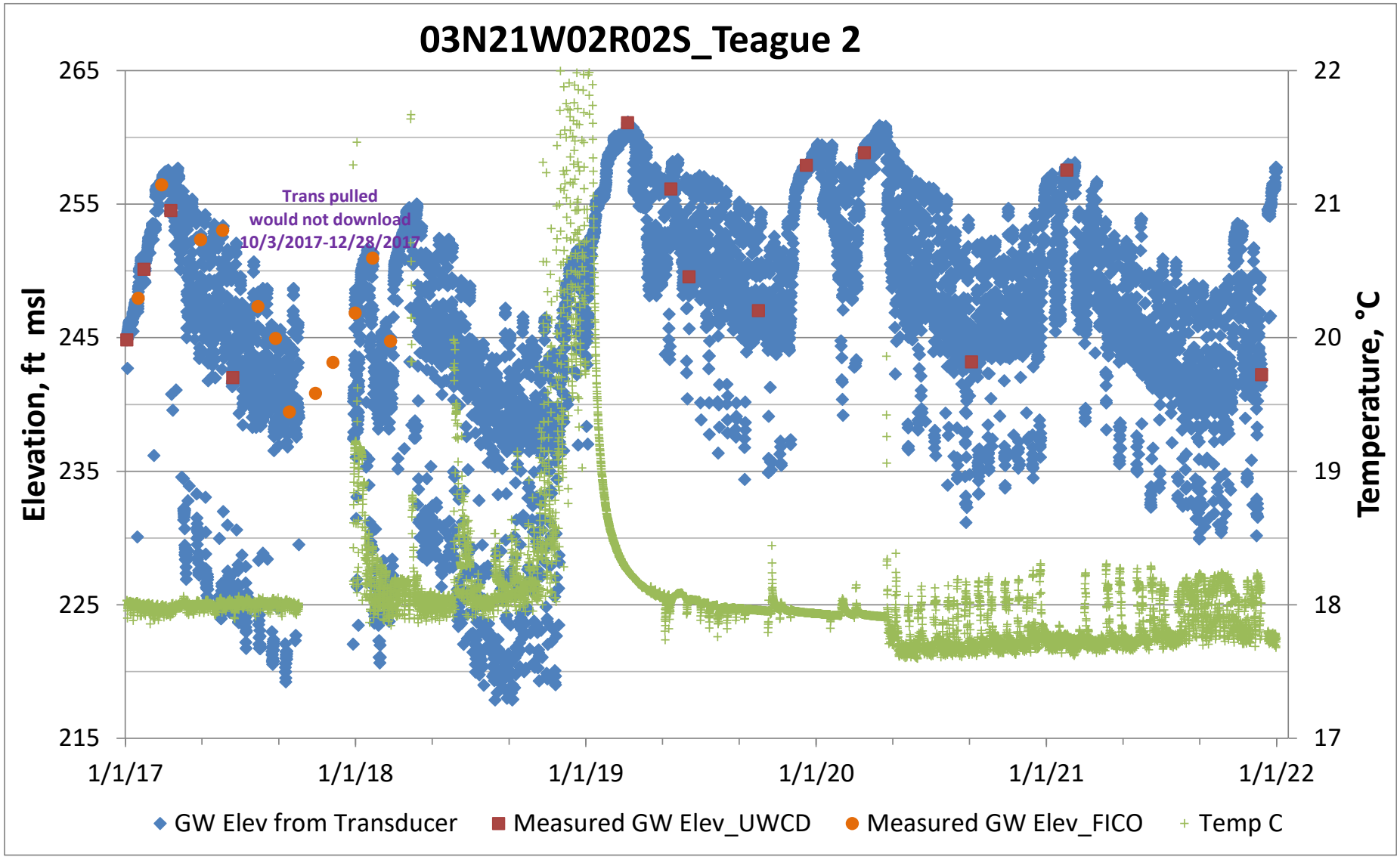

02N22W02K07S_Alta #9
Well Destroyed & Replaced with Alta #12
New Trans Installed (100' DRC)
New Trans Installed (120' DRC)
Rehang Trans
Rehang Trans
Pump & Trans pulled
Trans pulled
Trans Malfunc
Trans Malfunc
Transducer sometimes goes dry when well is pumping
offsets in temp due to changes in transducer hang depth
Elevation, ft msl
Temperature, °C
160
150
140
130
120
110
100
90
80
70
60
50
40
30
24
22
20
18
16
14
12
4/7/11
10/6/11
4/6/12
10/5/12
4/6/13
10/6/13
GW Elev from Transducer
Measured GW Elev_UWCD
Measured GW Elev_Alta MWC
Temp C

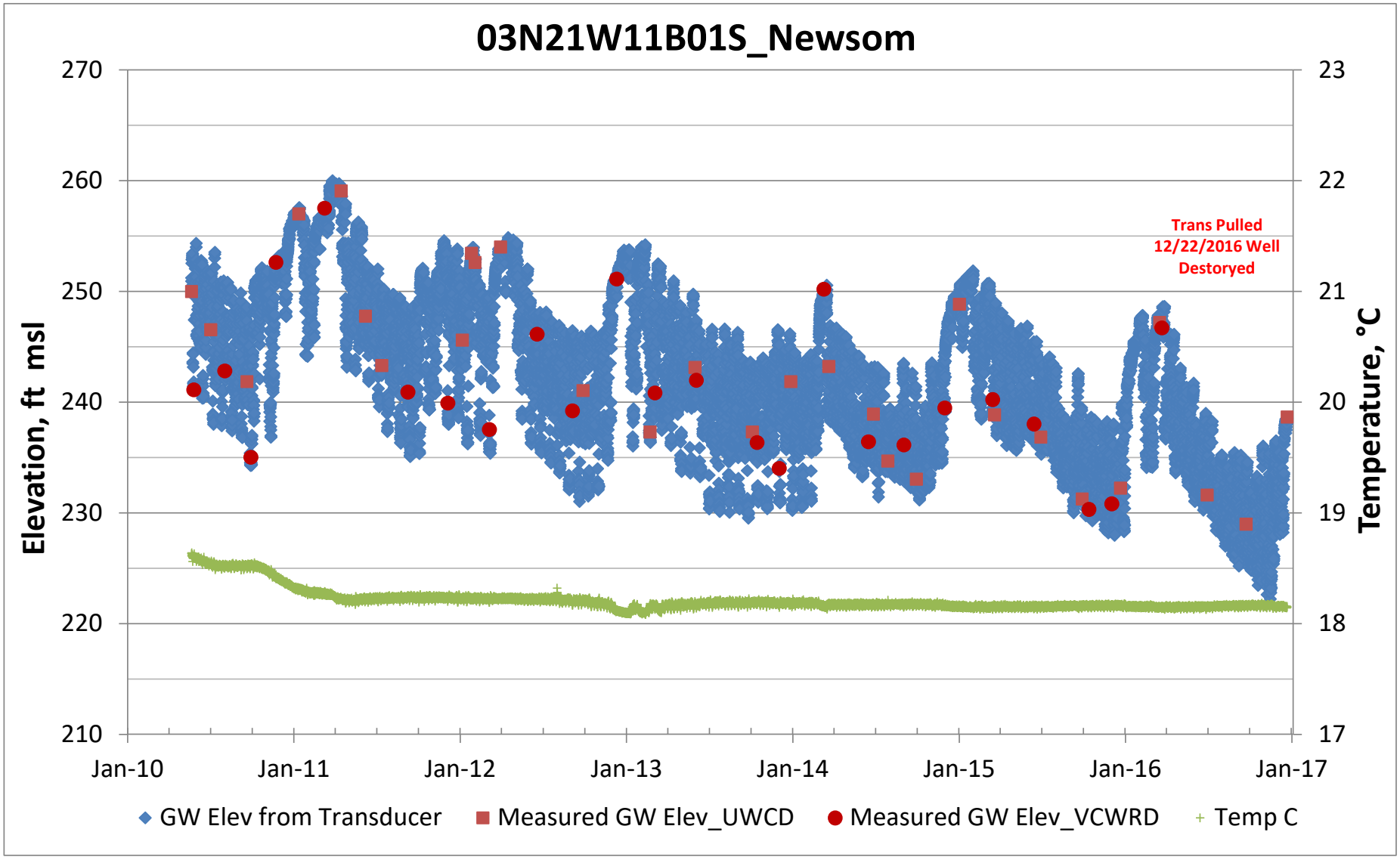

02N22W02K10S_Alta #12
Elevation, ft msl
Temperature, °C
160
150
140
130
120
110
100
90
80
70
60
50
40
30
24
22
20
18
16
14
12
5/6/14
8/5/14
11/4/14
2/3/15
5/6/15
Trans Pulled 5/5/2015
GW Elev from Transducer
Measured GW Elev_UWCD
Measured GW Elev_Alta MWC
Temp C

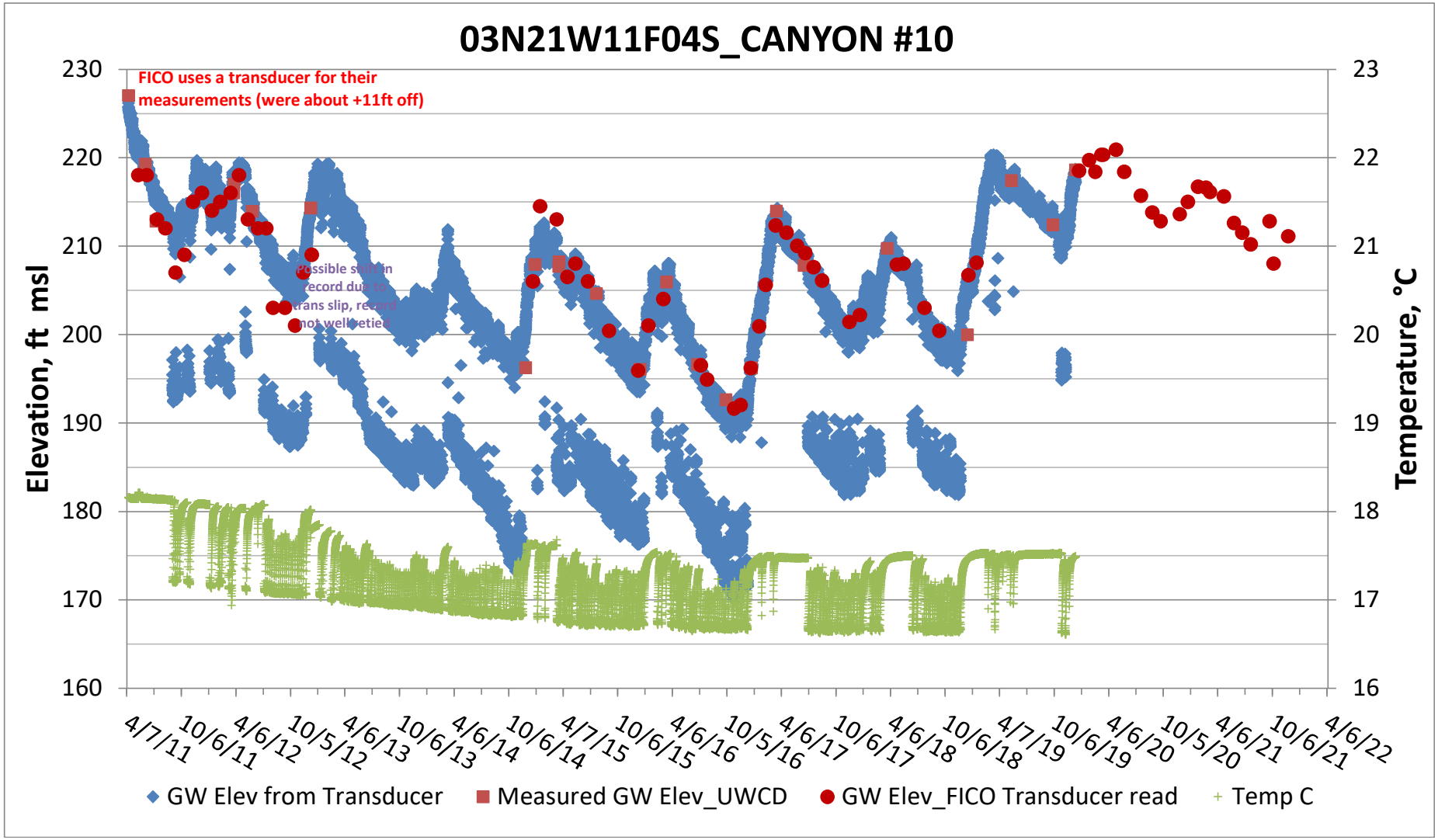

02N22W03M02S_Leavens Apartments
Elevation, ft msl
Temperature, °C
110
105
100
95
90
85
80
75
70
19
18
17
16
15
4/15/11
4/14/13
4/15/15
4/14/17
4/15/19
4/14/21
4/15/23
offset in temp due to change in hand depth or transducer unit
GW Elev from Transducer
Measured GW Elev_UWCD
Measured GW Elev_VCWRD
Temp C

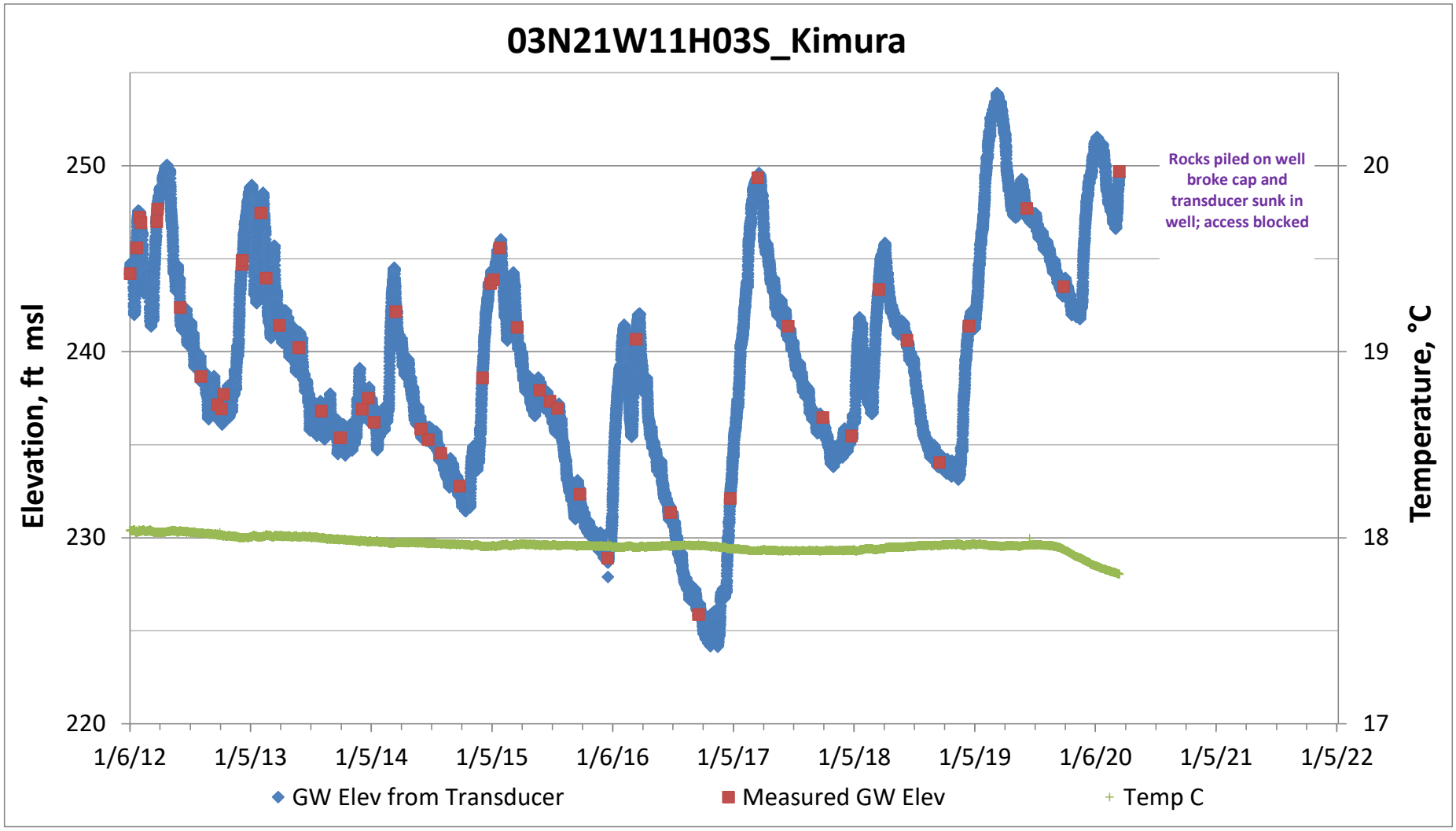
02N22W03Q01S_John McConica (Blackburn)

