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SANTA PAULA BASIN PUMPERS ASSOCIATION

SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF VENTURA

United Water Conservation District, Plaintiff, v. City of San Buenaventura and Does 1 through 100, inclusive, Defendant.	Case No. CIV115611 Assigned for All Purposes to the Honorable Mark Borrell Dept.: 40 **SUBMISSION OF THE SANTA PAULA BASIN 2019 ANNUAL REPORT**
Limoneira Company, Alta Mutual Water Company, et al., Intervenors.	
City of San Buenaventura, Cross-Complainant, v. Limoneira Company, Alta Mutual Water Company, et al., Cross-Defendants.	

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

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Committee ("TAC"), hereby submits the Santa Paula Basin 2019 Annual Report ("2019 Annual Report"). A true and correct copy of the Annual Report is attached to the Declaration of Stephanie Osler Hastings, 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 submits an annual report to the Court. The 2019 Annual Report sets forth the technical data concerning the Basin for Water Year 2019.

The TAC is willing to answer any questions posed by the Court with respect to the 2019 Annual Report or to attend a case management conference, if instructed to do so by the Court.

Dated: October 13, 2020

BROWNSTEIN HYATT FARBER SCHRECK, LLP

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

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DECLARATION OF STEPHANIE OSLER HASTINGS

I, Stephanie Osler Hastings, 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 *2019 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.

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 October 13, 2020 at Santa Barbara, California.

STEPHANIE OSLER HASTINGS

EXHIBIT A

2019 SANTA PAULA BASIN ANNUAL REPORT

United Water Conservation District
Professional Paper 2020-02

United Water
CONSERVATION DISTRICT

September 2020

PREPARED FOR:

SANTA PAULA BASIN TECHNICAL ADVISORY COMMITTEE

Cover photo: South Mountain (background) after Maria Fire and lemon orchard (foreground) in Santa Paula basin (photo taken by John Lindquist, November 2019).

2019 SANTA PAULA BASIN ANNUAL REPORT

(UWCD PROFESSIONAL PAPER 2020-02)

FOREWORD

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

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

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

In 2010 the Judgment was amended to join various pumpers that were not previously included as parties to the settlement, and to clarify certain provisions pertaining to shortage conditions, the responsibilities of the SPBPA and groundwater production by its members, and water-rights transfer procedures. Also in 2010, a Santa Paula Basin TAC Working Group was established consisting of

technical experts from United, the SPBPA, and the City of San Buenaventura. Since its formation, the Working Group has completed a series of specialty studies to better understand the factors that affect safe yield in the Santa Paula basin, including a revised safe-yield study in 2017. In addition, the Working Group will continue to conduct future studies to complement the 2017 Safe-Yield Study, as requested by the TAC. The Working Group is currently evaluating metrics ("triggers") that will be used to evaluate whether and to what extent the basin might be negatively affected by future pumping and considering options to enhance safe yield of the basin.

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

2019 SANTA PAULA BASIN ANNUAL REPORT

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

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LIST OF APPENDICES (appendices are located following the figures)

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2019 SANTA PAULA BASIN ANNUAL REPORT

(UWCD PROFESSIONAL PAPER 2020-02)

INTRODUCTION

This is the twenty-third annual report presenting key climatic, hydrologic, and hydrogeologic data to support management of groundwater resources in the Santa Paula basin. Relevant geographic features in and near the Santa Paula basin are shown on Figure 1. Data for calendar-year (CY) and water-year (WY) 2019 (the reporting period) are included in this report. This annual report provides the TAC—which consists of representatives from United Water Conservation District (UWCD or United), the City of San Buenaventura (Ventura), and the Santa Paula Basin Pumpers Association (SPBPA)—with monitoring results and other data to be used for management of the basin in accordance with the 1996 Santa Paula basin stipulated judgment by the Superior Court of the State of California for the County of Ventura (*United Water Conservation District vs. City of San Buenaventura,* original March 7, 1996, amended August 24, 2010 [hereinafter "Judgment"]) and with requirements for adjudicated-basin reporting under the Sustainable Groundwater Management Act (SGMA). This report summarizes annual precipitation, streamflow, surface water quality, production well installations and destructions, groundwater extractions and pumping allocations, groundwater levels, change in groundwater storage, and groundwater quality data obtained for the Santa Paula basin during the reporting period. Sources of the monitoring data and methods of their collection are unchanged from those described in the 2015 Santa Paula Basin Annual Report (United, 2017a); refer to that document for details regarding the sources and methods.

DATA SUMMARY AND EVALUATION

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

Table 1. Key Hydrologic Indicators in Santa Paula Basin

Hydrologic Indicator	2019	Average During Period of Record	Median During Period of Record	Period of Record
Water-Year[a] Precipitation at Santa Paula-UWCD[b] (inches)	22.23	17.17	14.89	1890 through 2019
Calendar-Year Precipitation at Santa Paula-UWCD[b] (inches)	26.02	17.04	15.48	1890 through 2019
Water-Year Discharge in Santa Clara River at Freeman Diversion[b] (AF/yr)	205,642	203,815	113,967	1956 through 2019
Water-Year Discharge in Santa Paula Creek at Mupu Bridge[b] (AF/yr)	22,518	17,898	8,184	1928 through 2019
Reported Calendar-Year Groundwater Extractions in Santa Paula Basin (AF/yr)	17,238	25,380	25,840	1980 through 2019
Groundwater Level Index (ft msl)	178.28	180.62	181.62	1983 through 2019
Change in Groundwater Storage from Previous Year (AF)	90 to 900	Not applicable	Not applicable	spring 2018 to spring 2019

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 2019 includes the period from 10/1/2018 through 9/30/2019.

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

PRECIPITATION

Annual precipitation at Saticoy and Santa Paula throughout the period of record is shown on Figures 2 and 3; monthly precipitation at these locations during CY and WY 2019 is shown on Figure 4. Appendix A (Table A-1) includes a tabulation of monthly precipitation at Santa Paula-UWCD during the period of record. It should be noted that CY (and WY) 2019 had above-average precipitation. As shown on Figure 4, the month with the most precipitation in CY and WY 2019 was January, with about 4.5 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 2019 is shown on Figure 7. Appendix A (Tables A-2 and A-3) provides annual total discharge in the Santa Clara River and Santa Paula Creek during the period of record. Annual discharge during WY 2019 in the Santa Clara River at Freeman Diversion was about 100% of the long-term average volume, and discharge in Santa Paula Creek near Santa Paula was about 125% of average.

SURFACE WATER QUALITY

Minimum, maximum, and average concentrations of selected major water quality constituents (chloride, nitrate, total dissolved solids [TDS], and sulfate) detected in surface water samples from the Santa Clara River at Freeman Diversion during CY 2019 are summarized in Table 2, below. Concentrations of these constituents detected throughout the period of record are shown on Figure 8. Table 2 indicates that average concentrations of chloride, nitrate, TDS, and sulfate detected in the Santa Clara River during CY 2019 were somewhat lower than long-term average concentrations.

Table 2. Summary of Major Surface Water Quality Parameters in Santa Clara River at Freeman Diversion, CY 2019

Statistic	Concentration, milligrams per liter (mg/L)			
	Chloride	Nitrate[a]	TDS	Sulfate
CY 2019 Minimum	20	1.3	520	77
CY 2019 Maximum	109	8.9	1,750	785
CY 2019 Average	63	4.8	1,068	480
Long-Term Average[b]	64	5.9	1,144	532

Notes:

[a] As nitrate (NO_3)

[b] Includes reported data in United's database from the entire period of record, beginning in CY 1925 for chloride, TDS, and sulfate; beginning in CY 1936 for nitrate.

Minimum, maximum, and average concentrations of selected major water quality constituents (chloride, nitrate, TDS, and sulfate) detected in surface water samples from Santa Paula Creek near Santa Paula during CY 2019 are summarized in Table 3, below. Concentrations of these constituents detected throughout the period of record are shown on Figure 9. Table 3 indicates that average concentrations of chloride, nitrate, TDS, and sulfate detected in Santa Paula Creek during CY 2019 were higher than long-term average concentrations.

Table 3. Summary of Major Surface Water Quality Parameters in Santa Paula Creek near Santa Paula, CY 2019

Statistic	Concentration (mg/L)			
	Chloride	Nitrate[a]	TDS	Sulfate
CY 2019 Minimum	18	5	650	288
CY 2019 Maximum	88	46	1,550	677
CY 2019 Average	48	21	1,025	464
Long-Term Average[b]	46	10.5	858	388

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

One production well (-10E2) was destroyed within the Santa Paula basin and was replaced by a new production well (-10E3) during CY 2019, as listed in Table 4, below. In total, three production wells were installed within the Santa Paula basin during 2019. The new production well (-11B2) replaced a well destroyed in CY 2018 as described in last year's annual report (United, 2020).

Table 4. Production Well Installations and Destructions During CY 2019

Production Wells Destroyed	Production Wells Drilled
03N21W10E02S, Gary Ohst	03N21W10E03S, Gary Ohst, 03N22W24R02S, Leavens Ranches LLC, 03N21W11B02S, Limoneira Lewis Builders LLC

GROUNDWATER EXTRACTIONS

Annual groundwater extractions (pumping) reported for Santa Paula basin wells throughout the period of record are summarized in Table 5, below, and illustrated on Figure 10. The total volume of groundwater extractions from Santa Paula basin in 2019 was about one-third less than the average (Table 5). Review of pumping data available in United's database for each half of CY 2019 indicates that reported groundwater extractions in the first half of CY 2019, in particular, were below average. Rainfall in January and February 2019 was well above normal (Figure 4), and occurred during a relatively large number of low- to moderate-rainfall storm events, which likely reduced irrigation demand during this period.

Table 5. Historical Santa Paula Basin Groundwater Extractions

Calendar Year	Groundwater Extractions (AF)	Calendar Year	Groundwater Extractions (AF)	Calendar Year	Groundwater Extractions (AF)
1980	26,820	1995	25,042	2010	23,115
1981	27,545	1996	26,008	2011	24,202
1982	22,925	1997	28,961	2012	25,824
1983	16,710	1998	21,622	2013	26,485
1984	29,455	1999	27,700	2014	27,437
1985	26,533	2000	26,798	2015	25,856
1986	21,617	2001	22,530	2016	25,363
1987	24,852	2002	27,259	2017	21,889
1988	25,370	2003	22,280	2018	22,881
1989	29,362	2004	27,306	2019	17,238
1990	33,453	2005	24,700		
1991	27,056	2006	24,830		
1992	24,355	2007	28,077		
1993	26,998	2008	26,686	***Average***	***25,380***
1994	26,244	2009	25,820	***Median***	***25,840***

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 2019 by the City of San Buenaventura, members of the SPBPA, and other pumpers are summarized in Table 6, below. The Judgment governs groundwater production on a seven-year rolling average, which allows parties to produce more or less than their allocation in any particular year so long as their rolling seven-year average does not exceed their allocation. Appendix D summarizes groundwater extractions for the past seven years (CYs 2013 through 2019), as well as Individual Party Allocations (IPAs) for the SPBPA (with transfers, de minimis parties, non-parties) and the City of San Buenaventura.

Table 6. Summary of Groundwater Extractions During CY 2019

Pumper	Extractions (AF)
City of San Buenaventura[a]	2,592
SPBPA Pumpers with Individual Party Allocations (adjusted by SPBPA)[b]	14,613
SPBPA Pumpers with Individual Party Allocations (reported to United)[c]	14,609
Non-stipulated Parties[b]	15
De Minimis Pumpers[b]	22
Total extractions (adjusted by SPBPA[b] / reported to United[c])	17,242/17,238

Notes:

[a] Includes pumping from well 02N/22W-03E01S (Appendix D, Table D-5)

[b] From Appendix D, compiled by SPBPA

[c] From UWCD Finance Department records

Reported groundwater extractions during CY 2019, together with estimated imports and exports, are summarized by use and source in Table 7 and graphically illustrated Figure 11. The distribution of groundwater extractions across the basin during CY 2019 is shown on Figure 12.

Table 7. Summary of Groundwater Extractions, Imports, and Exports in Santa Paula Basin, CY 2019

Description	Volume (AF)
Reported groundwater extractions from wells in the Santa Paula basin stipulated area	17,238
Estimated groundwater imports from Fillmore basin (assume 60% of total pumpage from Teague #6 and 100% from FICO #12)	+3,579
Estimated groundwater imports from Oxnard Forebay basin (assume 67% of total pumpage from Alta #3 and Alta #11)	+907
Estimated water exports to Mound basin via the FICO distribution system	-802
Estimated net groundwater use in Santa Paula basin (sum of extractions plus imports, less exports)	**= 20,922***

** 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 2019 in Santa Paula basin are shown on Figures 14 and 15. The contours were interpolated using groundwater elevation data obtained from wells in the Santa Paula basin and in the adjacent, hydraulically-connected Fillmore, Mound, and Oxnard Forebay basins. The contours represent lines of equal groundwater elevation (total hydraulic head), and generally define the water table (in unconfined portions of the aquifer) or potentiometric surface (in confined portions of the aquifer). Most of the groundwater elevations used for contouring were measured at long-screened wells with total depths greater than 100 feet. The screened interval contoured at United's cluster monitor well sites SP-1 and SP-2 are 370-390 feet below ground surface (bgs), and 290-310 feet bgs, respectively. Groundwater elevations measured at shallow versus deep wells are not contoured independently in this annual report.

Groundwater levels in most wells throughout the basin show a seasonal variation in the range of 10 to 20 feet. Longer-term groundwater level trends have been summarized in Santa Paula basin through the use of a "groundwater level index" (GLI). The GLI is calculated as the average of spring-high groundwater elevations measured each year at nine key wells selected for their relatively long record and their geographic distribution across the basin. These data are included in Appendix B. The GLIs for CYs 1983 through 2019 are shown on Figure 16, together with the cumulative departure from average precipitation over the same period at Santa Paula. The CY 2019 GLI is 178.28 feet above mean sea level (ft msl), which is about 6.5 feet higher than the previous year's GLI (171.76 ft. msl). Calculation of the GLI has been affected since one of the index wells, well 03N21W34R01S, was destroyed in 2017. Due to its location in the western part of Santa Paula basin, well 03N21W34R01S typically had lower groundwater elevations than most of the other index wells. Therefore, the average groundwater elevation for the remaining wells is higher than the average when well 03N21W34R01S was included. This artifact likely accounted for approximately 5 feet of the apparent increase in GLI between 2016 and 2017 (Figure 16). The average GLI since 1983, when it was first calculated, is 180.70 ft msl, which is almost 2.5 feet above the 2019 GLI. It can be concluded that water levels rose in 2019.

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 6.84 ft across the basin from spring 2018 (see UWCD, 2020) to spring 2019 (Figure 17; Appendix C). This increase is slightly larger than the calculated increase in GLI over the same period (2018-2019) of 6.5 ft. More data points are used for the geostatistical analysis than for the GLI calculation; therefore, the geostatistical analysis likely is more representative of basin wide groundwater-elevation and storage changes from year to year.

The magnitude of the geostatistically-calculated change in storage was based solely on data from wells where groundwater levels were measured both during spring 2018 and spring 2019 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 2018 and spring 2019 is an increase of approximately 90 to 900 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 2019 and reported to United are summarized in Table 8, below, together with California primary maximum contaminant levels (MCLs), secondary MCL ranges (MCLRs), and water quality objectives specified by the California Regional Water Quality Control Board, Los Angeles region (1994). Maps showing the maximum reported concentrations of these constituents during CY 2019 are provided on Figures 18 through 21. As noted in past annual reports, concentrations of chloride, TDS, and sulfate generally increase from east to west in the basin.

Table 8. Summary of Chloride, Nitrate, TDS, and Sulfate in Groundwater in Santa Paula Basin, CY 2019

Statistic	Concentration (mg/L)			
	Chloride	Nitrate[a]	TDS	Sulfate
CY 2019 Minimum	38	ND	860	347
CY 2019 Maximum	302	37	3,780	1,890
CY 2019 Average	73	8	1,301	577
Long-Term Average[b]	70	10	1,308	541
Primary MCL	none	45	none	none
Secondary MCLR-"Recommended"	250	none	500	250
Secondary MCLR-"Upper"	500	none	1,000	500
Water Quality Objectives East/West of Peck Rd.	100/110	45/45	1,200/2,000	600/800

Notes:

ND = not detected
MCL = Maximum Contaminant Level
MCLR = Maximum Contaminant Level Range

[a] As nitrate (NO_3)

[b] Includes reported data in United's database from the entire period of record: CY 1903 to present for chloride, TDS, and sulfate; CY 1923 to present for nitrate.

Reported concentrations of hardness, alkalinity, iron, and manganese for groundwater samples obtained during CY 2019 are summarized in Table 9, together with the secondary MCLs for iron and manganese, and the micro-irrigation plugging hazard criteria developed by Pitts and Peterson

(undated) and the University of California (2015). Iron and manganese occur naturally in groundwater, and any elevated concentrations detected in the Santa Paula basin are thought to be a result of local geochemical conditions rather than man-made sources (e.g. mining or industrial discharges). Increased iron concentrations were observed in three wells during the October 2018 sampling event, with levels recorded up to an order of magnitude higher than historically observed in these wells. Because this increase appears to have occurred simultaneously in several wells, laboratory or sampling issues may have resulted in artificially high reported concentrations. Subsequent samples in 2019 detected iron at historical concentrations at the three wells, so it can be reasonably assumed that the 2018 sampling result, for iron were anomalous and likely caused by sampling or laboratory issues.

Table 9. Summary of Hardness, Alkalinity, Iron, and Manganese in Groundwater in Santa Paula Basin, CY 2019

Statistic		Concentration (mg/L)			
		Hardness[a]	Alkalinity[a]	Iron	Manganese
CY 2019 Minimum		431	210	ND	ND
CY 2019 Maximum		1,170	400	1.38	0.75
CY 2019 Average		641	268	0.10	0.20
Long-Term Average[b]		646	270	0.15	0.24
Secondary MCL		NA	NA	0.3	0.05
Pitts and Peterson Plugging Hazard Potential	Moderate	150-300	100-200	0.1 - 1.0	0.1 - 1.0
	Severe	>300	>200	>1.0	>1.0
Univ. of Calif. Clogging Potential	Moderate	NA	100	0.2 - 1.5	0.1 - 1.5
	Severe	NA	NA	>1.5	>1.5

Notes:
ND = not detected
NA = not applicable or not reported
> = greater than the value shown
[a] As calcium carbonate ($CaCO_3$).
[b] Includes reported data in United's database from the entire period of record: CY 1929 to present for hardness and alkalinity; CY 1937 to present for iron and manganese.

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

FIGURES

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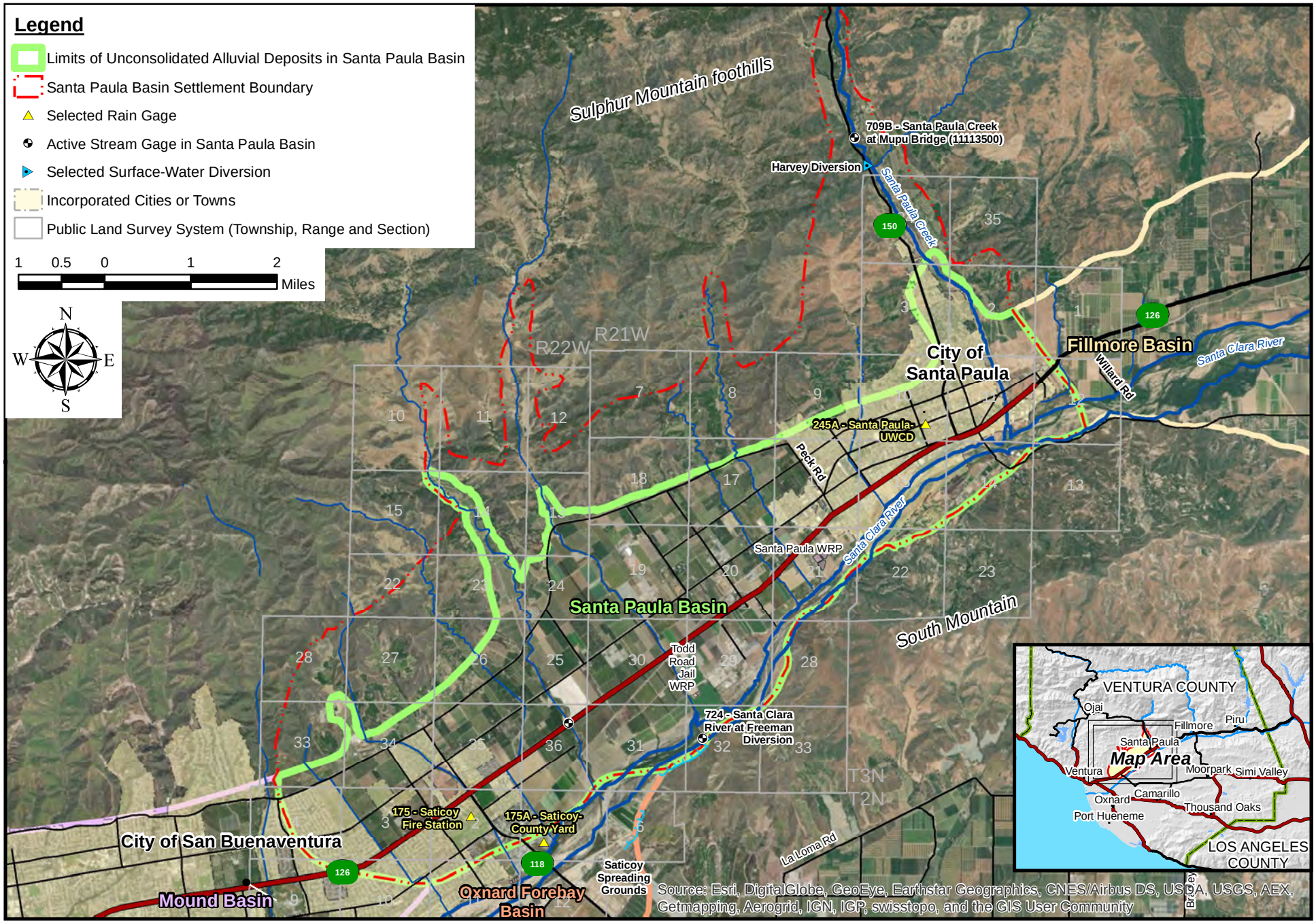

Figure 1. Santa Paula Basin Location Map

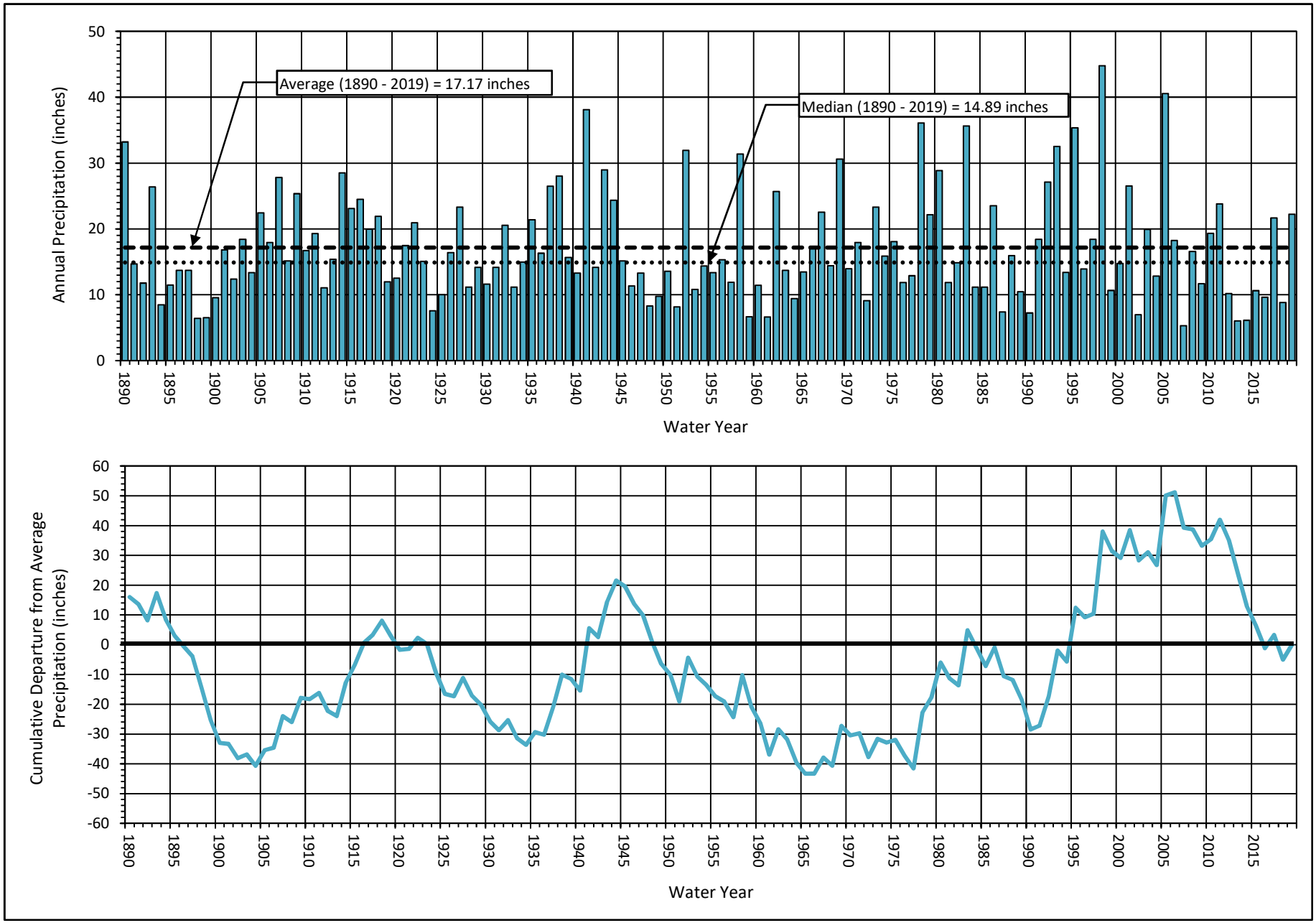

Figure 2. Annual Precipitation at Santa Paula and Cumulative Departure from Average, WYs 1890 through 2019

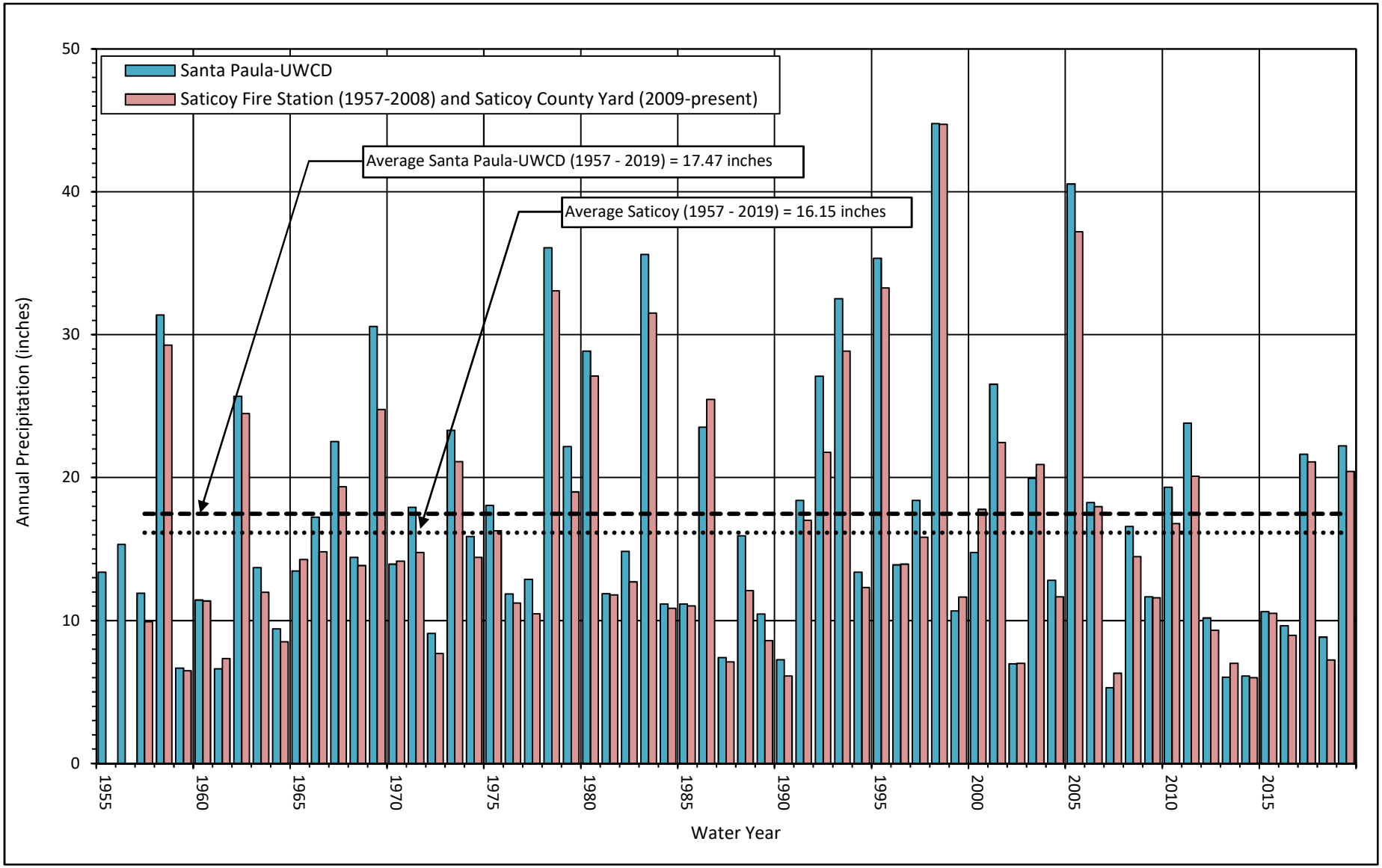

Figure 3. Annual Precipitation at Saticoy and Santa Paula, WYs 1955 through 2019

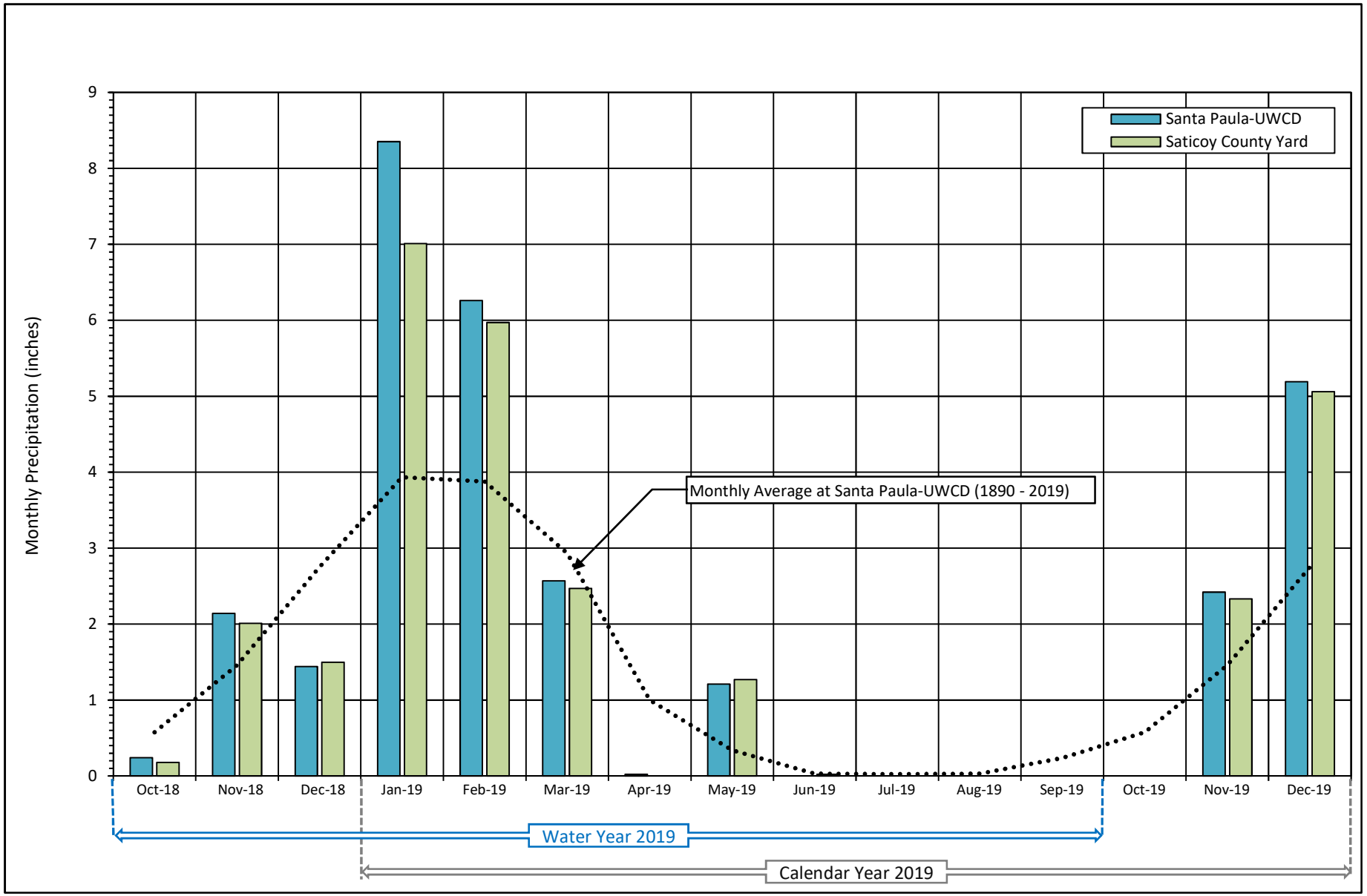

Figure 4. Monthly Precipitation in Santa Paula Basin, WY and CY 2019

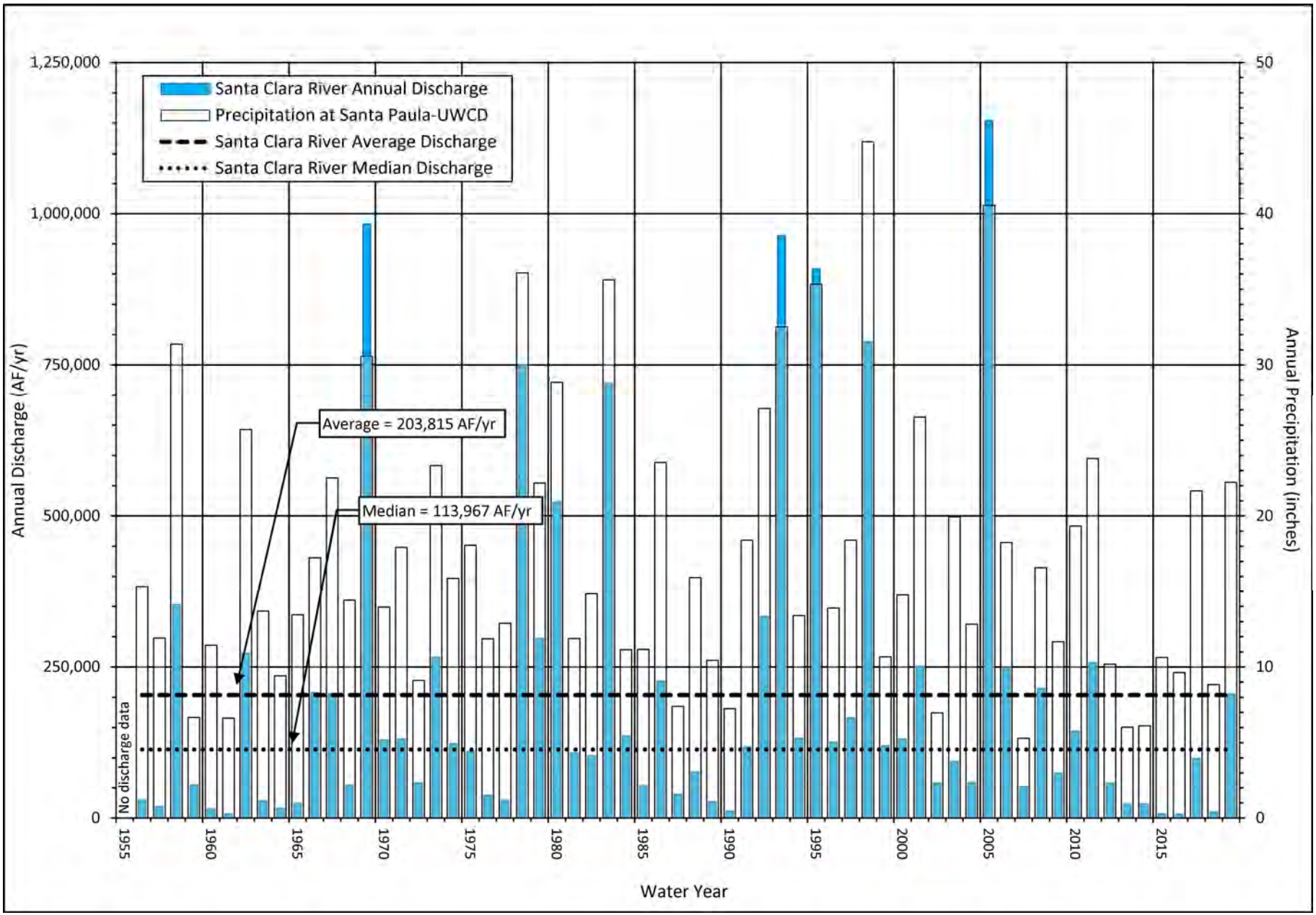

Figure 5. Annual Discharge of Santa Clara River at the Freeman Diversion, WYs 1956 through 2019

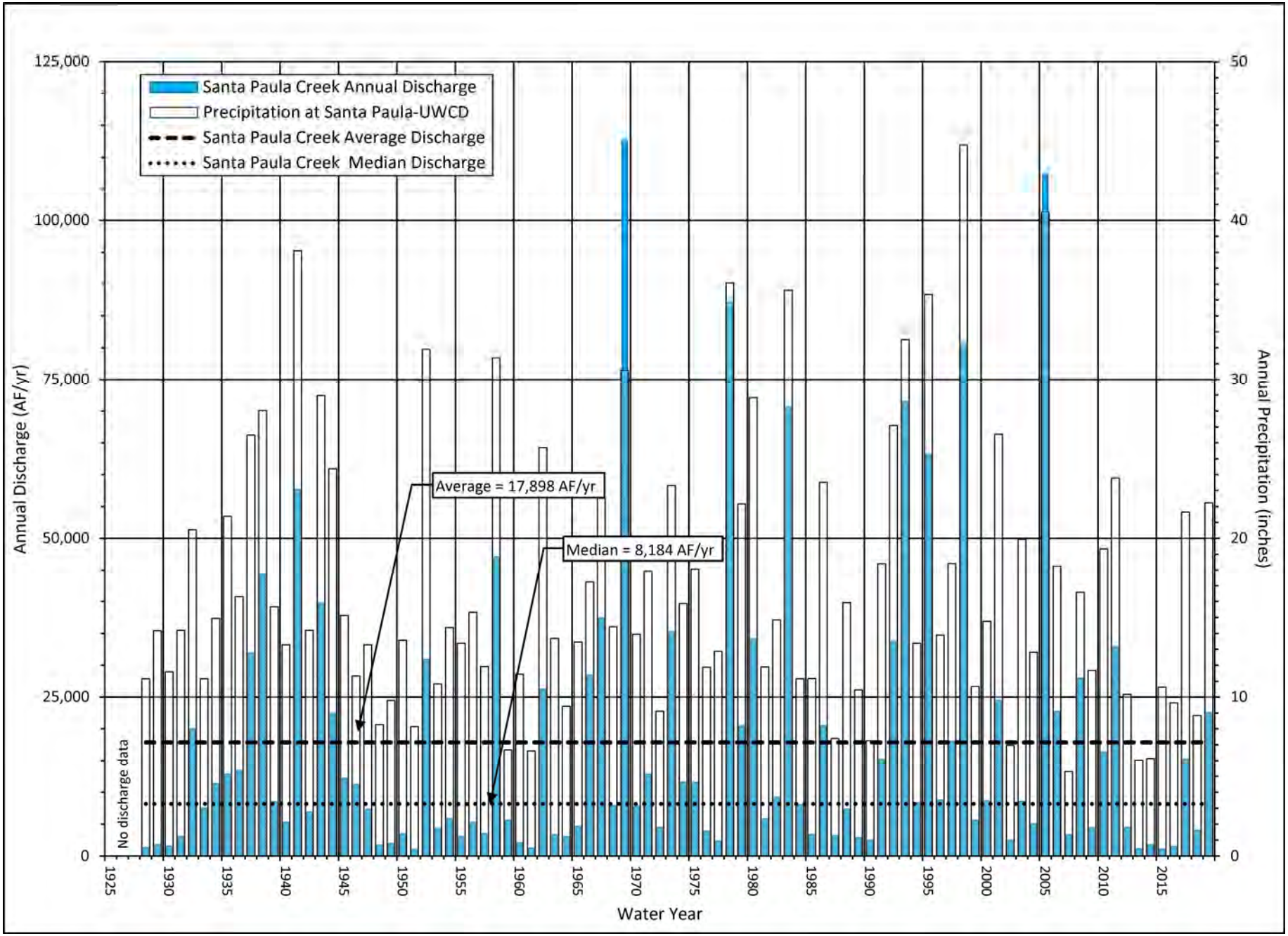

Figure 6. Annual Discharge of Santa Paula Creek Near Santa Paula, WYs 1928 through 2019

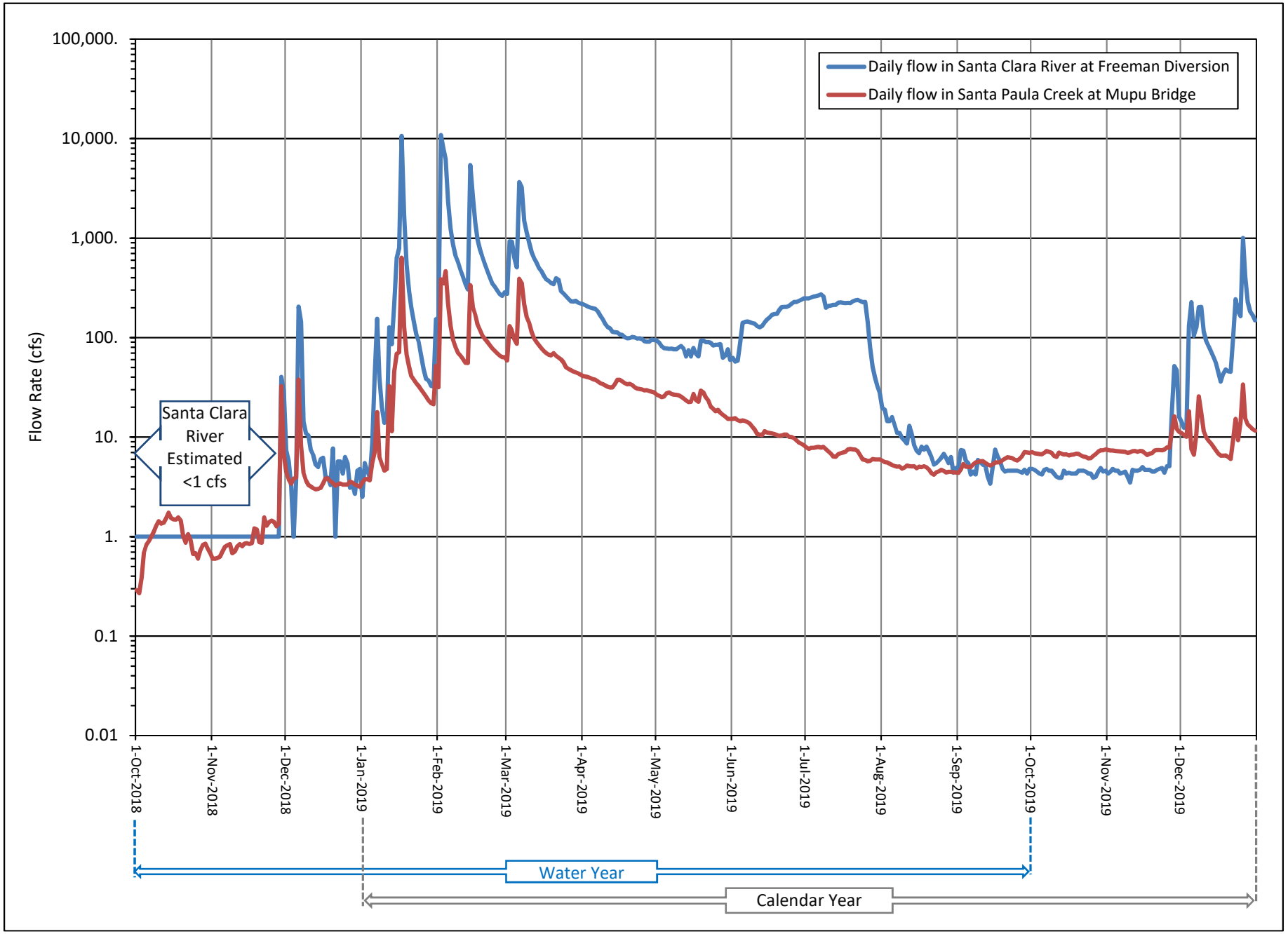

Figure 7. Daily Streamflow in Santa Paula Creek and Santa Clara River, WY and CY 2019

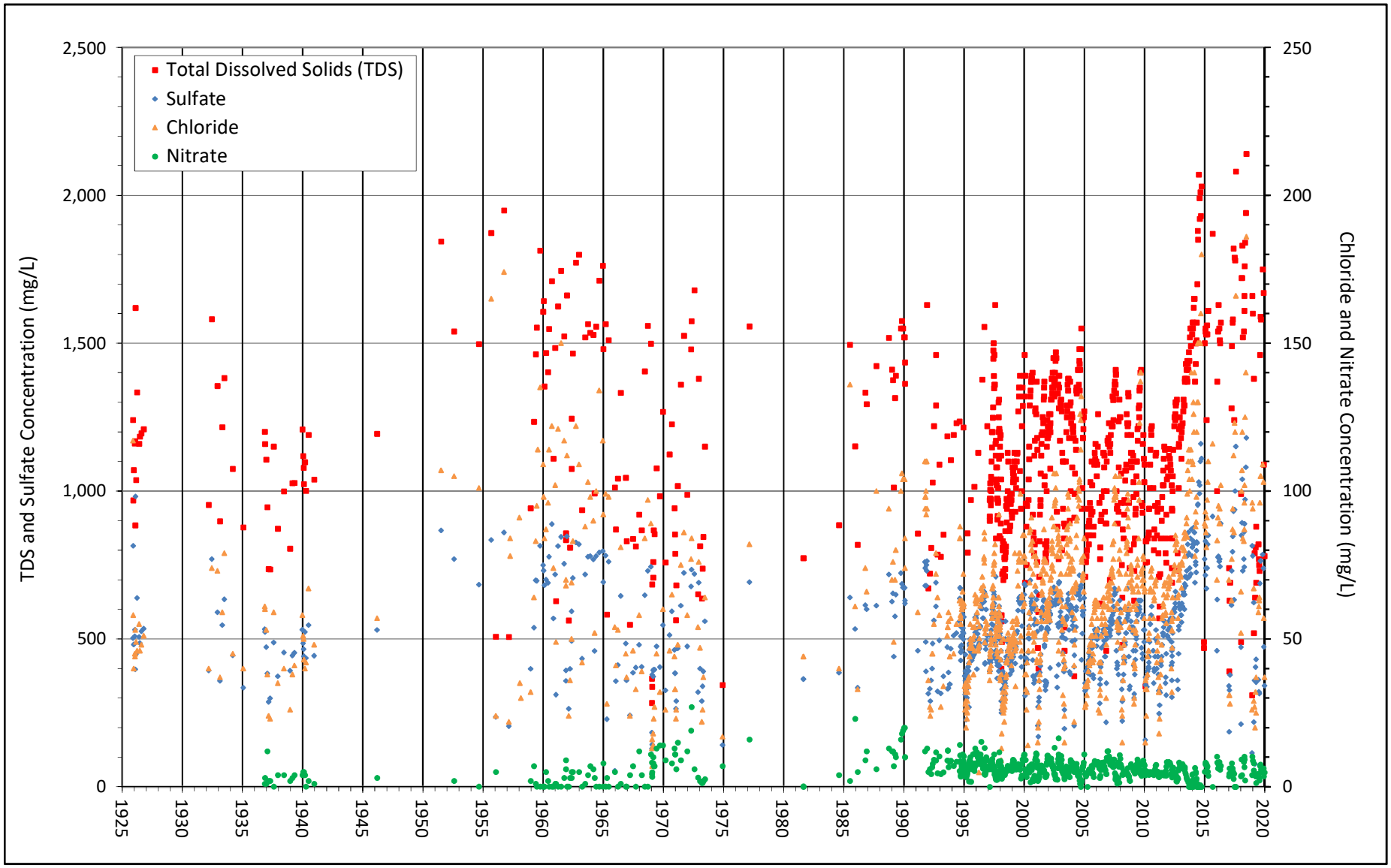

Figure 8. Concentrations of Selected Dissolved Constituents in the Santa Clara River at Freeman Diversion, CYs 1925 through 2019

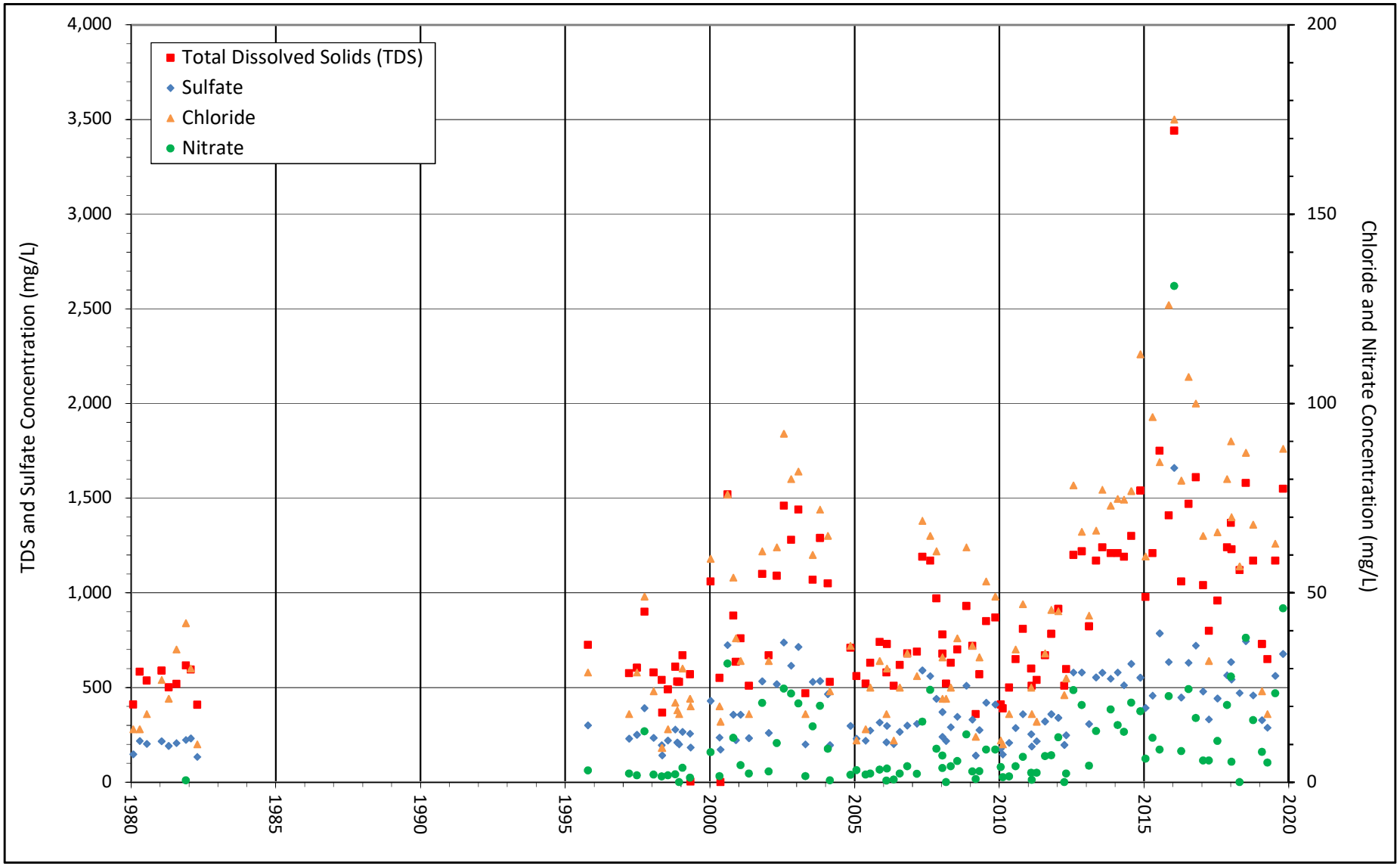

Figure 9. Concentrations of Selected Dissolved Constituents in Santa Paula Creek Near Santa Paula, CYs 1980 through 2019

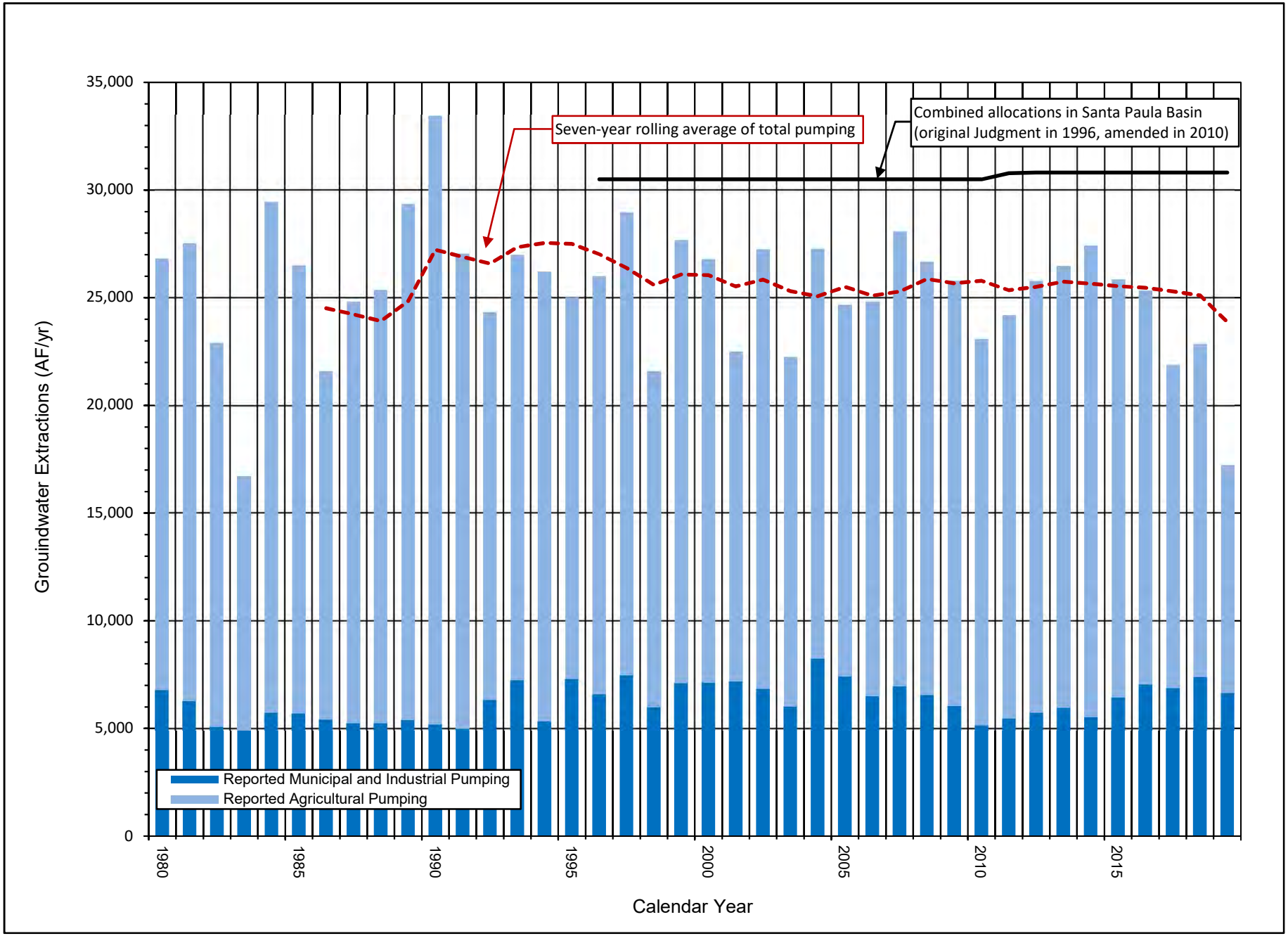

Figure 10. Historical Annual Groundwater Extractions from Santa Paula Basin, CYs 1980 through 2019

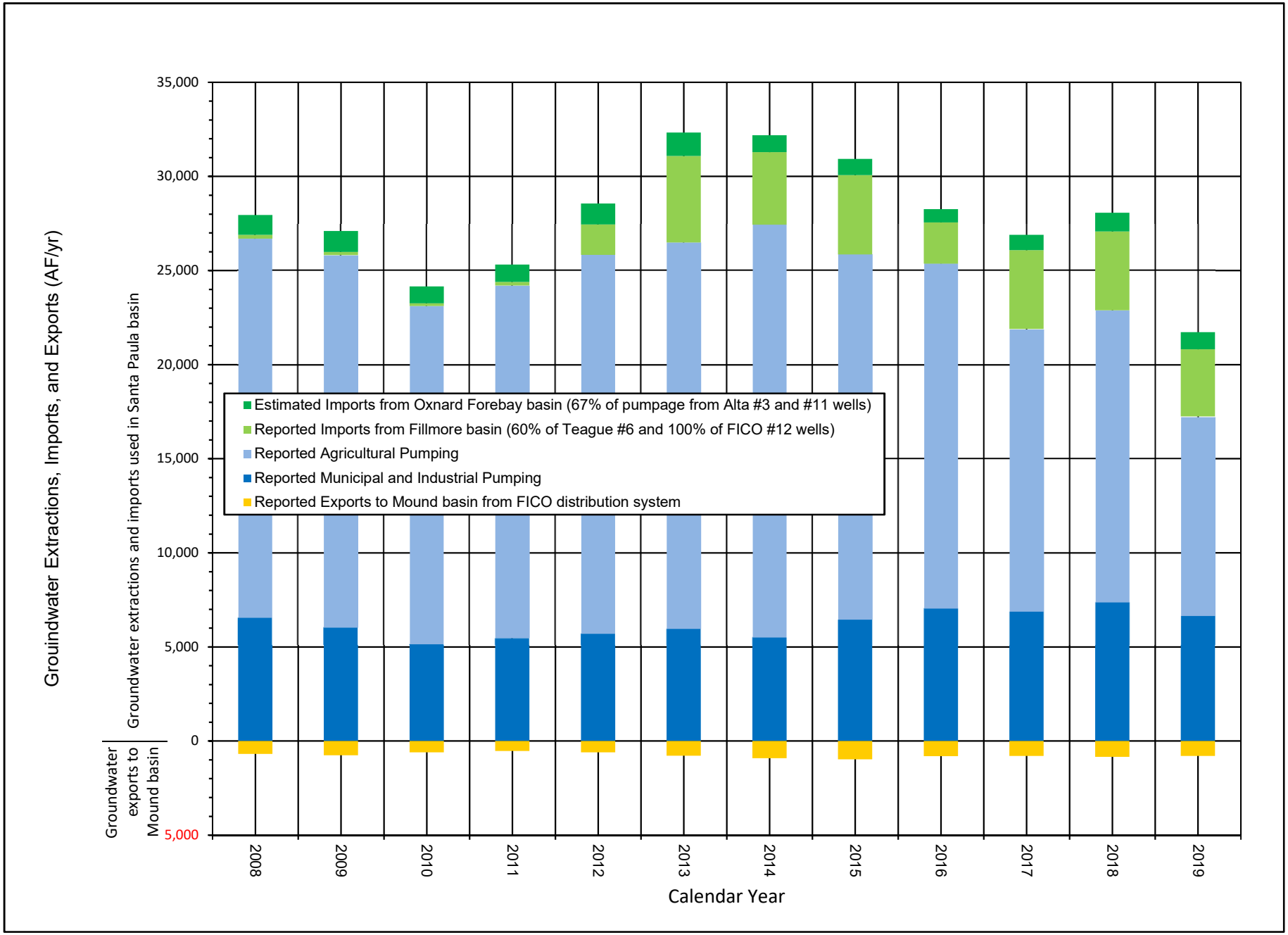

Figure 11. Annual Groundwater Extractions, Imports, and Exports from Santa Paula Basin, CYs 2008 through 2019

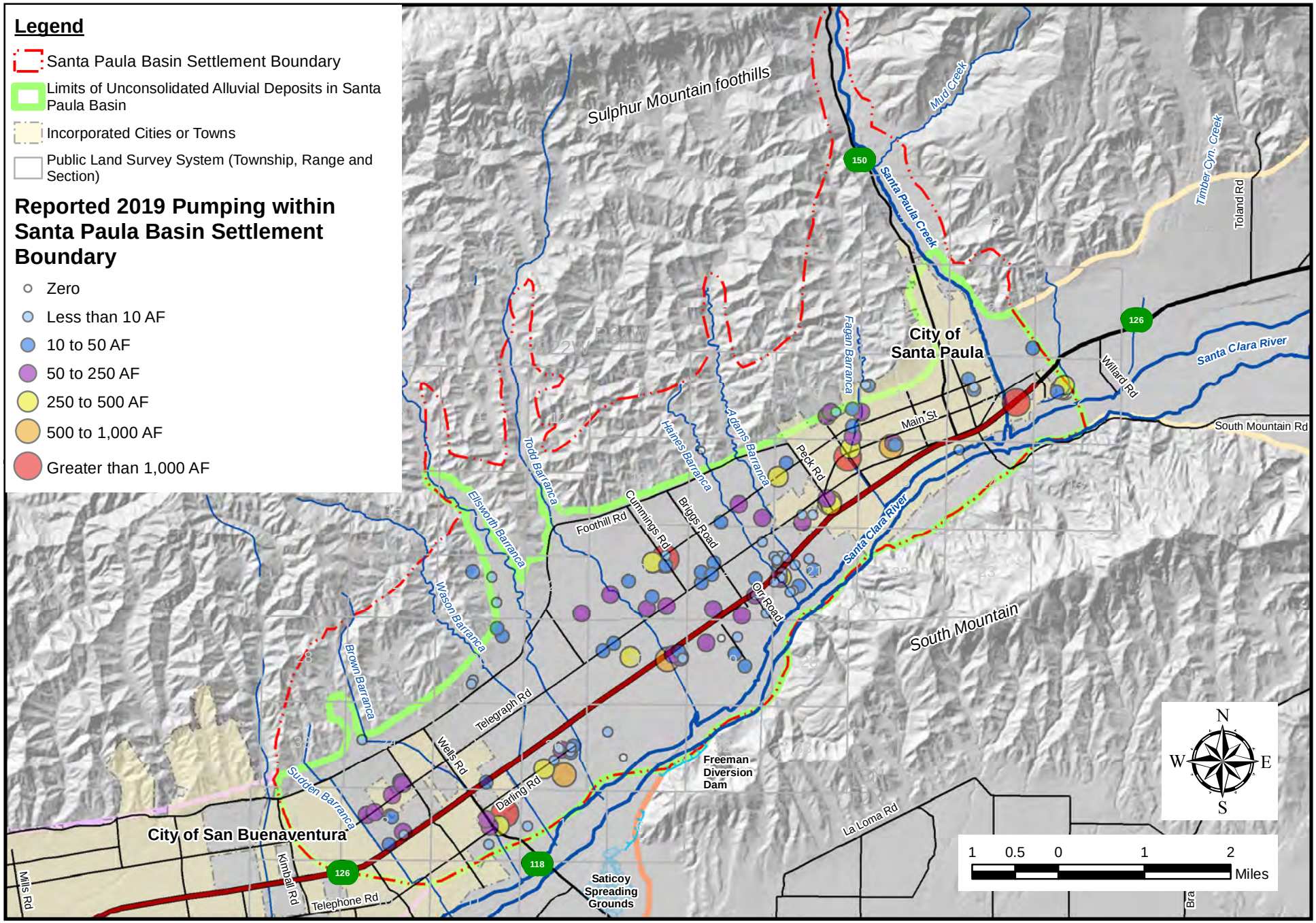

Figure 12. Santa Paula Basin Groundwater Extractions by Well, CY 2019

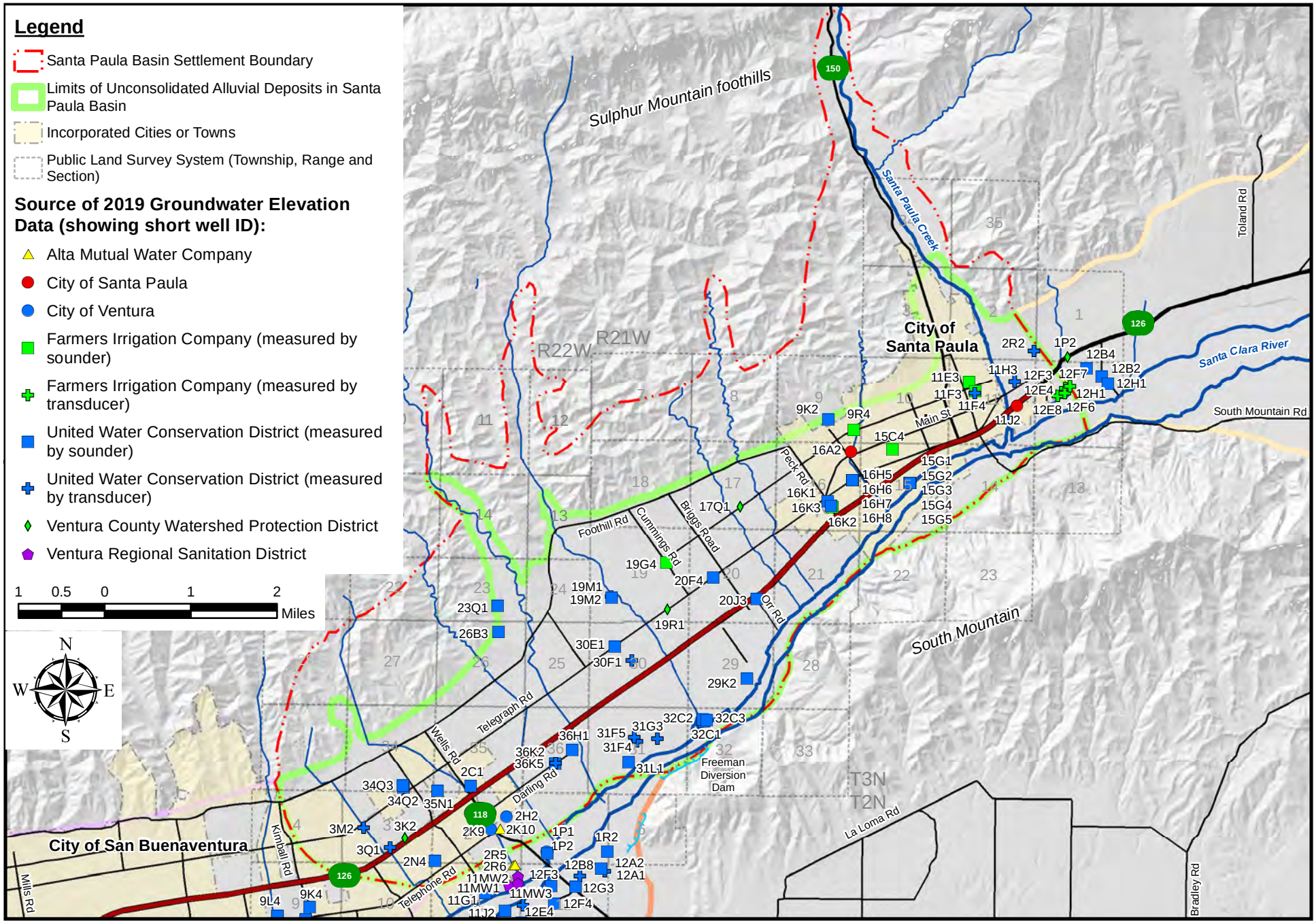

Figure 13. Locations of Wells used to Monitor Groundwater Levels in and Adjacent to Santa Paula Basin, CY 2019

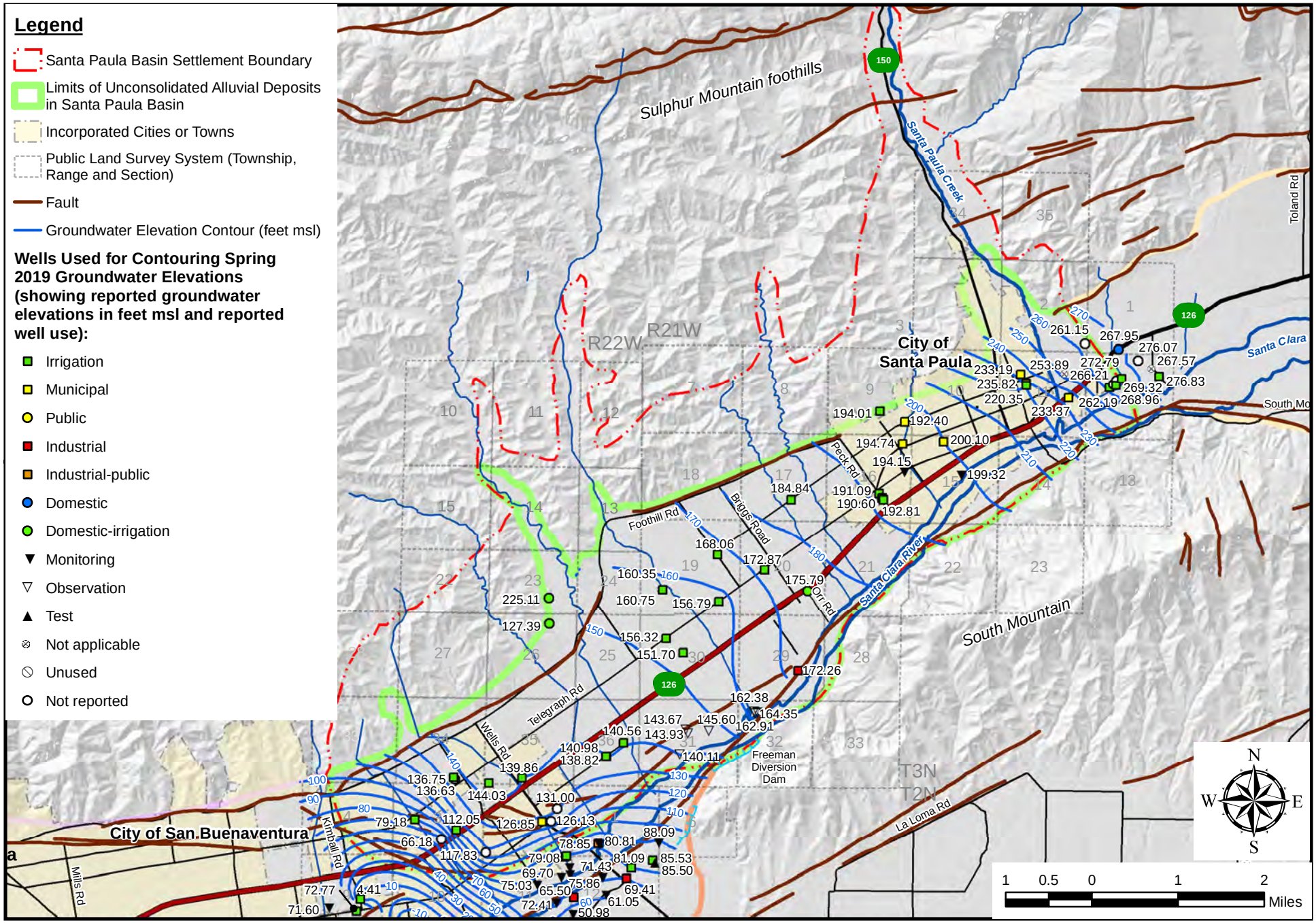

Figure 14. Santa Paula Basin Groundwater Elevation Contours, Spring 2019

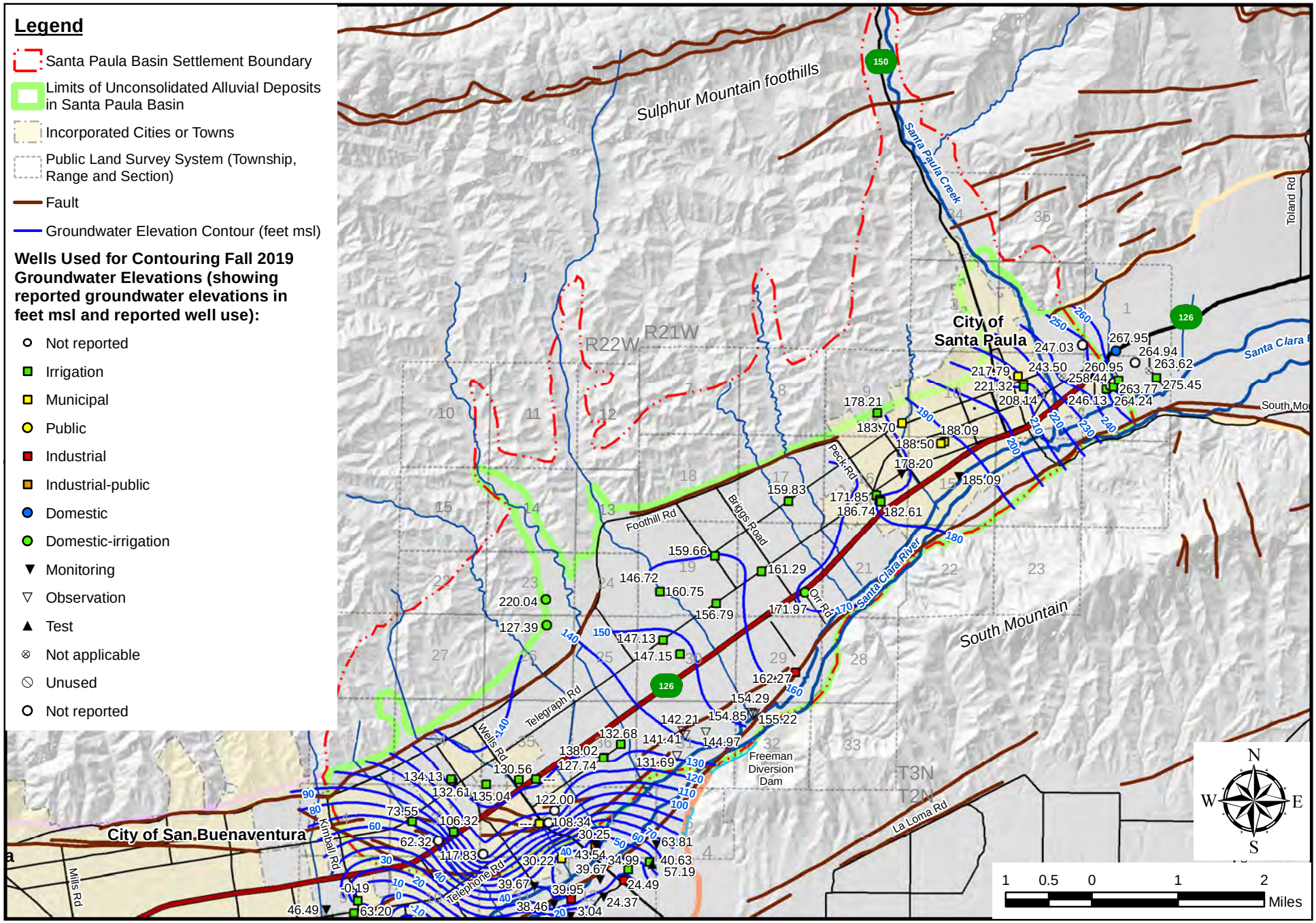

Figure 15. Santa Paula Basin Groundwater Elevation Contours, Fall 2019

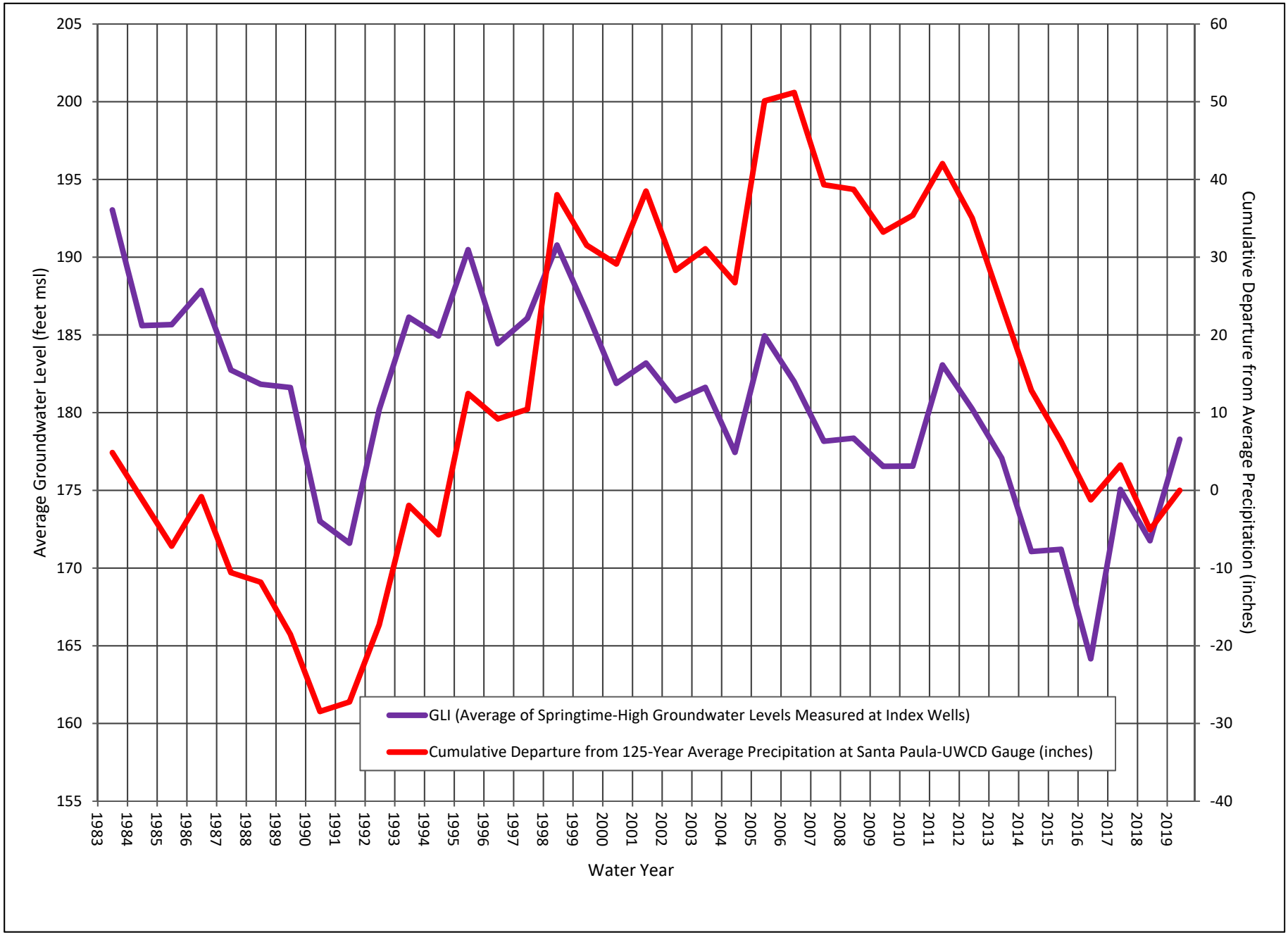

Figure 16. Groundwater Level Index and Cumulative Departure from Average Precipitation in Santa Paula Basin

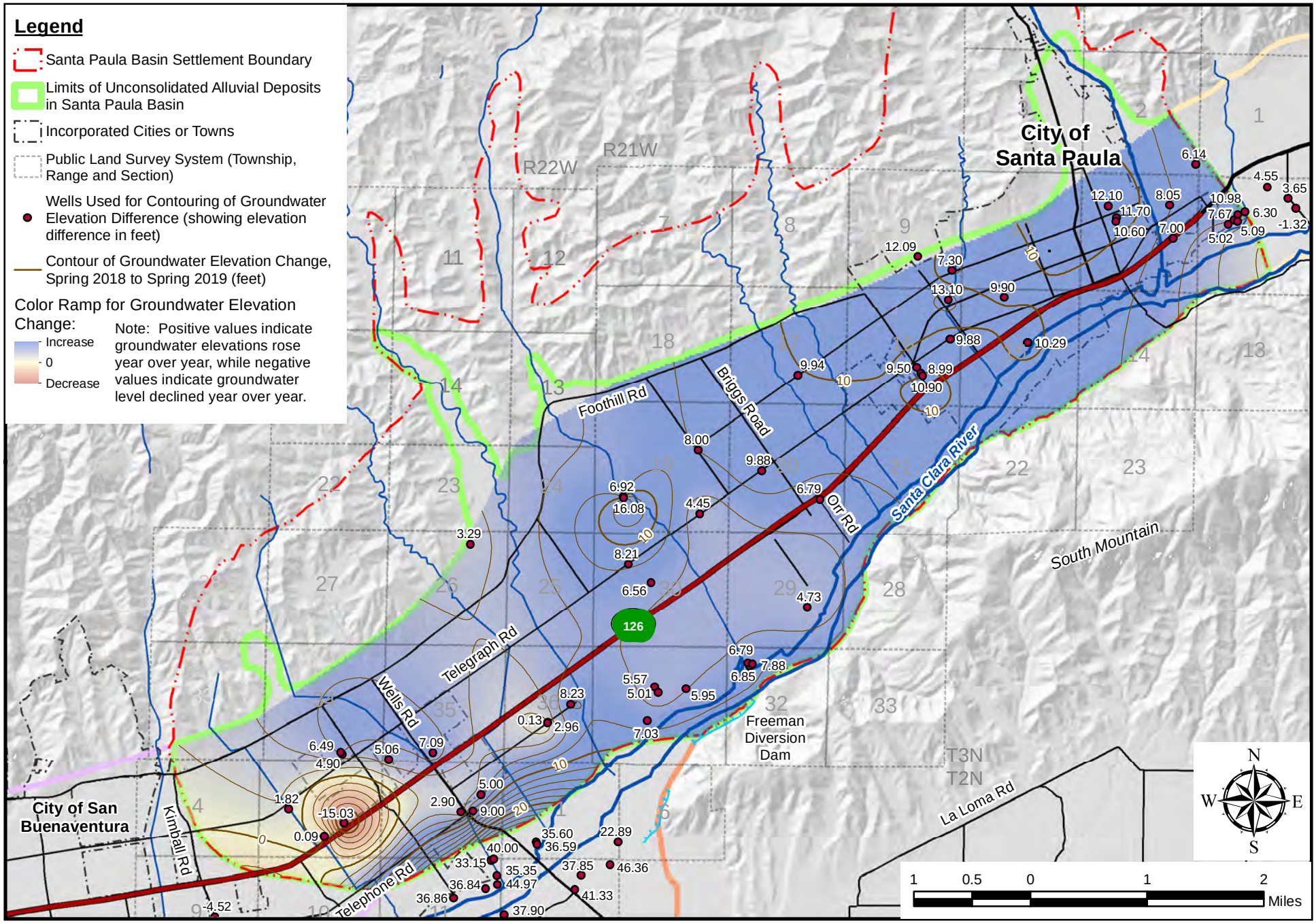

Figure 17. Change in Groundwater Elevation in Unconsolidated Alluvial Deposits of Santa Paula Basin, Spring 2018 to Spring 2019

