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04/03/2026
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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 **NOTICE OF SUBMISSION OF THE SANTA PAULA BASIN 2024 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.	

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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 2024 Santa Paula Basin Annual Report ("2024 Annual Report"). A true and correct copy of the 2024 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 2024 Annual Report sets forth the technical data concerning the Basin for Calendar Year 2024 and Water Year 2024.

The TAC is available to answer any questions posed by the Court with respect to the 2024 Annual Report or to attend a case management conference, if instructed to do so by the Court.

Dated: April 3, 2026

BROWNSTEIN HYATT FARBER SCHRECK, LLP

By: 

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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 *2024 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 April 1, 2026 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 3, 2026 at Santa Barbara, California.

Jessica Diaz

JESSICA L. DIAZ

EXHIBIT A

United Water
CONSERVATION DISTRICT

2024 SANTA PAULA BASIN ANNUAL REPORT

United Water Conservation District
Professional Paper 2026-01
March 2026

PREPARED FOR:

SANTA PAULA BASIN TECHNICAL ADVISORY COMMITTEE

Cover photo: View of orchards near Foothill Rd in Santa Paula basin (photo taken by Kathleen Kuepper 2026).

2024 SANTA PAULA BASIN ANNUAL REPORT

(UWCD PROFESSIONAL PAPER 2026-01)

FOREWORD

In March 1996, the Superior Court of the State of California for the County of Ventura entered a stipulated judgment to establish pumping allocations and establish a management plan for the Santa Paula groundwater basin (*United Water Conservation District vs. City of San Buenaventura,* original March 7, 1996, amended August 24, 2010 [hereinafter "Judgment"]). Members of the Santa Paula Basin Pumpers Association (SPBPA) and the City of San Buenaventura exercise rights to pump groundwater from the basin for reasonable and beneficial uses. United Water Conservation District (UWCD, or United) does not produce groundwater from the basin, but the basin is located within 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 groundwater for current and anticipated future uses (i.e., municipal, domestic, agricultural, and industrial). The TAC's specialty studies and annual 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 prepared a preliminary evaluation of metrics ("triggers") that was intended to assess whether and to what extent the basin might be negatively affected by future pumping and considered options to enhance safe yield of the basin. However, the analysis has been suspended as the TAC considers transitioning to using United's model for further evaluation of basin conditions. Given the recent trends indicating decreased pumping and increased groundwater levels, additional evaluations are not being pursued at this time.

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 the SGMA requirements to form a Groundwater Sustainability Agency and implement a Groundwater Sustainability Plan, but are required 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.

2024 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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2024 SANTA PAULA BASIN ANNUAL REPORT

(UWCD PROFESSIONAL PAPER 2026-01)

INTRODUCTION

This is the twenty-eighth 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. For more background information on the location and different basin boundaries shown in Figure 1, the reader is referred to the 2020 Santa Paula Basin Annual Report (UWCD, 2022). Data for calendar-year (CY) and water-year (WY) 2024 (the reporting period) are included in this report. This annual report provides the Santa Paula Basin Technical Advisory Committee (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 data 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	2024	Average During Period of Record	Median During Period of Record	Period of Record
Water-Year[a] Precipitation at Santa Paula (Wilson Ranch)[b] (inches)	27.88	17.26	14.94	1890 through 2024
Calendar-Year Precipitation at Santa Paula (Wilson Ranch)[b] (inches)	23.84	17.08	15.48	1890 through 2024
Water-Year Discharge in Santa Clara River at Freeman Diversion[b] (AF/yr)	376,980	206,264	110,294	1956 through 2024
Water-Year Discharge in Santa Paula Creek at Mupu Bridge[b] (AF/yr)	37,415	18,353	8,351	1928 through 2024
Reported Calendar-Year Groundwater Extractions in Santa Paula Basin (AF/yr)	17,000	24,764	25,370	1980 through 2024
Groundwater Level Index[c] (ft msl)	191.98	180.74	181.62	1983 through 2024
Change in Groundwater Storage from Previous Year (AF)	80 to 800	Not applicable	Not applicable	spring 2023 to spring 2024

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 2024 includes the period from 10/1/2023 through 9/30/2024.

[b] Locations and identification numbers for rain and stream gages are indicated on Figure 1.

[c] Groundwater level index is calculated as the average of spring-high groundwater elevations measured each year at key wells selected for their relatively long record and their geographic distribution across the basin.

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 2024 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 2024 was above average, with 27.88 inches recorded. Precipitation at the Santa Paula-Wilson Ranch rain gauge during CY 2024 was slightly lower, with 23.84 inches recorded. The majority of the precipitation was received between December 2023 and March 2024, accounting for approximately 93% of the annual WY precipitation (Figure 4). As shown on Figure 4, the month with the most precipitation in CY and WY 2024 was February, with about 10 inches above the average rainfall for that month.

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 2024 is shown on Figure 7. The increased discharge in the Santa Clara River at Freeman Diversion between September 11 and November 1 was a result of United's water conservation release from Lake Piru. 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 2024 for the Santa Clara River and Santa Paula Creek were both above average. The Santa Clara River at Freeman Diversion and discharge in Santa Paula Creek near Santa Paula was about two times the average volume.

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 2024 are summarized in Table 2, below. Concentrations of these constituents detected throughout the period of record are shown on Figure 8. A moving average trendline was added to the dataset covering 1990 to present. In recent years, the Santa Clara River at the Freeman Diversion has typically been sampled every two weeks. In a moving average, the period represents the number of data points included in each averaged value. A 24-point moving average was used to approximate an annual average.

Table 2 indicates that average concentrations of constituents detected in the Santa Clara River during CY 2024 were less than the long-term average concentrations, except for nitrate. Lower concentrations of chloride, TDS, and sulfate in 2024 are consistent with historical patterns during higher rainfall years.

Table 2. Summary of Major Surface Water Quality Parameters in Santa Clara River at Freeman Diversion, CY 2024

Statistic	Concentration, milligrams per liter (mg/L)			
	Chloride	Nitrate[a]	TDS	Sulfate
CY 2024 Minimum	22	3	360	148
CY 2024 Maximum	78	14	1,190	518
CY 2024 Average	52	9	905	385
Long-Term Average[b]	64	6	1,134	524

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 2024 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. A moving average trendline was added to the dataset covering 1990 to present. In recent years, the Santa Paula Creek has typically been sampled quarterly. In a moving average, the period represents the number of data points included in each averaged value. A 4-point moving average was used to approximate an annual average.

Table 3 indicates that average concentrations of chloride, nitrate, TDS, and sulfate detected in Santa Paula Creek during CY 2024 were lower than long-term average concentrations.

Table 3. Summary of Major Surface Water Quality Parameters in Santa Paula Creek near Santa Paula, CY 2024

Statistic	Concentration (mg/L)			
	Chloride	Nitrate[a]	TDS	Sulfate
CY 2024 Minimum	10	2	510	248
CY 2024 Maximum	38	7	770	356
CY 2024 Average	24	4	645	292

Table 3. Summary of Major Surface Water Quality Parameters in Santa Paula Creek near Santa Paula, CY 2024

Statistic	Concentration (mg/L)			
	Chloride	Nitrate[a]	TDS	Sulfate
Long-Term Average[b]	45	10	862	375

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

Well permitting data obtained from the County of Ventura Watershed Protection District indicated that no wells were constructed or destroyed within the Santa Paula basin during CY 2024.

GROUNDWATER EXTRACTIONS

Annual groundwater extractions (pumping) reported for Santa Paula basin wells throughout the period of record are summarized in Table 4, below, and illustrated on Figure 10. The total volume of reported groundwater extractions in 2024 (17,000 AF) was the third lowest reported on record[1]. Review of pumping data available in United's database for each half of the CY 2024 indicates that reported groundwater extractions in the first half of CY 2024, in particular, were below average. Rainfall in the first three months of the year was well above normal (Figure 4), which likely reduced irrigation demand during this period. The pumping rates reported during the last eight years remains below the long-term historical average (CYs 1980 through 2024) of 24,764 AF/yr.

[1] The total volume of calendar year 2024 groundwater extractions is based on reporting for 94% of known active or resumed active wells. Estimated unreported groundwater extractions for calendar year 2024 is 176.16 AF based on historical reporting for wells with incomplete or unreported extractions for calendar year 2024.

Table 4. Historical Santa Paula Basin Groundwater Extractions

Calendar Year	Groundwater Extractions (AF)	Calendar Year	Groundwater Extractions (AF)	Calendar Year	Groundwater Extractions (AF)
1980	26,820	1996	26,008	2012	25,824
1981	27,545	1997	28,961	2013	26,485
1982	22,925	1998	21,622	2014	27,437
1983	16,710	1999	27,700	2015	25,856
1984	29,455	2000	26,798	2016	25,363
1985	26,533	2001	22,530	2017	21,889
1986	21,617	2002	27,259	2018	22,881
1987	24,852	2003	22,280	2019	17,238
1988	25,370	2004	27,306	2020	21,213
1989	29,362	2005	24,700	2021	21,993
1990	33,453	2006	24,830	2022	22,642
1991	27,056	2007	28,077	2023	16,324
1992	24,355	2008	26,686	2024	17,000
1993	26,998	2009	25,820		
1994	26,244	2010	23,115	***Average***	***24,764***
1995	25,042	2011	24,202	***Median***	***25,370***

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 2024 by the City of San Buenaventura, members of the SPBPA, and other pumpers are summarized in Table 5, 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 2017 through 2024), as well as Individual Party Allocations (IPAs) for the SPBPA (with transfers, de minimis parties, non-parties) and the City of San Buenaventura.

Table 5. Summary of Groundwater Extractions During CY 2024

Pumper	Extractions (AF)
City of San Buenaventura[a]	1,561
SPBPA Pumpers with Individual Party Allocations (adjusted by SPBPA[b] / reported to United[c])	15,381
Non-stipulated Parties[b]	40
De Minimis Pumpers[b]	17.5
Total extractions (adjusted by SPBPA[b] / reported to United[c])	17,000

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 2024, together with estimated imports and exports, are summarized by use and source in Table 6 and graphically illustrated on Figure 11. The distribution of groundwater extractions across the basin during CY 2024 is shown on Figure 12.

Table 6. Summary of Groundwater Extractions, Imports, and Exports in Santa Paula Basin, CY 2024

Description	Volume (AF)
Reported groundwater extractions from wells in the Santa Paula basin stipulated area	17,000
Estimated groundwater imports from Fillmore basin (assume 100% of total pumpage from FICO #12 well)	+3,336
Estimated net groundwater imports from Oxnard Forebay basin via the Alta distribution system (reported by Alta)	+736
Estimated Santa Paula basin groundwater exported to Mound basin via the Alta distribution system (reported by Alta)	-43
Estimated Santa Paula basin groundwater exported to Mound basin via the FICO distribution system (reported by FICO)	-583
Estimated net groundwater use in Santa Paula basin (sum of extractions plus imports, less exports)	**= 20,447***

** 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 2024 in Santa Paula basin are shown on Figures 14[2] and 15[3]. 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 2024 are shown on Figure 16, together with the cumulative departure from average precipitation over the same period at Santa Paula. The CY 2024 GLI is 191.98 feet above mean sea level (ft msl), which is above the previous year's GLI (185.60 ft. msl). The average GLI since 1983, when it was first calculated, is 180.74 ft msl, which is over 10 feet below the 2024 GLI. It can be concluded that water levels rose in 2024.

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 eight 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 replaced with adjacent well 03N22W35Q01S as a key index well. Wells 2C1 and 35Q1 had similar groundwater levels, therefore the replacement is not thought to cause a significant change in the calculation of the GLI. In 2023, well 03N21W12E04S was replaced with adjacent well 03N21W12E08S because well 12E8 is measured more regularly by United staff. Again, both wells had similar groundwater levels and not thought to cause a significant change in the calculation of the GLI.

[2] Water levels considered impacted by pumping were not used to create contours.
[3] Water levels considered impacted by pumping were not used to create contours.

CHANGE IN GROUNDWATER STORAGE

Geostatistical analysis of year-over-year changes in spring-high groundwater elevations within the Santa Paula basin indicates that, on average, groundwater levels rose by 6.12 ft across the basin from spring 2023 (see UWCD, 2025) to spring 2024 (Figure 17; Appendix C). This increase is slightly smaller than the calculated increase in GLI over the same period (2023-2024) of 6.38 ft. More data points are used for the geostatistical analysis than for the GLI calculation; therefore, the geostatistical analysis may be 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 2023 and spring 2024 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 2023 and spring 2024 is an increase of approximately 80 to 800 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 2024 and reported to United are summarized in Table 7, 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 2024 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 7. Summary of Chloride, Nitrate, TDS, and Sulfate in Groundwater in Santa Paula Basin, CY 2024

Statistic	Concentration (mg/L)			
	Chloride	Nitrate[a]	TDS	Sulfate
CY 2024 Minimum	34	ND	810	347
CY 2024 Maximum	170	39	2,630	1,260
CY 2024 Average	73	8[c]	1,334	604
Long-Term Average[b]	70	10	1,312	546
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.

[c] Six out of 41 samples were non-detect (ND) for nitrate in 2024. The average concentration was calculated by using zero in place of ND values.

Reported concentrations of hardness, alkalinity, iron, and manganese for groundwater samples obtained during CY 2024 are summarized in Table 8, 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 8. Summary of Hardness, Alkalinity, Iron, and Manganese in Groundwater in Santa Paula Basin, CY 2024

Statistic		Concentration (mg/L)			
		Hardness[a]	**Alkalinity[a]**	**Iron**	**Manganese**
CY 2024 Minimum		416	210	ND	0.003
CY 2024 Maximum		1,050	380	1.83	0.69
CY 2024 Average		664	270	0.12[c]	0.23
Long-Term Average[b]		650	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.

[c] 52 out of 106 samples were non-detect (ND) for iron in 2024. The average concentration was calculated by using zero in place of ND values.

REFERENCES

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FIGURES

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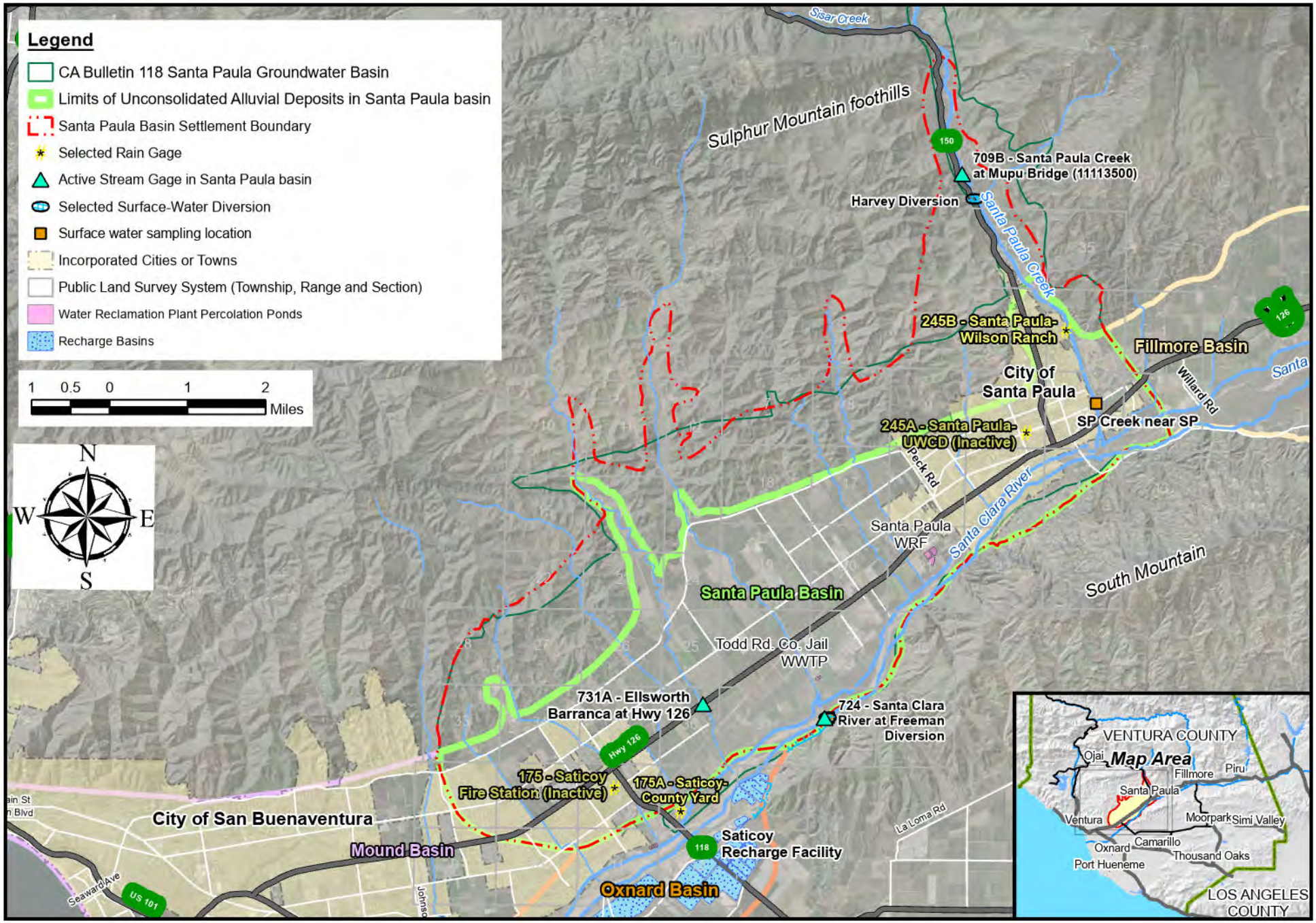


Figure 1. Santa Paula Basin Location Map

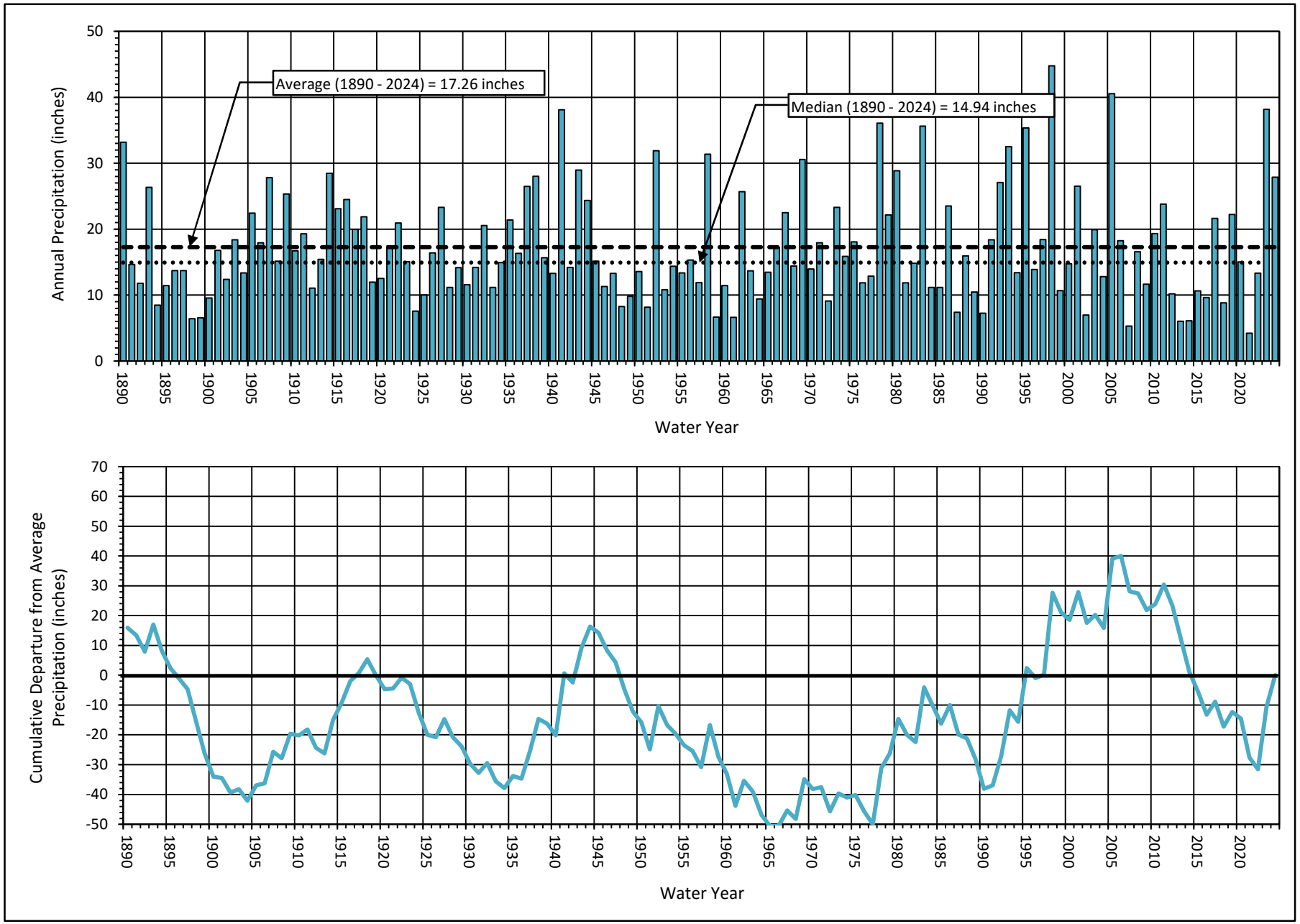


Figure 2. Annual Precipitation at Santa Paula and Cumulative Departure from Average, WYs 1890 through 2024

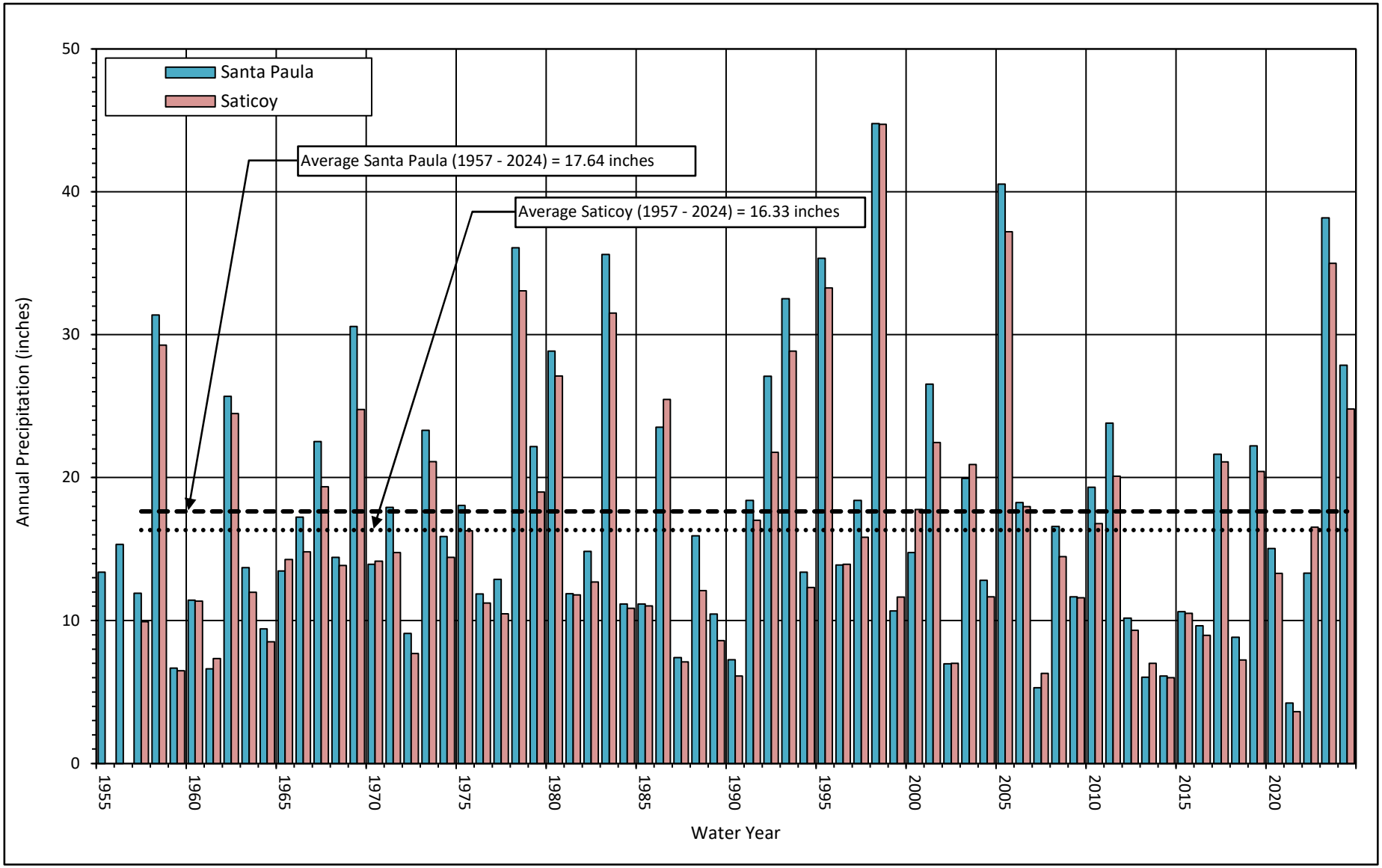


Figure 3. Annual Precipitation at Saticoy and Santa Paula, WYs 1955 through 2024

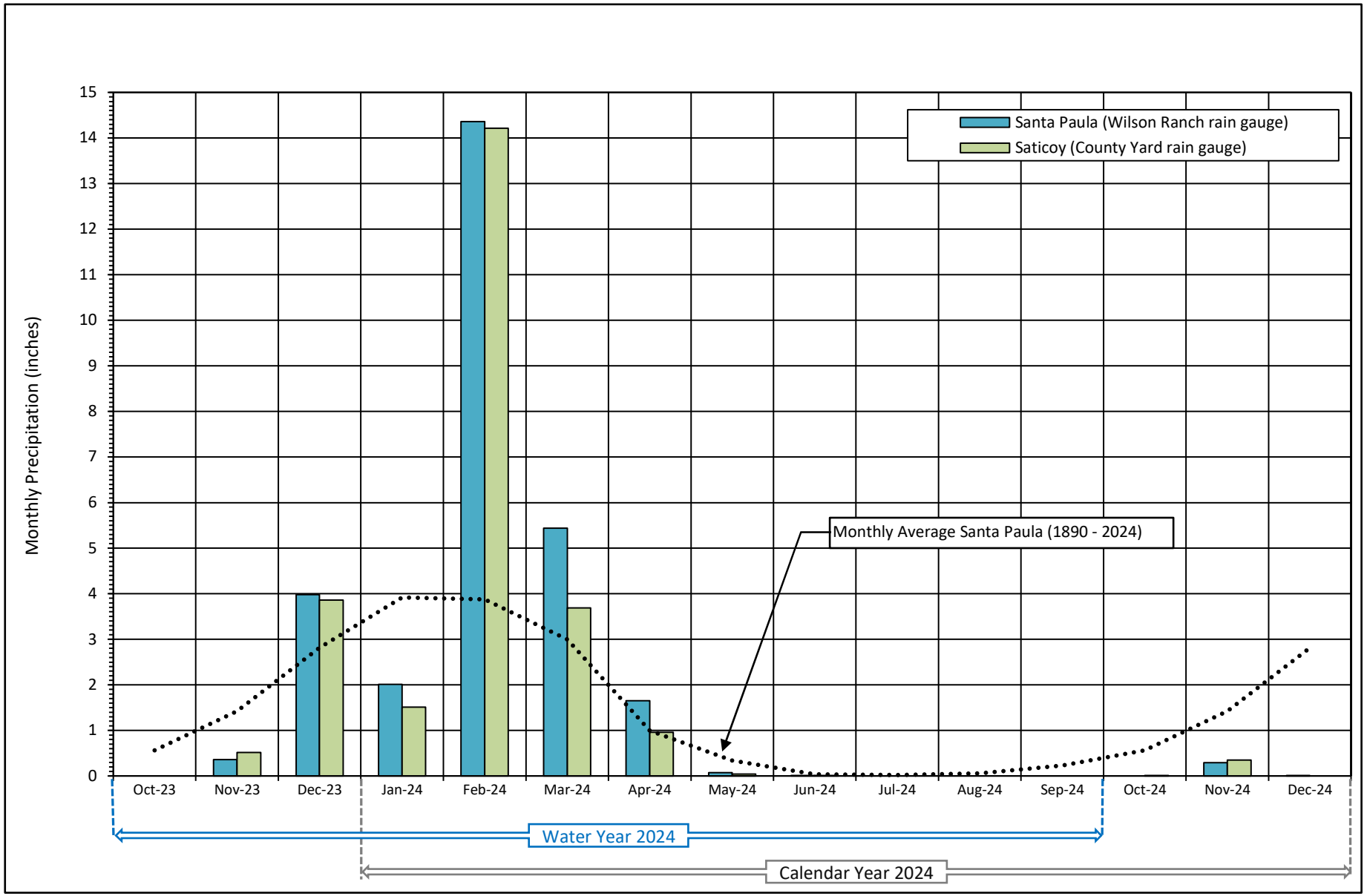


Figure 4. Monthly Precipitation in Santa Paula Basin, WY and CY 2024

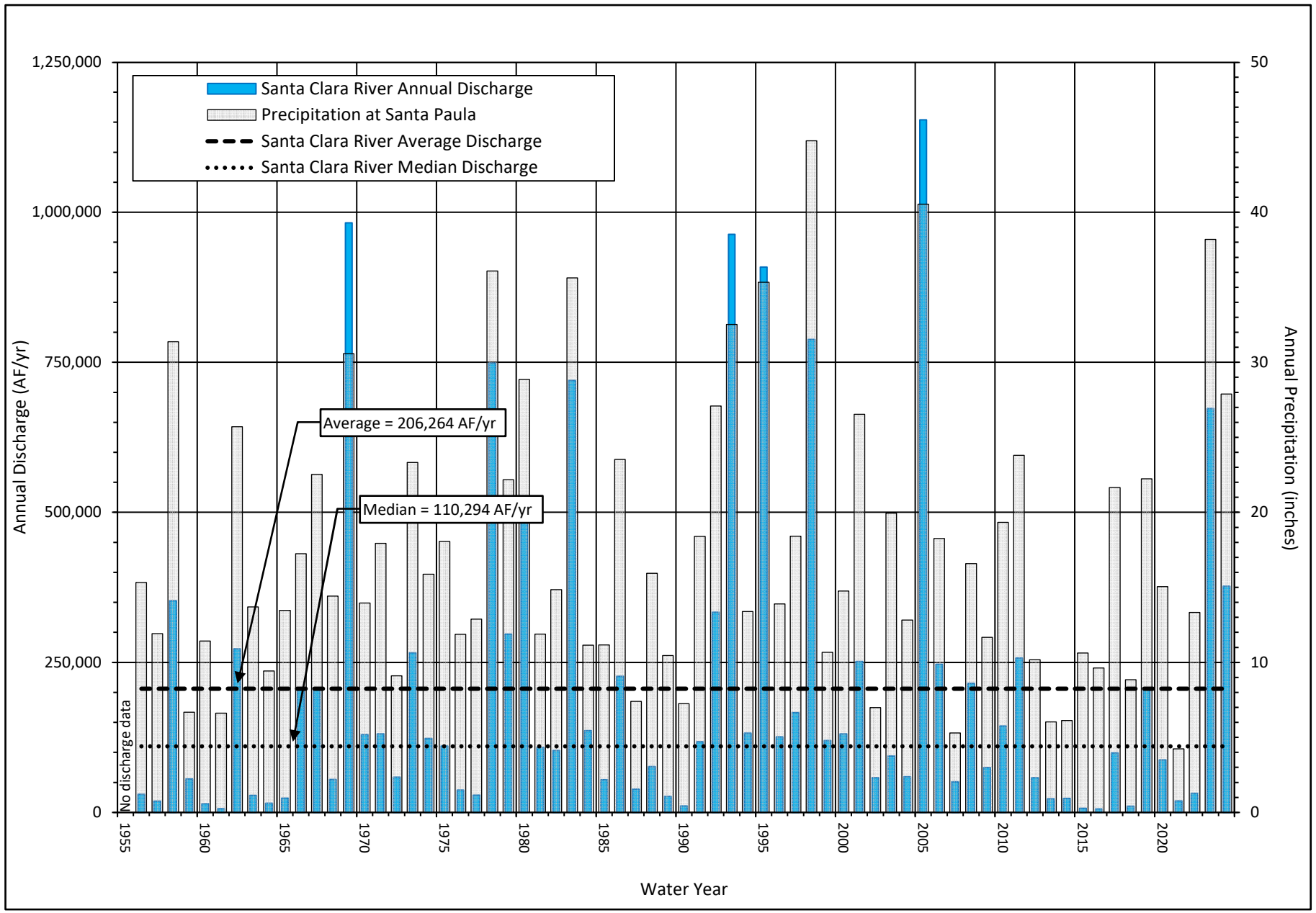


Figure 5. Annual Discharge of Santa Clara River at the Freeman Diversion, WYs 1956 through 2024

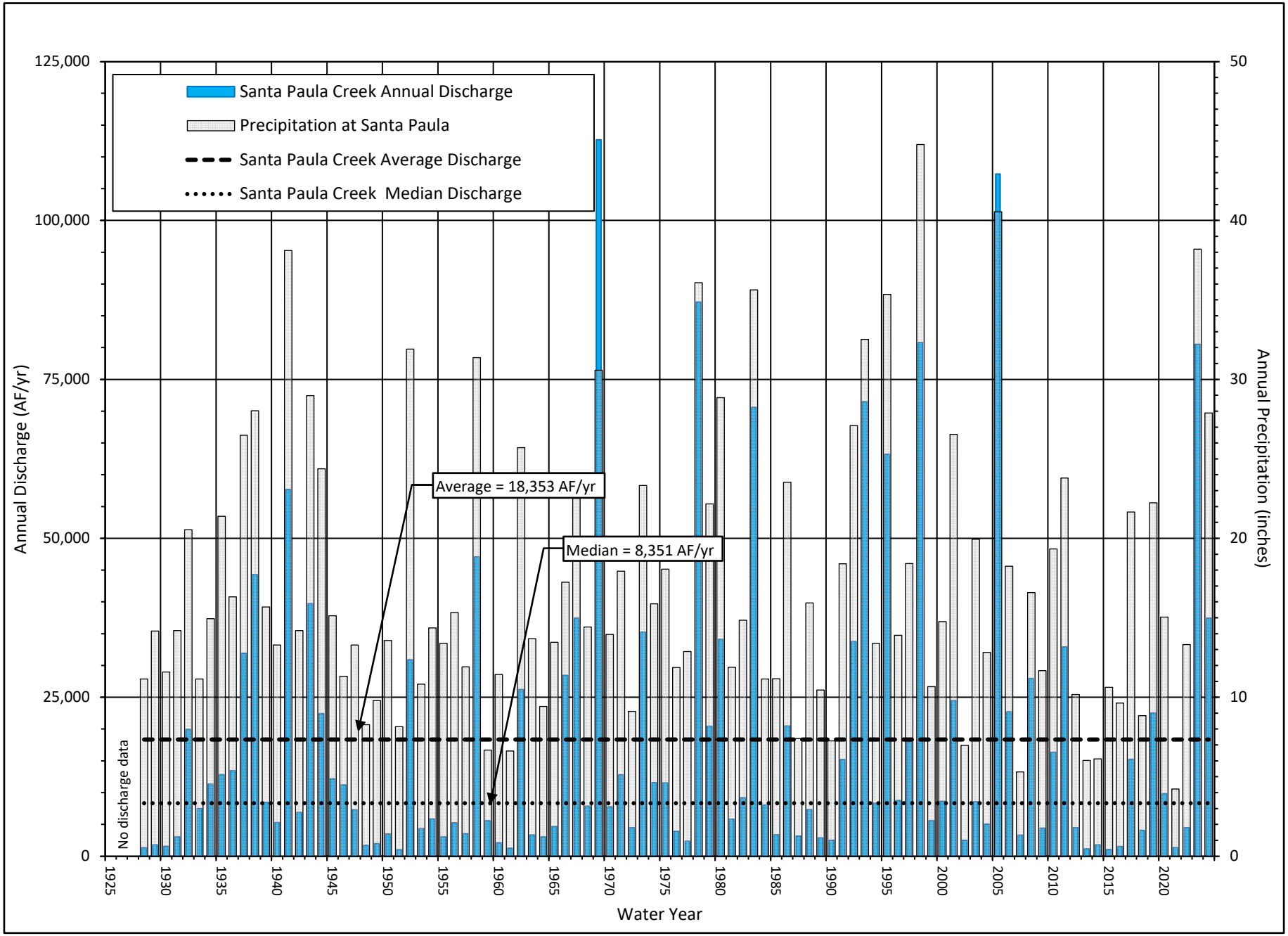


Figure 6. Annual Discharge of Santa Paula Creek Near Santa Paula, WYs 1928 through 2024

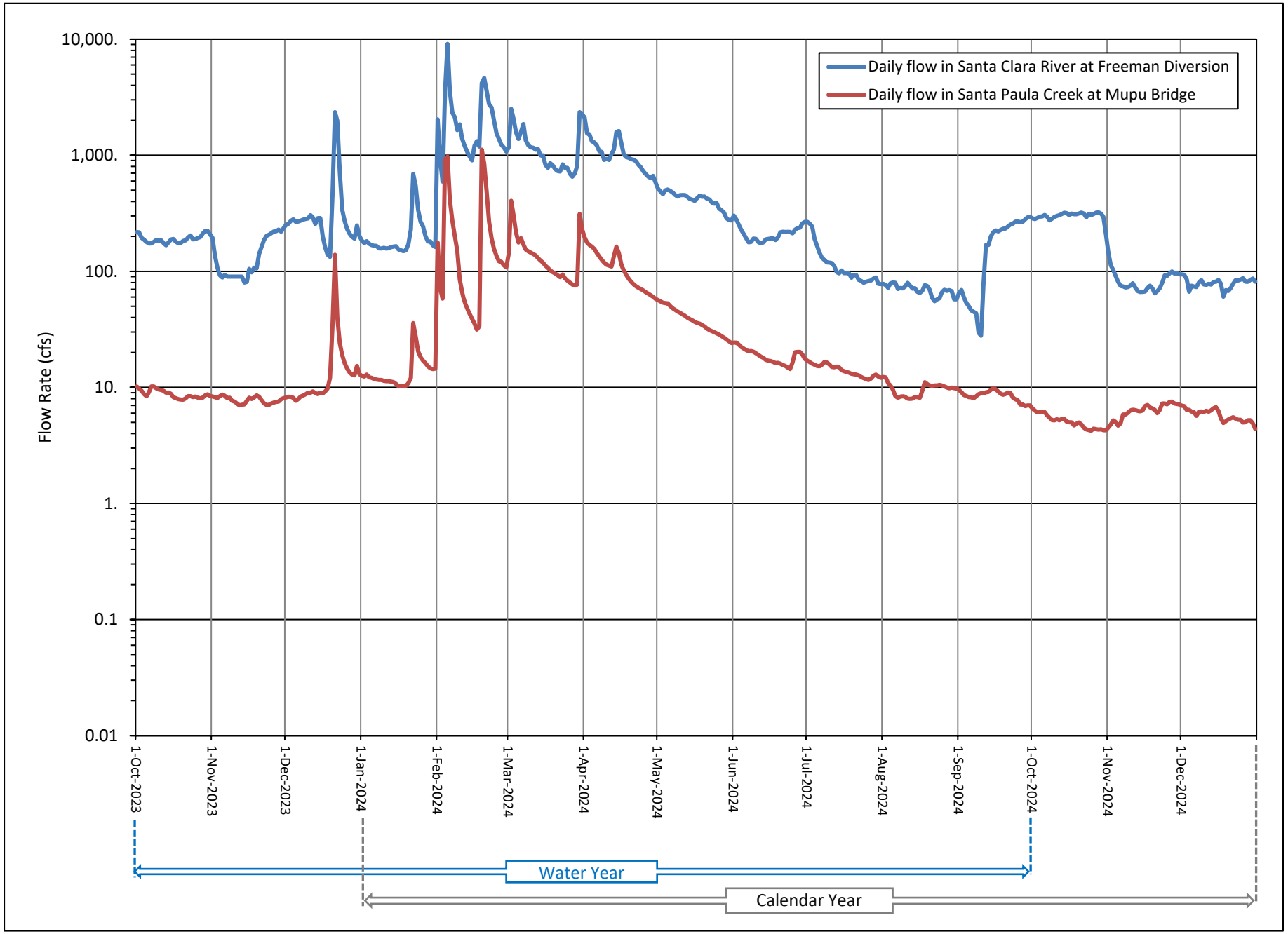


Figure 7. Daily Streamflow in Santa Paula Creek and Santa Clara River, WY and CY 2024

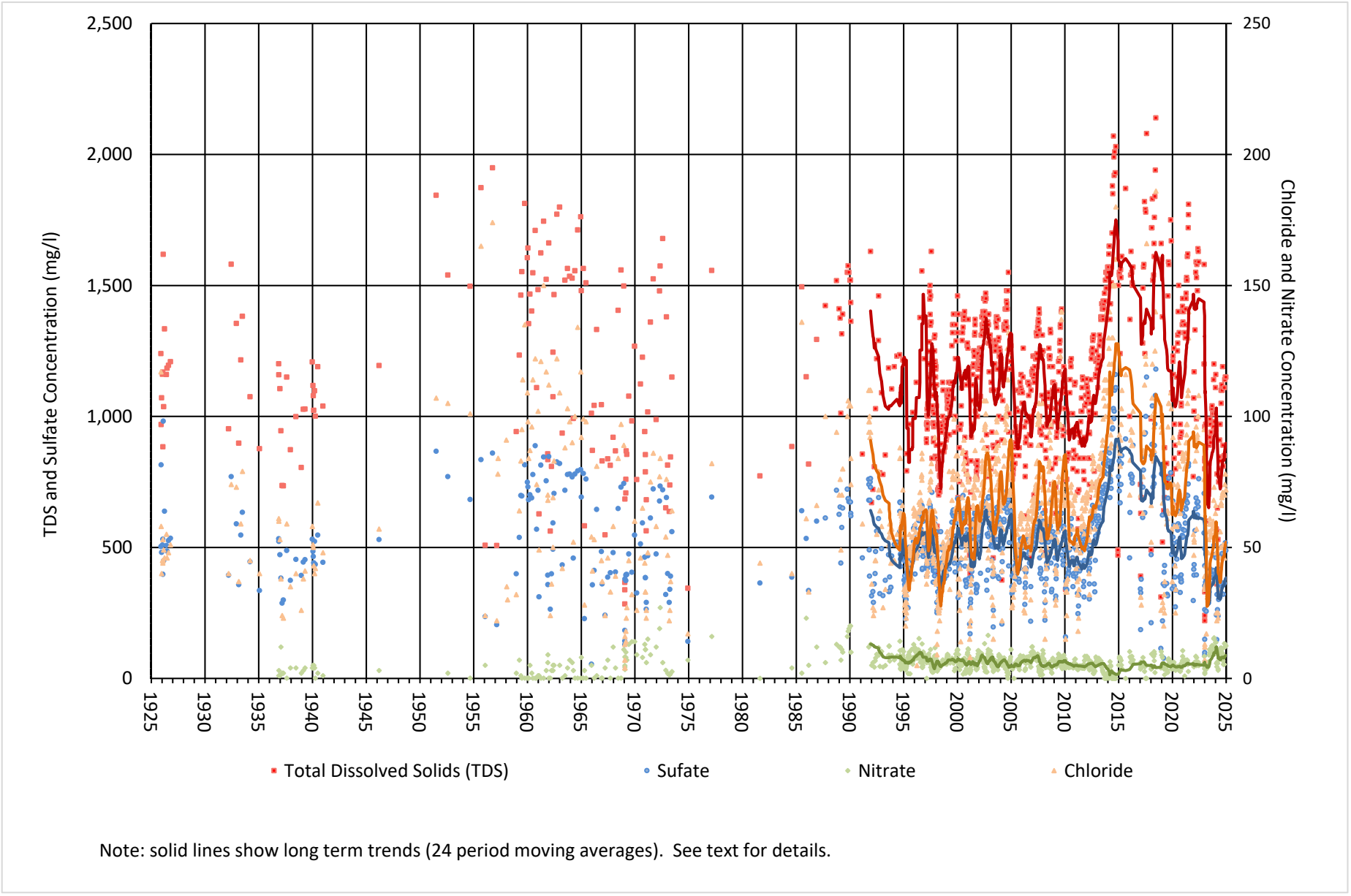


Figure 8. Concentrations of Selected Major Surface Water Quality Parameters in the Santa Clara River at Freeman Diversion, CYs 1925 through 2024

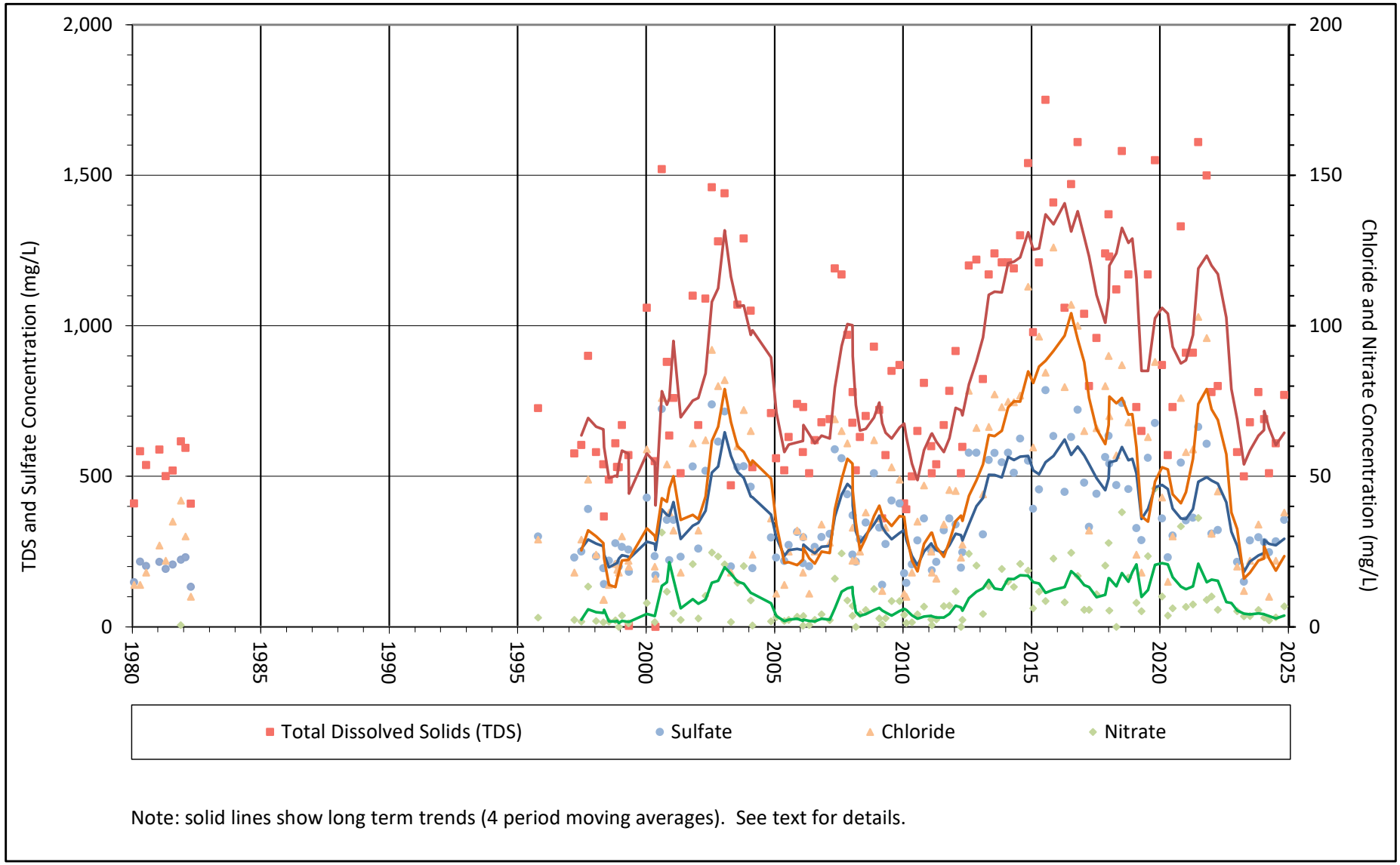


Figure 9. Concentrations of Selected Major Suface Water Quality Parameters in Santa Paula Creek Near Santa Paula, CYs 1980 through 2024

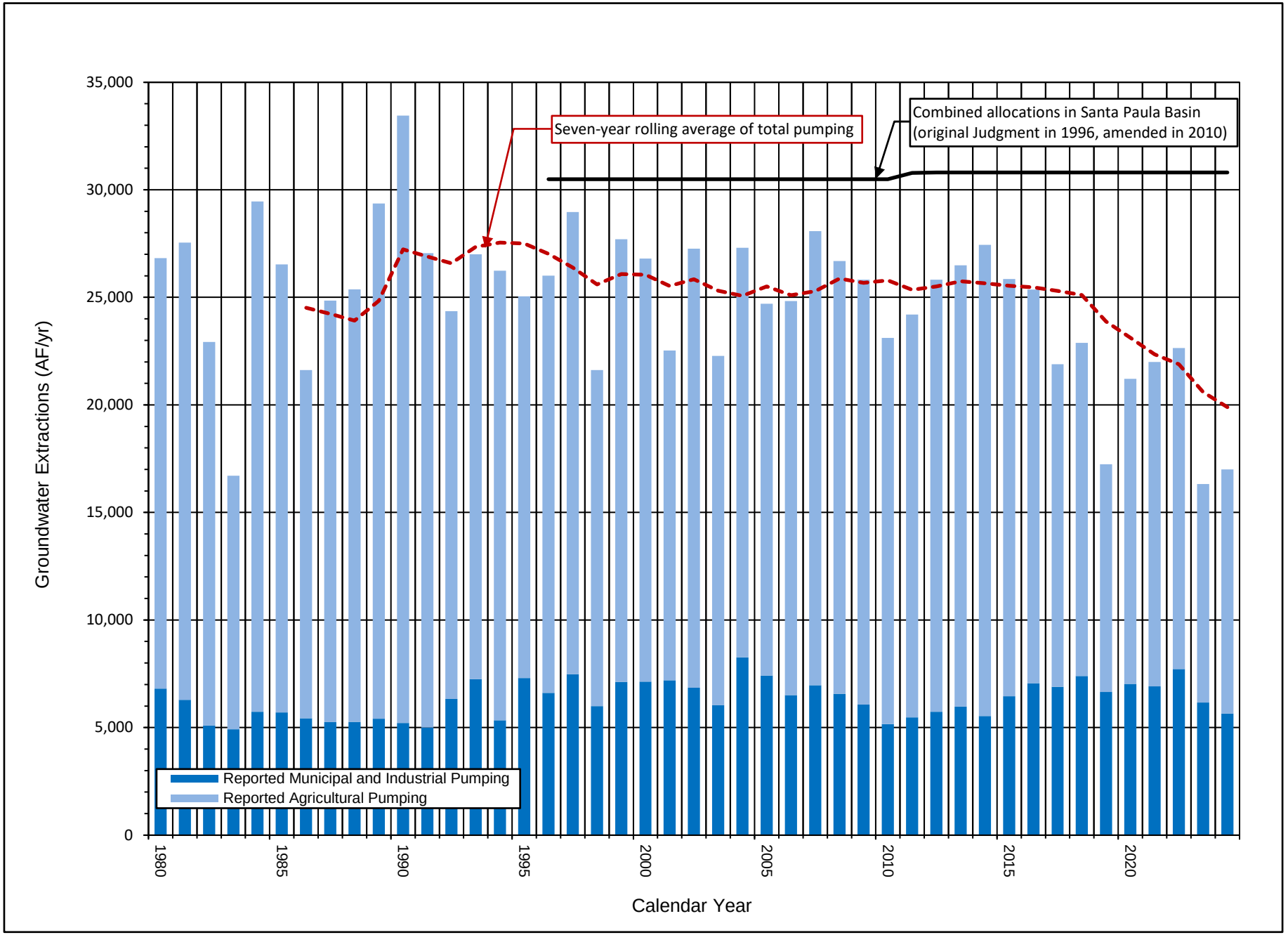
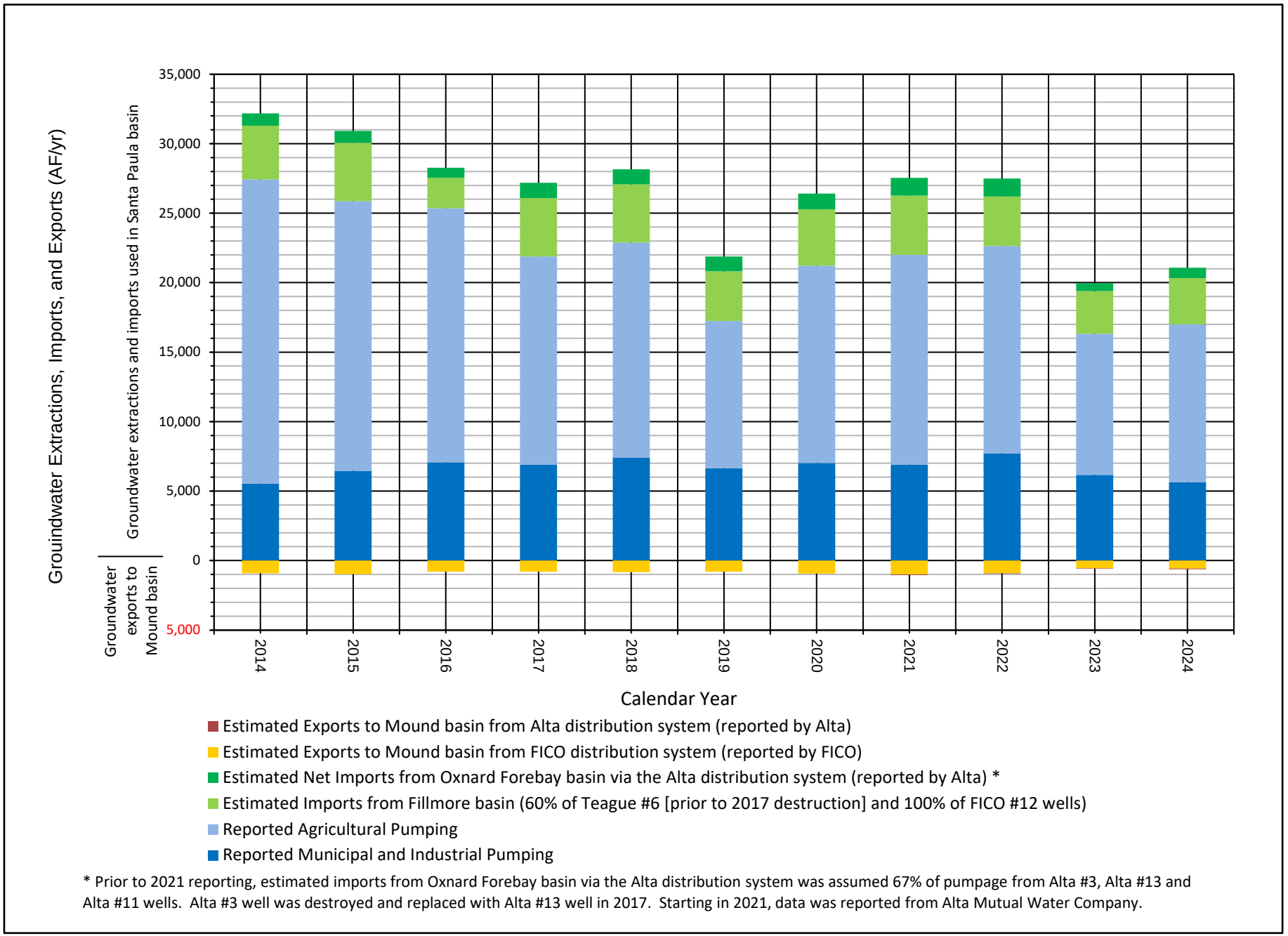


Figure 10. Historical Annual Groundwater Extractions from Santa Paula Basin, CYs 1980 through 2024



* 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. Starting in 2021, data was reported from Alta Mutual Water Company.

Figure 11. Annual Groundwater Extractions, Imports, and Exports from Santa Paula Basin, CYs 2014 through 2024

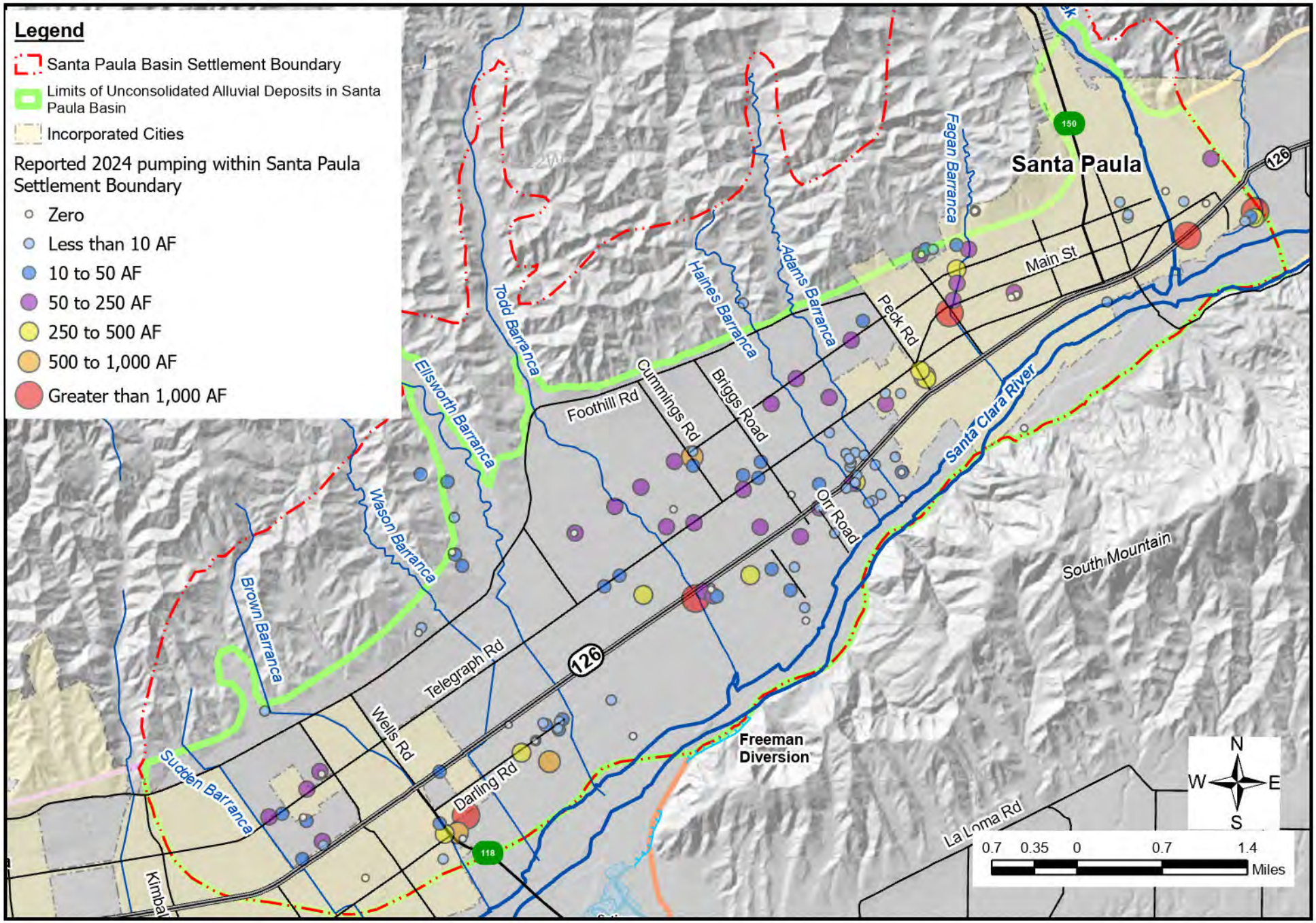


Figure 12. Santa Paula Basin Groundwater Extractions by Well, CY 2024

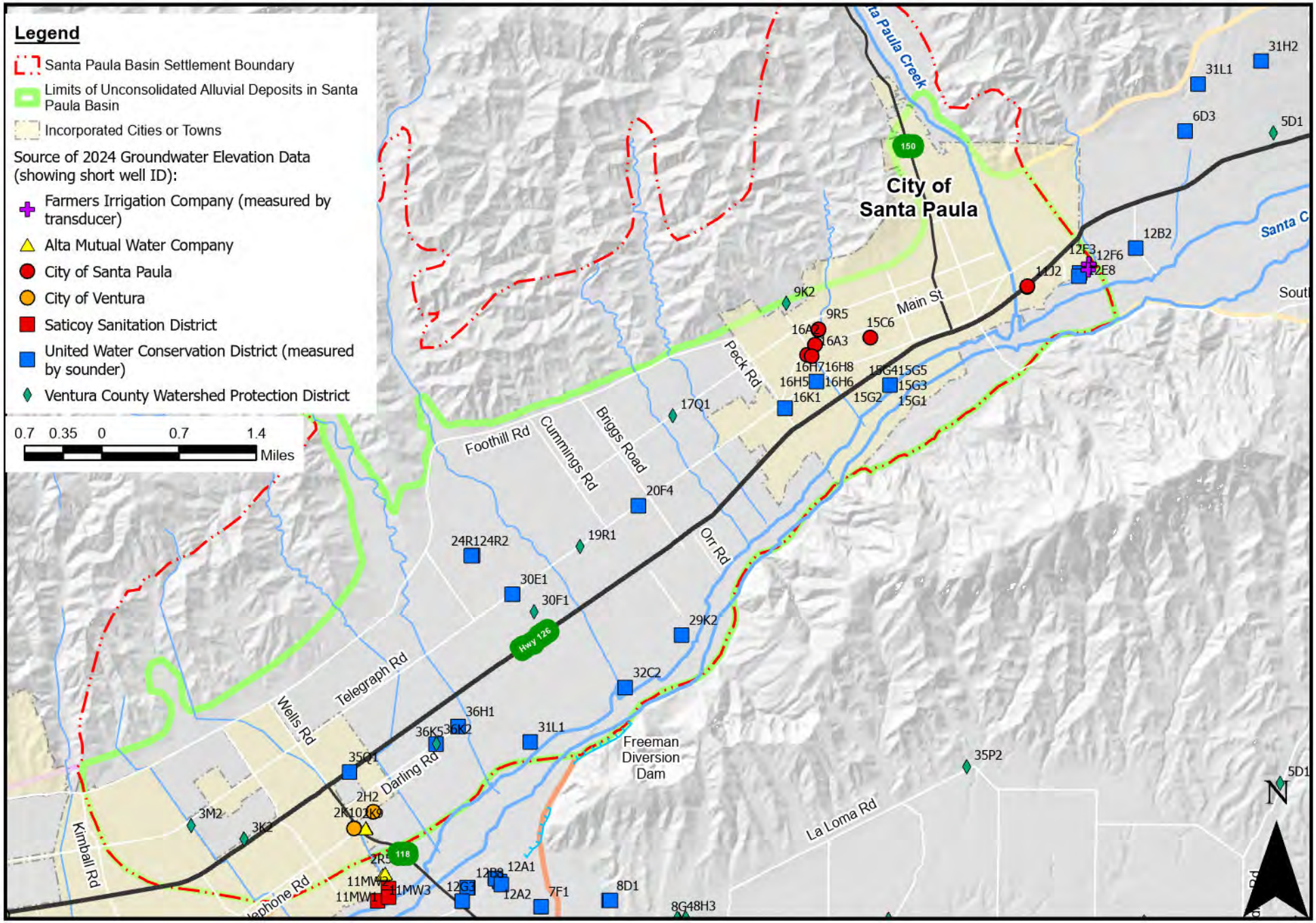


Figure 13. Locations of Wells used to Monitor Groundwater Levels in and Adjacent to Santa Paula Basin, CY 2024

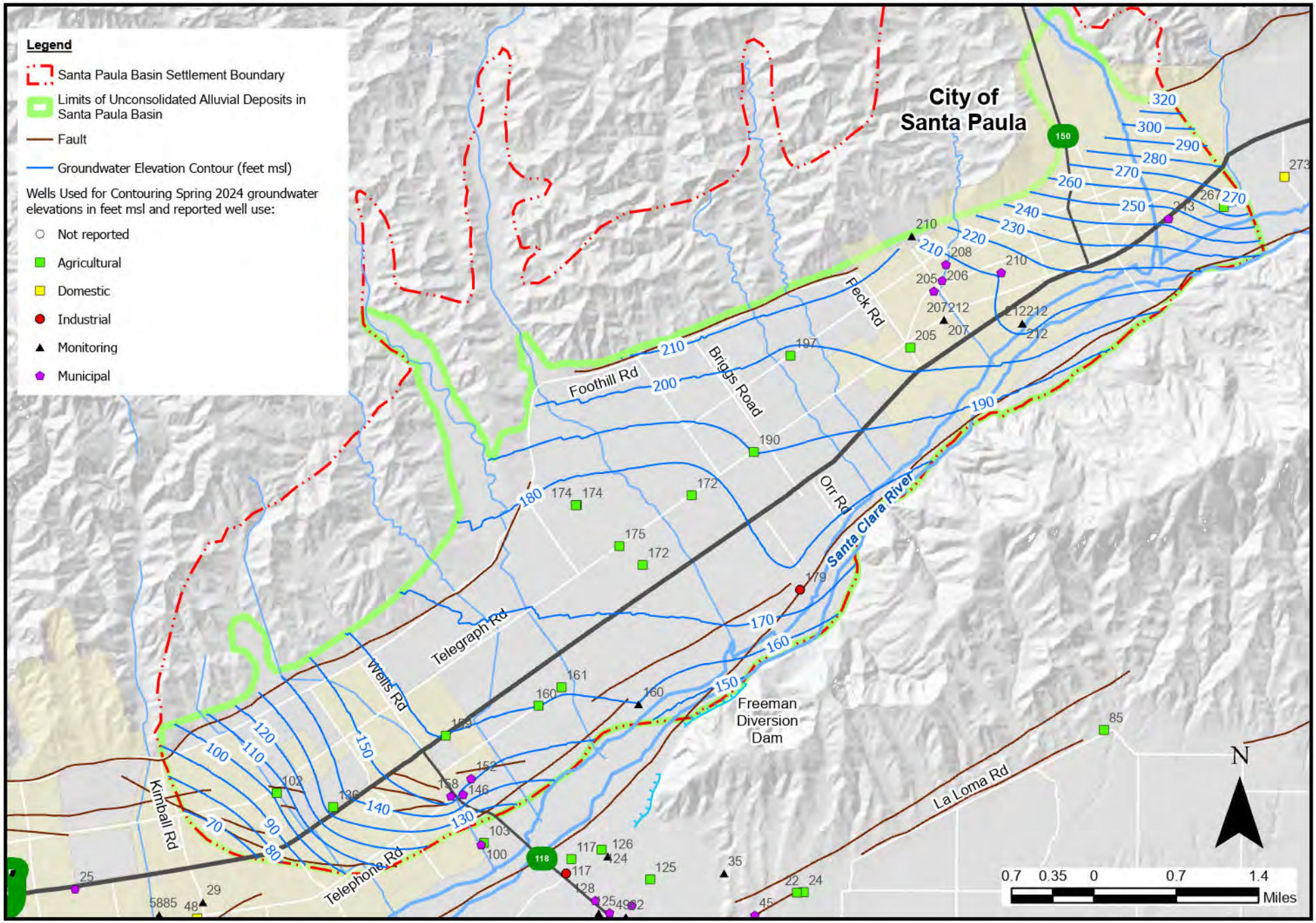


Figure 14. Santa Paula Basin Groundwater Elevation Contours, Spring 2024

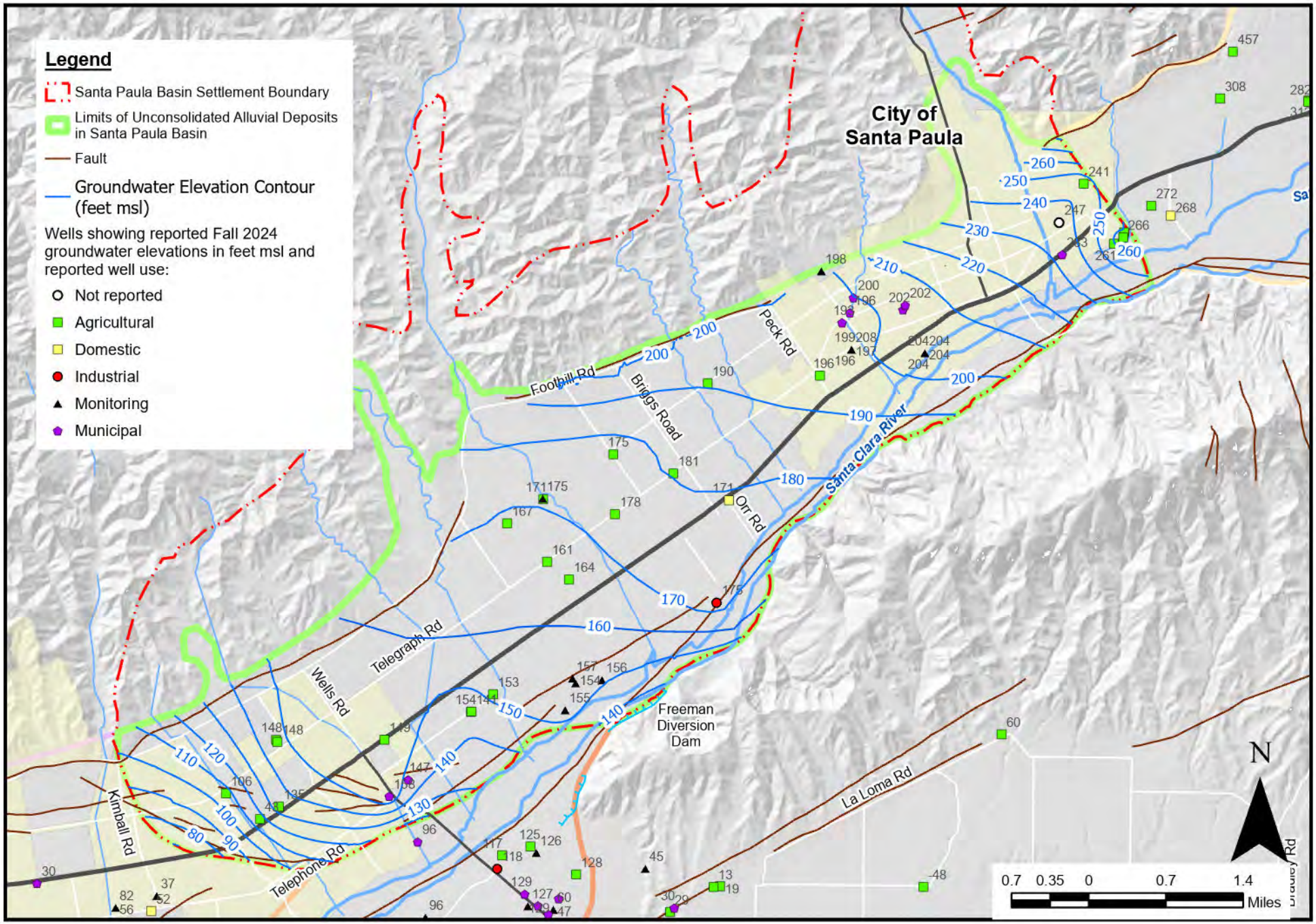


Figure 15. Santa Paula Basin Groundwater Elevation Contours, Fall 2024

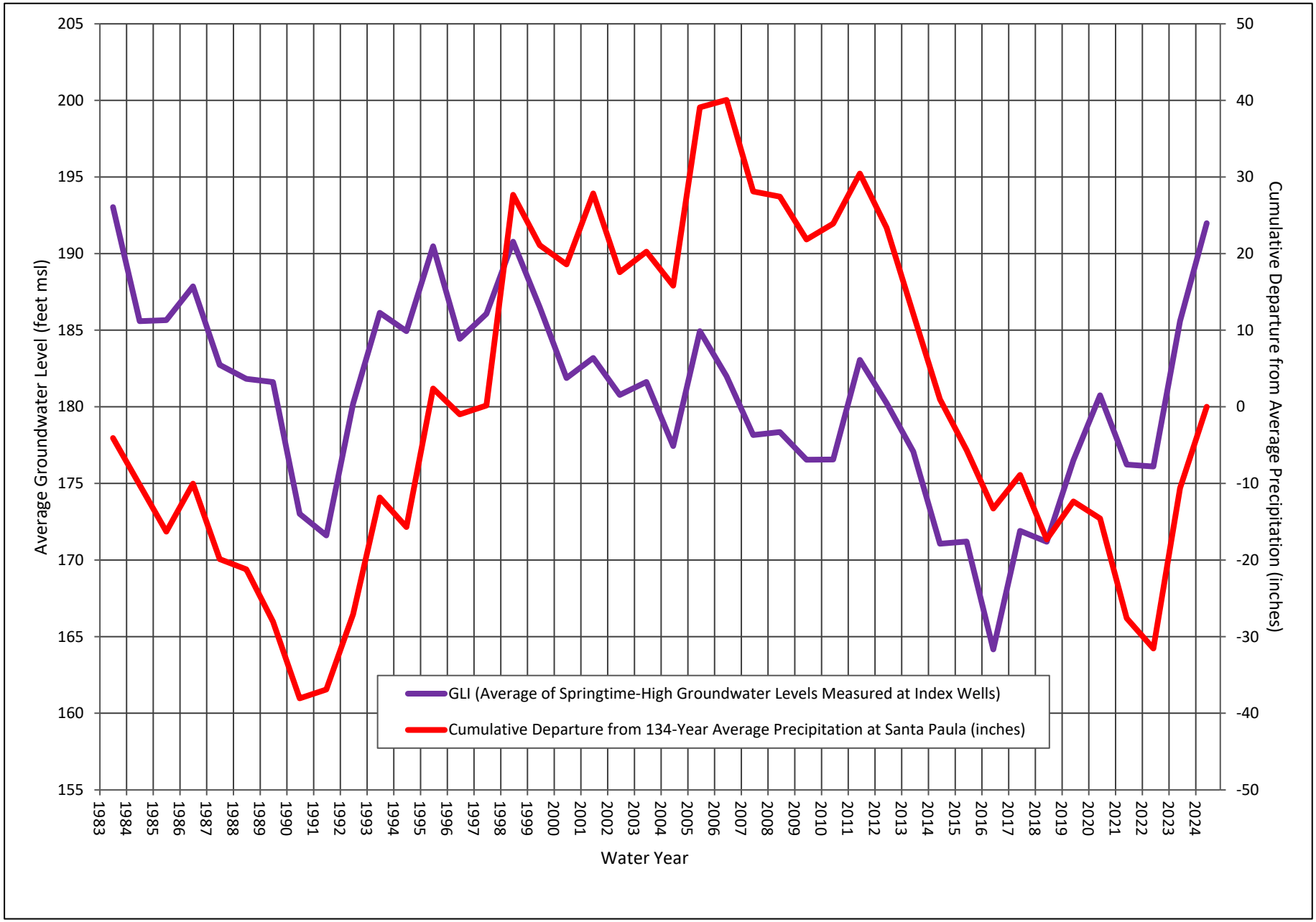


Figure 16. Groundwater Level Index and Cumulative Departure from Average Precipitation in Santa Paula Basin, WYs 1983 through 2024