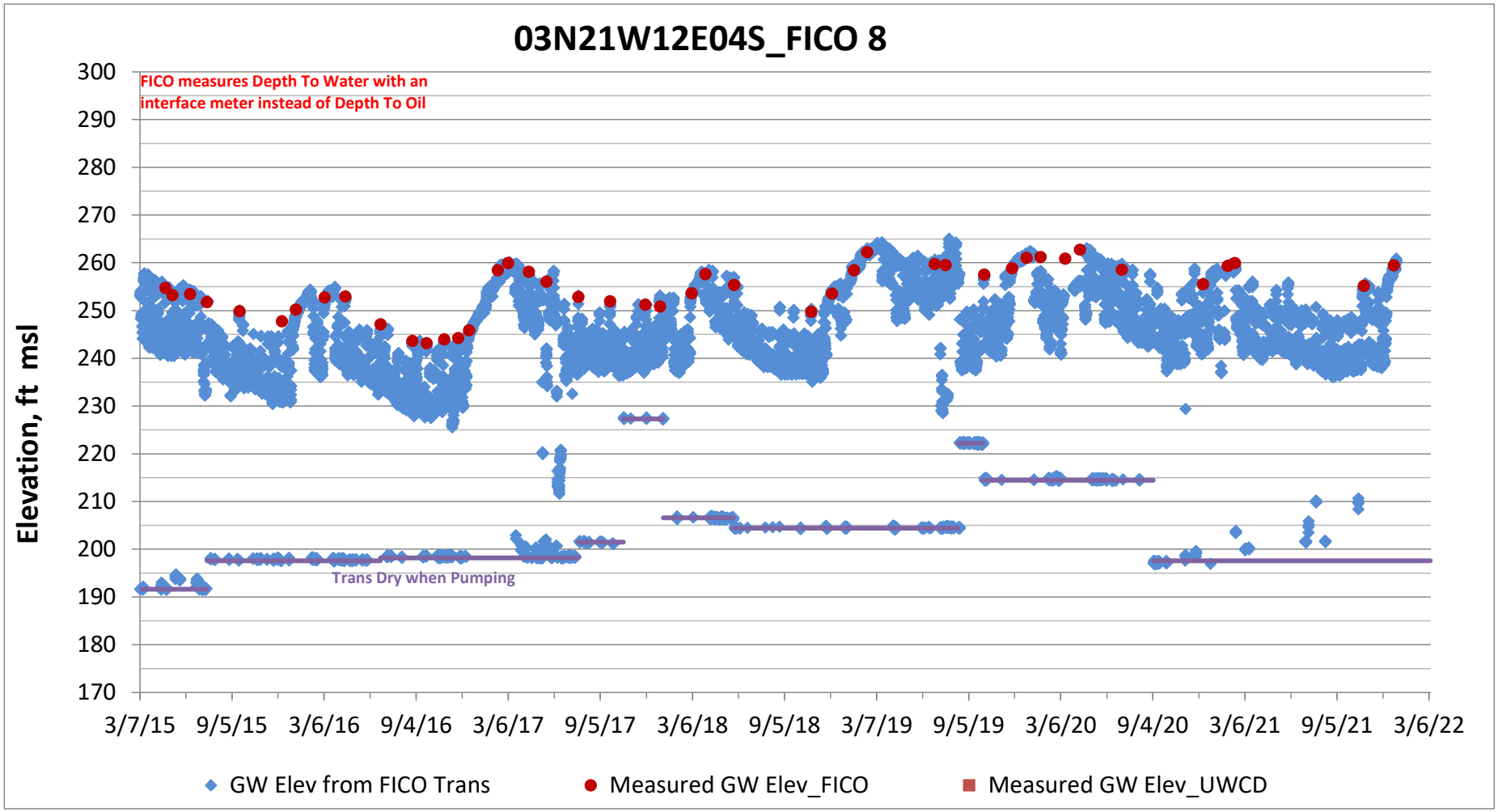


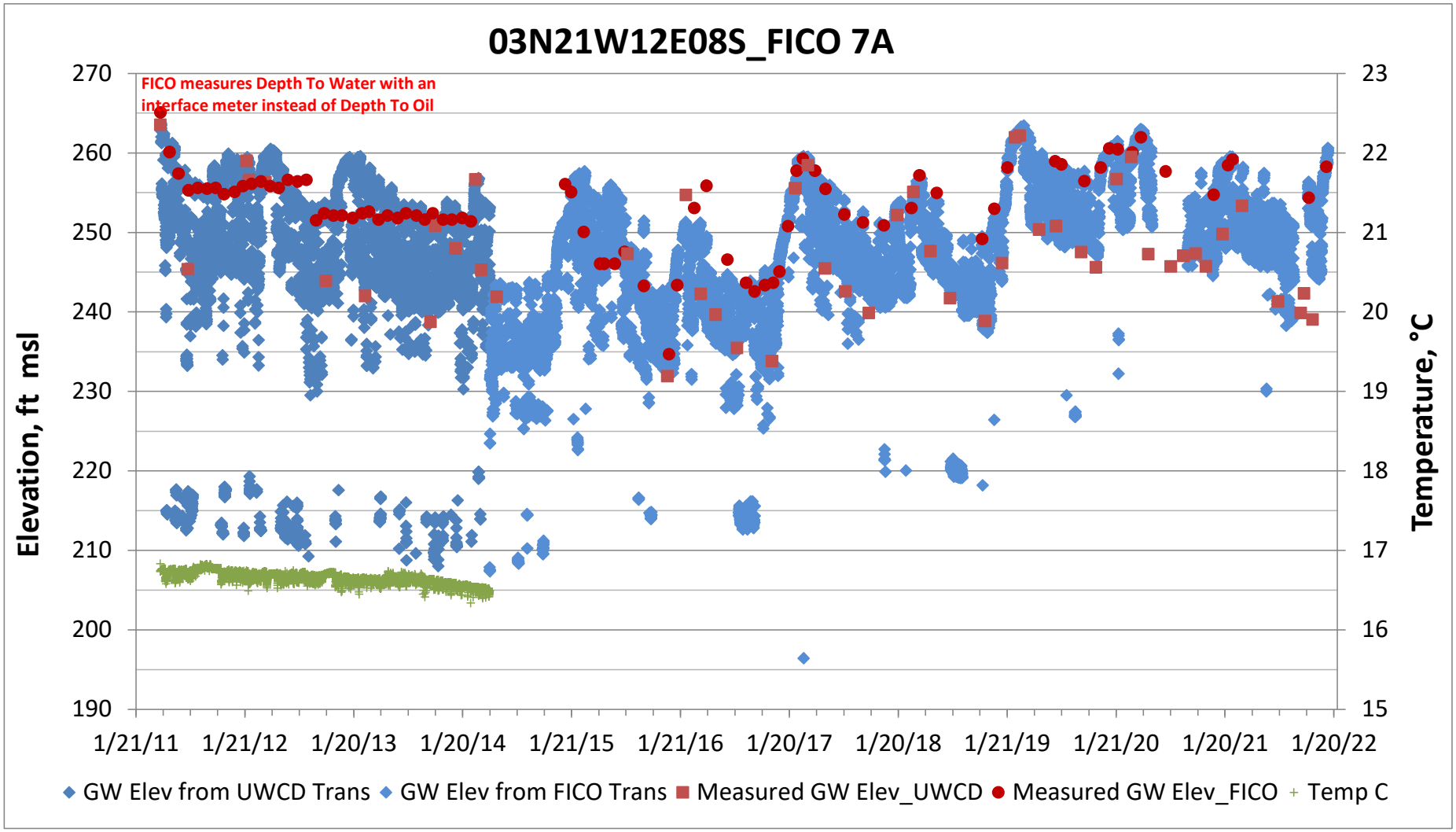

03N21W02R02S_Teague 2
Trans pulled
would not download
10/3/2017-12/28/2017
Elevation, ft msl
Temperature, °C
265
255
245
235
225
215
22
21
20
19
18
17
1/1/17
1/1/18
1/1/19
1/1/20
1/1/21
1/1/22
GW Elev from Transducer
Measured GW Elev_UWCD
Measured GW Elev_FICO
Temp C

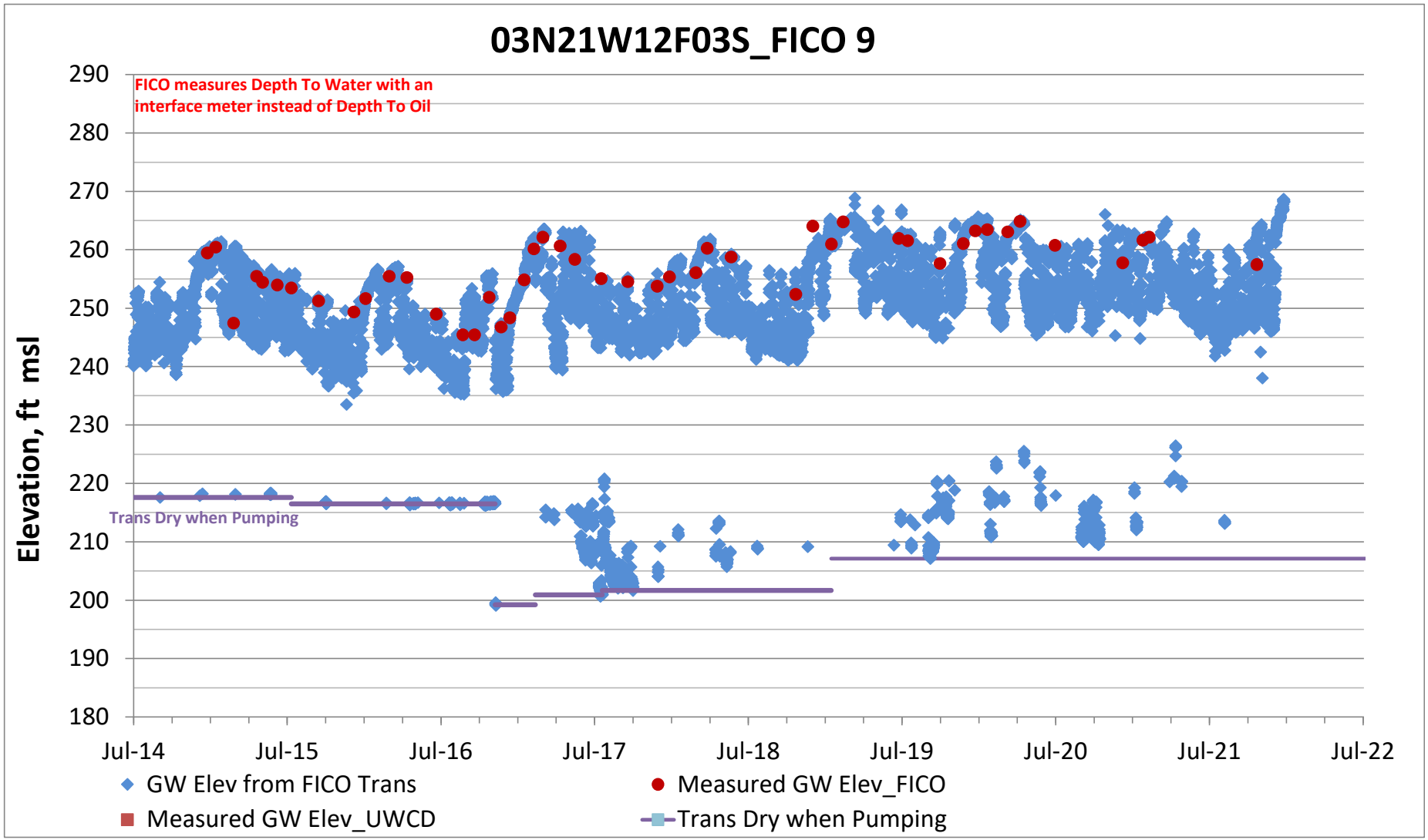

03N21W11B01S_Newsom
Elevation, ft msl
Temperature, °C
270
260
250
240
230
220
210
23
22
21
20
19
18
17
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Trans Pulled
12/22/2016 Well
Destoryed
GW Elev from Transducer
Measured GW Elev_UWCD
Measured GW Elev_VCWRD
Temp C

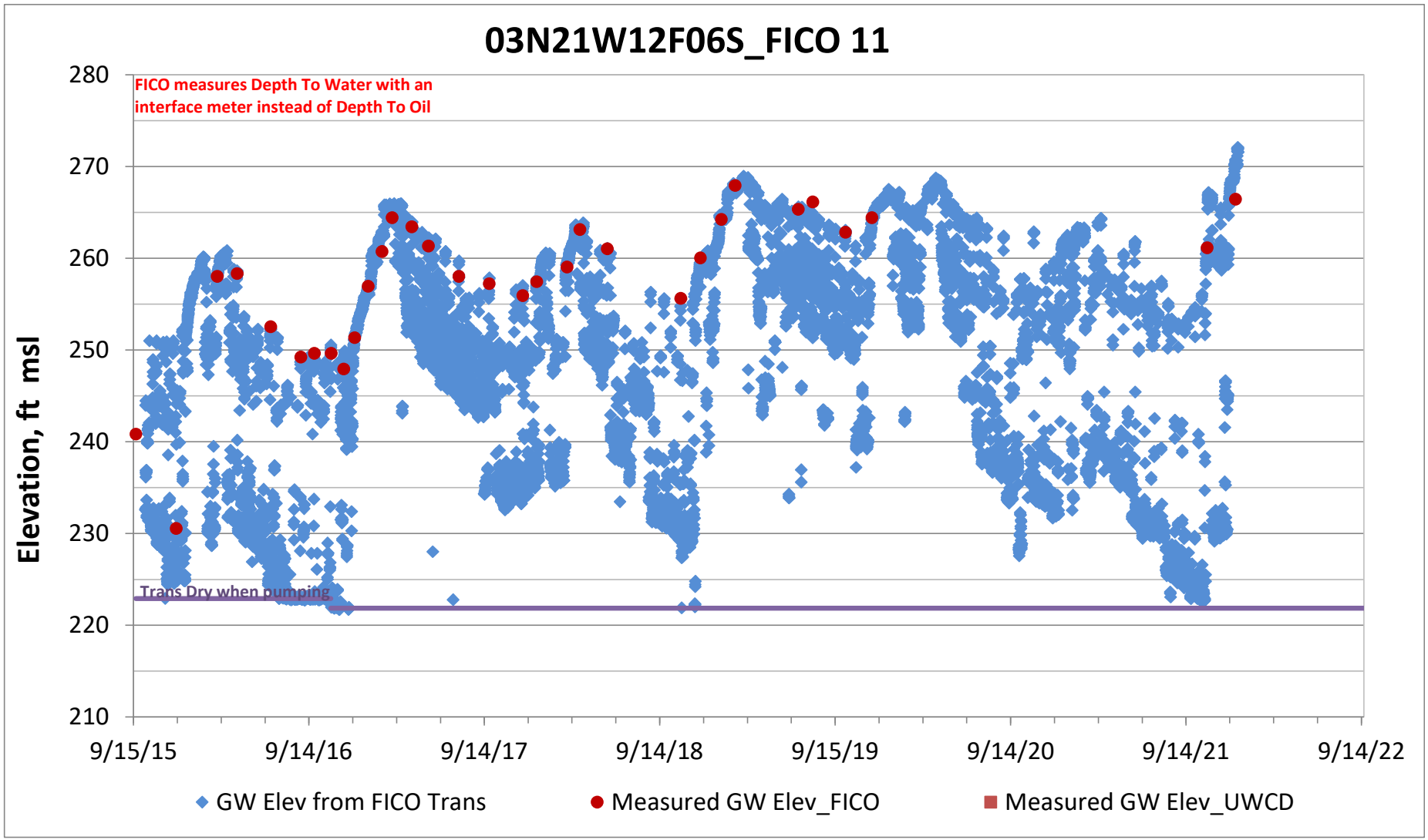

03N21W11F04S_CANYON #10
FICO uses a transducer for their measurements (were about +11ft off)
Possible station record due to trans slip, record not well tied
Elevation, ft msl
Temperature, °C
230
220
210
200
190
180
170
160
23
22
21
20
19
18
17
16
4/7/11
10/6/11
4/6/12
10/5/12
4/6/13
10/6/13
4/6/14
10/6/14
4/7/15
10/6/15
4/6/16
10/5/16
4/6/17
10/6/17
4/6/18
10/6/18
4/7/19
10/6/19
4/6/20
10/5/20
4/6/21
10/6/21
4/6/22
GW Elev from Transducer
Measured GW Elev_UWCD
GW Elev_FICO Transducer read
Temp C

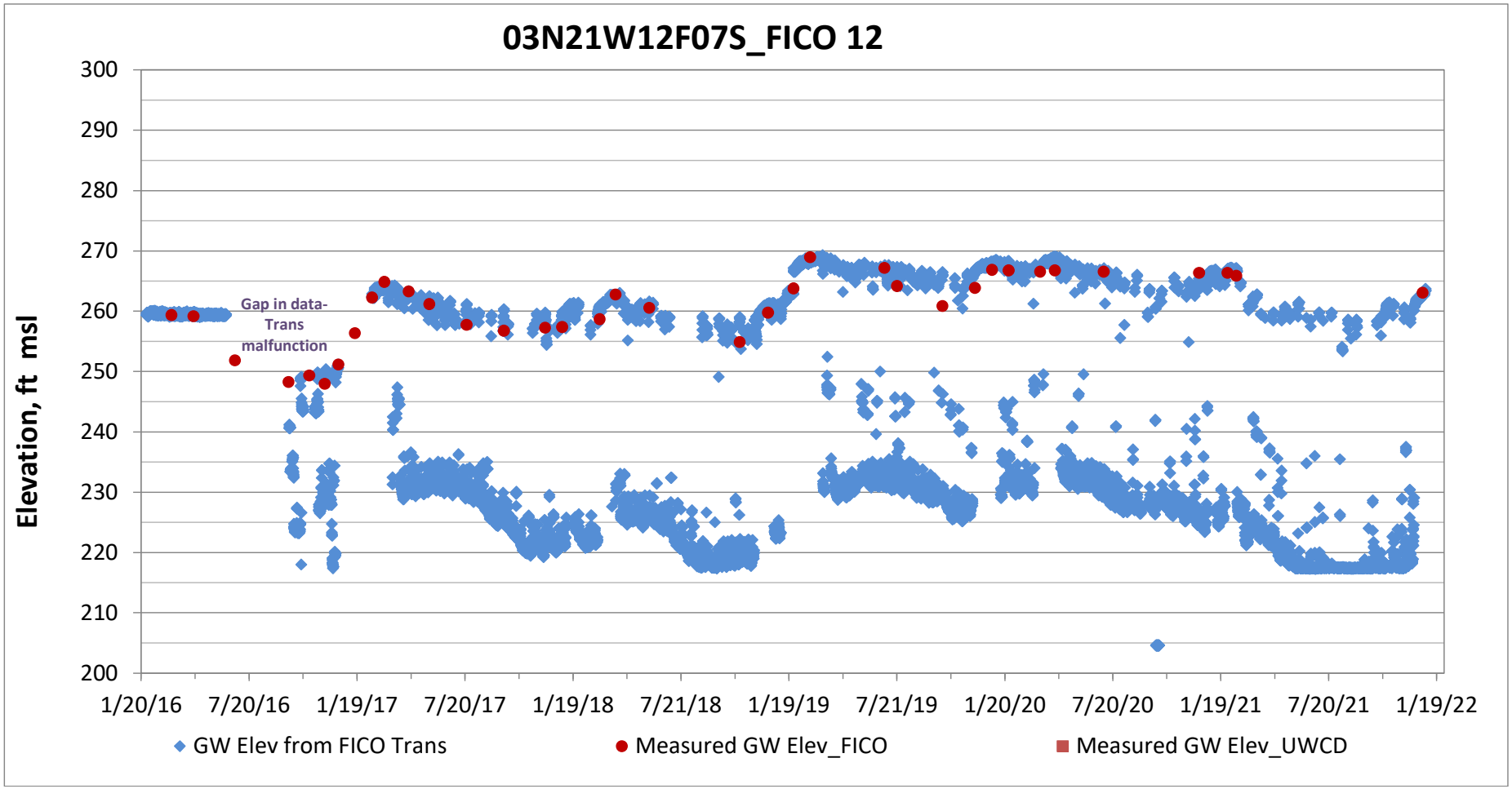

03N21W11H03S_Kimura
Elevation, ft msl
Temperature, °C
250
240
230
220
20
19
18
17
1/6/12
1/5/13
1/5/14
1/5/15
1/6/16
1/5/17
1/5/18
1/5/19
1/6/20
1/5/21
1/5/22
Rocks piled on well broke cap and transducer sunk in well; access blocked
GW Elev from Transducer
Measured GW Elev
Temp C

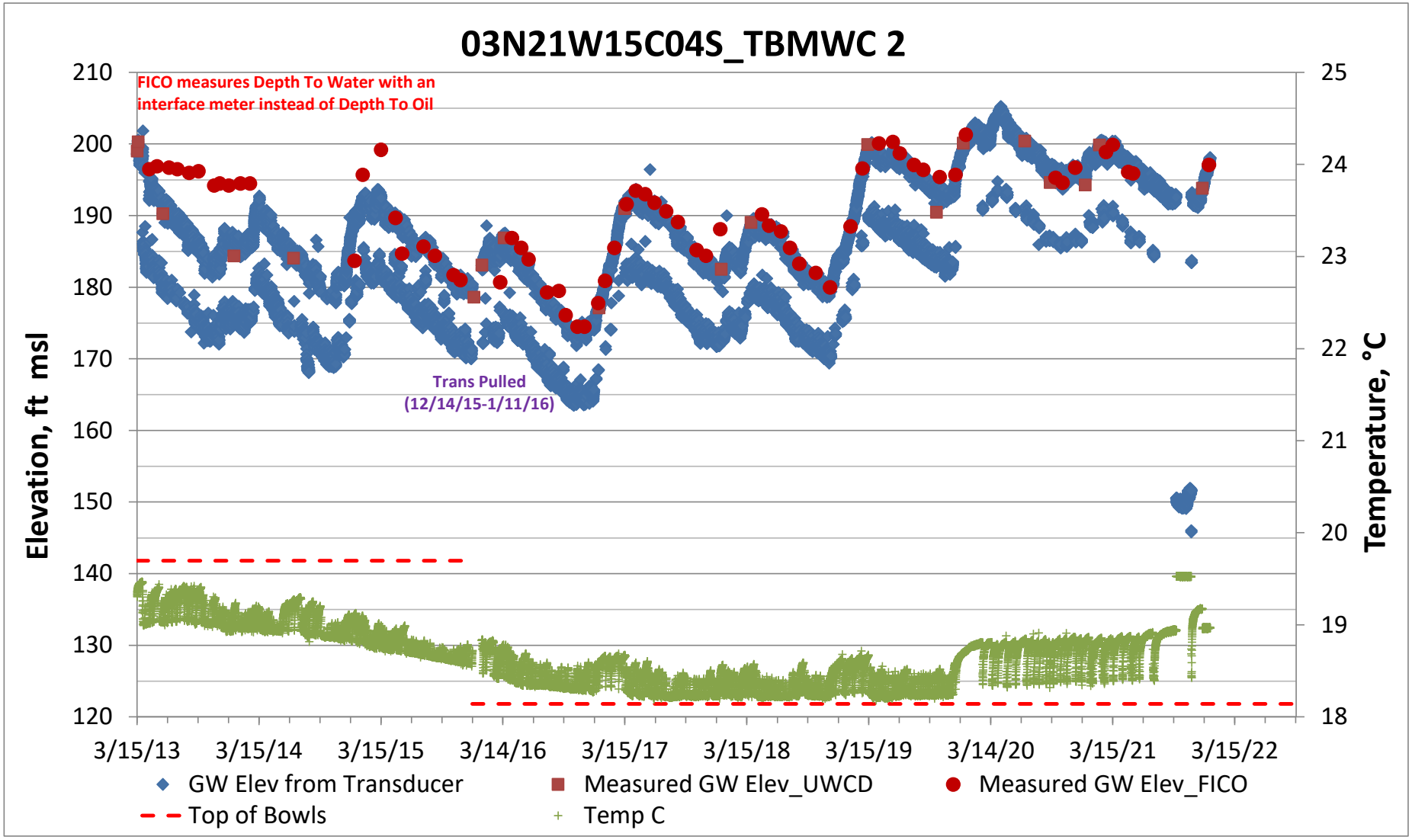

03N21W12E04S_FICO 8
FICO measures Depth To Water with an interface meter instead of Depth To Oil
Trans Dry when Pumping
Elevation, ft msl
300
290
280
270
260
250
240
230
220
210
200
190
180
170
3/7/15
9/5/15
3/6/16
9/4/16
3/6/17
9/5/17
3/6/18
9/5/18
3/7/19
9/5/19
3/6/20
9/4/20
3/6/21
9/5/21
3/6/22
GW Elev from FICO Trans
Measured GW Elev_FICO
Measured GW Elev_UWCD