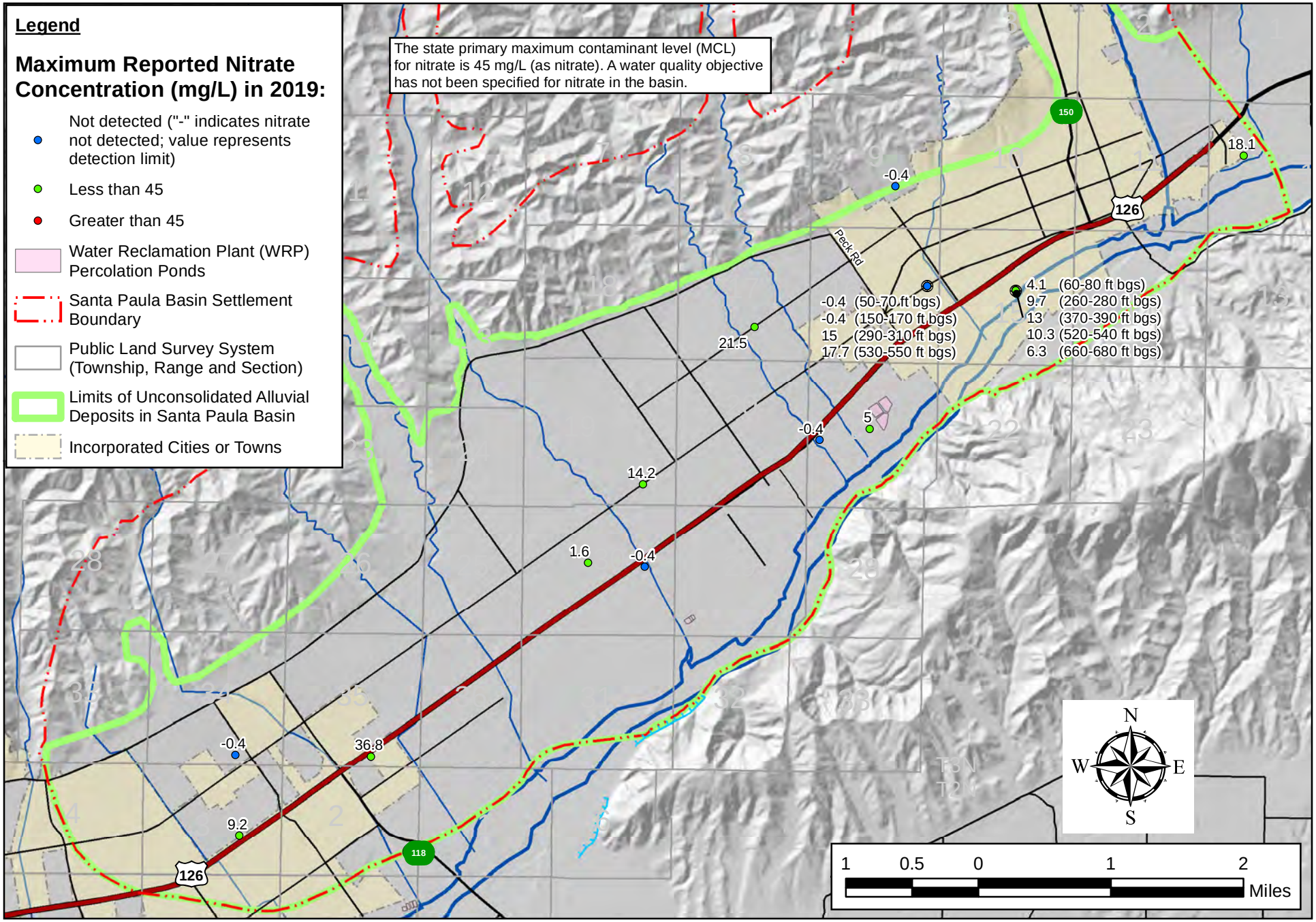

Figure 18. Maximum Reported Nitrate Concentrations in Groundwater, CY 2019

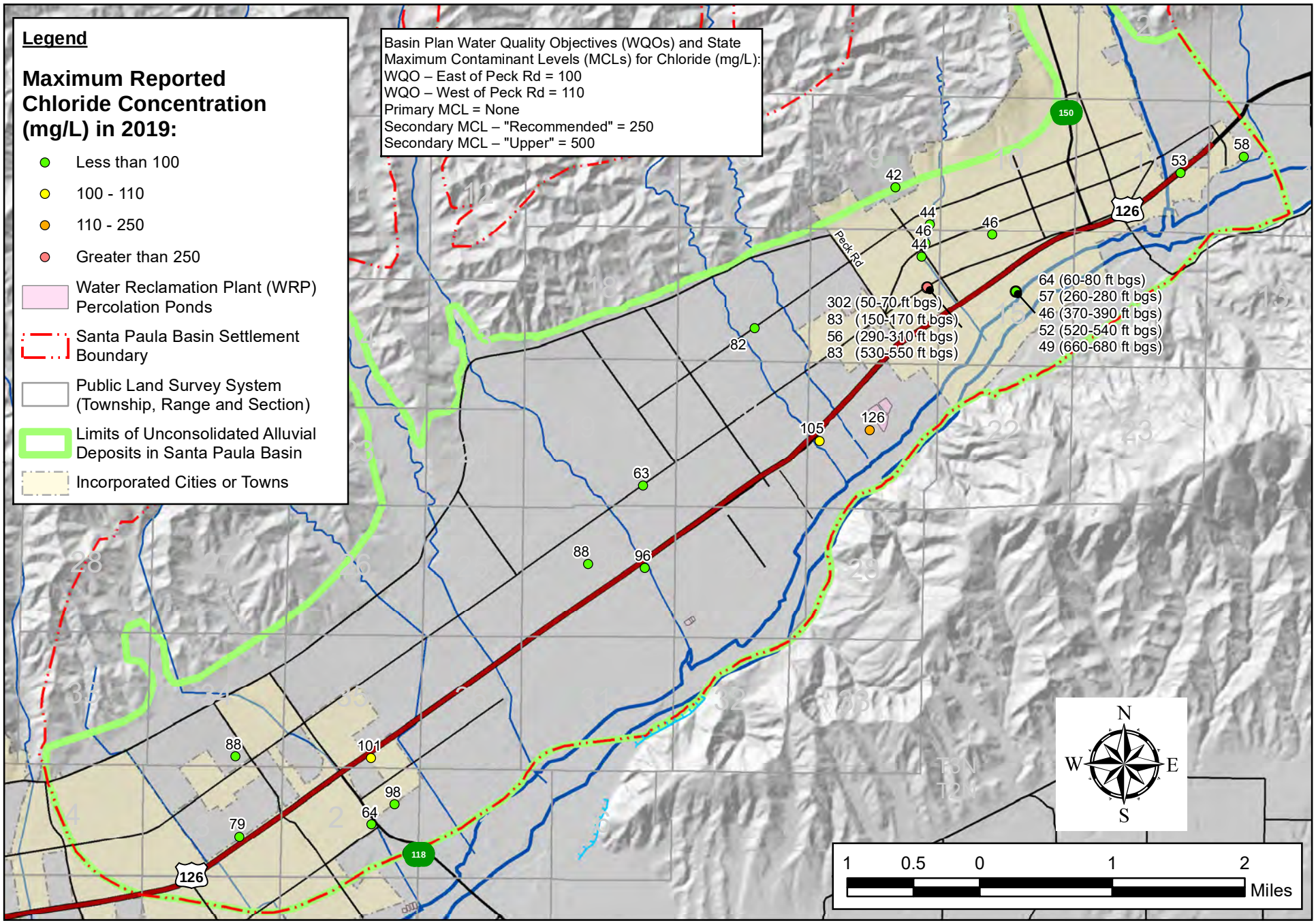

Figure 19. Maximum Reported Chloride Concentrations in Groundwater, CY 2019

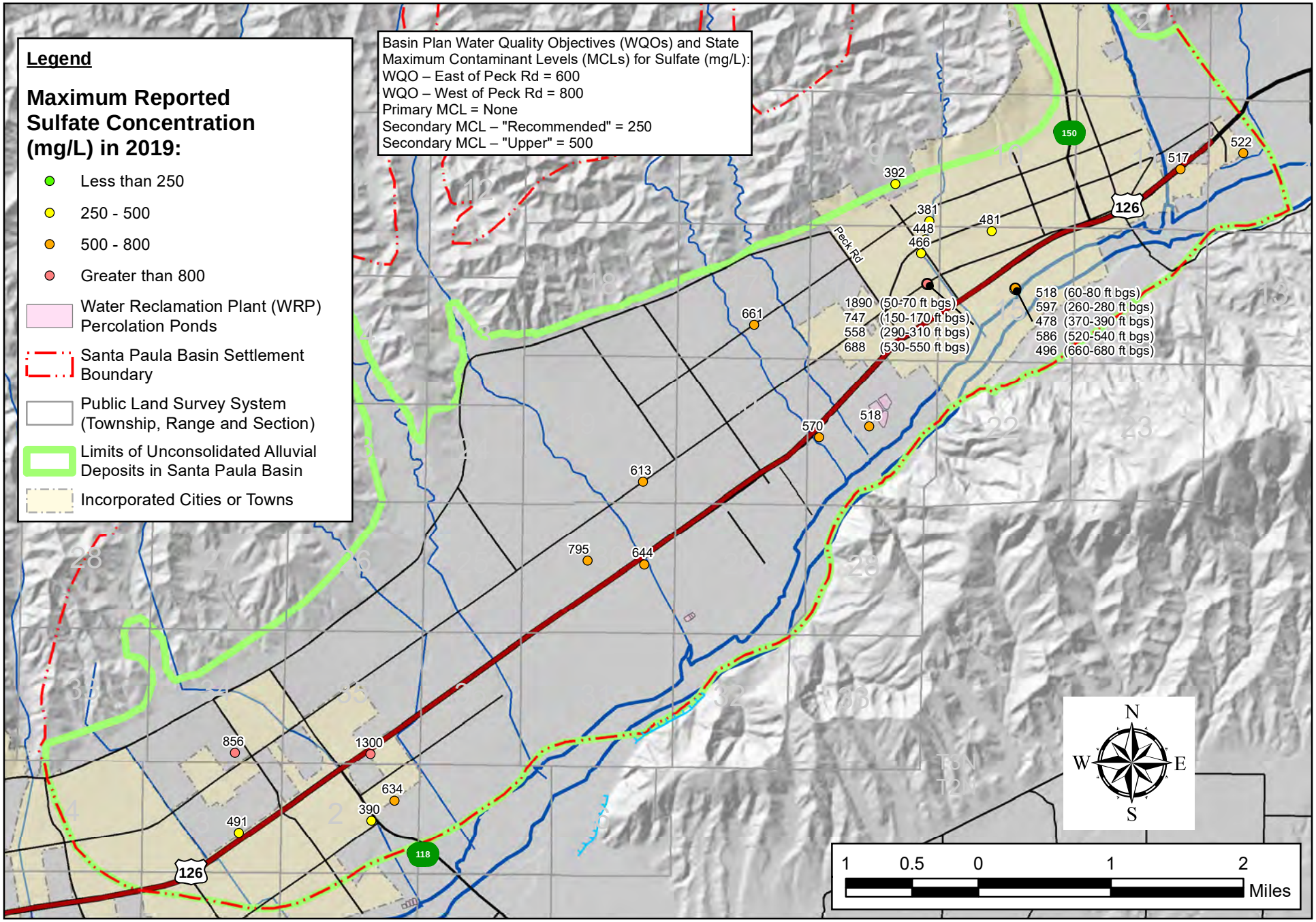

Figure 20. Maximum Reported Sulfate Concentrations in Groundwater, CY 2019

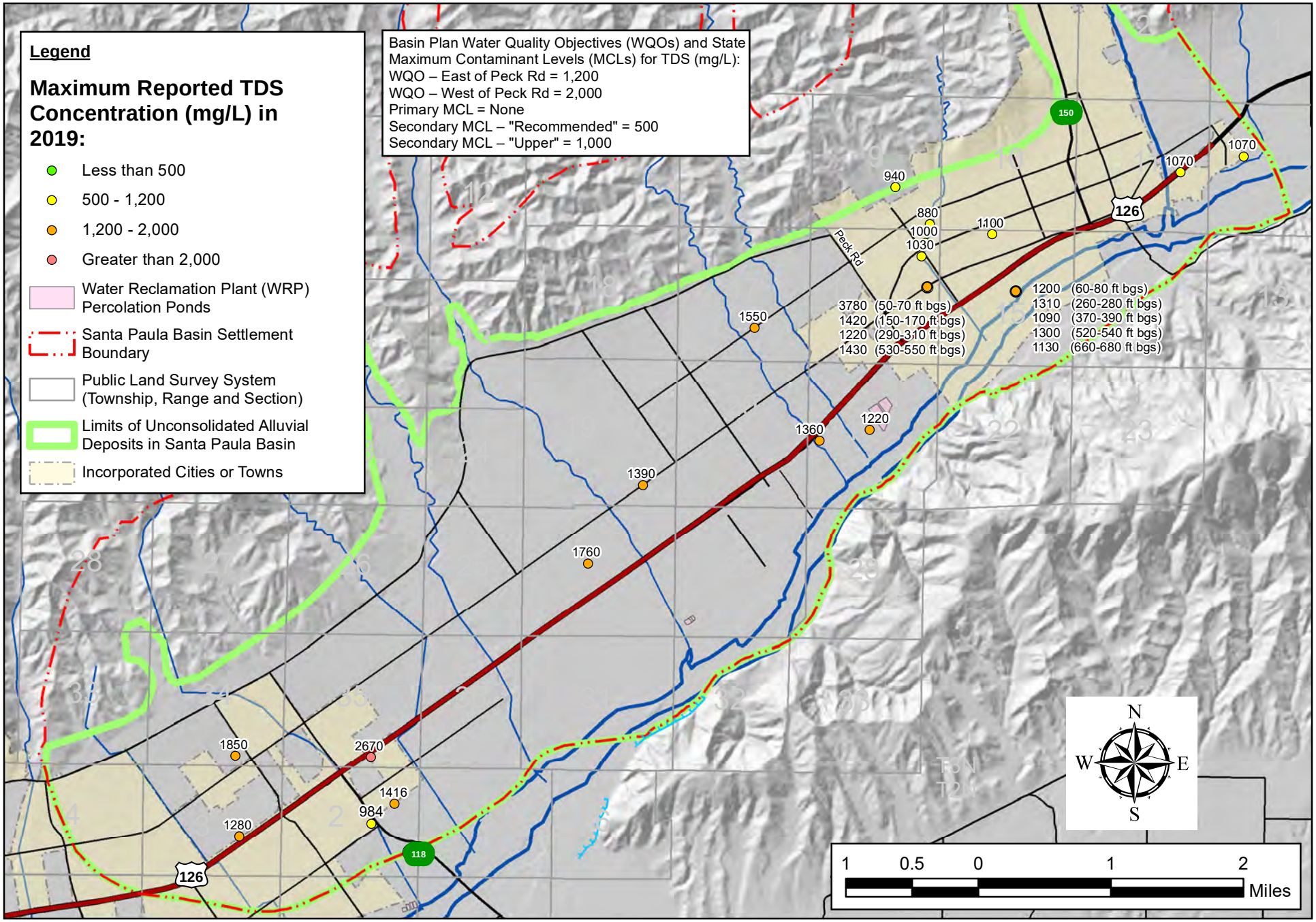

Figure 21. Maximum Reported Total Dissolved Solids (TDS) Concentrations in Groundwater, CY 2019

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APPENDIX A - Historical Precipitation and Streamflow Tables

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

WATER YEAR (WY)	MONTHLY PRECIPITATION (inches)												WY PRECIPITATION (inches)	WY CUMULATIVE DEPARTURE (inches)	CALENDAR YEAR PRECIPITATION (inches)
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1890	6.30	1.81	16.55	5.40	2.00	0.47	0.05	0.00	0.00	0.00	0.00	0.62	33.20	16.03	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	13.54	13.27
1892	0.00	0.00	1.52	0.70	3.99	3.24	0.54	1.80	0.00	0.00	0.00	0.00	11.79	8.16	24.31
1893	0.56	7.30	6.18	2.30	2.81	6.81	0.40	0.00	0.00	0.00	0.00	0.00	26.36	17.35	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	8.67	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	2.97	10.19
1896	0.00	0.00	0.00	5.03	4.98	3.24	0.00	0.00	0.00	0.00	0.00	0.45	13.70	-0.50	13.70
1897	0.00	0.00	0.00	5.03	4.98	3.24	0.00	0.00	0.00	0.00	0.00	0.45	13.70	-3.97	14.87
1898	1.17	0.00	0.00	0.92	0.70	1.55	0.00	1.22	0.00	0.00	0.00	0.86	6.42	-14.72	5.59
1899	0.08	0.00	0.26	3.44	0.00	2.41	0.35	0.00	0.00	0.00	0.00	0.00	6.54	-25.34	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	-32.94	9.61
1901	0.00	4.71	0.00	4.57	4.34	0.42	0.91	1.14	0.00	0.00	0.00	0.71	16.80	-33.31	14.87
1902	2.24	0.54	0.00	1.30	4.49	3.31	0.50	0.00	0.00	0.00	0.00	0.00	12.38	-38.10	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	-36.86	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	-40.67	15.92
1905	0.38	0.00	2.18	2.54	8.02	5.50	0.67	3.15	0.00	0.00	0.00	0.00	22.44	-35.40	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	-34.63	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	-23.97	24.88
1908	2.72	0.00	0.58	5.73	4.56	0.05	0.94	0.00	0.00	0.00	0.00	0.55	15.13	-26.01	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	-17.83	30.46
1910	0.13	1.36	7.27	2.82	0.00	2.36	0.00	0.00	0.00	0.00	0.00	2.78	16.72	-18.27	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	-16.15	19.23
1912	0.00	0.00	1.21	0.18	0.00	7.17	1.67	0.84	0.00	0.00	0.00	0.00	11.07	-22.25	10.53
1913	0.56	0.11	0.00	3.79	9.51	0.00	0.47	0.00	0.47	0.00	0.50	0.00	15.41	-24.01	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	-12.69	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	-6.74	21.79
1916	0.00	0.68	2.60	18.17	1.07	0.53	0.00	0.00	0.00	0.00	0.00	1.44	24.49	0.58	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	3.36	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	8.08	25.76
1919	0.00	3.01	1.17	1.33	1.89	2.65	0.00	0.22	0.00	0.00	0.00	1.71	11.98	2.89	10.43
1920	0.33	0.12	2.18	0.41	2.93	5.74	0.82	0.00	0.00	0.00	0.00	0.00	12.53	-1.75	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	-1.47	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	2.30	19.00
1923	0.43	1.63	7.01	1.86	1.03	0.00	2.97	0.00	0.00	0.00	0.00	0.14	15.07	0.20	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	-9.40	10.03
1925	1.02	1.12	1.08	0.31	1.25	2.25	2.02	0.88	0.08	0.00	0.00	0.00	10.01	-16.55	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	-17.31	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	-11.16	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	-17.18	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	-20.17	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	-25.75	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	-28.73	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	-25.36	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	-31.37	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	-33.60	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	-29.38	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	-30.23	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	-20.90	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	-10.05	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	-11.54	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	-15.41	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	5.53	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	2.55	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	14.36	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	21.57	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	19.53	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	13.68	16.83

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

WATER YEAR (WY)	MONTHLY PRECIPITATION (inches)												WY 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	9.80	3.30
1948	0.05	0.00	1.28	0.00	1.22	3.83	1.79	0.06	0.04	0.00	0.00	0.00	8.27	0.91	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	-6.47	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	-10.07	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	-19.09	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	-4.34	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	-10.69	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	-13.49	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	-17.27	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	-19.11	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	-24.37	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	-10.17	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	-20.66	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	-26.40	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	-36.95	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	-28.42	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	-31.89	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	-39.64	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	-43.35	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	-43.28	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	-37.92	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	-40.67	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	-27.26	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	-30.48	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	-29.71	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	-37.77	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	-31.62	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	-32.90	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	-32.01	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	-37.31	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	-41.60	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	-22.68	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	-17.68	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	-6.00	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	-11.29	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	-13.61	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	4.85	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	-1.17	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	-7.18	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	-0.81	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	-10.58	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	-11.82	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	-18.53	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	-28.45	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	-27.22	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	-17.30	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	-1.94	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	-5.72	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	12.45	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	9.18	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	10.43	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	38.03	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	31.53	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	29.12	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	38.49	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	28.30	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	31.08	16.02

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

WATER YEAR (WY)	MONTHLY PRECIPITATION (inches)												WY 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	26.73	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	50.10	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	51.19	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	39.32	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	38.73	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	33.23	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	35.40	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	42.03	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	35.04	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	23.90	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	12.86	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	6.32	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	-1.22	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	3.26	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	-5.06	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	0.00	26.02
2020	0.00	2.42	5.19												
AVERAGE:	**0.57**	**1.46**	**2.75**	**3.93**	**3.88**	**2.93**	**1.00**	**0.34**	**0.03**	**0.02**	**0.03**	**0.24**	**17.17**	**---**	**17.04**
MEDIAN:	**0.18**	**0.79**	**1.68**	**2.54**	**2.84**	**2.25**	**0.49**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**14.89**	**---**	**15.48**

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

WATER YEAR	ACRE-FEET	WATER YEAR	ACRE-FEET	WATER YEAR	ACRE-FEET	WATER YEAR	ACRE-FEET
1956	30,140	**1972**	58,807	**1988**	76,426	**2004**	59,397
1957	18,668	**1973**	265,962	**1989**	26,610	**2005**	1,153,883
1958	352,671	**1974**	123,279	**1990**	10,787	**2006**	246,950
1959	55,462	**1975**	110,294	**1991**	117,639	**2007**	51,065
1960	14,557	**1976**	37,116	**1992**	333,441	**2008**	214,847
1961	6,209	**1977**	28,818	**1993**	963,059	**2009**	74,645
1962	272,542	**1978**	748,780	**1994**	131,823	**2010**	143,938
1963	28,495	**1979**	297,212	**1995**	908,663	**2011**	257,205
1964	15,345	**1980**	523,154	**1996**	125,982	**2012**	57,761
1965	23,696	**1981**	108,357	**1997**	166,052	**2013**	22,696
1966	207,602	**1982**	103,255	**1998**	788,007	**2014**	23,213
1967	205,577	**1983**	719,692	**1999**	119,559	**2015**	6,670
1968	54,656	**1984**	136,205	**2000**	130,933	**2016**	5,825
1969	982,425	**1985**	54,431	**2001**	251,235	**2017**	98,843
1970	129,540	**1986**	226,857	**2002**	58,072	**2018**	10,116
1971	130,717	**1987**	38,796	**2003**	93,844	**2019**	205,642
						AVERAGE	203,815
						MEDIAN	113,967

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

WATER YEAR	ACRE-FEET	WATER YEAR	ACRE-FEET	WATER YEAR	ACRE-FEET	WATER YEAR	ACRE-FEET
1928	1,332	**1951**	992	**1974**	11,552	**1997**	18,015
1929	1,801	**1952**	30,882	**1975**	11,506	**1998**	80,799
1930	1,554	**1953**	4,340	**1976**	3,906	**1999**	5,562
1931	3,014	**1954**	5,861	**1977**	2,361	**2000**	8,609
1932	19,958	**1955**	3,012	**1978**	87,150	**2001**	24,461
1933	7,485	**1956**	5,257	**1979**	20,453	**2002**	2,513
1934	11,353	**1957**	3,527	**1980**	34,108	**2003**	8,563
1935	12,830	**1958**	47,074	**1981**	5,818	**2004**	5,054
1936	13,444	**1959**	5,593	**1982**	9,177	**2005**	107,309
1937	31,909	**1960**	2,123	**1983**	70,594	**2006**	22,708
1938	44,310	**1961**	1,254	**1984**	8,017	**2007**	3,305
1939	8,465	**1962**	26,203	**1985**	3,394	**2008**	27,945
1940	5,297	**1963**	3,340	**1986**	20,486	**2009**	4,393
1941	57,682	**1964**	3,026	**1987**	3,179	**2010**	16,342
1942	6,882	**1965**	4,665	**1988**	7,361	**2011**	32,887
1943	39,739	**1966**	28,458	**1989**	2,893	**2012**	4,465
1944	22,425	**1967**	37,423	**1990**	2,485	**2013**	1,168
1945	12,172	**1968**	7,866	**1991**	15,214	**2014**	1,788
1946	11,194	**1969**	112,696	**1992**	33,768	**2015**	1,028
1947	7,295	**1970**	7,779	**1993**	71,474	**2016**	1,502
1948	1,715	**1971**	12,795	**1994**	8,351	**2017**	15,226
1949	1,965	**1972**	4,492	**1995**	63,209	**2018**	4,063
1950	3,492	**1973**	35,236	**1996**	8,752	**2019**	22,518
						AVERAGE	17,898
						MEDIAN	8,184

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

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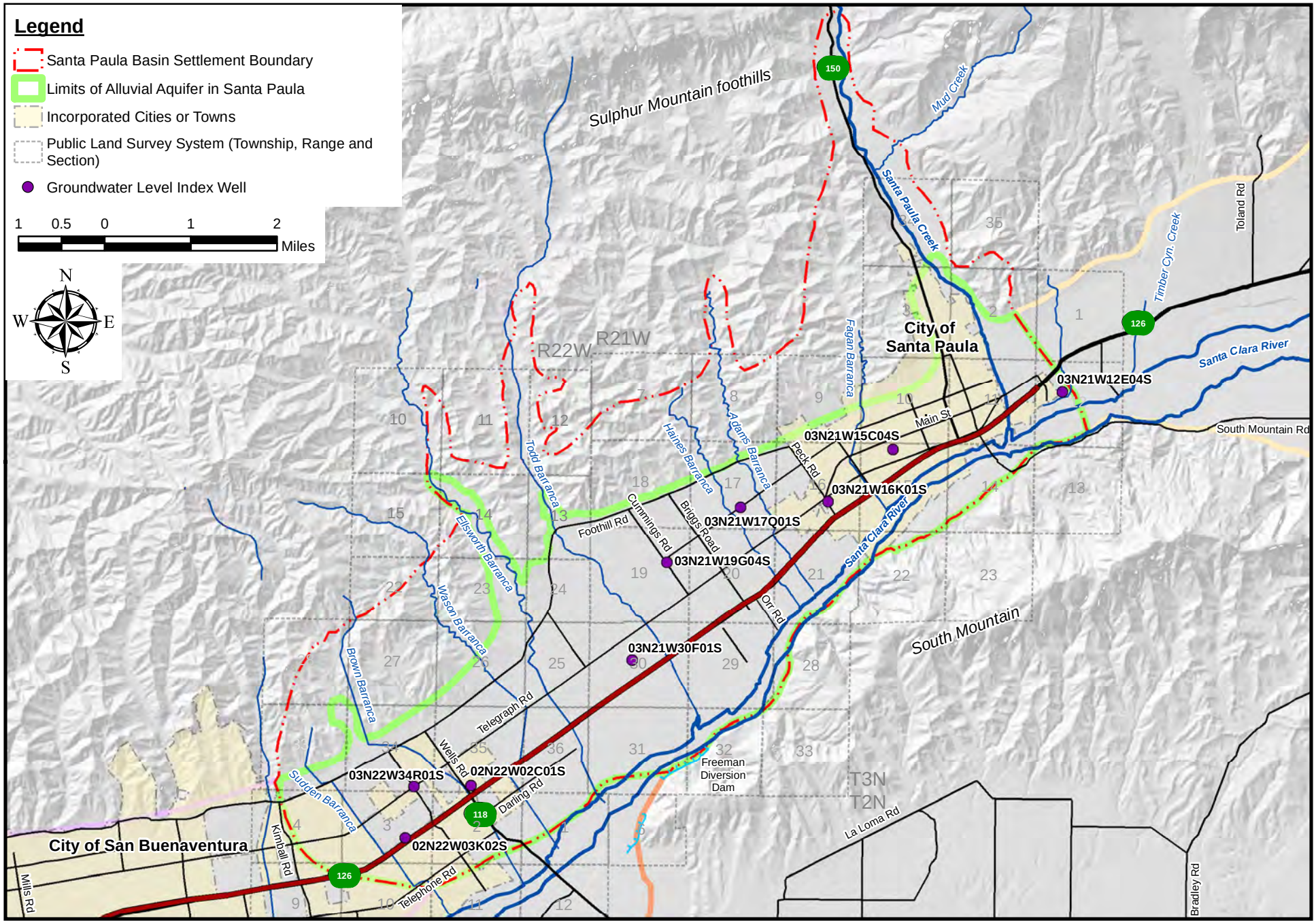

Location of Santa Paula Basin Groundwater Level Index Wells

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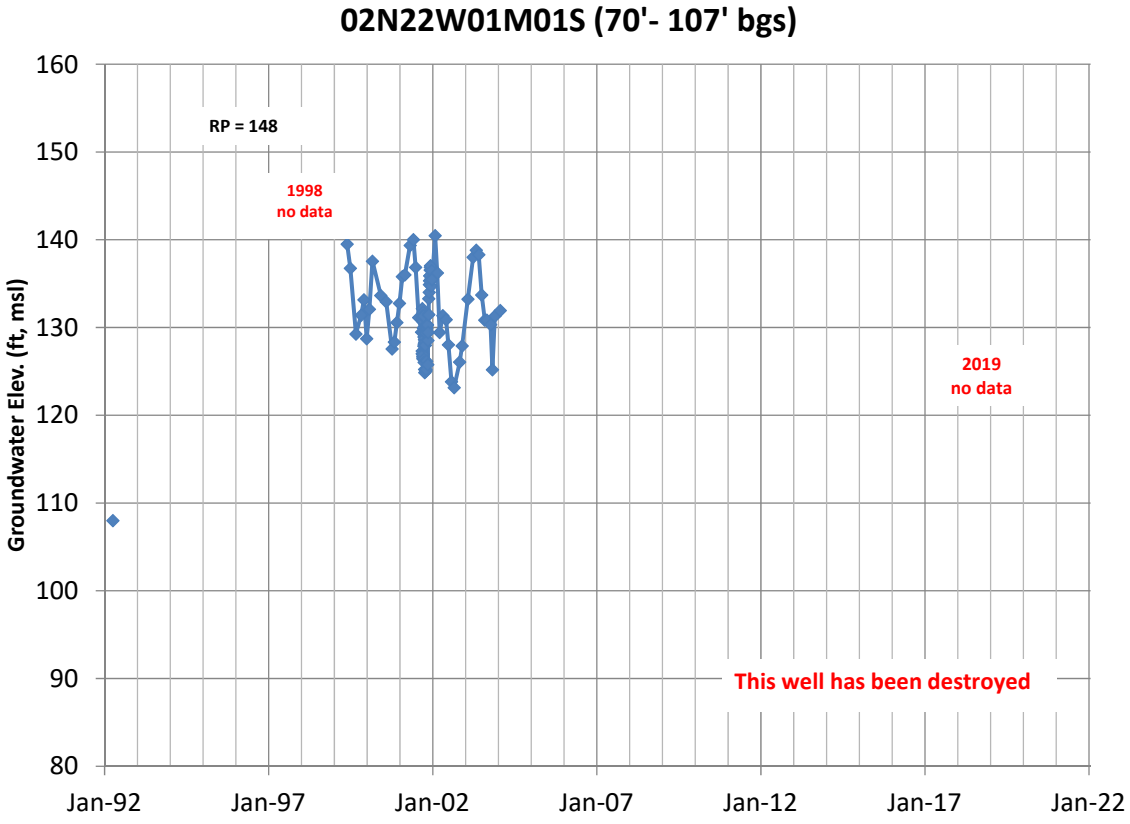

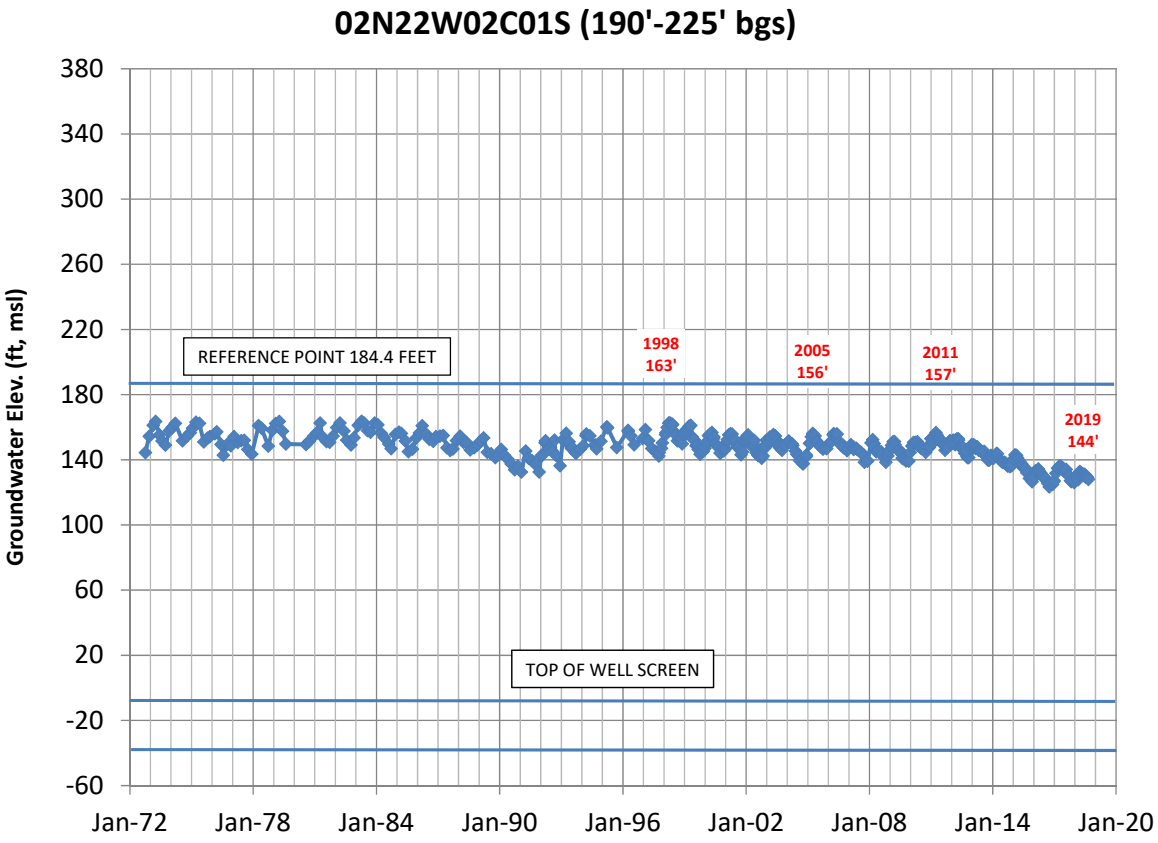

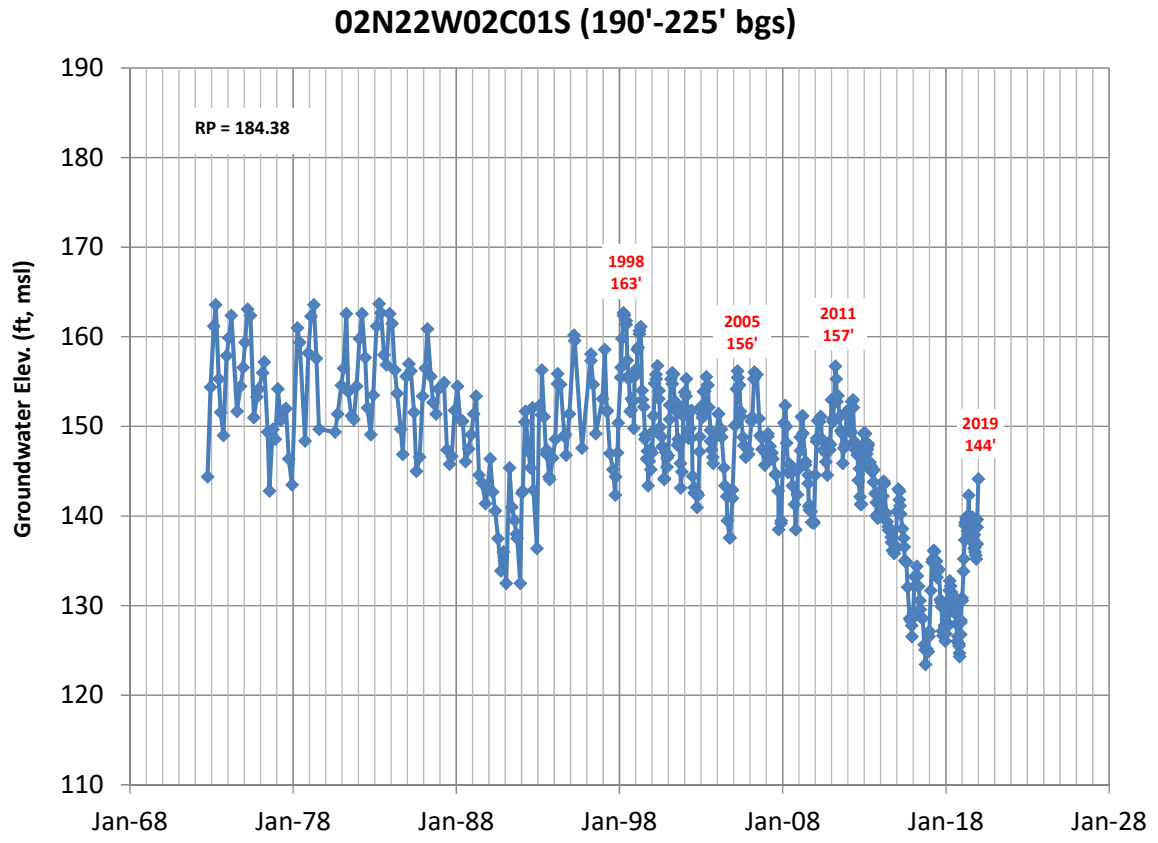

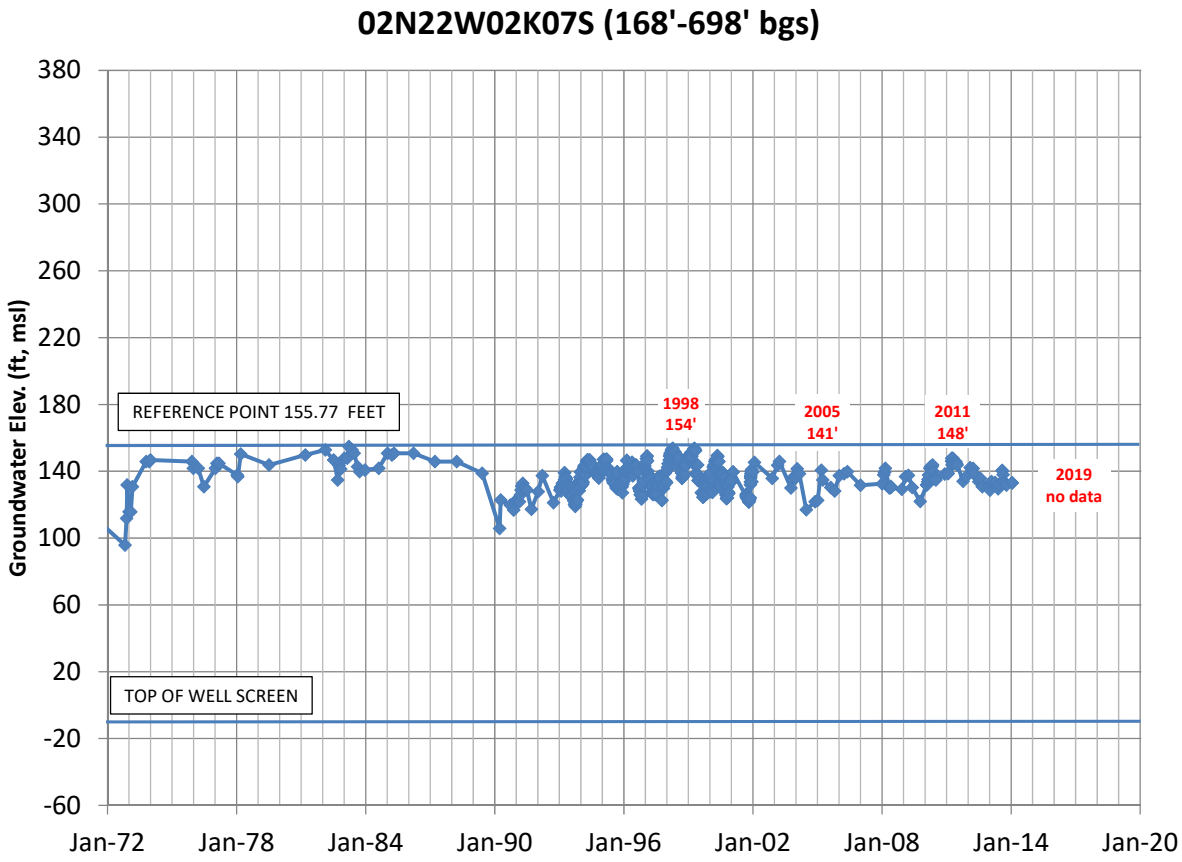

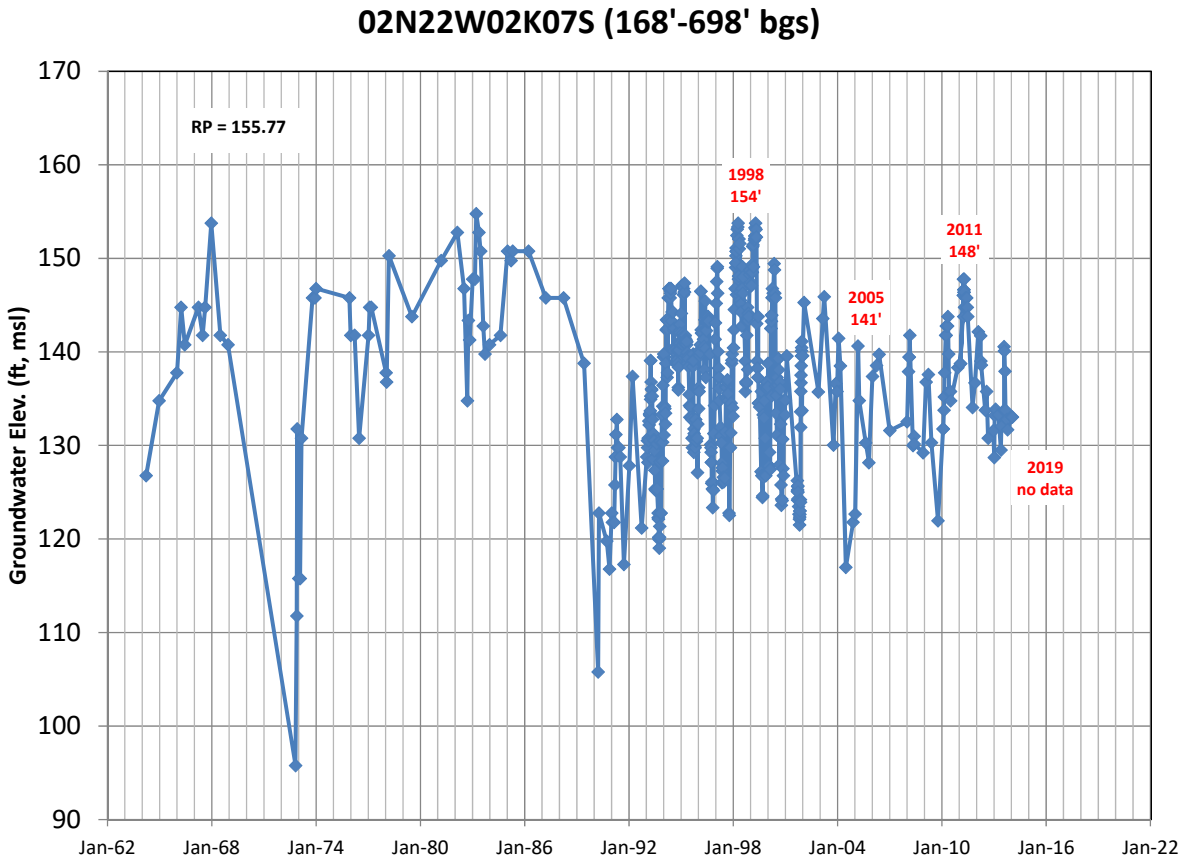

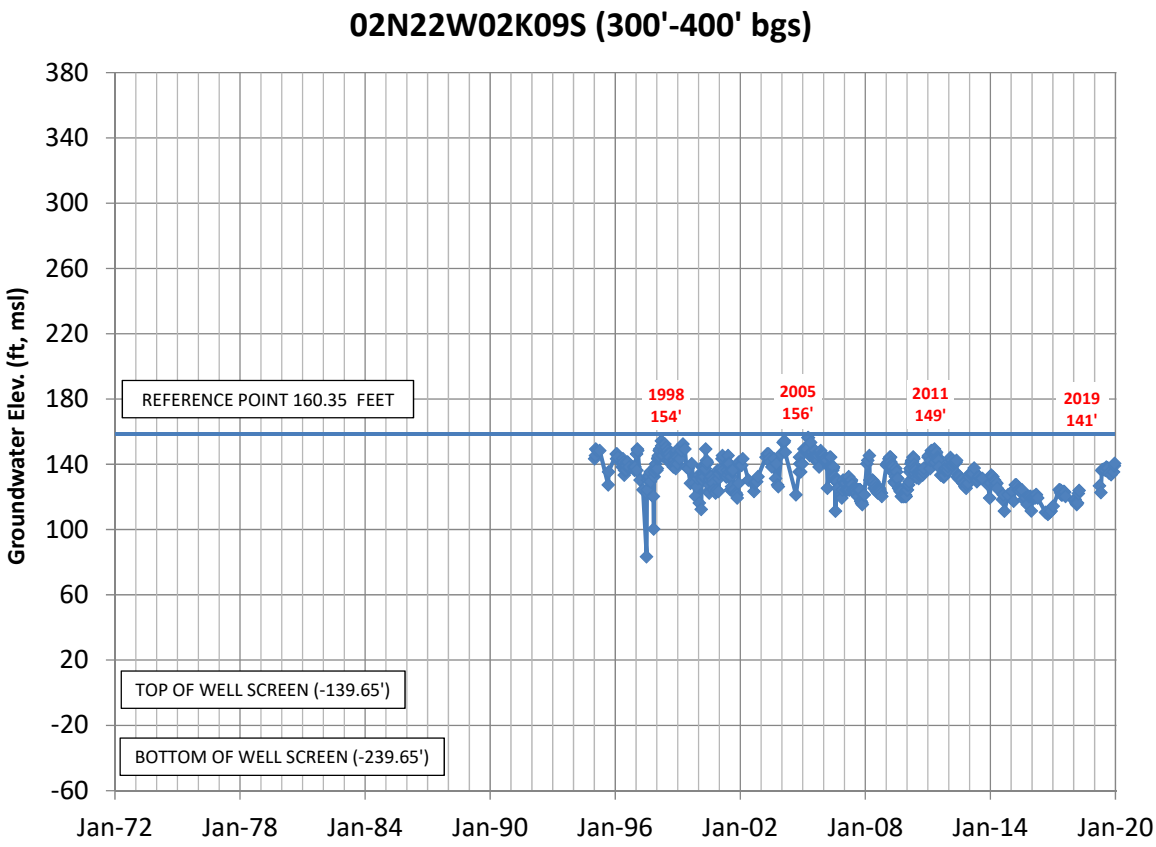

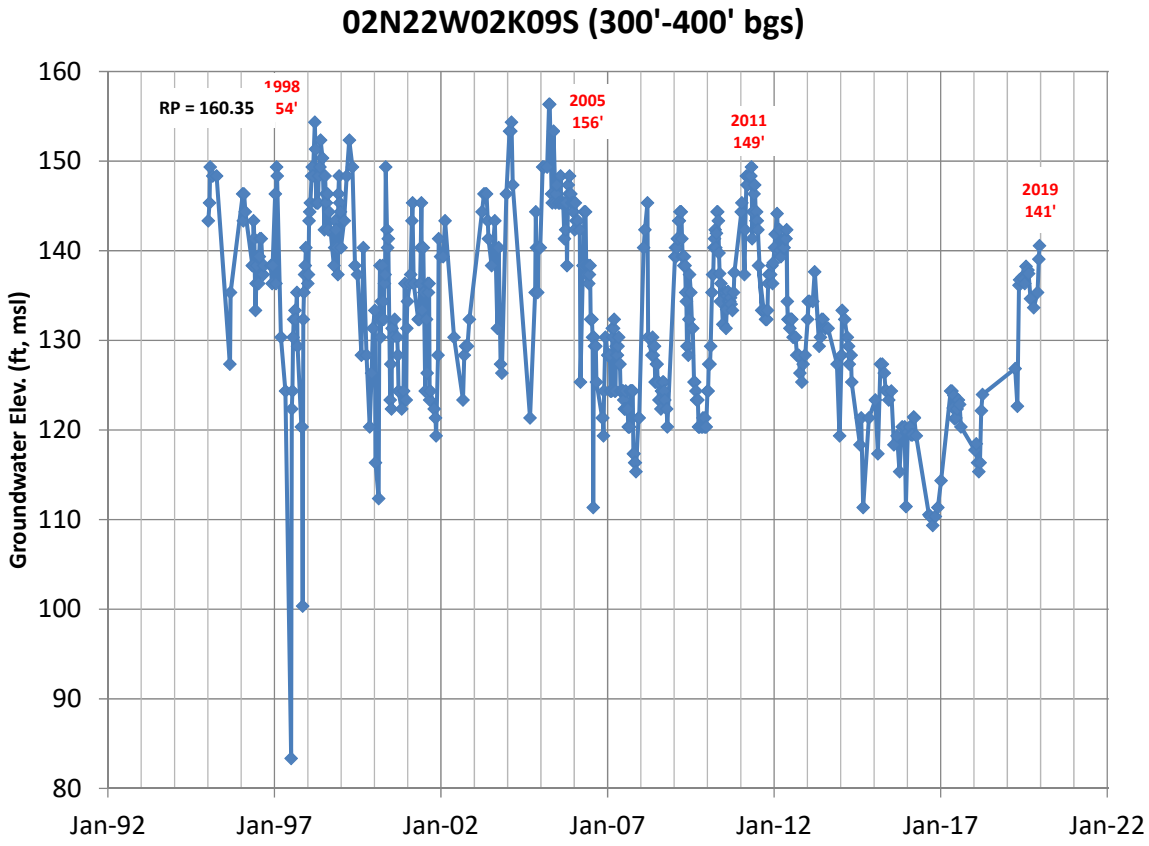

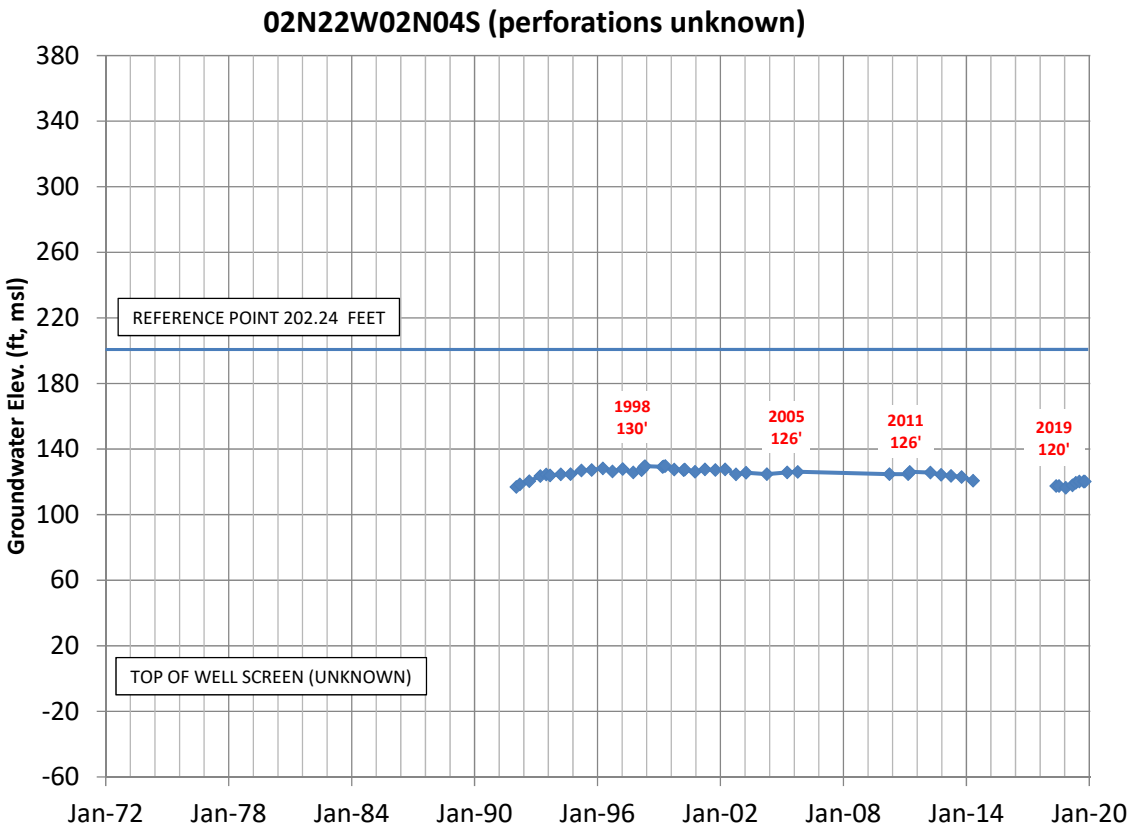

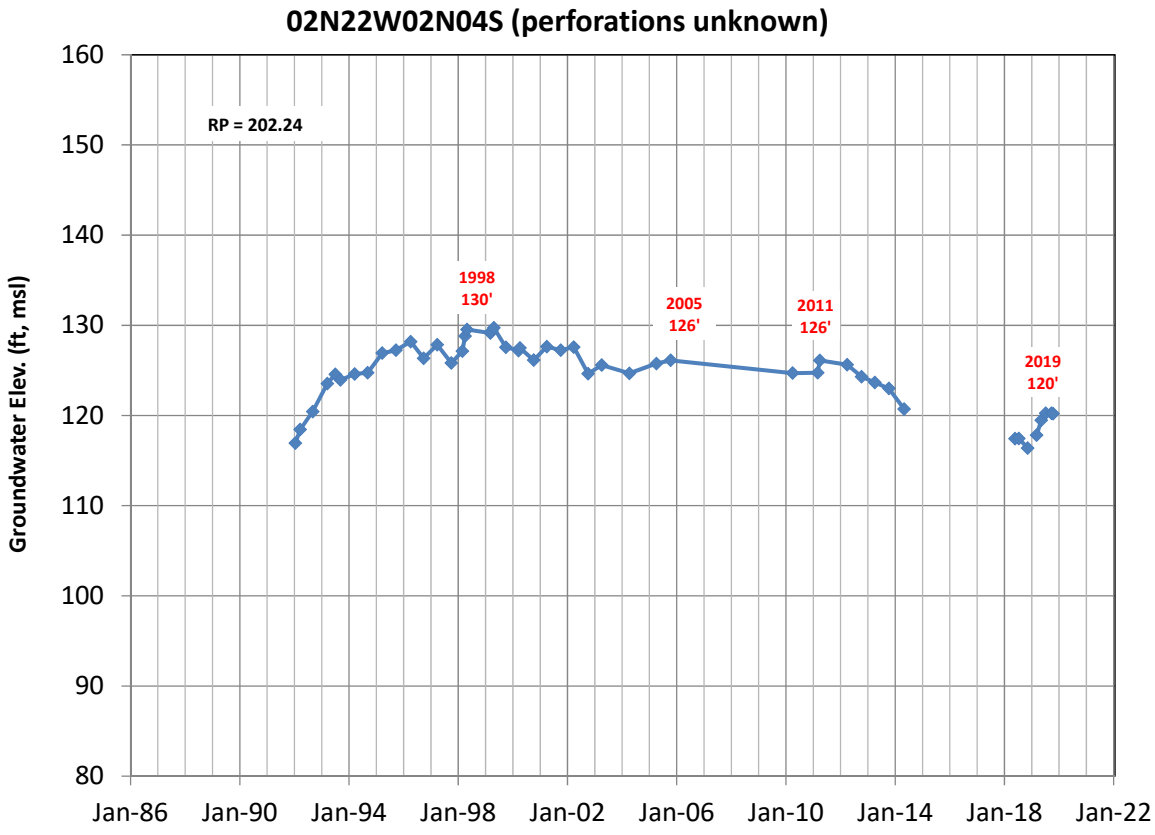

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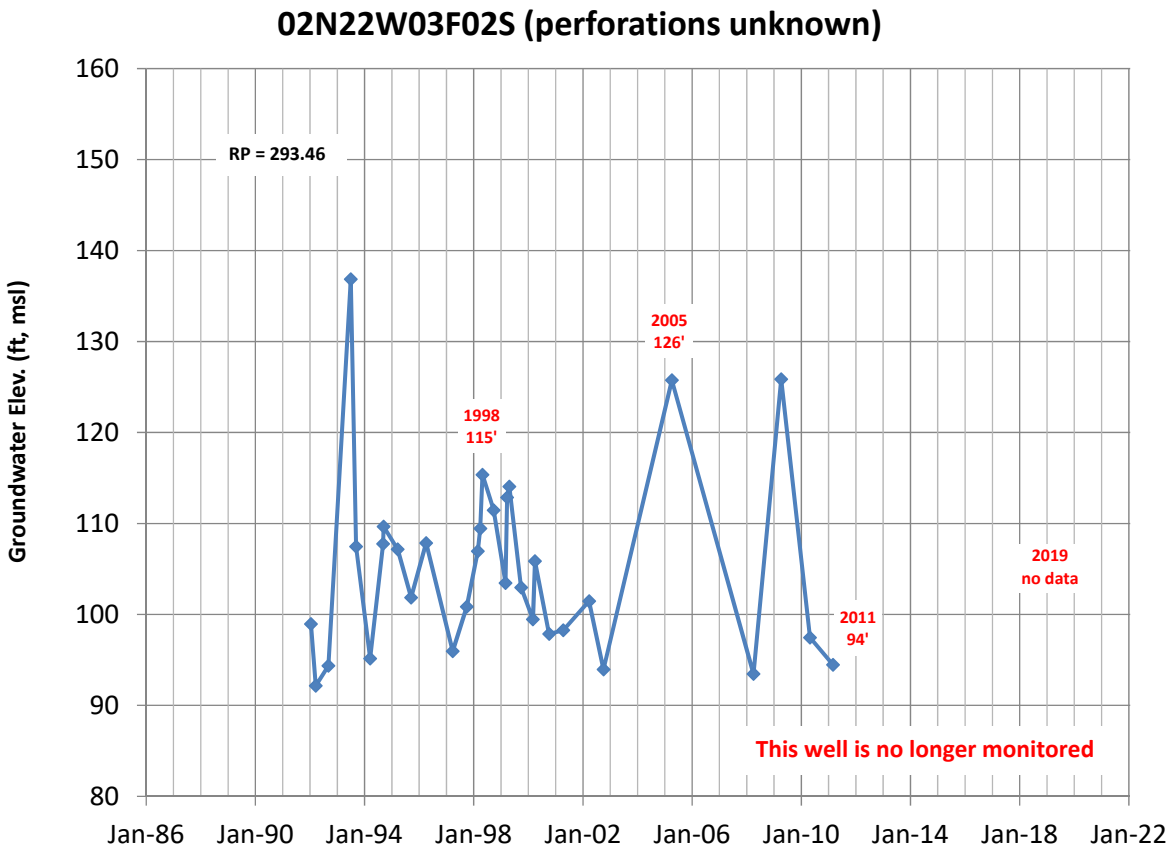

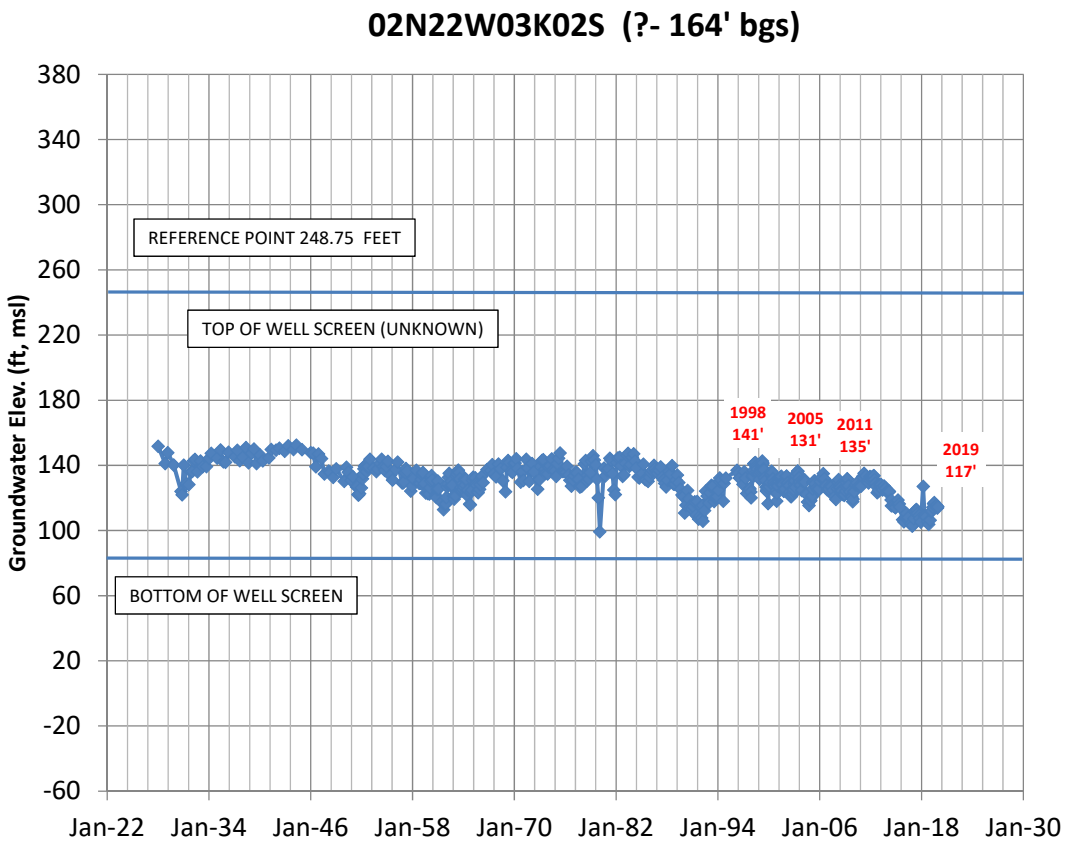

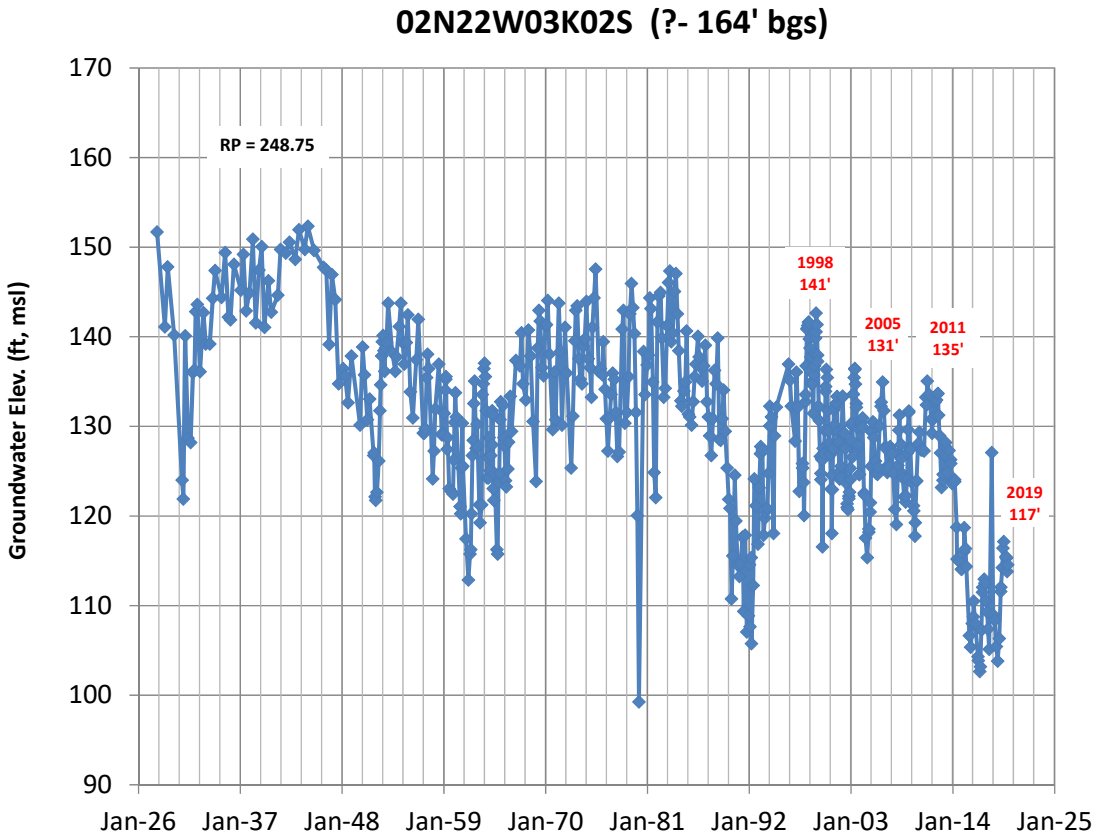

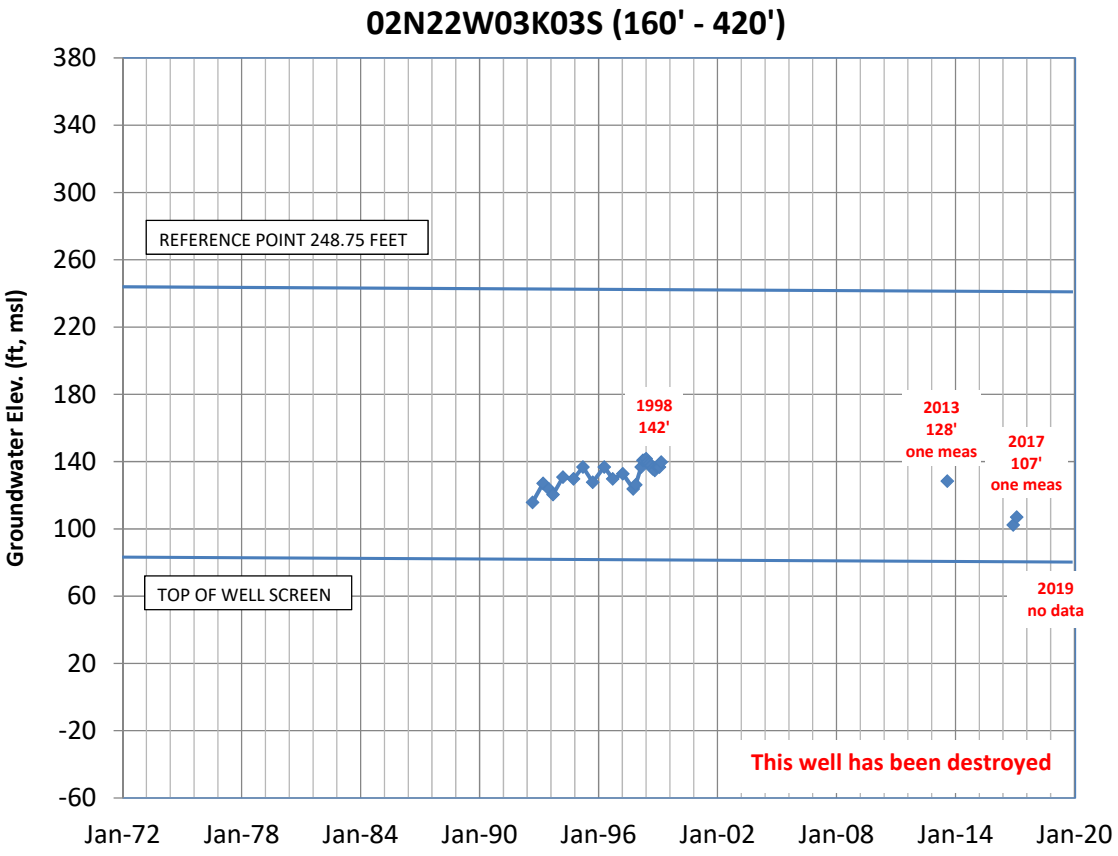

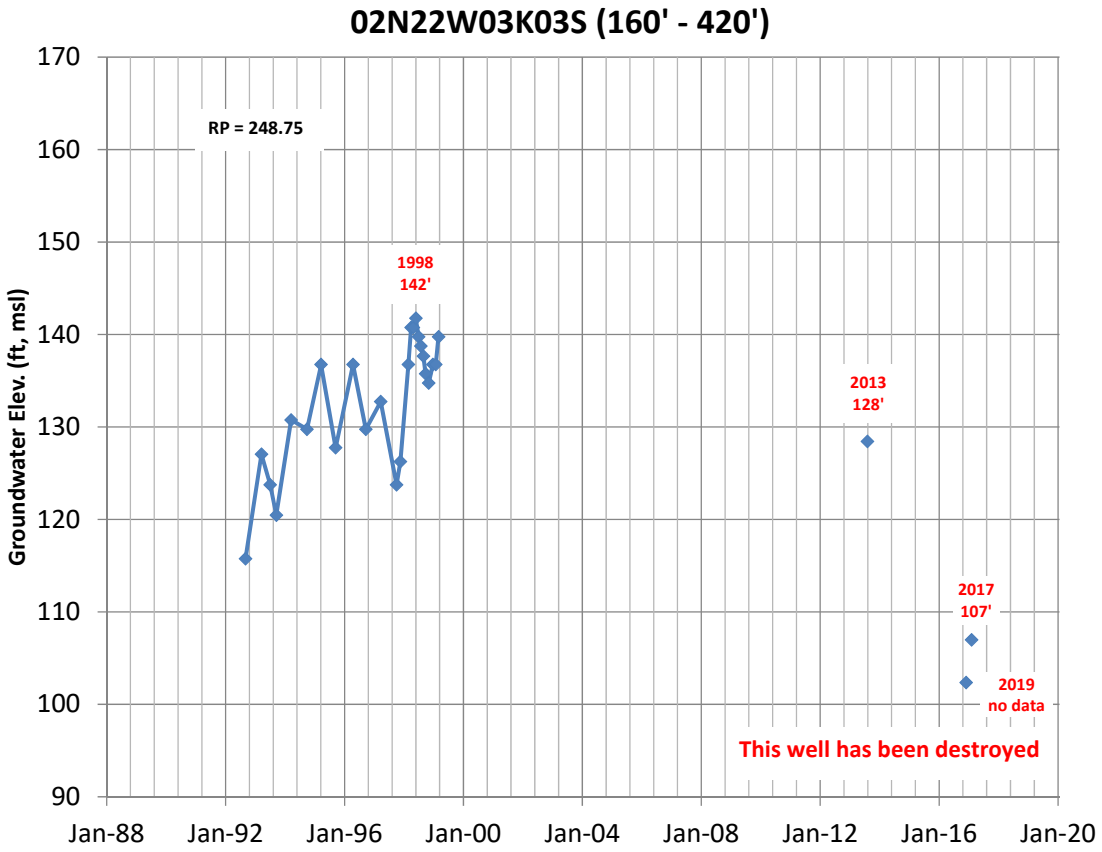

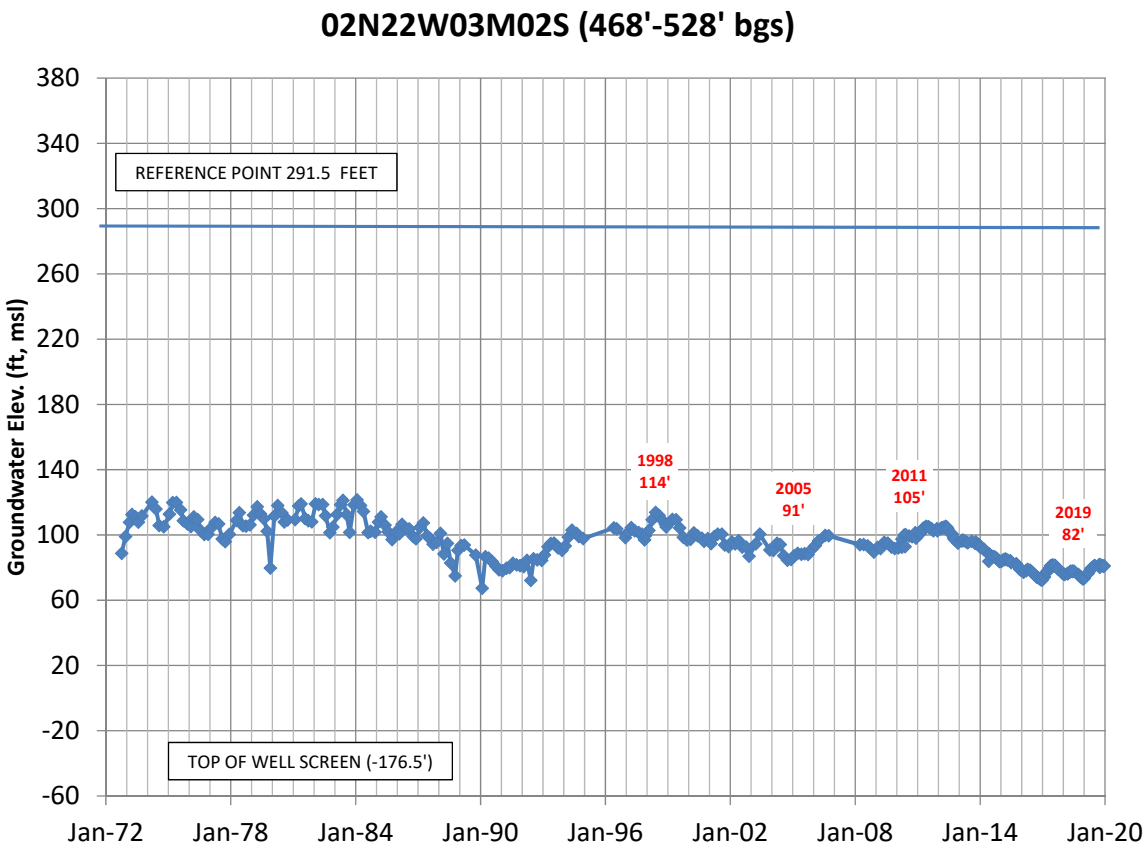

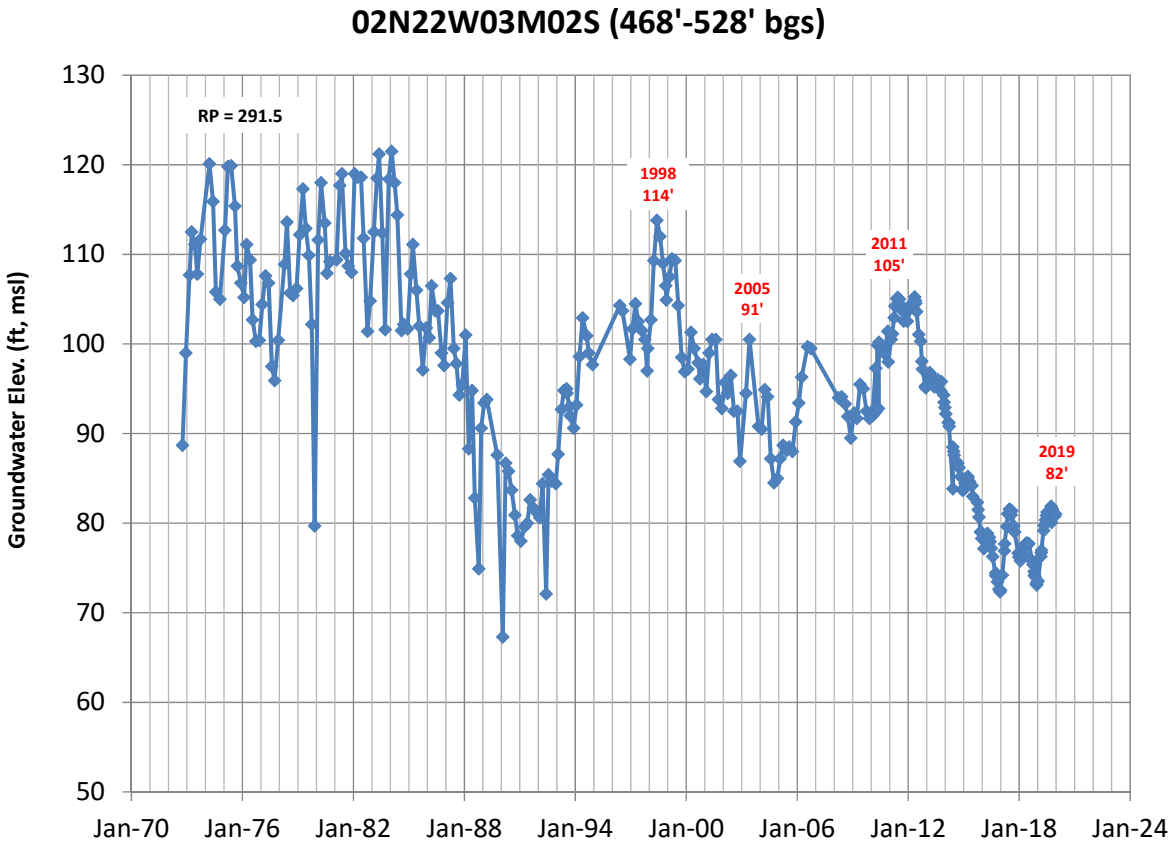

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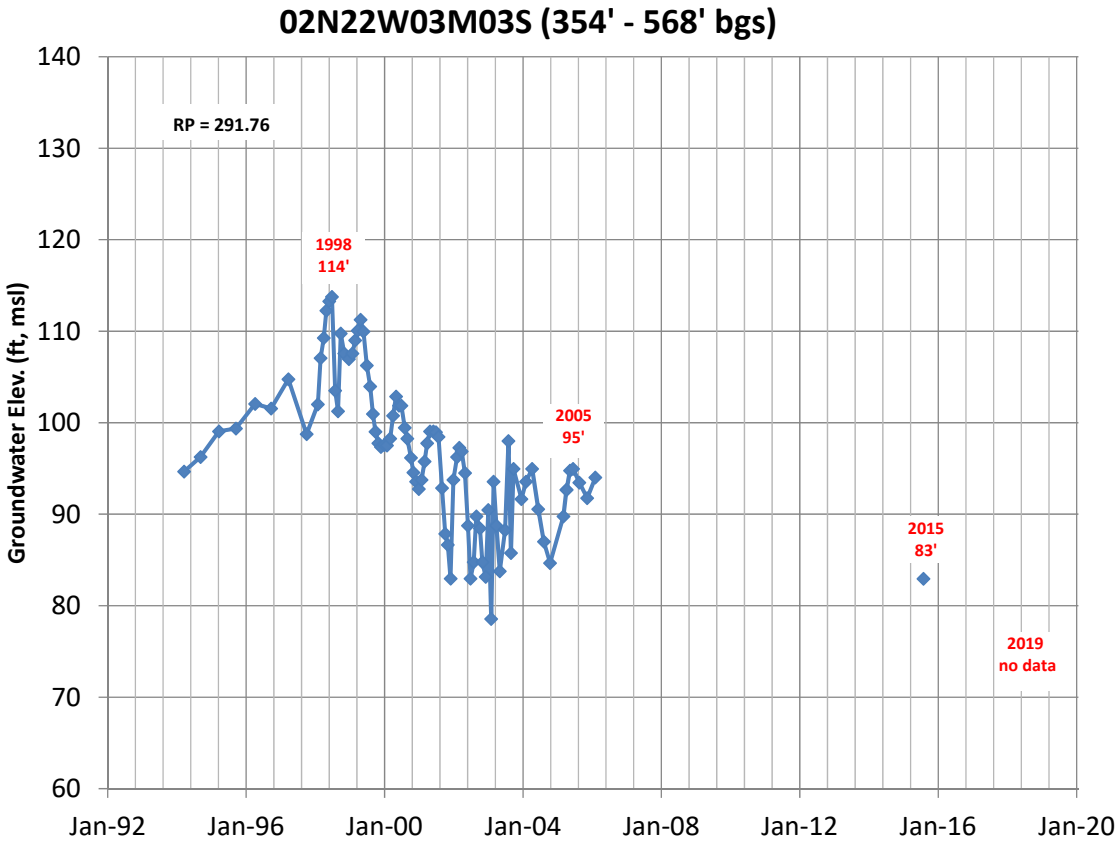