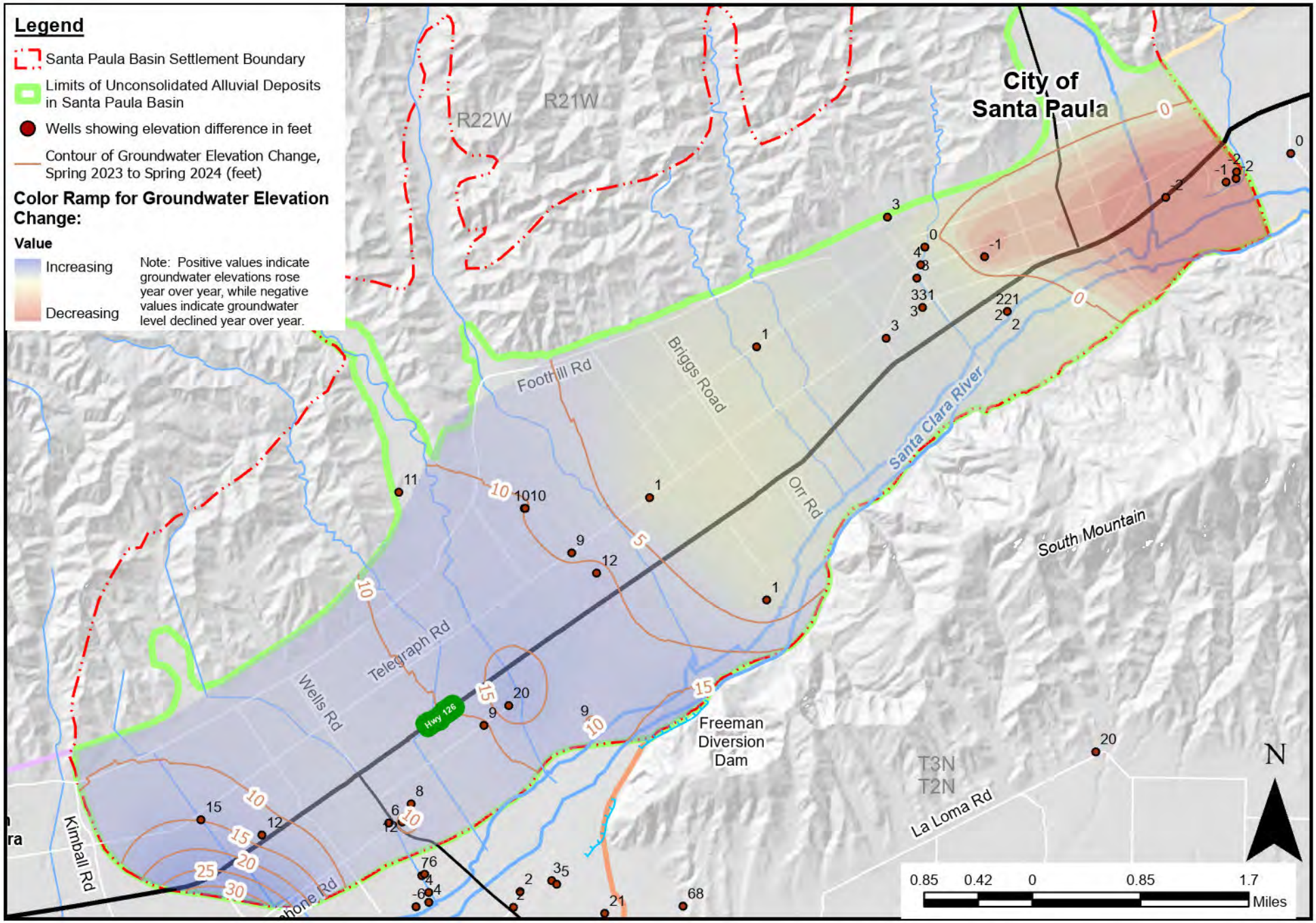


Figure 17. Change in Groundwater Elevation in Unconsolidated Alluvial Deposits of Santa Paula Basin, Spring 2023 to Spring 2024

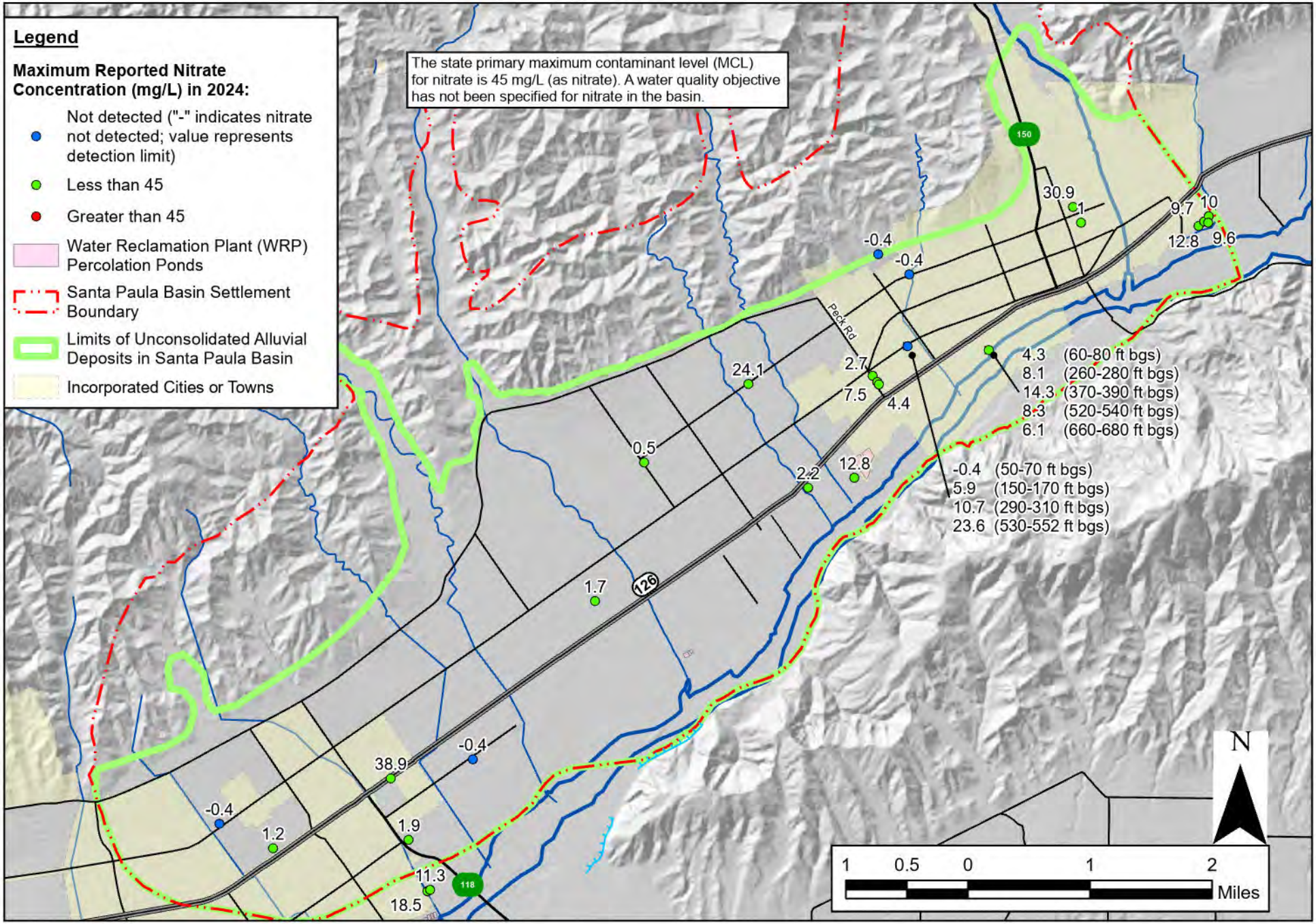


Figure 18. Maximum Reported Nitrate Concentrations in Groundwater, CY 2024

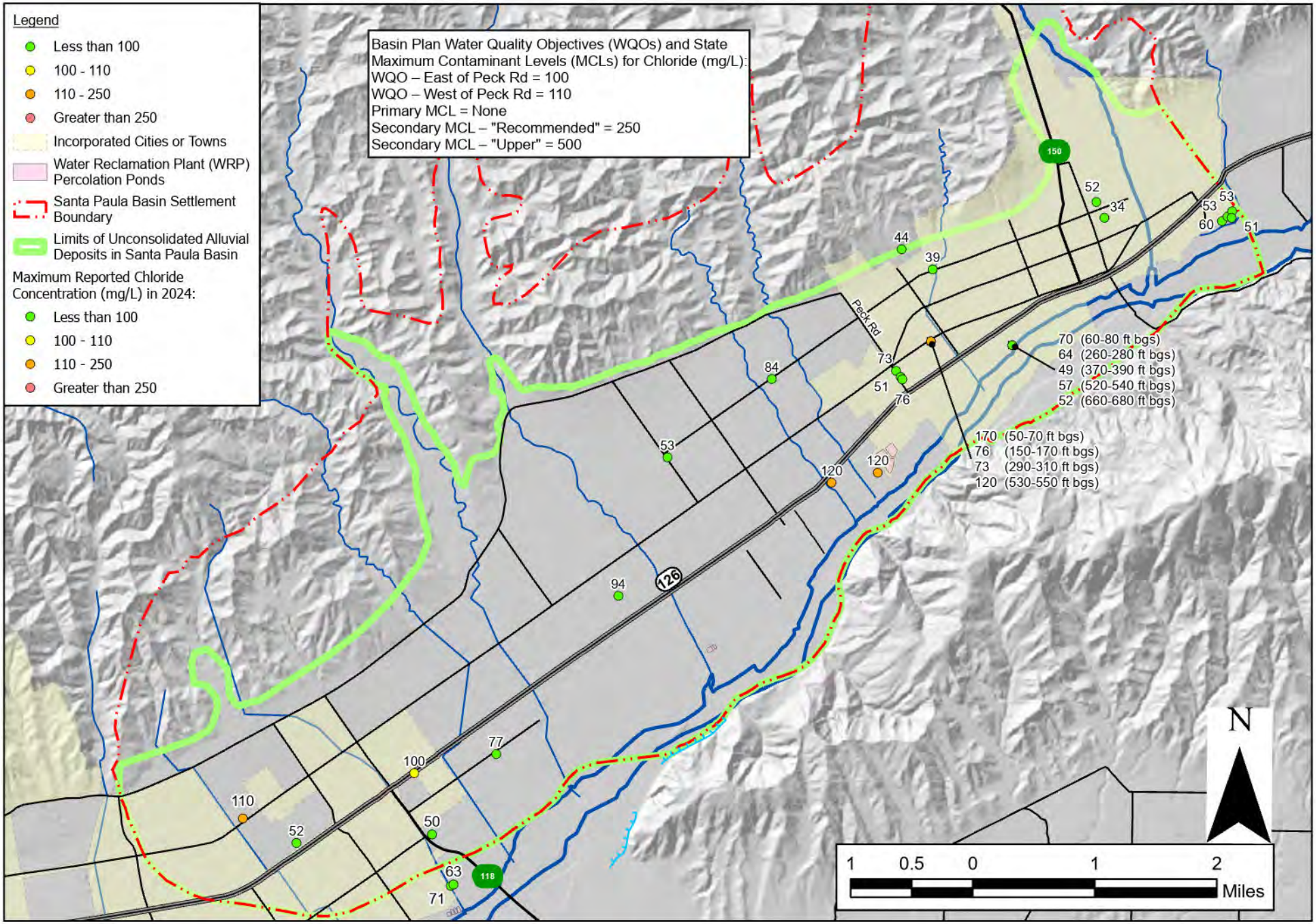


Figure 19. Maximum Reported Chloride Concentrations in Groundwater, CY 2024

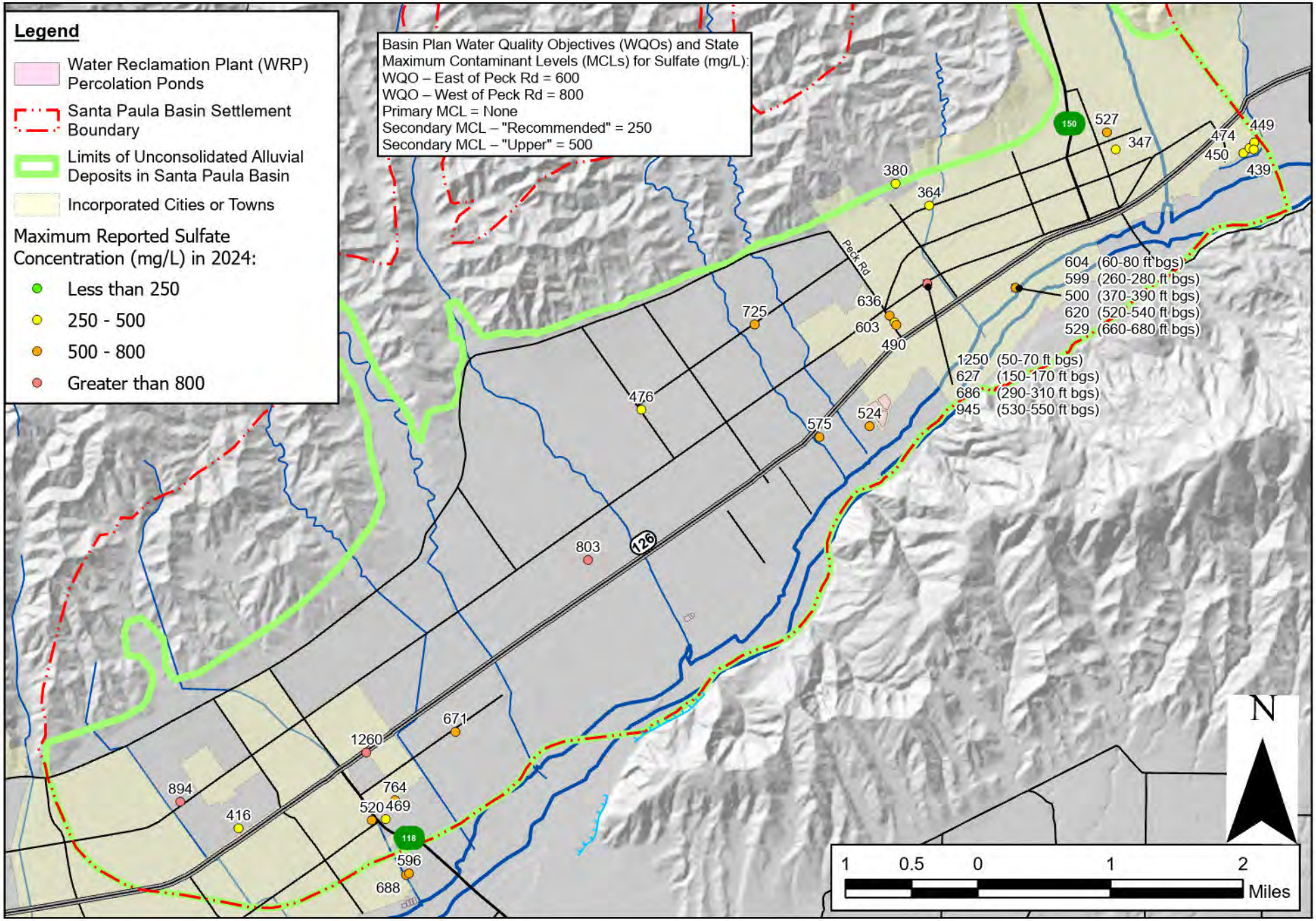


Figure 20. Maximum Reported Sulfate Concentrations in Groundwater, CY 2024

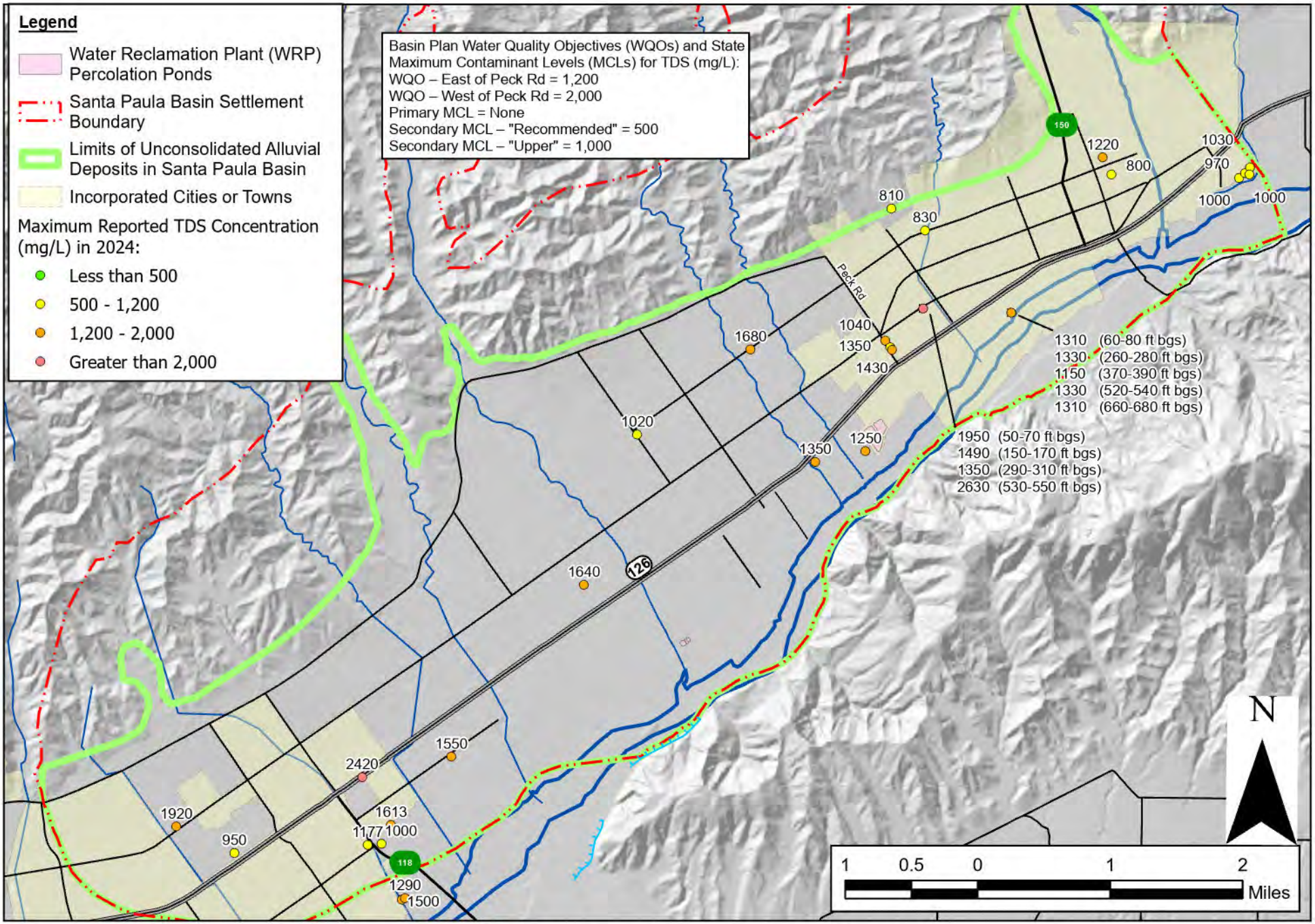


Figure 21. Maximum Reported Total Dissolved Solids (TDS) Concentrations in Groundwater, CY 2024

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	15.94	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	13.35	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	7.87	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	16.97	17.03
1894	0.87	0.20	3.64	1.04	0.55	0.42	0.23	0.46	0.00	0.10	0.00	0.98	8.49	8.20	5.05
1895	0.14	0.18	0.95	5.42	0.00	4.77	0.00	0.00	0.00	0.00	0.00	0.00	11.46	2.40	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	-1.17	13.70
1897	0.00	0.00	0.00	5.03	4.98	3.24	0.00	0.00	0.00	0.00	0.00	0.45	13.70	-4.73	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	-15.57	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	-26.29	10.87
1900	1.84	1.17	1.66	1.67	0.00	1.36	0.38	1.49	0.00	0.00	0.00	0.00	9.57	-33.99	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	-34.45	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	-39.33	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	-38.19	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	-42.10	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	-36.92	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	-36.25	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	-25.68	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	-27.81	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	-19.73	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	-20.27	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	-18.24	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	-24.43	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	-26.29	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	-15.07	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	-9.21	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	-1.98	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	0.70	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	5.32	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	0.04	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	-4.69	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	-4.50	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	-0.84	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	-3.03	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	-12.72	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	-19.97	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	-20.83	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	-14.77	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	-20.88	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	-23.97	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	-29.65	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	-32.72	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	-29.44	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	-35.55	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	-37.88	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	-33.75	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	-34.69	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	-25.46	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	-14.70	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	-16.29	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	-20.26	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	0.59	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	-2.48	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	9.23	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	16.34	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	14.21	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	8.27	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	4.29	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	-4.70	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	-12.17	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	-15.86	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	-24.97	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	-10.33	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	-16.77	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	-19.66	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	-23.54	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	-25.48	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	-30.83	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	-16.72	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	-27.31	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	-33.15	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	-43.79	6.45
1962	0.00	3.57	1.06	2.46	17.26	1.27	0.00	0.07	0.01	0.00	0.00	0.00	25.70	-35.35	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	-38.92	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	-46.77	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	-50.57	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	-50.59	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	-45.33	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	-48.17	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	-34.86	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	-38.17	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	-37.50	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	-45.65	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	-39.60	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	-40.98	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	-40.18	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	-45.57	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	-49.96	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	-31.14	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	-26.23	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	-14.64	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	-20.02	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	-22.45	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	-4.08	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	-10.19	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	-16.29	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	-10.03	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	-19.89	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	-21.22	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	-28.03	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	-38.05	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	-36.91	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	-27.08	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	-11.82	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	-15.70	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	2.38	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	-0.98	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	0.17	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	27.68	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	21.08	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	18.58	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	27.85	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	17.57	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	20.25	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	15.81	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	39.08	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	40.07	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	28.11	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	27.43	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	21.83	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	23.90	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	30.44	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	23.36	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	12.13	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	0.98	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	-5.65	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	-8.89	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	-17.32	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	-12.35	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	-14.57	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	-27.60	13.16
2022	0.91	0.01	9.36	0.21	0.01	2.20	0.27	0.05	0.26	0.00	0.00	0.04	13.32	-31.55	8.09
2023	0.06	0.86	4.13	12.95	4.80	10.5	0.01	0.99	0.24	0.00	3.58	0.07	38.19	-10.62	37.48
2024	0.00	0.36	3.98	2.01	14.36	5.44	1.65	0.07	0.01	0.00	0.00	0.00	27.88	0.00	23.84
2025	0.00	0.29	0.01												
AVERAGE:	**0.57**	**1.42**	**2.81**	**3.92**	**3.87**	**3.00**	**0.99**	**0.34**	**0.03**	**0.02**	**0.06**	**0.23**	**17.26**	**---**	**17.08**
MEDIAN:	**0.15**	**0.76**	**1.74**	**2.48**	**2.81**	**2.25**	**0.47**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**14.94**	**---**	**15.48**

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	**1974**	123,279	**1992**	333,441	**2010**	143,938
1957	18,668	**1975**	110,294	**1993**	963,059	**2011**	257,205
1958	352,671	**1976**	37,116	**1994**	131,823	**2012**	57,761
1959	55,462	**1977**	28,818	**1995**	908,663	**2013**	22,696
1960	14,557	**1978**	748,780	**1996**	125,982	**2014**	23,213
1961	6,209	**1979**	297,212	**1997**	166,052	**2015**	6,670
1962	272,542	**1980**	523,154	**1998**	788,007	**2016**	5,825
1963	28,495	**1981**	108,357	**1999**	119,559	**2017**	98,843
1964	15,345	**1982**	103,255	**2000**	130,933	**2018**	10,116
1965	23,696	**1983**	719,692	**2001**	251,235	**2019**	205,642
1966	207,602	**1984**	136,205	**2002**	58,072	**2020**	87,497
1967	205,577	**1985**	54,431	**2003**	93,844	**2021**	18,975
1968	54,656	**1986**	226,857	**2004**	59,397	**2022**	31,721
1969	982,425	**1987**	38,796	**2005**	1,153,883	**2023**	672,892
1970	129,540	**1988**	76,426	**2006**	246,950	**2024**	376,980
1971	130,717	**1989**	26,610	**2007**	51,065		
1972	58,807	**1990**	10,787	**2008**	214,847	**AVERAGE**	206,264
1973	265,962	**1991**	117,639	**2009**	74,645	**MEDIAN**	110,294

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	**1953**	4,340	**1978**	87,150	**2003**	8,563
1929	1,801	**1954**	5,861	**1979**	20,453	**2004**	5,054
1930	1,554	**1955**	3,012	**1980**	34,108	**2005**	107,309
1931	3,014	**1956**	5,257	**1981**	5,818	**2006**	22,708
1932	19,958	**1957**	3,527	**1982**	9,177	**2007**	3,305
1933	7,485	**1958**	47,074	**1983**	70,594	**2008**	27,945
1934	11,353	**1959**	5,593	**1984**	8,017	**2009**	4,393
1935	12,830	**1960**	2,123	**1985**	3,394	**2010**	16,342
1936	13,444	**1961**	1,254	**1986**	20,486	**2011**	32,887
1937	31,909	**1962**	26,203	**1987**	3,179	**2012**	4,465
1938	44,310	**1963**	3,340	**1988**	7,361	**2013**	1,168
1939	8,465	**1964**	3,026	**1989**	2,893	**2014**	1,788
1940	5,297	**1965**	4,665	**1990**	2,485	**2015**	1,028
1941	57,682	**1966**	28,458	**1991**	15,214	**2016**	1,502
1942	6,882	**1967**	37,423	**1992**	33,768	**2017**	15,226
1943	39,739	**1968**	7,866	**1993**	71,474	**2018**	4,063
1944	22,425	**1969**	112,696	**1994**	8,351	**2019**	22,518
1945	12,172	**1970**	7,779	**1995**	63,209	**2020**	9,826
1946	11,194	**1971**	12,795	**1996**	8,752	**2021**	1,361
1947	7,295	**1972**	4,492	**1997**	18,015	**2022**	4,475
1948	1,715	**1973**	35,236	**1998**	80,799	**2023**	80,525
1949	1,965	**1974**	11,552	**1999**	5,562	**2024**	37,415
1950	3,492	**1975**	11,506	**2000**	8,609		
1951	992	**1976**	3,906	**2001**	24,461	**AVERAGE**	18,353
1952	30,882	**1977**	2,361	**2002**	2,513	**MEDIAN**	8,351

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

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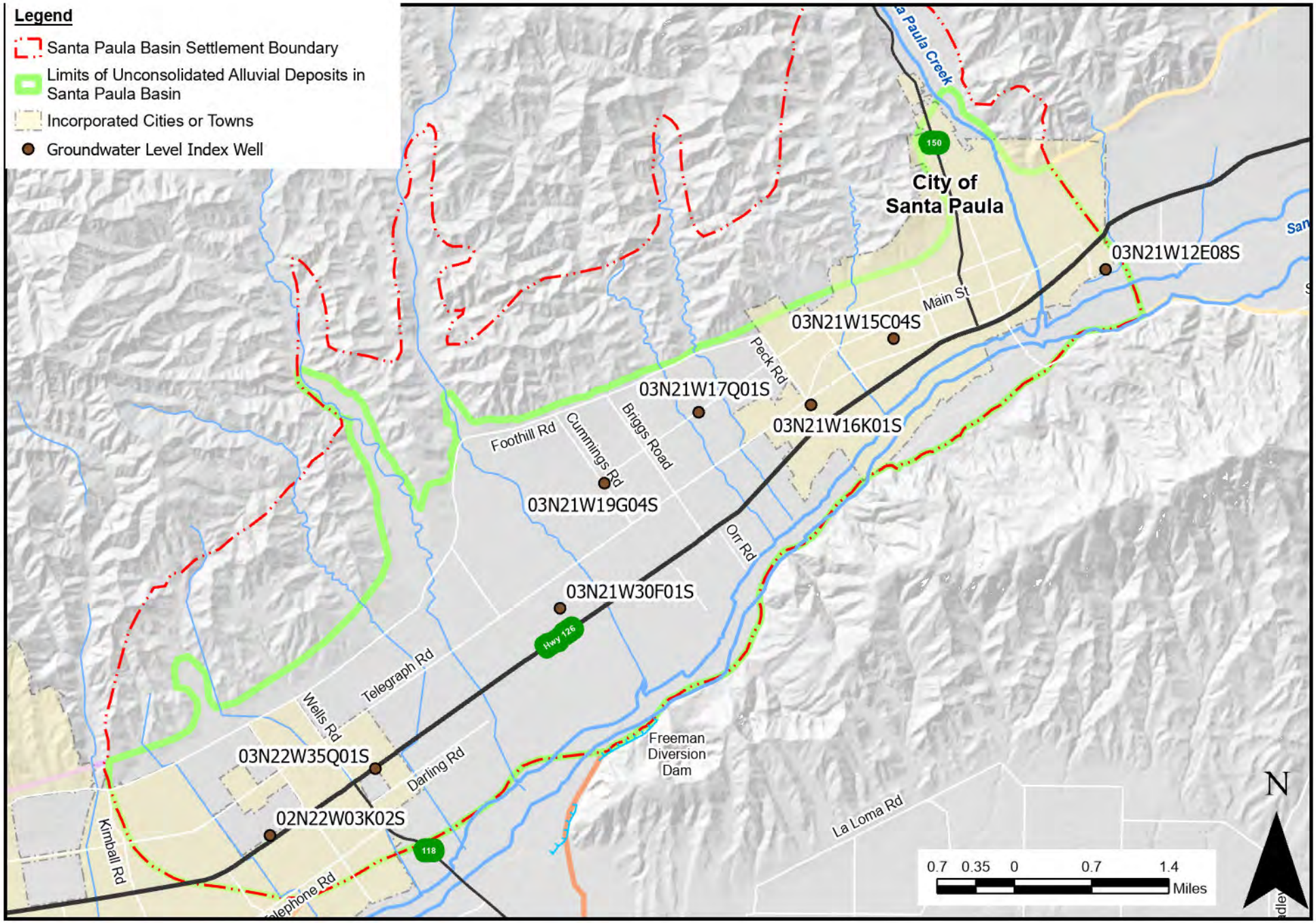

Locations of Santa Paula Basin Groundwater Level Index Wells

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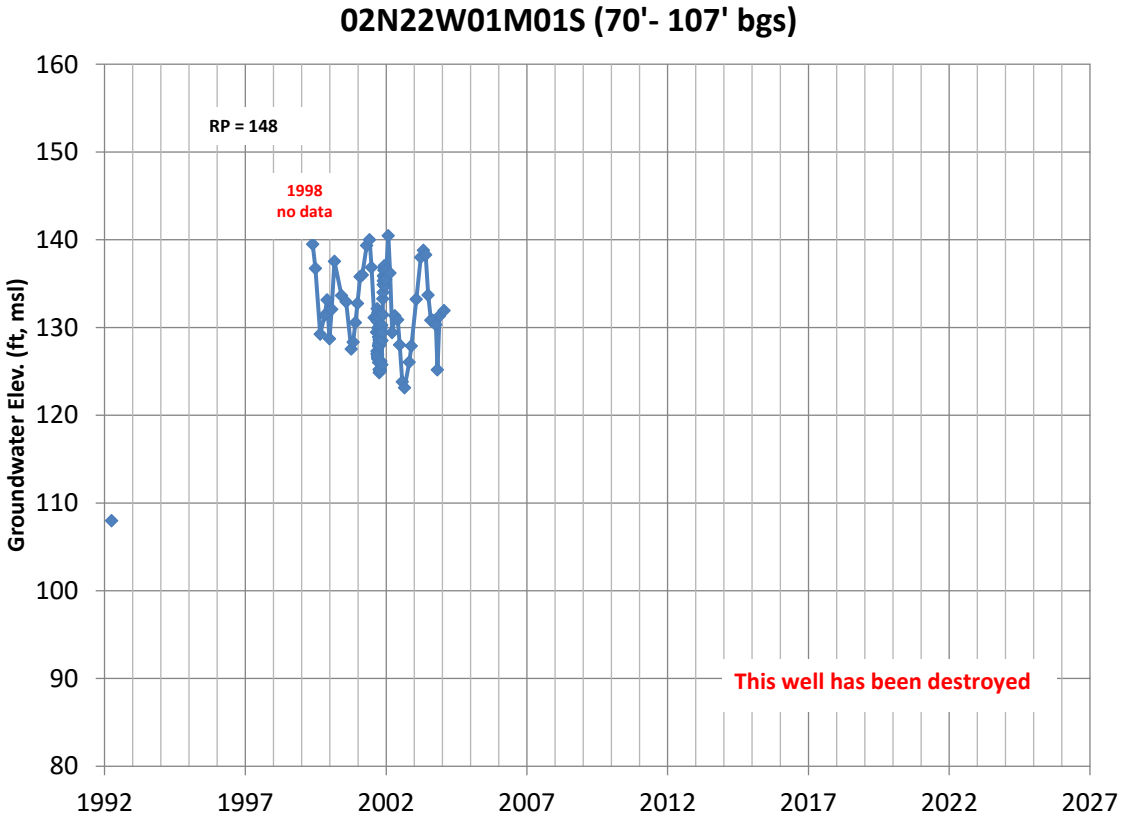

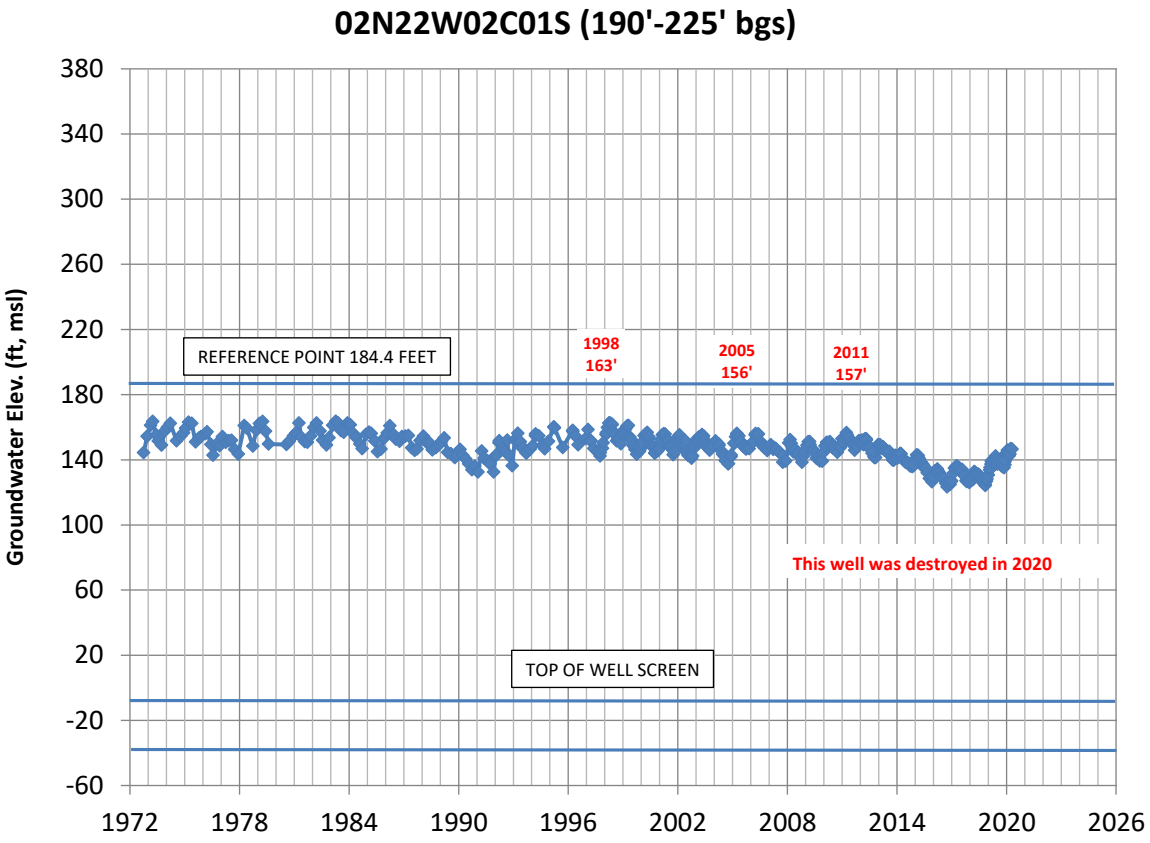
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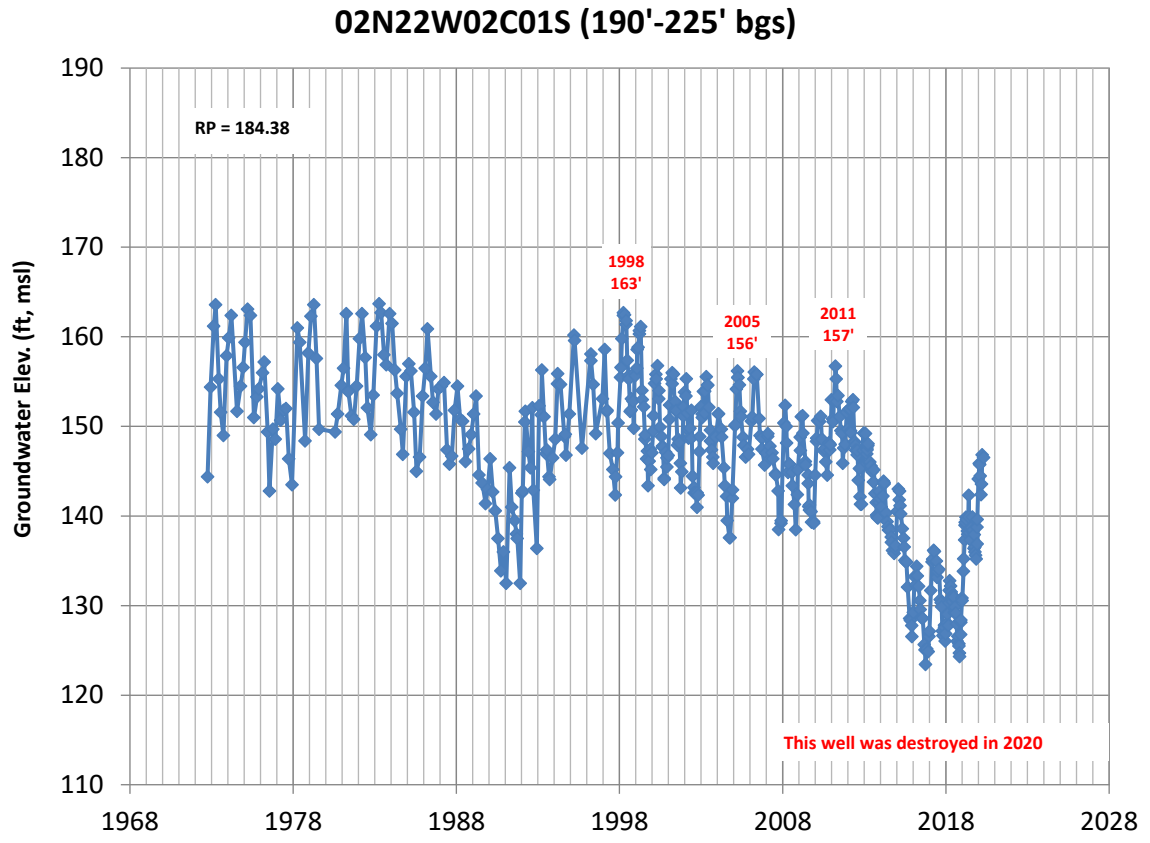
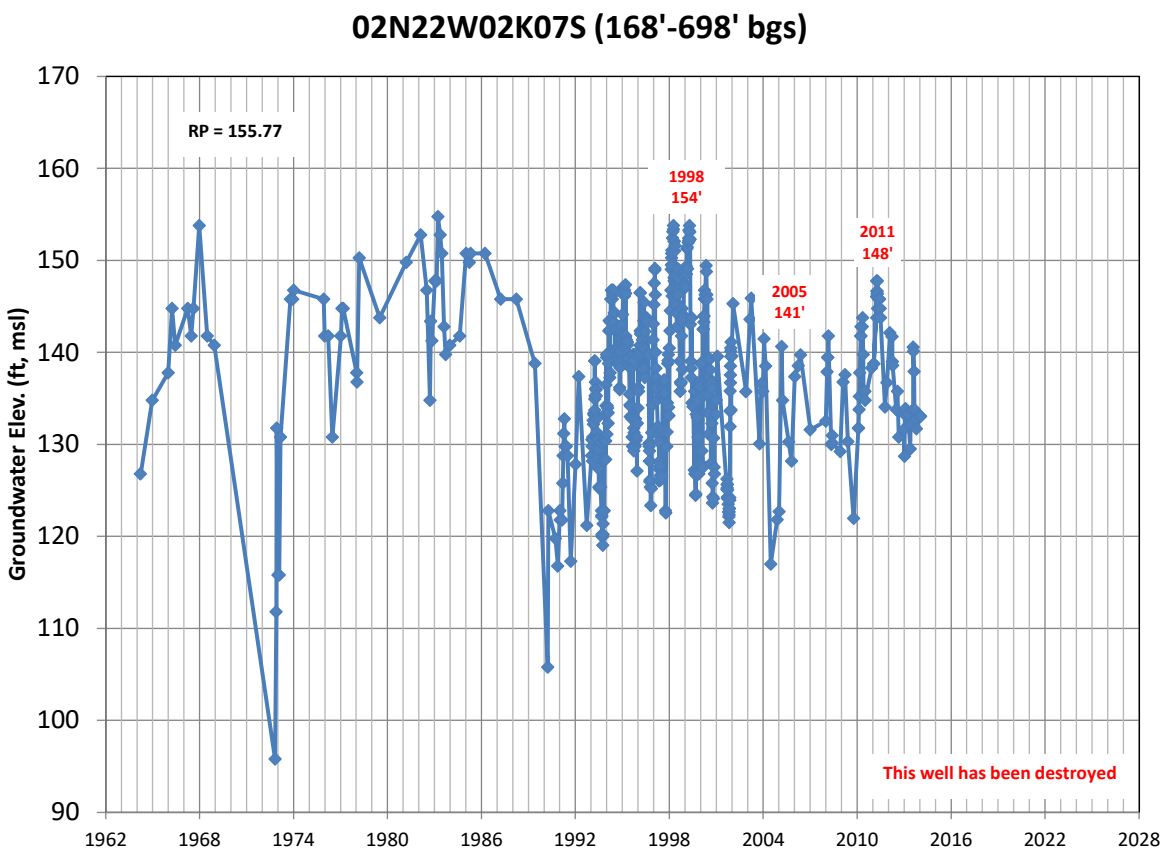
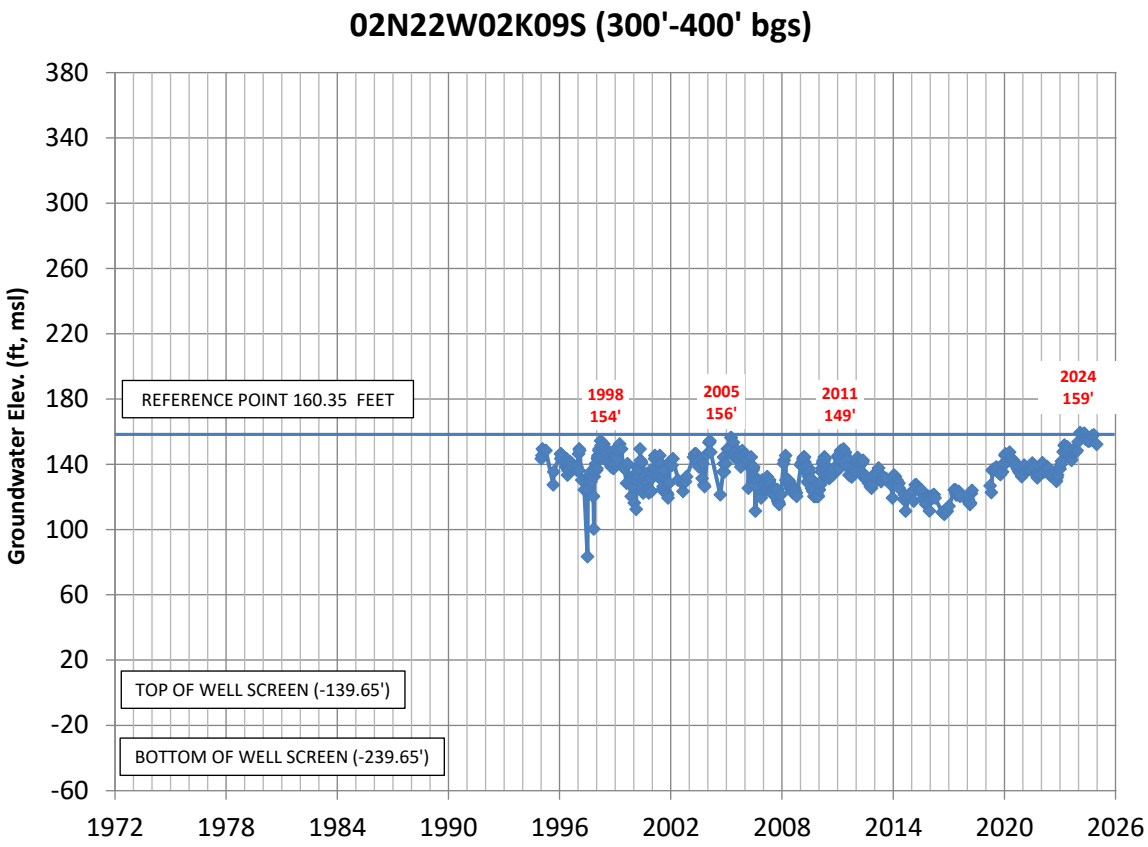
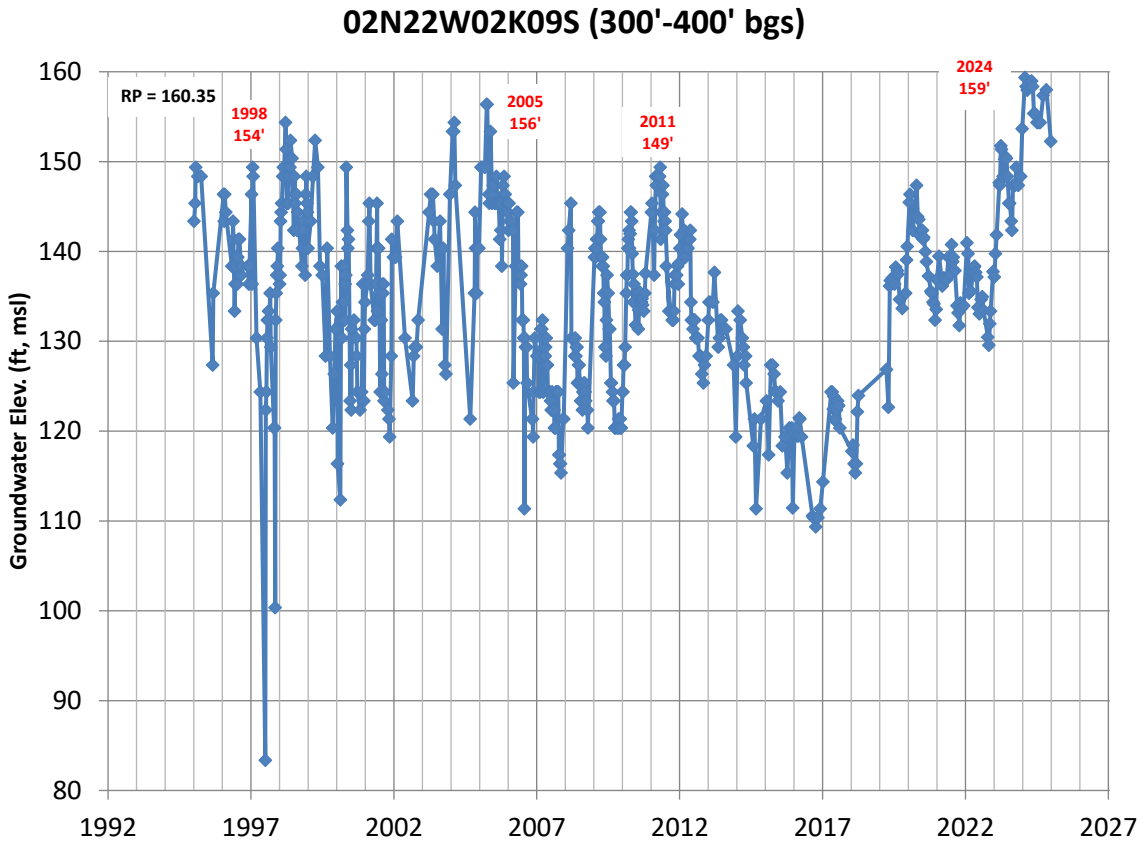
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 184.4 FEET
1998
163'
2005
156'
2011
157'
This well was destroyed in 2020
TOP OF WELL SCREEN

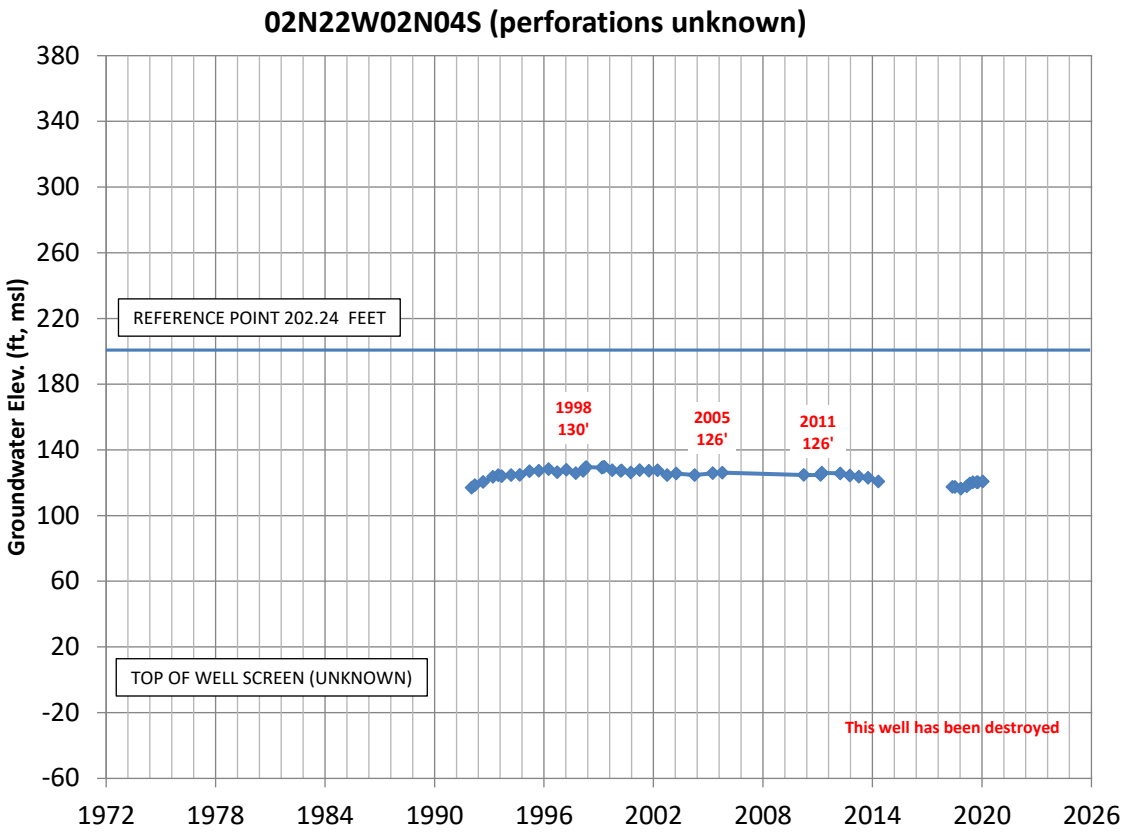

02N22W02C01S (190'-225' bgs)
Groundwater Elev. (ft, msl)
190
180
170
160
150
140
130
120
110
1968
1978
1988
1998
2008
2018
2028
RP = 184.38
1998
163'
2005
156'
2011
157'
This well was destroyed in 2020

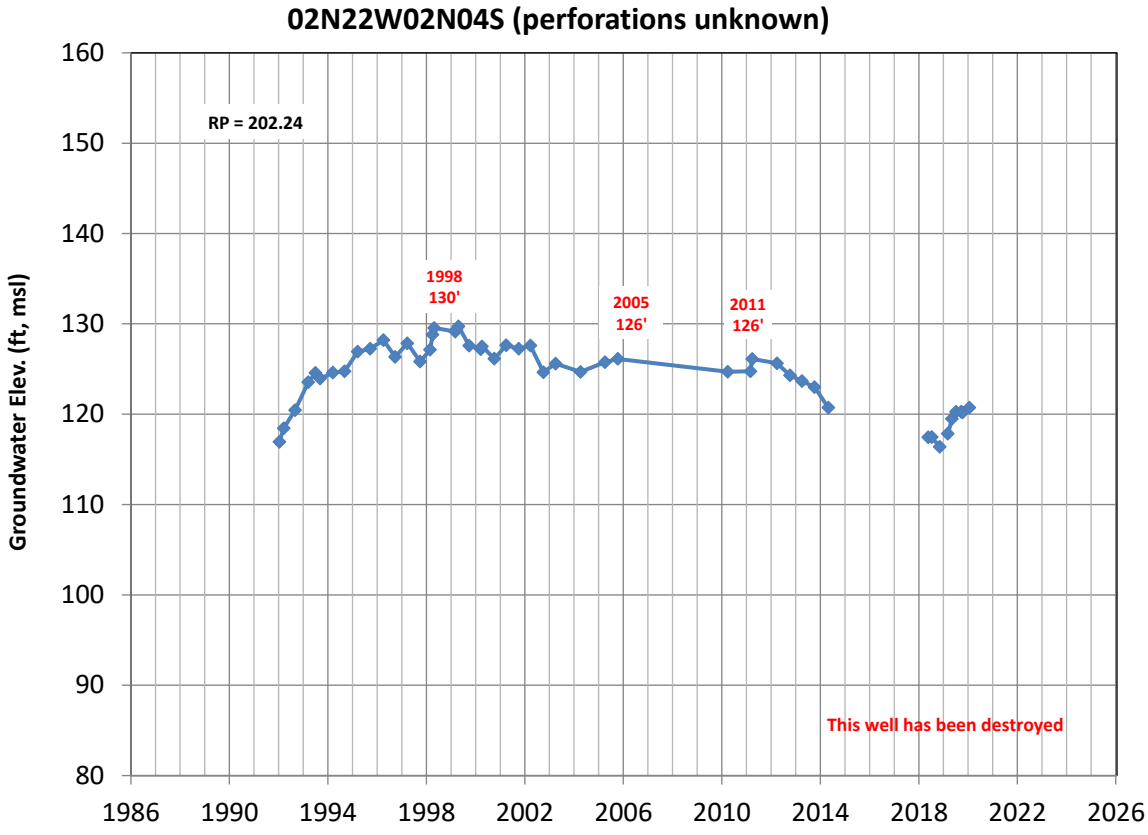
Intentionally Left Blank



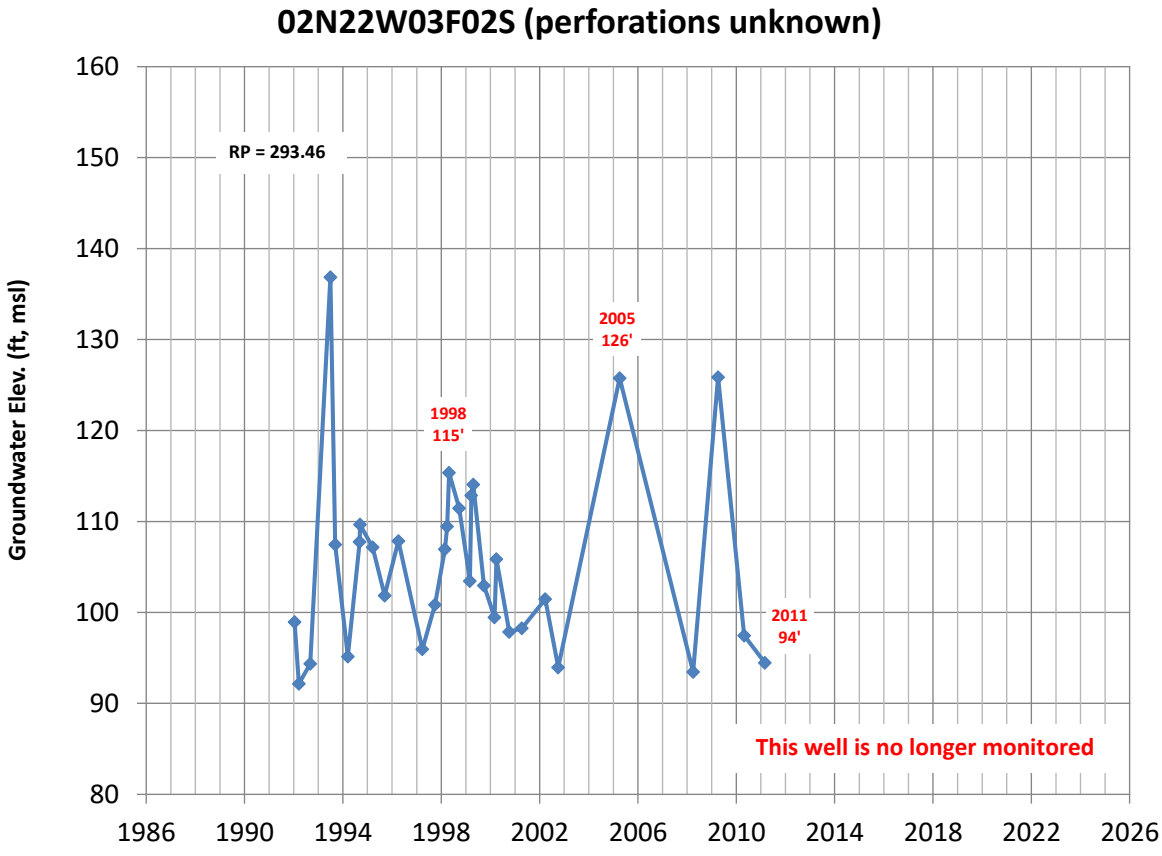

02N22W02K09S (300'-400' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 160.35 FEET
TOP OF WELL SCREEN (-139.65')
BOTTOM OF WELL SCREEN (-239.65')
1998
154'
2005
156'
2011
149'
2024
159'

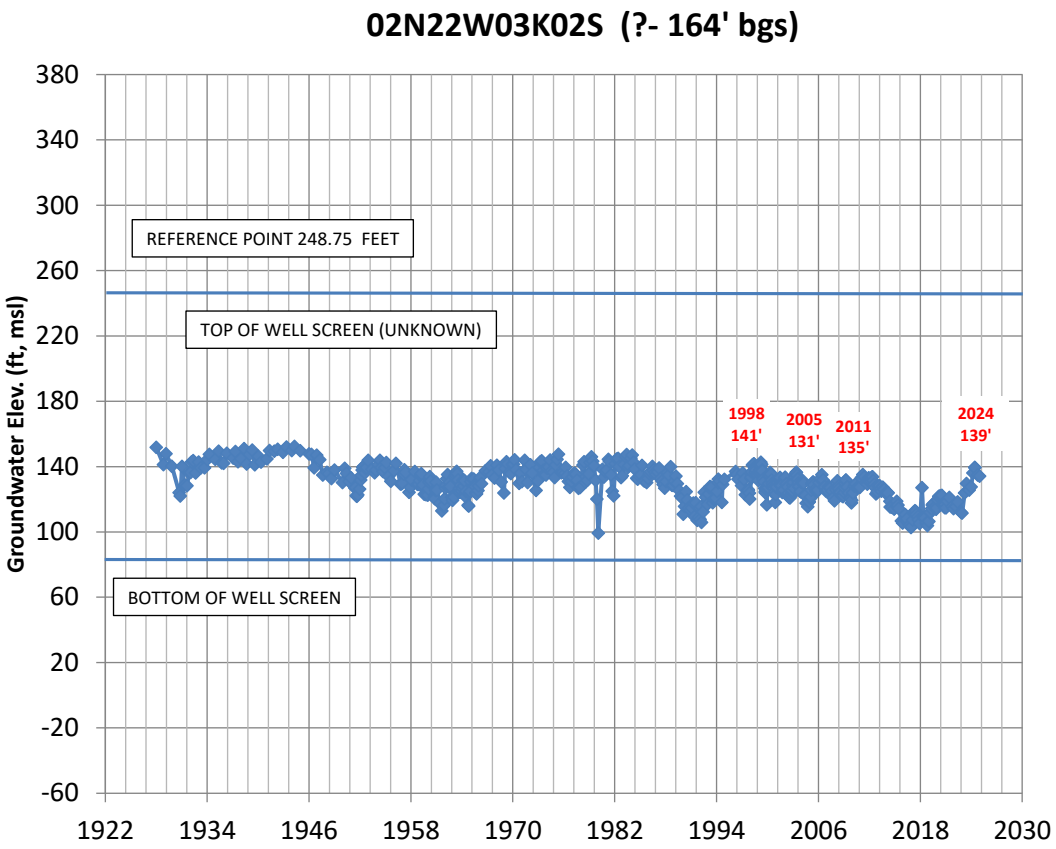

02N22W02K09S (300'-400' bgs)
Groundwater Elev. (ft, msl)
160
150
140
130
120
110
100
90
80
1992
1997
2002
2007
2012
2017
2022
2027
RP = 160.35
1998
154'
2005
156'
2011
149'
2024
159'

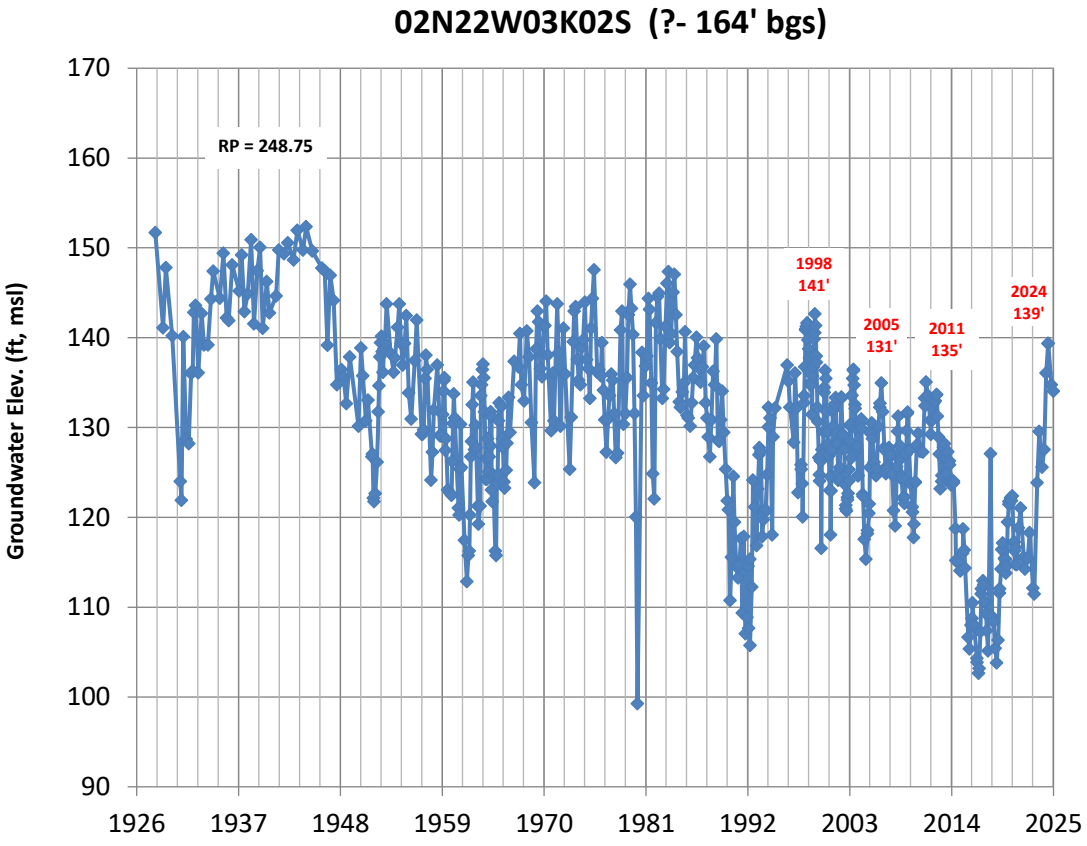

02N22W02N04S (perforations unknown)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 202.24 FEET
TOP OF WELL SCREEN (UNKNOWN)
1998
130'
2005
126'
2011
126'
This well has been destroyed


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
2026
RP = 202.24
1998
130'
2005
126'
2011
126'
This well has been destroyed

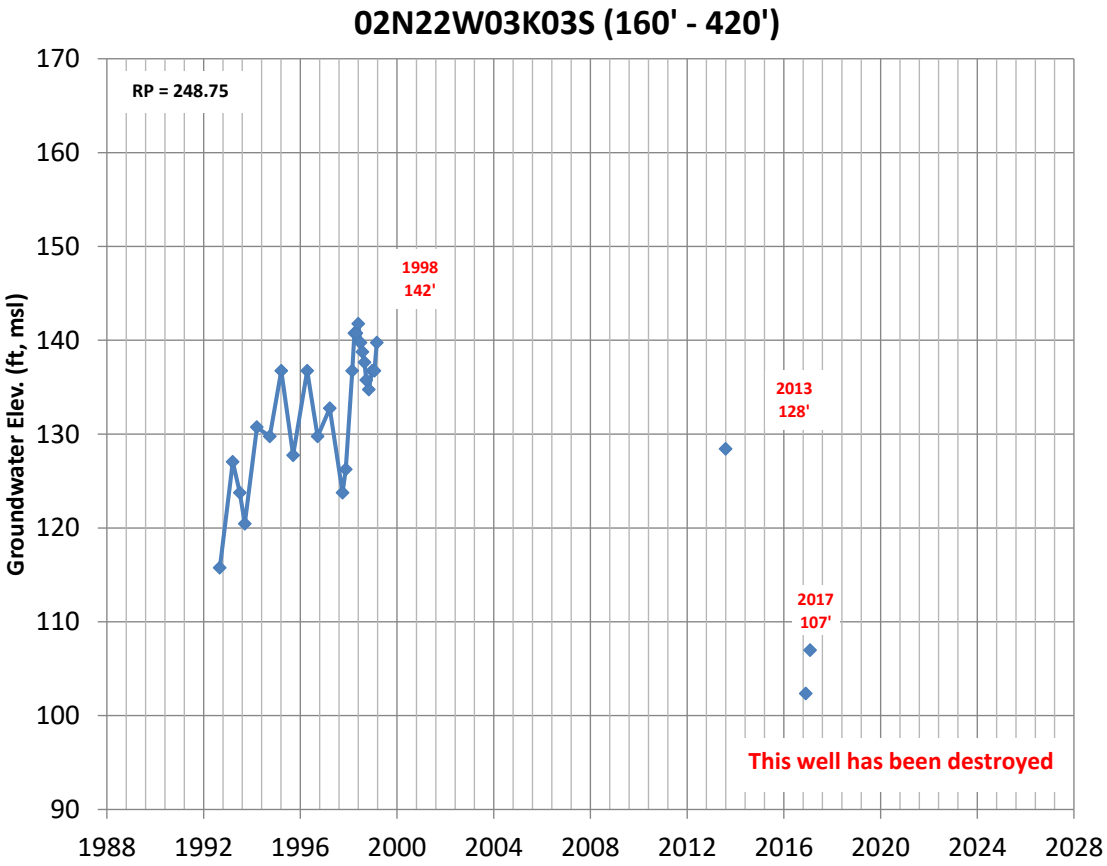
Intentionally Left Blank

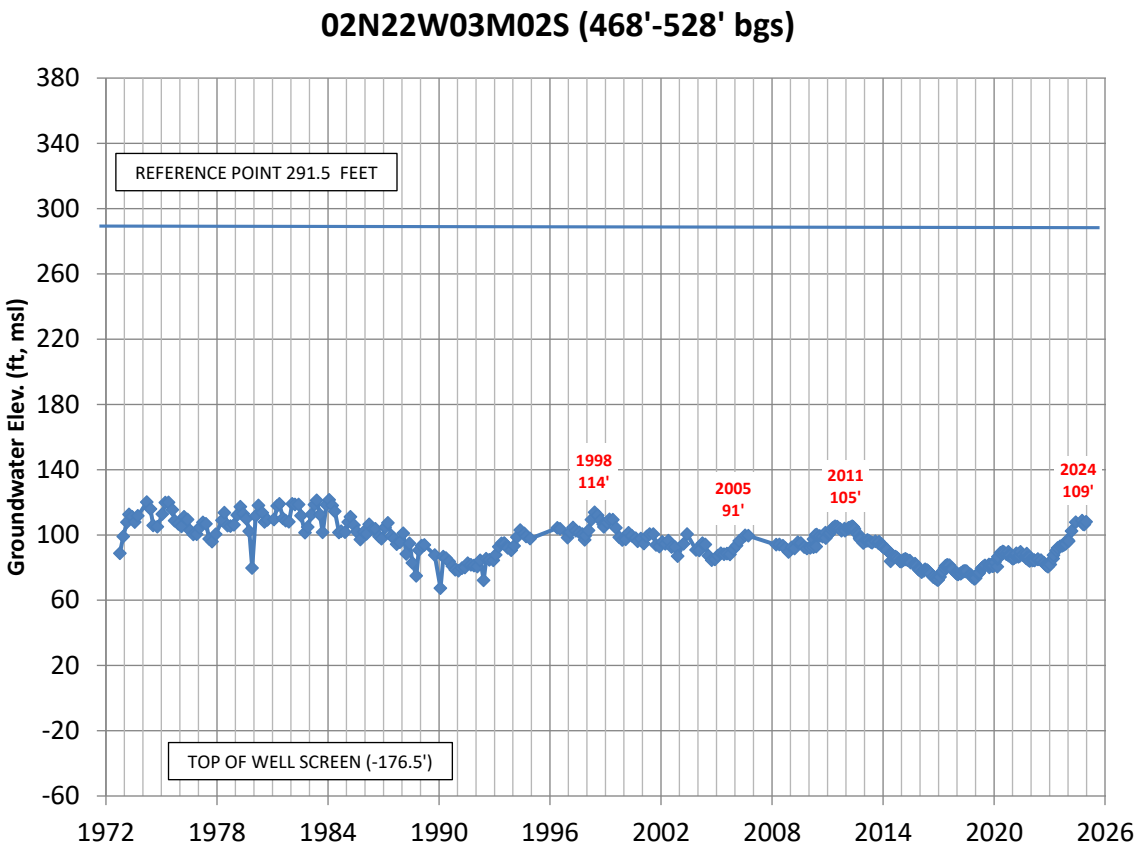


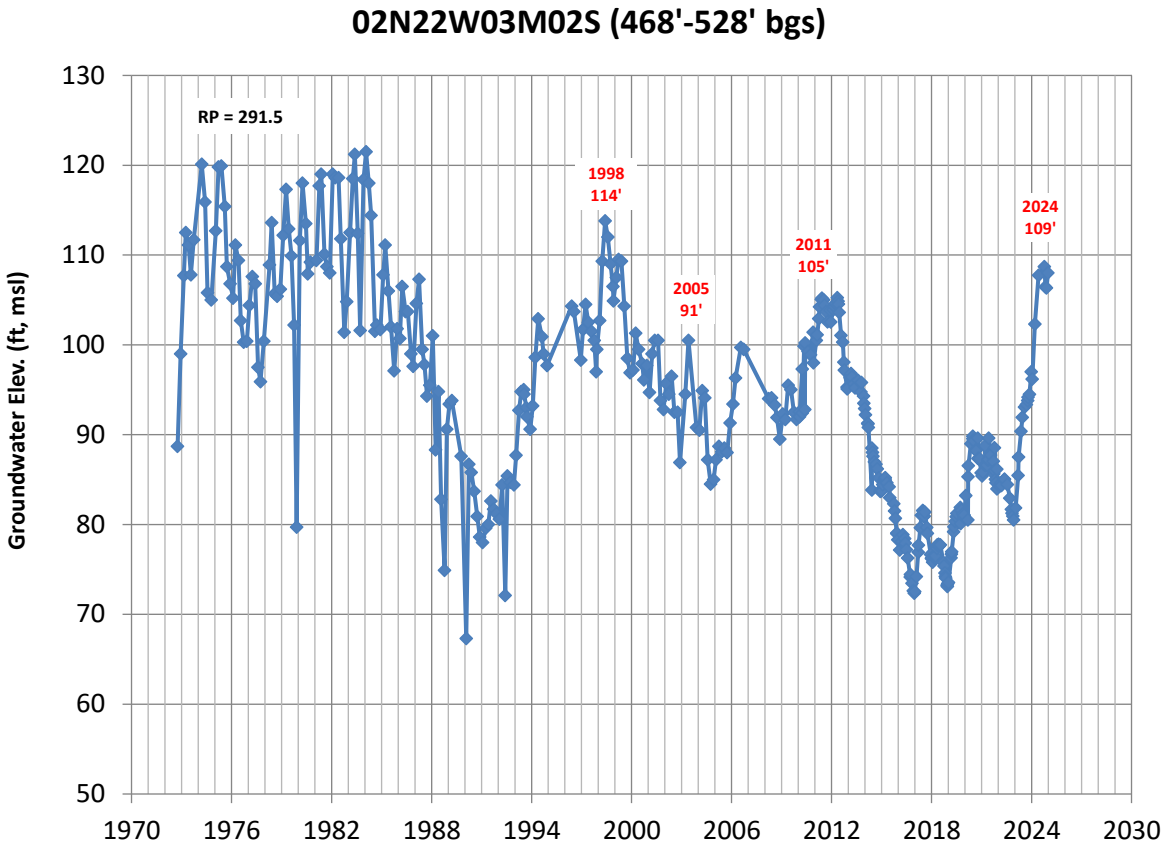

02N22W03K02S (?- 164' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1922
1934
1946
1958
1970
1982
1994
2006
2018
2030
REFERENCE POINT 248.75 FEET
TOP OF WELL SCREEN (UNKNOWN)
BOTTOM OF WELL SCREEN
1998
141'
2005
131'
2011
135'
2024
139'


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'
2024
139'