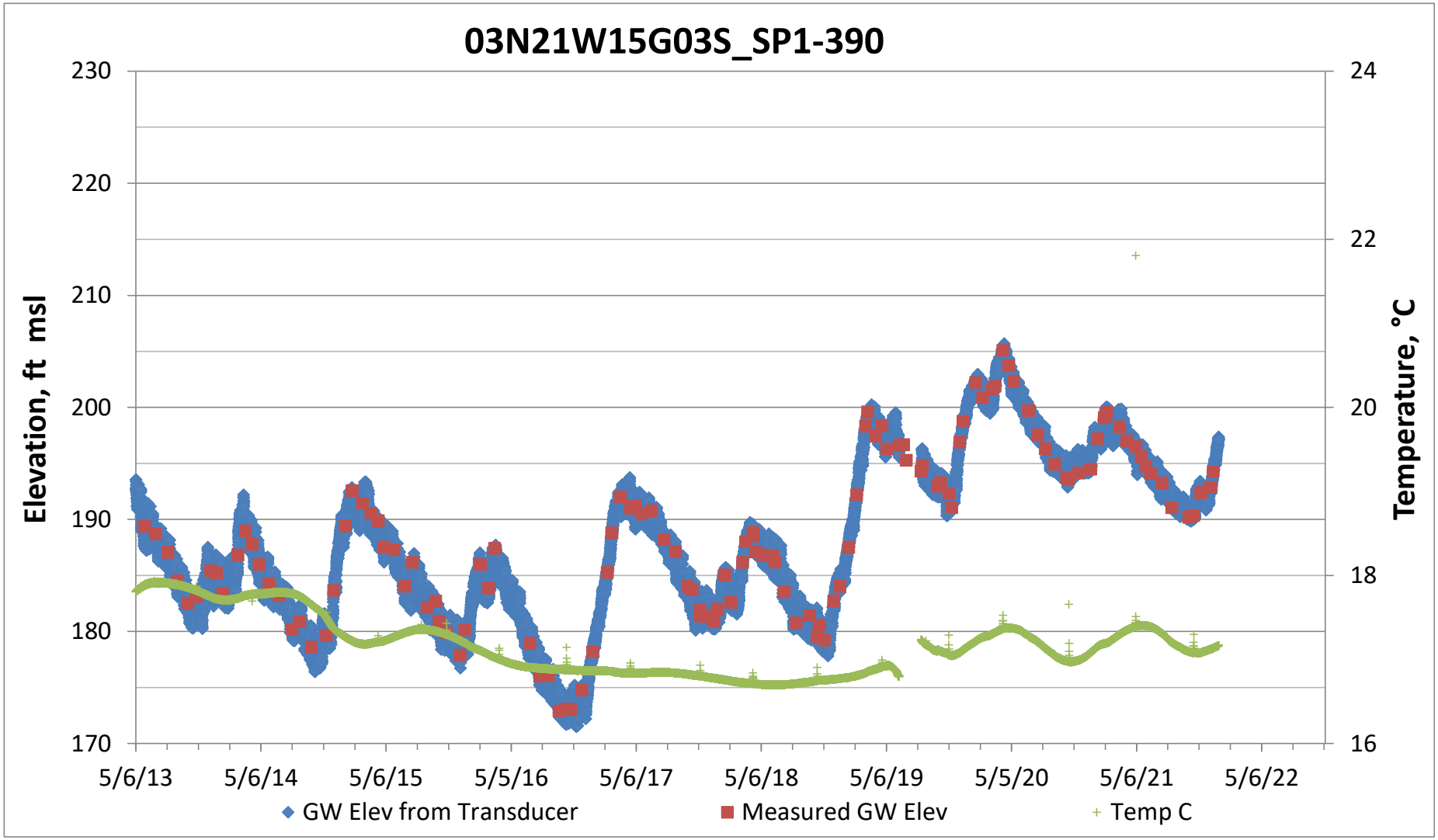

03N21W12E08S_FICO 7A
FICO measures Depth To Water with an interface meter instead of Depth To Oil
Elevation, ft msl
Temperature, °C
270
260
250
240
230
220
210
200
190
23
22
21
20
19
18
17
16
15
1/21/11
1/21/12
1/20/13
1/20/14
1/21/15
1/21/16
1/20/17
1/20/18
1/21/19
1/21/20
1/20/21
1/20/22
GW Elev from UWCD Trans
GW Elev from FICO Trans
Measured GW Elev_UWCD
Measured GW Elev_FICO
Temp C

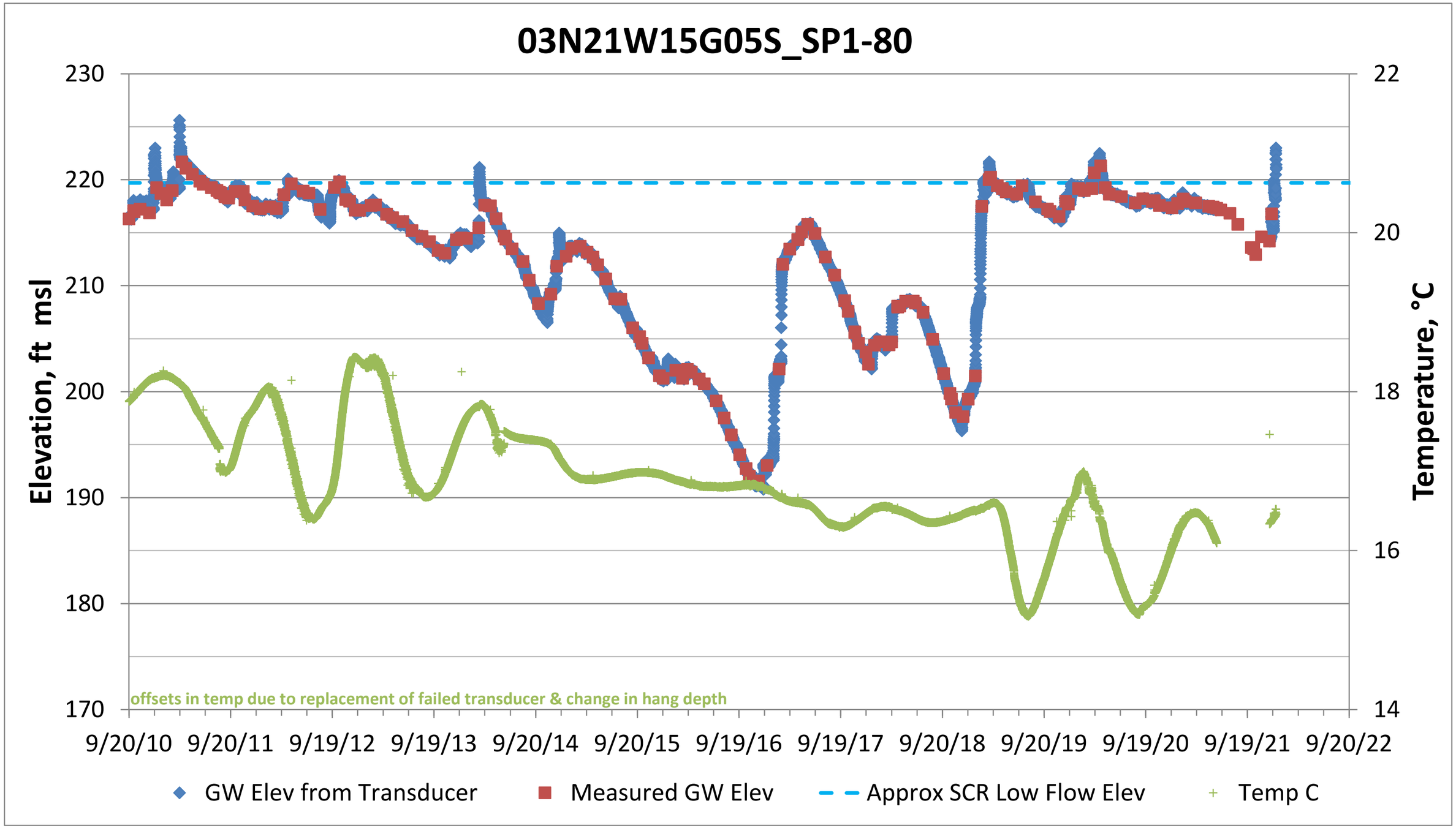

03N21W12F03S_FICO 9
FICO measures Depth To Water with an interface meter instead of Depth To Oil
Trans Dry when Pumping
Elevation, ft msl
290
280
270
260
250
240
230
220
210
200
190
180
Jul-14
Jul-15
Jul-16
Jul-17
Jul-18
Jul-19
Jul-20
Jul-21
Jul-22
GW Elev from FICO Trans
Measured GW Elev_FICO
Measured GW Elev_UWCD
Trans Dry when Pumping

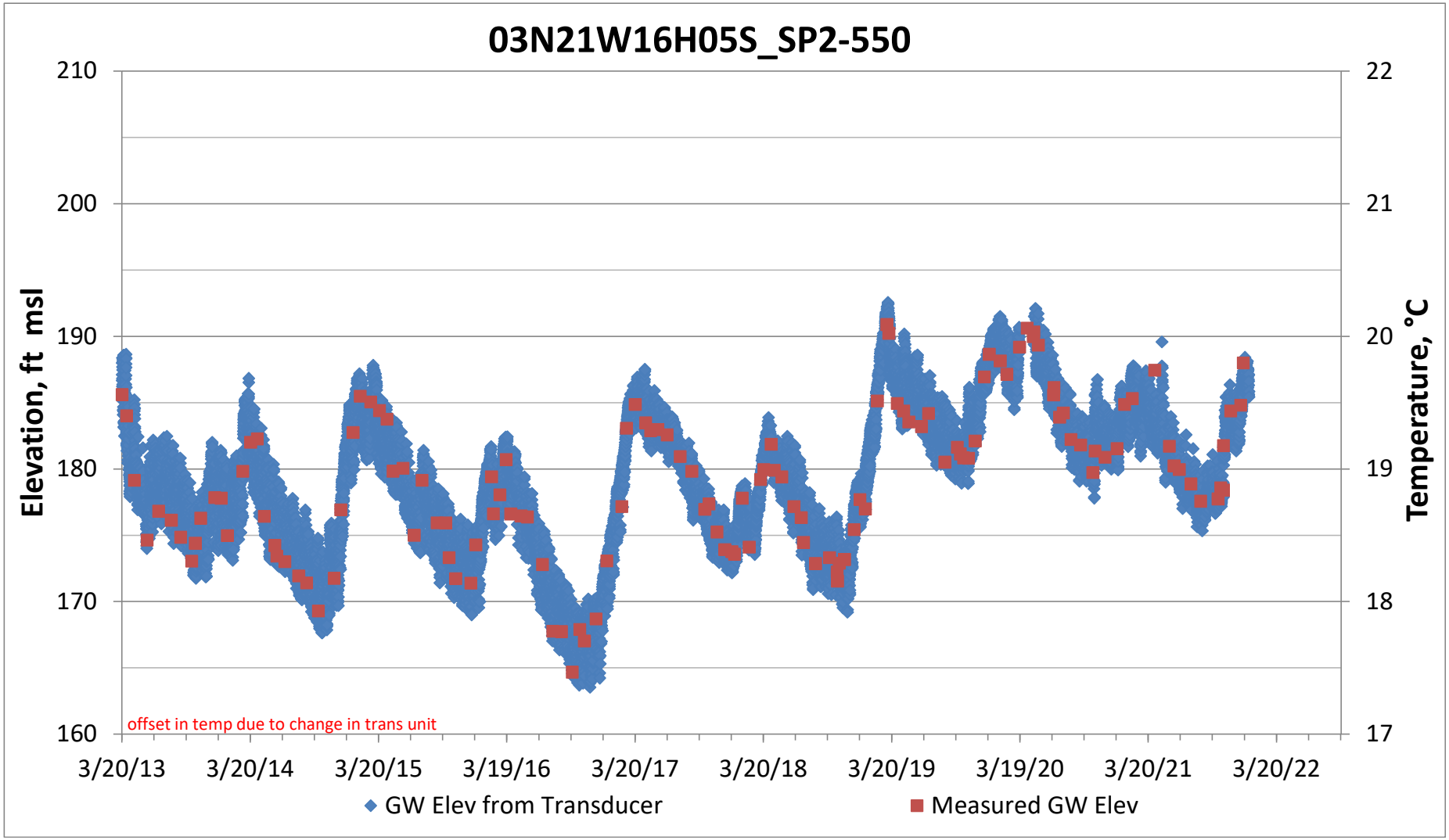

03N21W12F06S_FICO 11
FICO measures Depth To Water with an interface meter instead of Depth To Oil
Trans Dry when pumping
Elevation, ft msl
280
270
260
250
240
230
220
210
9/15/15
9/14/16
9/14/17
9/14/18
9/15/19
9/14/20
9/14/21
9/14/22
GW Elev from FICO Trans
Measured GW Elev_FICO
Measured GW Elev_UWCD

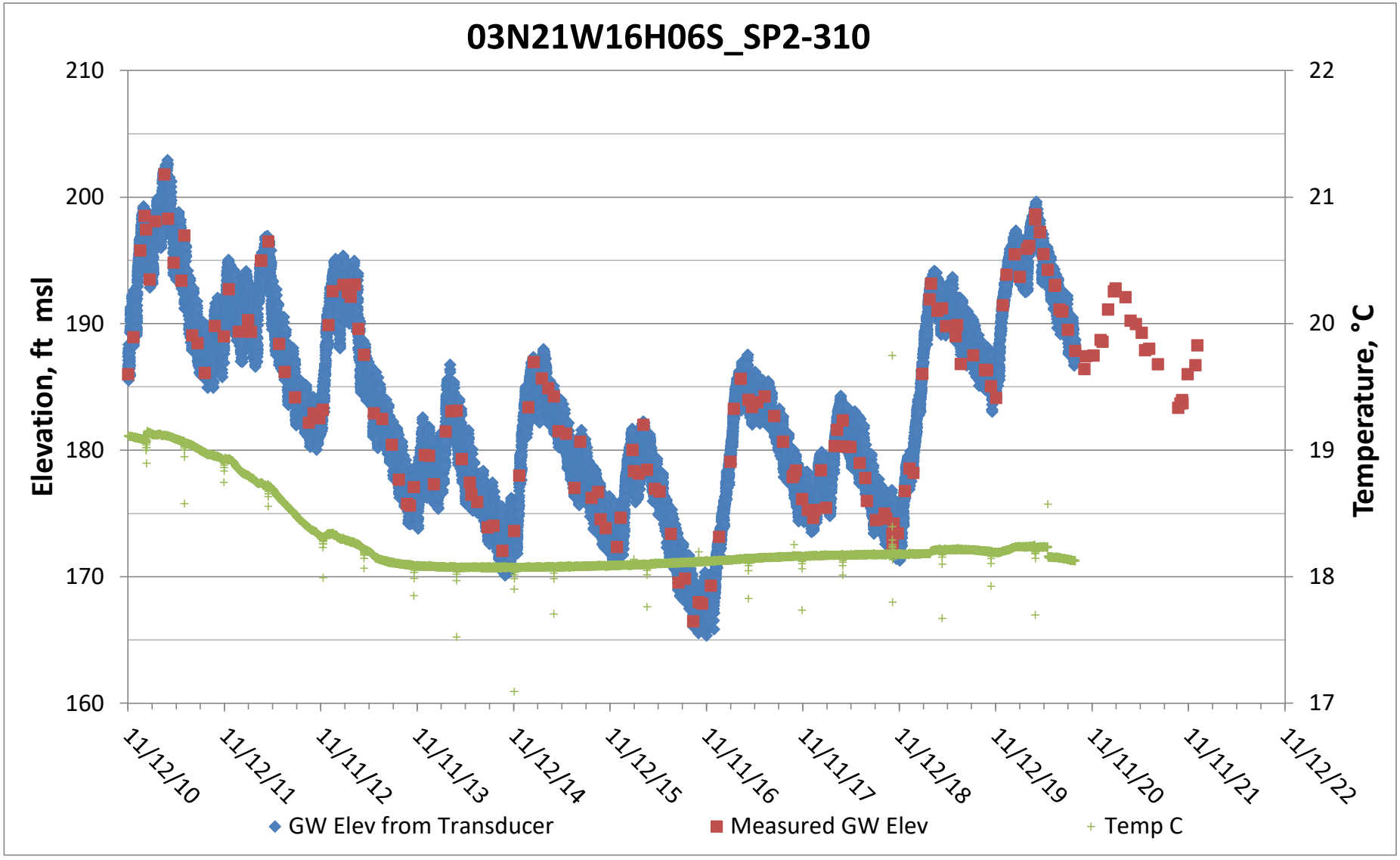

03N21W12F07S_FICO 12
Elevation, ft msl
300
290
280
270
260
250
240
230
220
210
200
Gap in data-
Trans
malfunction
1/20/16
7/20/16
1/19/17
7/20/17
1/19/18
7/21/18
1/19/19
7/21/19
1/20/20
7/20/20
1/19/21
7/20/21
1/19/22
GW Elev from FICO Trans
Measured GW Elev_FICO
Measured GW Elev_UWCD

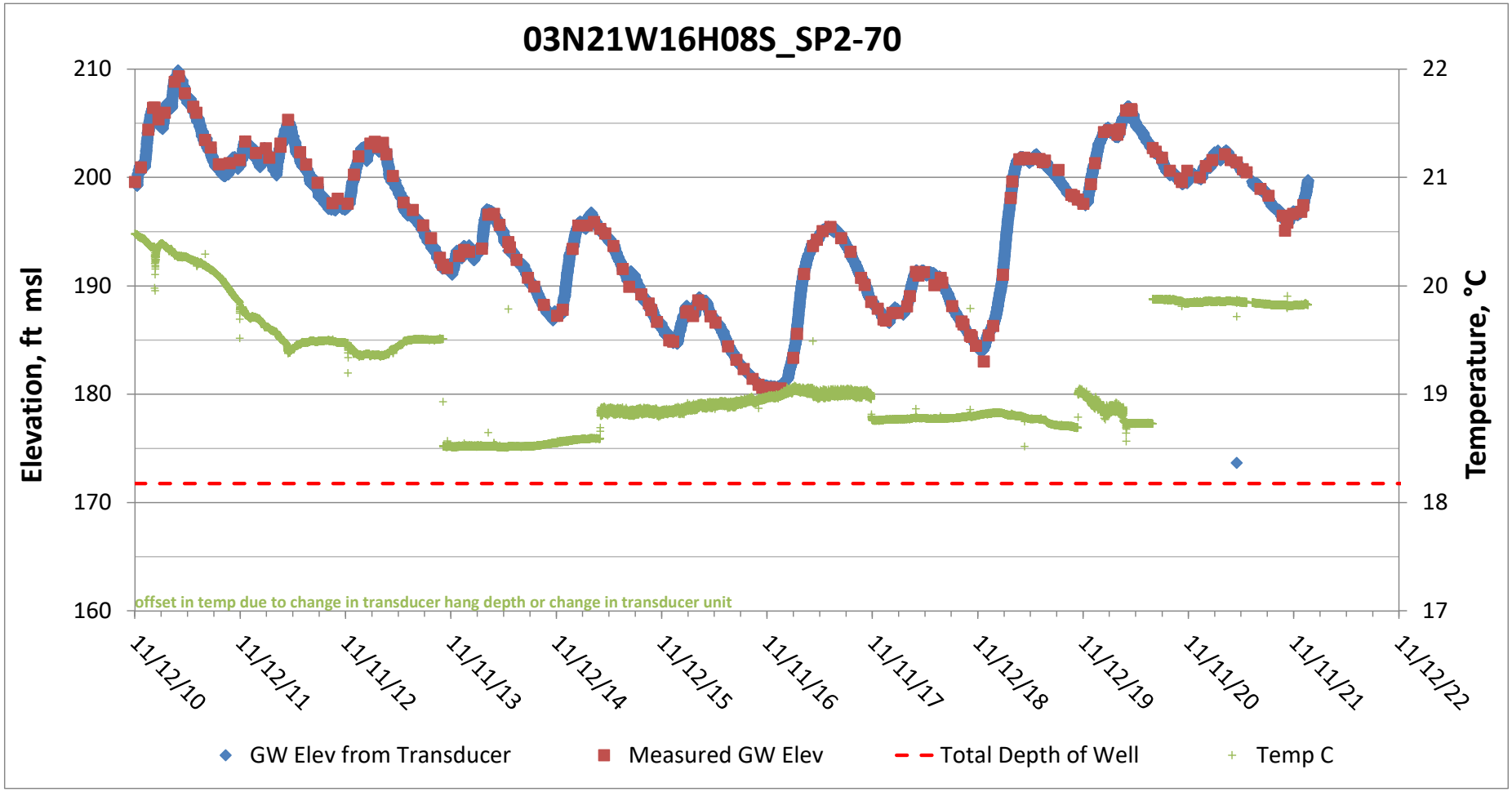

03N21W15C04S_TBMWC 2
FICO measures Depth To Water with an interface meter instead of Depth To Oil
Trans Pulled (12/14/15-1/11/16)
Elevation, ft msl
Temperature, °C
210
200
190
180
170
160
150
140
130
120
25
24
23
22
21
20
19
18
3/15/13
3/15/14
3/15/15
3/14/16
3/15/17
3/15/18
3/15/19
3/14/20
3/15/21
3/15/22
GW Elev from Transducer
Measured GW Elev_UWCD
Measured GW Elev_FICO
Top of Bowls
Temp C