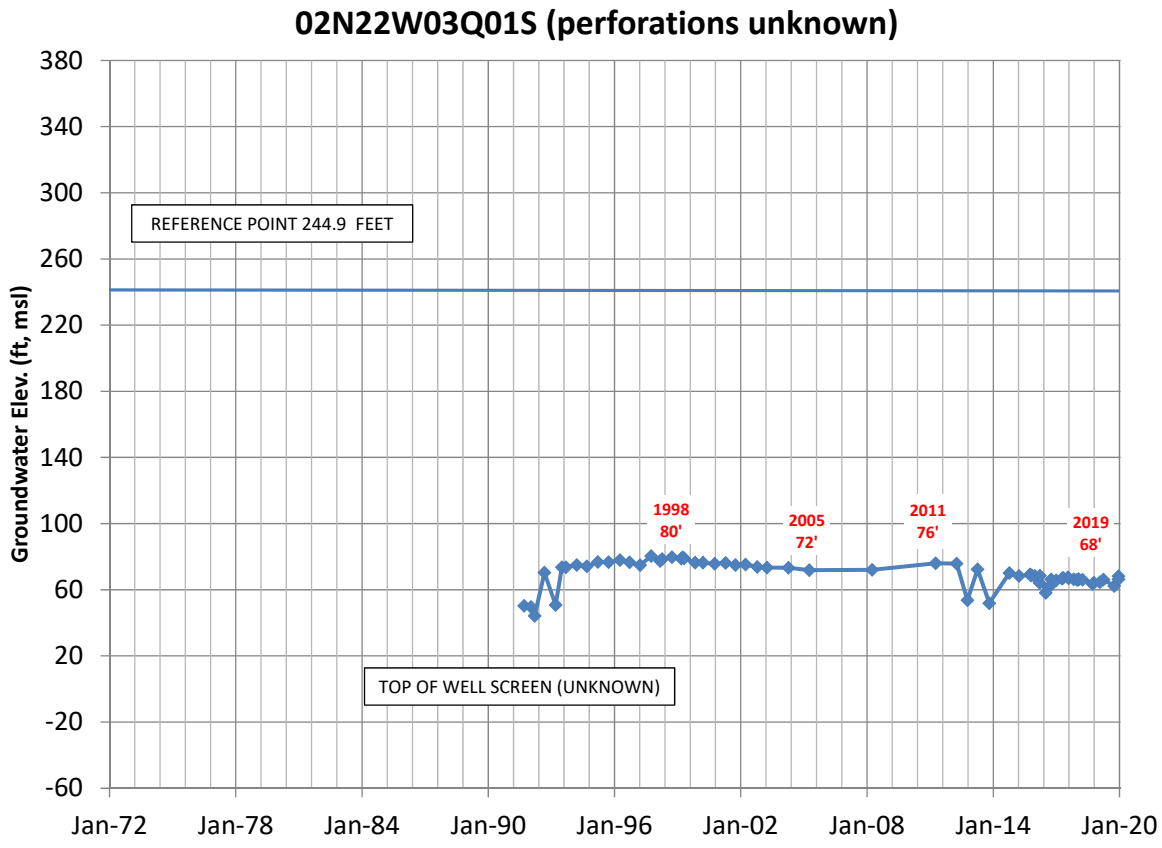

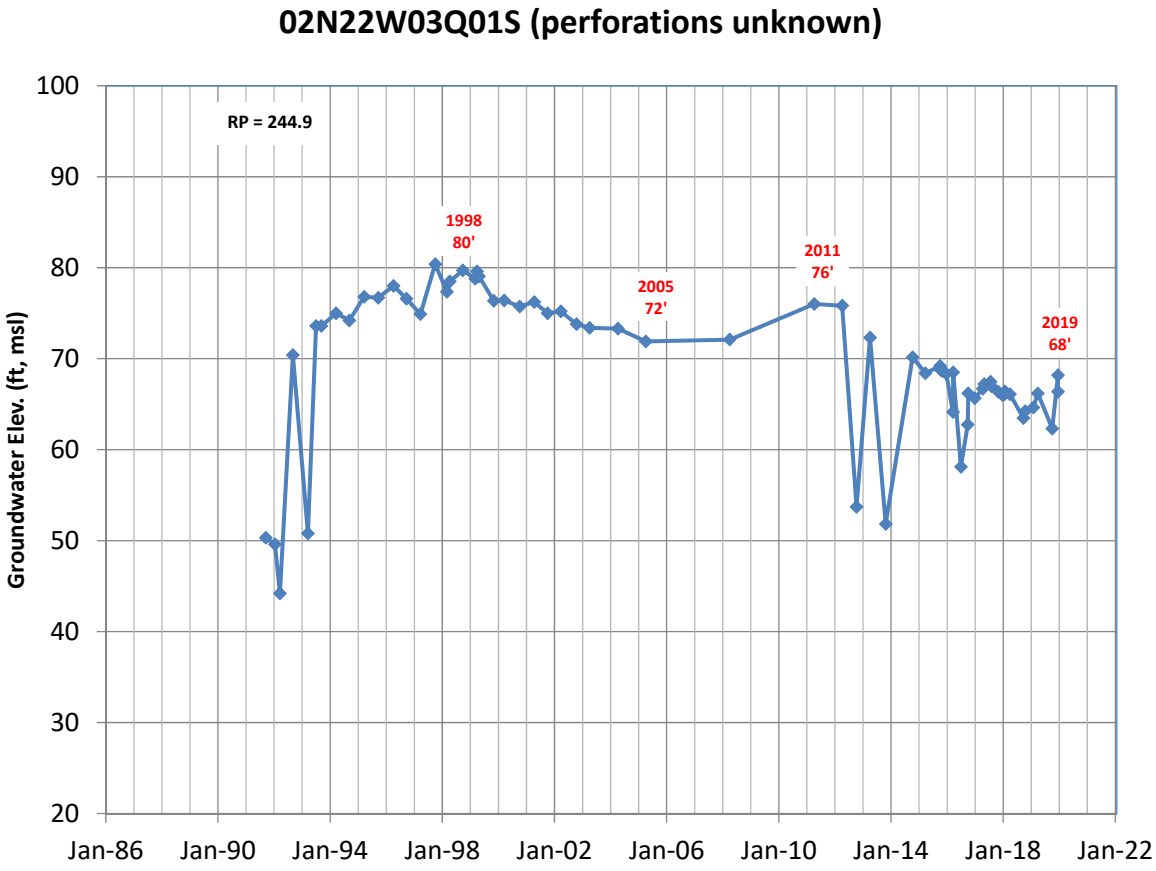

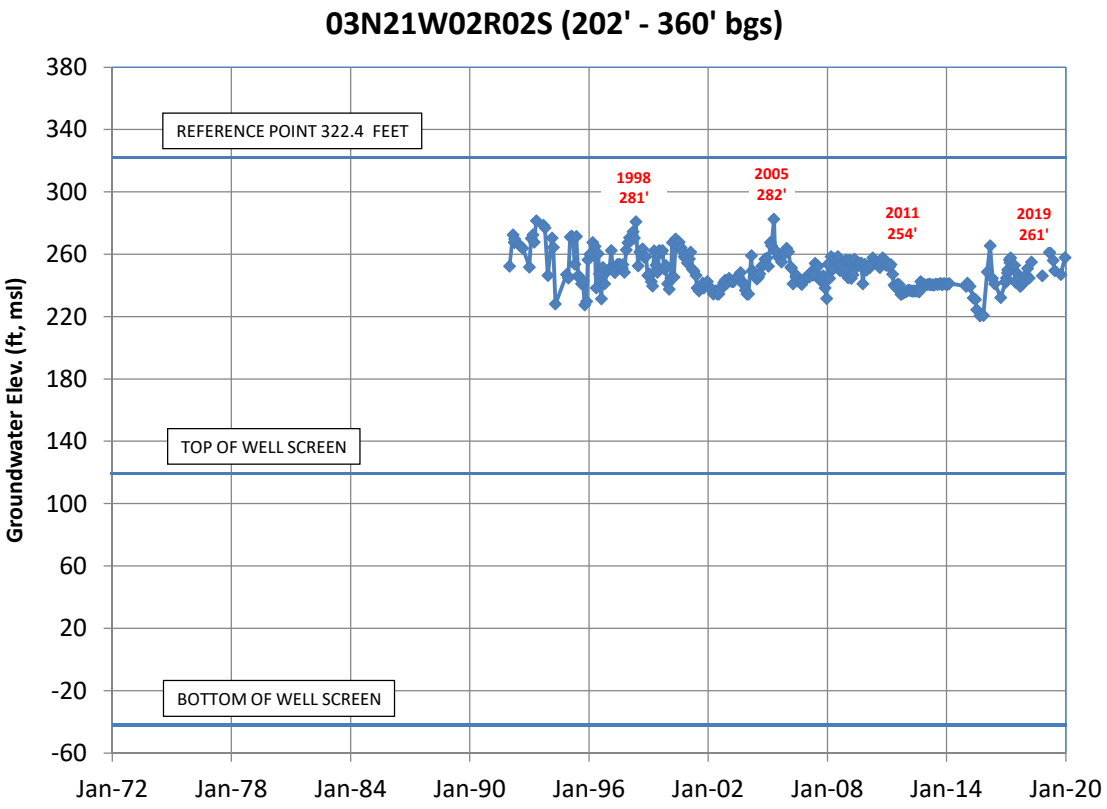

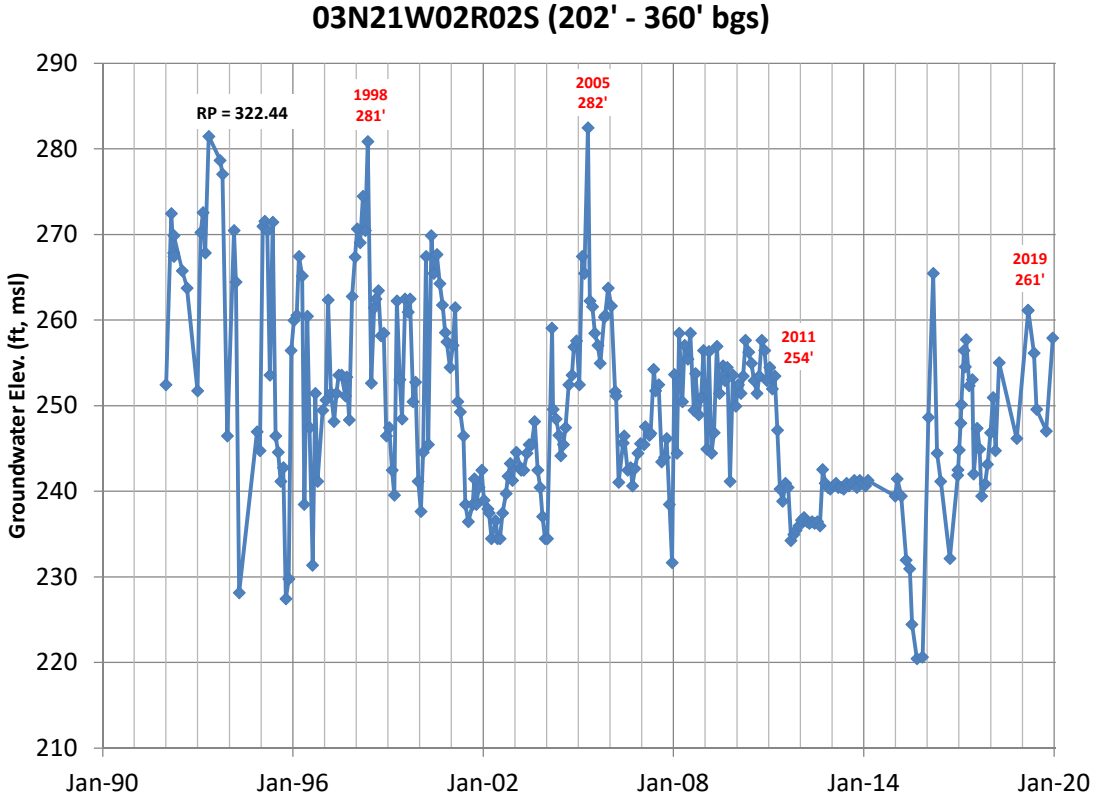

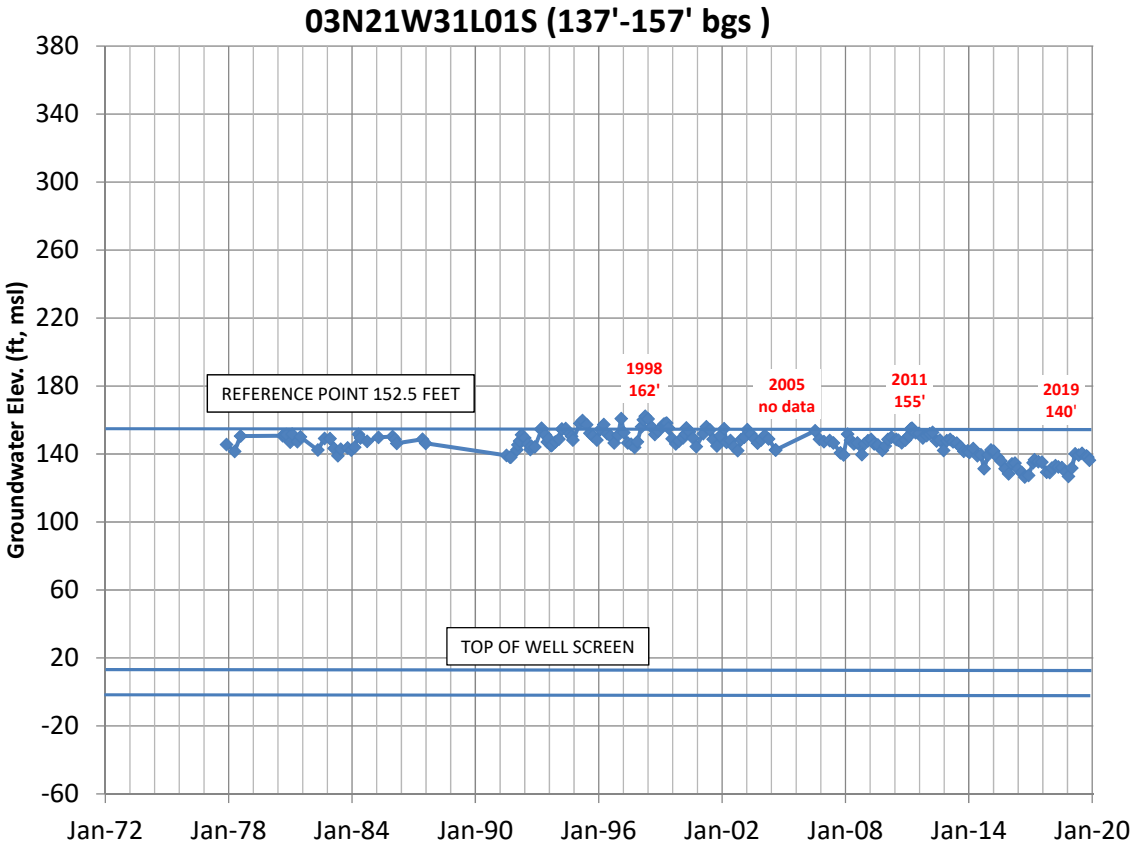

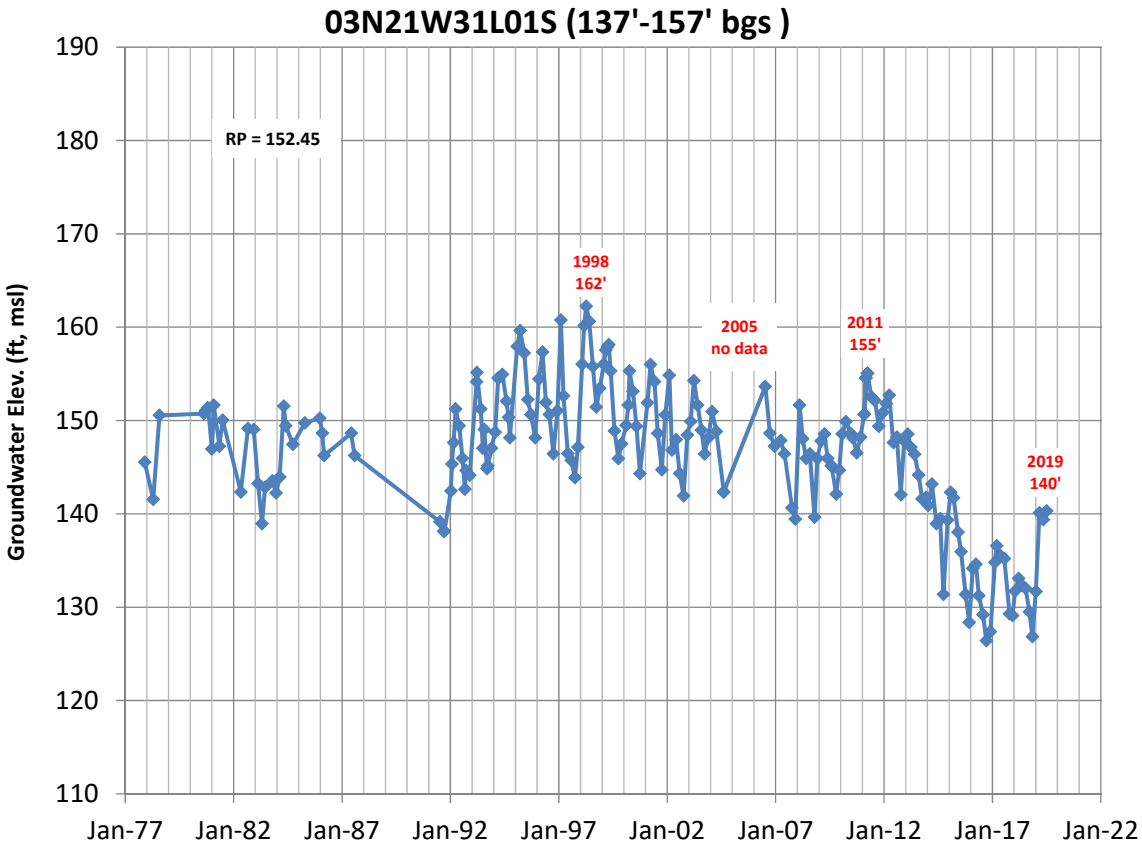

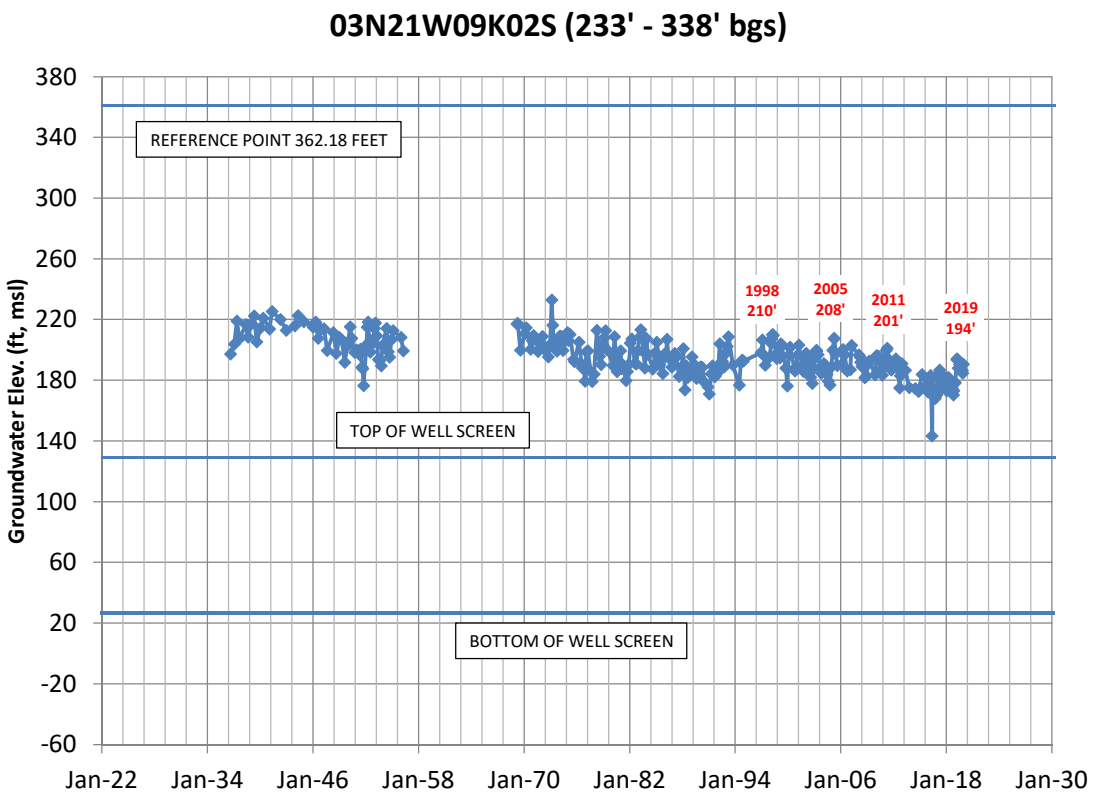

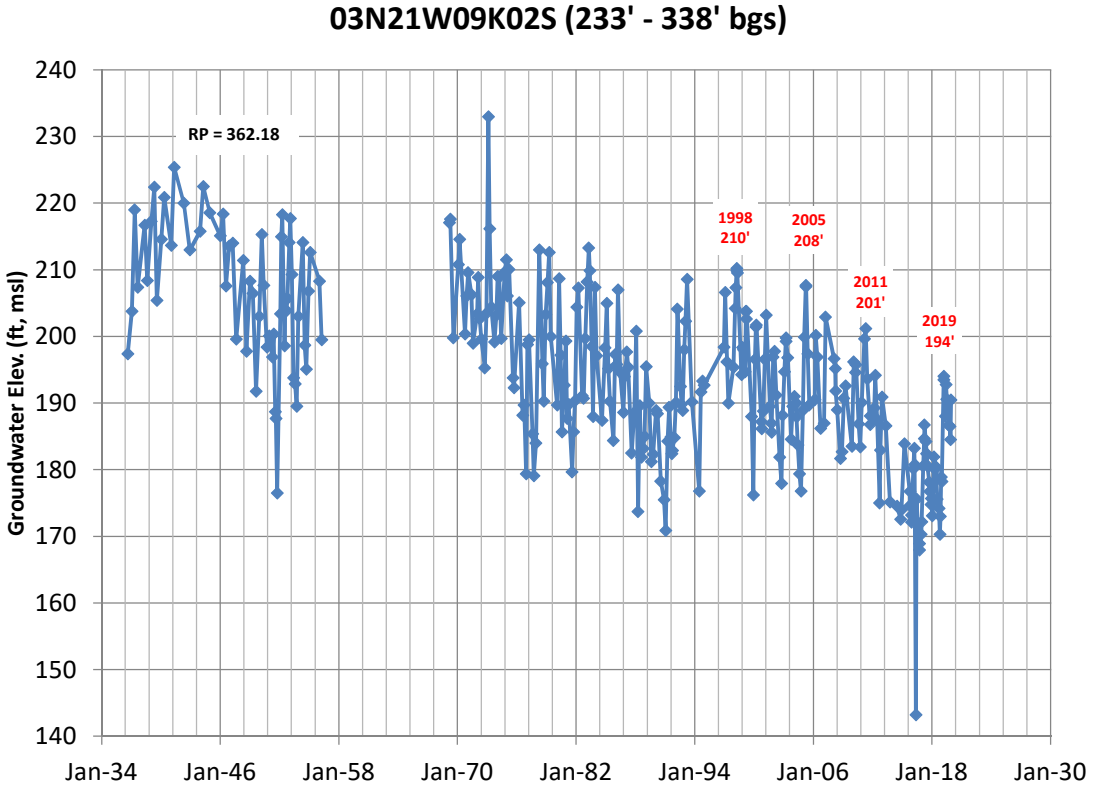

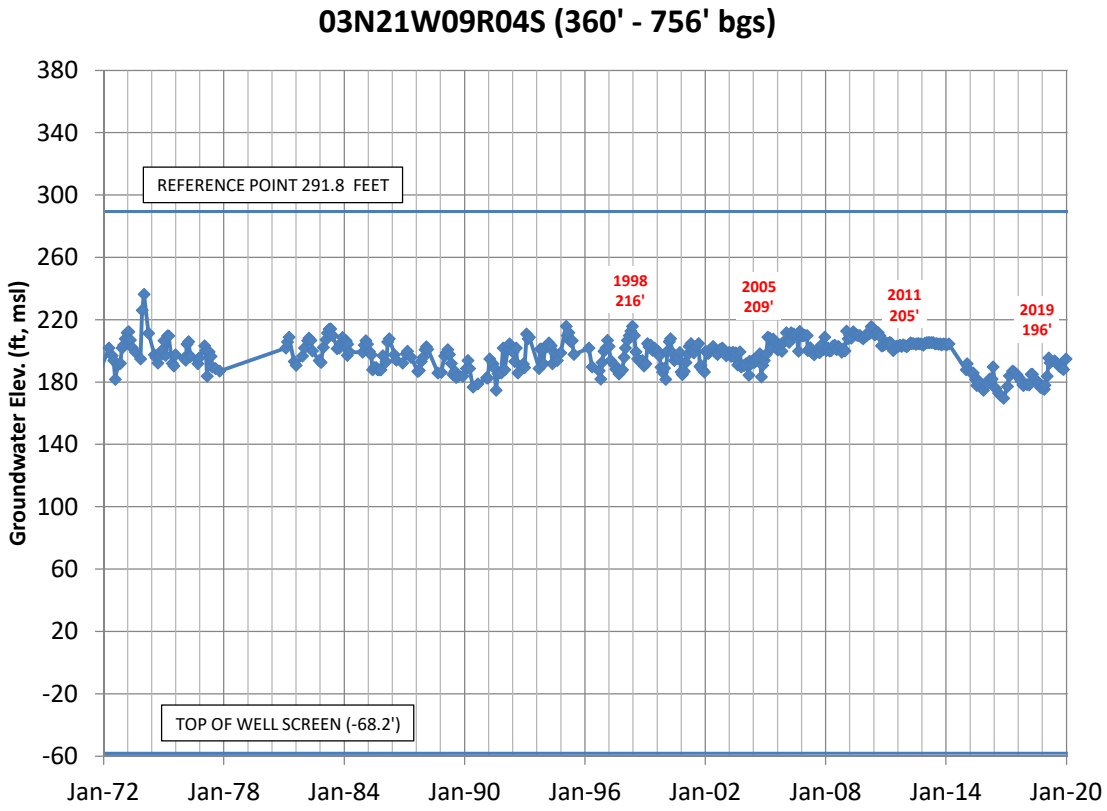

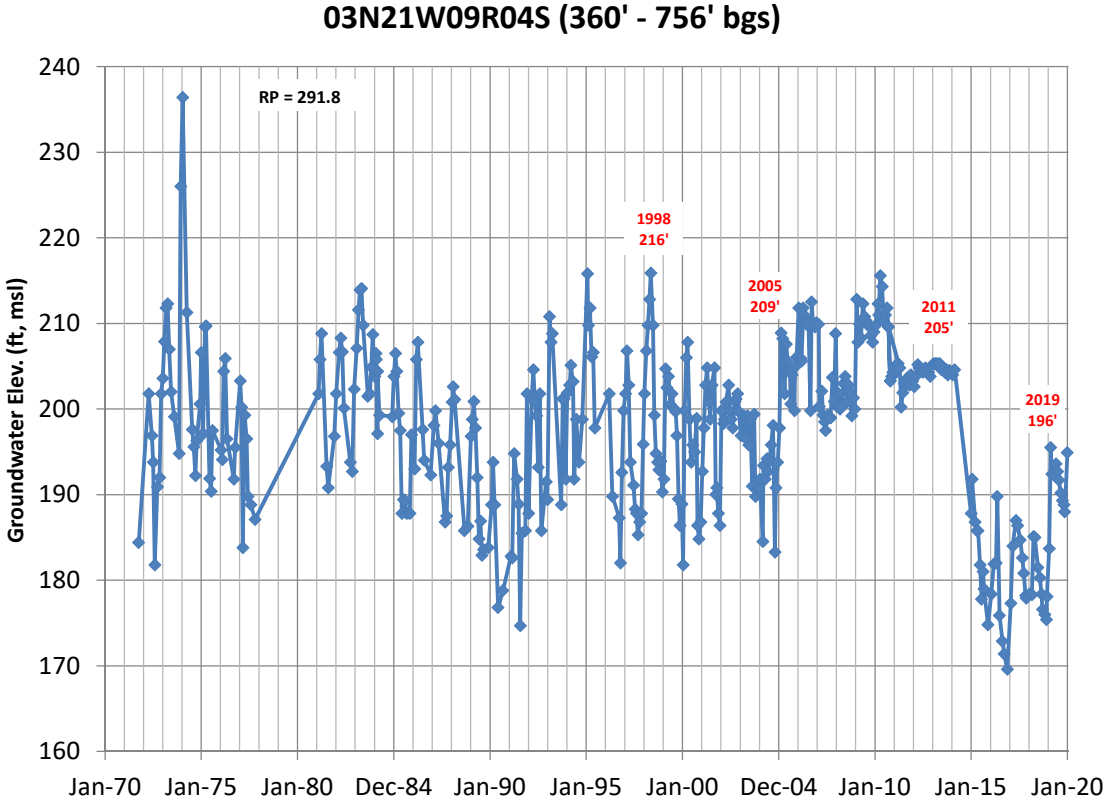

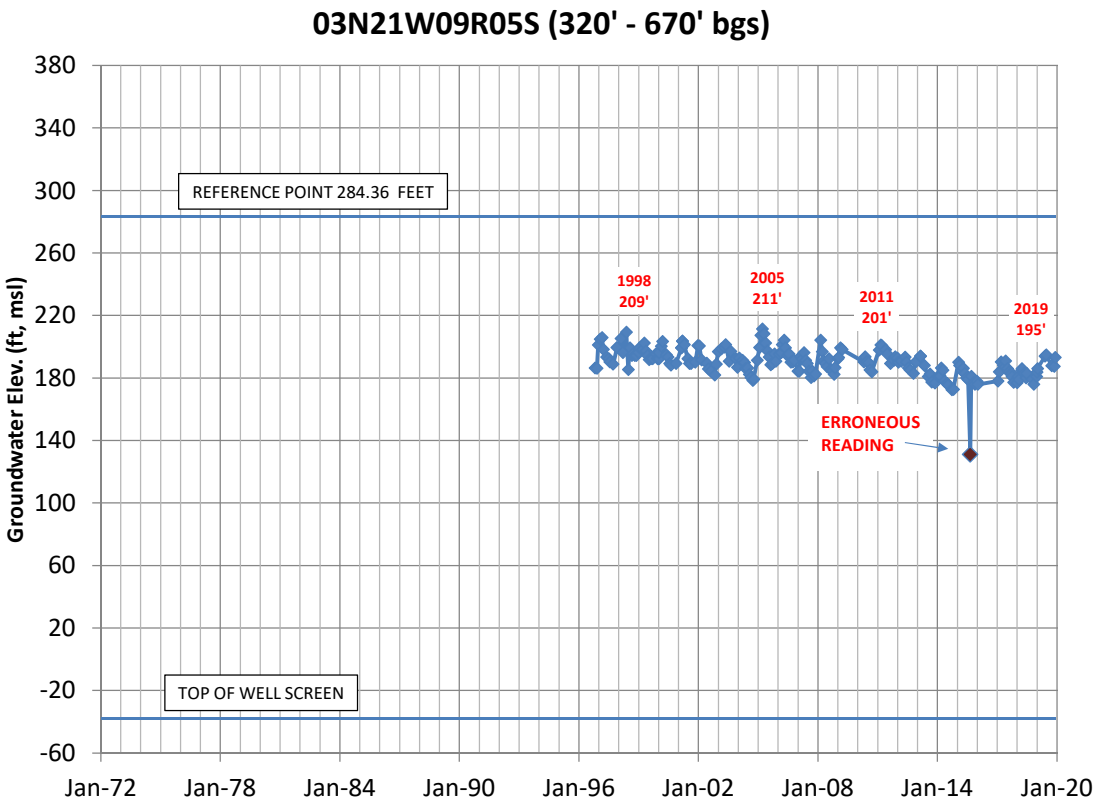

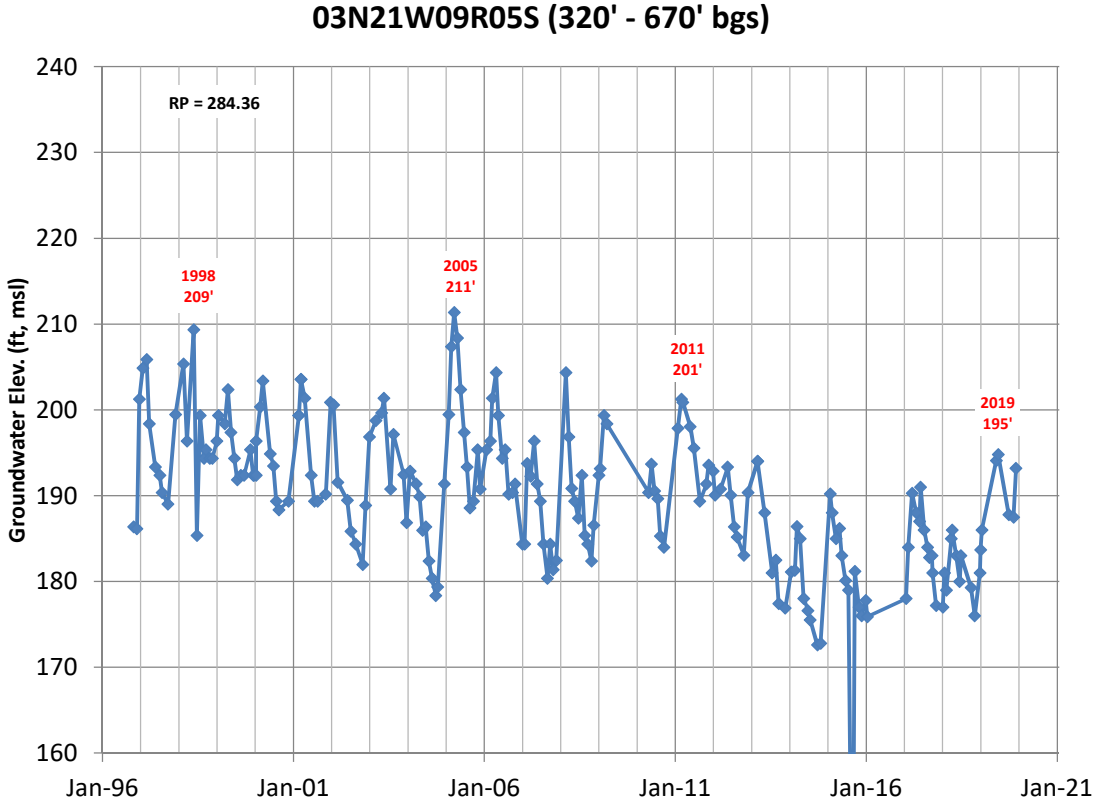

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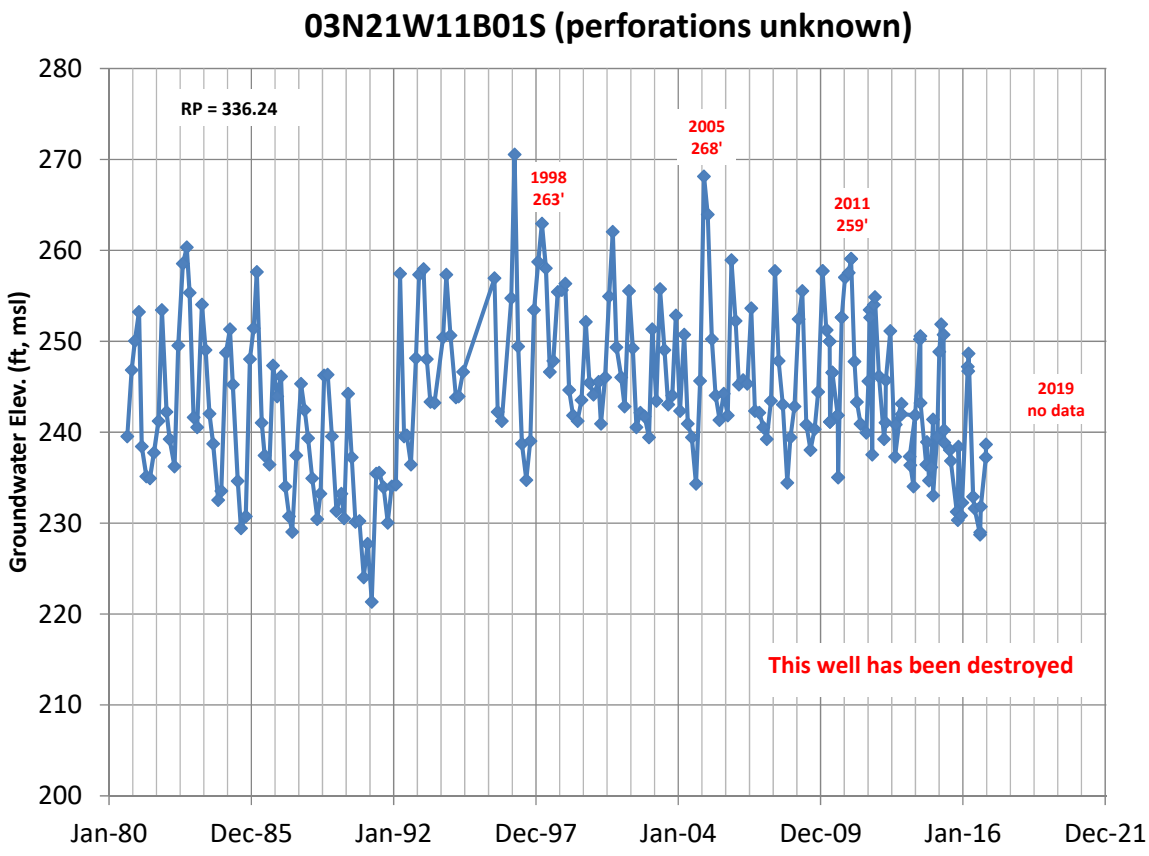
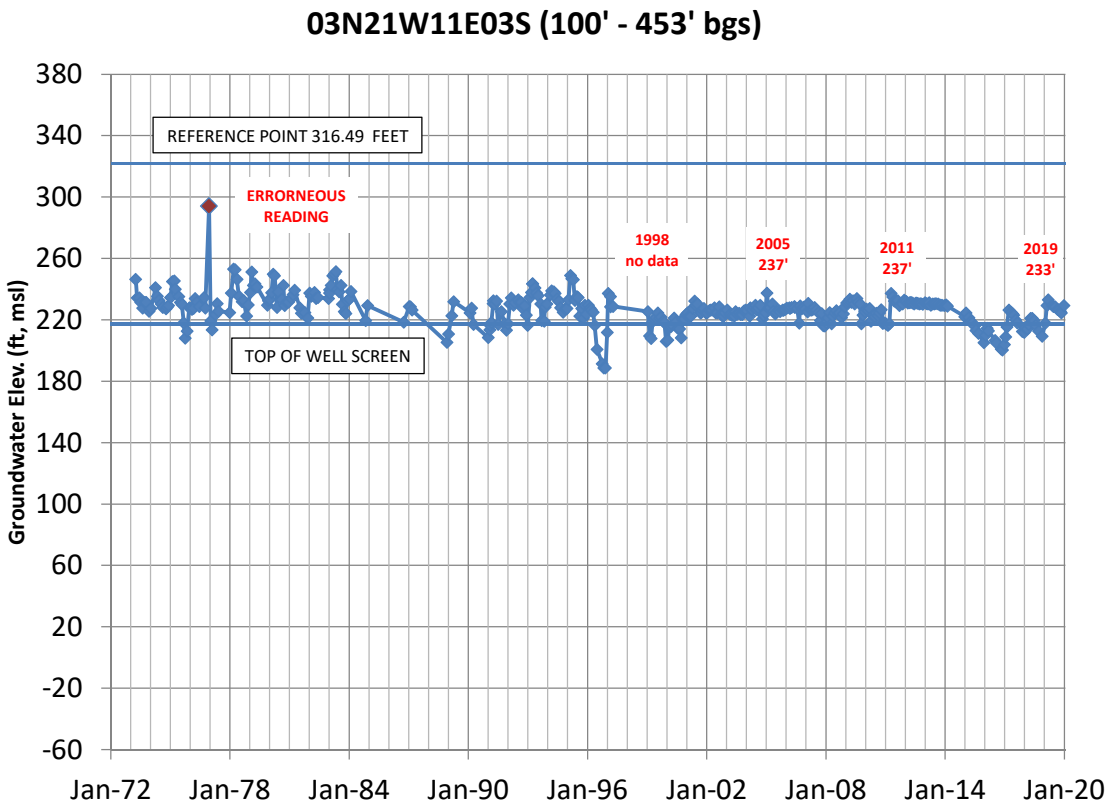
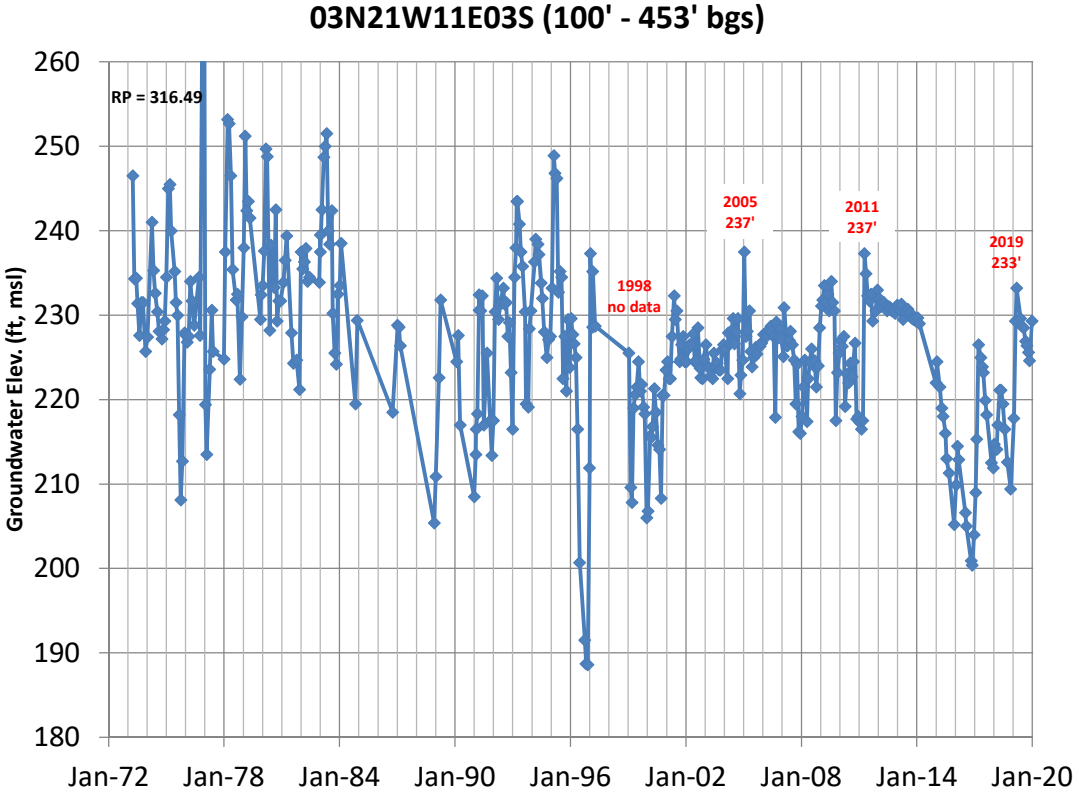
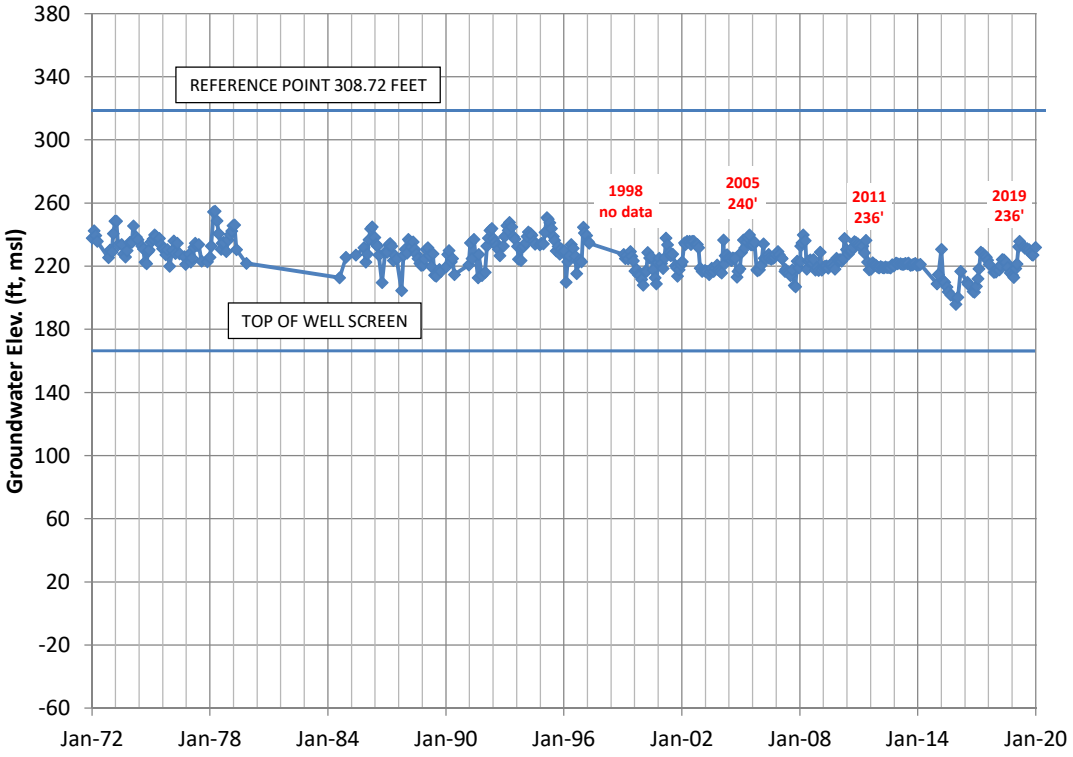


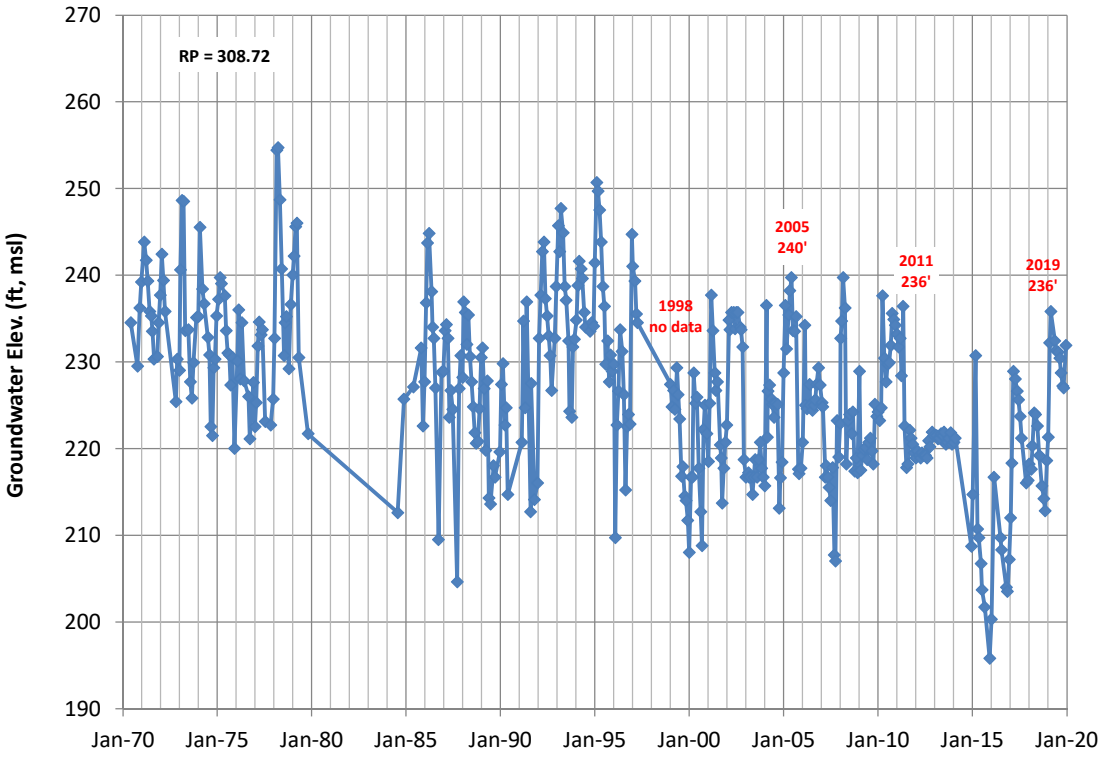


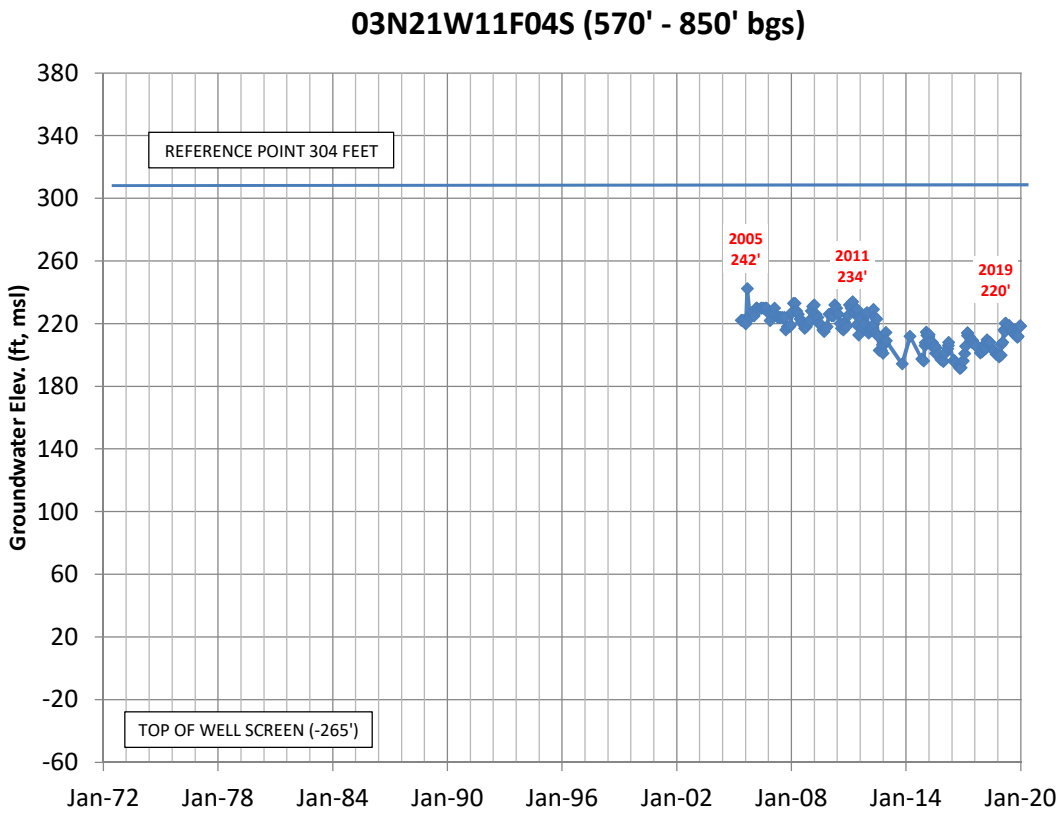


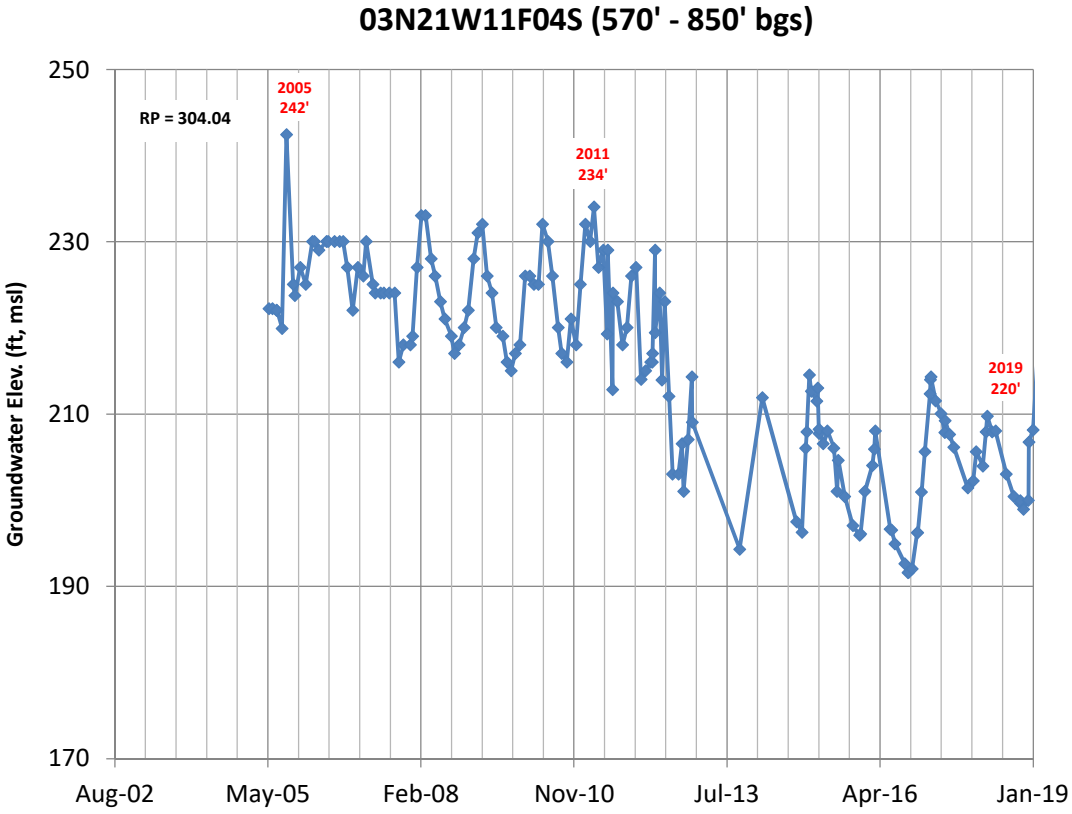
03N21W11F03S (153' -518' bgs)

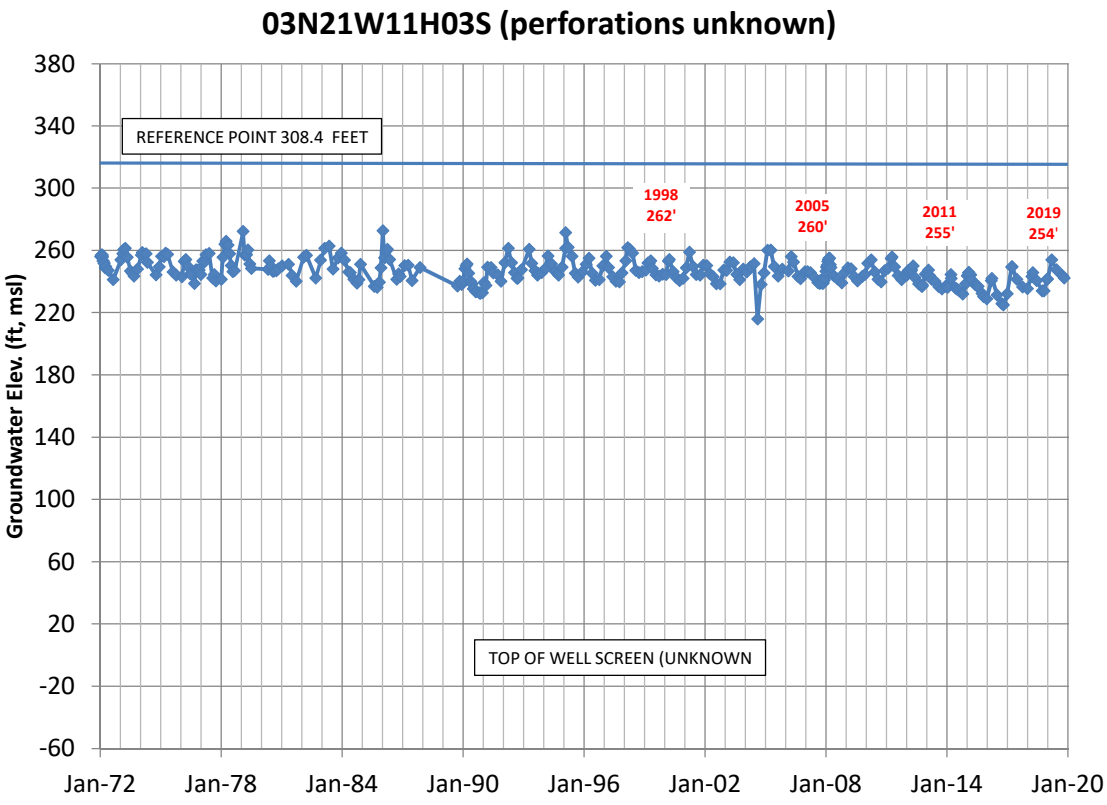


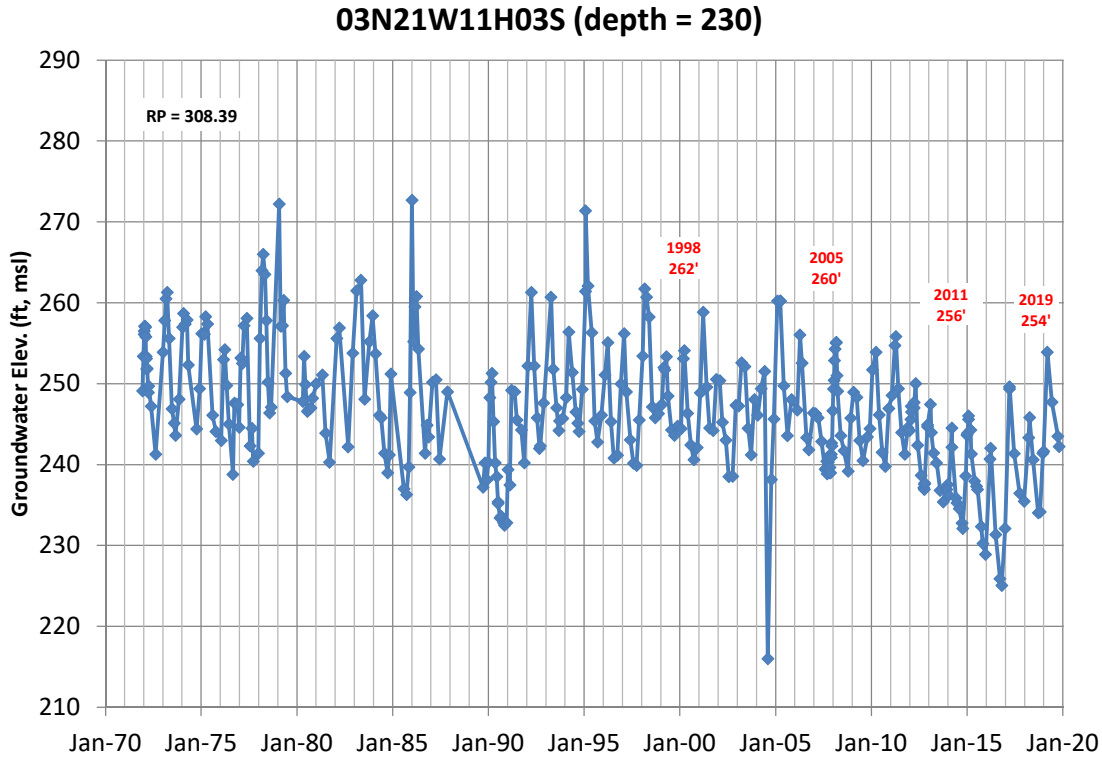
03N21W11F03S (153' -518' bgs)











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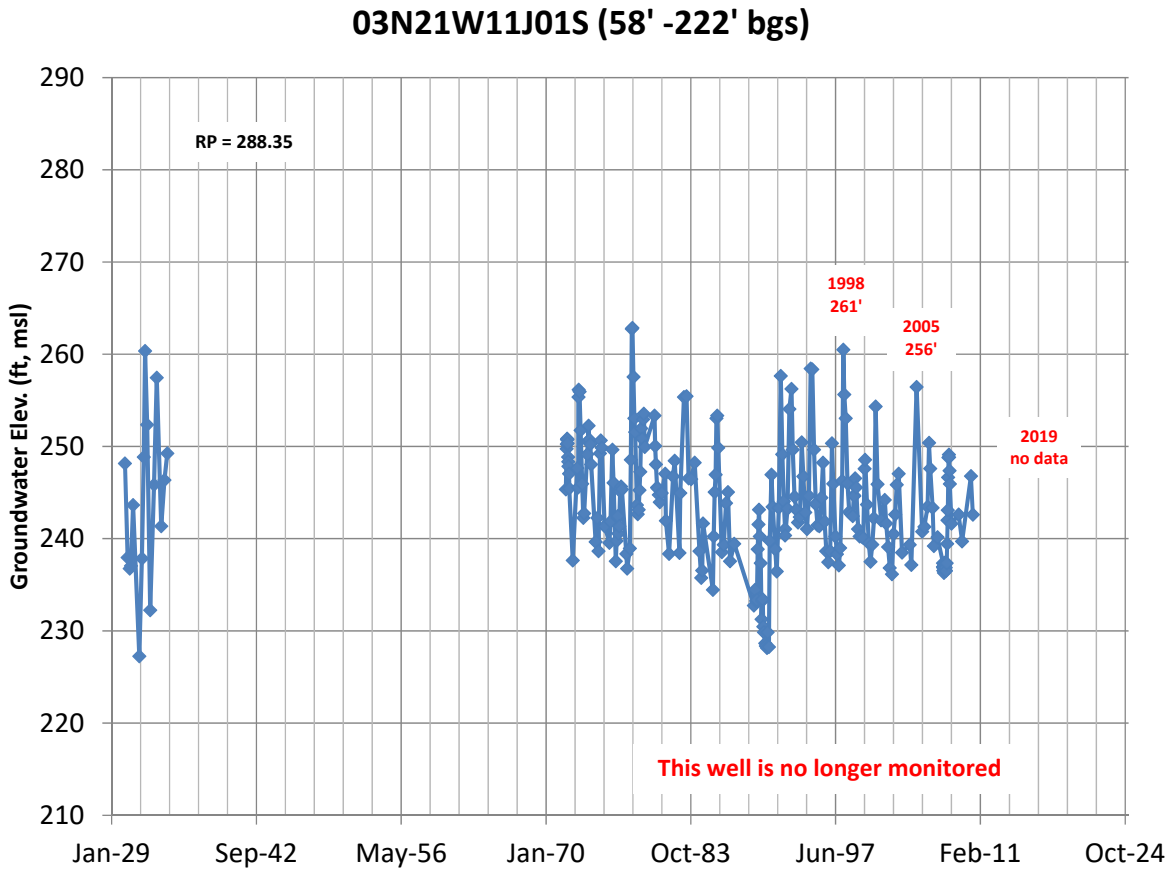

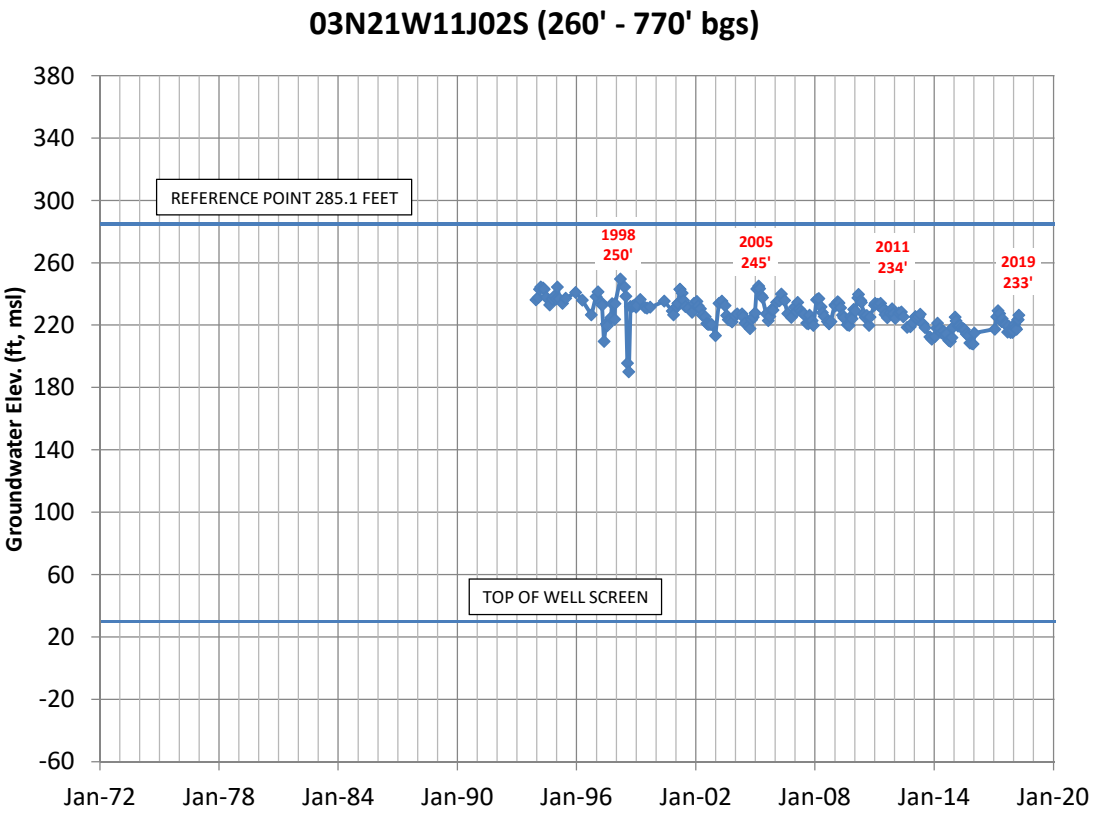

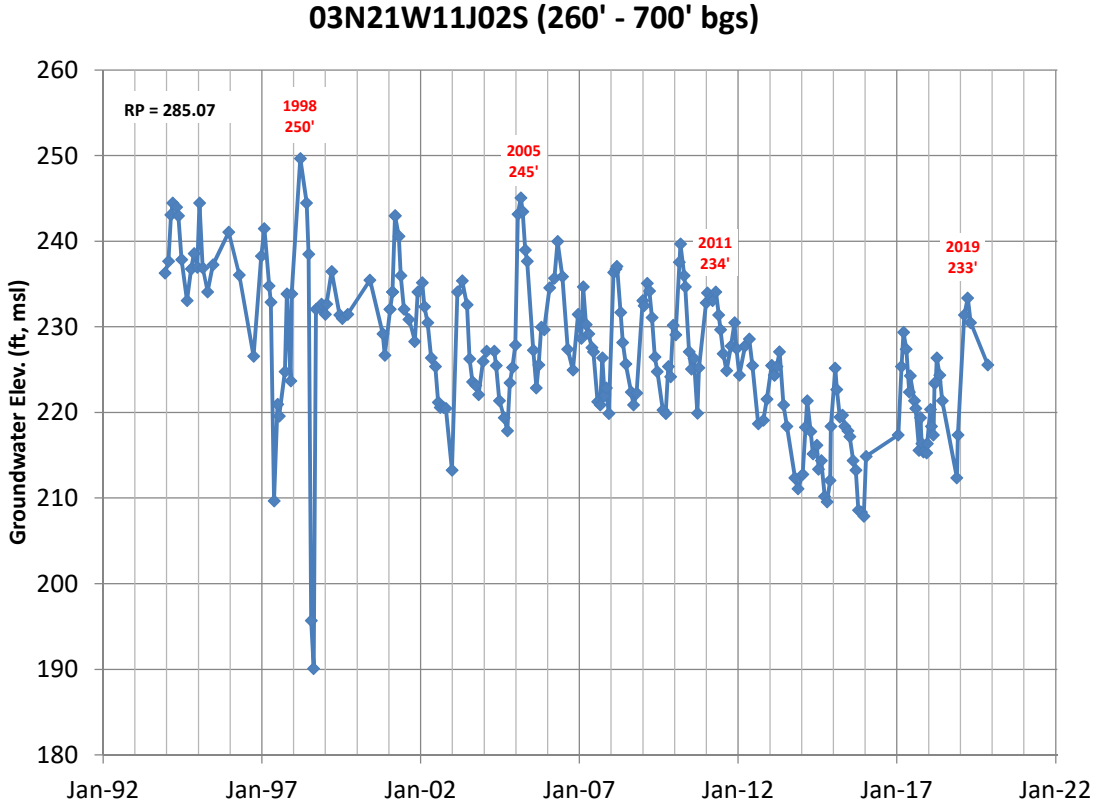

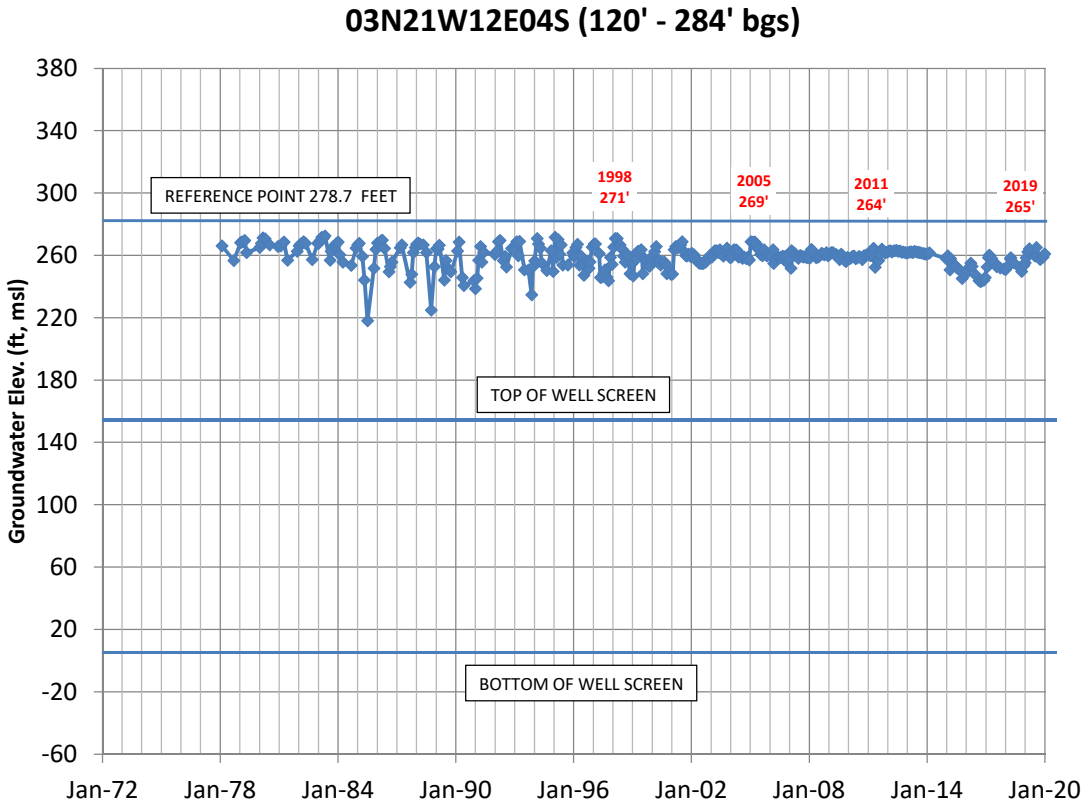

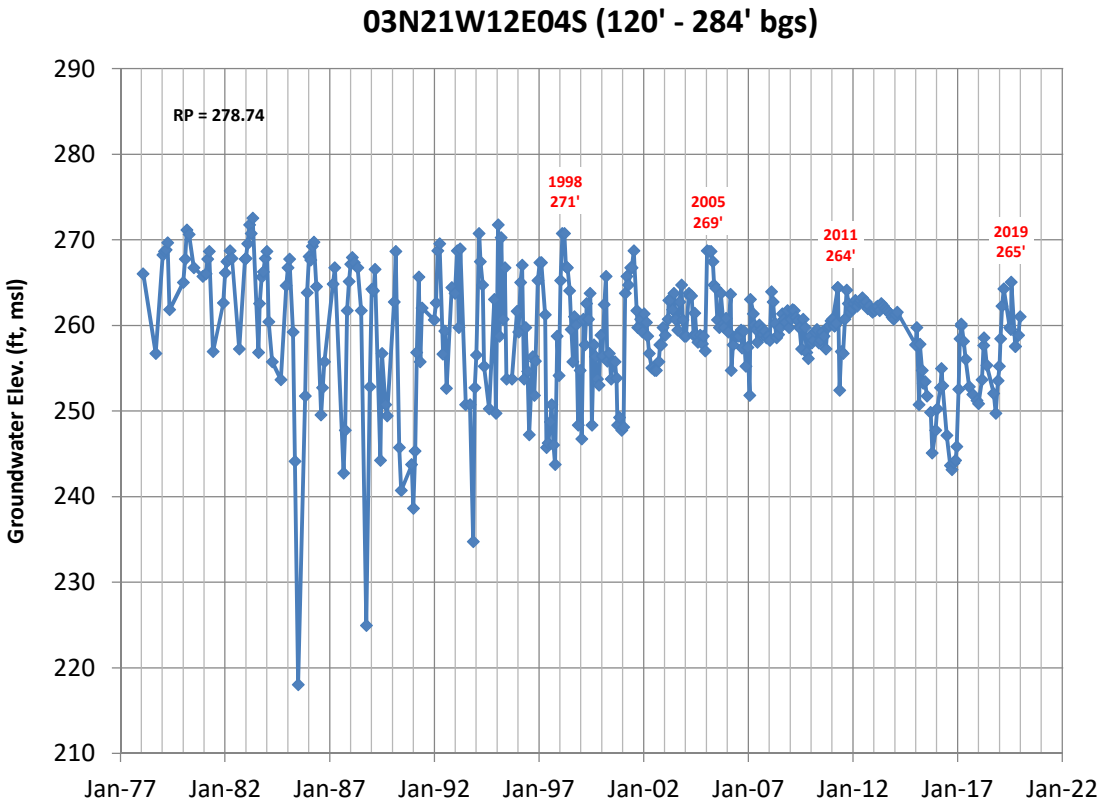

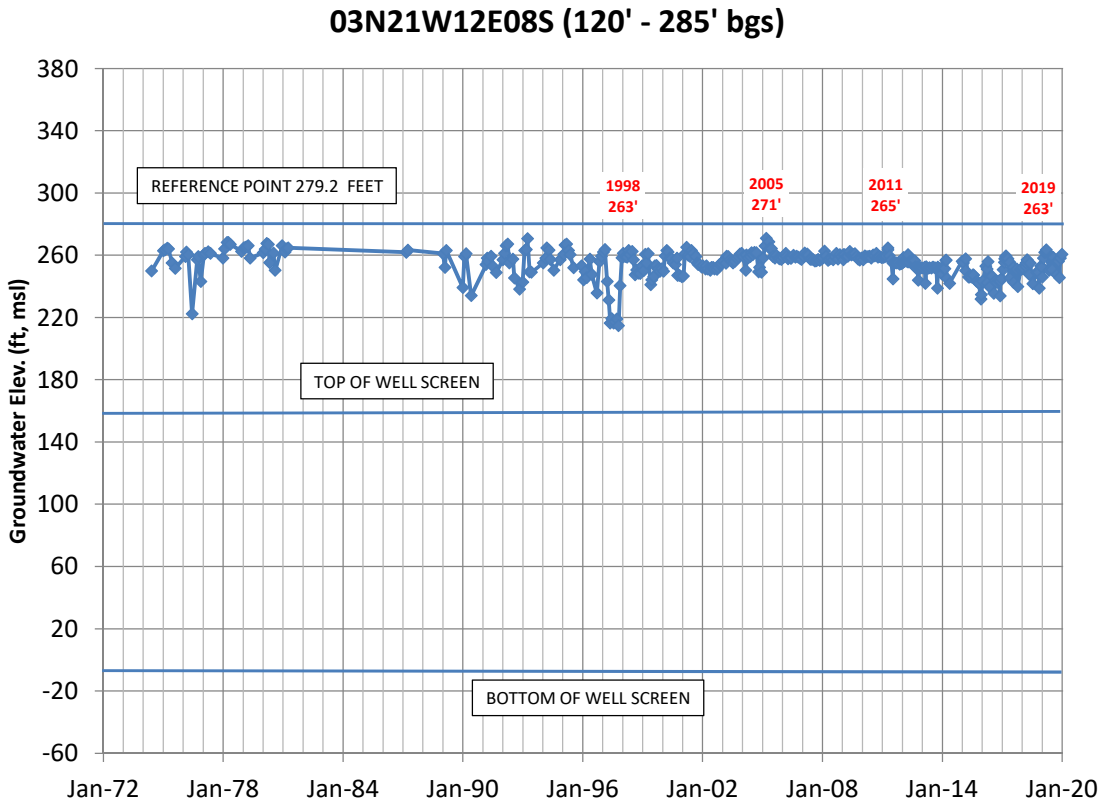

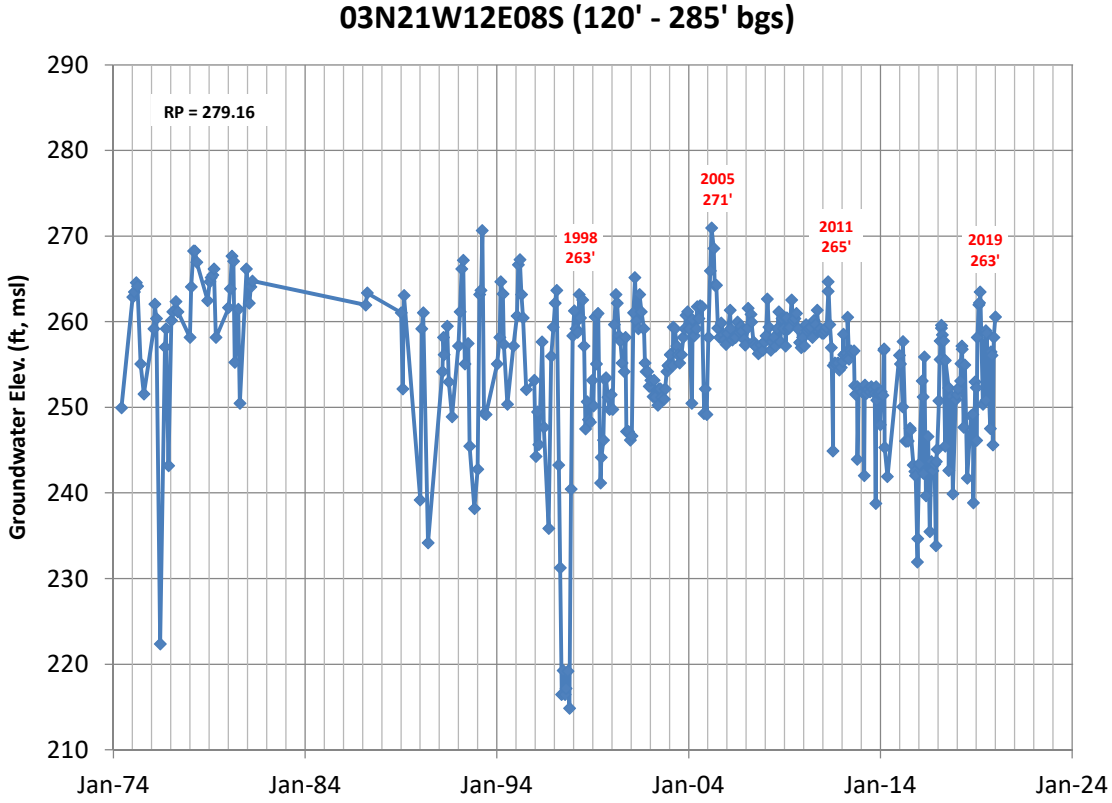

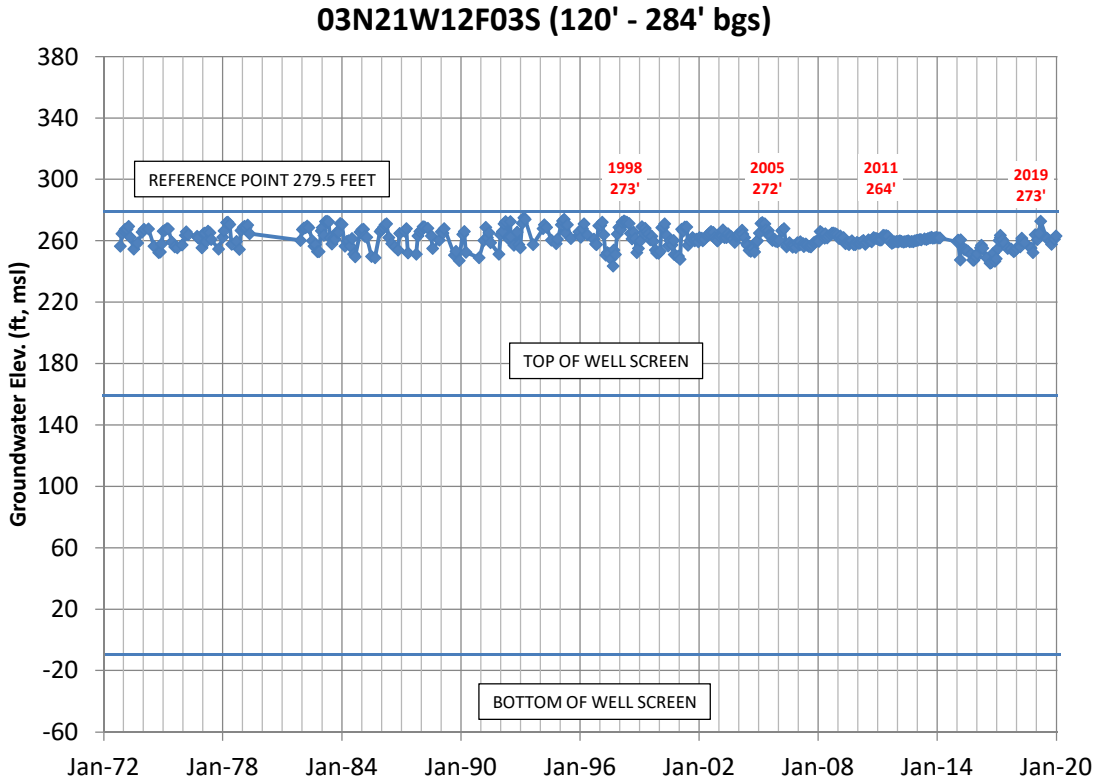

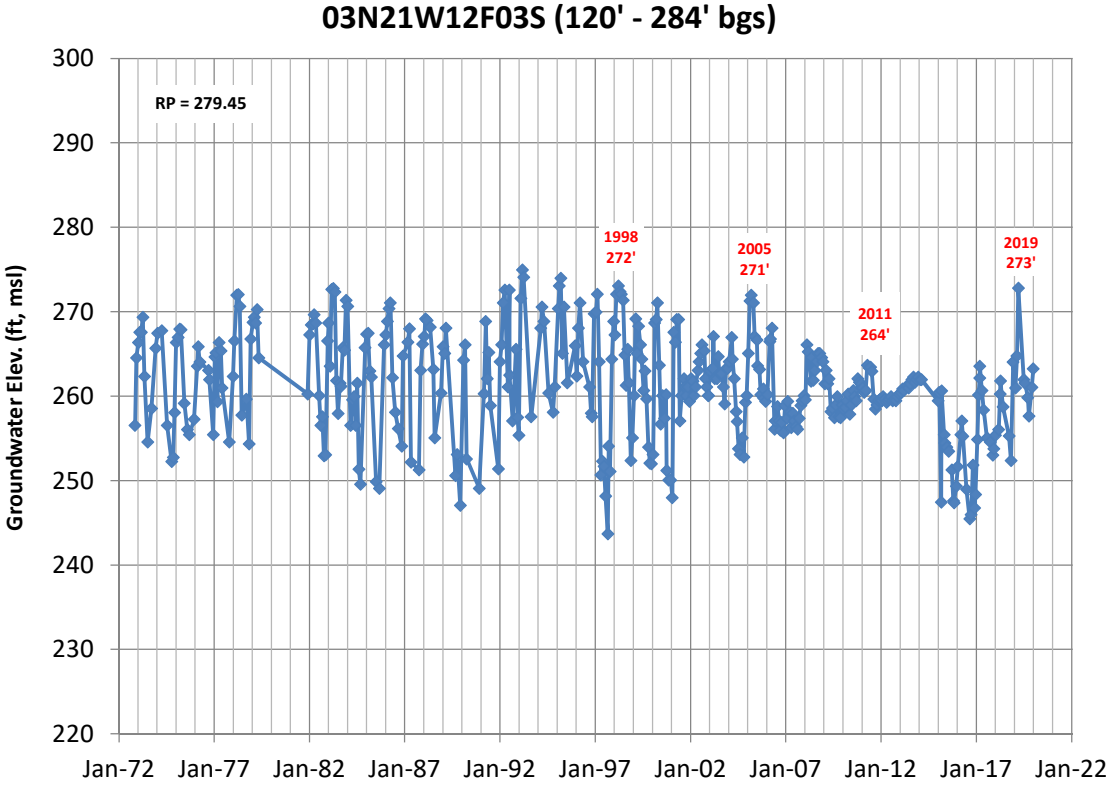

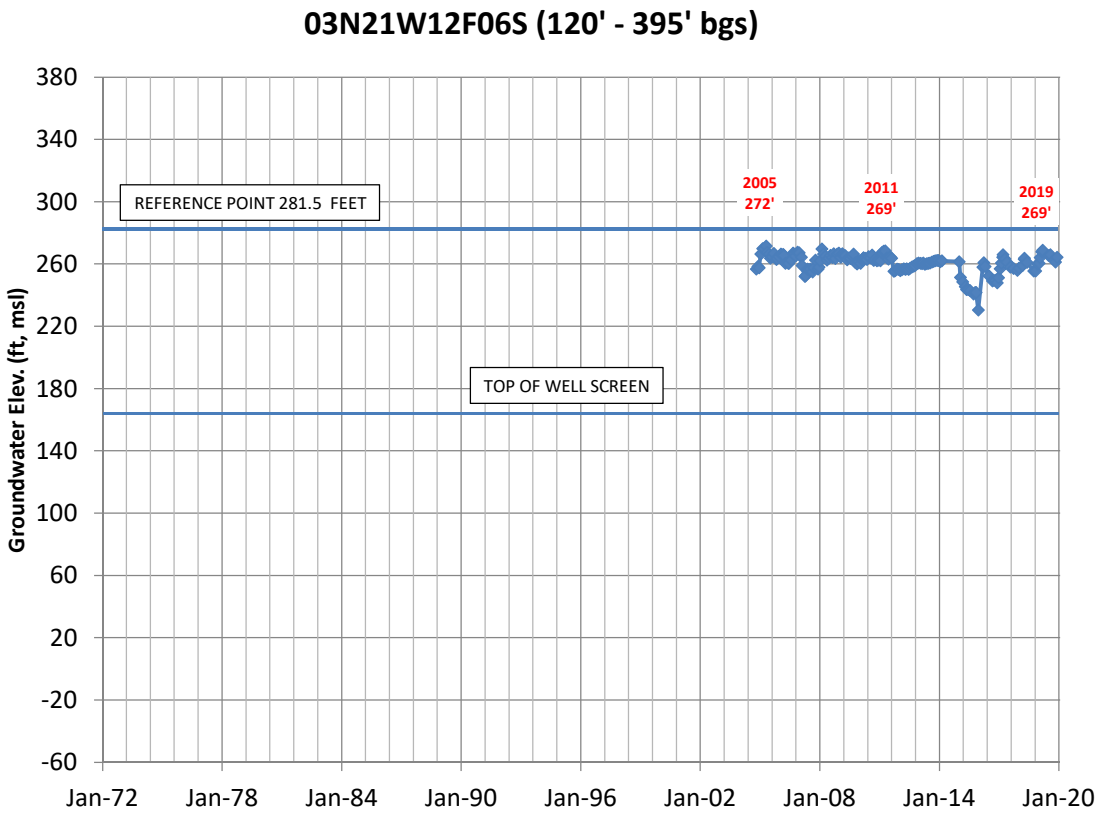

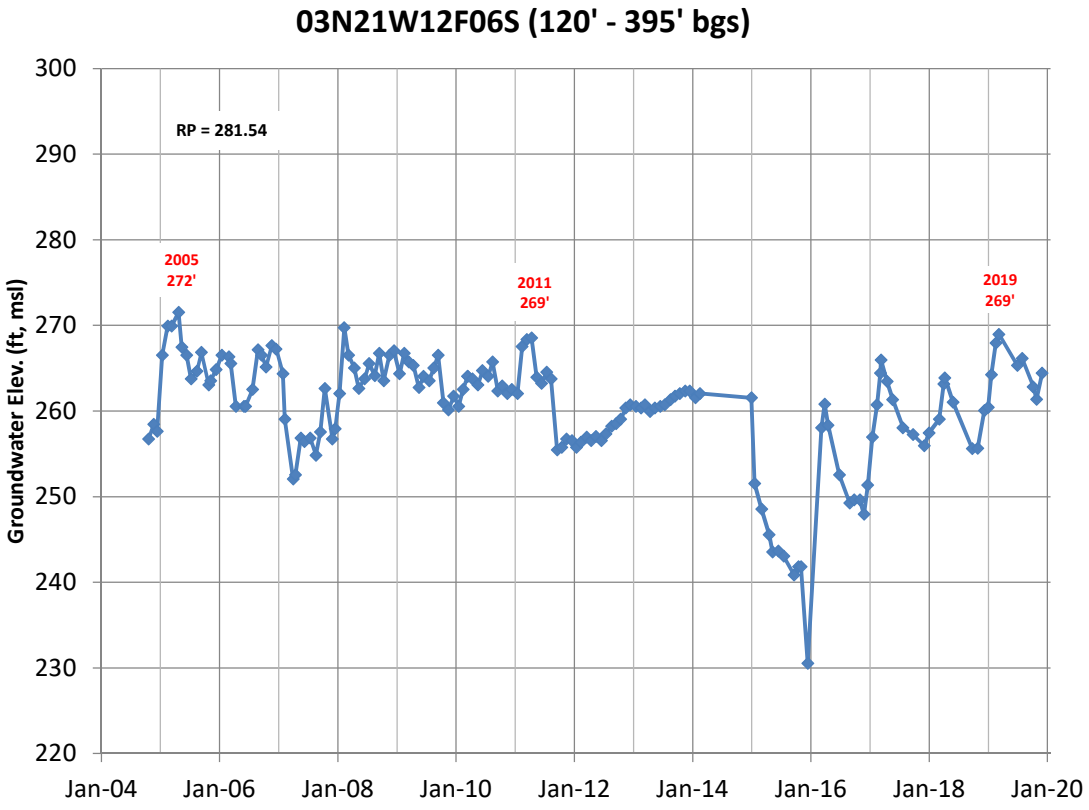

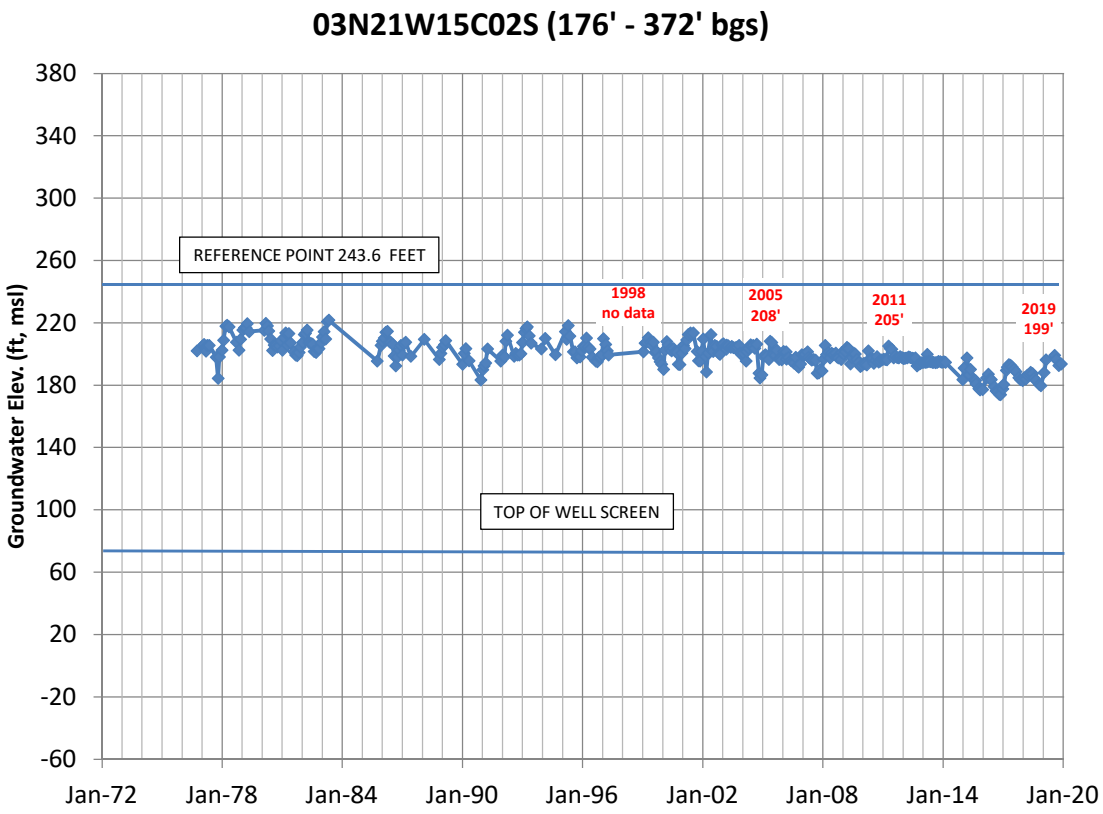

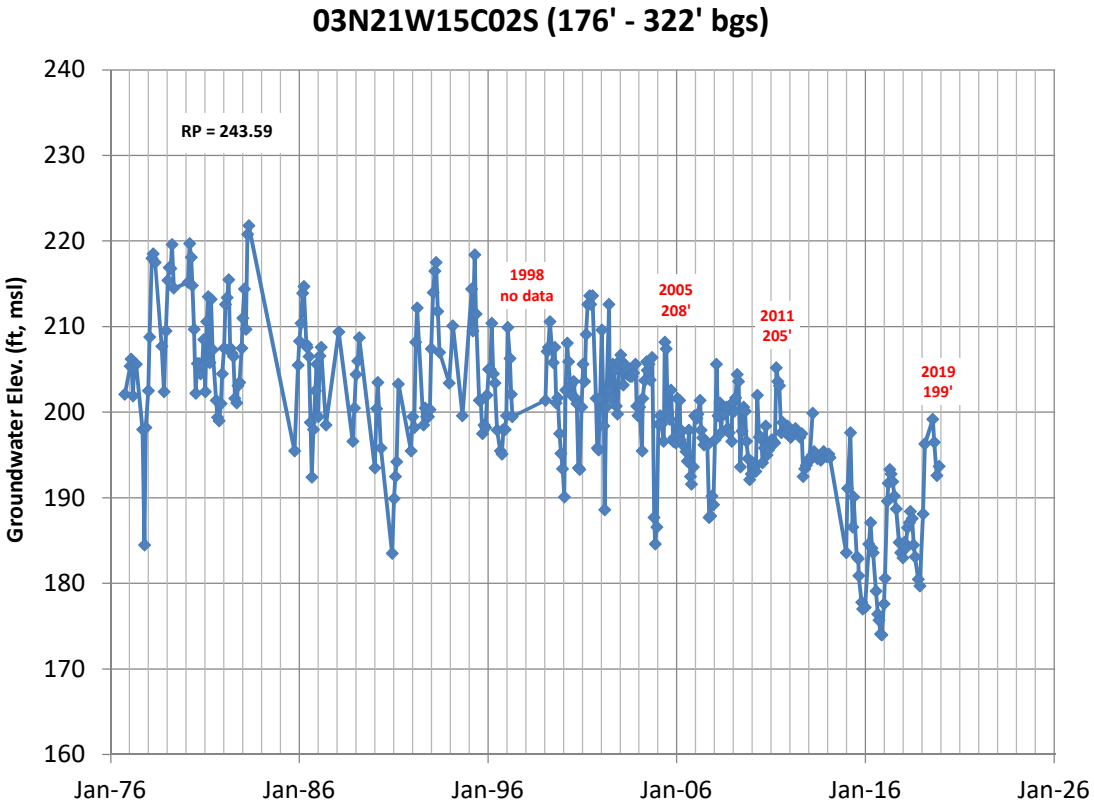

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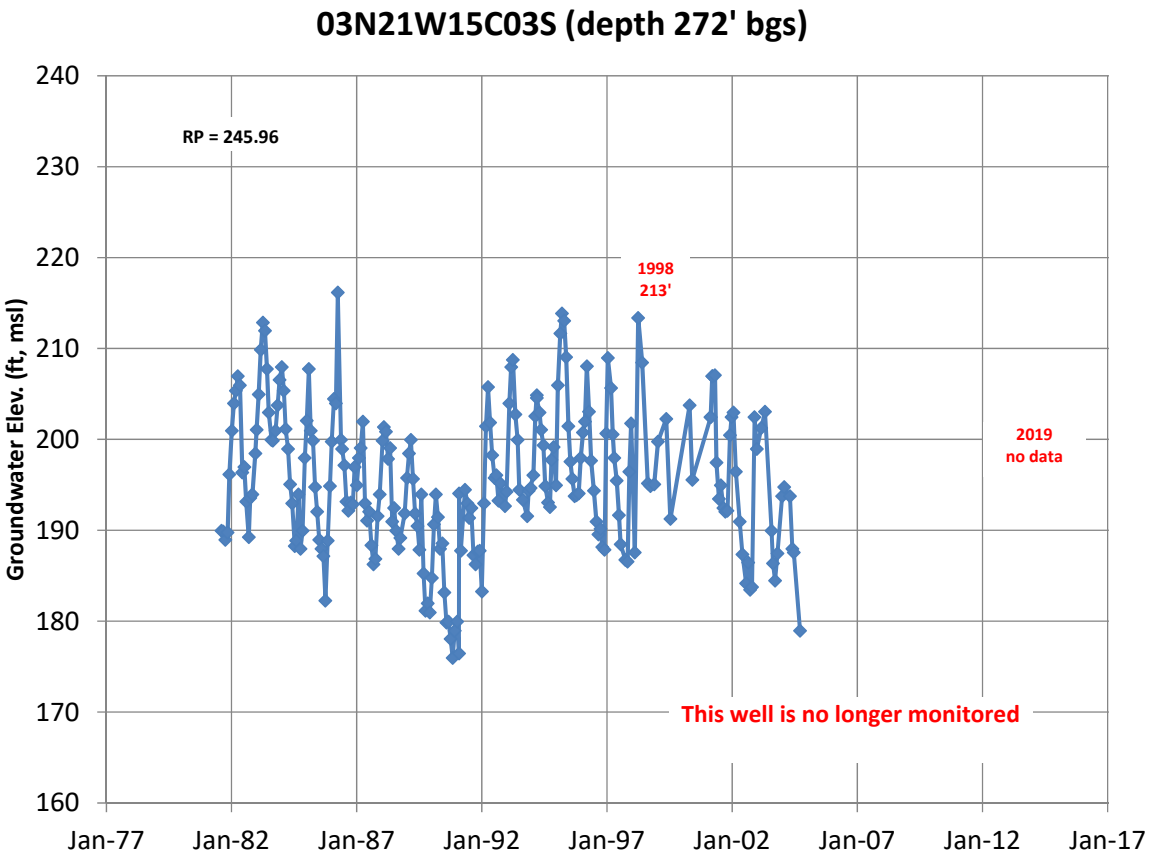