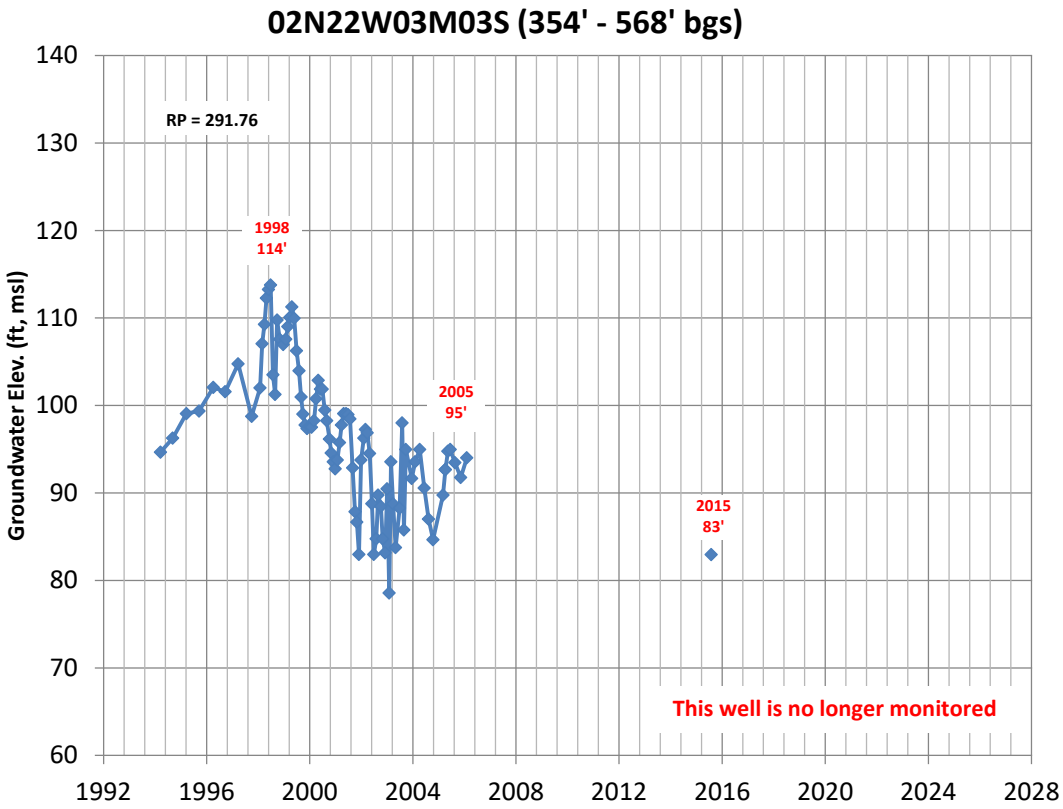
Intentionally Left Blank

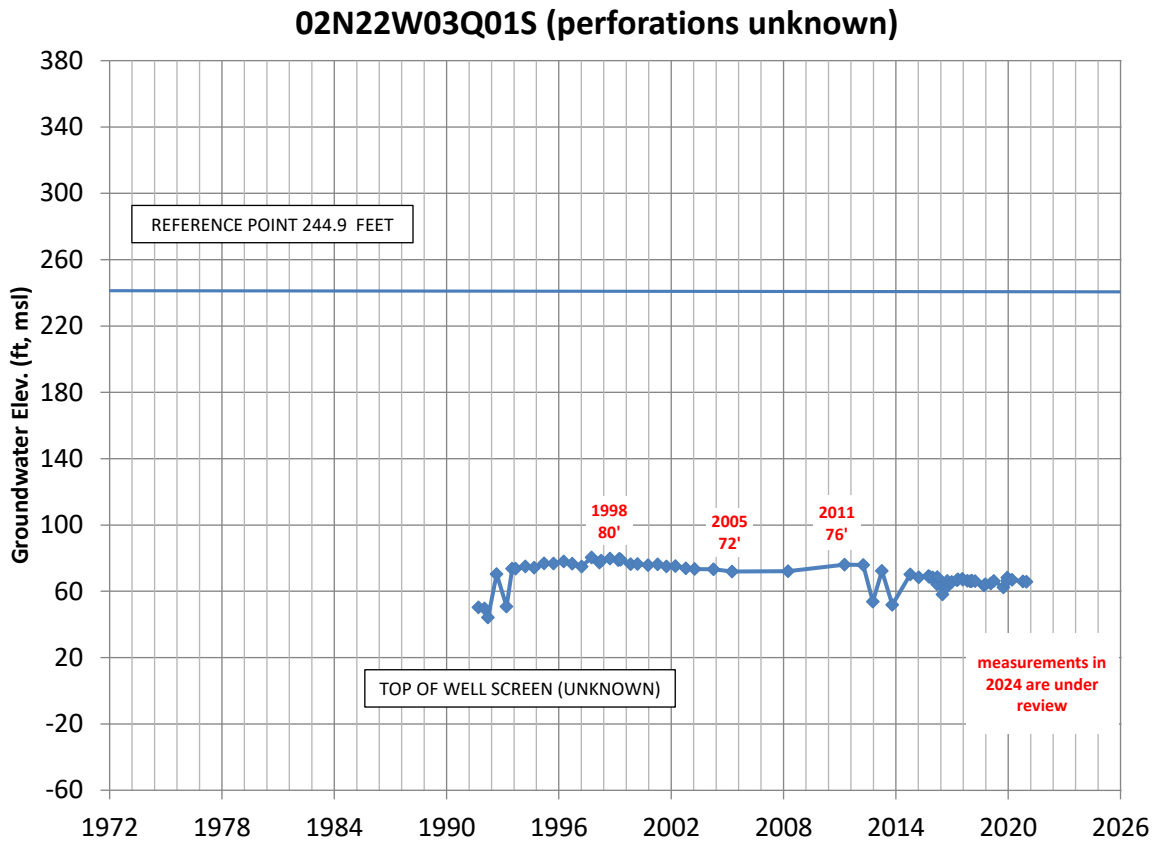


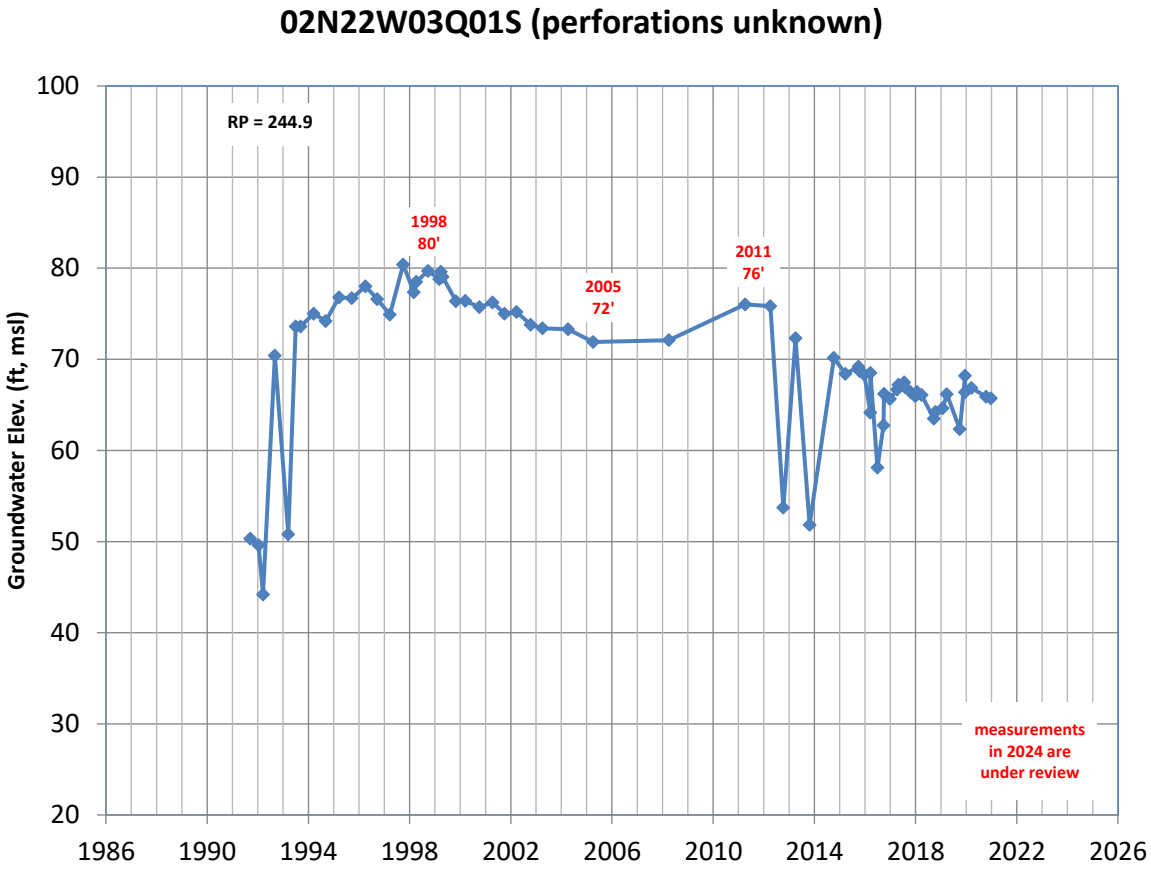

02N22W03M02S (468'-528' bgs)
Groundwater Elev. (ft, msl)
REFERENCE POINT 291.5 FEET
TOP OF WELL SCREEN (-176.5')
1998
114'
2005
91'
2011
105'
2024
109'
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026

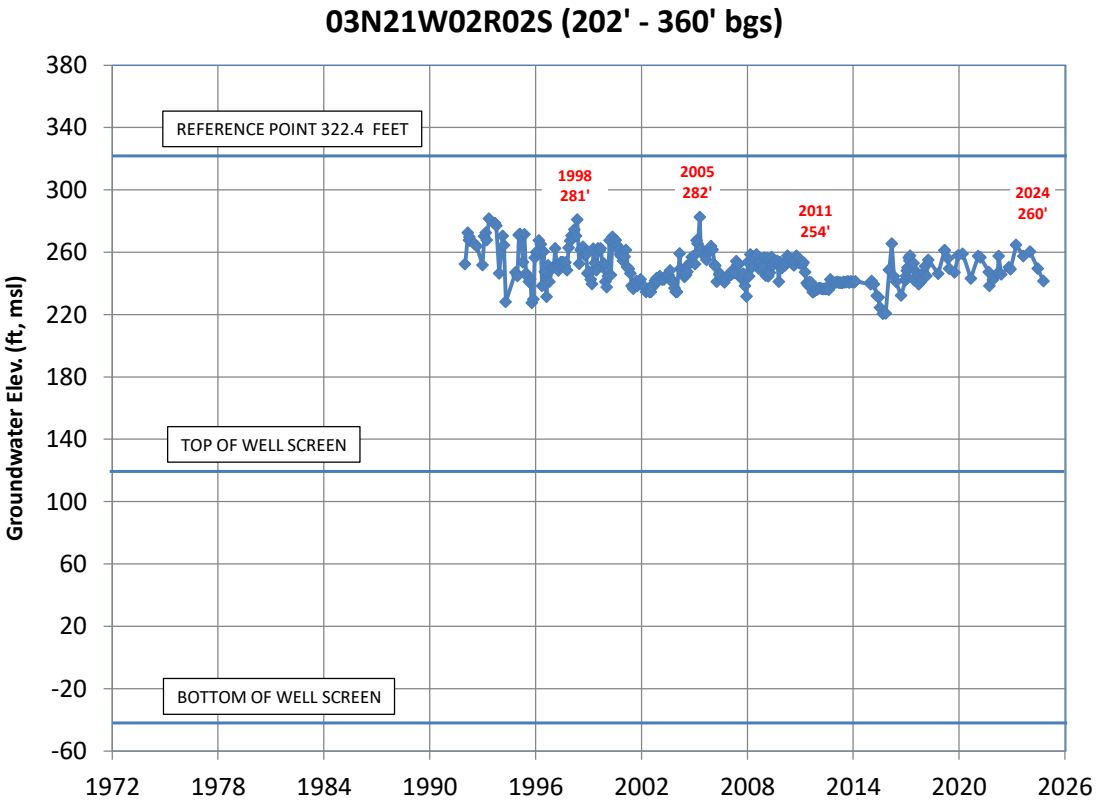

02N22W03M02S (468'-528' bgs)
Groundwater Elev. (ft, msl)
RP = 291.5
1998
114'
2005
91'
2011
105'
2024
109'
130
120
110
100
90
80
70
60
50
1970
1976
1982
1988
1994
2000
2006
2012
2018
2024
2030

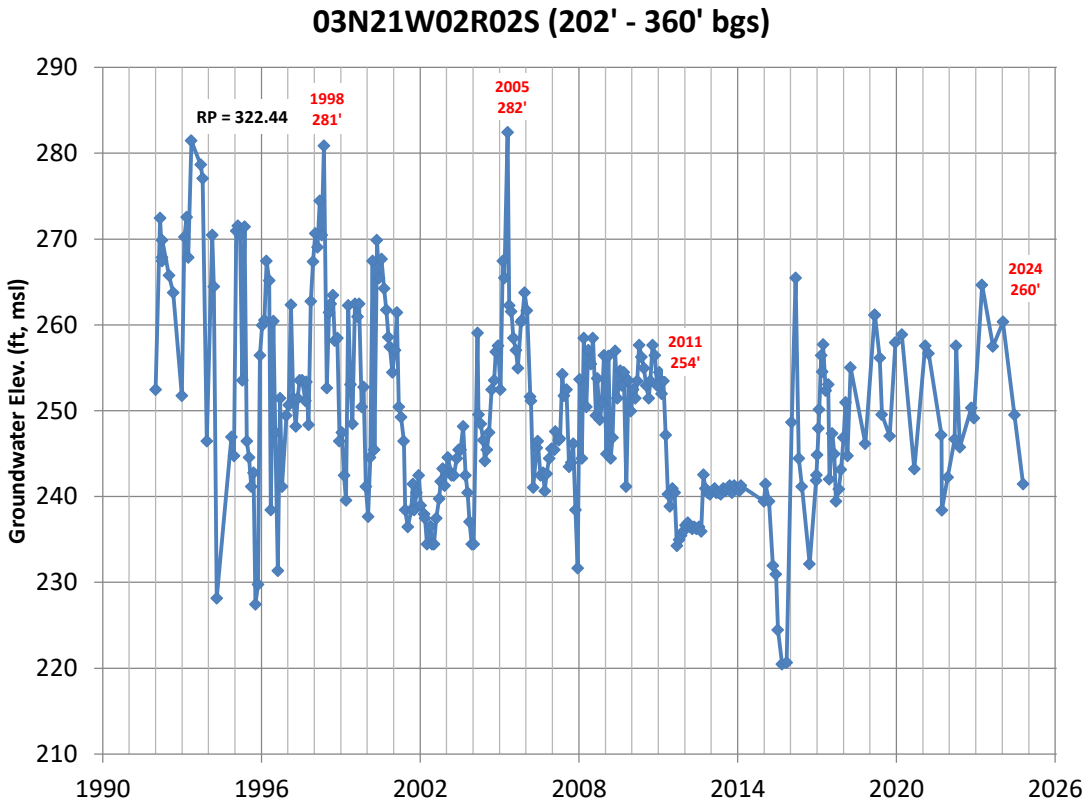
Intentionally Left Blank

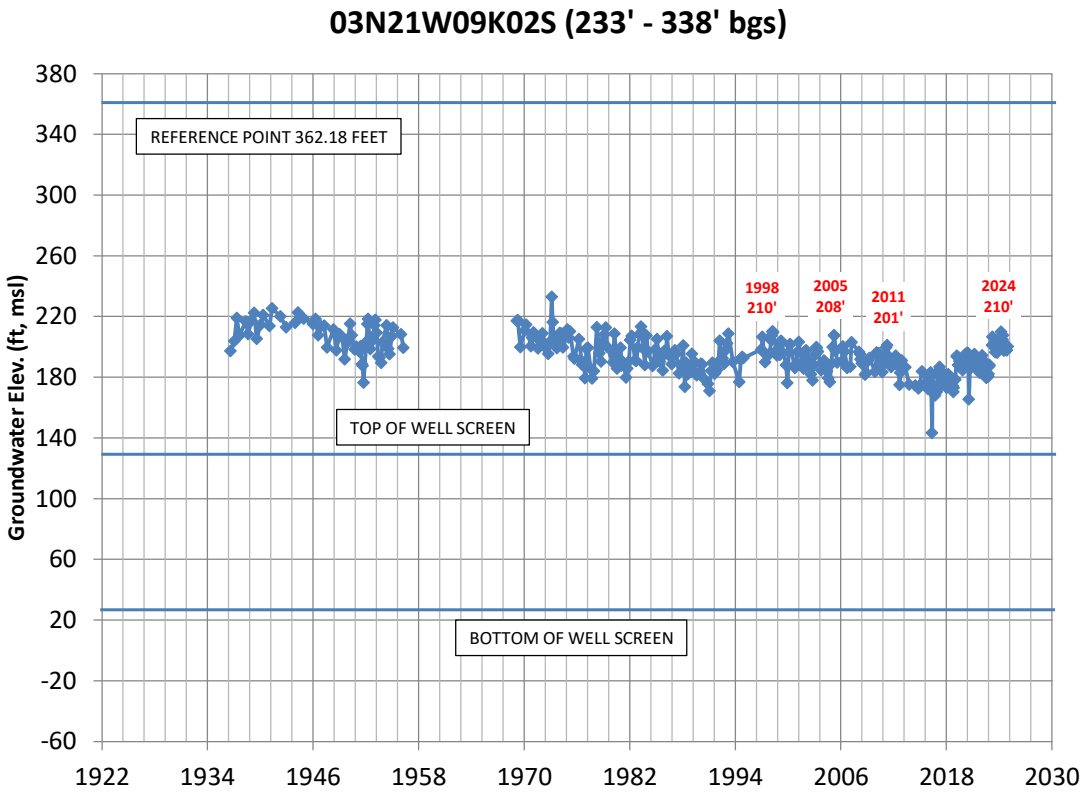


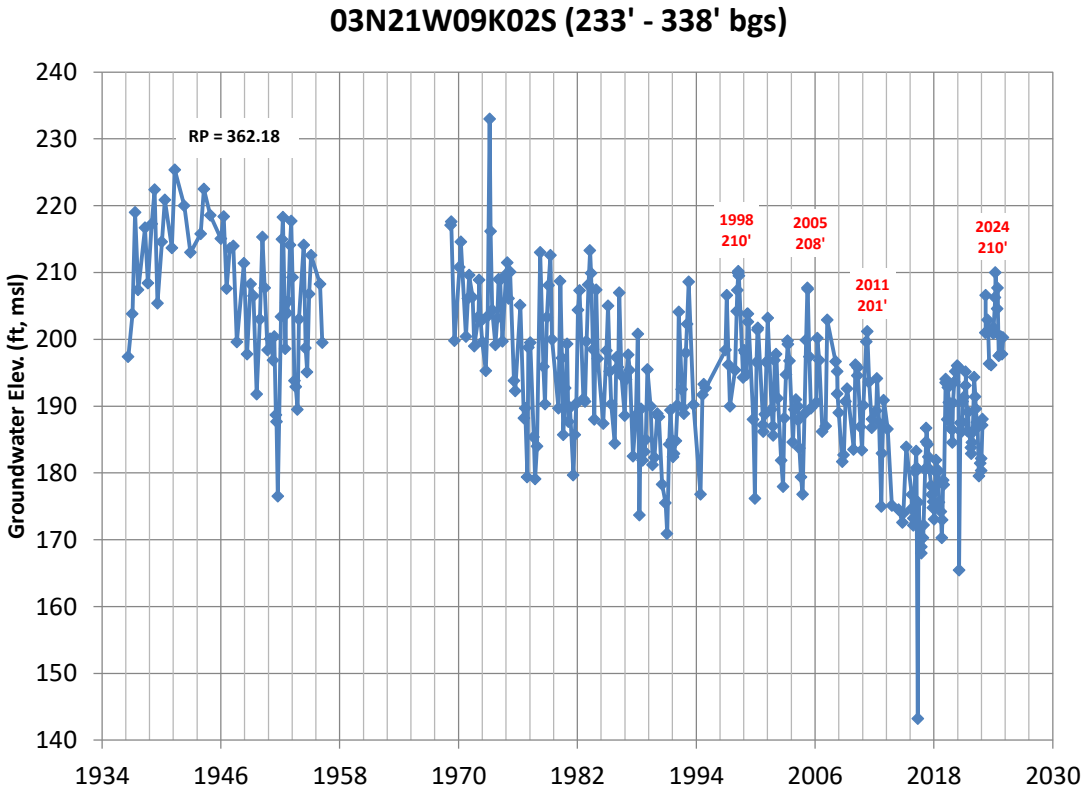

02N22W03Q01S (perforations unknown)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 244.9 FEET
TOP OF WELL SCREEN (UNKNOWN)
1998
80'
2005
72'
2011
76'
measurements in 2024 are under review

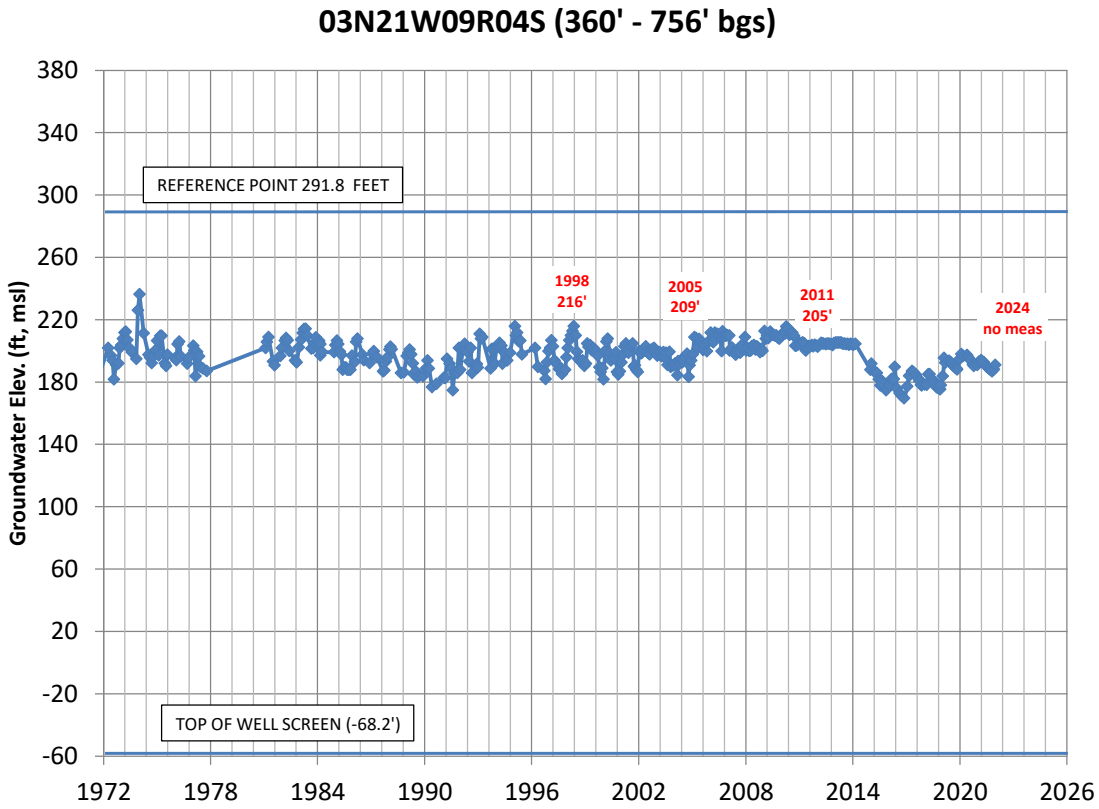

02N22W03Q01S (perforations unknown)
Groundwater Elev. (ft, msl)
100
90
80
70
60
50
40
30
20
1986
1990
1994
1998
2002
2006
2010
2014
2018
2022
2026
RP = 244.9
1998
80'
2005
72'
2011
76'
measurements in 2024 are under review

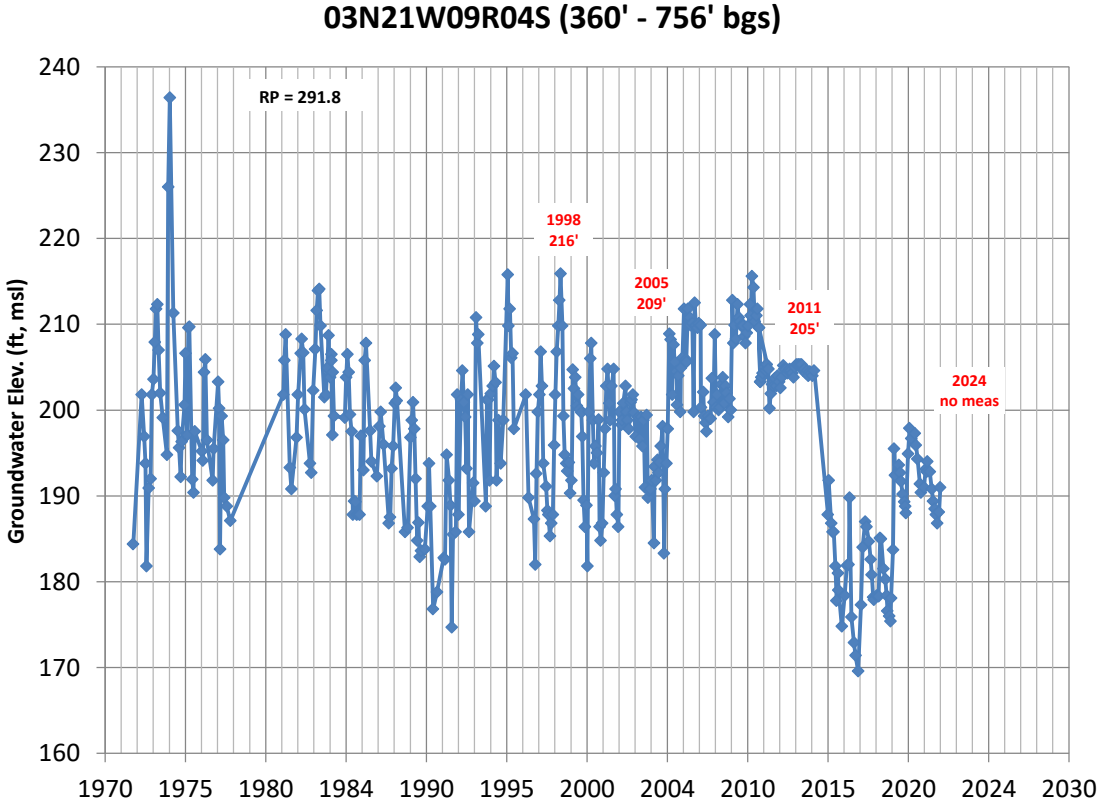

03N21W02R02S (202' - 360' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 322.4 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
1998
281'
2005
282'
2011
254'
2024
260'

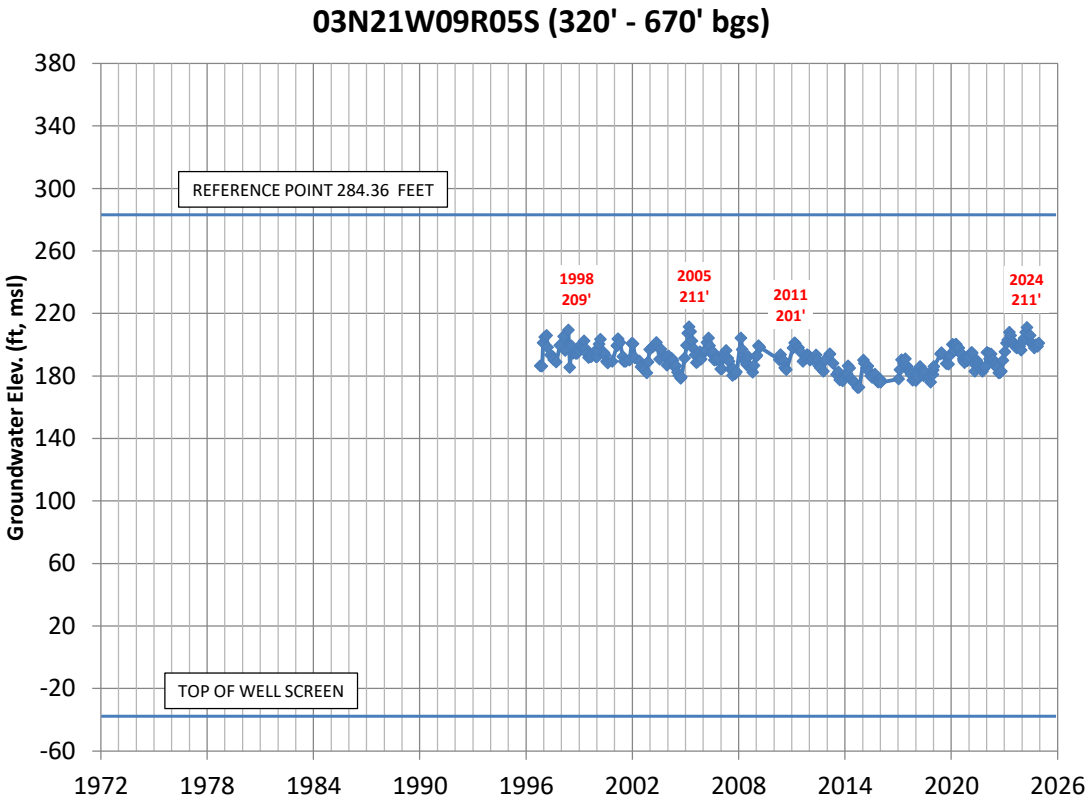

03N21W02R02S (202' - 360' bgs)
Groundwater Elev. (ft, msl)
290
280
270
260
250
240
230
220
210
1990
1996
2002
2008
2014
2020
2026
RP = 322.44
1998
281'
2005
282'
2011
254'
2024
260'

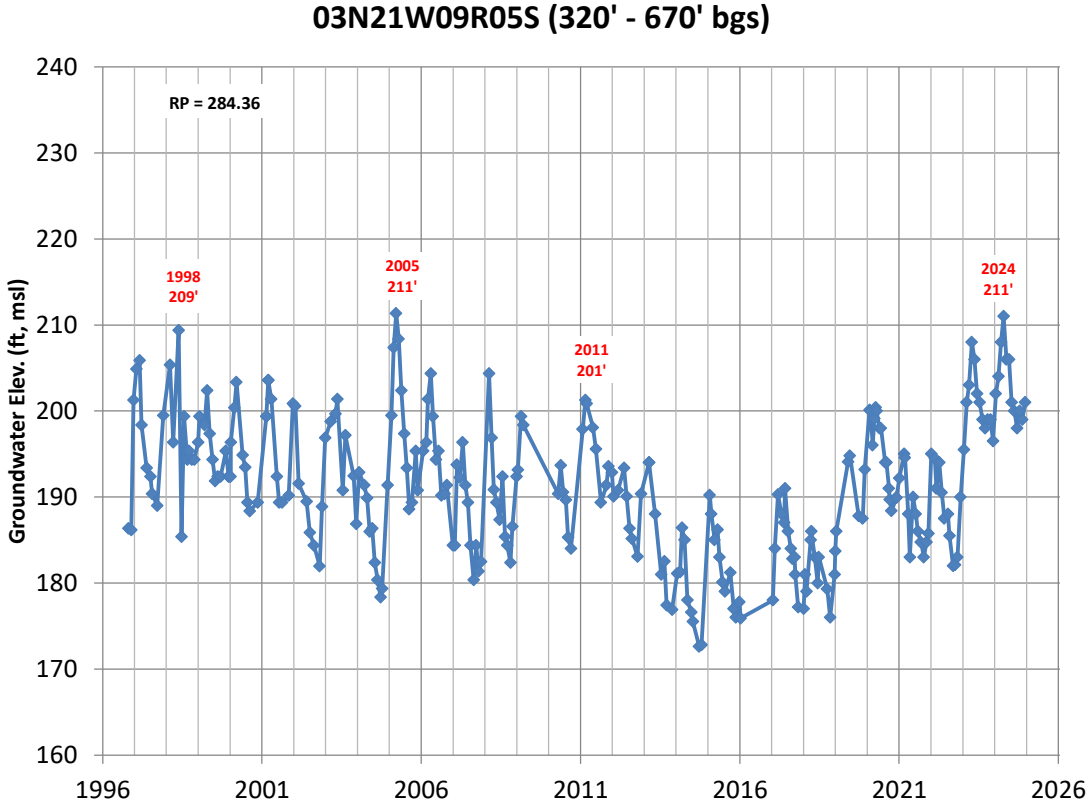

03N21W09K02S (233' - 338' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1922
1934
1946
1958
1970
1982
1994
2006
2018
2030
REFERENCE POINT 362.18 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
1998
210'
2005
208'
2011
201'
2024
210'


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'
2024
210'


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'
2024
no meas


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
2030
RP = 291.8
1998
216'
2005
209'
2011
205'
2024
no meas


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'
2024
211'


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'
2024
211'

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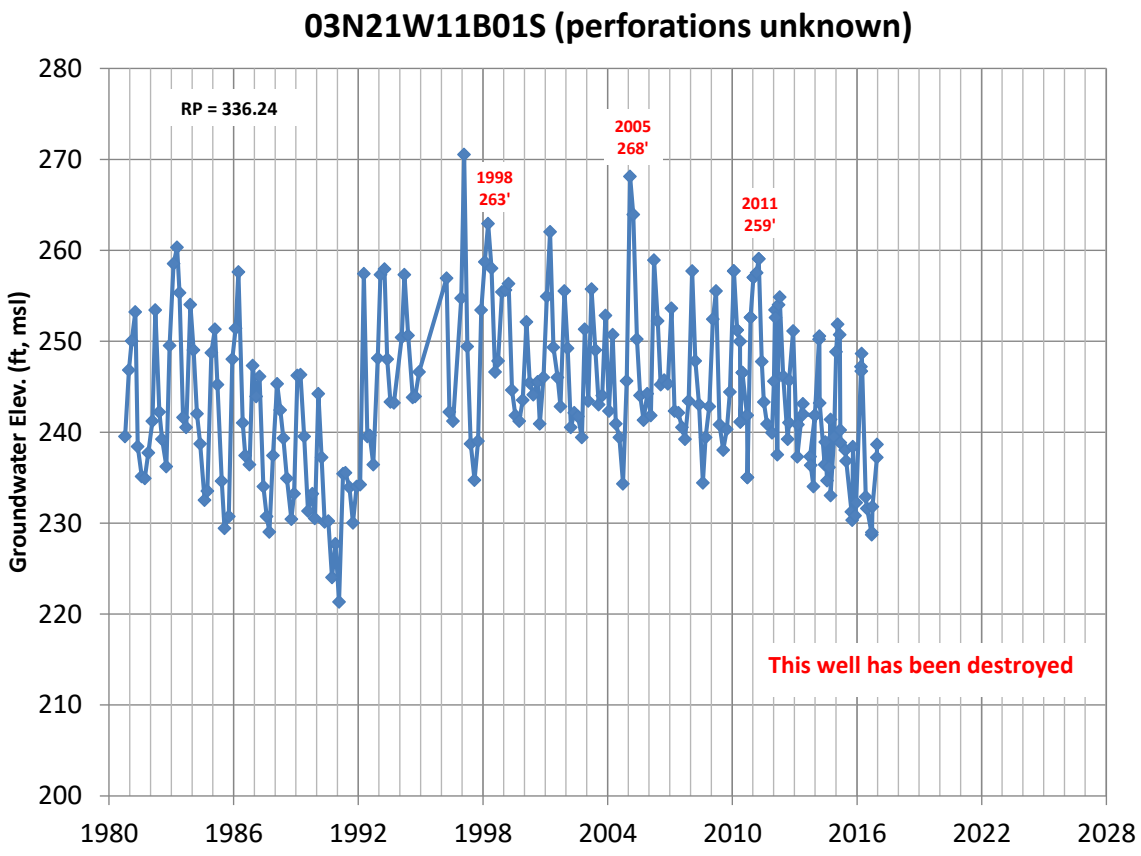
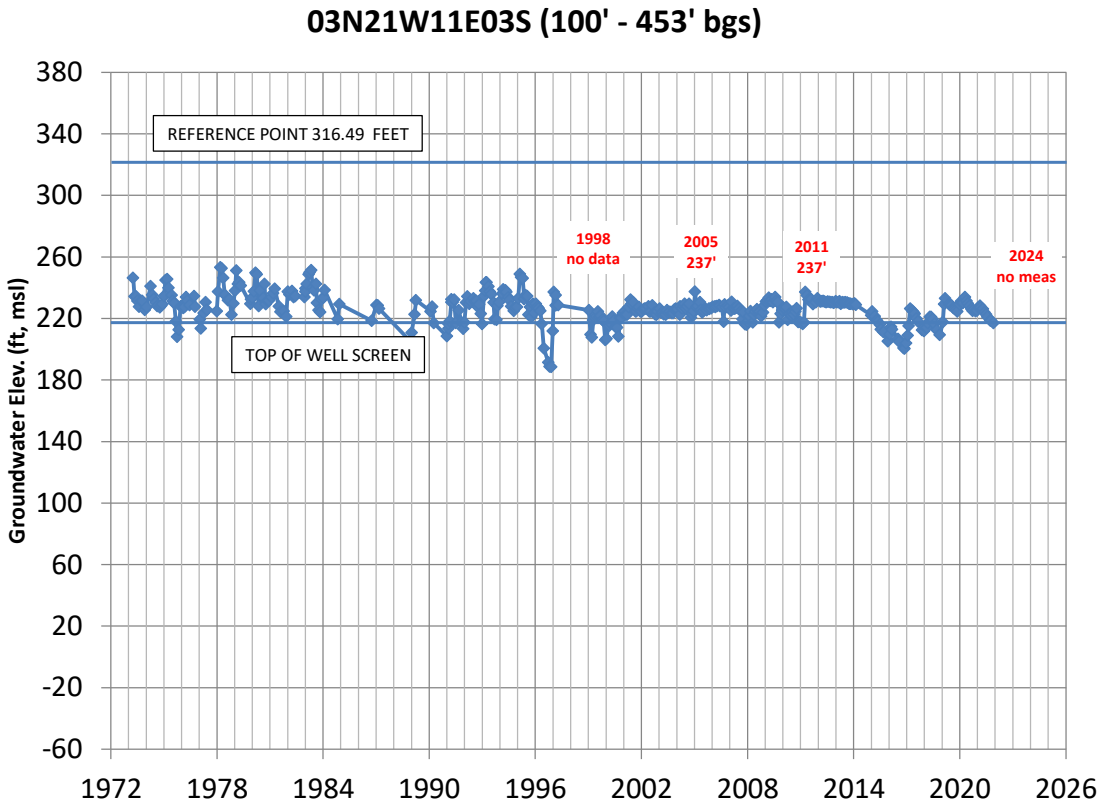
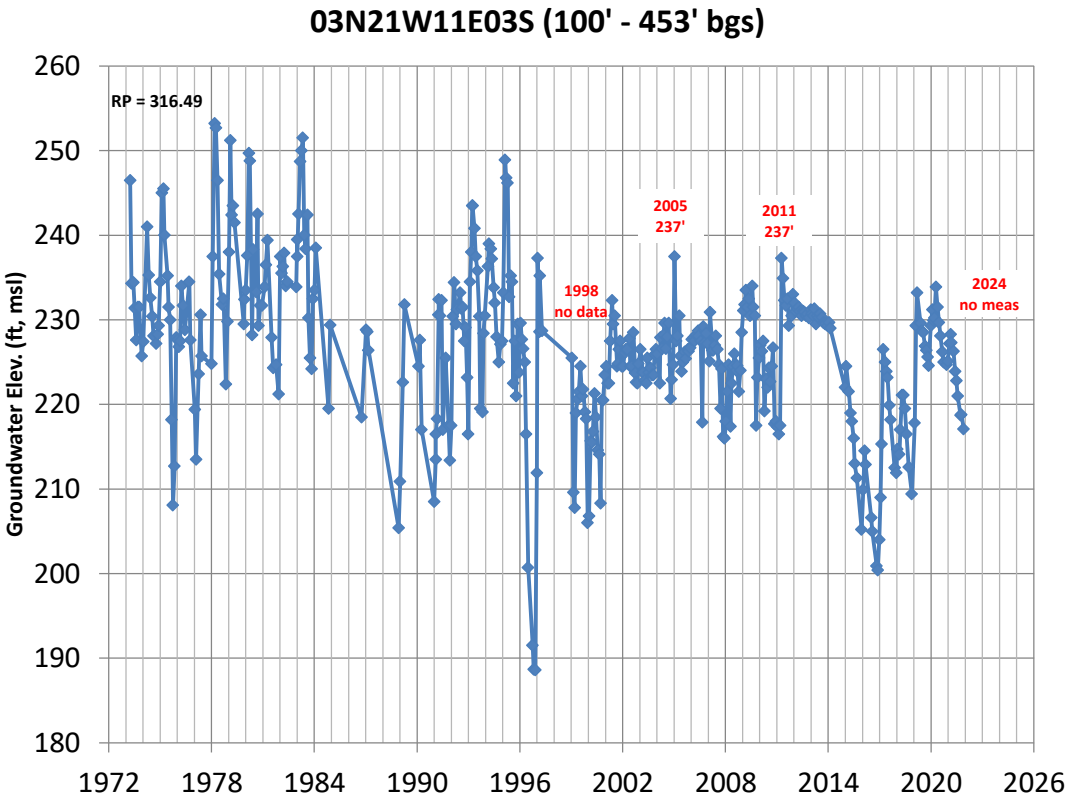
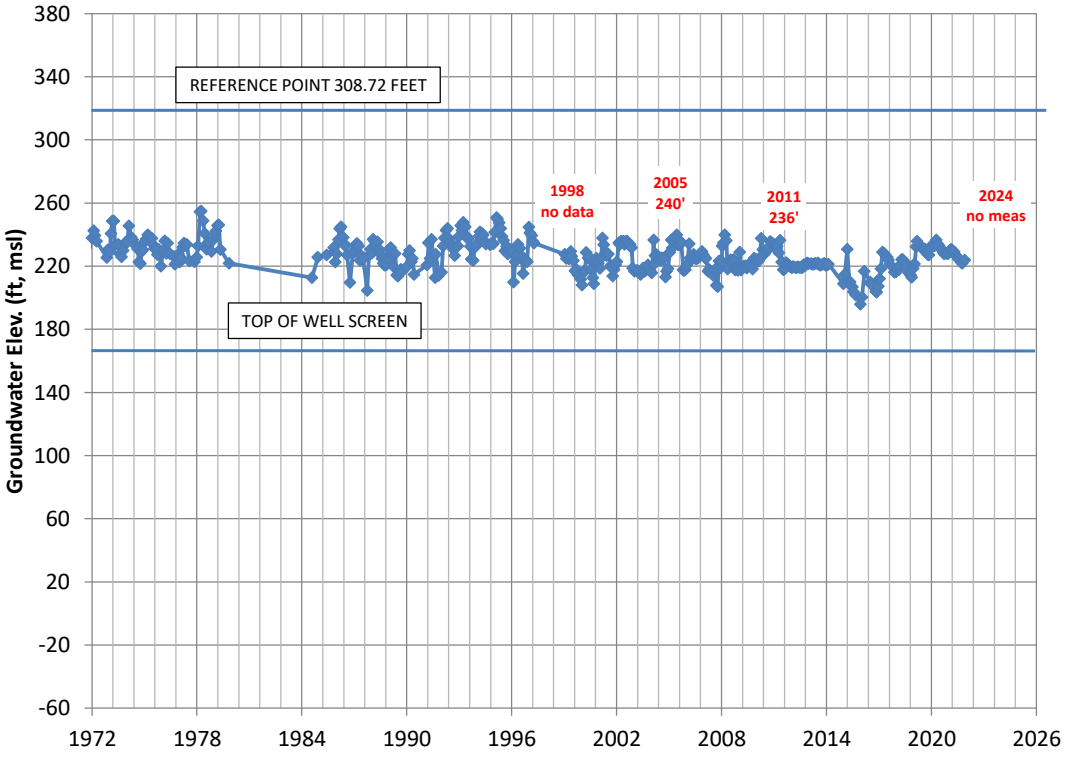


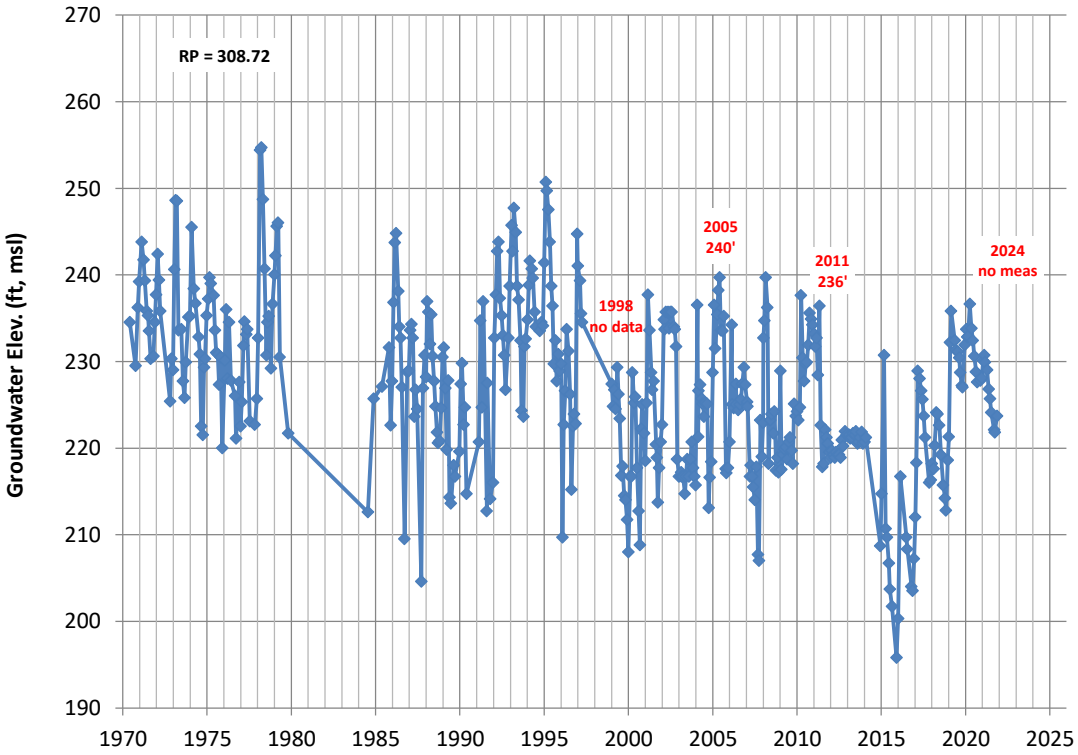

03N21W11E03S (100' - 453' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 316.49 FEET
TOP OF WELL SCREEN
1998
no data
2005
237'
2011
237'
2024
no meas


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'
2024
no meas

03N21W11F03S (153' -518' bgs)



03N21W11F03S (153' -518' bgs)



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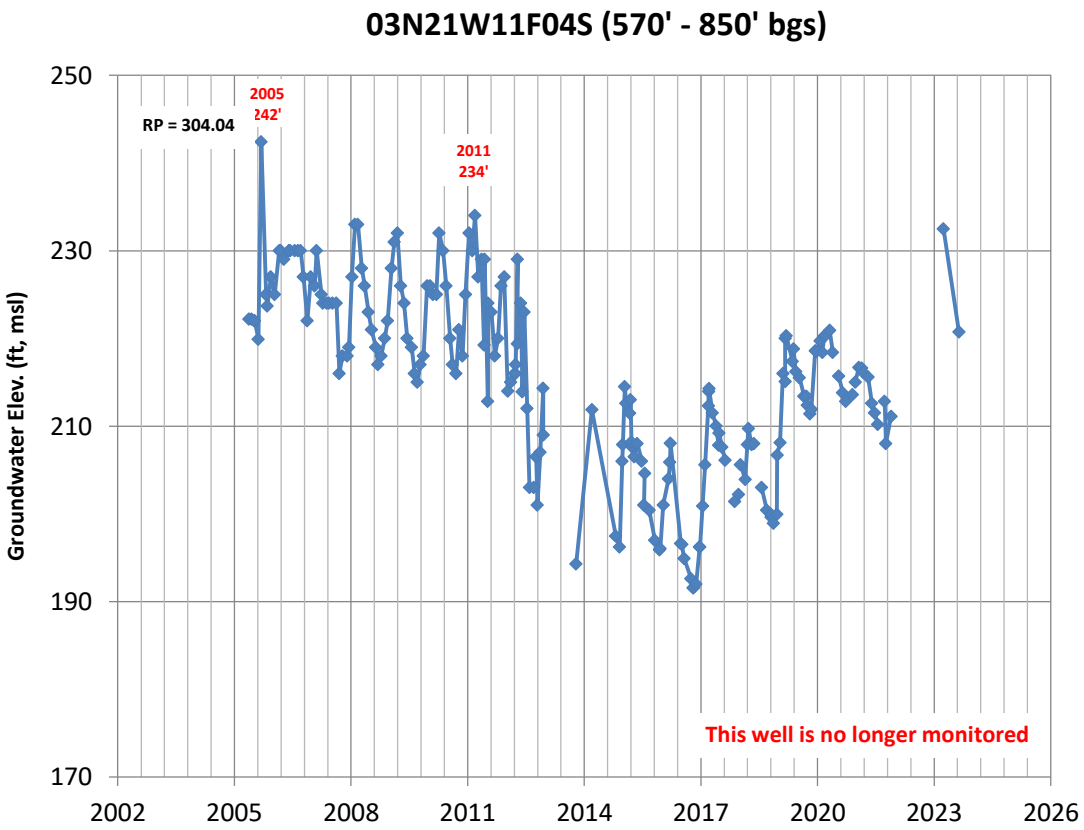
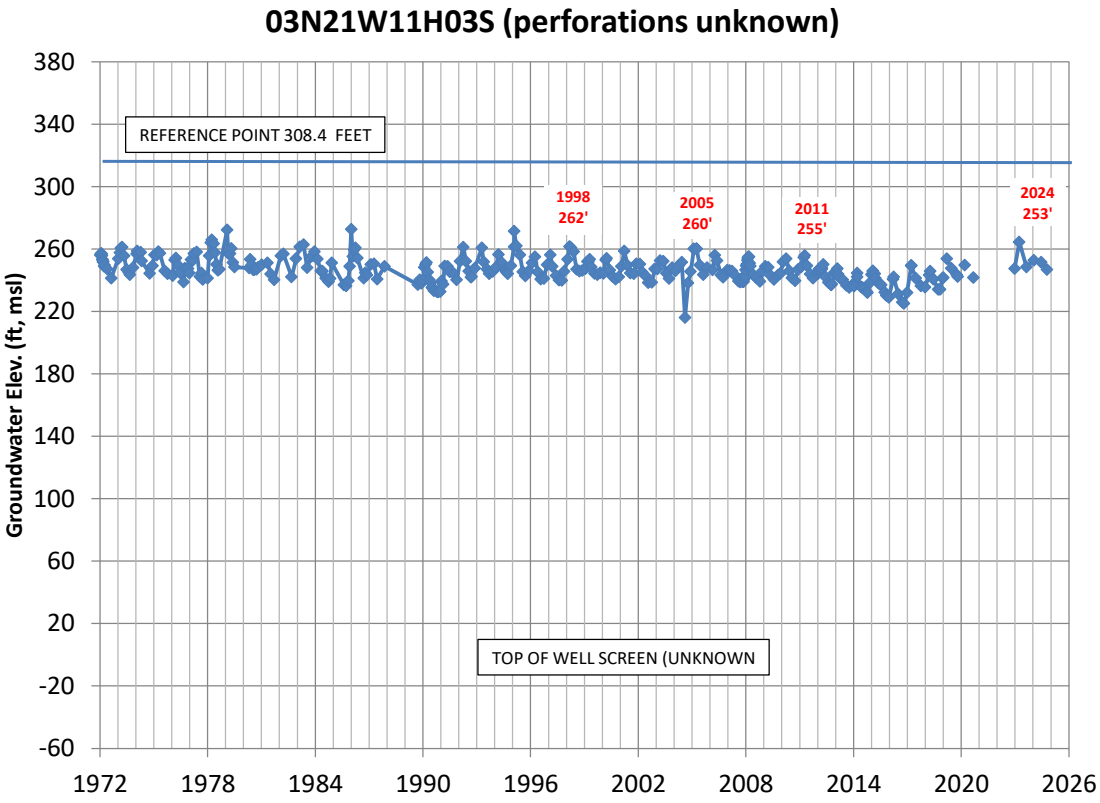
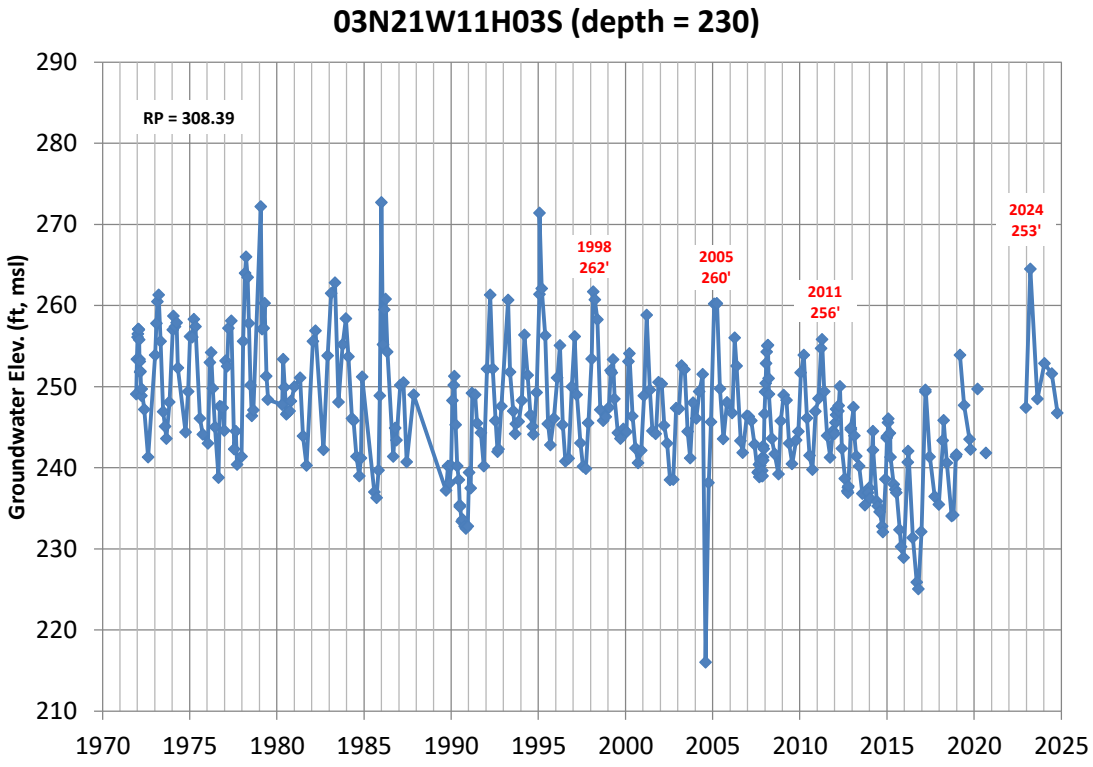
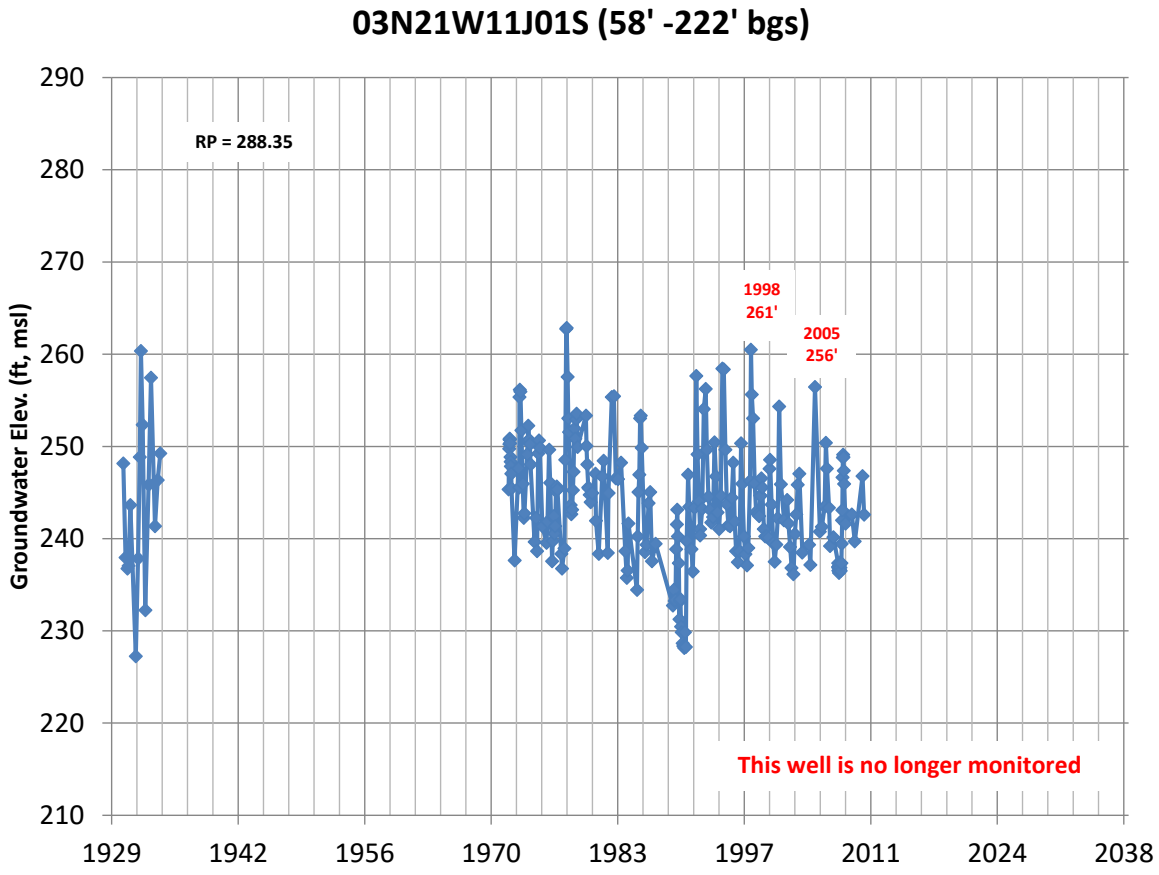
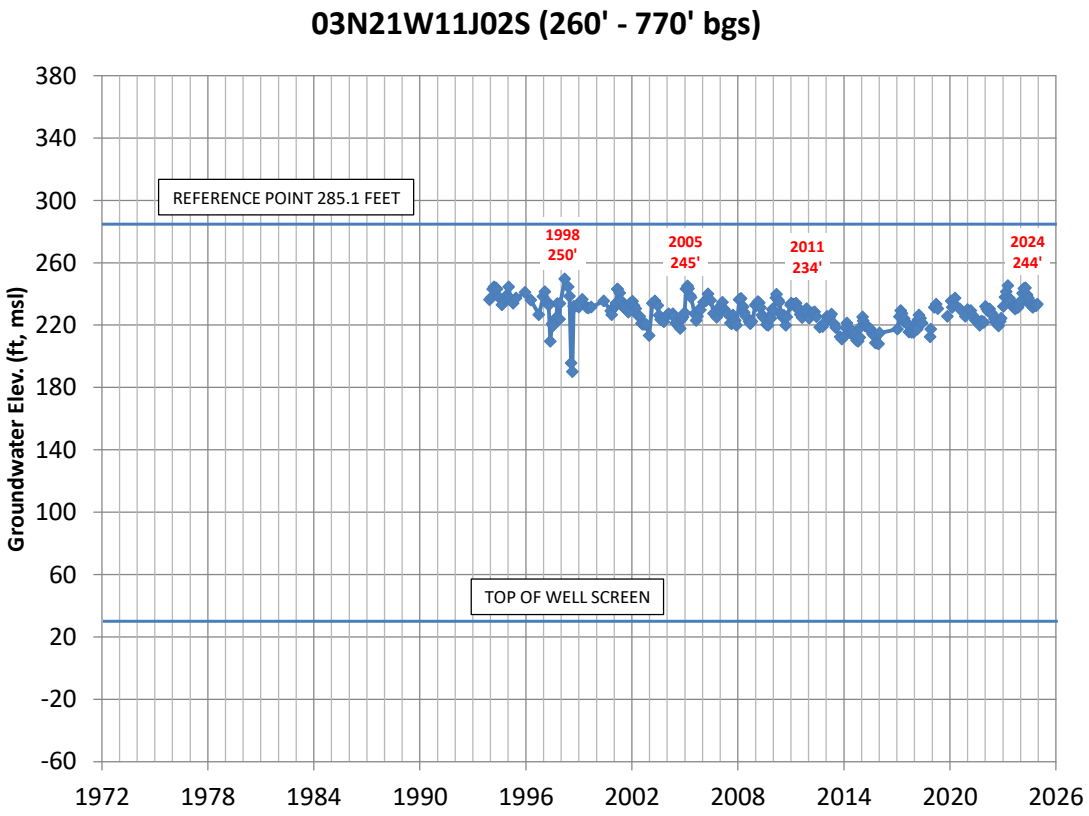


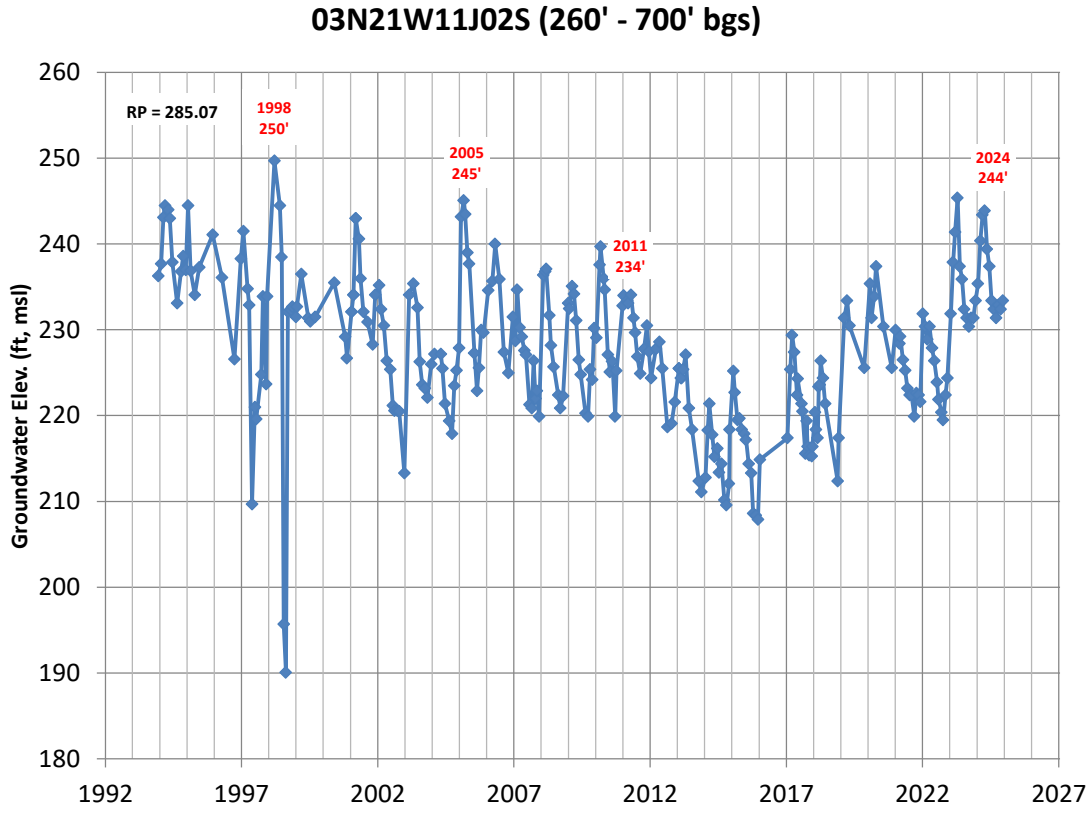

03N21W11H03S (perforations unknown)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 308.4 FEET
1998
262'
2005
260'
2011
255'
2024
253'
TOP OF WELL SCREEN (UNKNOWN

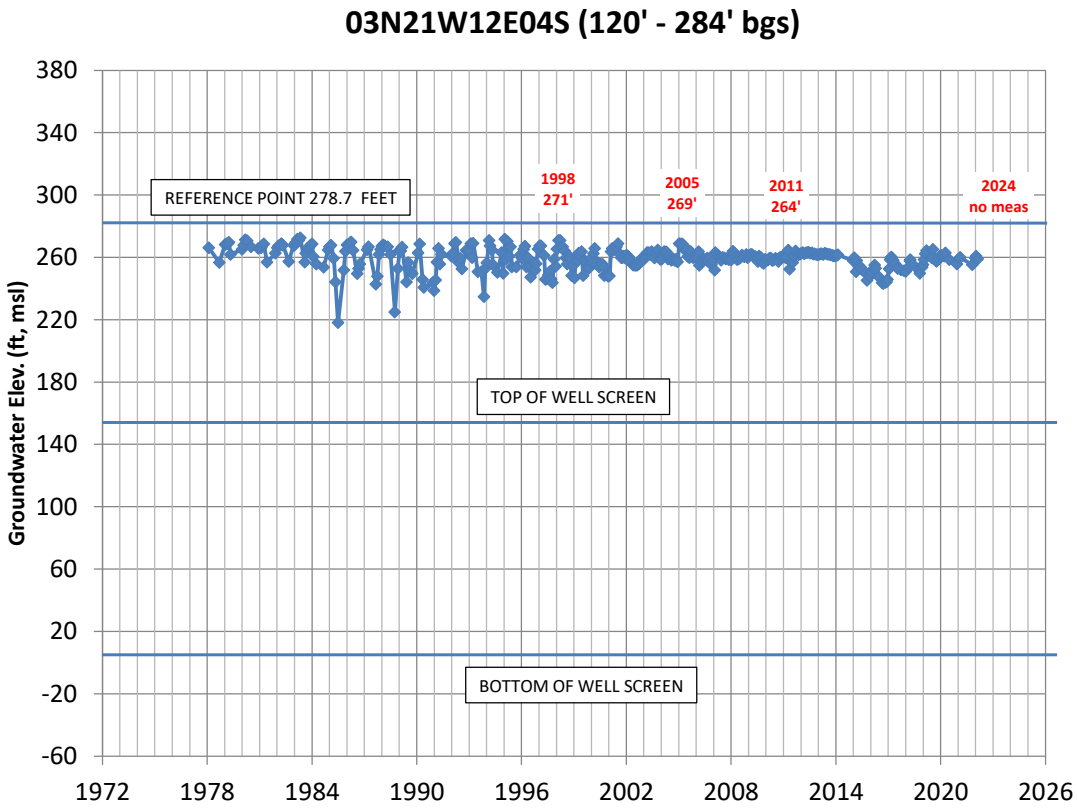

03N21W11H03S (depth = 230)
Groundwater Elev. (ft, msl)
290
280
270
260
250
240
230
220
210
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
RP = 308.39
1998
262'
2005
260'
2011
256'
2024
253'

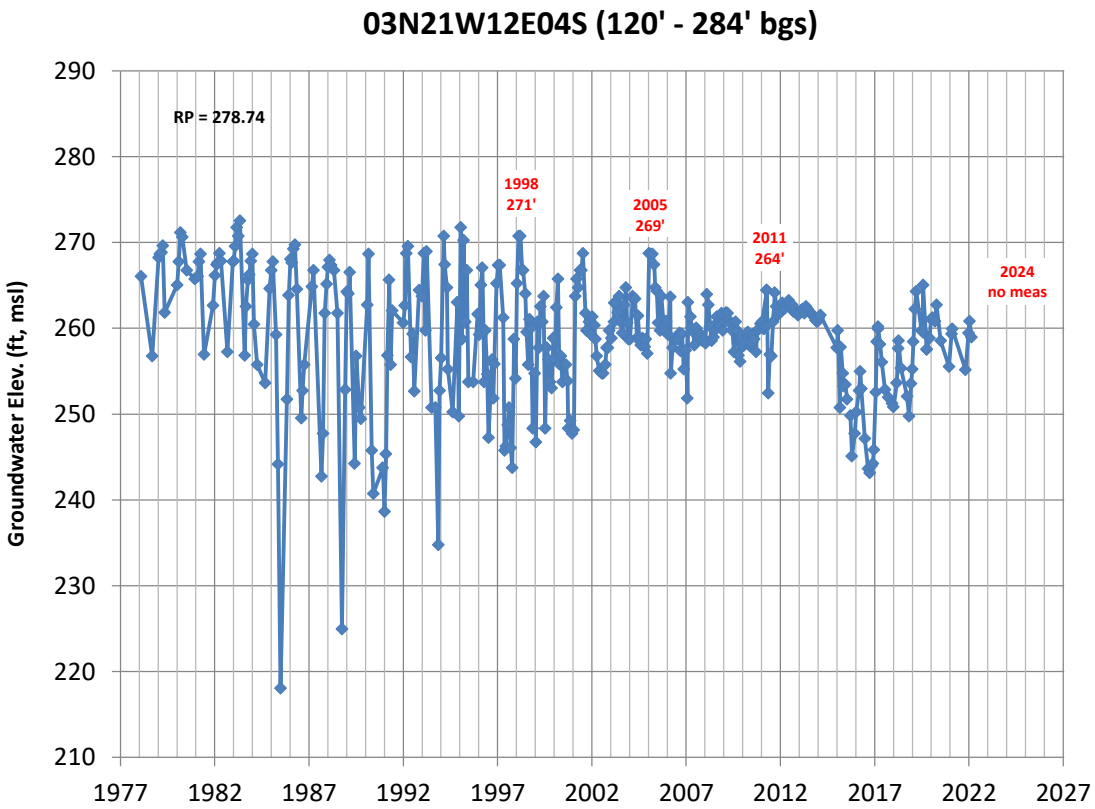
Intentionally Left Blank

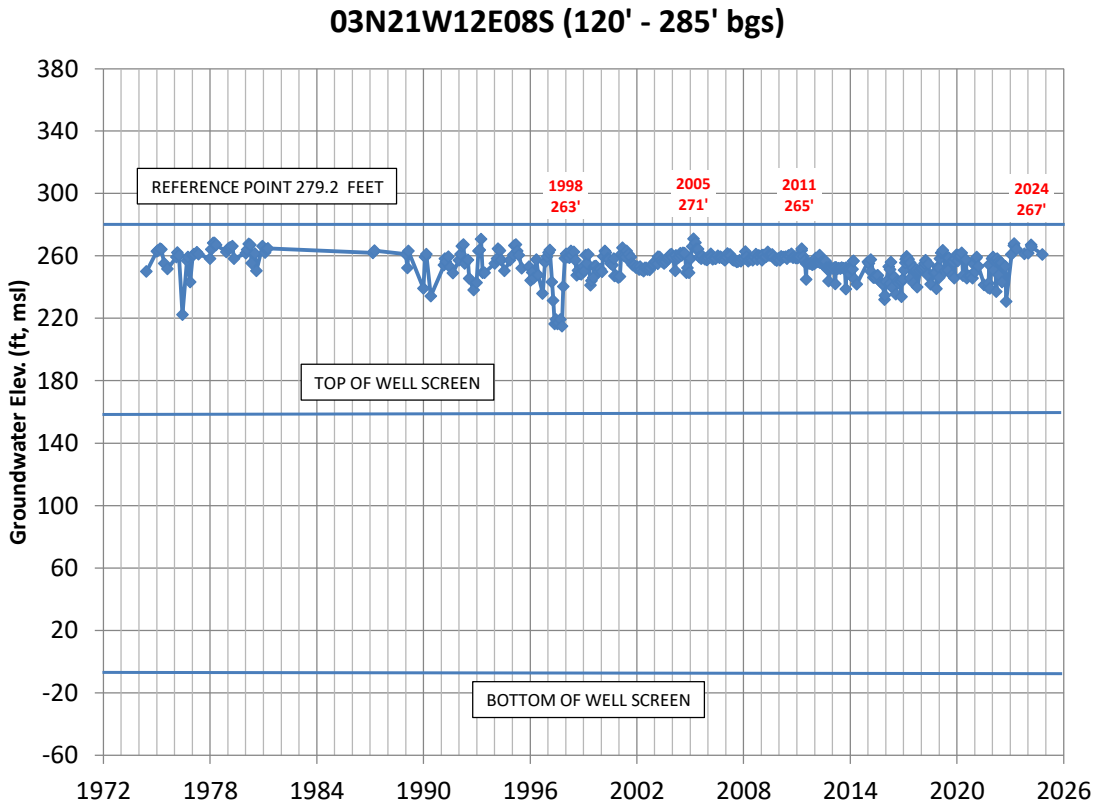


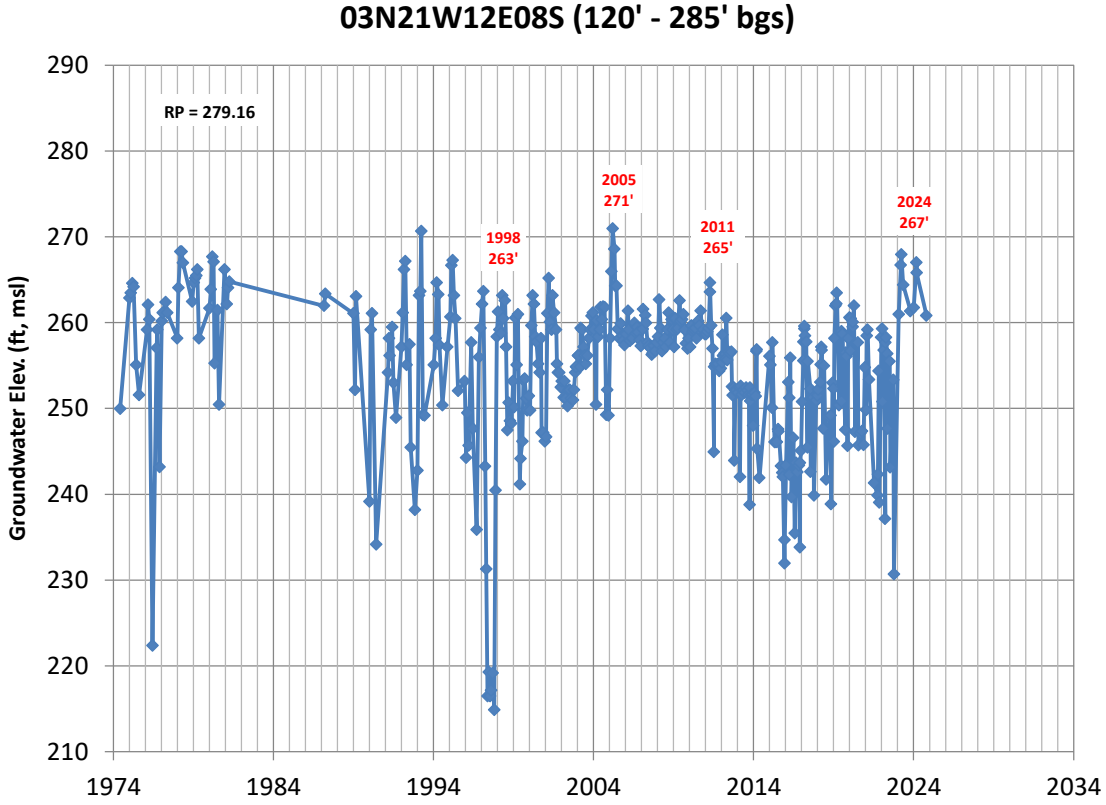

03N21W11J02S (260' - 770' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 285.1 FEET
TOP OF WELL SCREEN
1998
250'
2005
245'
2011
234'
2024
244'

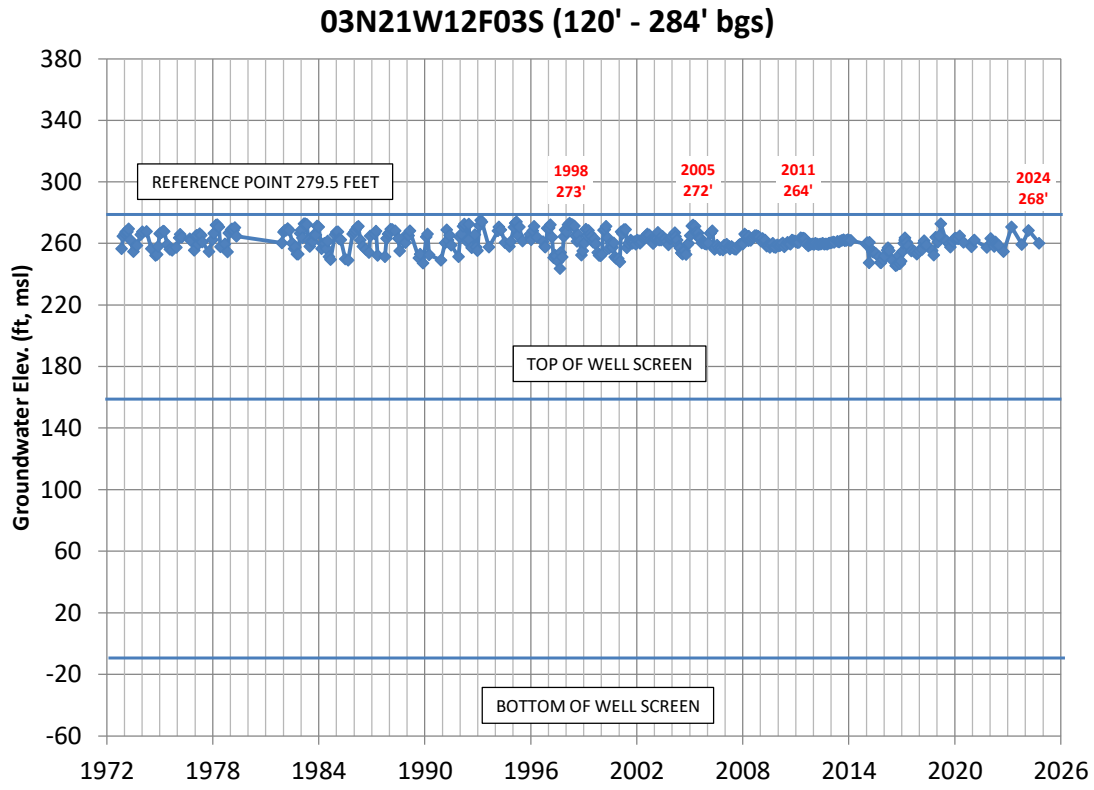

03N21W11J02S (260' - 700' bgs)
Groundwater Elev. (ft, msl)
260
250
240
230
220
210
200
190
180
1992
1997
2002
2007
2012
2017
2022
2027
RP = 285.07
1998
250'
2005
245'
2011
234'
2024
244'