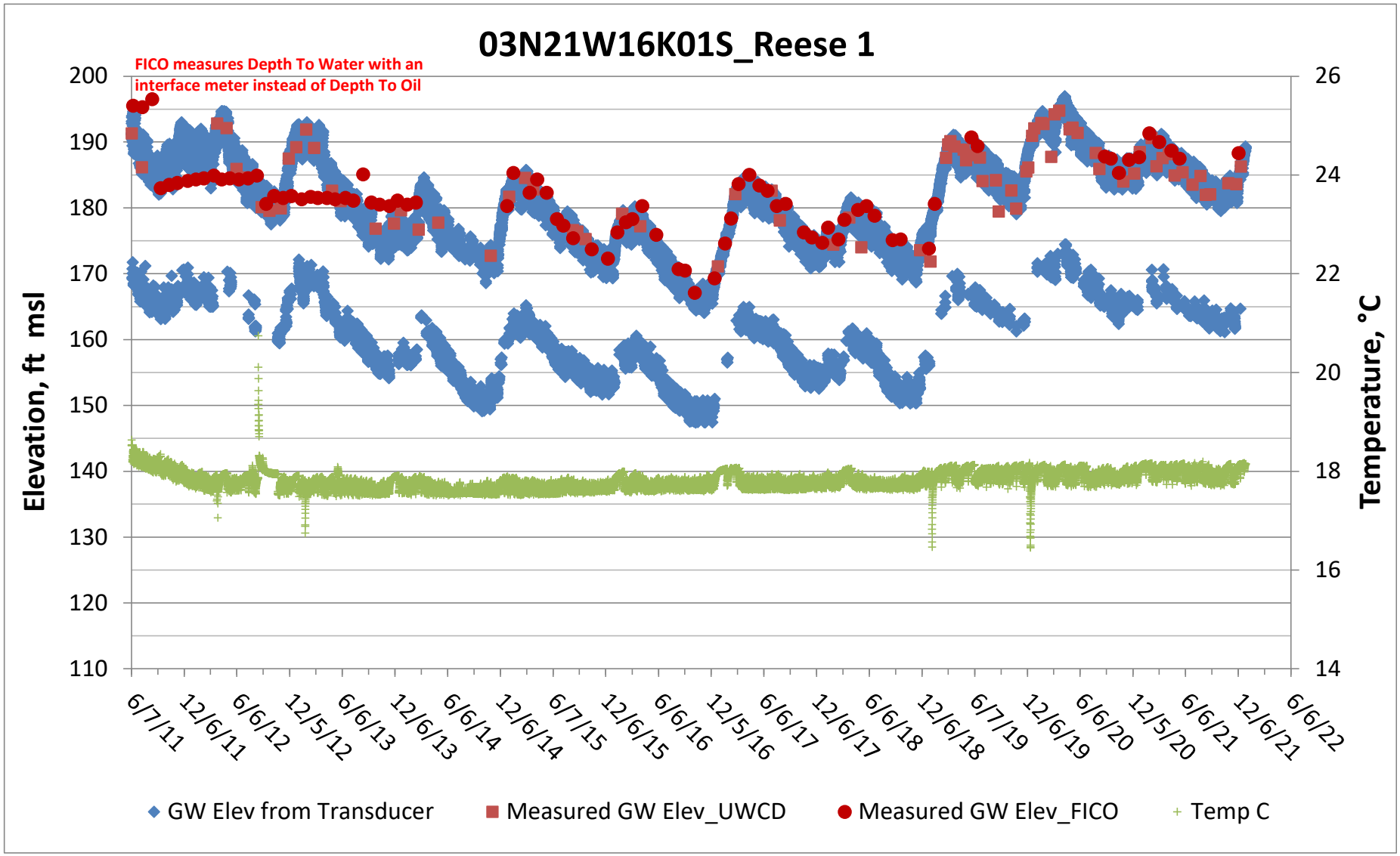

03N21W15G03S_SP1-390
Elevation, ft msl
Temperature, °C
230
220
210
200
190
180
170
24
22
20
18
16
5/6/13
5/6/14
5/6/15
5/5/16
5/6/17
5/6/18
5/6/19
5/5/20
5/6/21
5/6/22
GW Elev from Transducer
Measured GW Elev
Temp C

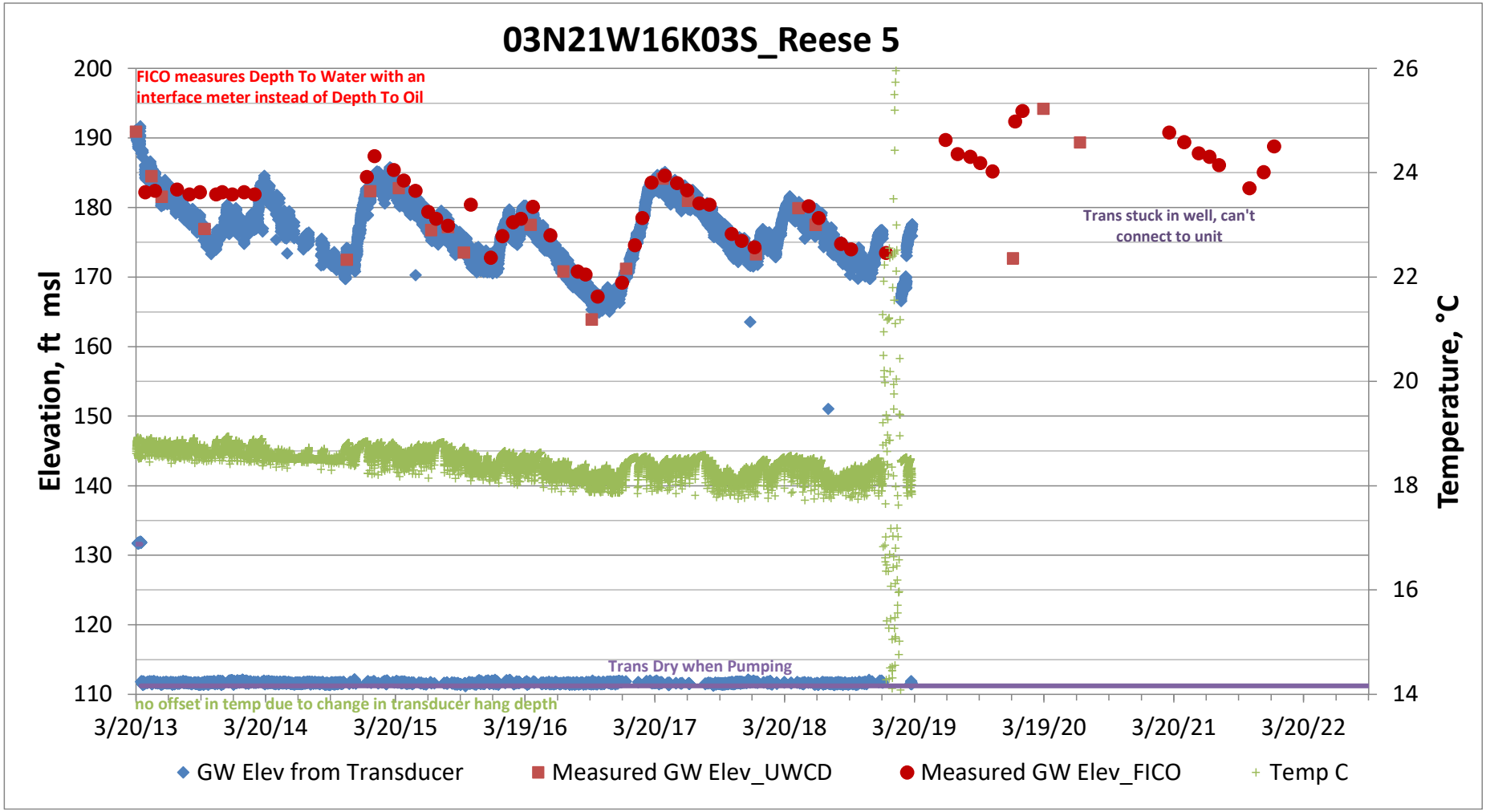

03N21W15G05S_SP1-80
Elevation, ft msl
Temperature, °C
230
220
210
200
190
180
170
22
20
18
16
14
offsets in temp due to replacement of failed transducer & change in hang depth
9/20/10
9/20/11
9/19/12
9/19/13
9/20/14
9/20/15
9/19/16
9/19/17
9/20/18
9/20/19
9/19/20
9/19/21
9/20/22
GW Elev from Transducer
Measured GW Elev
Approx SCR Low Flow Elev
Temp C

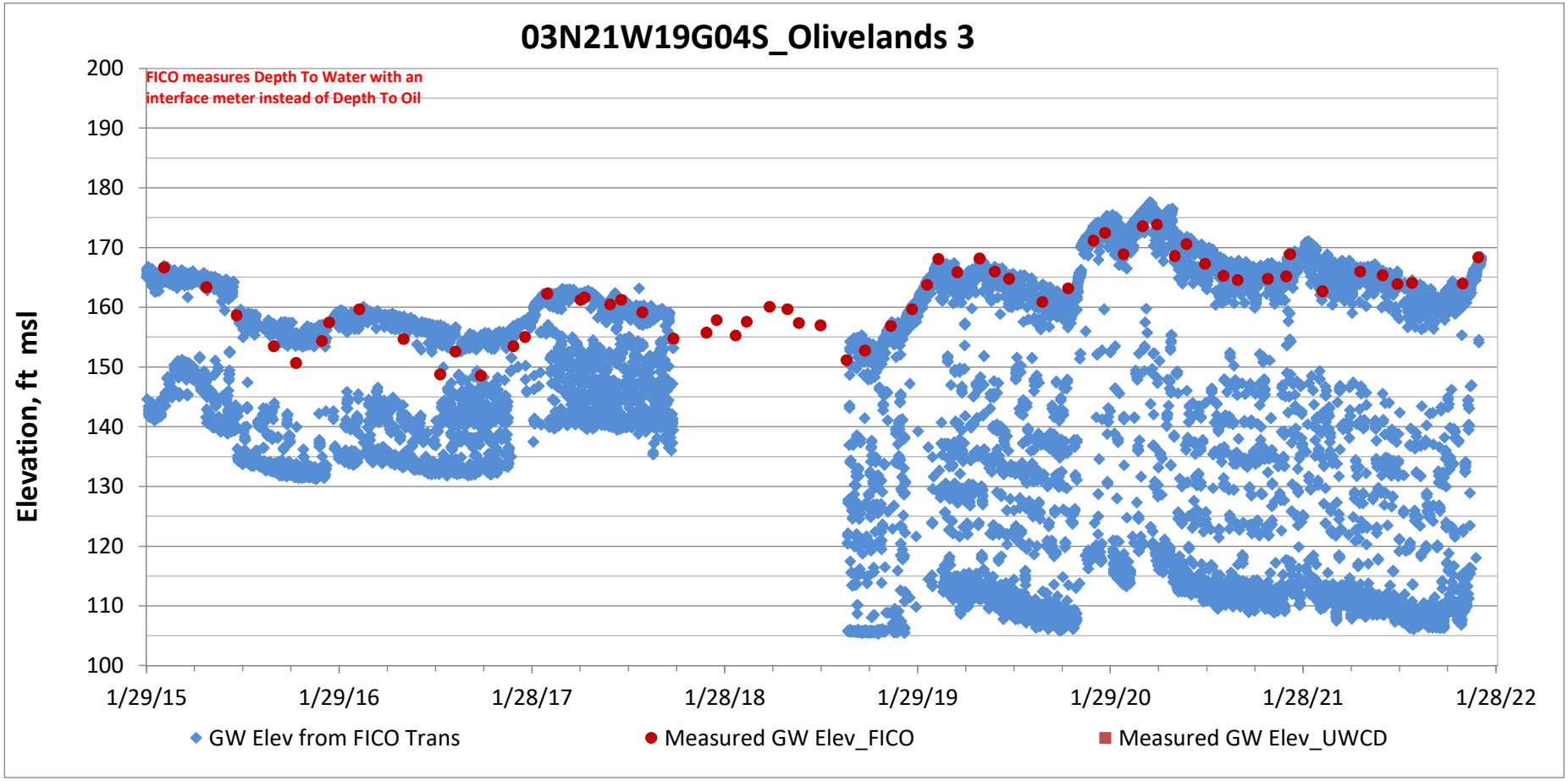

03N21W16H05S_SP2-550
210
200
190
180
170
160
22
21
20
19
18
17
Elevation, ft msl
Temperature, °C
offset in temp due to change in trans unit
3/20/13
3/20/14
3/20/15
3/19/16
3/20/17
3/20/18
3/20/19
3/19/20
3/20/21
3/20/22
GW Elev from Transducer
Measured GW Elev

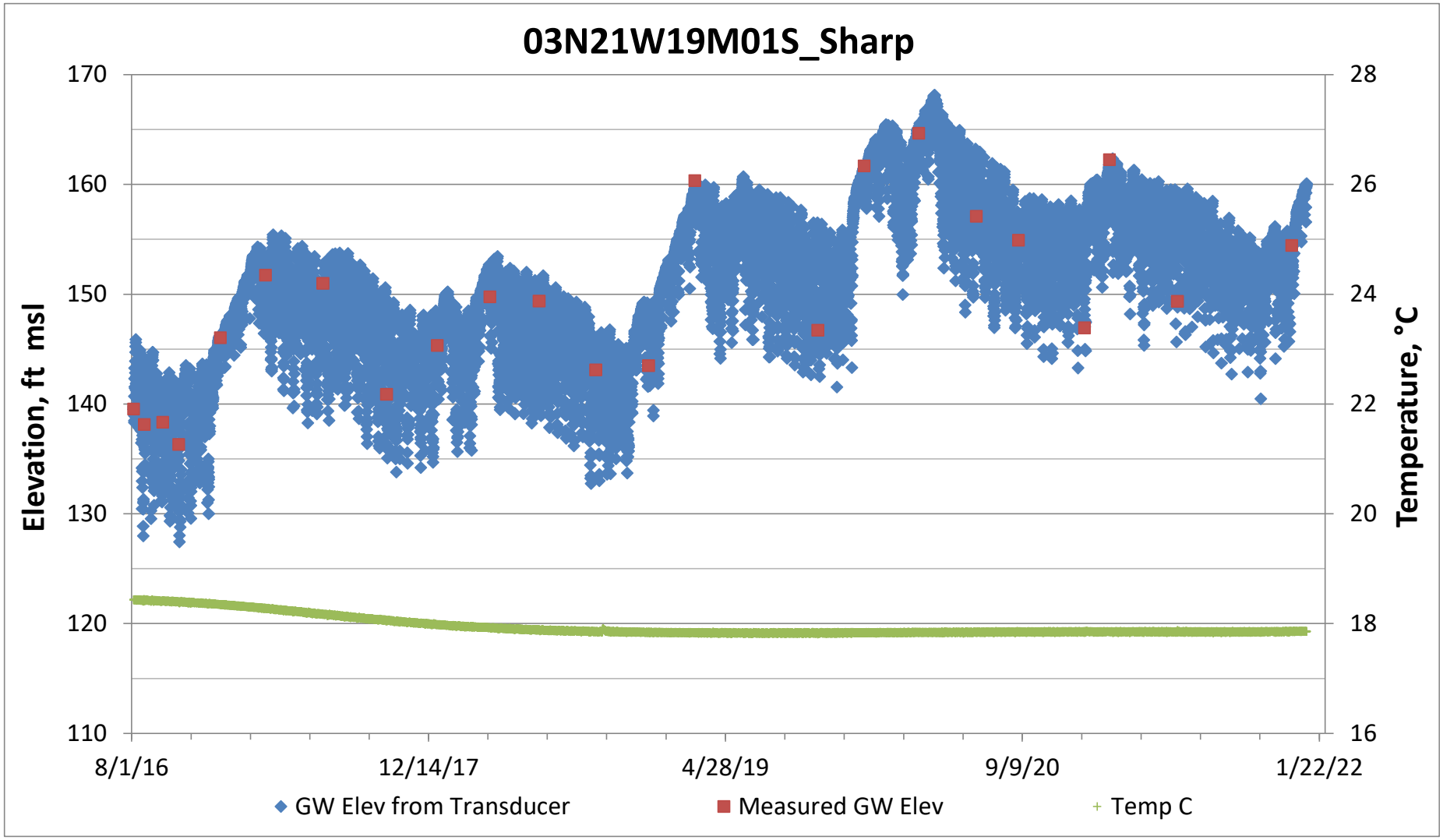

03N21W16H06S_SP2-310
Elevation, ft msl
Temperature, °C
210
200
190
180
170
160
22
21
20
19
18
17
11/12/10
11/12/11
11/11/12
11/11/13
11/12/14
11/12/15
11/11/16
11/11/17
11/12/18
11/12/19
11/11/20
11/11/21
11/12/22
GW Elev from Transducer
Measured GW Elev
Temp C

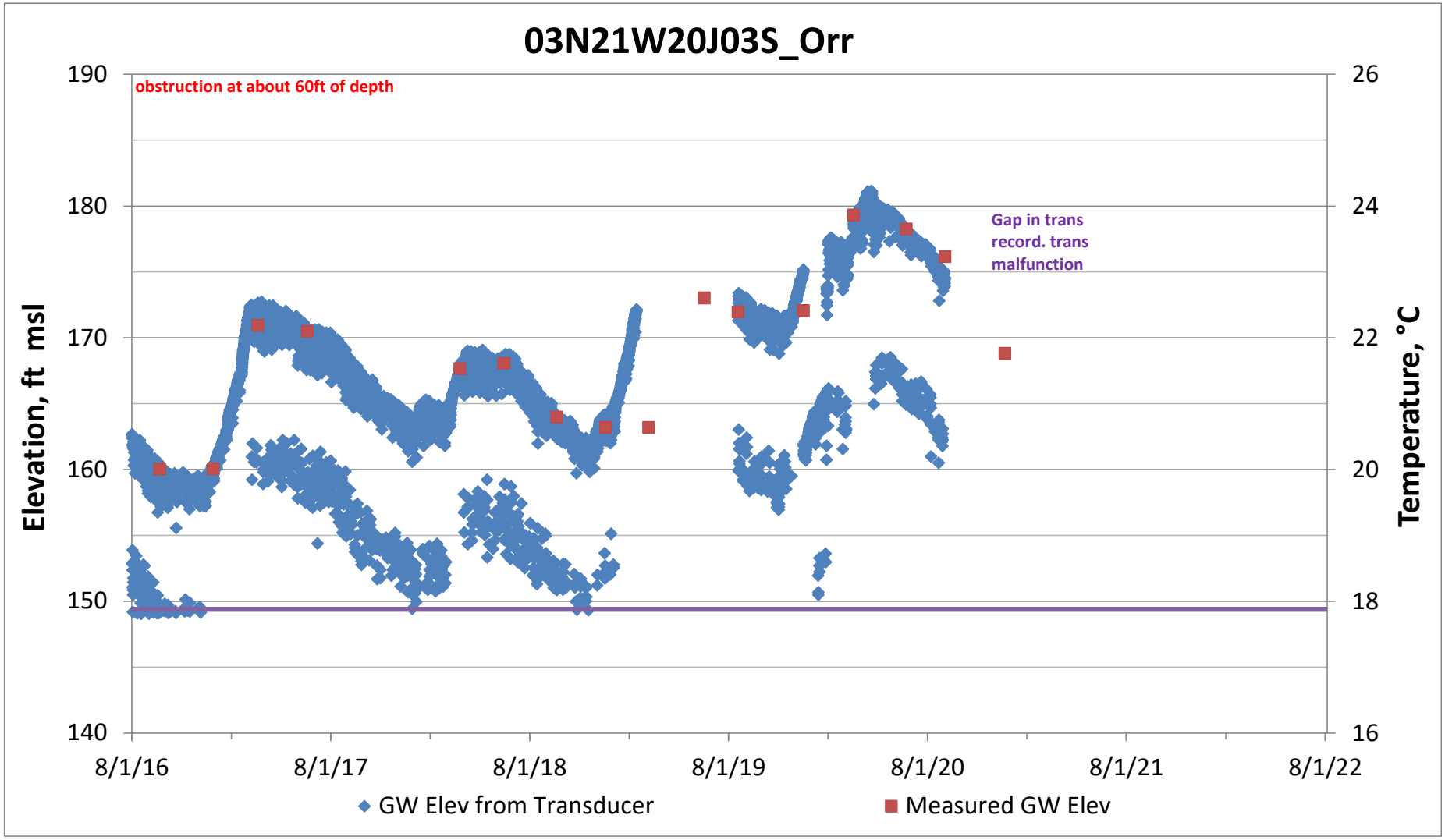

03N21W16H08S_SP2-70
Elevation, ft msl
Temperature, °C
210
200
190
180
170
160
22
21
20
19
18
17
offset in temp due to change in transducer hang depth or change in transducer unit
11/12/10
11/12/11
11/11/12
11/11/13
11/12/14
11/12/15
11/11/16
11/11/17
11/12/18
11/12/19
11/11/20
11/11/21
11/12/22
GW Elev from Transducer
Measured GW Elev
Total Depth of Well
Temp C