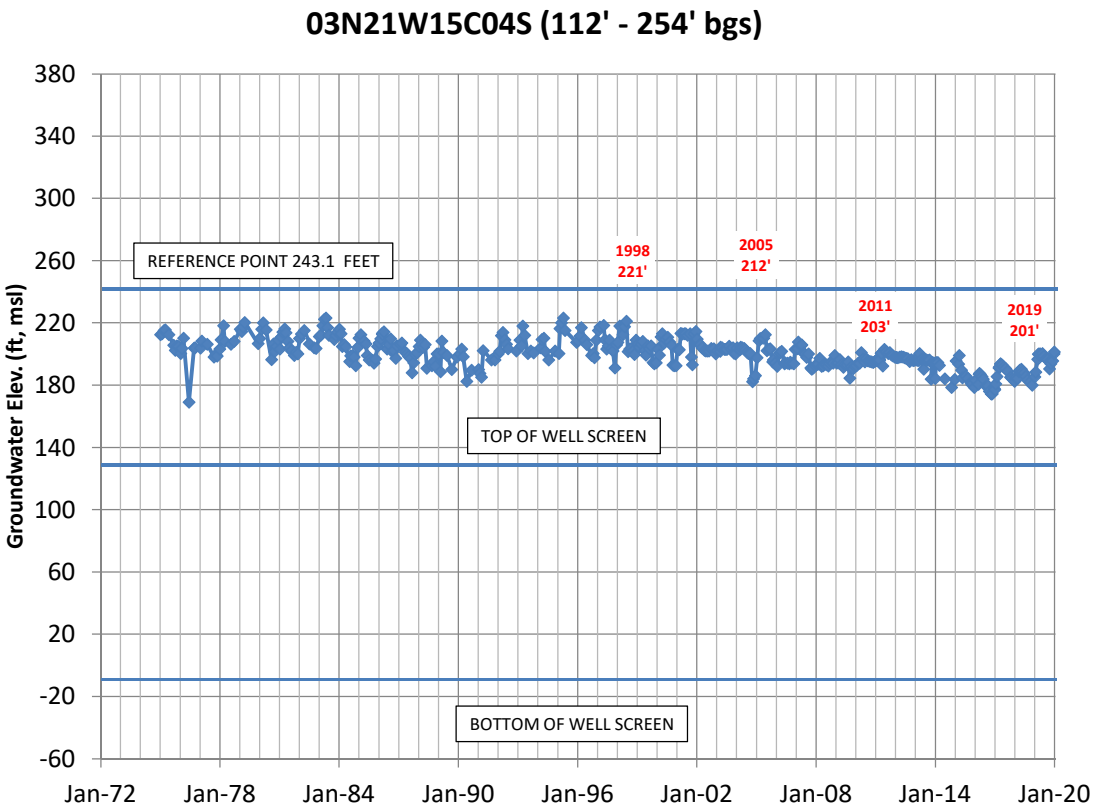

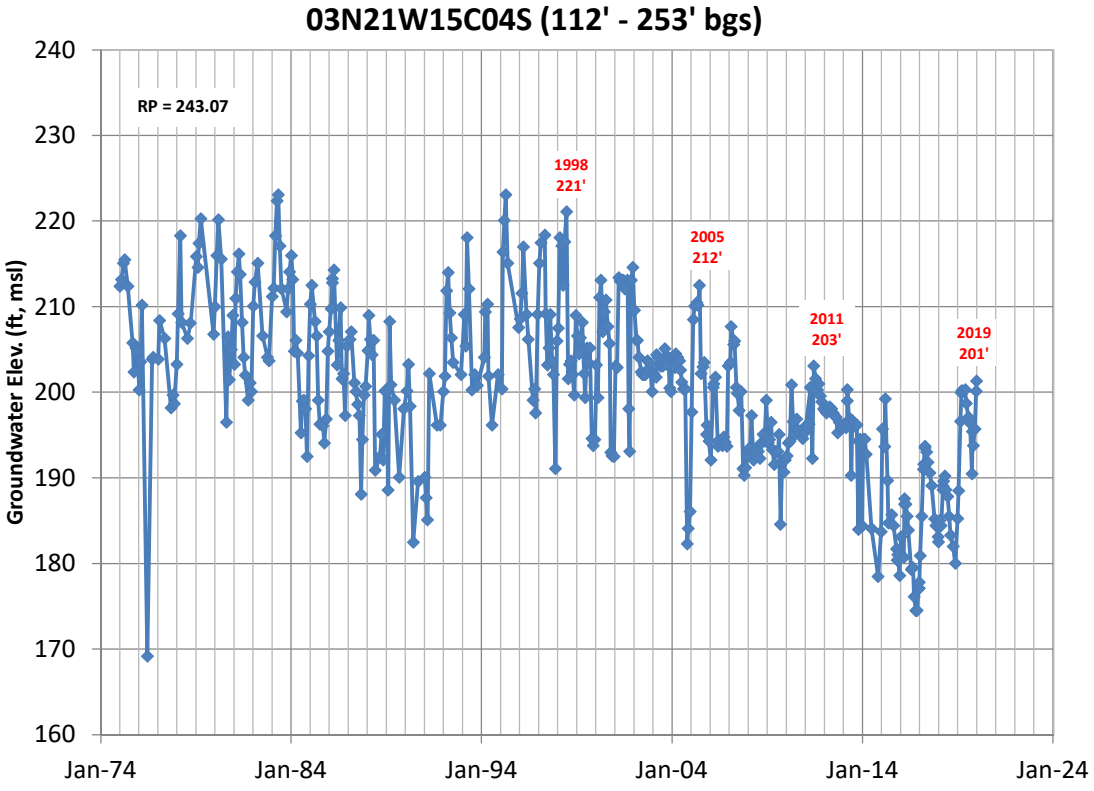

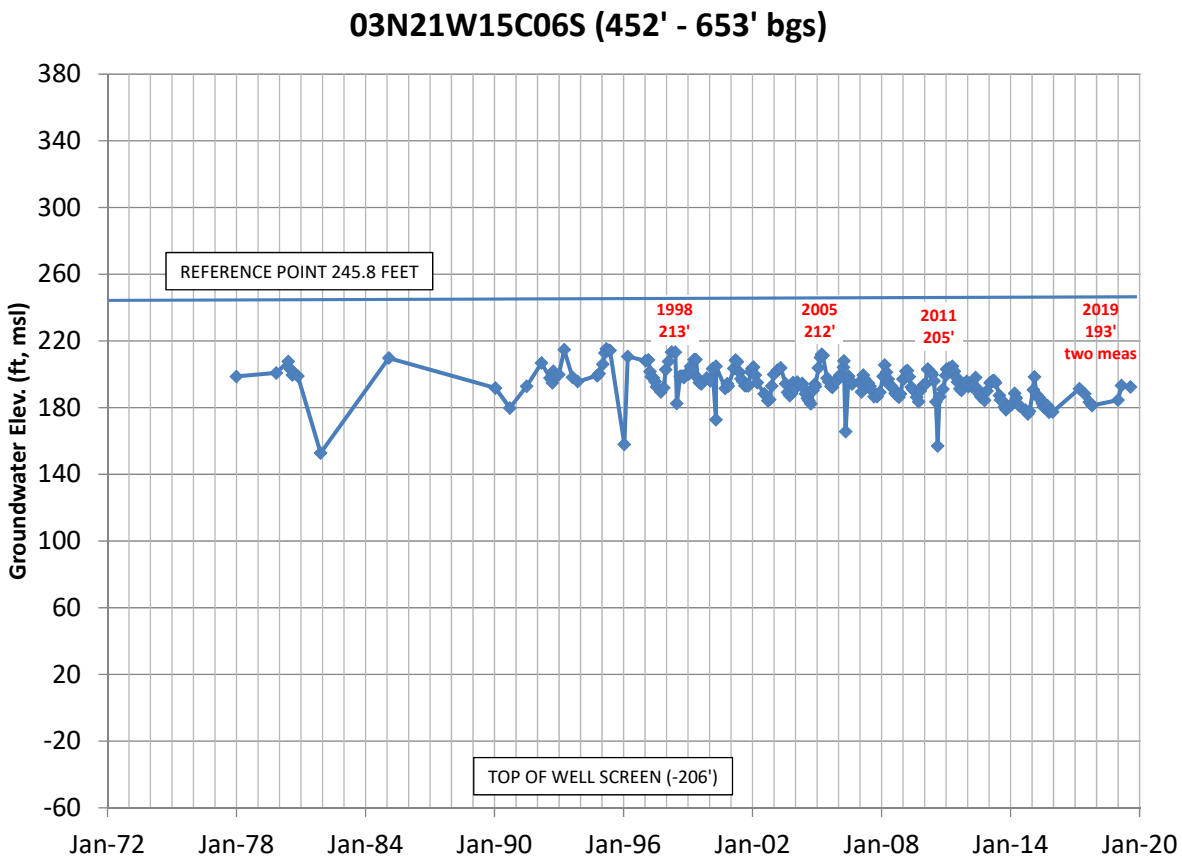

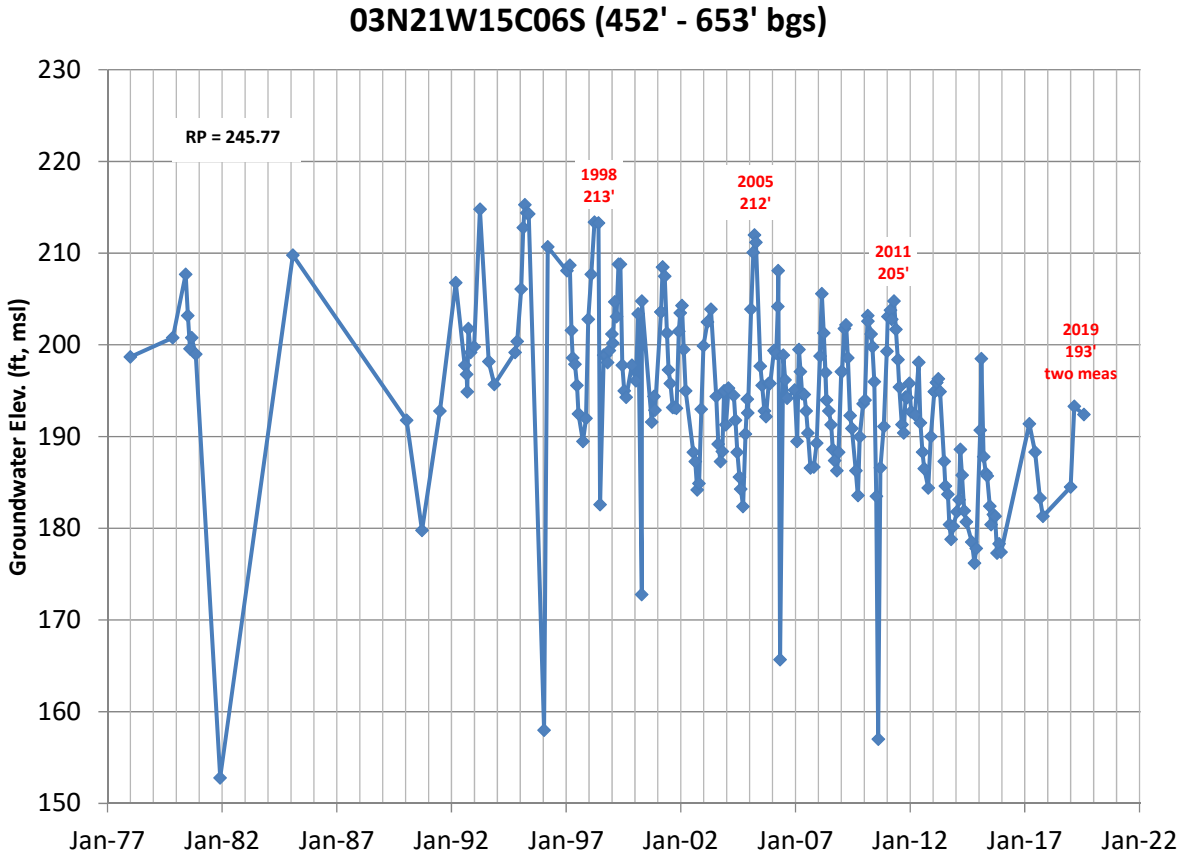

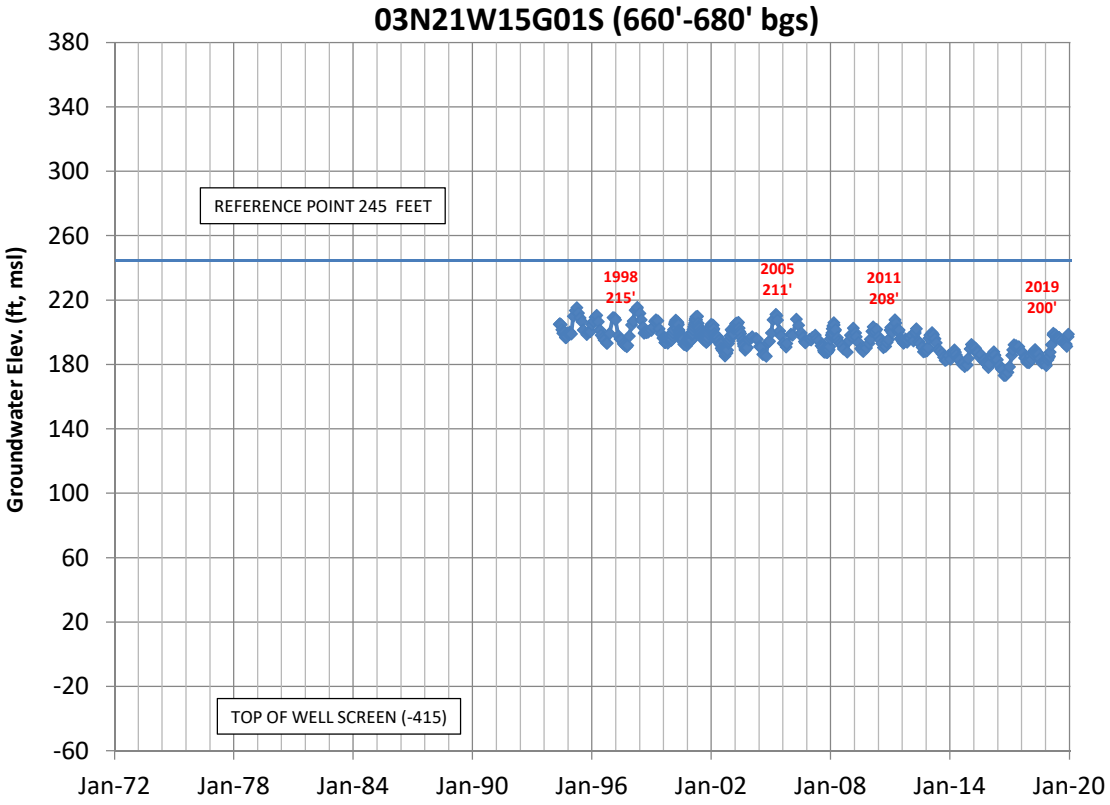

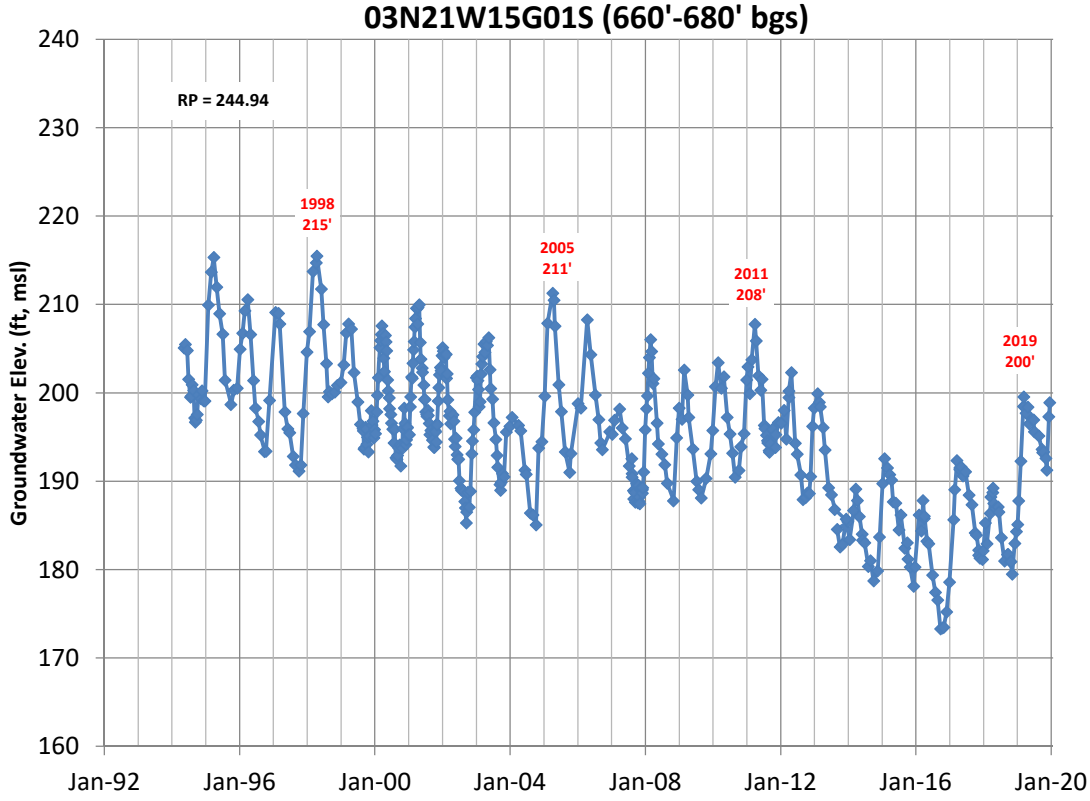

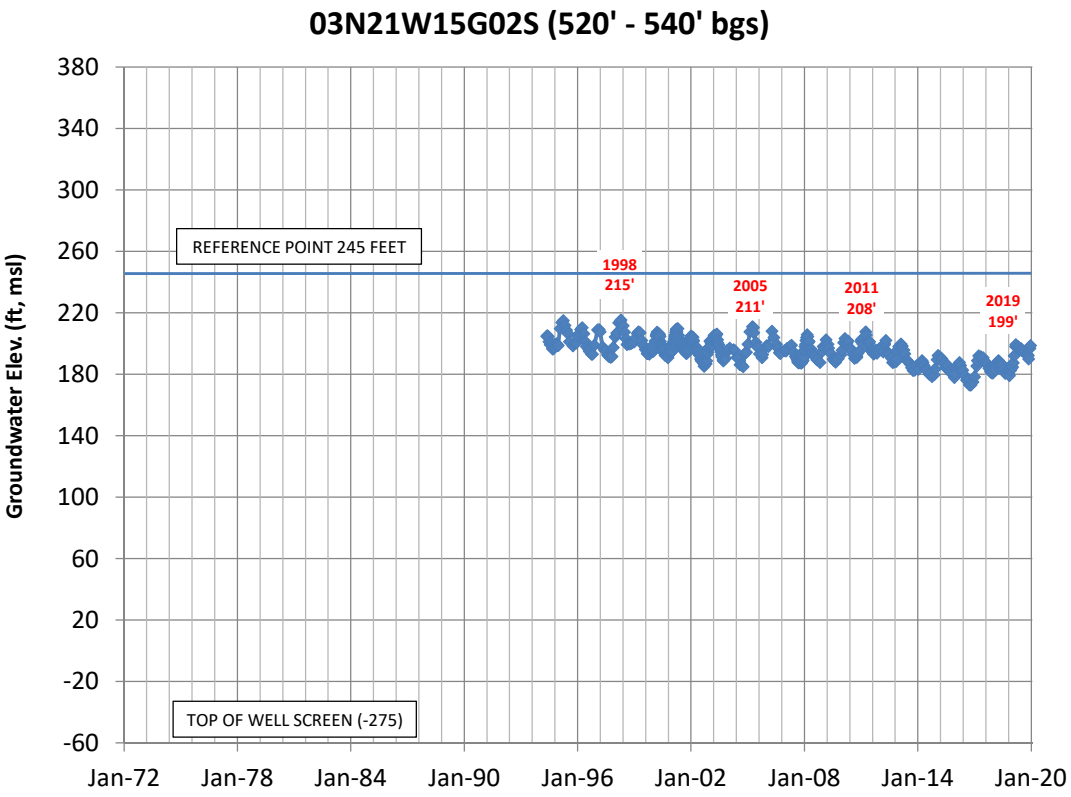

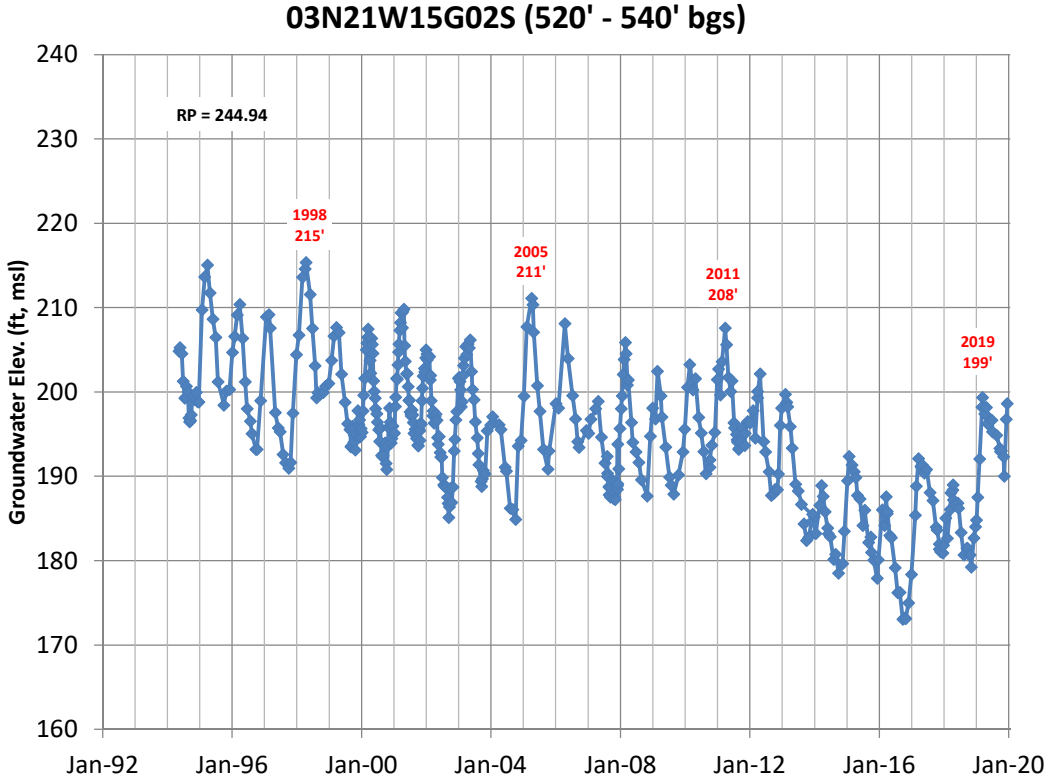

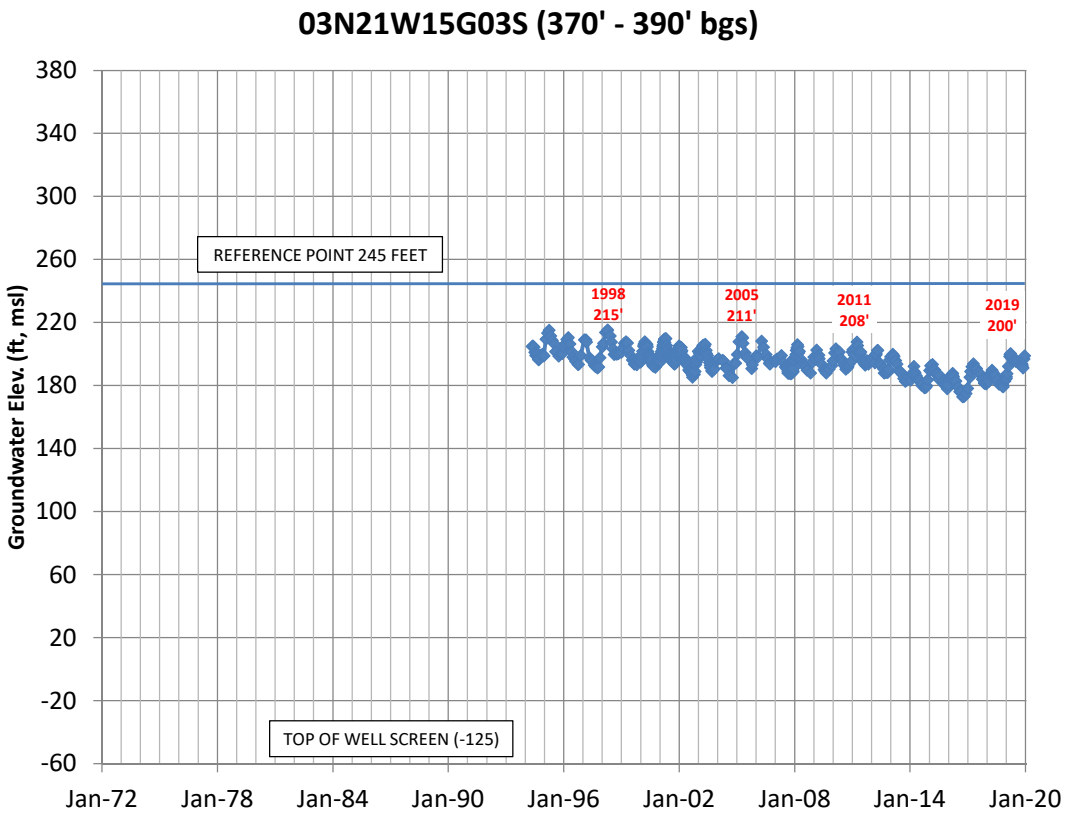

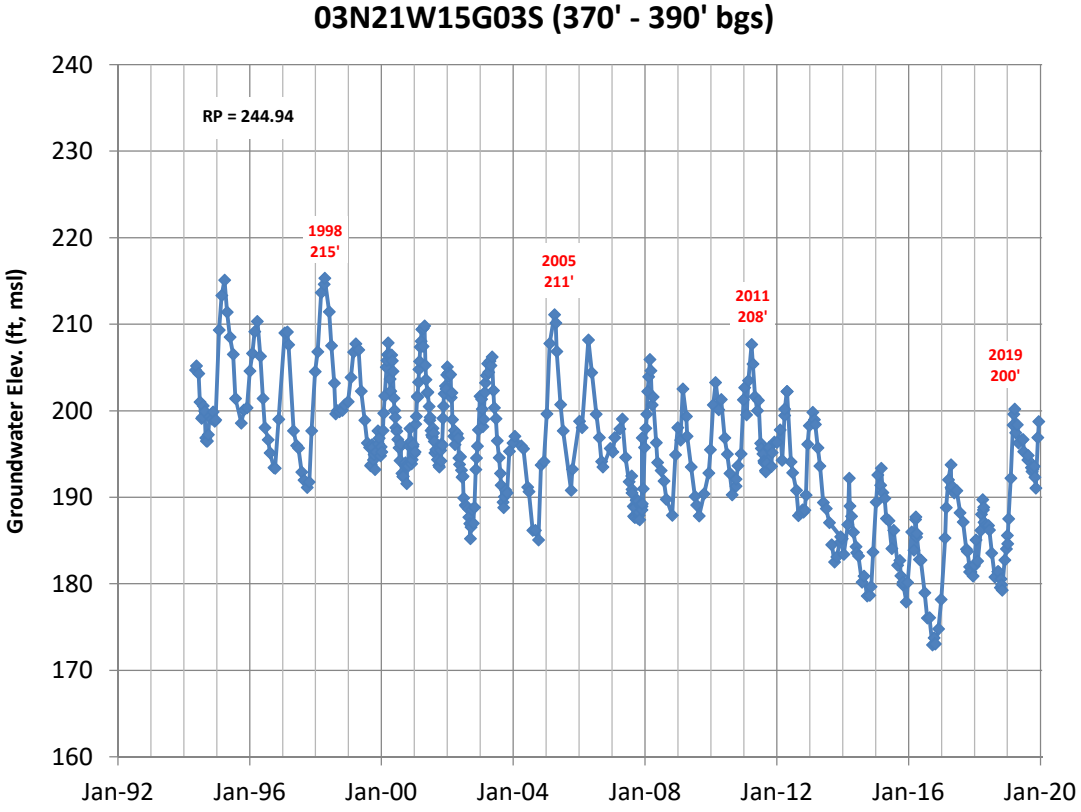

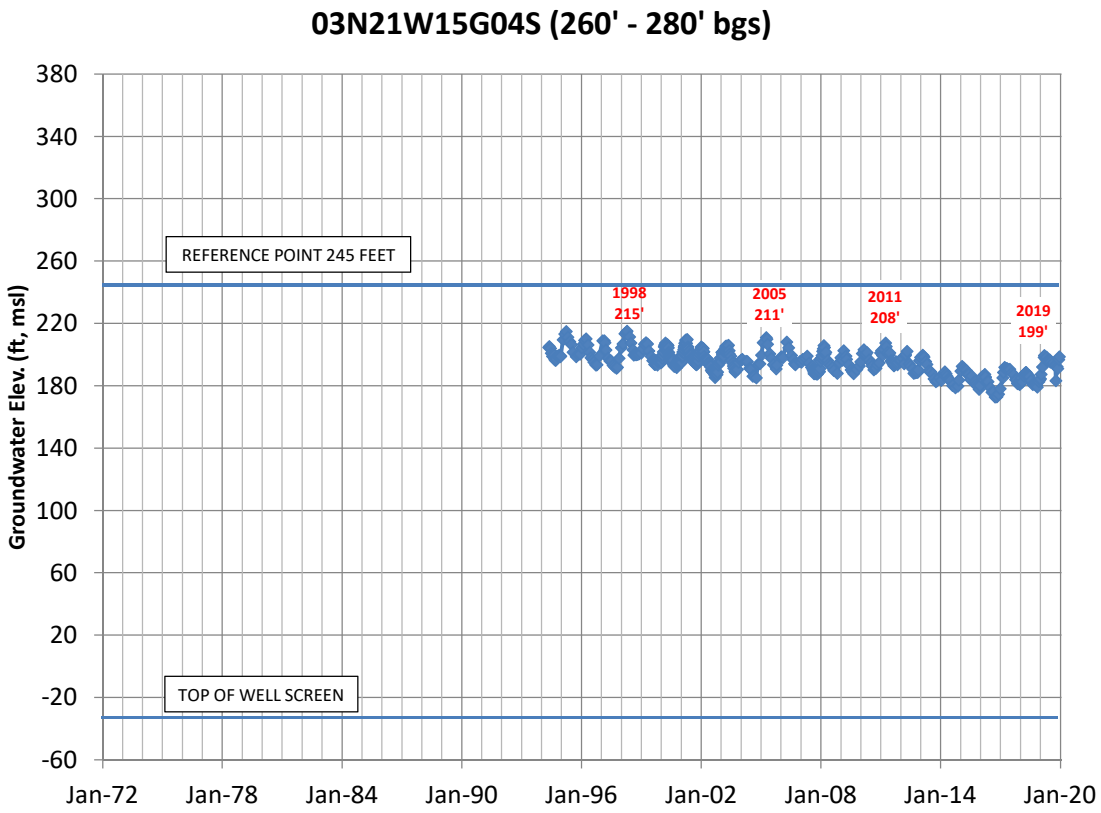

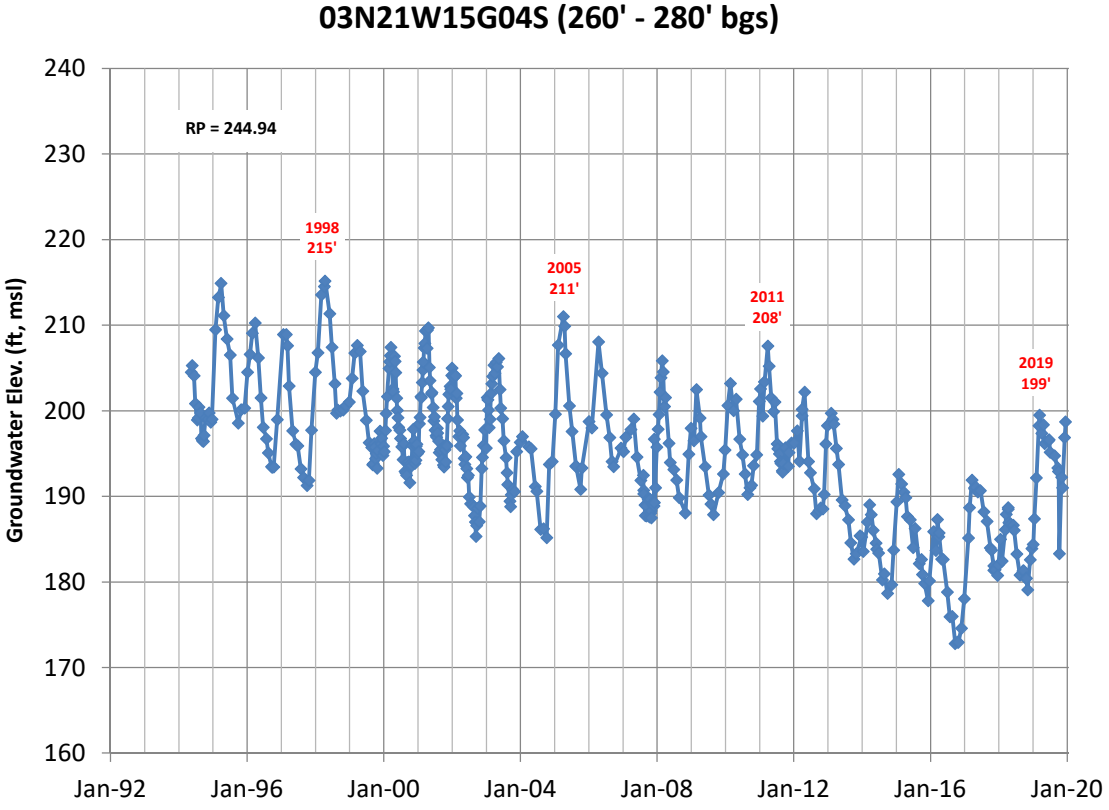

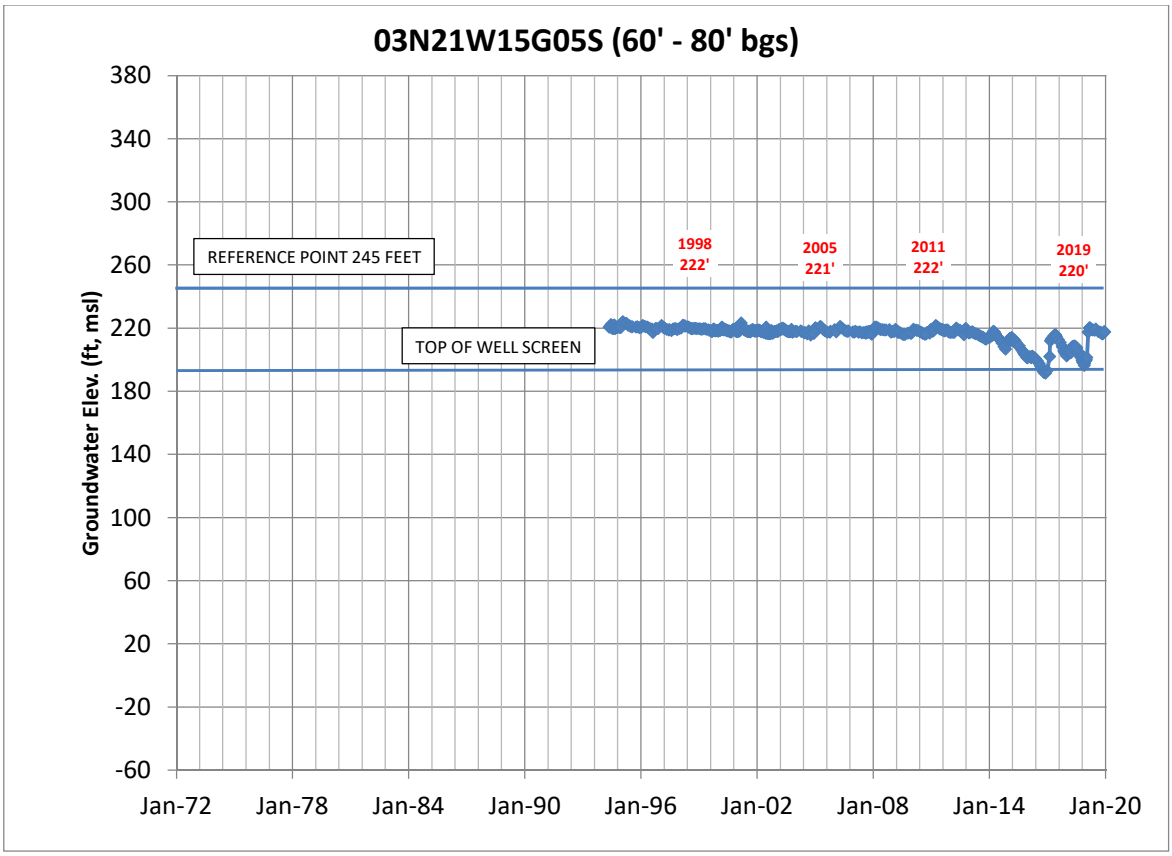

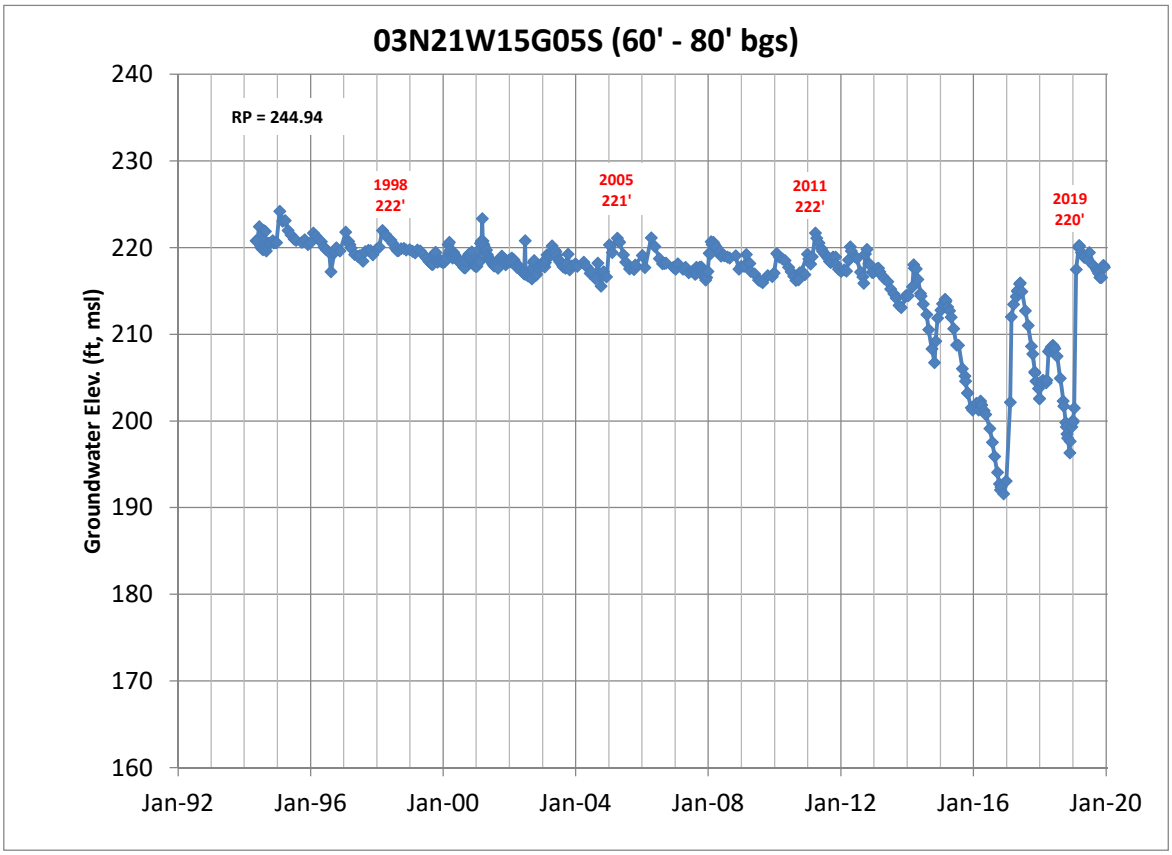

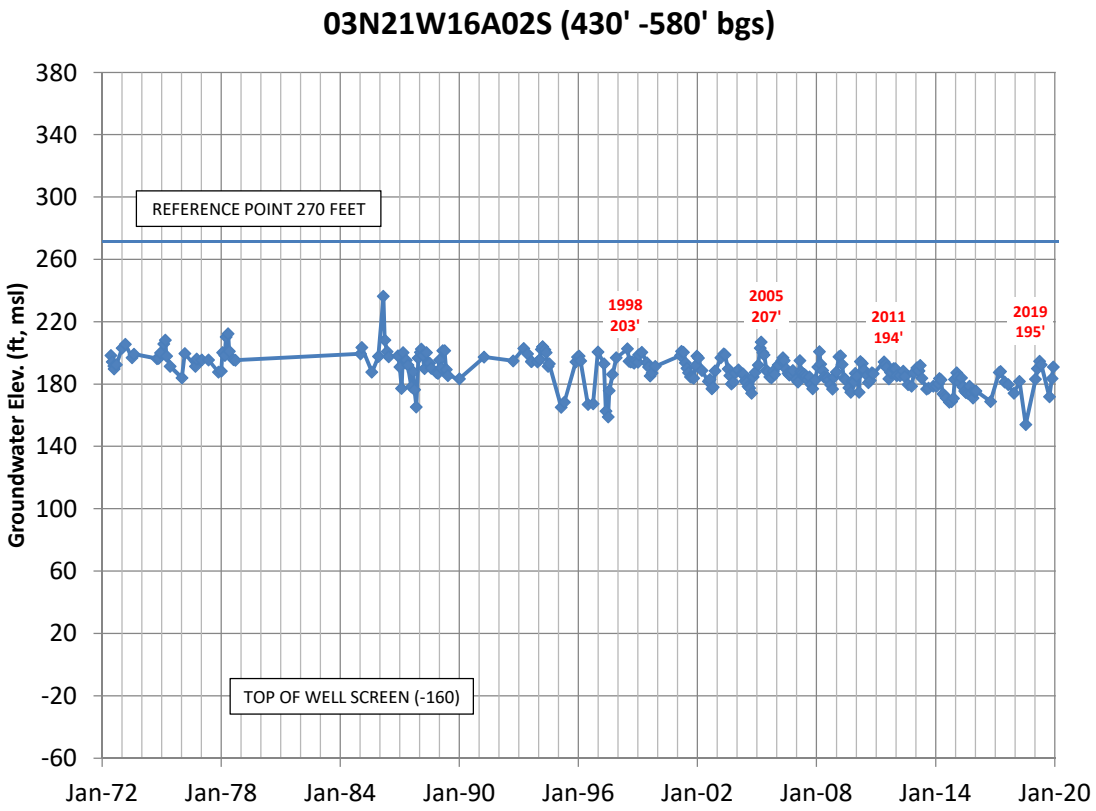

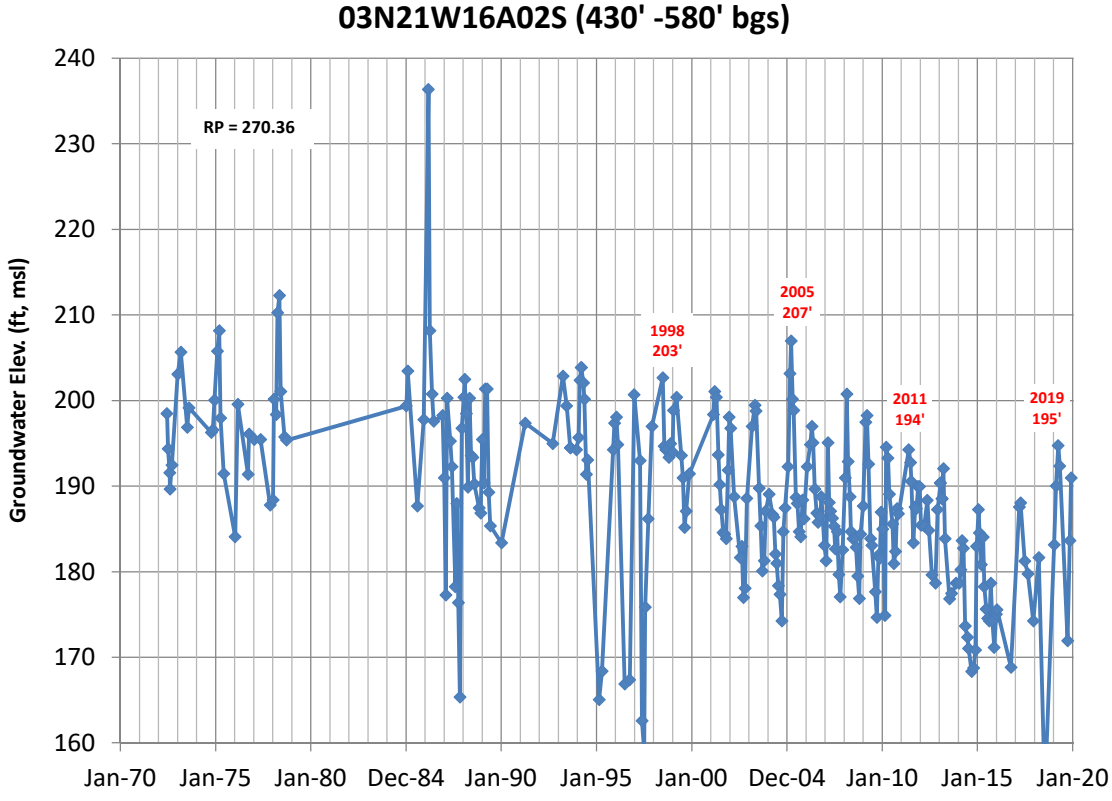

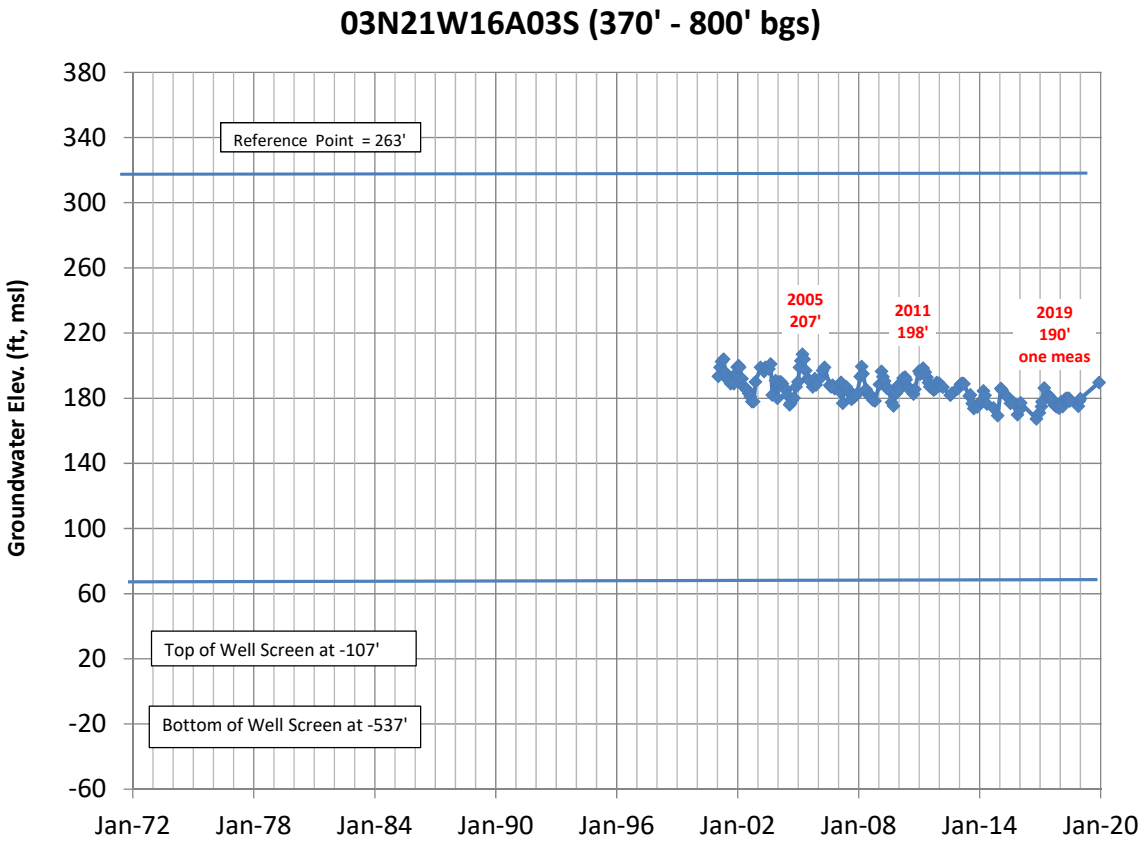

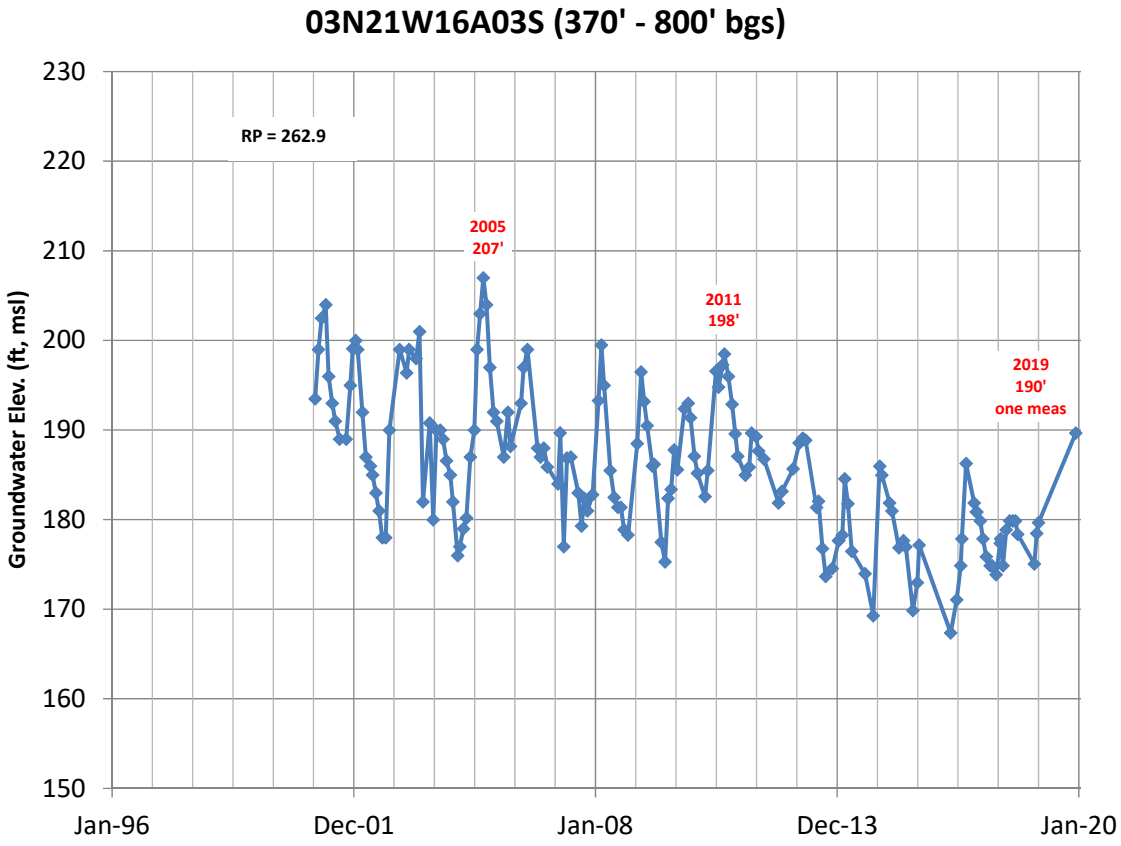

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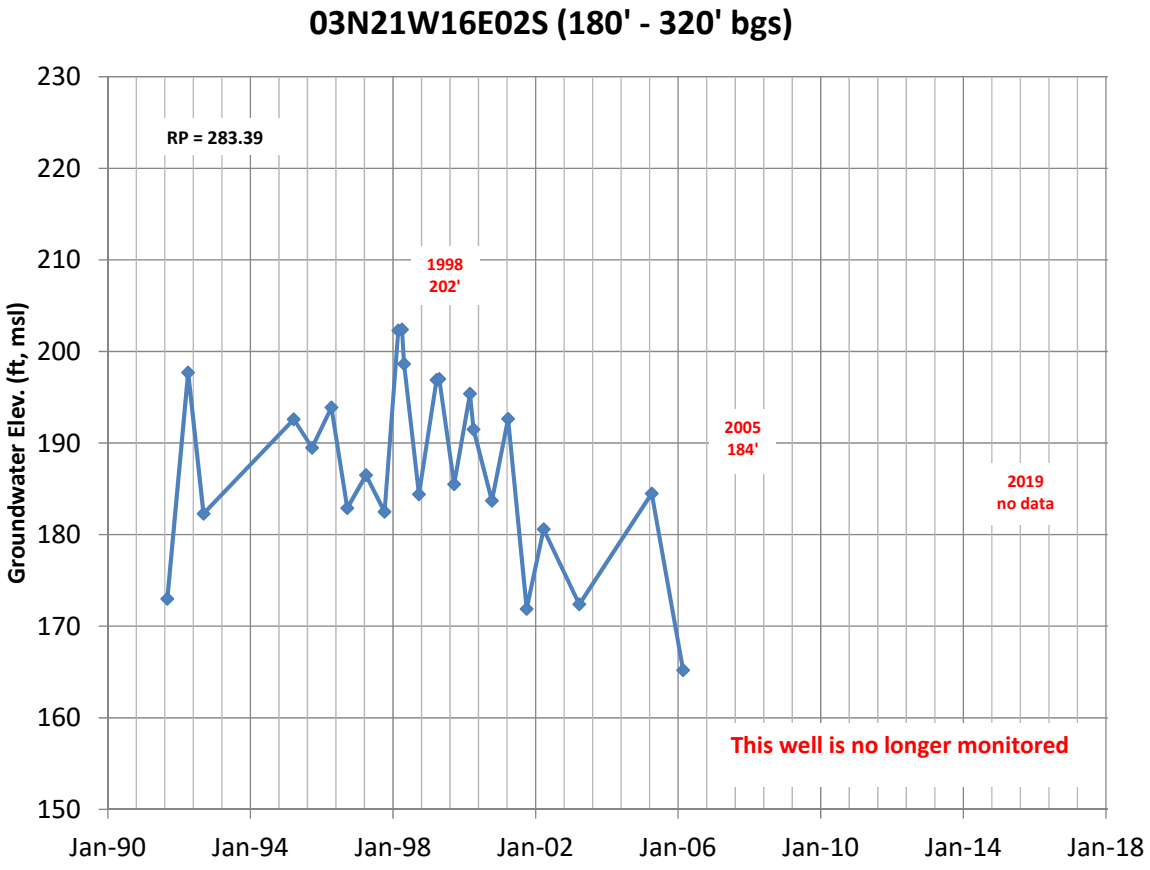

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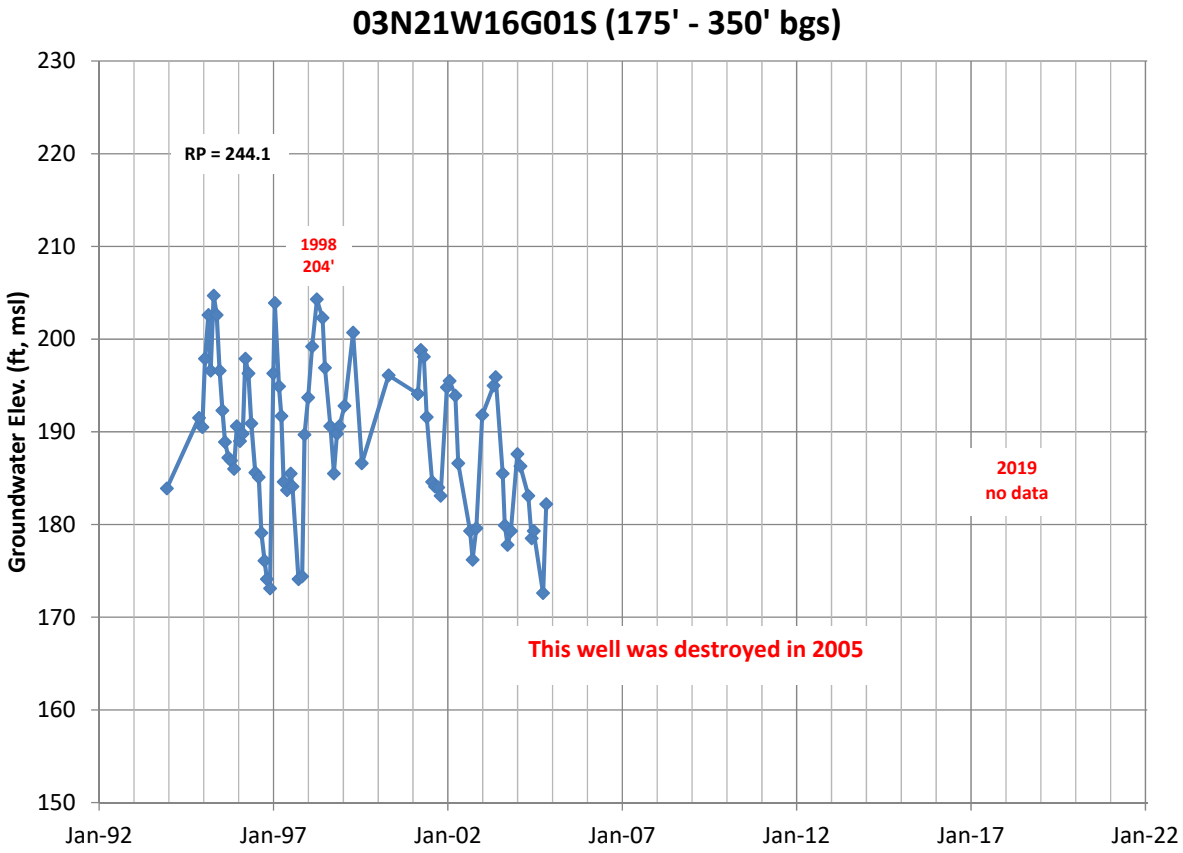
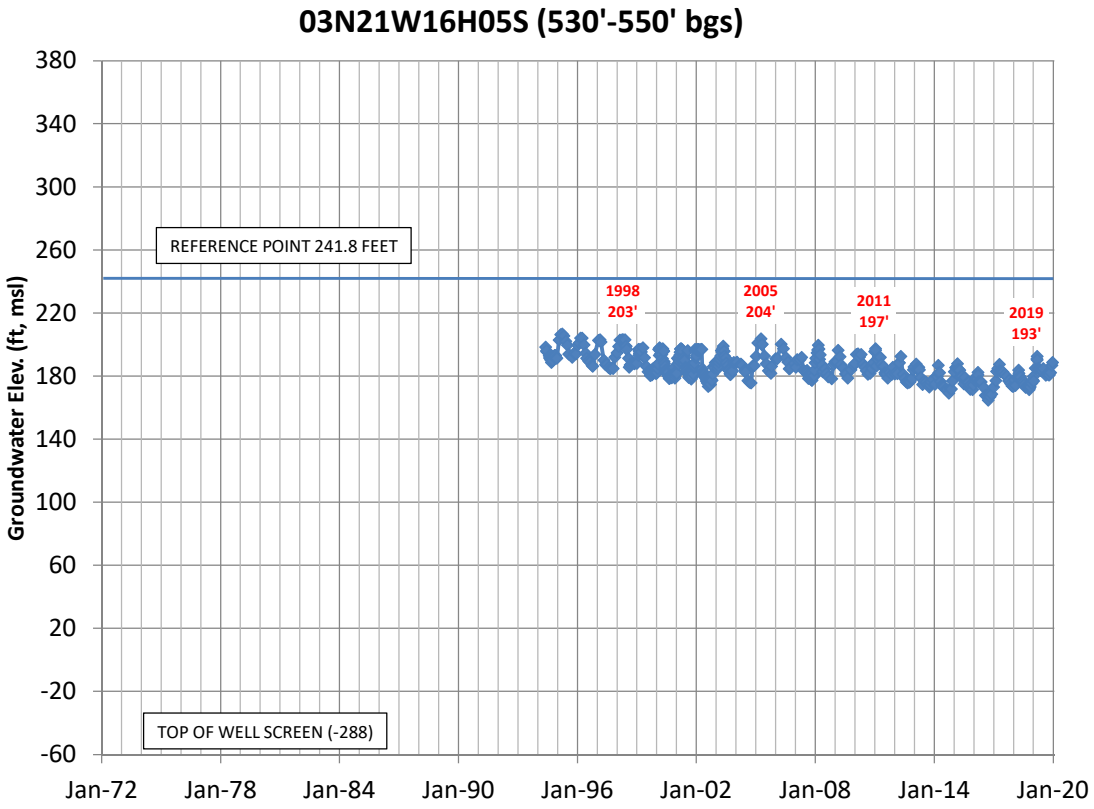
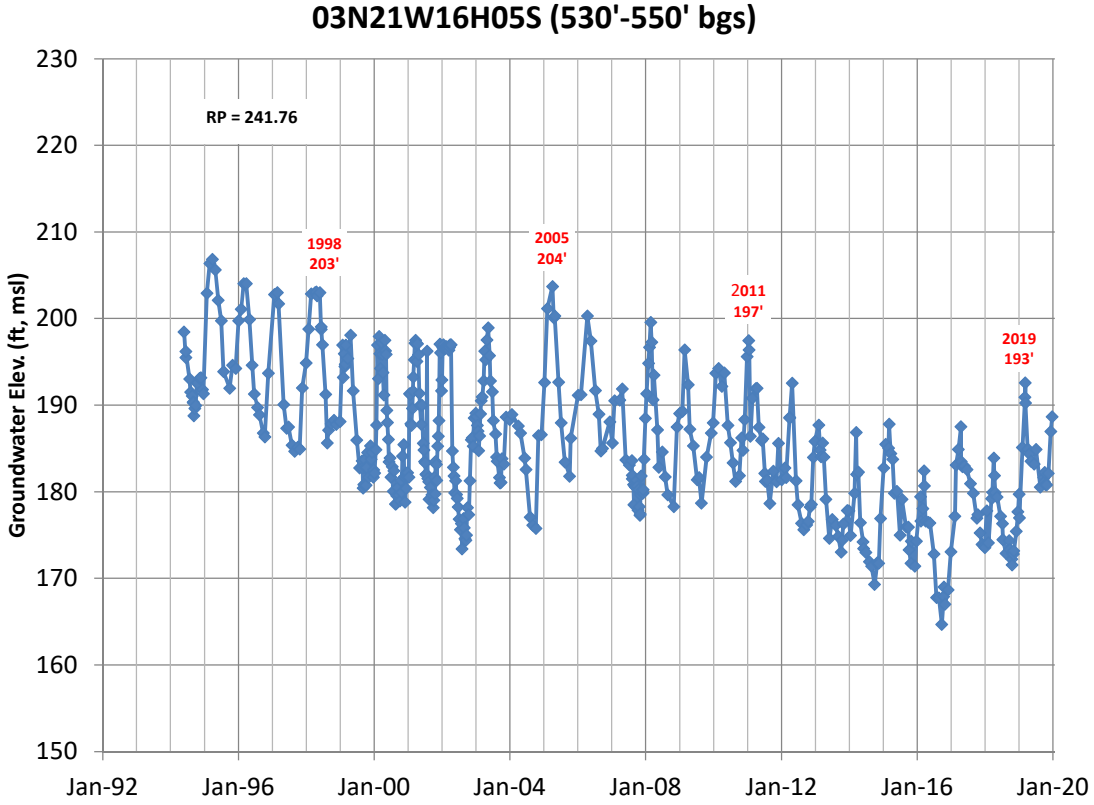
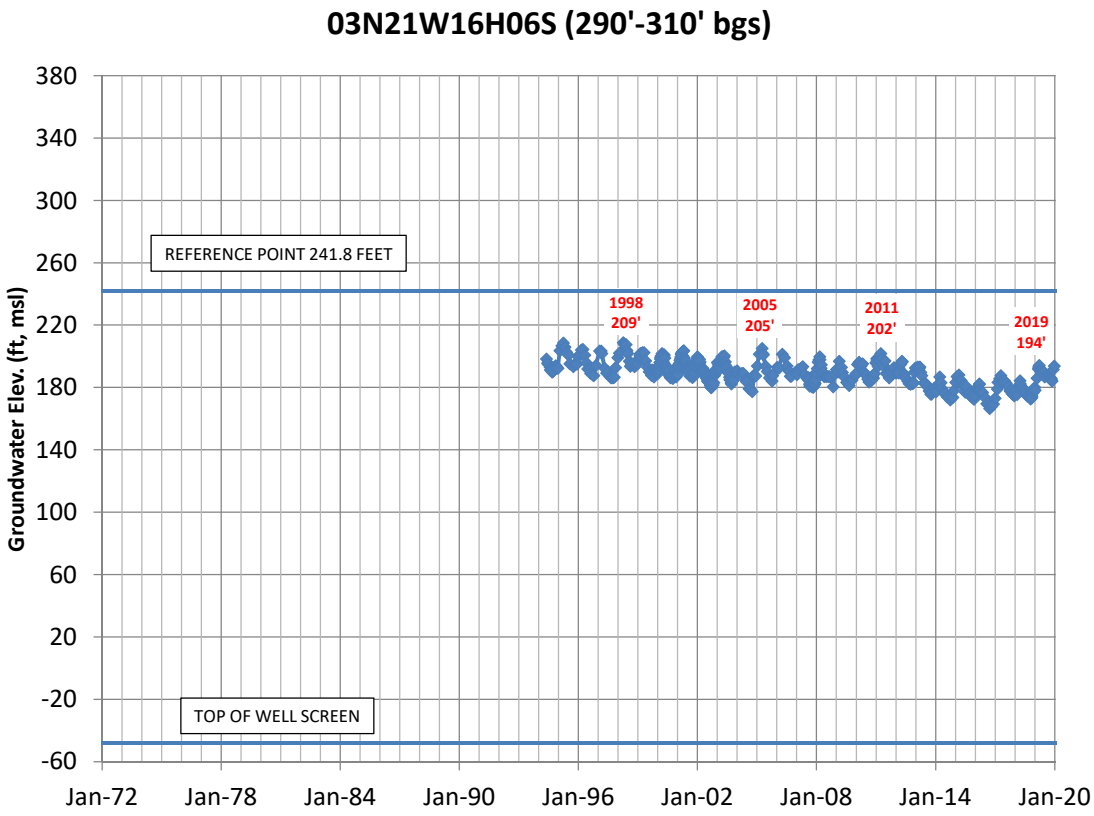
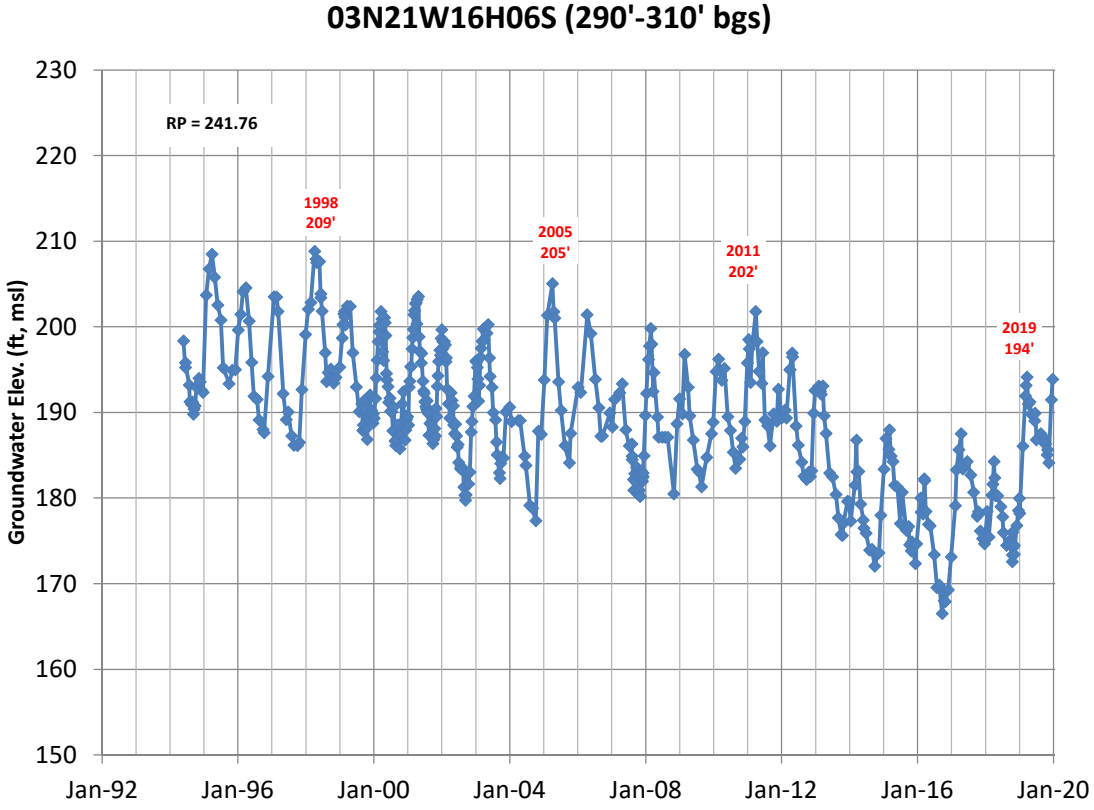
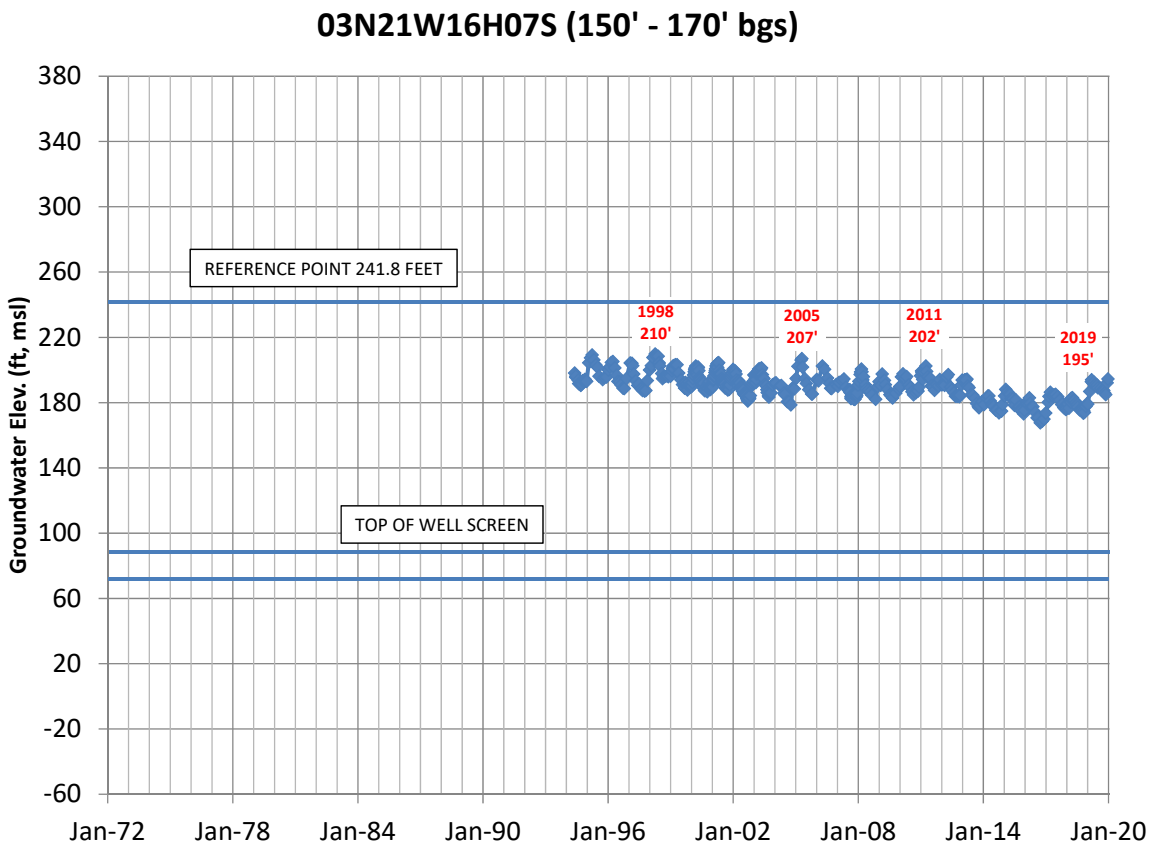