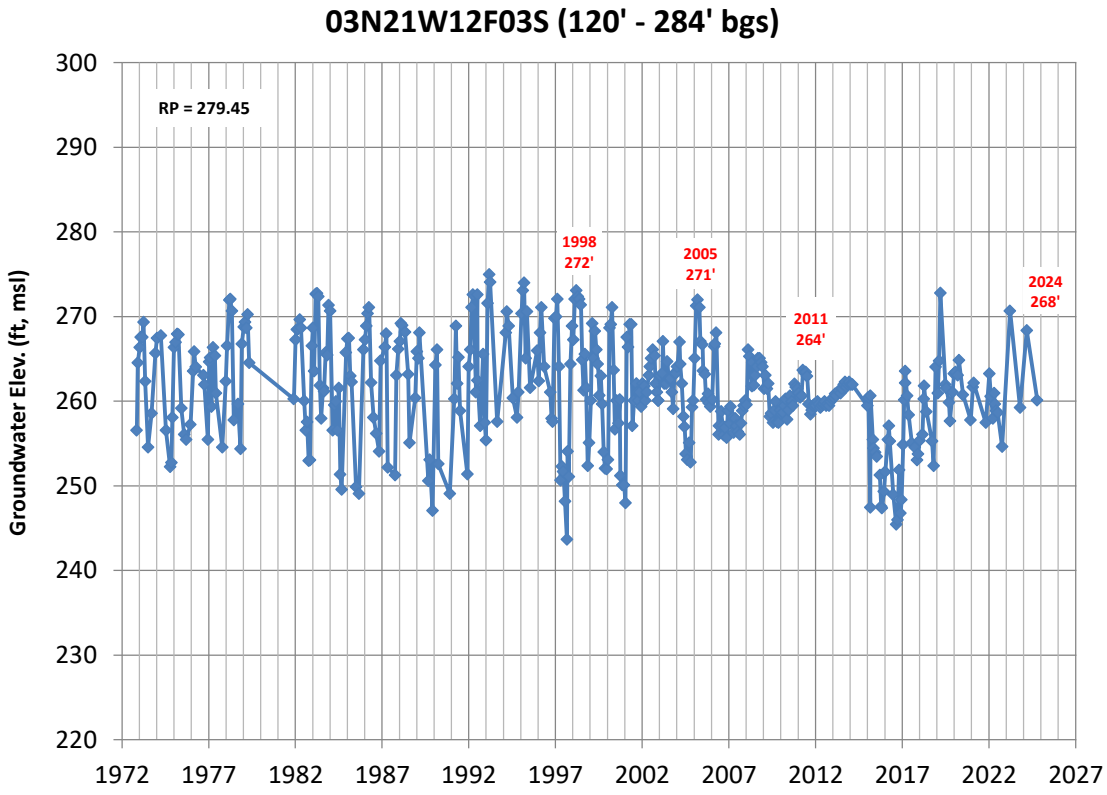

03N21W12E04S (120' - 284' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 278.7 FEET
1998
271'
2005
269'
2011
264'
2024
no meas
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN

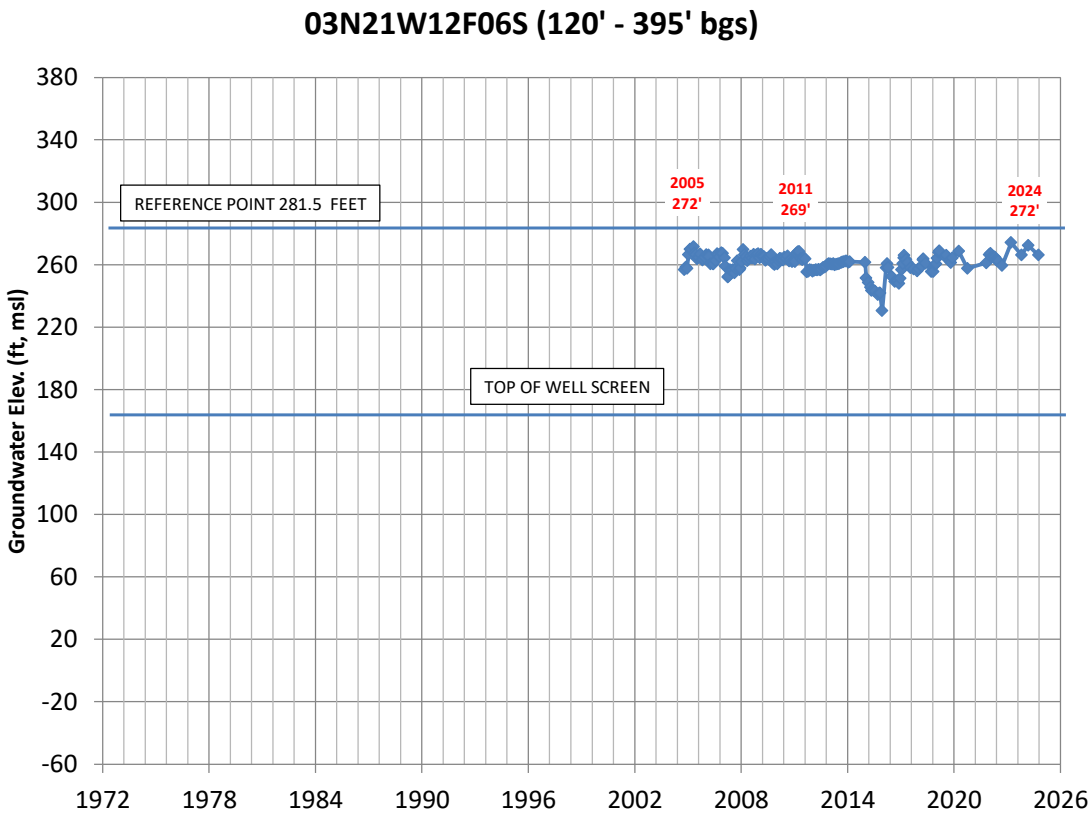

03N21W12E04S (120' - 284' bgs)
Groundwater Elev. (ft, msl)
290
280
270
260
250
240
230
220
210
1977
1982
1987
1992
1997
2002
2007
2012
2017
2022
2027
RP = 278.74
1998
271'
2005
269'
2011
264'
2024
no meas

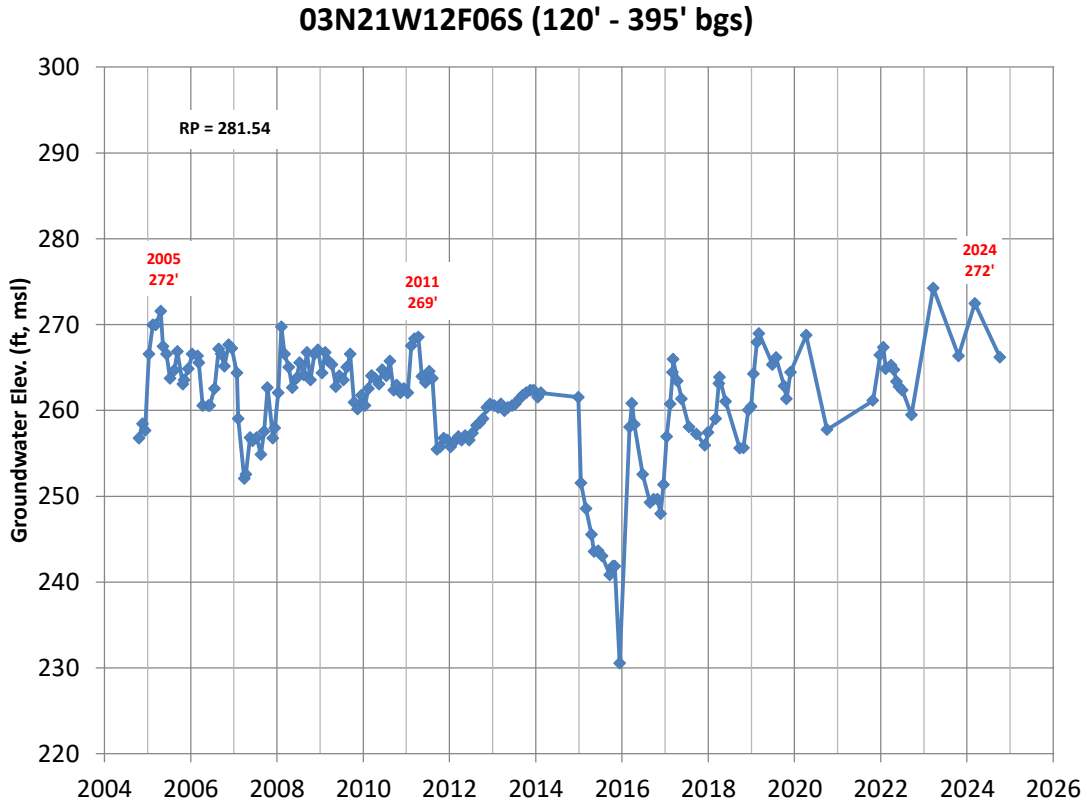

03N21W12E08S (120' - 285' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 279.2 FEET
1998
263'
2005
271'
2011
265'
2024
267'
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN

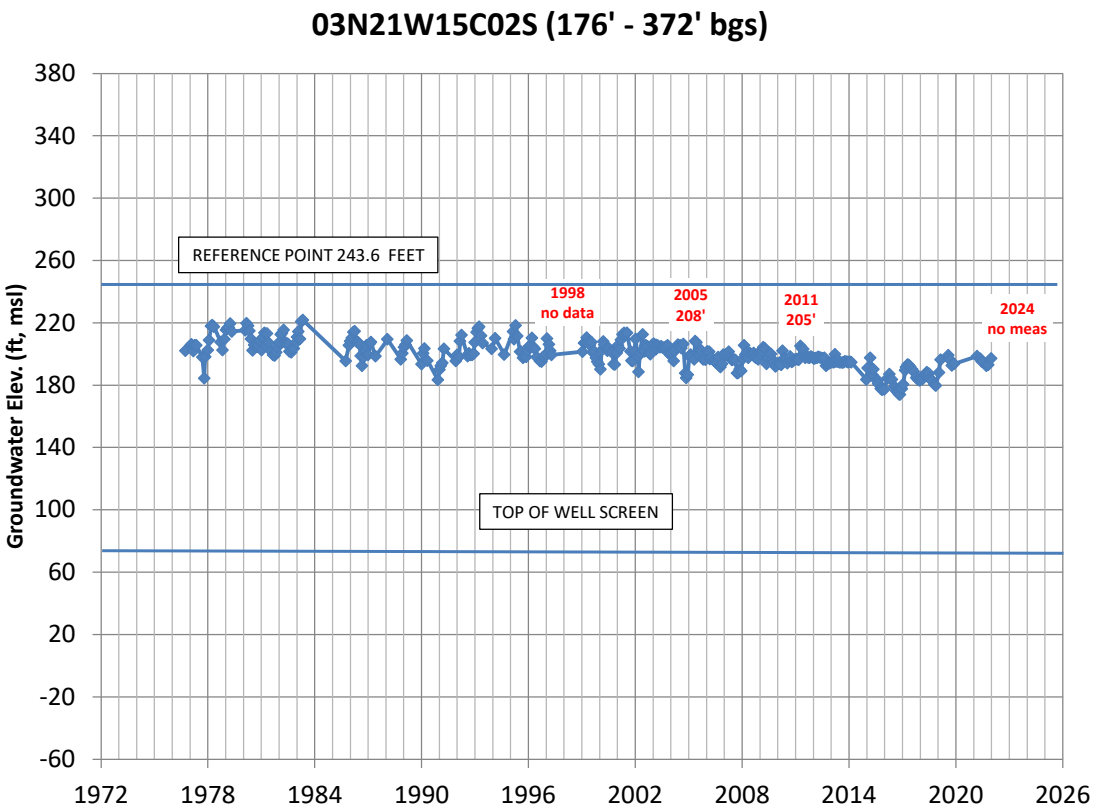

03N21W12E08S (120' - 285' bgs)
Groundwater Elev. (ft, msl)
290
280
270
260
250
240
230
220
210
1974
1984
1994
2004
2014
2024
2034
RP = 279.16
1998
263'
2005
271'
2011
265'
2024
267'

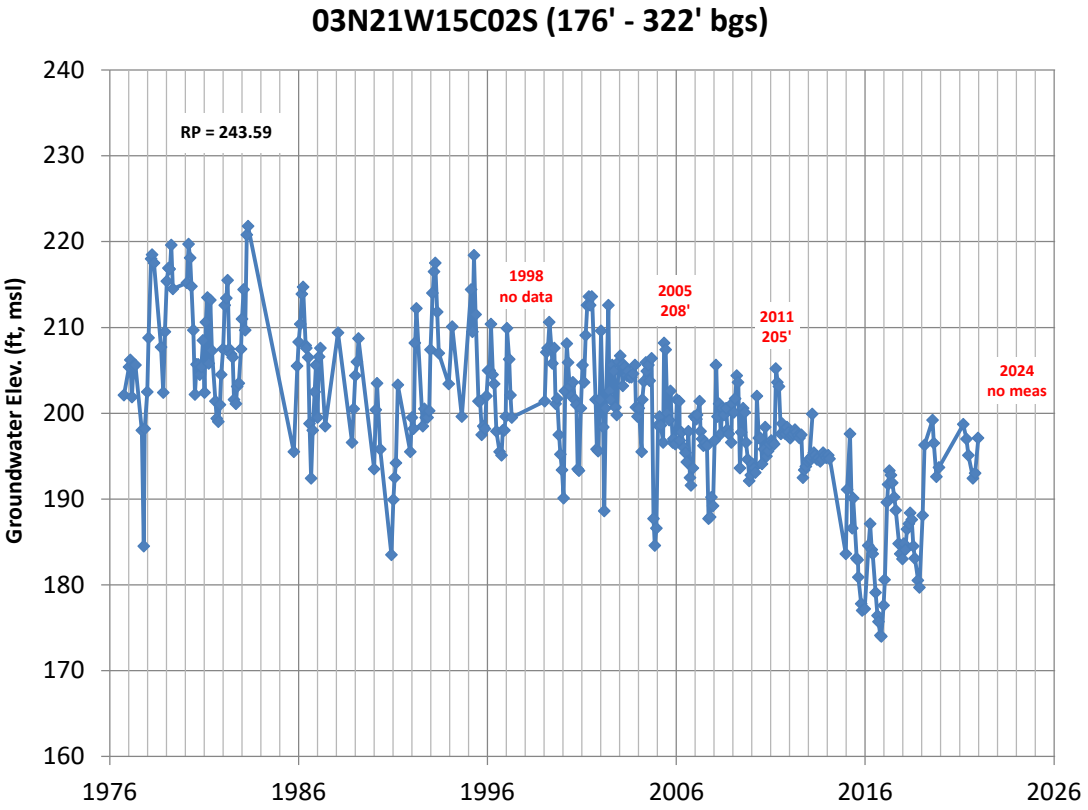

03N21W12F03S (120' - 284' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 279.5 FEET
1998
273'
2005
272'
2011
264'
2024
268'
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN


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'
2024
268'

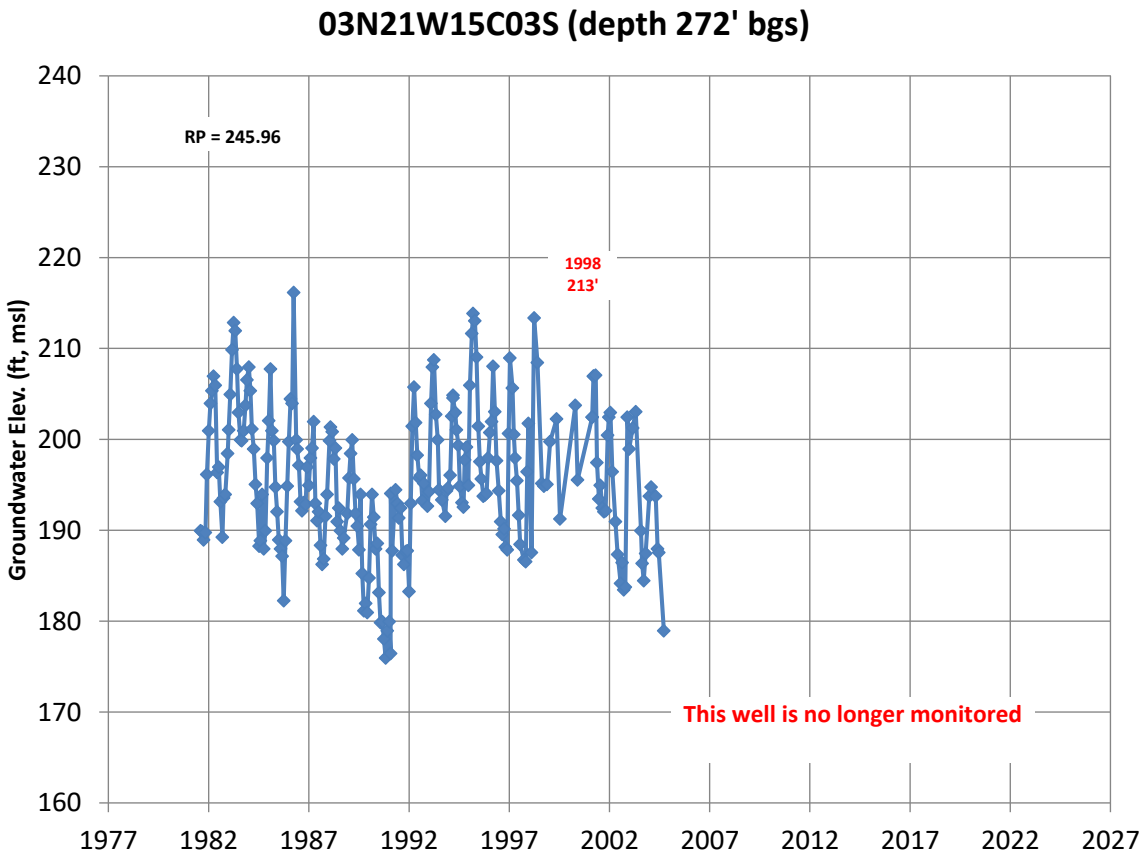

03N21W12F06S (120' - 395' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 281.5 FEET
TOP OF WELL SCREEN
2005
272'
2011
269'
2024
272'

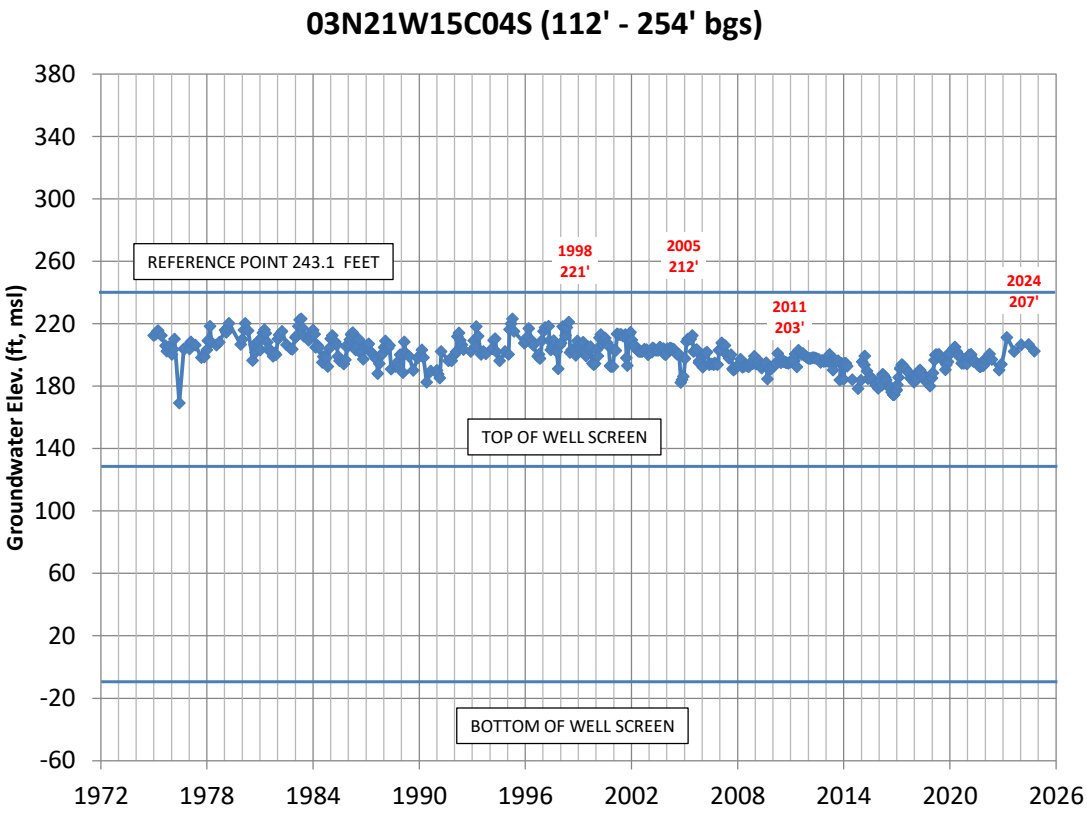

03N21W12F06S (120' - 395' bgs)
Groundwater Elev. (ft, msl)
300
290
280
270
260
250
240
230
220
2004
2006
2008
2010
2012
2014
2016
2018
2020
2022
2024
2026
RP = 281.54
2005
272'
2011
269'
2024
272'

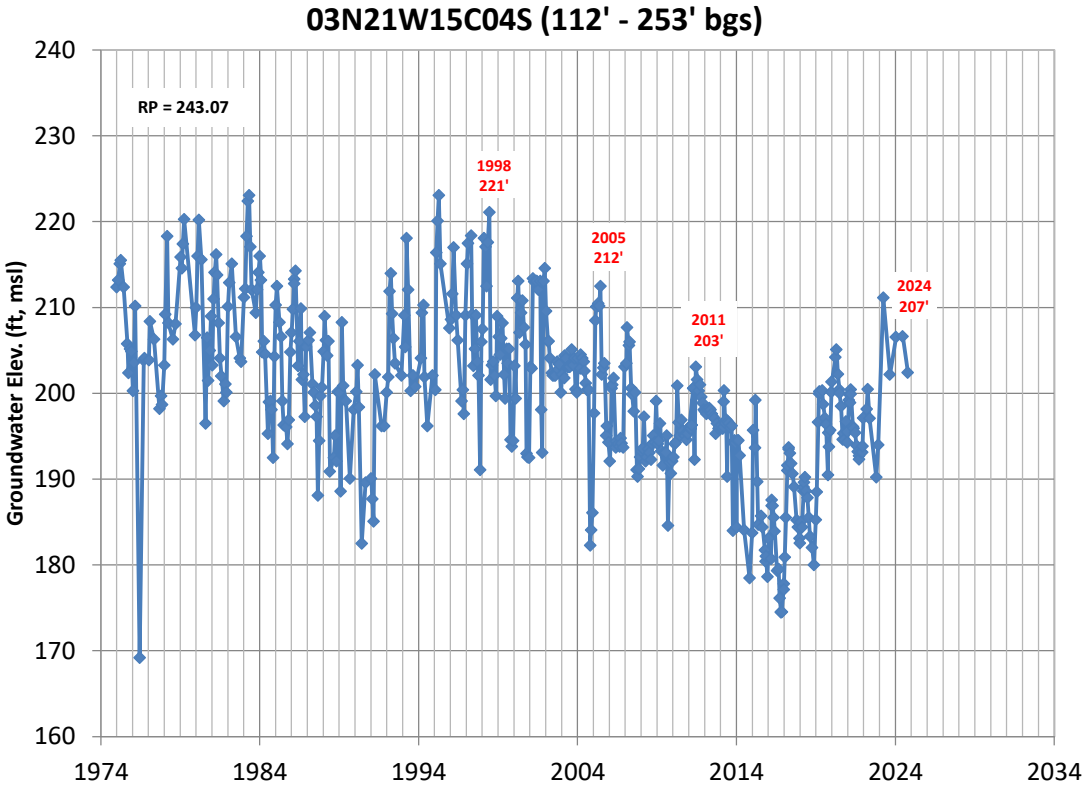

03N21W15C02S (176' - 372' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 243.6 FEET
TOP OF WELL SCREEN
1998
no data
2005
208'
2011
205'
2024
no meas

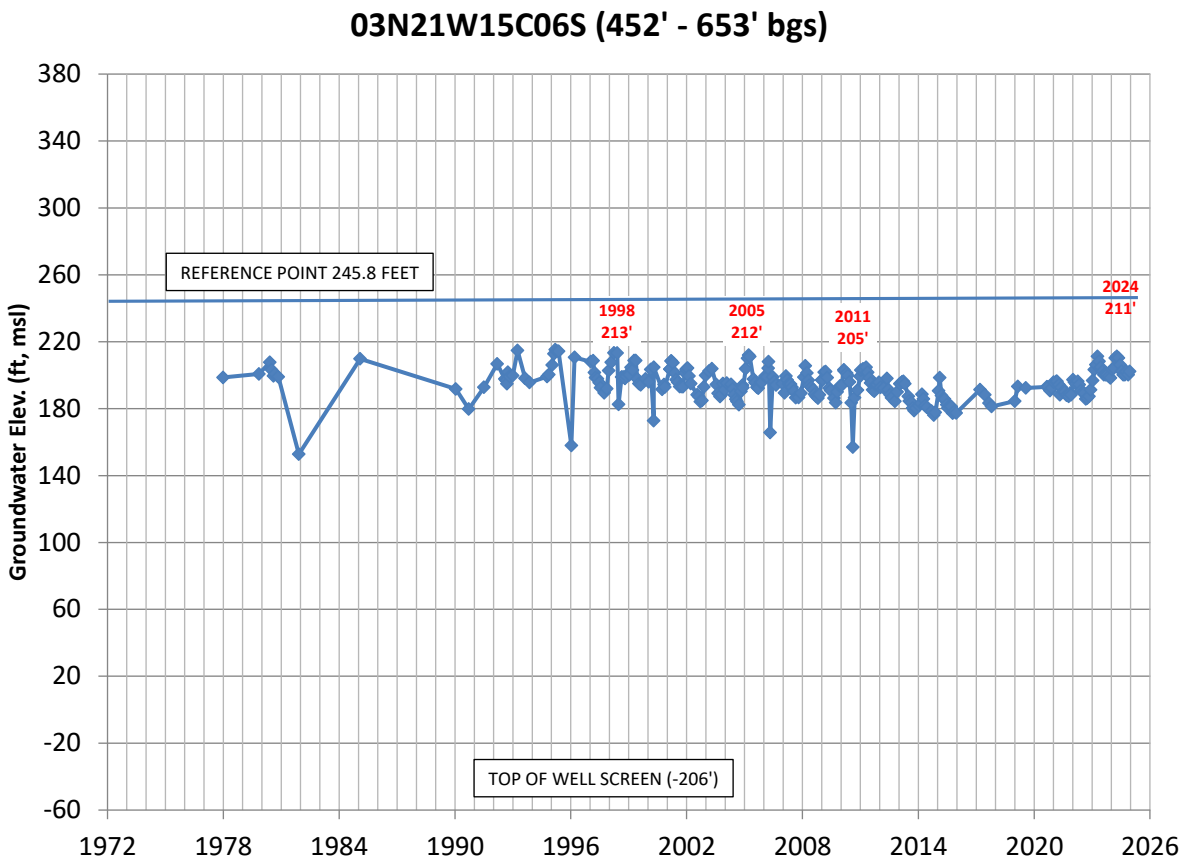

03N21W15C02S (176' - 322' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1976
1986
1996
2006
2016
2026
RP = 243.59
1998
no data
2005
208'
2011
205'
2024
no meas

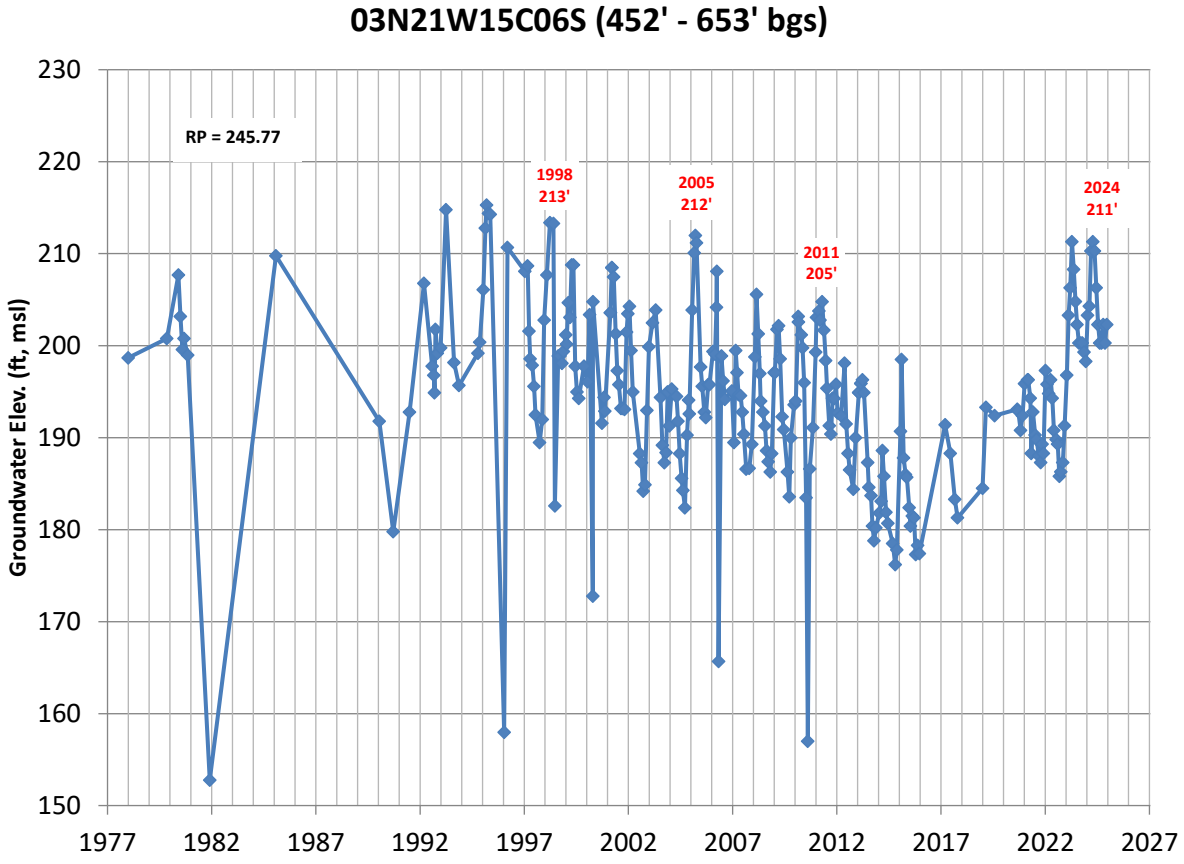
Intentionally Left Blank

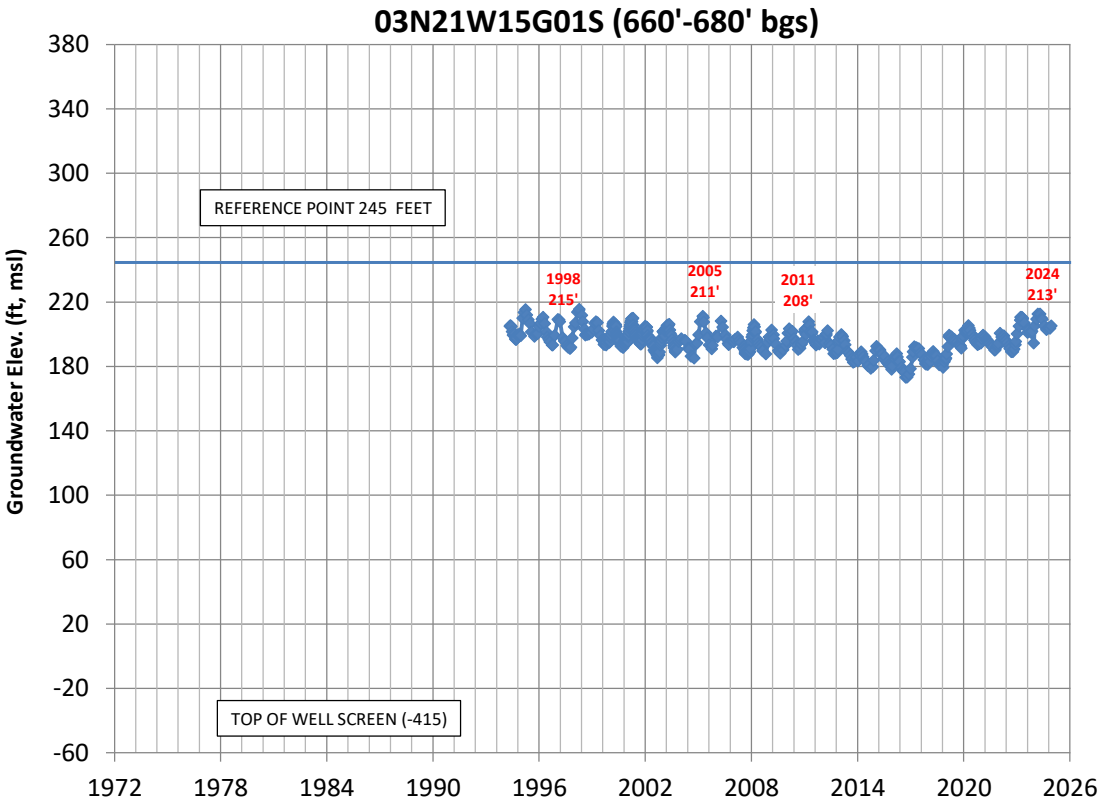


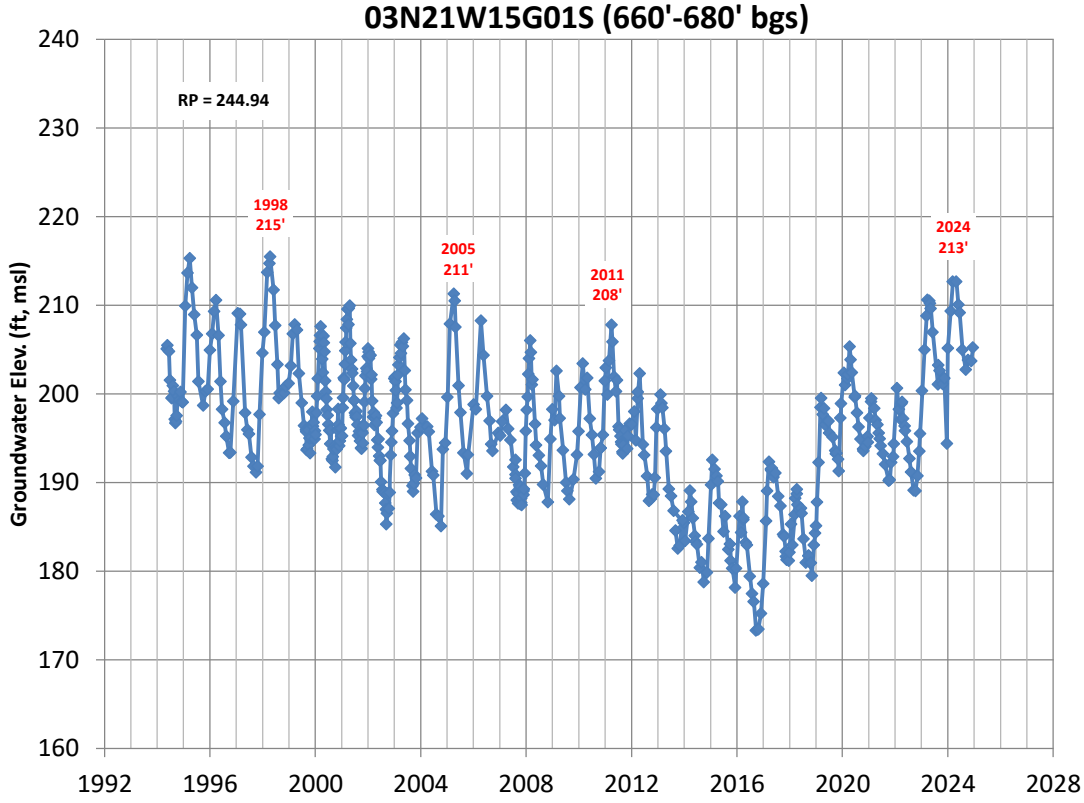

03N21W15C04S (112' - 254' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 243.1 FEET
1998
221'
2005
212'
2011
203'
2024
207'
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN

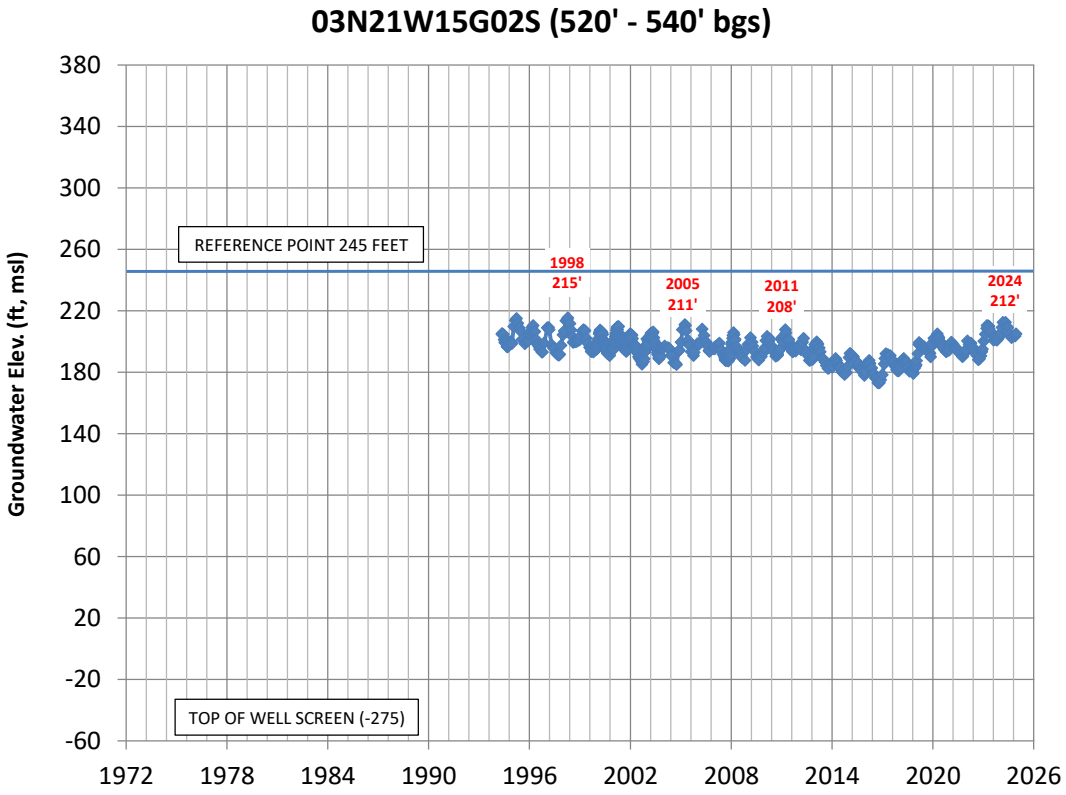

03N21W15C04S (112' - 253' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1974
1984
1994
2004
2014
2024
2034
RP = 243.07
1998
221'
2005
212'
2011
203'
2024
207'

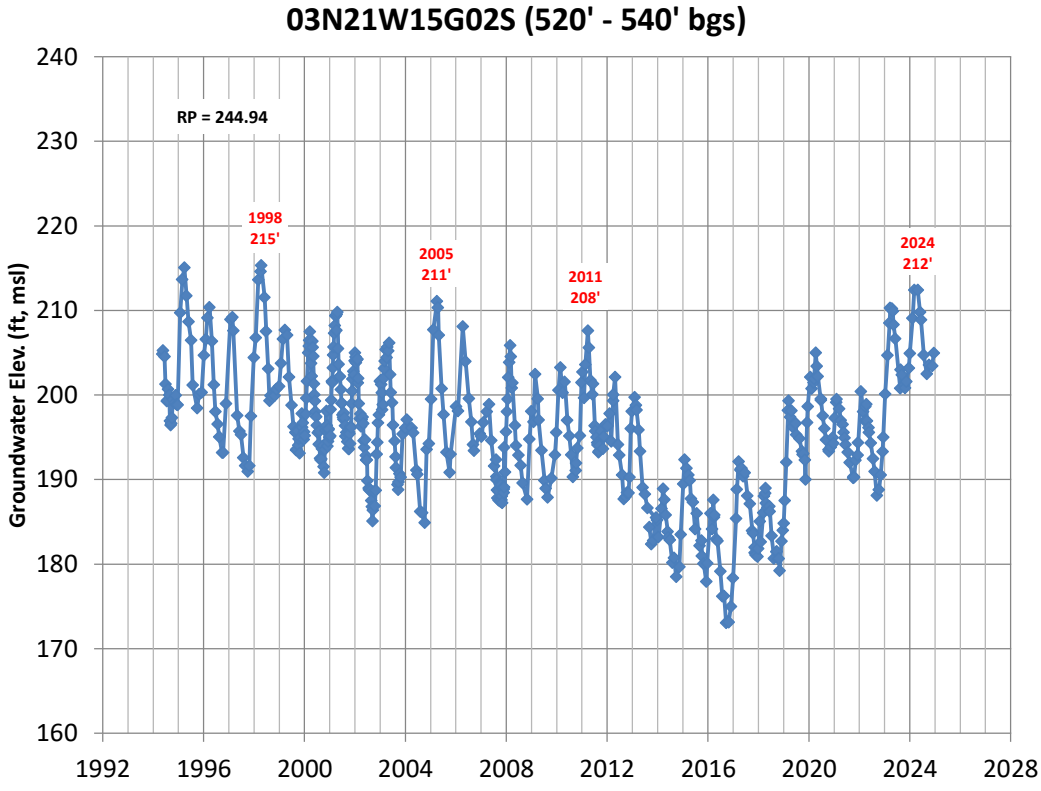

03N21W15C06S (452' - 653' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 245.8 FEET
TOP OF WELL SCREEN (-206')
1998
213'
2005
212'
2011
205'
2024
211'

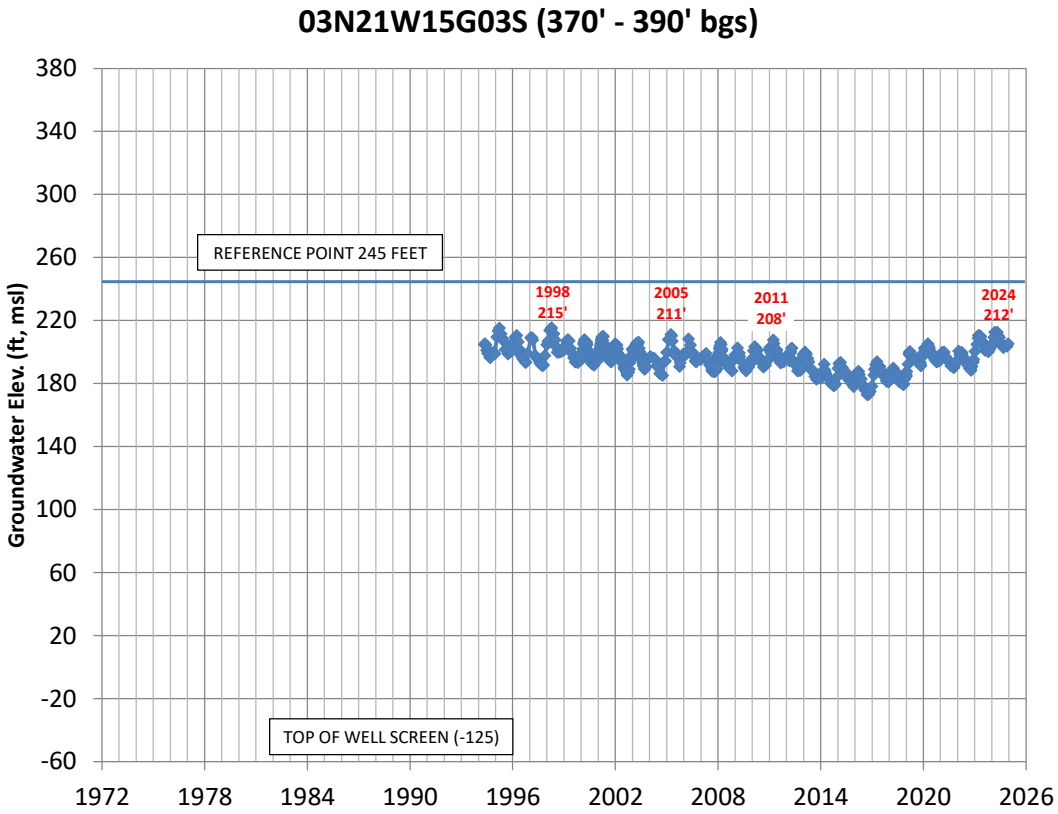

03N21W15C06S (452' - 653' bgs)
Groundwater Elev. (ft, msl)
230
220
210
200
190
180
170
160
150
1977
1982
1987
1992
1997
2002
2007
2012
2017
2022
2027
RP = 245.77
1998
213'
2005
212'
2011
205'
2024
211'

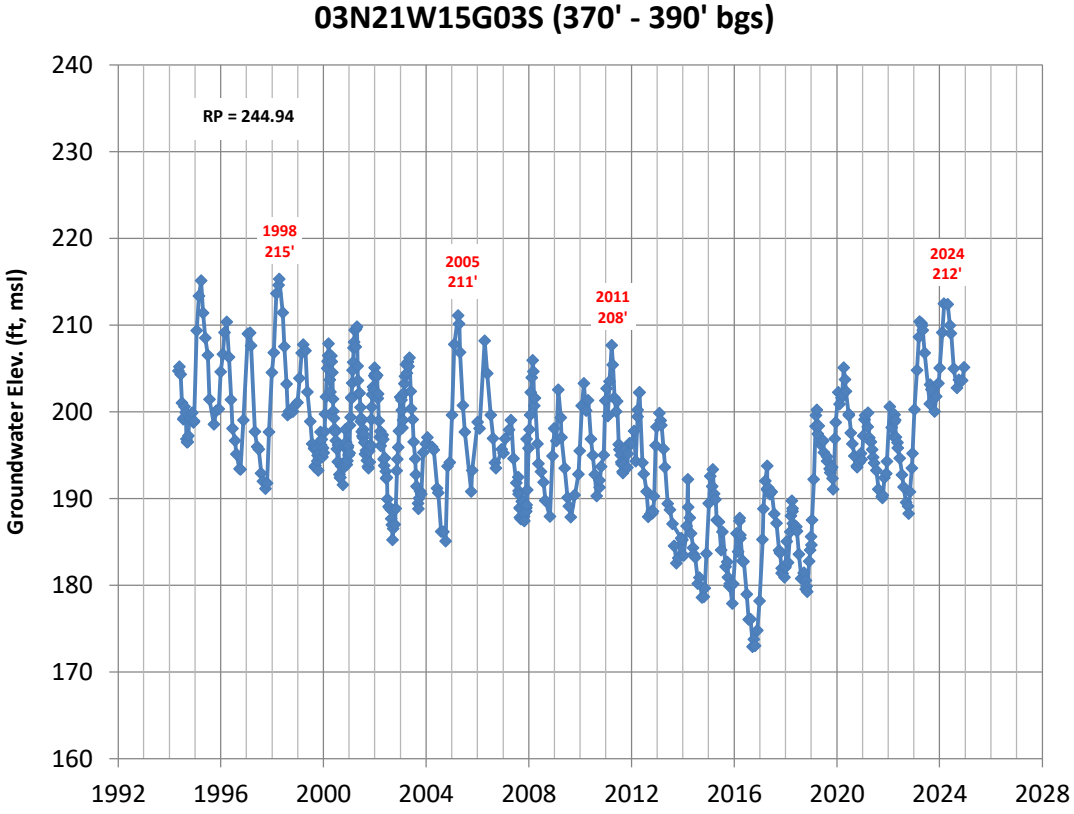

03N21W15G01S (660'-680' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 245 FEET
TOP OF WELL SCREEN (-415)
1998
215'
2005
211'
2011
208'
2024
213'

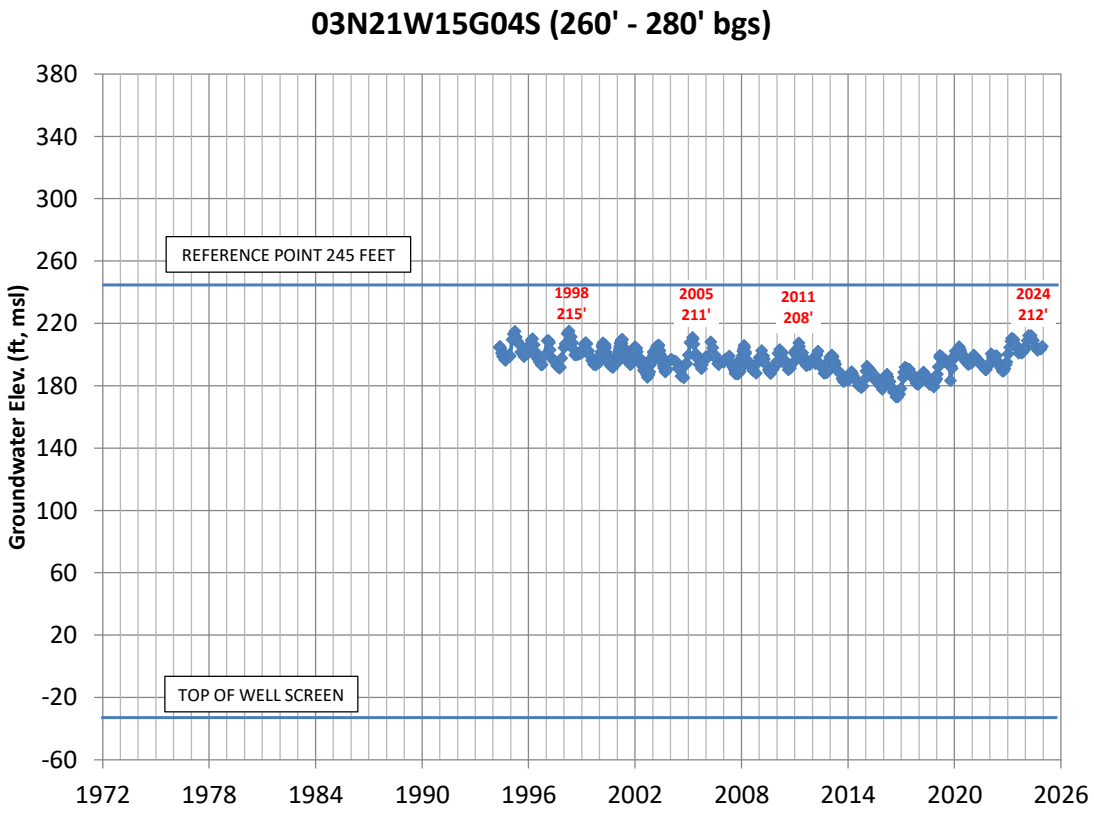

03N21W15G01S (660'-680' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1992
1996
2000
2004
2008
2012
2016
2020
2024
2028
RP = 244.94
1998
215'
2005
211'
2011
208'
2024
213'

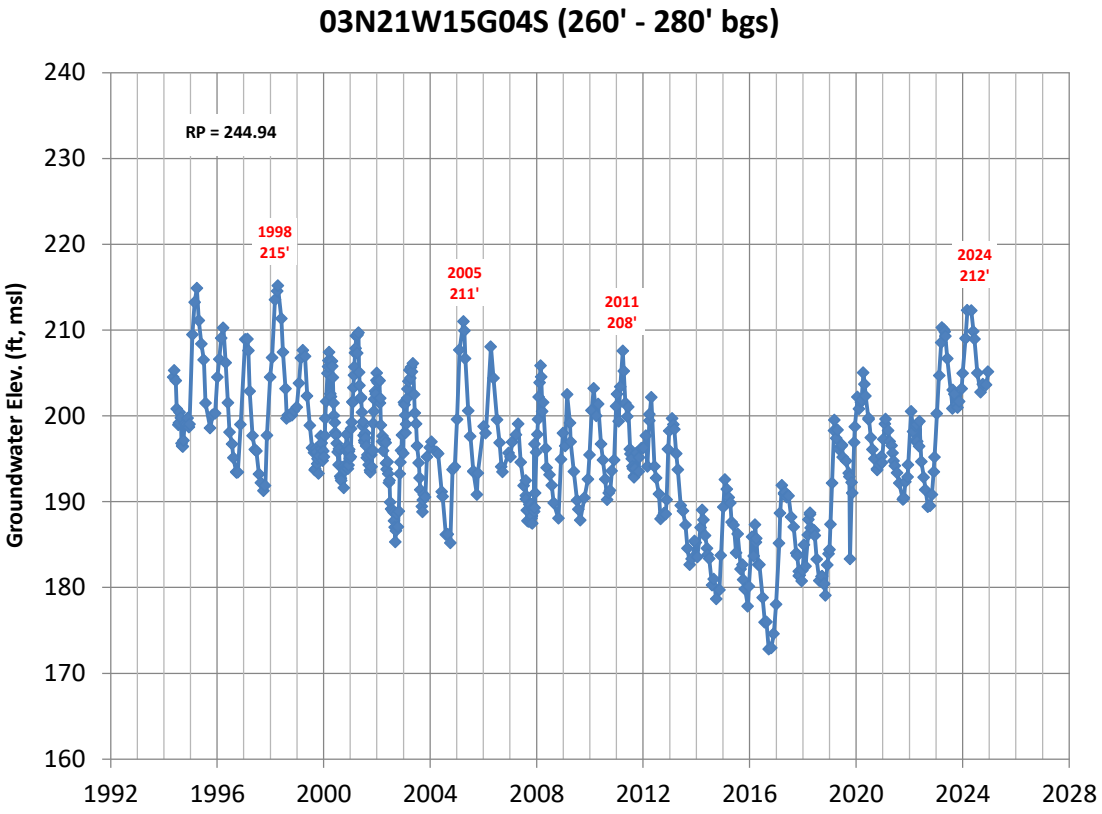

03N21W15G02S (520' - 540' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 245 FEET
TOP OF WELL SCREEN (-275)
1998
215'
2005
211'
2011
208'
2024
212'

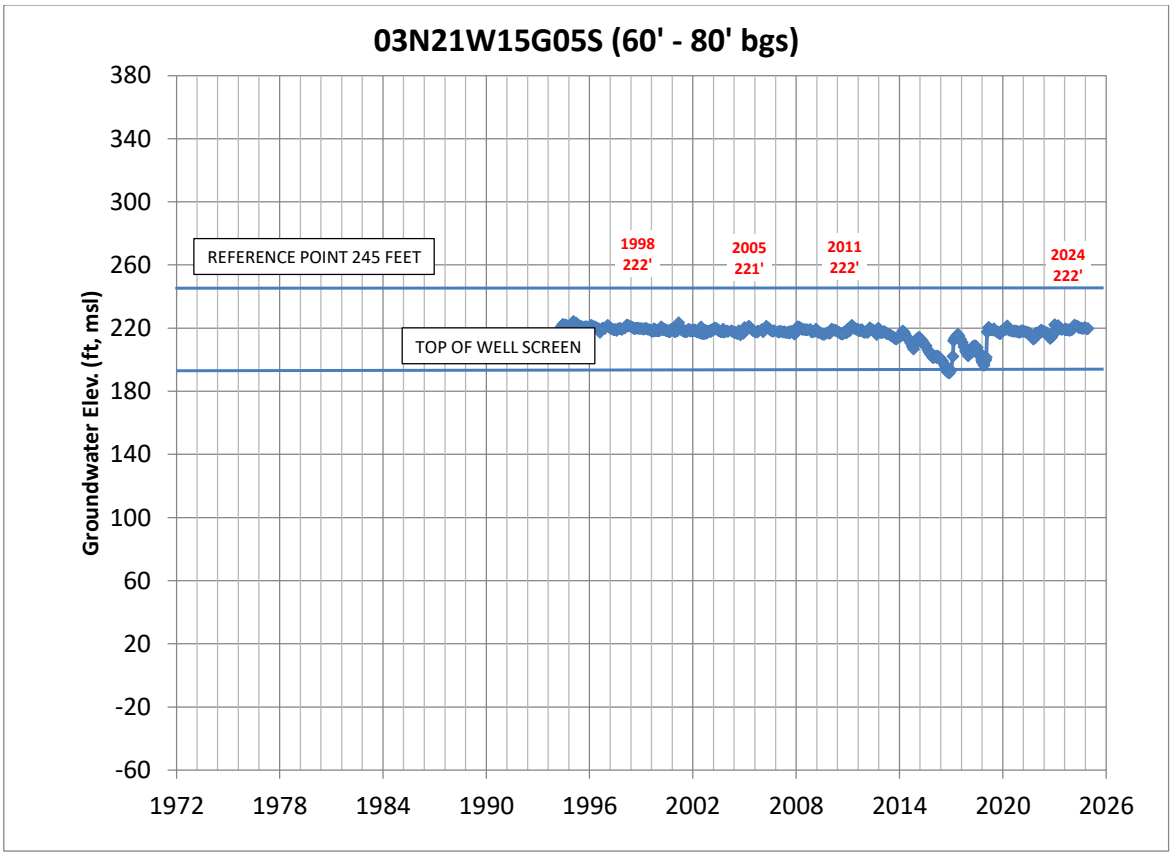

03N21W15G02S (520' - 540' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1992
1996
2000
2004
2008
2012
2016
2020
2024
2028
RP = 244.94
1998
215'
2005
211'
2011
208'
2024
212'

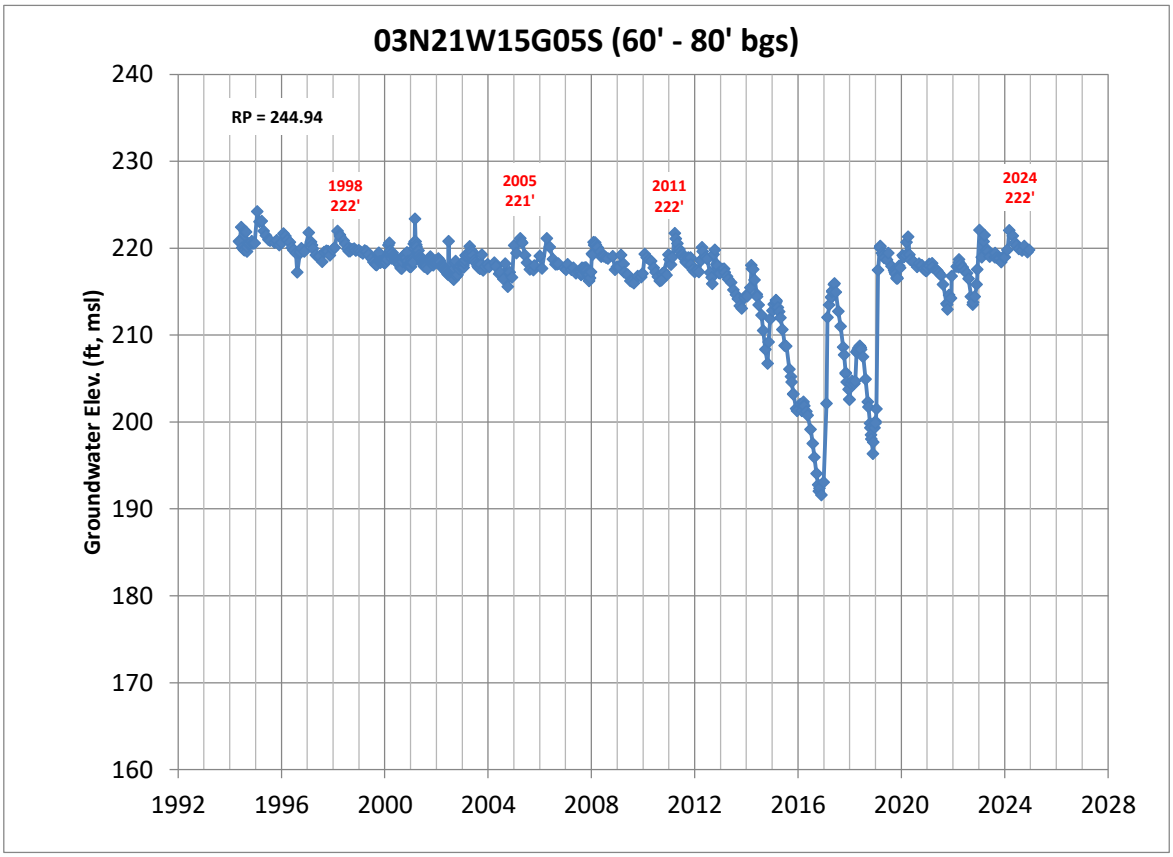

03N21W15G03S (370' - 390' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 245 FEET
TOP OF WELL SCREEN (-125)
1998
215'
2005
211'
2011
208'
2024
212'

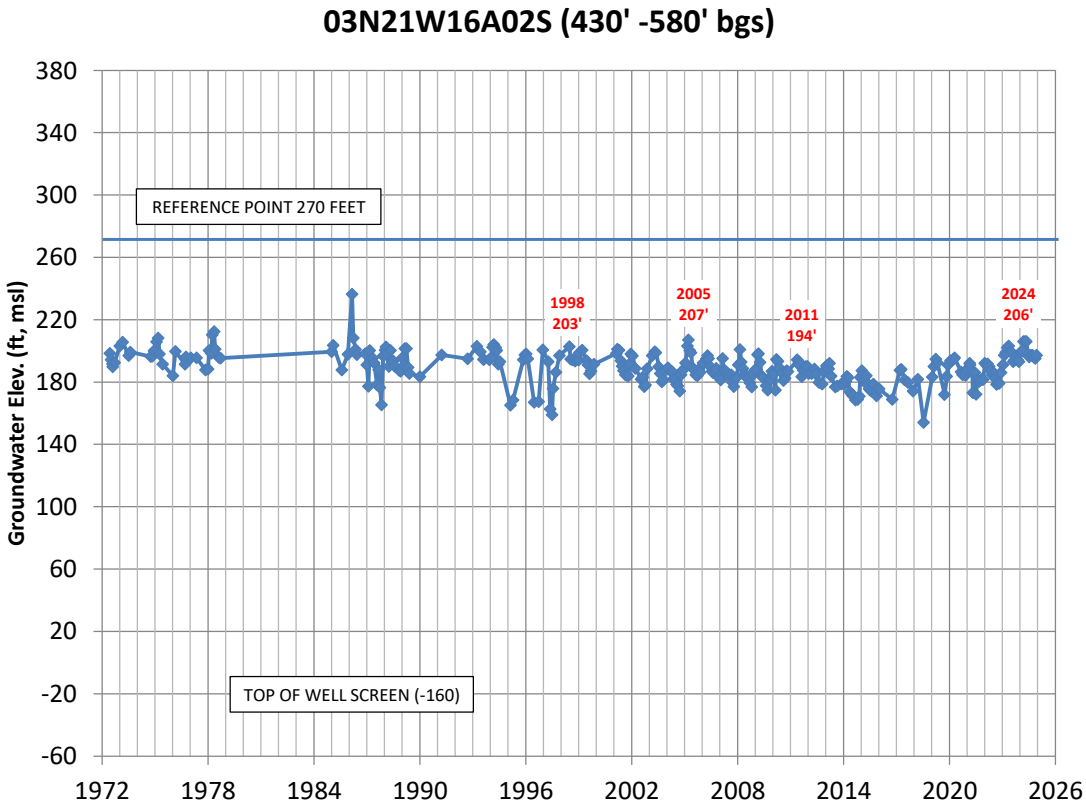

03N21W15G03S (370' - 390' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1992
1996
2000
2004
2008
2012
2016
2020
2024
2028
RP = 244.94
1998
215'
2005
211'
2011
208'
2024
212'

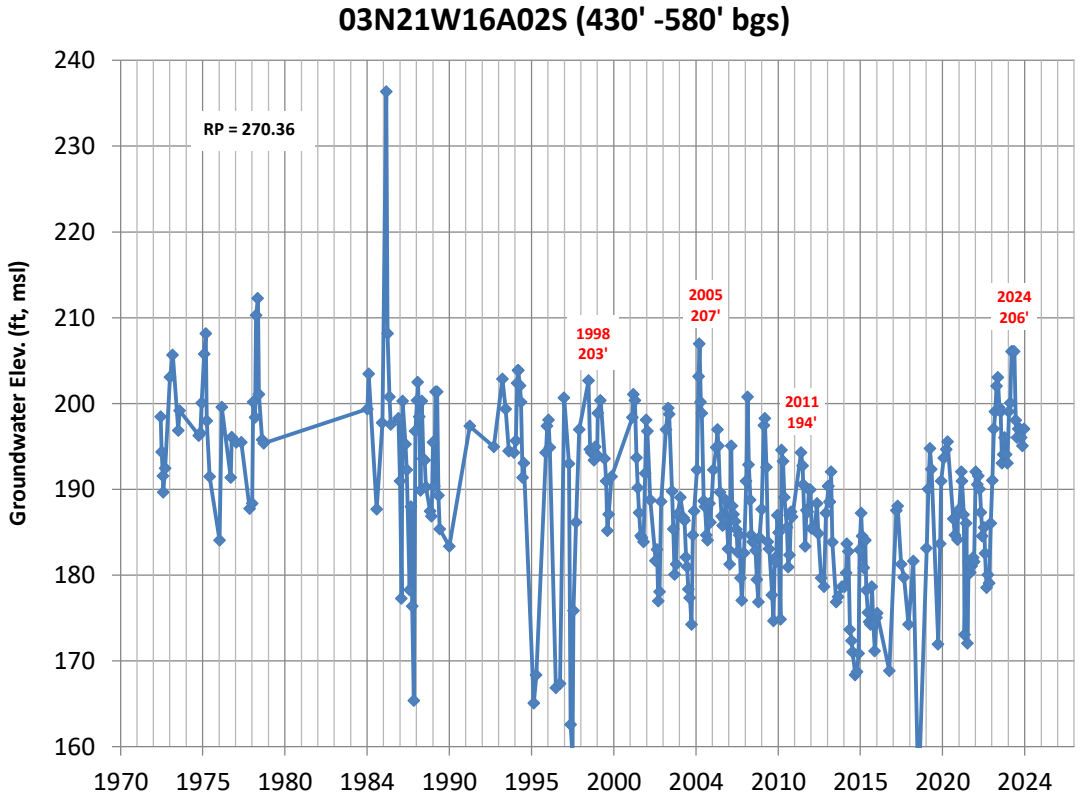

03N21W15G04S (260' - 280' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 245 FEET
TOP OF WELL SCREEN
1998
215'
2005
211'
2011
208'
2024
212'

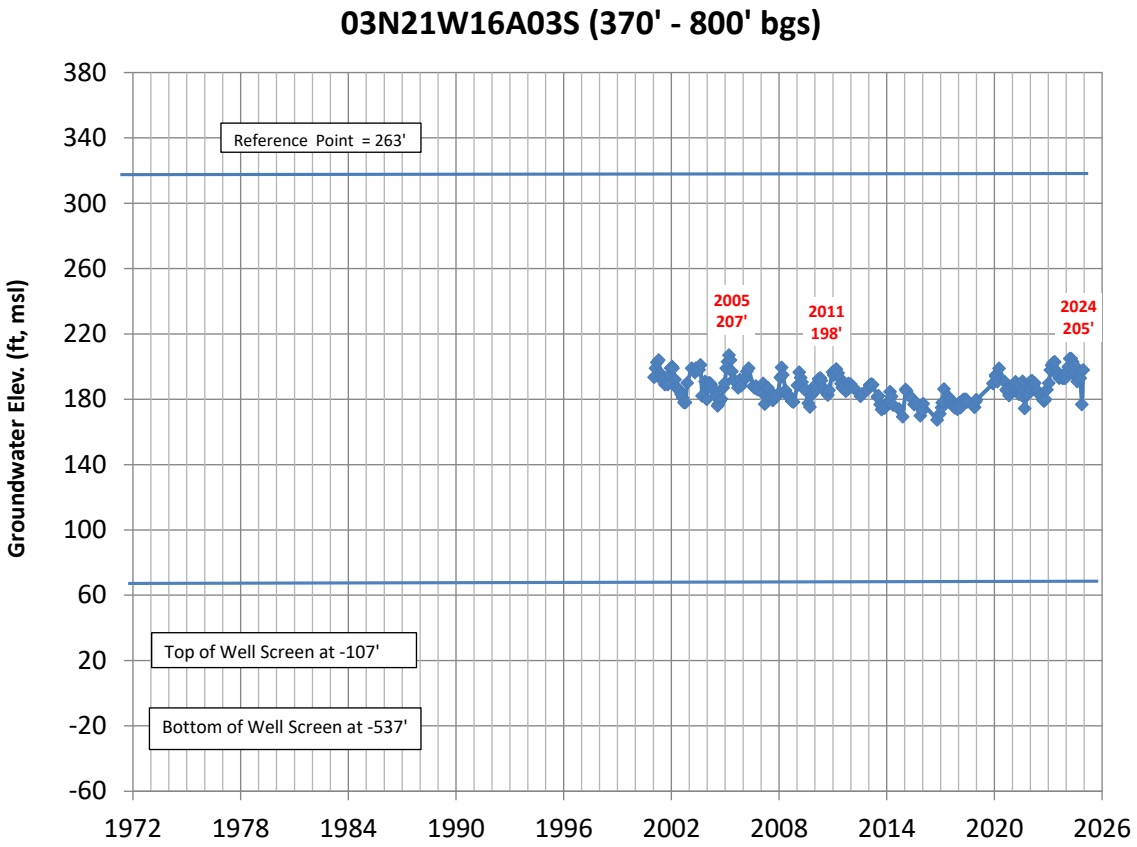

03N21W15G04S (260' - 280' bgs)
Groundwater Elev. (ft, msl)
240
230
220
210
200
190
180
170
160
1992
1996
2000
2004
2008
2012
2016
2020
2024
2028
RP = 244.94
1998
215'
2005
211'
2011
208'
2024
212'

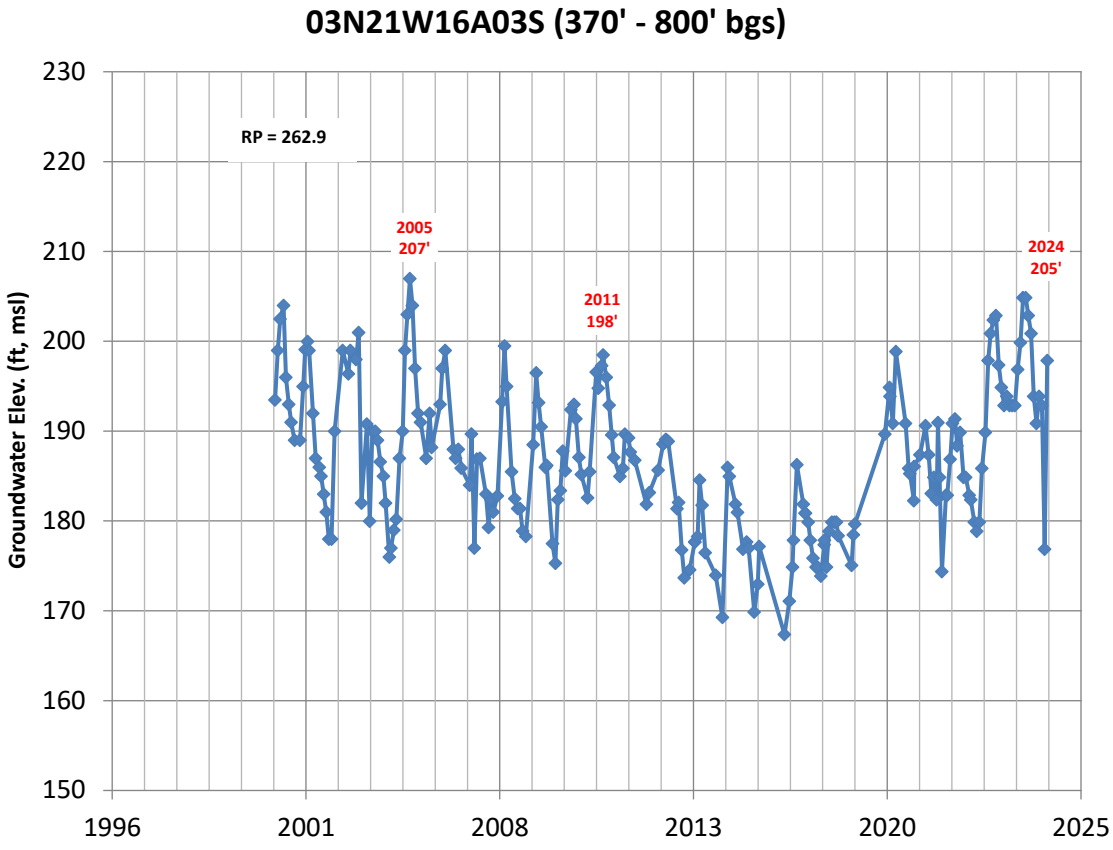

03N21W15G05S (60' - 80' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 245 FEET
TOP OF WELL SCREEN
1998
222'
2005
221'
2011
222'
2024
222'


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
2028
RP = 244.94
1998
222'
2005
221'
2011
222'
2024
222'