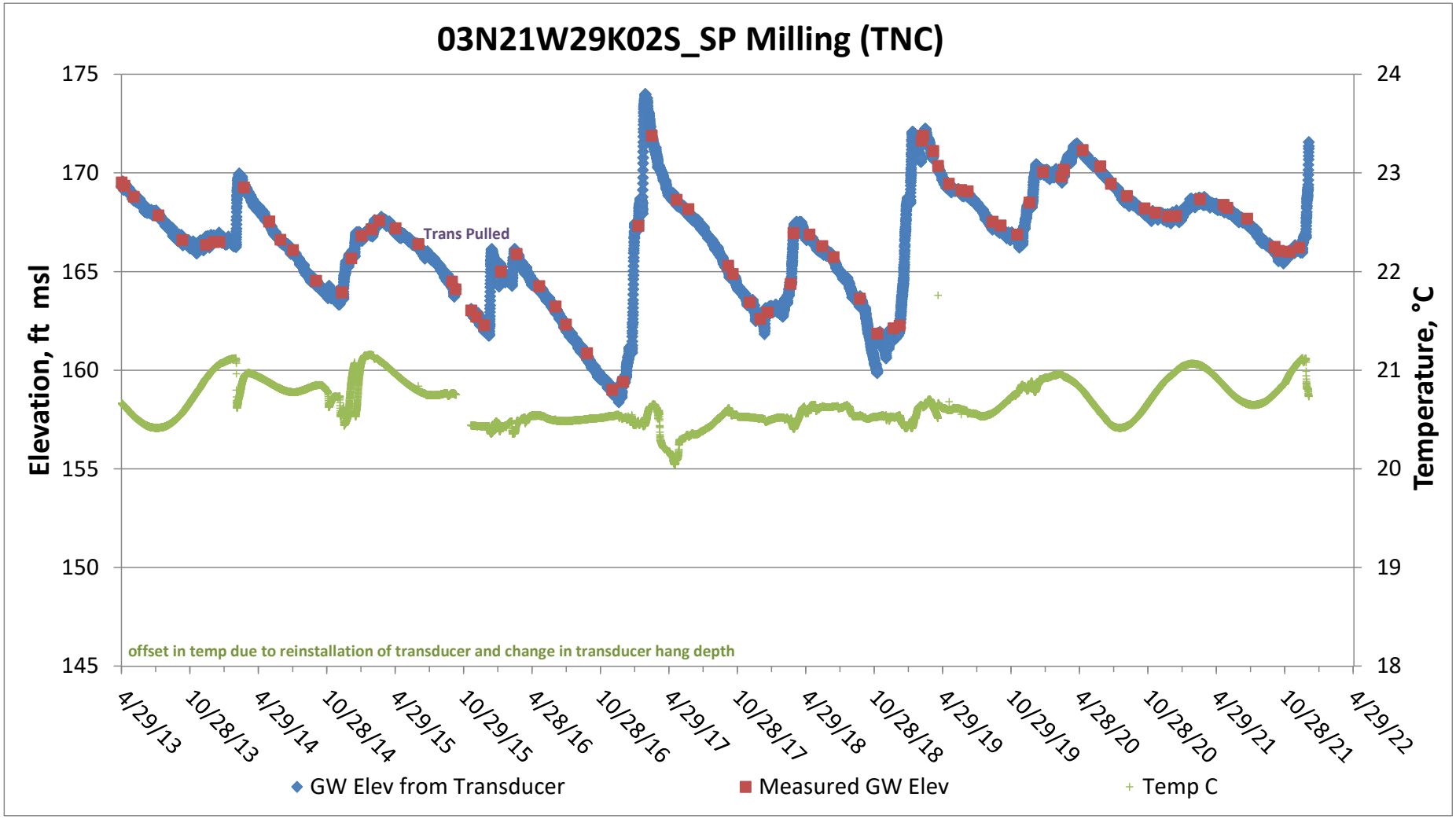

03N21W16K01S_Reese 1
FICO measures Depth To Water with an interface meter instead of Depth To Oil
Elevation, ft msl
Temperature, °C
200
190
180
170
160
150
140
130
120
110
26
24
22
20
18
16
14
6/7/11
12/6/11
6/6/12
12/5/12
6/6/13
12/6/13
6/6/14
12/6/14
6/7/15
12/6/15
6/6/16
12/5/16
6/6/17
12/6/17
6/6/18
12/6/18
6/7/19
12/6/19
6/6/20
12/5/20
6/6/21
12/6/21
6/6/22
GW Elev from Transducer
Measured GW Elev_UWCD
Measured GW Elev_FICO
Temp C

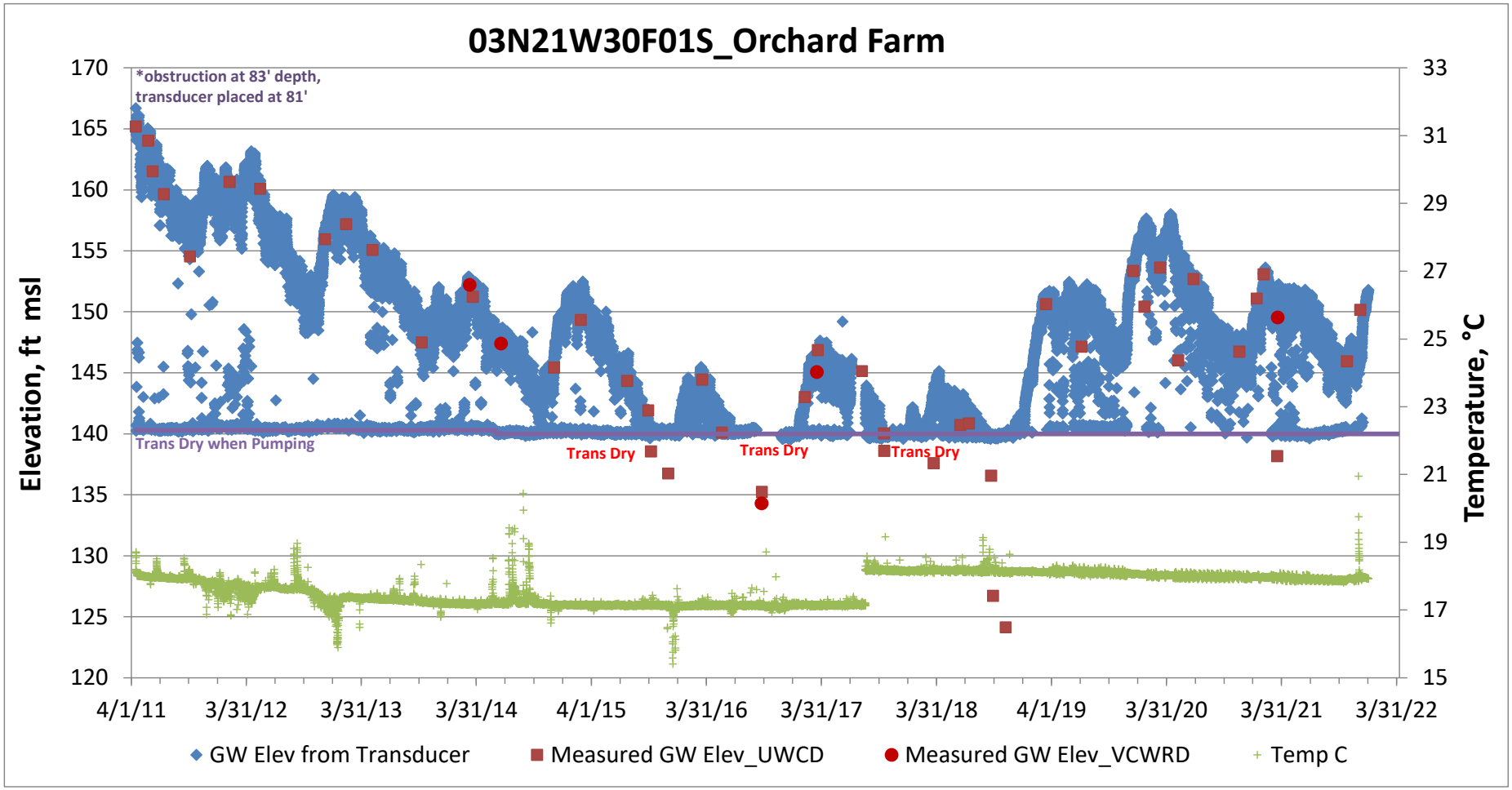

03N21W16K03S_Reese 5
FICO measures Depth To Water with an interface meter instead of Depth To Oil
Trans stuck in well, can't connect to unit
Trans Dry when Pumping
no offset in temp due to change in transducer hang depth
Elevation, ft msl
Temperature, °C
200
190
180
170
160
150
140
130
120
110
26
24
22
20
18
16
14
3/20/13
3/20/14
3/20/15
3/19/16
3/20/17
3/20/18
3/20/19
3/19/20
3/20/21
3/20/22
GW Elev from Transducer
Measured GW Elev_UWCD
Measured GW Elev_FICO
Temp C

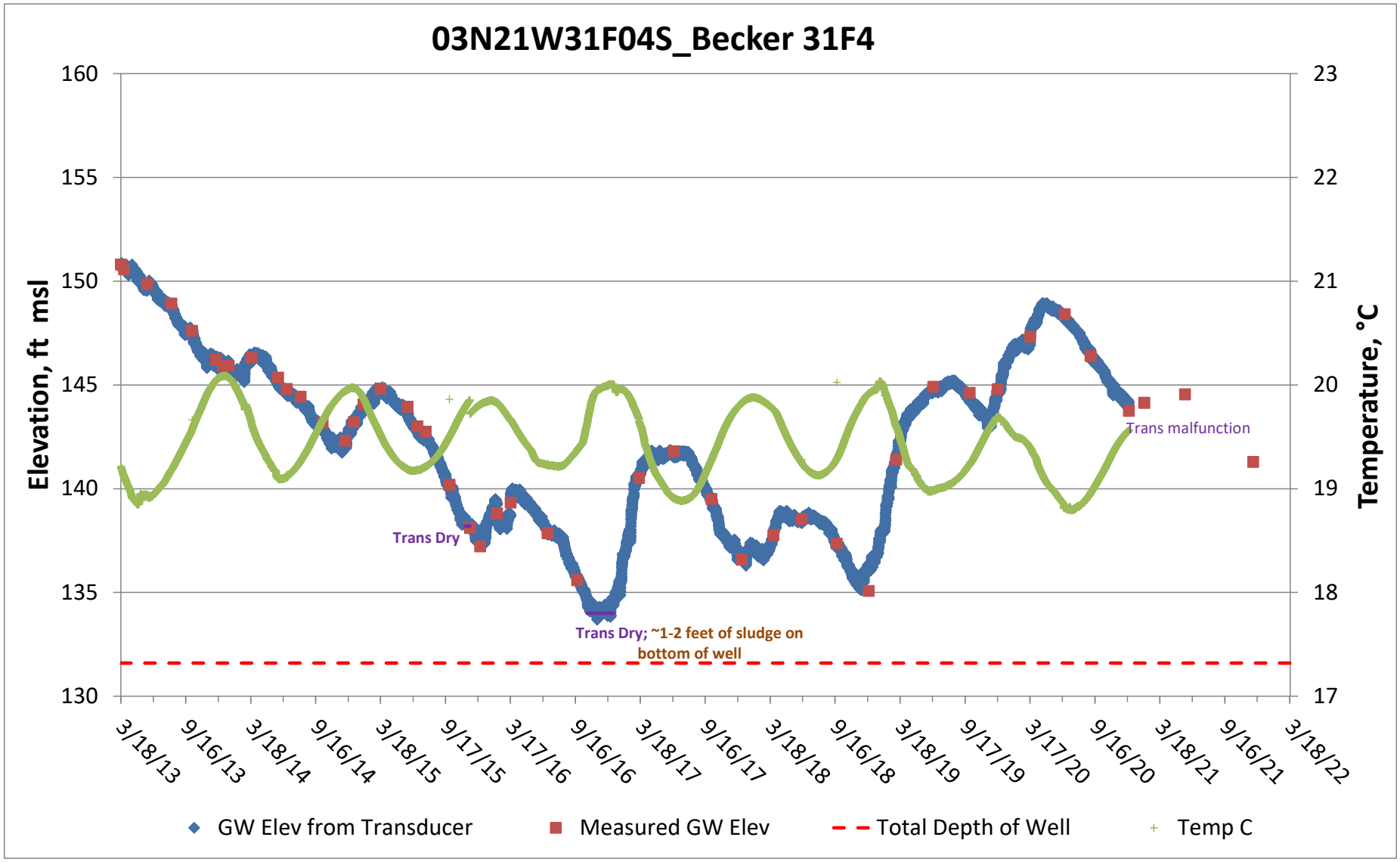

03N21W19G04S_Olivelands 3
FICO measures Depth To Water with an interface meter instead of Depth To Oil
Elevation, ft msl
200
190
180
170
160
150
140
130
120
110
100
1/29/15
1/29/16
1/28/17
1/28/18
1/29/19
1/29/20
1/28/21
1/28/22
GW Elev from FICO Trans
Measured GW Elev_FICO
Measured GW Elev_UWCD

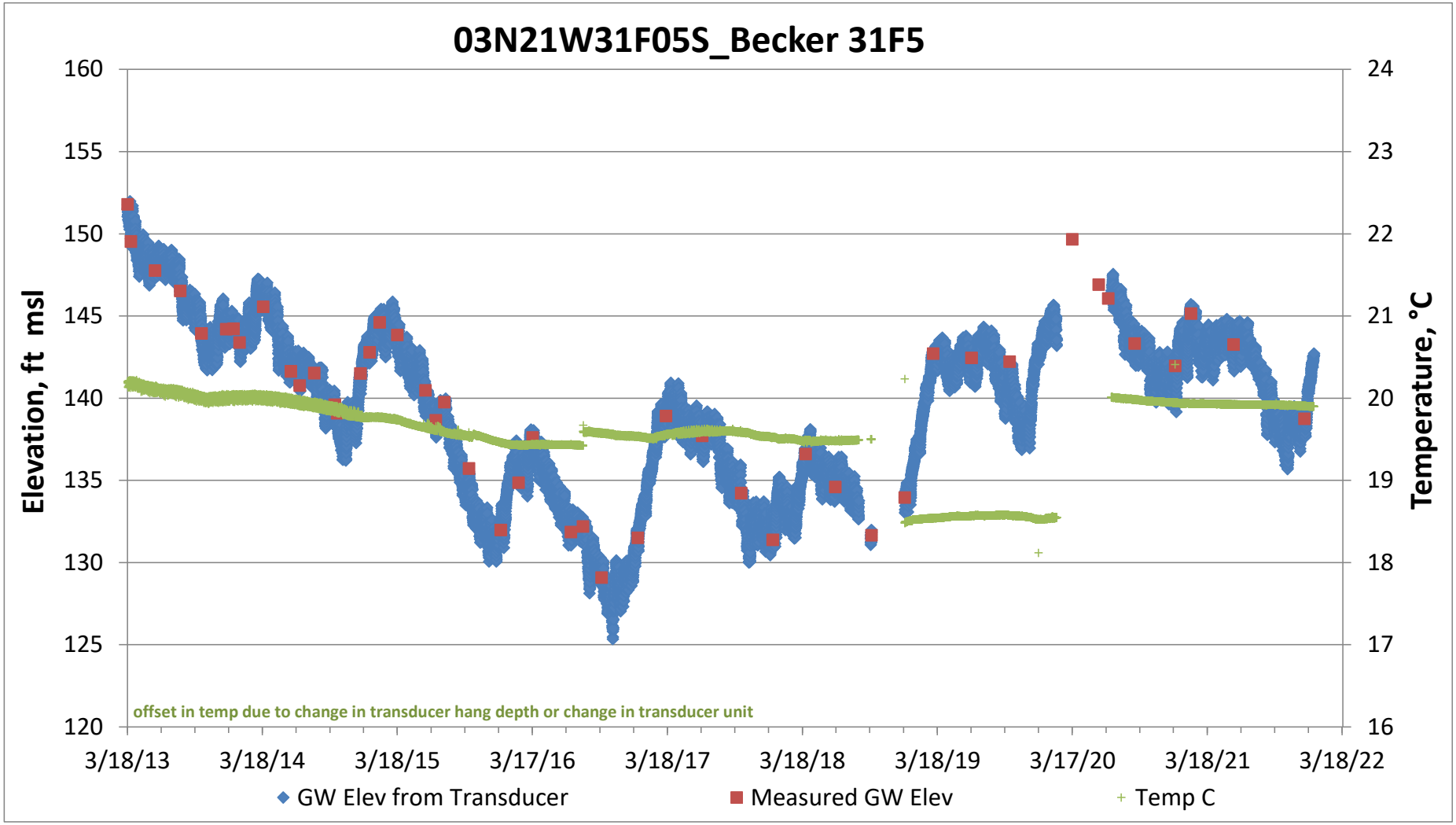

03N21W19M01S_Sharp
170
160
150
140
130
120
110
28
26
24
22
20
18
16
Elevation, ft msl
Temperature, °C
8/1/16
12/14/17
4/28/19
9/9/20
1/22/22
GW Elev from Transducer
Measured GW Elev
Temp C

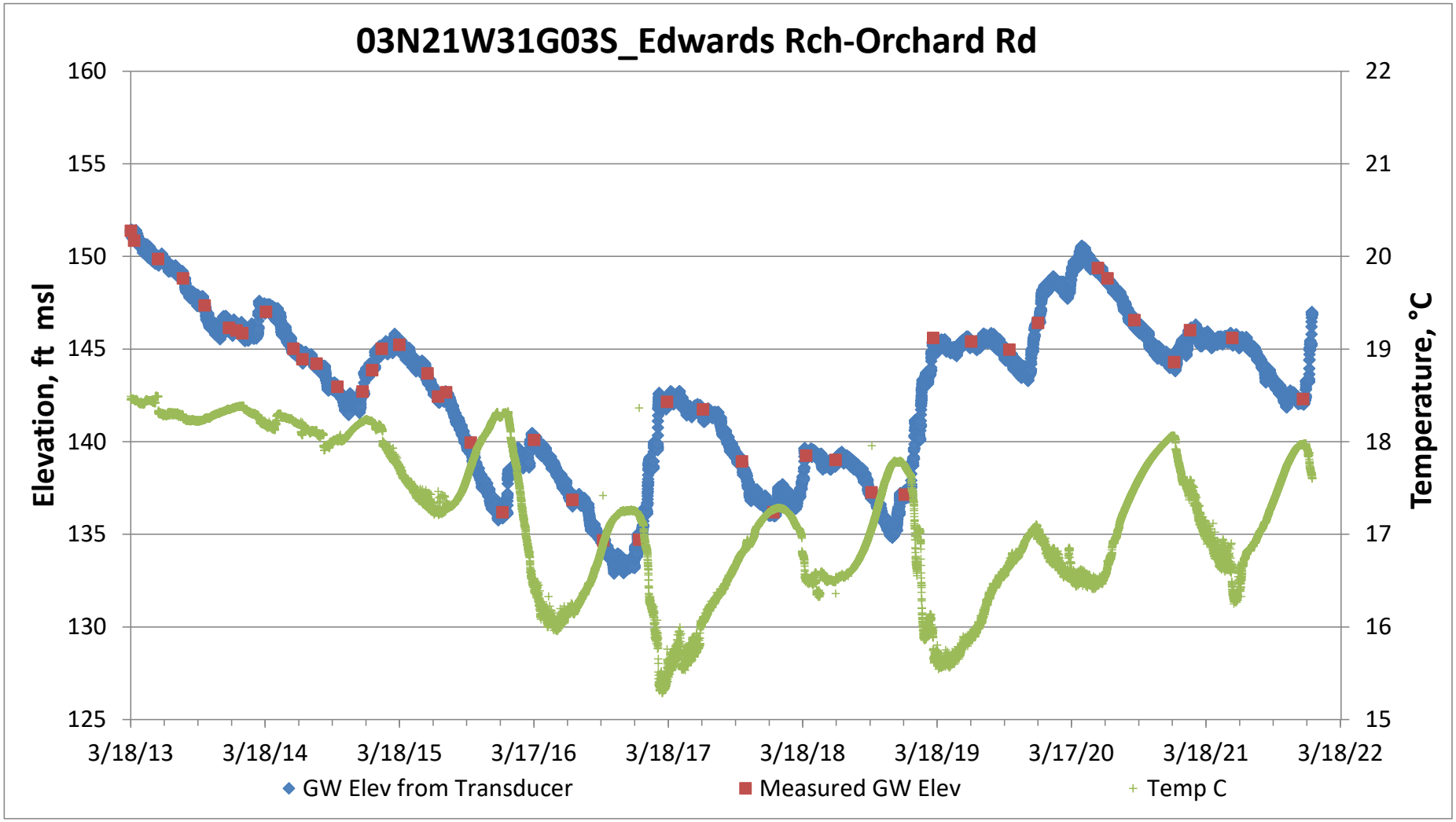

03N21W20J03S_Orr
obstruction at about 60ft of depth
Gap in trans record. trans malfunction
Elevation, ft msl
Temperature, °C
190
180
170
160
150
140
26
24
22
20
18
16
8/1/16
8/1/17
8/1/18
8/1/19
8/1/20
8/1/21
8/1/22
GW Elev from Transducer
Measured GW Elev