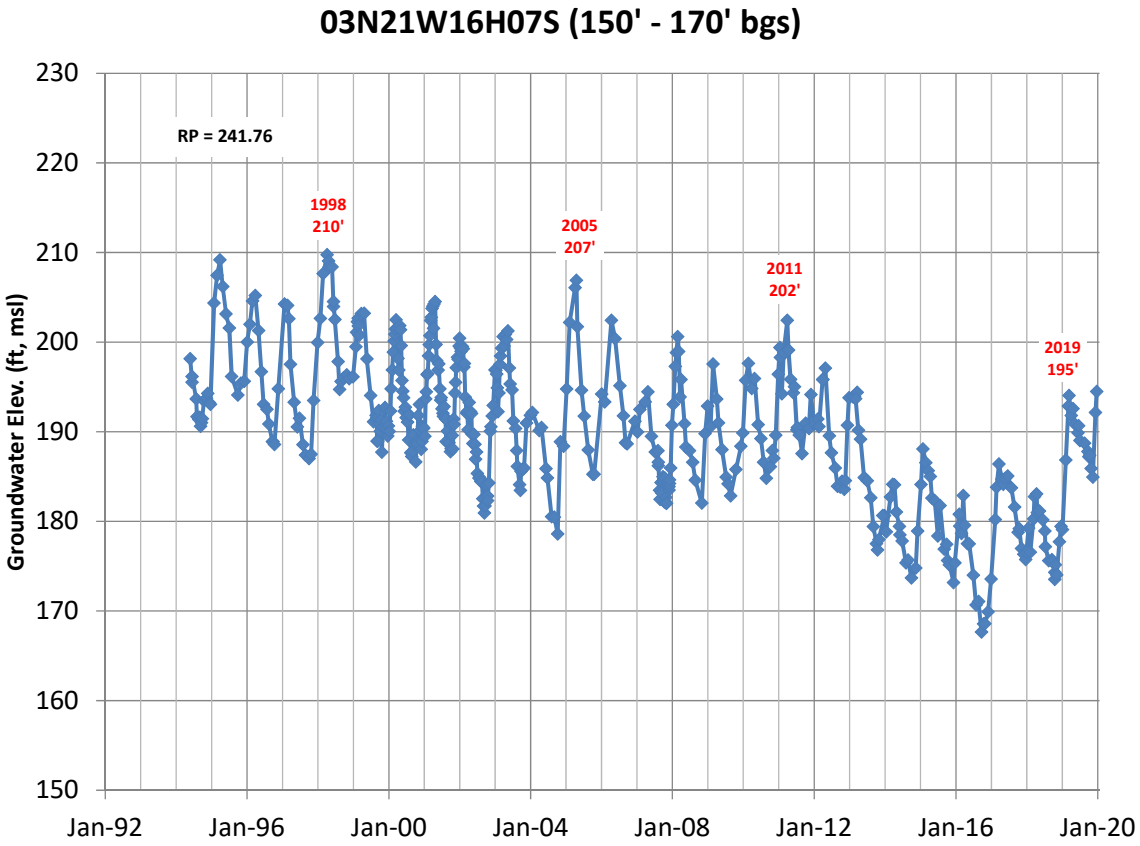


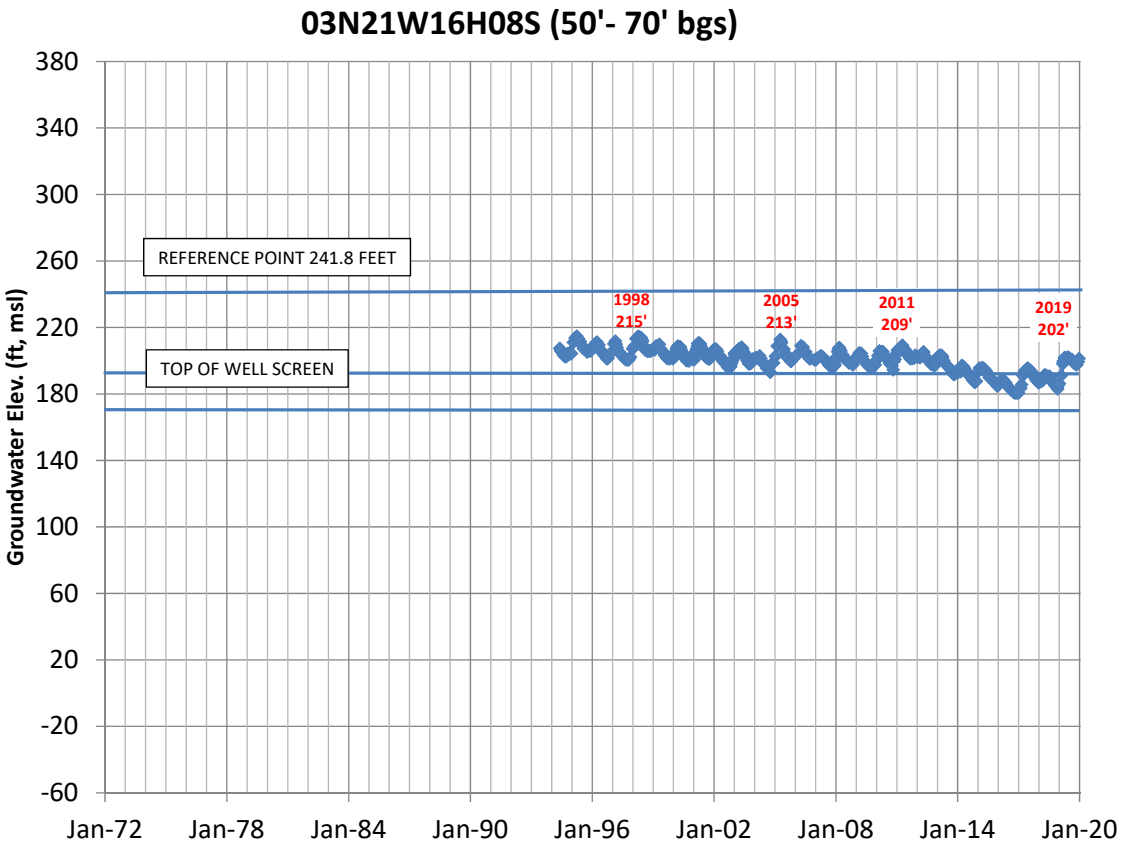


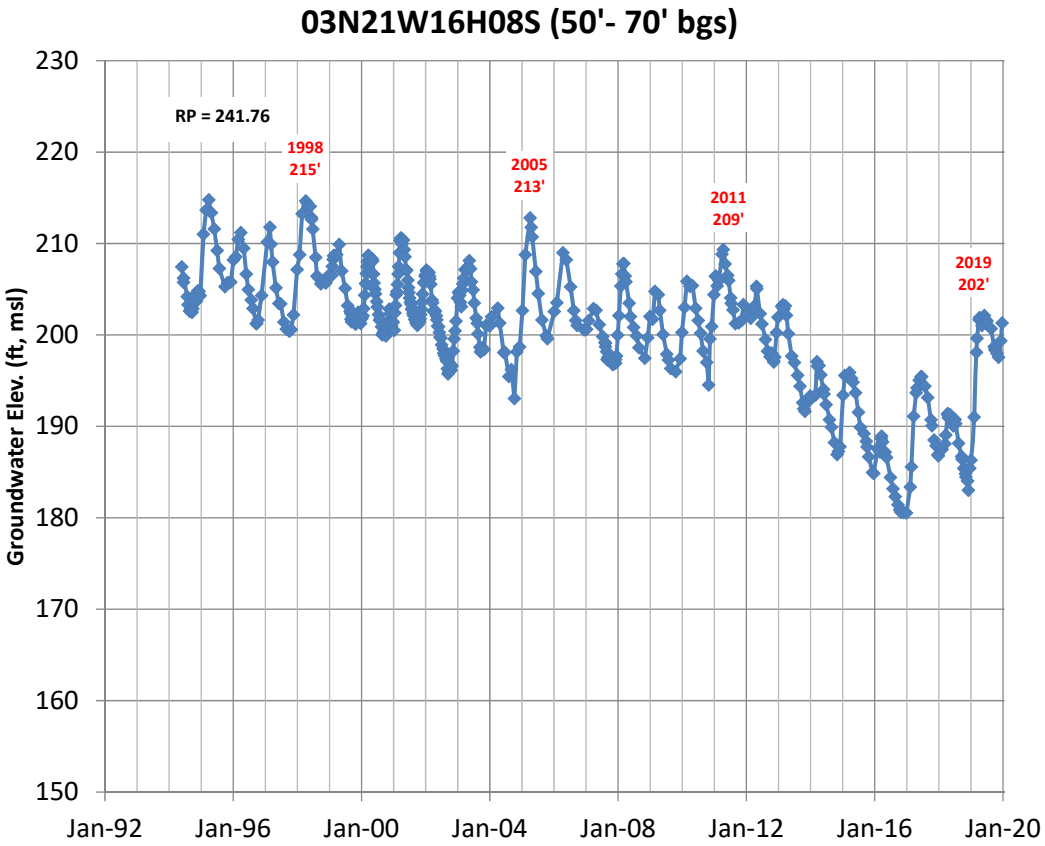


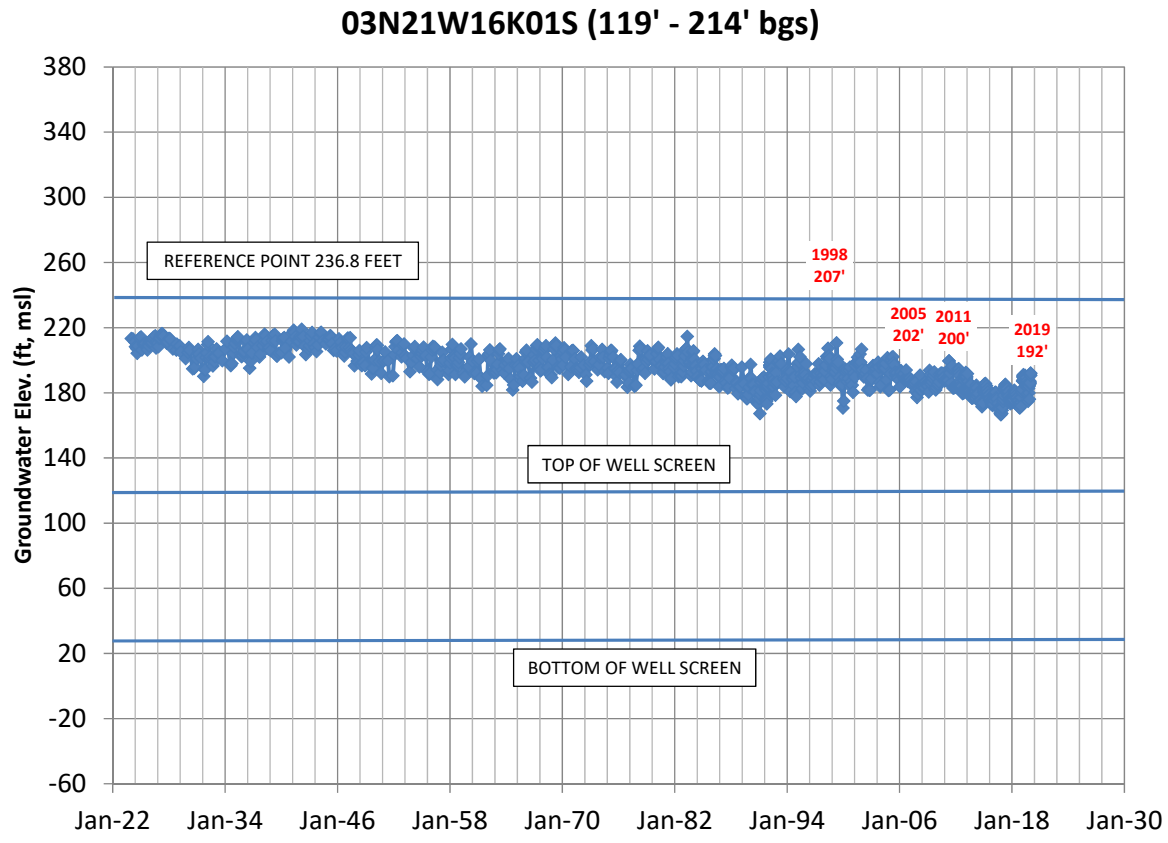


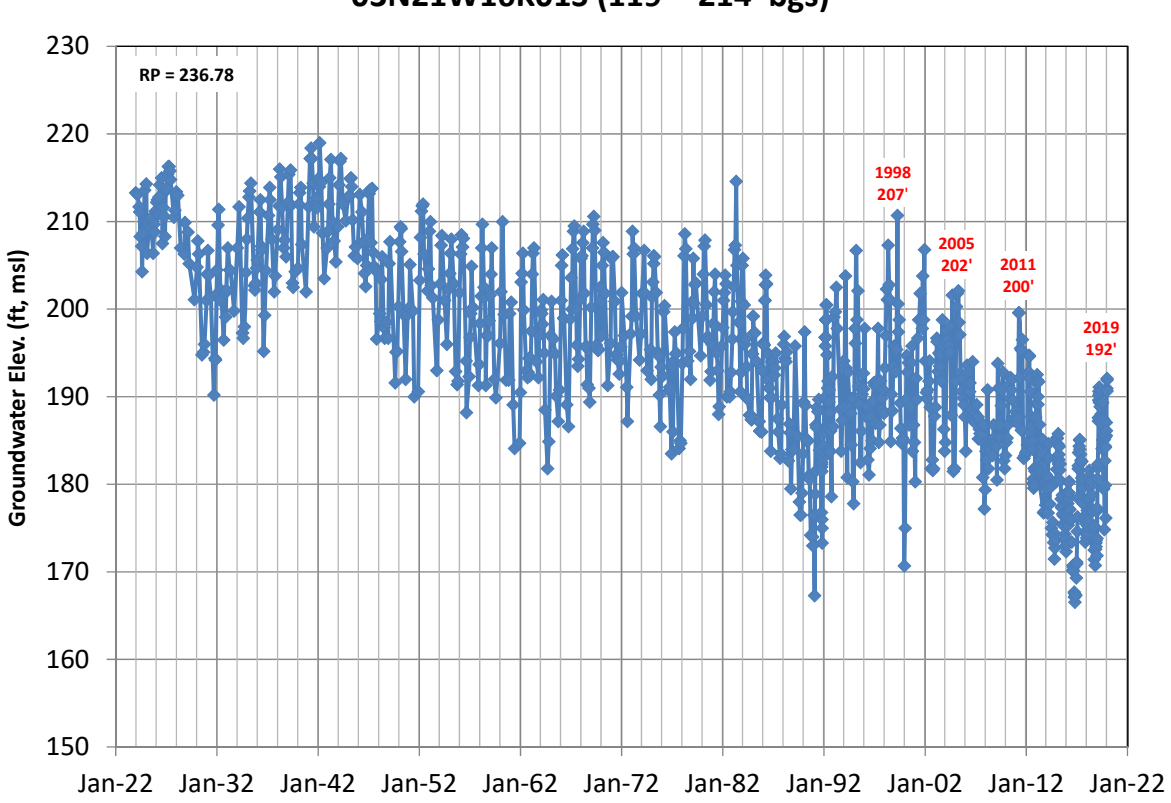


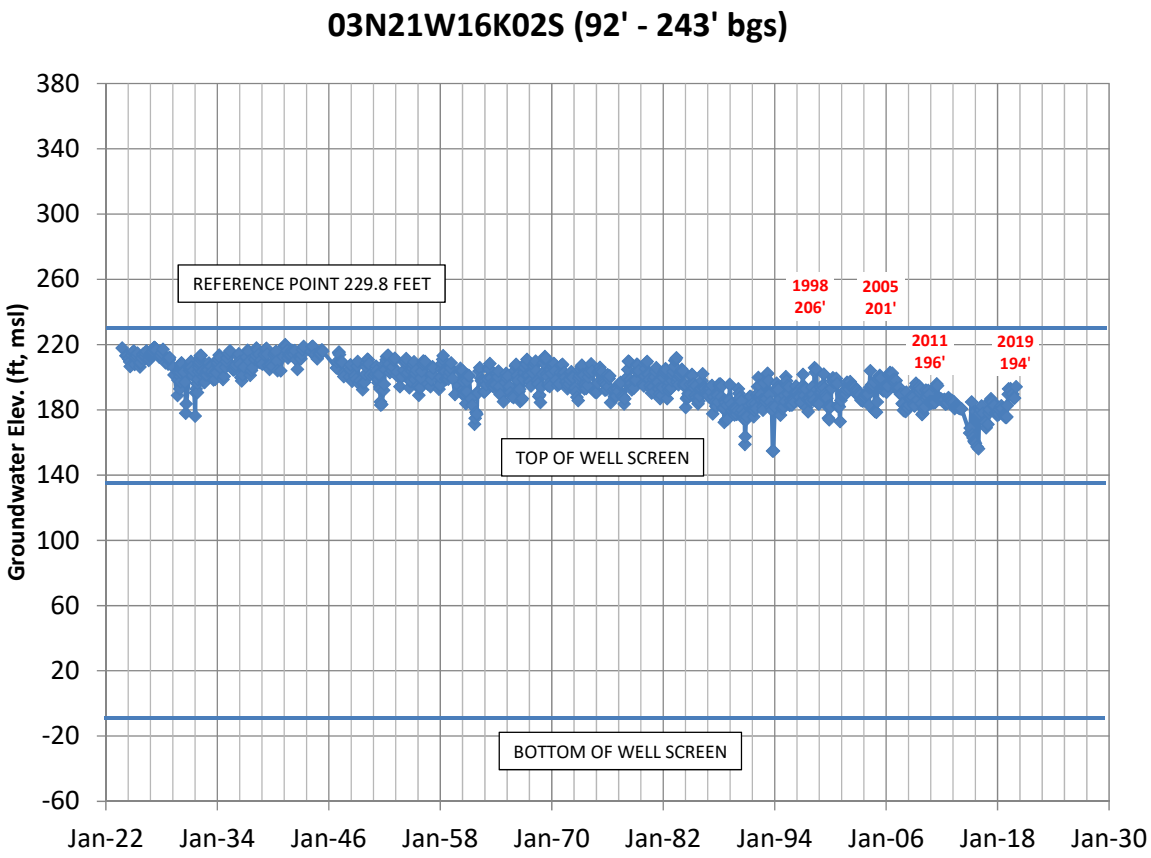


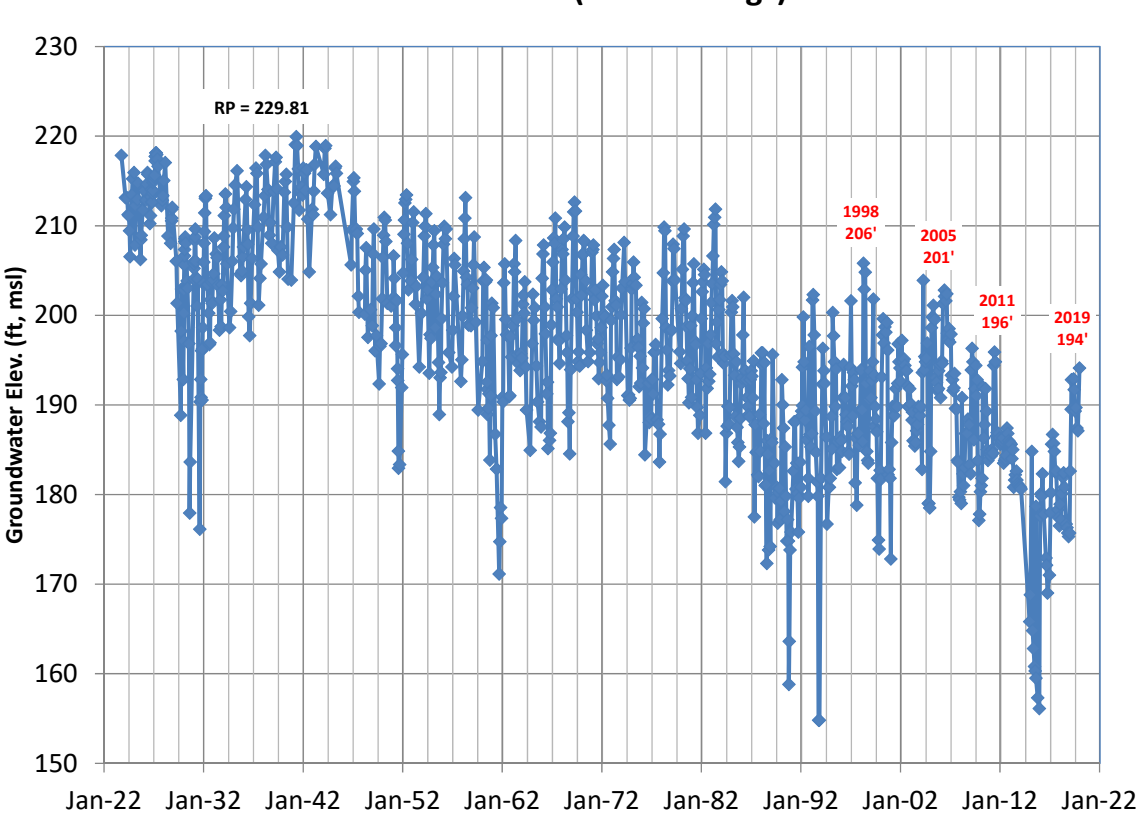




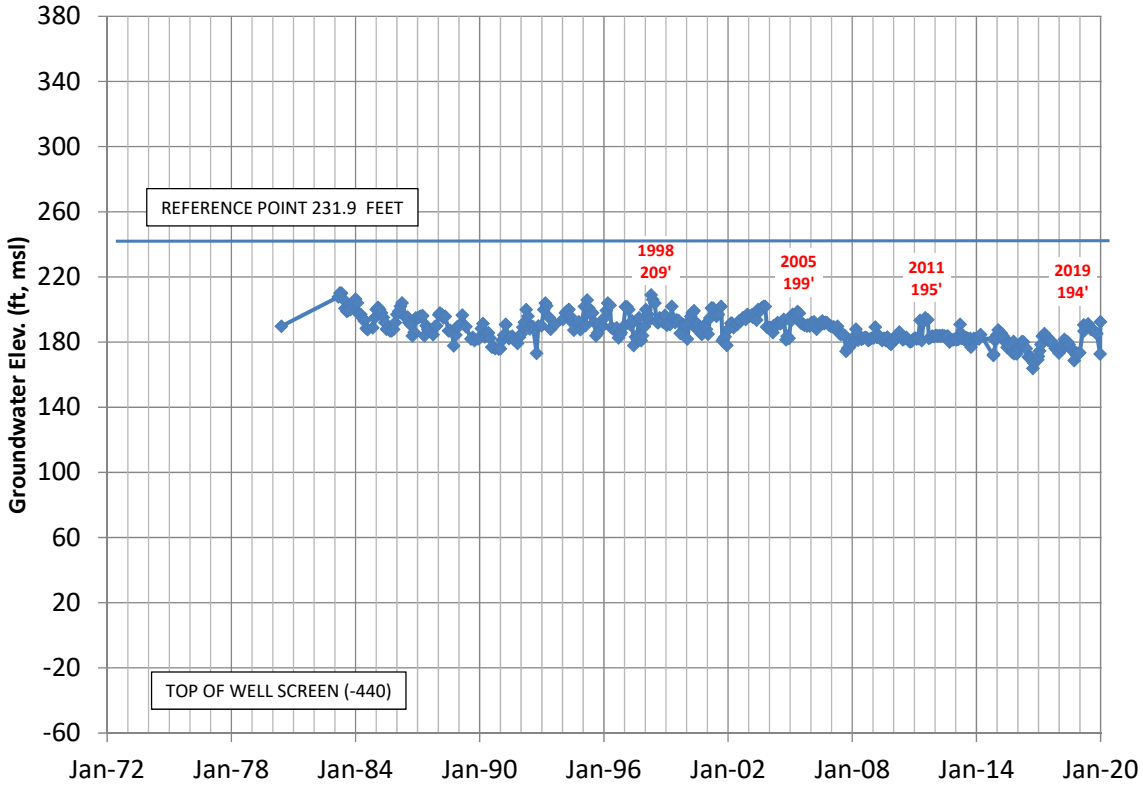




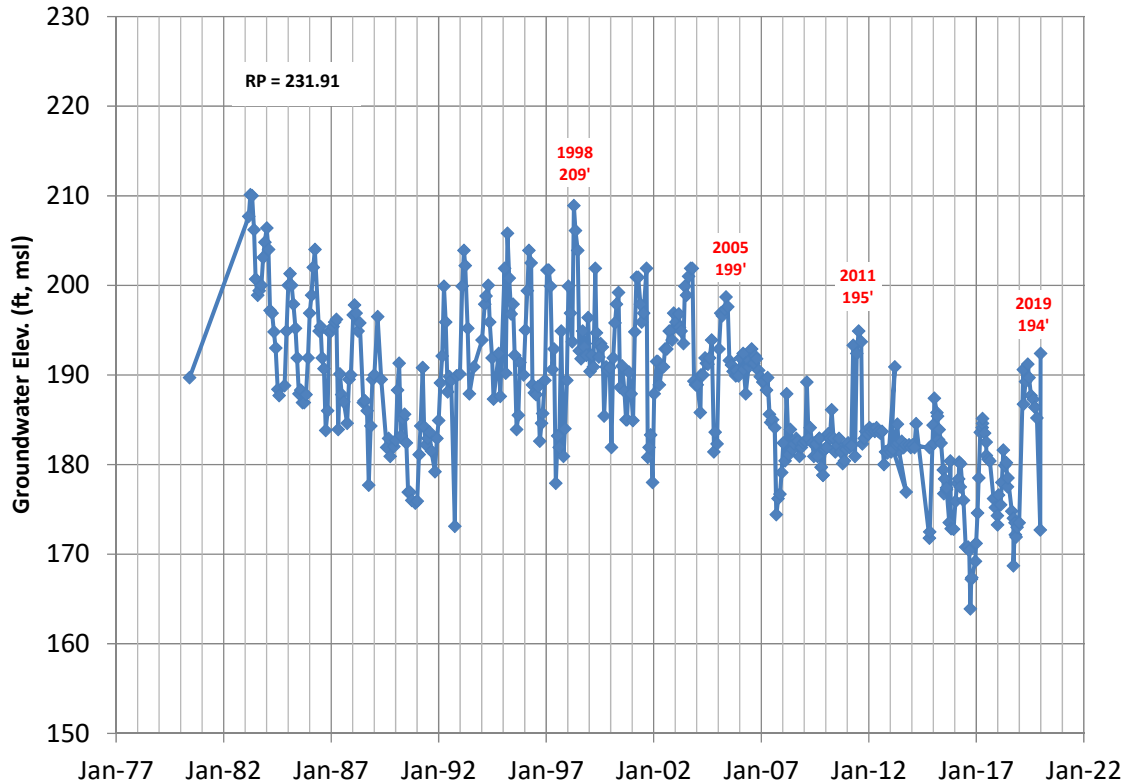


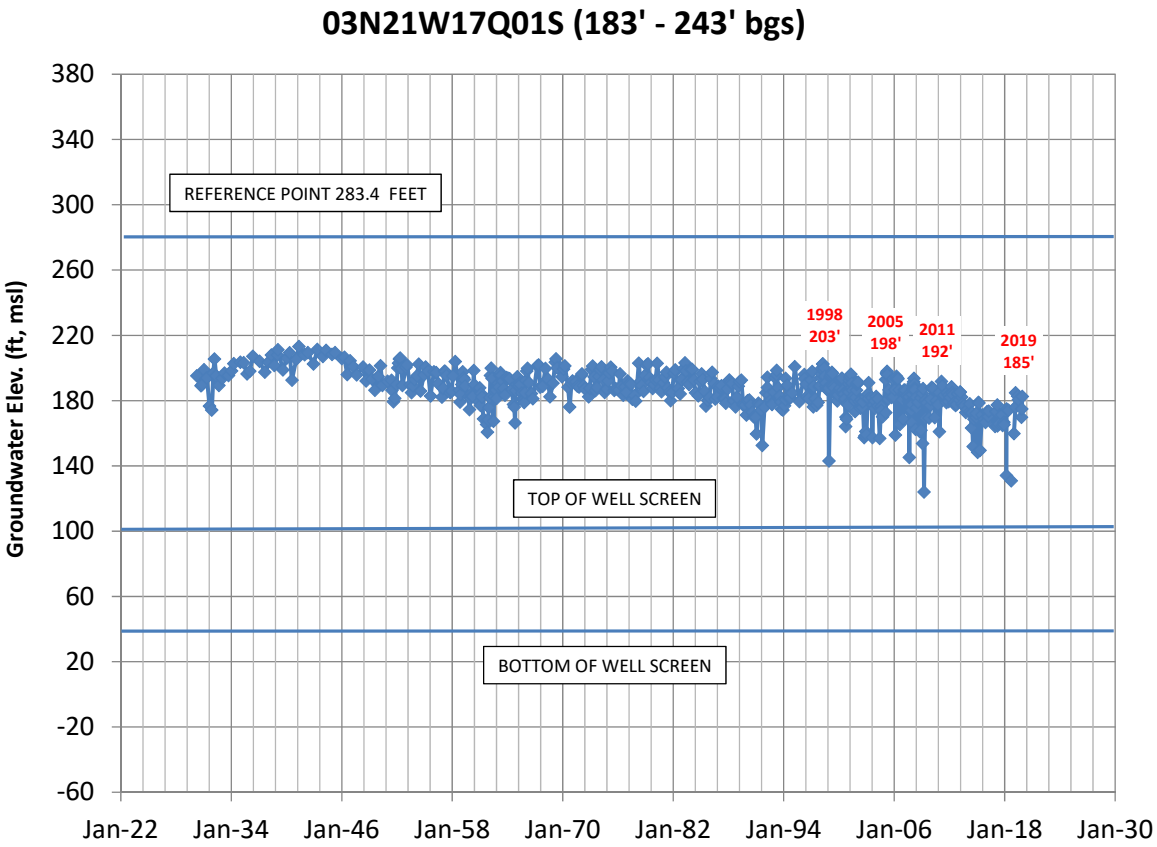


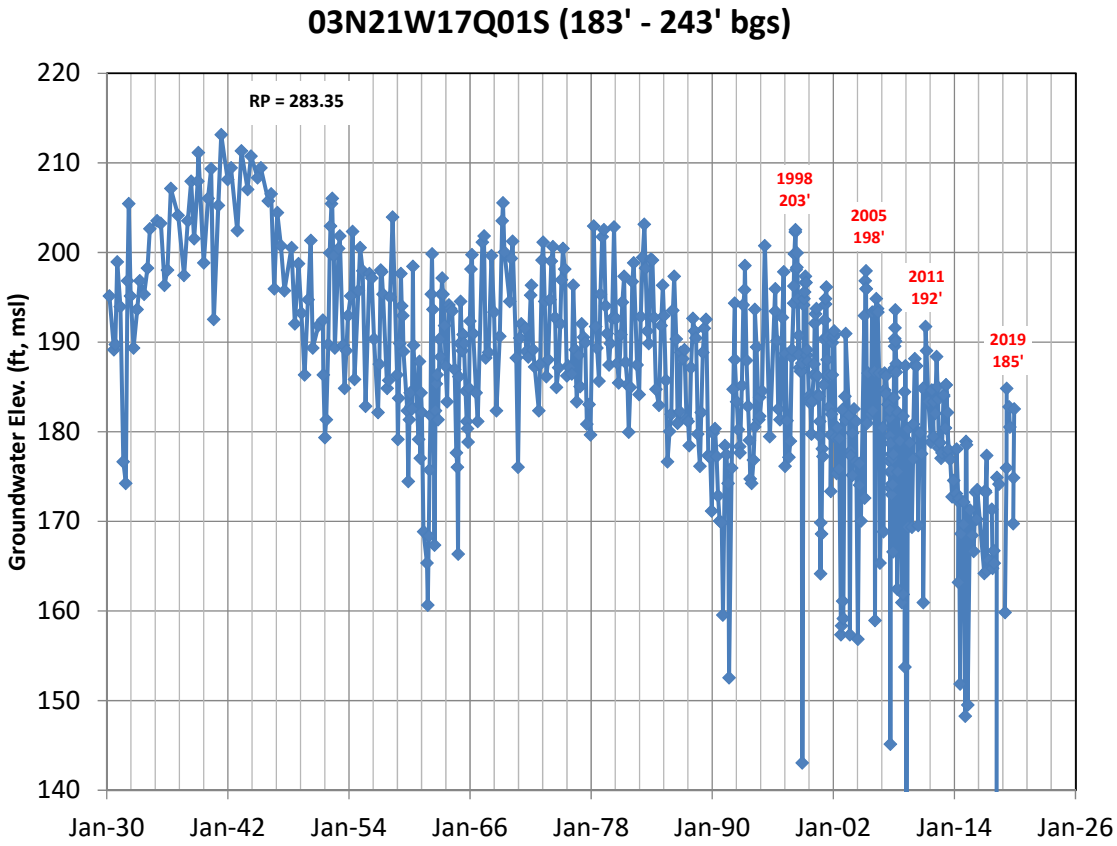
03N21W16K03S (672' - 760' bgs)



03N21W16K03S (672' - 760' bgs)







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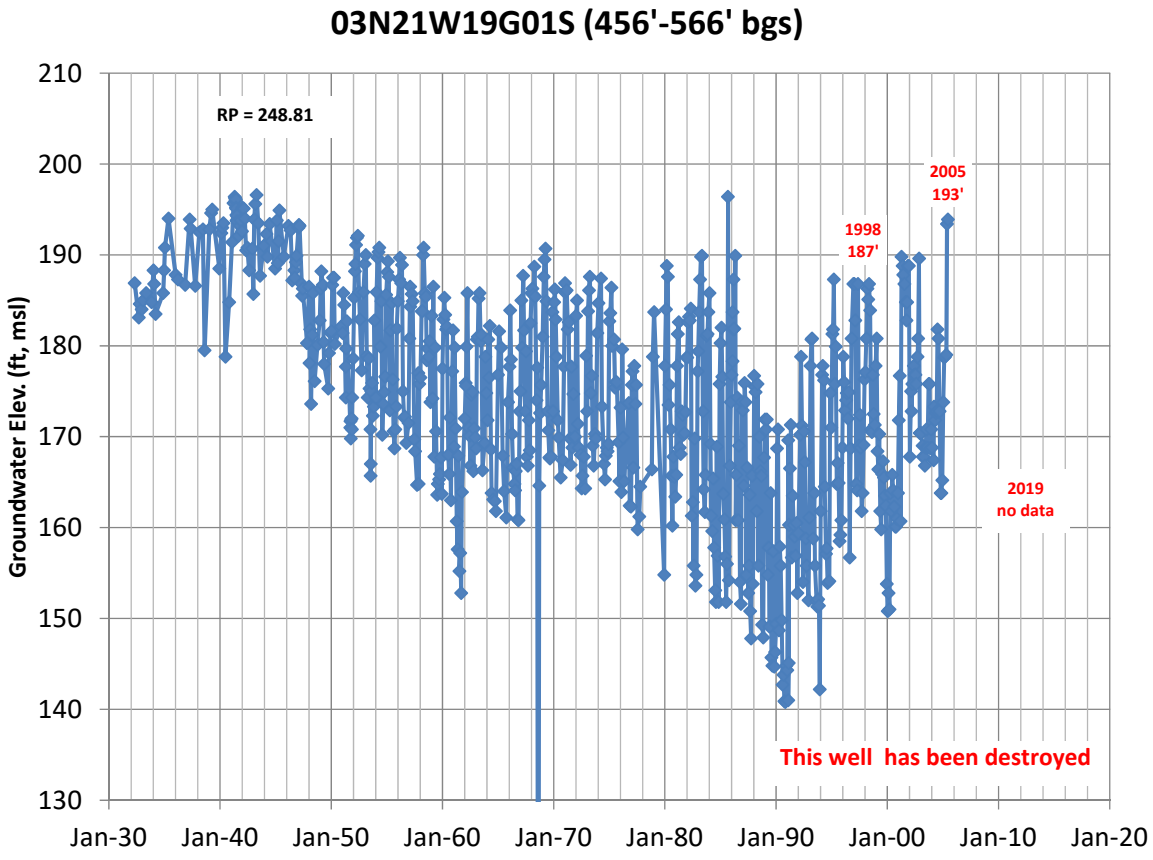

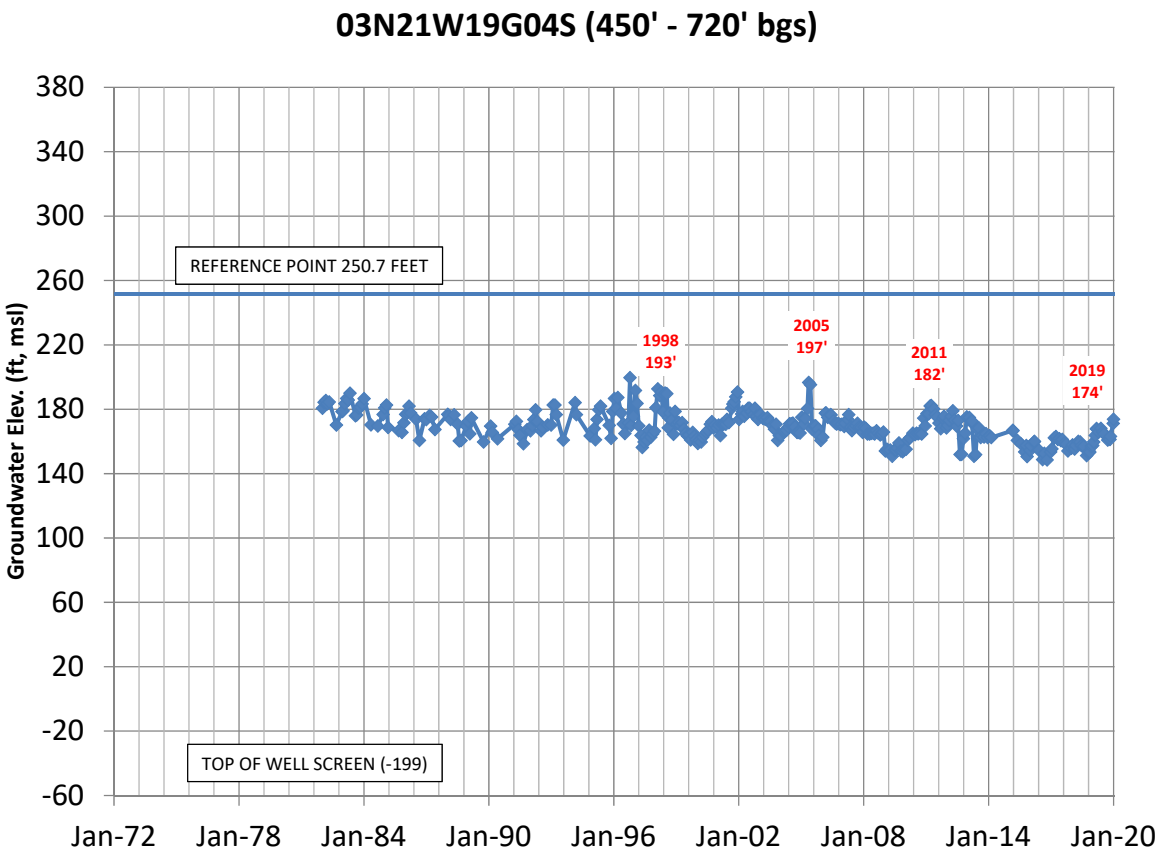

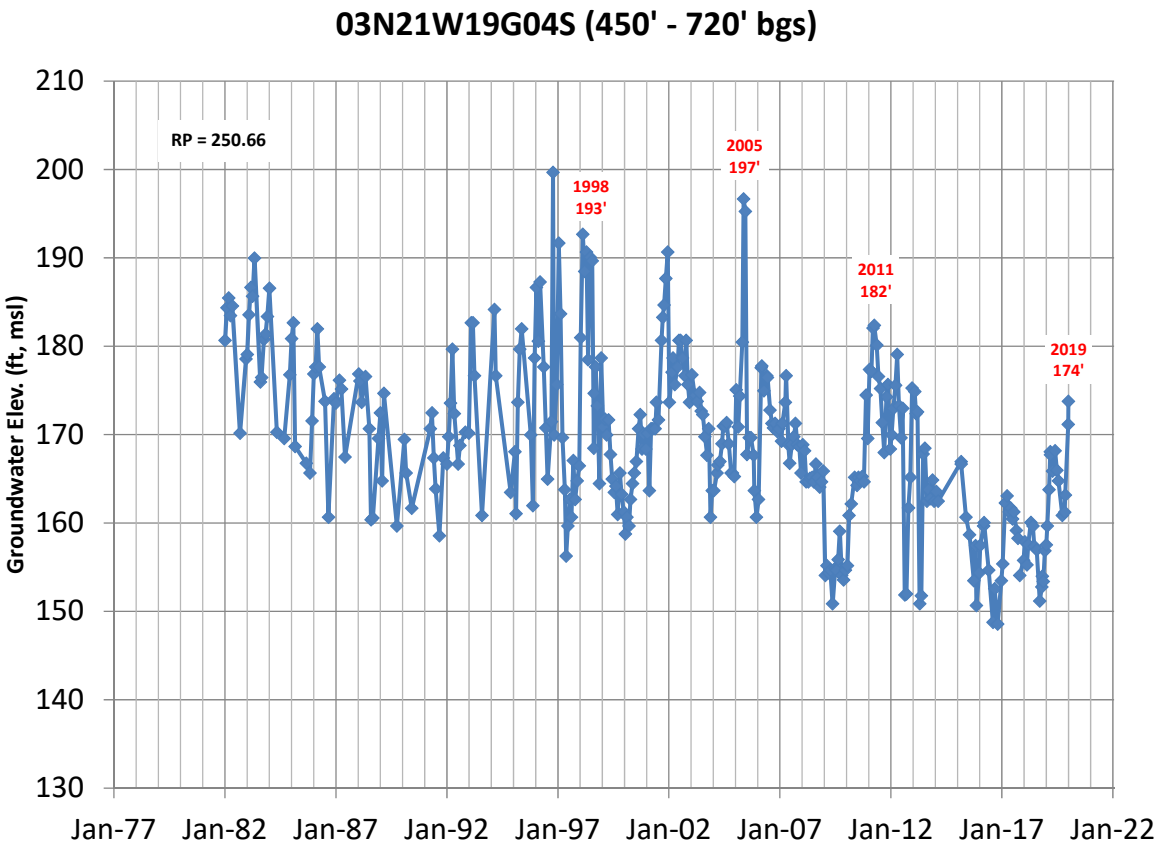

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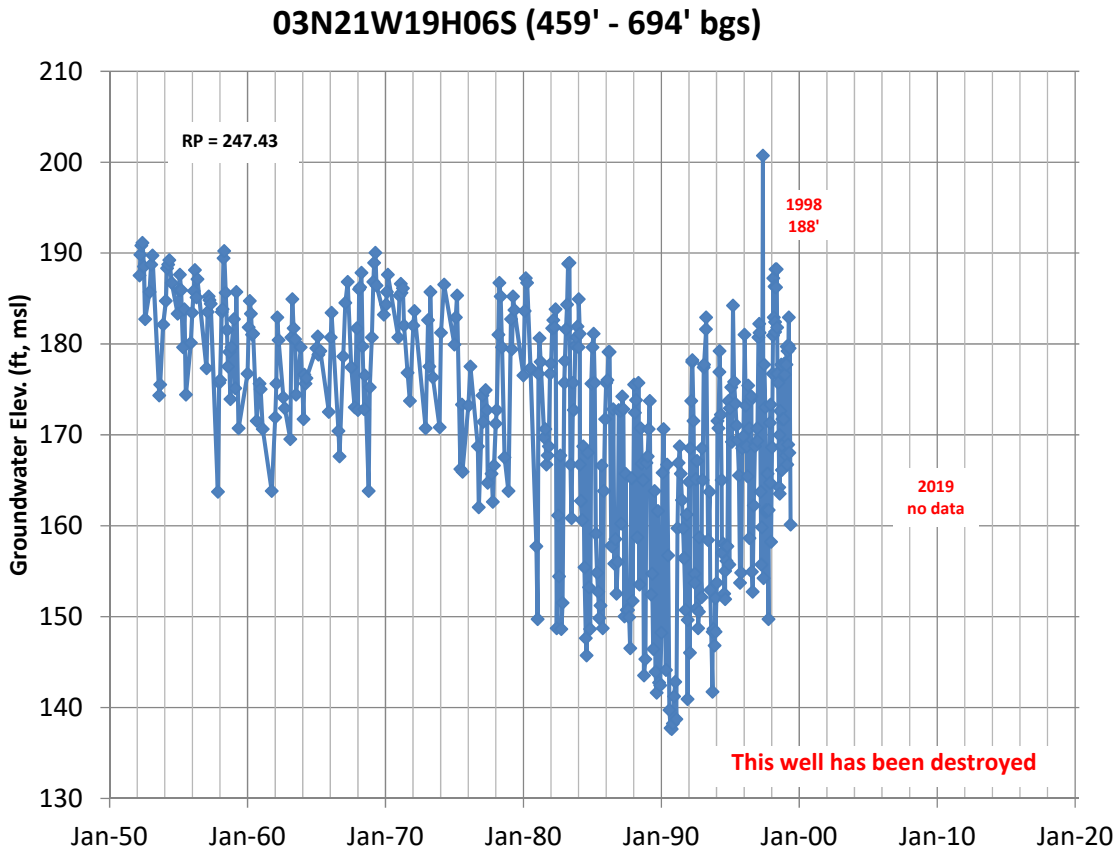

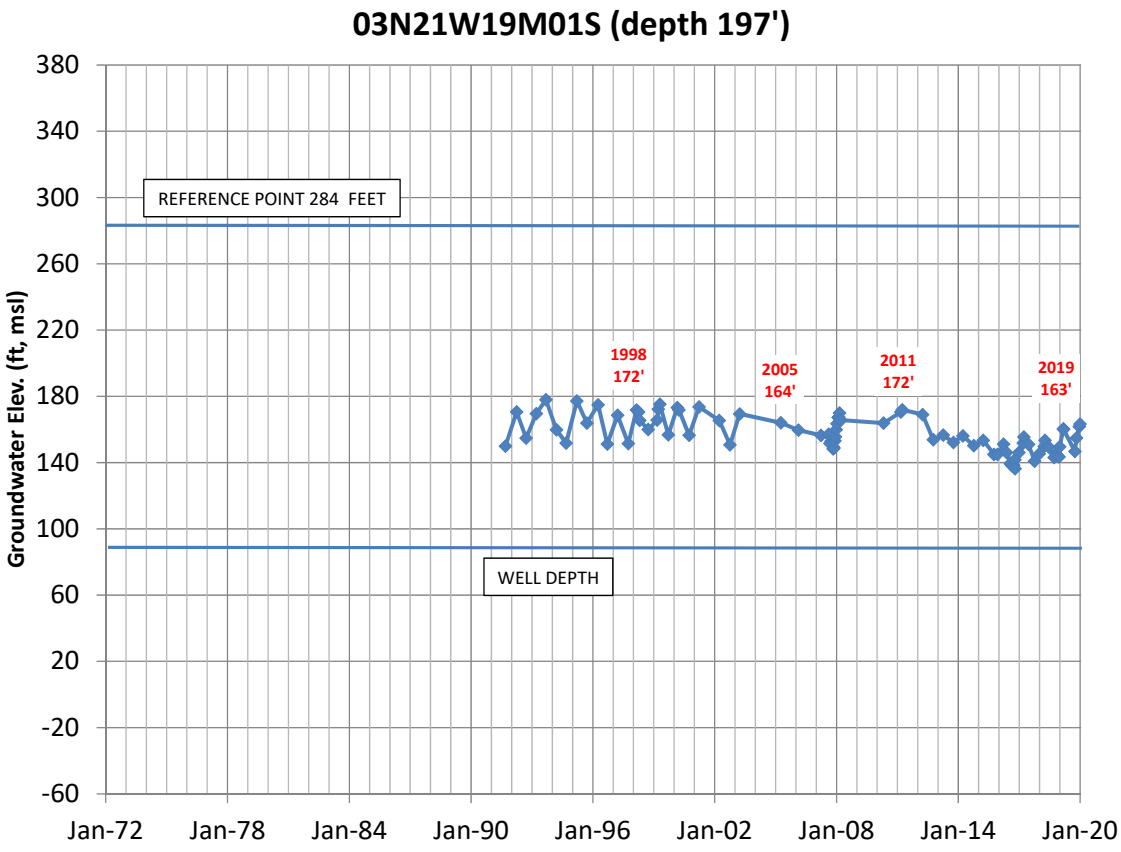

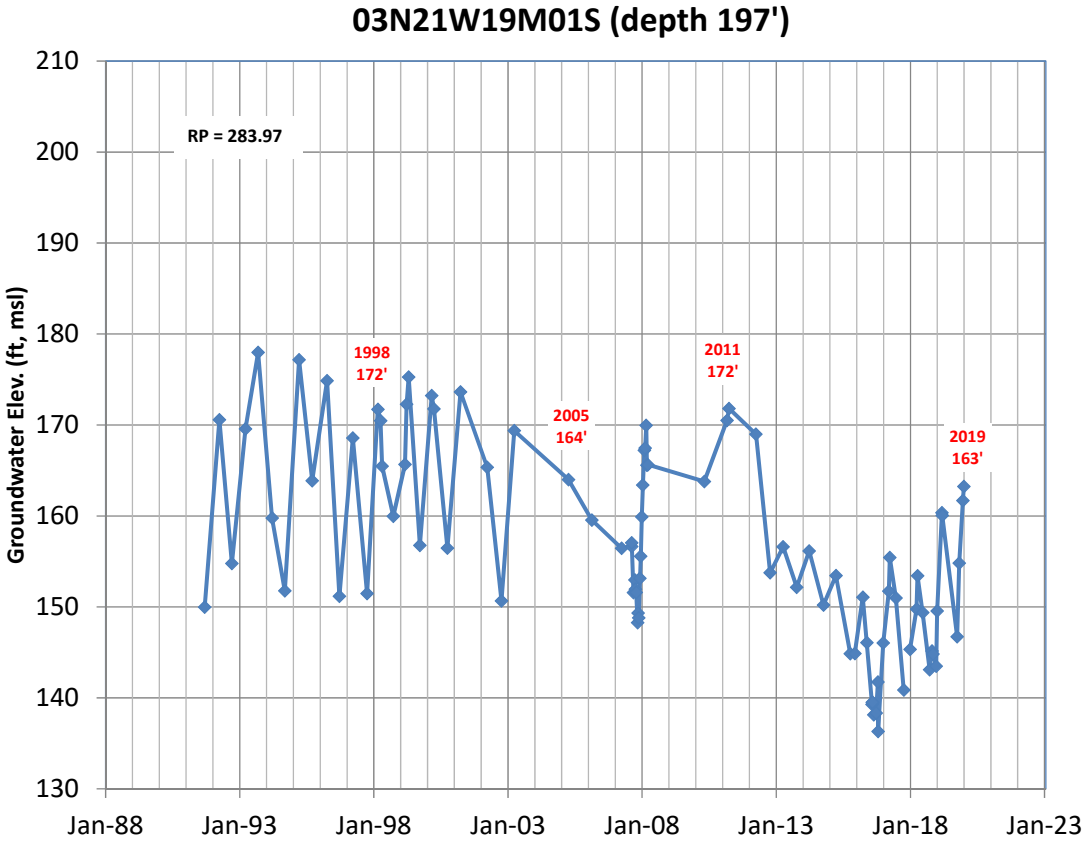

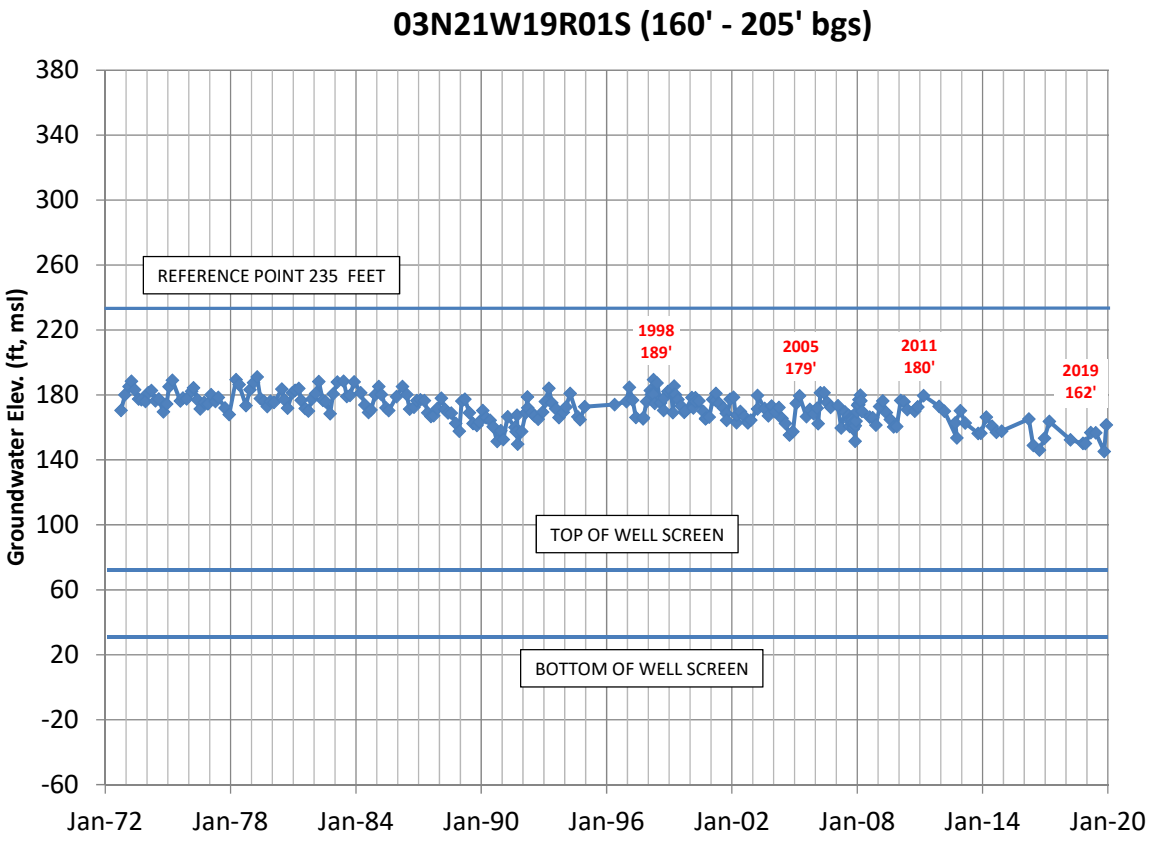

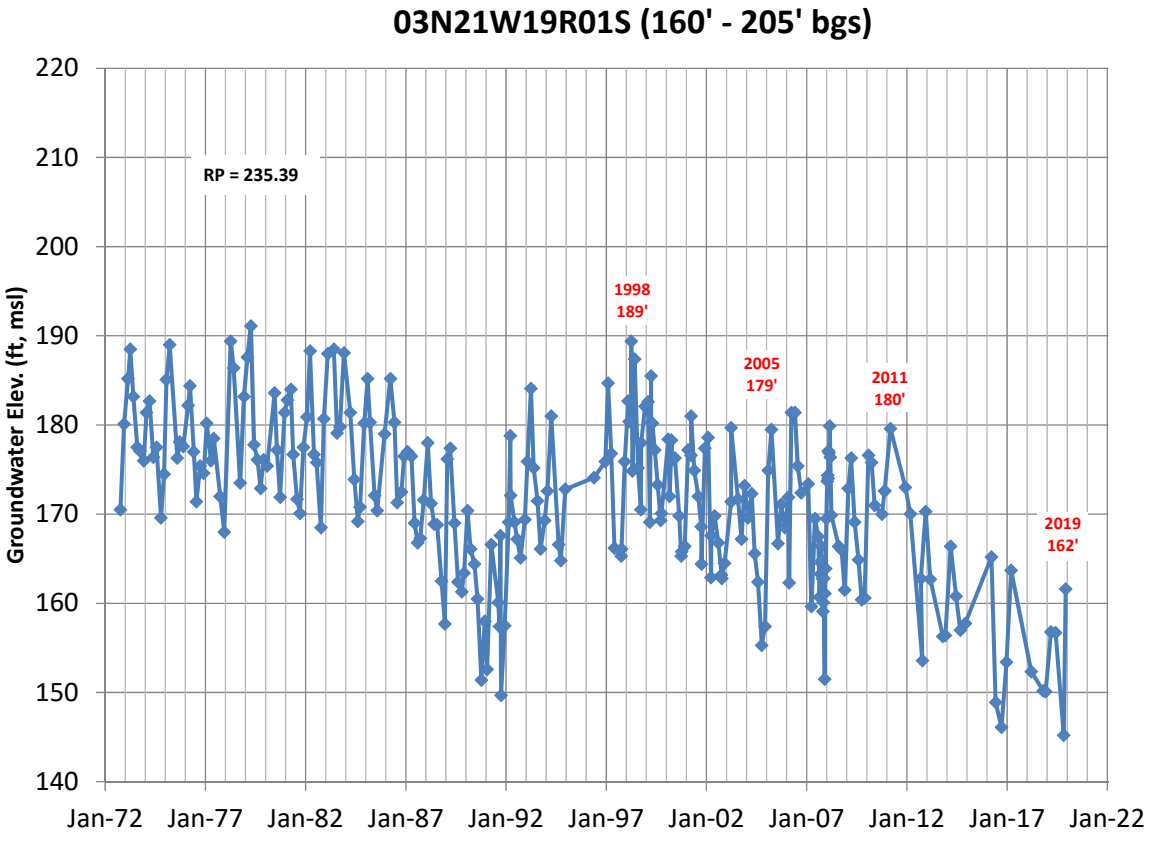

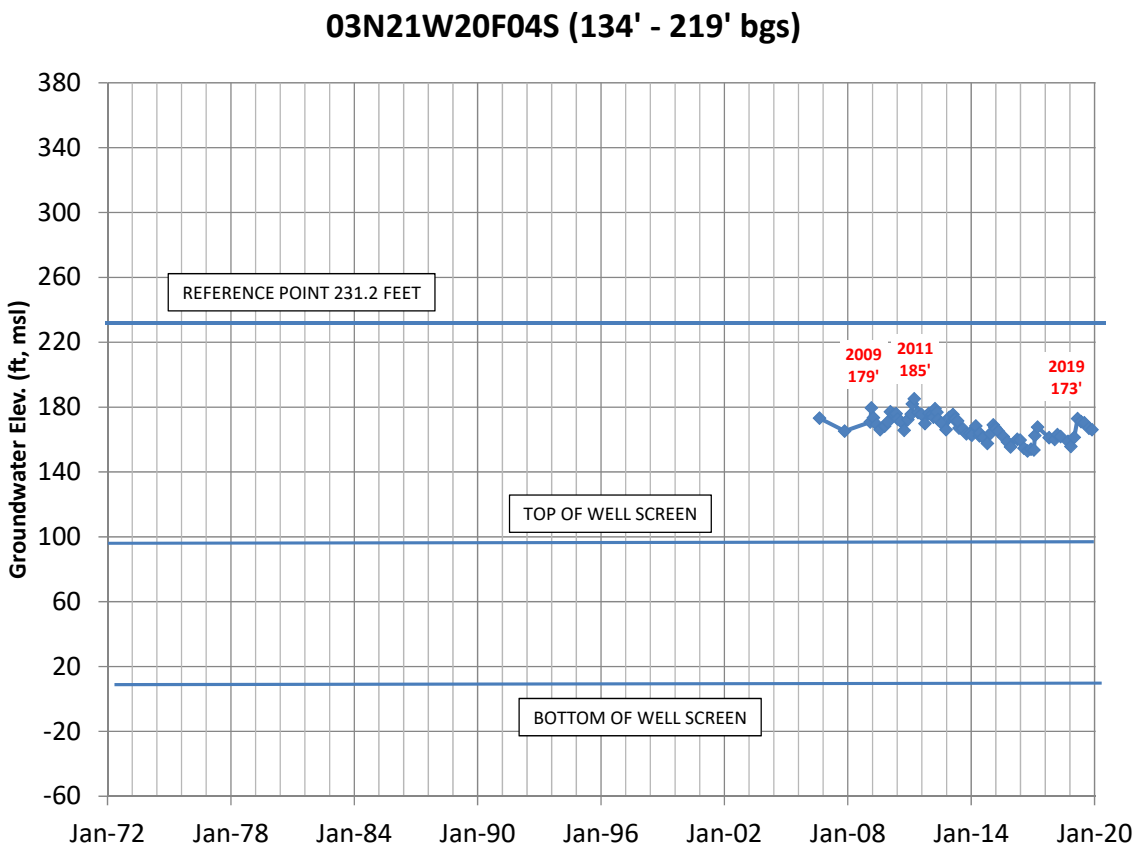

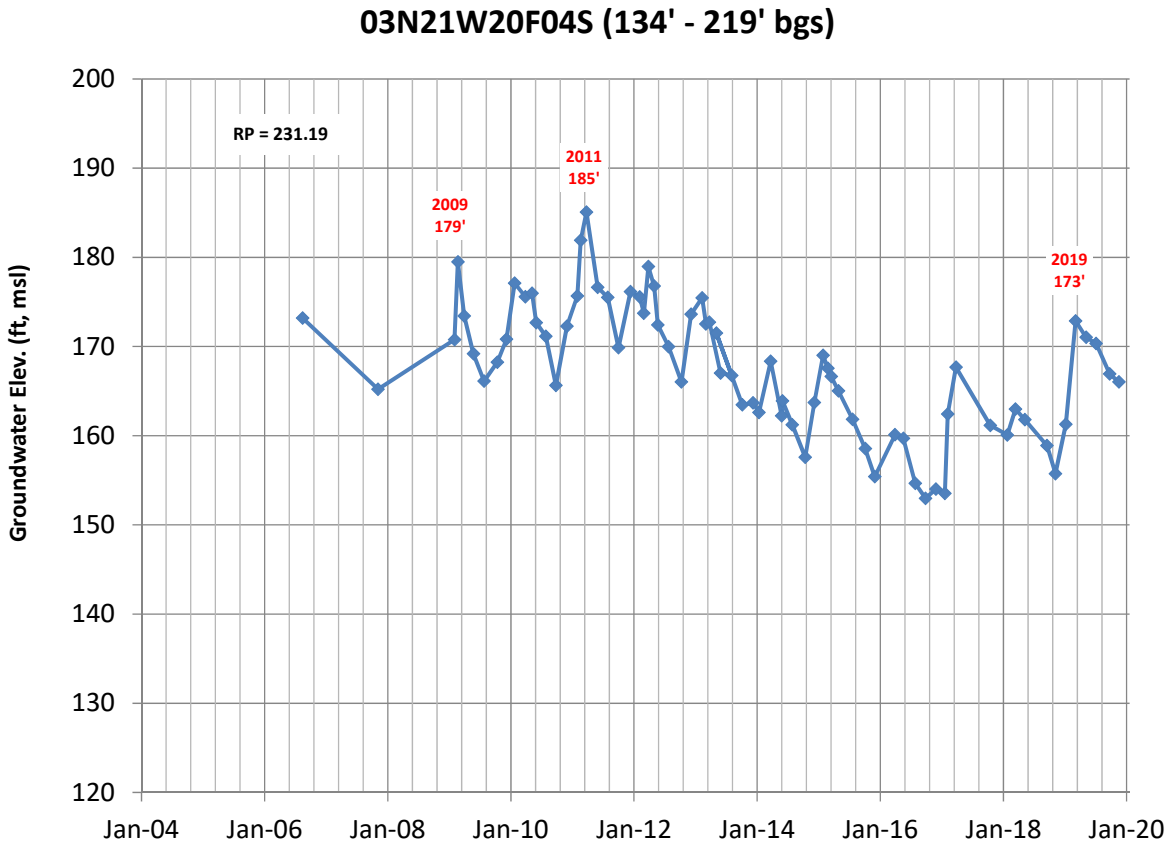

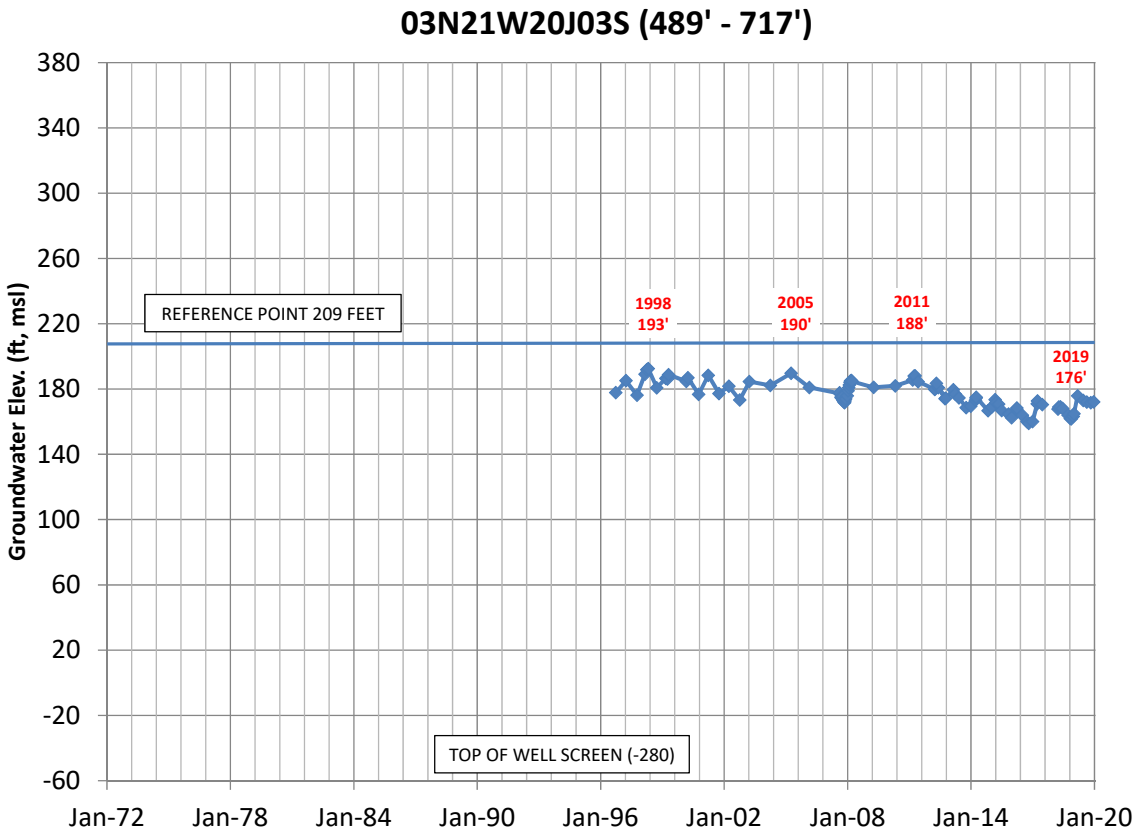

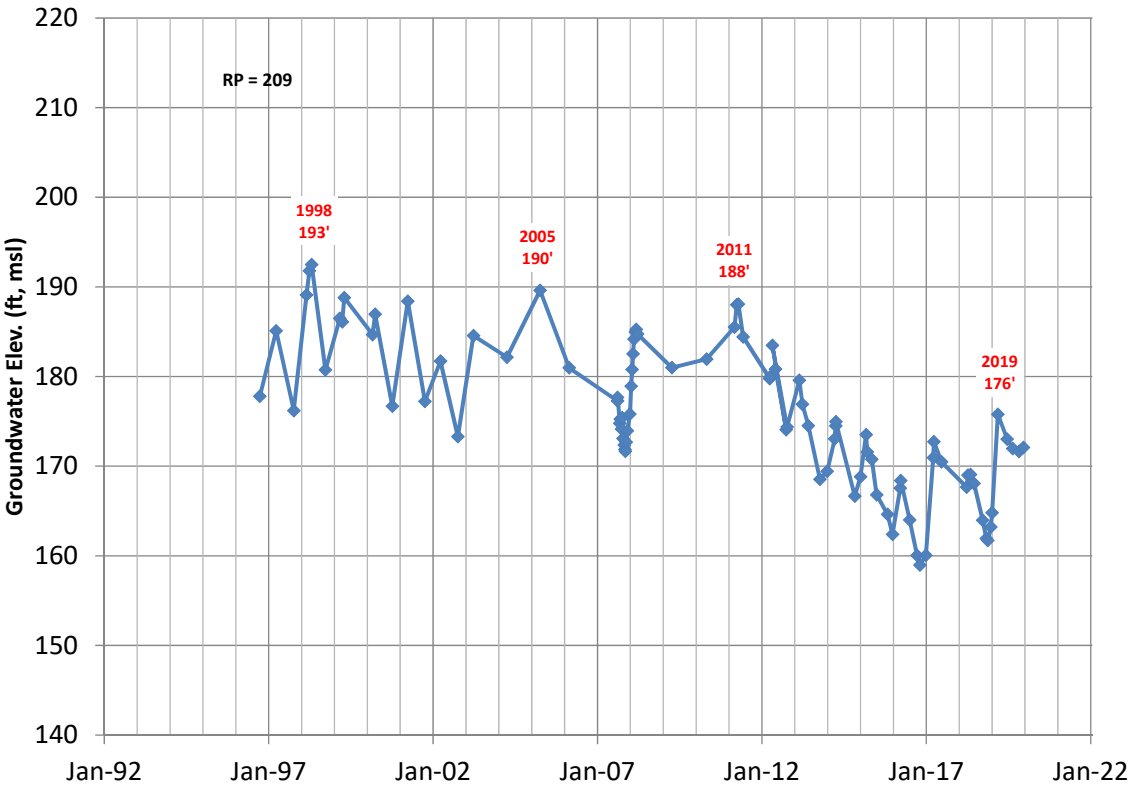

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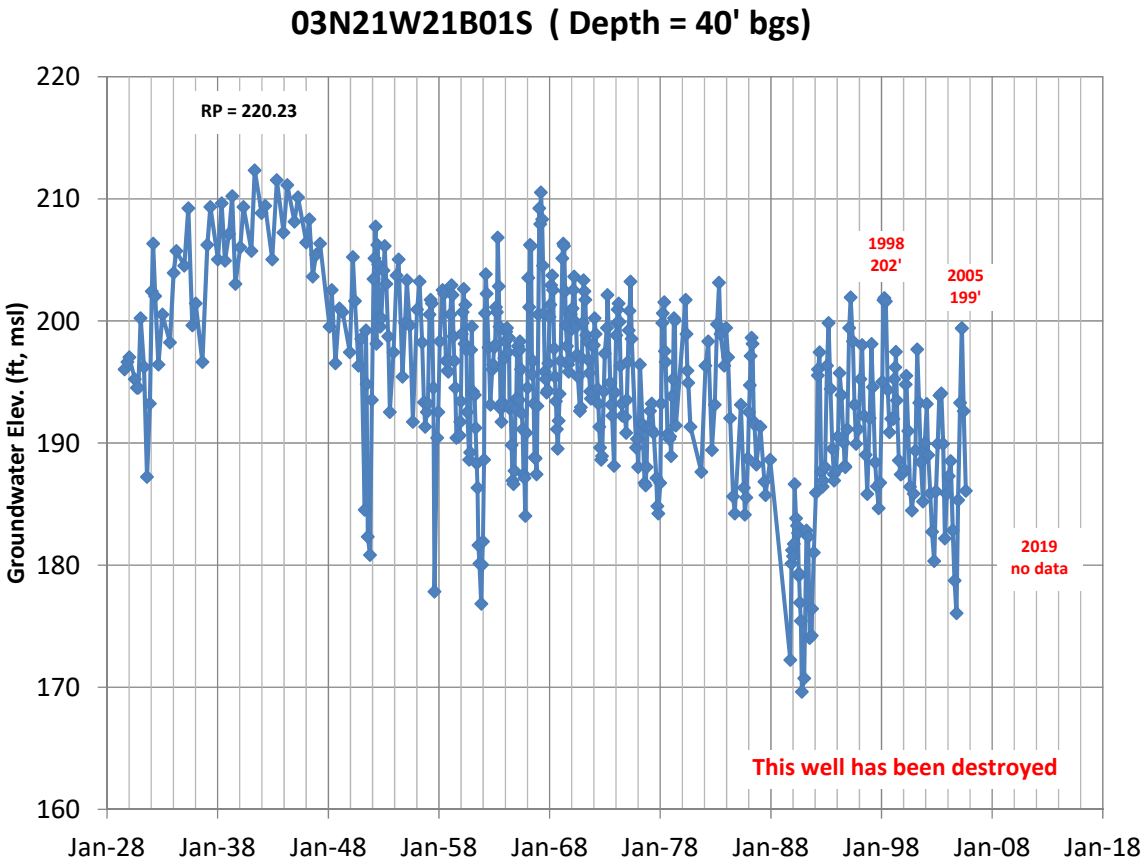

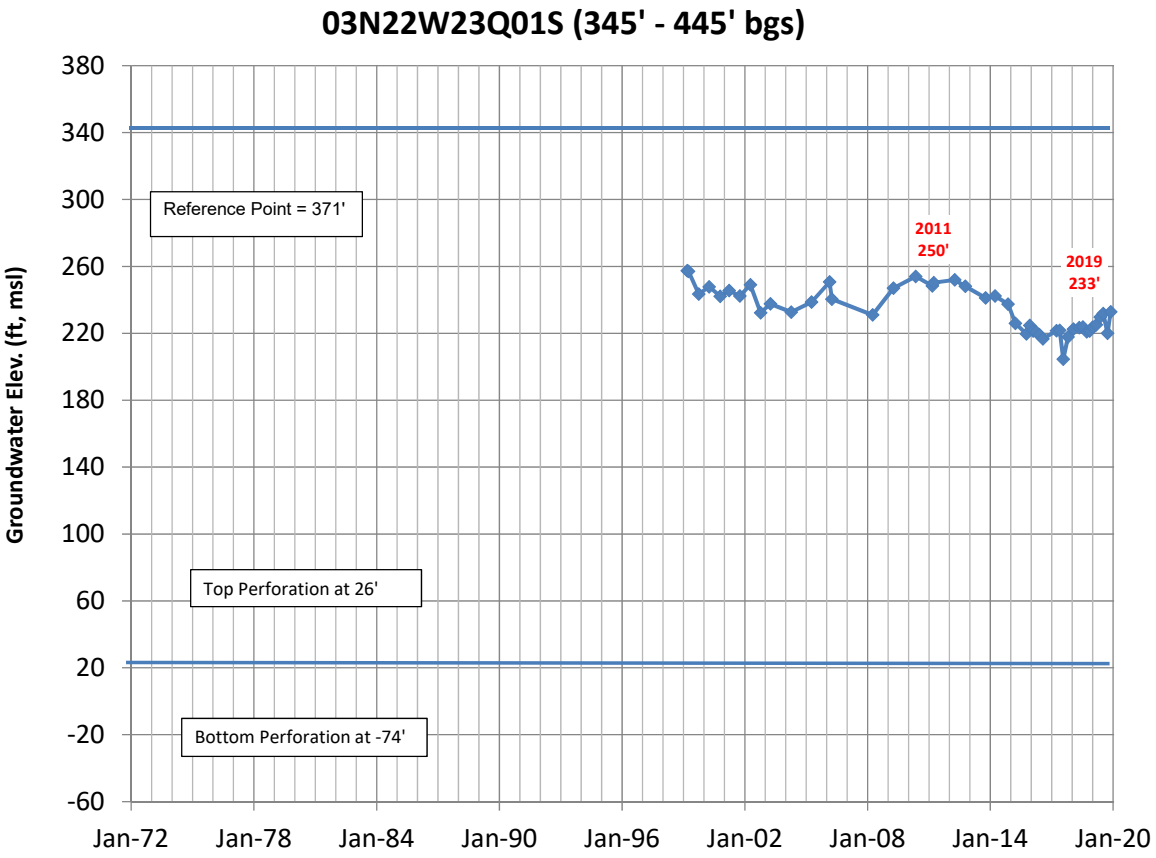

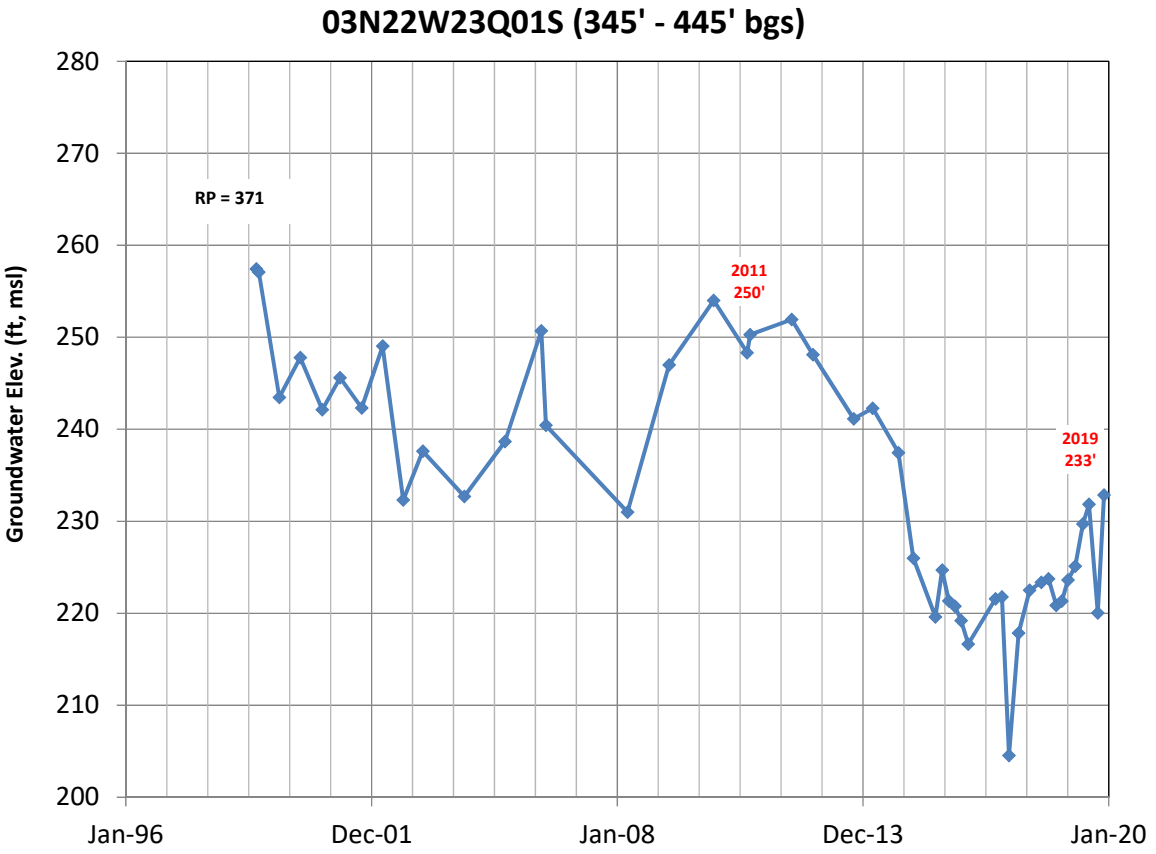

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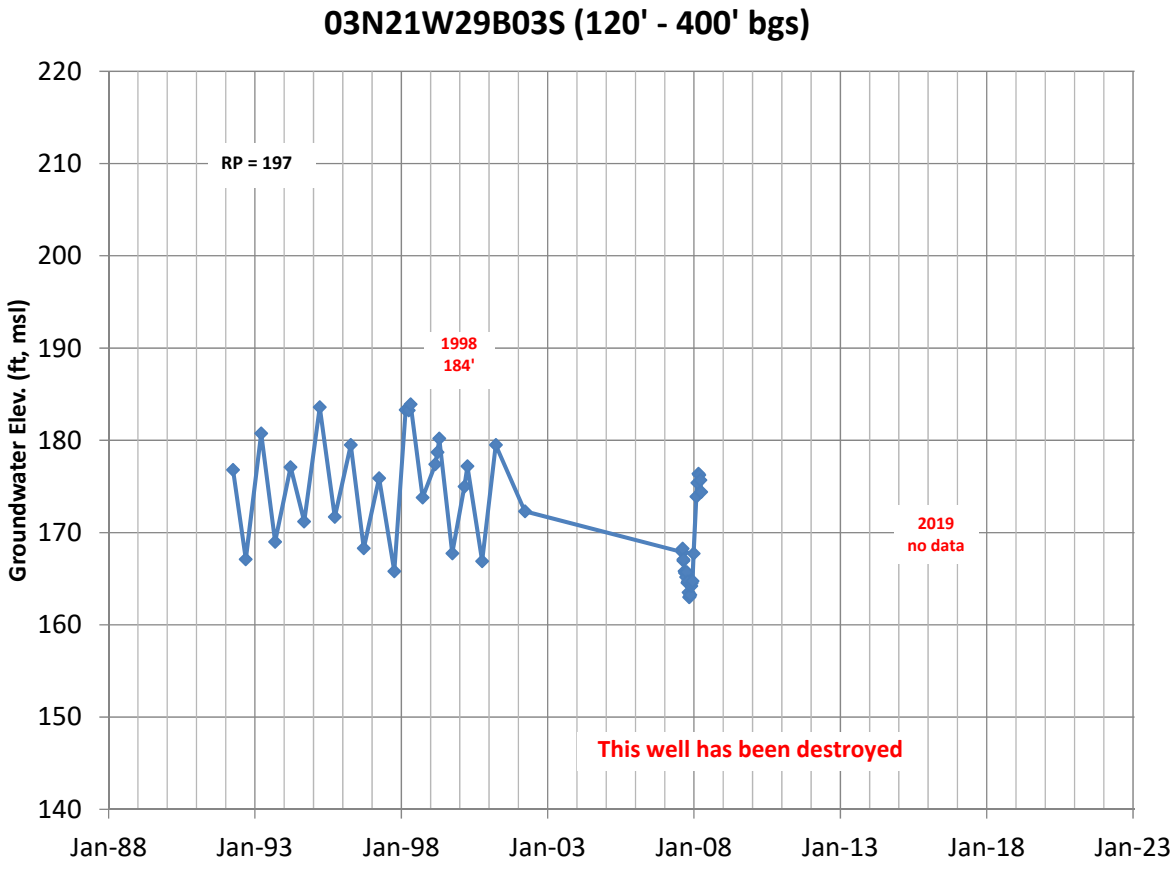

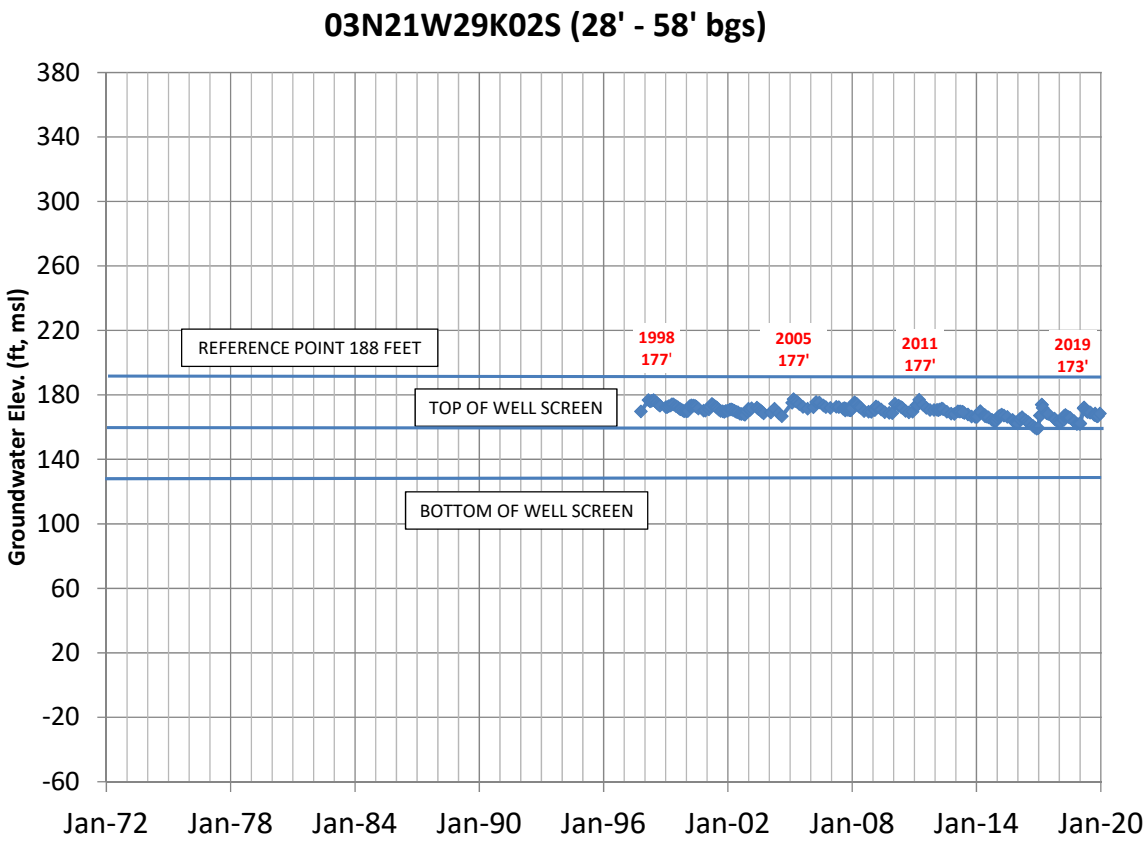

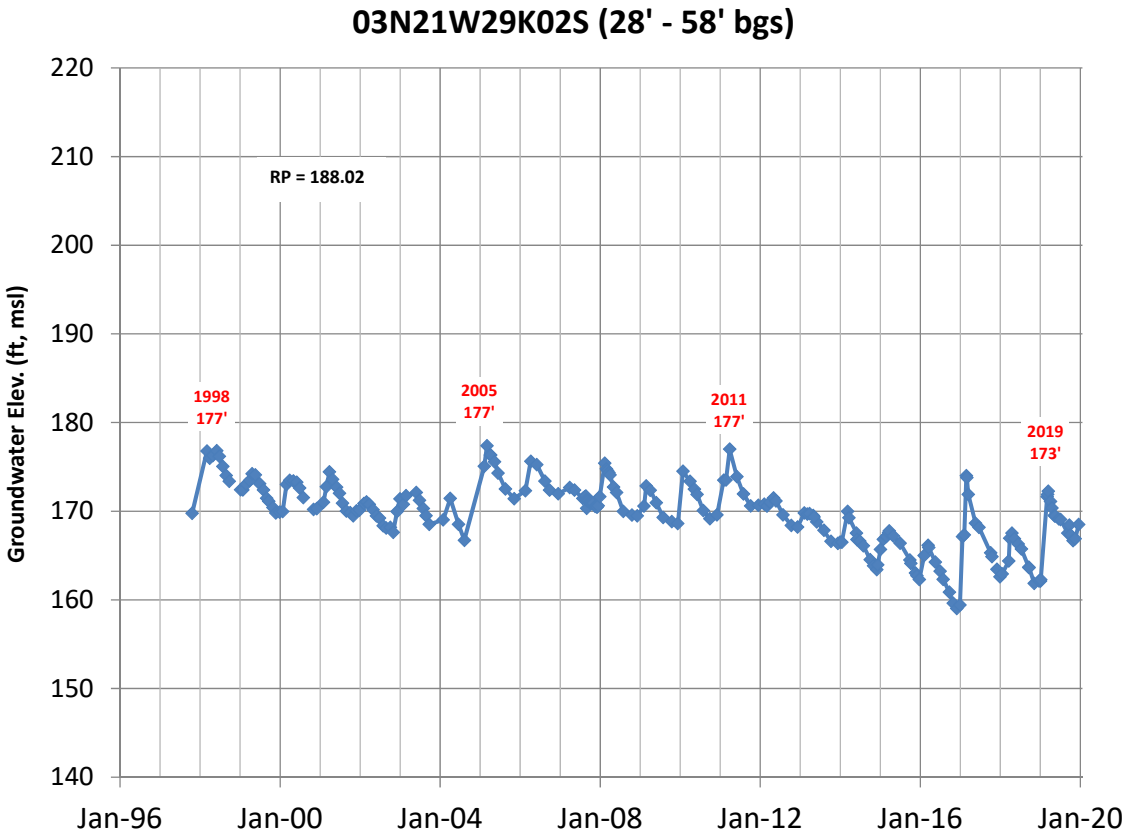

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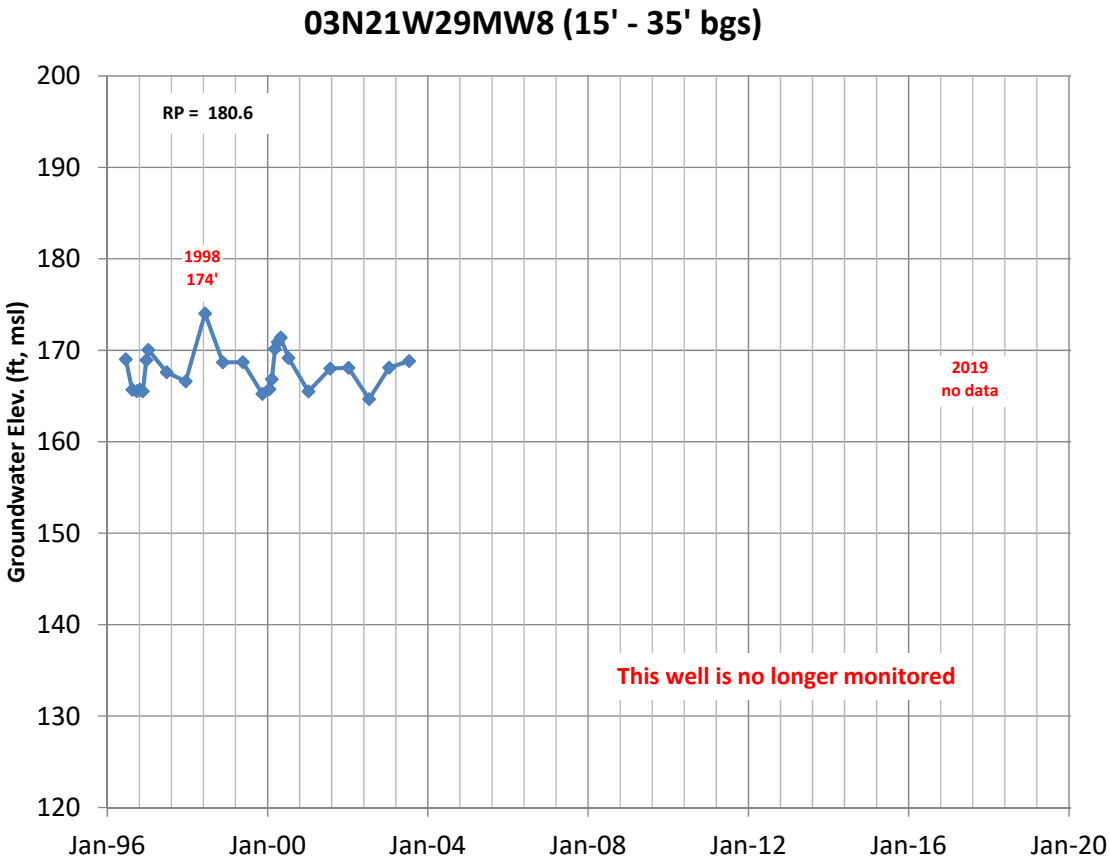