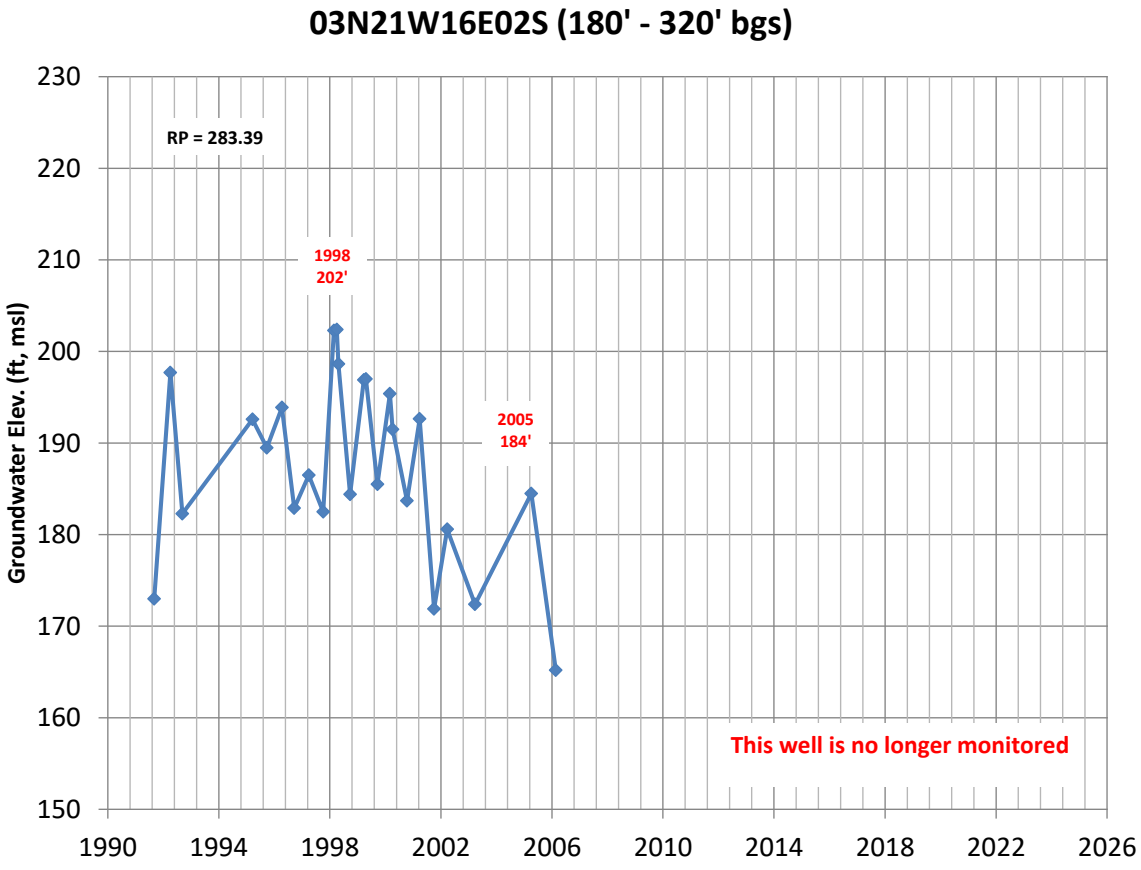

03N21W16A02S (430' -580' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 270 FEET
TOP OF WELL SCREEN (-160)
1998
203'
2005
207'
2011
194'
2024
206'


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'
2024
206'


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'
2024
205'


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'
2024
205'

Intentionally Left Blank



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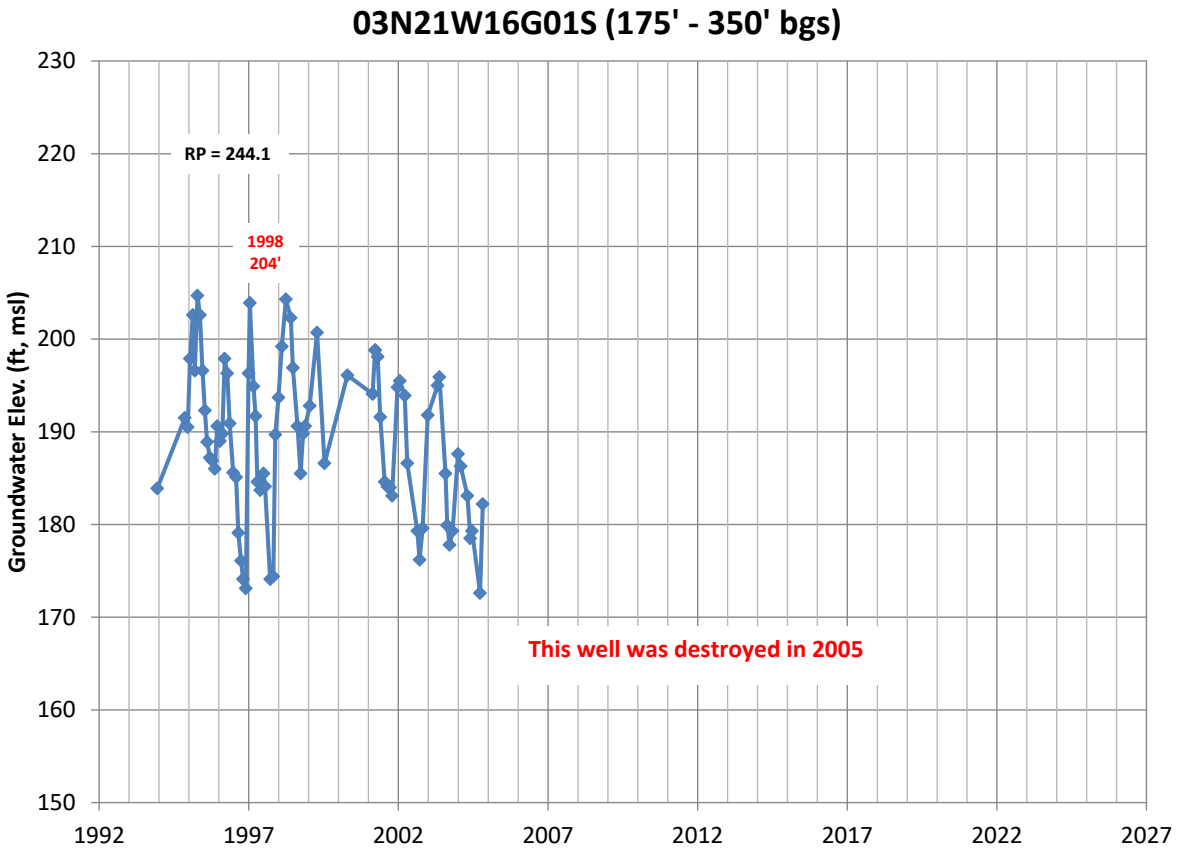
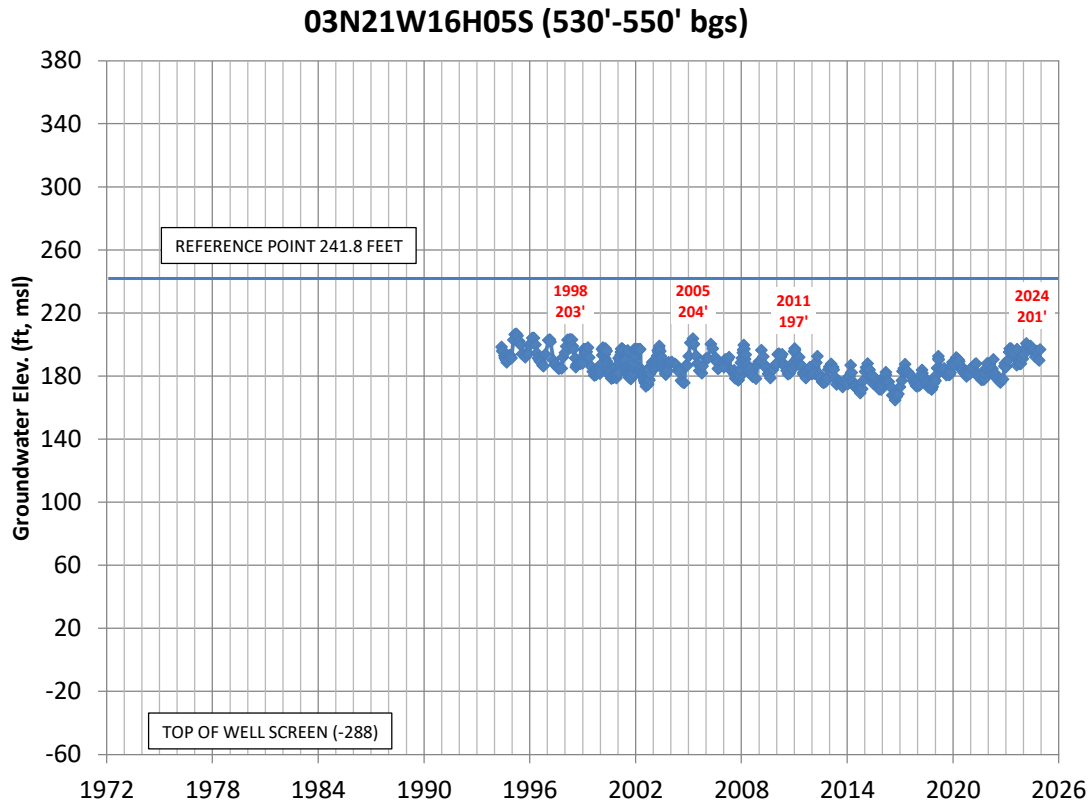
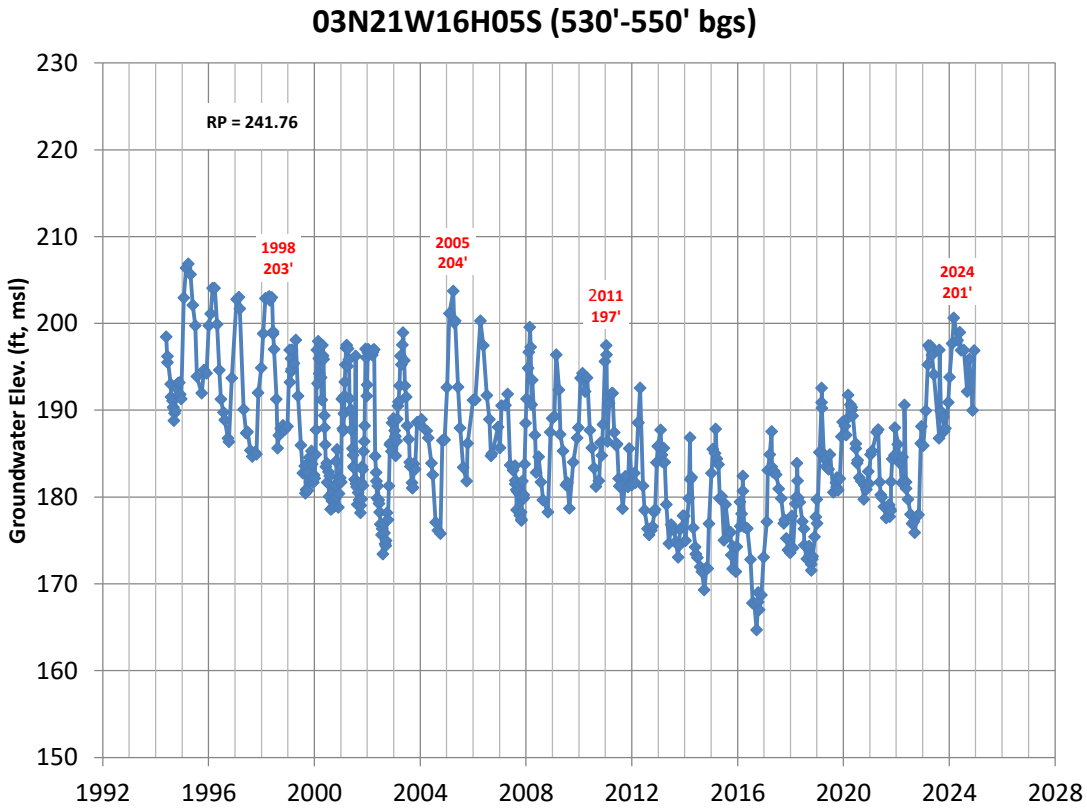
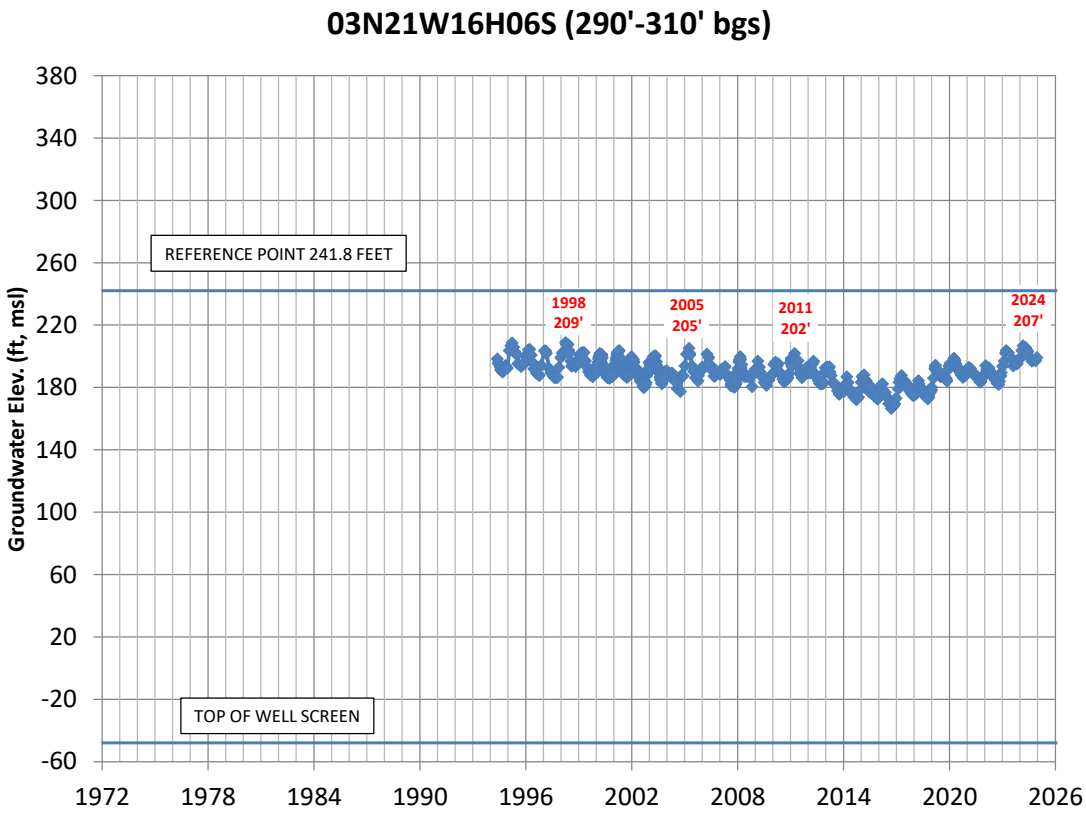
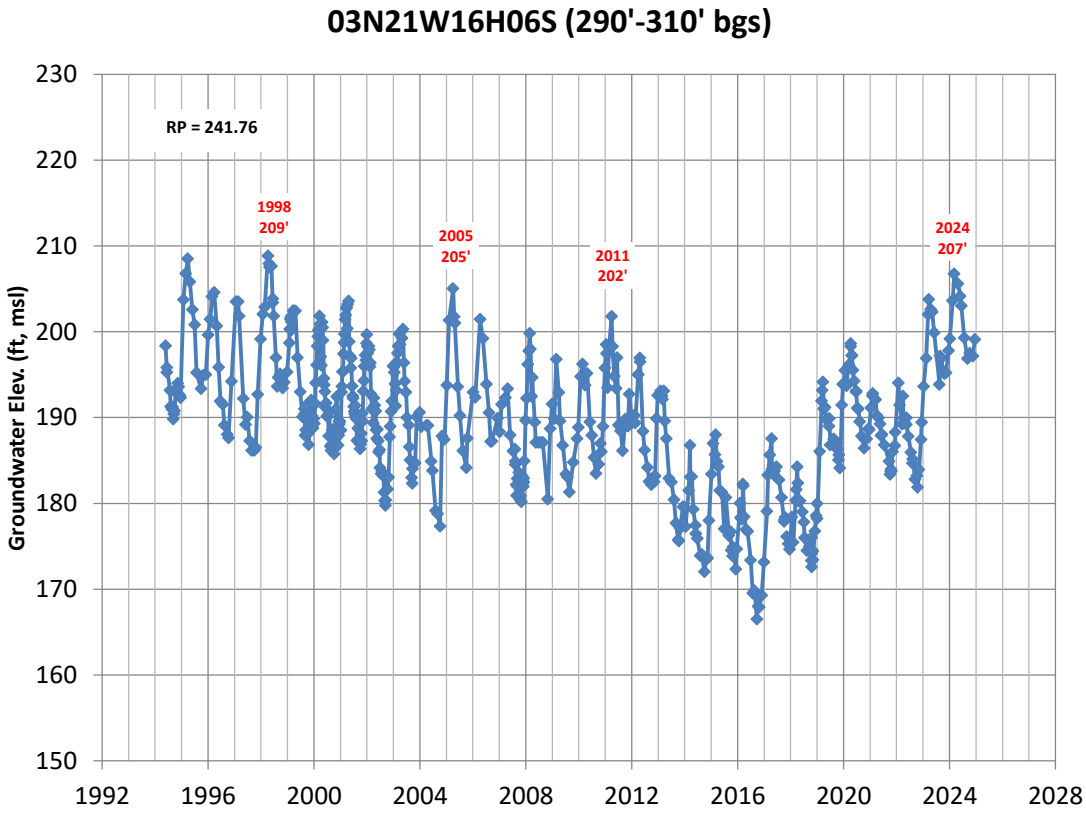
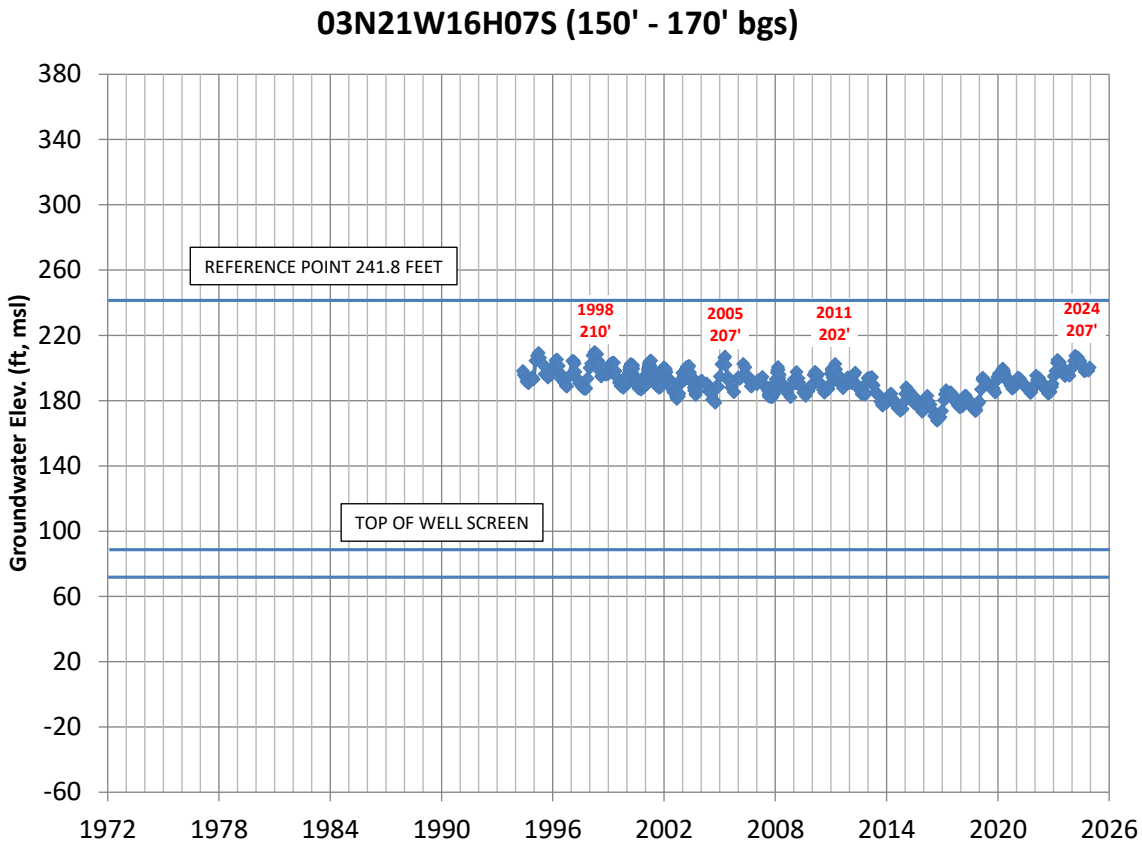


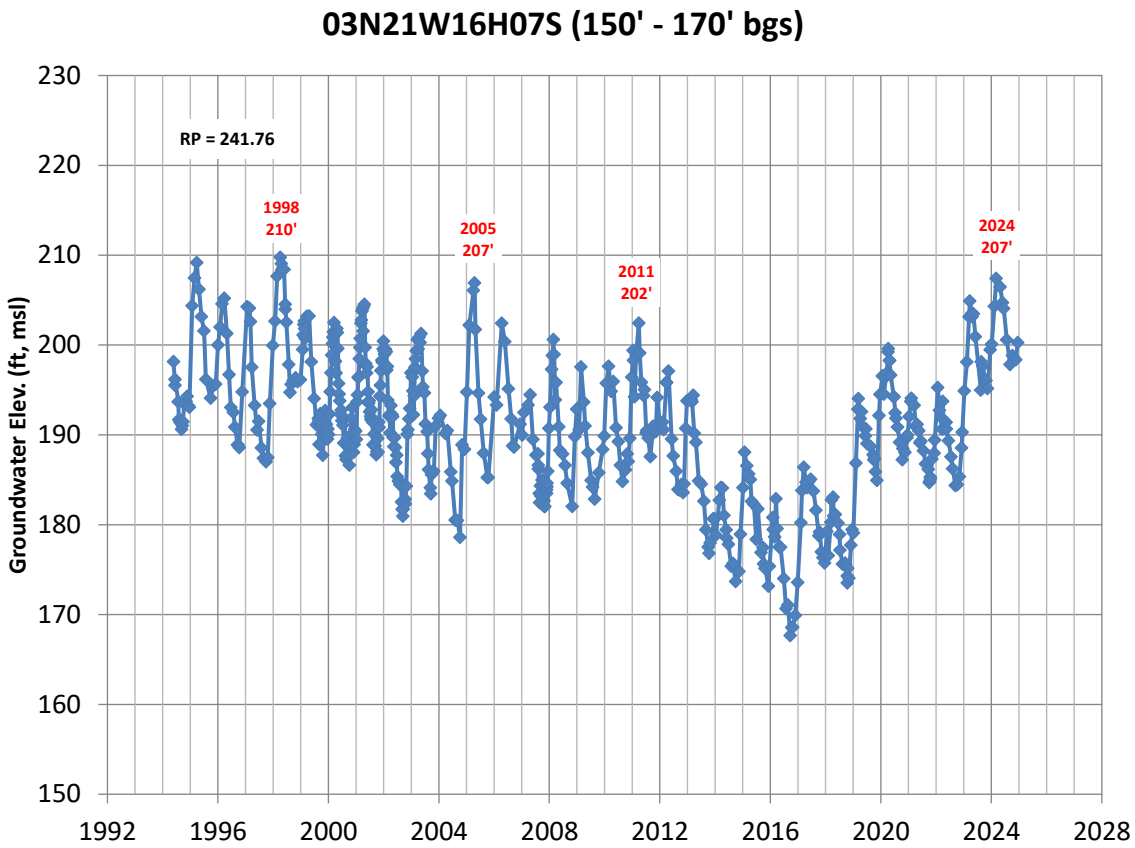

03N21W16H05S (530'-550' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 241.8 FEET
TOP OF WELL SCREEN (-288)
1998
203'
2005
204'
2011
197'
2024
201'

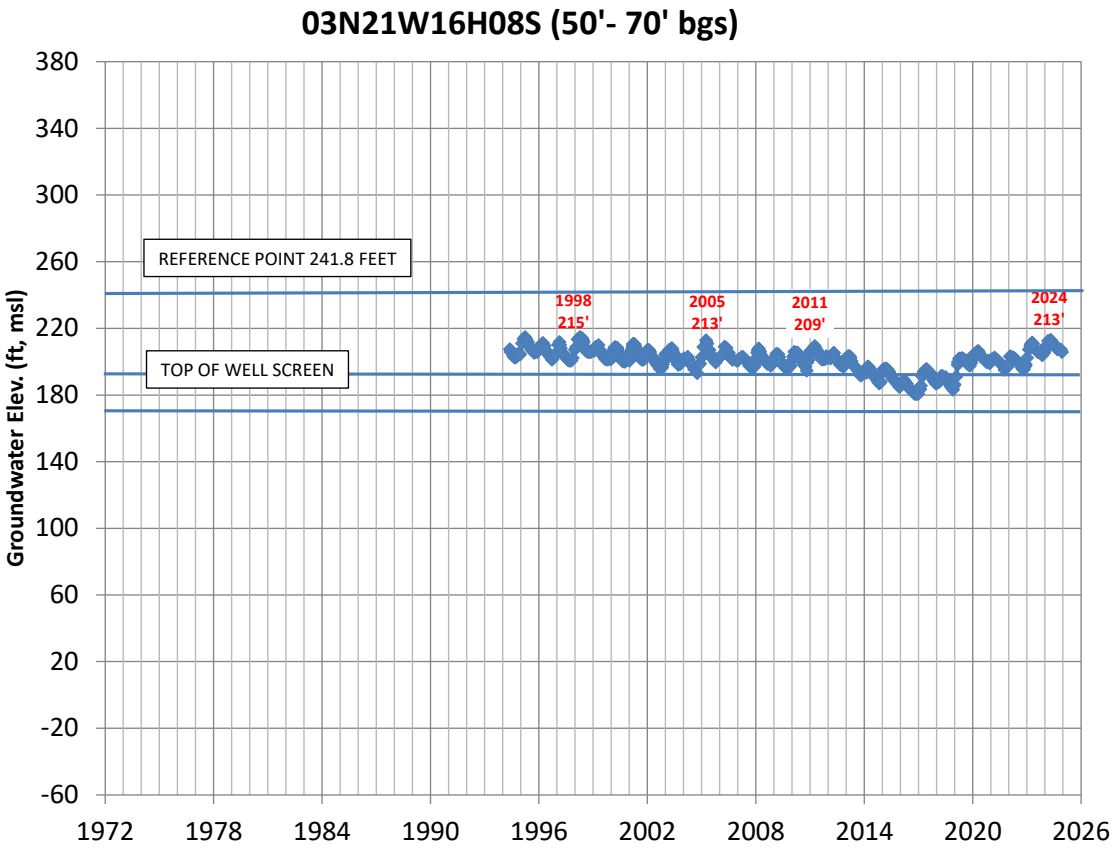

03N21W16H05S (530'-550' bgs)
Groundwater Elev. (ft, msl)
230
220
210
200
190
180
170
160
150
1992
1996
2000
2004
2008
2012
2016
2020
2024
2028
RP = 241.76
1998
203'
2005
204'
2011
197'
2024
201'

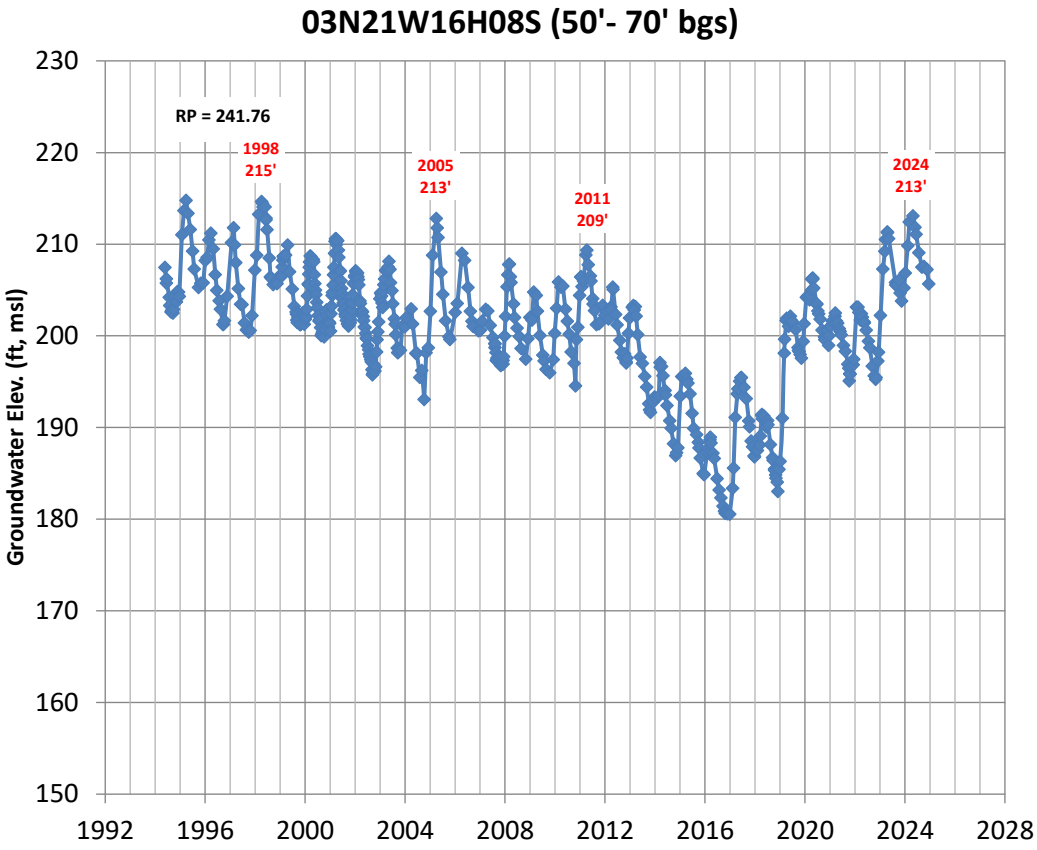

03N21W16H06S (290'-310' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 241.8 FEET
TOP OF WELL SCREEN
1998
209'
2005
205'
2011
202'
2024
207'

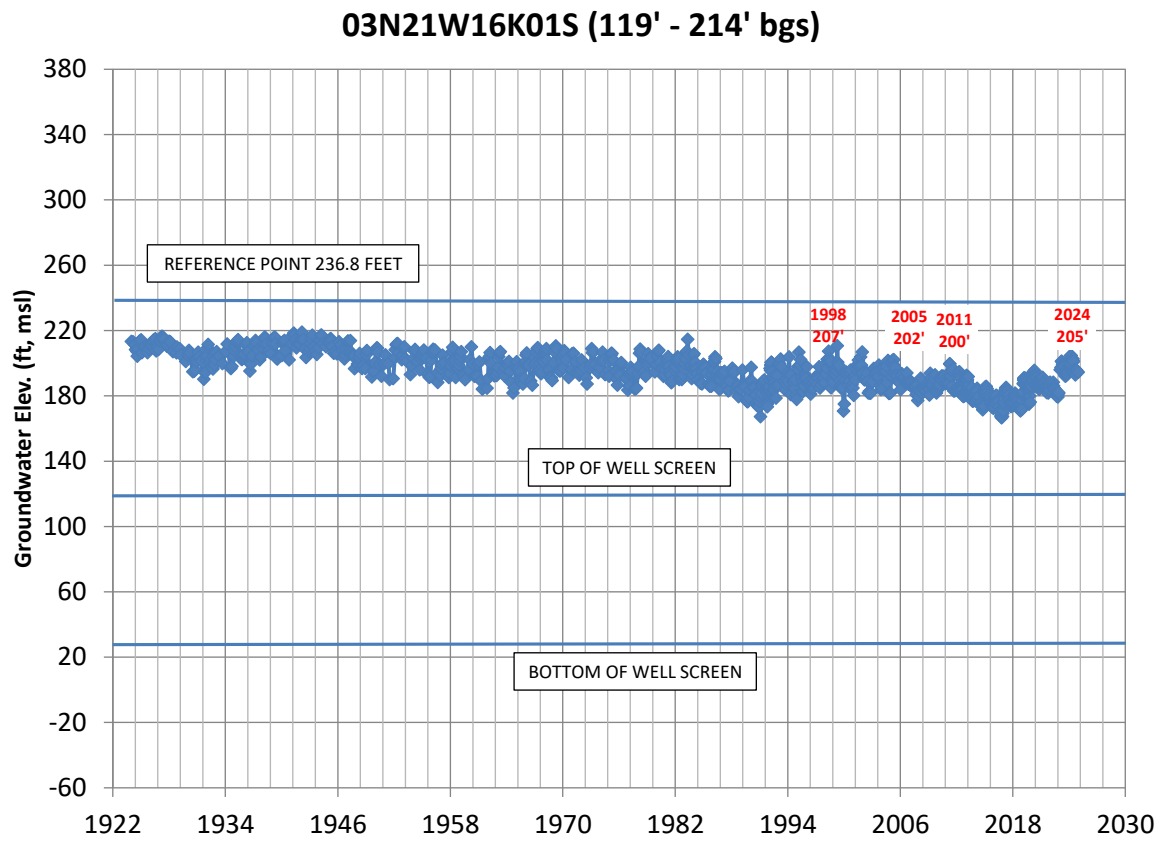

03N21W16H06S (290'-310' bgs)
Groundwater Elev. (ft, msl)
230
220
210
200
190
180
170
160
150
1992
1996
2000
2004
2008
2012
2016
2020
2024
2028
RP = 241.76
1998
209'
2005
205'
2011
202'
2024
207'

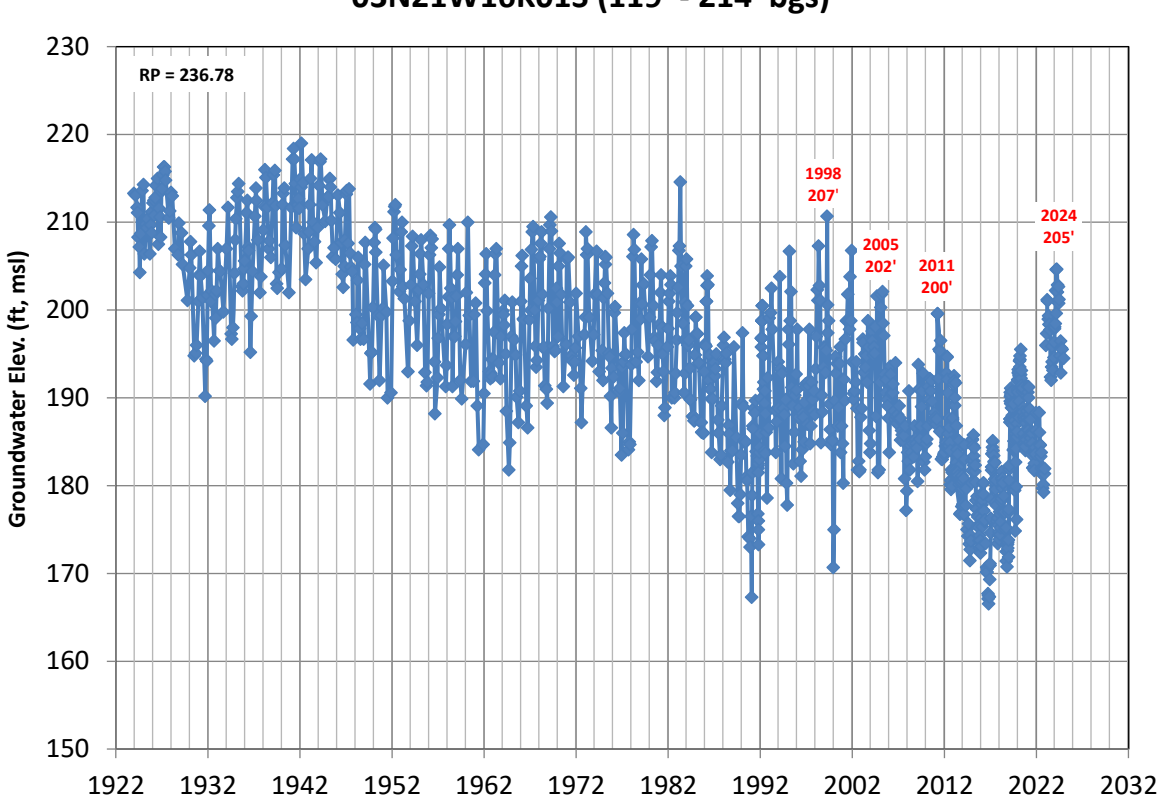

03N21W16H07S (150' - 170' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 241.8 FEET
TOP OF WELL SCREEN
1998
210'
2005
207'
2011
202'
2024
207'


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
2028
RP = 241.76
1998
210'
2005
207'
2011
202'
2024
207'

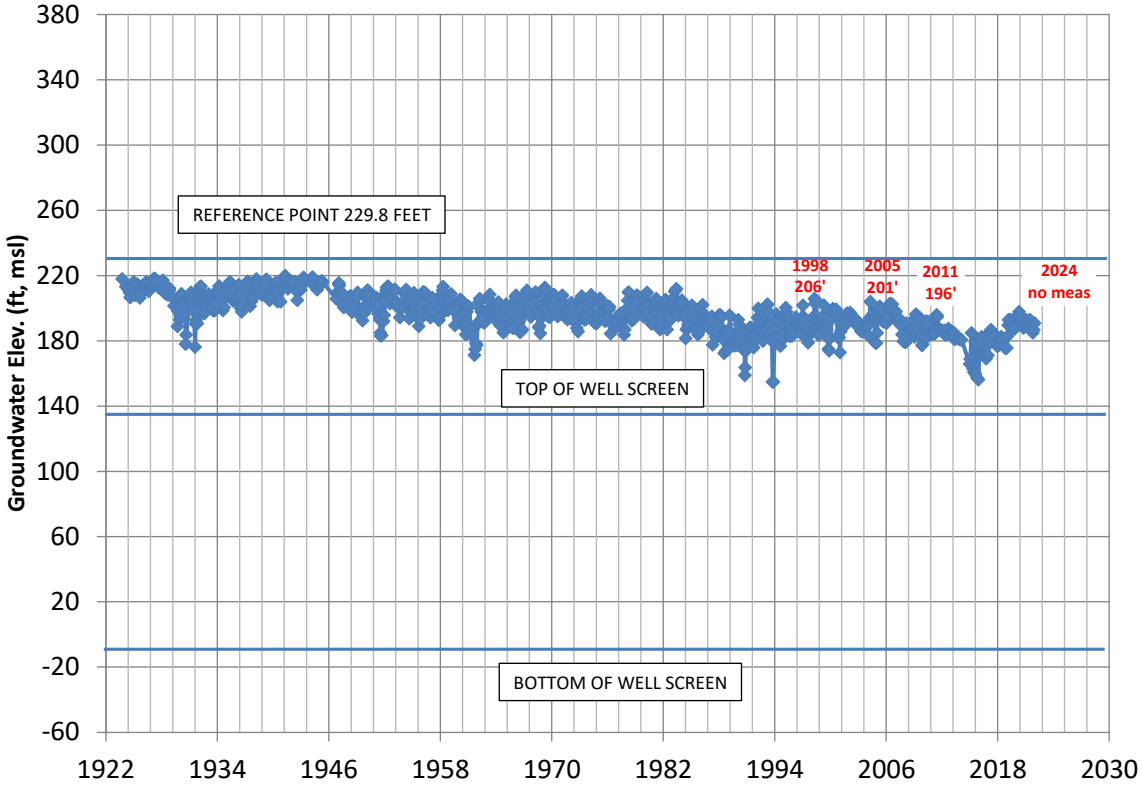

03N21W16H08S (50'- 70' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 241.8 FEET
TOP OF WELL SCREEN
1998
215'
2005
213'
2011
209'
2024
213'


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
2028
RP = 241.76
1998
215'
2005
213'
2011
209'
2024
213'

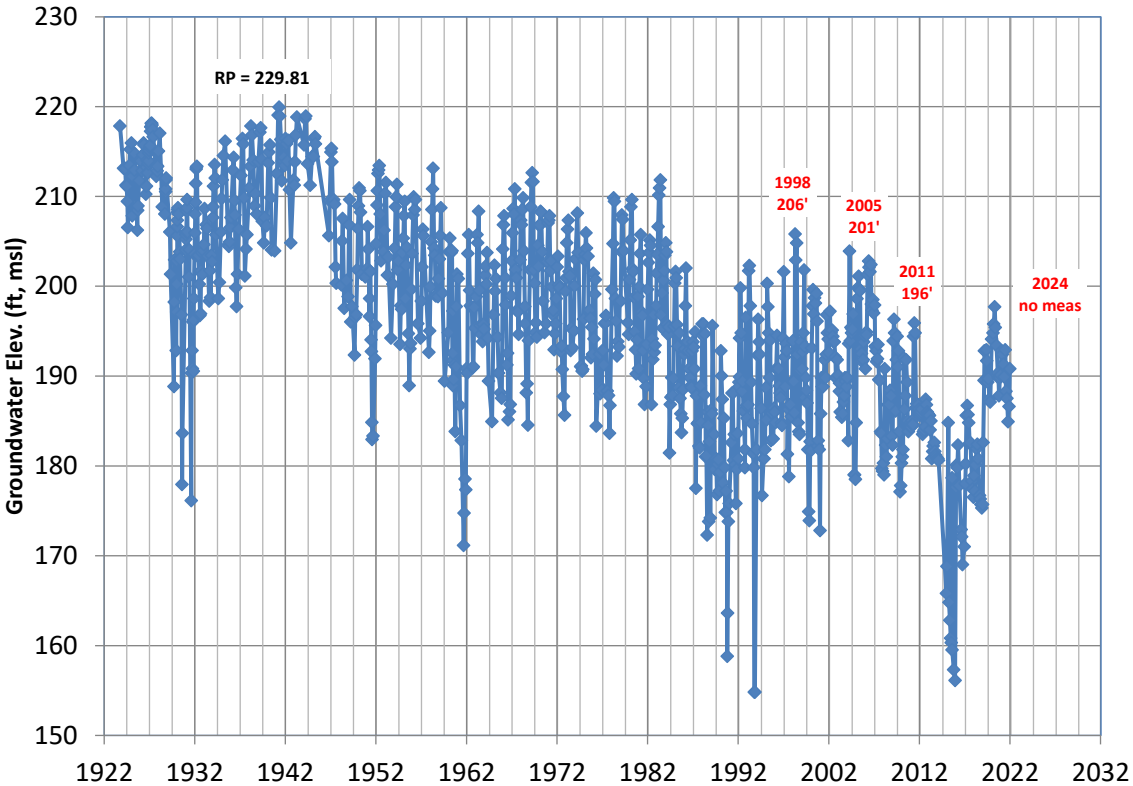

03N21W16K01S (119' - 214' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1922
1934
1946
1958
1970
1982
1994
2006
2018
2030
REFERENCE POINT 236.8 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
1998
207'
2005
202'
2011
200'
2024
205'


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'
2024
205'

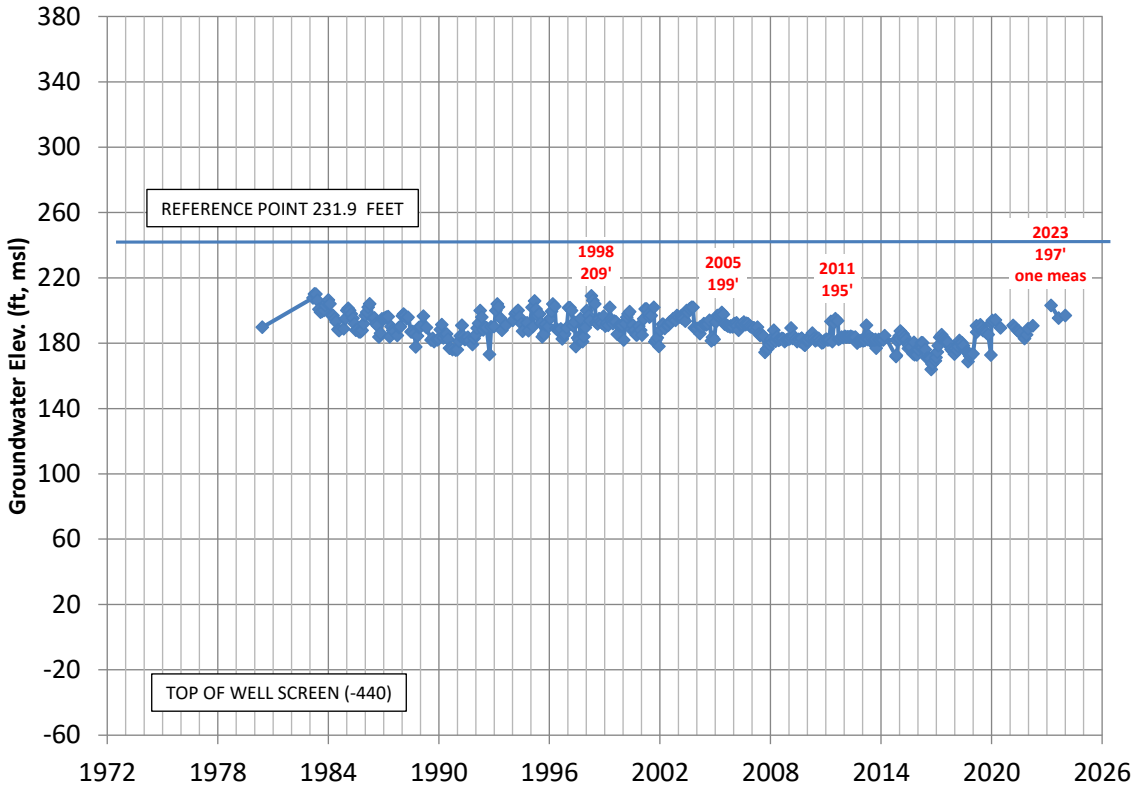
03N21W16K02S (92' - 243' bgs)



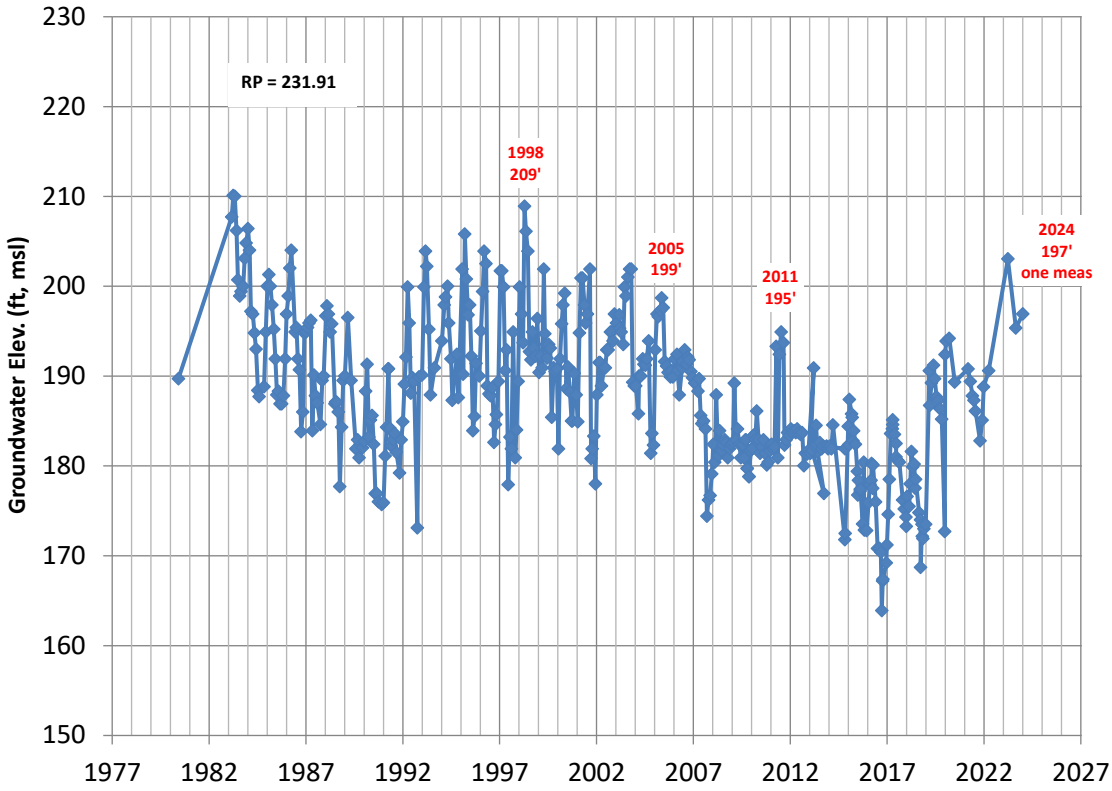
03N21W16K02S (92' - 243' bgs)

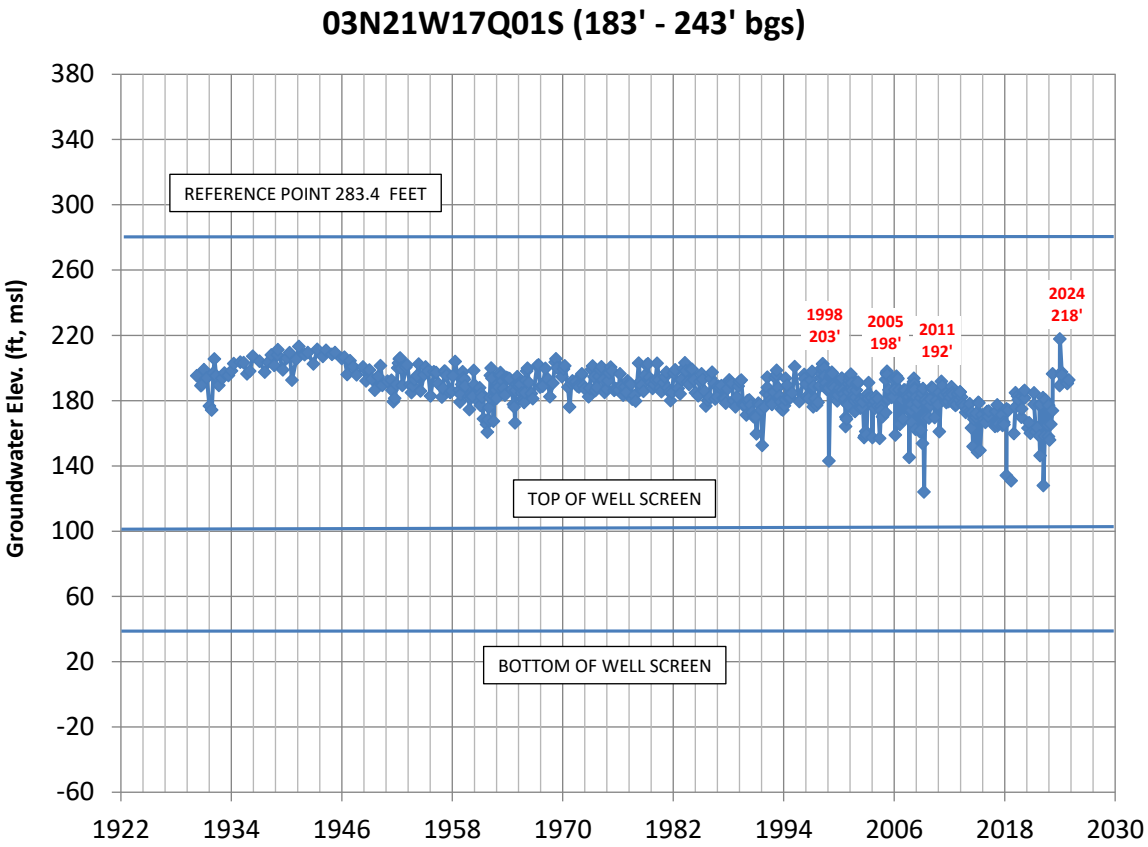


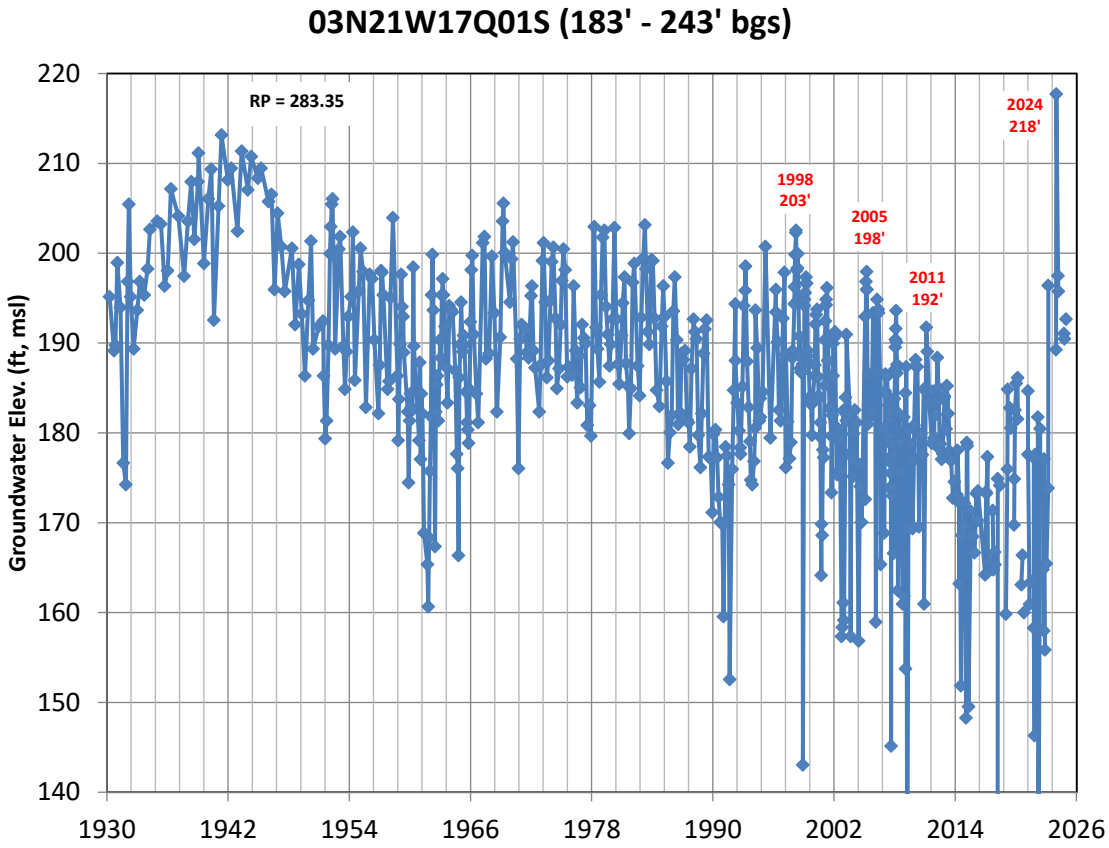
03N21W16K03S (672' - 760' bgs)



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'
2024
218'


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'
2024
218'

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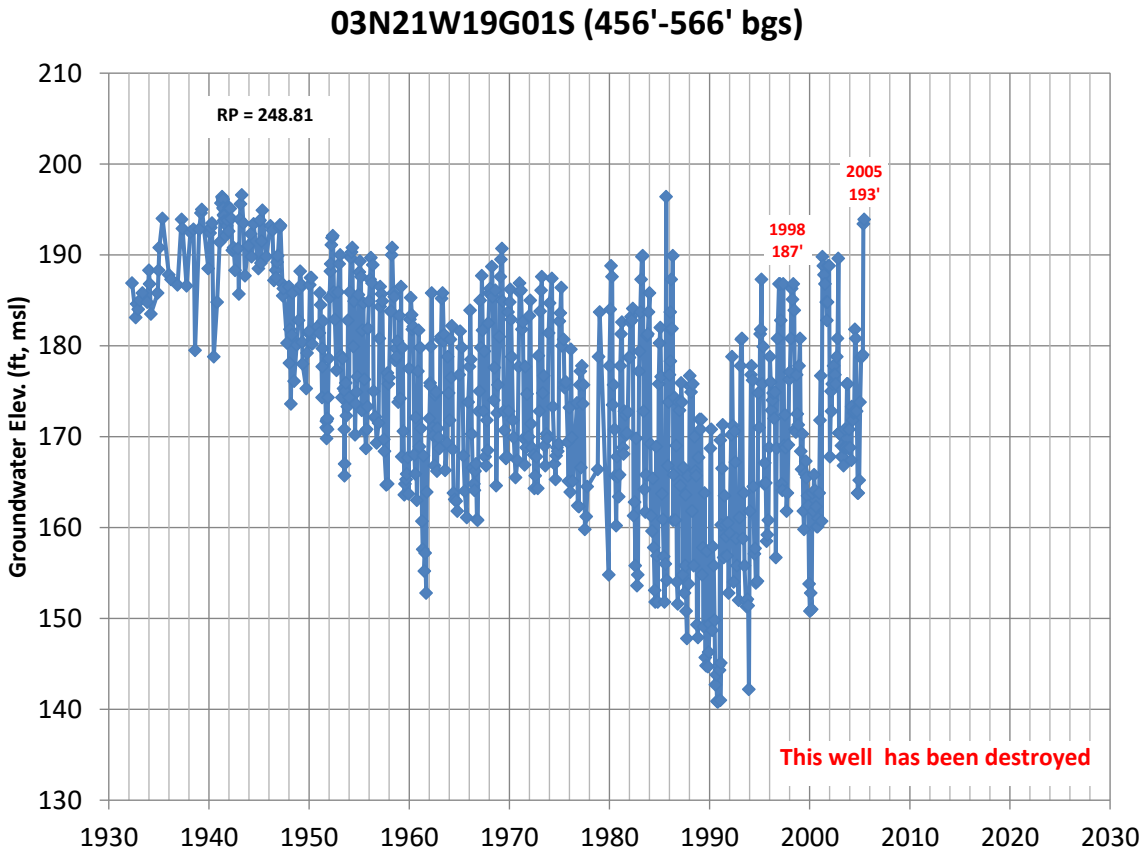
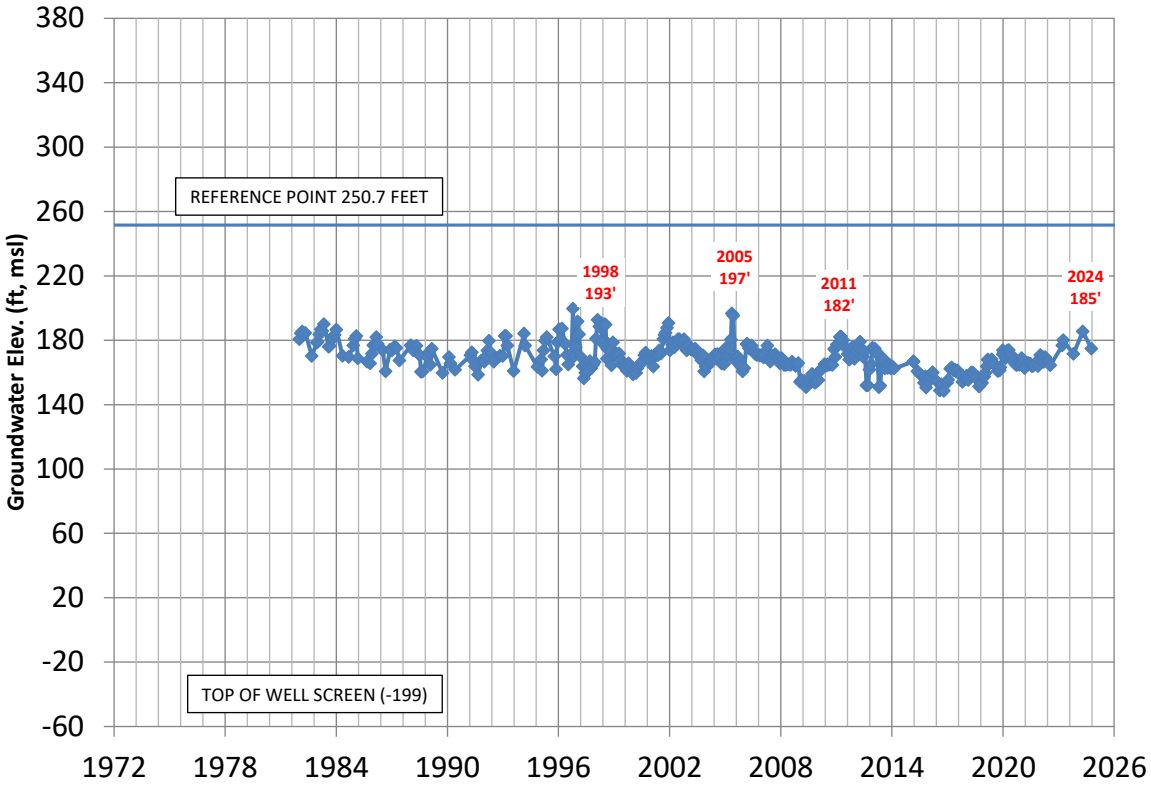
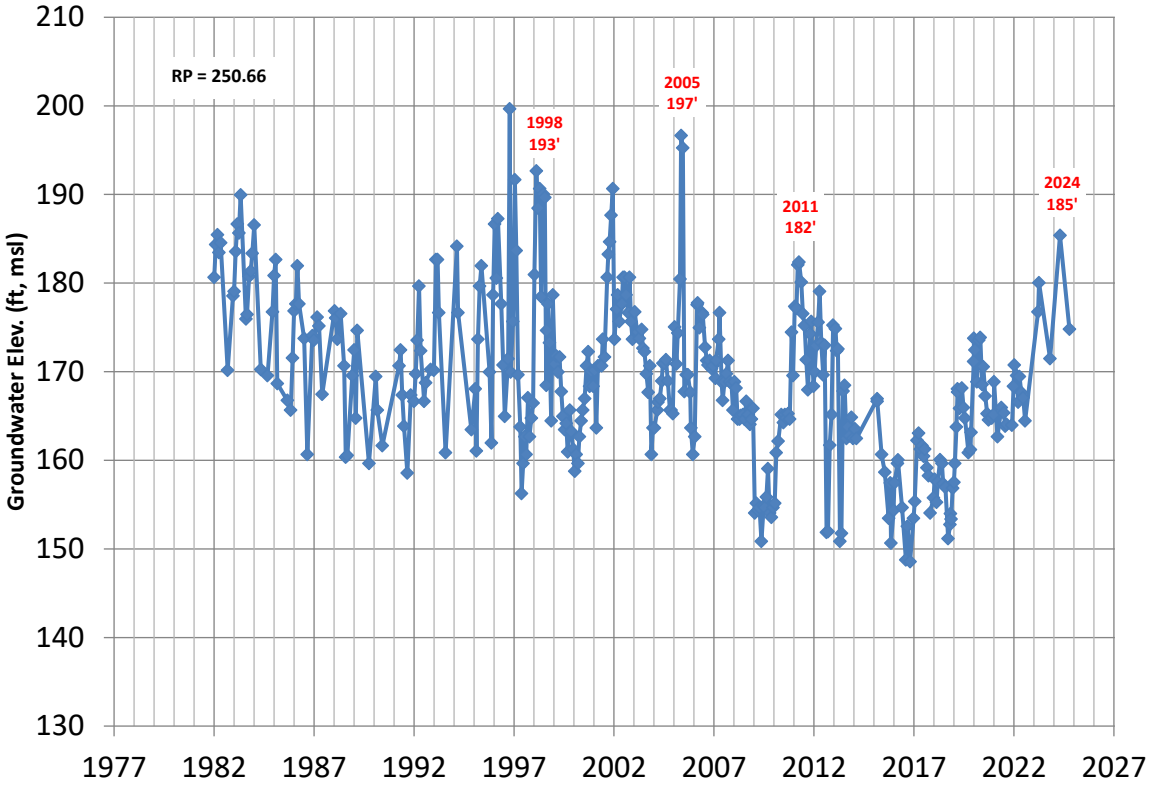


03N21W19G04S (450' - 720' bgs)



03N21W19G04S (450' - 720' bgs)



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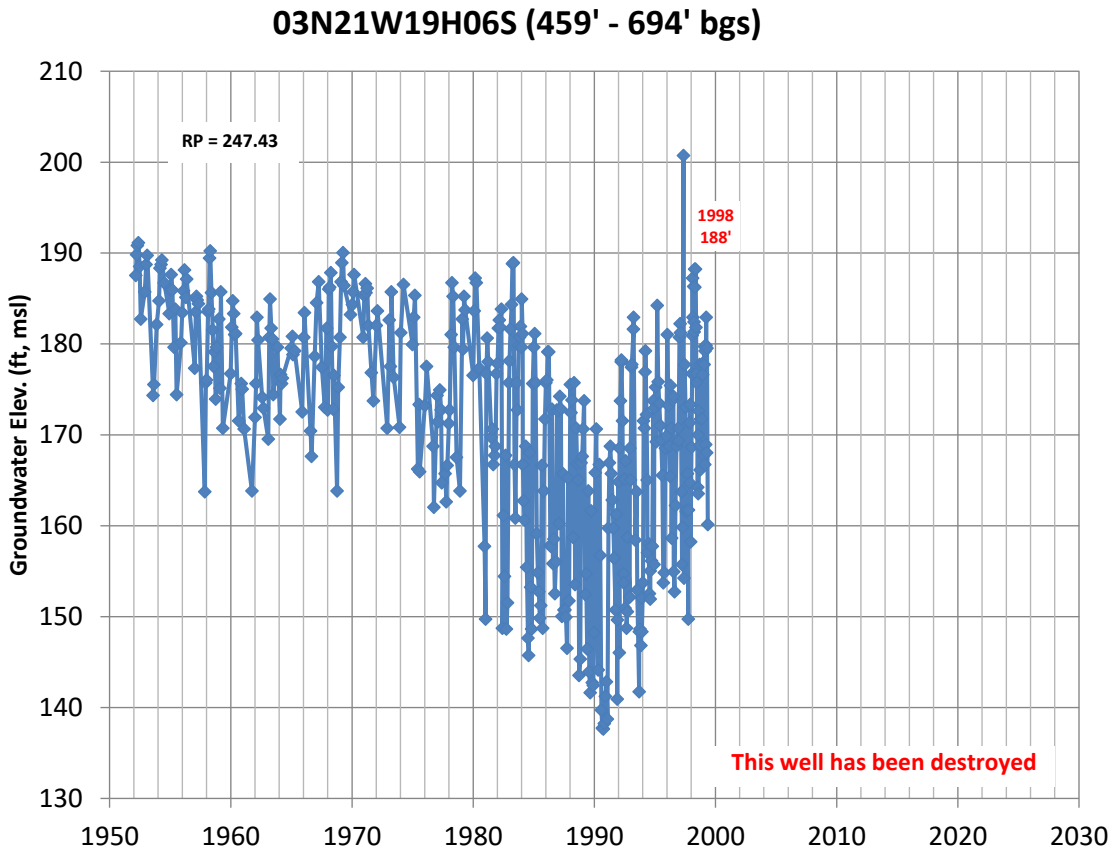
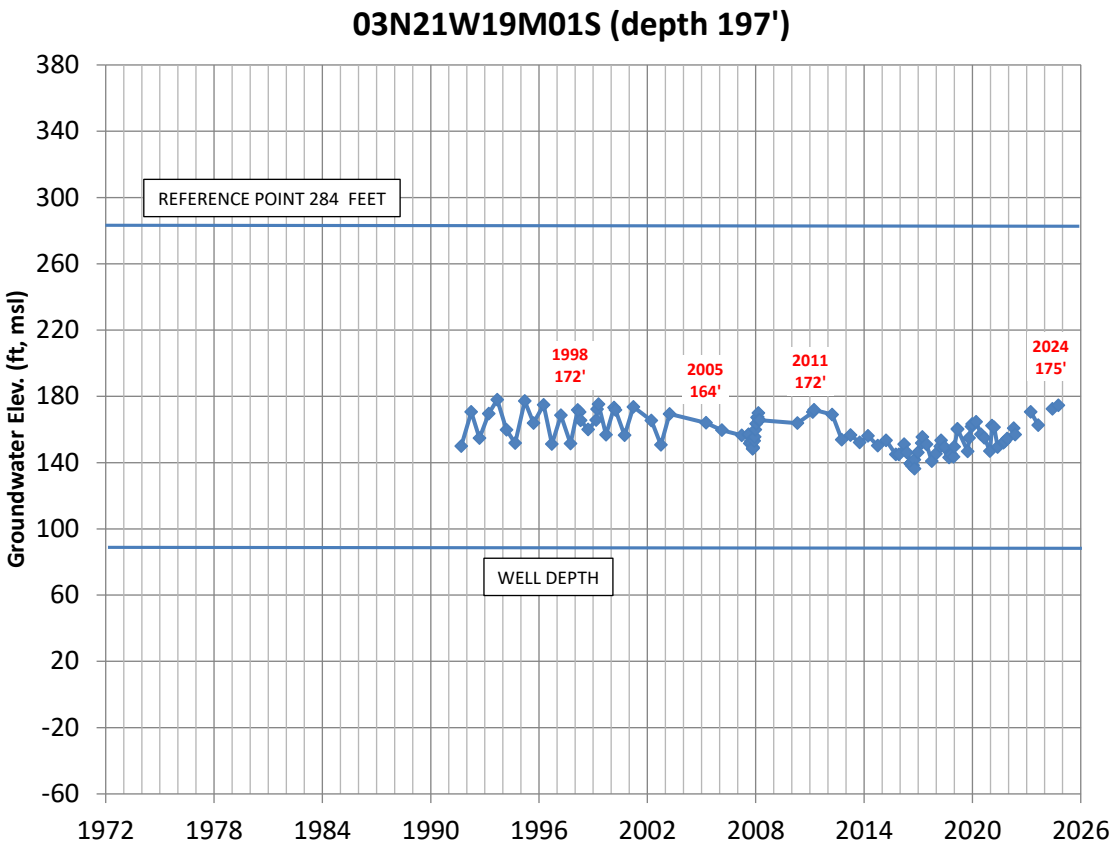
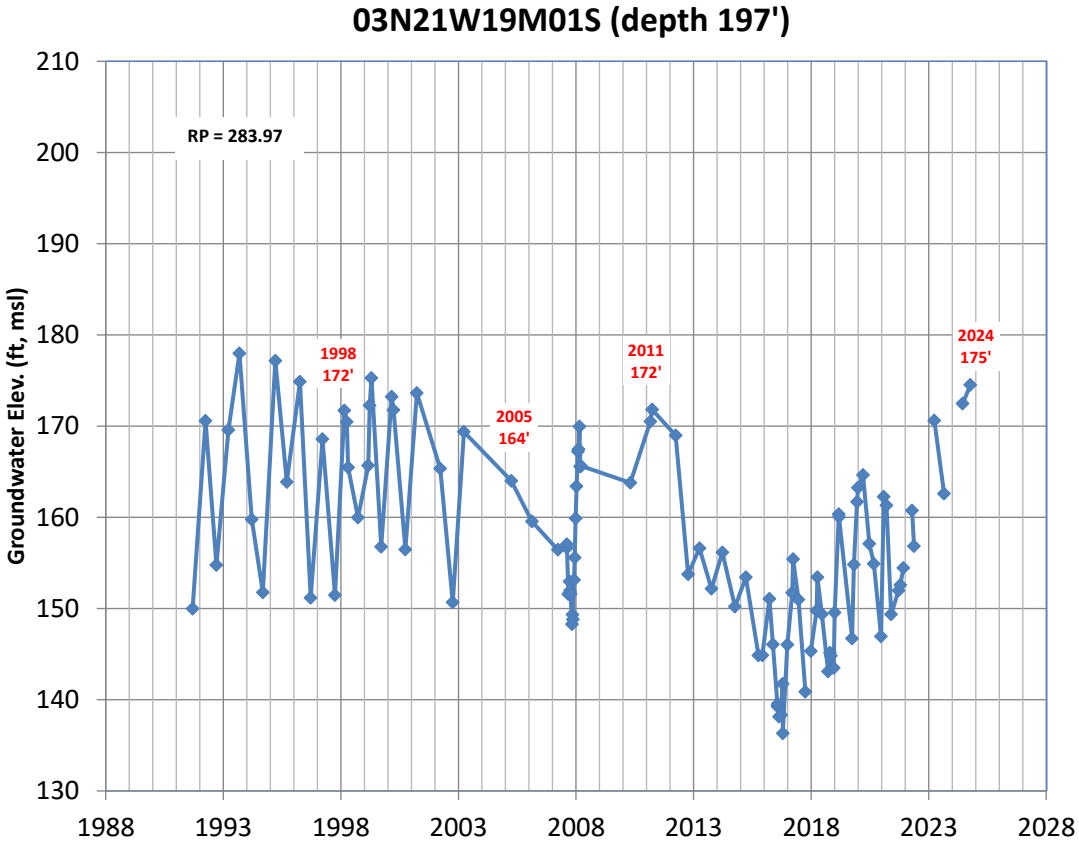
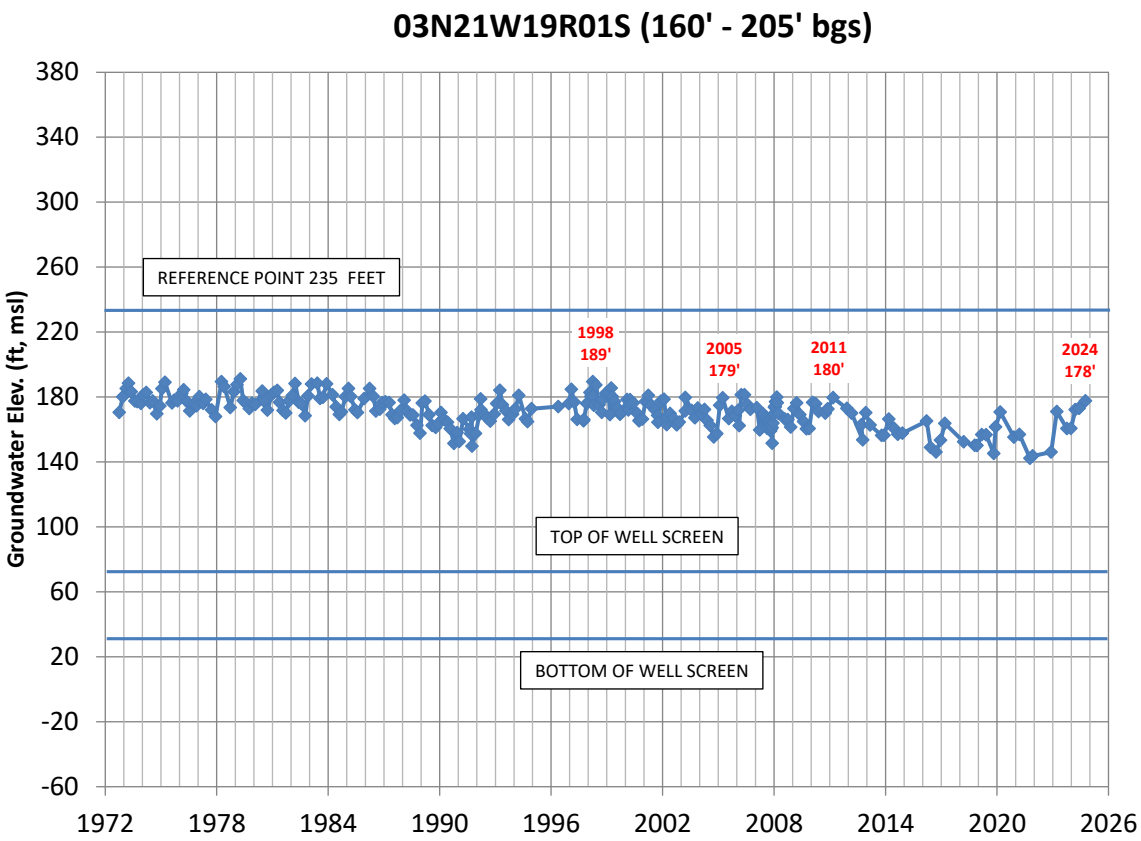
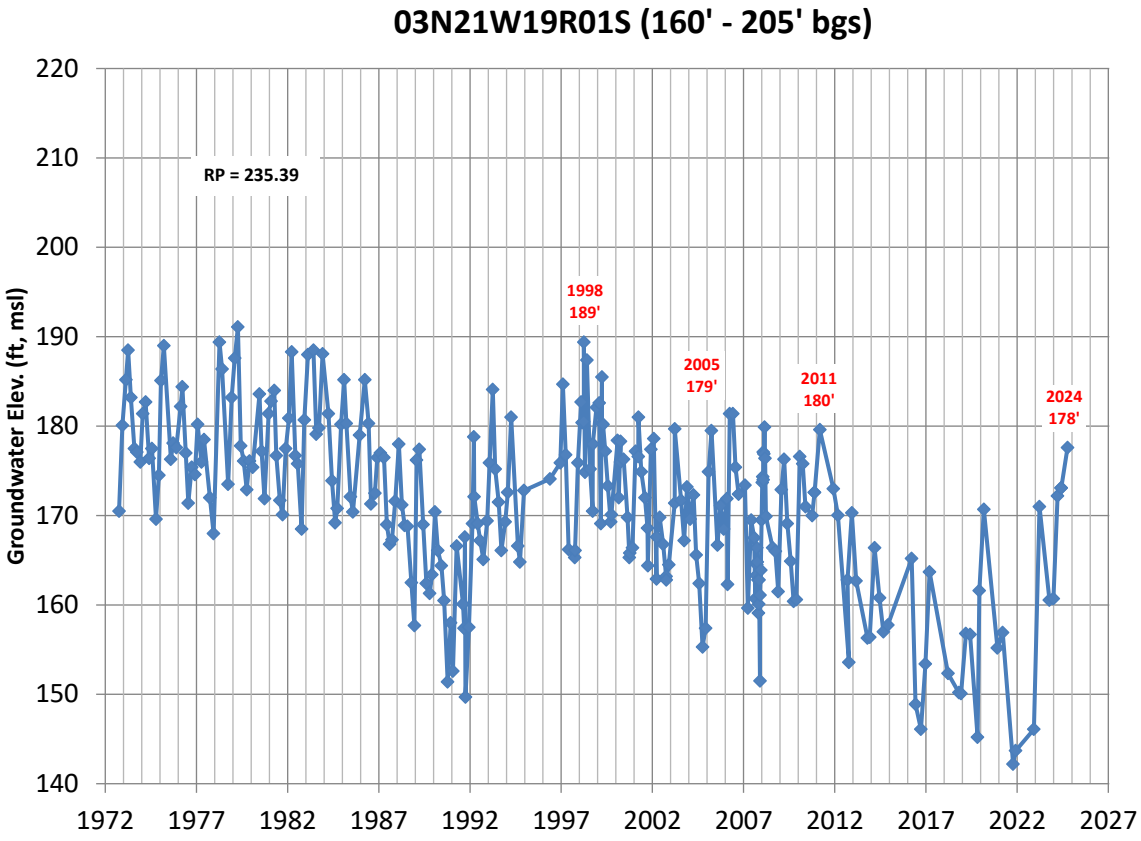
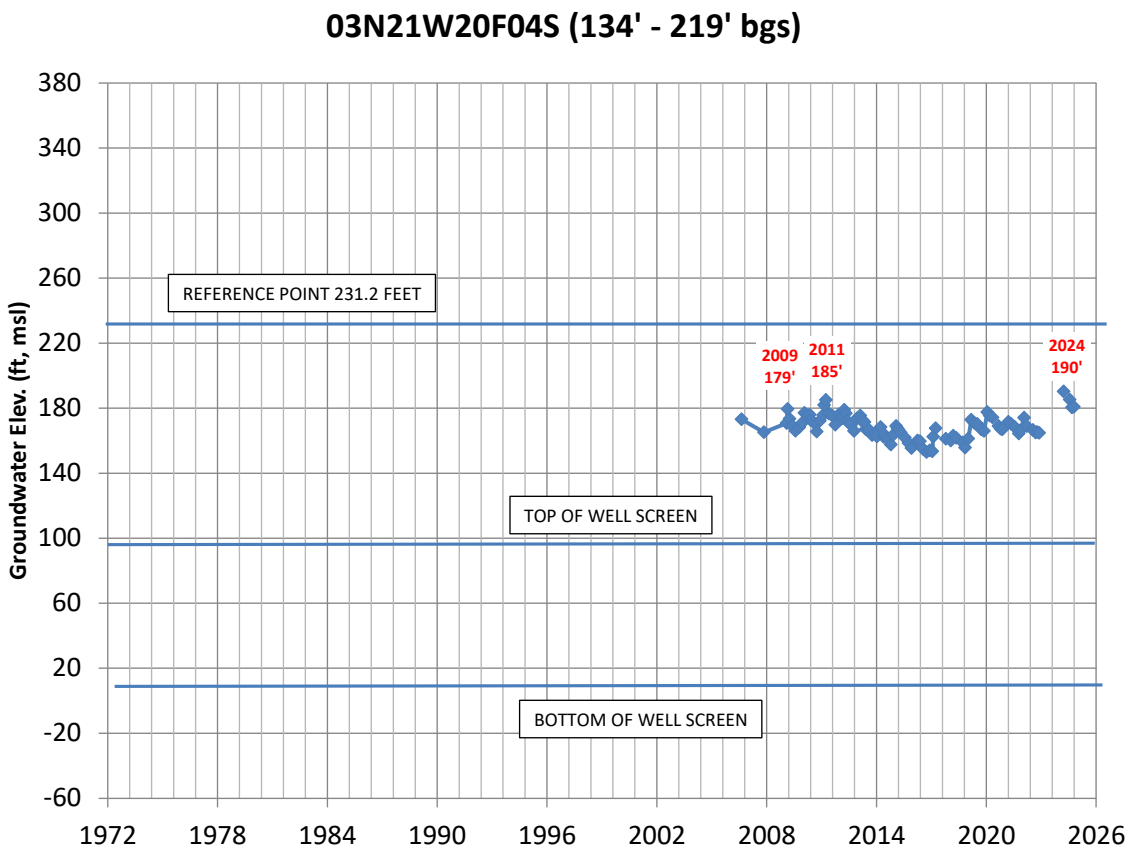