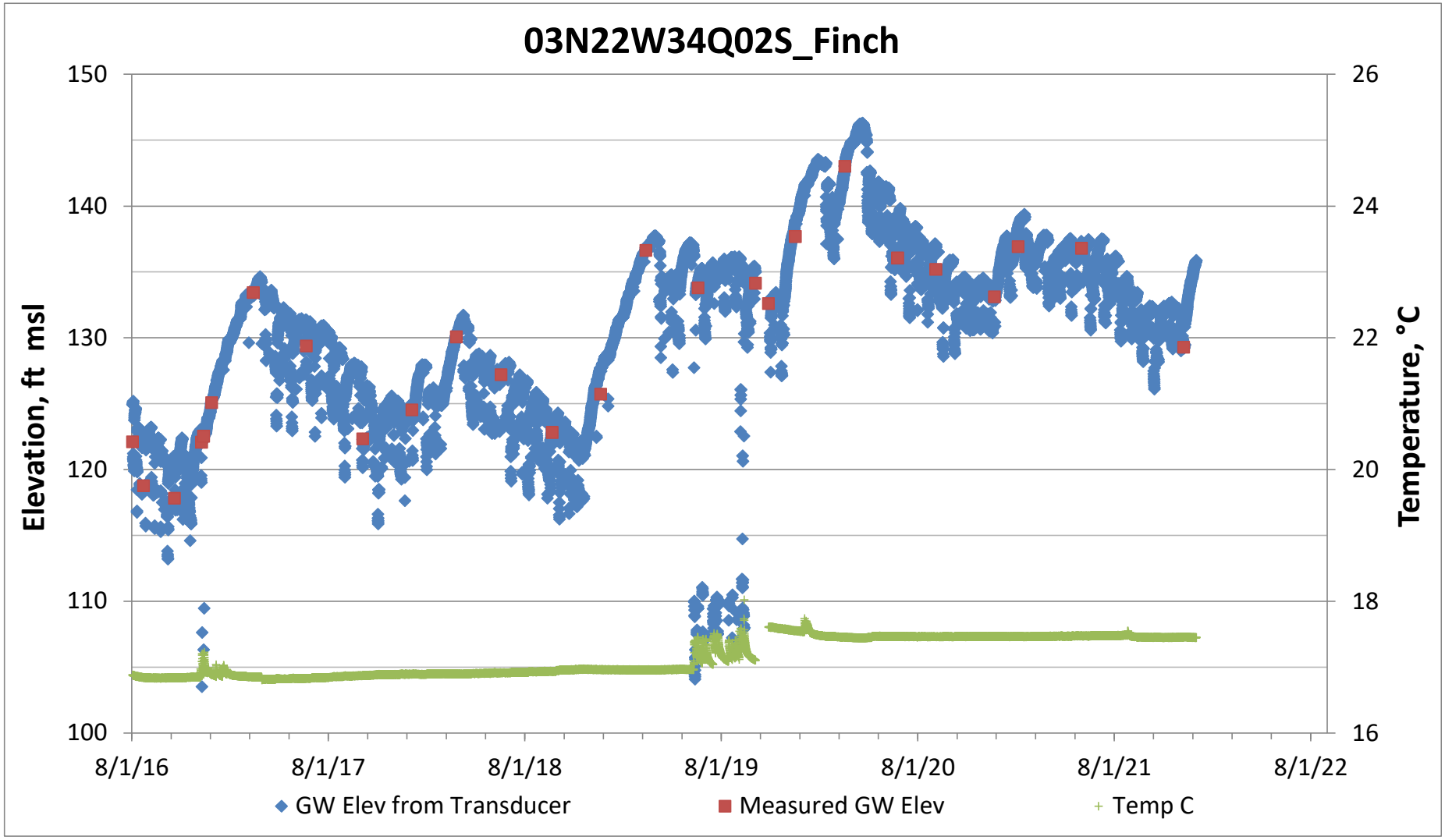

03N21W29K02S_SP Milling (TNC)
Elevation, ft msl
Temperature, °C
175
170
165
160
155
150
145
24
23
22
21
20
19
18
Trans Pulled
offset in temp due to reinstallation of transducer and change in transducer hang depth
4/29/13
10/28/13
4/29/14
10/28/14
4/29/15
10/29/15
4/28/16
10/28/16
4/29/17
10/28/17
4/29/18
10/28/18
4/29/19
10/29/19
4/28/20
10/28/20
4/29/21
10/28/21
4/29/22
GW Elev from Transducer
Measured GW Elev
Temp C

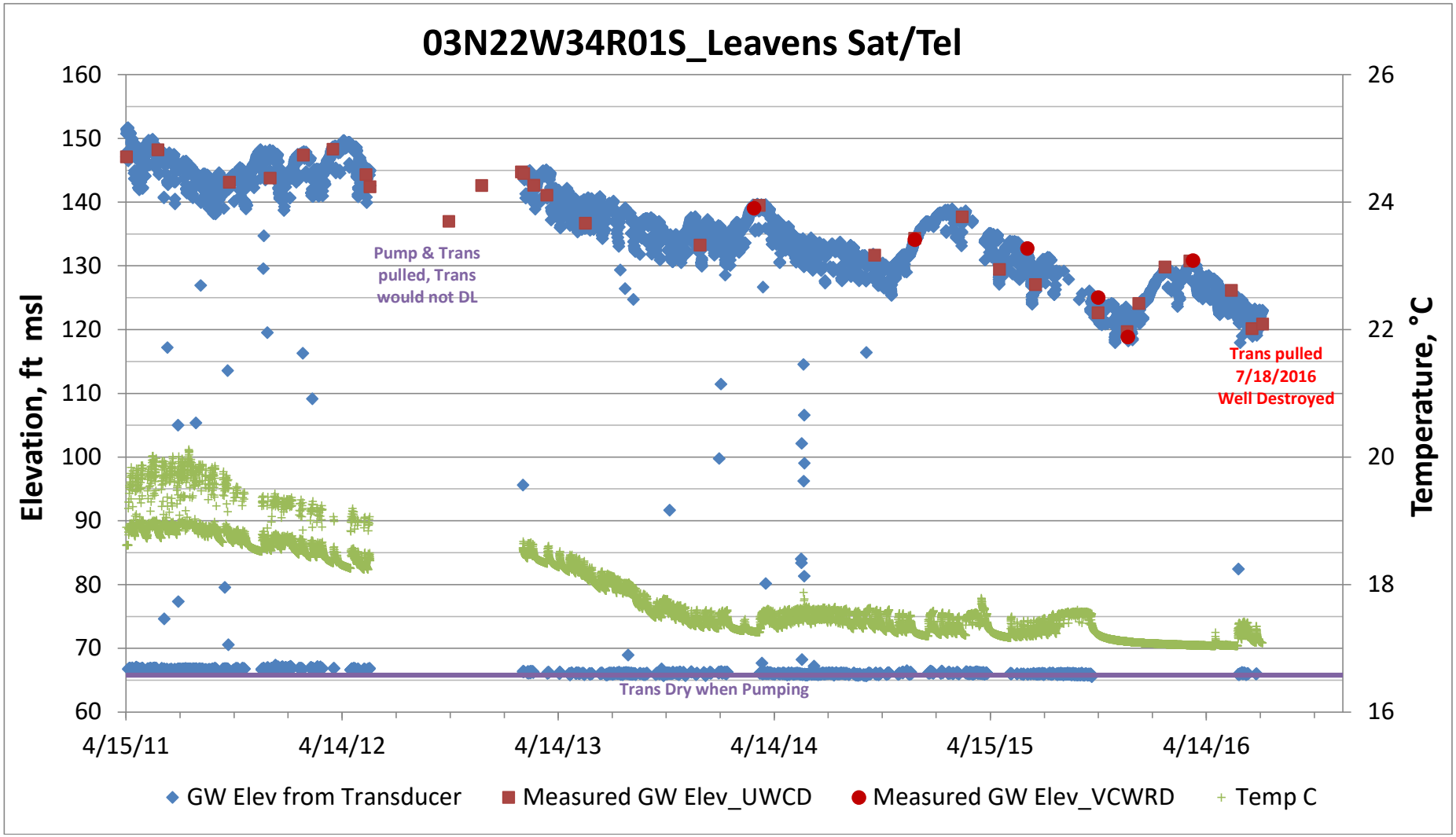

03N21W30F01S_Orchard Farm
*obstruction at 83' depth, transducer placed at 81'
Trans Dry when Pumping
Trans Dry
Trans Dry
Trans Dry
Elevation, ft msl
Temperature, °C
170
165
160
155
150
145
140
135
130
125
120
33
31
29
27
25
23
21
19
17
15
4/1/11
3/31/12
3/31/13
3/31/14
4/1/15
3/31/16
3/31/17
3/31/18
4/1/19
3/31/20
3/31/21
3/31/22
GW Elev from Transducer
Measured GW Elev_UWCD
Measured GW Elev_VCWRD
Temp C

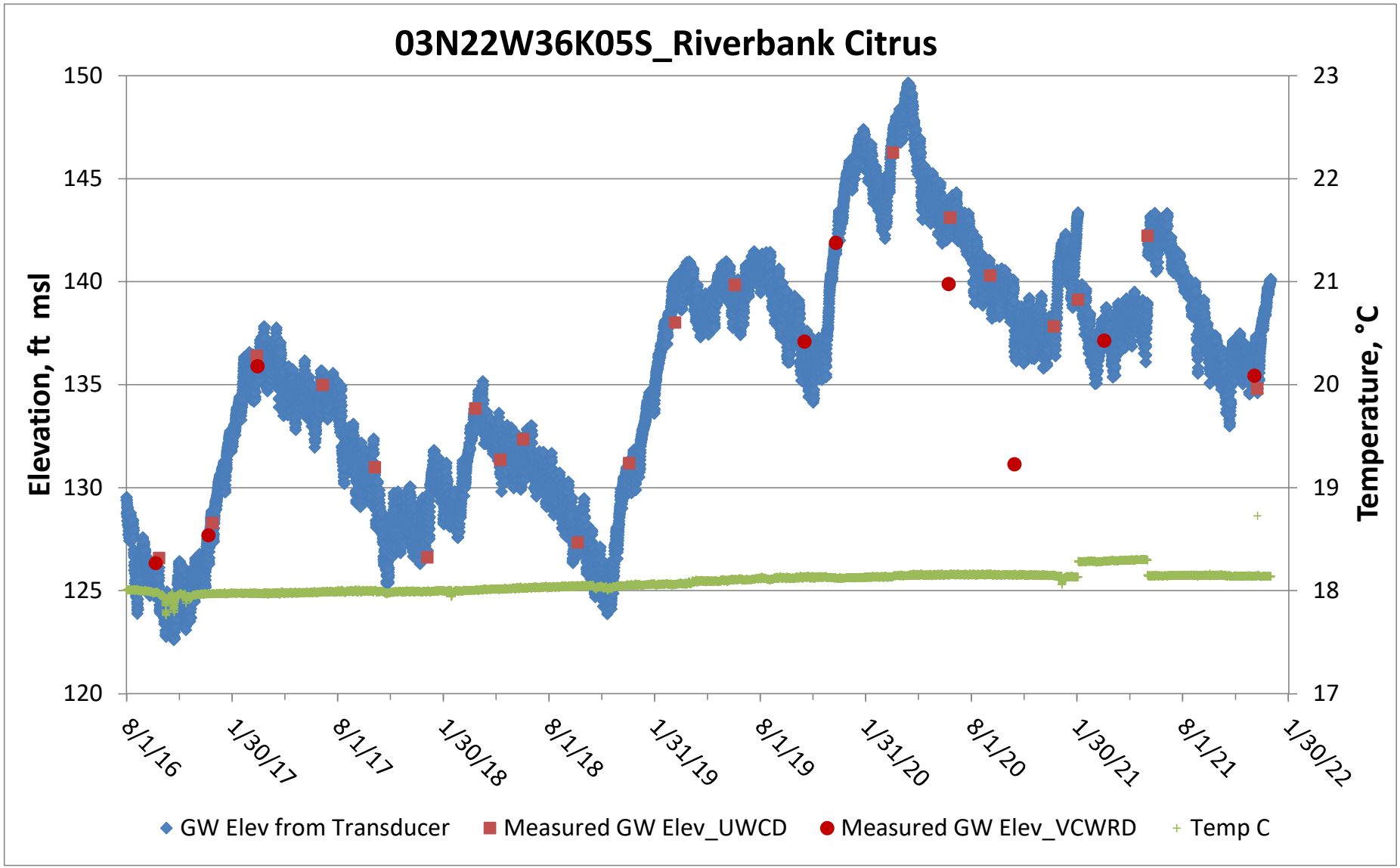

03N21W31F04S_Becker 31F4
Elevation, ft msl
Temperature, °C
160
155
150
145
140
135
130
23
22
21
20
19
18
17
3/18/13
9/16/13
3/18/14
9/16/14
3/18/15
9/17/15
3/17/16
9/16/16
3/18/17
9/16/17
3/18/18
9/16/18
3/18/19
9/17/19
3/17/20
9/16/20
3/18/21
9/16/21
3/18/22
Trans Dry
Trans Dry; ~1-2 feet of sludge on bottom of well
Trans malfunction
GW Elev from Transducer
Measured GW Elev
Total Depth of Well
Temp C


03N21W31F05S_Becker 31F5
Elevation, ft msl
Temperature, °C
160
155
150
145
140
135
130
125
120
24
23
22
21
20
19
18
17
16
3/18/13
3/18/14
3/18/15
3/17/16
3/18/17
3/18/18
3/18/19
3/17/20
3/18/21
3/18/22
offset in temp due to change in transducer hang depth or change in transducer unit
GW Elev from Transducer
Measured GW Elev
Temp C


03N21W31G03S_Edwards Rch-Orchard Rd
Elevation, ft msl
Temperature, °C
160
155
150
145
140
135
130
125
22
21
20
19
18
17
16
15
3/18/13
3/18/14
3/18/15
3/17/16
3/18/17
3/18/18
3/18/19
3/17/20
3/18/21
3/18/22
GW Elev from Transducer
Measured GW Elev
Temp C


03N22W34Q02S_Finch
150
140
130
120
110
100
26
24
22
20
18
16
Elevation, ft msl
Temperature, °C
8/1/16
8/1/17
8/1/18
8/1/19
8/1/20
8/1/21
8/1/22
GW Elev from Transducer
Measured GW Elev
Temp C


03N22W34R01S_Leavens Sat/Tel
Elevation, ft msl
Temperature, °C
160
150
140
130
120
110
100
90
80
70
60
26
24
22
20
18
16
4/15/11
4/14/12
4/14/13
4/14/14
4/15/15
4/14/16
Pump & Trans pulled, Trans would not DL
Trans pulled 7/18/2016 Well Destroyed
Trans Dry when Pumping
GW Elev from Transducer
Measured GW Elev_UWCD
Measured GW Elev_VCWRD
Temp C


03N22W36K05S_Riverbank Citrus
Elevation, ft msl
Temperature, °C
150
145
140
135
130
125
120
23
22
21
20
19
18
17
8/1/16
1/30/17
8/1/17
1/30/18
8/1/18
1/31/19
8/1/19
1/31/20
8/1/20
1/30/21
8/1/21
1/30/22
GW Elev from Transducer
Measured GW Elev_UWCD
Measured GW Elev_VCWRD
Temp C

APPENDIX C - Spring 2021 to Spring 2020 Groundwater Elevation Change Measured in Wells

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Well ID	Well No.	Spring 2021 Groundwater Elevation (ft, msl)	Spring 2020 Groundwater Elevation (ft, msl)	Difference
02N22W01P02S	NB1	31.15	59.98	-28.83
02N22W01R02S	HR1	59.70	87.95	-28.25
02N22W02H02S	Vta Saticoy #3	131.00	142.00	-11.00
02N22W02K09S	Vta Saticoy #2	137.05	147.35	-10.30
02N22W02K10S	Alta #12	121.13	130.13	-9.00
02N22W02R05S	Alta #11	33.14	48.52	-15.38
02N22W02R06S	Alta #13	33.08	57.08	-24.00
02N22W03K02S		118.81	121.75	-2.94
02N22W03M02S		86.60	86.55	0.05
02N22W09K04S		8.17	14.10	-5.93
02N22W09L03S	CWP-950	53.03	53.95	-0.92
02N22W09L04S	CWP-510	92.22	88.47	3.75
02N22W11J01S	FERRO A	11.84	42.87	-31.03
02N22W11MW1	Saticoy #1	32.51	34.26	-1.75
02N22W11MW2	Saticoy #2	35.20	36.20	-1.00
02N22W11MW3	Saticoy #3	32.86	33.16	-0.30
02N22W11Q01S	FERRO D	8.64	57.76	-49.12
02N22W12A02S		44.28	56.44	-12.16
02N22W12B08S	Dos Diegos- Shop	38.12	46.69	-8.57
02N22W12E04S	Vulcan 12E4	19.41	52.09	-32.68
02N22W12F04S	NOBLE 1	24.45	34.38	-9.93
02N22W12G03S		32.14	41.28	-9.14
03N21W01P02S		259.11	256.95	2.16
03N21W02R02S		256.66	260.87	-4.21
03N21W09K02S		195.14	195.19	-0.05
03N21W09R04S		194.00	196.70	-2.70
03N21W11E03S	Santa Paula #8	227.29	233.89	-6.60
03N21W11F03S	Santa Paula #9	229.92	236.62	-6.70
03N21W11F04S	CIC #10	216.14	220.94	-4.80
03N21W11J02S	Santa Paula #12	229.20	237.37	-8.17
03N21W12B02S	McCauly	267.87	267.99	-0.12
03N21W12B04S	Van Wingerden	273.00	276.15	-3.15
03N21W12E04S	FICO #8	259.94	263.09	-3.15
03N21W12E08S	FICO 7A	260.50	262.95	-2.45
03N21W12F03S	FICO #9	262.15	265.09	-2.94
03N21W12F07S	FICO 12	268.34	269.07	-0.73
03N21W15C04S		200.42	205.21	-4.79
03N21W15G01S	SP1-680	198.36	205.32	-6.96
03N21W15G02S	SP1-540	198.30	204.97	-6.67
03N21W15G03S	SP1-390	199.86	205.70	-5.84
03N21W15G04S	SP1-280	198.26	205.01	-6.75
03N21W15G05S	SP1-80	218.25	221.31	-3.06
03N21W16A02S	Santa Paula #11	190.96	195.54	-4.58
03N21W16H05S	SP2-550	189.57	191.72	-2.15
03N21W16H06S	SP2-310	192.09	199.64	-7.55
03N21W16H07S	SP2-170	193.29	199.60	-6.31
03N21W16H08S	SP2-70	202.49	206.54	-4.05
03N21W16K01S	Reese 1	191.21	196.92	-5.71
03N21W16K02S	Reese 2	192.41	197.71	-5.30
03N21W16K03S	Reese 5	190.80	194.20	-3.40
03N21W17Q01S		184.67	186.14	-1.47

03N21W19G04S		162.66	177.62	-14.96
03N21W19M01S		161.30	168.13	-6.83
03N21W19R01S		156.91	170.69	-13.78
03N21W20F04S	Hansen Ag Ctr	171.57	175.42	-3.85
03N21W29K02S		168.78	171.50	-2.72
03N21W30E01S		157.09	160.44	-3.35
03N21W30F01S	Orchard Rd	152.26	158.00	-5.74
03N21W31F05S	Becker 31F5	144.60	149.66	-5.06
03N21W31G03S	EdwardRch-Orchrd	145.94	150.57	-4.63
03N21W31L01S	Becker 31L1	140.32	145.42	-5.10
03N21W32C02S	Freeman Becker B	157.24	160.82	-3.58
03N22W23Q01S		228.72	232.68	-3.96
03N22W34Q02S		137.79	146.29	-8.50
03N22W36H01S		139.67	145.17	-5.50
03N22W36K05S		139.18	153.09	-13.91

APPENDIX D - Individual Party Allocations and Groundwater Extractions (from SPBPA)

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Table "D-1"

IPA's 2015 - 2021 Production & Averages

10/16/2022

2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	2020 (2)	2021 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
										18004 Telegraph Road Properties LLC	03N/21W-11H03
									0.0	ABC Rubarb Farms	03N/21W-16P01
0.6	1.0	0.7	0.5	0.4	1.2	0.5	0.7	(1.1)	1.8	Aliso Vista Ranch	03N/22W-23Q01
									0.0	Alsono, Andrew	03N/21W-21M01
1,175.1	1,386.5	709.1	745.7	292.0	536.7	804.3	807.1	43.96	763.1	Alta Mutual Water Company, Inc.	02N/22W-02K07, 02N/22W-02K10
4.4	2.9	5.1	1.3	1.4	2.0	2.4	2.8	(0.1)	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	Basso Properties	03N/21W-09J01
									0.0	Bender Farms (23) (29)	03N/21W-16P01
247.8	188.2	221.9	246.8	76.4	278.5	271.3	218.7	(73.9)	292.56	Bender Realty LTD (29)	3N/21W16P02, 3N/21W16P03, 3N21W17R01 (4)
46.5	52.4	71.3	71.7	26.2	80.1	88.5	62.4	(38.4)	100.8	Billiwhack Ranch LLC	03N/21W-17R01 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
2.5	2.2	2.5	1.1	2.1	1.8	1.8	2.0	(4.0)	6.0	Bratcher Family Revocable Tr 1-24-02 & Cutright Revocable Tr 8-18-03 (22)	03N/21W-16P01
237.0	266.7	242.8	383.5	400.8	439.2	427.7	342.5	66.0	276.5	Brucker Family Trust (29)	3N/21W-19Q1, 3N/21W-29E1, 3N/21W-29C3 03N/21W-29E1, 3N/21W-29C3
165.6	91.4	174.8	140.0	54.2	150.8	163.4	134.3	(148.0)	282.3	Campbell, Dan	03N/21W-19R01
0.4	0.4	0.3	3.5	0.1	0.3	0.4	0.8	(0.3)	1.1	Canine Adoption and Rescue League	03N/21W-29B02
1,526.5	1,342.9	772.5	819.5	53.5	227.7	911.3	807.7	134.7	673.0	Canyon Irrigation Company	03N/21W-11F03, 3N/21W-11E3, 3N/21W-11F4
42.3	37.0	43.2	42.3	28.2	45.8	40.6	39.9	(59.4)	99.3	Casa De Oro Ranch	03N/21W-20F01
140.0	65.6	71.1	60.4	59.9	87.3	117.8	86.0	(15.4)	101.4	Castaneda, Albert and Mary	03N/21W-19L01 (1), 3N21W19K01 03N/21W-19L01
									0.0	Coffman, Laura K. McAvoy, Successor Trustee of the Gladys Daily	03N/22W-35N01