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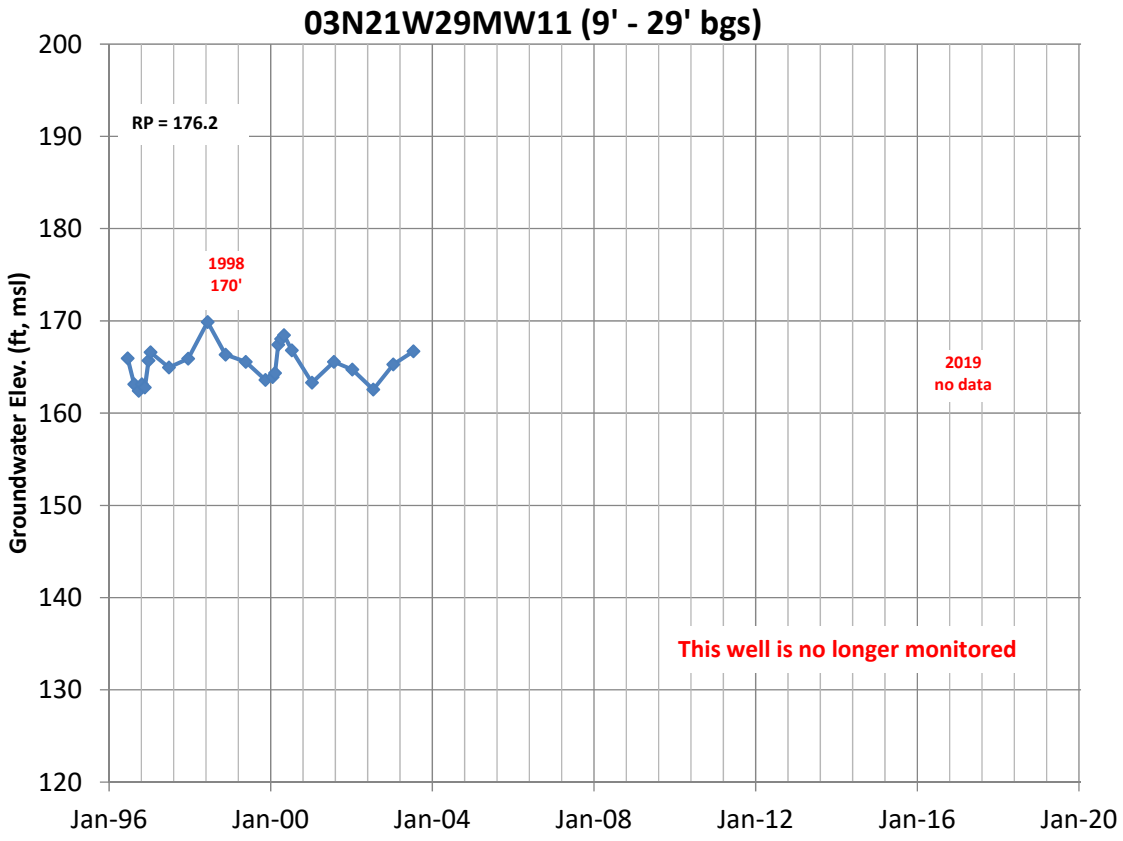

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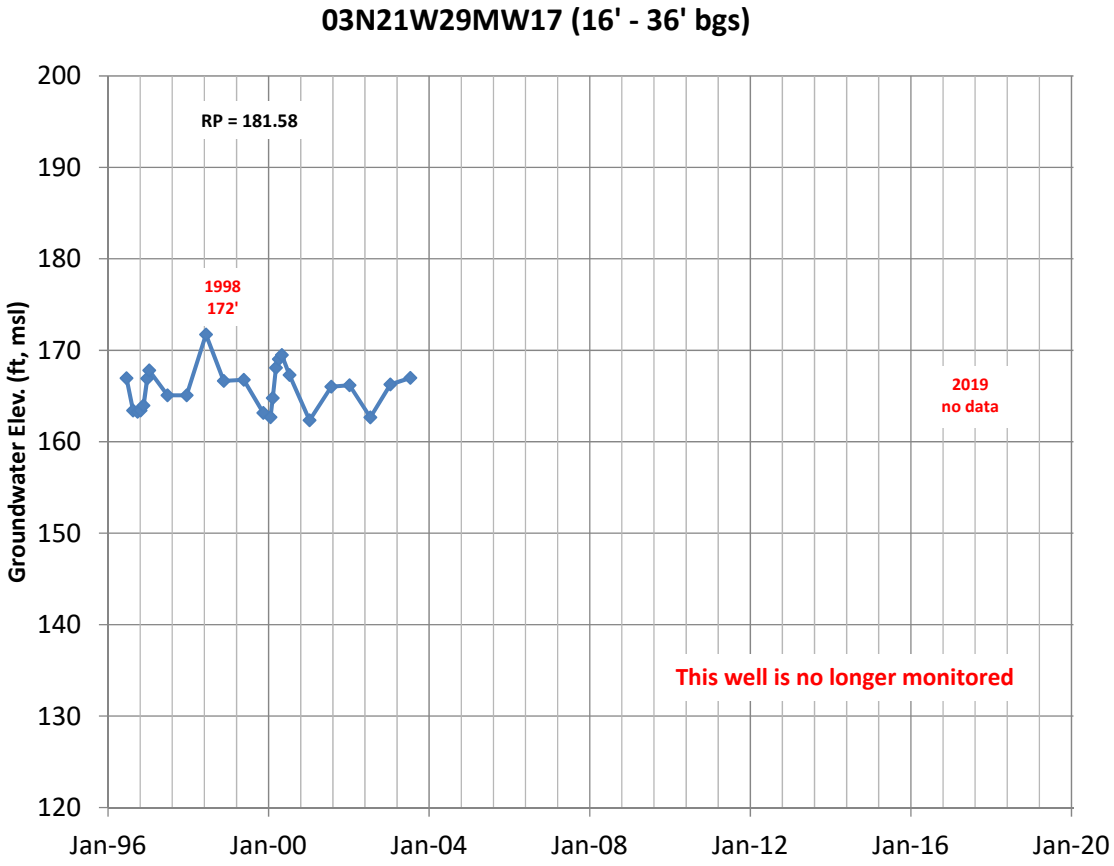

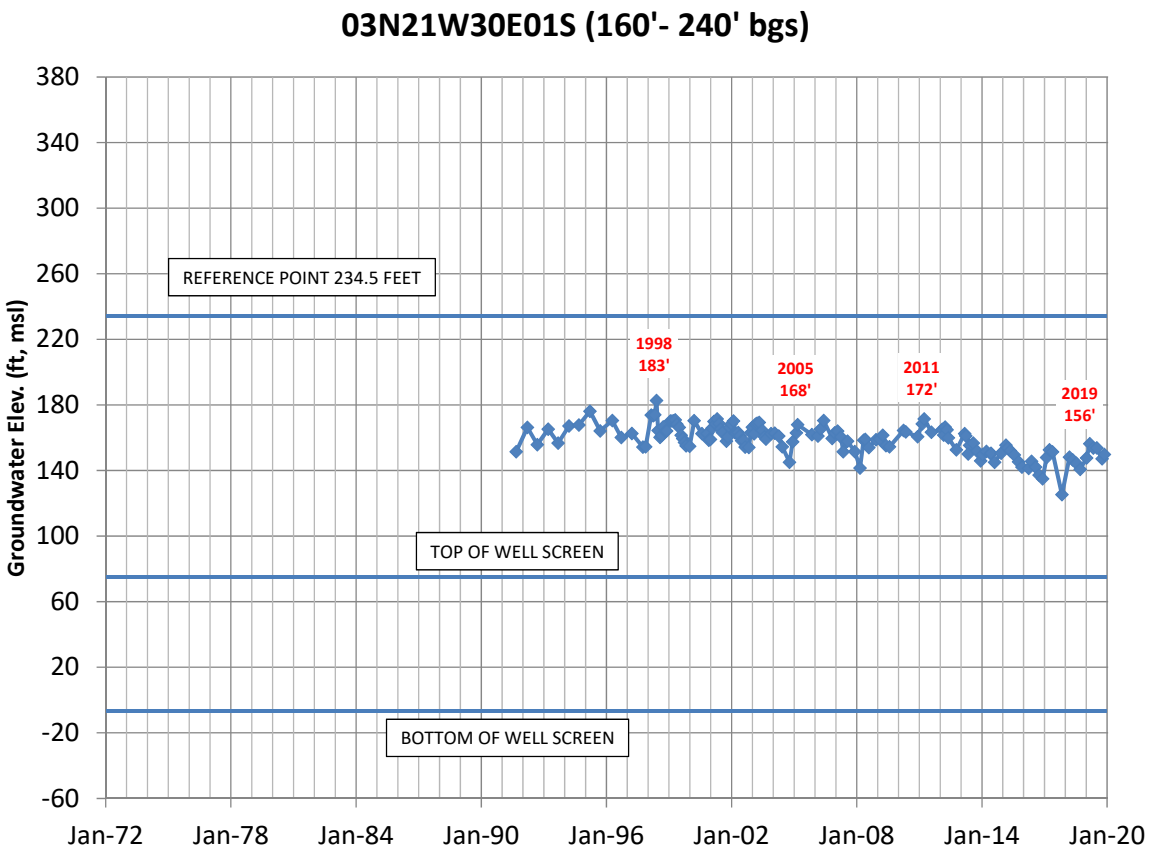

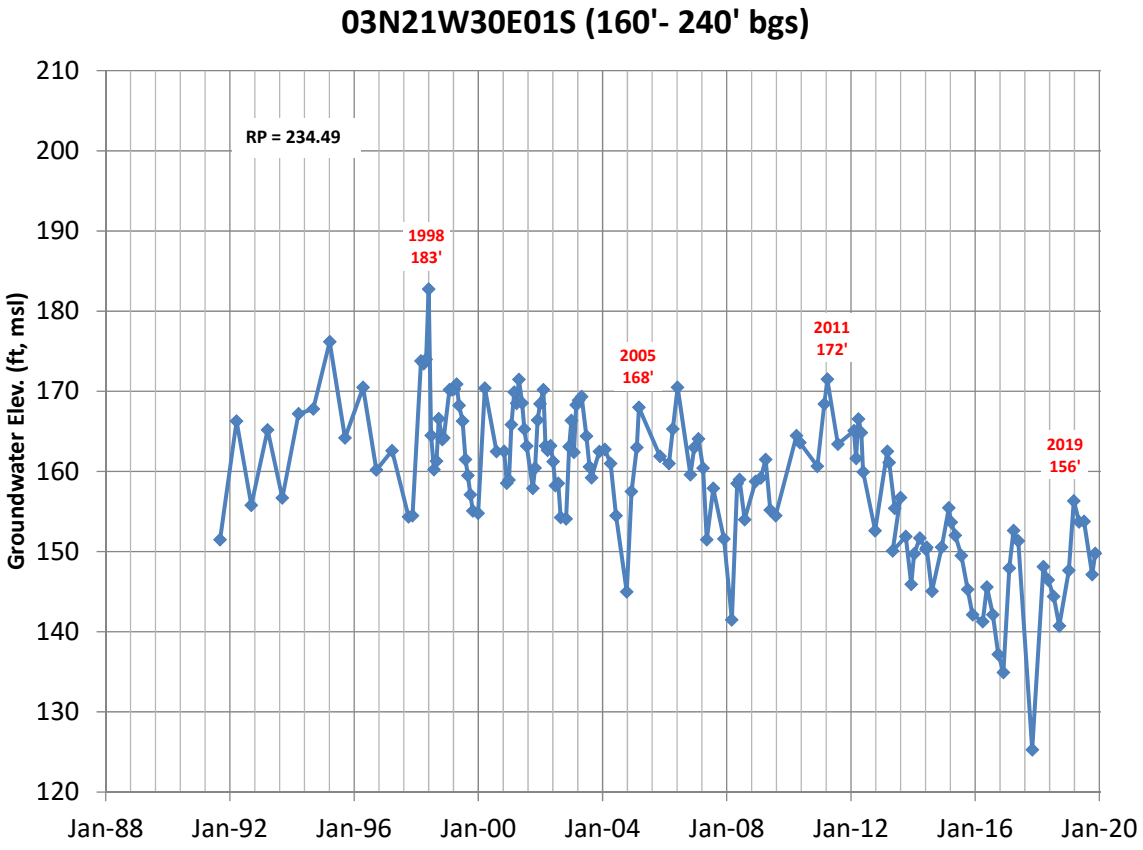

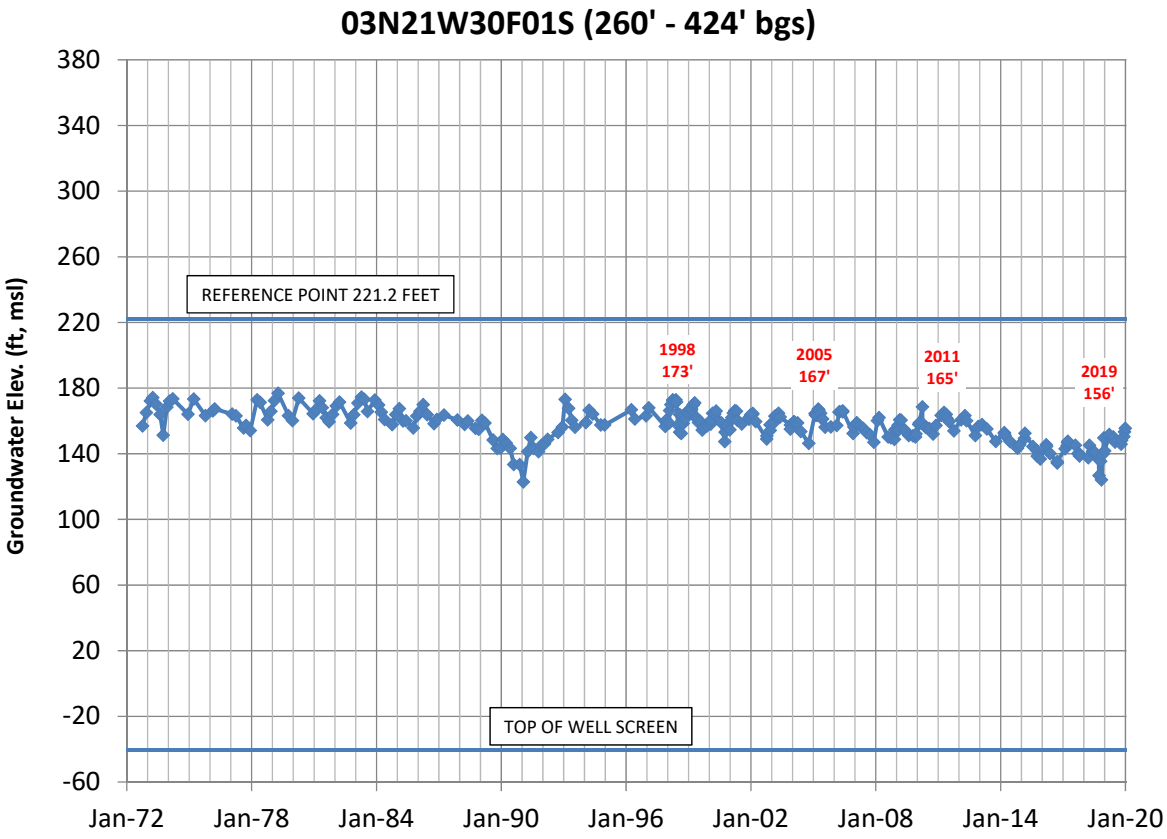

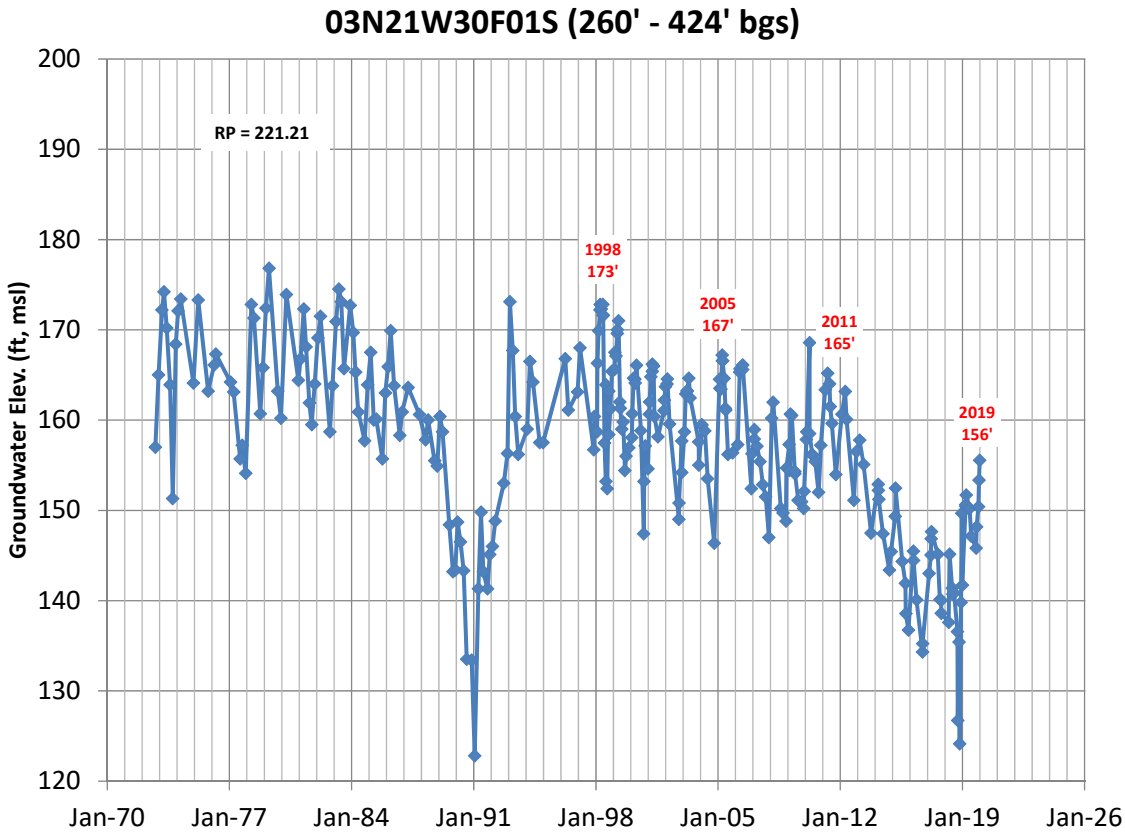

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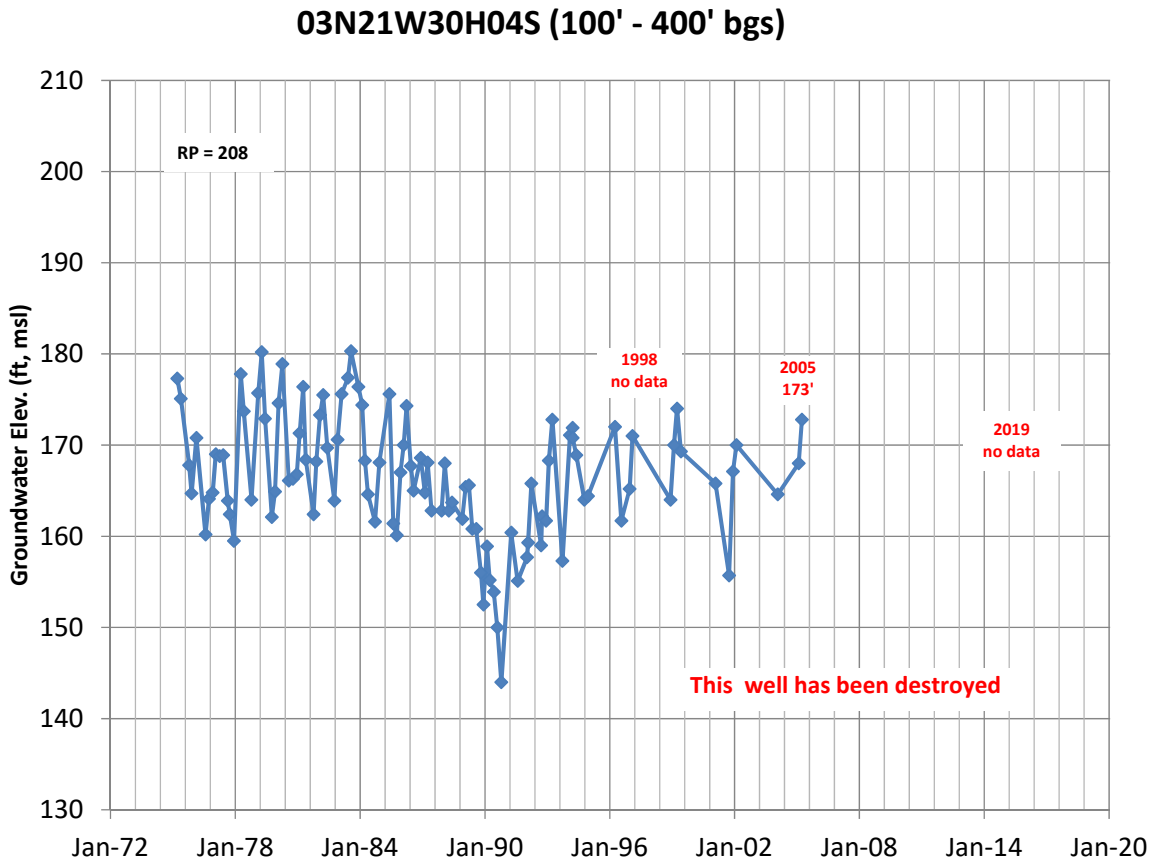

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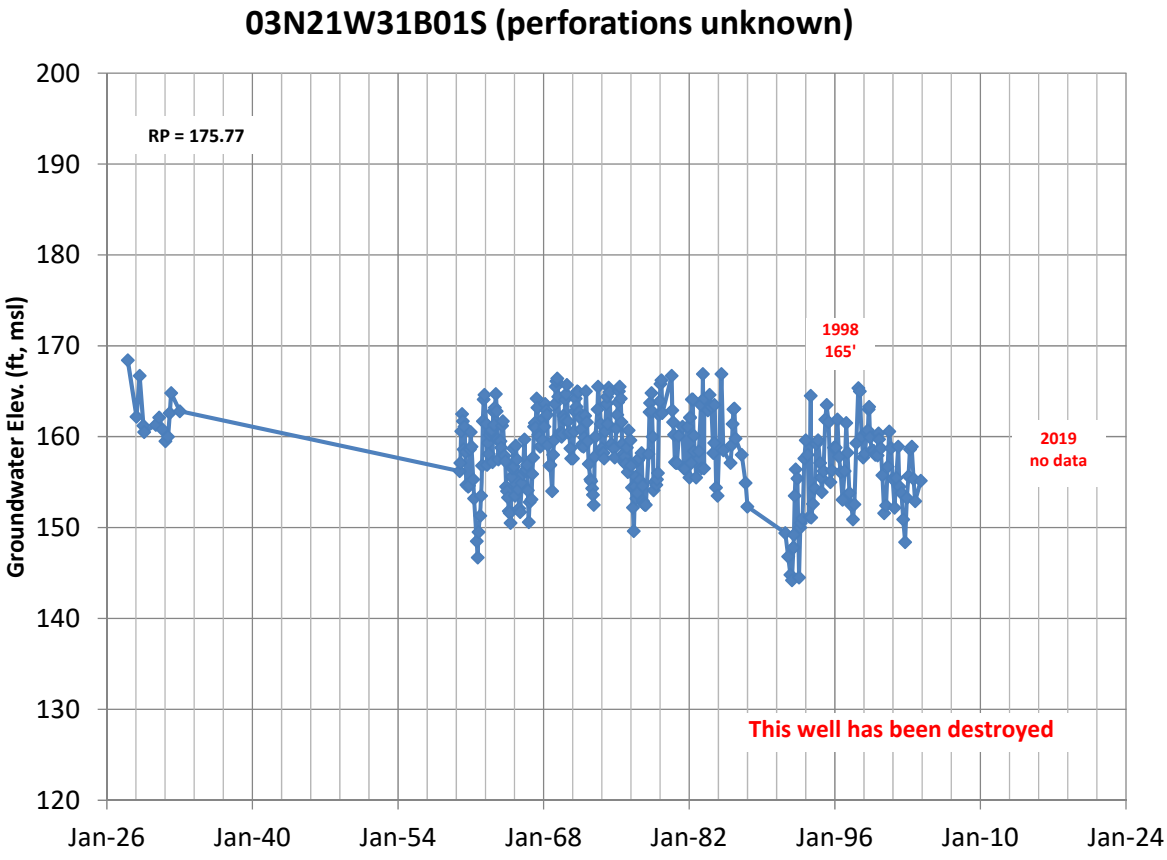
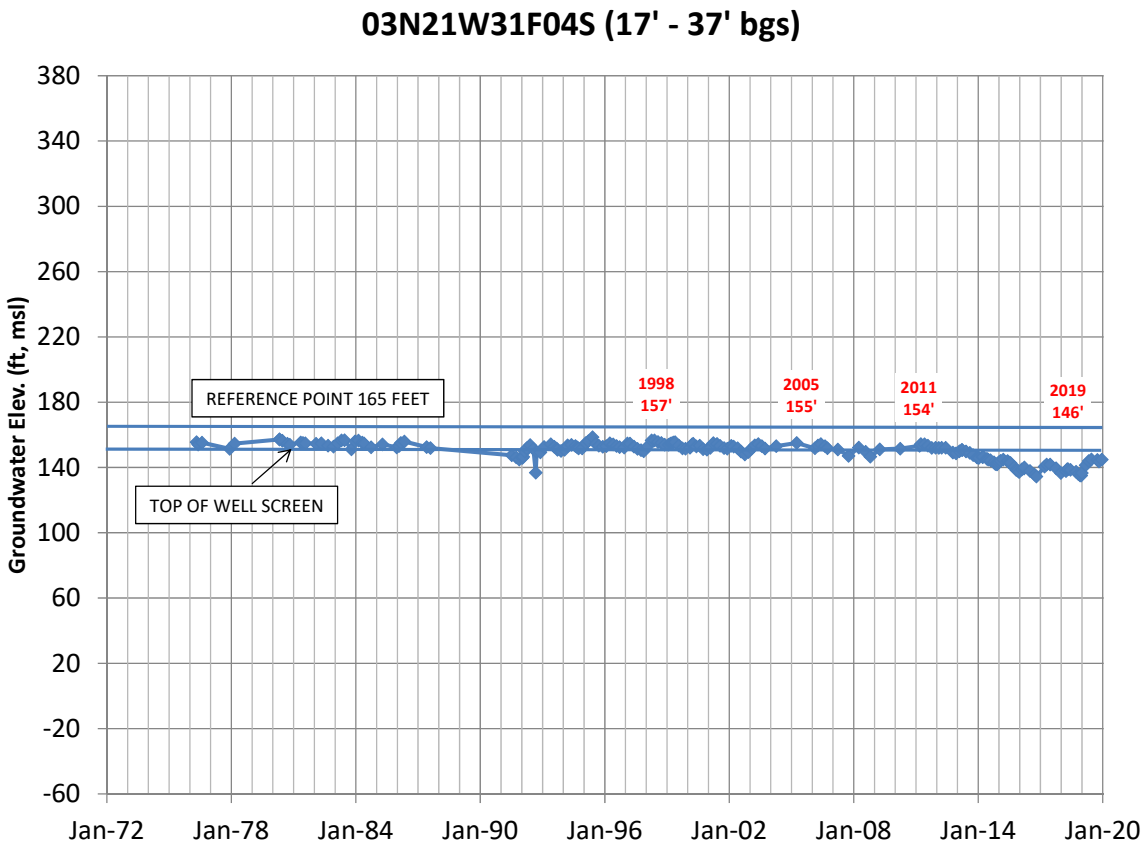
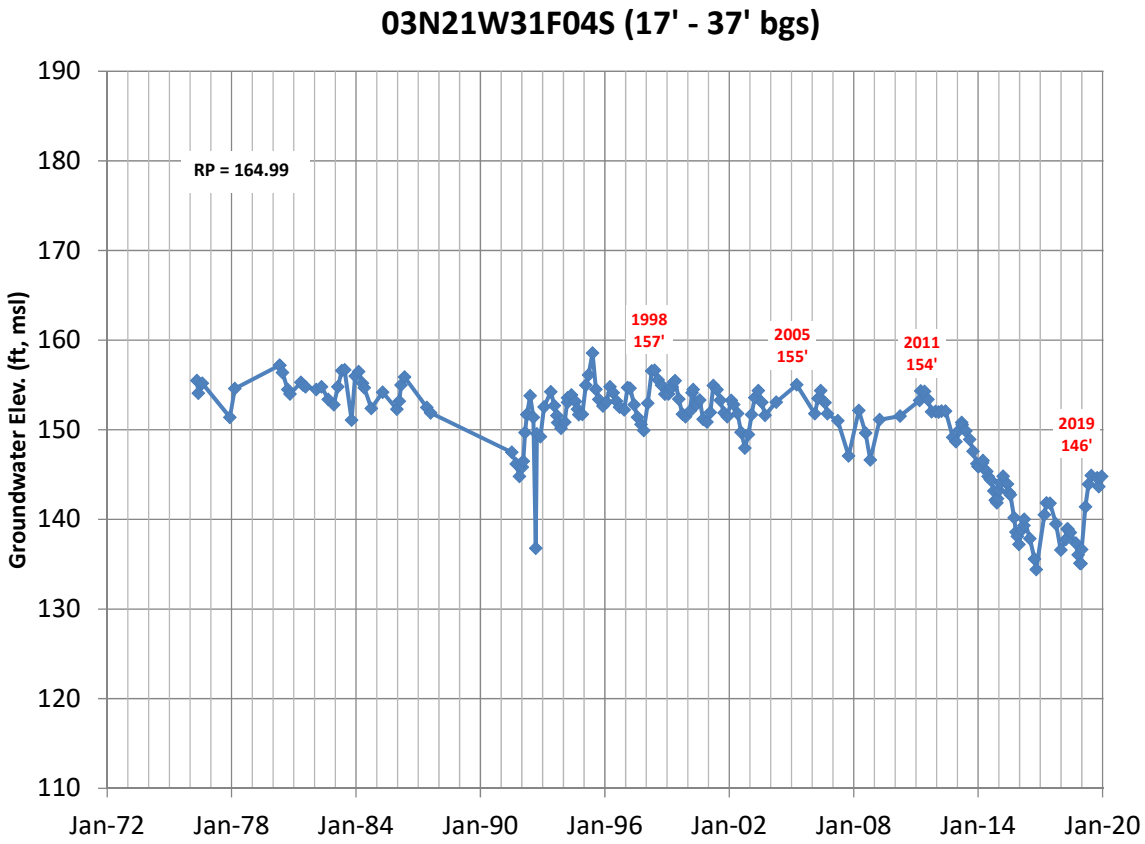
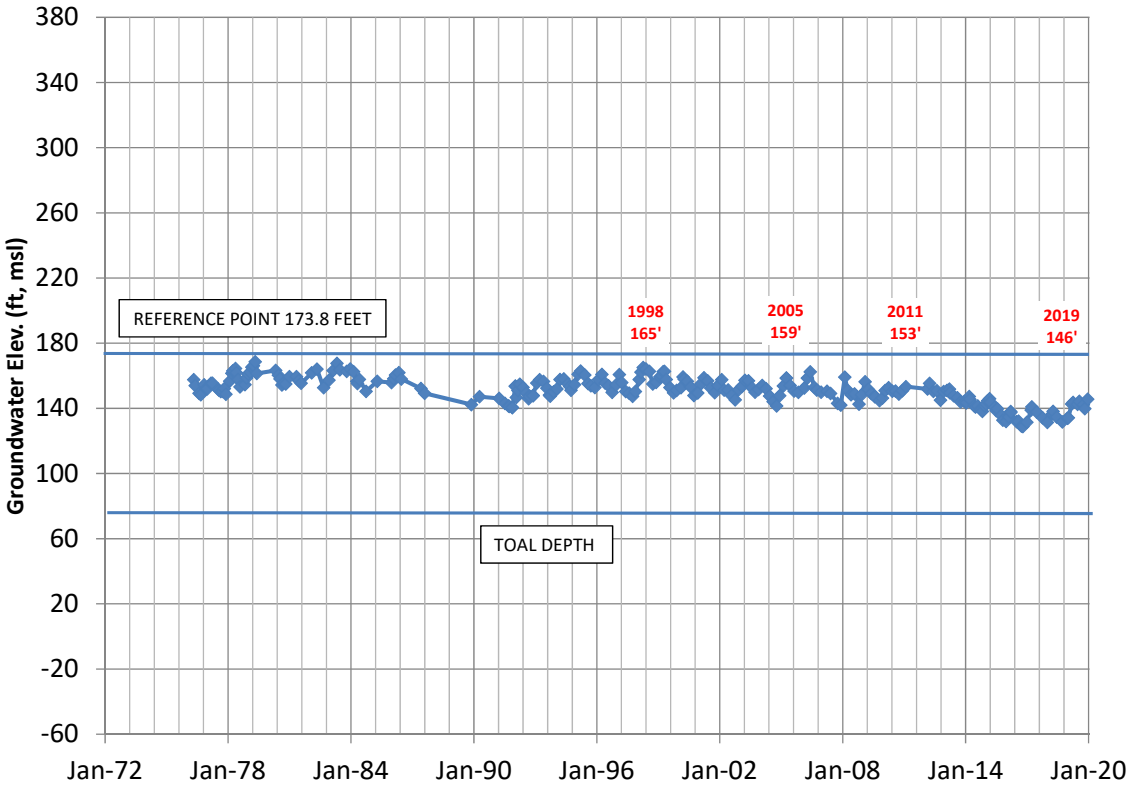


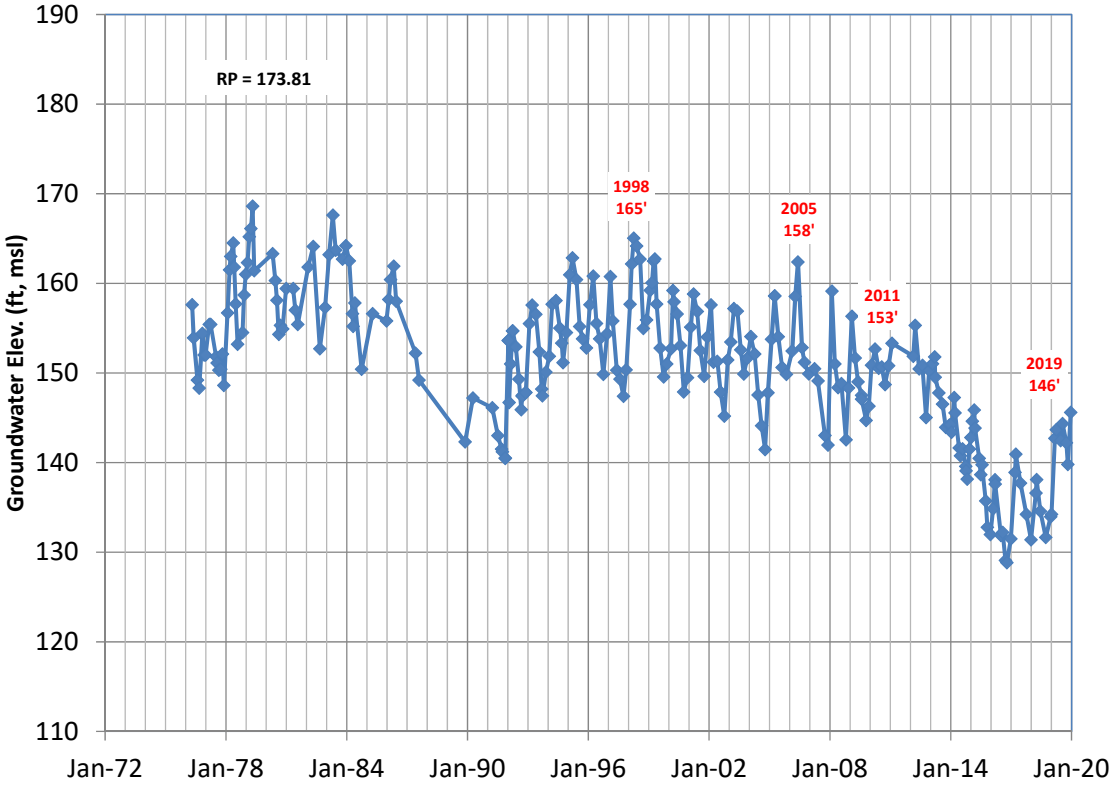


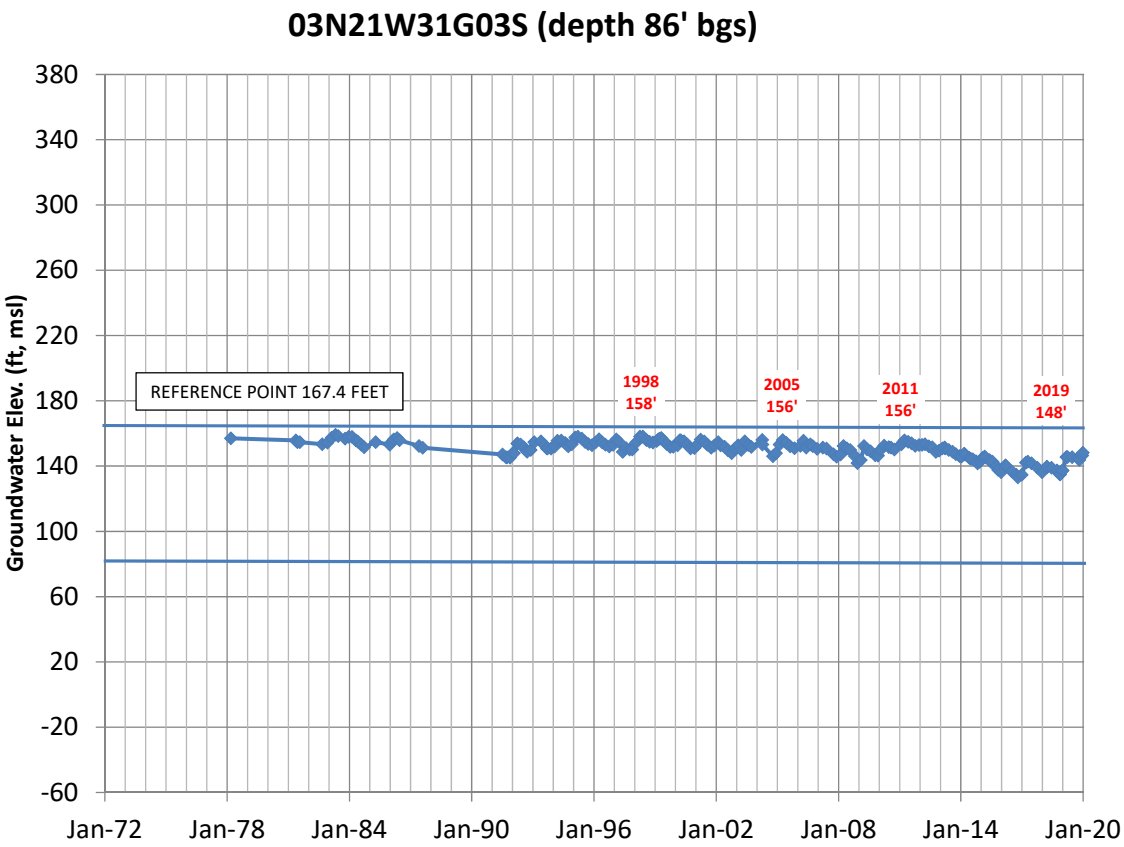


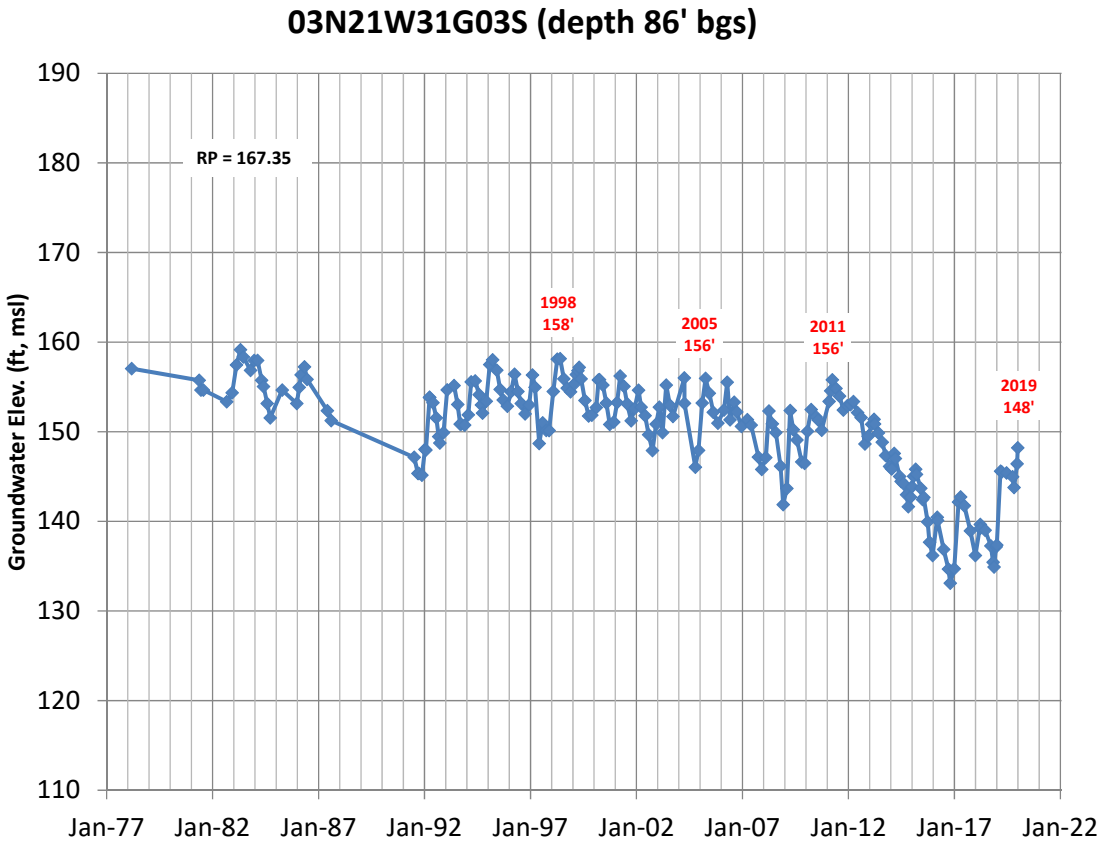
03N21W31F05S (depth 102' bgs)

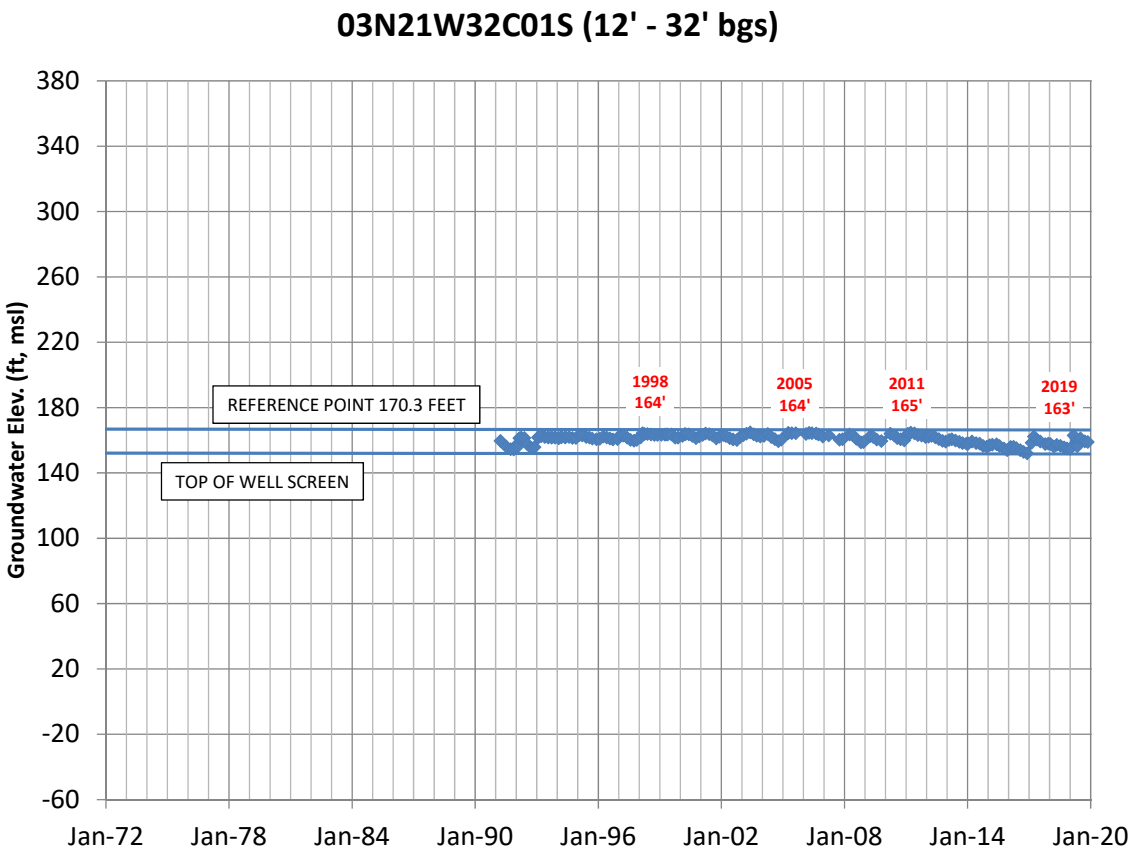


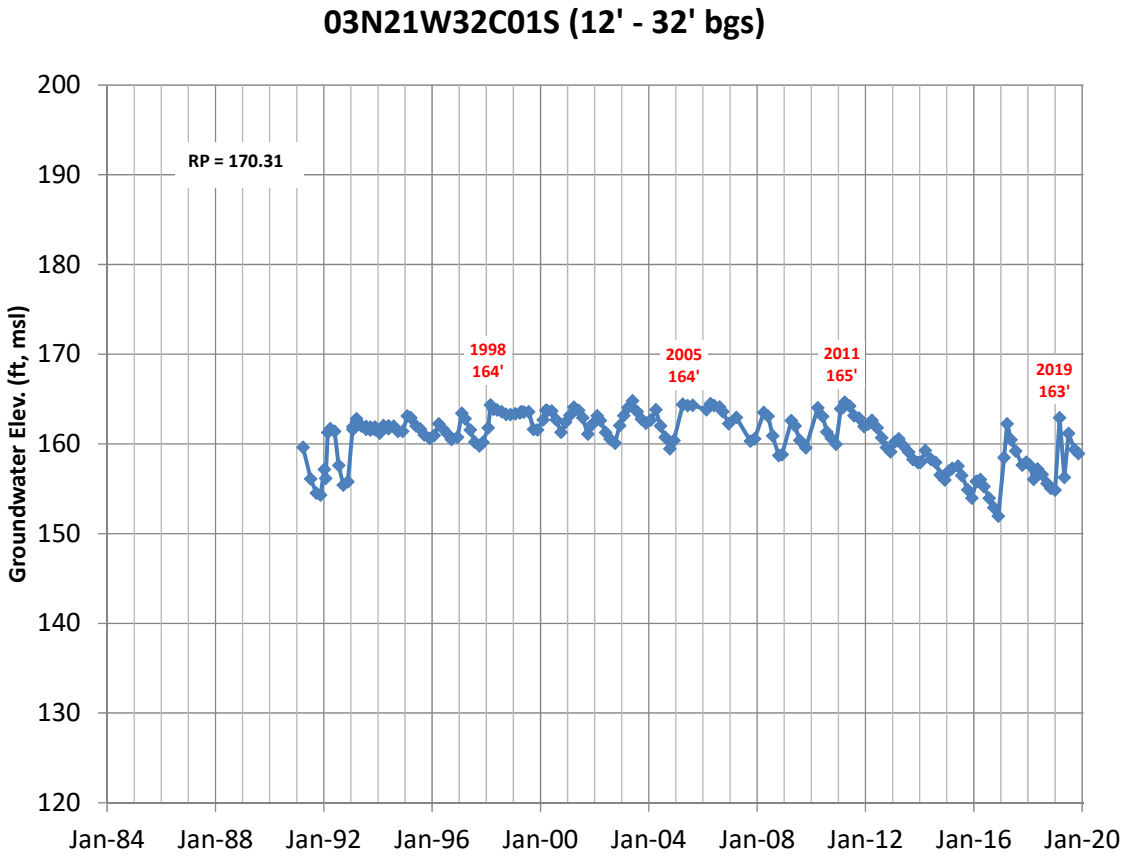
03N21W31F05S (92'- 102' bgs)











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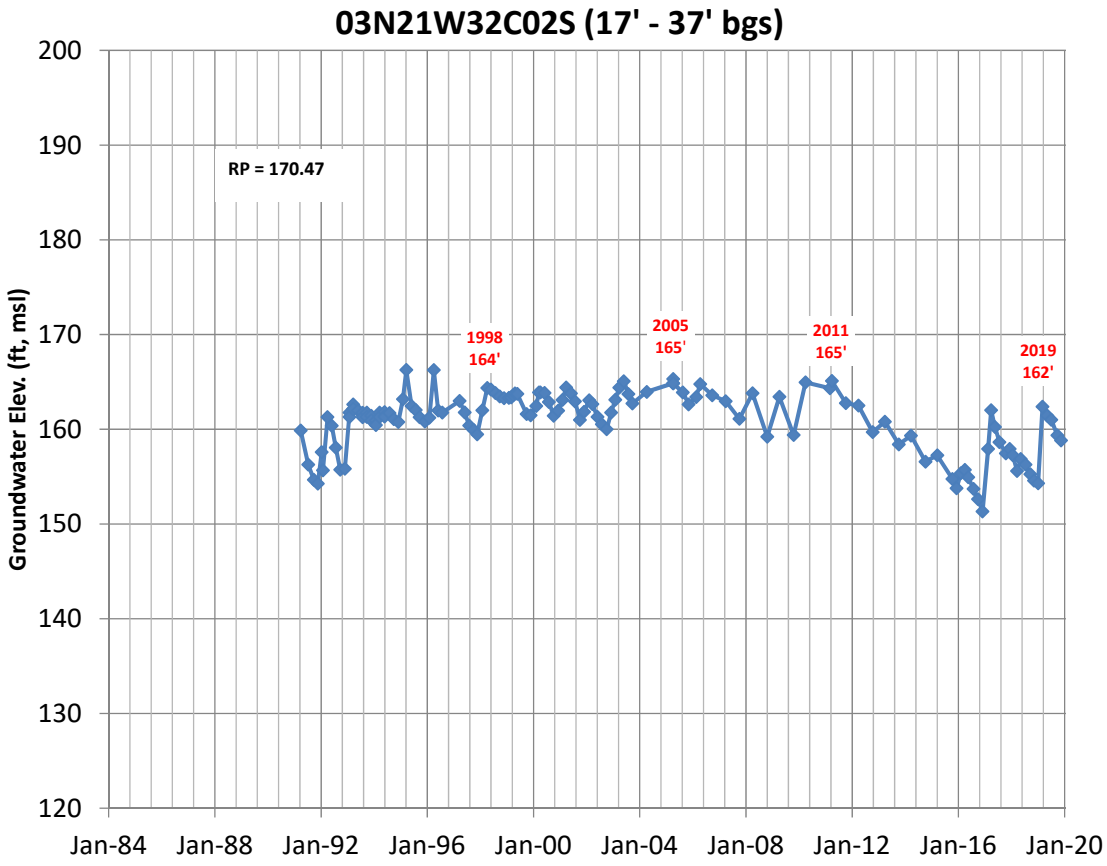

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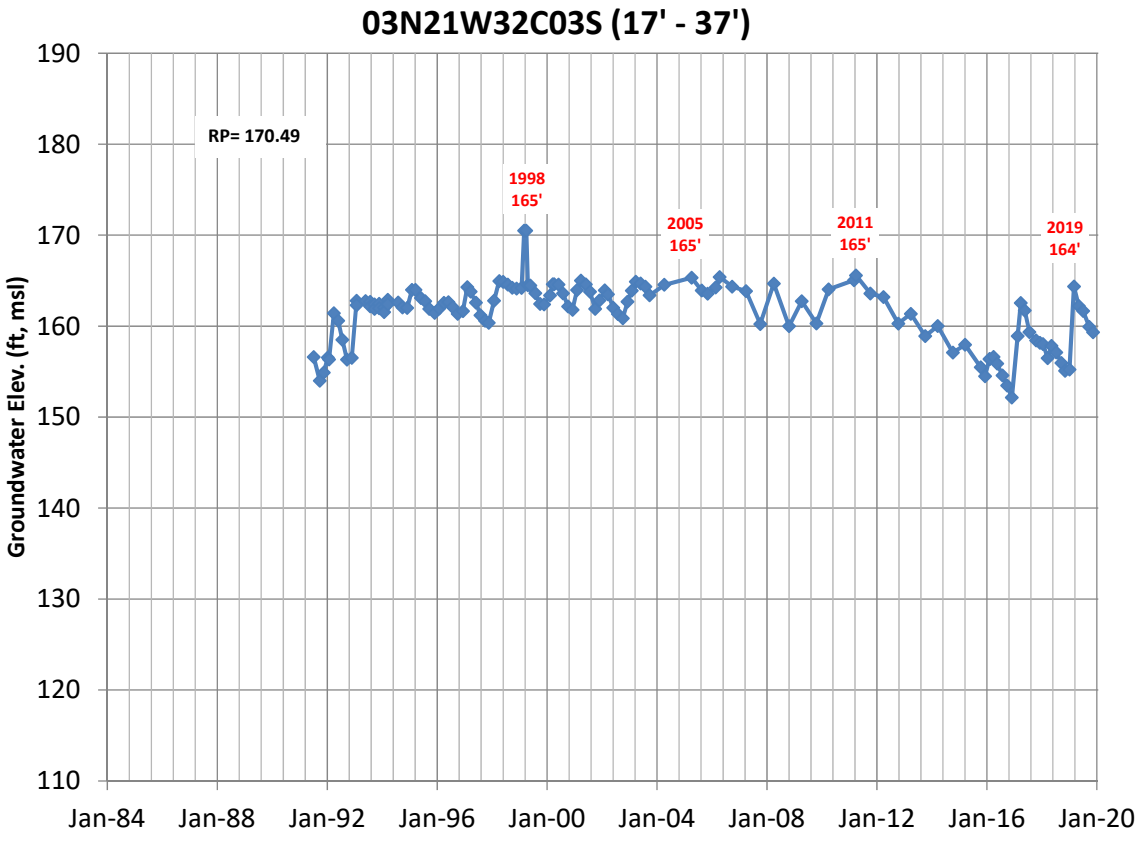

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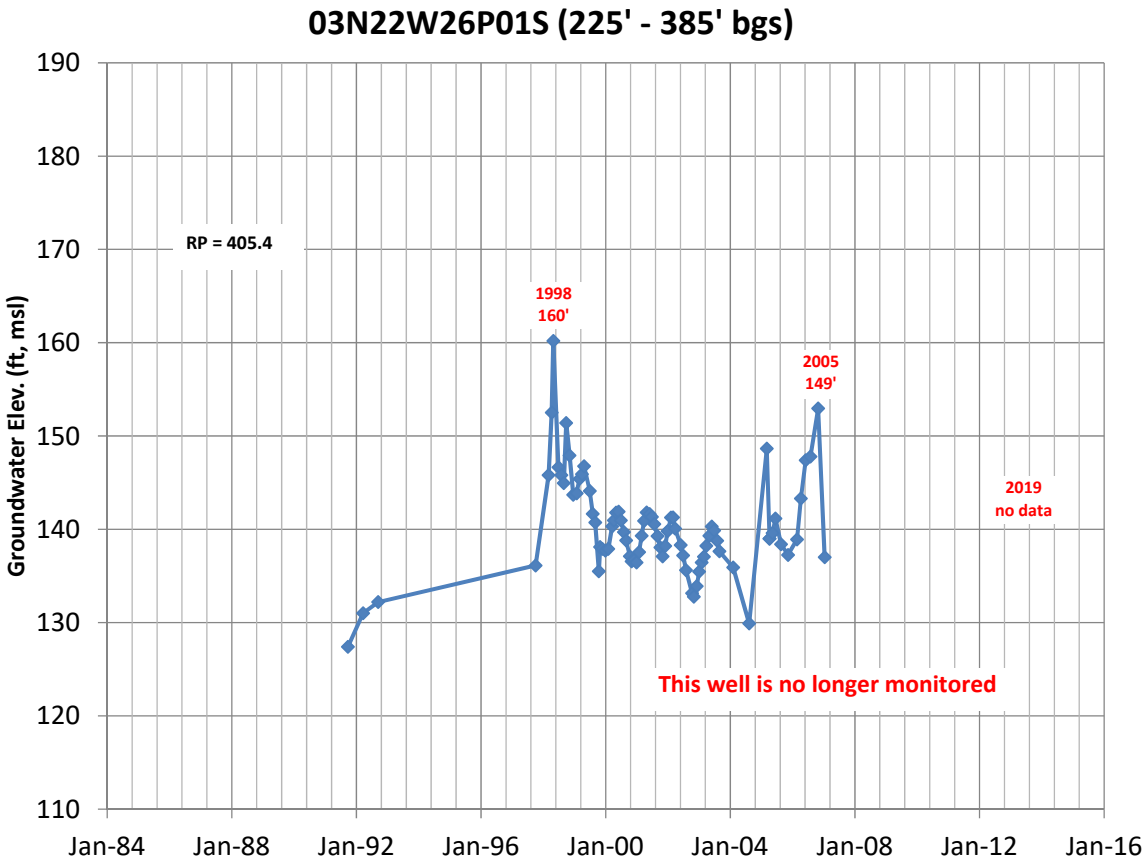

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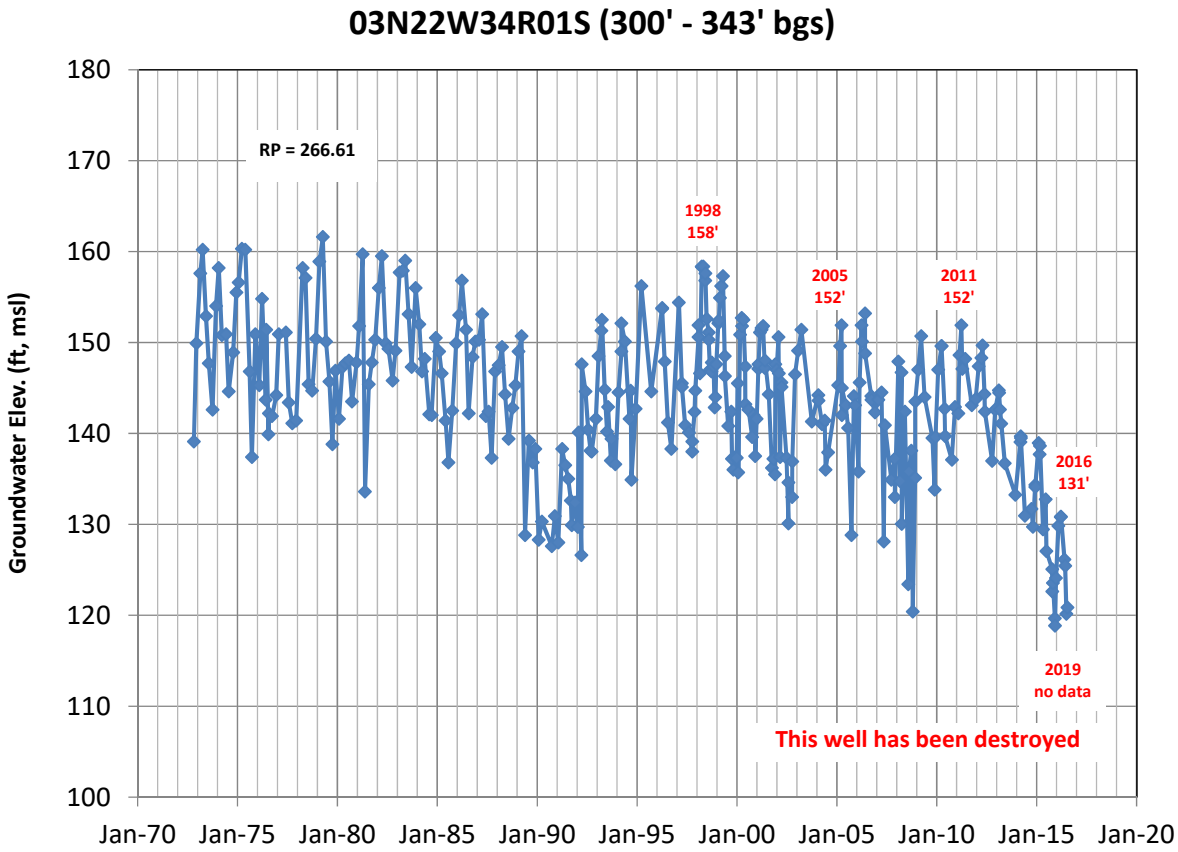
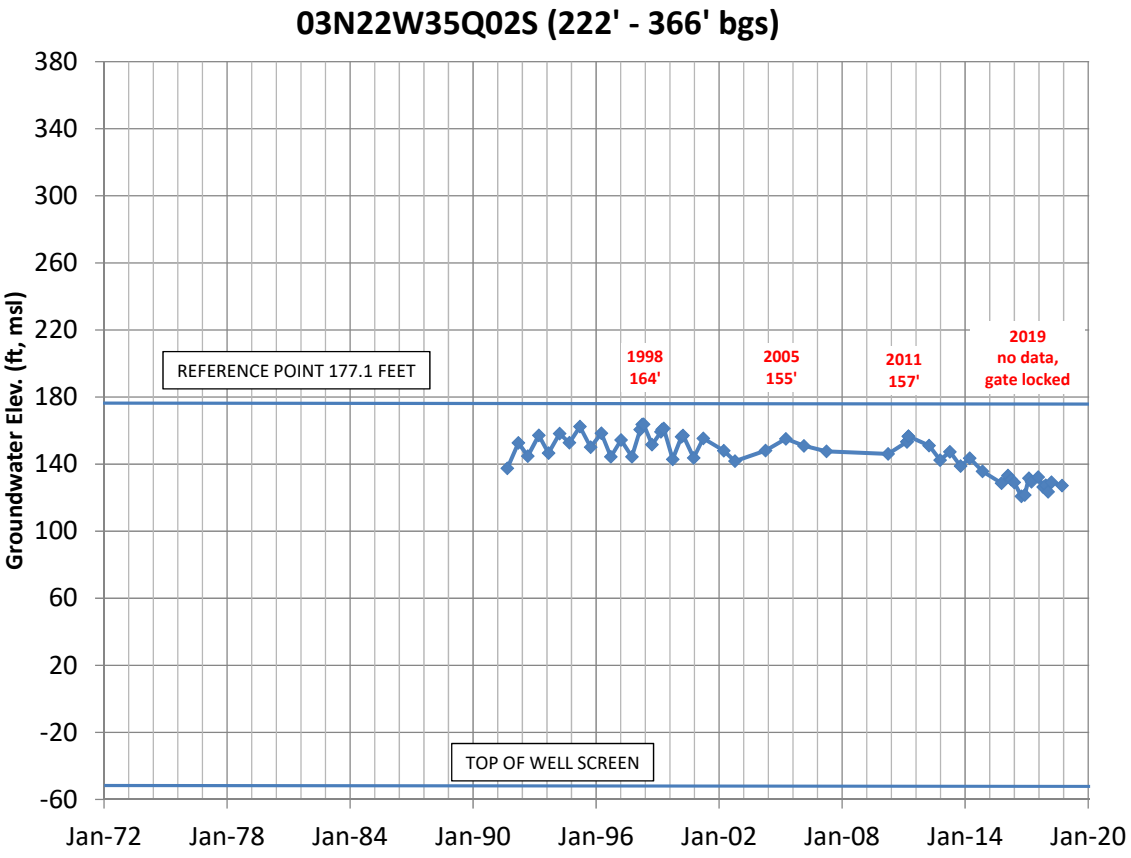
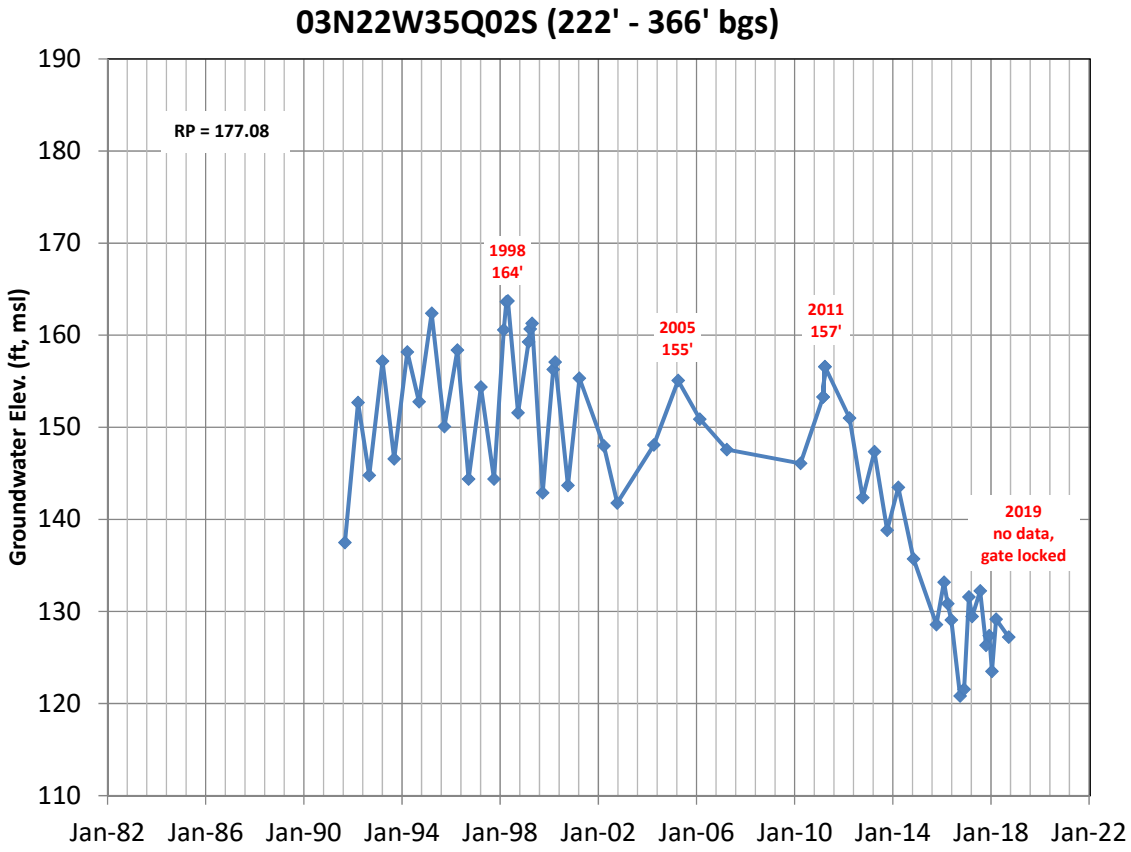
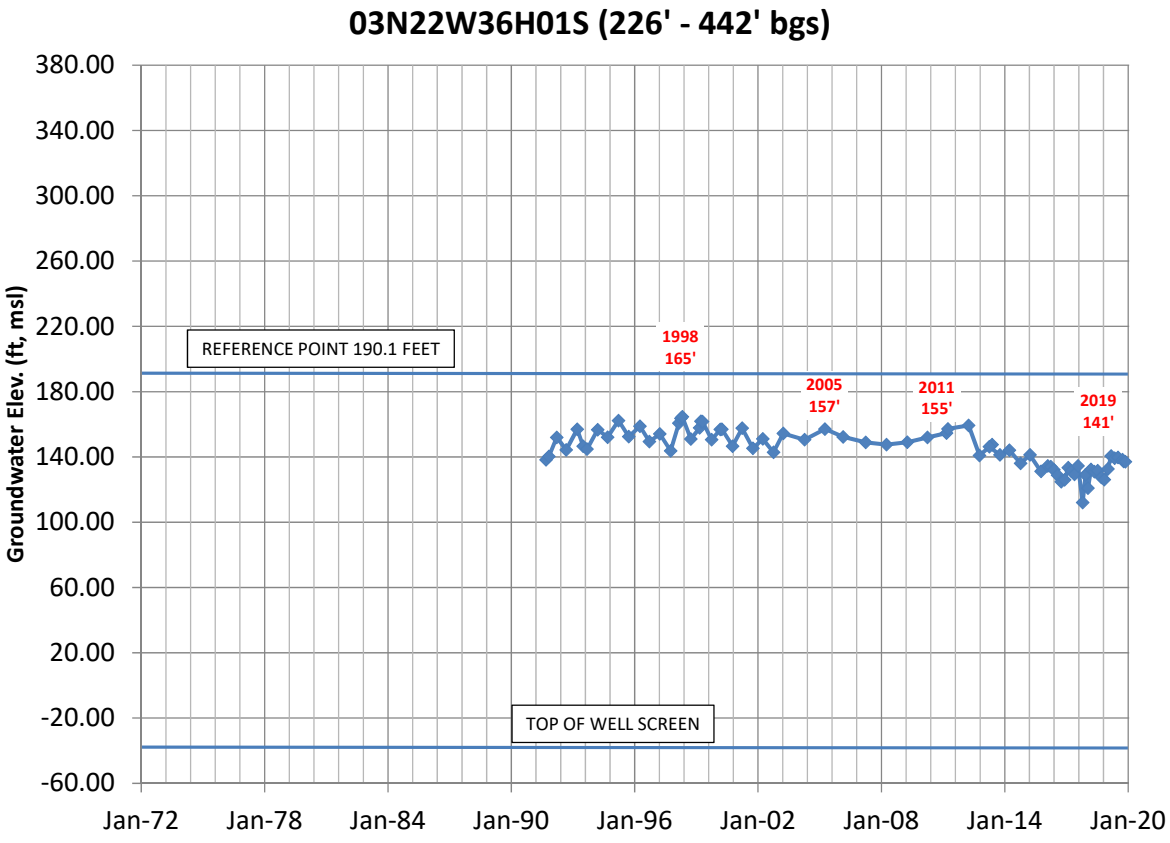
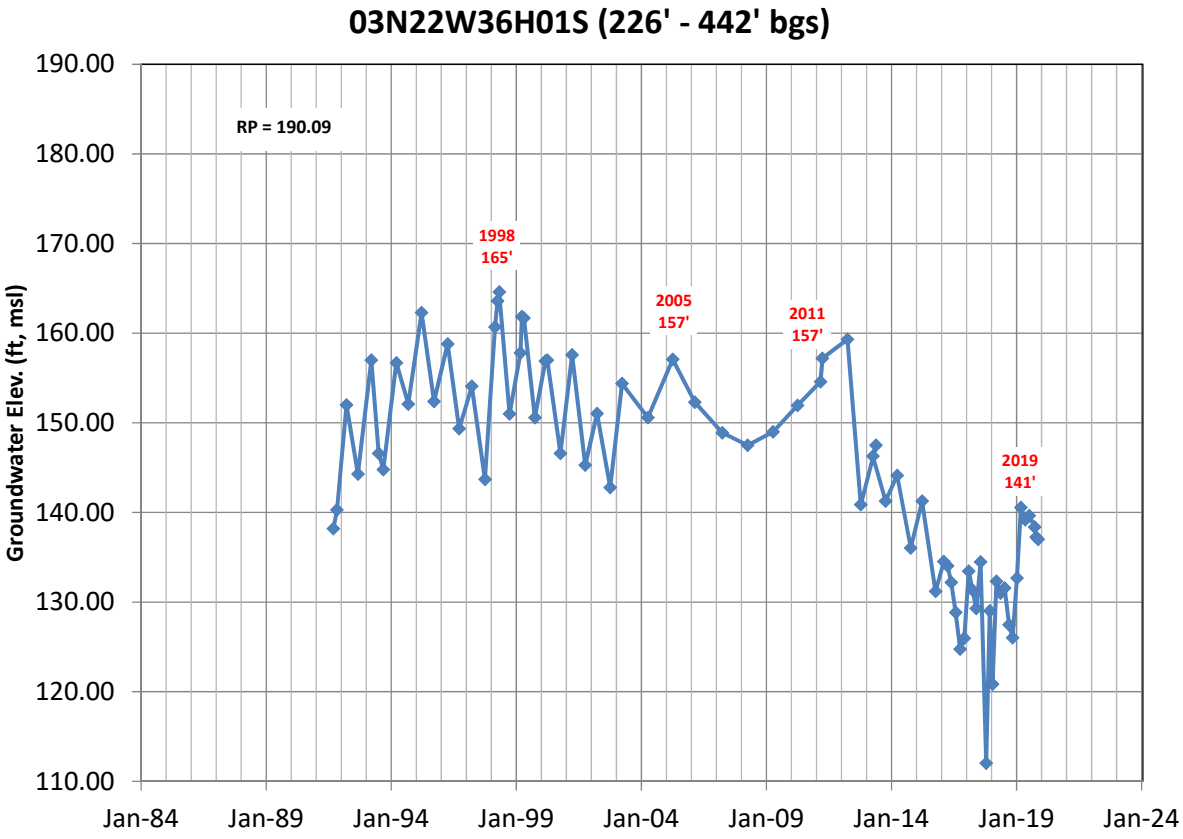
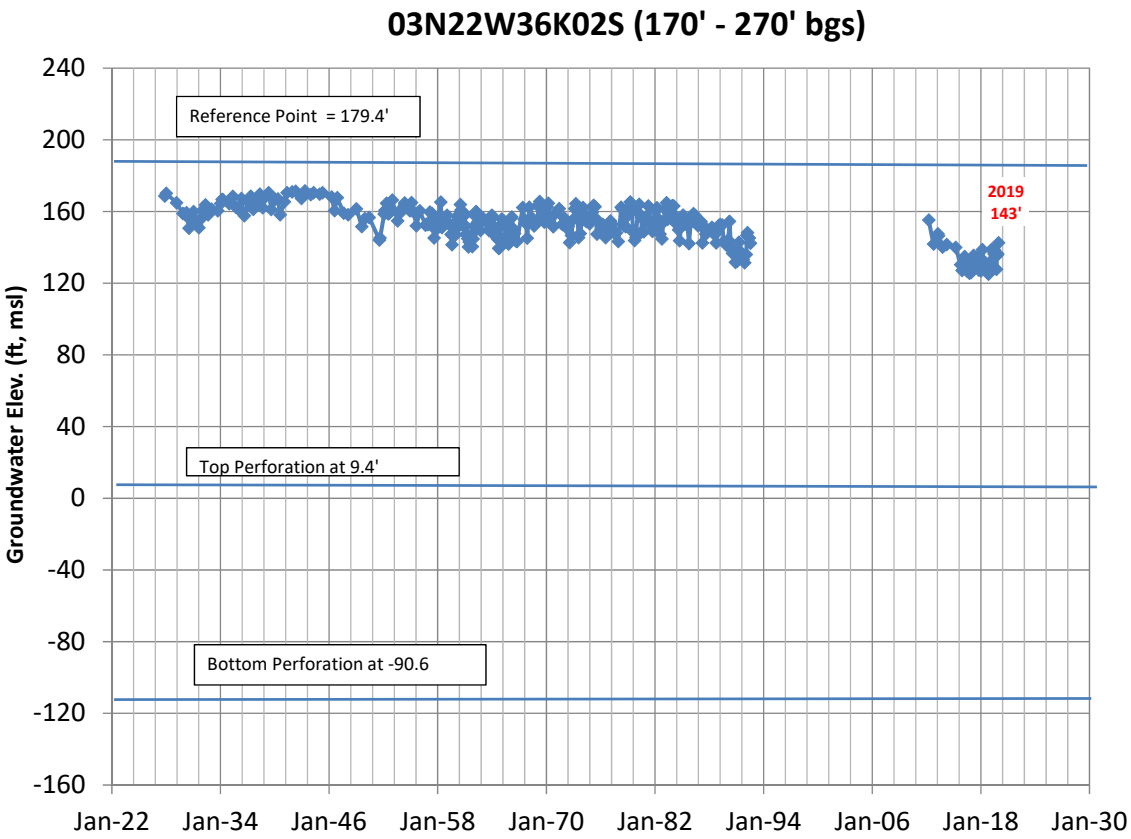