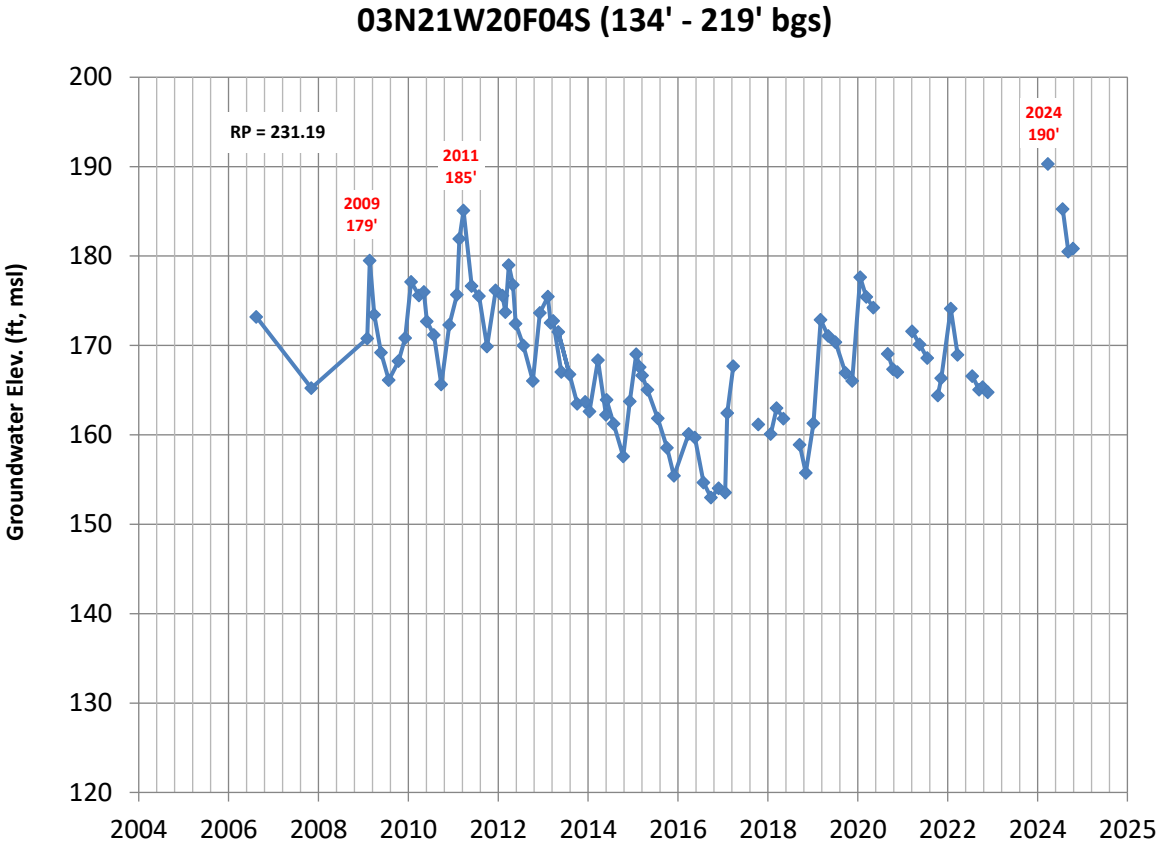

03N21W19M01S (depth 197')
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 284 FEET
WELL DEPTH
1998
172'
2005
164'
2011
172'
2024
175'

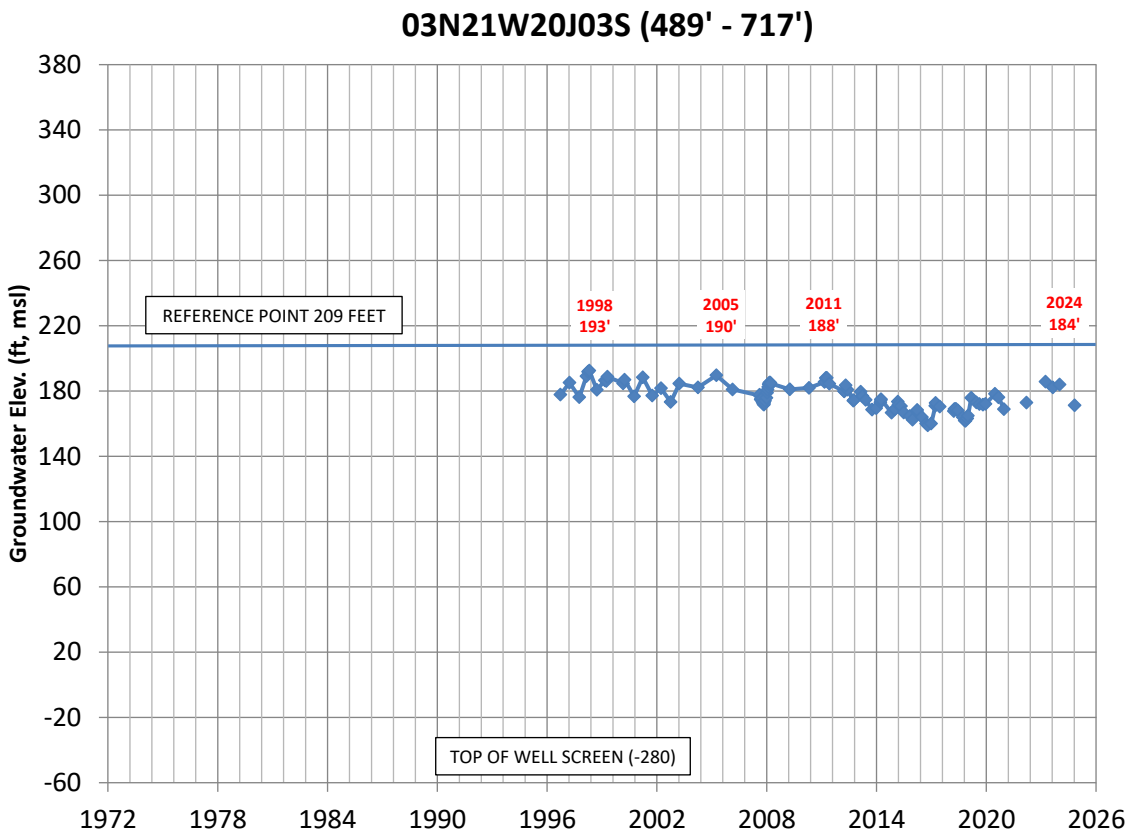

03N21W19M01S (depth 197')
Groundwater Elev. (ft, msl)
210
200
190
180
170
160
150
140
130
1988
1993
1998
2003
2008
2013
2018
2023
2028
RP = 283.97
1998
172'
2005
164'
2011
172'
2024
175'

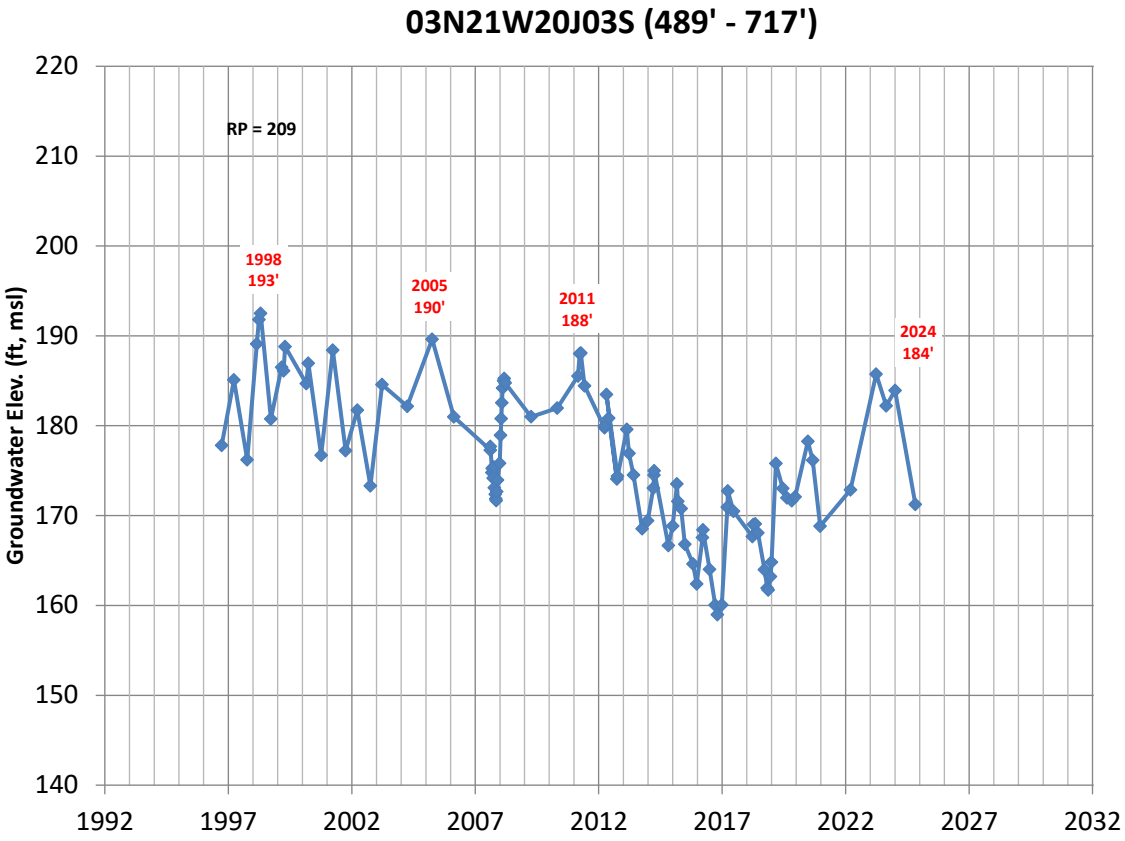

03N21W19R01S (160' - 205' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 235 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
1998
189'
2005
179'
2011
180'
2024
178'


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'
2024
178'

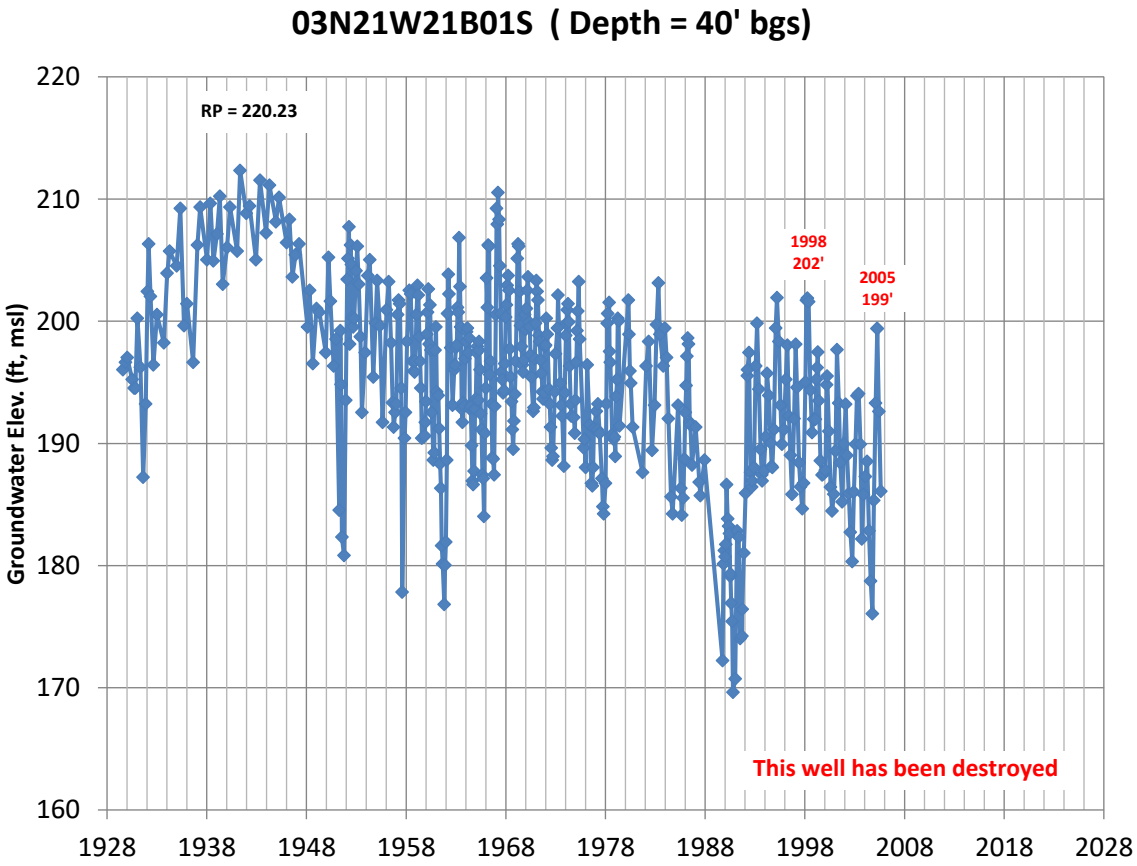

03N21W20F04S (134' - 219' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 231.2 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
2009
179'
2011
185'
2024
190'


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
2025
RP = 231.19
2009
179'
2011
185'
2024
190'


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
1998
193'
2005
190'
2011
188'
2024
184'
TOP OF WELL SCREEN (-280)


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'
2024
184'

Intentionally Left Blank



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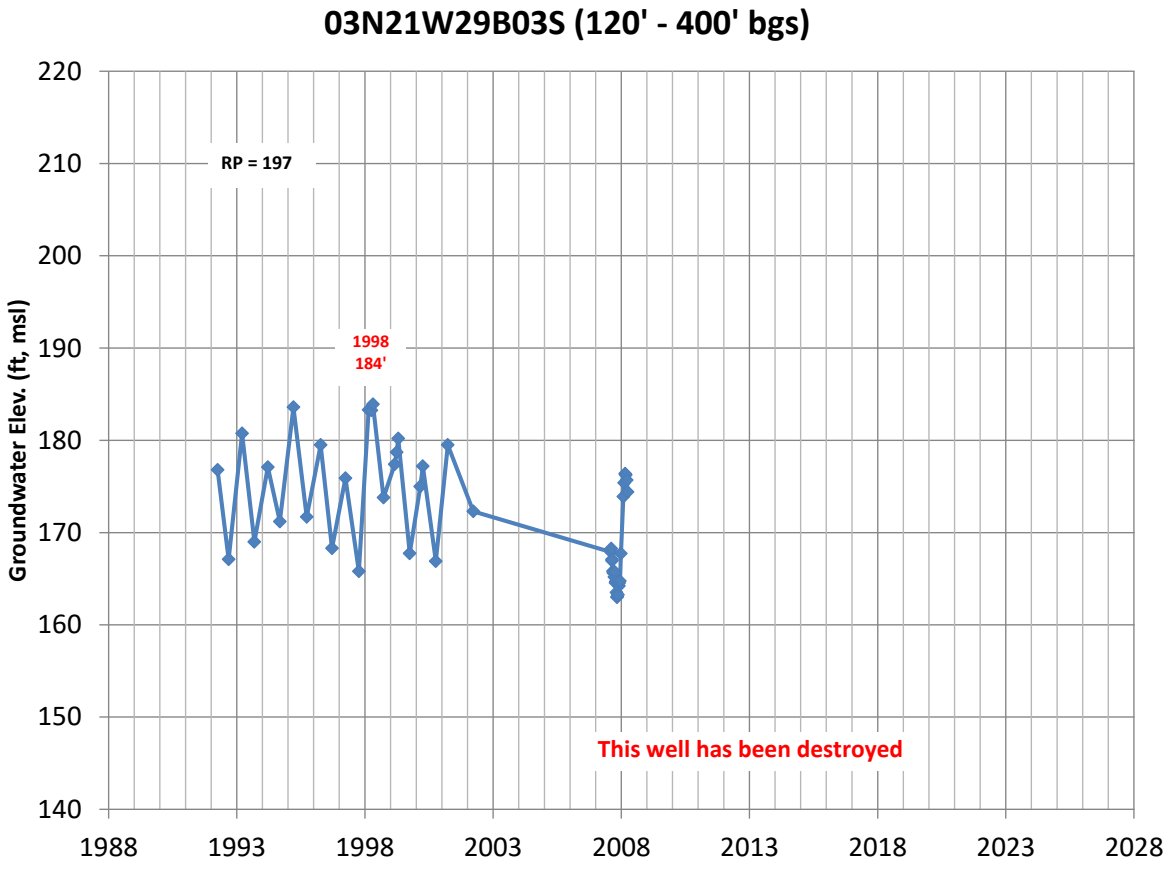
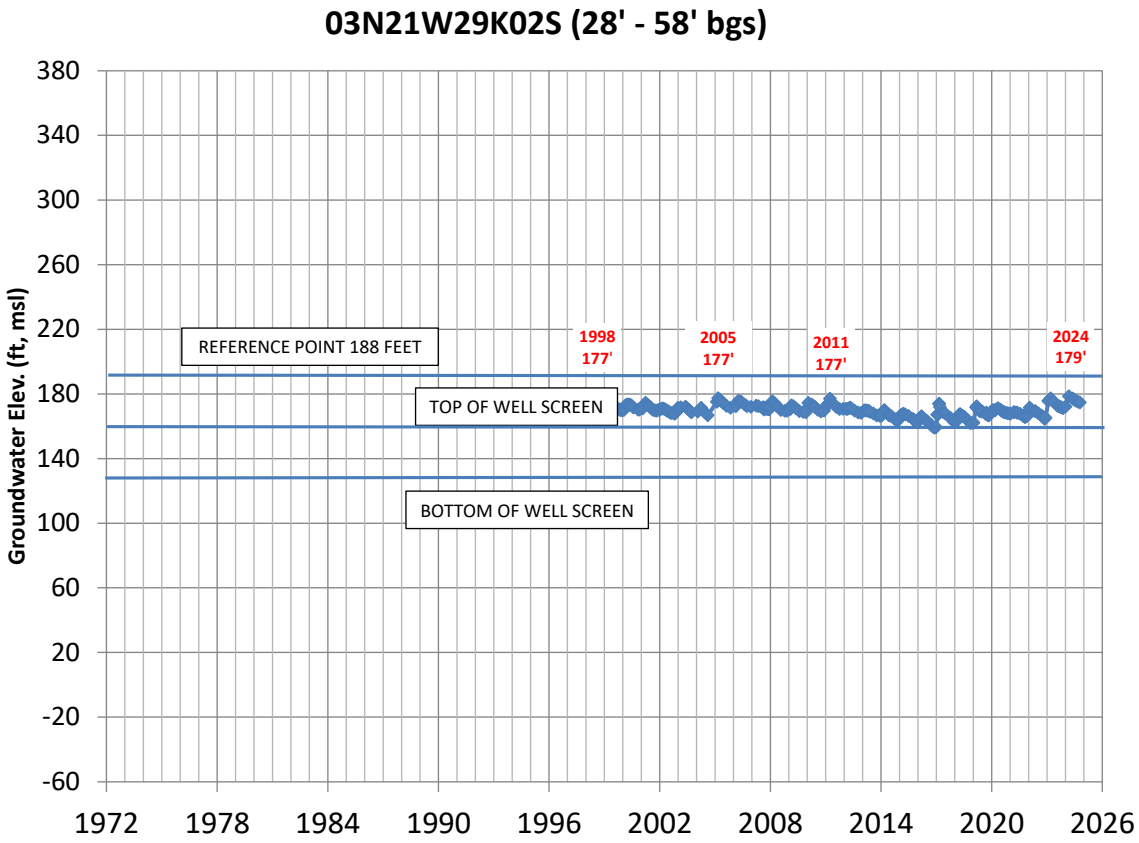
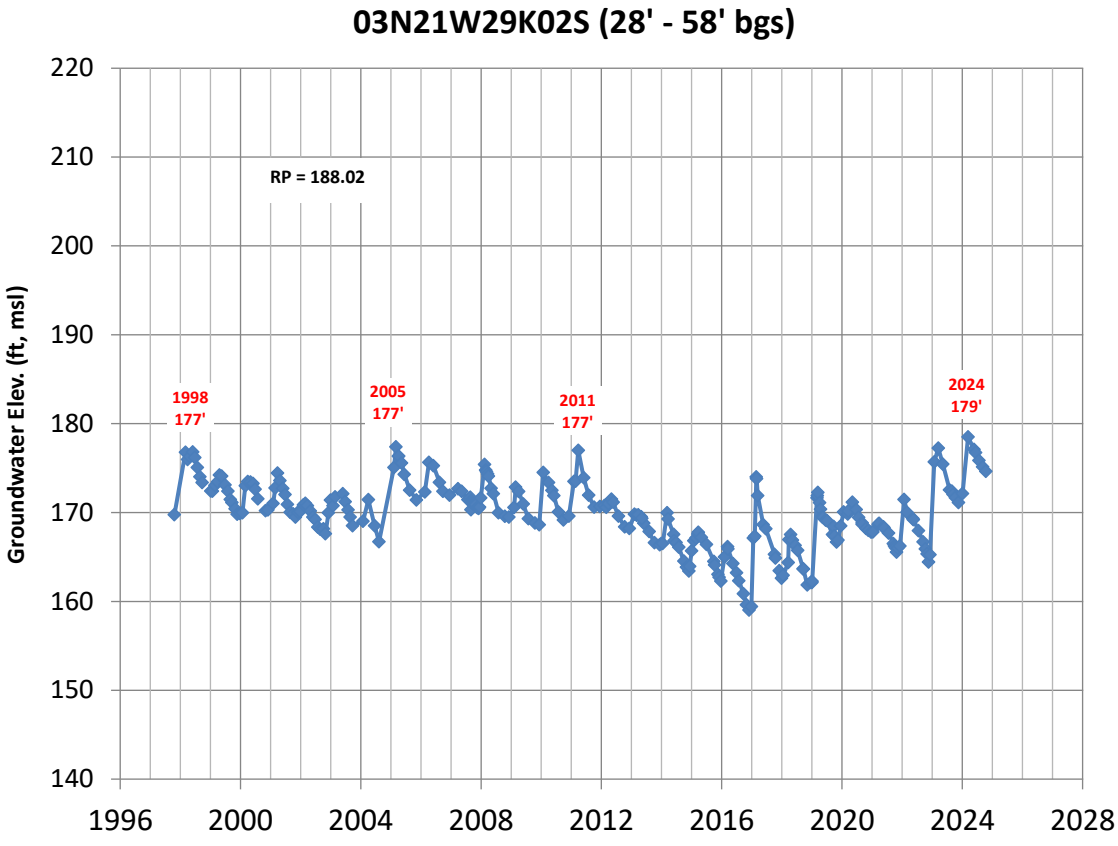
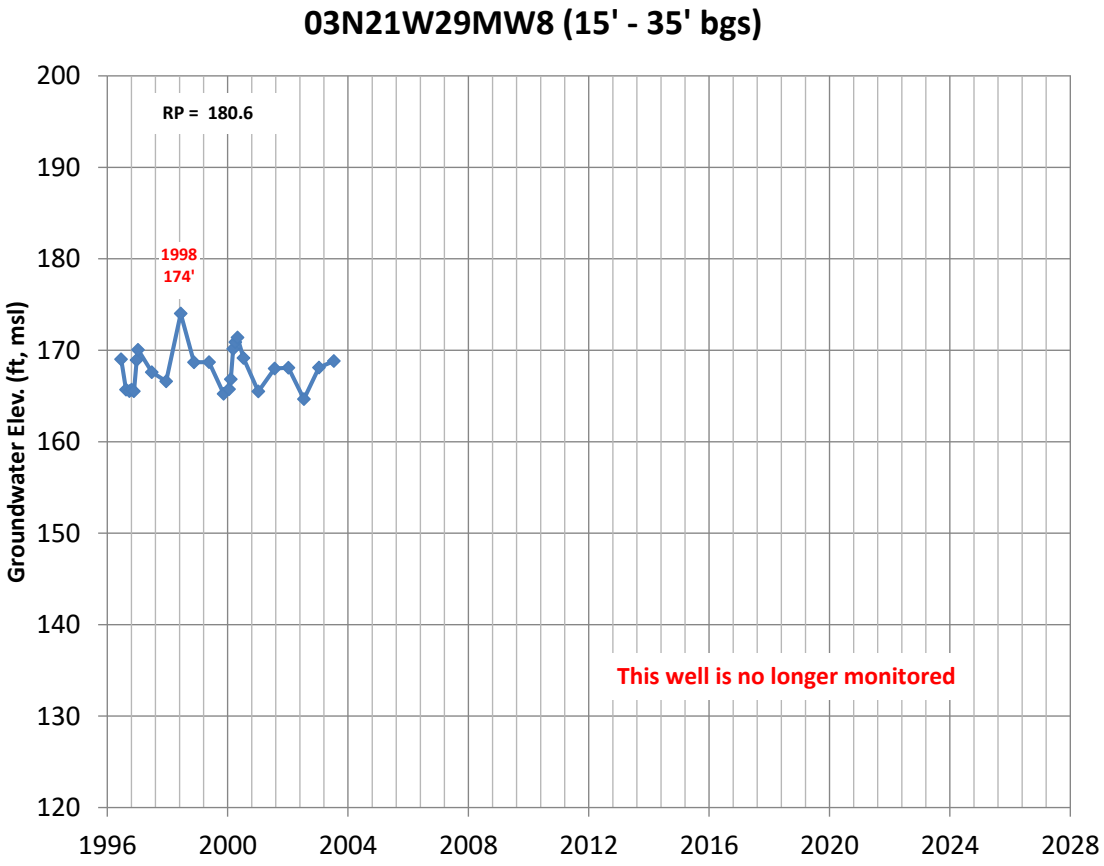



03N21W29K02S (28' - 58' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 188 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
1998
177'
2005
177'
2011
177'
2024
179'


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
2028
RP = 188.02
1998
177'
2005
177'
2011
177'
2024
179'

Intentionally Left Blank



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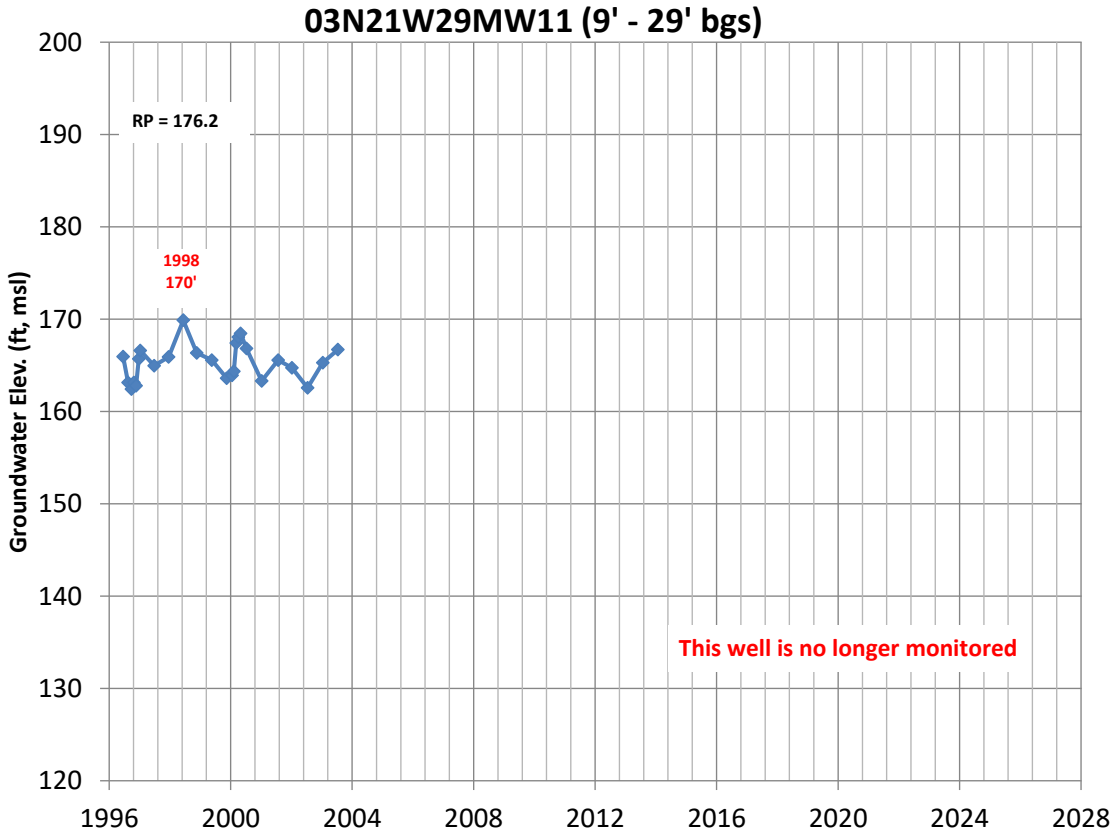

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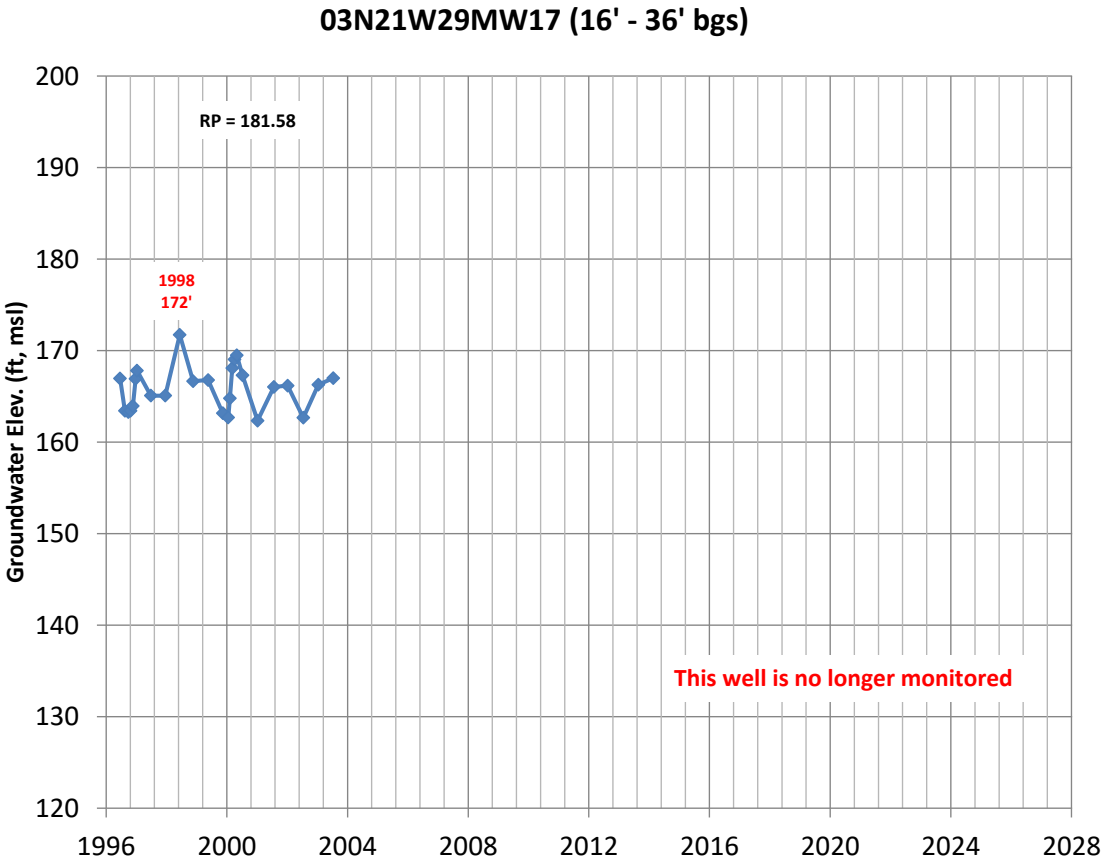
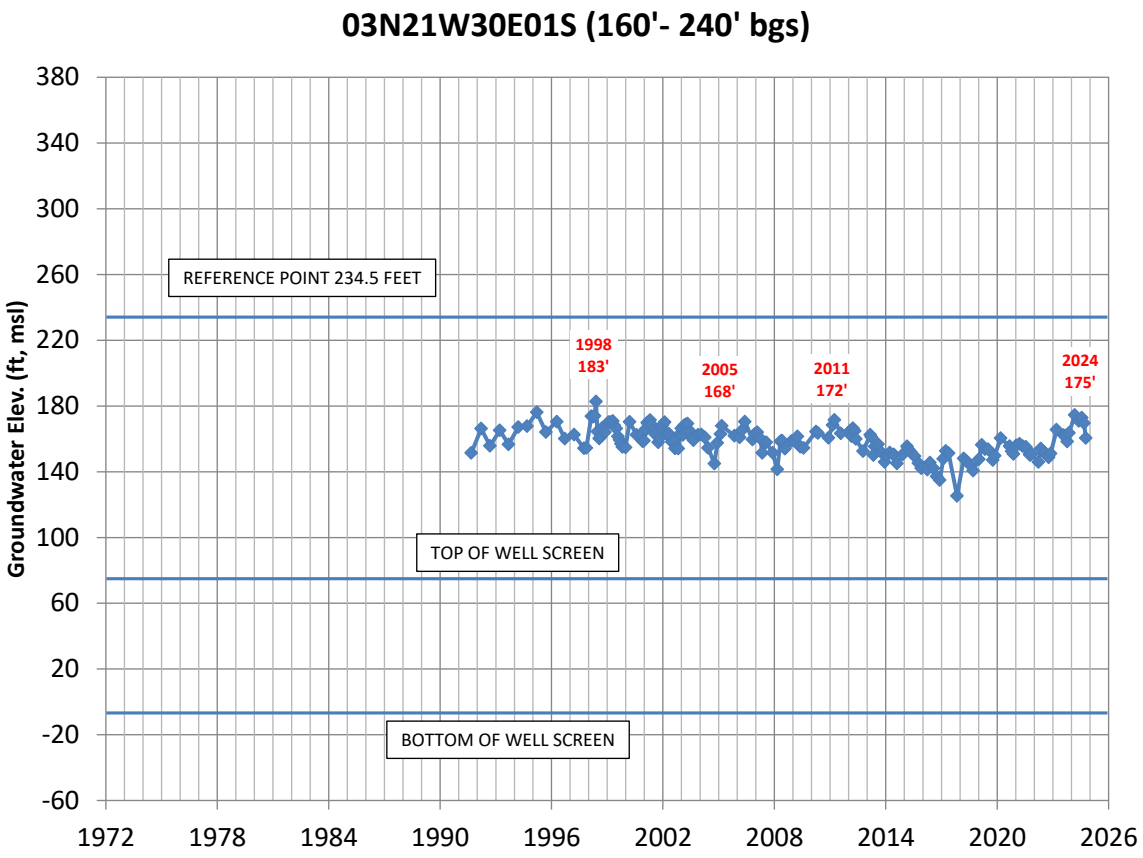
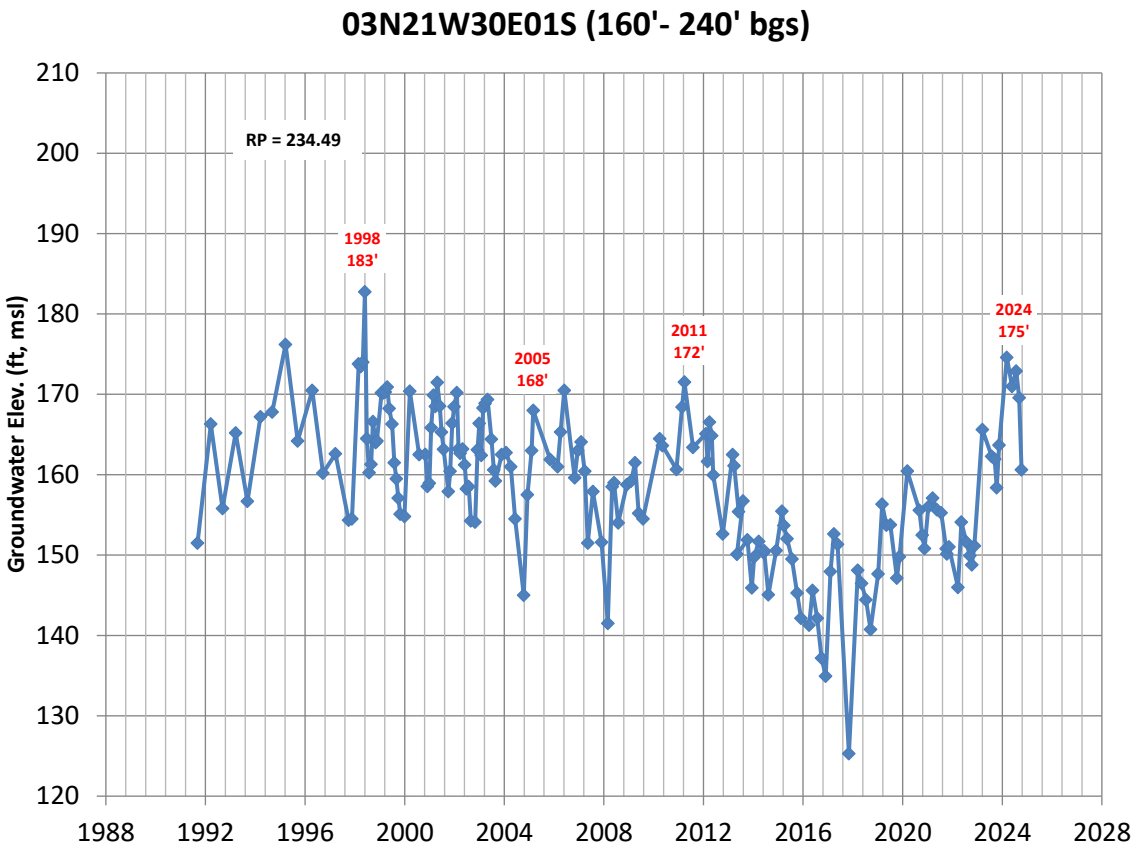
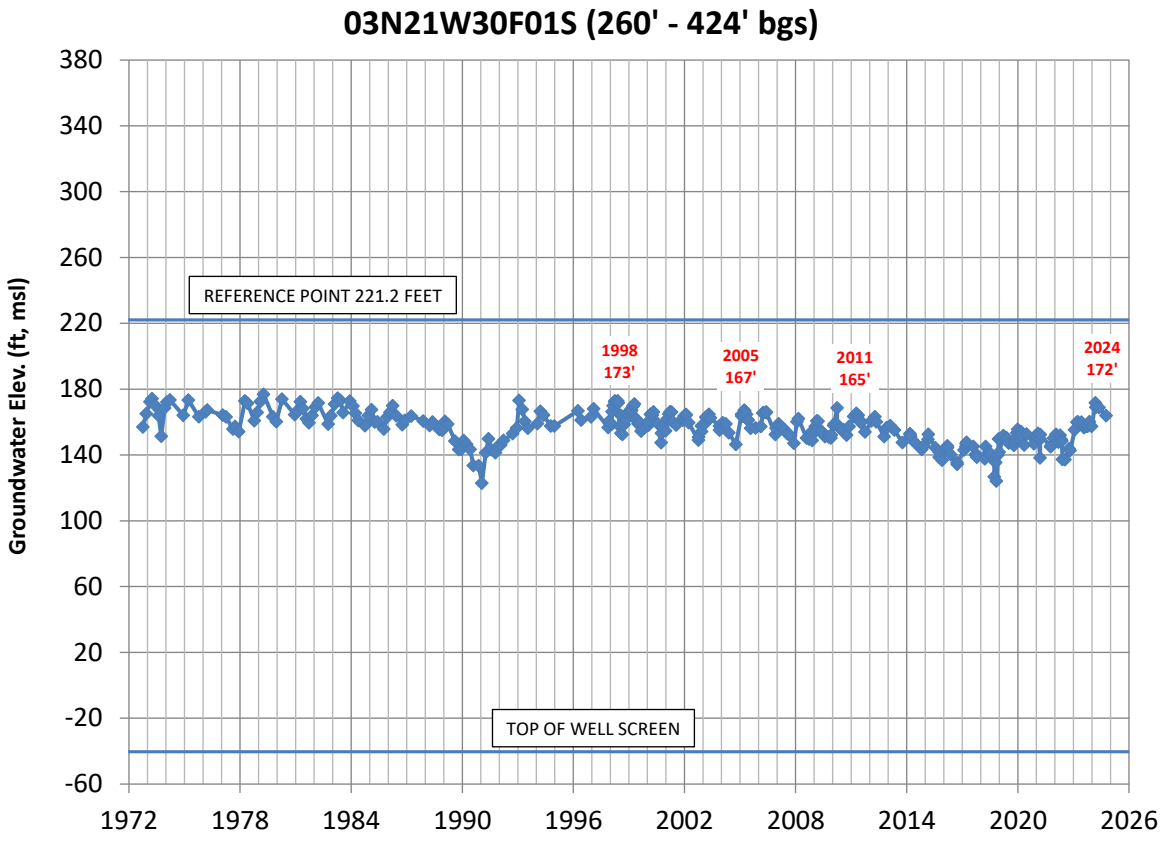
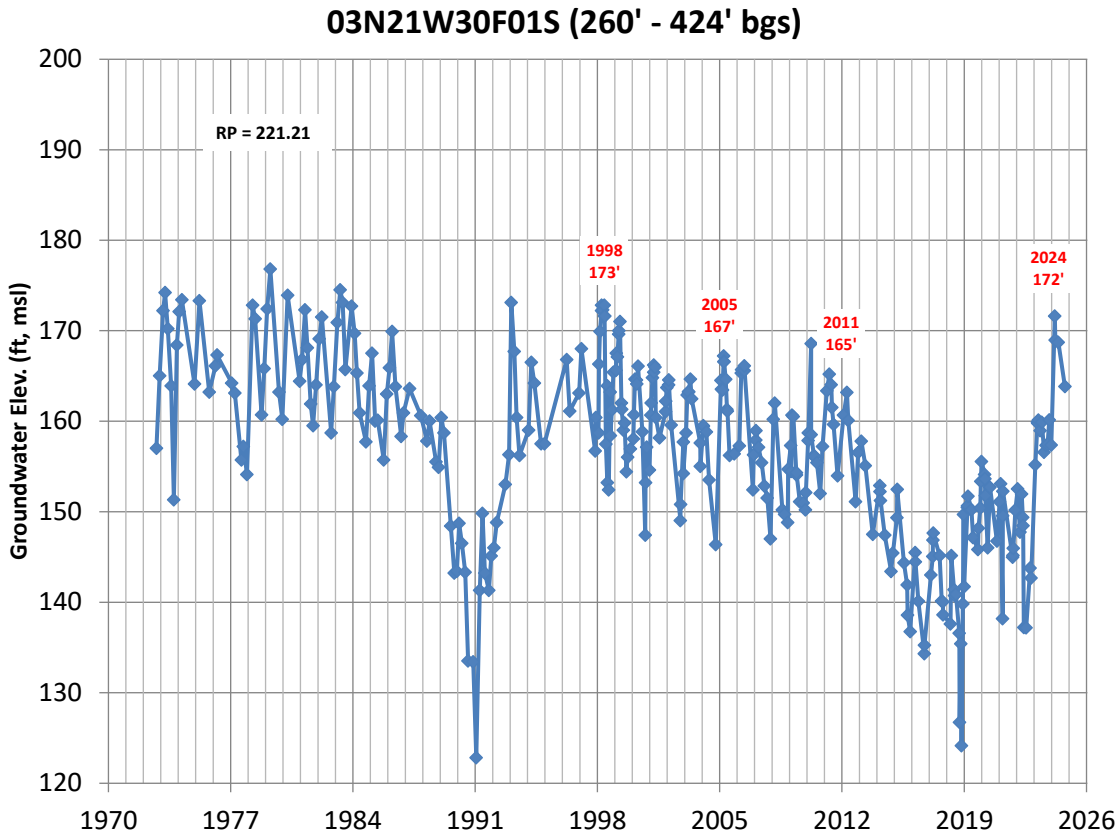


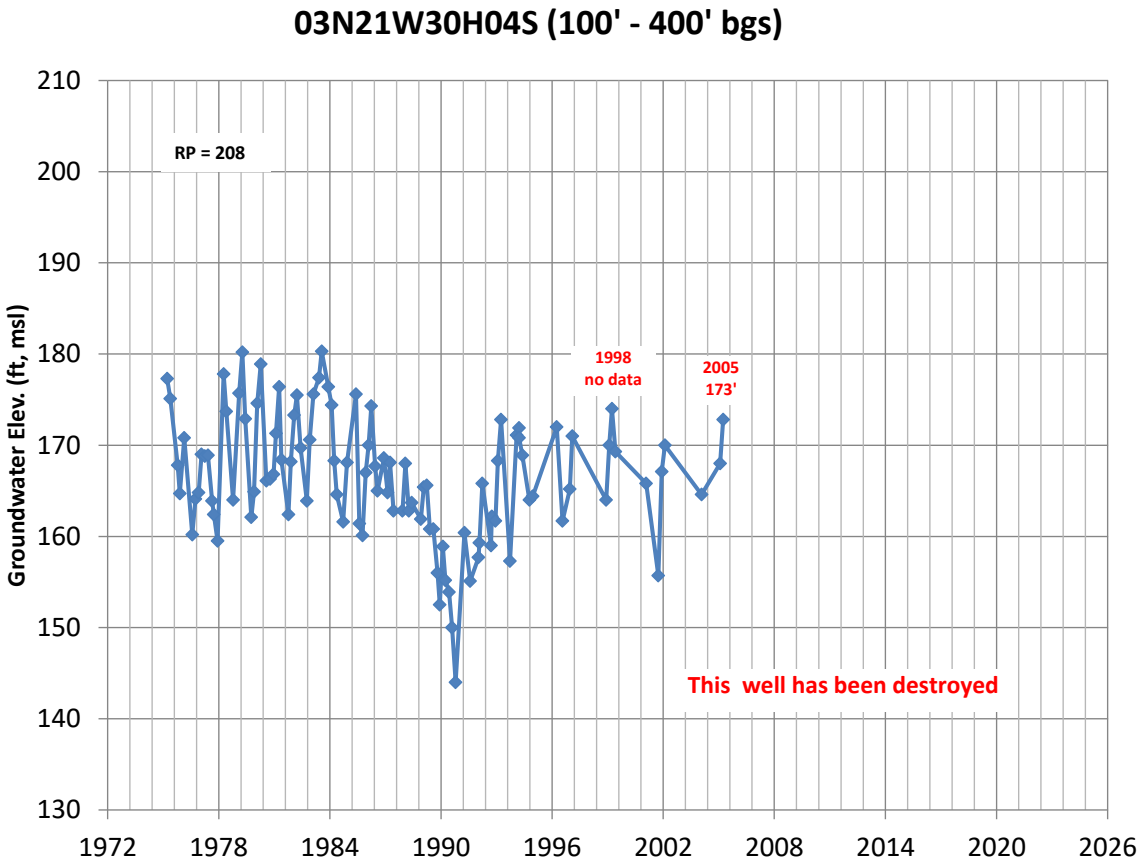

03N21W30E01S (160'- 240' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 234.5 FEET
TOP OF WELL SCREEN
BOTTOM OF WELL SCREEN
1998
183'
2005
168'
2011
172'
2024
175'


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
2028
RP = 234.49
1998
183'
2005
168'
2011
172'
2024
175'


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'
2024
172'


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'
2024
172'

Intentionally Left Blank



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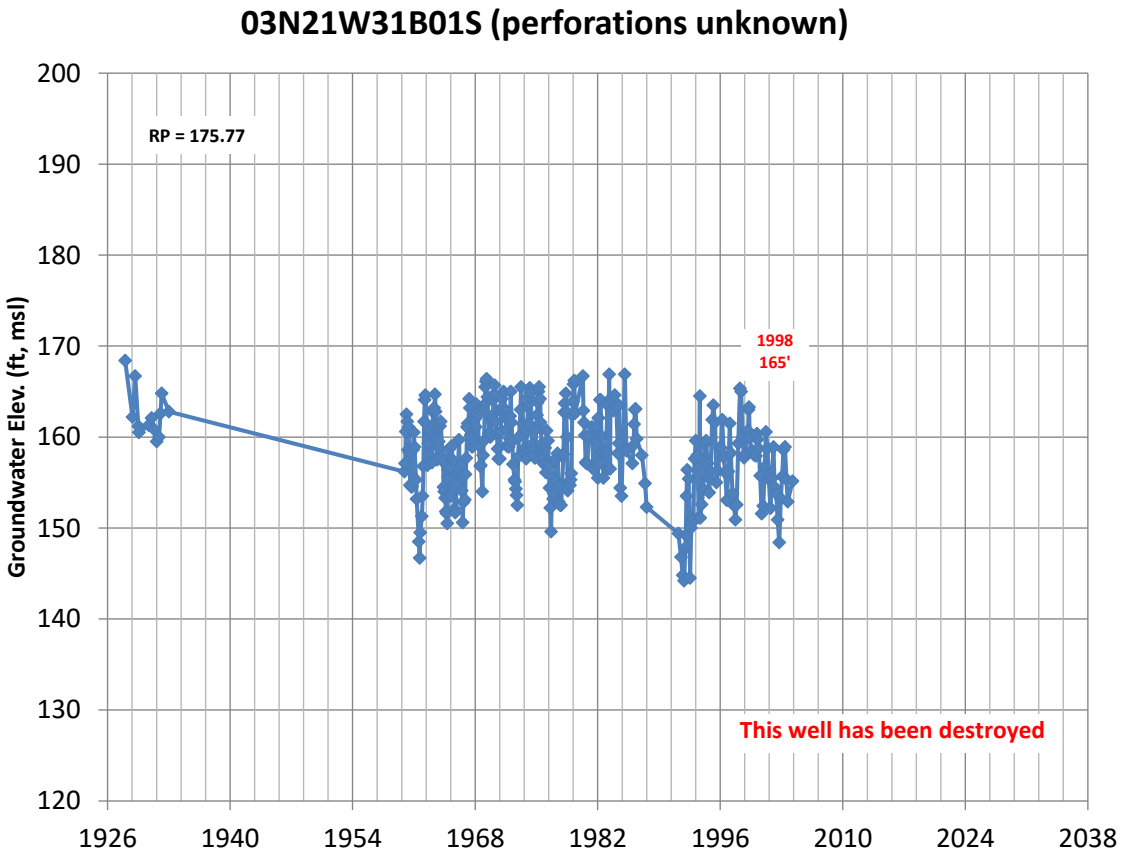
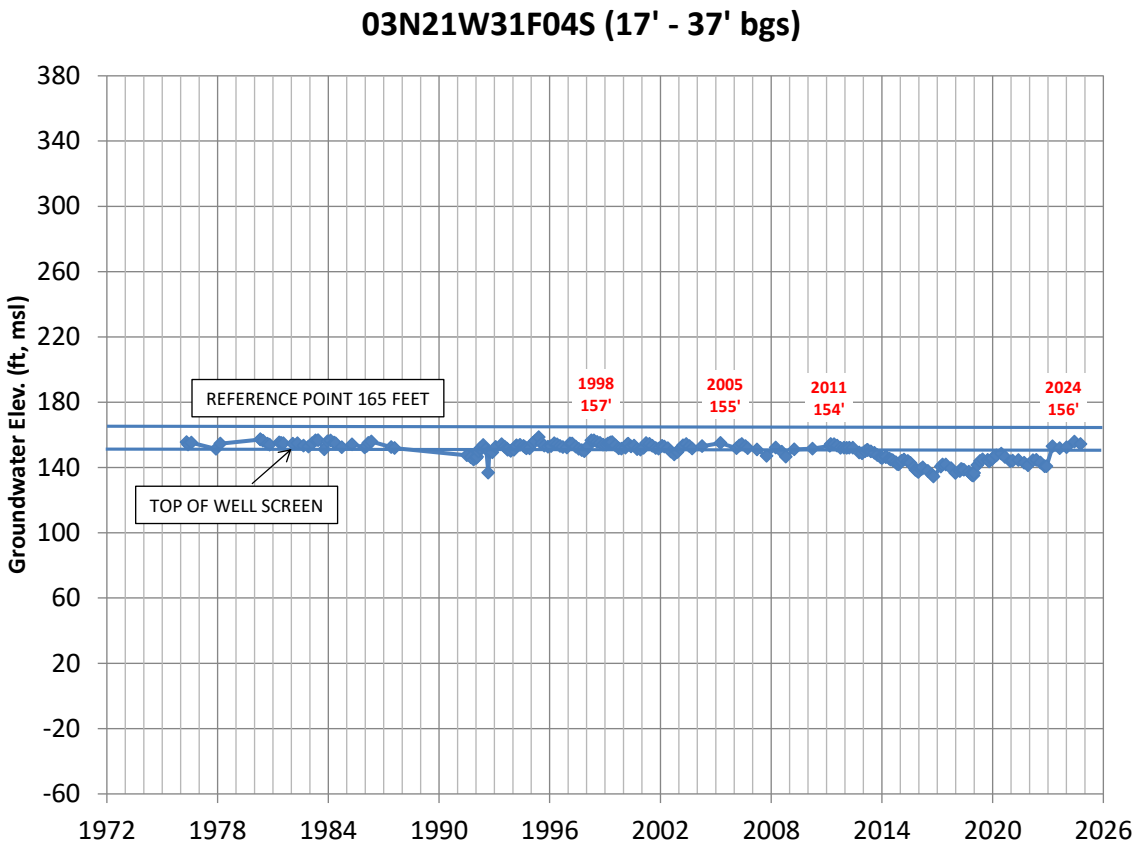
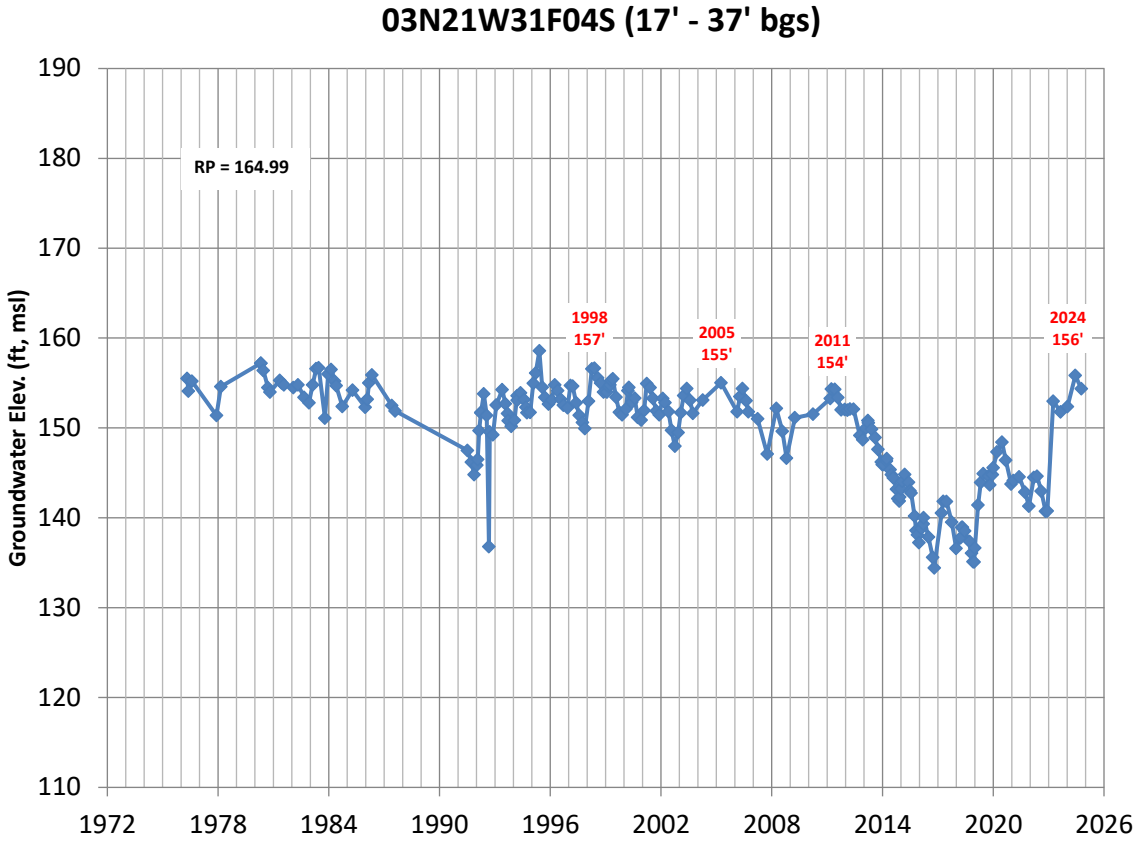
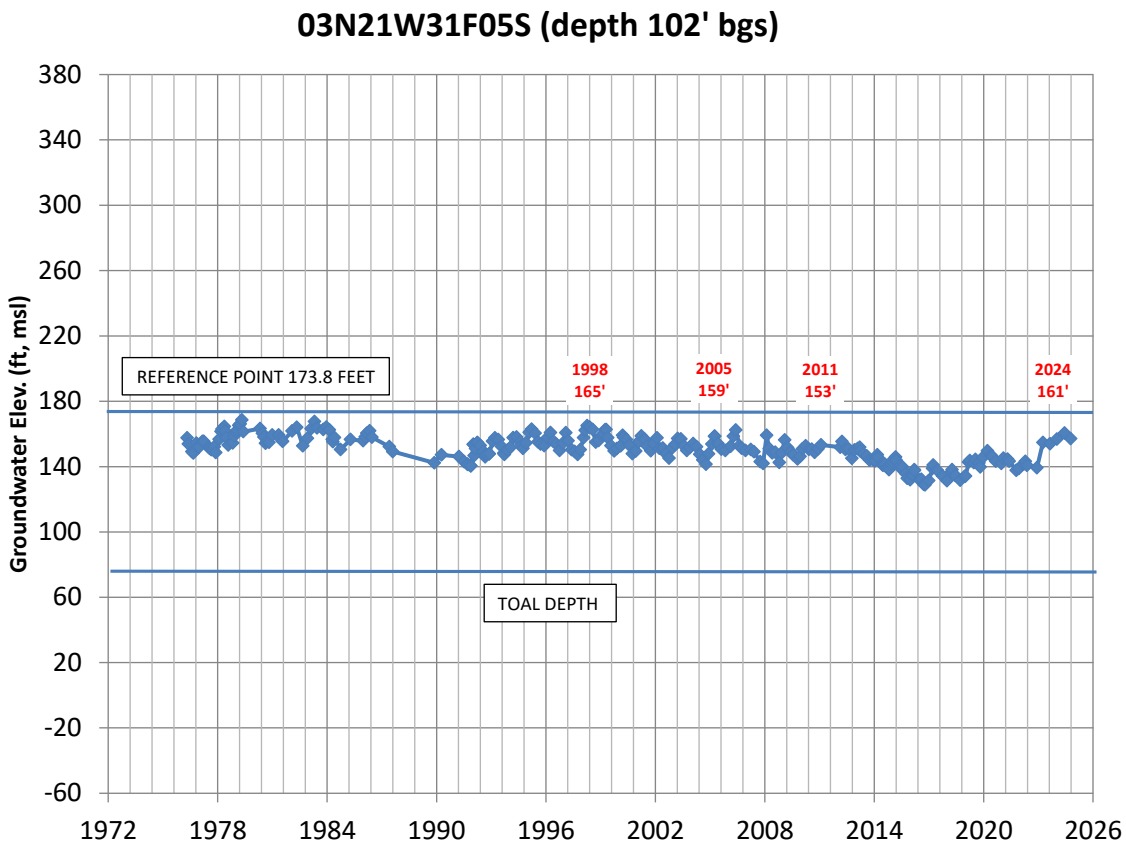
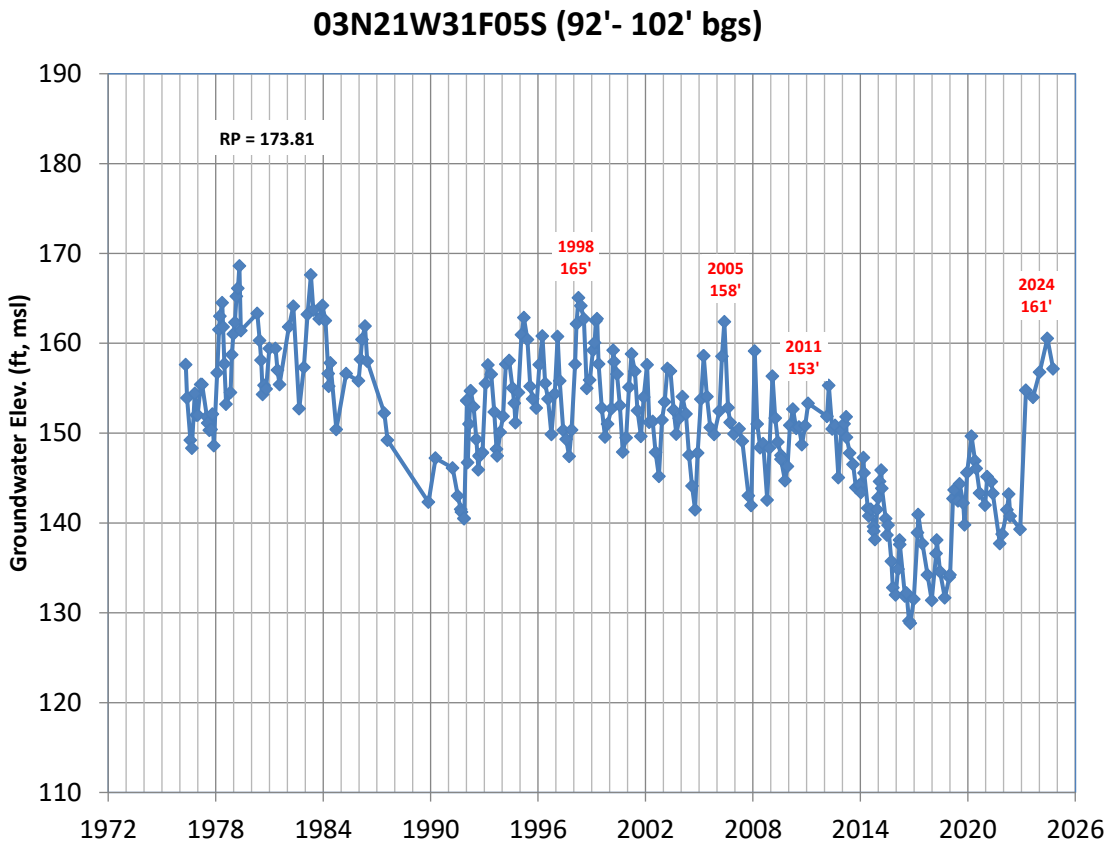
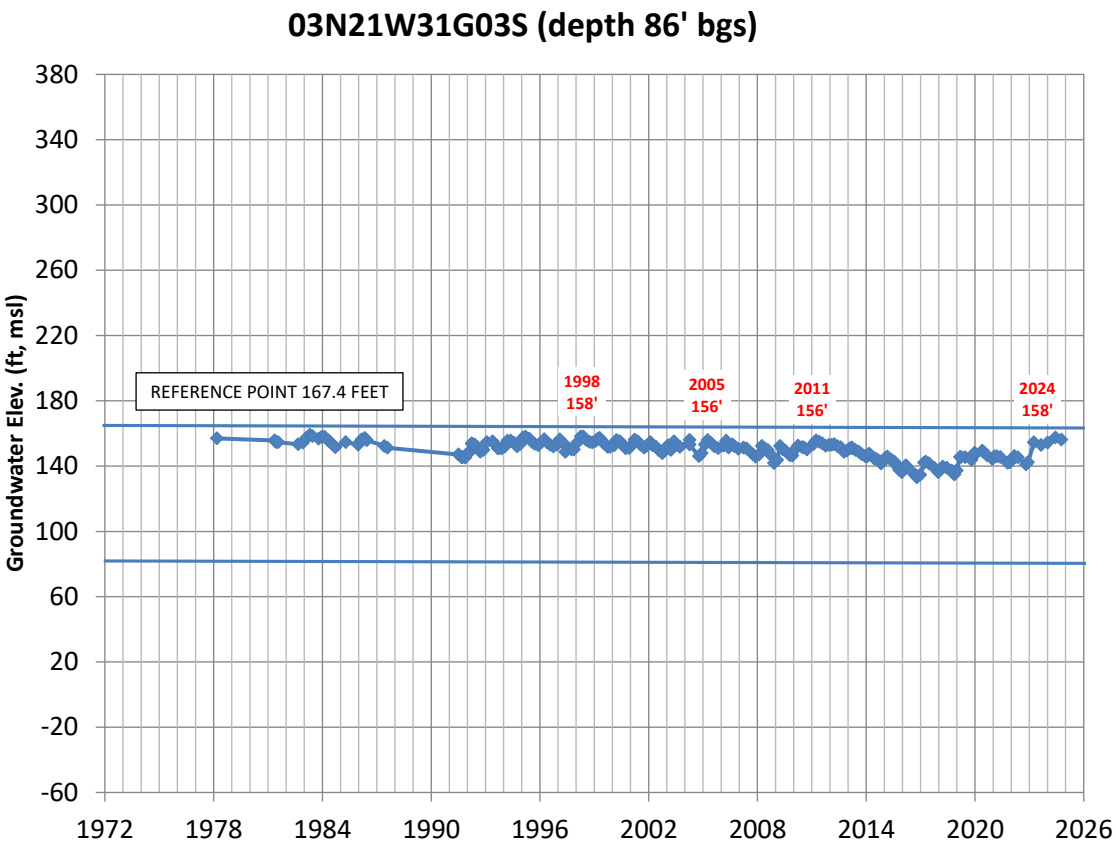


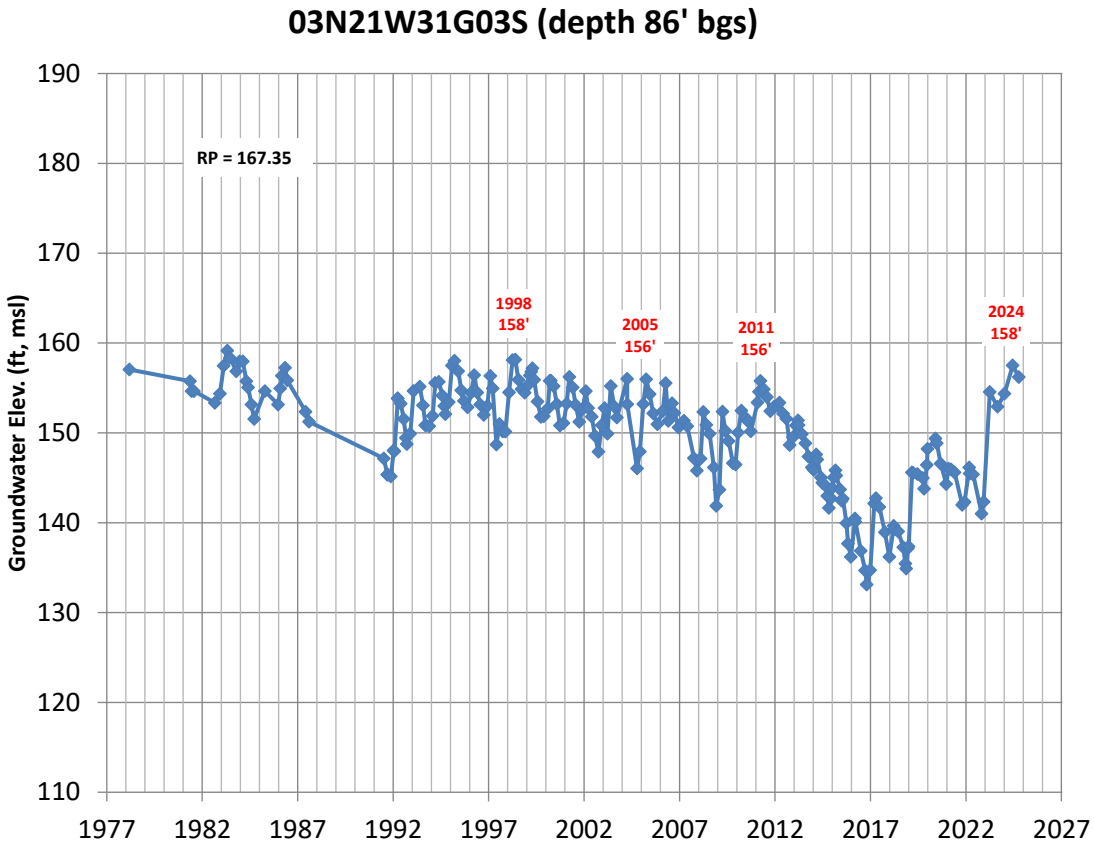

03N21W31F04S (17' - 37' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 165 FEET
TOP OF WELL SCREEN
1998
157'
2005
155'
2011
154'
2024
156'

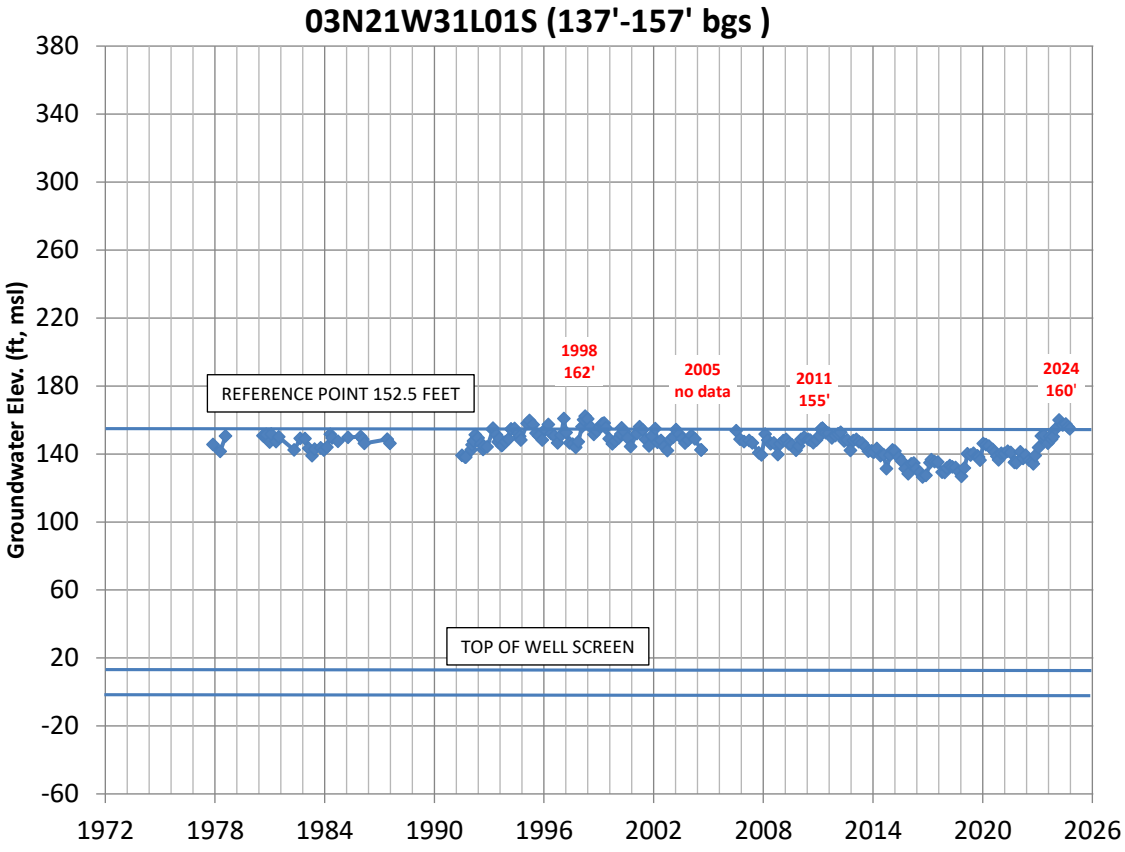

03N21W31F04S (17' - 37' bgs)
Groundwater Elev. (ft, msl)
190
180
170
160
150
140
130
120
110
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
RP = 164.99
1998
157'
2005
155'
2011
154'
2024
156'