Table "D-1"

IPA's 2015 - 2021 Production & Averages

10/16/2022

2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	2020 (2)	2021 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
4,168.0	4,087.2	4,260.1	4,232.5	4,082.8	4,444.9	4,489.9	4,252.2	(1,463.1)	5,715.3	City of Santa Paula (37) (38)	03N/21W-21B03 3N21W2R2 3N/21W9R5, 03N/21W11J02, 03N/21W15C06, 03N/21W16A02, 3N/21W16A3
50.8	33.3	40.6	33.5	36.2	41.4	43.2	39.9	(53.7)	93.6	Clow, The Roger D. Clow Trust, Dated September 15, 1994	3N/21W20J04 (17) 03N/21W-20A02, 03N21WL02S
74.2	96.0	82.0	150.3	262.2	204.4	76.9	135.2	(23.5)	158.7	Cole, Lecil E. Trustee of the Lecil E. and May Jeanette Cole Revocable Trust	3N/21W-16E02
									0.0	Conklin, Patricia	03N/21W-21D02
11.76	13.2	10.4	7.3	14.8	7.9	3.1	9.8	0.2	9.6	The Judson T. Cook & Suzette H. Cook Revocable Trust dated December 5, 2007 (28)	3N/22W-26B1
142.3	121.3	238.6	204.3	194.3	163.2	58.5	160.3	(11.9)	172.2	County of Ventura, General Services Agency (26)	03N/21W-30H08, 3N/21W-30H02
115.7	110.8	81.0	95.3	77.9	74.0	101.7	93.8	(84.5)	178.3	County of Ventura, General Services Agency	02N/22W-02G01
									0.0	Cummings, Paul R. and Irene & Sons	03N/21W-19L01
									0.0	Dabney, George & Rebecca Trust Inter Vivos	3N/22W-26B1
									0.0	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
									0.0	Dominguez, G. (6)	03N/21W-12E07
									0.0	Evergreen Ranch AKA San Miguel Products	03N/21W-19R01
115.6	51.0	75.0	97.5	59.8	281.7	118.3	114.1	(35.1)	149.2	Dickenson, Bruce E and Janice J Trustees of the B&J Dickenson Revocable Trust August 26, 2015	03N21W-10M01

Table "D-1"

IPA's 2015 - 2021 Production & Averages

10/16/2022

2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	2020 (2)	2021 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
									0.0	Fam, J. LLC	03N/22W-35N01
7,431.2	7,730.0	5,459.6	6,002.2	4,242.9	5,494.9	6,251.1	6,087.4	(3,816.8)	9,904.2	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
43.3	30.1	14.7	11.4	10.7	12.7	12.5	19.4	19.4	0.0	Fiano, Michael (21)	3N/22W26B02 & 3
193.1	171.2	167.9	184.9	113.9	155.3	131.6	159.7	(53.7)	213.4	Finch, J.J. & H.H.	3N/22W-34Q02, 3N22W34Q03
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Flying D Ranch LLC	03N/21W-10M01
									0.0	Galbreaith Brothers, Inc.	03N/21W-17Q01
6.75	6.51	20.70	19.12	4.39	16.1	12.3	12.3	2.67	9.6	Garcia, Elias & Guadalupe (15)	3N/22W-26B1
18.8	16.7	11.2	18.0	12.2	11.1	16.3	14.9	(27.9)	42.8	Gilbert, Patricia L., Trustee of the Gilbert Family Survivor's Trust	03N/21W-16E01
125.1	34.3	136.6	112.4	101.3	123.7	143.8	111.0	9.2	101.8	Gooding Ranch (John F. Gooding)	03N/21W-09K02, 03N/21W-09K05
31.4	31.6	44.2	33.2	27.0	33.9	38.4	34.2	(18.7)	52.9	Grant Family Ranches, LLC (20) (30)	3N22W3E01, 3N21W20E01
									0.0	Gregory, Eva as Trustee of the Gregory Family Trust	
83.2	47.6	72.7	56.0	44.5	119.4	53.7	68.2	(29.5)	97.6	Grether, Elizabeth Broome, Ann B. Priske, John S. Broome Jr. as Trustee of the John S. Broome Jr. Trust	03N/22W-35Q02
8.2	10.7	10.0	9.7	10.4	10.3	10.5	10.0	(3.0)	13.0	Guzman, Yeisi Brayen, Trustee of the Brayen And Mesa Guzman Revocable Family Trust, dated July 24, 2015	03N/21W-19G03
128.9	136.9	119.7	102.3	46.7	87.1	78.5	100.0	(29.2)	129.2	Hadley-Williams Partnership	02N/22W-03E01 (9),
									0.0	Hampton Canyon Ranch (Leslie) (32)	03N/21W-19A02
0.5	2.4	2.4	1.6	3.6	0.1	0.2	1.5	1.4	0.1	Herbert Family Trust (formerly Ray, Richard T. and Ruth L.)	03N/22W026P01
0.0	0.0	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

Table "D-1"

IPA's 2015 - 2021 Production & Averages

10/16/2022

2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	2020 (2)	2021 (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	(33.8)	33.8	Held, Joann	03N/22W-23F02
							0.0	(45.1)	45.1	JAKRAN VI LLC	02N/22W-01M03, 02N/22W-01M04
34.0	77.14	83.80	62.93	78.56	89.1	82.4	72.6	(52.4)	125.0	JKJ Farms, LLC (29)	3N/21W-16P01 3N/21W-16P02&3
									0.0	Juanamaria Land Company	02N/22W-03E01
									2.0	JVP Citrus, Inc.	
									0.0	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
195.0	159.1	171.3	120.0	178.1	138.5	167.8	161.4	(33.9)	195.3	Leavens Ranches	03N/22W-24R01 (13), 2N22W03F02
2,537.8	2,063.0	1,611.6	1,517.1	982.2	1,372.2	1,307.3	1,627.3	(1,736.5)	3,363.8	Limoneira Company (36, 37)	03N/21W-01N02, 03N/21W-02Q01, 03N/21W-19G02, 03N/21W-30F01, 03N/21W-30H04, 03N/21W-31E03, 3N/21W-31L2
											03N/21W-11A01
											See Limoneira
30.0	30.0	30.0	30.0	30.0	63.0	62.3	39.3	9.3	30.0	Limoneira Lewis Community Builders, LLC	3N/21W2R2
0.5	1.0	1.6	1.6	1.8	2.1	1.3	1.4	(8.6)	10.0	Little Clara Ranch LLC (30)	3N22W34E01
319.1	245.4	242.8	362.2	254.8	358.7	238.6	288.8	33.6	255.2	Loza Investments LLC	03N/21W-10M01, 02N/22W-03K02, 2N/22W-3K3
8.9	18.7	20.6	23.1	18.8	20.4	19.7	18.6	(17.7)	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

Table "D-1"

IPA's 2015 - 2021 Production & Averages

10/16/2022

2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	2020 (2)	2021 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
31.5	47.3	32.7	41.8	19.5	45.0	51.7	38.5	4.2	34.3	Martinez, Esther	3N21W-29G02
17.3	25.2	22.8	22.6	23.5	23.0	30.2	23.5	(1.2)	24.7	McConica, John II	2N/22W-3Q1 - this well to be abandoned as 6/2022
									0.0	McConica, John R. et al.	3N/21W21B3
									0.0	McConica, John R. II et al.	03N/21W-21B03
162.9	123.74	85.80	66.55	162.47	154.3	134.1	127.1	(54.5)	181.6	McGaelic Group	03N/21W17R01 (4), 3N/21W11H01
479.9	296.6	447.3	430.8	319.9	288.0	251.9	359.2	75.6	283.6	McGrath, John & Sons (18)	03N/21W21E05, 3N/21W21E11, 3N/21W-20J04 (17),3N/21W-20R3
									0.0	Mondol, J.K.	03N/21W-10E01, 3N/21W-10E2
									0.0	Newsom, Alice C. as Trustee of the Newsom Family Trust	03N/21W-11A01
35.8	18.5	27.3	38.1	14.1	18.0	31.7	26.2	(20.5)	46.7	Nichols Associates	03N/22W36H01, 03N/22W36H02
25.5	23.4	19.3	15.6	23.5	24.1	34.9	23.8	(102.6)	126.4	Nutwood Farms	03N/22W-36J01, 36J02 & 36J03
0.1	0.0	0.1	0.04	0.02	0.0	0.0	0.0	(7.9)	7.9	Oba Family Trust dtd 12-22-92	3N/21W17D03(10)
12.3	10.3	11.8	11.1	11.0	13.2	9.1	11.3	(3.9)	15.1	Ohst, Gary	03N/21W-10E01, 3N/21W-10E2
108.5	159.0	126.2	111.7	75.8	104.1	102.3	112.5	(81.4)	193.9	Rancho Resplandor de Oro, Inc. formerly Orr Ranch Co. (25)	03N/21W-20J03, 3N/21W-20J2
101.97	115.8	91.0	108.8	86.9	104.9	78.8	98.3	59.7	38.6	Ortiz Trust - Joseph & Sons	03N/21W-30E01 3N/21W-30E2, 3N/21W-20H1
392.7	299.3	343.8	343.9	121.2	314.9	267.0	297.5	(112.8)	410.3	Panamerican Seed, aka Ball Horticultural	3N/21W20K01, 3N/21W20M01 03N/21W20P01 & 3N/21W20F4
									0.0	Parklands Ventura LLC	3N22W35N01
									0.0	Pear Blossom Town & Country Market	03N/21W-10E01, 3N/21W-10E2
63.6	42.1	62.6	57.4	76.1	74.5	57.7	62.0	(54.0)	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
								(39.1)	39.1	Pinkerton, Arlene	3N21W17Q01 (5)
									2.0	Pinkerton, Jennifer Paulene	

Table "D-1"

IPA's 2015 - 2021 Production & Averages

10/16/2022

2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	2020 (2)	2021 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
41.5	1.6	33.8	93.2	57.2	105.9	114.2	63.9	2.0	61.9	Pinkerton, Murray	03N/21W-21E01
									2.0	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	Pinkerton, W. J. Estate Ranch	3N/21W-16E02
									0.0	Pinkerton, Wesley Estate	03N/21W-21E01
									0.0	Rancho Attilio	2N/22W-2Q01
172.6	143.7	159.0	125.7	72.2	87.8	102.4	123.4	3.8	119.6	Rancho Filoso, LLC	03N/21W-09K03, 3N/21W-9K4
								(10.0)	10.0	Rancho Santa Paula, LLC	
								0.0	0.0	Regents of the University of California (31)	3N/22W-34R1
1,114.4	1,268.1	1,343.5	1,094.6	966.5	1,144.9	1,139.4	1,153.0	389.5	763.5	Riverbank Citrus, LLC	3N/22W36K7 & 3N/22W36Q1, 3N22W36K05, 03N22W36L01S, 03N22W36K02S
									0.0	Riverpark A LLC	02N/22W-01M03, 02N/22W-01M04
									0.0	R.F. Robertson as Trustee of the Robertson Family Trust	03N/21W-17Q01
325.7	268.4	198.3	265.7	123.7	214.9	244.2	234.4	(129.4)	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) usage recorded under Leavens ranches 03N/21W-17Q01 (5) 03N/21W-17Q01 (5) 3N21W17R01 (4) listed under McGaelic 3N21W9J01 (24) 2N22W03E01 listed under City Ventura Juanamaria
5.0	10.4	7.9	7.7	3.4	8.0	7.2	7.1	(14.8)	21.9	Santa Paula Hay & Grain and Ranches	03N/21W-19A02
63.5	64.1	63.1	73.8	98.4	71.3	61.2	70.8	(63.2)	134.0	Saticoy Foods Corp.	03N/21W-30H05 (7), 3N/21W-30H6, 3N/21W-30H9
95.5	0.0	167.5	206.0	118.9	158.8	78.2	117.8	(49.5)	167.3	Sharp, J. M. Company	03N/21W-19M01, 19M02
									0.0	Shores, John Family Partnership	03N/21W-20J04 (17), 3N/21W-20R2

Table "D-1"

IPA's 2015 - 2021 Production & Averages

10/16/2022

2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	2020 (2)	2021 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
80.4	81.4	69.6	98.8	88.1	93.9	87.8	85.7	13.5	72.2	Shozi Ventura, LLC	02N/22W-03B01, 02N/22W-03B02
									0.0	Silva, Frank	02N/22W-01M03, 02N/22W-01M04
									0.0	Southern California Edison Co.	3N/22W-27M02 D
72.9	73.3	78.2	71.2	44.9	24.2	21.3	55.2	(6.9)	62.1	Strata Holdings LP	03N/21W-17P02
		44.9	52.3	34.2	3.0	10.2	20.6	(86.9)	107.5	The Nature Conservency	3N/21W29K1, 29K02 & 29K4
									0.0	Thermal Belt Mutual Water Co. Inc.	03N/21W-15C02, 03N/21W-15C04
									0.0	Torres, George 2013 Trust (32)	03N/21W-19A02
									0.0	Trademark Concrete Systems, Inc.	03N/21W-11H03
									0.0	Tri-Leaf Nursery (Bruce Arikawa)	3N/21W-30E01
									0.0	Tucker Ranch	02N/22W-03K02, 2N/22W-3K3
247.6	187.2	206.5	165.7	141.6	184.4	141.2	182.0	49.5	132.5	TVC Pinkerton Ranch LLC (27)	3N21W-29B4
									0.0	Twyford Plant Laboratories, Inc Fedes	03N/21W-17R01
								(5.8)	5.8	Utility Vault (Newbasis is Parent Co)	3N/21W-29K03 D (8)
1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	(7.0)	8.0	Vanoni, David or Mary - Mary Vanoni	02N/22W-02Q01
0.0								0.0	0.0	Walking Beam Ranches	03N/21W-19G03
									0.0	Wallace, William	3N/21W-21E01
28.22	44.3	8.1	2.0	0.0	0.0	0.0	11.8	2.0	9.8	We 5 Properties (35)	02N/22W-02J03
									0.0	WH Ventura 165 LLC (31)	3N/22W-34R1, 3N21W20F04
1.5	1.0	1.0	1.0	1.0	1.1	2.0	1.2	(26.4)	27.6	Williams, James W. III	03N/22W-23G01
									0.0	Wittenberg-Livingston Inc. (30)	02N/22W-02Q01
4.6	0.5					0.2	0.8	(36.7)	37.5	Wright, Scott	03N/21W-11H03
									0.0	Von Chmielewski, Wolfgang (15)	03N/21W-10E01, 3N/21W-10E2
16.7	79.1	40.4	32.4	27.2	30.2	29.5	36.5	5.5	31.0	Yoon Family Trust, (Soo Han Yoon)	2N/22W-3L01, 02N22W03K04S

Table "D-1"
IPA's 2015 - 2021 Production & Averages

10/16/2022

2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	2020 (2)	2021 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
15.7	14.9	23.7	13.8	16.3	8.5	14.3	15.3	(5.5)	20.8	Zimmerman, Wade N. III and Patricia B. Zimmerman Trust	3N/21W-21E08 03N/21W-21D02
23,181.8	**22,162.8**	**19,041.5**	**19,558.0**	**14,613.4**	**18,479.2**	**19,453.3**	**19,498.6**	(7,921.1)	**27,425.7**	**Total Basin IPA Stipulated Parties**	
27,466.4	**27,466.4**	**27,466.4**	**27,466.4**	**27,466.4**	**27,466.4**	**27,466.4**	**27,466.4**		**27,466.4**	**Historical Association IPA With Non-Parties (40.7 AF)**	
25,855.6	**25,363.0**	**21,889.3**	**22,880.7**	**17,242.1**	**21,212.6**	**21,993.2**	**22,348.1**			**Total IPA, Ventura, Non-Parties and De Minimus**	
25,855.6	**25,363.0**	**21,889.3**	**22,880.7**	**17,242.1**	**21,212.6**	**21,993.2**				**United Water Conservation District Totals**	
(0.01)	(0.01)	0.00	0.00	(0.00)	0.00	0.00				**Over/Under Amounts (1) (3) (19)**	

Footnotes:

Archived notes: 1, 3, 6, 11, 12, 14, 16, 18, 19, 20, 31, 32, 33

(2) Source of production data for 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, and 2021 was the United Water Conservation District, reviewed by the Association.

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

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

(7) Saticoy Foods 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 - 2013 between City of San Buenaventura & Hadley Williams Partnership: 64/36% of allocation, production meter to be installed to allocate produced water.

(10) Well number was added Oba.

(13) Shared well (3N/22W-24R01) between Leavens Ranches and Jamie Santana Family Trust. Production is reported separately.

(15) Garcia - Spelling correction

(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.

(21) Michael Fiano stipulated in 2012, will be leasing all water pumped annually going forward, transfers to date were estimated, 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 to the Orr Ranch Co. to Bryce R. and Elaine V. Bannatyne Co Trustees of the Bannatyne Trust; August 2019 corporation name change to Rancho Resplandor de Oro, Inc.

(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 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 2018

(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

(34) Silva allocation of 108 Acre-Feet was distributed to County of Ventura 47.5, Jakraan 45.1 and Riverpark A LLC 16.2

(35) 2014 Production was reduced to 5.9 AF from 15.01 using SCE Pump Test well was pumping air do to disrepair over recording, also 2015 was reduced to 21.61 from 40.28

(36) 30 AF Transferred from Limoneira to Limoneria Lewis Community Builders LLC, effective February 2020

(37) 94.45 AF Transferred from Limoneira to City of Santa Paula September 2020

(38) 60.71 AF Transferred From Limoneira to City of Santa Paula February 2021

Table "D-2"

De Minimus 2015-2021 Production & Averages DRAFT

(Production Not to Exceed 5 AFY)

2015	2016	2017	2018	2019	2020	2021	7 Year Average	Party Name	Well Number
1.0	1.0	1.0	1.0	0.6	1.00	1.03	0.9	Chapman, Kenneth	3N/21W21F1
2.2	2.2	2.6	2.4	2.4	2.40	2.40	2.4	Chavez, Joel and Carmen	3N/21W21E07
0.0	1.0	2.6	3.6	3.7	4.29	4.13	2.7	Loza, Jesus and Veronica	3N/22W26L01S
3.3	3.9	8.1	10.0	7.3	4.39	3.70	5.8	Rogers, Charles W., Jason C. Rogers, and Aaron W. Rogers	2N/22W-1M2
4.2	4.2	4.7	5.0	4.4	5.10	5.03	4.7	Santa Paula Airport Association	3N21W14D01
3.5	3.5	3.5	3.5	3.5	3.50	3.50	3.5	Sullivan, Russell J.	3N21W21L1
14.2	**15.8**	**22.5**	**25.5**	**21.9**	**20.68**	**19.79**	**20.0**	**Total De Minimus Producers**	

Table "D-3"

Non-Party 2015 - 2021 Production & Averages

10/16/2022

2015 (7)	2016 (7)	2017 (7)	2018 (7)	2019 (7)	2020 (7)	2021 (7)	2015-21 Average AFY Production	Name	Well Number
3.2	3.0	2.4	3.0	2.3	2.4	2.4	2.7	Davis, Linda Trust	3N21W21E04, 3N/21W-21E10 (2)
							0.0	Dominguez, G.(5) (0.9 AF)	03N/21W-12E07
							0.0	Fiano, Michael	3N/22W26B02 & 3
0.0	0.0				0.0		0.0	Garman, William (5) (2.0 AF)	02N/22W-02N04
							0.0	Grant Family Ranches, LLC	3N22W3E01 (1), 3N21W20E01 (2)
1.6	2.0	1.6	1.6	1.6	1.4	1.3	1.6	Minero, Gilbert (5) (1.1 AF)	03N/21W-21M01
6.3	10.6	11.0	10.7	7.5	7.5	7.5	8.7	Sanchez, Martin	3N/21W-21E6
	3.5						0.5	Sullivan, Russell J.	3N21W21L1
							0.0	Ventura Unified School District (5) (30.8 AF)	02N/22W-03P01
1.8	2.0	1.9	1.6	1.3	1.5	1.0	1.6	Vint, Thomas H. (5) (4.9 AF)	03N/21W-21E03
1.6	1.1	2.2	2.2	1.9	1.6	2.3	1.8	Westerdale Trust (5) 1.0 AF)	03N/21W-21G01
14.5	**22.2**	**19.1**	**19.2**	**14.6**	**14.4**	**14.5**	**16.4**	**Total Average AFY Production (Average 2015-2021)**	

Footnotes to Non-Stipulating Pumpers

Achived footnotes: 3, 4, 6

40.7 Acre-Feet for Non Parties from original Judgment

(1) Incorrect well number.

(2) Added well number.

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

(7) Source of production data for 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, and 2021 was the United Water Conservation District, reviewed by the Association.