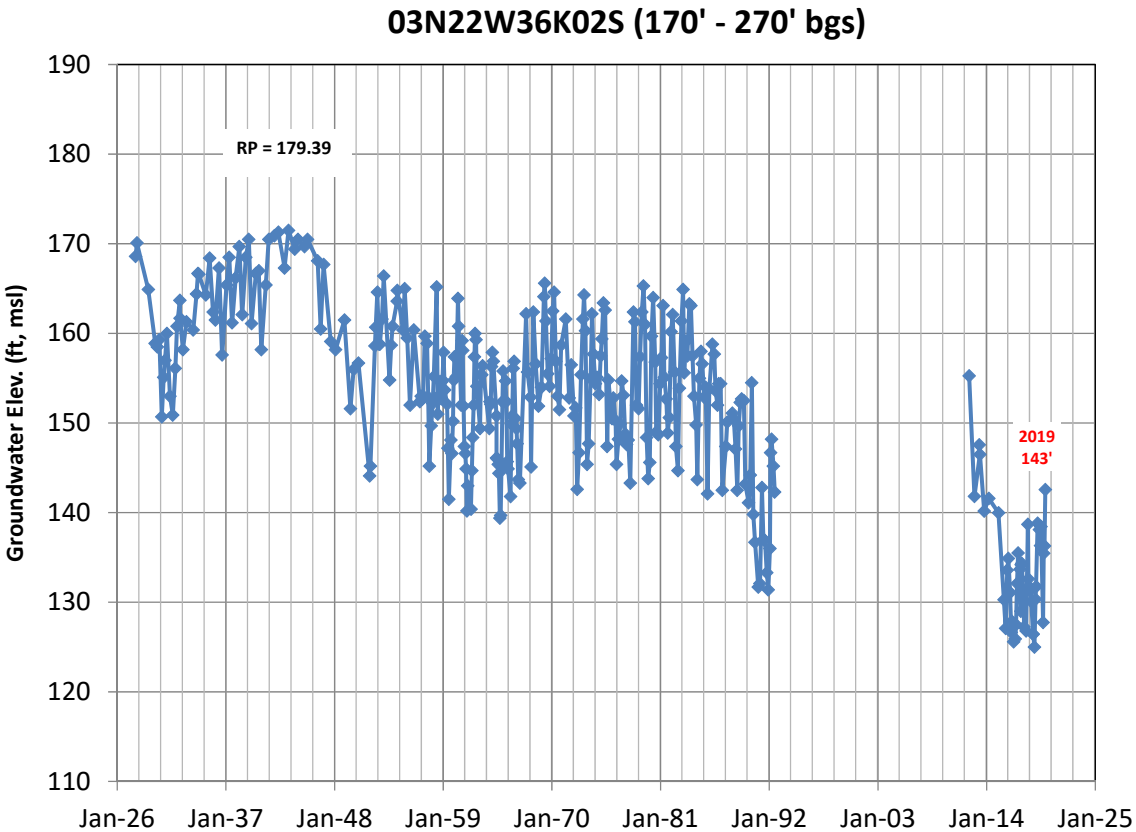


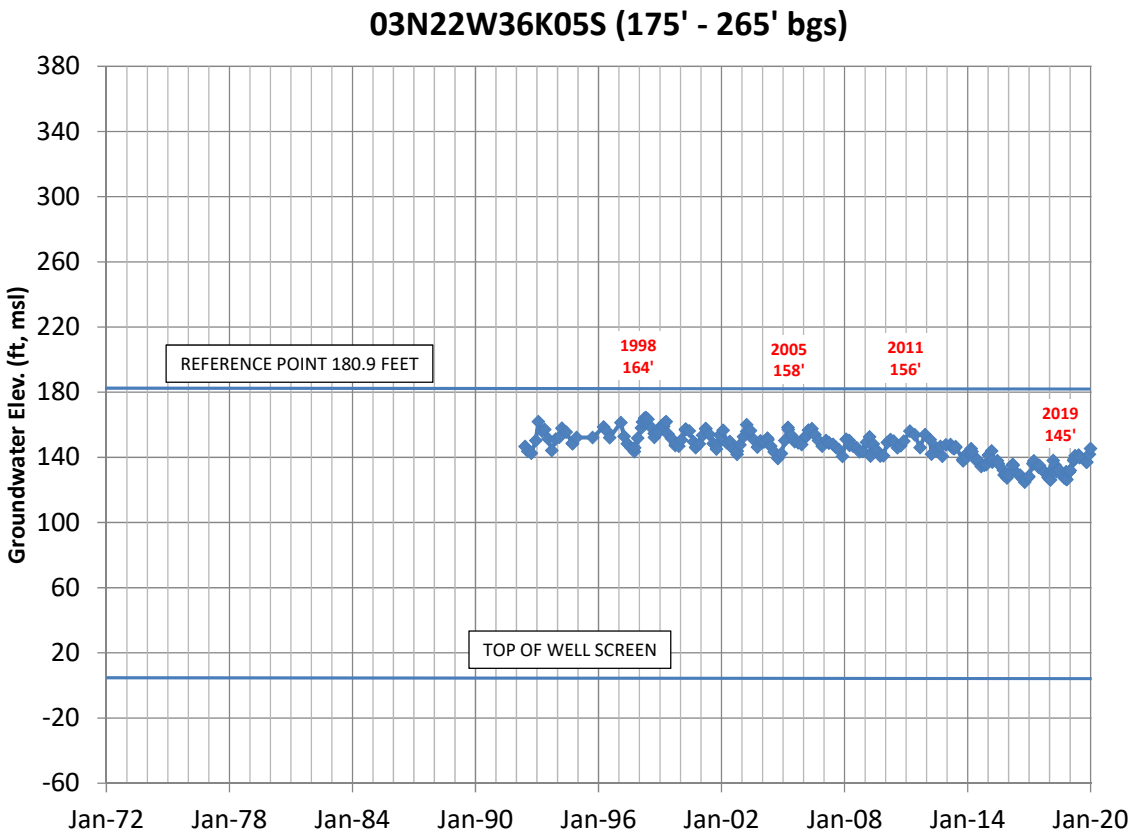


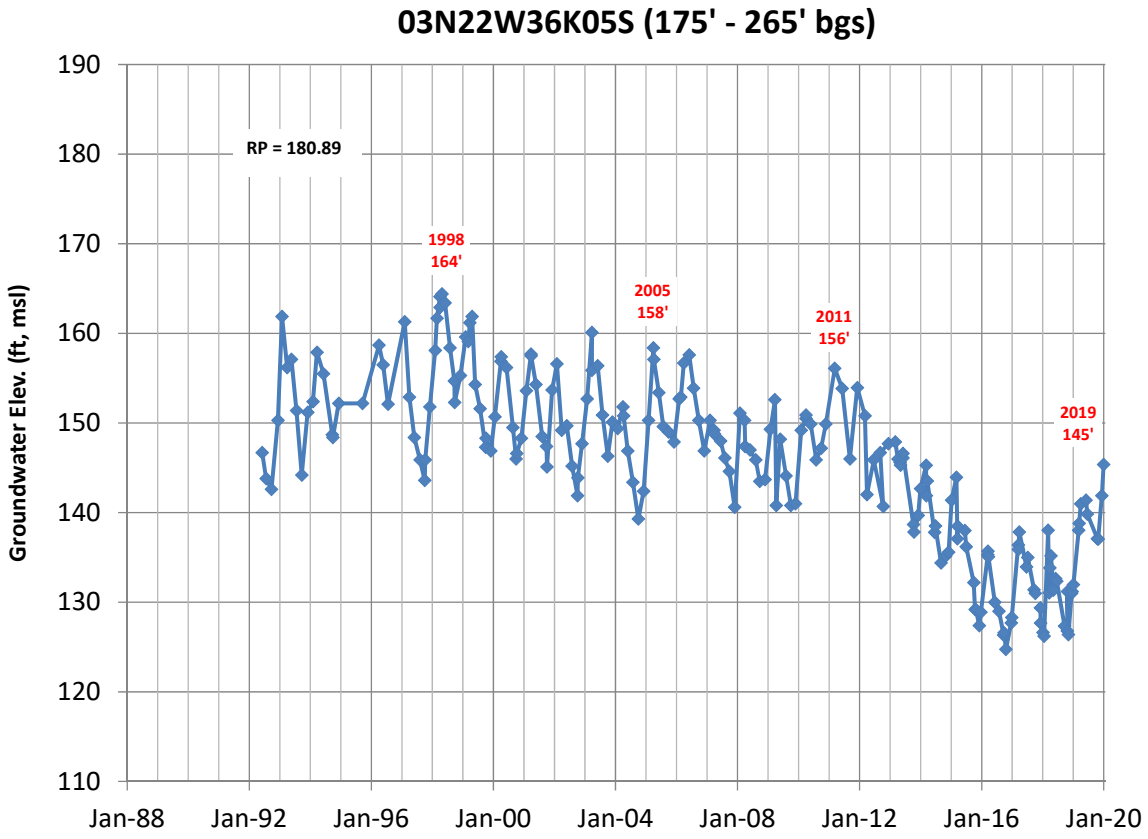


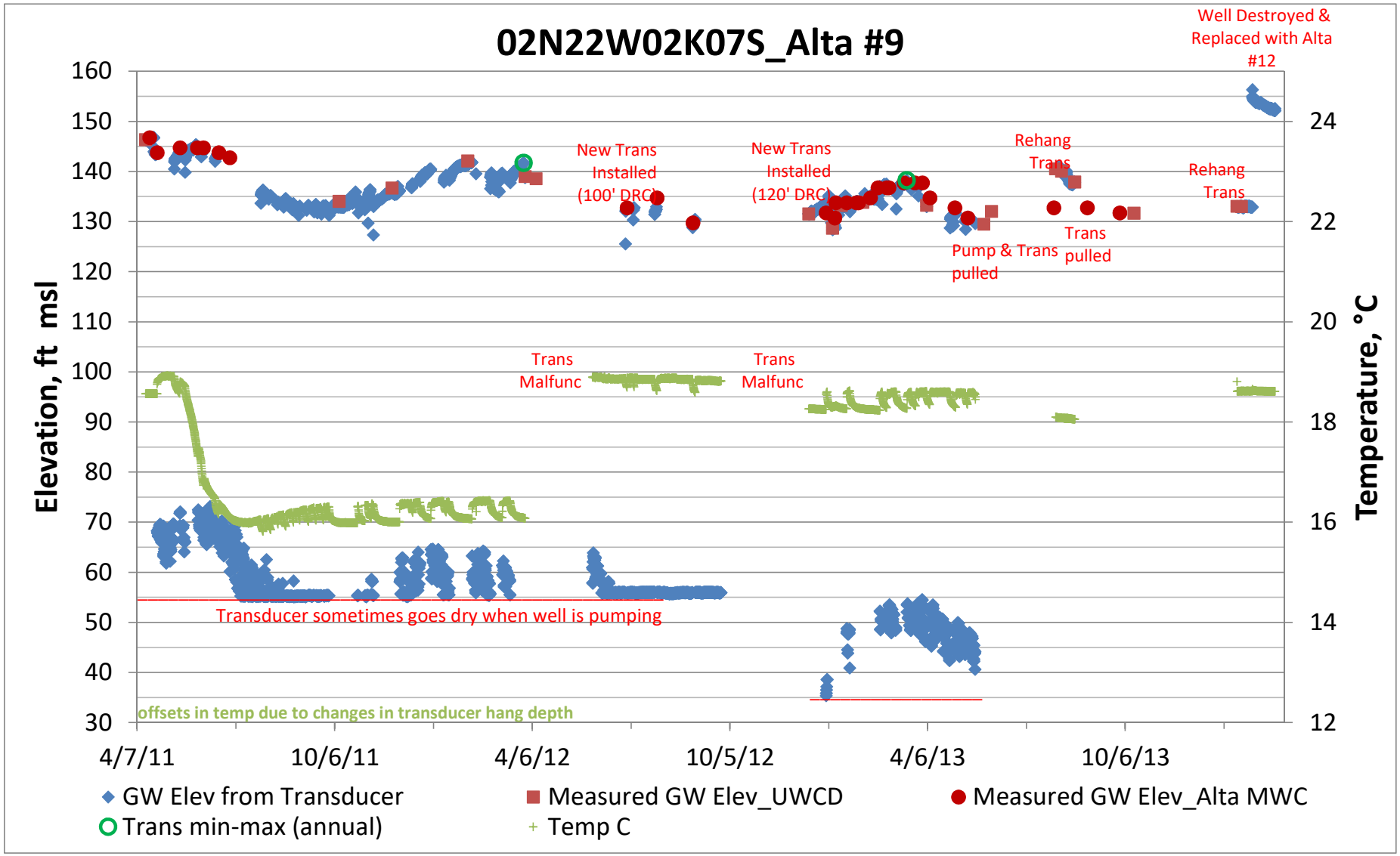


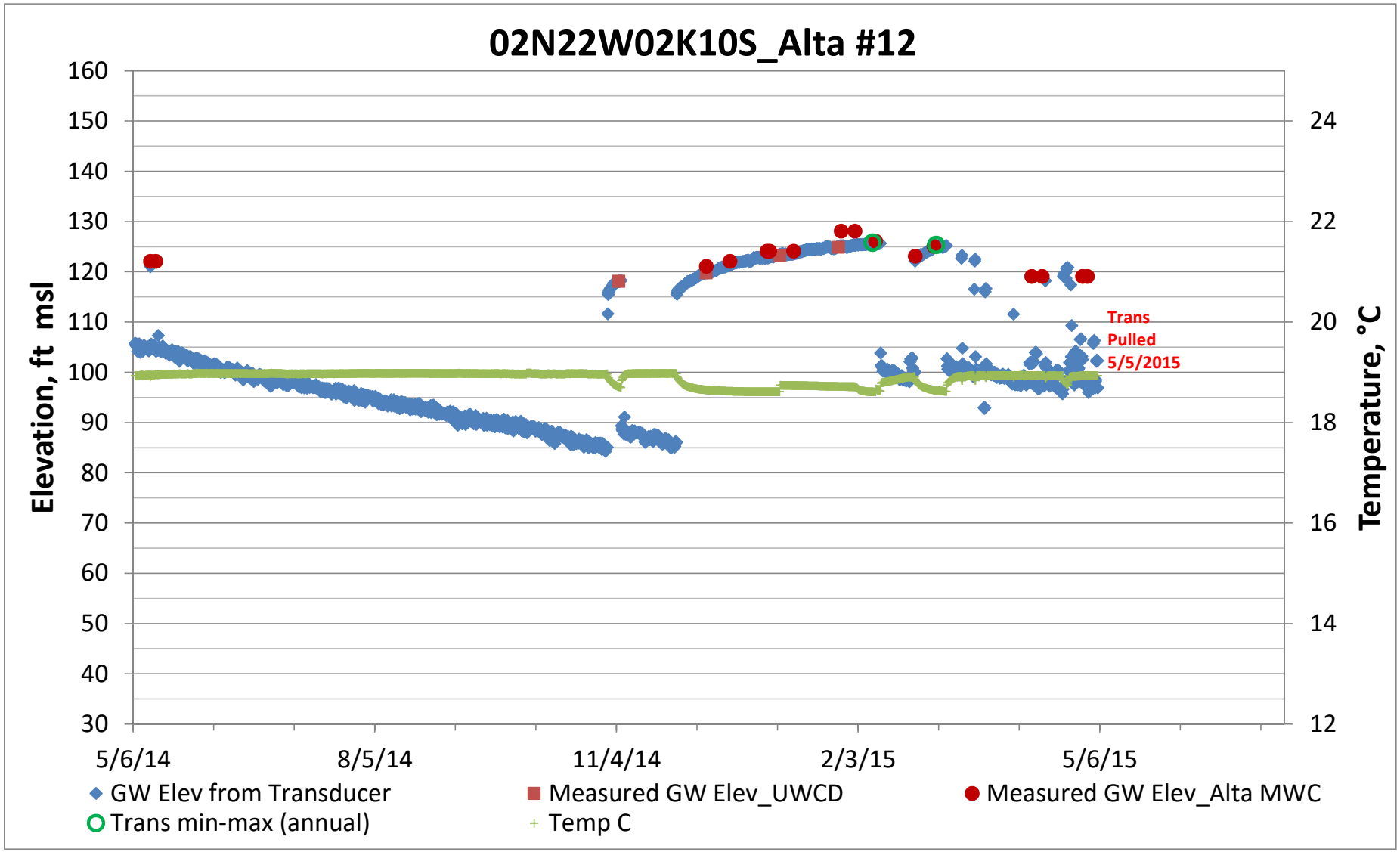


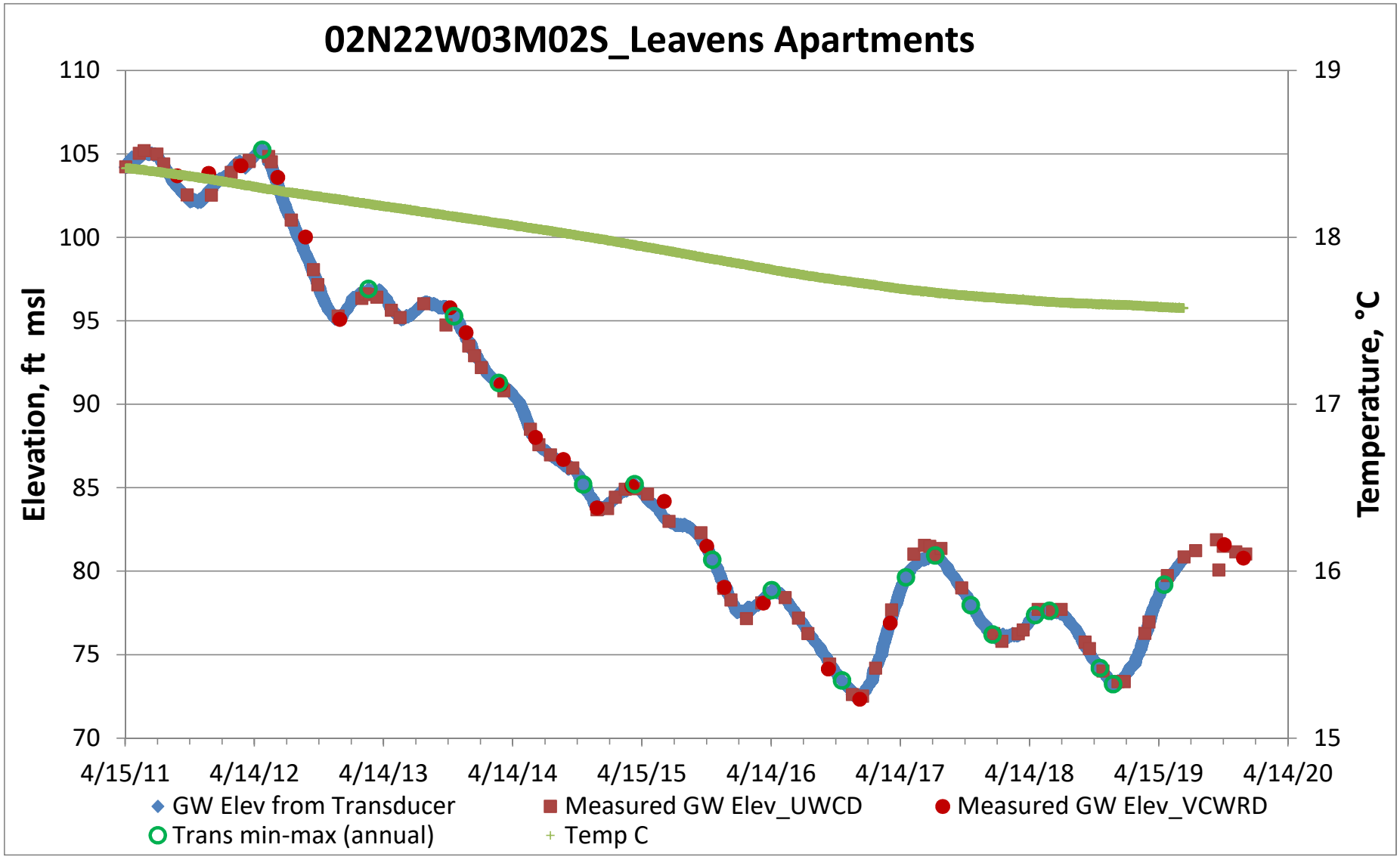












02N22W03Q01S_John McConica (Blackburn)

Difficult well to accurately measure manually - oil in well

Elevation, ft msl

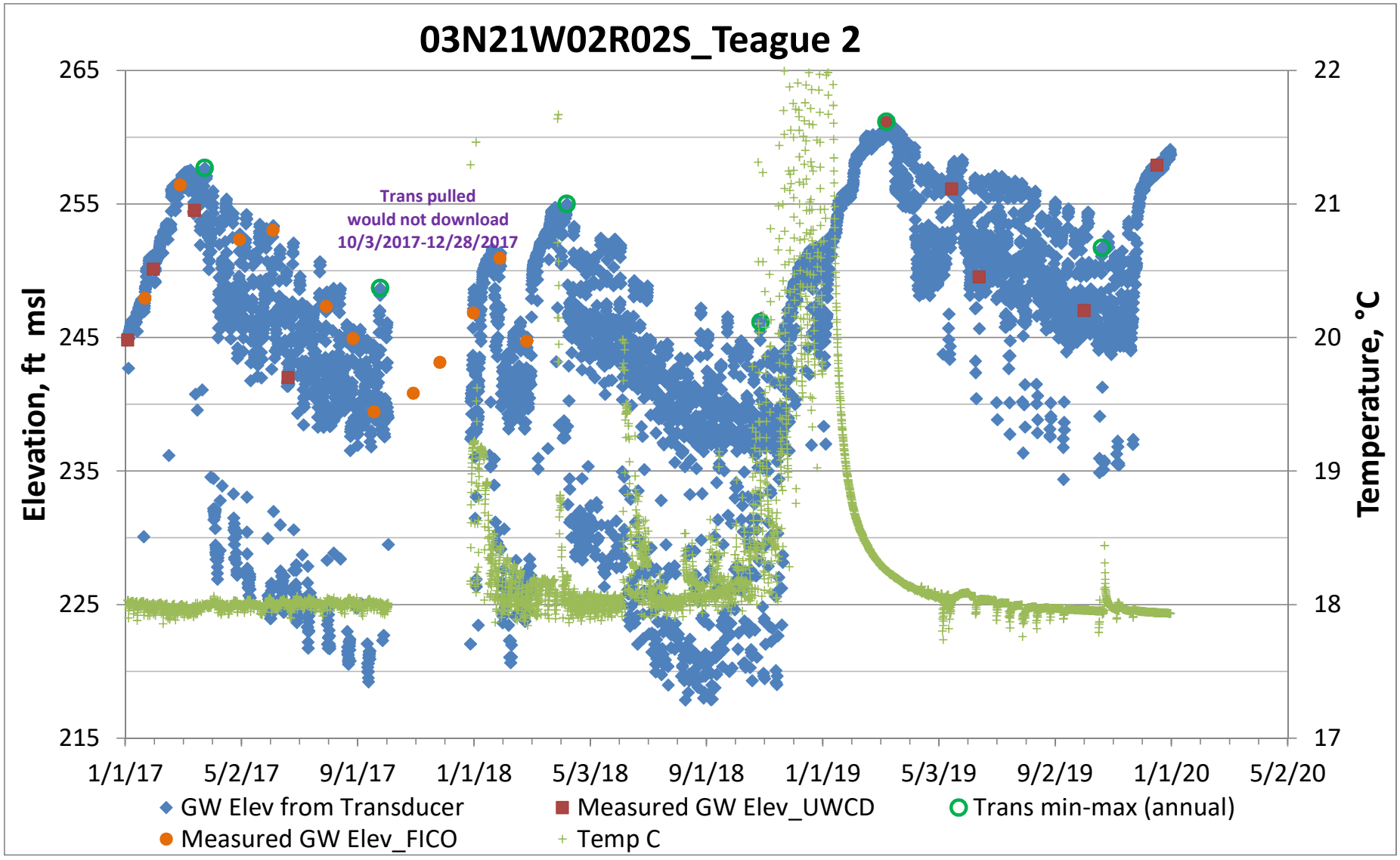
80
70
60
50

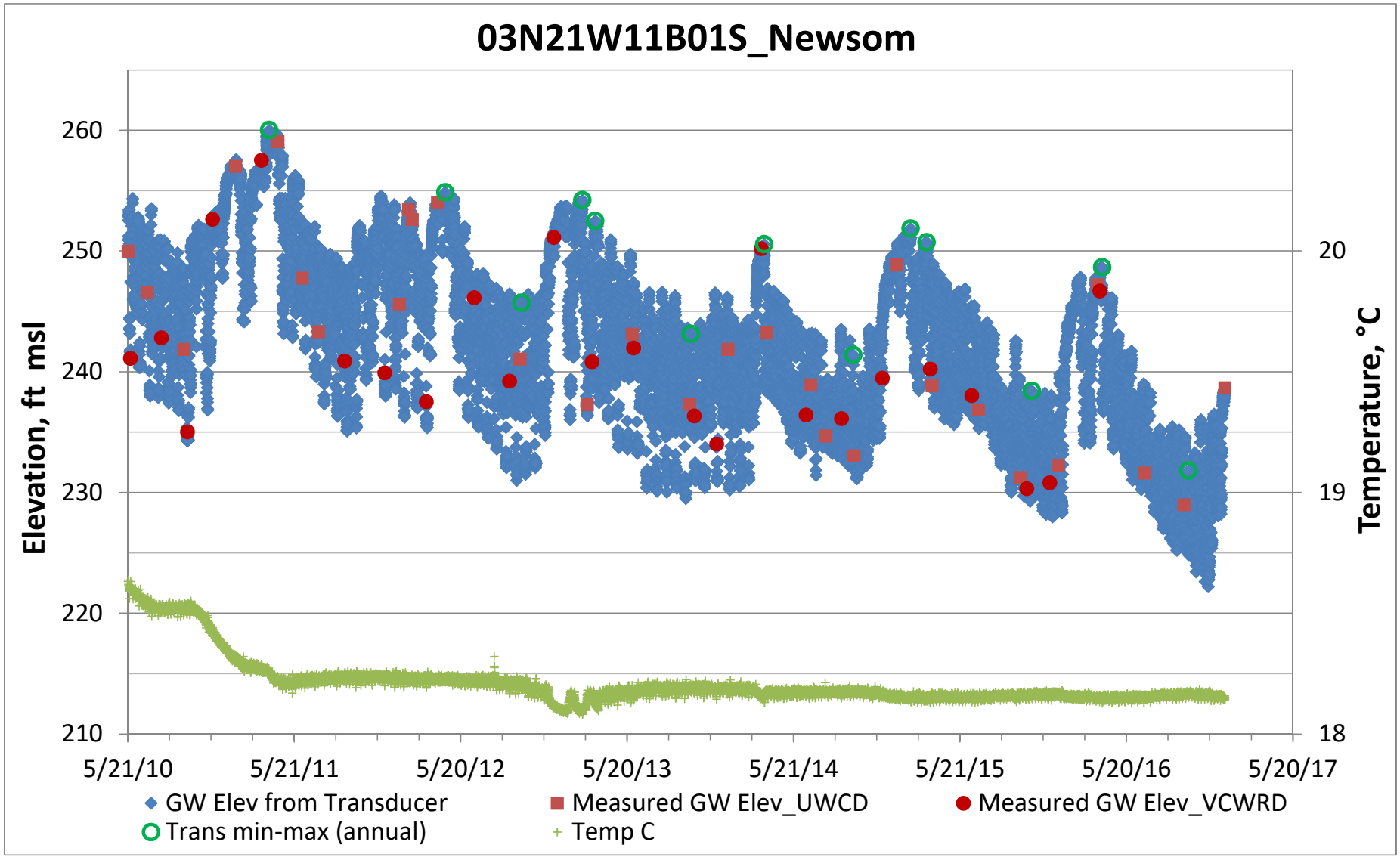
Temperature, °C

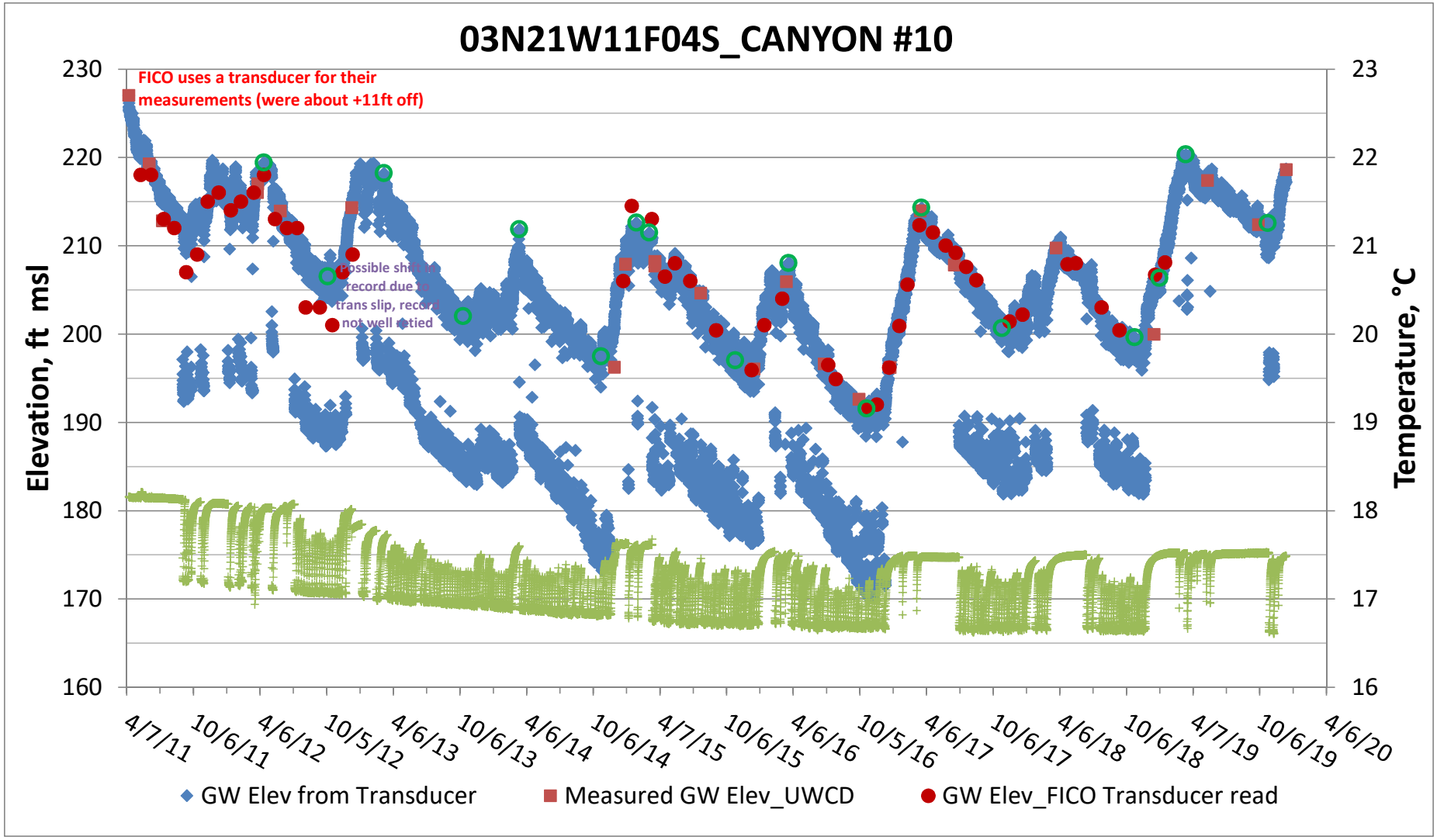
25
24
23
22
21
20
19

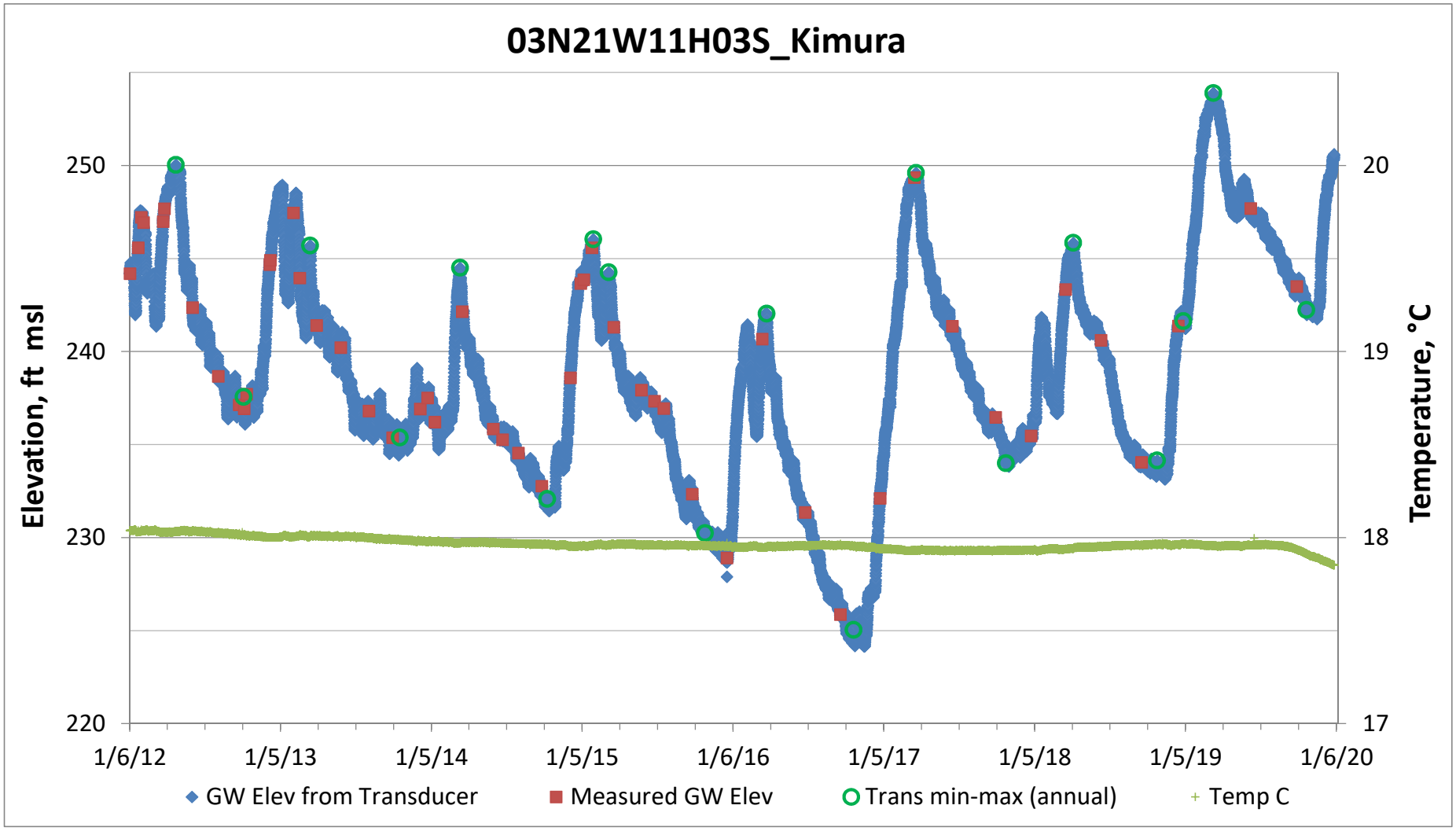
9/28/15
1/27/16
5/28/16
9/27/16
1/27/17
5/28/17
9/27/17
1/27/18
5/29/18
9/27/18
1/27/19
5/29/19
9/28/19

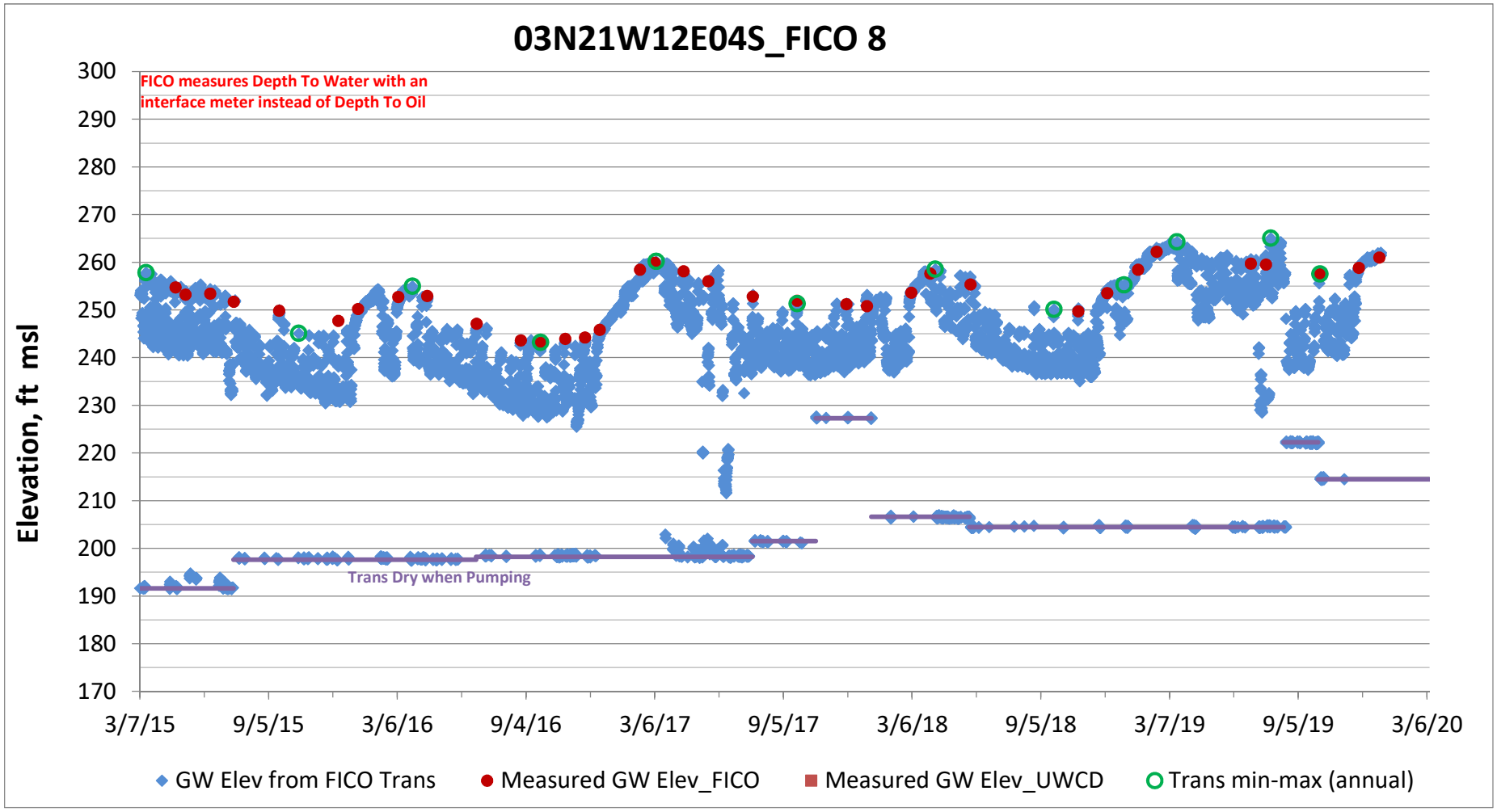
◆ GW Elev from Transducer ■ Measured GW Elev_UWCD ○ Trans min-max (annual) + Temp C