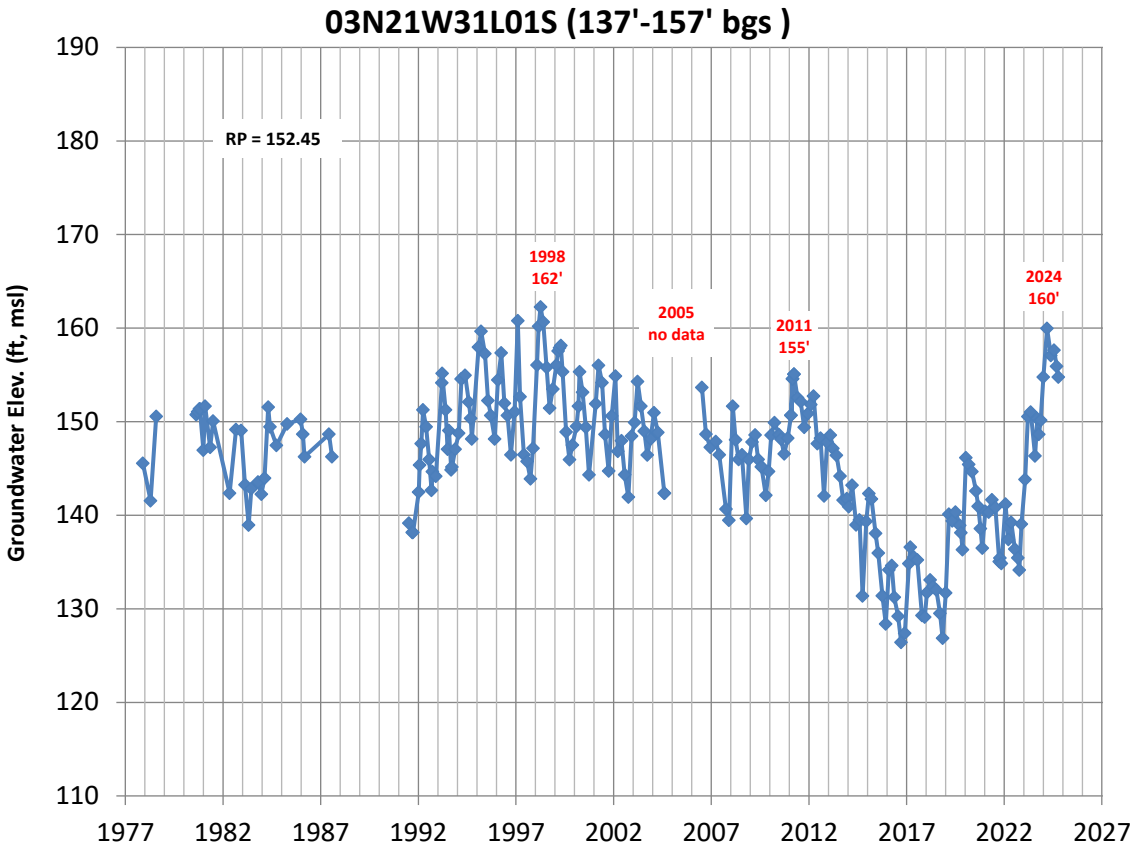

03N21W31F05S (depth 102' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 173.8 FEET
TOAL DEPTH
1998
165'
2005
159'
2011
153'
2024
161'


03N21W31F05S (92'- 102' 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 = 173.81
1998
165'
2005
158'
2011
153'
2024
161'

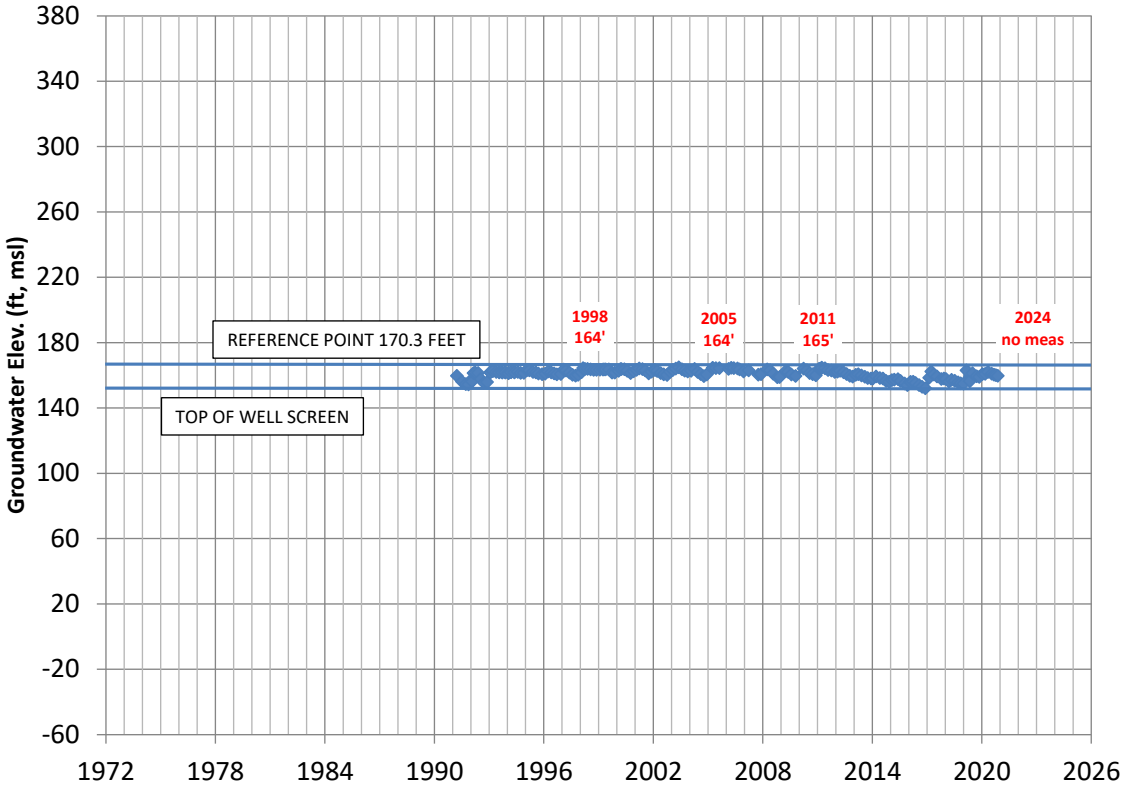

03N21W31G03S (depth 86' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 167.4 FEET
1998
158'
2005
156'
2011
156'
2024
158'


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'
2024
158'

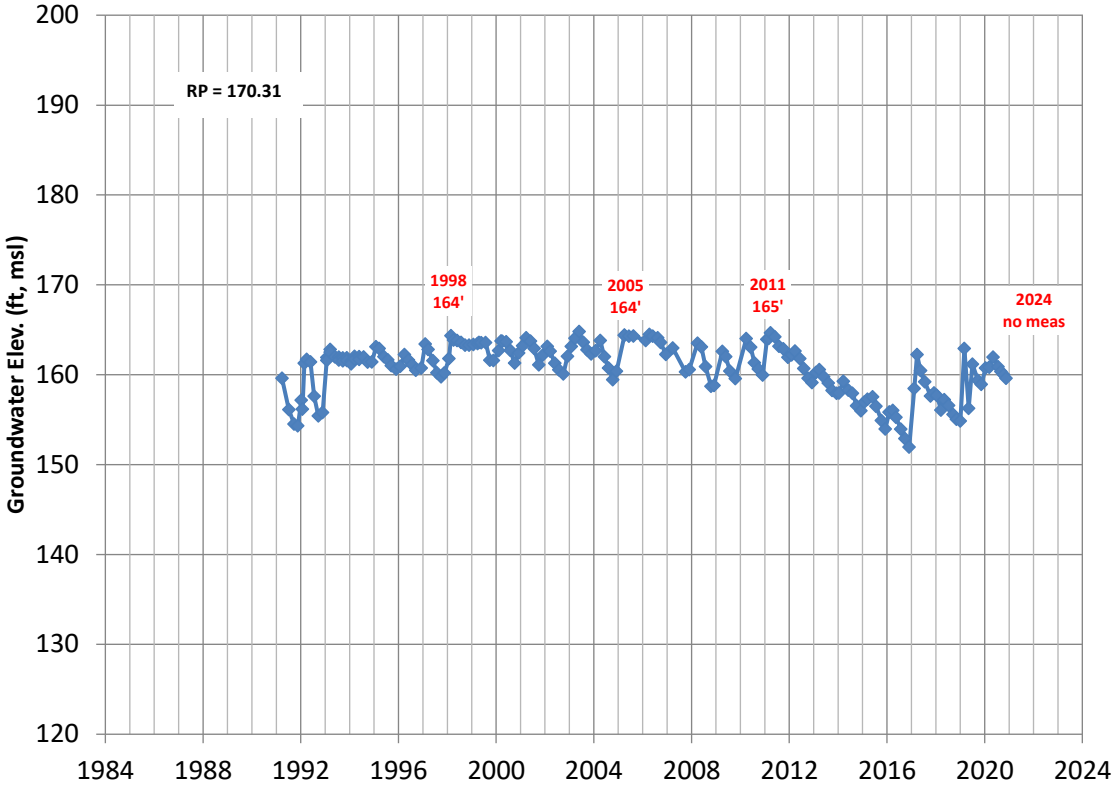

03N21W31L01S (137'-157' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 152.5 FEET
TOP OF WELL SCREEN
1998
162'
2005
no data
2011
155'
2024
160'


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'
2024
160'

03N21W32C01S (12' - 32' bgs)



03N21W32C01S (12' - 32' bgs)



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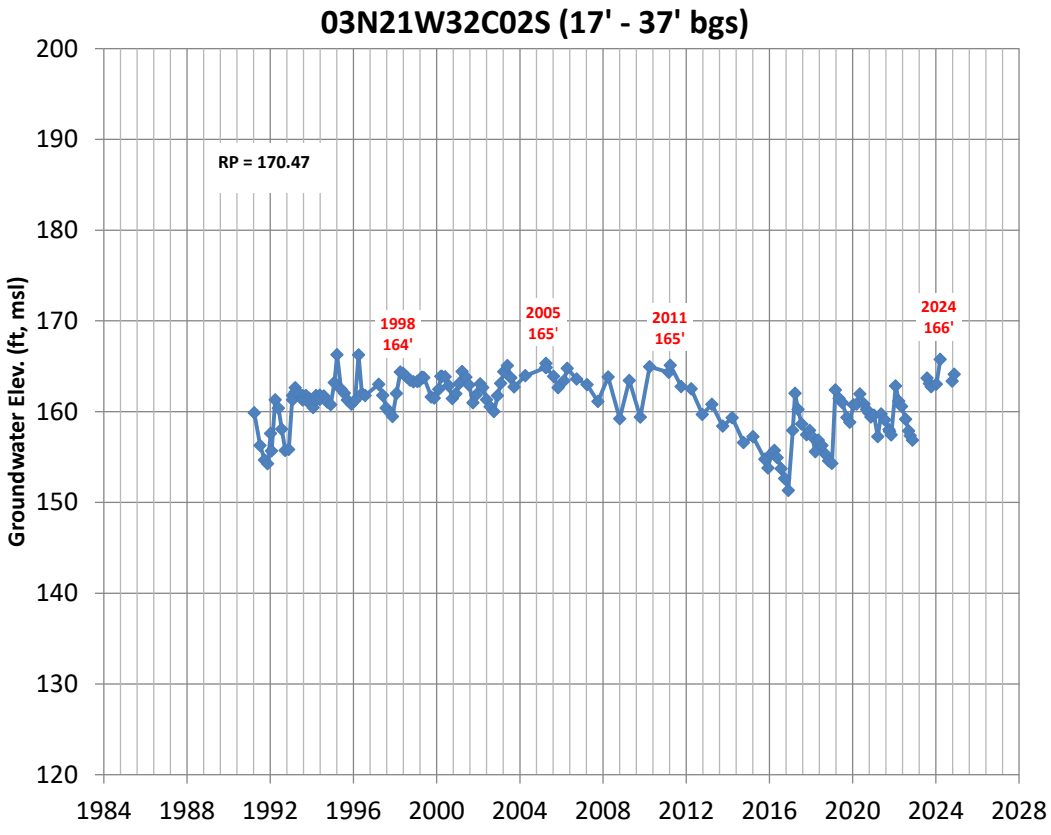

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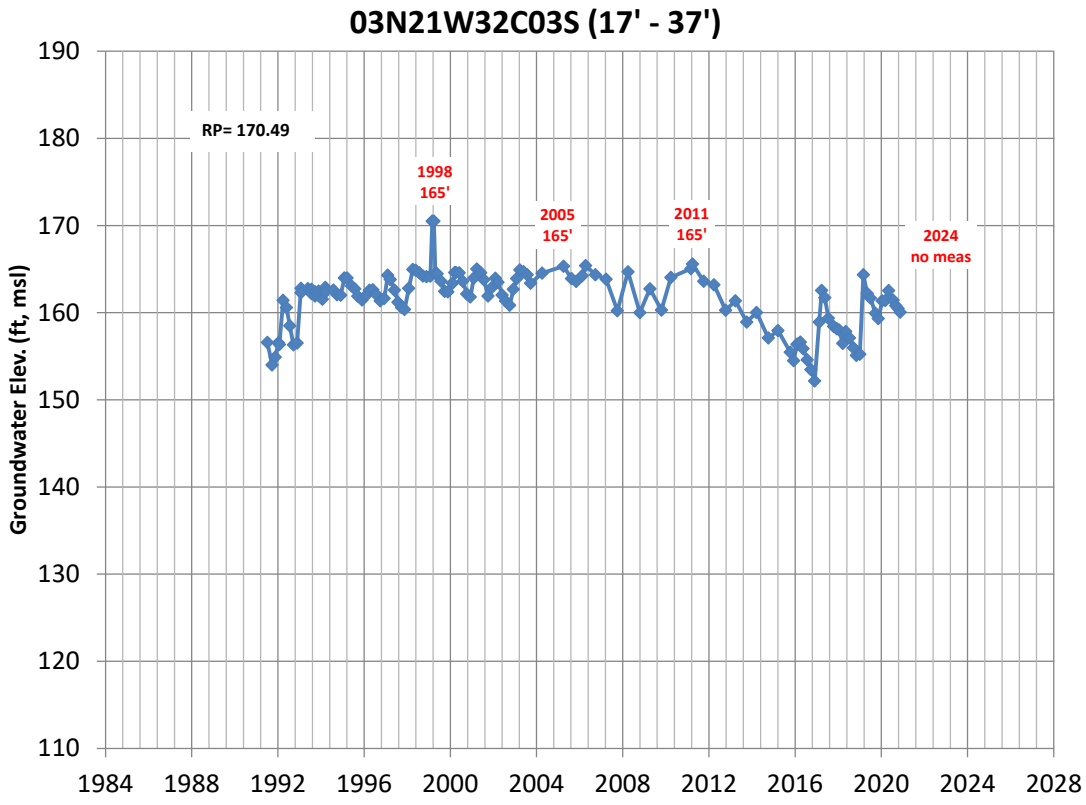
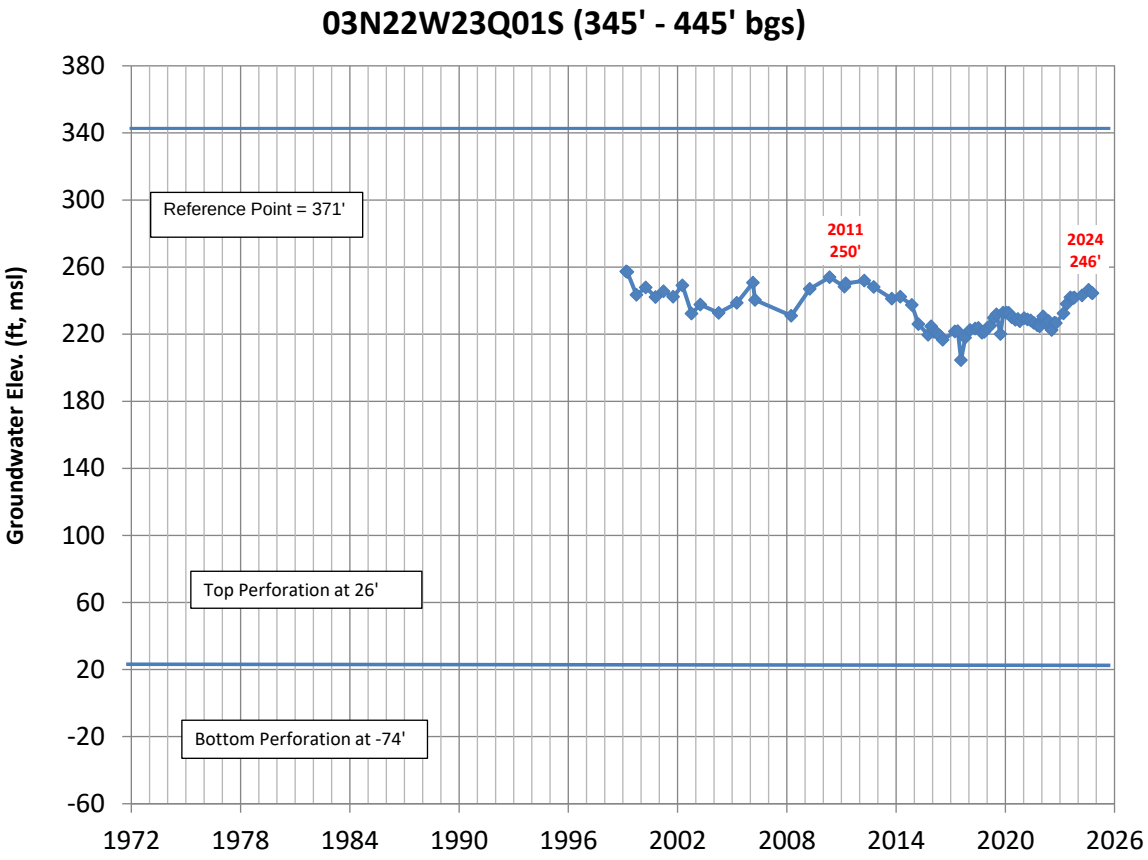
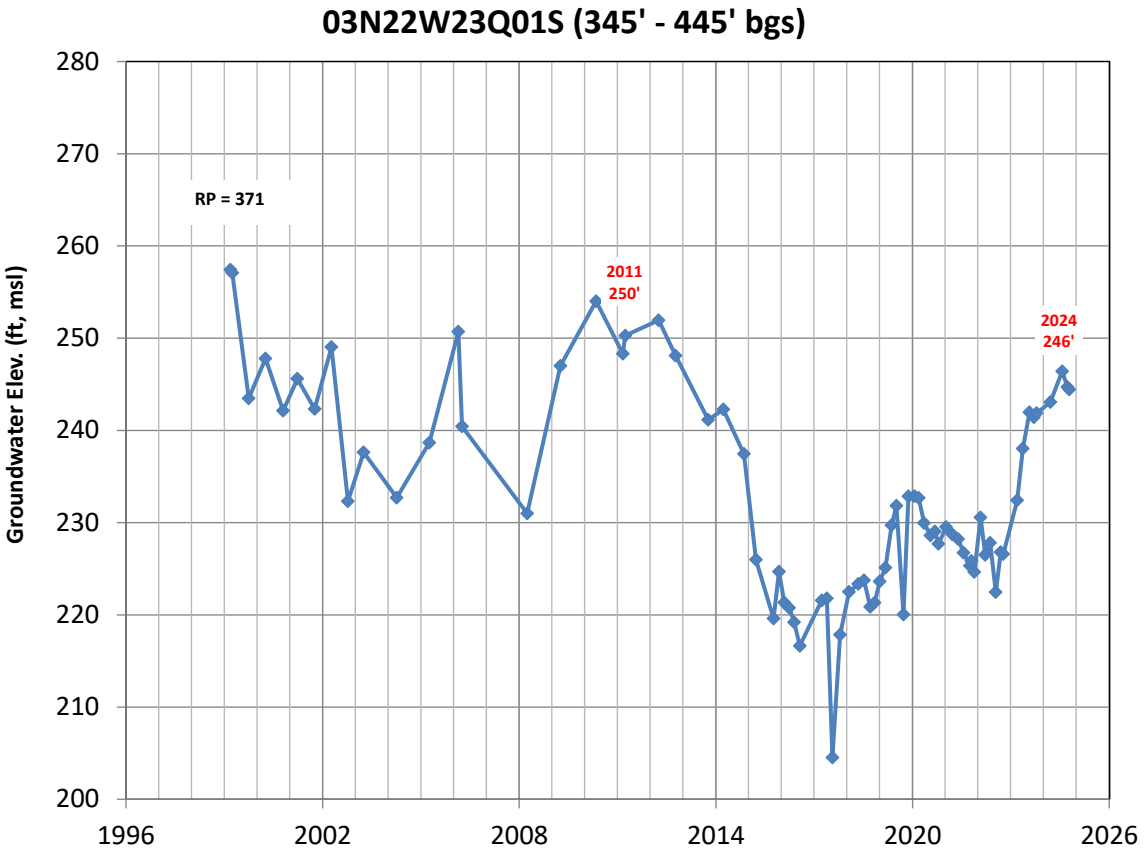
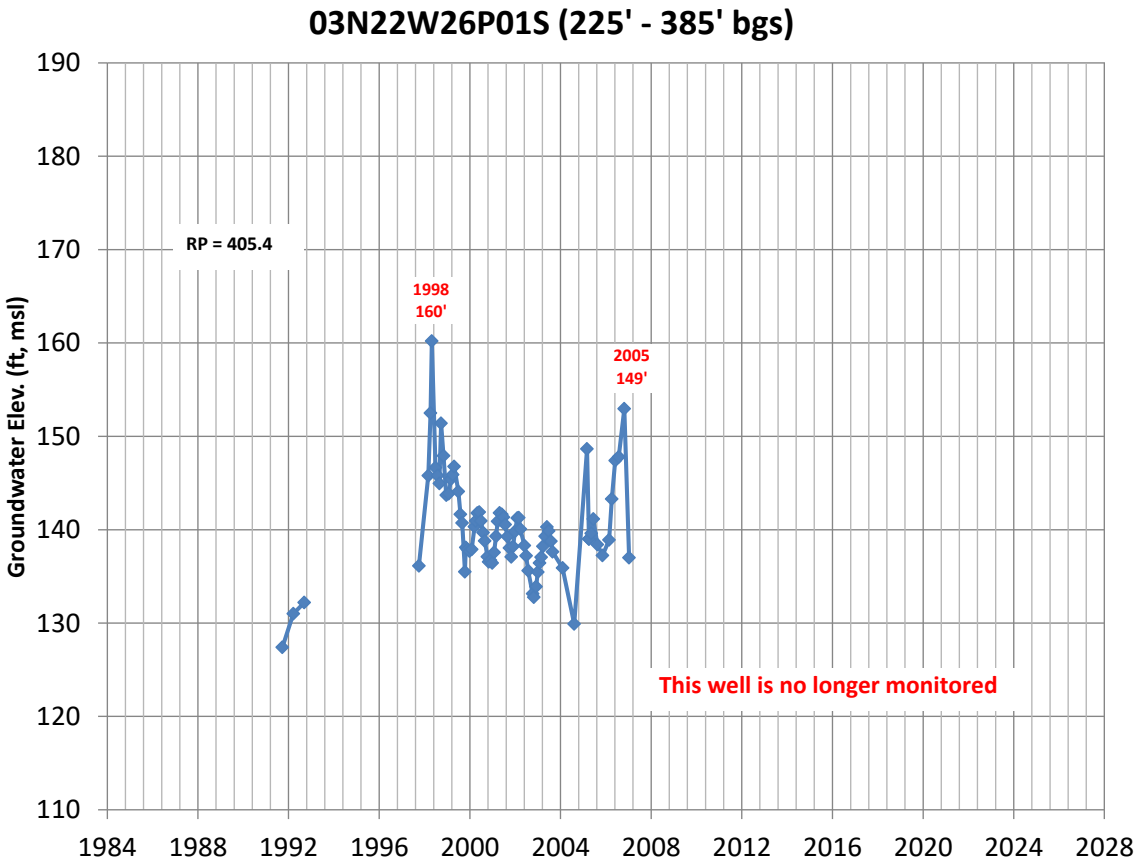



03N22W23Q01S (345' - 445' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
Reference Point = 371'
Top Perforation at 26'
Bottom Perforation at -74'
2011
250'
2024
246'


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'
2024
246'

Intentionally Left Blank



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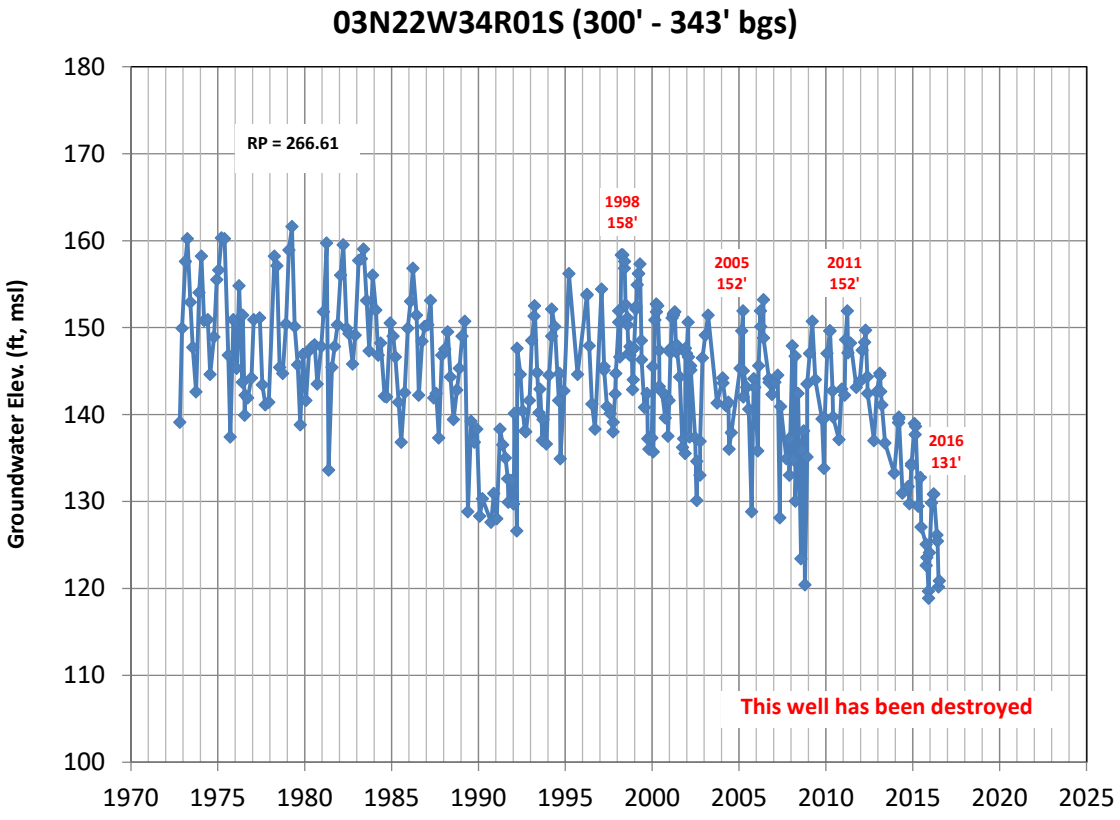
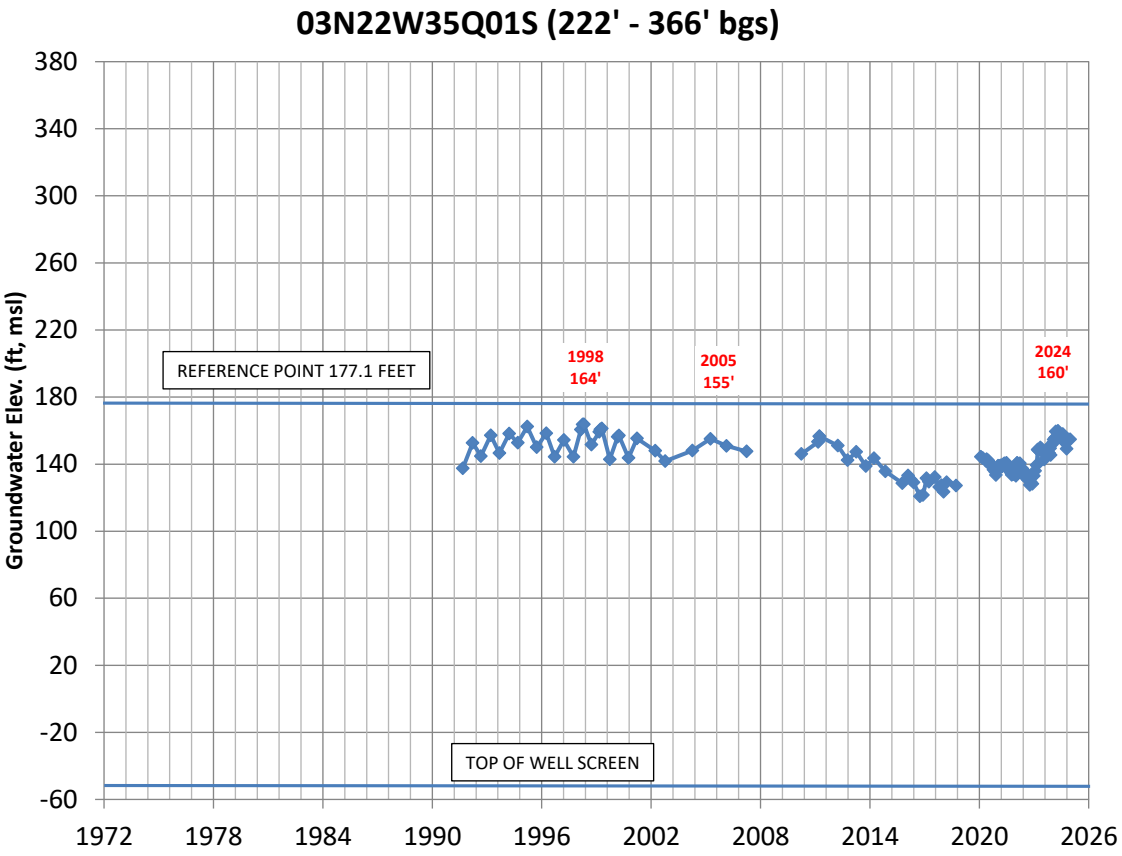
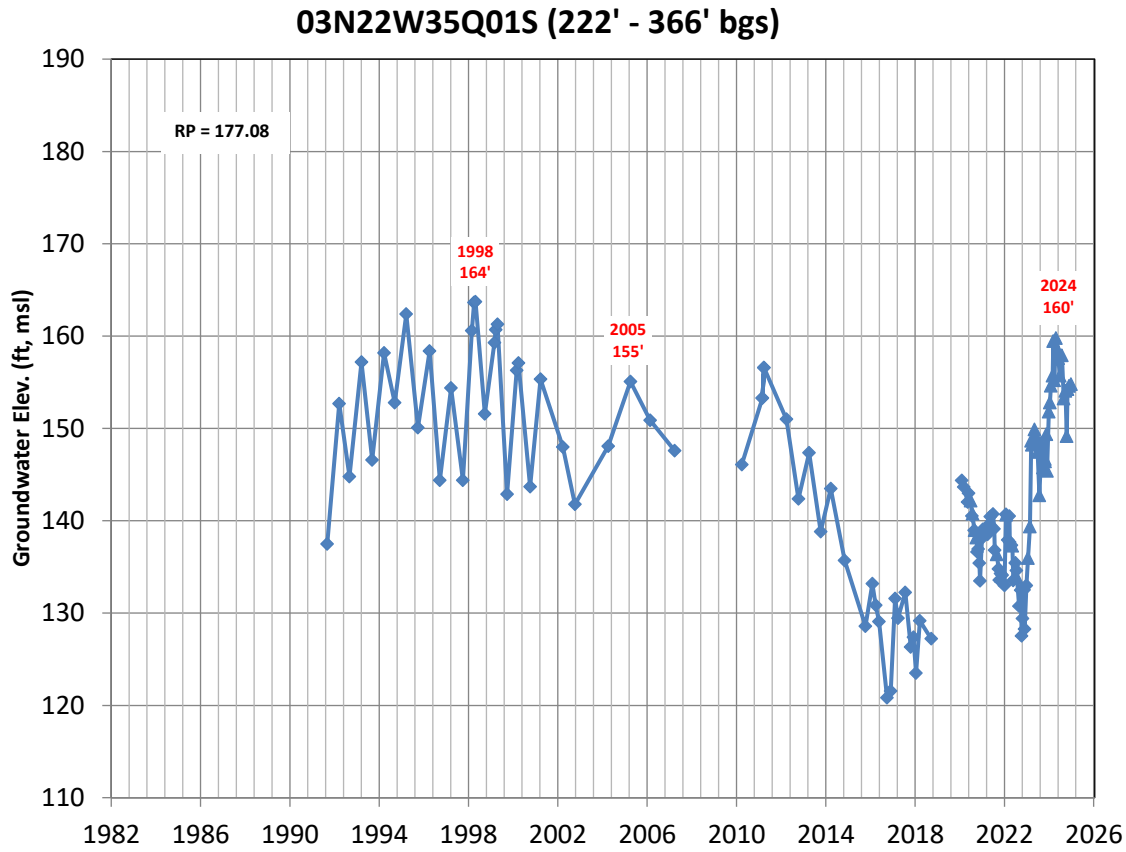
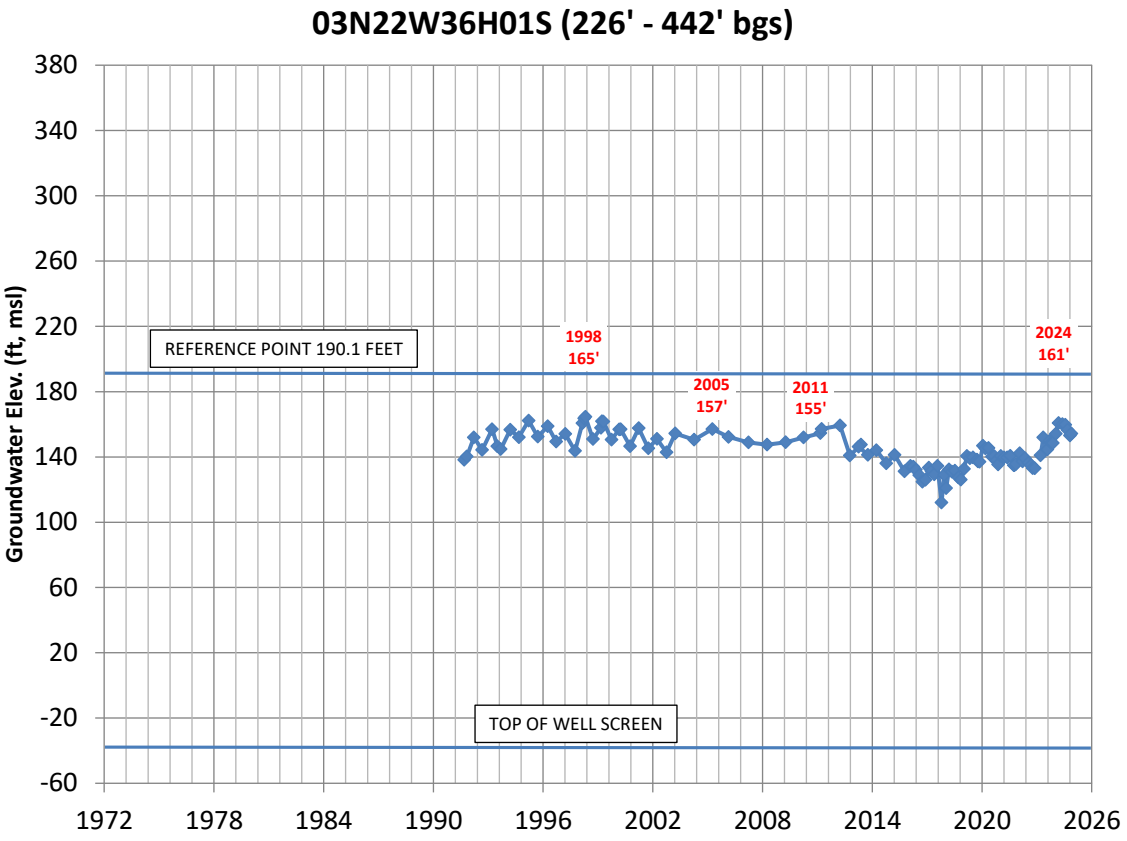
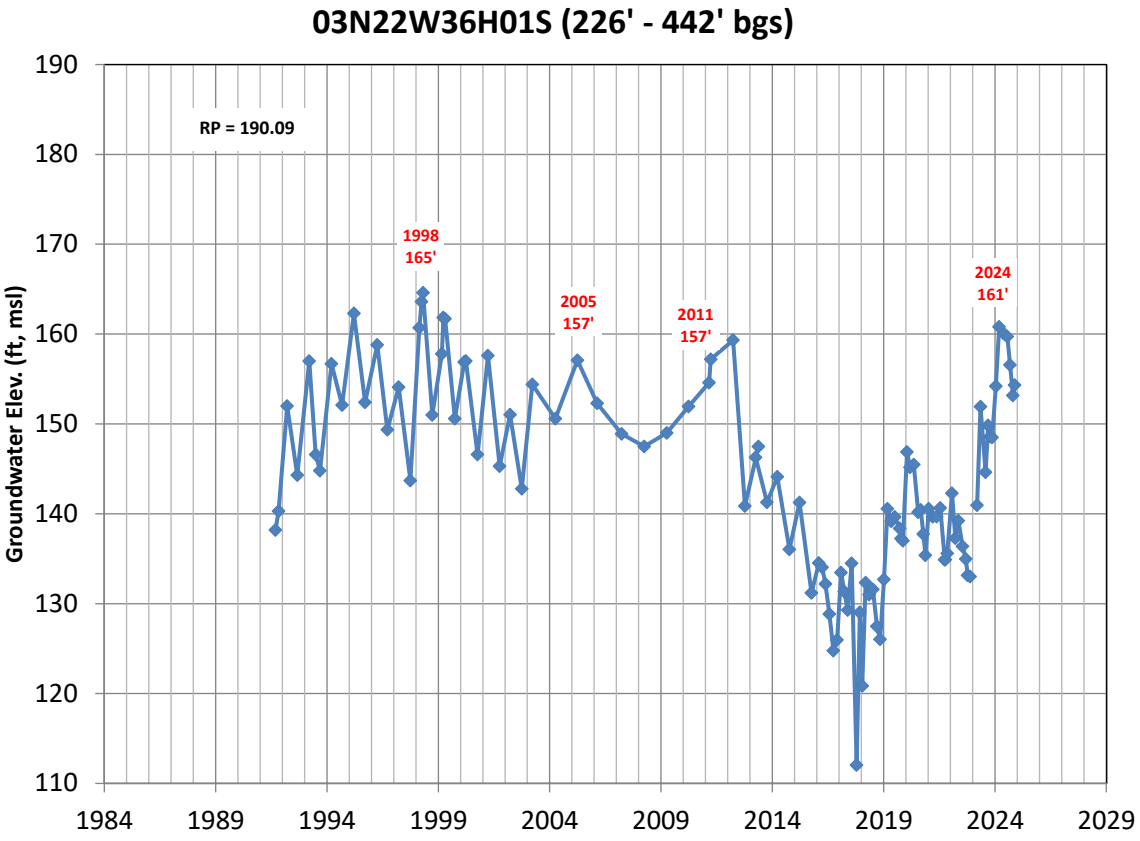
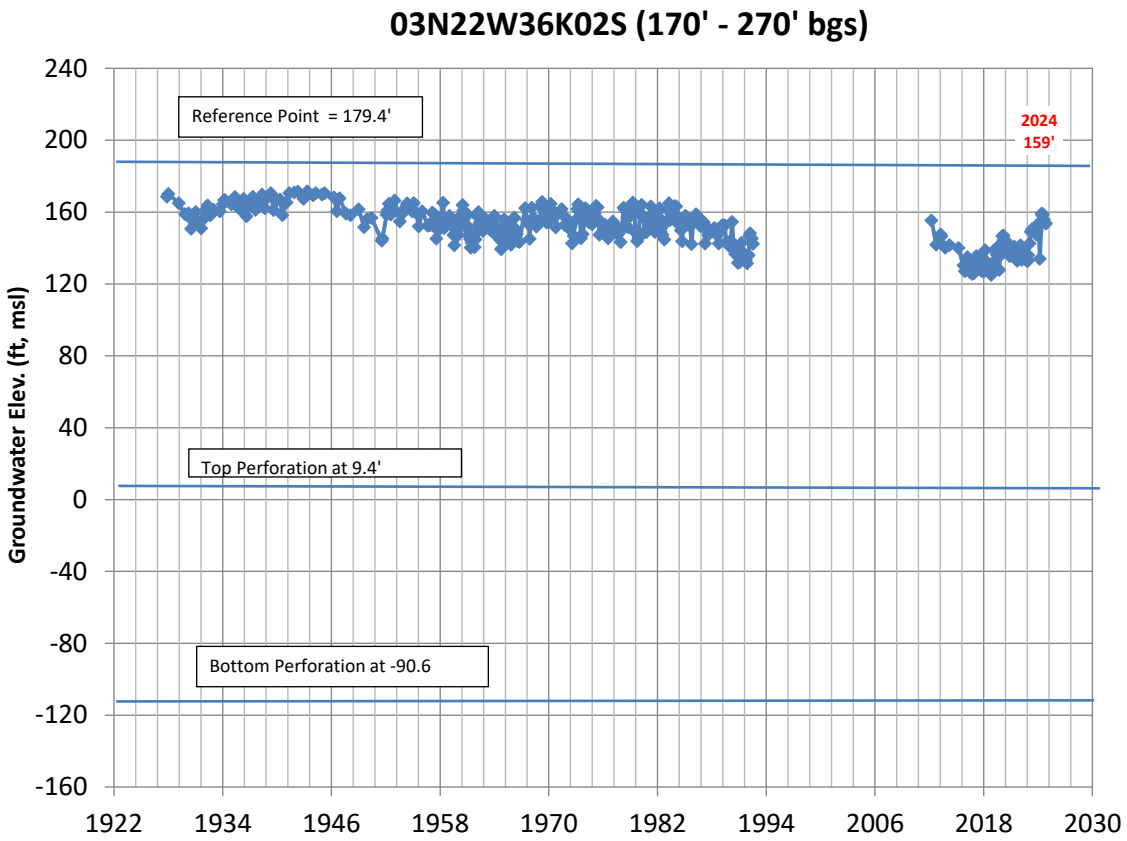


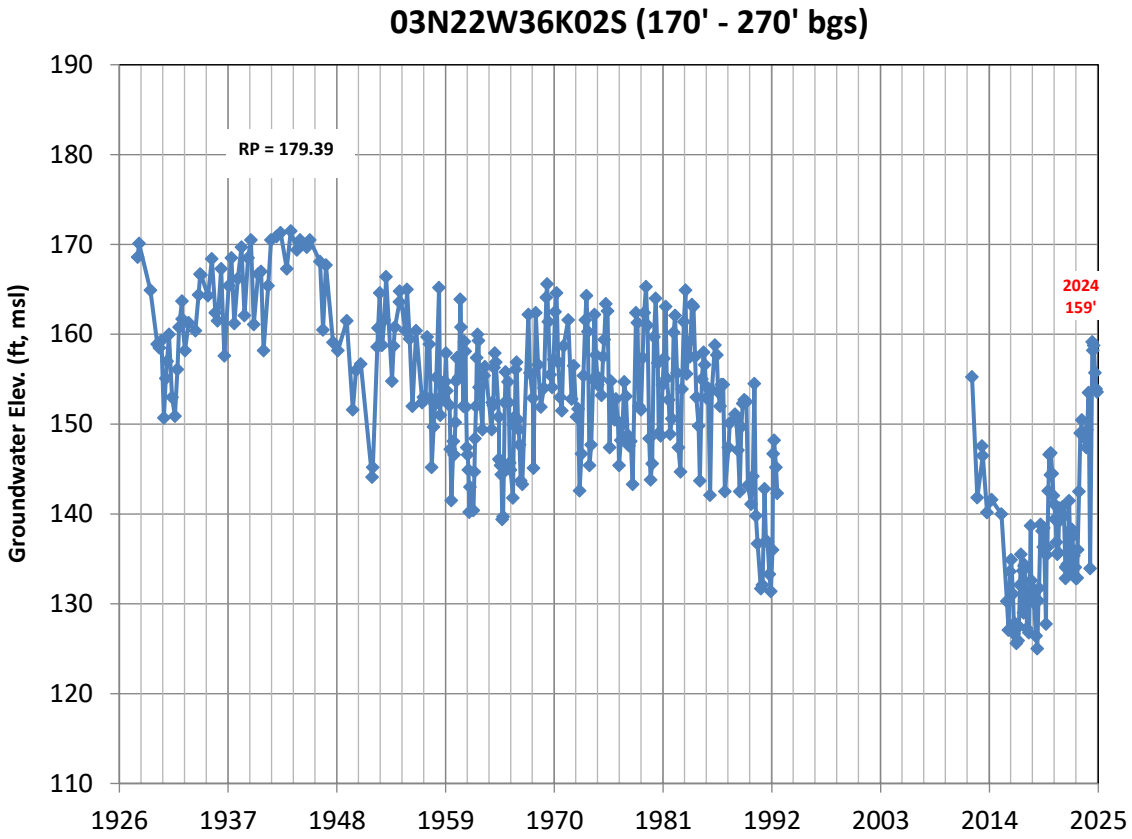

03N22W35Q01S (222' - 366' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 177.1 FEET
1998
164'
2005
155'
2024
160'
TOP OF WELL SCREEN

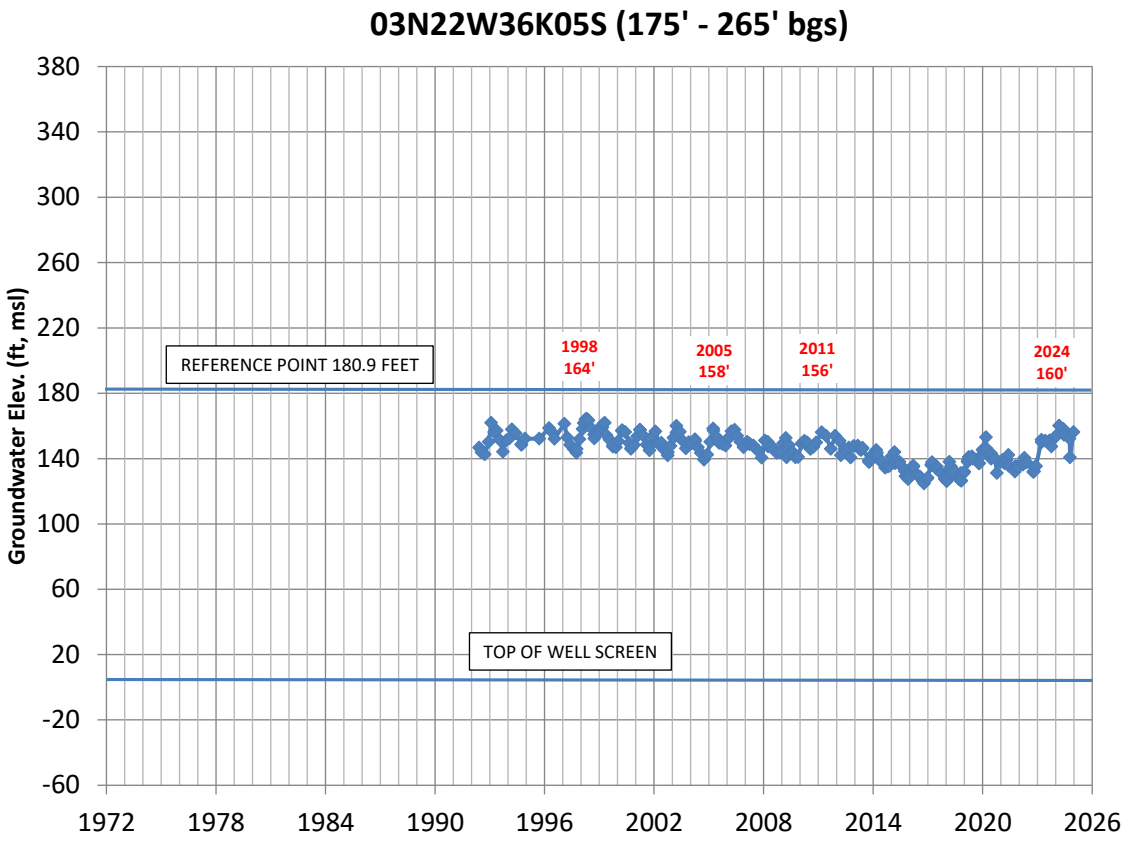

03N22W35Q01S (222' - 366' bgs)
Groundwater Elev. (ft, msl)
190
180
170
160
150
140
130
120
110
1982
1986
1990
1994
1998
2002
2006
2010
2014
2018
2022
2026
RP = 177.08
1998
164'
2005
155'
2024
160'

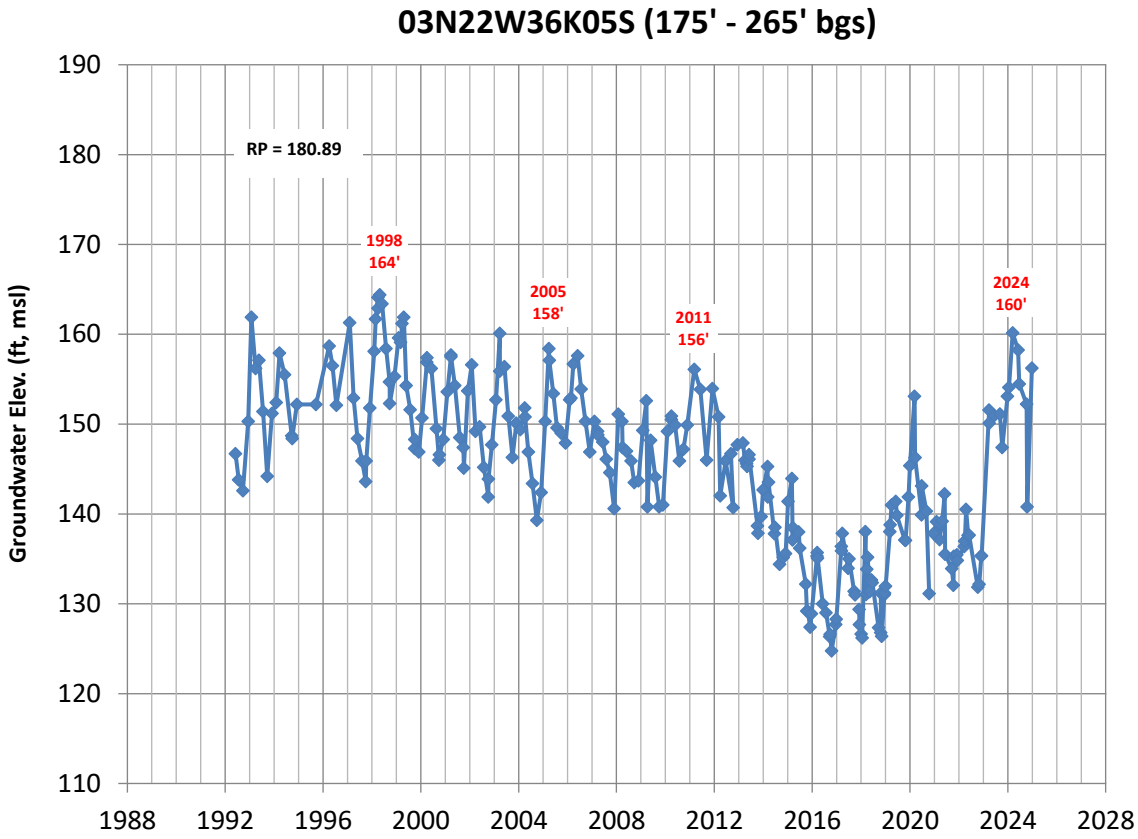

03N22W36H01S (226' - 442' bgs)
Groundwater Elev. (ft, msl)
380
340
300
260
220
180
140
100
60
20
-20
-60
1972
1978
1984
1990
1996
2002
2008
2014
2020
2026
REFERENCE POINT 190.1 FEET
TOP OF WELL SCREEN
1998
165'
2005
157'
2011
155'
2024
161'


03N22W36H01S (226' - 442' bgs)
Groundwater Elev. (ft, msl)
190
180
170
160
150
140
130
120
110
1984
1989
1994
1999
2004
2009
2014
2019
2024
2029
RP = 190.09
1998
165'
2005
157'
2011
157'
2024
161'


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'
2024
159'
Top Perforation at 9.4'
Bottom Perforation at -90.6


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
2024
159'


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'
2024
160'


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
2028
RP = 180.89
1998
164'
2005
158'
2011
156'
2024
160'

Transducer Records

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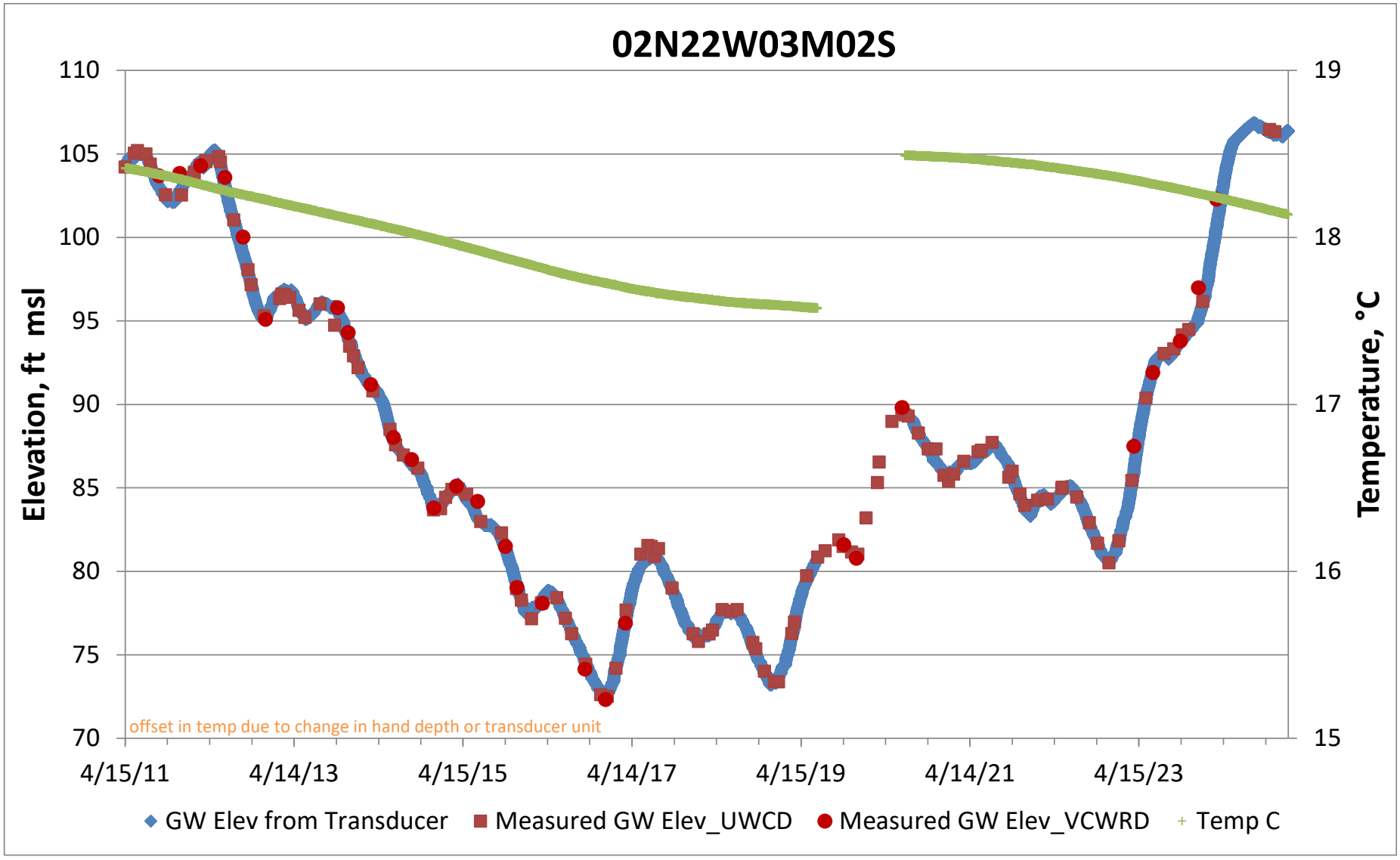
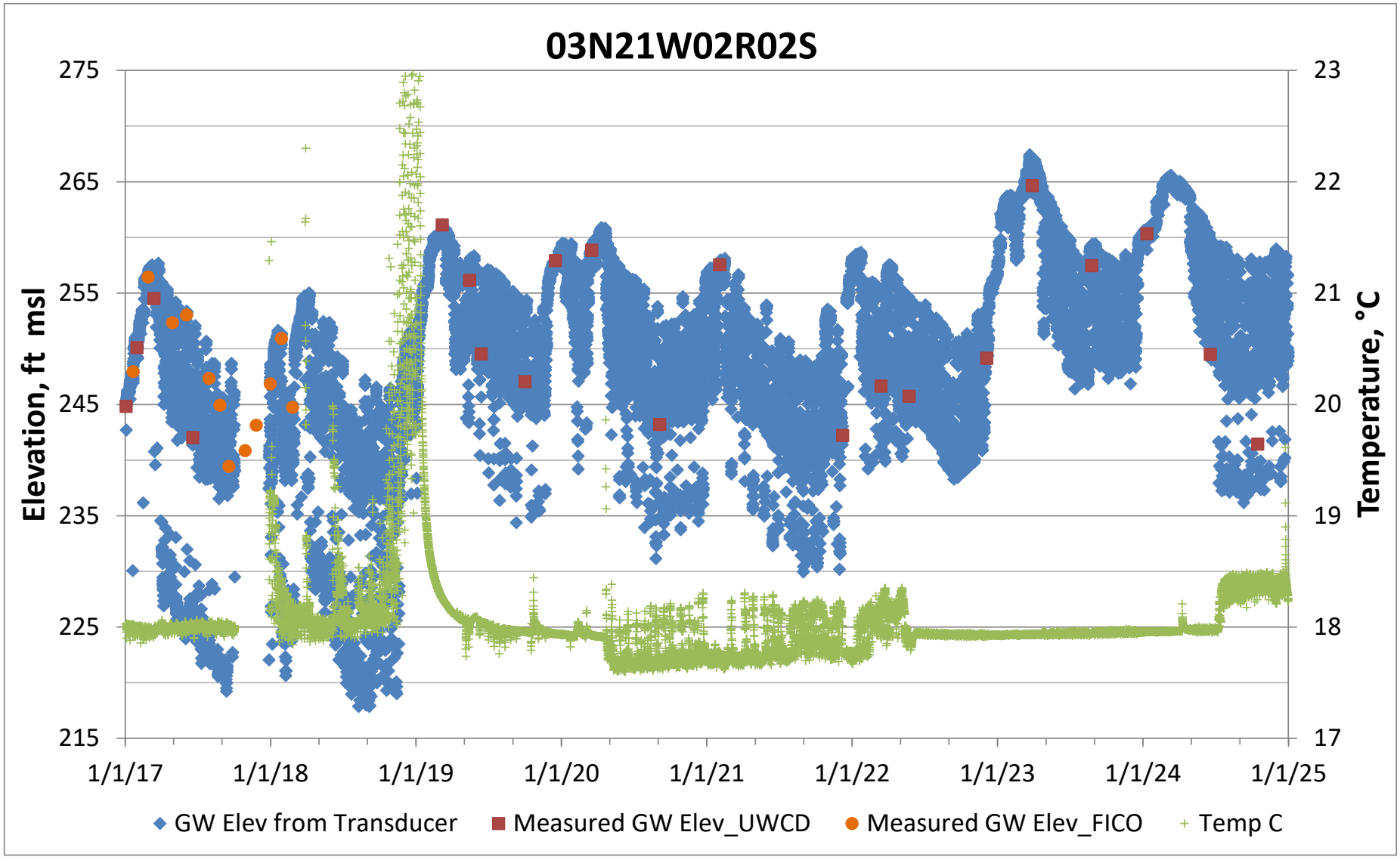
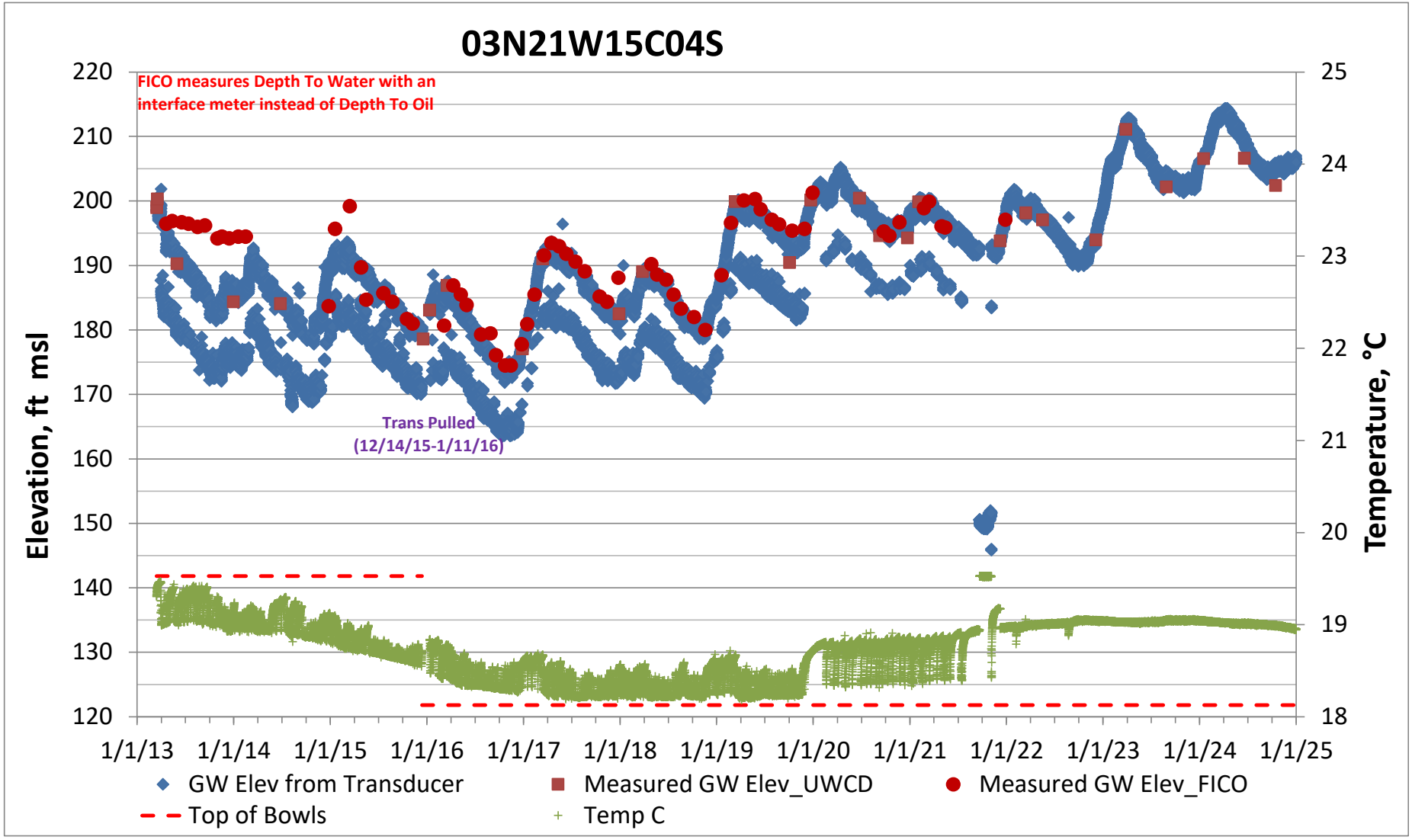
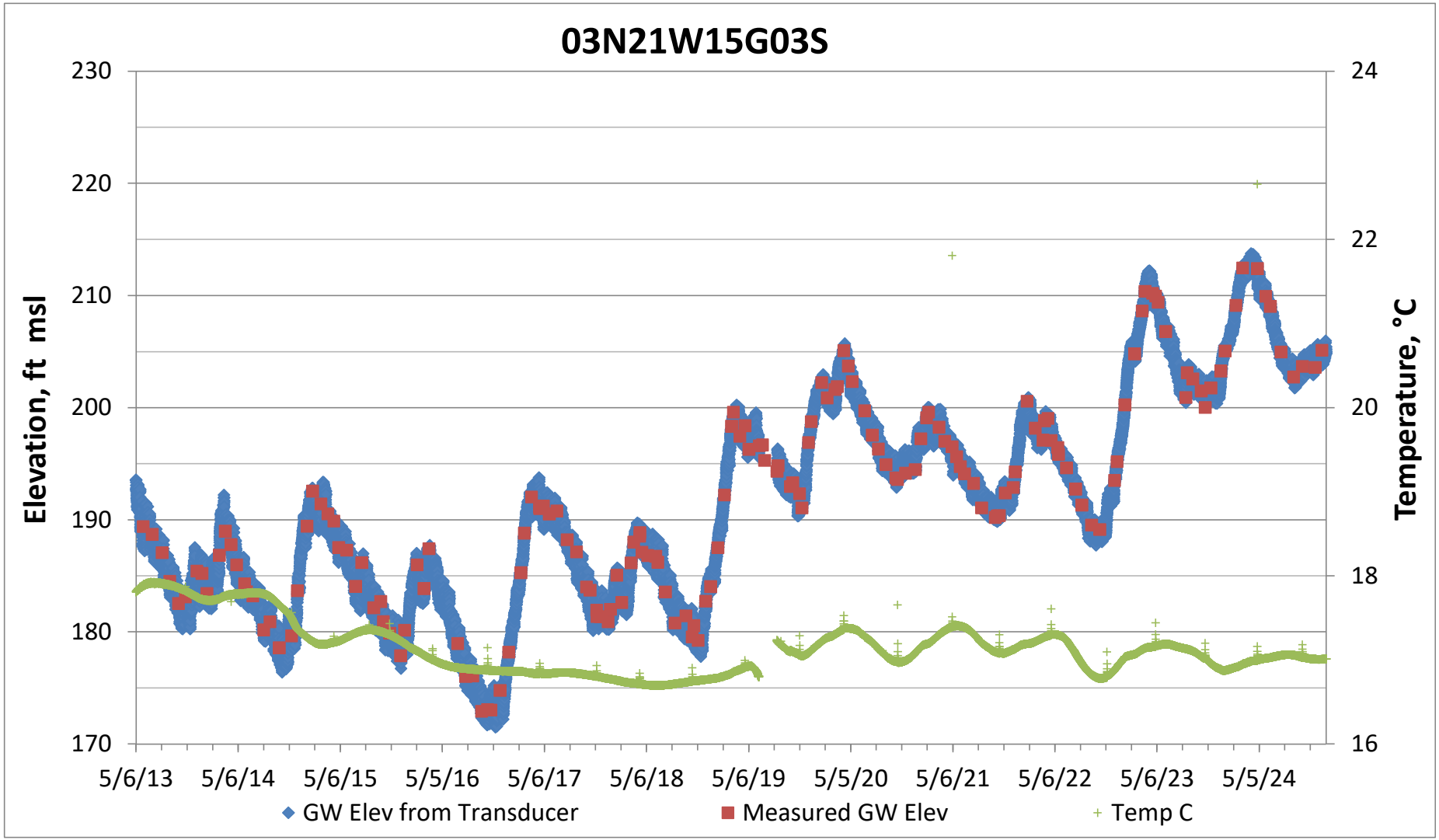
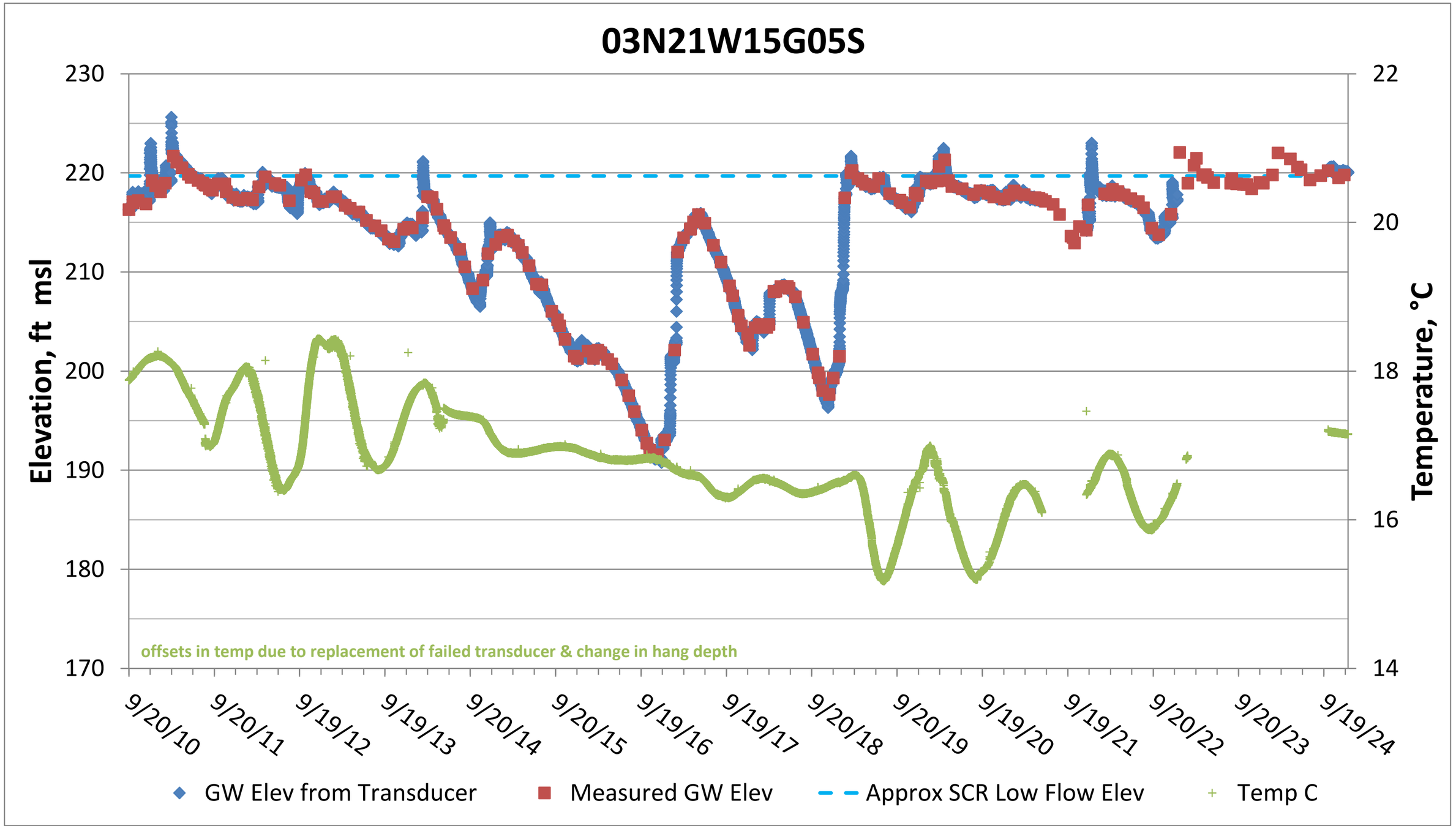
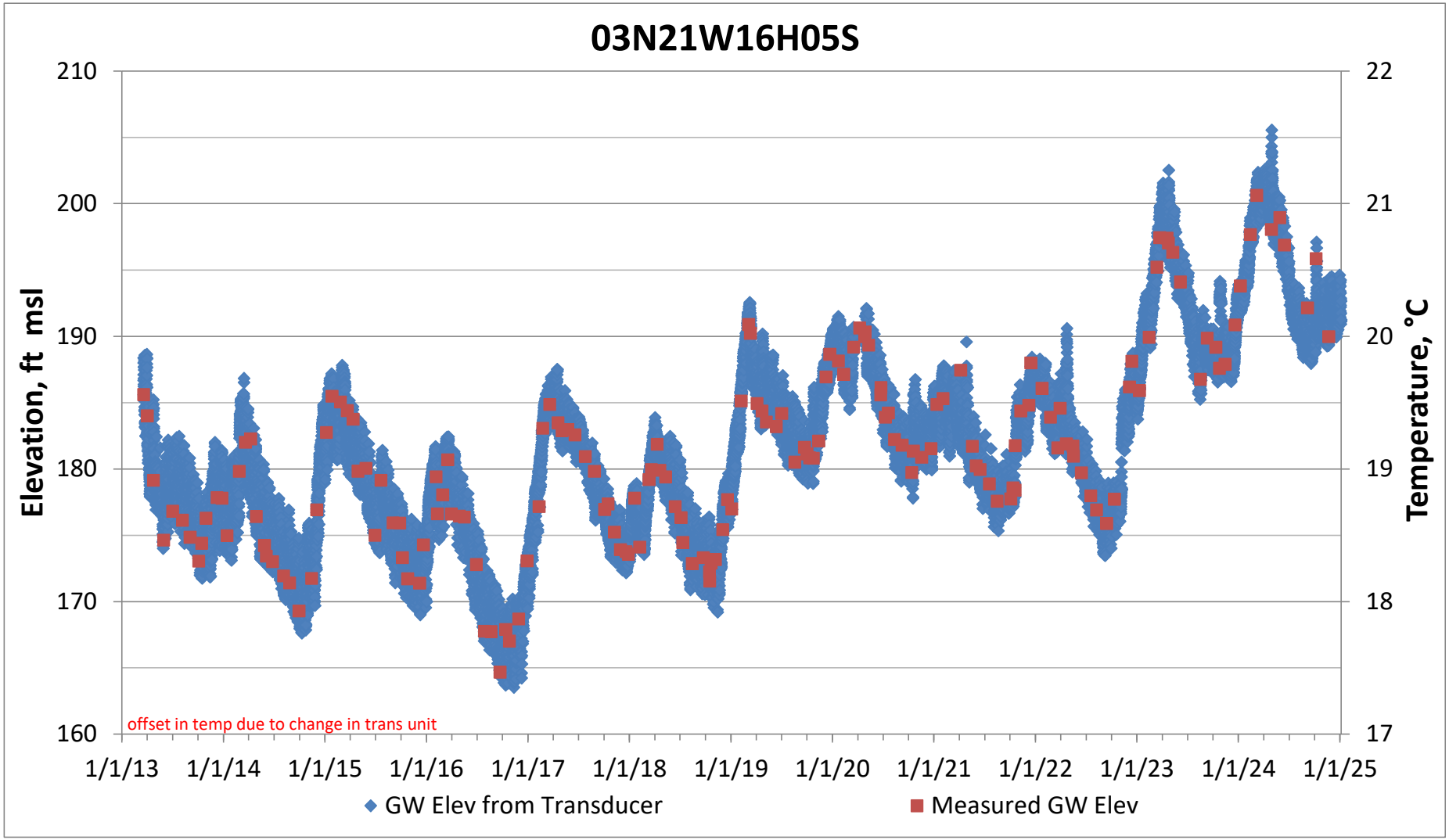