Table "D-4" Temporary Water Transfers

10/16/2022

2015	2016	2017	2018	2019	2020	2021	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transfering Parties
2,537.8	2,063.0	1,611.6	1,517.1	982.2	1,372.2	1,307.3	1,627.3	(1,736.5)	3,363.8	**Limoneira Company**
756.2	441.0	364.9	660.0							**To:** Canyon Irrigation Company
79.8			39.4							**To:** Canyon Irrigation Company for Rancho La Cuesta
250.0	526.4				579.6					**To:** Riverbank Citrus LLC
										To: Fiano, Michael J. Trust
										To: Leavens Ranches
										To: Regents of the University of Californnia
(62.2)	(62.2)									**To:** City of Santa Paula (2016 Permanent Transfer)
										To: Dabney/Cook
132.0	43.0									**To:** Tucker Ranch
24.0		17.0				23.8				**To:** Gooding Ranch
						65.1				**To:** Limoneira Lewis Community Builders
3,717.7	3,011.2	1,993.5	2,216.4	982.2	1,951.8	1,396.2	2,181.3	(1,182.6)	3,363.8	**Limoneira Company Balance**
43.3	30.1	14.7	11.4	10.7	12.7	12.5	19.4	19.4	0.0	**Fiano, Michael J. Trust**
										From: Limoneira Company
				(30.0)						**From**: Dan Campbell
(43.3)	(30.1)									**From:** Malzacher, Fred H & Elaine Trust
0.0	0.0	14.7	11.4	(19.3)	12.7	12.5	4.6	**4.6**	0.0	**Fiano, Michael J. Trust Balance**
165.6	91.4	174.8	140.0	54.2	150.8	163.4	134.3	(148.0)	282.3	**Campbell, Dan**
			30.0							**To:**Michael J Trust
			90.0							**To:** Alta Mutual Water Company, Inc.
165.6	91.4	174.8	260.0	54.2	150.8	163.4	151.5	(130.8)	282.3	**Campbell, Dan Balance**
8.9	18.7	20.6	23.1	18.8	20.4	19.7	18.6	(17.7)	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**
43.3	30.1	-	-							**To:** Fiano, Michael J. Trust
52.2	48.8	20.6	23.1	18.8	20.4	19.7	29.1	(7.2)	36.3	**Malzacher, Fred H. & Elaine C. Balance**
7,431.2	7,730.0	5,459.6	6,002.2	4,242.9	5,494.9	6,251.1	6,087.4	(3,816.8)	9,904.2	**Farmers Irrigation Company**
33.0		123.4	128.0	588.2	499.7					**To:** Canyon Irrigation Company
5.6						38.0				**To:** Brucker Family Trust
63.4	77.2	52.4	70.2	48.3	66.3	40.2				**To:** Ortiz Trust - Joseph & Sons
										To: Bender Reality LTD
					76.5	23.2				**To:** Loza Investments, LLC
										To: Rancho Filoso, LLC
		28.3	39.1	18.2		9.1				**To:** Schozi Ventura
170.0	85.0	85.0	132.0	93.0	57.0					**To:** McGrath, John & Sons
	426.3	145.8								**To:** Alta Mutual Water Company
		3.7								**To:** Aramblua, Pedro
		295.6	220.4	149.1	279.3	376.6				**To:** Riverbank Citrus
100.0										**To:** Strata Holdings LP
										To: Grant Family Ranches
	116.1			79.4		35.0				**To:** TVC Pinkerton Ranch LLC
7,803.1	8,434.6	6,193.9	6,591.9	5,219.1	6,473.6	6,773.3	6,784.2	(3,120.0)	9,904.2	**Farmers Irrigation Company Balance**
1,526.5	1,342.9	772.5	819.5	53.5	227.7	911.3	807.7	134.7	673.0	**Canyon Irrigtion Company**
(33.0)	-	(123.4)	(128.0)	(588.2)	(499.7)					**To:** City of Santa Paula
33.0	-	123.4	128.0	588.2	499.7					**From:** Farmers Irrigation Company
(79.8)										**From:** Limoneira Company for La Cuesta over use
(756.2)	(441.0)	(364.9)	(699.3)							**From:** Limoneira Company
690.5	901.9	407.6	120.2	53.5	227.7	911.3	473.2	(199.8)	673.0	**Canyon Irrigation Company Balance**
4,168.0	4,087.2	4,260.1	4,232.5	4,082.8	4,444.9	4,489.9	4,252.2	(1,463.1)	5,715.3	**City of Santa Paula**
(33.0)	-	(123.4)	(128.0)	(588.2)	(499.7)					**From:** Canyon Irrigation Company
62.2	62.2									**From:** Limoneira Company (62.2 Permenant Transfer '16)
4,197.2	4,149.4	4,136.7	4,104.5	3,494.6	3,945.3	4,489.9	4,073.9	(1,641.4)	5,715.3	**City of Santa Paula Balance**

Table "D-4" Temporary Water Transfers

10/17/2022

2015	2016	2017	2018	2019	2020	2021	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transfering Parties
125.1	34.3	136.6	112.4	101.3	123.7	143.8	111.0	9.2	101.8	**Gooding Ranch (John F. Gooding)**
										From: Dickeson, D&P Dickenson Family Rev. Tr.
(24.0)		(17.0)				(23.8)				**From:** Limoneira Company
101.1	34.3	119.6	112.4	101.3	123.7	120.0	101.8	0.0	101.8	**Gooding Ranch (John F. Gooding) Balance**
162.9	123.7	85.8	66.6	162.5	154.3	134.1	127.1	(54.5)	181.6	**McGaelic Group**
		75.0	51.0			25.0				**To:** McGrath, John & Sons (Permanent Transfer of 55.9)
162.9	123.7	160.8	117.6	162.5	154.3	159.1	148.7	(32.9)	181.6	**McGaelic Group Balance**
80.4	81.4	69.6	98.8	88.1	93.9	87.8	85.7	13.5	72.2	**Shozi Ventura, LLC**
		(28.3)	(39.1)	(18.2)		(9.1)				From: Farmers Irrigaton Company
80.4	81.4	41.3	59.8	69.9	93.9	78.7	72.2	0.0	72.2	**Shozi Ventura, LLC Balance**
479.9	296.6	447.3	430.8	319.9	288.0	251.9	359.2	75.6	283.6	**McGrath, John & Sons**
		(75.0)	(51.0)			(25.0)				From: McGaelic Group
										From: The Nature Conservency
										From: Shores, John Family Partnership
(170.0)	(85.0)	(85.0)	(132.0)	(93.0)	(57.0)					From: Farmers Irrigation Company
309.9	211.6	287.3	247.8	226.9	231.0	226.9	248.8	(34.8)	283.6	**McGrath, John & Sons Balance**
0.0							0.0	0.0	0.0	**WH Ventura 165 LLC (Regents)**
										From: Leavens Ranches
0.0										**From: Limoneira Company**
0.0							0.0	0.0	0.0	**WH Ventura 165 LLC Balance**
195.0	159.1	171.3	120.0	178.1	138.5	167.8	161.4	(33.9)	195.3	**From: Leavens Ranches**
										To: Regents of the University of California
										From: Limoneira Company
195.0	159.1	171.3	120.0	178.1	138.5	167.8	161.4	(33.9)	195.3	**Leavens Ranches Balance**
1,114.4	1,268.1	1,343.5	1,094.6	966.5	1,144.9	1,139.4	1,153.0	389.5	763.5	**Riverbank Citrus LLC**
(250.0)	(526.4)									**From:** Limoneira Company
		(295.6)	(220.4)	(149.1)	(279.3)	(376.6)				**From:** Farmers Irrigation Company
(100.9)	(105.6)	(107.1)	(110.9)	(53.8)	(151.2)					**From:** Nutwood Farms
763.5	636.1	940.8	763.3	763.5	714.4	762.8	763.5	0.0	763.5	**Riverbank Citrus LLC Balance**
25.5	23.4	19.3	15.6	23.5	24.1	34.9	23.8	(102.6)	126.4	**Nutwood Farms**
100.9	103.0	107.1	110.8	53.8	151.2					**To:** Riverbank Citrus LLC
126.4	126.4	126.4	126.4	77.4	175.3	34.9	113.3	(13.1)	126.4	**Nutwood Farms Balance**
0.5	1.0	1.6	1.6	1.8	2.1	1.3	1.4	(8.6)	10.0	**Little Clara Ranch LLC**
										To: We 5 Properties
0.5	1.0	1.6	1.6	1.8	2.1	1.3	1.4	(8.6)	10.0	**Little Clara Ranch Balance**
28.2	44.3	8.1	2.0	0.0	0.0	0.0	11.8	2.0	9.8	**We 5 Properties**
										From: Little Clara Ranch LLC
(43.0)	(28.8)									**From:** Alta Mutual Water Company
(14.8)	15.5	8.1	2.0	0.0	0.0	0.0	1.6	(8.2)	9.8	**We 5 Properties Balance**
-	-	44.9	52.3	34.2	3.0	10.2	20.6	(86.9)	107.5	**The Nature Conservency**
70.0										**To: County of Ventura Gen Services Agency Jail**
	100.0									**To: Alta Mutual Water Company**
										To: Brucker Family Trust
70.0	100.0	44.9	52.3	34.2	3.0	10.2	44.9	(62.6)	107.5	**The Nature Conservancy Balance**
237.0	266.7	242.8	383.5	400.8	439.2	427.7	342.5	66.0	276.5	**Brucker Family Trust**
										From: The Nature Conservency
					(253.8)	(113.2)				**From:** JKJ Farms, LLC
(5.6)	(51.7)					(38.0)				**From:** Farmers Irrigation Company
231.5	215.1	242.8	383.5	400.8	185.4	276.5	276.5	0.0	276.5	**Brucker Family Trust Balance**

Table "D-4" Temporary Water Transfers

10/17/2022

2015	2016	2017	2018	2019	2020	2021	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transfering Parties
34.0	77.1	83.8	62.9	78.6	89.1	82.4	72.6	(52.4)	125.0	**JKJ Farms, LLC**
					253.8	113.2				**To: Brucker Family Trust**
34.0	77.1	83.8	62.9	78.6	342.9	195.6	125.0	0.0	125.0	**JKJ Farms, LLC Balance**
102.0	115.8	91.0	108.8	86.9	104.9	78.8	98.3	59.7	38.6	**Ortiz Trust - Joseph & Sons**
(63.4)	(77.2)	(52.4)	(70.2)	(48.3)	(66.3)	(40.2)				**From:** Farmers Irrigation Company
38.6	38.6	38.6	38.5	38.6	38.6	38.6	38.6	0.0	38.6	**Ortiz Trust - Joseph & Sons Balance**
11.8	13.2	10.4	7.3	14.8	7.9	3.1	9.8	0.2	9.6	**The Judson T. Cook & Suzette H. Cook Revocable Trust dated December 5, 2007 (28)**
	(11.6)									From: Limoneira Company
11.8	1.6	10.4	7.3	14.8	7.9	3.1	8.1	(1.5)	9.6	**The Judson T. Cook & Suzette H. Cook Revocable Trust Balance**
1,175.1	1,386.5	709.1	745.7	292.0	536.7	804.3	807.1	44.0	763.1	**Alta Mutual Water Company**
			(90.0)							**From:** Dan Campbell
	(100.0)									**From:** The Nature Conservency
	(26.6)	(23.2)								**From:** Wallace, James III
										To: We 5 Properties
	(426.3)	(145.8)								**From: Farmers Irrigation Company**
1,175.1	833.6	540.1	655.7	292.0	536.7	804.3	691.1	(72.0)	763.1	**Alta Mutual Water Company Balance**
319.1	245.4	242.8	362.2	254.8	358.7	238.6	288.8	33.6	255.2	**Loza Investments LLC - Tucker Ranch**
(132.0)	(43.0)									From: Limoneira Company
					(76.5)	(23.2)				From: Farmers Irrigation Company
	37.5	2.1								To: Yoon Family Trust
187.1	239.9	244.8	362.2	254.8	282.2	215.4	255.2	(0.0)	255.2	**Loza Investments LLC - Tucker Ranch Balance**
4.4	2.9	5.1	1.3	1.4	2.0	2.4	2.8	(0.1)	2.9	**Arambula, Pedro**
		(3.7)								From: Farmers Irrigation Company
										From: Correction of Reporting to United (3)
4.4	2.9	1.4	1.3	1.4	2.0	2.4	2.3	(0.6)	2.9	**Arambula, Pedro Balance**
1.5	1.0	1.0	1.0	1.0	1.1	2.0	1.2	(26.4)	27.6	**Williams, James W. III**
	26.6	23.2								**To:** Alta Mutual Water Company
1.5	27.6	24.2	1.0	1.0	1.1	2.0	8.3	(19.3)	27.6	**Williams, James W. III Balance**
247.8	188.2	221.9	246.8	76.4	278.5	271.3	218.7	(73.9)	292.6	**Bender Reality, LTD & Bender Farms**
										From: Farmers Irrigation Company
247.8	188.2	221.9	246.8	76.4	278.5	271.3	218.7	(73.9)	292.6	**Bender Reality, LTD & Bender Farms Balance**
6.8	6.5	20.7	19.1	4.4	16.1	12.3	12.3	2.7	9.6	**Garcia, Elias & Guadalupe**
		(2.4)								From: Castaneda, Albert & Mary
							(16.1)			From: Farmers Irrigation Company
6.8	6.5	18.3	19.1	4.4	16.1	12.3	(3.8)	0.0	9.6	**Garcia, Elias Balance**
140.0	65.6	71.1	60.4	59.9	87.3	117.8	86.0	(15.4)	101.4	**Castaneda, Albert & Mary**
		2.4								To: Garcia, Elias & Guadalupe
140.0	65.6	73.5	60.4	59.9	87.3	117.8	86.4	(15.0)	101.4	**Castaneda, Albert & Mary Balance**
31.4	31.6	44.2	33.2	27.0	33.9	38.4	34.2	(18.7)	52.9	**Grant Family Ranches**
										From:Farmers Irrigation Company
31.4	31.6	44.2	33.2	27.0	33.9	38.4	34.2	(18.7)	52.9	**Grant Family Ranches Balance**
172.6	143.7	159.0	125.7	72.2	87.8	102.4	123.4	3.8	119.6	**Rancho Filoso, LLC**
(65.0)	(28.7)	(65.5)								From: JM Sharp Company
										From:Farmers Irrigation Company
107.6	115.0	93.5	125.7	72.2	87.8	102.4	100.6	(19.0)	119.6	**Rancho Filoso, LLC Balance**
95.5	-	167.5	206.0	118.9	158.8	78.2	117.8	(49.5)	167.3	**Sharp, JM Compnay**
65.0	28.7	65.5								To: Rancho Filloso

Table "D-4"

Temporary Water Transfers

10/17/2022

2015	2016	2017	2018	2019	2020	2021	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transfering Parties
	15.0									Cook, The Judson T. Cook & Suzette H. Cook Revocable Trust dated December 5, 2007 (28)
160.5	43.7	233.0	206.0	118.9	158.8	78.2	142.7	(24.6)	167.3	**Sharp, JM Company Balance**
11.8	13.2	10.4	7.3	14.8	7.9	3.1	9.8	0.2	9.6	**Cook, The Judson T. Cook & Suzette H. Cook Revocable Trust dated December 5, 2007 (28)**
	(15.0)									From: Sharp, JM Company
11.8	(1.8)	10.4	7.3	14.8	7.9	3.1	8.9	(0.7)	9.6	**Cook, The Judson T. Balance**
247.6	187.2	206.5	165.7	141.6	184.4	141.2	182.0	49.5	132.5	**TVC Pinkerton Ranch LLC (27)**
										From: Pinkerton, W. J. Estate Ranch
(116.1)	(116.1)			(79.4)		(35.0)				From: Farmers Irrigation Company
131.5	71.1	206.5	165.7	62.1	184.4	106.2	132.5	0.0	132.5	**TVC Pinkerton Ranch LLC Balance**
-	-	-	-	-	-	-	-	158.7	158.7	**Pinkerton W. J. Estate Ranch**
										To: TVC Pinkerton Ranch LLC
-	-	-	-	-	-	-	-	(158.7)	158.7	**TVC Pinkerton Ranch LLC Balance**
72.9	73.3	78.2	71.2	44.9	24.2	21.3	55.2	6.9	62.1	**Strata Holdings LP**
(100.0)										From: Farmers Irrigation Company
(27.1)	73.3	78.2	71.2	44.9	24.2	21.3	40.9	(21.2)	62.1	**Strata Holdings LP Balance**
142.3	121.3	238.6	204.3	194.3	163.2	58.5	160.3	(11.9)	172.2	**County of Ventura, General Services Agency**
(70.0)										From: The Nature Conservancy
72.3	121.3	238.6	204.3	194.3	163.2	58.5	150.3	(21.9)	172.2	**County of Ventura, General Services Agency Jail Bal**
16.7	79.1	40.4	32.4	27.2	30.2	29.5	36.5	5.5	31.0	**Yoon Family Trust**
	(37.5)	(2.1)								From: Tucker Ranch
16.7	41.6	38.4	32.4	27.2	30.2	29.5	30.8	(0.2)	31.0	**Yoon Family Trust Balance**
41.5	1.6	33.8	93.2	57.2	105.9	114.2	63.9	2.0	61.9	**Murray Pinkerton**
						(14.0)				From: Arlene Pinkerton
41.5	1.6	33.8	93.2	57.2	105.9	100.2	61.9	0.0	61.9	**Murray Pinkerton Balance**
0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	(39.1)	39.1	**Arlene Pinkerton**
						14.0				To: Murray Pinkerton
-	-	-	-	-	-	14.0	2.0	(37.1)	39.1	**Arlene Pinkerton Balance**
31.5	47.3	32.7	41.8	19.5	45.0	51.7	38.5	4.2	34.3	**Esther Martinez**
										From:
31.5	47.3	32.7	41.8	19.5	45.0	51.7	38.5	**4.2**	34.3	**Esther Martinez Balance**

The amounts reflected in Red above represent amounts that need to be leased to be compliant

(2) Shores Family Partnership permanently transferred 126.7 and that was retroactively applied wiping out the temporary transfer

(3) A flow meter was installed in June 2013 to record production versus crop factor, during the first year 6.8 acre-feet was recorded so that amount was used for 2013 production and the 3.5 acre-feet reduction represents the over reported amount that United did not adjust to actual.

Table "D-5"

Original and Acquired Allocation of the City of San Buenaventura

10/16/2022

2015 (7)	2016 (7)	2017 (7)	2018 (7)	2019 (7)	2020 (7)	2021 (7)	7 Year Average	Over (+) Under (-)	Acre Feet	Party Name	Well Number
229.1	243.4	212.8	182.2	83.1	154.8	139.5	177.8	(42.2)	220.0	City of San Buenaventura	02N/22W-03E01 (1)
									5.8	City of San Buenaventura (3)	3N/21W-21B3
97.8	15.4						16.2	(6.9)	23.1	City of San Buenaventura (10)	3N/22W-34R1
	5.9						0.8	(96.2)	97.0	City of San Buenaventura (9)	03N/22W-35N01
326.9	264.7	212.8	182.2	83.1	154.8	139.5	194.8	(151.1)	**345.9**	**Total Aquired by City of San Buenaventura**	
2,318.3	2,897.6	2,593.3	3,095.9	2,509.2	2,543.5	2,366.1	2,617.7	(382.3)	3,000.0	City of San Buenaventura	02N/22W-02K09 (2) 2N/22W-02H02 (8)
2,645.2	3,162.2	2,806.1	3,278.0	2,592.2	2,698.3	2,505.6	2,812.5	(533.4)	**3,345.9**	**Total City of San Buenaventura**	

FOOTNOTES:

Archived footnotes: 4, 5, 6

(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 should be used.

(2) Well number was added.

(3) McConica allocation transfer.

(7) Source of production data for 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019 and 2020was 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) from Parklands Ventura LLC 2021 (85)

(10) Permanent water transfer from WH Ventura 165 LLC to City of Ventura, 2016 (23.1 AF)

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PROOF OF SERVICE

I am a citizen of the United States and employed in Santa Barbara County, California. I am over the age of eighteen years and not a party to the within-entitled action. My business address is 1021 Anacapa Street, 2nd Floor, Santa Barbara, California 93101. On April 5, 2023, I served a copy of the within document(s):

SUBMISSION OF THE SANTA PAULA BASIN 2021 ANNUAL REPORT

☐ by transmitting via facsimile the document(s) listed above to the fax number(s) set forth below on this date before 5:00 p.m.

☒ by placing the document(s) listed above in a sealed envelope with postage thereon fully prepaid, the United States mail at Santa Barbara, California addressed as set forth below.

☐ by placing the document(s) listed above in a sealed Federal Express envelope and affixing a pre-paid air bill, and causing the envelope to be delivered to a Federal Express agent for delivery.

☐ by personally delivering the document(s) listed above to the person(s) at the address(es) set forth below.

☒ by transmitting via e-mail or electronic transmission the document(s) listed above to the person(s) at the e-mail address(es) set forth below.

I am readily familiar with the firm's practice of collection and processing correspondence for mailing. Under that practice it would be deposited with the U.S. Postal Service on that same day with postage thereon fully prepaid in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

I declare under penalty of perjury under the laws of the State of California that the above is true and correct. Executed on April 5, 2023, at Santa Barbara, California.

Melissa Eldridge

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