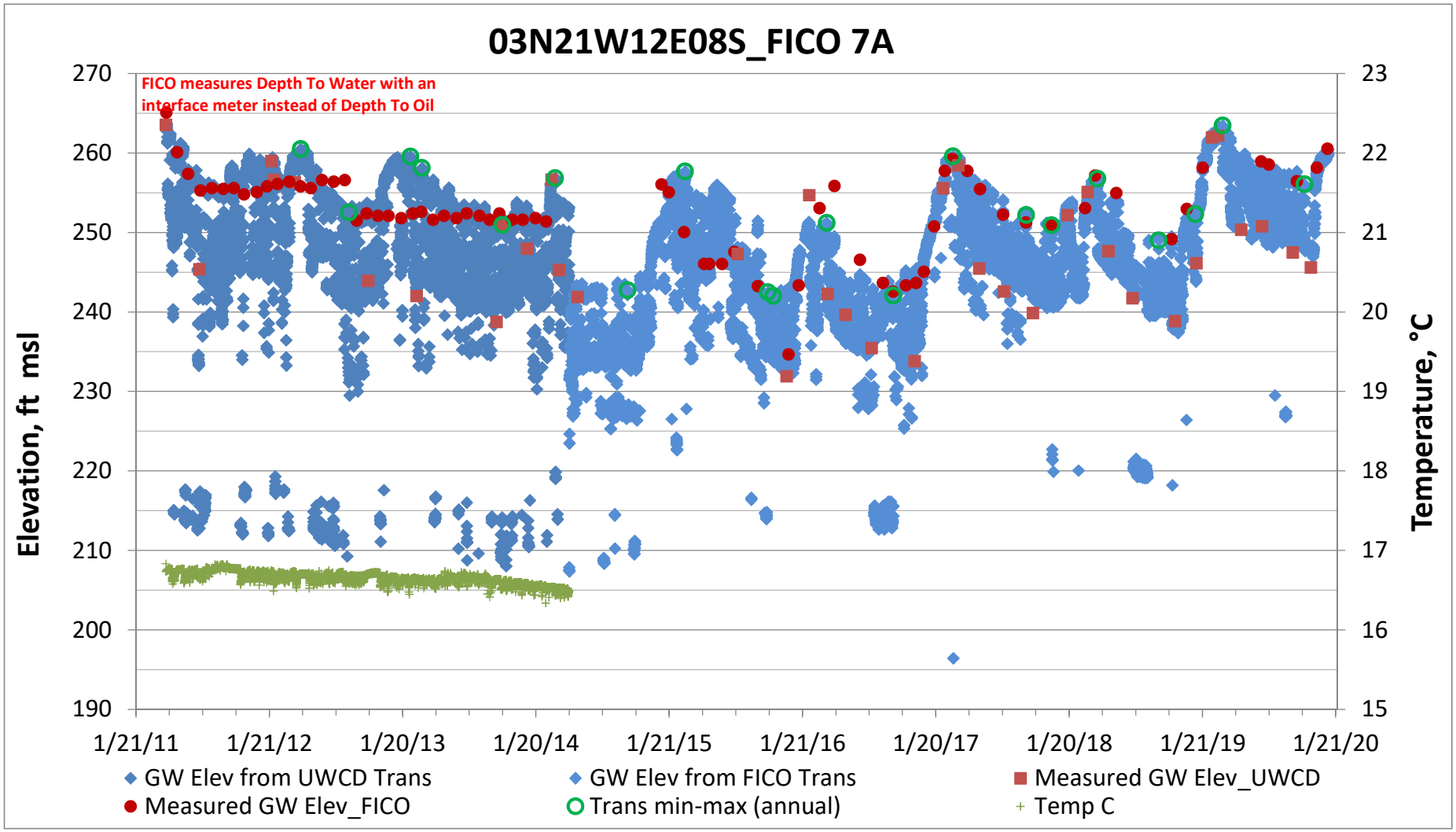


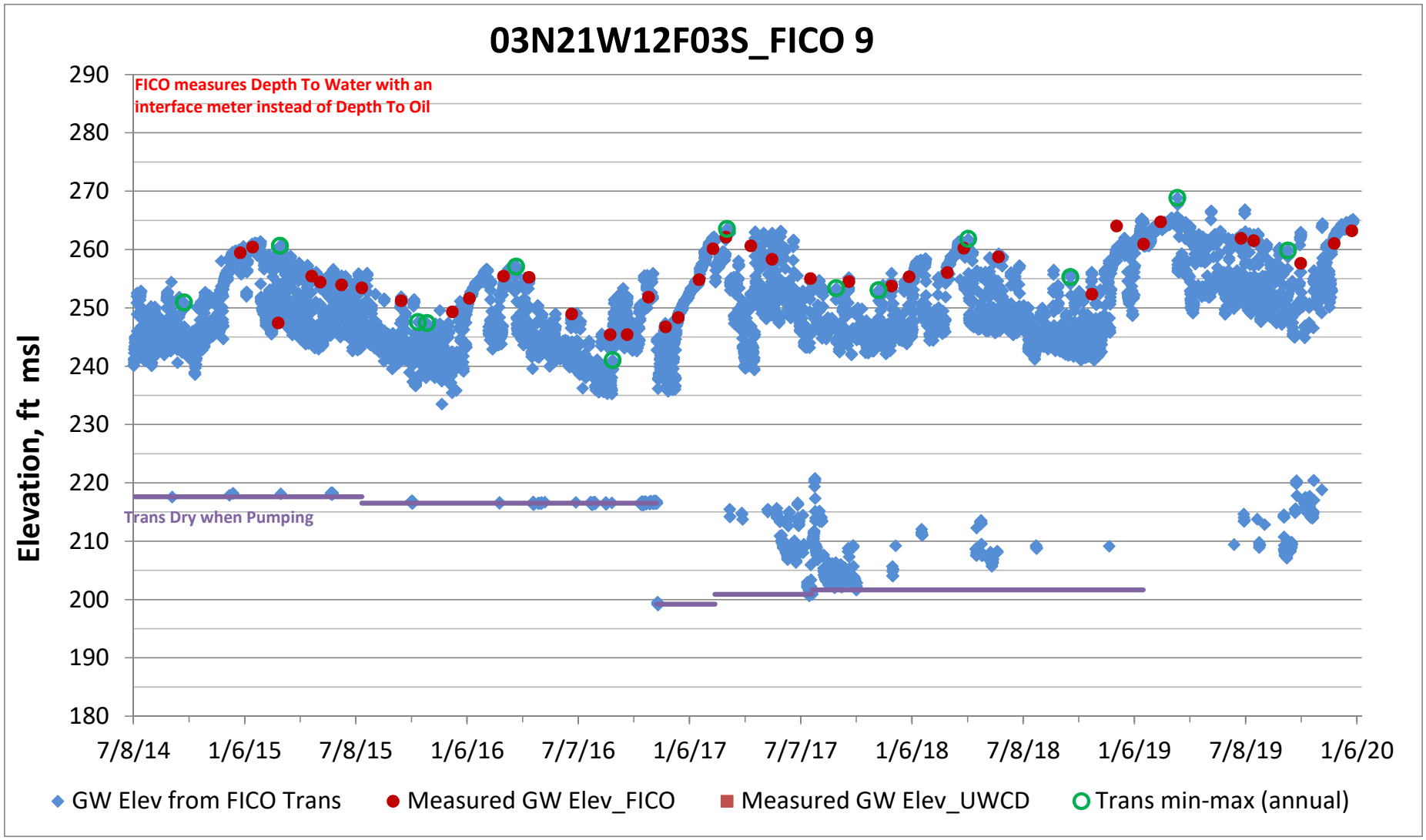


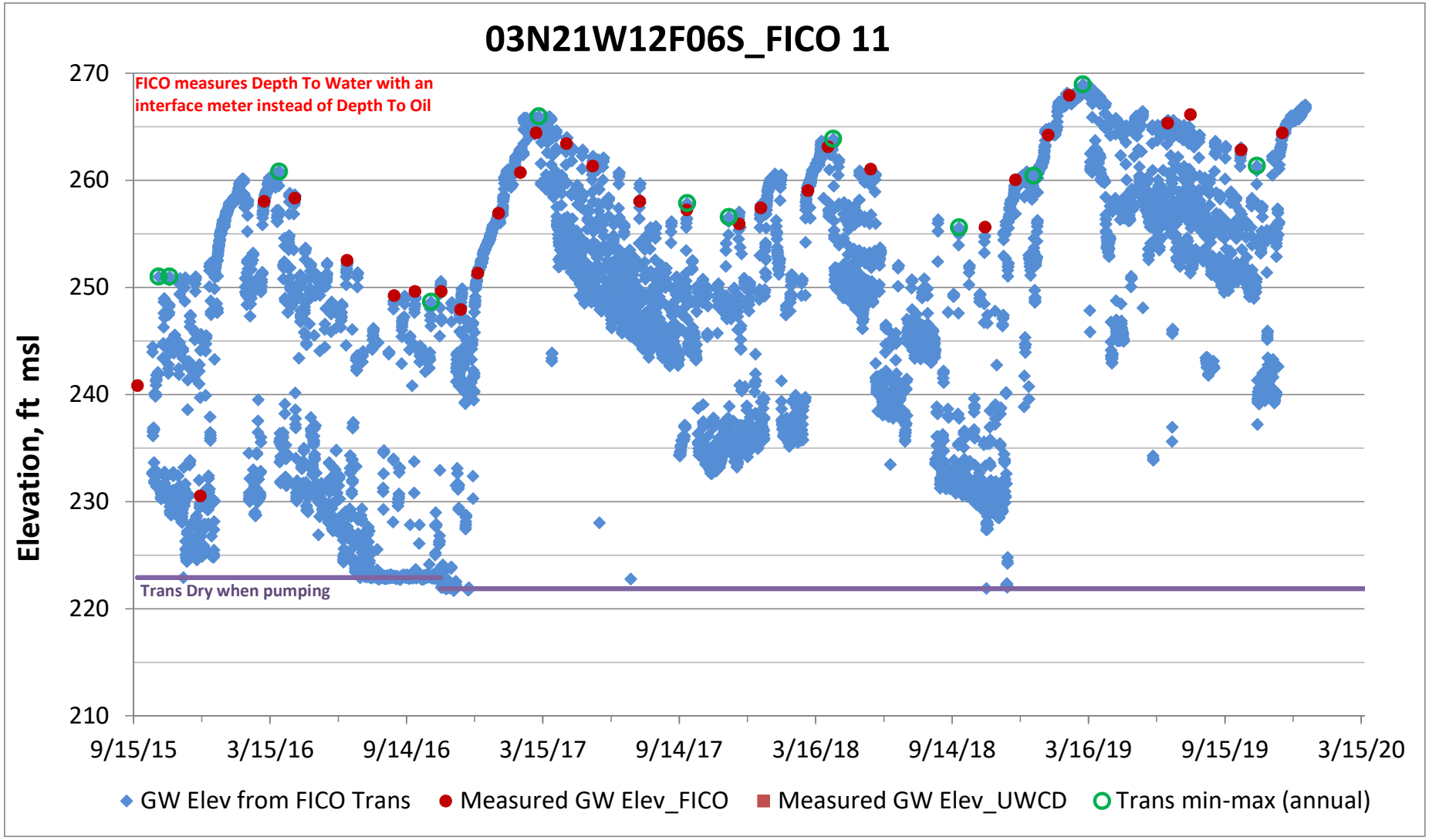


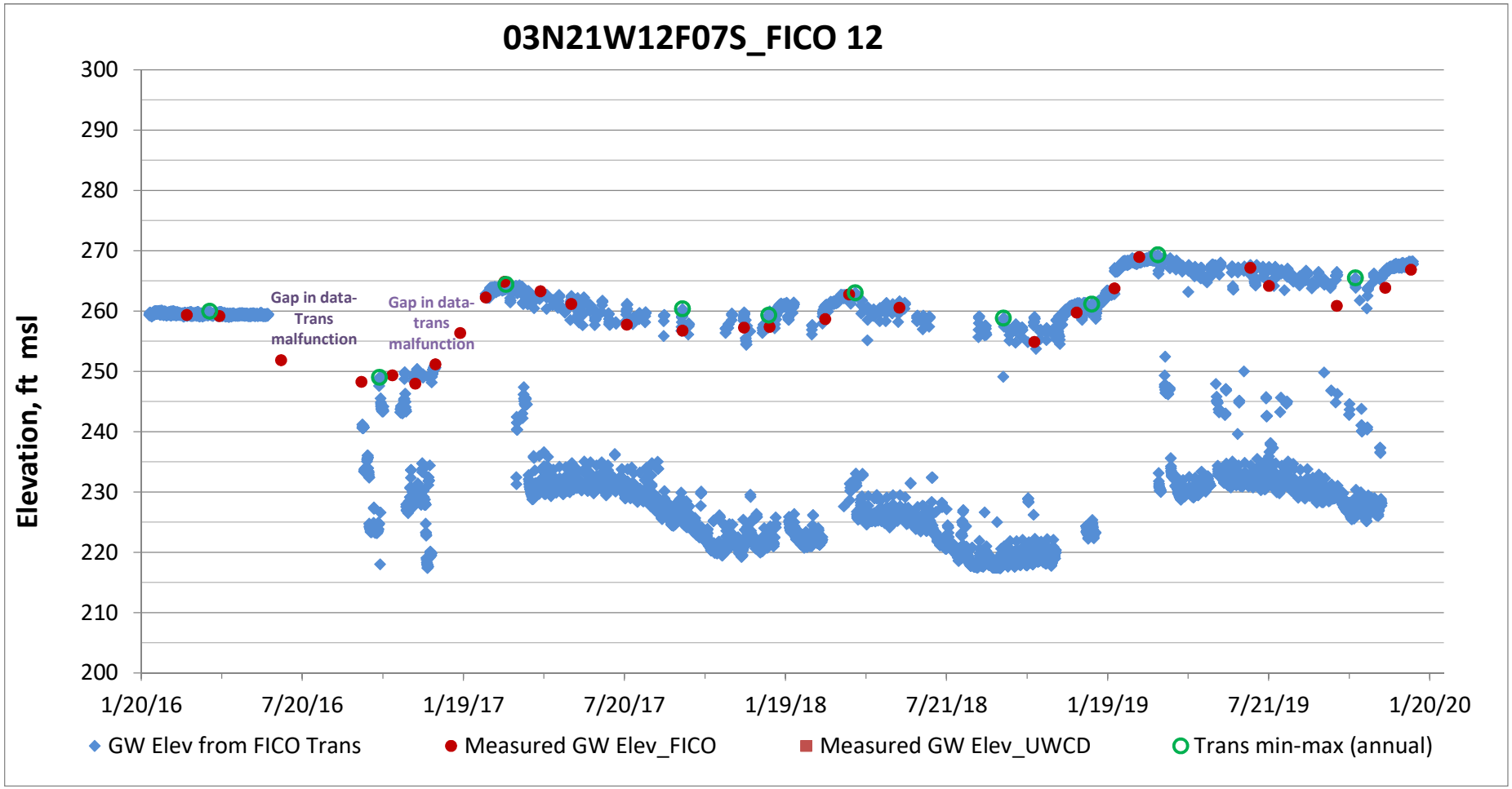


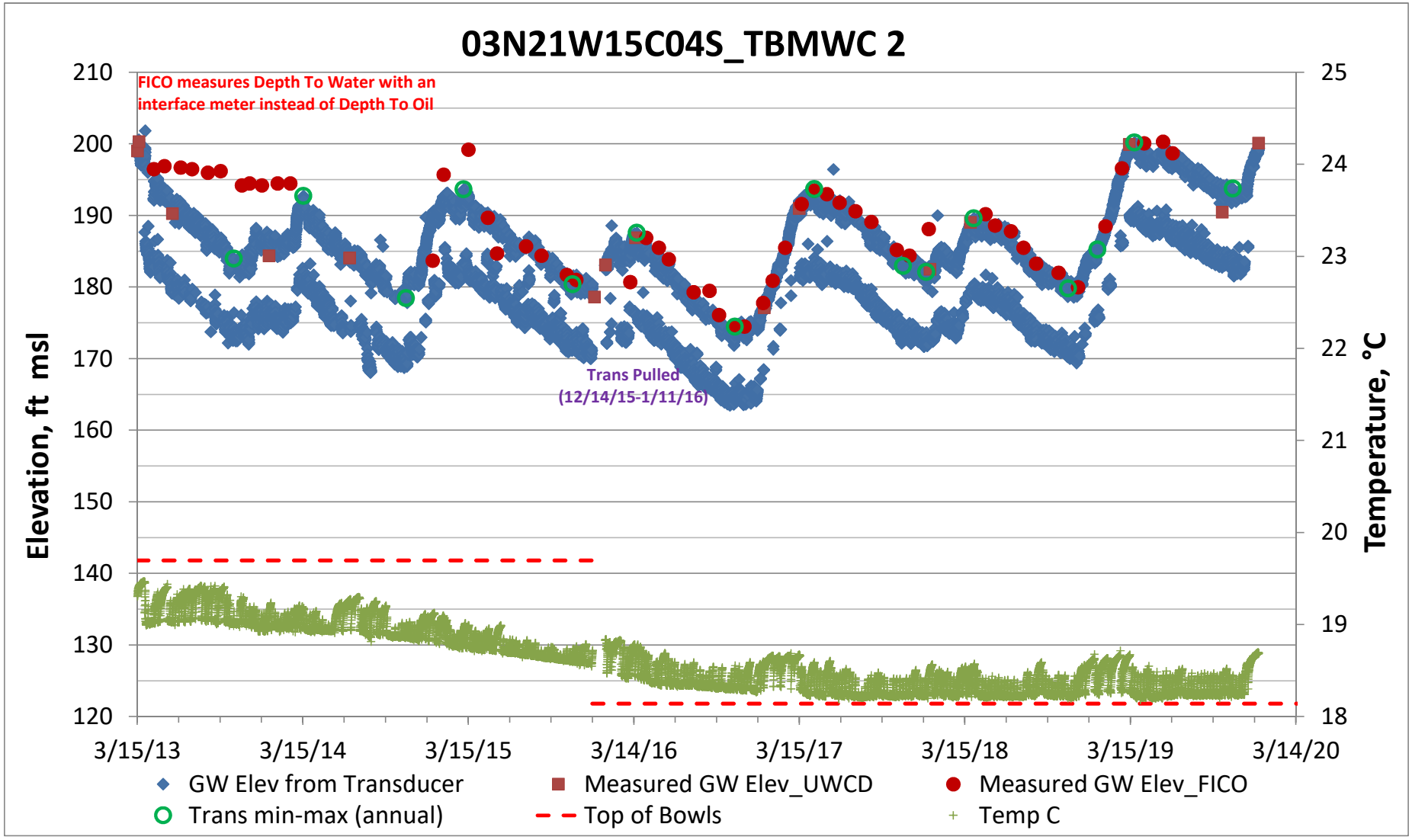


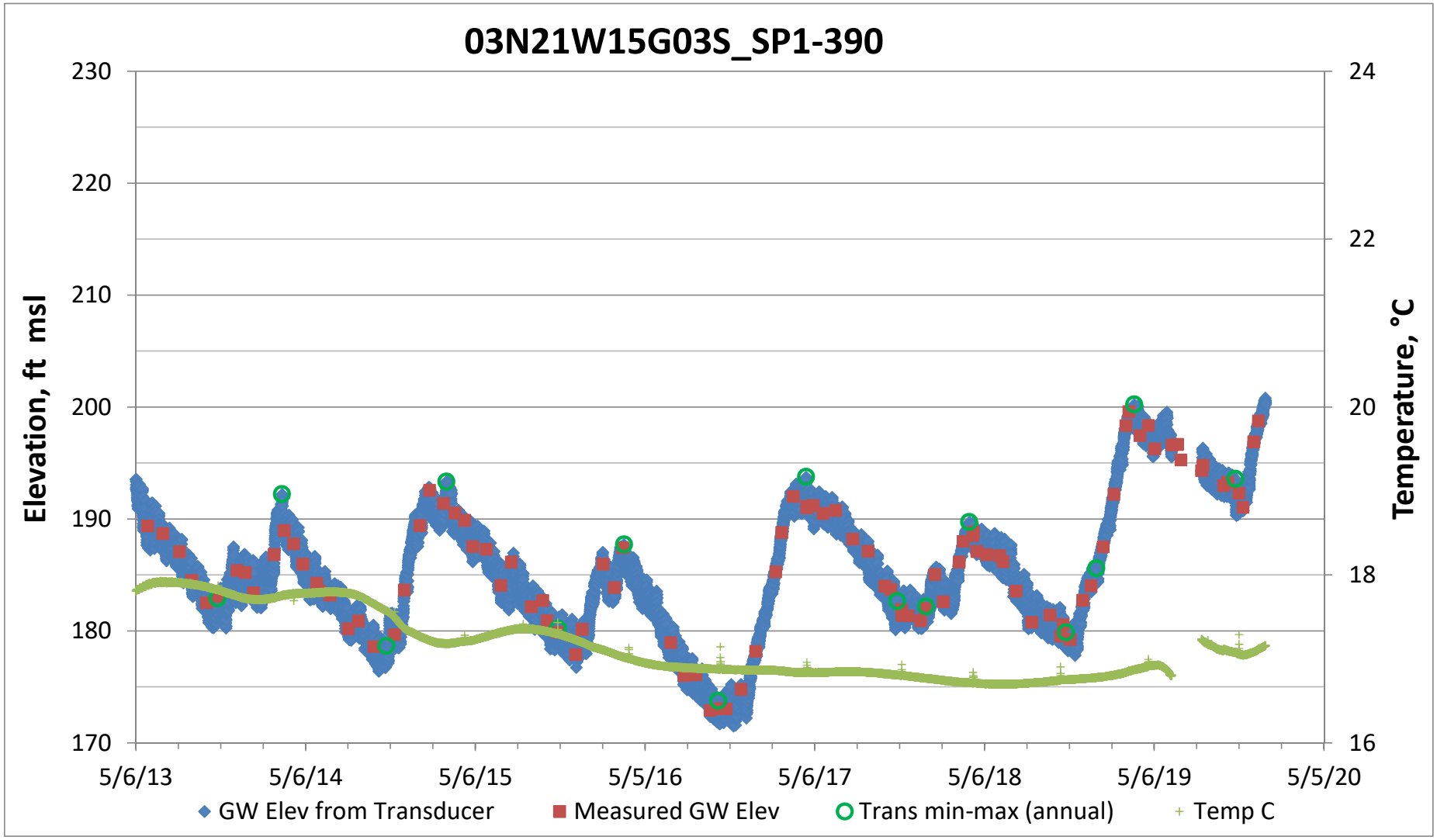


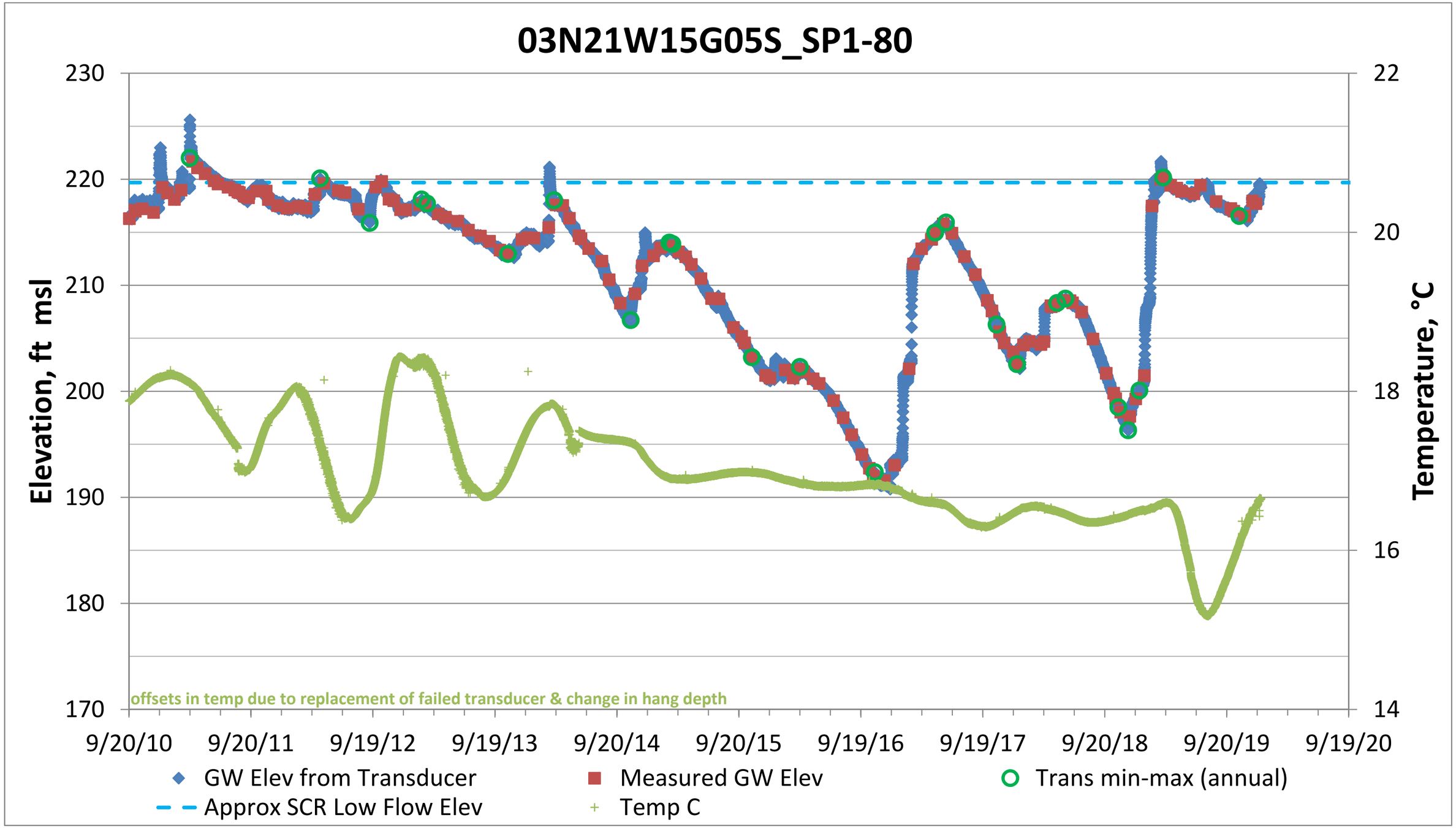


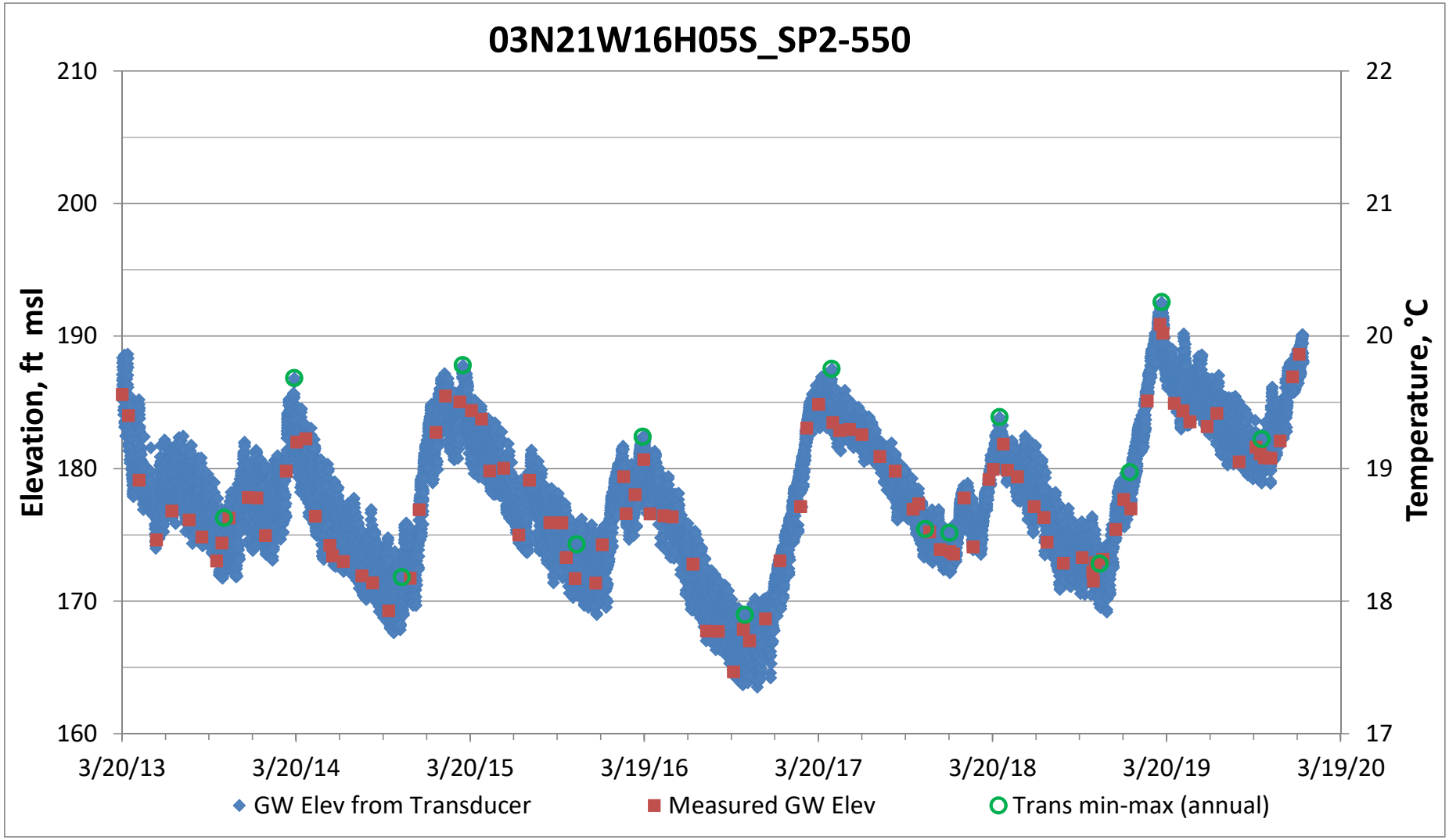


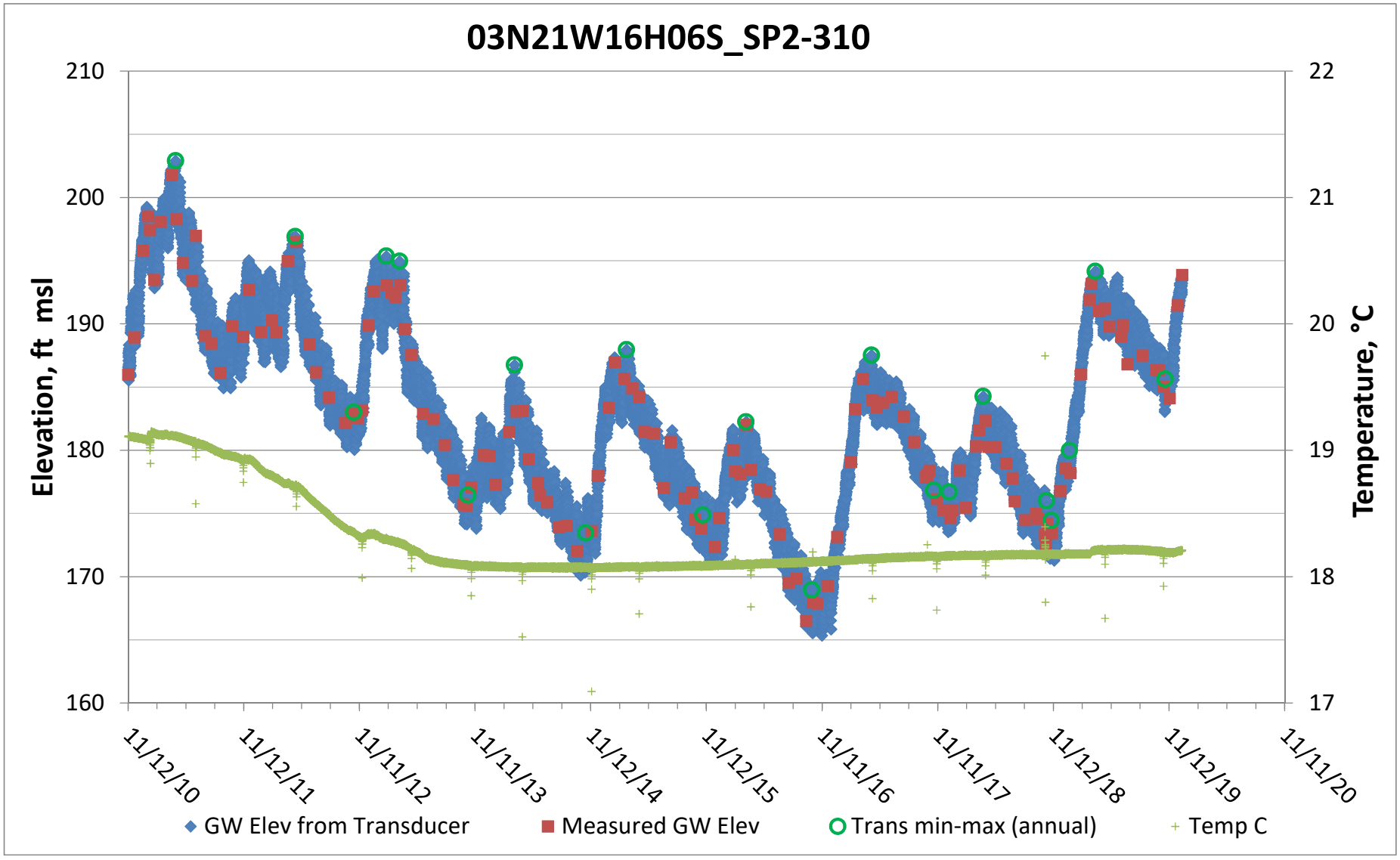


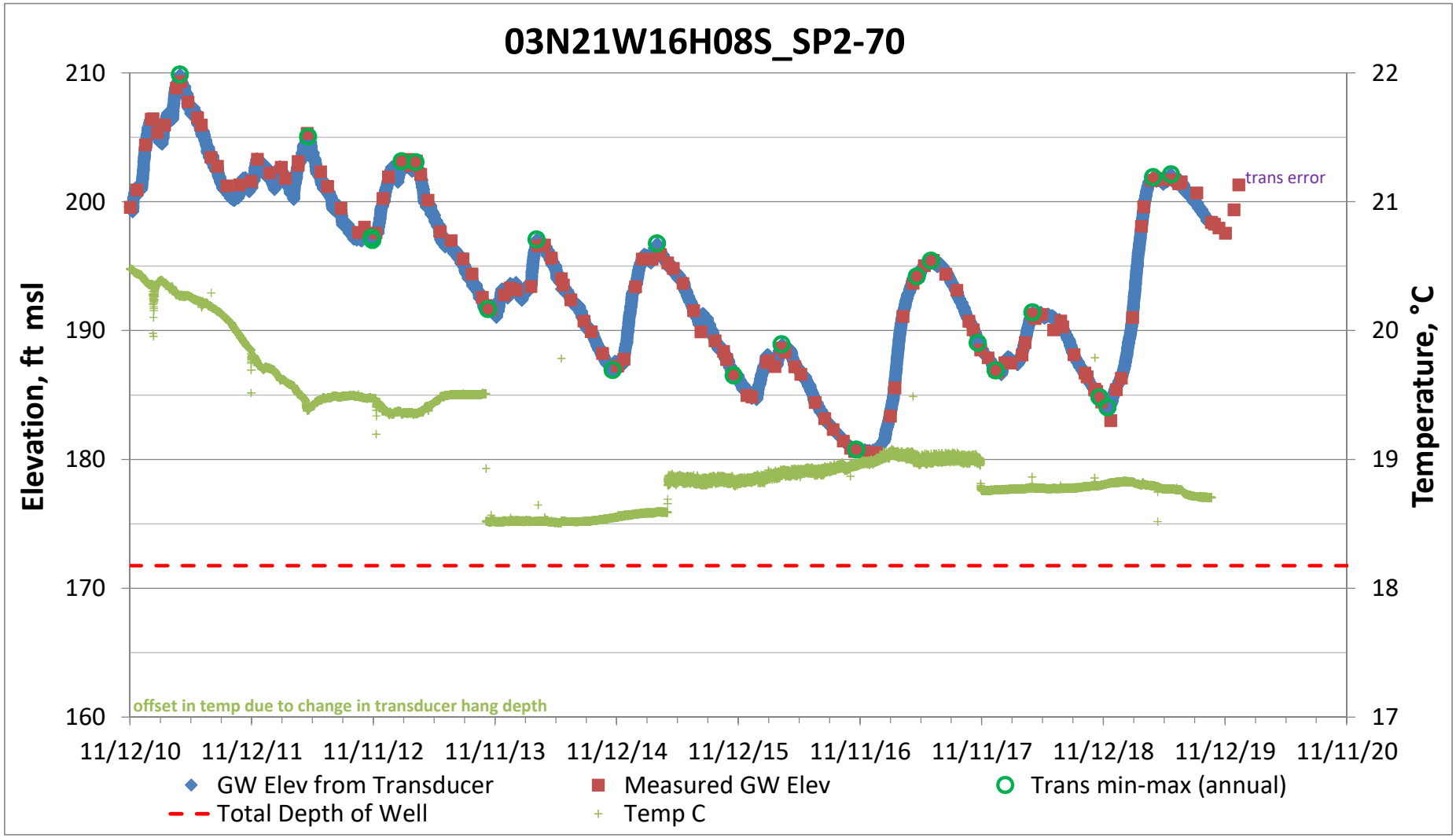


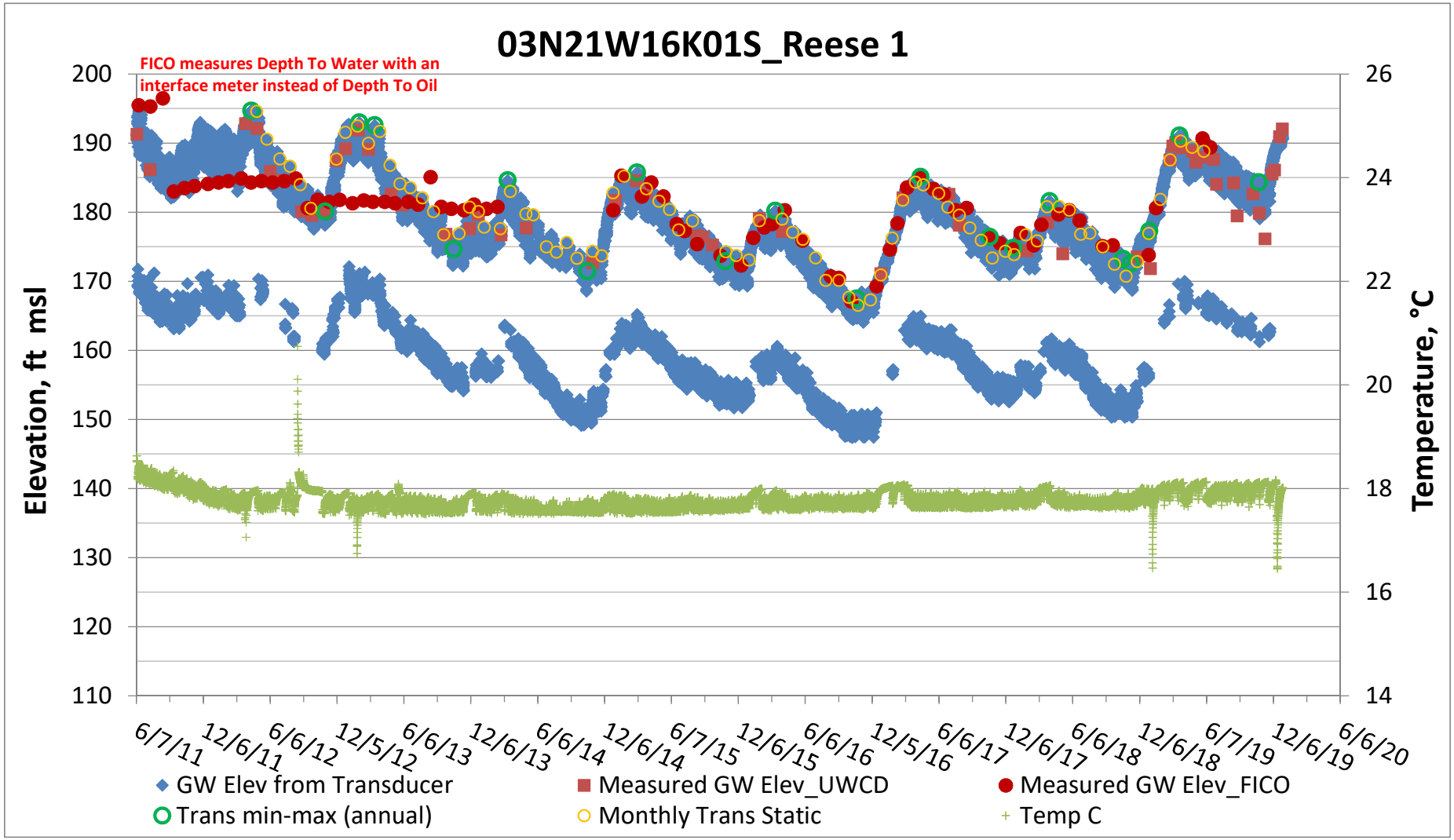


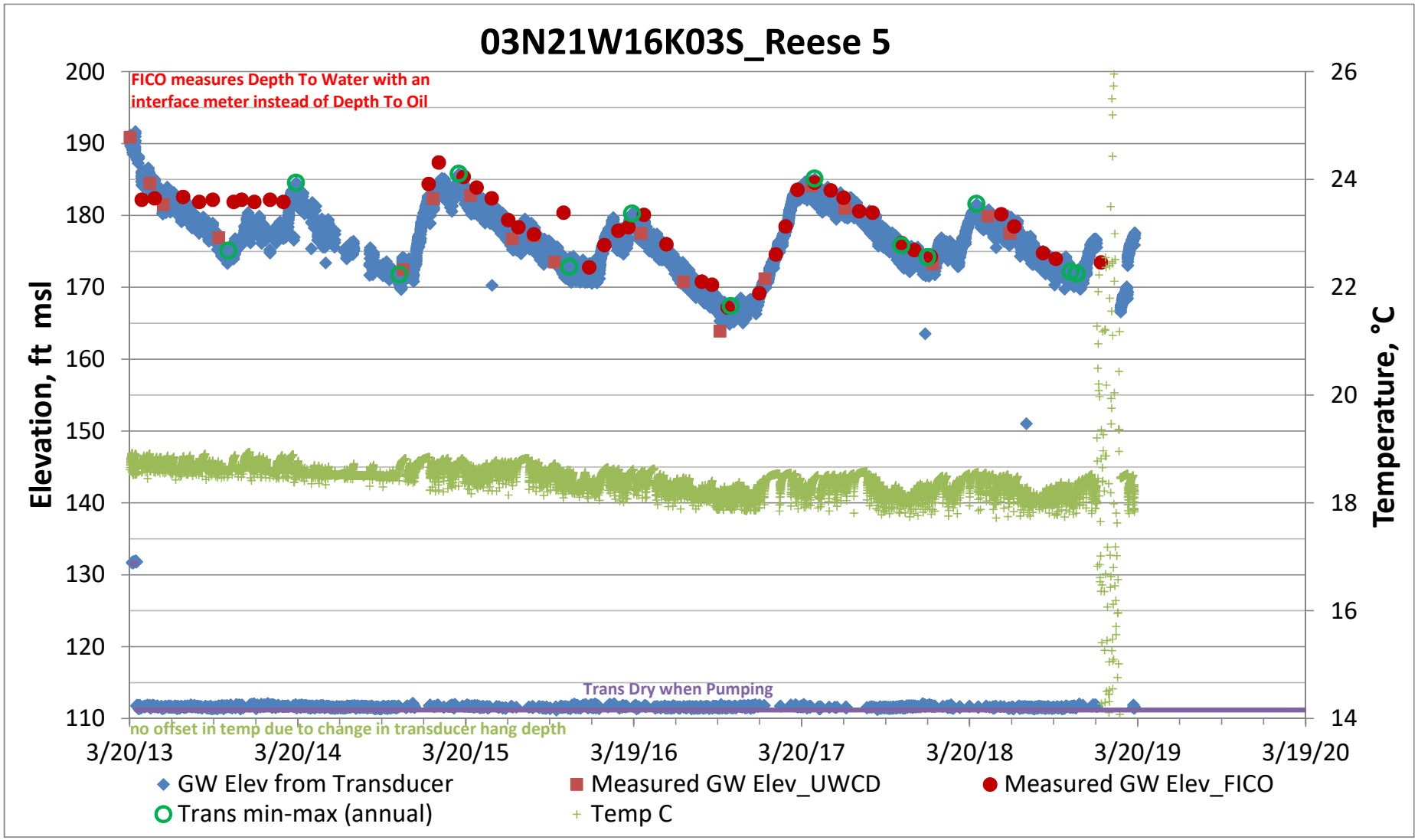


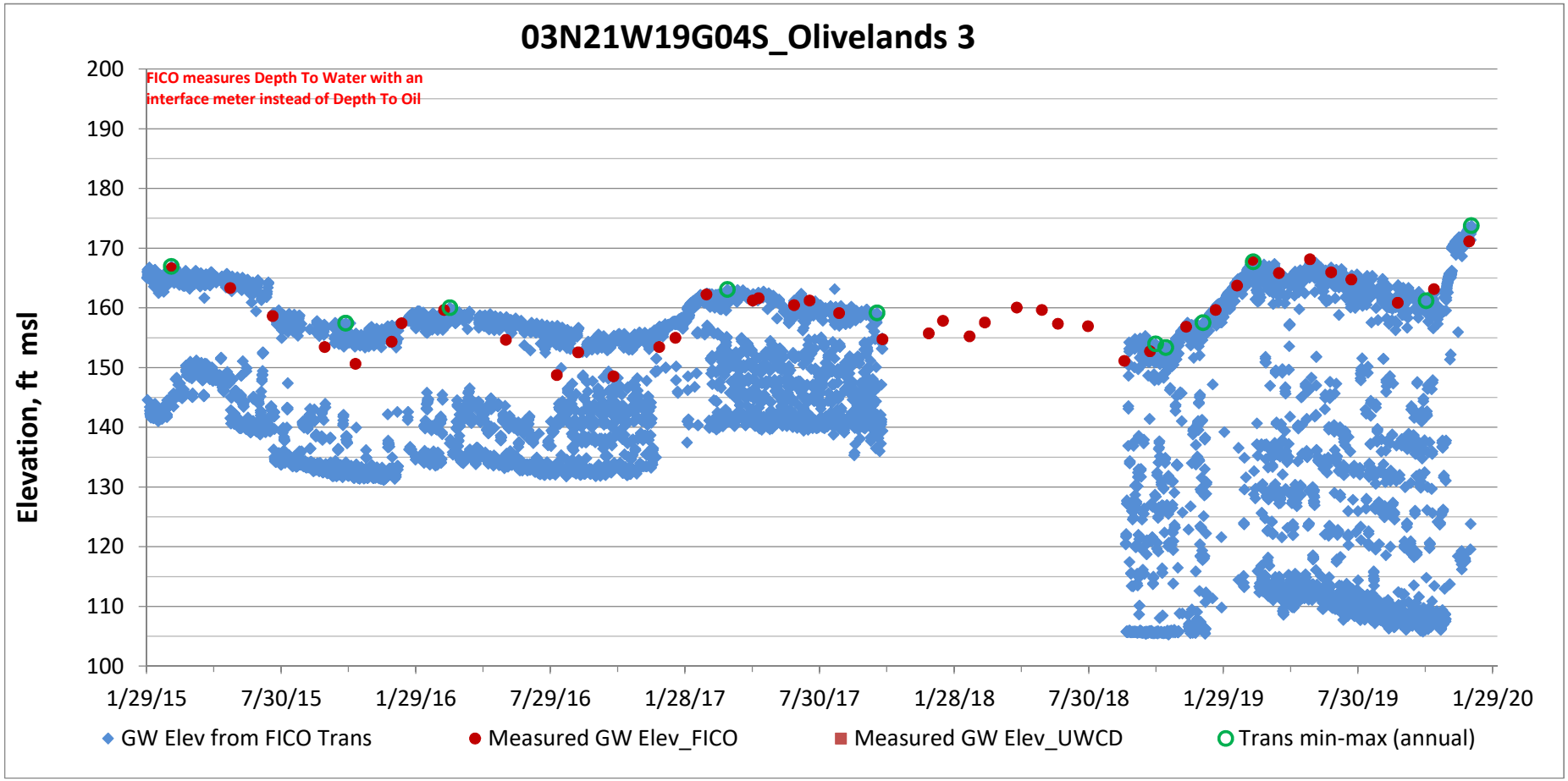


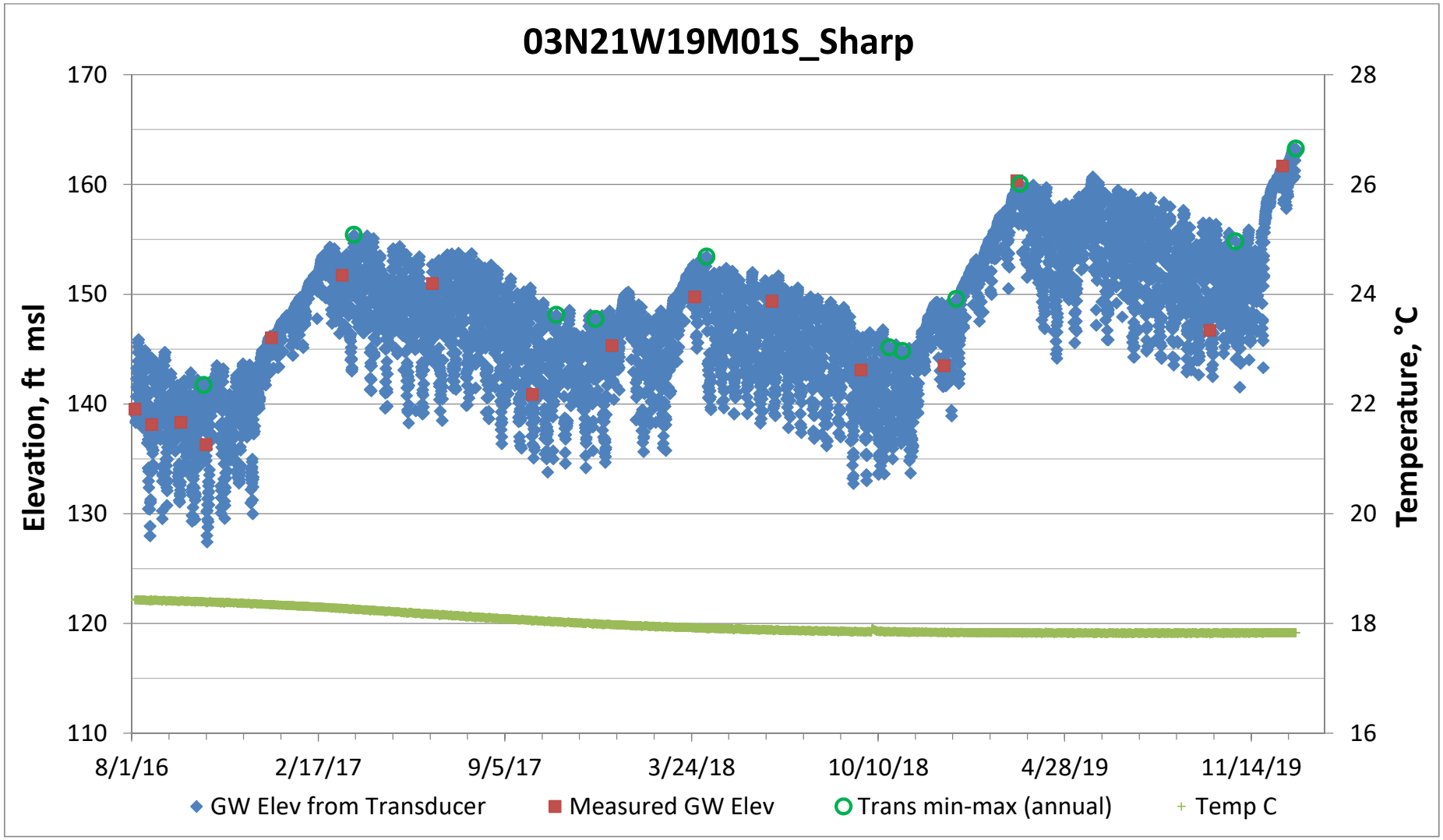


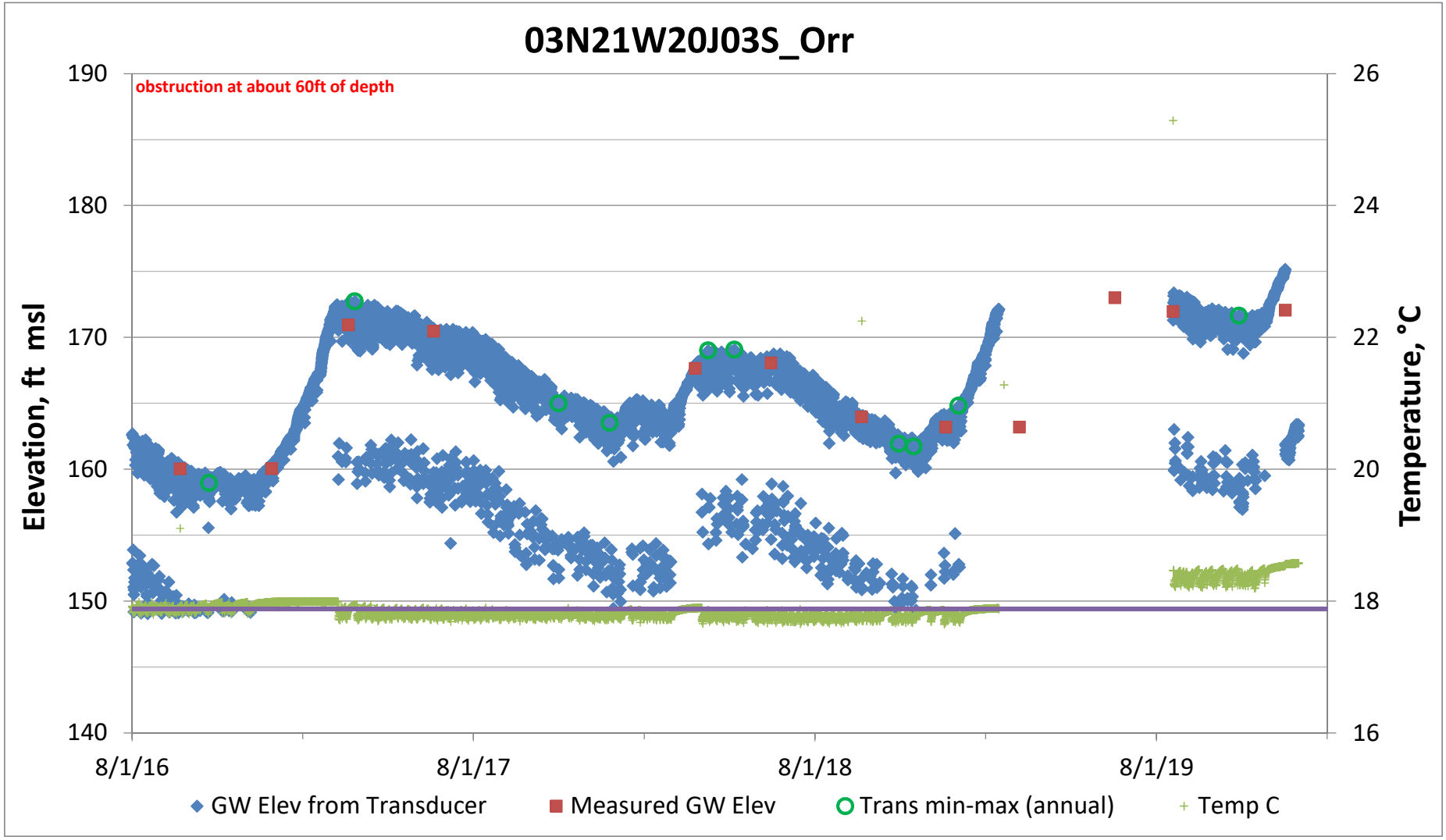


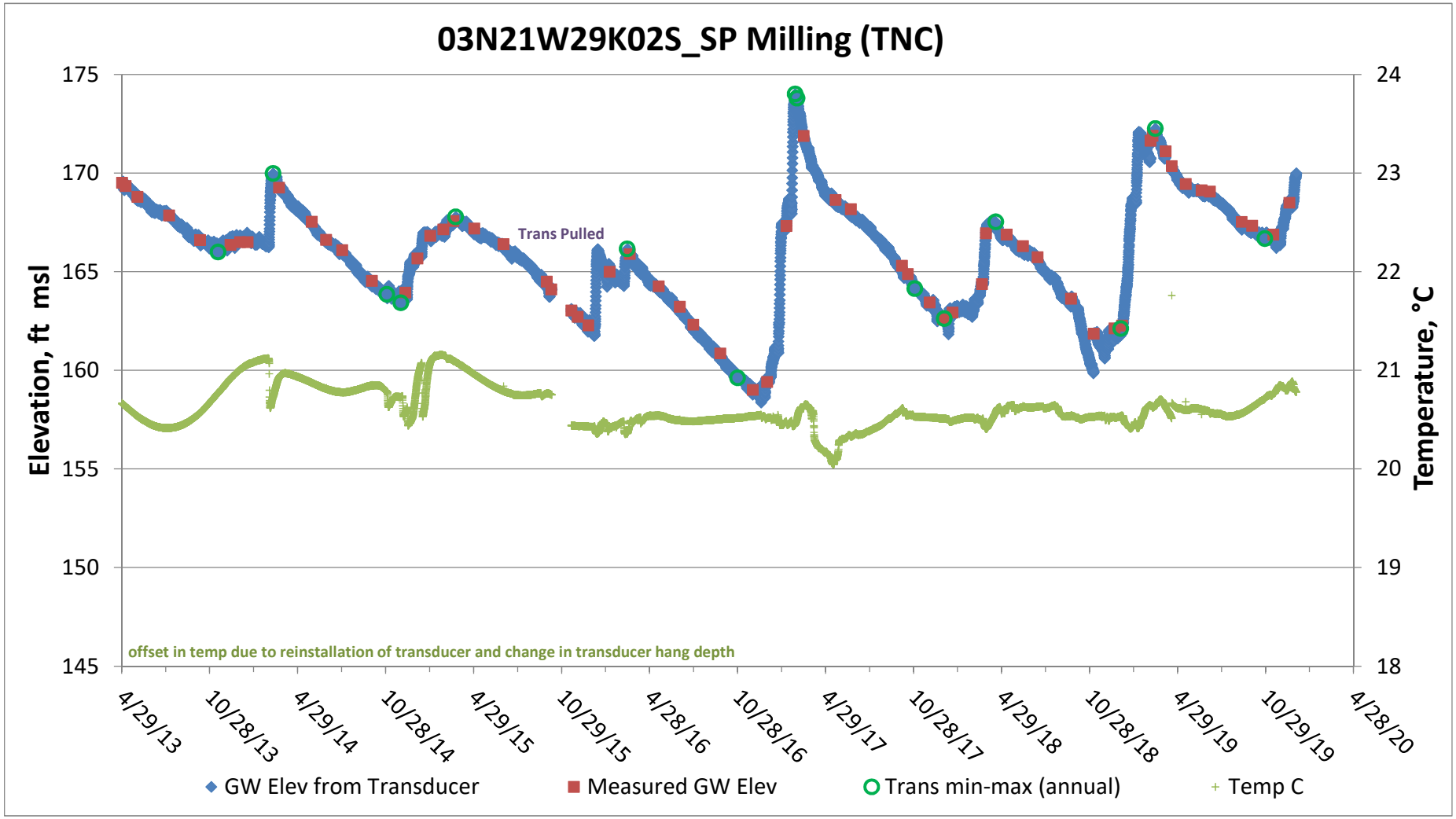


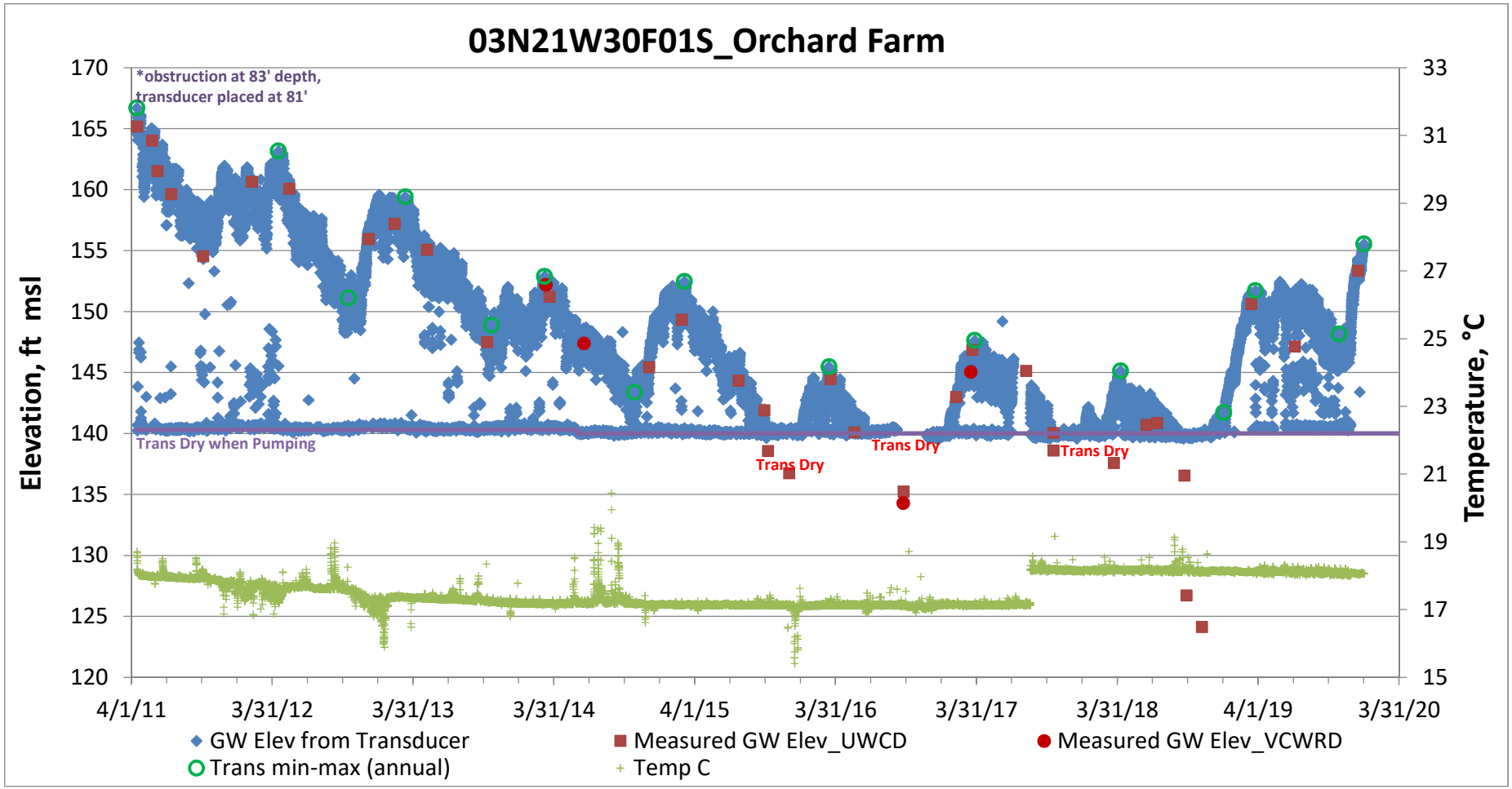


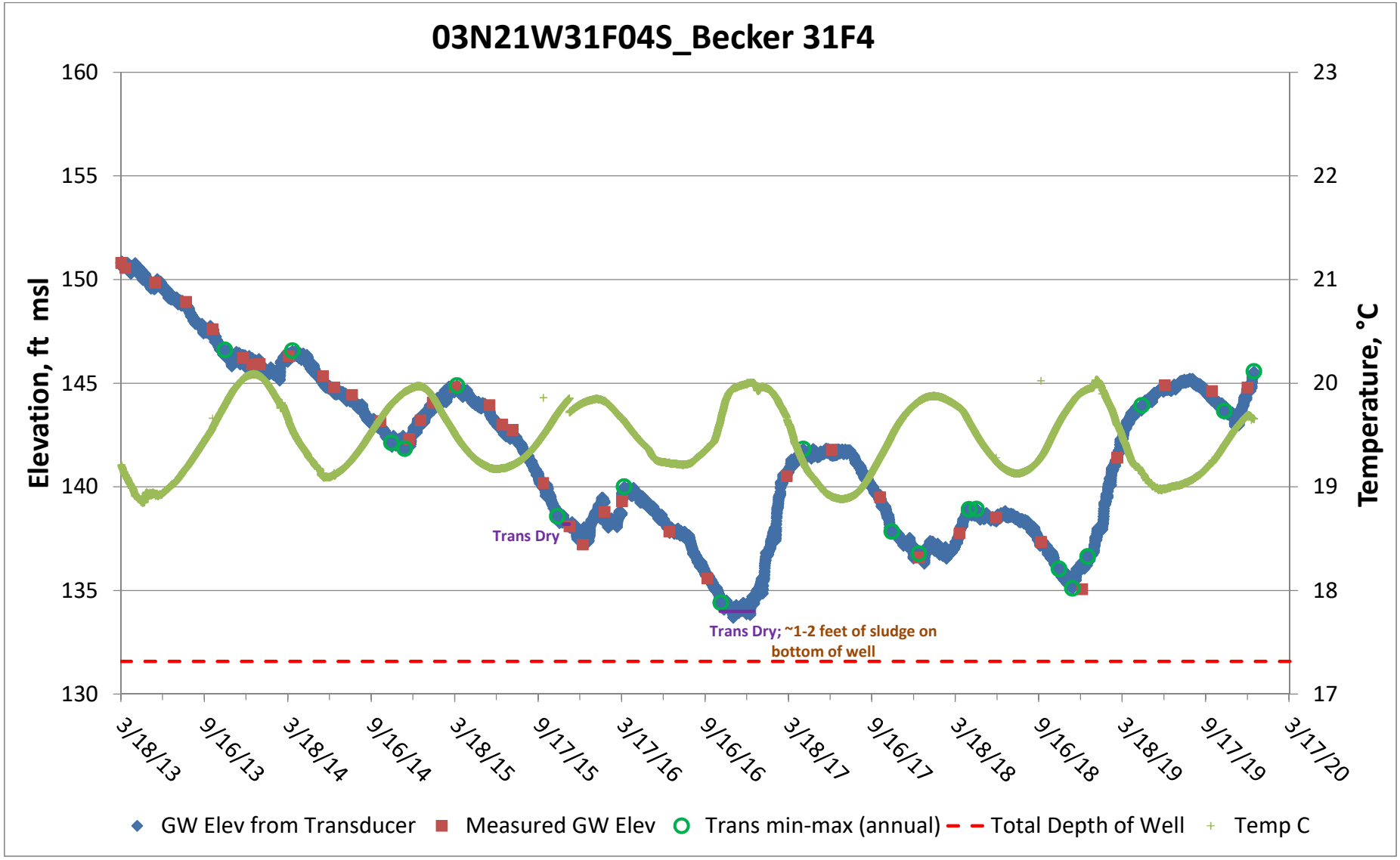


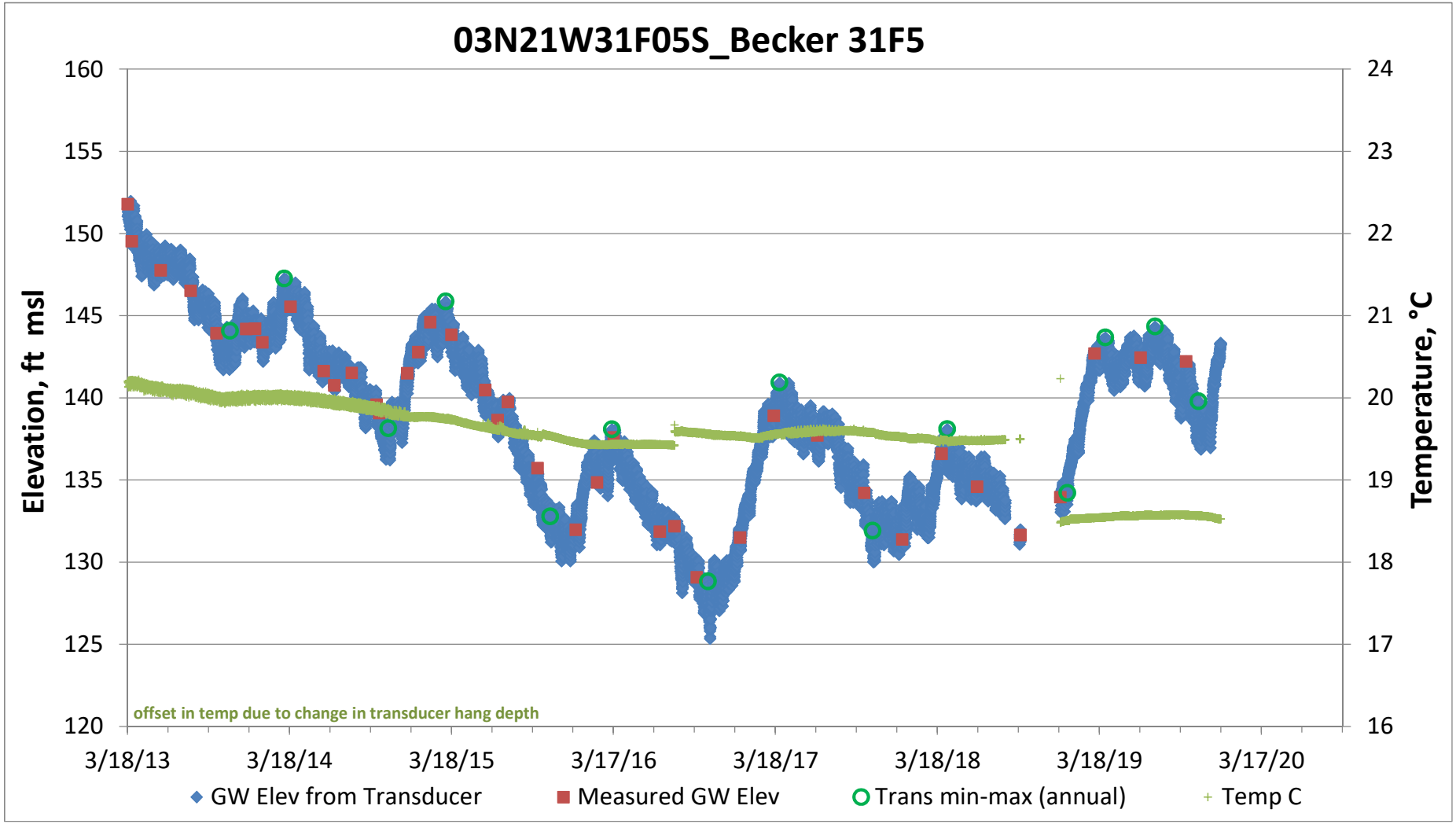


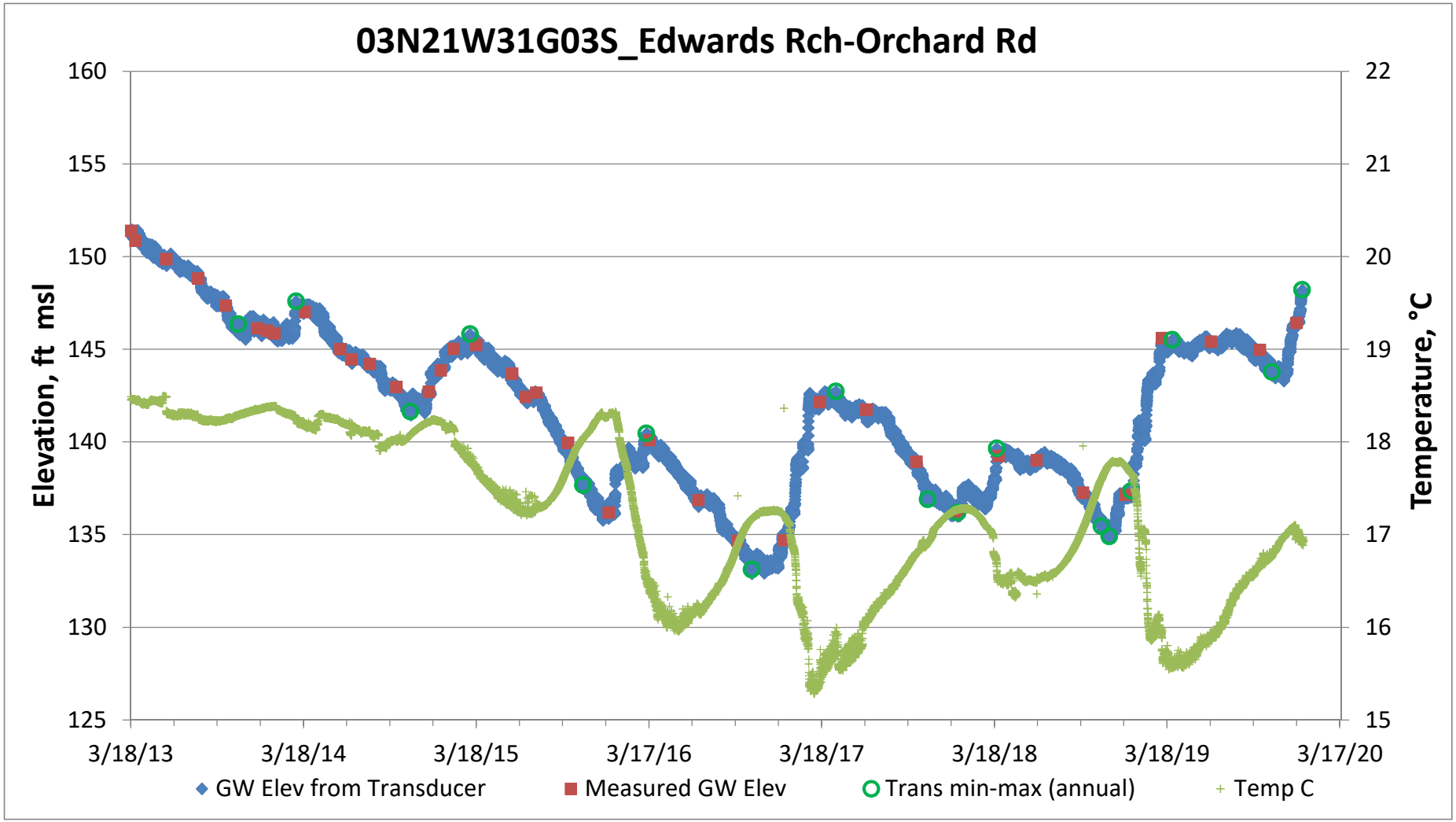


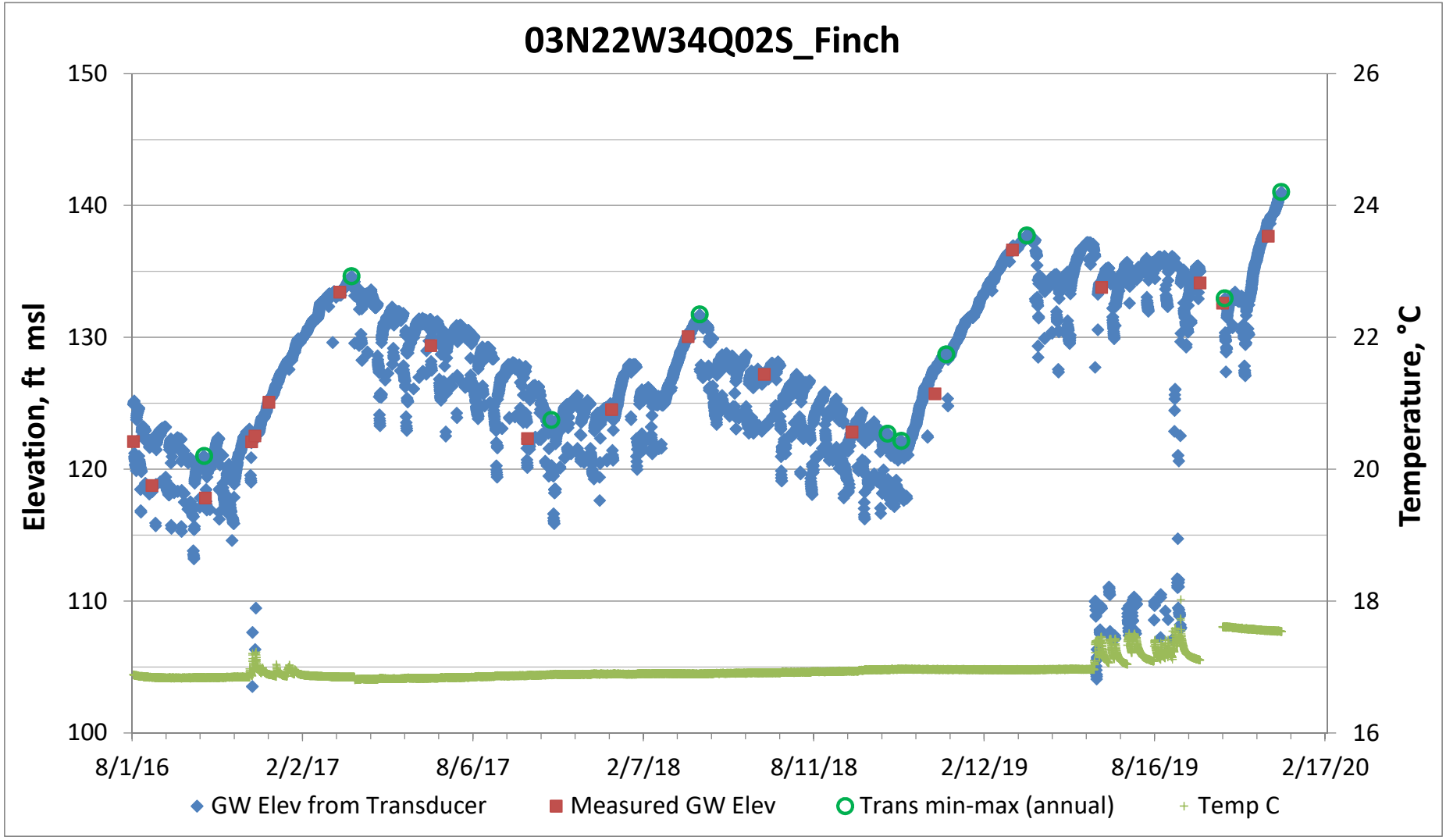


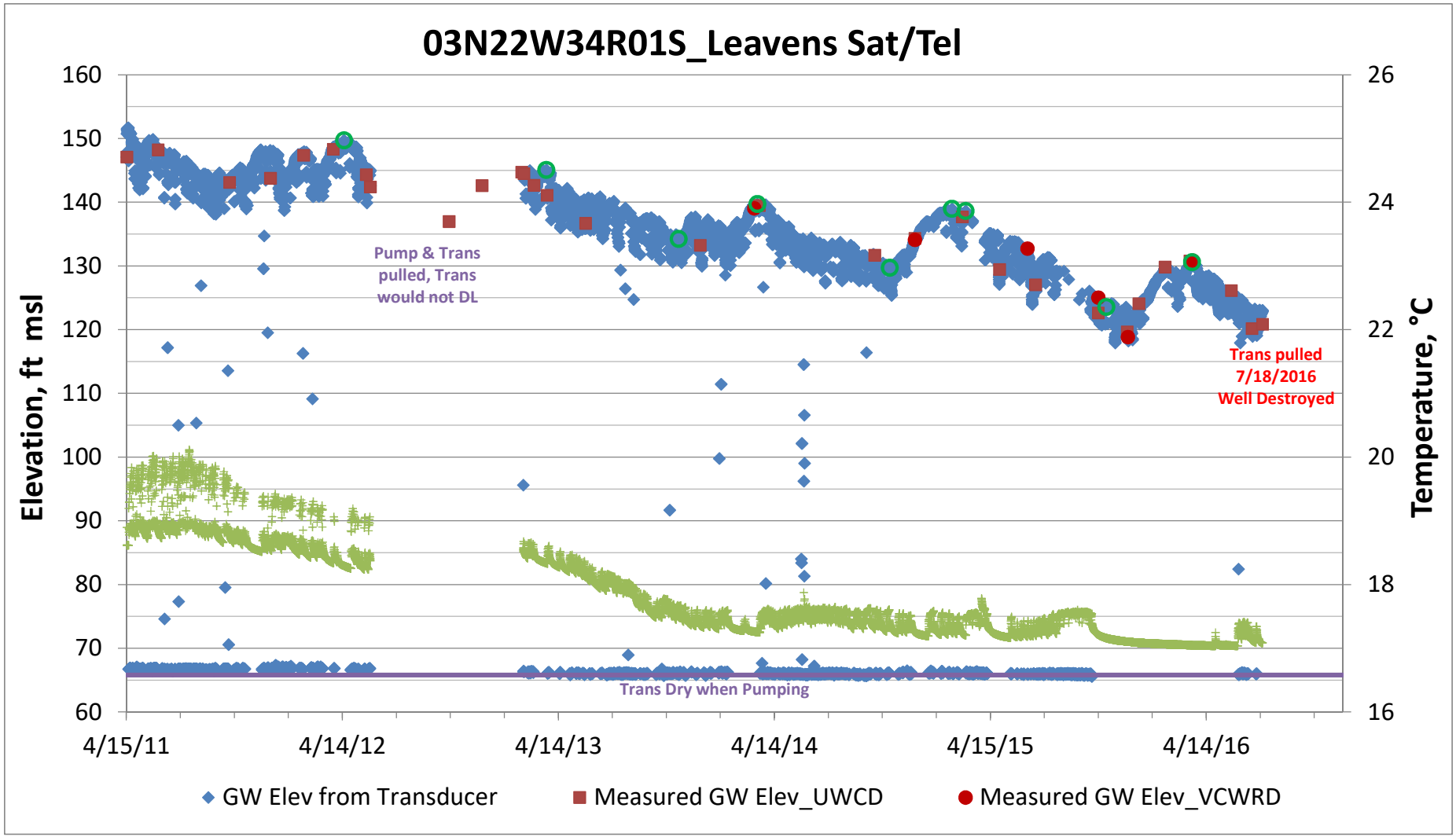


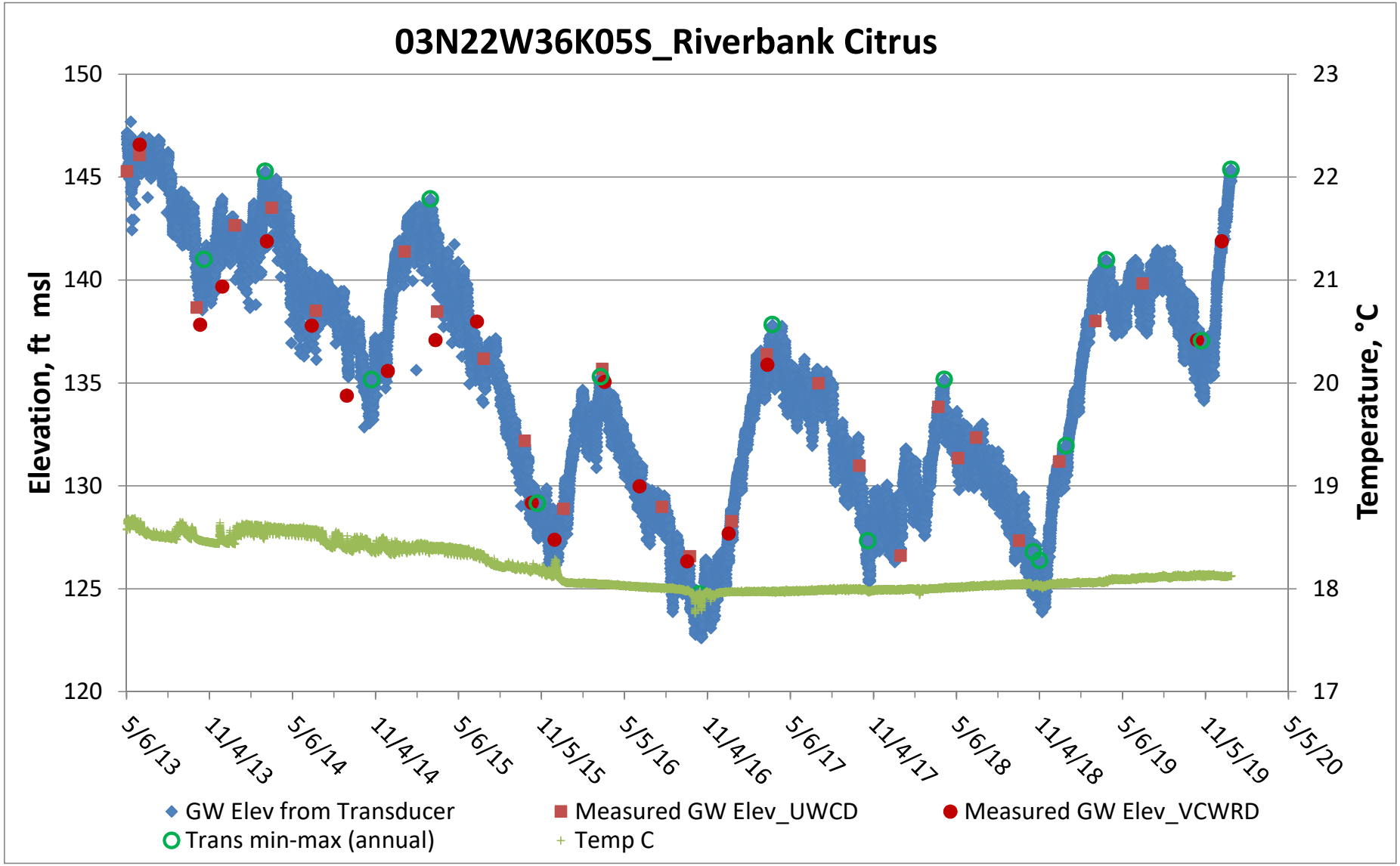












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APPENDIX C - Spring 2018 to Spring 2019 Groundwater Elevation Change Measured in Wells

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Well ID	Well No.	Spring 2019 Groundwater Elevation (ft, msl)	Spring 2018 Groundwater Elevation (ft, msl)	Difference
02N22W01P01S		78.85	43.25	35.60
02N22W01P02S	NB1	80.81	44.22	36.59
02N22W01R02S	HR1	88.09	65.20	22.89
02N22W02C01S	Greg Well	139.86	132.77	7.09
02N22W02H02S	Saticoy #3	131.00	126.00	5.00
02N22W02K09S	Saticoy #2	126.85	123.95	2.90
02N22W02K10S	Alta #12	126.13	117.13	9.00
02N22W02R05S	Alta #11	74.67	41.52	33.15
02N22W02R06S	Alta #13	79.08	39.08	40.00
02N22W03K02S		112.05	127.08	-15.03
02N22W03M02S	by apts sub pump	79.18	77.36	1.82
02N22W03Q01S		66.18	66.09	0.09
02N22W09K04S		4.41	8.93	-4.52
02N22W09K05S		72.77	77.45	-4.68
02N22W09L03S	CWP-950	51.68	52.03	-0.35
02N22W09L04S	CWP-510	71.60	67.22	4.38
02N22W10N03S	Well 2	-28.57	-18.74	-9.83
02N22W11G01S	NB2	75.03	38.17	36.86
02N22W11J01S	FERRO A	50.98	16.12	34.86
02N22W11J02S	HR3	72.41	35.61	36.80
02N22W11MW1	Saticoy #1	69.70	32.86	36.84
02N22W11MW2	Saticoy #2	69.66	34.31	35.35
02N22W11MW3	Saticoy #3	75.86	30.89	44.97
02N22W11Q01S	FERRO D	61.99	21.06	40.93
02N22W12A02S		85.53	39.17	46.36
02N22W12B08S	Dos Diegos- Shop	81.09	43.24	37.85
02N22W12E04S	Vulcan 12E4	65.50	27.60	37.90
02N22W12G03S		69.41	28.08	41.33
03N21W02R02S		261.15	255.01	6.14
03N21W09K02S		194.01	181.92	12.09
03N21W09R04S		192.40	185.10	7.30
03N21W11E03S	Santa Paula #8	233.19	221.09	12.10
03N21W11F03S	Santa Paula #9	235.82	224.12	11.70
03N21W11F04S	CIC #10	220.35	209.75	10.60
03N21W11H03S		253.89	245.84	8.05
03N21W11J02S	Santa Paula #12	233.37	226.37	7.00
03N21W12B02S	McCauly	267.57	263.92	3.65
03N21W12B04S	Van Wingerden	276.07	271.52	4.55
03N21W12E04S	FICO #8	266.21	258.54	7.67
03N21W12E08S	FICO 7A	262.19	257.17	5.02
03N21W12F03S	FICO #9	272.79	261.81	10.98
03N21W12F06S	FICO #11	268.96	263.87	5.09
03N21W12F07S	FICO 12	269.32	263.02	6.30
03N21W12H01S		276.83	278.15	-1.32
03N21W15C04S		200.10	190.20	9.90
03N21W15G01S	SP1-680	199.52	189.23	10.29
03N21W15G02S	SP1-540	199.32	188.97	10.35
03N21W15G03S	SP1-390	199.59	189.73	9.86
03N21W15G04S	SP1-280	199.49	188.68	10.81
03N21W15G05S	SP1-80	221.70	208.33	13.37
03N21W16A02S	Santa Paula #11	194.74	181.64	13.10
03N21W16H05S	SP2-550	192.56	183.89	8.67
03N21W16H06S	SP2-310	194.15	184.27	9.88
03N21W16H07S	SP2-170	194.04	183.07	10.97
03N21W16H08S	SP2-70	201.91	191.41	10.50
03N21W16K01S	Reese 1	191.09	181.59	9.50

Well ID	Well No.	Spring 2019 Groundwater Elevation (ft, msl)	Spring 2018 Groundwater Elevation (ft, msl)	Difference
03N21W16K02S	Reese 2	192.81	181.91	10.90
03N21W16K03S	Reese 5	190.60	181.61	8.99
03N21W17Q01S		184.84	174.90	9.94
03N21W19G04S		168.06	160.06	8.00
03N21W19M01S		160.35	153.43	6.92
03N21W19M02S		160.75	144.67	16.08
03N21W19R01S		156.79	152.34	4.45
03N21W20F04S	Hansen Ag Ctr	172.87	162.99	9.88
03N21W20J03S		175.79	169.00	6.79
03N21W29K02S		172.26	167.53	4.73
03N21W30E01S		156.32	148.11	8.21
03N21W30F01S	Orchard Rd	151.70	145.14	6.56
03N21W31F04S	Becker 31F4	143.93	138.92	5.01
03N21W31F05S	Becker 31F5	143.67	138.10	5.57
03N21W31G03S	EdwardRch-Orchrd	145.60	139.65	5.95
03N21W31L01S	Becker 31L1	140.11	133.08	7.03
03N21W32C01S	Freeman Becker A	162.91	156.06	6.85
03N21W32C02S	Freeman Becker B	162.38	155.59	6.79
03N21W32C03S	Freeman Becker C	164.35	156.47	7.88
03N22W26B03S		127.39	124.10	3.29
03N22W34Q02S		136.63	131.73	4.90
03N22W34Q03S		136.75	130.26	6.49
03N22W35N01S		144.03	138.97	5.06
03N22W36H01S		140.56	132.33	8.23
03N22W36K02S		138.82	138.69	0.13
03N22W36K05S		140.98	138.02	2.96

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

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Table "D-1"

IPA's 2013 - 2019 Production & Averages

8/5/2020

2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
1.0	0.8	0.6	1.0	0.7	0.5	0.4	0.7	(1.1)	1.8	Aliso Vista Ranch	03N/22W-23Q01
							0.0		0.0	Alsono, Andrew	03N/21W-21M01
241.0	1,018.4	1,175.1	1,386.5	709.1	745.7	292.0	795.4	32.31	763.1	Alta Mutual Water Company, Inc.	02N/22W-02K07, 02N/22W-02K10
10.3	6.2	4.4	2.9	5.1	1.3	1.4	4.5	1.6	2.9	Arambula, Pedro	03N/21W-21E02
									0.0	Associated Concrete Products, Inc.	3N/21W-29K03 D
									0.0	Axell, Randall as Trustee of the Dorthey E. Axell Trust	3N/21W16P02, 3N/21W16P03
0.0							0.0	0.0	0	Basso Properties	03N/21W-09J01
-3.6								0.0	0	Bender Farms (23) (29)	03N/21W-16P01
391.1	273.7	247.8	188.2	221.9	246.8	76.4	235.1	(57.4)	292.56	Bender Realty LTD (29)	3N/21W16P02, 3N/21W16P03, 3N21W17R01 (4)
											03N/21W-17R01
70.6	62.1	46.5	52.4	71.3	71.7	26.2	57.3	(43.5)	100.8	Billiwhack Ranch LLC	03N/22W-23F02
									0.0	Birky, Angie E. Trustee	3N/21W-10E01
									0.0	Brucker, Frank R. as Trustee of the Frank R. Brucker Trust	03N/21W-29E1, 3N/21W-29C3
2.4	2.5	2.5	2.2	2.5	1.1	2.1		(6.0)	6.0	Bratcher Family Revocable Tr 1-24-02 & Cutright Revocable Tr 8-18-03 (22)	03N/21W-16P01
363.0	561.9	237.0	266.7	242.8	383.5	301.4	336.6	60.1	276.5	Brucker Family Trust (29)	3N/21W-19Q1, 3N/21W-29E1, 3N/21W-29C3
											03N/21W-29E1, 3N/21W-29C3
128.8	137.0	165.6	91.4	174.8	140.0	54.2	127.4	(154.9)	282.3	Campbell, Dan	03N/21W-19R01
0.8	0.6	0.4	0.4	0.3	3.5	0.1	0.9	(0.2)	1.1	Canine Adoption and Rescue League	03N/21W-29B02
2,069.1	2,013.9	1,526.5	1,342.9	772.5	819.5	53.5	1,228.3	555.3	673.0	Canyon Irrigation Company	03N/21W-11F03, 3N/21W-11E3, 3N/21W-11F4
40.1	46.5	42.3	37.0	43.2	42.3	28.2	39.9	(59.4)	99.3	Casa De Oro Ranch	03N/21W-20F01
63.8	88.0	140.0	65.6	71.1	60.4	59.9	78.4	(23.0)	101.4	Castaneda, Albert and Mary	03N/21W-19L01 (1), 3N21W19K01

Table "D-1"

IPA's 2013 - 2019 Production & Averages

8/5/2020

2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
											03N/21W-19L01
										Coffman, Laura K. McAvoy, Successor Trustee of the Gladys Daily Coffman Trust dated June 16, 1993	03N/22W-35N01
5,084.0	4,721.7	4,042.9	3,962.1	4,135.0	4,107.4	3,927.6	4,282.9	(1,277.2)	5,560.1	City of Santa Paula (30)	03N/21W-21B03 3N21W2R2 3N/21W9R5, 03N/21W11J02, 03N/21W15C06, 03N/21W16A02, 3N/21W16A3
26.4	39.0	50.8	33.3	40.6	33.5	36.2	37.1	(56.5)	93.6	Clow, The Roger D. Clow Trust, Dated September 15, 1994	3N/21W20J04 (17) 03N/21W-20A02, 03N21WL02S
142.5	127.2	74.2	96.0	82.0	150.3	262.2	133.5	(25.2)	158.7	Cole, Lecil E. Trustee of the Lecil E. and May Jeanette Cole Revocable Trust	3N/21W-16E02
									0.0	Conklin, Patricia	03N/21W-21D02
9.87	8.85	11.76	13.2	10.4	7.3	14.8	10.9	1.3	9.6	The Judson T. Cook & Suzette H. Cook Revocable Trust dated December 5, 2007 (28)	3N/22W-26B1
175.2	168.2	142.3	121.3	238.6	204.3	194.3	177.7	5.5	172.2	County of Ventura, General Services Agency (26)	03N/21W-30H08, 3N/21W-30H02
142.4	134.6	115.7	110.8	81.0	95.3	77.9	108.3	(70.0)	178.3	County of Ventura, General Services Agency	02N/22W-02G01
							0.0	0.0	0.0	Cummings, Paul R. and Irene & Sons	03N/21W-19L01
							0.0	0.0		Dabney, George & Rebecca Trust Inter Vivos	3N/22W-26B1
							0.0	0.0		Dickenson, D&P Dickenson Family Revocable Trust, Louise Dickenson, Bruce E. Dickenson, Virginia Dickenson, Reed and Diana G. Dickenson as undivided co-owners	03N/21W-10M01
							0.0	0.0		Dominguez, G. (6)	03N/21W-12E07
							0.0	0.0	0.0	Evergreen Ranch AKA San Miguel Products	03N/21W-19R01
41.5	124.5	115.6	51.0	75.0	97.5	59.8	80.7	(59.5)	140.2	Dickenson, D&P Dickenson Family Re	03N21W-10M01

Table "D-1"

IPA's 2013 - 2019 Production & Averages

8/5/2020

2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
33.7	9.3		5.9				7.0	(78.0)	85.0	Fam, J. LLC	03N/22W-35N01
8,294.6	9,543.8	7,431.2	7,730.0	5,459.6	6,002.2	4,242.9	6,957.7	(2,955.5)	9,913.2	Farmers Irrigation Company, Inc.	03N/21W09R04, 03N/21W12E04, 03N/21W12E08, 03N/21W12F03, 03N/21W16K01, 03N/21W16K02, 03N/21W16K03, 03N/21W19H07, 3N/21W19G4, 3N/21W12F6, 03N21W15C04, 3N21W15C02
44.7	33.8	43.3	30.1	14.7	11.4	10.7	27.0	27.0	0.0	Fiano, Michael (21)	3N/22W26B02 & 3
											03N/21W-15C02, 03N/21W-15C04
205.4	211.3	193.1	171.2	167.9	184.9	113.9	178.2	(35.2)	213.4	Finch, J.J. & H.H.	3N/22W-34Q02, 3N22W34Q03
0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	Flying D Ranch LLC	03N/21W-10M01
							0.0		0.0	Galbreaith Brothers, Inc.	03N/21W-17Q01
13.45	13.89	6.75	6.51	20.70	19.12	4.39	12.1	2.52	9.6	Garcia, Elias & Guadalupe (15)	3N/22W-26B1
25.0	18.4	18.8	16.7	11.2	18.0	12.2	17.2	(25.6)	42.8	Gilbert, Patricia L., Trustee of the Gilbert Family Survivor's Trust	03N/21W-16E01
128.9	136.3	125.1	34.3	136.6	112.4	101.3	110.7	8.9	101.8	Gooding Ranch (John F. Gooding)	03N/21W-09K02, 03N/21W-09K05
36.6	41.5	31.4	31.6	44.2	33.2	27.0	35.1	(17.8)	52.9	Grant Family Ranches, LLC (20) (30)	3N22W3E01, 3N21W20E01
							0.0		0.0	Gregory, Eva as Trustee of the Gregory Family Trust	
59.4	62.2	83.2	47.6	72.7	56.0	44.5	60.8	(36.8)	97.6	Grether, Elizabeth Broome, Ann B. Priske, John S. Broome Jr. as Trustee of the John S. Broome Jr. Trust	03N/22W-35Q02
12.9	11.1	8.2	10.7	10.0	9.7	10.4	10.4	(2.6)	13.0	Guzman, Yeisi Brayen, Trustee of the Brayen And Mesa Guzman Revocable Family Trust, dated July 24, 2015	03N/21W-19G03
128.2	91.4	128.9	136.9	119.7	102.3	46.7	107.7	(21.5)	129.2	Hadley-Williams Partnership	02N/22W-03E01 (9)
							0.0			Hampton Canyon Ranch (Leslie) (32)	03N/21W-19A02
0.5	0.5	0.5	2.4	2.4	1.6	3.6	1.6	1.5	0.1	Herbert Family Trust (formerly Ray, Richard T. and Ruth L.)	03N/22W026P01

Table "D-1"

IPA's 2013 - 2019 Production & Averages

8/5/2020

2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
0.0	0.0	0.0					0.0	(7.9)	7.9	Held, Family Trust dtd 1-16-03	03N/22W-23F02
0.0	0.0	0.0						(33.8)	33.8	Held, Joann	03N/22W-23F02
							0.0	(45.1)	45.1	JAKRAN VI LLC	02N/22W-01M03, 02N/22W-01M04
125.0	125.0	34.0	77.14	83.80	62.93	177.98	98.0	(27.0)	125.0	JKJ Farms, LLC (29)	3N/21W-16P01 3N/21W-16P02&3
									0.0	Juanamaria Land Company	02N/22W-03E01
									2.0	JVP Citrus, Inc.	
										Kimura, Albert	03N/21W-11H03
									0.0	Kimura, Tama	03N/21W-11H01
									0.0	La Mesa Partnership #1	3N/21W-17R01
									0.0	Lassich, Madeline	03N/21W-29B02
176.5	235.5	195.0	159.1	171.3	120.0	178.1	176.5	(18.8)	195.3	Leavens Ranches	03N/22W-24R01 (13), 2N22W03F02
2,778.2	2,389.4	2,693.0	2,218.2	1,766.8	1,672.2	1,137.4	2,093.6	(1,425.4)	3,519.0	Limoneira Company (34)	03N/21W-01N02, 03N/21W-02Q01, 03N/21W-19G02, 03N/21W-30F01, 03N/21W-30H04, 03N/21W-31E03, 3N/21W-31L2
											03N/21W-11A01
											See Limoneira
30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	0.0	30.0	Limoneira Lewis Community Builders,	3N/21W2R2
1.2	1.1	0.5	1.0	1.6	1.6	1.8	1.5	(8.5)	10.0	Little Clara Ranch LLC (30)	3N22W34E01
							0.0	0.0			3N22W34E01
171.0	171.0	171.0	171.0	171.0	171.0	171.0	171.0	0.0	171.0	Loza Investments LLC	03N/21W-10M01
										Malzacher, Fred H. & Elaine C., Trustees	

Table "D-1"

IPA's 2013 - 2019 Production & Averages

8/5/2020

2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
30.3	7.2	8.9	18.7	20.6	23.1	18.8	18.2	(18.1)	36.3	of the Fred H. Malzacher and Elaine C. Malzacher Revocable Trust dated January 16, 1992 U/D/T dated November 25, 2009, as amended	03N/21W-21G03
31.5	31.5	31.5	47.3	32.7	41.8	19.5	33.7	(0.6)	34.3	Martinez, Esther	3N21W-29G02
22.3	23.8	17.3	25.2	22.8	22.6	23.5	22.5	(2.2)	24.7	McConica, John II	2N/22W-3Q1
							0.0			McConica, John R. et al.	3N/21W21B3
							0.0			McConica, John R. II et al.	03N/21W-21B03
149.6	124.8	162.9	123.74	85.80	66.55	162.47	125.1	(56.5)	181.6	McGaelic Group	03N/21W17R01 (4), 3N/21W11H01
570.6	392.0	479.9	296.6	447.3	430.8	319.9	419.6	136.0	283.6	McGrath, John & Sons (18)	03N/21W21E05, 3N/21W21E11, 3N/21W-20J04 (17),3N/21W-20R3
							0.0			Mondol, J.K.	03N/21W-10E01, 3N/21W-10E2
							0.0		0.0	Newsom, Alice C. as Trustee of the Newsom Family Trust	03N/21W-11A01
31.8	27.4	35.8	18.5	27.3	38.1	14.1	27.6	(19.1)	46.7	Nichols Associates	03N/22W36H01, 03N/22W36H02
33.5	28.1	25.5	23.4	19.3	15.6	23.5	24.1	(102.3)	126.4	Nutwood Farms	03N/22W-36J01, 36J02 & 36J03
0.1	0.1	0.1	0.0	0.1	0.04	0.02	0.1	(7.8)	7.9	Oba Family Trust dtd 12-22-92	03N/22W23F02, 3N/21W17D03(10)
12.5	6.3	12.3	10.3	11.8	11.1	11.0	10.7	(4.4)	15.1	Ohst, Gary	03N/21W-10E01, 3N/21W-10E2
159.9	261.3	108.5	159.0	126.2	111.7	75.8	143.2	(50.7)	193.9	Orr Ranch Co. (25)	03N/21W-20J03, 3N/21W-20J2
95.01	89.82	101.97	115.8	91.0	108.8	86.9	98.5	59.9	38.6	Ortiz Trust - Joseph & Sons	03N/21W-30E01 3N/21W-30E2, 3N/21W-20H1
406.7	445.8	392.7	299.3	343.8	343.9	121.2	336.2	(74.1)	410.3	Panamerican Seed, aka Ball Horticultural	3N/21W20K01, 3N/21W20M01 03N/21W20P01 & 3N/21W20F4
										Pear Blossom Town & Country Market,	03N/21W-10E01, 3N/21W-10E2
85.5	86.8	63.6	42.1	62.6	57.4	76.1	67.7	(48.3)	116.0	Petty Ranch LP	03N/22W-36K04, 3N/22W-36K6
							0.0			Pinkerton, Dan C. and Susan V. Pinkerton, Co-Trustees of the Pinkerton Family Living Trust dated March 19, 1990	03N/21W-17P02

Table "D-1"

IPA's 2013 - 2019 Production & Averages

8/5/2020

2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
							0.0	(39.1)	39.1	Pinkerton, Arlene	3N21W17Q01 (5)
									2	Pinkerton, Jennifer Paulene	
41.1	59.2	41.5	1.6	33.8	93.2	57.2	46.8	(15.1)	61.9	Pinkerton, Murray	03N/21W-21E01
									2	Pinkerton Ranch Trust	
									0.0	Pinkerton, W. B. Limited Partnership	3N21W17Q01
										Pinkerton, W. J. Estate Ranch 1 & 2	03N/21W-16E02, 3N/21W-29B4
							0.0	0.0	0	Pinkerton, W. J. Estate Ranch	3N/21W-16E02
									0.0	Pinkerton, Wesley Estate	03N/21W-21E01
									0.0	Rancho Attilio	2N/22W-2Q01
157.9	160.6	172.6	143.7	159.0	125.7	72.2	141.7	22.1	119.6	Rancho Filoso, LLC	03N/21W-09K03, 3N/21W-9K4
							0.0	(10.0)	10.0	Rancho Santa Paula, LLC	
0.0	0.0						0.0	0.0	0	Regents of the University of California (31)	3N/22W-34R1
1,017.1	1,092.2	1,114.4	1,268.1	1,343.5	1,094.6	966.5	1,128.0	364.5	763.5	Riverbank Citrus, LLC	3N/22W36K7 & 3N/22W36Q1, 3N22W36K05
							0.0	(16.2)	16.2	Riverpark A LLC	02N/22W-01M03, 02N/22W-01M04
									0.0	R.F. Robertson as Trustee of the Robertson Family Trust	03N/21W-17Q01
439.2	245.4	325.7	268.4	198.3	265.7	123.7	266.6	(97.2)	363.8	Santana, Jamie, L. Trustee of the Survivor's Trust Under the Jamime L. Santana Family Trust dated May 30, 1984 as amended	3N/22W-24R01 (13)
											03N/21W-17Q01 (5)
											03N/21W-17Q01 (5)
											3N21W17R01 (4)
											3N21W9J01 (24)
											2N22W03E01
3.6	8.3	5.0	10.4	7.9	7.7	3.4	6.6	(15.3)	21.9	Santa Paula Hay & Grain and Ranches	03N/21W-19A02
101.1	75.9	63.5	64.1	63.1	73.8	98.4	77.1	(56.9)	134.0	Saticoy Foods Corp.	03N/21W-30H05 (7), 3N/21W-30H6, 3N/21W-30H9
115.2	114.4	95.5	0.0	167.5	206.0	118.9	116.8	(50.5)	167.3	Sharp, J. M. Company	03N/21W-19M01, 19M02
										Shores, John Family Partnership	03N/21W-20J04 (17), 3N/21W-20R2
85.1	87.6	80.4	81.4	69.6	98.8	88.1	84.4	12.2	72.2	Shozi Ventura, LLC	02N/22W-03B01, 02N/22W-03B02
								0.0	0	Silva, Frank	02N/22W-01M03, 02N/22W-01M04

Table "D-1"

IPA's 2013 - 2019 Production & Averages

8/5/2020

2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
									0.0	Southern California Edison Co.	3N/22W-27M02 D
64.1	103.6	72.9	73.3	78.2	71.2	44.9	72.6	10.5	62.1	Strata Holdings LP	03N/21W-17P02
				44.9	52.3	34.2	18.8	(88.7)	107.5	The Nature Conservency	3N/21W29K1, 29K02 & 29K4
									0.0	Thermal Belt Mutual Water Co. Inc.	03N/21W-15C02, 03N/21W-15C04
										Torres, George 2013 Trust (32)	03N/21W-19A02
										Trademark Concrete Systems, Inc.	03N/21W-11H03
									0.0	Tri-Leaf Nursery (Bruce Arikawa)	3N/21W-30E01
162.3	134.4	148.1	74.38	71.76	191.19	83.76	123.7	55.7	68.0	Tucker Ranch	02N/22W-03K02, 2N/22W-3K3
315.4	206.0	247.6	187.2	206.5	165.7	141.6	210.0	77.5	132.5	TVC Pinkerton Ranch LLC (27)	3N21W-29B4
										Twyford Plant Laboratories, Inc Fedes	03N/21W-17R01
							0.0	(5.8)	5.8	Utility Vault (Newbasis is Parent Co)	3N/21W-29K03 D (8)
1.2	1.2	1.2	1.0	1.0	1.0	1.0	1.1	(6.9)	8.0	Vanoni, David or Mary - Mary Vanoni	02N/22W-02Q01
0.0	0.0	0.0					0.0	0.0	0.0	Walking Beam Ranches	03N/21W-19G03
									0.0	Wallace, William	3N/21W-21E01
46.8	23.87	28.22	44.3	8.1	2.0	0.0	21.9	12.1	9.8	We 5 Properties (35)	02N/22W-02J03
										WH Ventura 165 LLC (31)	3N/22W-34R1, 3N21W20F04
2.0	2.2	1.5	1.0	1.0	1.0	1.0	1.4	(26.2)	27.6	Williams, James W. III	03N/22W-23G01
										Wittenberg-Livingston Inc. (30)	02N/22W-02Q01
19.8	16.5	4.6	0.5				5.9	(31.6)	37.5	Wright, Scott	03N/21W-11H03
										Von Chmielewski, Wolfgang (15)	03N/21W-10E01, 3N/21W-10E2
4.8	2.4	16.7	79.1	40.4	32.4	27.2	29.0	(2.0)	31.0	Yoon Family Trust, (Soo Han Yoon)	2N/22W-3L01
11.7	15.0	15.7	14.9	23.7	13.8	16.3	15.9	(4.9)	20.8	Zimmerman, Wade N. III and Patricia B. Zimmerman Trust	3N/21W-21E08 03N/21W-21D02
25,486.5	**26,534.2**	**23,211.8**	**22,198.7**	**19,071.5**	**19,588.0**	**14,613.4**	**21,529.2**	(5,977.4)	**27,510.7**	**Total Basin IPA Stipulated Parties**	
27,551.4	**27,551.4**	**27,551.4**	**27,551.4**	**27,551.4**	**27,551.4**	**27,551.4**	**27,551.4**		**27,551.4**	**Historical Association IPA With Non-Parties (40.7 AF)**	
26,492	**27,456**	**25,886**	**25,393**	**21,919**	**22,911**	**17,242**	**23,900**			**Total IPA, Ventura, Non-Parties and De Minimus**	

Table "D-1"

IPA's 2013 - 2019 Production & Averages

8/5/2020

2013 (2)	2014 (2)	2015 (2)	2016 (2)	2017 (2)	2018 (2)	2019 (2)	7 Year Average	Avg Over + Under (-)	Acre Feet	Party Name	Well Number
26,479	**27,445**	**25,856**	**25,363**	**21,889**	**22,881**	**17,237.66**				**United Water Conservation District Totals**	
13.06	10.86	30.00	30.00	30.00	30.00	4.44				**Over/Under Amounts (1) (3) (19)**	

Footnotes:

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

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

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

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

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

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

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

(10) Well number was added Oba.

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

(15) Garcia - Spelling correction

(17) Roger Clow is a 1/3 owner of the Shores well; however, Clow used 100% of the water for 2007 and 2008. Clow's usage totals 30.5 AF for 2007 and 61 AF for 2008 were reallocated from Shores.

(21) Michael Fiano stipulated in 2012, will be leasing all water pumped annually going forward, transfers to date were estimated, any remaining balances will be made current with 2014 recorded production.

(22) Bratcher Cutright IPA From Bender Farms, 6 acre-feet

(23) Bender Reality and Bender Farms are owned by the same person, Bender Farms transferred 4.6 AF to the City of Santa Paula in 2012 and 6.0 AF to Bratcher in 2014, minus numbers reflect remaining allocation for production for the years reported to United Water Conservation District.

(24) Basso Properties Sold to Jaime Santana Trust 43.4 acre-feet with property

(25) Roger Orr as Trustee of the Orr Family Trust so the Orr Ranch Co. to Bryce R. and Elaine V. Bannatyne Co Trustees of the Bannatyne Trust

(26) County of Ventura over reported 158.62 acre-feet in 2013, (331.2+2.67-158.62=175.2) United Water Conservation Distrcit did not recognize that production correction in their records.

(27) Pinkerton, W. J. Estate Ranch 1 & 2, Sold to Pinkerton W. J. Estate Ranch 158.7 AF of IPA and 132.5 AF of IPA to TVC Pinkerton Ranch LLC in 2014, combined over production is reflected on TVC Pinkerton

(28) The Judson T. Cook & Suzette H. Cook Revocable Trust dated December 5, 2007 Purchased the Dabney, George and Rebecca Trust Inter Vivos in January 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

Table "D-2"

De Minimus 2013-2019 Production & Averages

(Production Not to Exceed 5 AFY)

2012	2013	2014	2015	2016	2017	2018	2019	7 Year Average	Party Name	Well Number
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6	0.9	Chapman, Kenneth	3N/21W21F1
3.5	3.5	3.4	2.2	2.2	2.6	2.4	2.4	2.7	Chavez, Joel and Carmen	3N/21W21E07
0.0	0.0	0.0	0.0	1.0	2.6	3.6	3.7	1.5	Loza, Jesus and Veronica	3N/22W26L01S
8.6	4.3	4.3	3.3	3.9	8.1	10.0	7.3	5.9	Rogers, Charles W., Jason C. Rogers, and Aaron W. Rogers	2N/22W-1M2
3.6	3.6	4.1	4.2	4.2	4.7	5.0	4.4	4.3	Santa Paula Airport Association	3N21W14D01
3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	Sullivan, Russell J.	3N21W21L1
20.2	**15.9**	**16.3**	**14.2**	**15.8**	**22.5**	**25.5**	**21.9**	**18.9**	**Total De Minimus Producers**	

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Table "D-3"

Non-Party 2013 - 2019 Production & Averages

2012 (7)	2013 (7)	2014 (7)	2015 (7)	2016 (7)	2017 (7)	2018 (7)	2019 (7)	2013-19 Average AFY Production	Name	Well Number
4.0	3.2	3.2	3.2	3.0	2.4	3.0	2.3	2.9	Davis, Linda Trust	3N21W21E04, 3N/21W-21E10 (2)
0.0	0.0		0.0	0.0				0.0	Garman, William (5) (2.0 AF)	02N/22W-02N04
1.5	1.4	2.0	1.6	2.0	1.6	1.6	1.6	1.7	Minero, Gilbert (5) (1.1 AF)	03N/21W-21M01
3.6	3.8	4.4	6.3	10.6	11.0	10.7	7.5	7.8	Sanchez, Martin	3N/21W-21E6
2.0	1.0	2.0	1.8	2.0	1.9	1.6	1.3	1.7	Vint, Thomas H. (5) (4.9 AF)	03N/21W-21E03
5.0	5.0	5.0	1.6	1.1	2.2	2.2	1.9	2.7	Westerdale Trust (5) 1.0 AF)	03N/21W-21G01
16.1	**14.4**	**16.6**	**14.5**	**22.2**	**19.1**	**19.2**	**14.6**	**16.7**	**Total Average AFY Production (Average 2013-2019)**	

Footnotes to Non-Stipulating Pumpers

Achived footnotes: 3, 4, 6

40.7 Acre-Feet for Non Parties from

(1) Incorrect well number.

(2) Added well number.

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

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

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Table "D-4"
Temporary Water Transfers

8/5/2020

2012	2013	2014	2015	2016	2017	2018	2019	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transfering Parties
2,348	2,778	2,389	2,693	2,218	1,767	1,672	1,137	2,093.6	(1,425)	3,519	**Limoneira Company**
689.5	1,242.0	674.0	756.2	441.0	364.9	660.0					**To:** Canyon Irrigation Company
72.5	120.4	136.1	79.8			39.4					**To:** Canyon Irrigation Company for Rancho La Cuesta
413.0	160.7	231.0	250.0	526.4							**To:** Riverbank Citrus LLC
20.0	37.0	49.0									**To:** Fiano, Michael J. Trust
		135.1									**To:** Leavens Ranches
		74.5									**To:** Regents of the University of Californnia
-62.2	(62.2)	(62.2)	(62.2)	(62.2)							**To:** City of Santa Paula (2016 Permanent Transfer)
2.0											**To:** Dabney/Cook
	146.2	90.0	132.0	43.0							**To:** Tucker Ranch
	28.1	35.0	24.0		17.0						**To:** Gooding Ranch
3483.0	4,422.3	3,751.8	3,872.8	3,166.4	2,148.7	2,371.6	1,137.4	2,981.6	(537)	3,519	**Limoneira Company Balance**
27.2	44.7	33.8	43.3	30.1	14.7	11.4	10.7	27.0	27	-	**Fiano, Michael J. Trust**
-20.0	-37.0	-49.0									**From:** Limoneira Company
						-30.00					**From**: Dan Campbell
			-43.3	-30.09							**From:** Malzacher, Fred H & Elaine Trust
7.2	7.7	-15.2	0.0	0.0	14.7	-18.6	10.7	(0.1)	(0.09)	-	**Fiano, Michael J. Trust Balance**
76.1	128.8	137.0	165.6	91.4	174.8	140.0	54.2	127.4	(155)	282.3	**Campbell, Dan**
						30.0					**To:**Michael J Trust
						90.0					**To:** Alta Mutual Water Company, Inc**.**
76.1	128.8	137.0	165.6	91.4	174.8	260.0	54.2	144.5	(137.75)	282.3	**Campbell, Dan Balance**
30.3	30.3	7.2	8.9	18.7	20.6	23.1	18.8	18.2	(18)	36	**Malzacher, Fred H. & Elaine C., Trustees of the Fred H.**
			43.3	30.1	0.0	0.0					**To: Fiano, Michael j. Trust**
30.3	30.3	7.2	52.2	48.8	20.6	23.1	18.8	28.7	(7.59)	36	**Malzacher, Fred H. & Elaine C. Balance**
9,443.5	8,294.6	9,543.8	7,431.2	7,730.0	5,459.6	6,002.2	4,242.9	6,957.7	(2,955)	9,913	**Farmers Irrigation Company**
			33.0		123.4	128.0	588.2				**To:** Canyon Irrigation Company
		185.4	5.6								**To:** Brucker Family Trust
77.7	56.4	51.2	63.4	77.2	52.4	70.2	48.3				**To:** Ortiz Trust - Joseph & Sons
	98.9										**To:** Bender Reality LTD
	32.9										**To:** Rancho Filoso, LLC
					28.3	39.1	18.2				**To:** Schozi Ventura
190.0	306.0	150.0	170.0	85.0	85.0	132.0	93.0				**To:** McGrath, John & Sons
				426.3	145.8						**To:** Alta Mutual Water Company
	3.9	3.3			3.7						**To:** Aramblua, Pedro
					295.6	220.4	149.1				**To:** Riverbank Citrus
		100.0	100.0								**To:** Strata Holdings LP
	4.5	9.4									**To:** Grant Family Ranches
	113.4			116.1			79.4				**To:** TVC Pinkerton Ranch LLC
9,711.2	8,910.6	10,043.1	7,803.1	8,434.6	6,193.9	6,591.9	5,219.1	7,599.5	(2,313.7)	9,913	**Farmers Irrigation Company Balance**
1442.4	2069.1	2013.9	1,526.5	1,342.9	772.5	819.5	53.5	1,228.3	555	673	**Canyon Irrigtion Company**
0.0	0.0	0.0	-33.0	0.0	-123.4	-128.0	-588.2	(124.7)			**To:** City of Santa Paula
0.0	0.0	0.0									**Returned to Creek**
0.0	0.0	0.0	33.0	0.0	123.4	128.0	588.2				**From:** Farmers Irrigation Company
-72.5	-120.4	-136.1	-79.8								**From:** Limoneira Company for La Cuesta over use
-689.5	-1242.0	-674.0	-756.2	-441.0	-364.9	-699.3					**From:** Limoneira Company
680.4	706.6	1203.8	690.5	901.9	407.6	120.2	53.5	583.4	(89.56)	673	**Canyon Irrigation Company Balance**

Table "D-4"
Temporary Water Transfers

8/5/2020

2012	2013	2014	2015	2016	2017	2018	2019	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transfering Parties
0.0	0.0	0.0	-33.0	0.0	-123.4	-128.0	-588.2	(124.7)			**From:** Canyon Irrigation Company
62.2	62.2	62.2	62.2	62.2							**From:** Limoneira Company (62.2 Permenant Transfer '16)
4,833.6	5,146.2	4,783.9	4,072.0	4,024.3	4,011.5	3,979.3	3,339.4	4,193.8	(1,366)	5,560	**City of Santa Paula Balance**
0	0	0	0	0	0	0	0	-	-	0.0	**Dickenson, D&P Dickenson Family Revocable Tr.**
13.8											**To:** Gooding Ranch (John F. Gooding)
13.8	0	0	0	0	0	0	0	-	-	0.0	**Dickenson, D&P Dickenson Family Rev. Tr Balance**
115.6	128.9	136.29	125.06	34.3	136.57	112.38	101.31	110.7	9	101.8	**Gooding Ranch (John F. Gooding)**
-13.8											**From:** Dickeson, D&P Dickenson Family Rev. Tr.
	-28.1	-35.0	-24.0		-17.0						**From:** Limoneira Company
101.8	100.8	101.29	101.06	34.3	119.57	112.38	101.31	95.8	(6.0)	101.8	**Gooding Ranch (John F. Gooding) Balance**
176.5	149.6	124.8	162.9	123.7	85.8	66.6	162.5	125.1	(56)	181.6	**McGaelic Group**
		48.8			75.0	51.0					**To:** McGrath, John & Sons (Permanent Transfer of 55.9)
176.5	149.6	173.6	162.9	123.7	160.8	117.6	162.5	150.1	(31)	181.6	**McGaelic Group Balance**
69.9	85.1	87.6	80.4	81.4	69.6	98.8	88.1	84.4	12	72.2	**Shozi Ventura, LLC**
					-28.3	-39.1	-18.2				**From: Farmers Irrigaton Company**
69.9	85.1	87.6	80.4	81.4	41.3	59.8	69.9	72.2	-	72.2	**Shozi Ventura, LLC Balance**
0	0	0						-	-	0.0	**From: Shores, John Family Partnership**
85.4	-439.7										**To:** McGrath, John & Sons (Permanent Transfer of 126.7)
85.4	-439.7	0.0						(0.0)	(0)	0.0	**Shores, John Family Partnership Balance**
356.8	570.6	392.0	479.9	296.6	447.3	430.8	319.9	419.6	136	283.6	**McGrath, John & Sons**
		-48.8			-75	-51					**From:** McGaelic Group
											From: The Nature Conservency
											From: Shores, John Family Partnership
-190	-306.0	-150.0	-170.0	-85.0	-85.0	-132.0	-93.0	(116.6)			**From:** Farmers Irrigation Company
166.8	264.6	193.2	309.9	211.6	287.3	247.8	226.9	248.8	(34.8)	283.6	**McGrath, John & Sons Balance**
0.0	0.0	0.0						-	-	0.0	**Regents of the University of California**
0.0	0.0	0.0						-			**From:** Leavens Ranches
0.0	0.0	0.0						-	-	0.0	**Regents of the University of California Balance**
0.0	0.0	0.0	0.0					-	-	0.0	**WH Ventura 165 LLC (Regents)**
-60.0	-52.0	172.0						8.6			**From: Leavens Ranches**
		-74.5	0.0					(10.6)			**From: Limoneira Company**
-60.0	-52.0	97.5	0.0						-	0.0	**WH Ventura 165 LLC**
178.5	176.5	235.5	195.0	159.1	171.3	120.0	178.1	176.5	(19)	195.3	**From: Leavens Ranches**
0.0	0.0										**To:** Regents of the University of California
		-135.1									**From:** Limoneira Company
178.5	176.5	100.4	195.0	159.1	171.3	120.0	178.1	157.2	(38.1)	195.3	**Leavens Ranches Balance**
1225.2	1017.1	1092.2	1114.4	1268.1	1343.5	1094.6	966.5	1,128.0	365	763.5	**Riverbank Citrus LLC**
-413.0	-160.7	-231.0	-250.0	-526.4							**From:** Limoneira Company
					-295.6	-220.4					**From:** Farmers Irrigation Company
-48.7	-141.9	-98.3	-100.9	-105.6	-107.1	-110.9	-53.8				**From:** Nutwood Farms
763.5	714.5	762.9	763.5	636.1	940.8	763.3	912.6	784.8	21.3	763.5	**Riverbank Citrus LLC Balance**
25.9	33.5	28.1	25.5	23.4	19.3	15.6	23.5	24.1	(102)	126.4	**Nutwood Farms**
48.7	141.9	98.3	100.9	103.0	107.1	110.8	53.8				**To:** Riverbank Citrus LLC

Table "D-4"
Temporary Water Transfers

8/5/2020

2012	2013	2014	2015	2016	2017	2018	2019	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transfering Parties
3.8	1.2	1.1	0.5	1.0	1.6	1.6	1.8	1.2	(9)	10.0	**Little Clara Ranch LLC**
											To: We 5 Properties
3.8	1.2	1.1	0.5	1.0	1.6	1.6	1.8	1.2	(9)	10.0	**Little Clara Ranch Balance**
11.5	46.8	23.9	28.2	44.3	8.1	2.0	0.0	21.9	12	9.8	**We 5 Properties**
											From: Little Clara Ranch LLC
	-30.2	0.0	-42.98	-28.77							**From:** Alta Mutual Water Company
11.5	16.6	23.9	-14.8	15.5	8.1	2.0	0.0	7.3	(2.46)	9.8	**We 5 Properties Balance**
0.0	0.0	0.0	0.0	0.0	44.9	52.3	34.2	18.8	(89)	107.5	**The Nature Conservency**
			70.0								**To: County of Ventura Gen Services Agency Jail**
				100.0							**To: Alta Mutual Water Company**
107.5	107.5	100.0									**To:** Brucker Family Trust
107.5	107.5	100.0	70.0	100.0	44.9	52.3	34.2	72.7	(34.8)	107.5	**The Nature Conservancy Balance**
379.0	363.0	561.9	237.0	266.7	242.8	383.5	301.4	336.6	60	276.5	**Brucker Family Trust**
-107.5	-107.5	-100									**From:** The Nature Conservency
		-185.4	-5.6	-51.7							**From:** Farmers Irrigation Company
271.5	255.5	276.5	231.5	215.1	242.8	383.5	301.4	272.3	(4.19)	276.5	**Brucker Family Trust Balance**
116.3	95.0	89.8	102.0	115.8	91.0	108.8	86.9	98.5	60	38.6	**Ortiz Trust - Joseph & Sons**
-77.7	-56.4	-51.2	-63.4	-77.2	-52.4	-70.2	-48.3				**From:** Farmers Irrigation Company
38.6	38.6	38.6	38.6	38.6	38.6	38.5	38.6	38.6	-	38.6	**Ortiz Trust - Joseph & Sons Balance**
5.9	9.9	8.9	11.8	13.2	10.4	7.3	14.8	10.9	1	9.6	**The Judson T. Cook & Suzette H. Cook Revocable Trust**
-2.0				-11.6							From: Limoneira Company
3.9	9.9	8.9	11.8	1.6	10.4	7.3	14.8	9.2	(0.37)	9.6	**The Judson T. Cook & Suzette H. Cook Revocable Trust date**
757.6	241.0	1,018.4	1,175.1	1,386.5	709.1	745.7	292.0	795.4	32	763.1	**Alta Mutual Water Company**
						(90.0)					**From:** Dan Campbell
				(100.0)							**From:** The Nature Conservency
				(26.6)	(23.2)						**From:** Wallace, James III
	30.2										**To:** We 5 Properties
				-426.3	-145.8						**From: Farmers Irrigation Company**
757.6	271.2	1018.4	1175.1	833.6	540.1	655.7	292.0	683.7	(79.4)	763.1	**Alta Mutual Water Company Balance**
103.6	162.34	134.36	148.11	74.38	71.76	191.19	83.76	123.7	56	68.0	**Tucker Ranch**
	-146.2	-90.0	-132.0	-43.0							From: Limoneira Company
				37.5	2.1						To: Yoon Family Trust
103.6	16.1	44.4	16.1	68.9	73.8	191.2	83.8	70.6	2.6	68.0	**Tucker Ranch Balance**
10.3	10.3	6.21	4.43	2.91	5.08	1.33	1.38	4.5	2	2.9	**Arambula, Pedro**
	-3.9	-3.3			-3.7						From: Farmers Irrigation Company
	-3.5										From: Correction of Reporting to United (3)
10.3	2.9	2.9	4.4	2.9	1.4	1.3	1.4	2.5	(0.44)	2.9	**Arambula, Pedro Balance**
1.3	2	2.2	1.5	1	1	1	1	1.4	(26)	27.6	**Williams, James W. III**
				26.6	23.2						**To:** Alta Mutual Water Company
1.3	2	2.2	1.5	27.6	24.2	1		8.4	(19)	27.6	**Williams, James W. III**
298.3	387.5	273.7	247.8	188.2	221.9	246.8	76.4	234.6	(58)	292.6	**Bender Reality, LTD & Bender Farms**
	-98.9										From: Farmers Irrigation Company
298.28	288.6	273.7	247.8	188.2	221.9	246.8	76.4	220.5	(72)	292.6	**Bender Reality, LTD & Bender Farms**

Table "D-4"
Temporary Water Transfers

8/5/2020

2012	2013	2014	2015	2016	2017	2018	2019	7 Year Average	Avg Over + Under (-)	AF Annual Allocation	Transfering Parties
13.3	13.5	13.9	6.8	6.5	20.7	19.1	4.4	12.1	3	9.6	**Garcia, Elias & Guadalupe**
	-3.9	-4.3			-2.4						From: Castaneda, Albert & Mary
13.31	9.6	9.6	6.8	6.5	18.3	19.1	4.4	10.6	1.01	9.6	**Garcia, Elias Balance**
44.7	63.8	88.0	140.0	65.6	71.1	60.4	59.9	78.4	(23)	101.4	**Castaneda, Albert & Mary**
	3.9	4.3			2.4						To: Garcia, Elias & Guadalupe
44.67	67.7	92.3	140.0	65.6	73.5	60.4	59.9	79.9	(21)	101.4	**Castaneda, Albert & Mary**
60.0	36.6	41.5	31.4	31.6	44.2	33.2	27.0	35.1	(18)	52.9	**Grant Family Ranches**
	-4.5	-9.4									From:Farmers Irrigation Company
60	32.1	32.1	31.4	31.6	44.2	33.2	27.0	33.1	(20)	52.9	**Grant Family Ranches Balance**
130.2	157.9	160.6	172.6	143.7	159.0	125.7	72.2	141.7	22	119.6	**Rancho Filoso, LLC**
		-11.2	-65.0	-28.7	-65.5						From: JM Sharp Company
	-32.9										From:Farmers Irrigation Company
130.22	125.0	149.4	107.6	115.0	93.5	125.7	72.2	112.6	(7.0)	119.6	**Ranch Filoso, LLC Balance**
79.99	115.15	114.37	95.47	0	167.48	206.02	118.9	116.8	(50.5)	167.3	**Sharp, JM Compnay**
		11.2	65.0	28.7	65.5						To: Rancho Filloso
				15.0							Cook, The Judson T. Cook & Suzette H. Cook Revocable
79.99	115.15	125.57	160.47	43.7	233.01	206.02	118.9	143.3	(24.0)	167.3	**Sharp, JM Company Balance**
5.9	9.9	8.9	11.8	13.2	10.4	7.3	14.8	10.9	1.3	9.6	**Cook, The Judson T. Cook & Suzette H. Cook**
				-15.0							From: Sharp, JM Company
5.9	9.9	8.9	11.8	(1.8)	10.4	7.3	14.8	8.8	(0.9)	9.6	**Cook, The Judson T. Balance**
206.31	315.42	206.04	247.64	187.17	206.53	165.65	141.57	210.0	77.5	132.5	**TVC Pinkerton Ranch LLC (27)**
-47.65	-16.23	-31.47									From: Pinkerton, W. J. Estate Ranch
	-113.4	-69.8	-116.1	-116.1			-79.4				From: Farmers Irrigation Company
158.66	185.79	104.77	131.50	71.12	206.53	165.65	62.14	132.5	-	132.5	**TVC Pinkerton Ranch LLC Balance**
111.05	142.47	127.23	0	0	0			38.5	120.2	158.7	**From: Pinkerton W. J. Estate Ranch**
47.65	16.23	31.47						289.3			**To: TVC Pinkerton Ranch LLC**
158.7	158.7	158.7	0.0	0.0	0.0			45.3	(113.4)	158.7	**TVC Pinkerton Ranch LLC Balance**
51.44	64.07	103.6	72.93	73.31	78.24	71.22	44.93	72.6	0.0	62.1	**Strata Holdings LP**
		-100.0	-100.0								From: Farmers Irrigation Company
51.44	64.07	3.6	-27.07	73.31	78.24	71.22	44.93	44.0	(18.1)	62.1	**Strata Holding LP Balance**
70.05	175.15	168.18	142.3	121.33	238.58	204.3	194.33	177.7	5.5	172.2	**County of Ventura, General Services Agency**
			-70								**From:** The Nature Conservancy
70.05	175.15	168.18	72.3	121.33	238.58	204.3	194.33	167.7	(4.5)	172.2	**County of Ventura, General Services Agency Jail Bal**
4.8	4.8	2.4	16.66	79.09	40.41	32.43	27.18	29.0	(2.0)	31.0	**Yoon Family Trust**
				-37.54	-2.05			(5.4)			**From: Tucker Ranch**
4.8	4.8	2.4	16.66	41.55	38.36	32.43	27.18	23.3	(7.7)	31.0	**Yoon Family Trust Balance**

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

9/3/2020

2012 (7)	2013 (7)	2014 (7)	2015 (7)	2016 (7)	2017 (7)	2018 (7)	2019 (7)	7 Year Average	Over (+) Under (-)	Acre Feet	Party Name	Well Number
227.8	227.8	162.4	229.1	243.4	212.8	182.2	83.1	191.55	(28.5)	220.0	City of San Buenaventura	02N/22W-03E01 (1)
										5.8	City of San Buenaventura (3)	3N/21W-21B3
61.0	74.5	97.6	97.8	15.4				40.75	17.7	23.1	City of San Buenaventura (10)	3N/22W-34R1, 3N21W20F04
										12.0	City of San Buenaventura (9)	03N/22W-35N01
288.8	302.3	260.0	326.9	258.8	212.8	182.2	83.1	232.30	(28.6)	**260.9**	**Total Aquired by City of San Buenaventura**	
754.7	672.9	629.0	2,318.3	2,897.6	2,593.3	3,095.9	2,509.2	2,102.30	(897.7)	3,000.0	City of San Buenaventura	02N/22W-02K09 (2) 2N/22W-02H02 (8)
1,043.5	975.2	889.0	2,645.2	3,156.3	2,806.1	3,278.0	2,592.2	2,113.36	(1,147.5)	**3,260.9**	**Total City of San Buenaventura**	

FOOTNOTES:
Archived footnotes: 4, 5, 6
(1) Shared well allocated 356.0 AF/Year of production for 2007 to 2013 between City of San Buenaventura and Hadley Williams Partnership by 64/36% of allocation a production meter should be used.
(2) Well number was added.
(3) McConica allocation transfer.
(7) Source of production data for 2012, 2013, 2014, 2015, 2016, 2017, 2018 and 2019 was the United Water Conservation District, reviewed by the Association.
(8) New well put online in 2015.
(9) Permanent water transfer from J Fam, LLC to City of Ventura in 2015 (12.0 AF)
(10) Permanent water transfer from WH Ventura 165 LLC to City of Ventura, 2016 (23.1 AF)

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PROOF OF SERVICE

I am a citizen of the United States and employed in Santa Barbara, California. I am over the age of eighteen and not a party to the within-entitled action. My business address is Brownstein Hyatt Farber Schreck, LLP, 1021 Anacapa Street, 2nd Floor, Santa Barbara, California 93101. On October 13, 2020 I served a copy of the within document(s):

SUBMISSION OF THE SANTA PAULA BASIN 2019 ANNUAL REPORT

by placing a copy of the above document(s) in a sealed envelope, postage fully paid, addressed to the following:

[See Attached Service List]

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 there on 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 October 13, 2020 at Santa Barbara, California.

Melissa Eldridge

20179007

BROWNSTEIN HYATT FARBER SCHRECK, LLP
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United Water Conservation District vs. City of San Buenaventura
Plaintiff and Defendant
Limoneira Company, Alta Mutual Water Co.,
Intervenors
City of San Buena Ventura vs. Limoneira Company, Alta Mutual Water Co.,
Cross-Complainant and Cross-Defendants

Ventura County Superior Court Case No. CIV115611

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