02N22W03M02S
Elevation, ft msl
Temperature, °C
110
105
100
95
90
85
80
75
70
19
18
17
16
15
4/15/11
4/14/13
4/15/15
4/14/17
4/15/19
4/14/21
4/15/23
offset in temp due to change in hand depth or transducer unit
GW Elev from Transducer
Measured GW Elev_UWCD
Measured GW Elev_VCWRD
Temp C

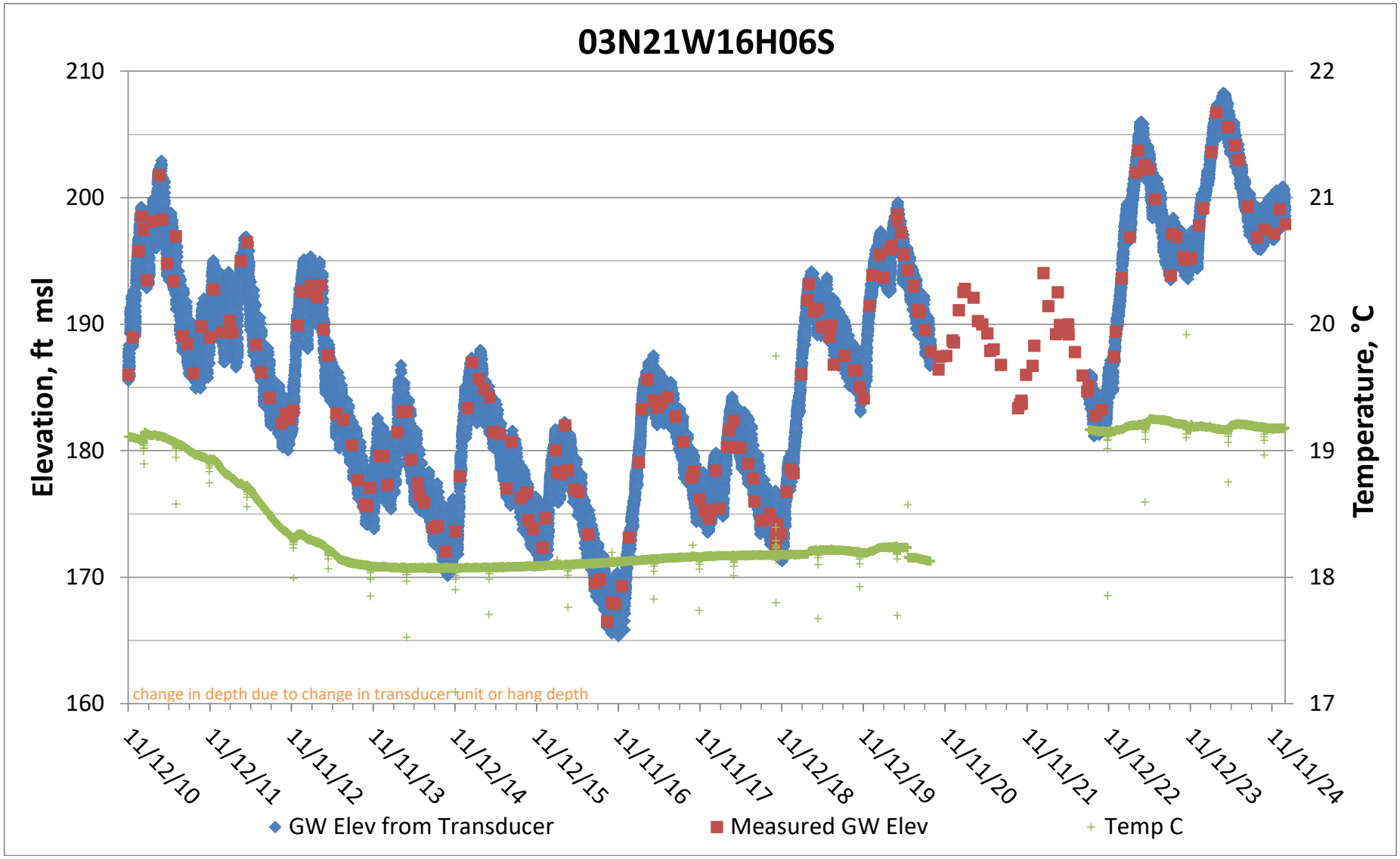

03N21W02R02S
Elevation, ft msl
Temperature, °C
275
265
255
245
235
225
215
23
22
21
20
19
18
17
1/1/17
1/1/18
1/1/19
1/1/20
1/1/21
1/1/22
1/1/23
1/1/24
1/1/25
GW Elev from Transducer
Measured GW Elev_UWCD
Measured GW Elev_FICO
Temp C

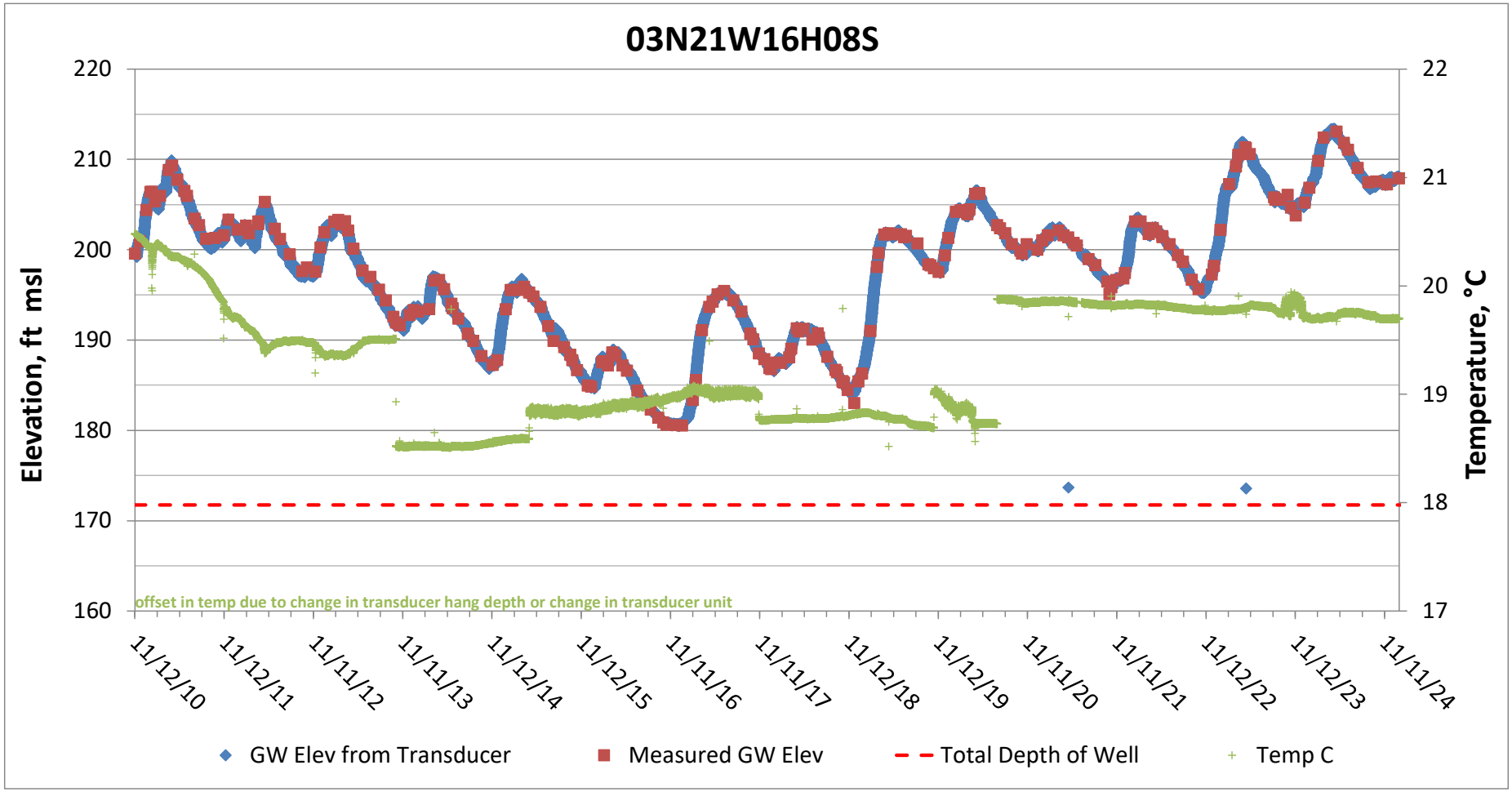

03N21W15C04S
FICO measures Depth To Water with an interface meter instead of Depth To Oil
Trans Pulled (12/14/15-1/11/16)
Elevation, ft msl
Temperature, °C
220
210
200
190
180
170
160
150
140
130
120
25
24
23
22
21
20
19
18
1/1/13
1/1/14
1/1/15
1/1/16
1/1/17
1/1/18
1/1/19
1/1/20
1/1/21
1/1/22
1/1/23
1/1/24
1/1/25
GW Elev from Transducer
Measured GW Elev_UWCD
Measured GW Elev_FICO
Top of Bowls
Temp C

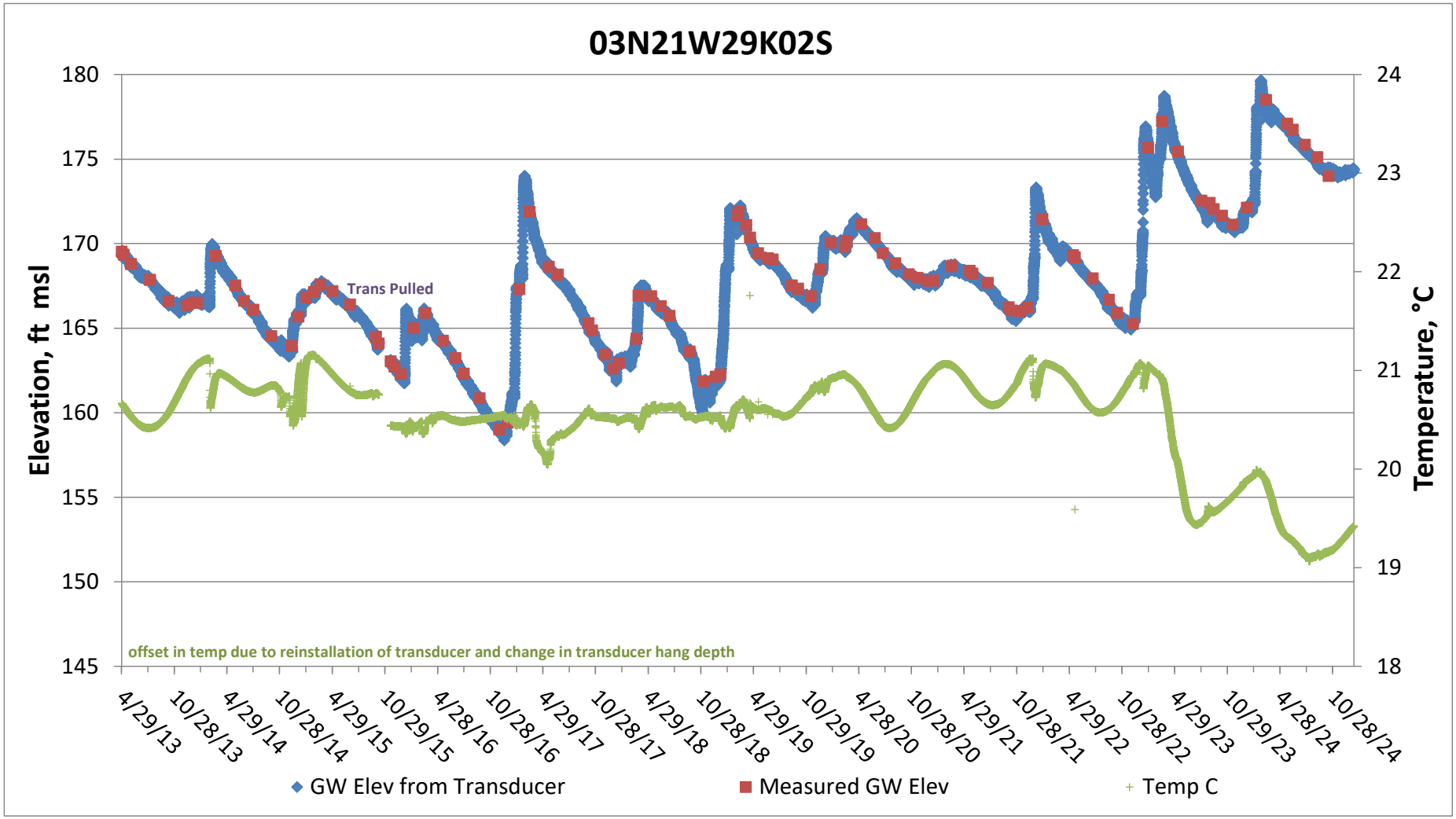

03N21W15G03S
Elevation, ft msl
Temperature, °C
230
220
210
200
190
180
170
24
22
20
18
16
5/6/13
5/6/14
5/6/15
5/5/16
5/6/17
5/6/18
5/6/19
5/5/20
5/6/21
5/6/22
5/6/23
5/5/24
GW Elev from Transducer
Measured GW Elev
Temp C

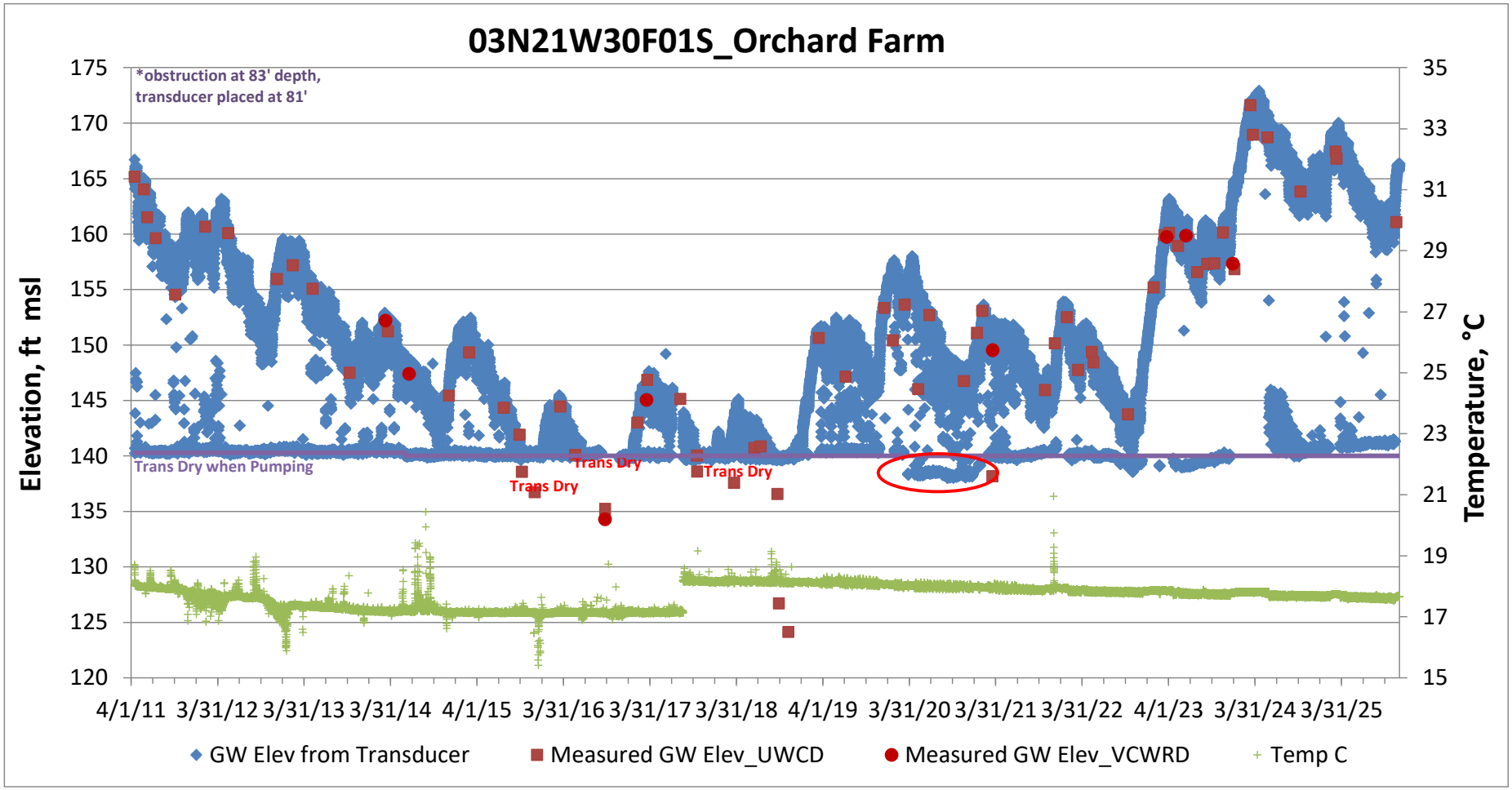

03N21W15G05S
Elevation, ft msl
Temperature, °C
230
220
210
200
190
180
170
22
20
18
16
14
offsets in temp due to replacement of failed transducer & change in hang depth
9/20/10
9/20/11
9/19/12
9/19/13
9/20/14
9/20/15
9/19/16
9/19/17
9/20/18
9/20/19
9/19/20
9/19/21
9/20/22
9/20/23
9/19/24
GW Elev from Transducer
Measured GW Elev
Approx SCR Low Flow Elev
Temp C

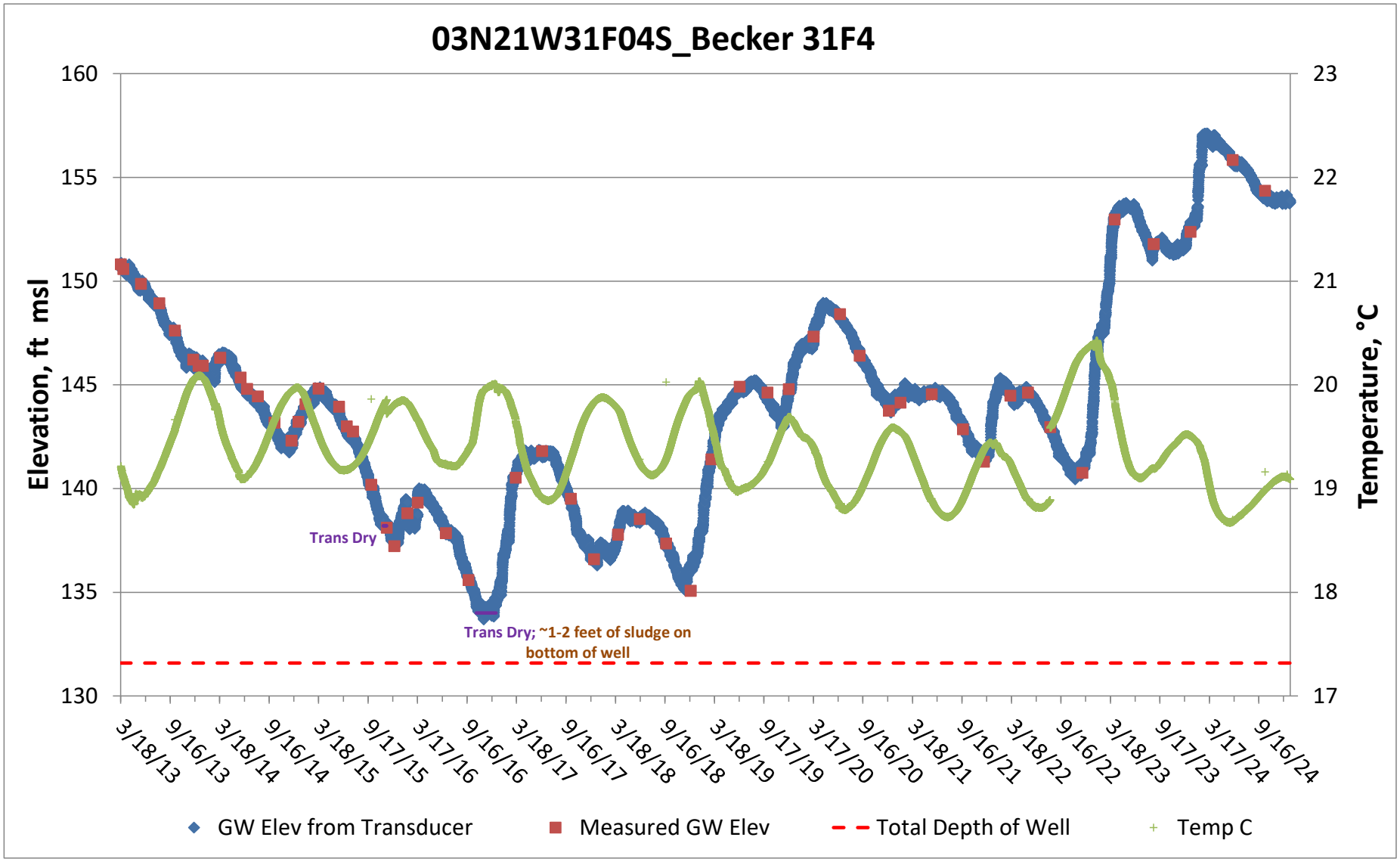

03N21W16H05S
Elevation, ft msl
Temperature, °C
210
200
190
180
170
160
22
21
20
19
18
17
1/1/13
1/1/14
1/1/15
1/1/16
1/1/17
1/1/18
1/1/19
1/1/20
1/1/21
1/1/22
1/1/23
1/1/24
1/1/25
offset in temp due to change in trans unit
GW Elev from Transducer
Measured GW Elev

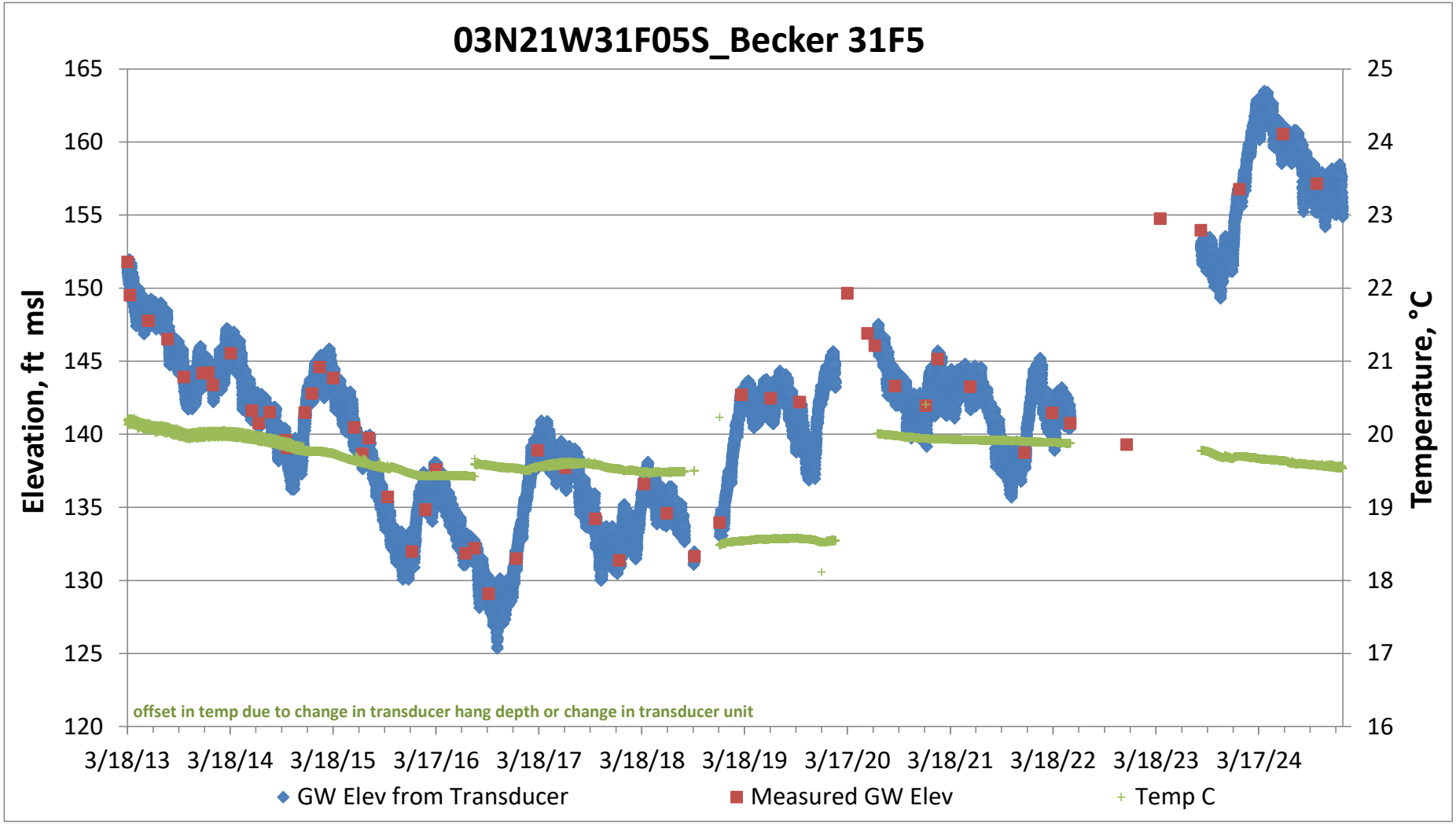

03N21W16H06S
Elevation, ft msl
Temperature, °C
210
200
190
180
170
160
22
21
20
19
18
17
change in depth due to change in transducer unit or hang depth
11/12/10
11/12/11
11/11/12
11/11/13
11/12/14
11/12/15
11/11/16
11/11/17
11/12/18
11/12/19
11/11/20
11/11/21
11/12/22
11/12/23
11/11/24
GW Elev from Transducer
Measured GW Elev
Temp C

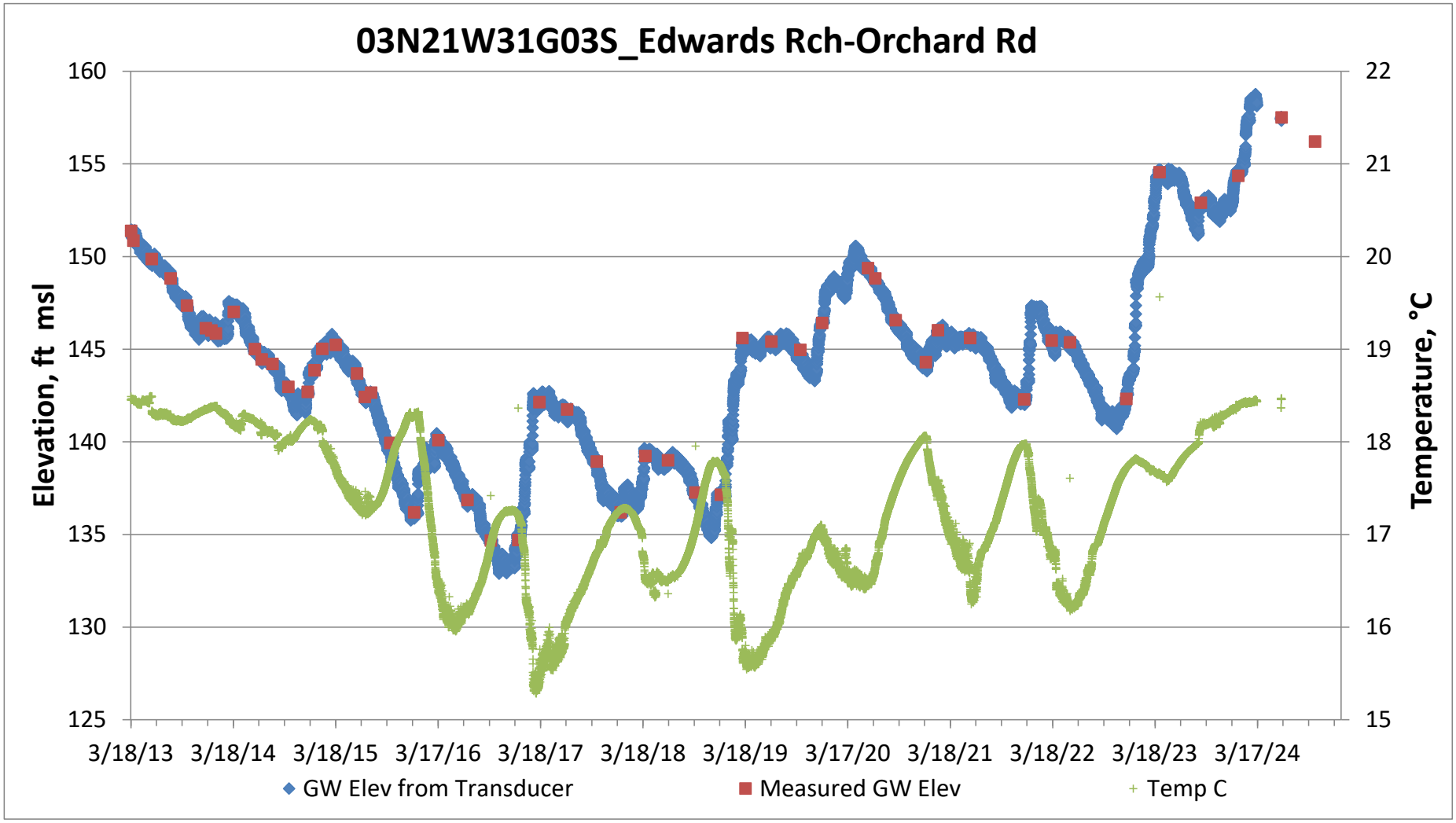

03N21W16H08S
Elevation, ft msl
Temperature, °C
220
210
200
190
180
170
160
22
21
20
19
18
17
offset in temp due to change in transducer hang depth or change in transducer unit
11/12/10
11/12/11
11/11/12
11/11/13
11/12/14
11/12/15
11/11/16
11/11/17
11/12/18
11/12/19
11/11/20
11/11/21
11/12/22
11/12/23
11/11/24
GW Elev from Transducer
Measured GW Elev
Total Depth of Well
Temp C

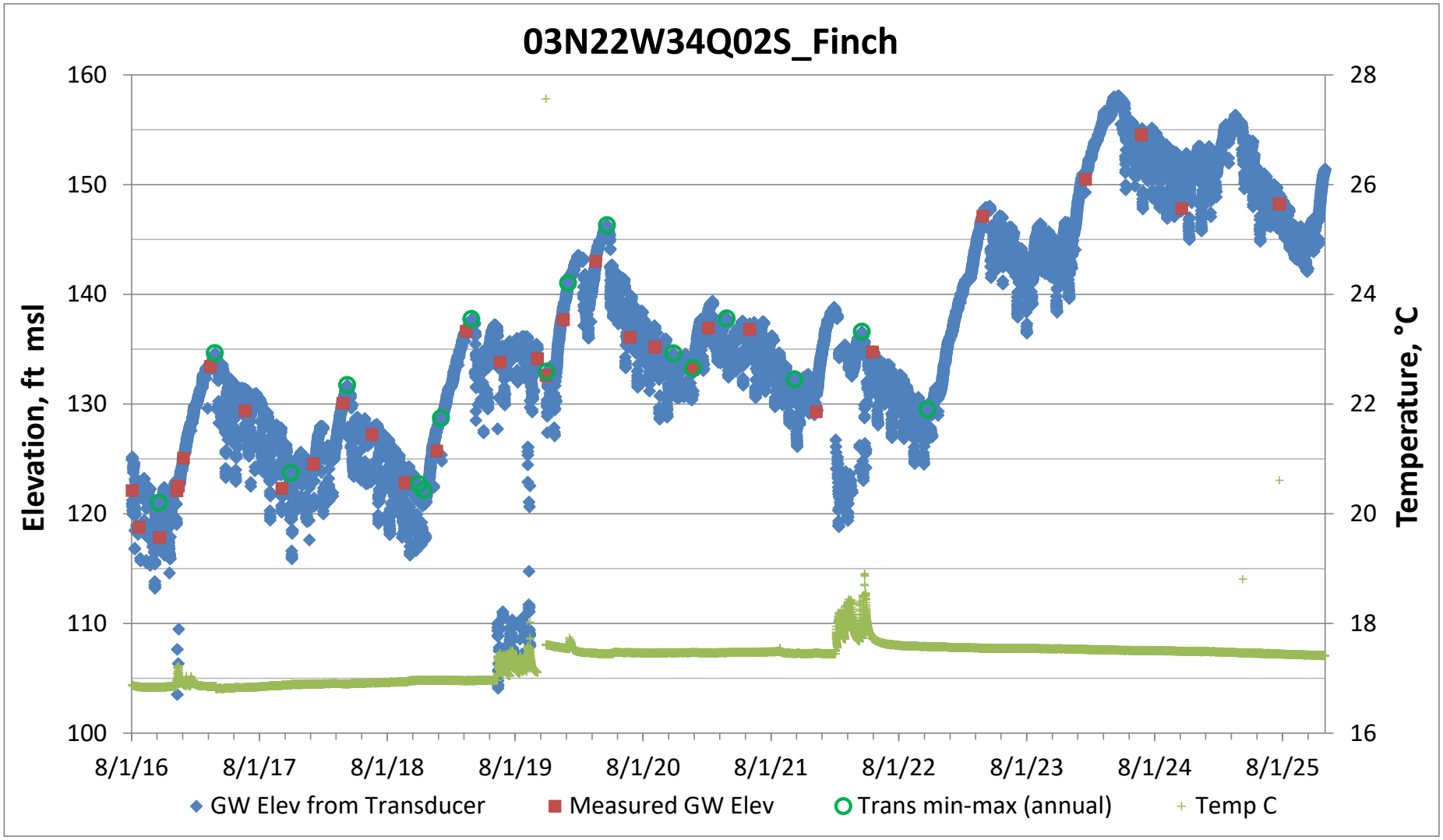

03N21W29K02S
Elevation, ft msl
Temperature, °C
180
175
170
165
160
155
150
145
24
23
22
21
20
19
18
Trans Pulled
offset in temp due to reinstallation of transducer and change in transducer hang depth
4/29/13
10/28/13
4/29/14
10/28/14
4/29/15
10/29/15
4/28/16
10/28/16
4/29/17
10/28/17
4/29/18
10/28/18
4/29/19
10/29/19
4/28/20
10/28/20
4/29/21
10/28/21
4/29/22
10/28/22
4/29/23
10/29/23
4/28/24
10/28/24
GW Elev from Transducer
Measured GW Elev
Temp C

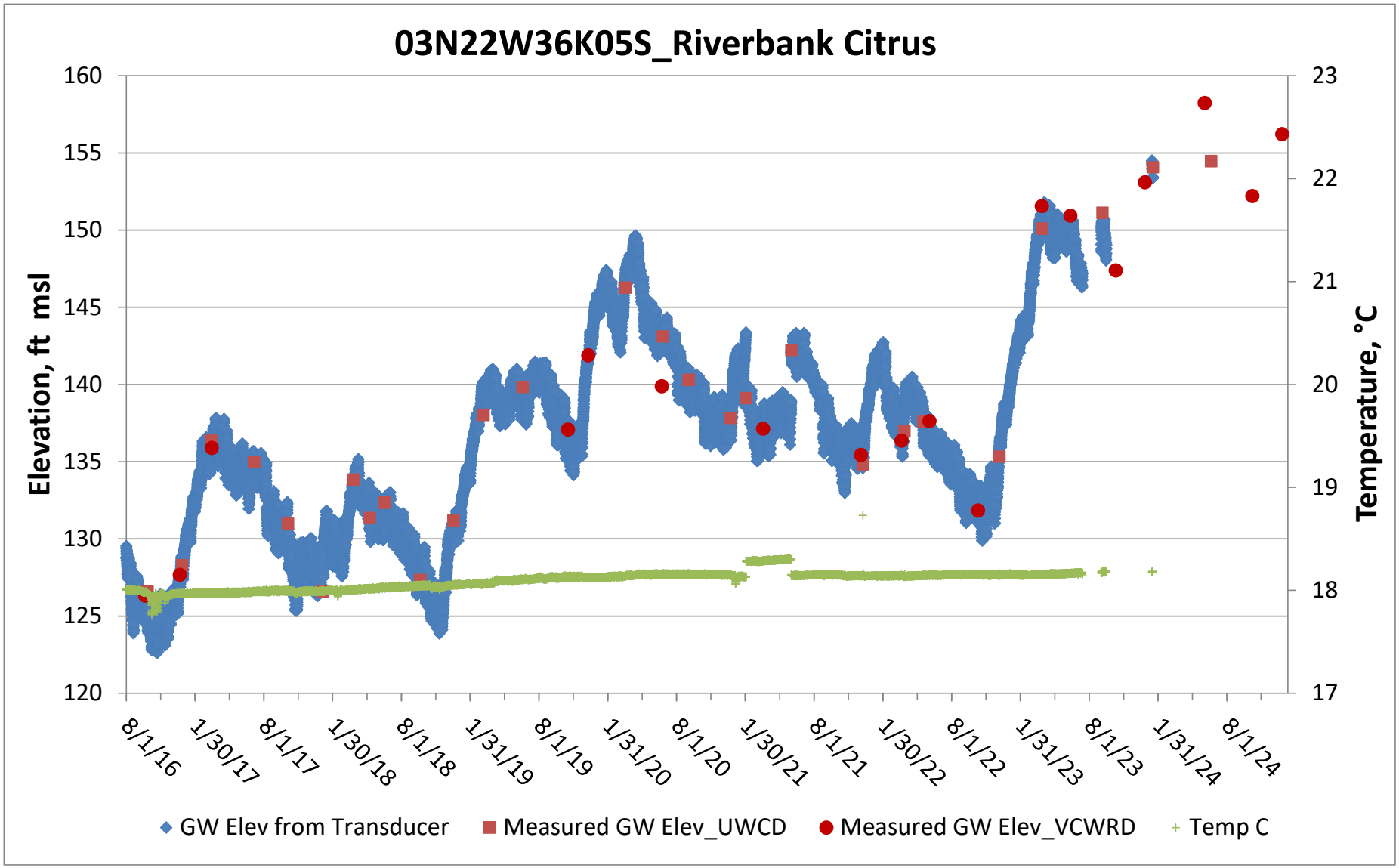

03N21W30F01S_Orchard Farm
*obstruction at 83' depth, transducer placed at 81'
Trans Dry when Pumping
Trans Dry
Trans Dry
Trans Dry
Elevation, ft msl
Temperature, °C
175
170
165
160
155
150
145
140
135
130
125
120
35
33
31
29
27
25
23
21
19
17
15
4/1/11
3/31/12
3/31/13
3/31/14
4/1/15
3/31/16
3/31/17
3/31/18
4/1/19
3/31/20
3/31/21
3/31/22
4/1/23
3/31/24
3/31/25
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
Trans Dry
Trans Dry; ~1-2 feet of sludge on bottom of well
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
9/16/22
3/18/23
9/17/23
3/17/24
9/16/24
GW Elev from Transducer
Measured GW Elev
Total Depth of Well
Temp C


03N21W31F05S_Becker 31F5
Elevation, ft msl
Temperature, °C
165
160
155
150
145
140
135
130
125
120
25
24
23
22
21
20
19
18
17
16
offset in temp due to change in transducer hang depth or change in transducer unit
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
3/18/23
3/17/24
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
3/18/23
3/17/24
GW Elev from Transducer
Measured GW Elev
Temp C


03N22W34Q02S_Finch
Elevation, ft msl
Temperature, °C
160
150
140
130
120
110
100
28
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
8/1/23
8/1/24
8/1/25
GW Elev from Transducer
Measured GW Elev
Trans min-max (annual)
Temp C


03N22W36K05S_Riverbank Citrus
Elevation, ft msl
Temperature, °C
160
155
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
8/1/22
1/31/23
8/1/23
1/31/24
8/1/24
GW Elev from Transducer
Measured GW Elev_UWCD
Measured GW Elev_VCWRD
Temp C

APPENDIX C - Spring 2023 to Spring 2024 Groundwater Elevation Change Measured in Wells

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WELLID	Spring 2023 Groundwater Elevation (ft,msl)	Spring 2024 Groundwater Elevation (ft,msl)	Difference
03N21W09K02S	206.58	209.98	3.40
03N21W15C06S	211.29	210.29	-1.00
03N21W16A02S	202.04	206.04	4.00
03N21W16K01S	201.16	204.64	3.48
03N21W17Q01S	196.40	197.49	1.09
03N22W23Q01S	232.43	243.07	10.64
03N21W19R01S	170.99	172.19	1.20
03N22W24R01S	174.22	173.70	-0.52
03N21W30E01S	165.61	174.59	8.98
03N21W30F01S	160.12	171.62	11.50
03N21W29K02S	177.24	178.50	1.26
03N22W36H01S	140.95	160.80	19.85
03N21W31L01S	150.54	159.95	9.41
03N22W36K05S	151.56	160.14	8.58
02N22W03M02S	87.50	102.30	14.80
02N22W02K09S	151.75	158.15	6.40
02N22W03K02S	123.85	136.05	12.20
03N21W15G01S	210.59	212.65	2.06
03N21W15G02S	210.30	212.40	2.10
03N21W15G03S	210.38	212.45	2.07
03N21W15G04S	210.27	212.30	2.03
03N21W15G05S	221.47	222.02	0.55
03N21W12E08S	267.93	267.02	-0.92
03N21W16H05S	197.43	200.62	3.19
03N21W16H06S	203.74	206.74	3.00
03N21W12F03S	270.67	268.36	-2.31
03N21W16H07S	204.90	207.42	2.52
03N21W16H08S	211.34	212.41	1.07
03N21W11J02S	245.37	243.37	-2.00
03N21W09R05S	208.00	208.00	0.00
03N21W16A03S	202.35	204.85	2.50
03N21W12F06S	274.24	272.45	-1.78
02N22W02H02S	144.00	152.00	8.00
02N22W02K10S	133.50	145.61	12.11
03N22W24R02S	164.00	174.28	10.28

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

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Table "D-1"
IPA's 2018 - 2024 Production & Averages

12/3/2025

2018 (2)	2019 (2)	2020 (2)	2021 (2)	2022 (2)	2023 (2)	2024 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
0.5	0.4	1.2	0.5	0.3	0.6	0.3	0.5	(1.3)	1.8	Aliso Vista Ranch	03N/22W-23Q01
745.7	292.0	536.7	804.3	509.2	637.0	759.1	612.0	(151.1)	763.1	Alta Mutual Water Company, Inc.	02N/22W-02K10
1.3	1.4	2.0	2.4	2.4	1.9	1.8	1.9	(1.0)	2.9	Arambula, Pedro	03N/21W-21E02
246.8	76.4	278.5	271.3	241.5	218.6	211.6	220.7	(71.9)	292.6	Bender Realty LTD (29)	3N/21W16P02, 3N/21W16P03, 3N21W17R01 (4) 03N/21W-17R01
71.7	26.2	80.1	88.5	80.7	49.2	28.0	60.6	(40.2)	100.8	Billiwhack Ranch LLC	03N/22W-23F02, 03N/22W-23G01
1.1	2.1	1.8	1.8	1.4	1.8	1.7	1.7	(4.3)	6.0	Bratcher Family Revocable Tr 1-24-02 & Cutright Revocable Tr 8-18-03 (22)	03N/21W-16P01
383.5	400.8	439.2	427.7	413.3	263.4	438.1	395.1	118.6	276.5	Brucker Family Trust (29)	3N/21W-19Q01, 3N/21W-29E01, 3N/21W-29C03 03N/21W-29E01, 3N/21W-29C03
140.0	54.2	150.8	163.4	130.4	25.8	55.7	102.9	(179.4)	282.3	Campbell, Dan	03N/21W-19R01
3.5	0.1	0.3	0.4	0.2	0.1	0.1	0.7	(0.4)	1.1	Canine Adoption and Rescue League	03N/21W-29B02
819.5	53.5	227.7	911.3	476.4	5.0	7.7	357.3	(315.7)	673.0	Canyon Irrigation Company	03N/21W-11F03, 3N/21W-11E03, 3N/21W-11F04
42.3	28.2	45.8	40.6	52.1	36.1	39.4	40.6	(58.7)	99.3	Casa De Oro Ranch	03N/21W-20F01
60.4	59.9	87.3	117.8	140.3	57.9	70.4	84.9	44.2	40.7	Castaneda, Albert	03N/21W-19L01 (1), 3N21W19K01 03N/21W-19L01
						70.4	10.1	(40.6)	50.7	Casteneda, Mary	03N/21W-19L01
4,232.5	4,082.8	4,444.9	4,489.9	4,233.9	3,841.1	4,250.2	4,225.1	(1,490.2)	5,715.3	City of Santa Paula (37) (38)	03N/21W-21B03 3N/21W-02R02 3N/21W9R05, 03N/21W11J02, 03N/21W15C06, 03N/21W16A02, 3N/21W16A03
33.5	36.2	41.4	43.2	45.2	6.5	9.7	30.8	(62.8)	93.6	Clow, The Roger D. Clow Trust, Dated September 15, 1994	3N/21W20J04 (17) 03N/21W-20A02, 03N21W21L02

Table "D-1"
IPA's 2018 - 2024 Production & Averages

12/3/2025

2018 (2)	2019 (2)	2020 (2)	2021 (2)	2022 (2)	2023 (2)	2024 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
150.3	262.2	204.4	76.9	120.5	84.7	95.0	142.0	(16.7)	158.7	Cole, Lecil E. Trustee of the Lecil E. and May Jeanette Cole Revocable Trust	3N/21W-16E02
7.3	14.8	7.9	3.1	3.1	8.7	10.4	7.9	(1.7)	9.6	The Judson T. Cook & Suzette H. Cook Revocable Trust dated December 5, 2007 (28)	3N/22W-26B01
204.3	194.3	163.2	58.5	81.3	100.0	78.0	125.7	(46.6)	172.2	County of Ventura, General Services Agency (26)	03N/21W-30H08, 3N/21W-30H02
95.3	77.9	74.0	101.7	84.5	86.7	34.4	79.2	(99.1)	178.3	County of Ventura, General Services Agency	02N/22W-02G01
97.5	59.8	281.7	118.3	126.2	73.8	51.9	115.6	(33.6)	149.2	Dickenson, Bruce E and Janice J Trustees of the B&J Dickenson Revocable Trust August 26, 2015	03N21W-10M01
6,002.2	4,242.9	5,494.9	6,251.1	6,268.2	3,923.3	4,337.6	5,217.2	(4,687.0)	9,904.2	Farmers Irrigation Company, Inc.	03N/21W09R04, 03N/21W12E04, 03N/21W12E08, 03N/21W12F03, 03N/21W16K01, 03N/21W16K02, 03N/21W16K03, 3N/21W19G04, 3N/21W12F06, 03N21W15C04, 3N21W15C02
11.4	10.7	12.7	12.5	10.8	14.7	24.5	13.9	13.9	0.0	Fiano, Michael J. Trust (21)	3N/22W26B02 & 3
184.9	113.9	155.3	131.6	133.3	133.4	127.7	140.0	(73.4)	213.4	Finch Family Trust (formerly Finch, J.J. & H.H.)	3N/22W34Q02, 3N22W34Q03
									48.0	FLT Telegraph, LLC	
7.8	4.1	7.4	6.6	7.5	8.7	10.1	7.5	(12.1)	19.6	Garcia, Elias & Guadalupe (15)	3N/22W26B1
18.0	12.2	11.1	16.3	11.1	12.8	15.9	13.9	(28.9)	42.8	Tegland Family Farm LLC (40)	03N/21W16E01
112.4	101.3	123.7	143.8	130.7	104.7	121.6	119.7	17.9	101.8	Gooding Ranch (John F. Gooding)	~~03N/21W09K02~~, 03N/21W09K05
33.2	27.0	33.9	38.4	21.2	15.8	18.0	26.8	(26.1)	52.9	Grant Family Ranches, LLC (20) (30)	3N21W20E01
56.0	44.5	119.4	53.7	51.8	46.5	46.0	59.7	(37.9)	97.6	Grether, Elizabeth Broome, Ann B. Priske, John S. Broome Jr. as Trustee of the John S. Broome Jr. Trust	~~03N/22W35Q02~~, 03N/22W35Q01

Table "D-1"
IPA's 2018 - 2024 Production & Averages

12/3/2025

2018 (2)	2019 (2)	2020 (2)	2021 (2)	2022 (2)	2023 (2)	2024 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
9.7	10.4	10.3	10.5	10.4	10.4	10.4	10.3	(2.7)	13.0	Guzman, Yeisi Brayen, Trustee of the Brayen And Mesa Guzman Revocable Family Trust, dated July 24, 2015	03N/21W-19G03
102.3	46.7	87.1	78.5	88.3	63.0	51.3	73.9	(55.3)	129.2	Hadley-Williams Partnership	02N/22W-03E01 (9),
1.6	3.6	0.1	0.2	0.3	0.0	0.0	0.8	0.7	0.1	Hebert Family Trust	03N/22W026P01
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(25.0)	25.0	Held, Family Trust dtd 1-16-03	03N/22W-23F02 - not using part of ranch
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(45.1)	45.1	JAKRAN VI LLC	02N/22W01M03, 02N/22W01M04
62.93	78.56	89.1	82.4	49.6	37.4	69.3	67.0	(58.0)	125.0	JKJ Farms, LLC (29)	3N/21W-16P01 3N/21W-16P02&3
120.0	178.1	138.5	167.8	170.1	77.3	61.1	130.4	(64.9)	195.3	Leavens Ranches	03N/22W24R01 (inactive), 03N/22W24R02 (13), 2N22W03F02
1,517.1	982.2	1,405.2	1,339.6	1,494.1	1,138.3	1,310.2	1,312.4	(2,003.5)	3,315.8	Limoneira Company (36-38)	03N/21W01N02, 03N/21W02Q01, 03N/21W19G02, 03N/21W30F01, 03N/21W30H04, 03N/21W31E03, 3N/21W31L02 ~~03N/21W11A01~~
30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	0.0	30.0	Limoneira Lewis Community Builders, LLC	3N/21W02R02, 03N/21W11B02
1.6	1.8	2.1	1.3	1.5	1.8	1.8	1.7	(8.3)	10.0	Little Clara Ranch LLC (30)	3N22W34E01
362.2	254.8	358.7	238.6	346.3	199.1	173.1	276.1	10.9	265.2	Loza Investments LLC	03N/21W10M01, 02N/22W03K02, ~~2N/22W03K03~~, 02N/22W03K05
23.1	18.8	20.4	19.7	17.8	16.9	17.2	19.1	(17.2)	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/21W21G03
41.8	19.5	45.0	51.7	57.0	42.8	44.1	43.1	8.8	34.3	Martinez, Esther	3N21W29G02

Table "D-1"
IPA's 2018 - 2024 Production & Averages

12/3/2025

2018 (2)	2019 (2)	2020 (2)	2021 (2)	2022 (2)	2023 (2)	2024 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
22.6	23.5	23.0	30.2	34.4	29.0	34.6	28.2	3.5	24.7	McConica, John II	02N22W03Q01
66.55	162.47	154.3	134.1	71.6	105.4	80.6	110.7	(70.9)	181.6	McGaelic Group	03N/21W17R01 (4), ~~3N/21W11H01~~
430.8	319.9	288.0	251.9	287.8	203.0	279.9	294.5	10.9	283.6	McGrath, John & Sons (18)	03N/21W21E05, 3N/21W21E11, 3N/21W-20J04 (17),3N/21W-20R03
38.1	14.1	18.0	31.7	29.5	31.4	19.1	26.0	(20.7)	46.7	Nichols Associates	03N/22W36H01, 03N/22W36H02
15.6	23.5	24.1	34.9	28.2	20.0	21.0	23.9	(102.5)	126.4	Nutwood Farms	03N/22W-36J01, 36J02 & 36J03
0.04	0.02	0.0	0.0	0.0	0.0	0.0	0.0	(24.6)	24.6	Oba Family Trust dtd 12-22-92	3N/21W17D03(10) - this well is rarely used; splits with Panamerican using a different well, but Panamerican reports all usage
11.1	11.0	13.2	9.1	7.8	6.4	6.7	9.3	(5.8)	15.1	Ohst, Gary	03N/21W10E01, ~~03N/21W10E02~~, 03N21W10E03
111.7	75.8	104.1	102.3	115.0	50.8	89.4	92.7	(101.2)	193.9	Rancho Resplandor de Oro, Inc. formerly Orr Ranch Co. (25)	03N/21W-20J03, 3N/21W-20J2
108.8	86.9	104.9	78.8	91.7	100.4	68.2	91.4	52.8	38.6	Ortiz Trust - Joseph & Sons	03N/21W-30E01
											3N/21W-30E02, 3N/21W-20H01
326.3	107.9	297.7	249.2	251.8	207.1	191.0	233.0	(177.3)	410.3	Panamerican Seed, aka Ball Horticultural	3N/21W20K01, 3N/21W20M01, 03N/21W20P01
57.4	76.1	74.5	57.7	55.7	40.7	35.9	56.8	(59.2)	116.0	Petty Ranch LP	03N/22W-36K04, 3N/22W-36K06
0.0	0.0	0.0	0.0	0.0	0.0	24.0	3.4	(35.7)	39.1	Pinkerton, Arlene	3N21W17Q01 (5)
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(2.0)	2.0	Pinkerton, Jennifer Paulene	
93.2	57.2	105.9	114.2	123.4	57.0	94.4	92.2	30.3	61.9	Pinkerton, Arlene (formerly Pinkerton, Murray)	03N/21W21E01
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(7.0)	7.0	Pinkerton Ranch Trust	
125.7	72.2	87.8	102.4	77.1	37.1	47.8	78.6	(41.0)	119.6	Rancho Filoso, LLC	03N/21W09K03, 3N/21W09K04
							0.0	(10.0)	10.0	Rancho Santa Paula, LLC	
1,094.6	966.5	1,144.9	1,139.4	1,320.4	1,021.5	1,034.2	1,103.1	339.6	763.5	GP Saticoy Ranch, LLC (formerly Riverbank Citrus, LLC)	3N/22W36K07 & 3N/22W36Q01, 3N22W36K05, 03N22W36L01S, 03N22W36K02S
265.7	123.7	214.9	244.2	237.3	226.4	183.7	213.7	(150.1)	363.8	Santana, Jaime, L. Trustee of the Survivor's Trust Under the Jaime L. Santana Family Trust dated May 30, 1984 as amended	3N/22W24R02 (13)
											03N/21W17Q01 (5)
											03N/21W17Q01 (5)
											3N21W17R01 (4)
											3N21W9J01 (24)

Table "D-1"
IPA's 2018 - 2024 Production & Averages

12/3/2025

2018 (2)	2019 (2)	2020 (2)	2021 (2)	2022 (2)	2023 (2)	2024 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
											2N22W03E01 listed under City Ventura Juanamaria
7.7	3.4	8.0	7.2	7.7	7.9	7.6	7.1	(14.8)	21.9	Santa Paula Hay & Grain and Ranches	03N/21W19A02
73.8	98.4	71.3	61.2	89.5	68.1	69.1	75.9	(58.1)	134.0	Saticoy Foods Corp.	03N/21W30H05 (7) (inactive), 3N/21W30H06, 3N/21W30H09
206.0	118.9	158.8	78.2	77.9	72.6	57.7	110.0	(57.3)	167.3	Sharp, J. M. Company	03N/21W19M01, 03N/21W19M02
98.8	88.1	93.9	87.8	80.1	19.9	67.7	76.6	4.4	72.2	Shozi Ventura, LLC	02N/22W03B01, 02N/22W03B02
71.2	44.9	24.2	21.3	25.7	45.4	84.5	45.3	(16.8)	62.1	Strata Holdings LP	03N/21W17P02
52.3	34.2	3.0	10.2	64.2	6.8	0.2	24.4	(83.1)	107.5	The Nature Conservancy	03N21W29K04
165.7	141.6	184.4	141.2	255.8	123.8	131.1	163.4	30.9	132.5	TVC Pinkerton Ranch LLC (27)	3N21W29B04
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(5.8)	5.8	Utility Vault (Newbasis is Parent Co)	~~3N/21W29K03~~ (8)
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	(7.0)	8.0	Atchley Vanoni Family Trust (formerly Vanoni, David and Mary)	02N/22W02Q01
2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	(9.5)	9.8	We 5 Properties (35)	02N/22W02J03, 02N22W02J04
1.0	1.0	1.1	2.0	2.0	10.0	28.1	6.4	(21.2)	27.6	Williams, James W. III	03N/22W-23F02S
0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	(17.5)	17.5	Wright, Scott	03N/21W11H03
32.4	27.2	30.2	29.5	28.8	25.4	29.1	28.9	(2.1)	31.0	Yoon Family Trust, (Soo Han Yoon)	~~2N/22W03L01~~, 02N22W03K04S
13.8	16.3	8.5	14.3	10.2	7.5	10.8	11.6	(9.2)	20.8	Zimmerman, Wade N. III and Patricia B. Zimmerman Trust	3N/21W21E08 03N/21W21D02
19,529.1	**14,599.7**	**18,453.3**	**19,429.8**	**19,017.3**	**13,899.9**	**15,380.9**	**17,708.5**	(10,190.6)	**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**	**Historical Association IPA With Non-Parties (40.7 AF)**	
22,851.8	**17,228.5**	**21,186.7**	**21,987.5**	**22,634.8**	**16,323.8**	**16,999.9**	**21,875.8**			**Total IPA, Ventura, Non-Parties and De Minimus**	
22,869.4	**17,241.8**	**21,203.9**	**21,987.5**	**22,634.8**	**16,323.8**	**16,999.9**				**United Water Conservation District Totals**	
(17.5)	(13.3)	(17.2)	0.0	0.0	0.0	0.0				**Over/Under Amounts**	

Footnotes:

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

(2) Source of production data for 2014-2024: 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.

Table "D-1"
IPA's 2018 - 2024 Production & Averages

12/3/2025

2018 (2)	2019 (2)	2020 (2)	2021 (2)	2022 (2)	2023 (2)	2024 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number

(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-24R02) 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
(39) 2017 - 2022 groundwater production numbers were reported incorrectly and updated on 12-18-2023
(40) Patricia L. Gilbert, Trustee of the Gilbert Family Survivor's Trust dated February 19, 1982 sold property to Tegland Family Farm LLC with 42.8af of allocation, effective November 2023

Table "D-2"
De Minimus 2018-2024 Production
(Production Not to Exceed 5 AF/Year)

12/3/2025

2018 (3)	2019 (3)	2020 (3)	2021 (3)	2022 (3)	2023 (3)	2024 (3)	Party Name	Well Number
1.0	0.6	1.0	1.0	1.0	1.0	1.0	Chapman, Michael (1)	3N/21W21F01S
2.4	2.4	2.4	2.4	2.4	1.0	1.8	Chavez, Joel and Carmen (2)	3N/21W21E07S
3.6	3.7	4.3	4.1	3.7	2.7	2.2	Loza, Jesus and Veronica	3N/22W26L01S
10.0	7.3	4.4	3.7	0.0	0.0	0.0	Rogers, Charles W., Jason C. Rogers, and Aaron W. Rogers	~~2N/22W 1M02S~~
5.0	4.4	5.1	5.0	4.8	4.2	9.0	Santa Paula Airport Association	3N21W14D01S
3.5	3.5	3.5	3.5	3.5	3.5	3.5	Sullivan, Russell J.	3N21W21L01S
25.5	**21.9**	**20.7**	**19.8**	**15.3**	**12.5**	**17.5**	**Total De Minimus Producers**	

(1) Successor to Kenneth Chapman

(2) United Water Conservation District records show well owner as Jorge Cisneros Magana & Isabel A. Magana

(3) Source of production data for 2018-2024: United Water Conservation District, reviewed by the Association.

Table "D-3"
Non-Party 2018 - 2024 Production & Averages

12/2/2025

2018 (7)	2019 (7)	2020 (7)	2021 (7)	2022 (7)	2023 (7)	2024 (7)	2018-2024 Average AFY Production	Name	Well Number
3.0	2.3	2.4	2.4	2.6	2.6	2.6	2.6	Davis, Linda Trust	3N21W21E04, 3N/21W-21E10 (2)
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Catlani Jr., Arnold (5) (2.0 AF)	02N/22W-02N04
1.6	1.6	1.4	1.3	1.2	1.0	1.1	1.3	Minero, Gilbert (5) (1.1 AF)	03N/21W-21M01
10.7	7.5	7.5	7.5	7.5	7.5	7.5	8.0	Sanchez, Martin	3N/21W-21E6
							0.0	Ventura Unified School District (5) (30.8 AF)	02N/22W-03P01
1.6	1.3	1.5	1.0	1.1	1.6	1.9	1.4	Vint, Thomas H. (5) (4.9 AF)	03N/21W-21E03
2.2	1.9	1.6	2.3	2.0	1.4	3.0	2.1	Westerdale Trust (5, 8) (1.0 AF)	03N/21W-21G01
			17.8	14.9	9.7	23.9	9.5	Phil & Laina Graf (9)	03N/21W-20F04
19.2	**14.6**	**14.4**	**32.4**	**29.3**	**23.7**	**40.2**	**24.8**	**Total Average AFY Production (Average 2018-2024)**	

Footnotes to Non-Stipulating Pumpers
Achived footnotes: 1, 3, 4, 6
(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 2018-2024: United Water Conservation District, reviewed by the Association.
(8) United Water Conservation District records show well owner as Monte Carlo Farms
(9) pumping reported to United from Hansen Agricultural Learning Center 2007 to 3/21/2021, then Philip and Lain Graf from 3/5/2021 to present

Table "D-4" DRAFT
Temporary Water Transfers
12/3/2025

2018	2019	2020	2021	2022	2023	2024	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transfering Parties
1,517.1	982.2	1,405.2	1,339.6	1,494.1	1,138.3	1,310.2	1,312.4	(2,003.5)	3,315.8	**Limoneira Company**
660.0										To: Canyon Irrigation Company
39.4										To: Canyon Irrigation Company for Rancho La Cuesta
		579.6								To: Riverbank Citrus LLC
			23.8	29.4	10.0					To: Gooding Ranch
			65.1							To: Limoneira Lewis Community Builders
2,216.4	982.2	1,984.8	1,428.5	1,523.5	1,148.3	1,310.2	1,513.4	(1,802.4)	3,315.8	**Limoneira Company Balance**
11.4	10.7	12.7	12.5	10.8	14.7	24.5	13.9	13.9	0.0	**Fiano, Michael J. Trust**
(30.0)										From: Dan Campbell
(18.6)	10.7	12.7	12.5	10.8	14.7	24.5	9.6	**9.6**	0.0	**Fiano, Michael J. Trust Balance**
140.0	54.2	150.8	163.4	130.4	25.8	55.7	102.9	(179.4)	282.3	**Campbell, Dan**
30.0										To: Fiano, Michael J. Trust
90.0										To: Alta Mutual Water Company, Inc.
260.0	54.2	150.8	163.4	130.4	25.8	55.7	120.0	(162.3)	282.3	**Campbell, Dan Balance**
6,002.2	4,242.9	5,494.9	6,251.1	6,268.2	3,923.3	4,337.6	5,217.2	(4,687.0)	9,904.2	**Farmers Irrigation Company**
128.0	588.2	499.7								To: Canyon Irrigation Company
			38.0	197.5	17.5	67.0				To: Brucker Family Trust
70.2	48.3	66.3	40.2	53.2	61.6					To: Ortiz Trust - Joseph & Sons
										To: Bender Reality LTD
		76.5	23.2	158.9						To: Loza Investments, LLC
										To: Rancho Filoso, LLC
39.1	18.2		9.1							To: Schozi Ventura
132.0	93.0	57.0								To: McGrath, John & Sons
										To: Alta Mutual Water Company
										To: Aramblua, Pedro
220.4	149.1	279.3	376.6	565.5						To: GP Saticoy Ranch (formerly Riverbank Citrus)
										To: Strata Holdings LP
										To: Grant Family Ranches
	79.4		35.0	124.6						To: TVC Pinkerton Ranch LLC
				8.9						To: McConica, John II
				1.0						To: Yoon Family Trust
6,591.9	5,219.1	6,473.6	6,773.3	7,377.8	4,002.4	4,404.6	5,834.7	(4,069.5)	9,904.2	**Farmers Irrigation Company Balance**
819.5	53.5	227.7	911.3	476.4	5.0	7.7	357.3	(315.7)	673.0	**Canyon Irrigtion Company**
128.0	588.2	499.7								To: City of Santa Paula
(128.0)	(588.2)	(499.7)								From: Farmers Irrigation Company
(699.3)										From: Limoneira Company
120.2	53.5	227.7	911.3	476.4	5.0	7.7	257.4	(415.6)	673.0	**Canyon Irrigation Company Balance**
4,232.5	4,082.8	4,444.9	4,489.9	4,233.9	3,841.1	4,250.2	4,225.1	(1,490.2)	5,715.3	**City of Santa Paula**
(128.0)	(588.2)	(499.7)								From: Canyon Irrigation Company
4,104.5	3,494.6	3,945.3	4,489.9	4,233.9	3,841.1	4,250.2	4,051.4	(1,663.9)	5,715.3	**City of Santa Paula Balance**
112.4	101.3	123.7	143.8	130.7	104.7	121.6	119.7	17.9	101.8	**Gooding Ranch (John F. Gooding)**
			(23.8)	(29.4)	(10.0)					From: Limoneira Company
112.4	101.3	123.7	120.0	101.3	94.7	121.6	110.7	**8.9**	101.8	**Gooding Ranch (John F. Gooding) Balance**

Table "D-4" DRAFT
Temporary Water Transfers
12/3/2025

2018	2019	2020	2021	2022	2023	2024	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transfering Parties
66.6	162.5	154.3	134.1	71.6	105.4	80.6	110.7	(70.9)	181.6	**McGaelic Group**
51.0			25.0	64.0		57.0				To: McGrath, John & Sons
117.6	162.5	154.3	159.1	135.6	105.4	137.6	138.9	(42.7)	181.6	**McGaelic Group Balance**
98.8	88.1	93.9	87.8	80.1	19.9	67.7	76.6	4.4	72.2	**Shozi Ventura, LLC**
(39.1)	(18.2)		(9.1)							From: Farmers Irrigaton Company
59.8	69.9	93.9	78.7	80.1	19.9	67.7	67.1	(5.1)	72.2	**Shozi Ventura, LLC Balance**
430.8	319.9	288.0	251.9	287.8	203.0	279.9	294.5	10.9	283.6	**McGrath, John & Sons**
(51.0)			(25.0)	(64.0)		(57.0)				From: McGaelic Group
(132.0)	(93.0)	(57.0)								From: Farmers Irrigation Company
247.8	226.9	231.0	226.9	223.8	203.0	222.9	226.0	(57.6)	283.6	**McGrath, John & Sons Balance**
1,094.6	966.5	1,144.9	1,139.4	1,320.4	1,021.5	1,034.2	1,103.1	339.6	763.5	**GP Saticoy Ranch Land LLC (formerly Riverbank Citrus LLC)**
										From: Limoneira Company
(220.4)	(149.1)	(279.3)	(376.6)	(565.5)						From: Farmers Irrigation Company
(110.9)	(53.8)	(151.2)								From: Nutwood Farms
763.3	763.5	714.4	762.8	754.9	1,021.5	1,034.2	830.6	**67.1**	763.5	**GP Saticoy Ranch Land LLC Balance**
15.6	23.5	24.1	34.9	28.2	20.0	21.0	23.9	(102.5)	126.4	**Nutwood Farms**
110.8	53.8	151.2								To: Riverbank Citrus LLC
126.4	77.4	175.3	34.9	28.2	20.0	21.0	69.0	(57.4)	126.4	**Nutwood Farms Balance**
52.3	34.2	3.0	10.2	64.2	6.8	0.2	24.4	(83.1)	107.5	**The Nature Conservancy**
29.4										To: Esther Martinez
81.7	34.2	3.0	10.2	64.2	6.8	0.2	28.6	(78.9)	107.5	**The Nature Conservancy Balance**
383.5	400.8	439.2	427.7	413.3	263.4	438.1	395.1	118.6	276.5	**Brucker Family Trust**
		(253.8)	(113.2)	(15.4)						From: JKJ Farms, LLC
			(38.0)	(197.5)	(17.5)	(67.0)				From: Farmers Irrigation Company
383.5	400.8	185.4	276.5	200.4	245.9	371.1	294.8	18.3	276.5	**Brucker Family Trust Balance**
62.9	78.6	89.1	82.4	49.6	37.4	69.3	67.0	(58.0)	125.0	**JKJ Farms, LLC**
		253.8	113.2	15.4						To: Brucker Family Trust
62.9	78.6	342.9	195.6	65.0	37.4	69.3	121.7	(3.3)	125.0	**JKJ Farms, LLC Balance**
108.8	86.9	104.9	78.8	91.7	100.4	68.2	91.4	52.8	38.6	**Ortiz Trust - Joseph & Sons**
(70.2)	(48.3)	(66.3)	(40.2)	(53.2)	(61.6)					From: Farmers Irrigation Company
38.5	38.6	38.6	38.6	38.5	38.8	68.2	42.8	4.2	38.6	**Ortiz Trust - Joseph & Sons Balance**
745.7	292.0	536.7	804.3	509.2	637.0	759.1	612.0	(151.1)	763.1	**Alta Mutual Water Company**
(90.0)			(53.2)							From: Dan Campbell
										From: The Nature Conservancy
										From: Wallace, James III
										From: Farmers Irrigation Company
655.7	292.0	536.7	751.1	509.2	637.0	759.1	591.5	(171.6)	763.1	**Alta Mutual Water Company Balance**
362.2	254.8	358.7	238.6	346.3	199.1	173.1	276.1	10.9	265.2	**Loza Investments LLC - Tucker Ranch**
		(76.5)	(23.2)	(158.9)						From: Farmers Irrigation Company
										To: Yoon Family Trust
362.2	254.8	282.2	215.4	187.4	199.1	173.1	239.2	(26.0)	265.2	**Loza Investments LLC - Tucker Ranch Balance**

Table "D-4" DRAFT
Temporary Water Transfers
12/3/2025

2018	2019	2020	2021	2022	2023	2024	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transfering Parties
1.3	1.4	2.0	2.4	2.4	1.9	1.8	1.9	(1.0)	2.9	**Arambula, Pedro**
										From: Farmers Irrigation Company
1.3	1.4	2.0	2.4	2.4	1.9	1.8	1.9	(1.0)	2.9	**Arambula, Pedro Balance**
7.8	4.1	7.4	6.6	7.5	8.7	10.1	7.5	(2.1)	9.6	**Garcia, Elias & Guadalupe**
										From: Castaneda, Albert & Mary
			(16.1)							From: Farmers Irrigation Company
7.8	4.1	7.4	(9.5)	7.5	8.7	10.1	5.2	(4.4)	9.6	**Garcia, Elias Balance**
60.4	59.9	87.3	117.8	140.3	57.9	70.4	84.9	34.2	50.7	**Castaneda, Albert & Mary**
										To: Garcia, Elias & Guadalupe
60.4	59.9	87.3	117.8	140.3	57.9	70.4	84.9	34.2	50.7	**Castaneda, Albert & Mary Balance**
125.7	72.2	87.8	102.4	77.1	37.1	47.8	78.6	(41.0)	119.6	**Rancho Filoso, LLC**
										From: JM Sharp Company
125.7	72.2	87.8	102.4	77.1	37.1	47.8	78.6	(41.0)	119.6	**Rancho Filoso, LLC Balance**
165.7	141.6	184.4	141.2	255.8	123.8	131.1	163.4	30.9	132.5	**TVC Pinkerton Ranch LLC**
	(79.4)		(35.0)	(124.6)						From: Farmers Irrigation Company
165.7	62.1	184.4	106.2	131.2	123.8	131.1	129.2	(3.3)	132.5	**TVC Pinkerton Ranch LLC Balance**
32.4	27.2	30.2	29.5	28.8	25.4	29.1	28.9	(2.1)	31.000	**Yoon Family Trust**
										From: Tucker Ranch
				(1.0)						From: Farmers Irrigation Company
32.4	27.2	30.2	29.5	27.8	25.4	29.1	28.8	(2.2)	31.000	**Yoon Family Trust Balance**
93.2	57.2	105.9	114.2	123.4	57.0	94.4	92.2	30.3	61.9	**Pinkerton, Arlene (formerly Pinkerton, Murray)**
			(14.0)	(81.9)	(55.3)					From: Arlene Pinkerton
93.2	57.2	105.9	100.2	41.5	1.7	94.4	70.6	**8.7**	61.9	**Pinkerton, Arlene Balance**
0.0	0.0	0.0	0.0	0.0	0.0	24.0	3.4	(35.7)	39.1	**Arlene Pinkerton**
			14.0	81.9	55.3					To: Pinkerton, Arlene formerly Murray Pinkerton)
0.0	0.0	0.0	14.0	81.9	55.3	24.0	25.0	(14.1)	39.1	**Arlene Pinkerton Balance**
41.8	19.5	45.0	51.7	57.0	42.8	44.1	43.1	8.8	34.3	**Martinez, Esther**
(29.4)										From: The Nature Conservancy
				(25.2)						From: Clow, Roger
12.4	19.5	45.0	51.7	31.8	42.8	44.1	35.3	1.0	34.3	**Martinez, Esther Balance**
30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	-	30.0	**Limoneira Lewis Community Builders LLC**
			(65.1)							From: Limoneira
30.0	30.0	30.0	(35.1)	30.0	30.0	30.0	20.7	(9.3)	30.0	**Limoneira Lewis Balance**
22.6	23.5	23.0	30.2	34.4	29.0	34.6	28.2	3.5	24.7	**McConica, John II**
				(8.9)						From: Farmers Irrigation Company
22.6	23.5	23.0	30.2	25.5	29.0	34.6	26.9	**2.2**	24.7	**McConica, John II Balance**

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

Table "D-5"
Original and Acquired Allocation of the City of San Buenaventura

12/2/2025

2018 (7)	2019 (7)	2020 (7)	2021 (7)	2022 (7)	2023 (7)	2024 (7)	2018-2024 Average AFY Production	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
182.2	83.1	154.8	139.5	157.0	112.0	91.1	131.4	(88.6)	220.0	City of San Buenaventura	02N22W03E01(1)
							0.0	(5.8)	5.8	City of San Buenaventura	3/21W21B03 (3)
							0.0	(23.1)	23.1	City of San Buenaventura (10)	~~3N22W34R01~~
							0.0	(97.0)	97.0	City of San Buenaventura (9)	~~03N22W35N01~~
182.2	83.1	154.8	139.5	157.0	112.0	91.1	131.4	(214.5)	**345.9**	**Total Aquired by City of San Buenaventura**	
3,095.9	2,509.2	2,543.5	2,366.1	3,415.9	2,275.8	1,470.1	2,525.2	(474.8)	3,000.0	City of San Buenaventura	02N22W02K09 (2) 2N22W02H02 (8)
3,278.0	2,592.2	2,698.3	2,505.6	3,572.9	2,387.8	1,561.2	2,656.6	(689.3)	**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 2024 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 2018-2024: 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 (85.0 AF)
(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 1020 State Street, Santa Barbara, California 93101. My electronic service address is Meldridge@bhfs.com. On April 3, 2026, I served a copy of the within document(s):

NOTICE OF SUBMISSION OF THE SANTA PAULA BASIN 2024 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 3, 2026, at Santa Barbara, California.

Melissa Eldridge

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